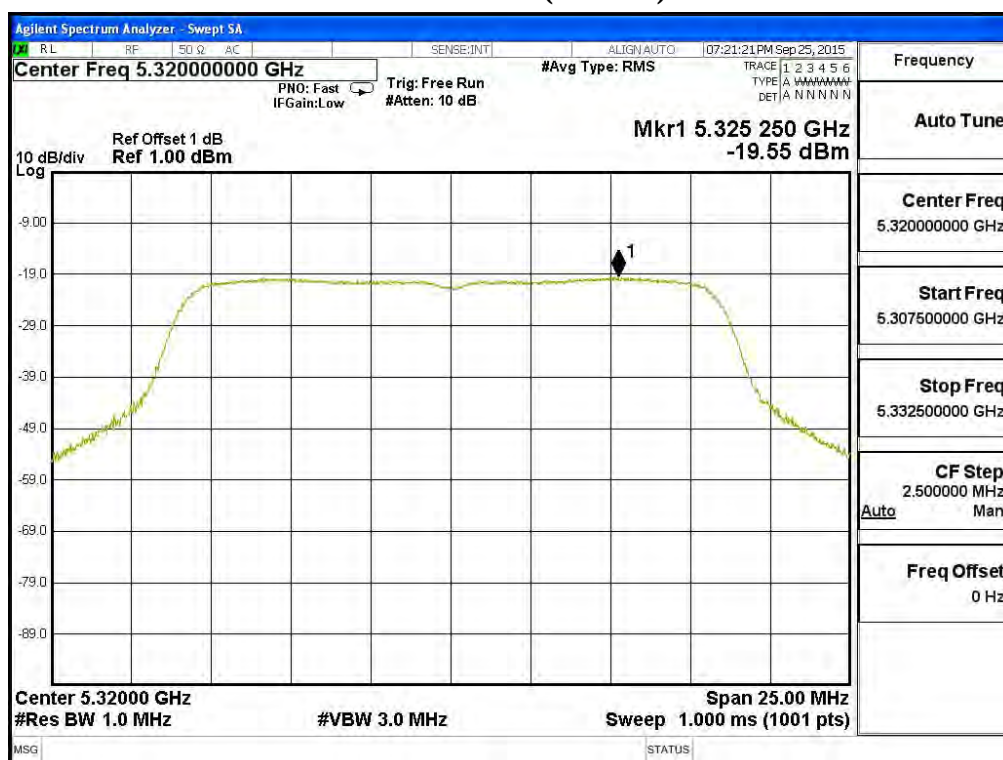
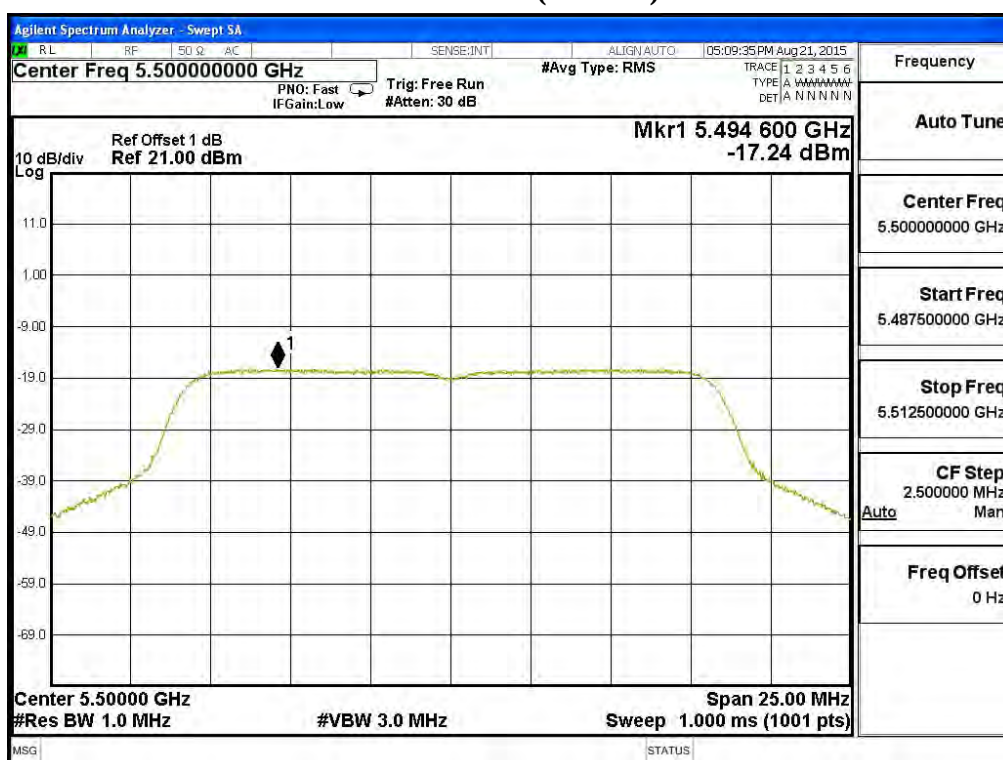


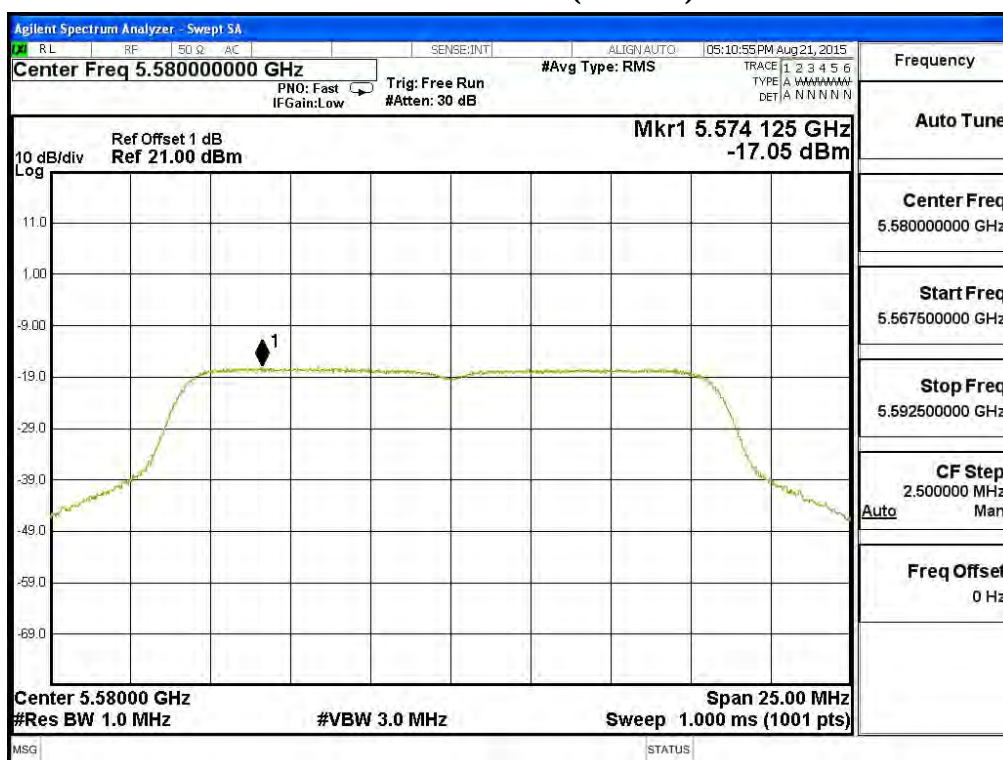
### Channel 64: (Chain A)



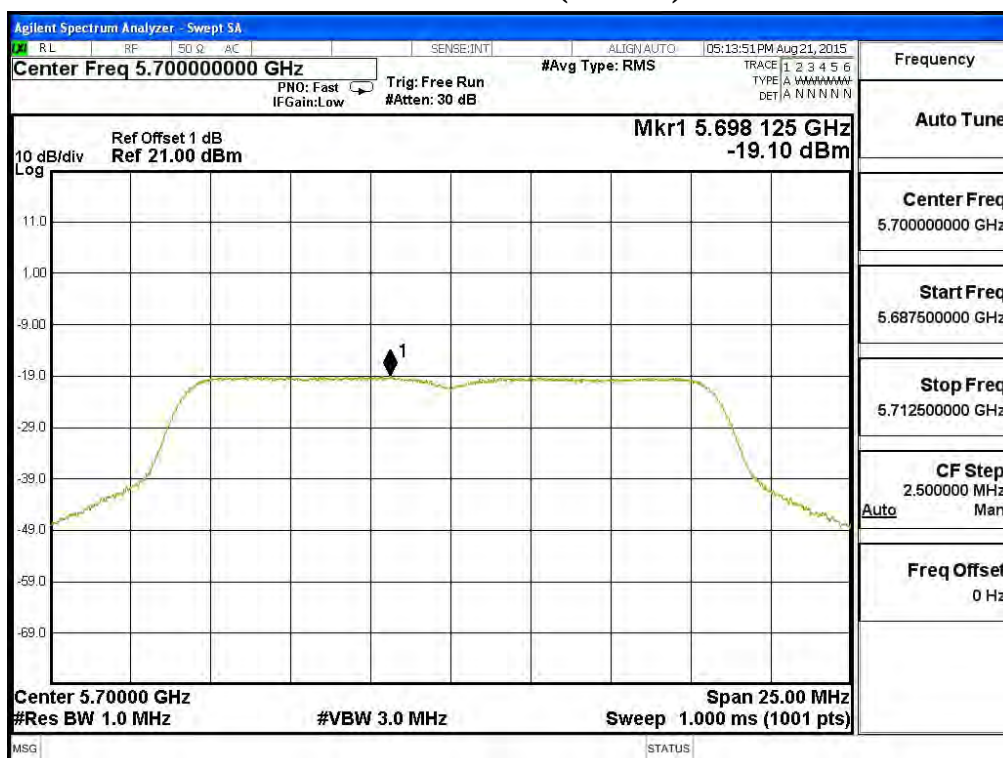
### Channel 100: (Chain A)



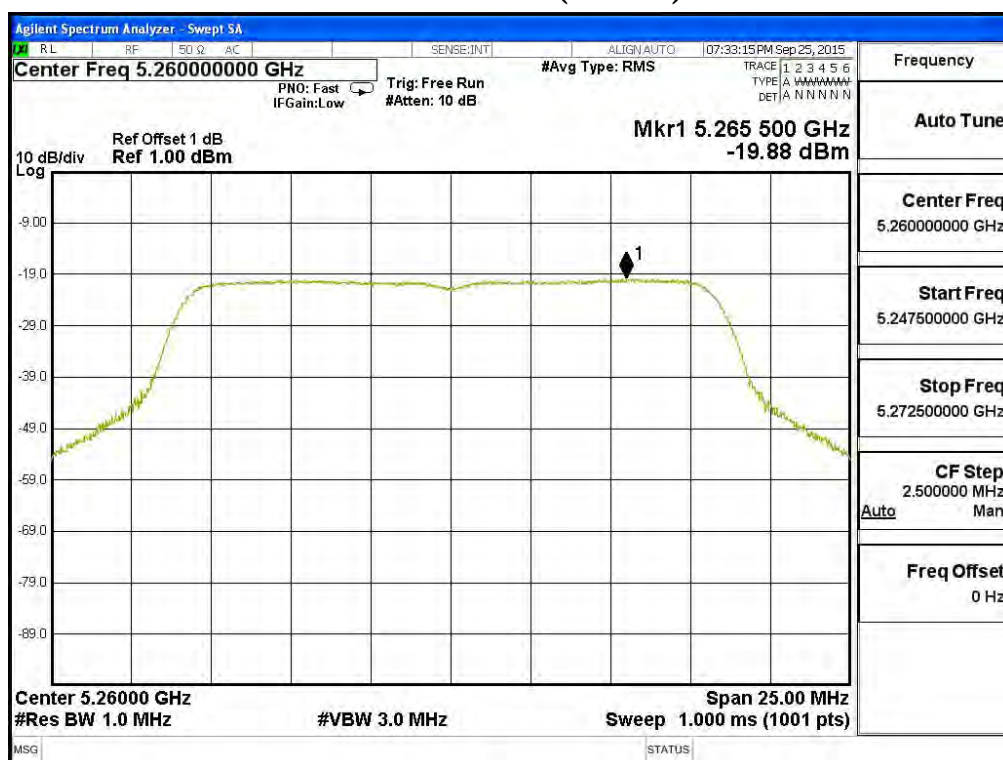
### Channel 116: (Chain A)



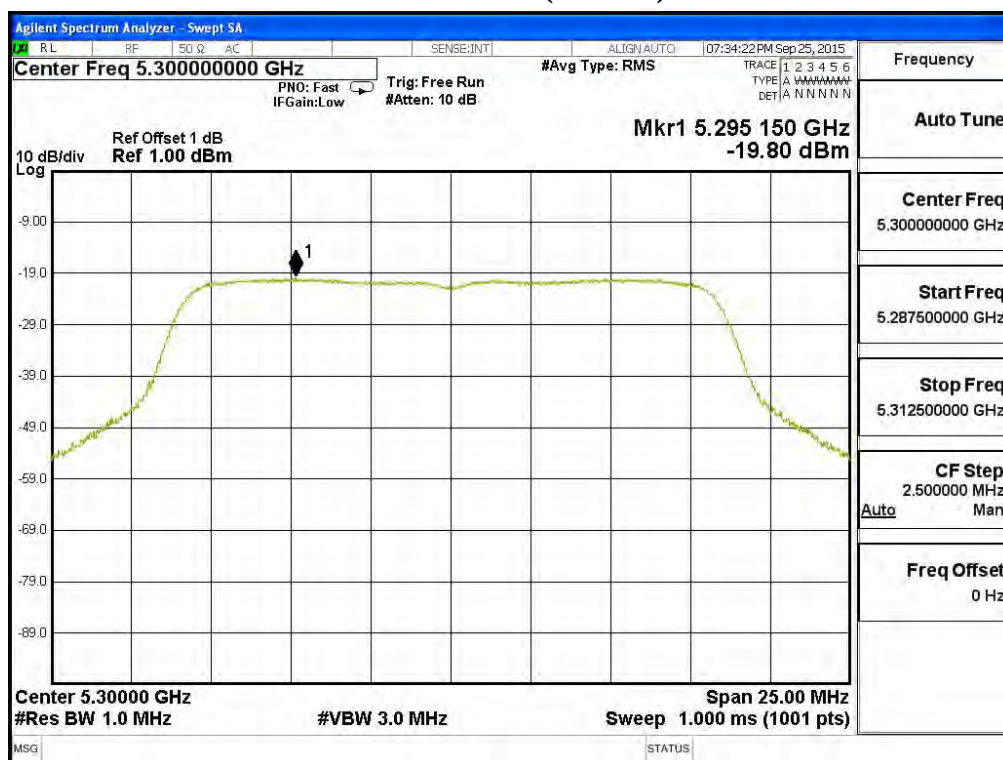
### Channel 140: (Chain A)



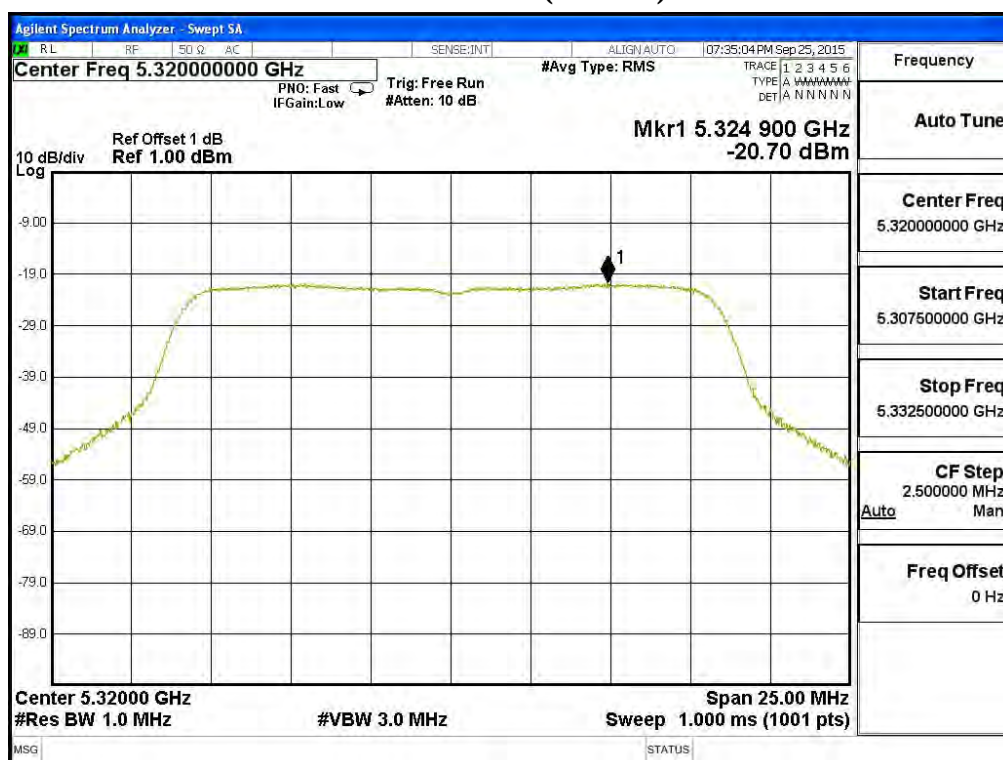
### Channel 52: (Chain B)



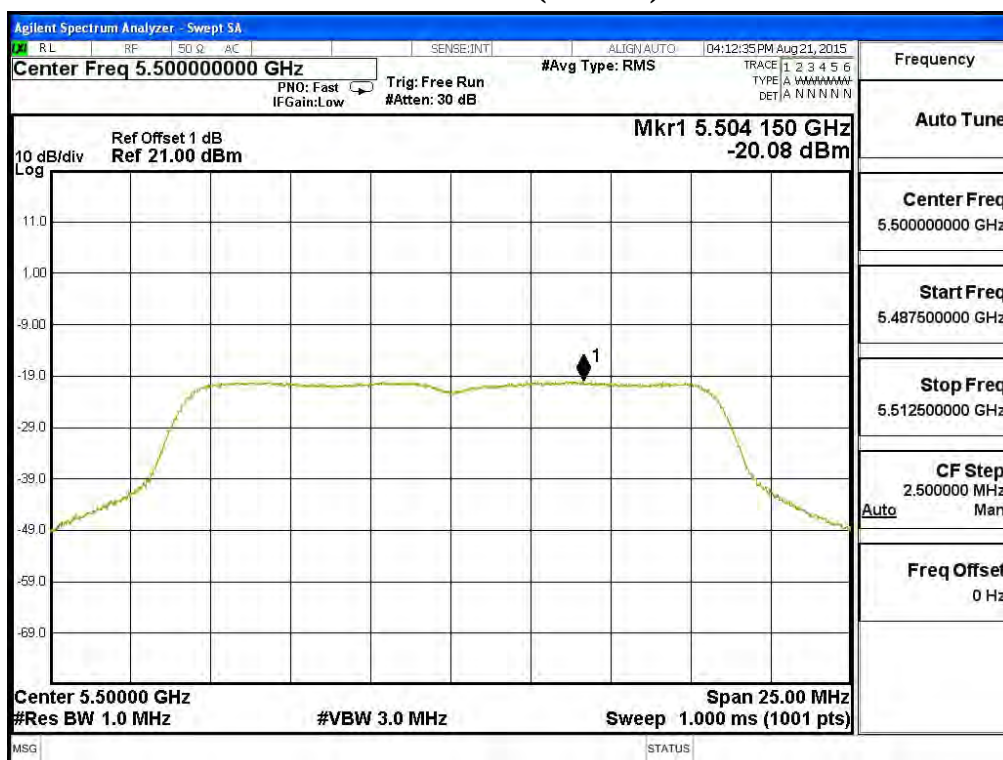
### Channel 60: (Chain B)



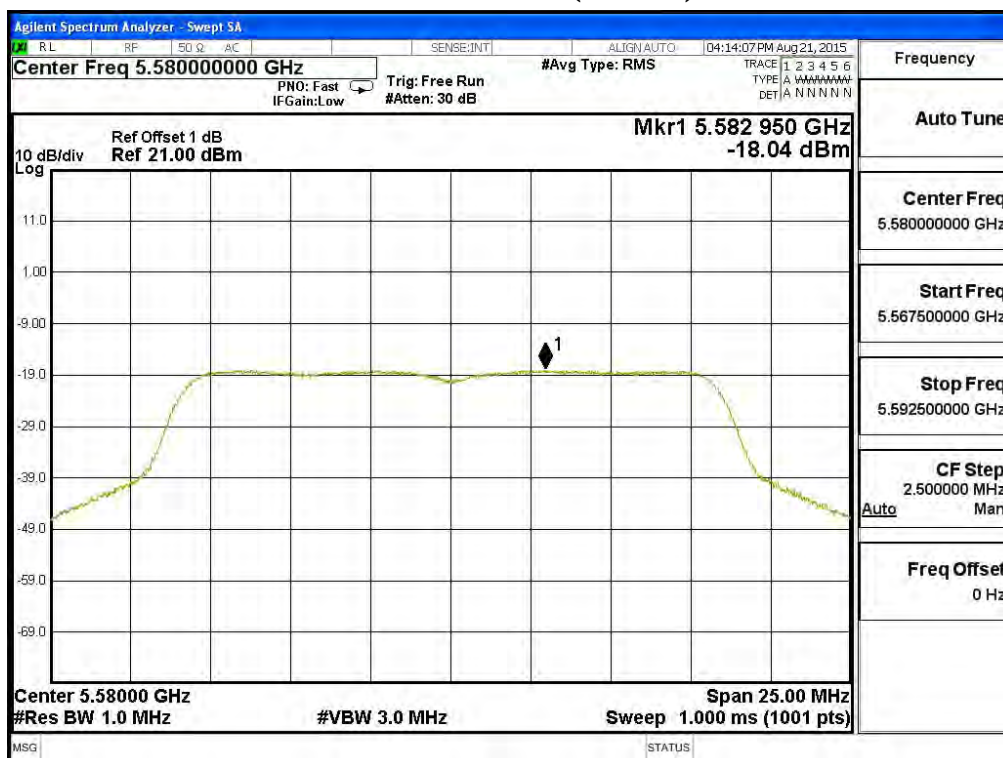
### Channel 64: (Chain B)



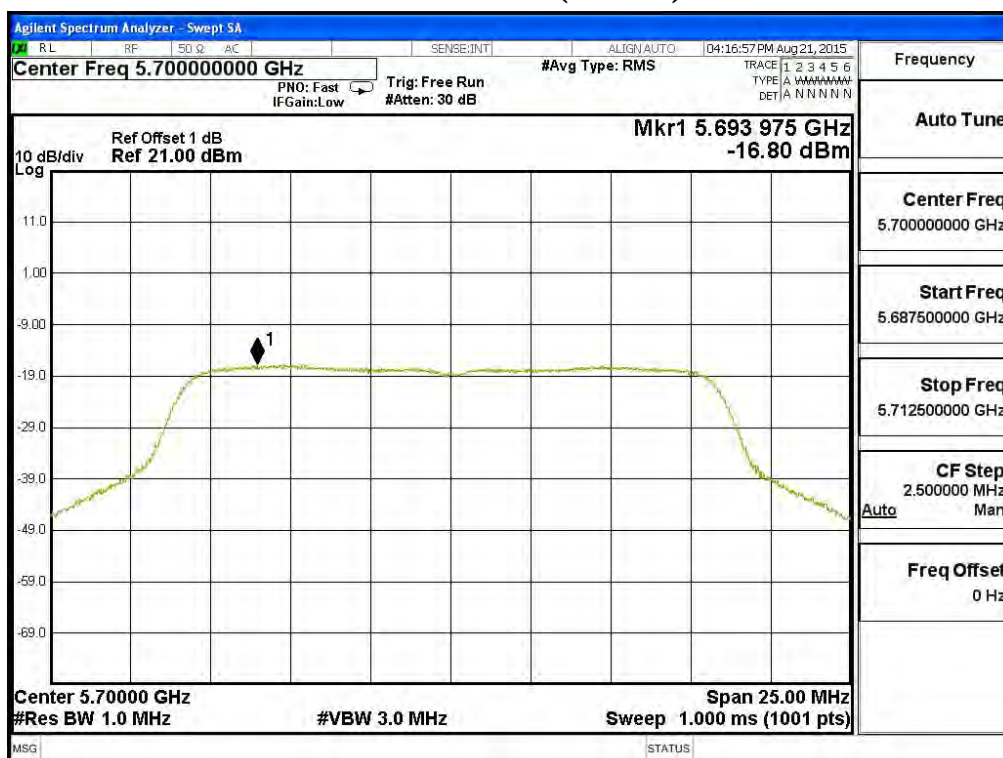
### Channel 100: (Chain B)



### Channel 116: (Chain B)



### Channel 140: (Chain B)



Product : 802.11 ac PCie Module  
Test Item : Peak Power Spectral Density  
Test Site : No.3 OATS  
Test Mode : Mode 20: Transmit (802.11n-20BW 14.4Mbps)(Panel Antenna)

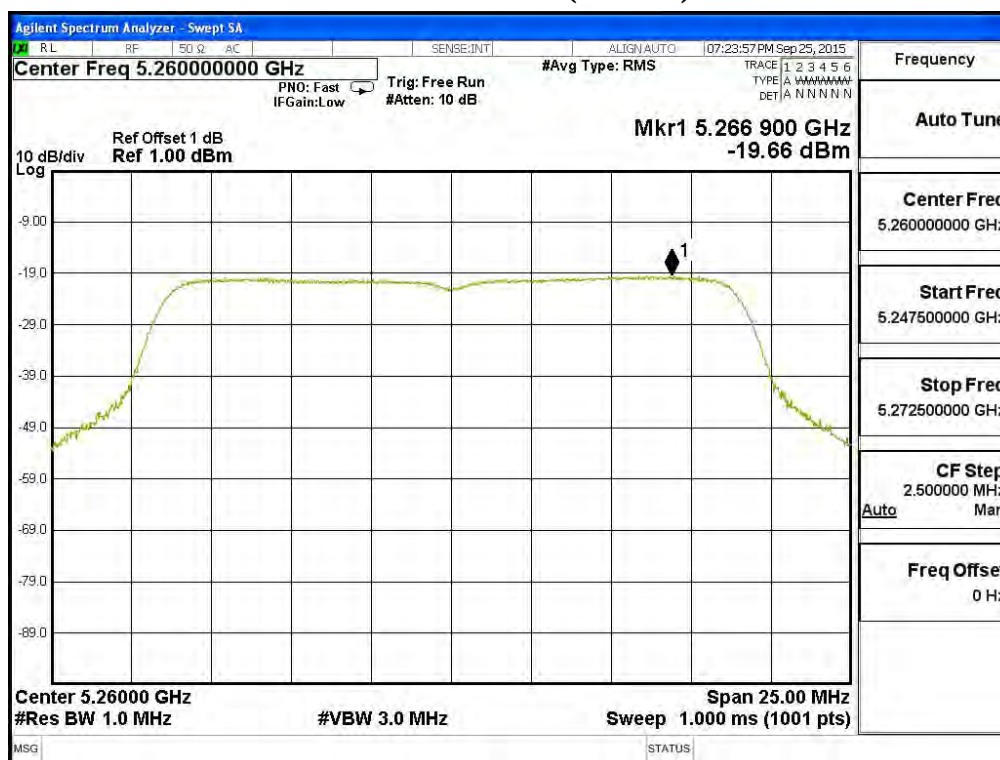
**5250~5350MHz, 5470-5600 MHz and 5650-5725 MHz**

| Channel Number | Frequency (MHz) | Chain | PPSD/MHz (dBm) | Total PPSP/MHz (dBm) | Required Limit (dBm) | Result |
|----------------|-----------------|-------|----------------|----------------------|----------------------|--------|
| 52             | 5260            | A     | -19.660        | -16.650              | -13                  | Pass   |
|                |                 | B     | -20.301        | -17.291              | -13                  | Pass   |
| 60             | 5300            | A     | -19.326        | -16.316              | -13                  | Pass   |
|                |                 | B     | -19.906        | -16.896              | -13                  | Pass   |
| 64             | 5320            | A     | -20.022        | -17.012              | -13                  | Pass   |
|                |                 | B     | -21.203        | -18.193              | -13                  | Pass   |
| 100            | 5500            | A     | -16.669        | -13.659              | -13                  | Pass   |
|                |                 | B     | -19.319        | -16.309              | -13                  | Pass   |
| 116            | 5580            | A     | -16.376        | -13.366              | -13                  | Pass   |
|                |                 | B     | -17.033        | -14.023              | -13                  | Pass   |
| 140            | 5700            | A     | -19.421        | -16.411              | -13                  | Pass   |
|                |                 | B     | -17.341        | -14.331              | -13                  | Pass   |

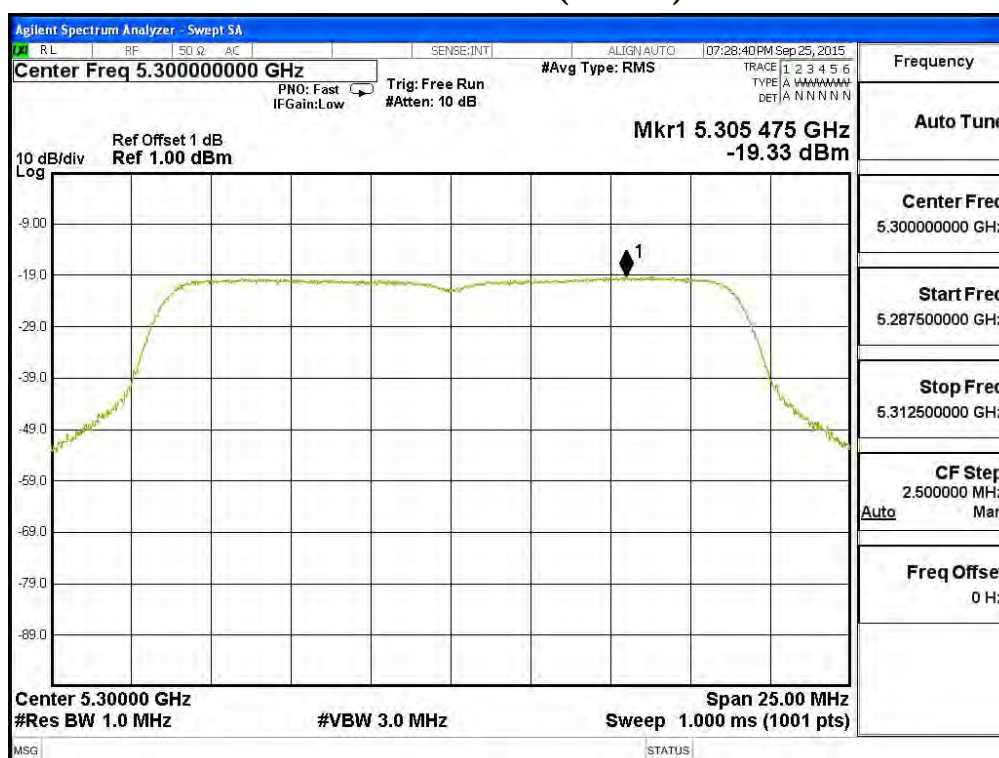
Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.

2. Total PPSP Value = PPSP/MHz value +  $10 \cdot \log 2$  (two antennas).

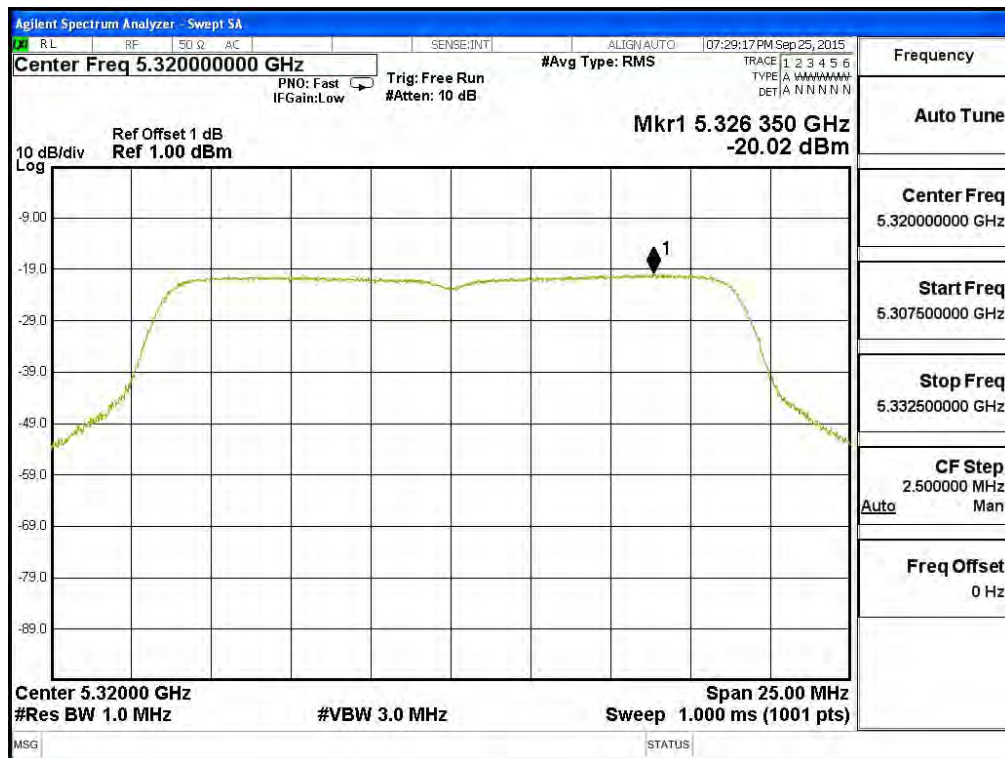
### Channel 52: (Chain A)



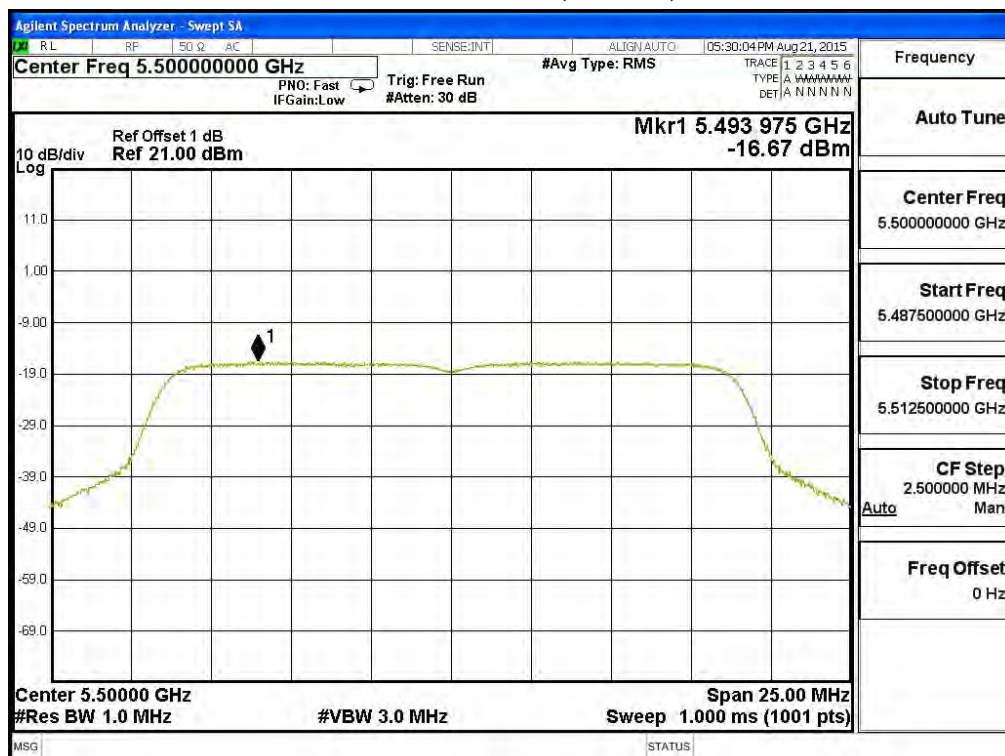
### Channel 60: (Chain A)



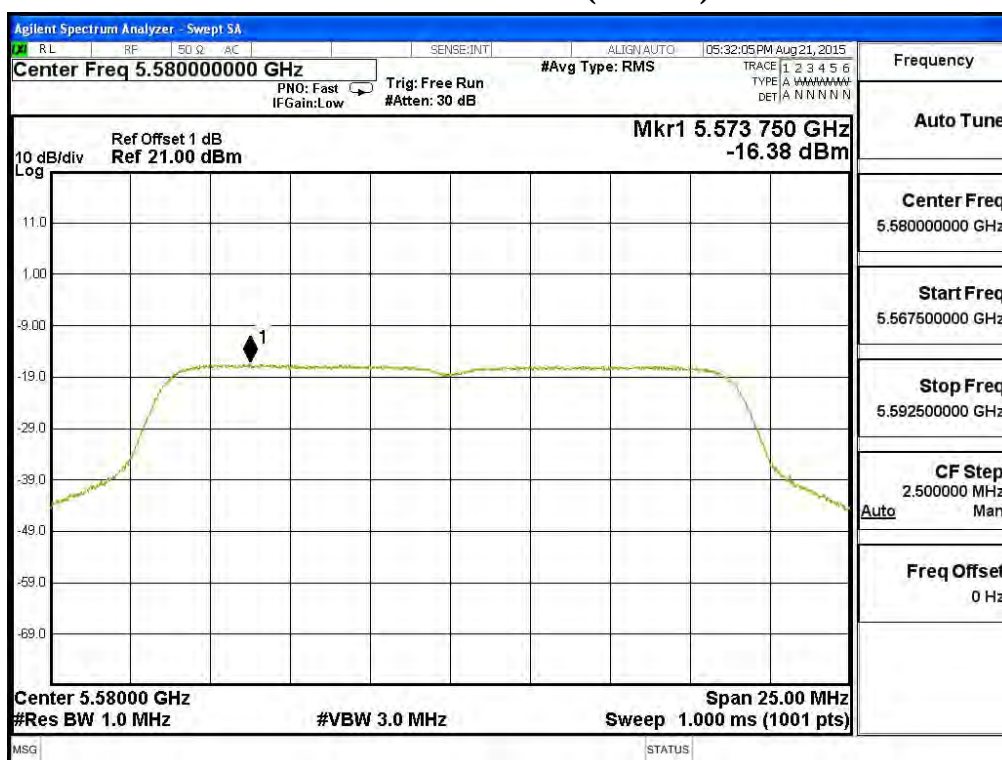
### Channel 64: (Chain A)



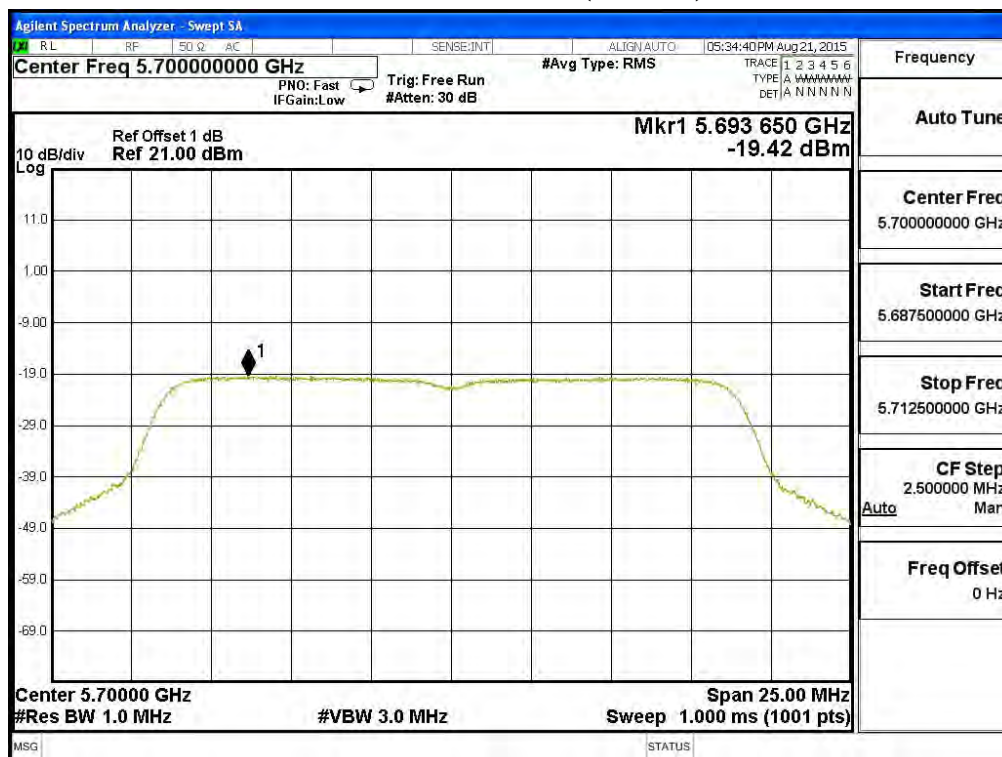
### Channel 100: (Chain A)

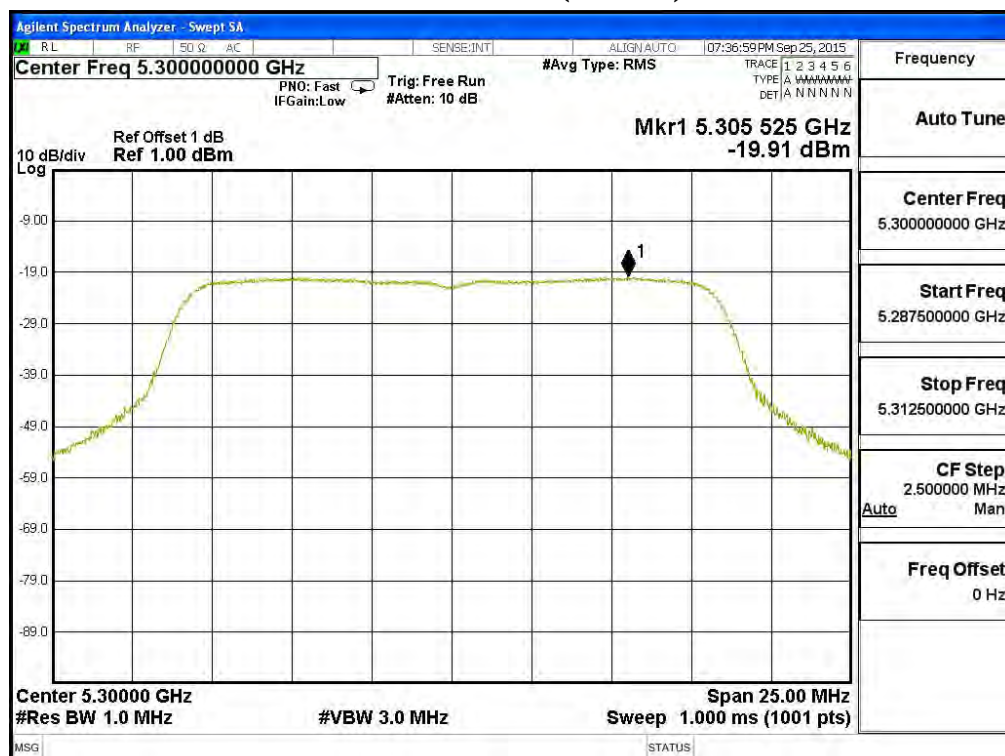


### Channel 116: (Chain A)

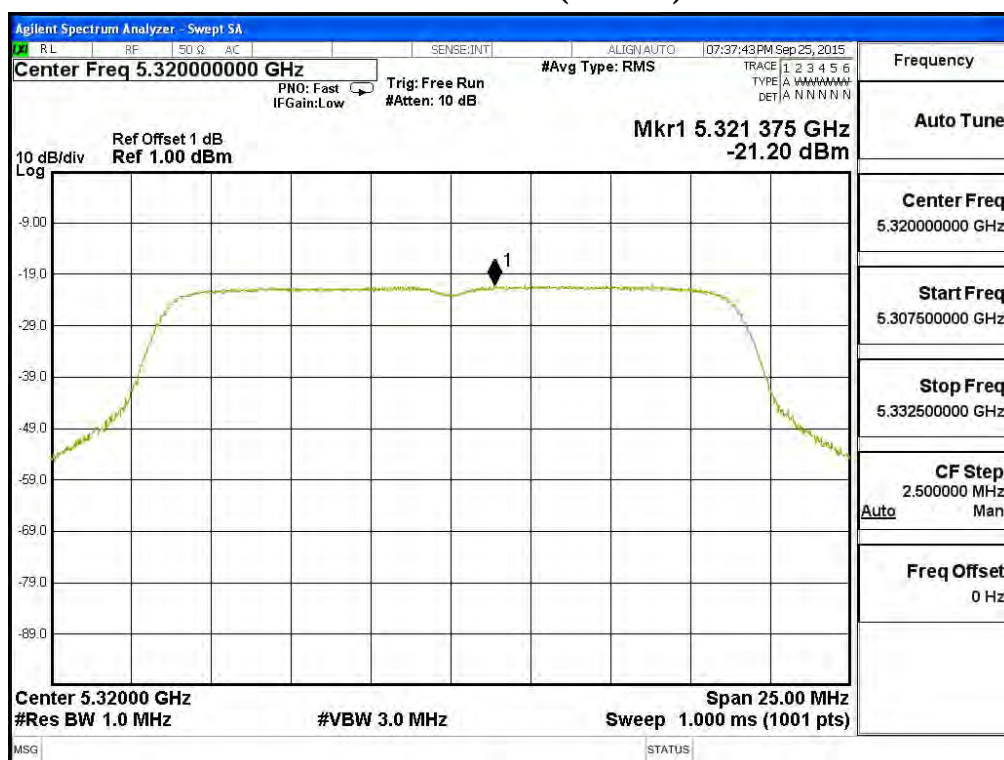


### Channel 140: (Chain A)

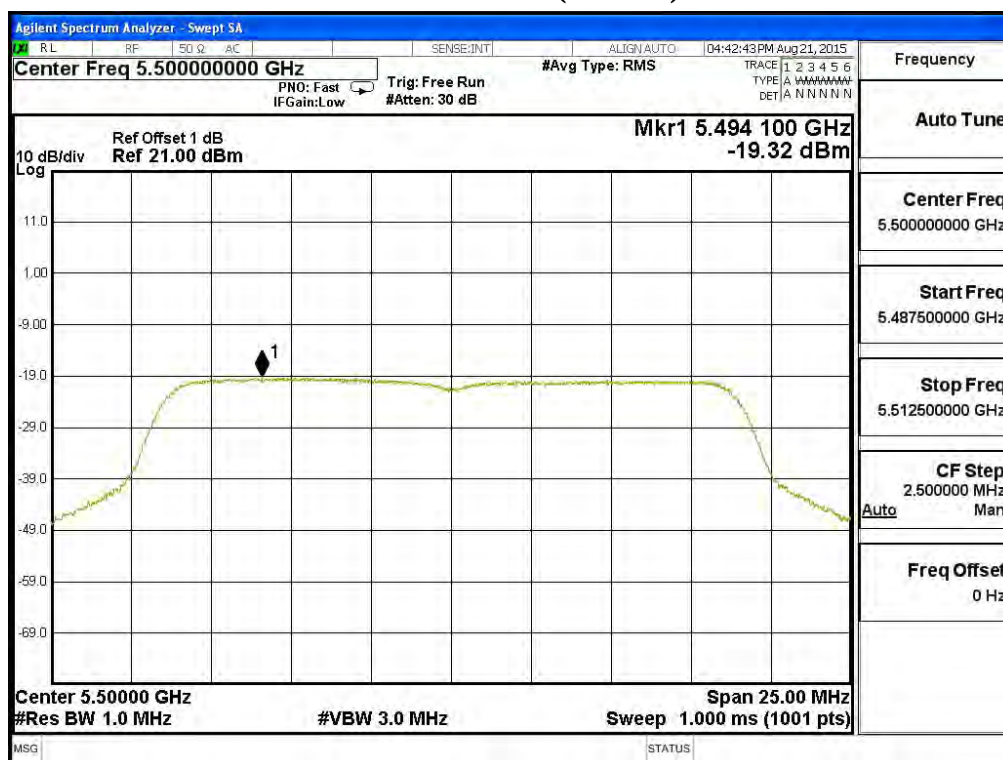




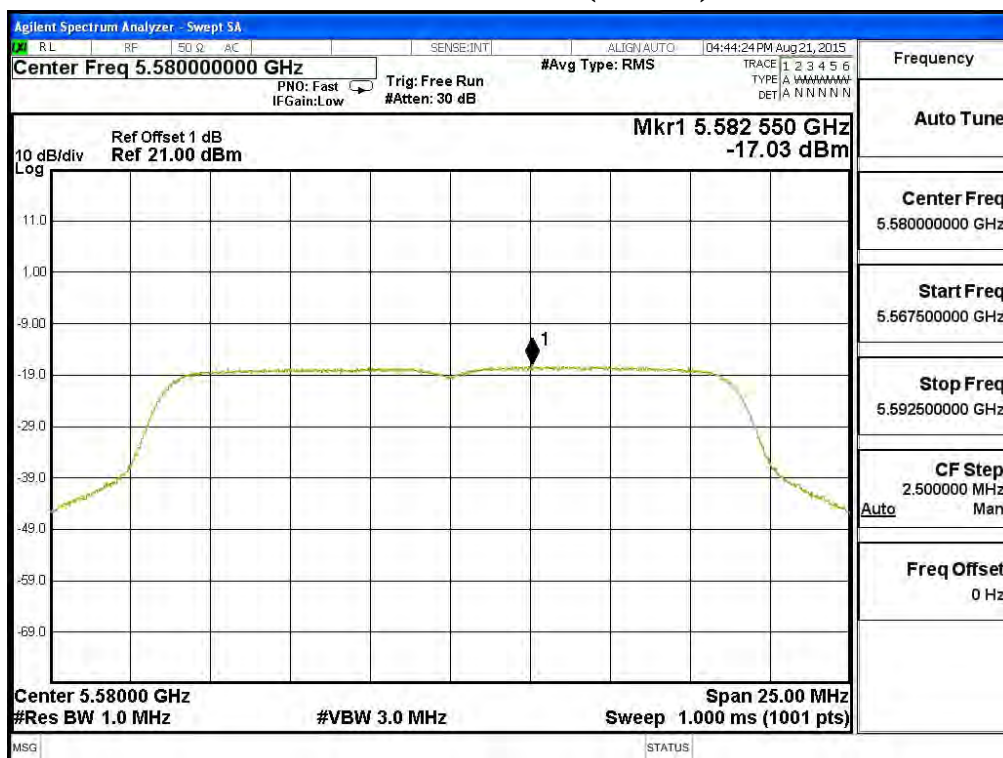
### Channel 64: (Chain B)



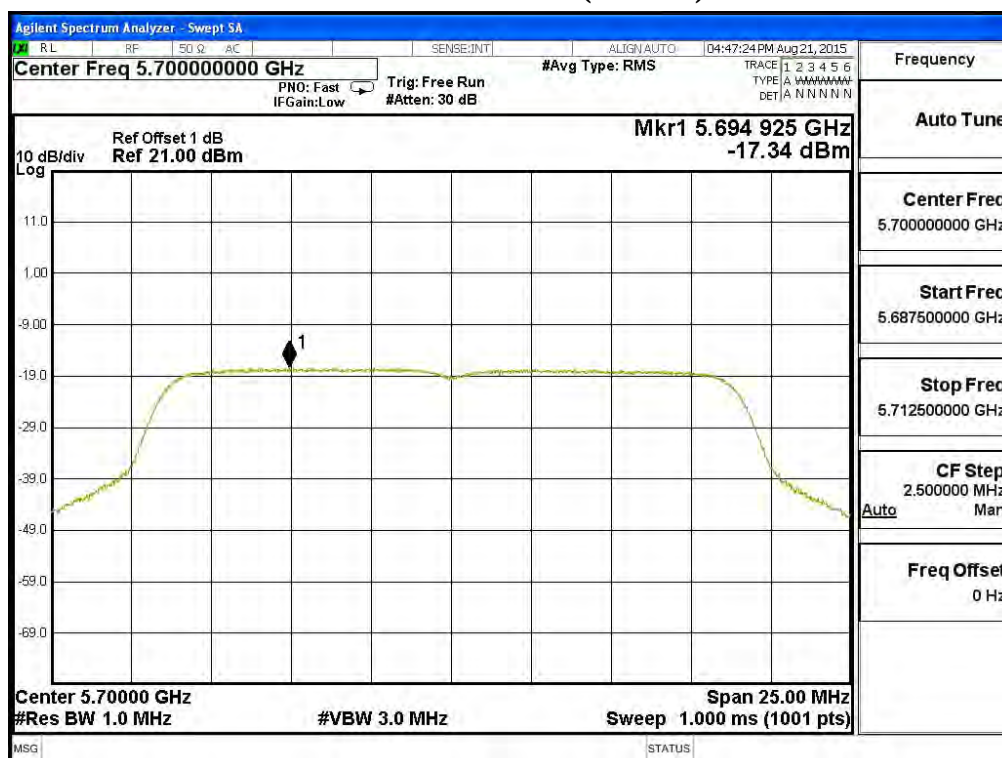
### Channel 100: (Chain B)



### Channel 116: (Chain B)



### Channel 140: (Chain B)



Product : 802.11 ac PCIe Module  
Test Item : Peak Power Spectral Density  
Test Site : No.3 OATS  
Test Mode : Mode 21: Transmit (802.11n-40BW 30Mbps)(Panel Antenna)

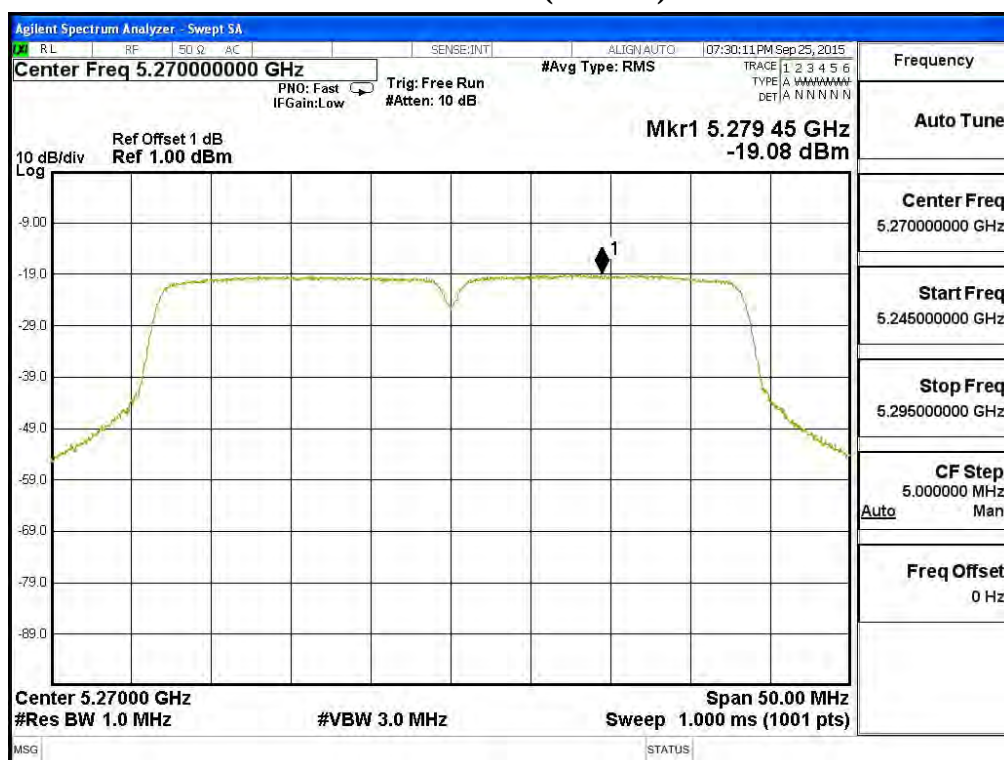
**5250~5350MHz, 5470-5600 MHz and 5650-5725 MHz**

| Channel Number | Frequency (MHz) | Chain | PPSD/MHz (dBm) | Total PPSP/MHz (dBm) | Required Limit (dBm) | Result |
|----------------|-----------------|-------|----------------|----------------------|----------------------|--------|
| 54             | 5270            | A     | -19.080        | -16.070              | -13                  | Pass   |
|                |                 | B     | -19.911        | -16.901              | -13                  | Pass   |
| 62             | 5310            | A     | -19.490        | -16.480              | -13                  | Pass   |
|                |                 | B     | -20.270        | -17.260              | -13                  | Pass   |
| 102            | 5510            | A     | -17.910        | -14.900              | -13                  | Pass   |
|                |                 | B     | -22.820        | -19.810              | -13                  | Pass   |
| 110            | 5550            | A     | -17.950        | -14.940              | -13                  | Pass   |
|                |                 | B     | -22.680        | -19.670              | -13                  | Pass   |
| 134            | 5670            | A     | -18.560        | -15.550              | -13                  | Pass   |
|                |                 | B     | -18.730        | -15.720              | -13                  | Pass   |

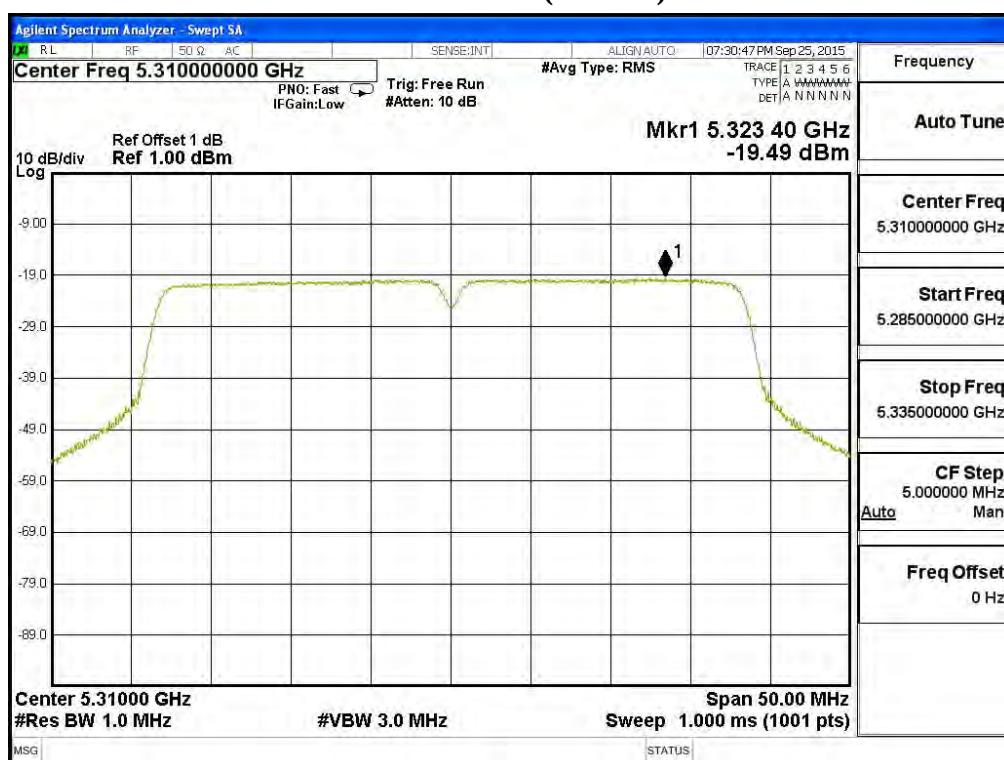
Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.

2.Total PPSP Value = PPSP/MHz value +  $10 \cdot \log 2$  (two antennas).

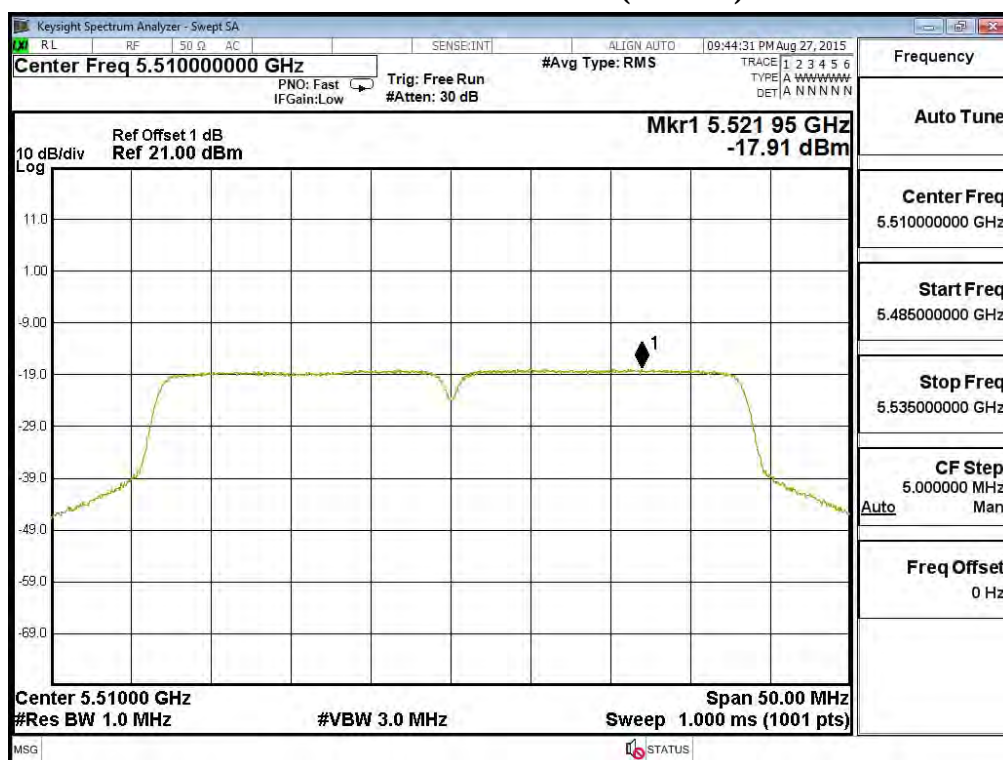
### Channel 54: (Chain A)



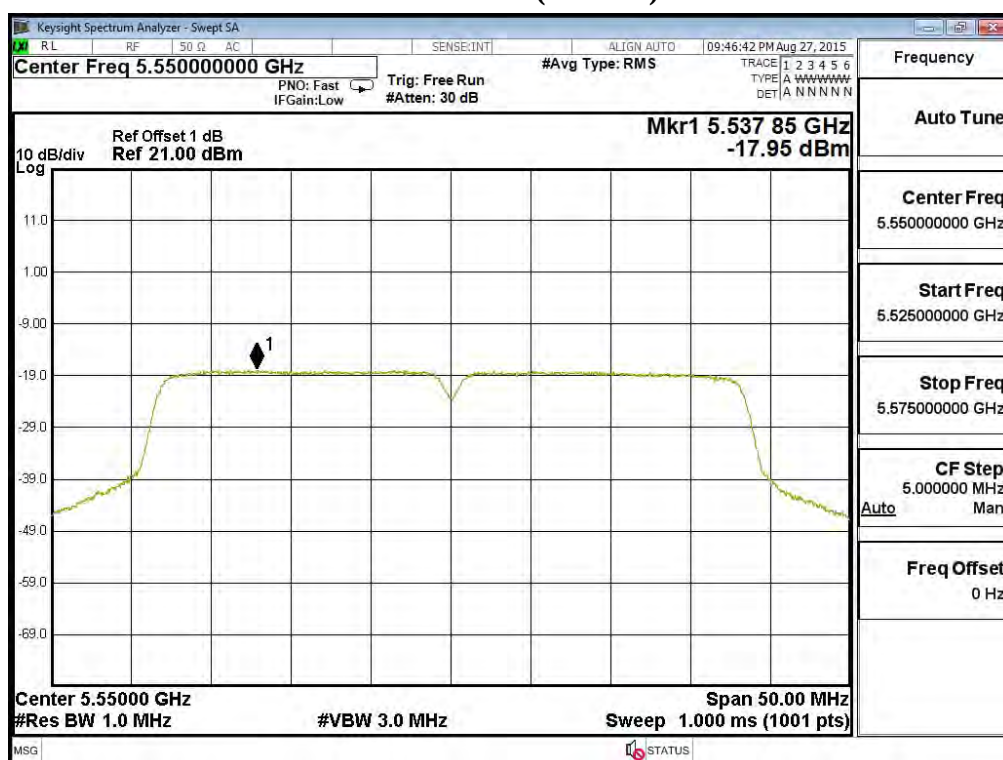
### Channel 62: (Chain A)



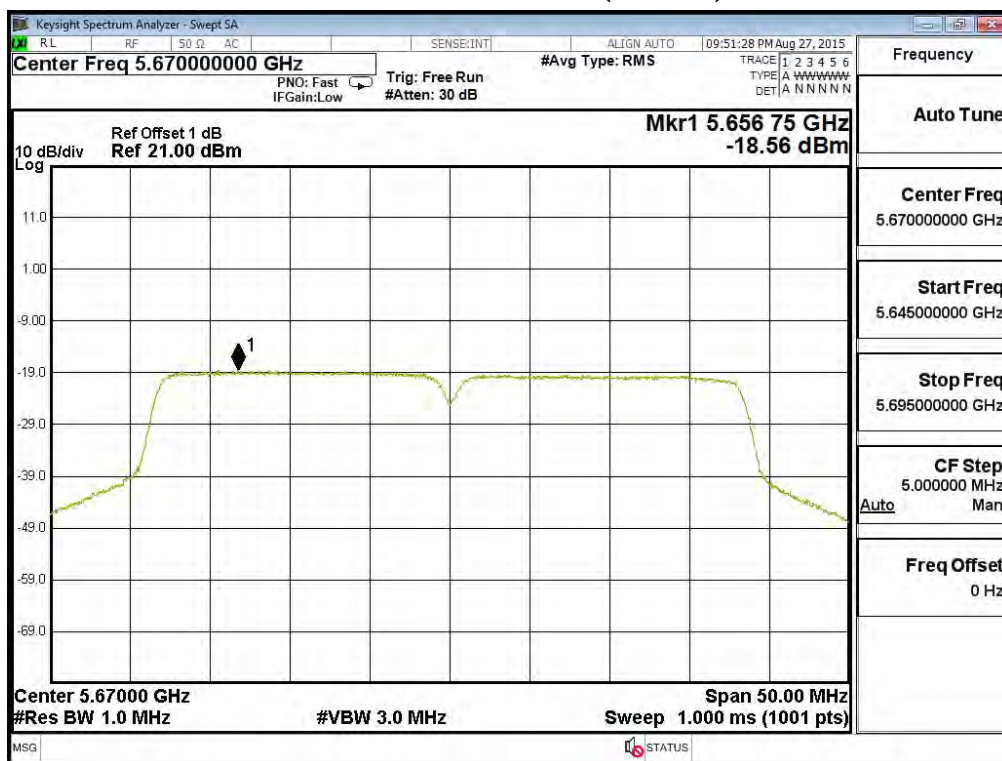
### Channel 102: (Chain A)



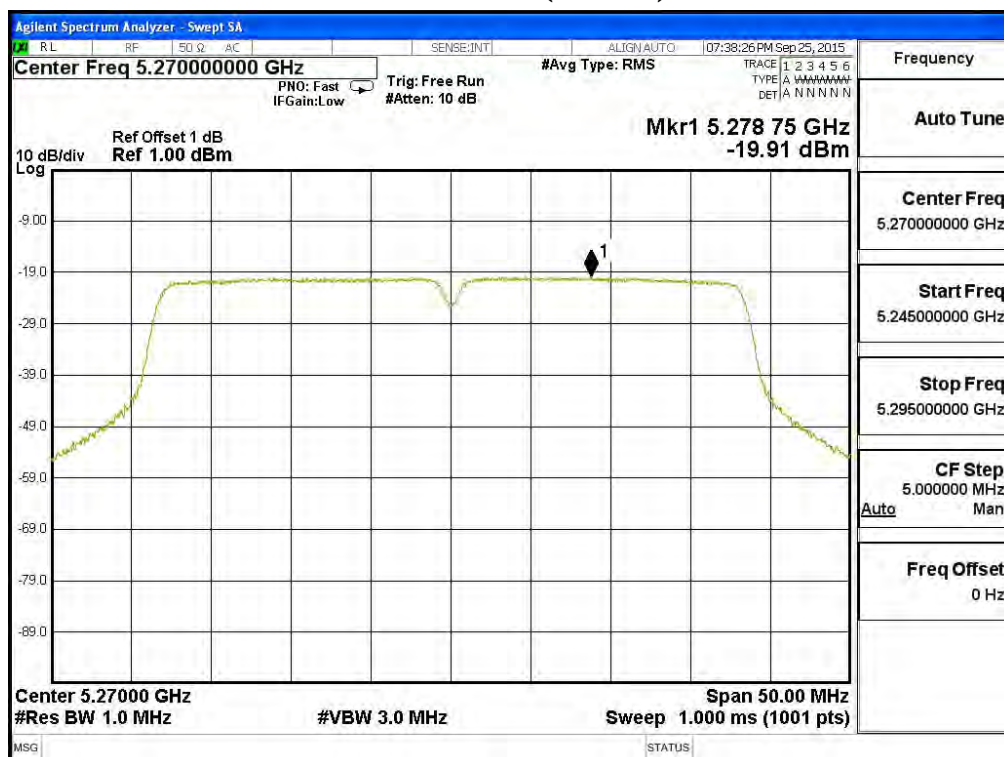
### Channel 110: (Chain A)



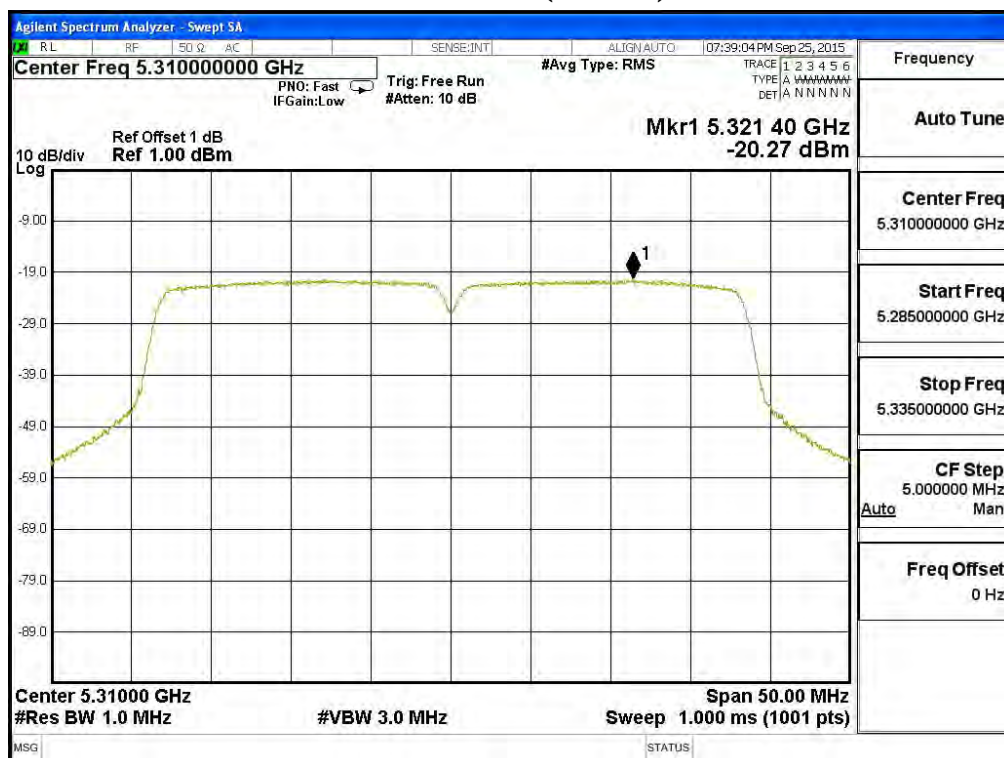
### Channel 134: (Chain A)



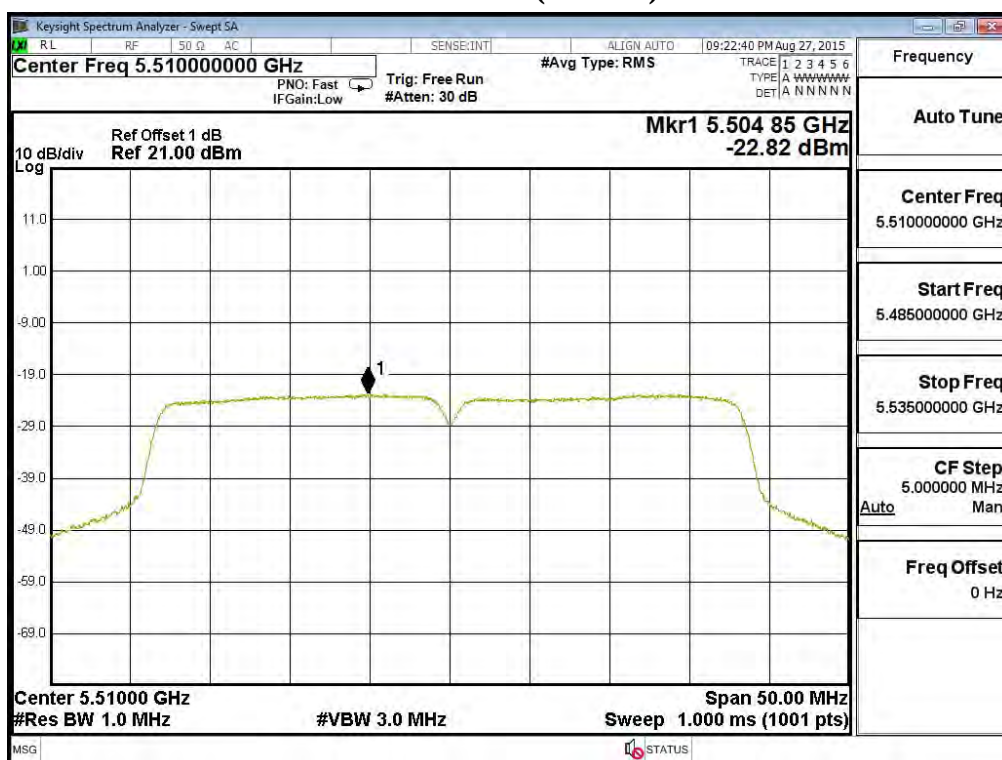
### Channel 54: (Chain B)



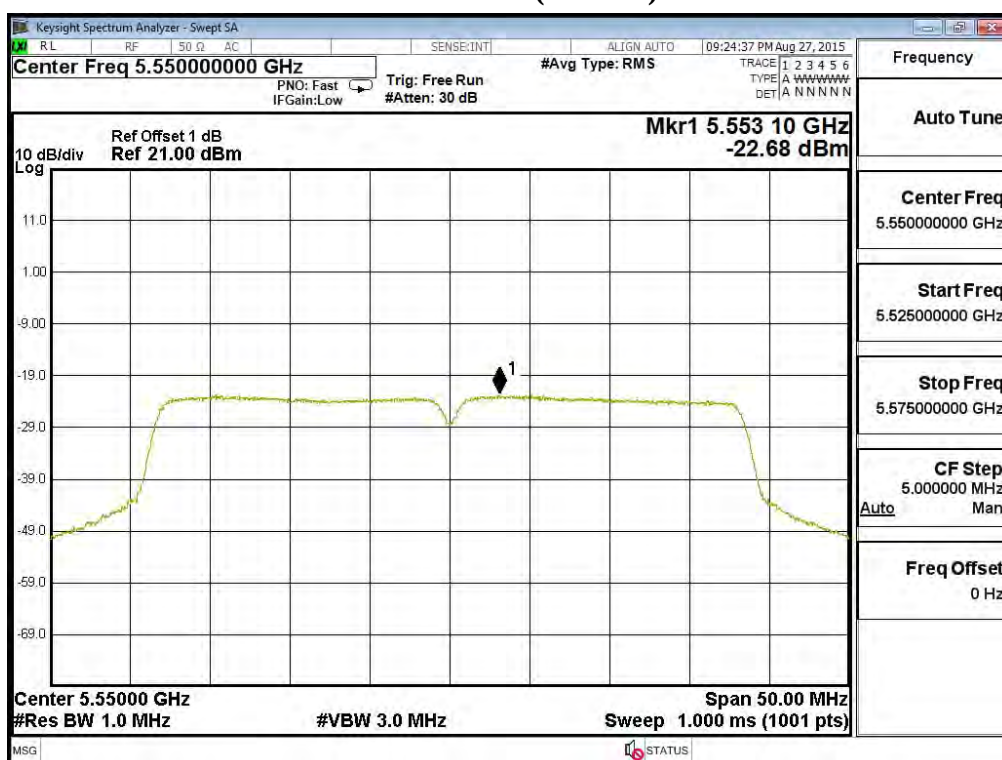
### Channel 62: (Chain B)



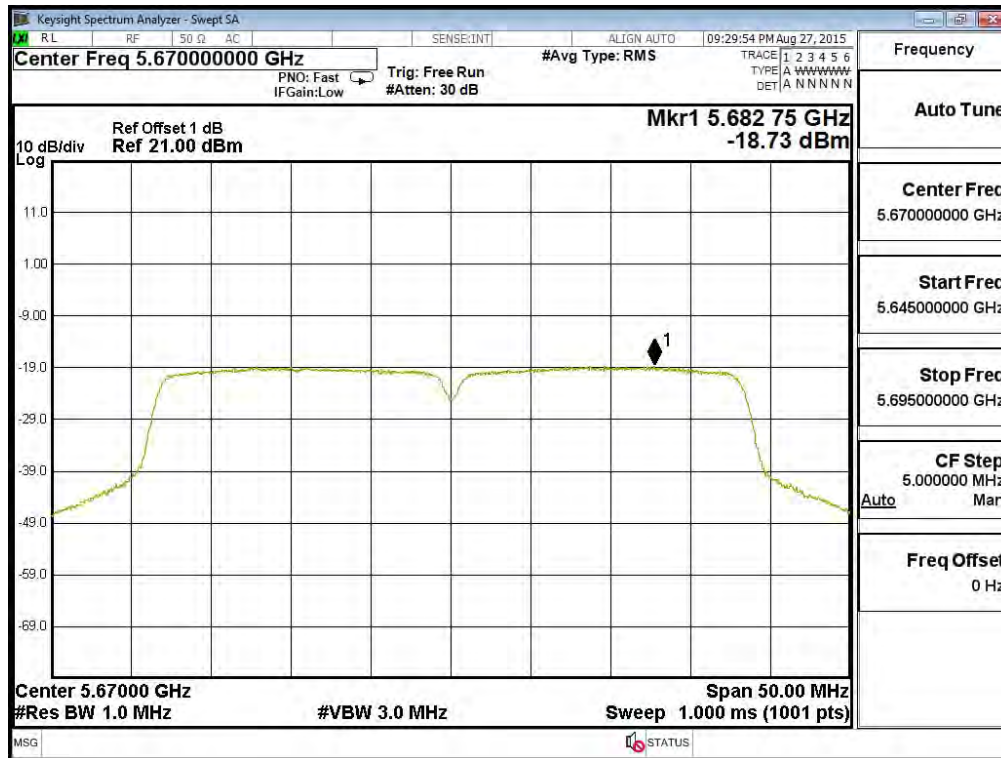
### Channel 102: (Chain B)



### Channel 110: (Chain B)



### Channel 134: (Chain B)



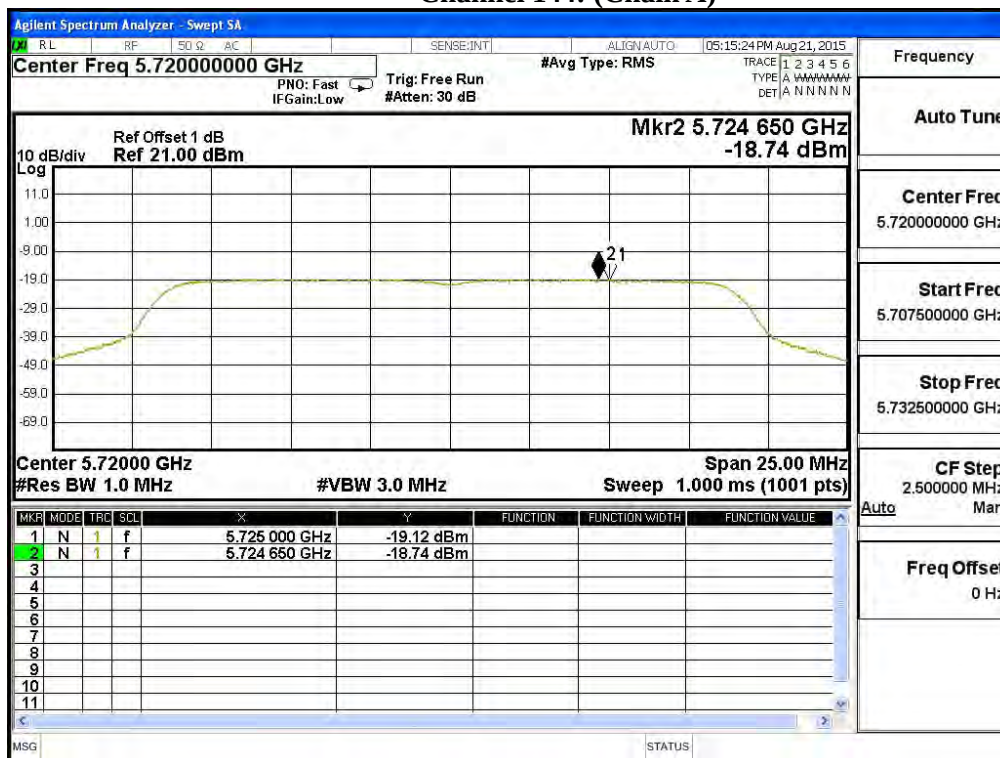
Product : 802.11 ac PCIe Module  
 Test Item : Peak Power Spectral Density  
 Test Site : No.3 OATS  
 Test Mode : Mode 22: Transmit (802.11ac-20BW-14.4Mbps)(Panel Antenna)

| Channel Number | Frequency (MHz) | Chain | PPSD (dBm) | BWCF (dB) | Total PPSD (dBm) | Required Limit (dBm) | Result |
|----------------|-----------------|-------|------------|-----------|------------------|----------------------|--------|
| 144            | 5720(Band3)     | A     | -18.740    | --        | -15.730          | -13                  | Pass   |
|                |                 | B     | -16.730    | --        | -13.720          | -13                  | Pass   |
| 144            | 5720(Band4)     | A     | -28.080    | 6.980     | -18.090          | 30                   | Pass   |
|                |                 | B     | -26.180    | 6.980     | -16.190          | 30                   | Pass   |

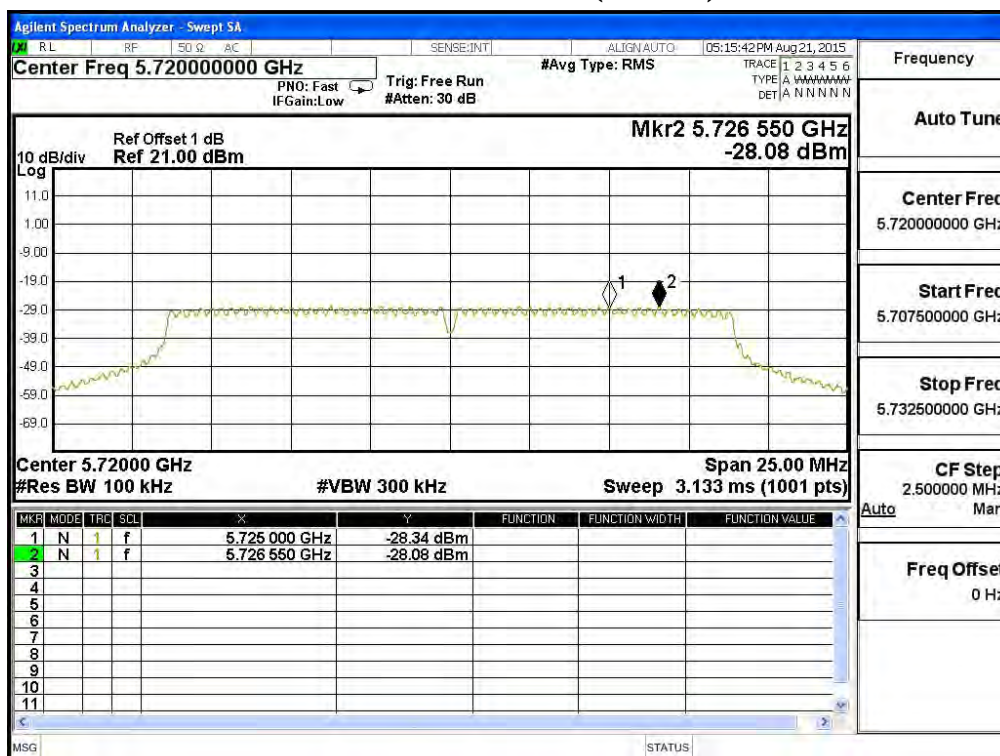
Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.

2.Total PPSD Value = PPSD/MHz value +  $10 \cdot \log 2$  (two antennas) + BWCF.

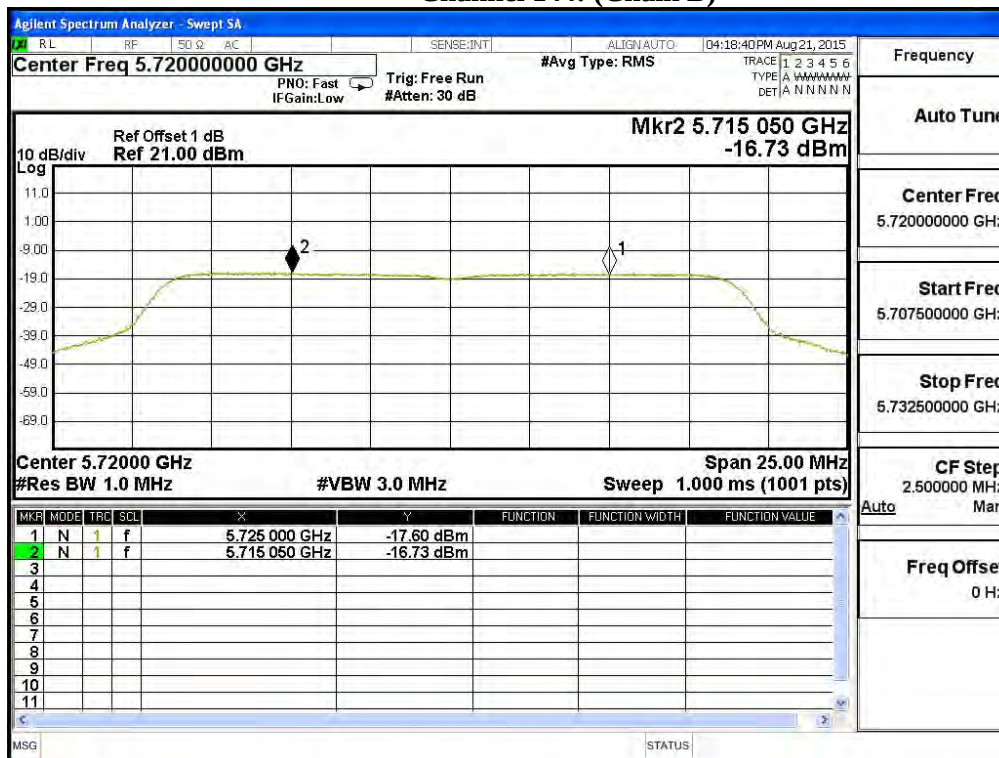
### Channel 144: (Chain A)



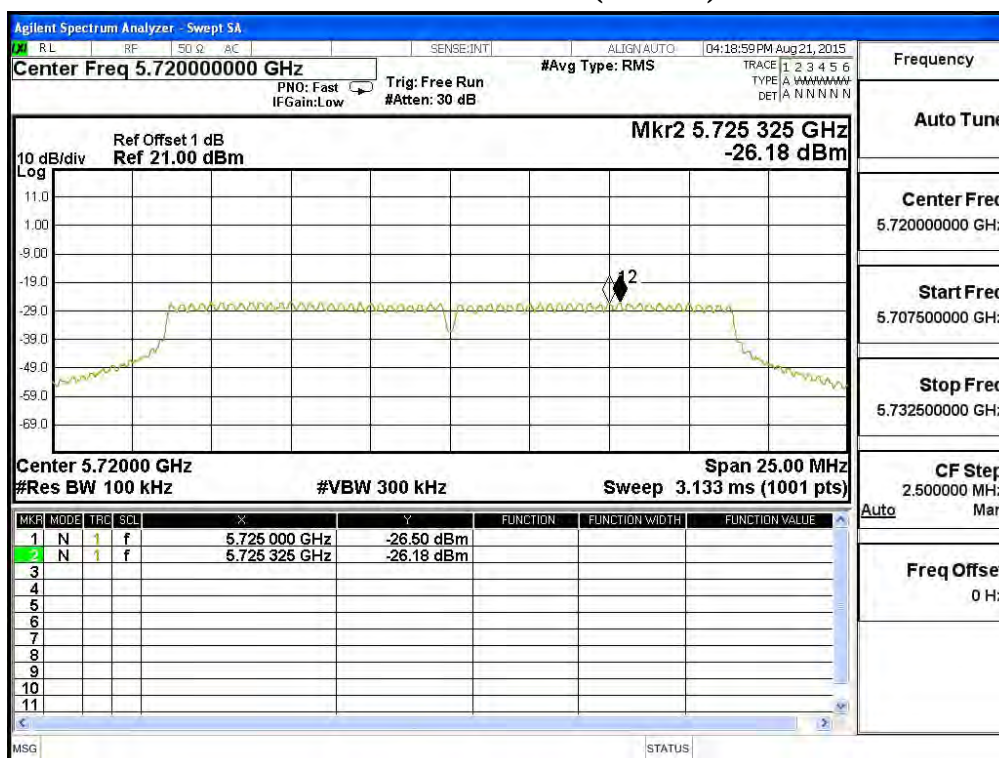
### Channel 144: (Chain A)



### Channel 144: (Chain B)



### Channel 144: (Chain B)

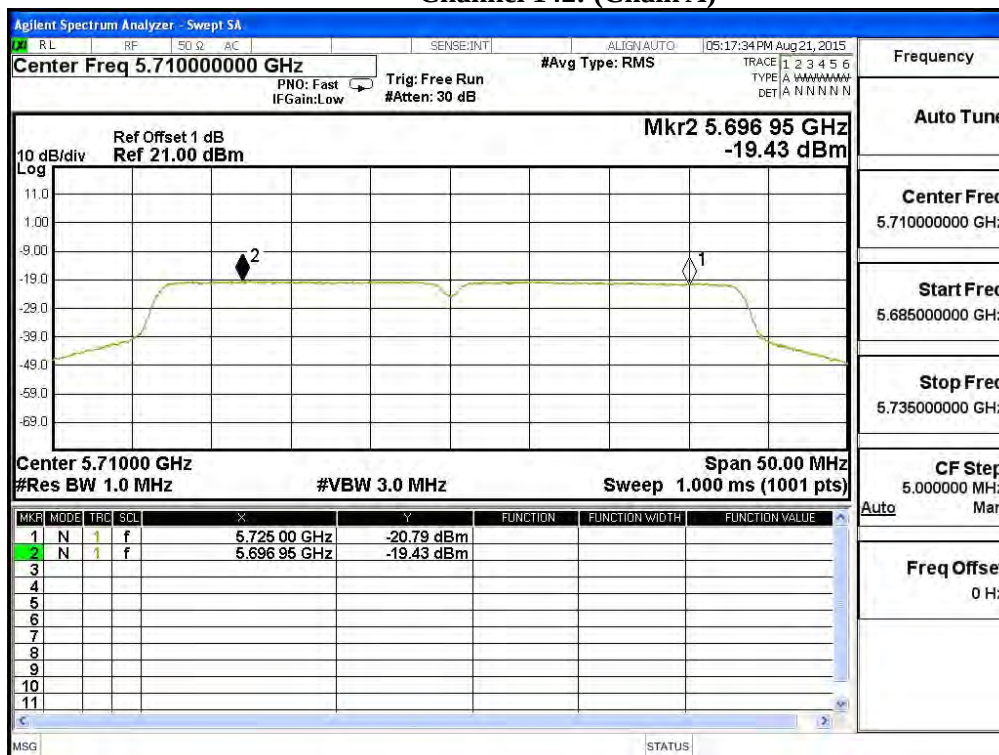


Product : 802.11 ac PCIE Module  
 Test Item : Peak Power Spectral Density  
 Test Site : No.3 OATS  
 Test Mode : Mode 23: Transmit (802.11ac-40BW-30Mbps)(Panel Antenna)

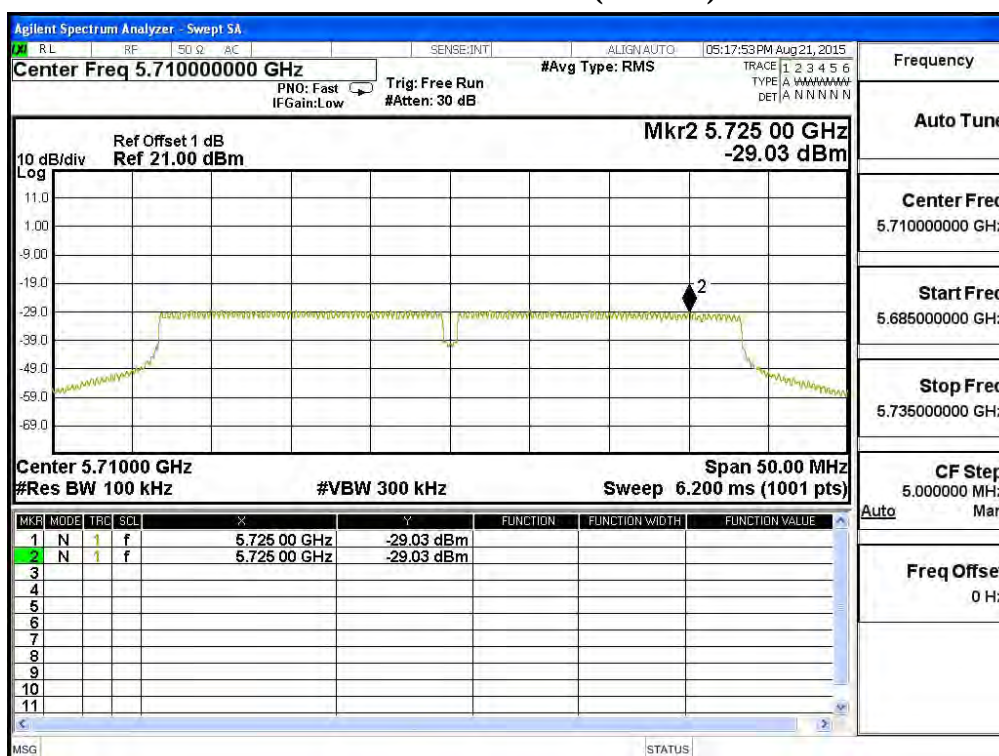
| Channel Number | Frequency (MHz) | Chain | PPSD (dBm) | BWCF (dB) | Total PSD (dBm) | Required Limit (dBm) | Result |
|----------------|-----------------|-------|------------|-----------|-----------------|----------------------|--------|
| 142            | 5710(Band3)     | A     | -19.430    | --        | -16.420         | -13                  | Pass   |
|                |                 | B     | -17.150    | --        | -14.140         | -13                  | Pass   |
| 142            | 5710(Band4)     | A     | -29.030    | 6.980     | -19.040         | 30                   | Pass   |
|                |                 | B     | -27.630    | 6.980     | -17.640         | 30                   | Pass   |

Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.  
 2.Total PSD Value = PSD/MHz value +  $10 \cdot \log 2$  (two antennas) + BWCF.

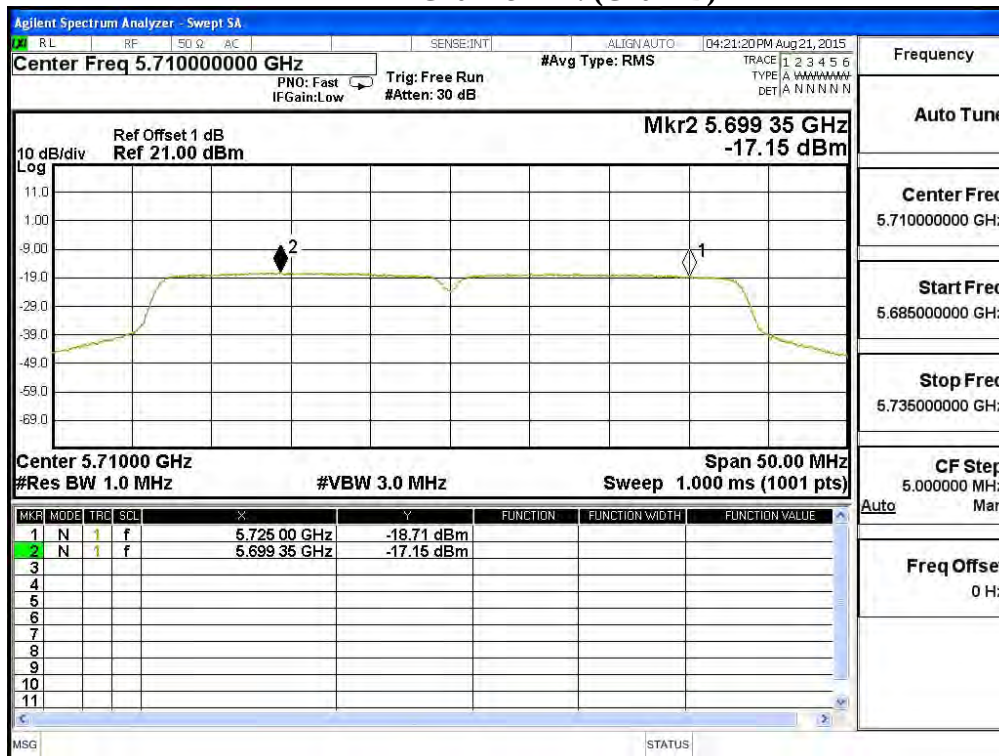
### Channel 142: (Chain A)



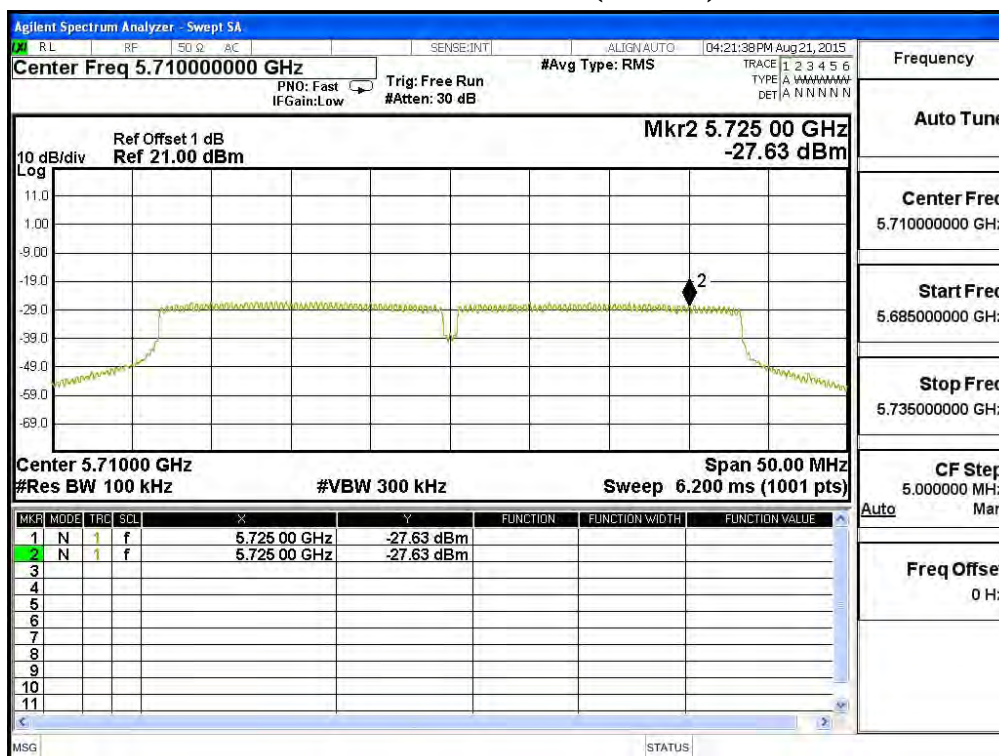
### Channel 142: (Chain A)



### Channel 142: (Chain B)



### Channel 142: (Chain B)



Product : 802.11 ac PCIe Module  
Test Item : Peak Power Spectral Density  
Test Site : No.3 OATS  
Test Mode : Mode 24: Transmit (802.11ac-80BW-65Mbps)(Panel Antenna)

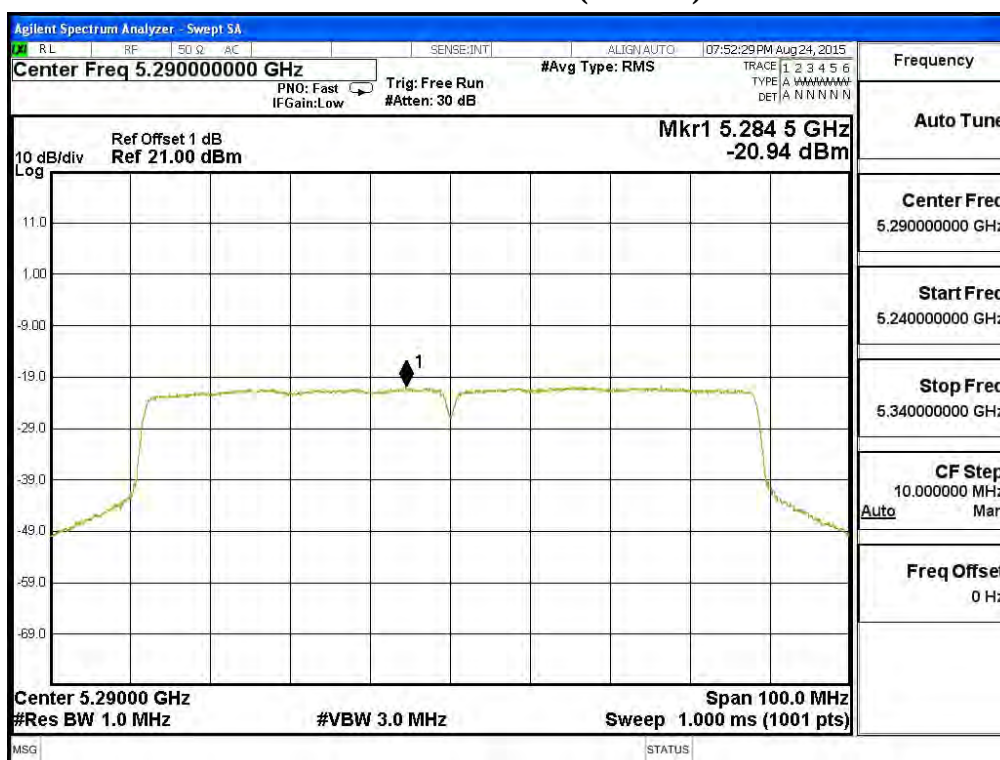
**5250~5350MHz, 5470-5600 MHz and 5650-5725 MHz**

| Channel Number | Frequency (MHz) | Chain | PPSD (dBm) | BWCF (dB) | Total PPSSD (dBm) <sub>1</sub> | Required Limit (dBm) | Result |
|----------------|-----------------|-------|------------|-----------|--------------------------------|----------------------|--------|
| 58             | 5290            | A     | -20.944    | --        | -17.934                        | -13                  | Pass   |
|                |                 | B     | -22.616    | --        | -19.606                        | -13                  | Pass   |
| 106            | 5530            | A     | -20.241    | --        | -17.231                        | -13                  | Pass   |
|                |                 | B     | -25.557    | --        | -22.547                        | -13                  | Pass   |
| 122            | 5610            | A     | -16.830    | --        | -13.820                        | -13                  | Pass   |
|                |                 | B     | -16.900    | --        | -13.890                        | -13                  | Pass   |
| 138            | 5690 (Band3)    | A     | -20.110    | --        | -17.100                        | -13                  | Pass   |
|                |                 | B     | -21.100    | --        | -18.090                        | -13                  | Pass   |
| 138            | 5690 (Band4)    | A     | -31.320    | 6.980     | -21.330                        | 30                   | Pass   |
|                |                 | B     | -29.980    | 6.980     | -19.990                        | 30                   | Pass   |

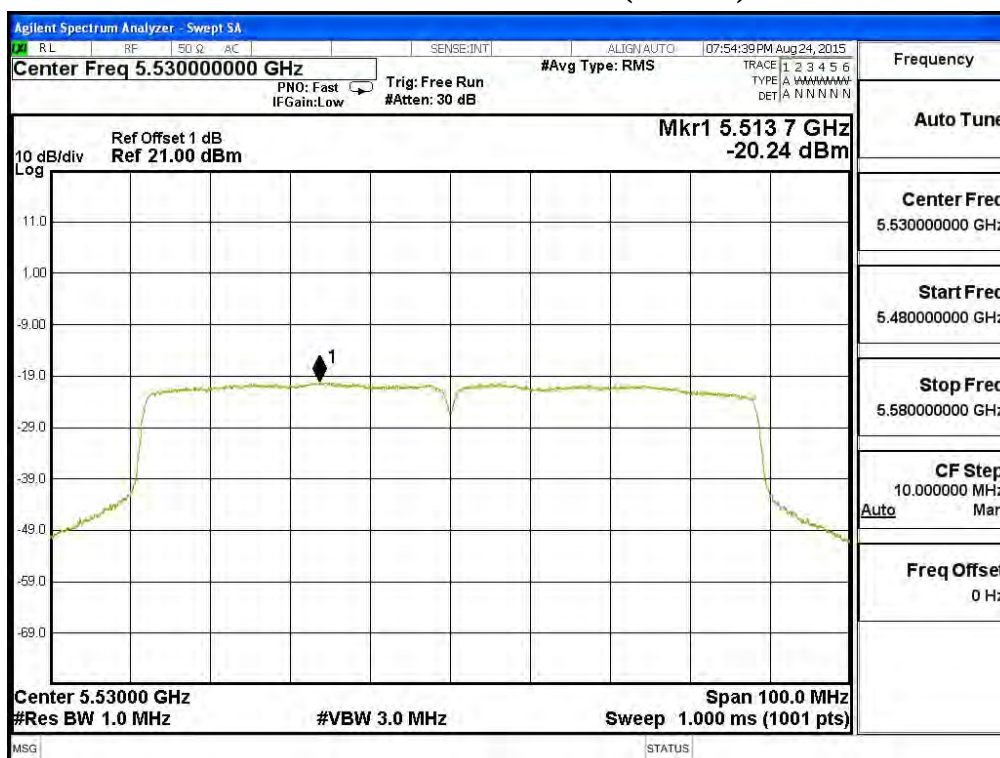
Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.

2.Total PPSSD Value = PPSSD/MHz value +  $10 \cdot \log 2$  (two antennas)

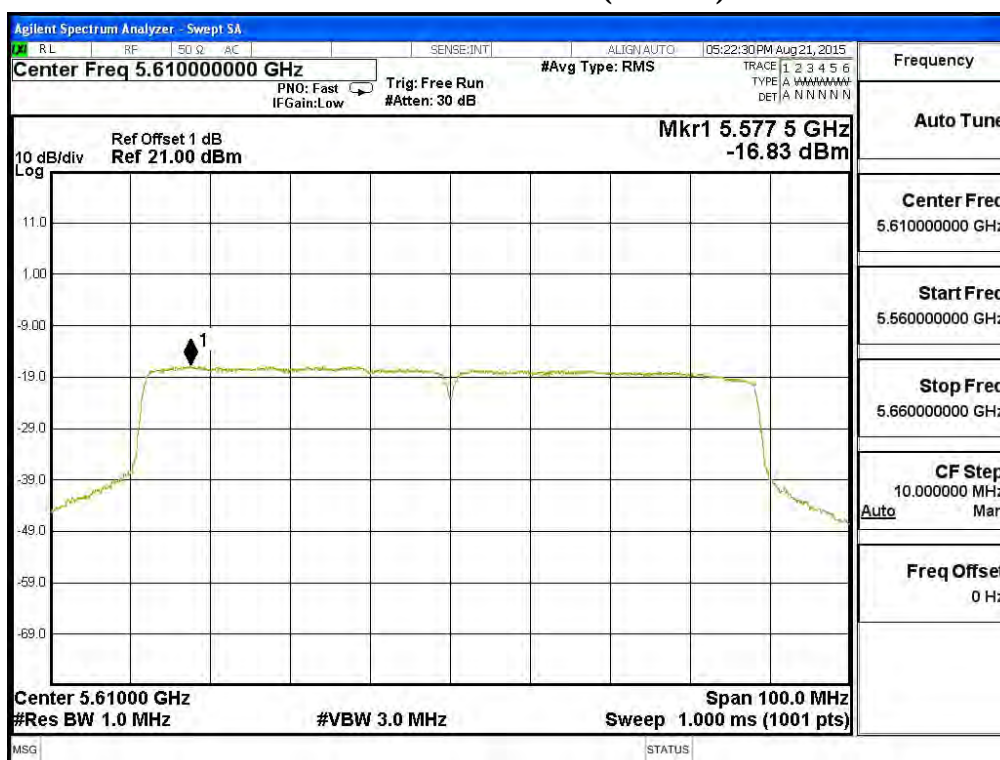
### Channel 58: (Chain A)



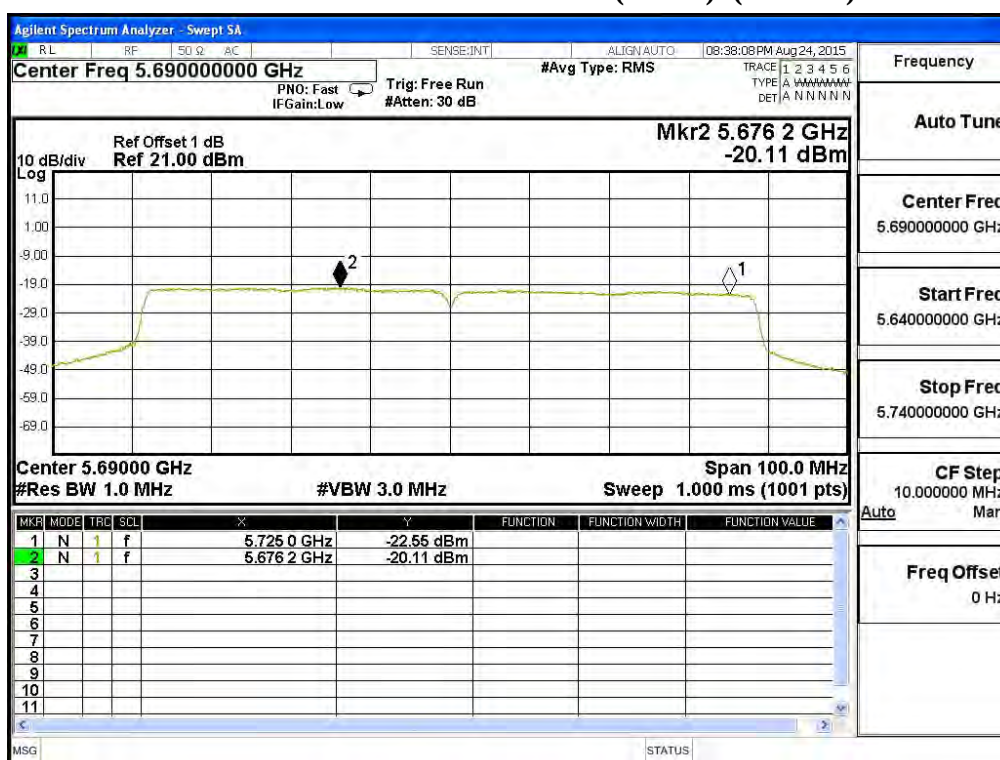
### Channel 106: (Chain A)



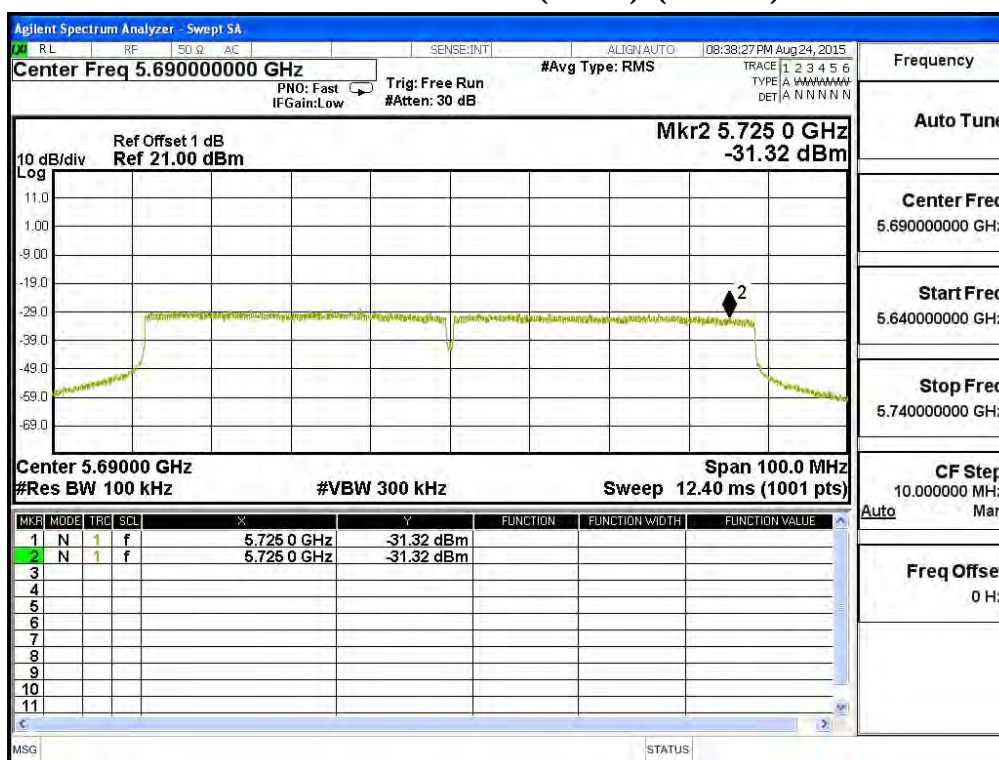
### Channel 122: (Chain A)



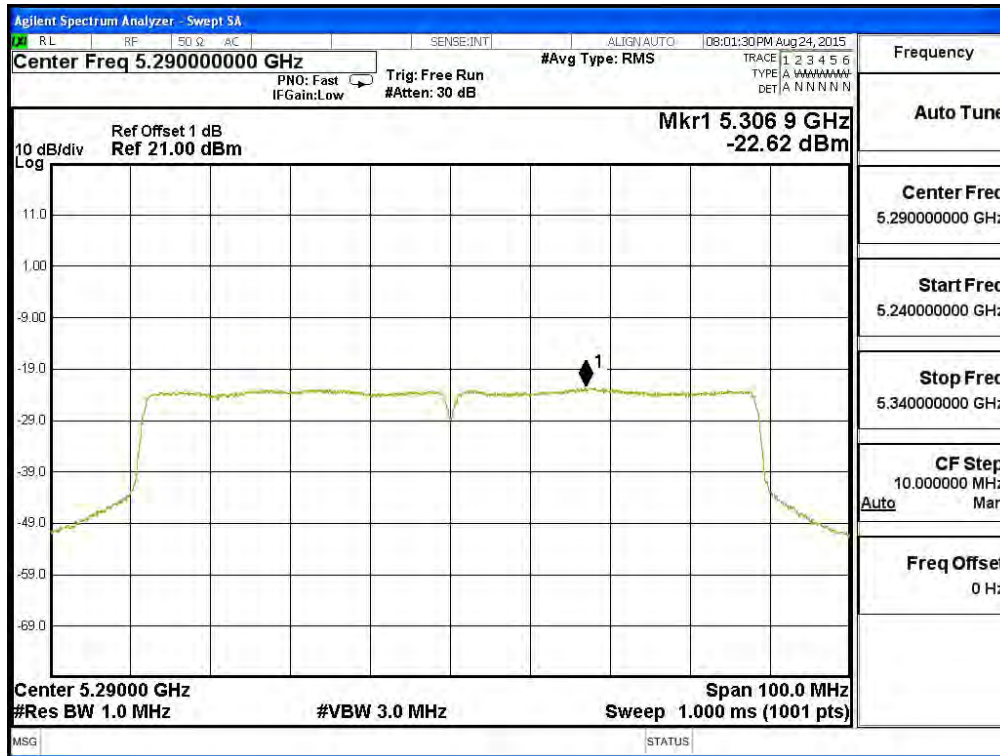
### Channel 138 (Band3): (Chain A)



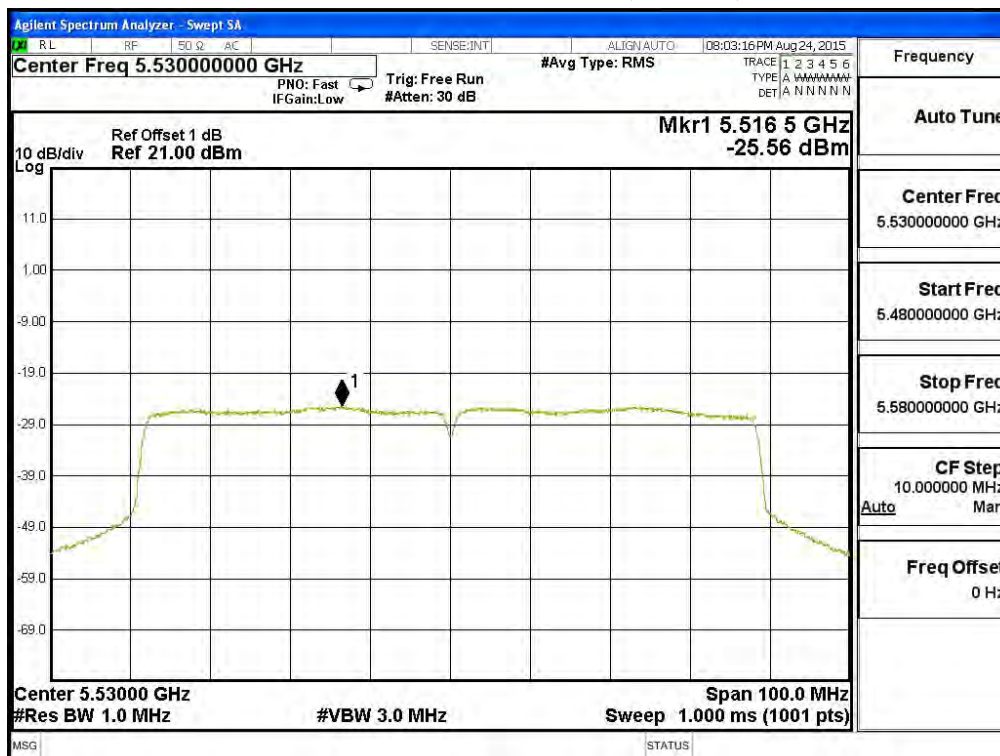
### Channel 138 (Band4): (Chain A)



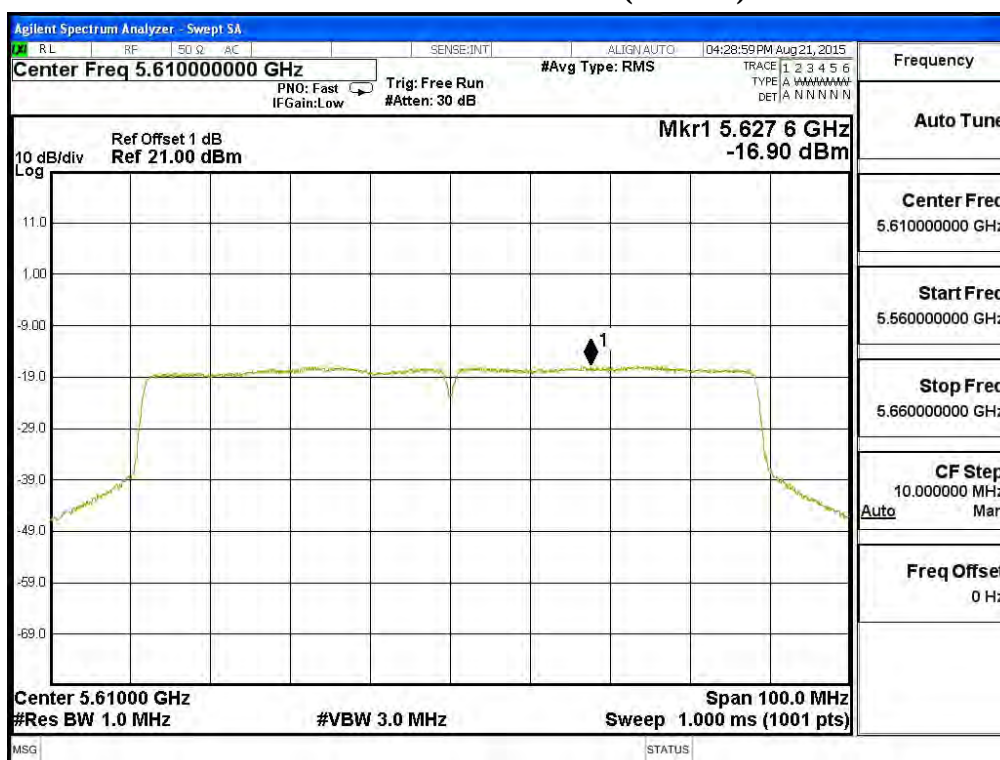
### Channel 58: (Chain B)



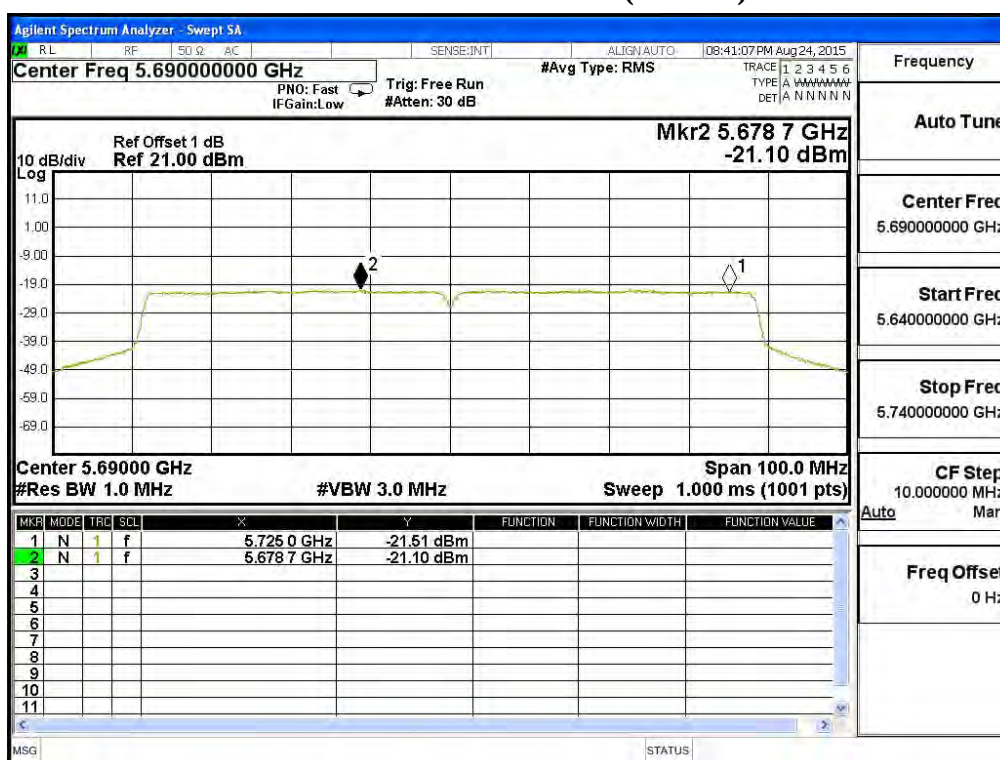
### Channel 106: (Chain B)



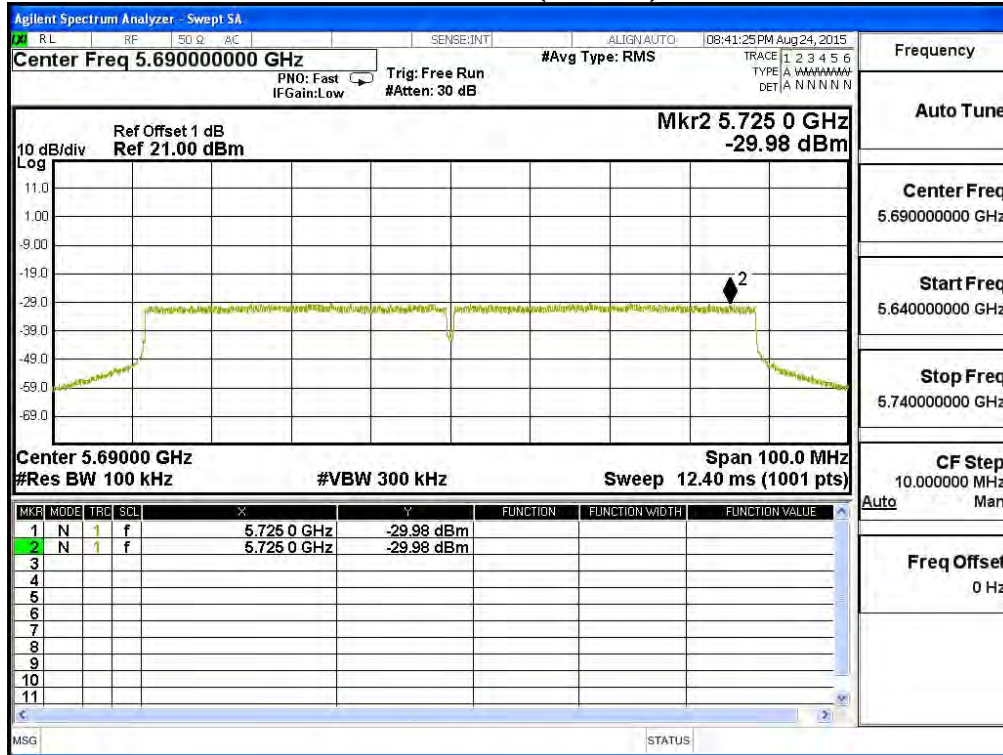
### Channel 122: (Chain B)



### Channel 138: (Chain B)



### Channel 138: (Chain B)



Product : 802.11 ac PCIe Module  
Test Item : Peak Power Spectral Density  
Test Site : No.3 OATS  
Test Mode : Mode 25: Transmit (802.11a-6Mbps)(Sector Antenna)

**5250~5350MHz, 5470-5600 MHz and 5650-5725 MHz**

| Channel Number | Frequency (MHz) | Chain | PPSD/MHz (dBm) | Total PPSP/MHz (dBm) | Required Limit (dBm) | Result |
|----------------|-----------------|-------|----------------|----------------------|----------------------|--------|
| 52             | 5260            | A     | -12.400        | -9.390               | -3                   | Pass   |
|                |                 | B     | -13.190        | -10.180              | -3                   | Pass   |
| 60             | 5300            | A     | -12.803        | -9.793               | -3                   | Pass   |
|                |                 | B     | -13.853        | -10.843              | -3                   | Pass   |
| 64             | 5320            | A     | -12.386        | -9.376               | -3                   | Pass   |
|                |                 | B     | -13.868        | -10.858              | -3                   | Pass   |
| 100            | 5500            | A     | -7.517         | -4.507               | -3                   | Pass   |
|                |                 | B     | -12.325        | -9.315               | -3                   | Pass   |
| 116            | 5580            | A     | -8.030         | -5.020               | -3                   | Pass   |
|                |                 | B     | -12.406        | -9.396               | -3                   | Pass   |
| 140            | 5700            | A     | -10.135        | -7.125               | -3                   | Pass   |
|                |                 | B     | -8.840         | -5.830               | -3                   | Pass   |

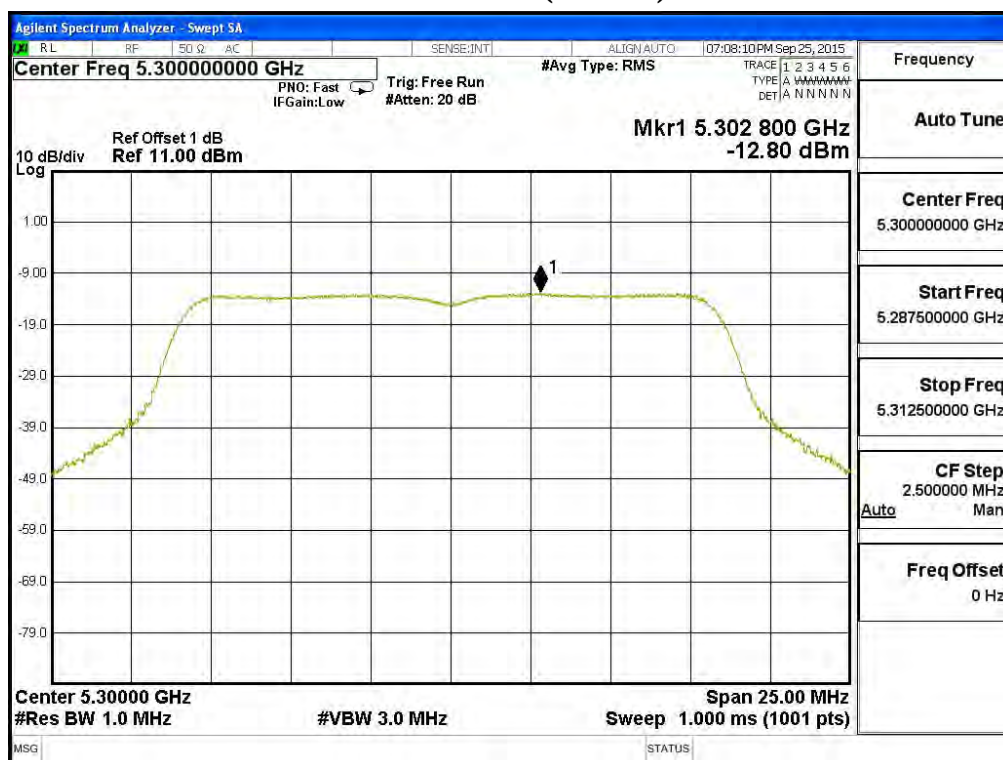
Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.

2.Total PPSP Value = PPSP/MHz value +  $10 \cdot \log 2$  (two antennas).

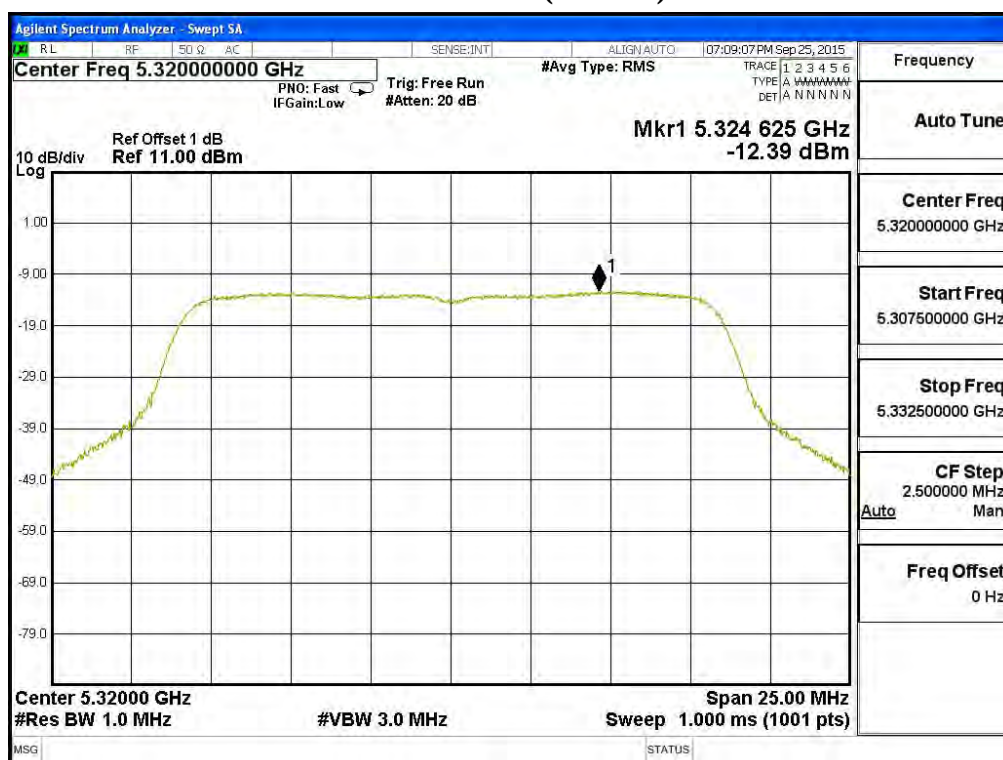
### Channel 52: (Chain A)



### Channel 60: (Chain A)



### Channel 64: (Chain A)



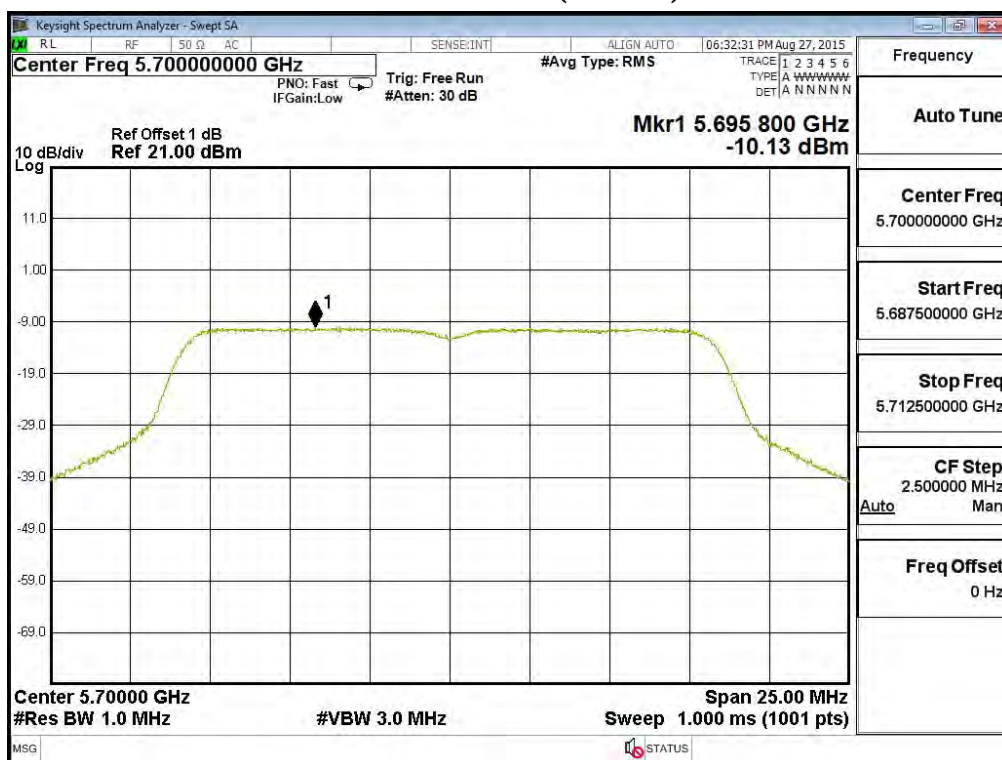
### Channel 100: (Chain A)



### Channel 116: (Chain A)



### Channel 140: (Chain A)



### Channel 52: (Chain B)



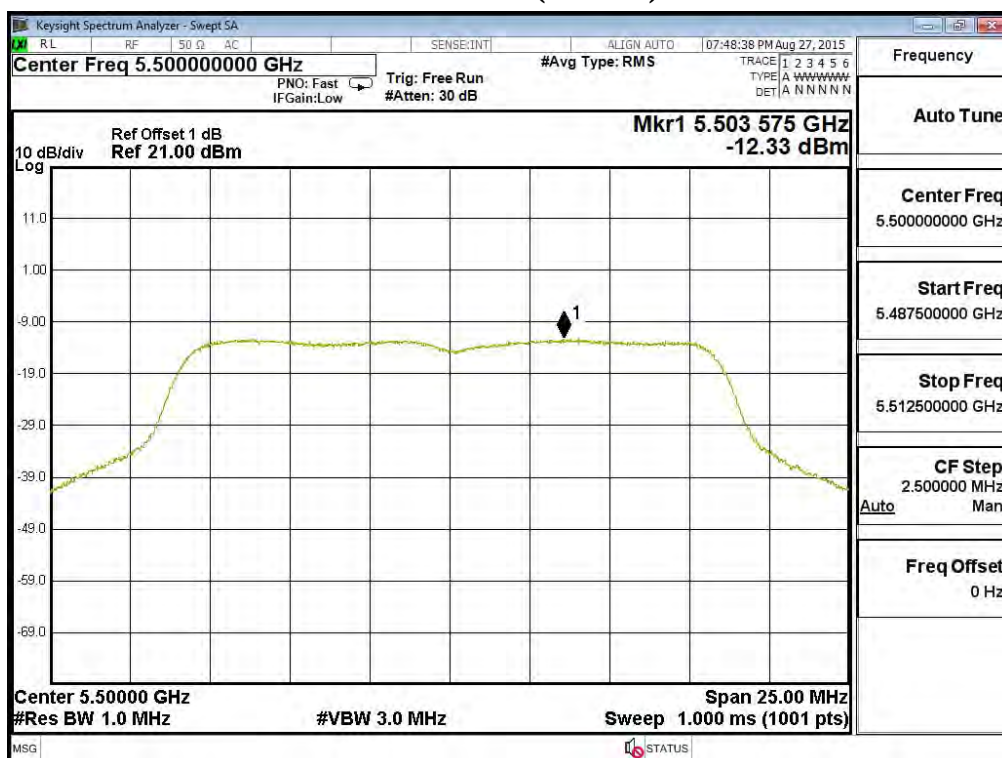
### Channel 60: (Chain B)



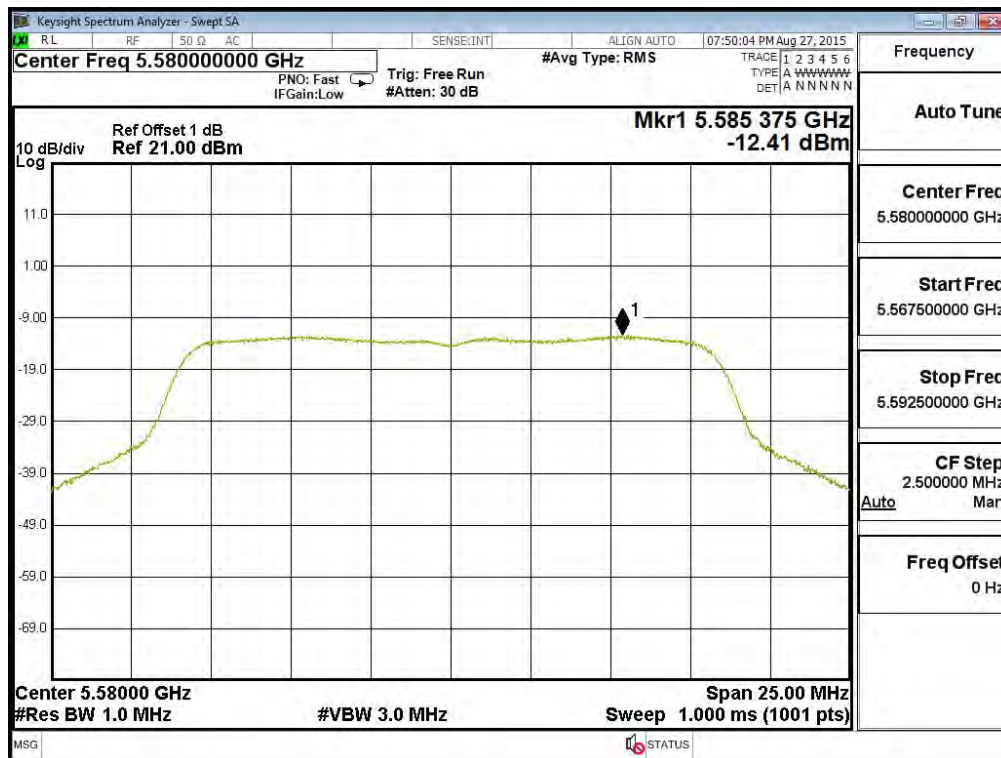
### Channel 64: (Chain B)



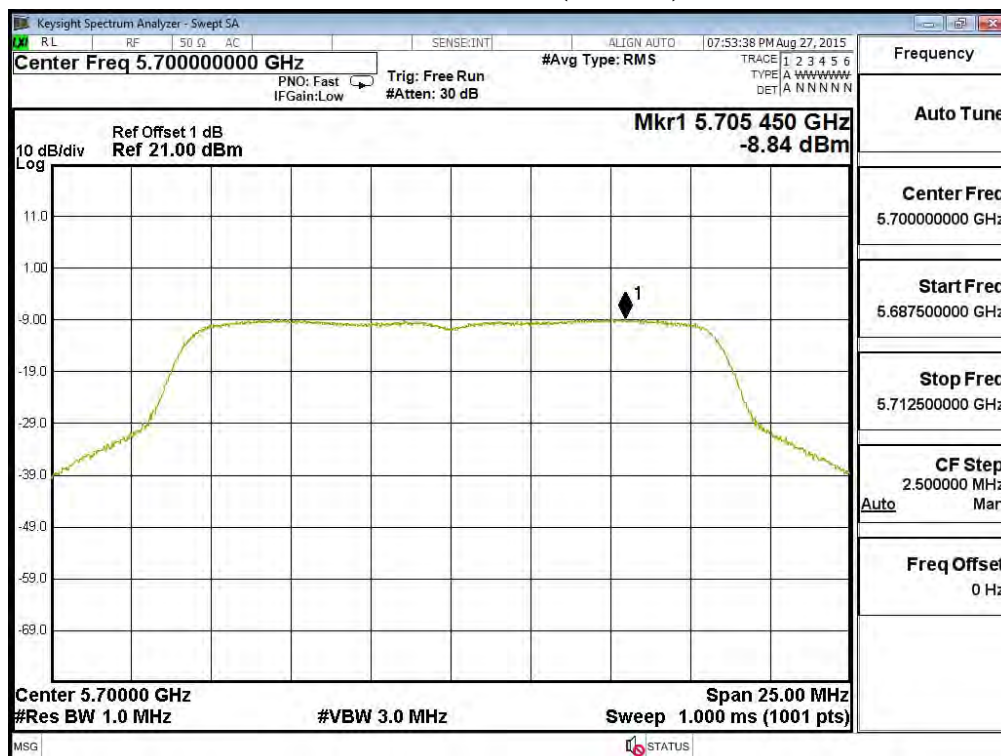
### Channel 100: (Chain B)



### Channel 116: (Chain B)



### Channel 140: (Chain B)



Product : 802.11 ac PCie Module  
Test Item : Peak Power Spectral Density  
Test Site : No.3 OATS  
Test Mode : Mode 26: Transmit (802.11n-20BW 14.4Mbps)(Sector Antenna)

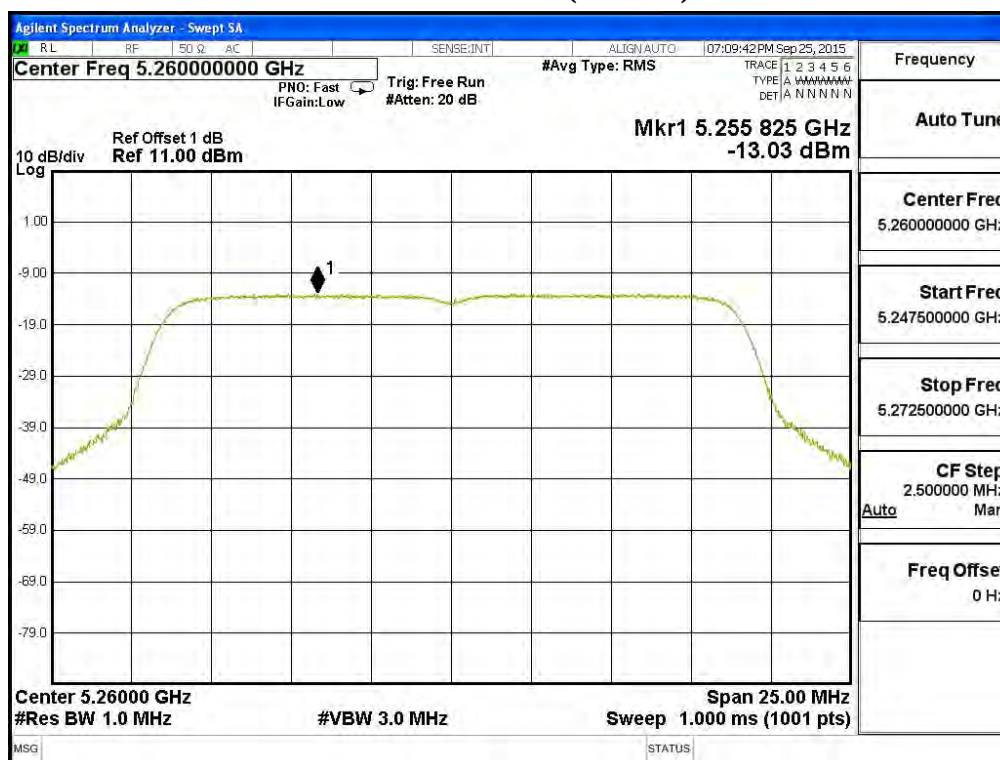
**5250~5350MHz, 5470-5600 MHz and 5650-5725 MHz**

| Channel Number | Frequency (MHz) | Chain | PPSD/MHz (dBm) | Total PPSP/MHz (dBm) | Required Limit (dBm) | Result |
|----------------|-----------------|-------|----------------|----------------------|----------------------|--------|
| 52             | 5260            | A     | -13.034        | -10.024              | -3                   | Pass   |
|                |                 | B     | -13.514        | -10.504              | -3                   | Pass   |
| 60             | 5300            | A     | -12.875        | -9.865               | -3                   | Pass   |
|                |                 | B     | -14.299        | -11.289              | -3                   | Pass   |
| 64             | 5320            | A     | -12.818        | -9.808               | -3                   | Pass   |
|                |                 | B     | -14.194        | -11.184              | -3                   | Pass   |
| 100            | 5500            | A     | -8.439         | -5.429               | -3                   | Pass   |
|                |                 | B     | -12.654        | -9.644               | -3                   | Pass   |
| 116            | 5580            | A     | -7.800         | -4.790               | -3                   | Pass   |
|                |                 | B     | -11.991        | -8.981               | -3                   | Pass   |
| 140            | 5700            | A     | -10.588        | -7.578               | -3                   | Pass   |
|                |                 | B     | -9.332         | -6.322               | -3                   | Pass   |

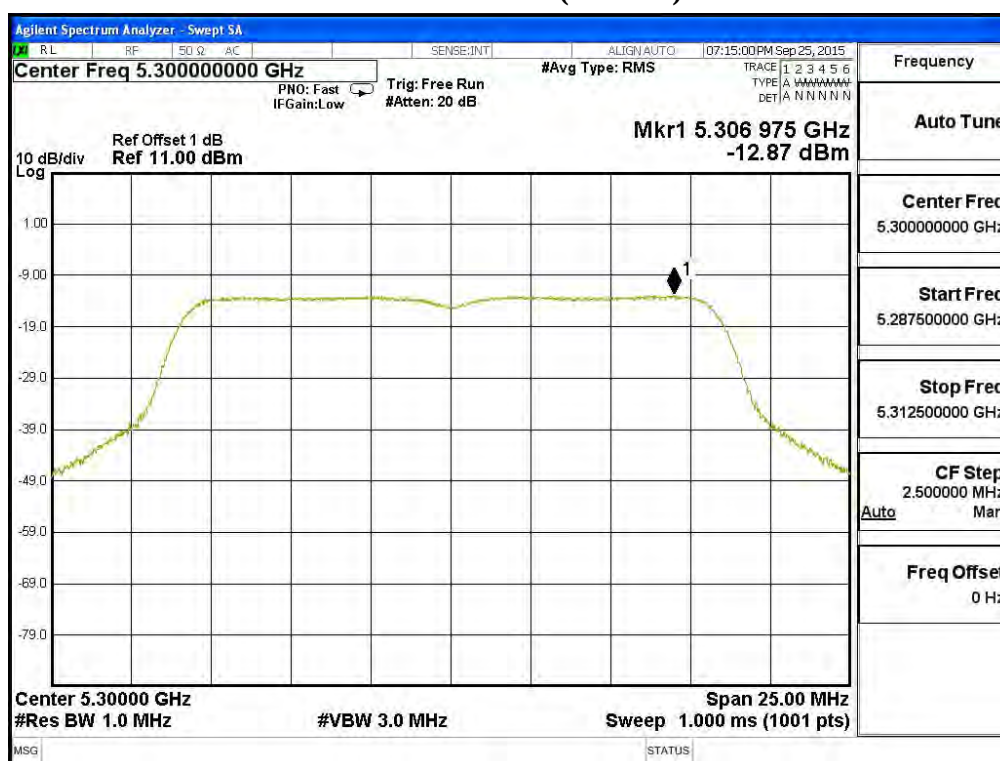
Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.

2.Total PPSP Value = PPSP/MHz value +  $10 \cdot \log 2$  (two antennas).

### Channel 52: (Chain A)



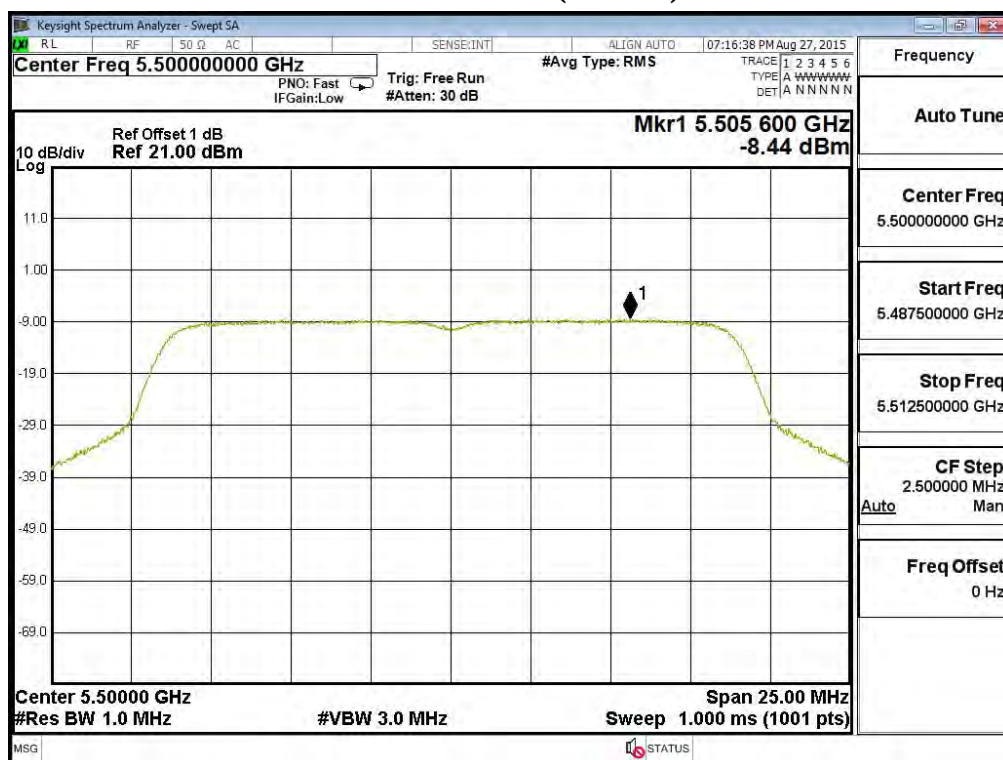
### Channel 60: (Chain A)



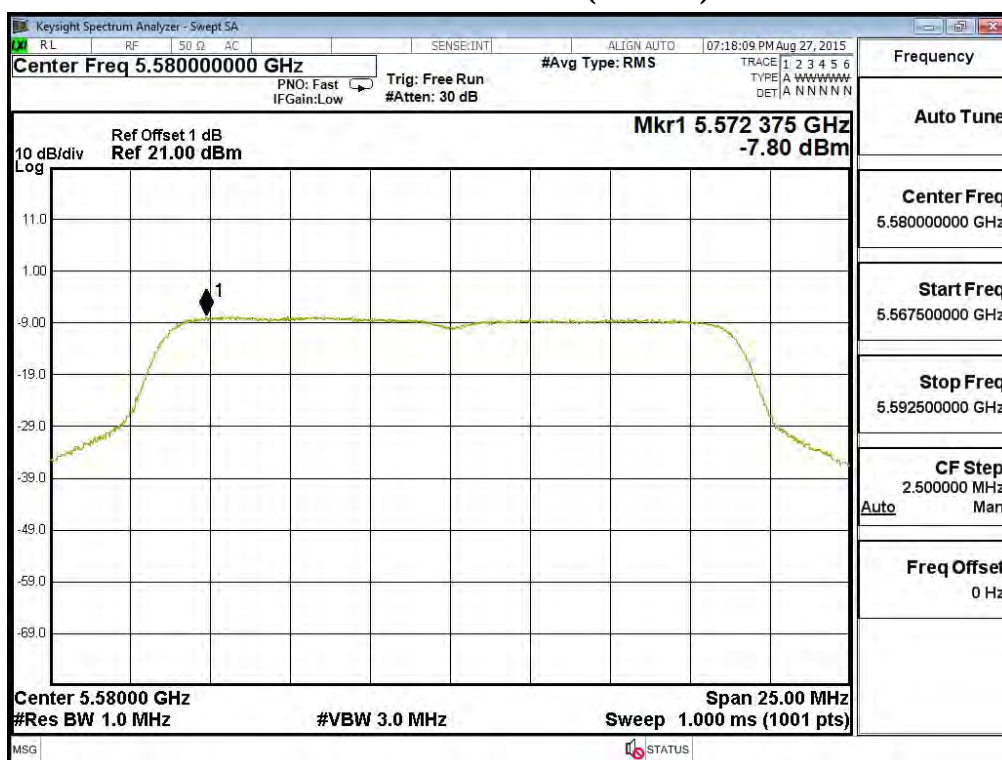
### Channel 64: (Chain A)



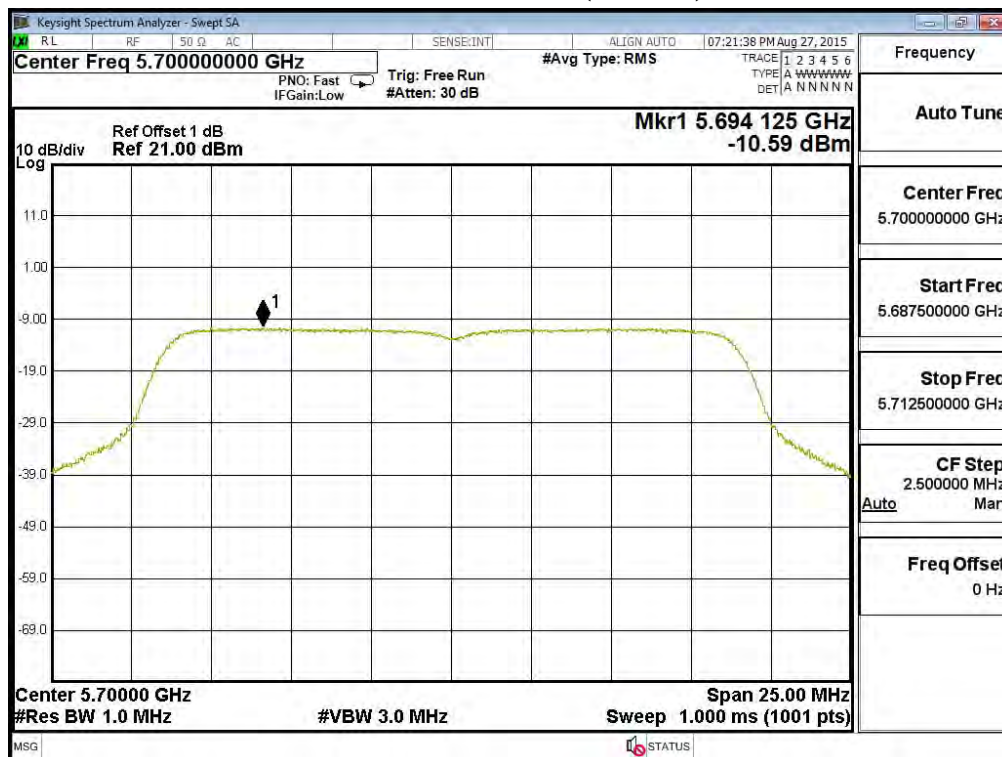
### Channel 100: (Chain A)



### Channel 116: (Chain A)



### Channel 140: (Chain A)



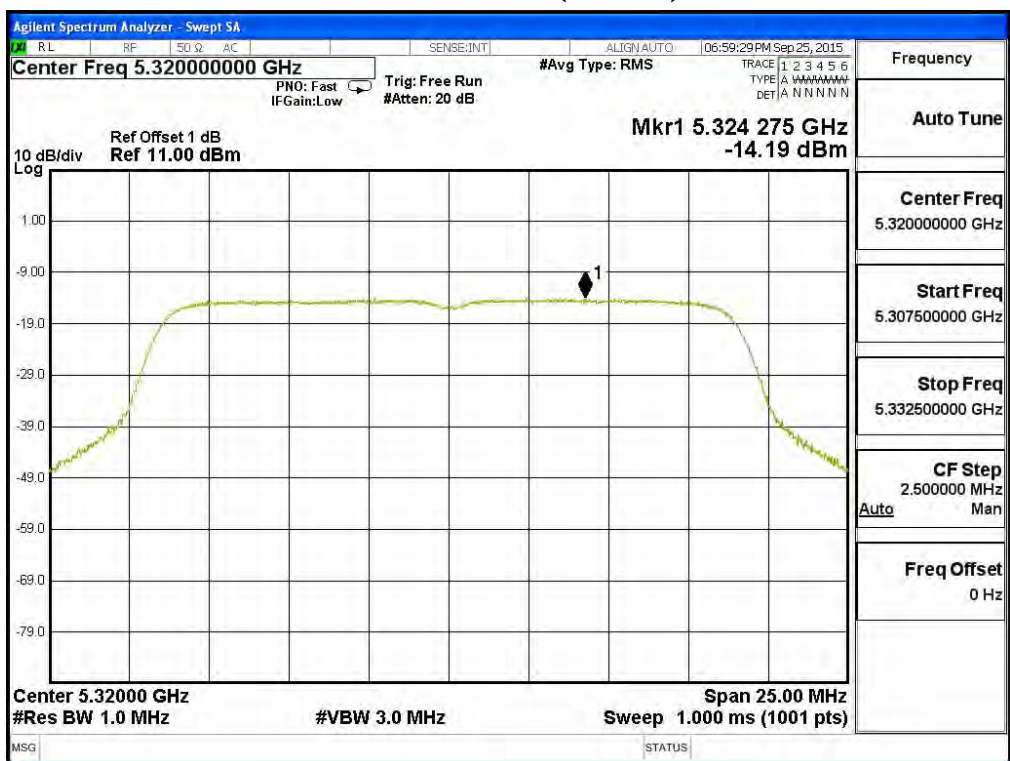
### Channel 52: (Chain B)



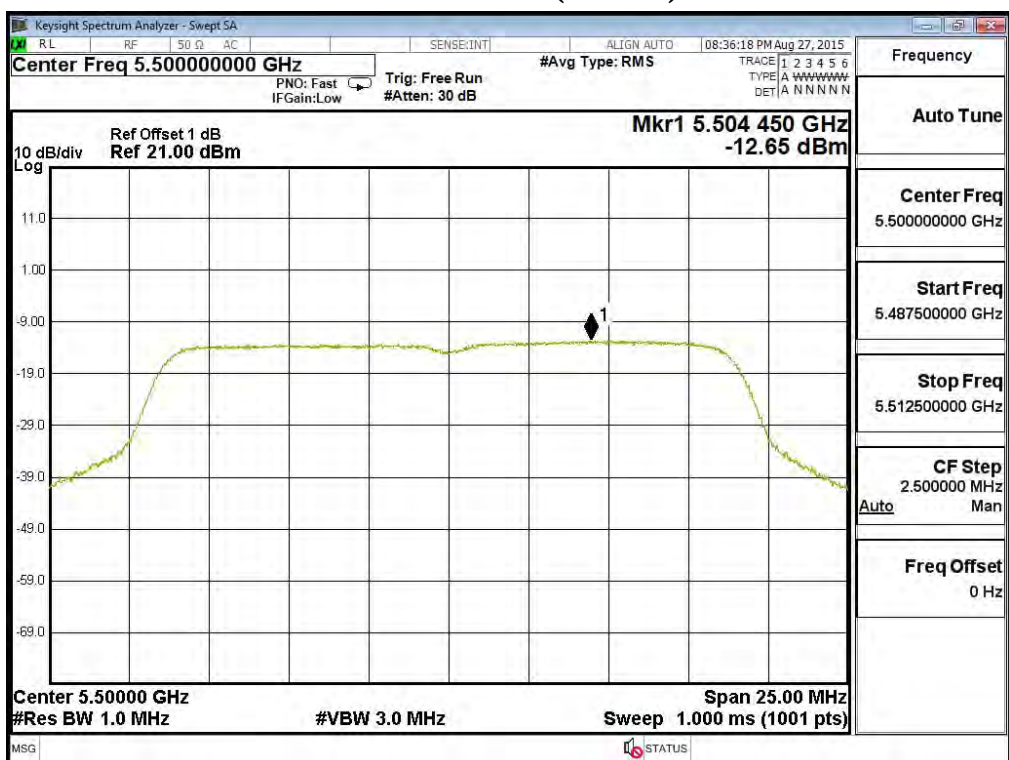
### Channel 60: (Chain B)



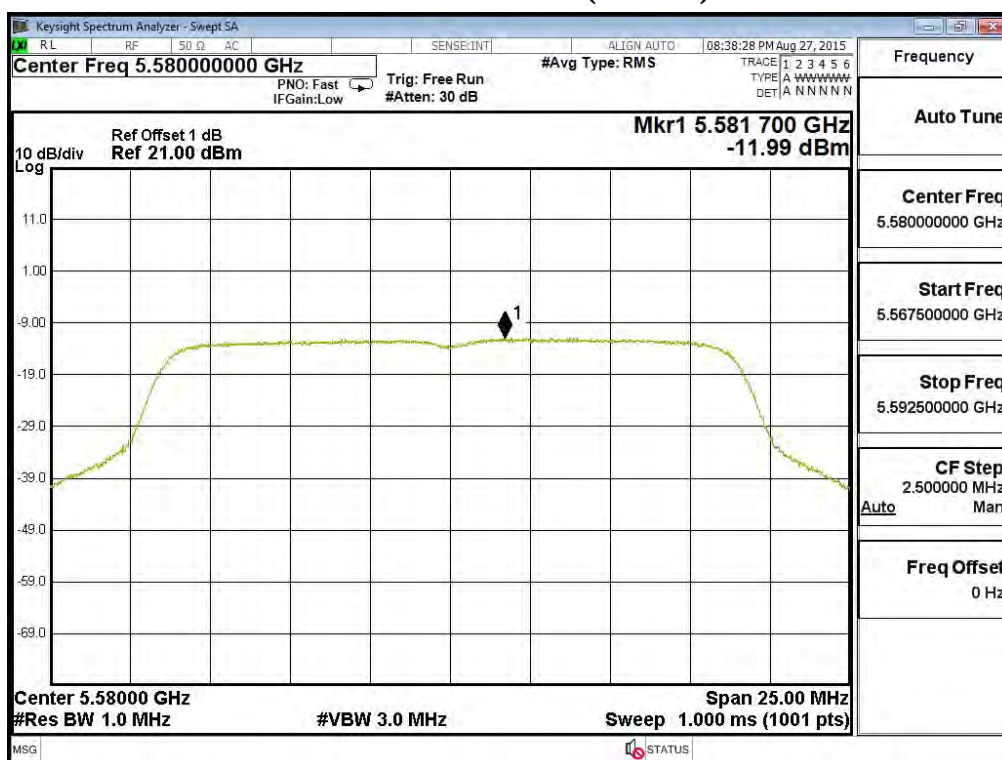
### Channel 64: (Chain B)



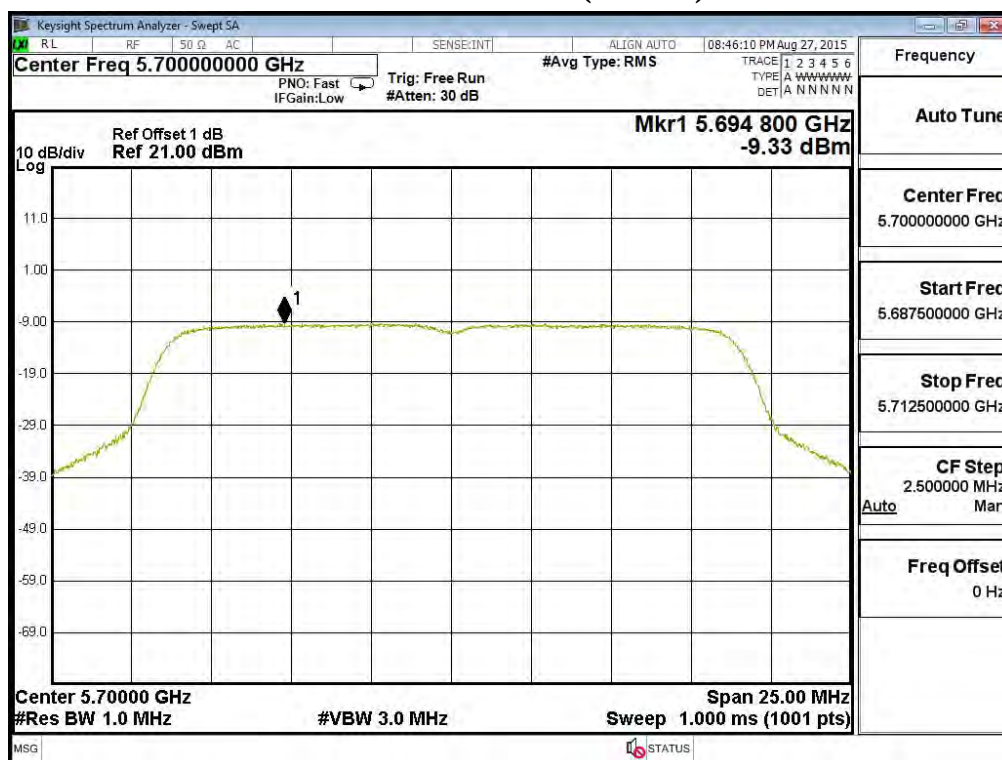
### Channel 100: (Chain B)



### Channel 116: (Chain B)



### Channel 140: (Chain B)



Product : 802.11 ac PCie Module  
Test Item : Peak Power Spectral Density  
Test Site : No.3 OATS  
Test Mode : Mode 27: Transmit (802.11n-40BW 30Mbps)(Sector Antenna)

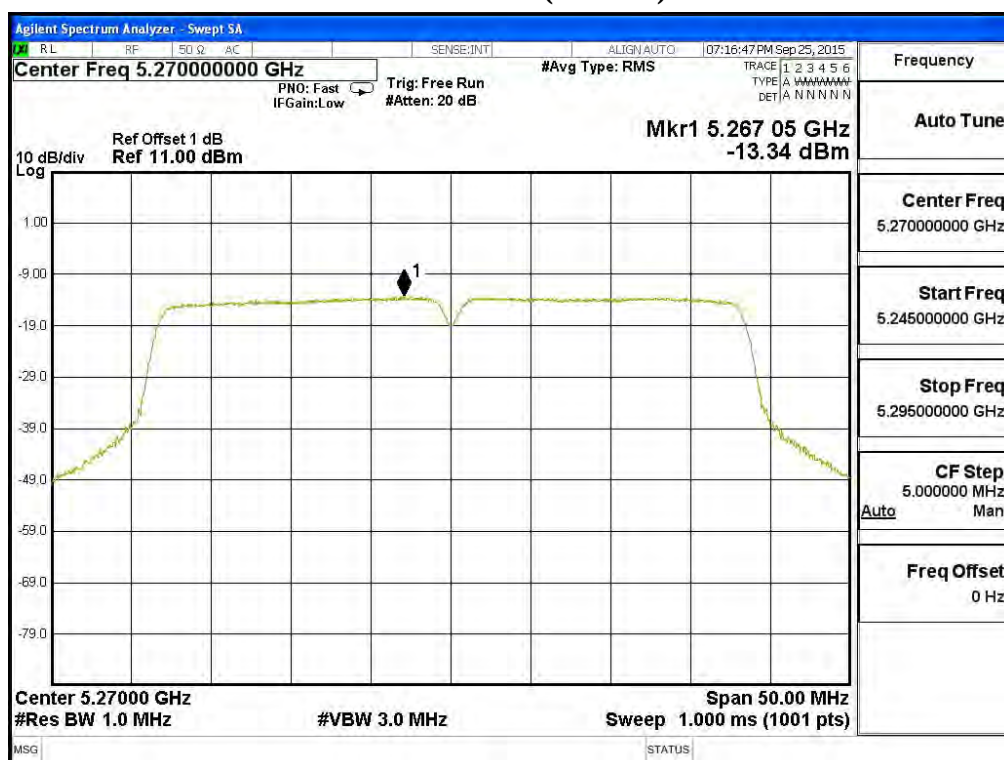
**5250~5350MHz, 5470-5600 MHz and 5650-5725 MHz**

| Channel Number | Frequency (MHz) | Chain | PPSD/MHz (dBm) | Total PPSD/MHz (dBm) | Required Limit (dBm) | Result |
|----------------|-----------------|-------|----------------|----------------------|----------------------|--------|
| 54             | 5270            | A     | -13.338        | -10.328              | -3                   | Pass   |
|                |                 | B     | -13.801        | -10.791              | -3                   | Pass   |
| 62             | 5310            | A     | -12.361        | -9.351               | -3                   | Pass   |
|                |                 | B     | -13.711        | -10.701              | -3                   | Pass   |
| 102            | 5510            | A     | -11.172        | -8.162               | -3                   | Pass   |
|                |                 | B     | -16.116        | -13.106              | -3                   | Pass   |
| 110            | 5550            | A     | -11.128        | -8.118               | -3                   | Pass   |
|                |                 | B     | -16.331        | -13.321              | -3                   | Pass   |
| 134            | 5670            | A     | -12.018        | -9.008               | -3                   | Pass   |
|                |                 | B     | -12.009        | -8.999               | -3                   | Pass   |

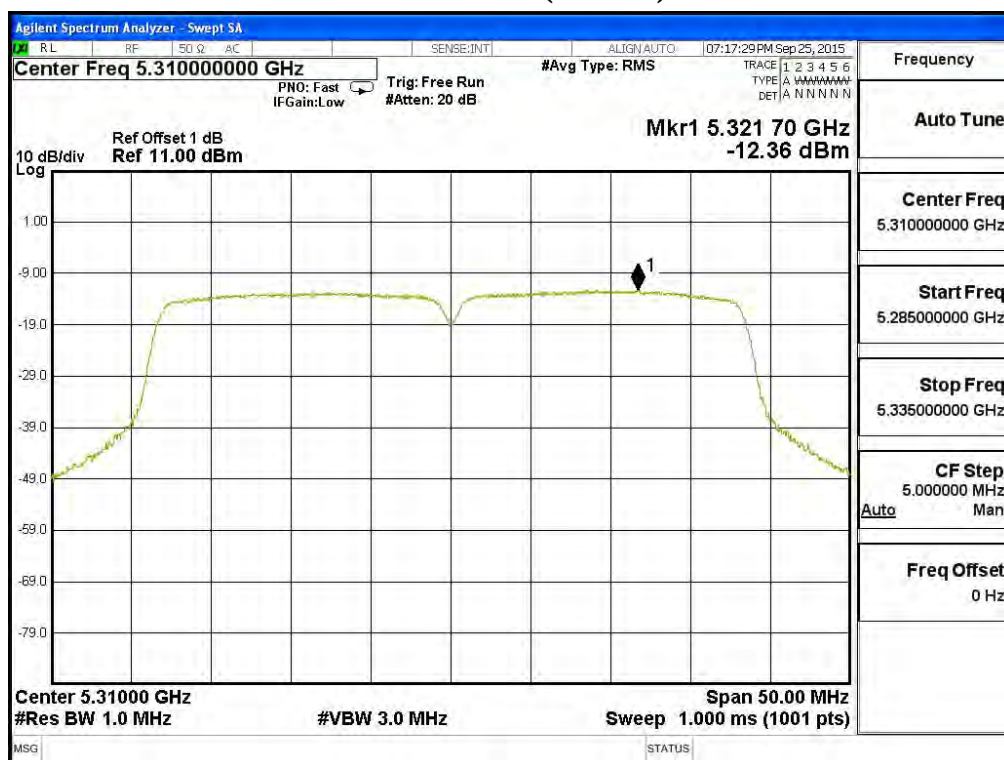
Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.

2. Total PPSD Value = PPSD/MHz value +  $10 \cdot \log 2$  (two antennas).

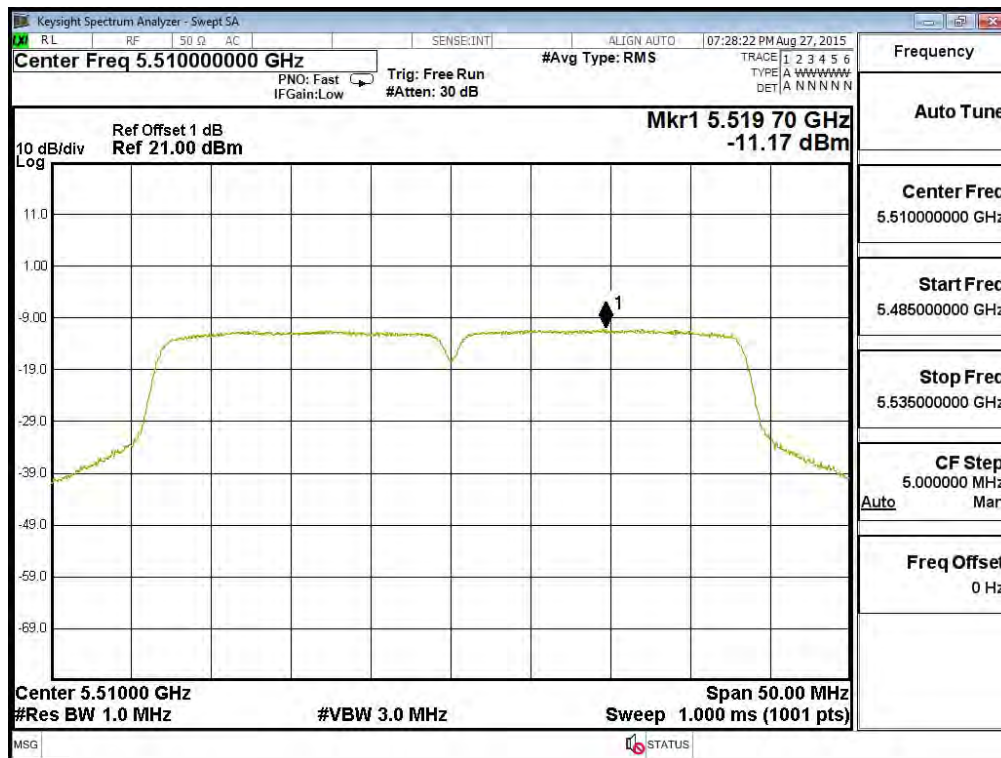
### Channel 54: (Chain A)



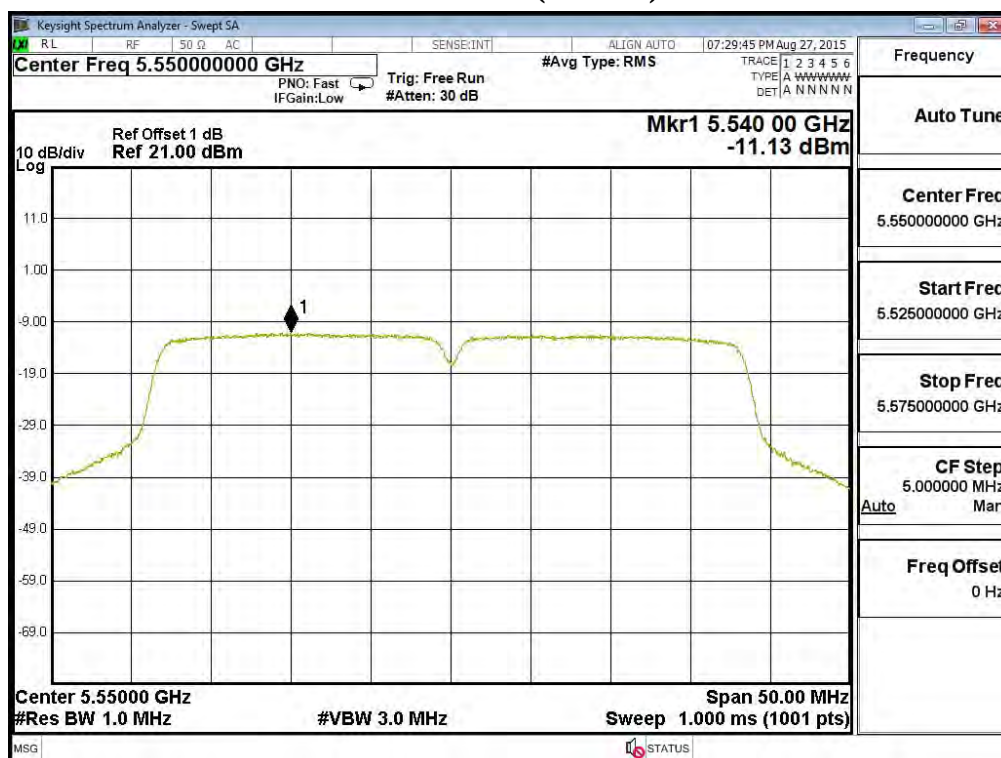
### Channel 62: (Chain A)



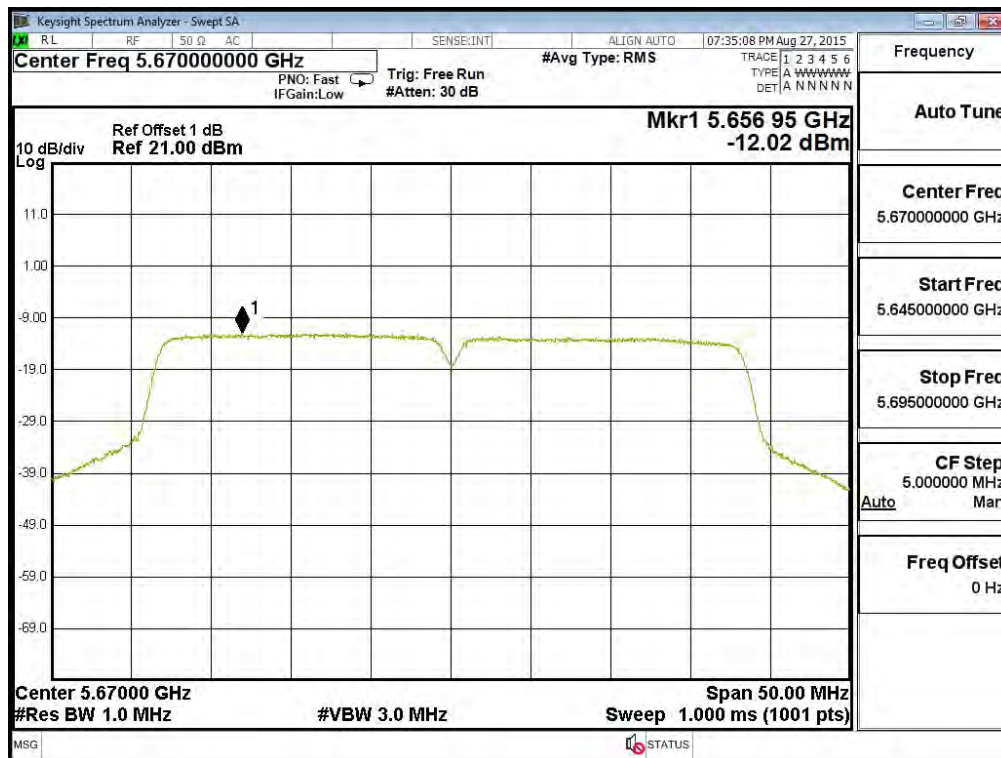
### Channel 102: (Chain A)



### Channel 110: (Chain A)



### Channel 134: (Chain A)



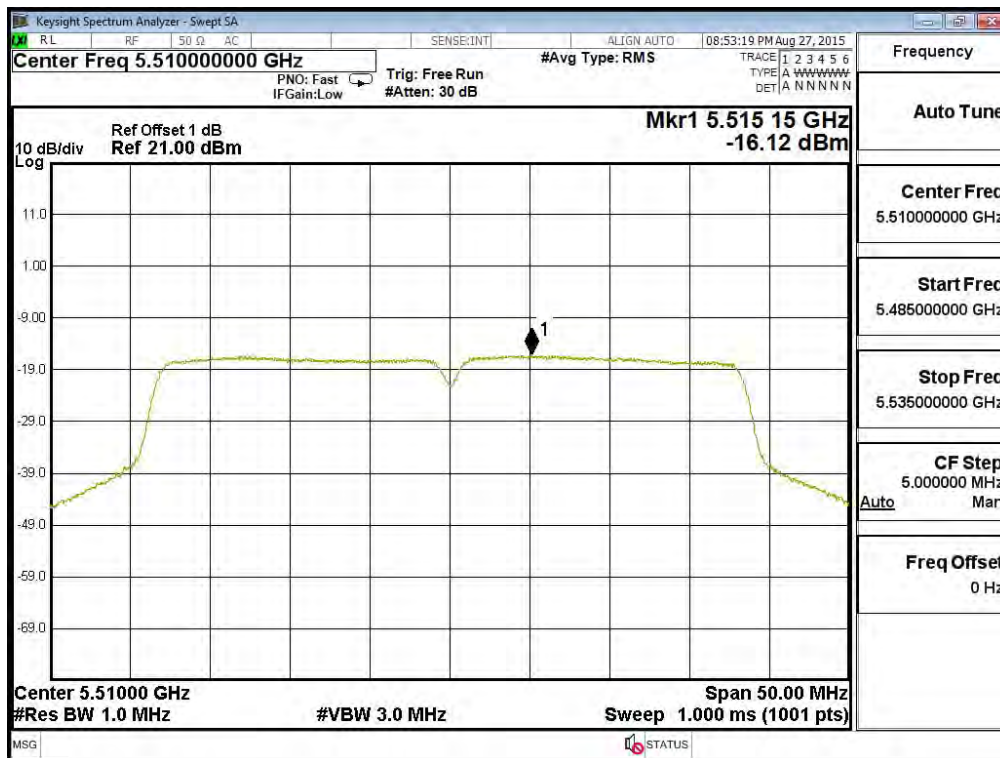
### Channel 54: (Chain B)



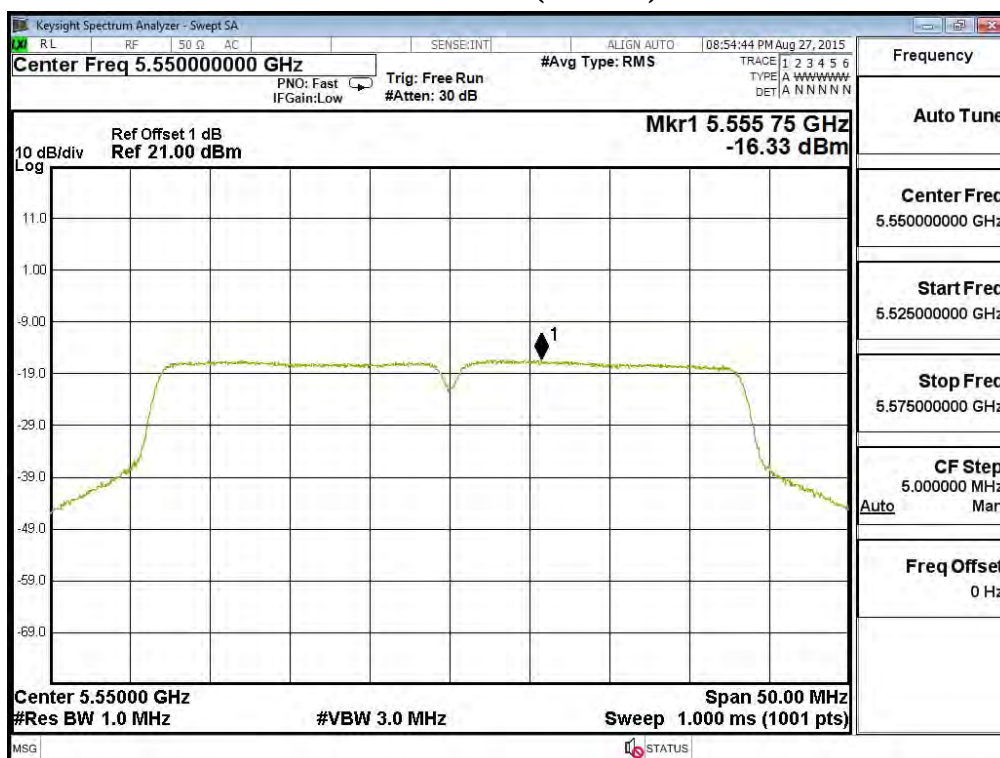
### Channel 62: (Chain B)



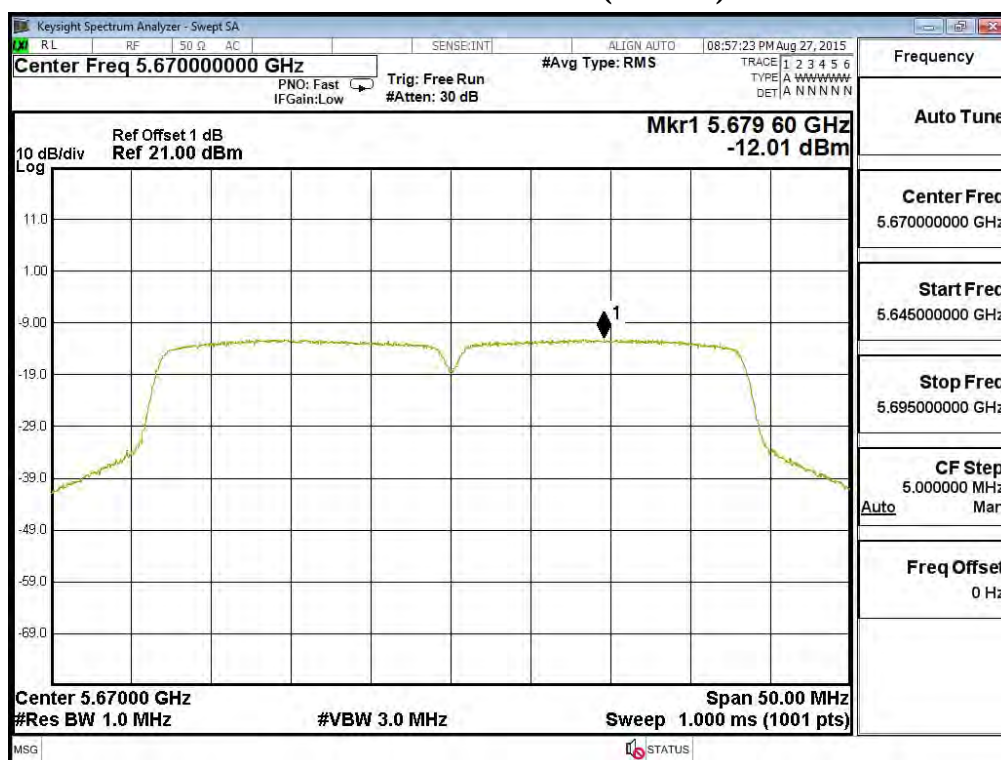
### Channel 102: (Chain B)



### Channel 110: (Chain B)



### Channel 134: (Chain B)



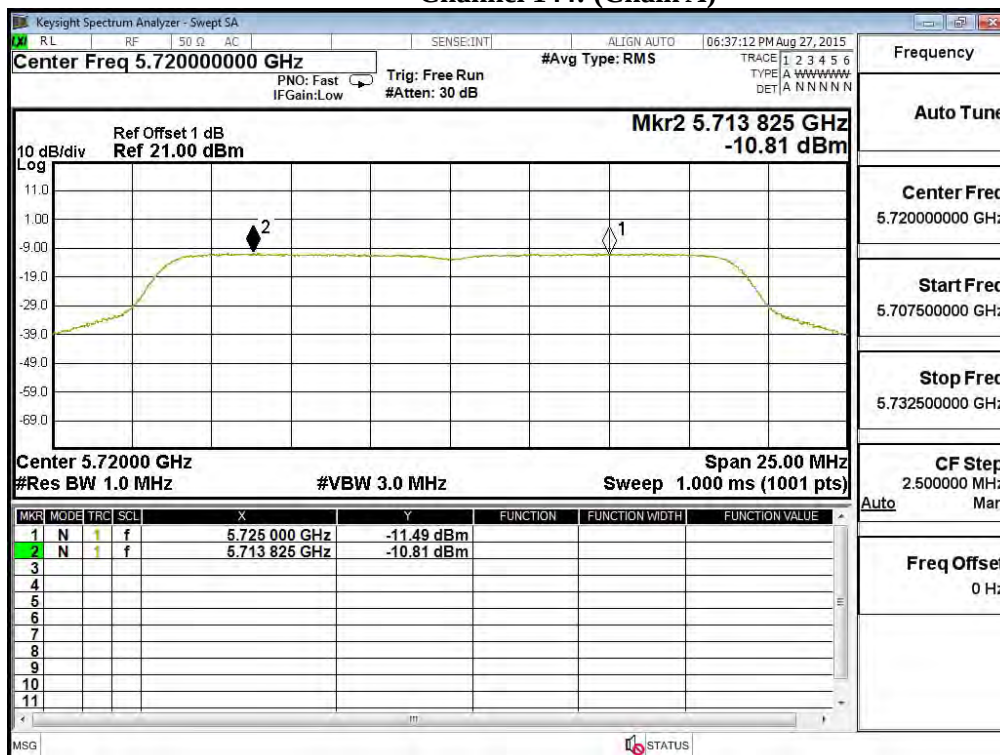
Product : 802.11 ac PCIe Module  
 Test Item : Peak Power Spectral Density  
 Test Site : No.3 OATS  
 Test Mode : Mode 28: Transmit (802.11ac-20BW-14.4Mbps)(Sector Antenna)

| Channel Number | Frequency (MHz) | Chain | PPSD (dBm) | BWCF (dB) | Total PPSD (dBm) | Required Limit (dBm) | Result |
|----------------|-----------------|-------|------------|-----------|------------------|----------------------|--------|
| 144            | 5720(Band3)     | A     | -10.810    | --        | -7.800           | -3                   | Pass   |
|                |                 | B     | -9.020     | --        | -6.010           | -3                   | Pass   |
| 144            | 5720(Band4)     | A     | -20.070    | 6.980     | -10.080          | 30                   | Pass   |
|                |                 | B     | -18.220    | 6.980     | -8.230           | 30                   | Pass   |

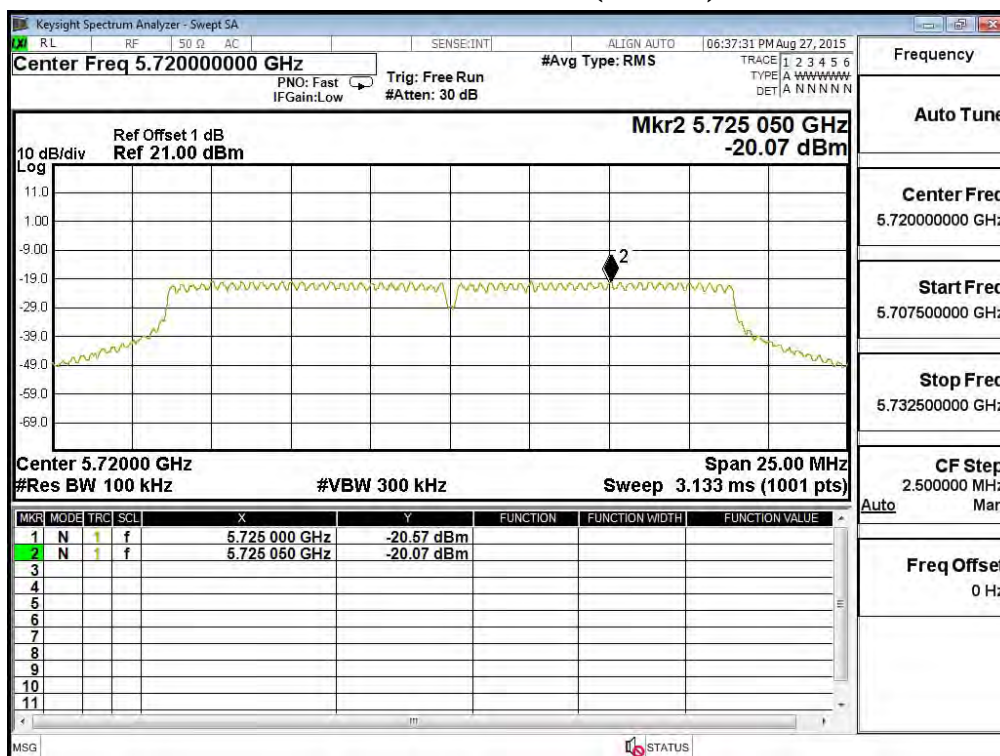
Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.

2.Total PPSD Value = PPSD/MHz value +  $10 \cdot \log 2$  (two antennas) + BWCF.

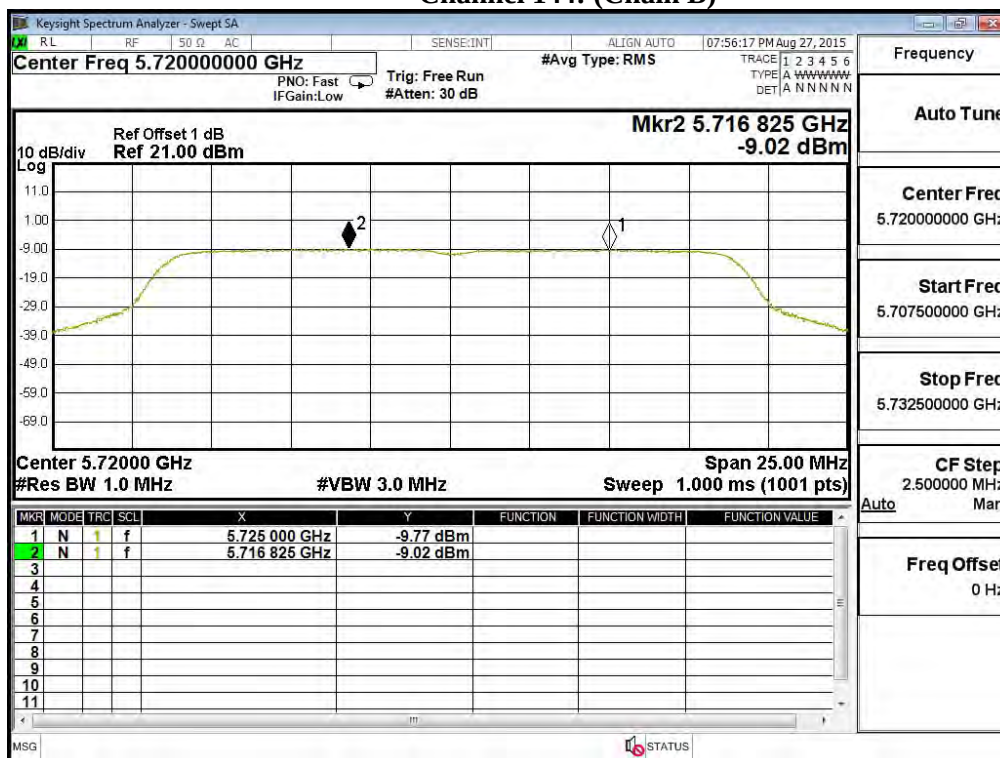
### Channel 144: (Chain A)



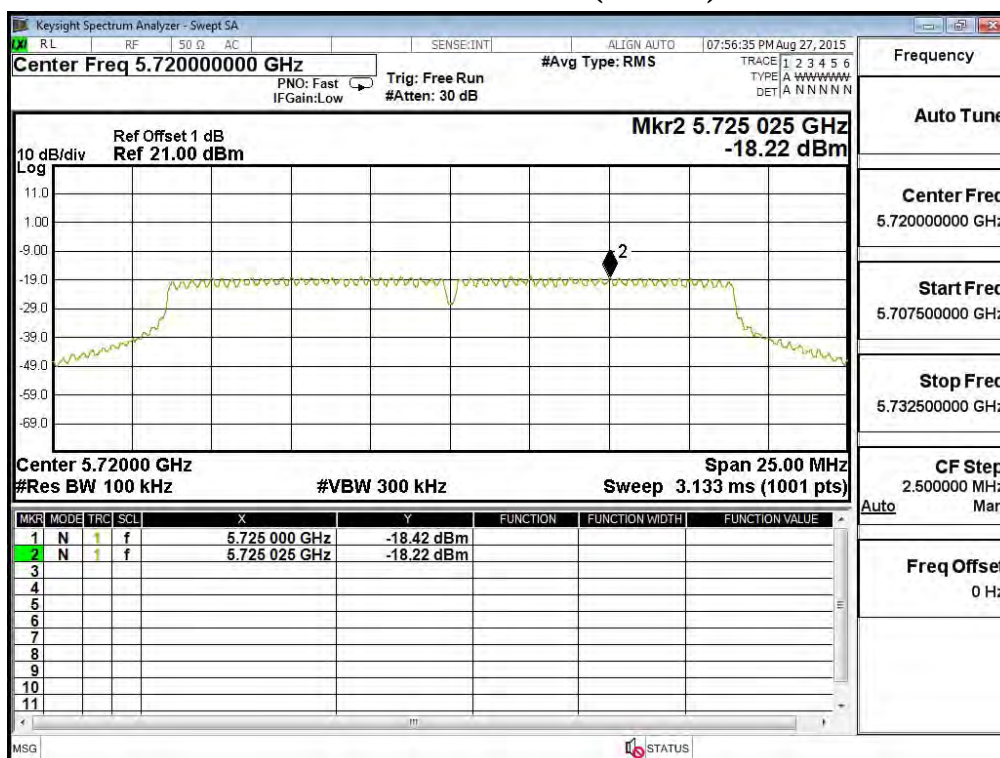
### Channel 144: (Chain A)



### Channel 144: (Chain B)



### Channel 144: (Chain B)



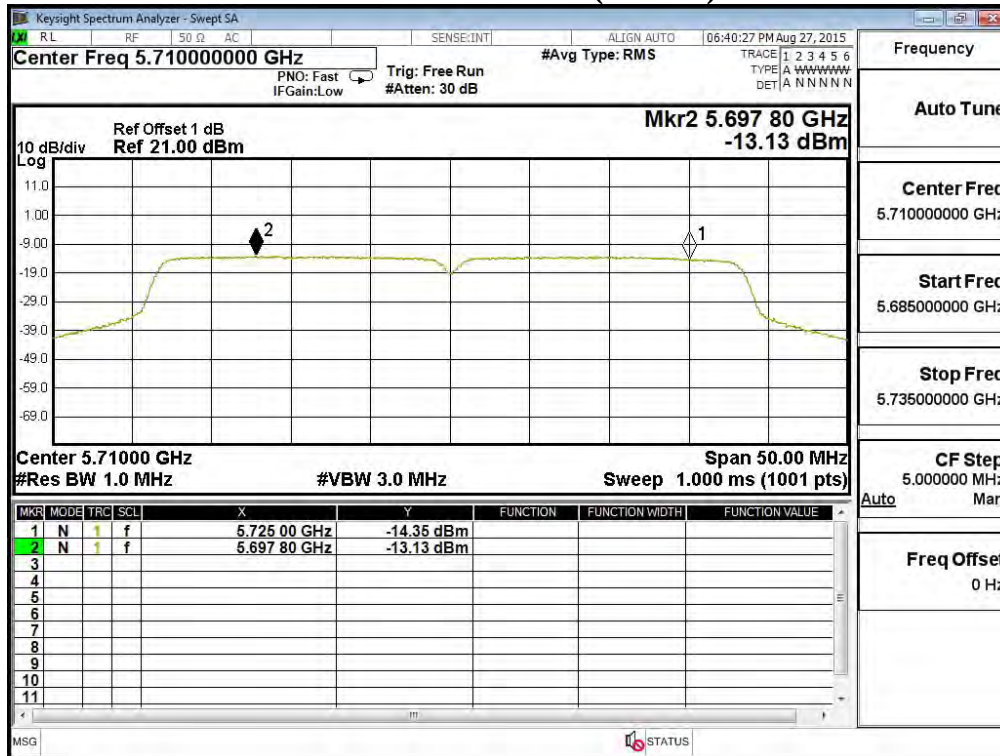
Product : 802.11 ac PCIE Module  
 Test Item : Peak Power Spectral Density  
 Test Site : No.3 OATS  
 Test Mode : Mode 29: Transmit (802.11ac-40BW-30Mbps)(Sector Antenna)

| Channel Number | Frequency (MHz) | Chain | PPSD (dBm) | BWCF (dB) | Total PSD (dBm) | Required Limit (dBm) | Result |
|----------------|-----------------|-------|------------|-----------|-----------------|----------------------|--------|
| 142            | 5710(Band3)     | A     | -13.130    | --        | -10.120         | -3                   | Pass   |
|                |                 | B     | -11.500    | --        | -8.490          | -3                   | Pass   |
| 142            | 5710(Band4)     | A     | -23.320    | 6.980     | -13.330         | 30                   | Pass   |
|                |                 | B     | -20.770    | 6.980     | -10.780         | 30                   | Pass   |

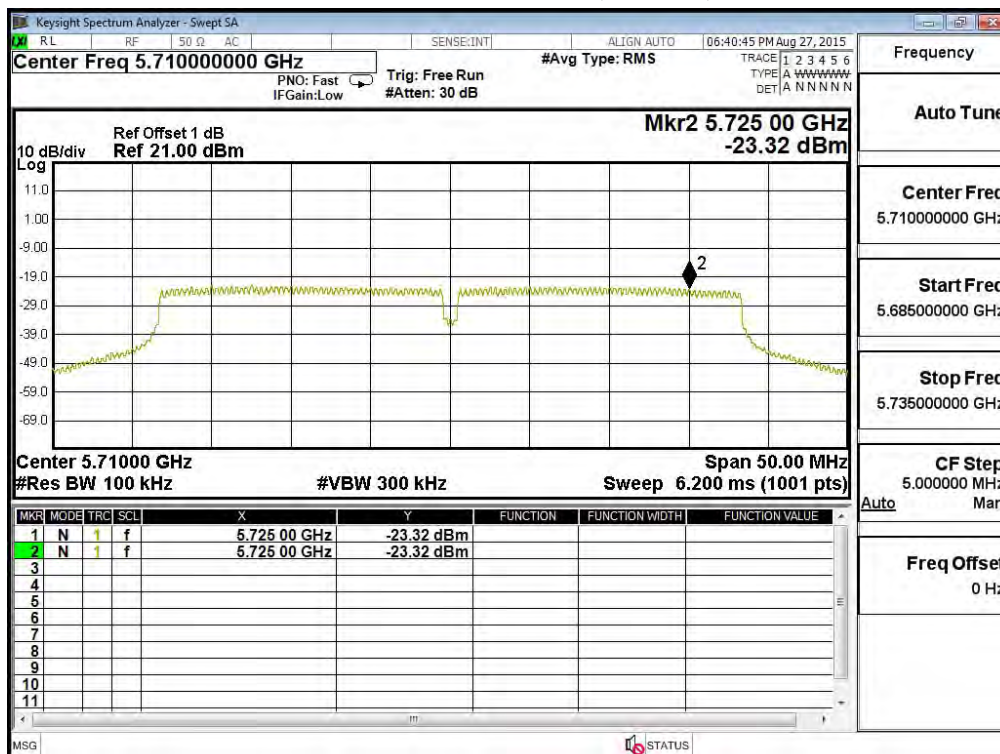
Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.

2.Total PSD Value = PSD/MHz value +  $10 \cdot \log 2$  (two antennas) + BWCF.

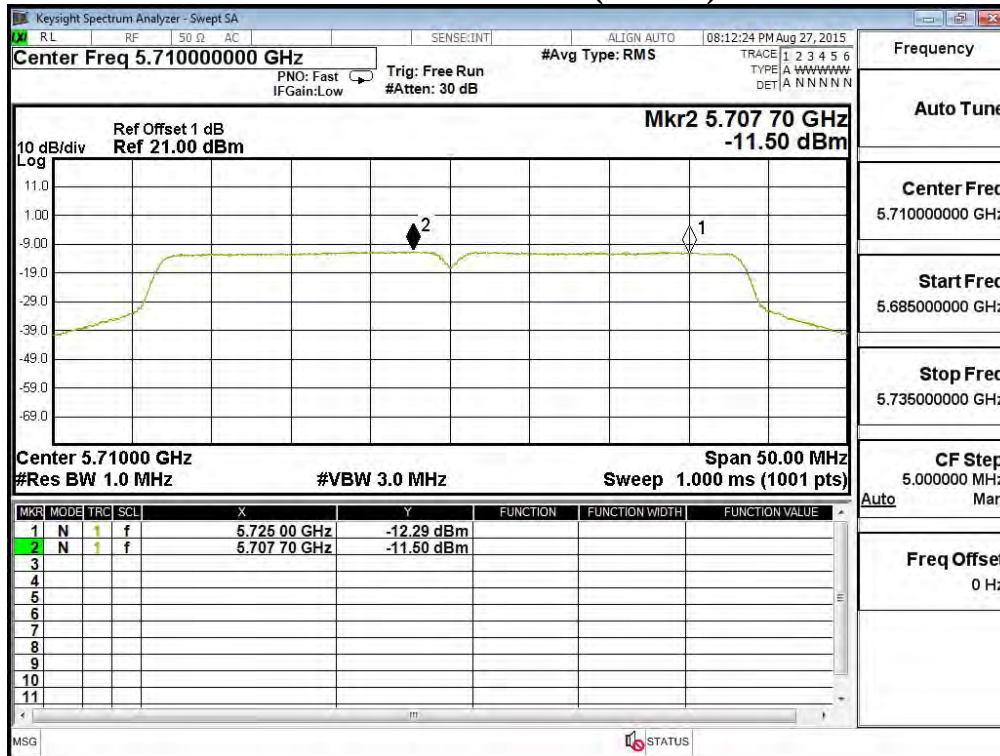
### Channel 142: (Chain A)



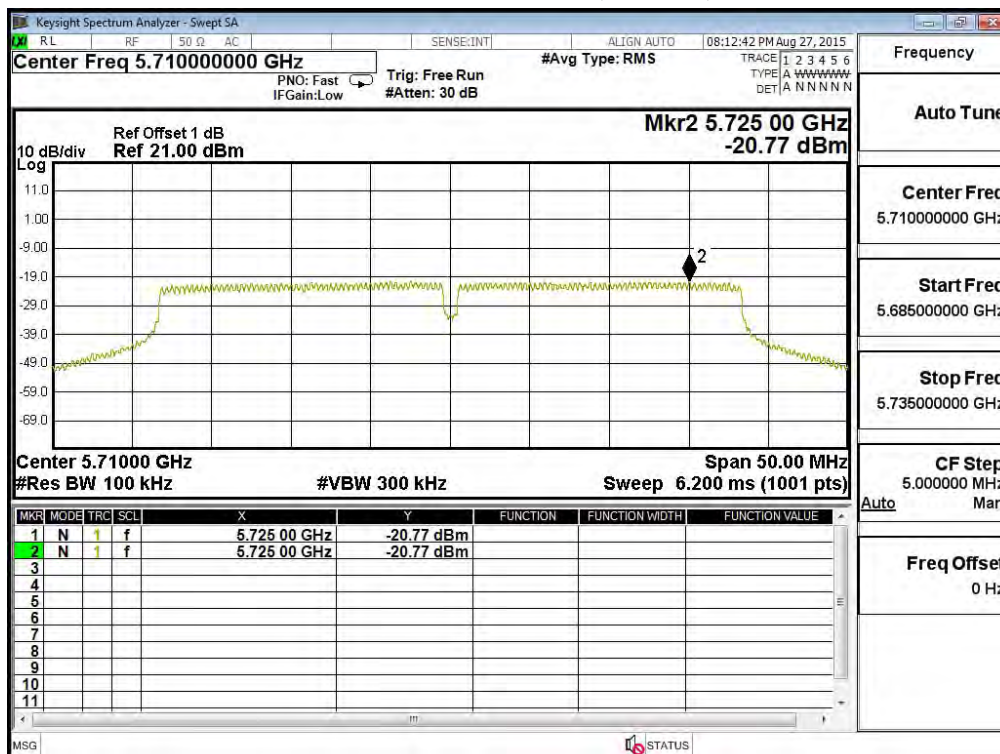
### Channel 142: (Chain A)



### Channel 142: (Chain B)



### Channel 142: (Chain B)



Product : 802.11 ac PCIe Module  
Test Item : Peak Power Spectral Density  
Test Site : No.3 OATS  
Test Mode : Mode 30: Transmit (802.11ac-80BW-65Mbps)(Sector Antenna)

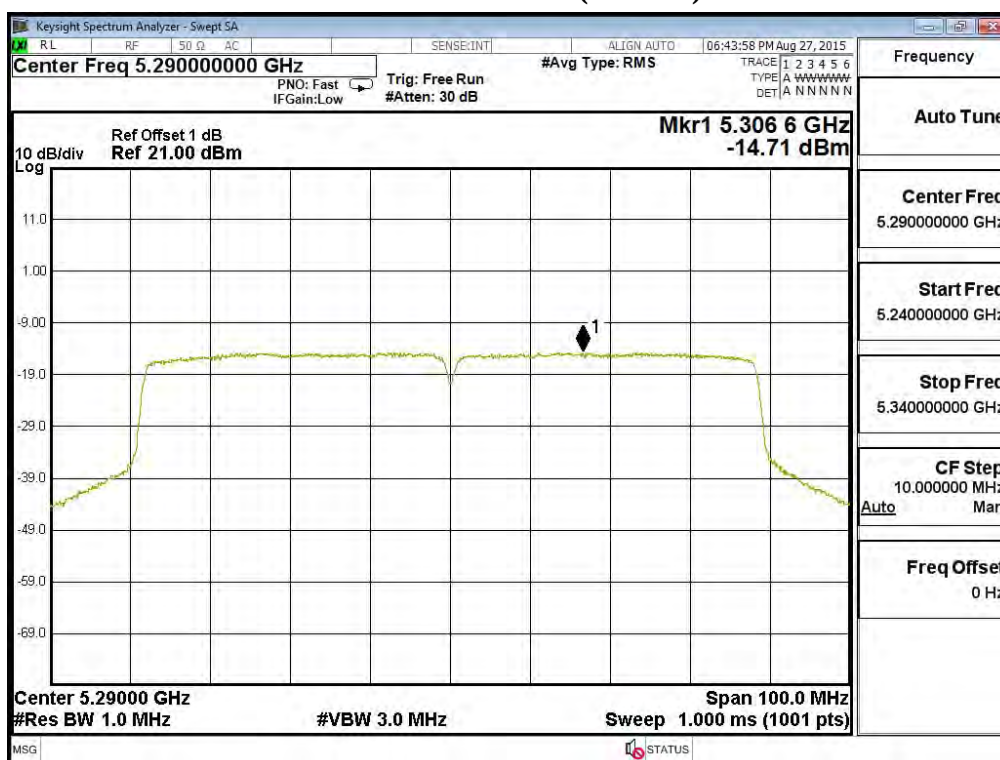
**5250~5350MHz, 5470-5600 MHz and 5650-5725 MHz**

| Channel Number | Frequency (MHz) | Chain | PPSD (dBm) | BWCF (dB) | Total PPSSD (dBm) <sub>1</sub> | Required Limit (dBm) | Result |
|----------------|-----------------|-------|------------|-----------|--------------------------------|----------------------|--------|
| 58             | 5290            | A     | -14.710    | --        | -11.700                        | -3.0                 | Pass   |
|                |                 | B     | -15.760    | --        | -12.750                        | -3.0                 | Pass   |
| 106            | 5530            | A     | -15.594    | --        | -12.584                        | -3.0                 | Pass   |
|                |                 | B     | -19.900    | --        | -16.890                        | -3.0                 | Pass   |
| 122            | 5610            | A     | -14.290    | --        | -11.280                        | -3.0                 | Pass   |
|                |                 | B     | -17.960    | --        | -14.950                        | -3.0                 | Pass   |
| 138            | 5690 (Band3)    | A     | -14.960    | --        | -11.950                        | -3.0                 | Pass   |
|                |                 | B     | -14.460    | --        | -11.450                        | -3.0                 | Pass   |
| 138            | 5690 (Band4)    | A     | -26.580    | 6.980     | -16.590                        | 30                   | Pass   |
|                |                 | B     | -24.670    | 6.980     | -14.680                        | 30                   | Pass   |

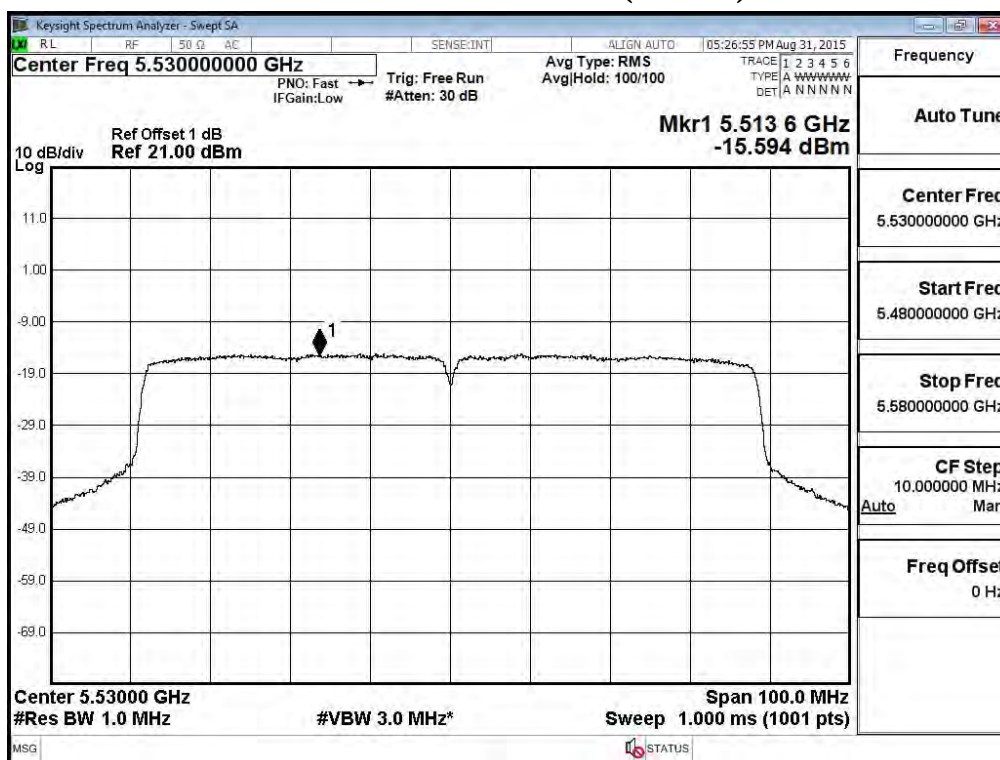
Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.

2.Total PPSSD Value = PPSSD/MHz value +  $10 \cdot \log 2$  (two antennas)

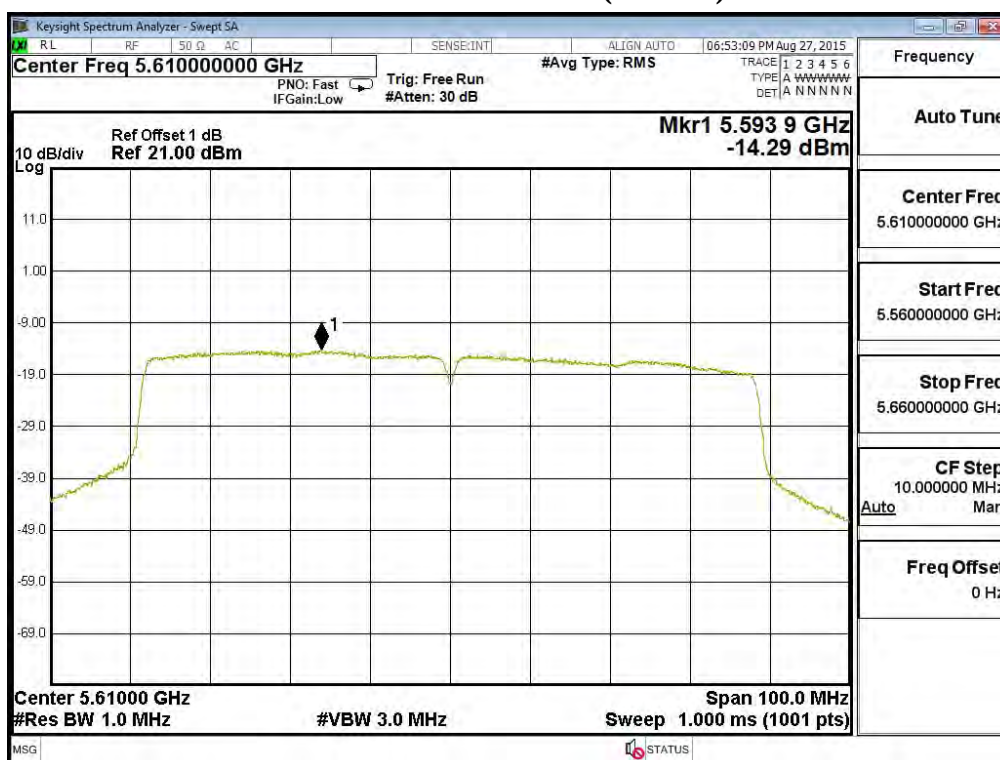
### Channel 58: (Chain A)



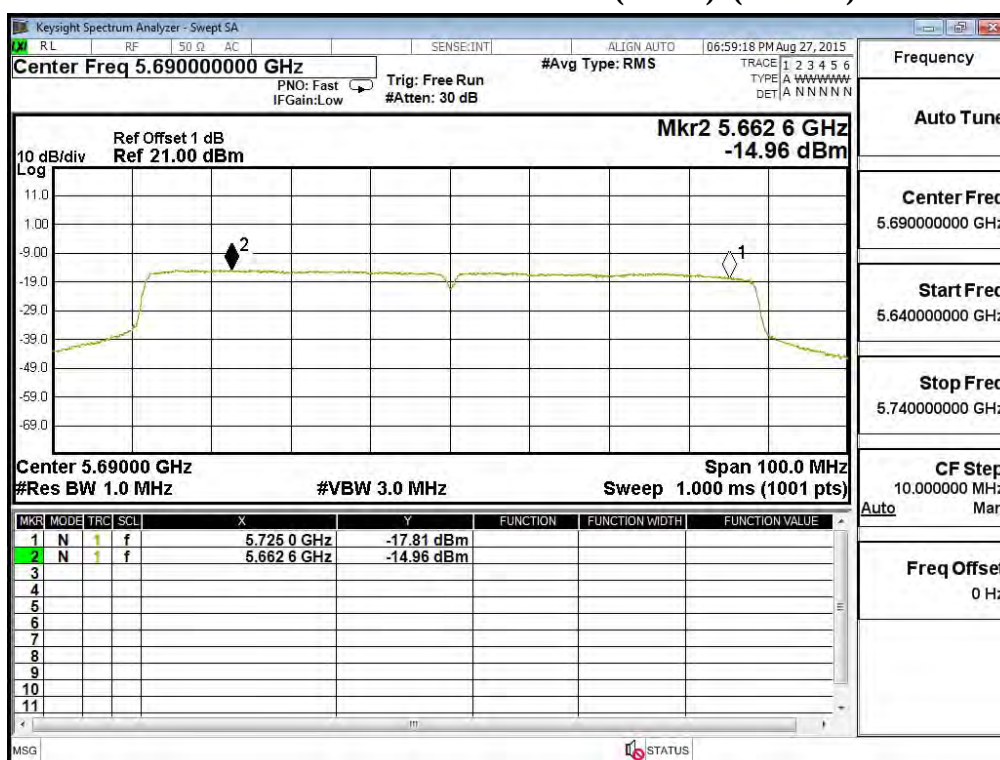
### Channel 106: (Chain A)



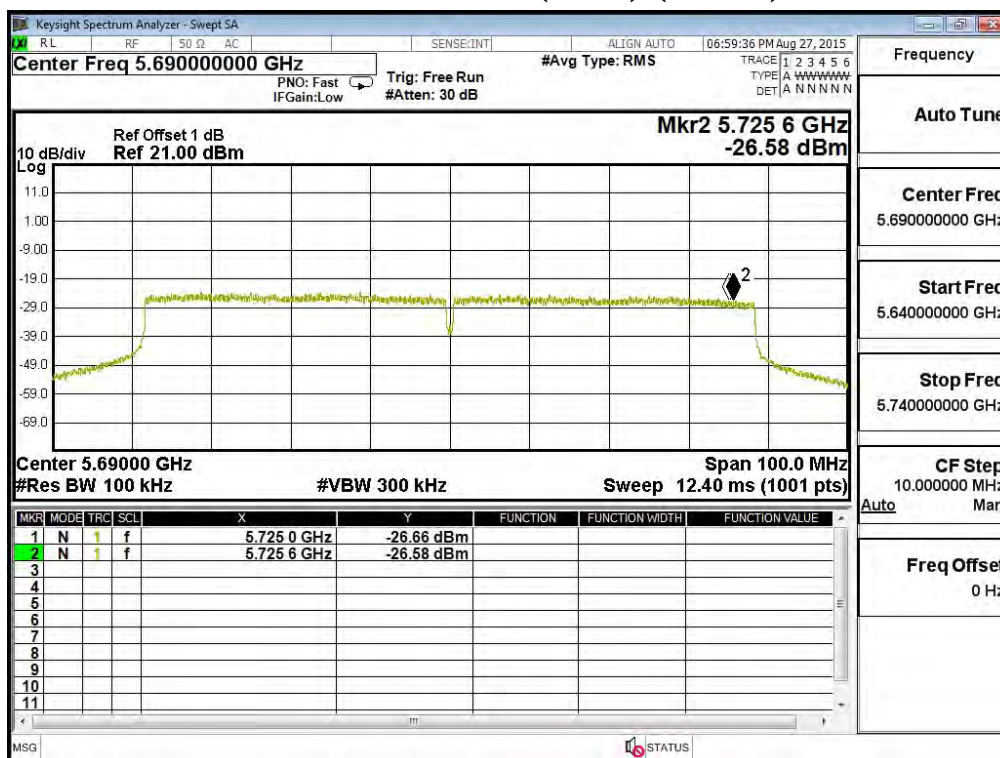
### Channel 122: (Chain A)



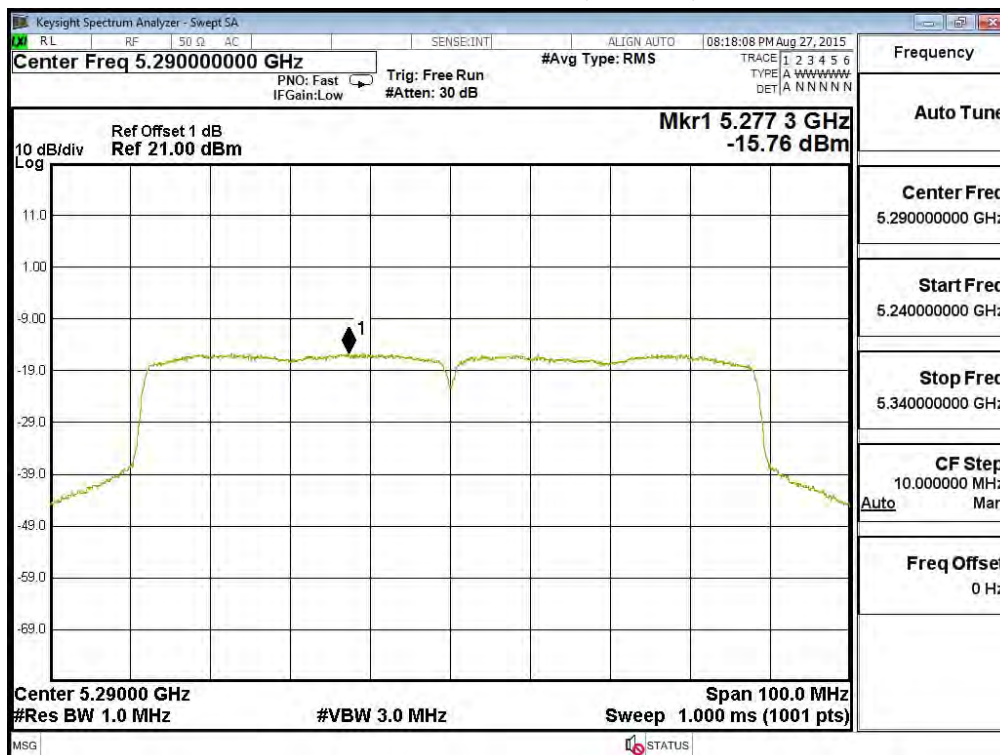
### Channel 138 (Band3): (Chain A)



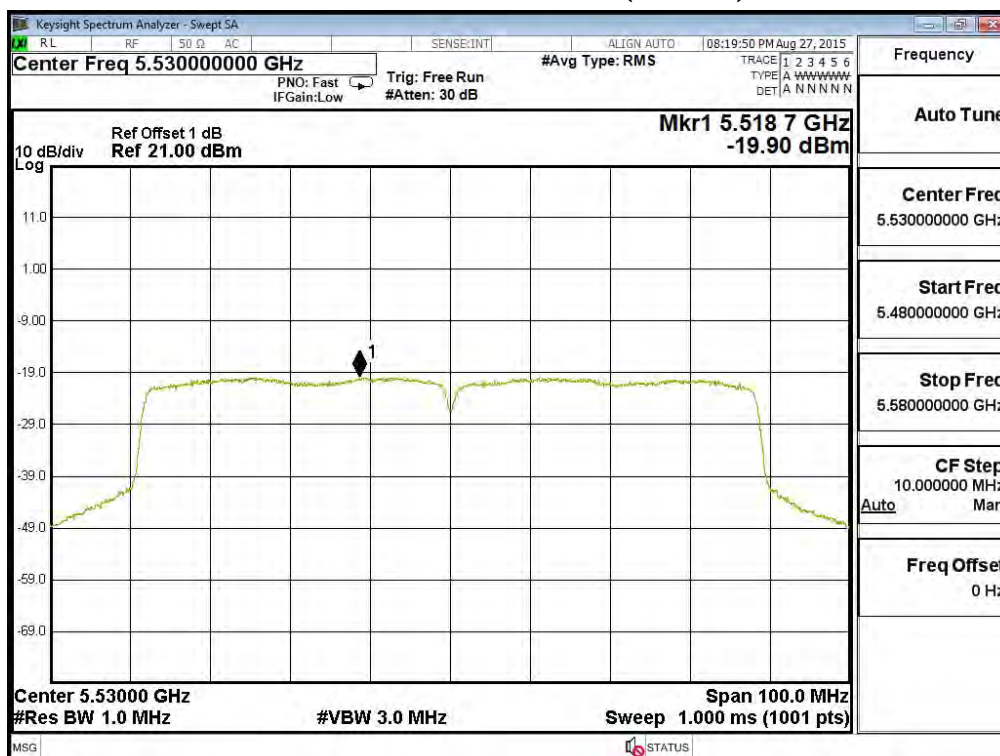
### Channel 138 (Band4): (Chain A)



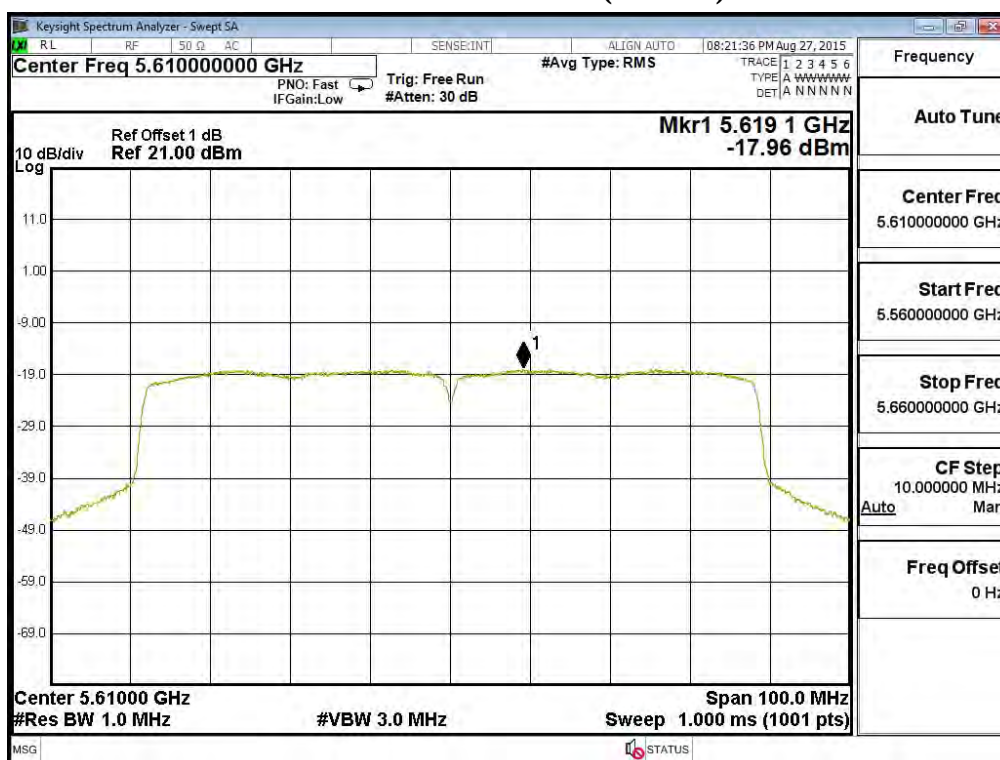
### Channel 58: (Chain B)



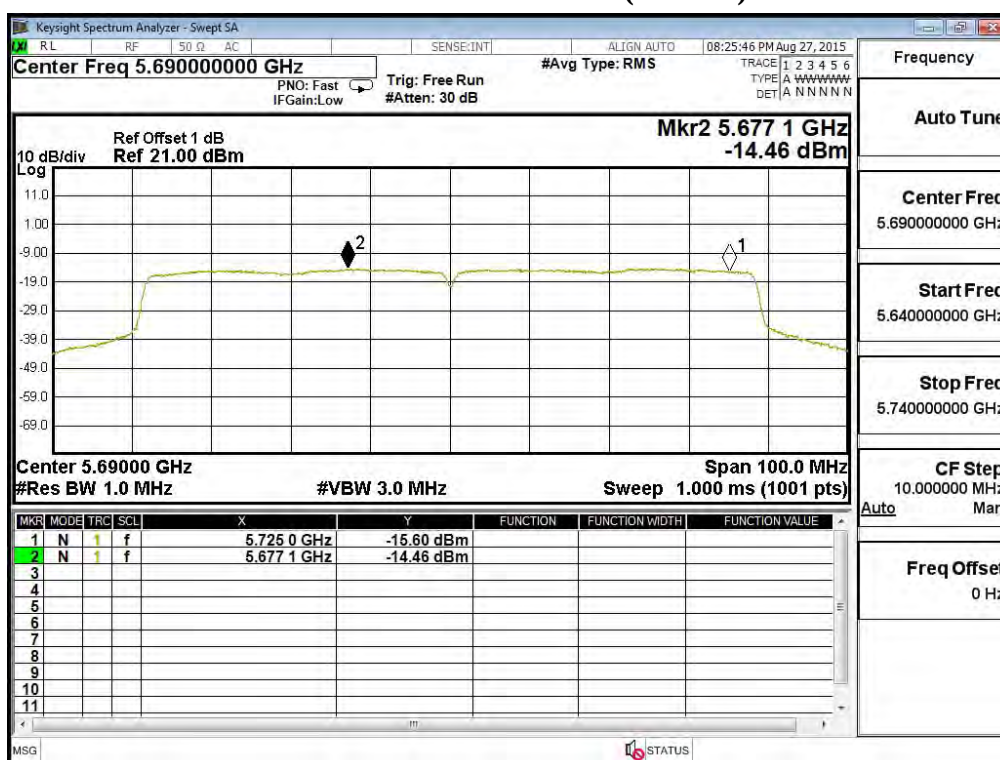
### Channel 106: (Chain B)



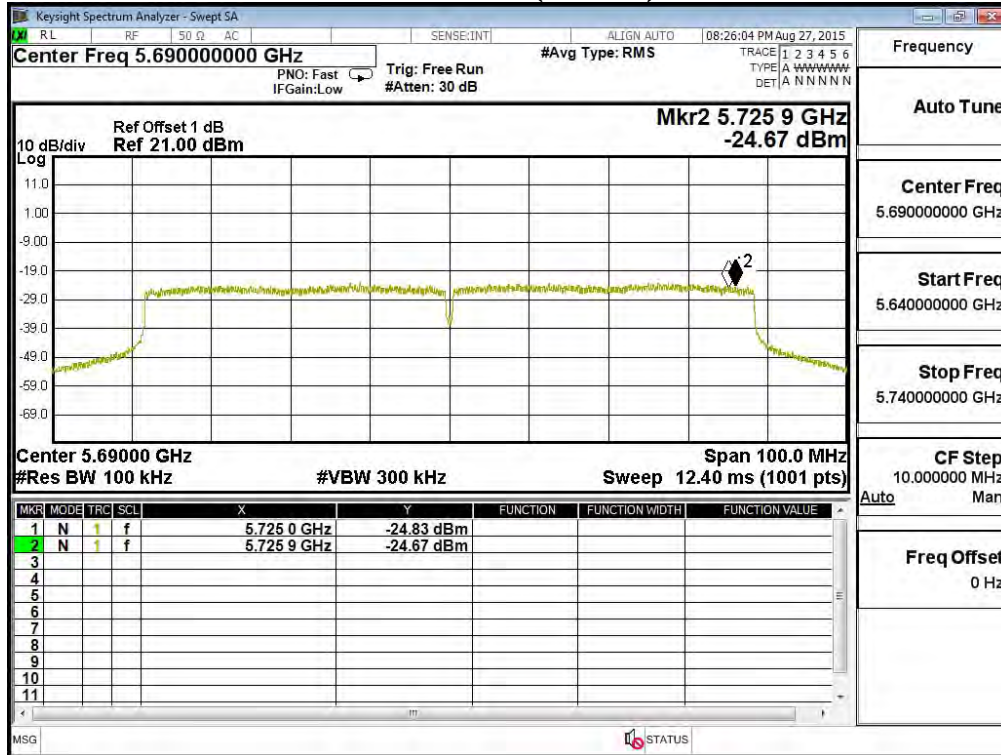
### Channel 122: (Chain B)



### Channel 138: (Chain B)



### Channel 138: (Chain B)



## 5. Radiated Emission

### 5.1. Test Equipment

The following test equipments are used during the radiated emission test:

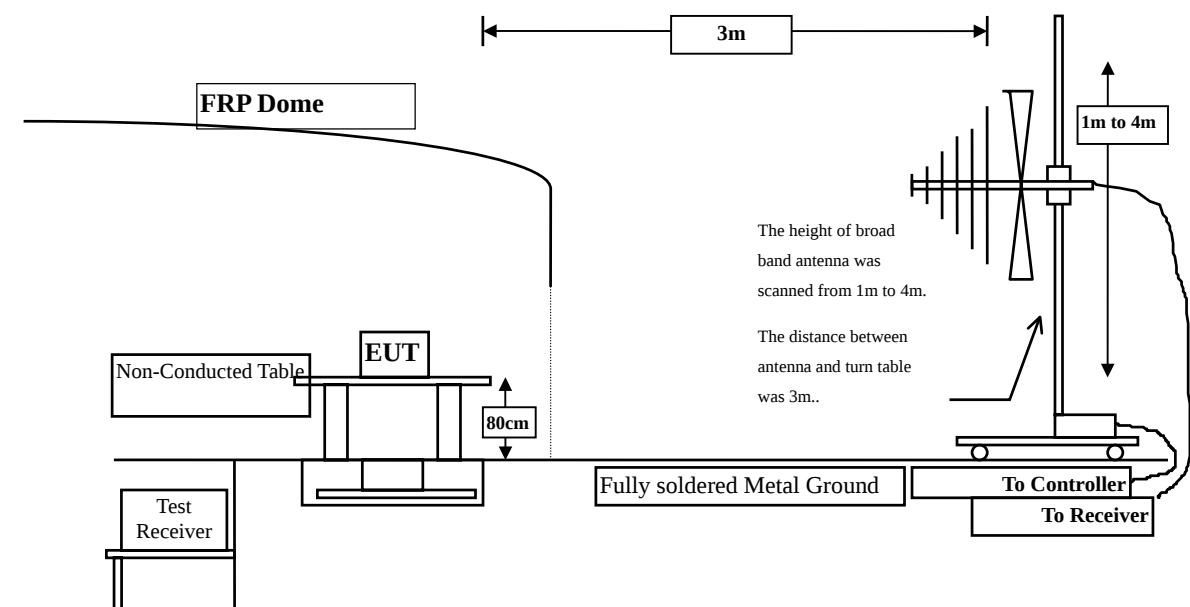
| Test Site  |   | Equipment         | Manufacturer    | Model No./Serial No.        | Last Cal.  |
|------------|---|-------------------|-----------------|-----------------------------|------------|
| ☒ Site # 3 | X | Loop Antenna      | Teseq           | HLA6120 / 26739             | Jul., 2015 |
|            | X | Bilog Antenna     | Schaffner Chase | CBL6112B/2673               | Sep., 2015 |
|            | X | Horn Antenna      | Schwarzbeck     | BBHA9120D/D305              | Sep., 2015 |
|            | X | Horn Antenna      | Schwarzbeck     | BBHA9170/208                | Jul., 2015 |
|            | X | Pre-Amplifier     | QTK             | QTK-AMP-03 / 0003           | May, 2015  |
|            | X | Pre-Amplifier     | QTK             | AP-180C / CHM_0906076       | Sep., 2015 |
|            | X | Pre-Amplifier     | MITEQ           | AMF-4D-180400-45-6P/ 925975 | Mar., 2015 |
|            | X | Spectrum Analyzer | Agilent         | E4407B / US39440758         | May, 2015  |
|            | X | Test Receiver     | R & S           | ESCS 30/ 825442/018         | Sep., 2015 |
|            | X | Coaxial Cable     | QuieTek         | QTK-CABLE/ CAB5             | Feb., 2015 |
|            | X | Controller        | QuieTek         | QTK-CONTROLLER/ CTRL3       | N/A        |
|            | X | Coaxial Switch    | Anritsu         | MP59B/6200265729            | N/A        |

Note:

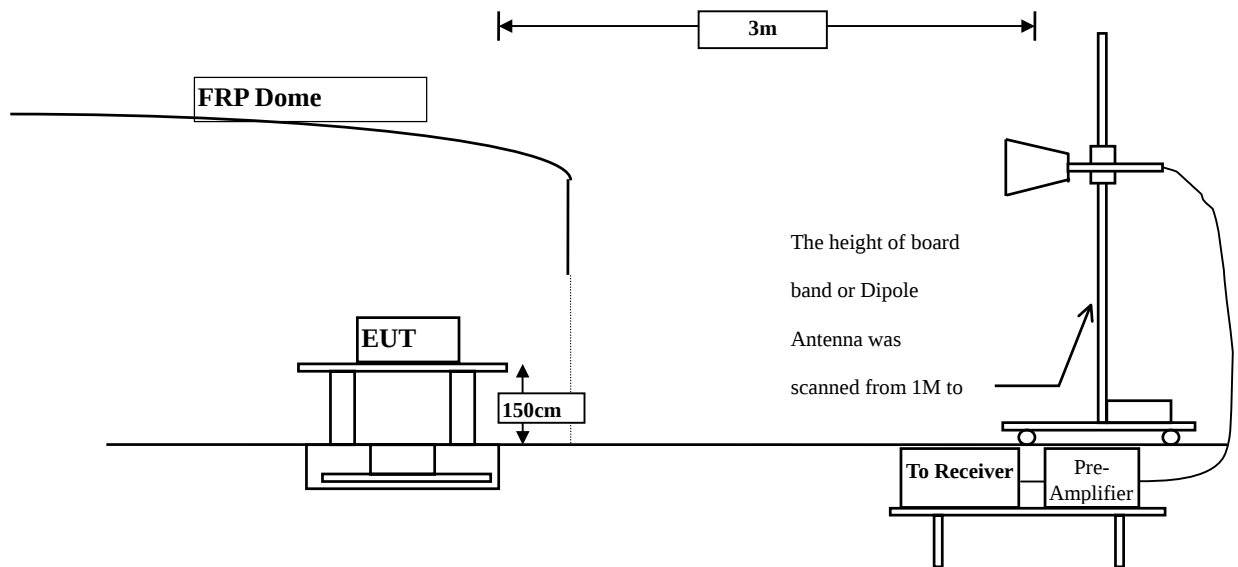
1. All equipment is calibrated once a year or as required by manufacturer.
2. All equipment is calibrated to traceable calibration procedures.
3. The test instruments marked by “X” are used to measure the final test results.

### 5.2. Test Setup

Radiated Emission Below 1GHz



## Radiated Emission Above 1GHz



### 5.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

| FCC Part 15 Subpart C Paragraph 15.209(a) Limits |                                   |                              |
|--------------------------------------------------|-----------------------------------|------------------------------|
| Frequency MHz                                    | Field strength (microvolts/meter) | Measurement distance (meter) |
| 0.009-0.490                                      | 2400/F(kHz)                       | 300                          |
| 0.490-1.705                                      | 24000/F(kHz)                      | 30                           |
| 1.705-30                                         | 30                                | 30                           |
| 30-88                                            | 100                               | 3                            |
| 88-216                                           | 150                               | 3                            |
| 216-960                                          | 200                               | 3                            |
| Above 960                                        | 500                               | 3                            |

Remarks: E field strength (dBμV/m) = 20 log E field strength (uV/m)

#### 5.4. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground, when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

The turn table is rotated 360 degrees to determine the position of the maximum emission level.

The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level.

This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

The measurement frequency range from 9kHz - 10th Harmonic of fundamental was investigated.

#### 5.5. Uncertainty

± 3.8 dB below 1GHz

± 3.9 dB above 1GHz

## 5.6. Test Result of Radiated Emission

Product : 802.11 ac PCIe Module  
Test Item : Harmonic Radiated Emission Data  
Test Site : No.3 OATS  
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna) (5260MHz)

| Frequency<br>MHz      | Correct<br>Factor<br>dB | Reading<br>Level<br>dBμV | Measurement<br>Level<br>dBμV/m | Margin<br>dB | Limit<br>dBμV/m |
|-----------------------|-------------------------|--------------------------|--------------------------------|--------------|-----------------|
| <b>Horizontal</b>     |                         |                          |                                |              |                 |
| <b>Peak Detector:</b> |                         |                          |                                |              |                 |
| 10520.000             | 14.015                  | 34.110                   | 48.125                         | -25.875      | 74.000          |
| 15780.000             | *                       | *                        | *                              | *            | 74.000          |
| 21040.000             | *                       | *                        | *                              | *            | 74.000          |
| 26300.000             | *                       | *                        | *                              | *            | 74.000          |
| <b>Average</b>        |                         |                          |                                |              |                 |
| <b>Detector:</b>      |                         |                          |                                |              |                 |
| *                     | *                       | *                        | *                              | *            | *               |
| <b>Vertical</b>       |                         |                          |                                |              |                 |
| <b>Peak Detector:</b> |                         |                          |                                |              |                 |
| 10520.000             | 14.818                  | 39.010                   | 53.828                         | -20.172      | 74.000          |
| 15780.000             | *                       | *                        | *                              | *            | 74.000          |
| 21040.000             | *                       | *                        | *                              | *            | 74.000          |
| 26300.000             | *                       | *                        | *                              | *            | 74.000          |
| <b>Average</b>        |                         |                          |                                |              |                 |
| <b>Detector:</b>      |                         |                          |                                |              |                 |
| *                     | *                       | *                        | *                              | *            | *               |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater than 10db under the limit and not shown in test report.

Product : 802.11 ac PCIe Module  
Test Item : Harmonic Radiated Emission Data  
Test Site : No.3 OATS  
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna) (5300MHz)

| Frequency<br>MHz             | Correct<br>Factor<br>dB | Reading<br>Level<br>dBμV | Measurement<br>Level<br>dBμV/m | Margin<br>dB | Limit<br>dBμV/m |
|------------------------------|-------------------------|--------------------------|--------------------------------|--------------|-----------------|
| <b>Horizontal</b>            |                         |                          |                                |              |                 |
| <b>Peak Detector:</b>        |                         |                          |                                |              |                 |
| 10600.000                    | 14.550                  | 35.420                   | 49.969                         | -24.031      | 74.000          |
| 15900.000                    | *                       | *                        | *                              | *            | 74.000          |
| 21200.000                    | *                       | *                        | *                              | *            | 74.000          |
| 26500.000                    | *                       | *                        | *                              | *            | 74.000          |
| <b>Average<br/>Detector:</b> |                         |                          |                                |              |                 |
| *                            | *                       | *                        | *                              | *            | *               |
| <b>Vertical</b>              |                         |                          |                                |              |                 |
| <b>Peak Detector:</b>        |                         |                          |                                |              |                 |
| 10600.000                    | 14.881                  | 36.170                   | 51.051                         | -22.949      | 74.000          |
| 15900.000                    | *                       | *                        | *                              | *            | 74.000          |
| 21200.000                    | *                       | *                        | *                              | *            | 74.000          |
| 26500.000                    | *                       | *                        | *                              | *            | 74.000          |
| <b>Average<br/>Detector:</b> |                         |                          |                                |              |                 |
| *                            | *                       | *                        | *                              | *            | *               |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : 802.11 ac PCIe Module  
Test Item : Harmonic Radiated Emission Data  
Test Site : No.3 OATS  
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna) (5320MHz)

| Frequency<br>MHz             | Correct<br>Factor<br>dB | Reading<br>Level<br>dBμV | Measurement<br>Level<br>dBμV/m | Margin<br>dB | Limit<br>dBμV/m |
|------------------------------|-------------------------|--------------------------|--------------------------------|--------------|-----------------|
| <b>Horizontal</b>            |                         |                          |                                |              |                 |
| <b>Peak Detector:</b>        |                         |                          |                                |              |                 |
| 10640.000                    | 14.690                  | 35.120                   | 49.810                         | -24.190      | 74.000          |
| 15960.000                    | *                       | *                        | *                              | *            | 74.000          |
| 21280.000                    | *                       | *                        | *                              | *            | 74.000          |
| 26600.000                    | *                       | *                        | *                              | *            | 74.000          |
| <b>Average<br/>Detector:</b> |                         |                          |                                |              |                 |
| *                            | *                       | *                        | *                              | *            | *               |
| <b>Vertical</b>              |                         |                          |                                |              |                 |
| <b>Peak Detector:</b>        |                         |                          |                                |              |                 |
| 10640.000                    | 15.083                  | 35.780                   | 50.863                         | -23.137      | 74.000          |
| 15960.000                    | *                       | *                        | *                              | *            | 74.000          |
| 21280.000                    | *                       | *                        | *                              | *            | 74.000          |
| 26600.000                    | *                       | *                        | *                              | *            | 74.000          |
| <b>Average<br/>Detector:</b> |                         |                          |                                |              |                 |
| *                            | *                       | *                        | *                              | *            | *               |

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : 802.11 ac PCIe Module  
Test Item : Harmonic Radiated Emission Data  
Test Site : No.3 OATS  
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna) (5500MHz)

| Frequency<br>MHz             | Correct<br>Factor<br>dB | Reading<br>Level<br>dBμV | Measurement<br>Level<br>dBμV/m | Margin<br>dB | Limit<br>dBμV/m |
|------------------------------|-------------------------|--------------------------|--------------------------------|--------------|-----------------|
| <b>Horizontal</b>            |                         |                          |                                |              |                 |
| <b>Peak Detector:</b>        |                         |                          |                                |              |                 |
| 11000.000                    | 16.399                  | 33.990                   | 50.389                         | -23.611      | 74.000          |
| 16500.000                    | *                       | *                        | *                              | *            | 74.000          |
| 22000.000                    | *                       | *                        | *                              | *            | 74.000          |
| 27500.000                    | *                       | *                        | *                              | *            | 74.000          |
| <b>Average<br/>Detector:</b> |                         |                          |                                |              |                 |
| *                            | *                       | *                        | *                              | *            | *               |
| <b>Vertical</b>              |                         |                          |                                |              |                 |
| <b>Peak Detector:</b>        |                         |                          |                                |              |                 |
| 11000.000                    | 17.132                  | 34.110                   | 51.242                         | -22.758      | 74.000          |
| 16500.000                    | *                       | *                        | *                              | *            | 74.000          |
| 22000.000                    | *                       | *                        | *                              | *            | 74.000          |
| 27500.000                    | *                       | *                        | *                              | *            | 74.000          |
| <b>Average<br/>Detector:</b> |                         |                          |                                |              |                 |
| *                            | *                       | *                        | *                              | *            | *               |

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : 802.11 ac PCIe Module  
Test Item : Harmonic Radiated Emission Data  
Test Site : No.3 OATS  
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna) (5580MHz)

| Frequency<br>MHz             | Correct<br>Factor<br>dB | Reading<br>Level<br>dB $\mu$ V | Measurement<br>Level<br>dB $\mu$ V/m | Margin<br>dB | Limit<br>dB $\mu$ V/m |
|------------------------------|-------------------------|--------------------------------|--------------------------------------|--------------|-----------------------|
| <b>Horizontal</b>            |                         |                                |                                      |              |                       |
| <b>Peak Detector:</b>        |                         |                                |                                      |              |                       |
| 11160.000                    | 16.664                  | 39.270                         | 55.935                               | -18.065      | 74.000                |
| 16800.000                    | *                       | *                              | *                                    | *            | 74.000                |
| 22400.000                    | *                       | *                              | *                                    | *            | 74.000                |
| 28000.000                    | *                       | *                              | *                                    | *            | 74.000                |
| <b>Average<br/>Detector:</b> |                         |                                |                                      |              |                       |
| 11160.000                    | 16.664                  | 23.910                         | 40.575                               | -13.425      | 54.000                |
| <b>Vertical</b>              |                         |                                |                                      |              |                       |
| <b>Peak Detector:</b>        |                         |                                |                                      |              |                       |
| 11160.000                    | 17.643                  | 45.900                         | 63.543                               | -10.457      | 74.000                |
| 16800.000                    | *                       | *                              | *                                    | *            | 74.000                |
| 22400.000                    | *                       | *                              | *                                    | *            | 74.000                |
| 28000.000                    | *                       | *                              | *                                    | *            | 74.000                |
| <b>Average<br/>Detector:</b> |                         |                                |                                      |              |                       |
| 11160.000                    | 17.643                  | 29.730                         | 47.373                               | -6.627       | 54.000                |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : 802.11 ac PCIe Module  
Test Item : Harmonic Radiated Emission Data  
Test Site : No.3 OATS  
Test Mode : Mode 1: Transmit (802.11a-6Mbps)(Dipole Antenna) (5700MHz)

| Frequency<br>MHz             | Correct<br>Factor<br>dB | Reading<br>Level<br>dBμV | Measurement<br>Level<br>dBμV/m | Margin<br>dB | Limit<br>dBμV/m |
|------------------------------|-------------------------|--------------------------|--------------------------------|--------------|-----------------|
| <b>Horizontal</b>            |                         |                          |                                |              |                 |
| <b>Peak Detector:</b>        |                         |                          |                                |              |                 |
| 11400.000                    | 16.530                  | 34.380                   | 50.911                         | -23.089      | 74.000          |
| 17100.000                    | *                       | *                        | *                              | *            | 74.000          |
| 22800.000                    | *                       | *                        | *                              | *            | 74.000          |
| 28500.000                    | *                       | *                        | *                              | *            | 74.000          |
| <b>Average<br/>Detector:</b> |                         |                          |                                |              |                 |
| *                            | *                       | *                        | *                              | *            | *               |
| <b>Vertical</b>              |                         |                          |                                |              |                 |
| <b>Peak Detector:</b>        |                         |                          |                                |              |                 |
| 11400.000                    | 17.138                  | 34.700                   | 51.838                         | -22.162      | 74.000          |
| 17100.000                    | *                       | *                        | *                              | *            | 74.000          |
| 22800.000                    | *                       | *                        | *                              | *            | 74.000          |
| 28500.000                    | *                       | *                        | *                              | *            | 74.000          |
| <b>Average<br/>Detector:</b> |                         |                          |                                |              |                 |
| *                            | *                       | *                        | *                              | *            | *               |

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : 802.11 ac PCIe Module  
Test Item : Harmonic Radiated Emission Data  
Test Site : No.3 OATS  
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5260MHz)

| Frequency                | Correct | Reading    | Measurement  | Margin  | Limit        |
|--------------------------|---------|------------|--------------|---------|--------------|
| MHz                      | Factor  | Level      | Level        |         |              |
|                          | dB      | dB $\mu$ V | dB $\mu$ V/m | dB      | dB $\mu$ V/m |
| <b>Horizontal</b>        |         |            |              |         |              |
| <b>Peak Detector:</b>    |         |            |              |         |              |
| 10520.000                | 14.015  | 34.320     | 48.335       | -25.665 | 74.000       |
| 15780.000                | *       | *          | *            | *       | 74.000       |
| 21040.000                | *       | *          | *            | *       | 74.000       |
| 26300.000                | *       | *          | *            | *       | 74.000       |
| <b>Average Detector:</b> |         |            |              |         |              |
| *                        | *       | *          | *            | *       | *            |
| <b>Vertical</b>          |         |            |              |         |              |
| <b>Peak Detector:</b>    |         |            |              |         |              |
| 10520.000                | 14.818  | 38.380     | 53.198       | -20.802 | 74.000       |
| 15780.000                | *       | *          | *            | *       | 74.000       |
| 21040.000                | *       | *          | *            | *       | 74.000       |
| 26300.000                | *       | *          | *            | *       | 74.000       |
| <b>Average Detector:</b> |         |            |              |         |              |
| *                        | *       | *          | *            | *       | *            |

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : 802.11 ac PCIe Module  
Test Item : Harmonic Radiated Emission Data  
Test Site : No.3 OATS  
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5300MHz)

| Frequency<br>MHz         | Correct<br>Factor<br>dB | Reading<br>Level<br>dB $\mu$ V | Measurement<br>Level<br>dB $\mu$ V/m | Margin<br>dB | Limit<br>dB $\mu$ V/m |
|--------------------------|-------------------------|--------------------------------|--------------------------------------|--------------|-----------------------|
| <b>Horizontal</b>        |                         |                                |                                      |              |                       |
| <b>Peak Detector:</b>    |                         |                                |                                      |              |                       |
| 10600.000                | 14.550                  | 35.740                         | 50.289                               | -23.711      | 74.000                |
| 15900.000                | *                       | *                              | *                                    | *            | 74.000                |
| 21200.000                | *                       | *                              | *                                    | *            | 74.000                |
| 26500.000                | *                       | *                              | *                                    | *            | 74.000                |
| <b>Average Detector:</b> |                         |                                |                                      |              |                       |
| *                        | *                       | *                              | *                                    | *            | *                     |
| <b>Vertical</b>          |                         |                                |                                      |              |                       |
| <b>Peak Detector:</b>    |                         |                                |                                      |              |                       |
| 10600.000                | 14.881                  | 41.580                         | 56.461                               | -17.539      | 74.000                |
| 15900.000                | *                       | *                              | *                                    | *            | 74.000                |
| 21200.000                | *                       | *                              | *                                    | *            | 74.000                |
| 26500.000                | *                       | *                              | *                                    | *            | 74.000                |
| <b>Average Detector:</b> |                         |                                |                                      |              |                       |
| 10600.000                | 14.881                  | 25.270                         | 40.151                               | -13.849      | 54.000                |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : 802.11 ac PCIe Module  
Test Item : Harmonic Radiated Emission Data  
Test Site : No.3 OATS  
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5320MHz)

| Frequency<br>MHz             | Correct<br>Factor<br>dB | Reading<br>Level<br>dB $\mu$ V | Measurement<br>Level<br>dB $\mu$ V/m | Margin<br>dB | Limit<br>dB $\mu$ V/m |
|------------------------------|-------------------------|--------------------------------|--------------------------------------|--------------|-----------------------|
| <b>Horizontal</b>            |                         |                                |                                      |              |                       |
| <b>Peak Detector:</b>        |                         |                                |                                      |              |                       |
| 10640.000                    | 14.690                  | 35.100                         | 49.790                               | -24.210      | 74.000                |
| 15960.000                    | *                       | *                              | *                                    | *            | 74.000                |
| 21280.000                    | *                       | *                              | *                                    | *            | 74.000                |
| 26600.000                    | *                       | *                              | *                                    | *            | 74.000                |
| <b>Average<br/>Detector:</b> |                         |                                |                                      |              |                       |
| *                            | *                       | *                              | *                                    | *            | *                     |
| <b>Vertical</b>              |                         |                                |                                      |              |                       |
| <b>Peak Detector:</b>        |                         |                                |                                      |              |                       |
| 10640.000                    | 15.083                  | 35.130                         | 50.213                               | -23.787      | 74.000                |
| 15960.000                    | *                       | *                              | *                                    | *            | 74.000                |
| 21280.000                    | *                       | *                              | *                                    | *            | 74.000                |
| 26600.000                    | *                       | *                              | *                                    | *            | 74.000                |
| <b>Average<br/>Detector:</b> |                         |                                |                                      |              |                       |
| *                            | *                       | *                              | *                                    | *            | *                     |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : 802.11 ac PCIe Module  
Test Item : Harmonic Radiated Emission Data  
Test Site : No.3 OATS  
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5500MHz)

| Frequency<br>MHz             | Correct<br>Factor<br>dB | Reading<br>Level<br>dBμV | Measurement<br>Level<br>dBμV/m | Margin<br>dB | Limit<br>dBμV/m |
|------------------------------|-------------------------|--------------------------|--------------------------------|--------------|-----------------|
| <b>Horizontal</b>            |                         |                          |                                |              |                 |
| <b>Peak Detector:</b>        |                         |                          |                                |              |                 |
| 11000.000                    | 16.399                  | 33.700                   | 50.099                         | -23.901      | 74.000          |
| 16500.000                    | *                       | *                        | *                              | *            | 74.000          |
| 22000.000                    | *                       | *                        | *                              | *            | 74.000          |
| 27500.000                    | *                       | *                        | *                              | *            | 74.000          |
| <b>Average<br/>Detector:</b> |                         |                          |                                |              |                 |
| *                            | *                       | *                        | *                              | *            | *               |
| <b>Vertical</b>              |                         |                          |                                |              |                 |
| <b>Peak Detector:</b>        |                         |                          |                                |              |                 |
| 11000.000                    | 17.132                  | 33.700                   | 50.832                         | -23.168      | 74.000          |
| 16500.000                    | *                       | *                        | *                              | *            | 74.000          |
| 22000.000                    | *                       | *                        | *                              | *            | 74.000          |
| 27500.000                    | *                       | *                        | *                              | *            | 74.000          |
| <b>Average<br/>Detector:</b> |                         |                          |                                |              |                 |
| *                            | *                       | *                        | *                              | *            | *               |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.

Product : 802.11 ac PCIe Module  
Test Item : Harmonic Radiated Emission Data  
Test Site : No.3 OATS  
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna) (5580MHz)

| Frequency<br>MHz         | Correct<br>Factor<br>dB | Reading<br>Level<br>dB $\mu$ V | Measurement<br>Level<br>dB $\mu$ V/m | Margin<br>dB | Limit<br>dB $\mu$ V/m |
|--------------------------|-------------------------|--------------------------------|--------------------------------------|--------------|-----------------------|
| <b>Horizontal</b>        |                         |                                |                                      |              |                       |
| <b>Peak Detector:</b>    |                         |                                |                                      |              |                       |
| 11160.000                | 16.664                  | 39.470                         | 56.135                               | -17.865      | 74.000                |
| 16800.000                | *                       | *                              | *                                    | *            | 74.000                |
| 22400.000                | *                       | *                              | *                                    | *            | 74.000                |
| 28000.000                | *                       | *                              | *                                    | *            | 74.000                |
| <b>Average Detector:</b> |                         |                                |                                      |              |                       |
| 11160.000                | 16.664                  | 22.850                         | 39.515                               | -14.485      | 54.000                |
| <b>Vertical</b>          |                         |                                |                                      |              |                       |
| <b>Peak Detector:</b>    |                         |                                |                                      |              |                       |
| 11160.000                | 17.643                  | 43.970                         | 61.613                               | -12.387      | 74.000                |
| 16800.000                | *                       | *                              | *                                    | *            | 74.000                |
| 22400.000                | *                       | *                              | *                                    | *            | 74.000                |
| 28000.000                | *                       | *                              | *                                    | *            | 74.000                |
| <b>Average Detector:</b> |                         |                                |                                      |              |                       |
| 11160.000                | 17.643                  | 26.230                         | 43.873                               | -10.127      | 54.000                |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correction Factor.
5. Correction Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data is under the limit of average detection.
7. The emission levels of other frequencies are greater then 10db under the limit and not shown in test report.