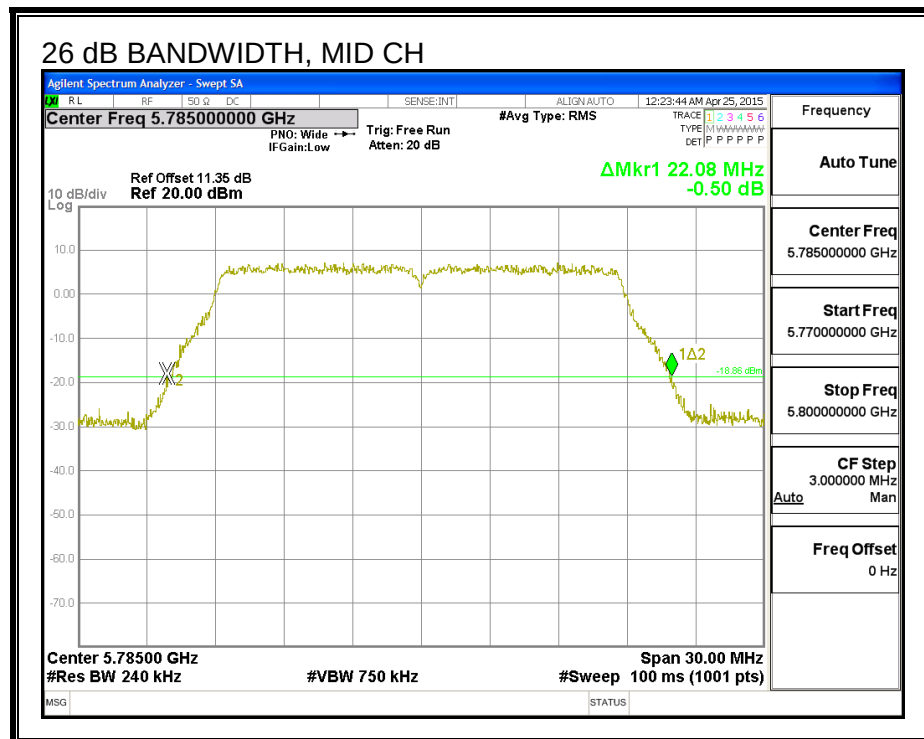
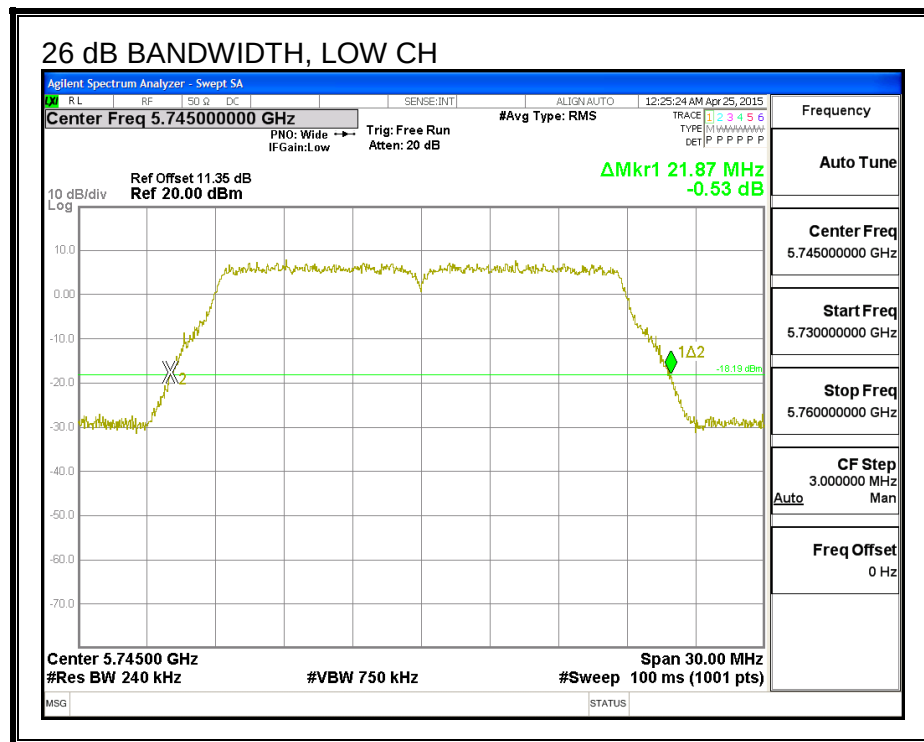
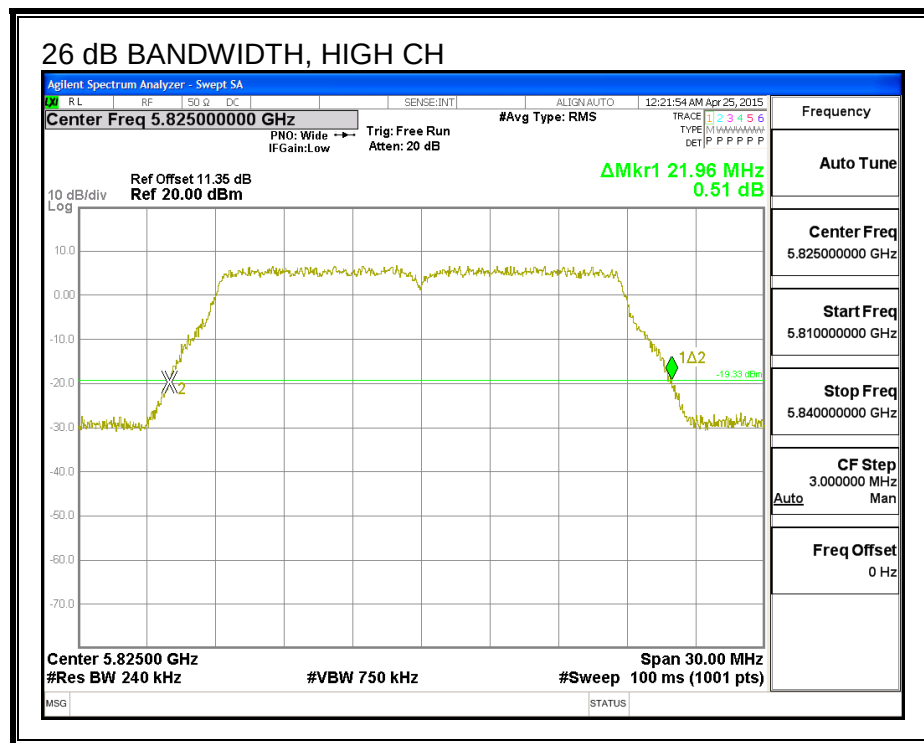
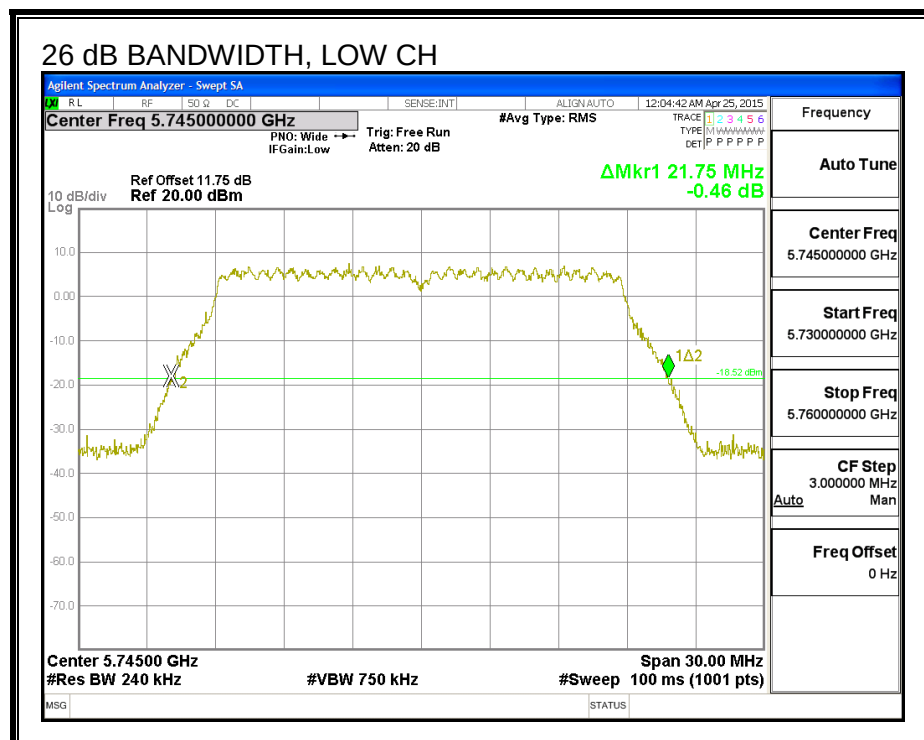


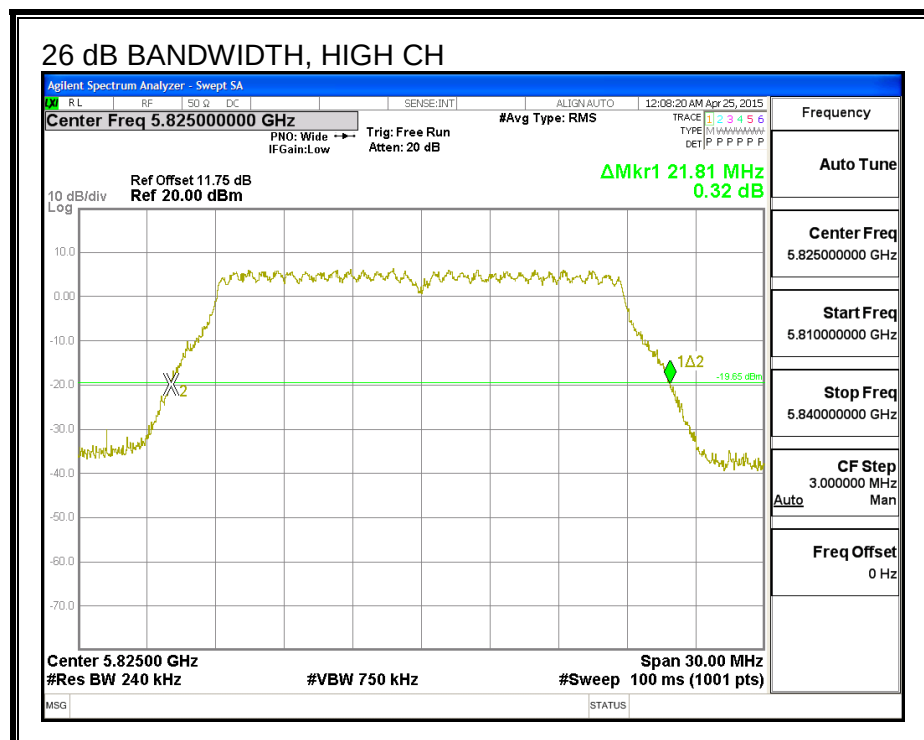
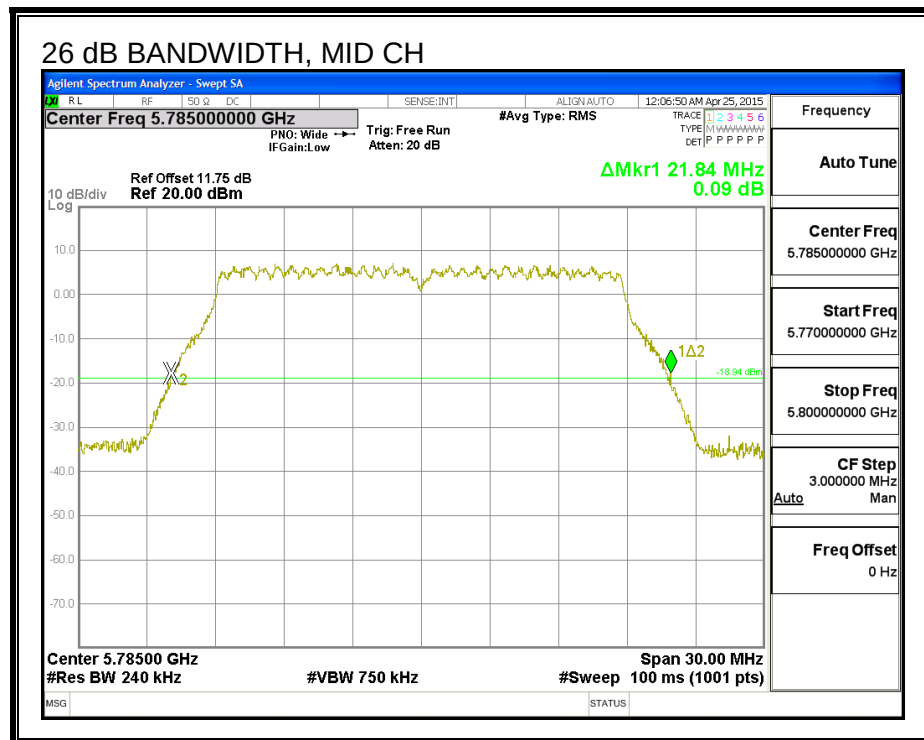
**26 dB BANDWIDTH, CHAIN 0**





**26 dB BANDWIDTH, CHAIN 1**





### 8.39.3. 99% BANDWIDTH

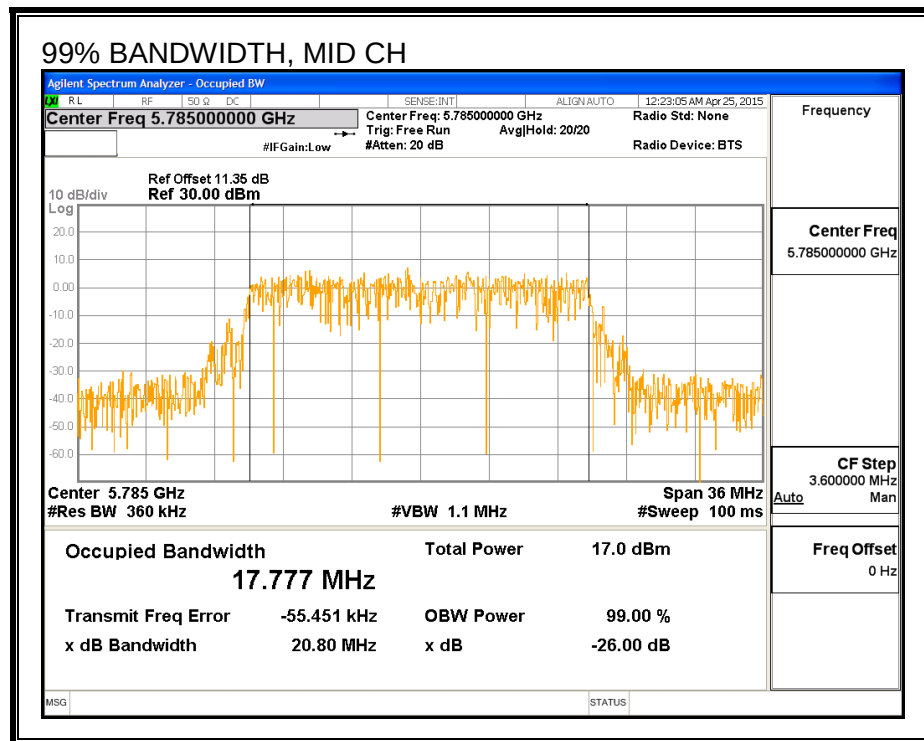
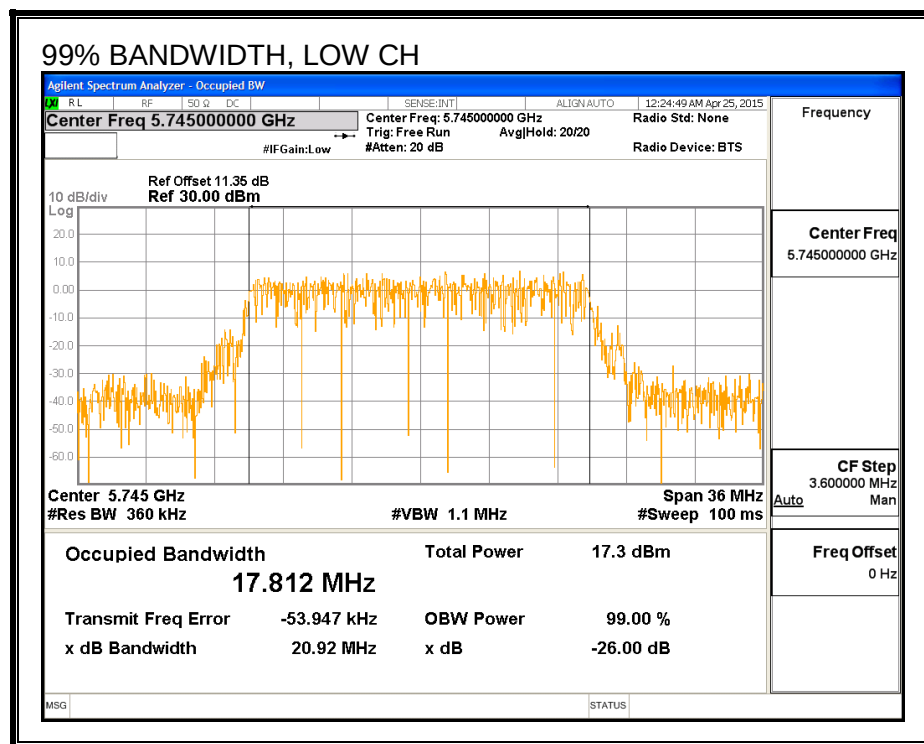
#### LIMITS

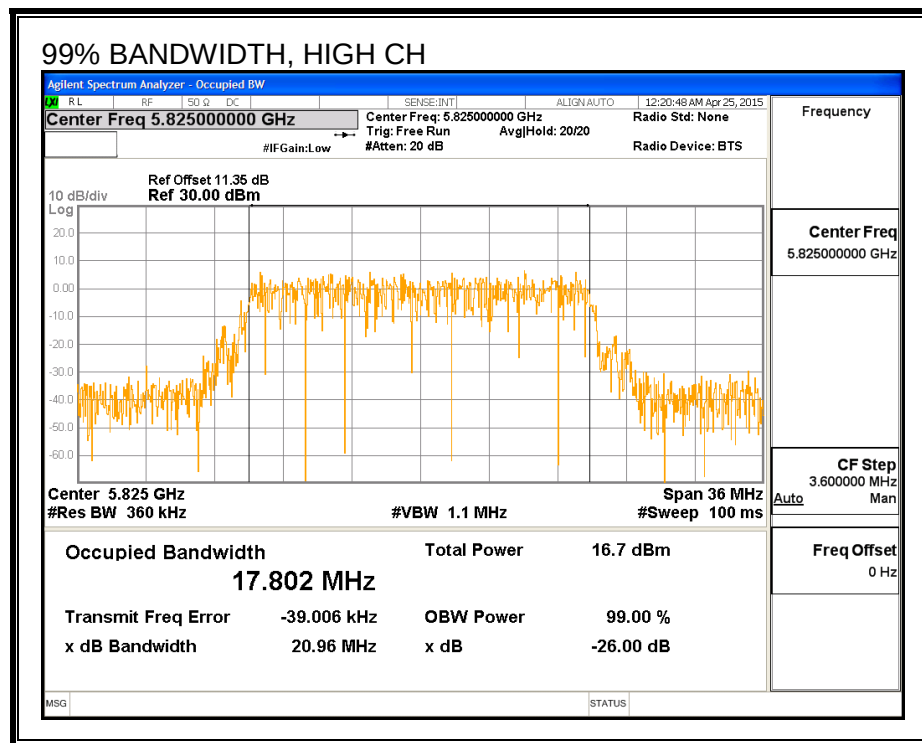
None; for reporting purposes only.

#### RESULTS

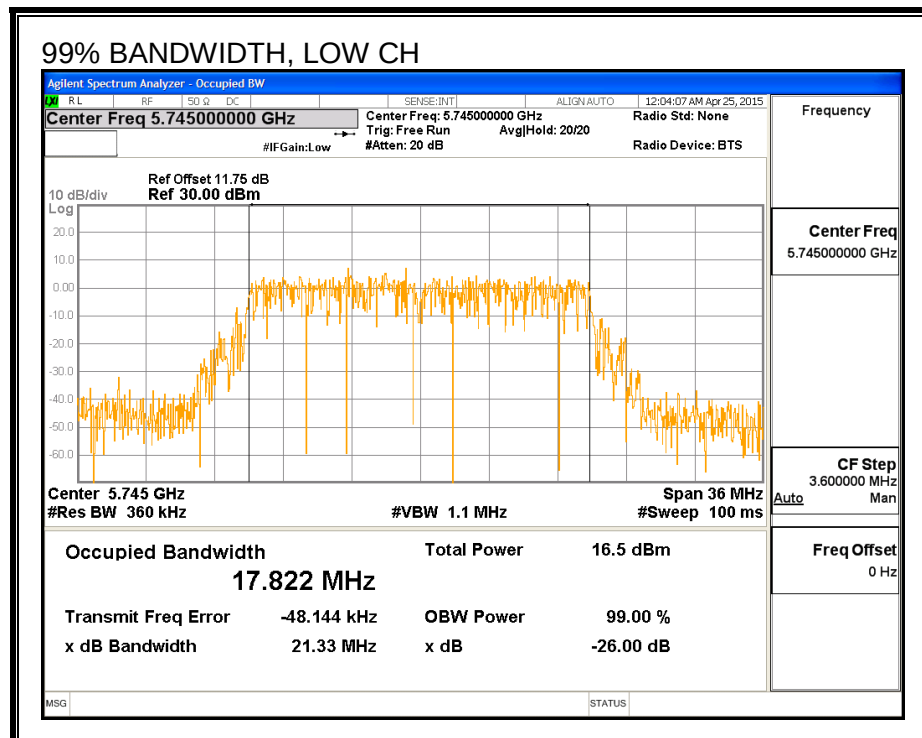
| Channel | Frequency<br>(MHz) | 99% BW<br>Chain 0<br>(MHz) | 99% BW<br>Chain 1<br>(MHz) |
|---------|--------------------|----------------------------|----------------------------|
| Low     | 5745               | 17.812                     | 17.822                     |
| Mid     | 5785               | 17.777                     | 17.850                     |
| High    | 5825               | 17.802                     | 17.867                     |

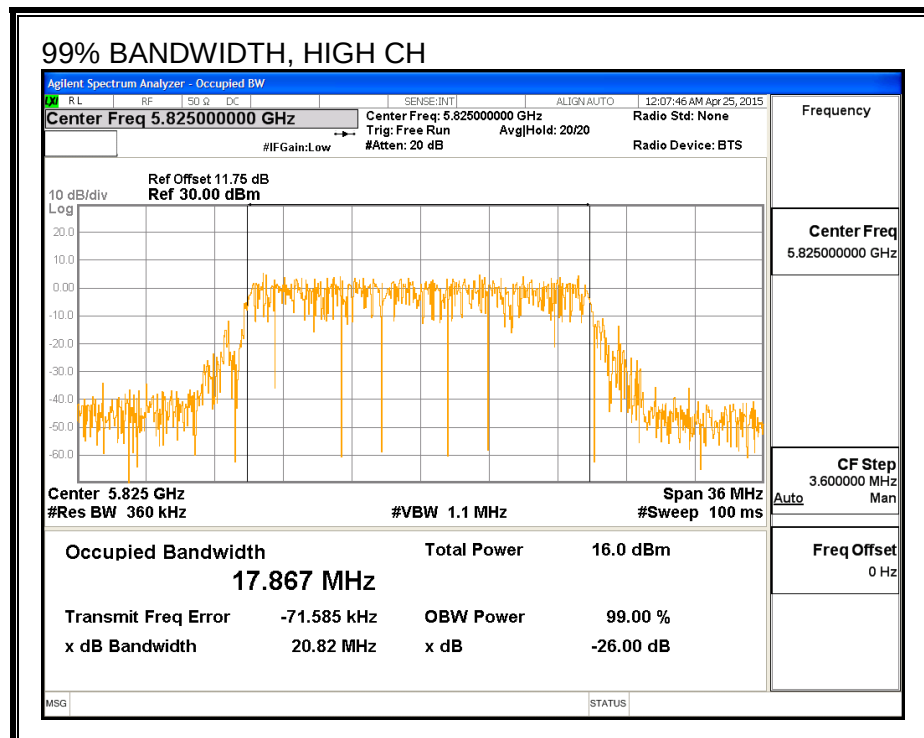
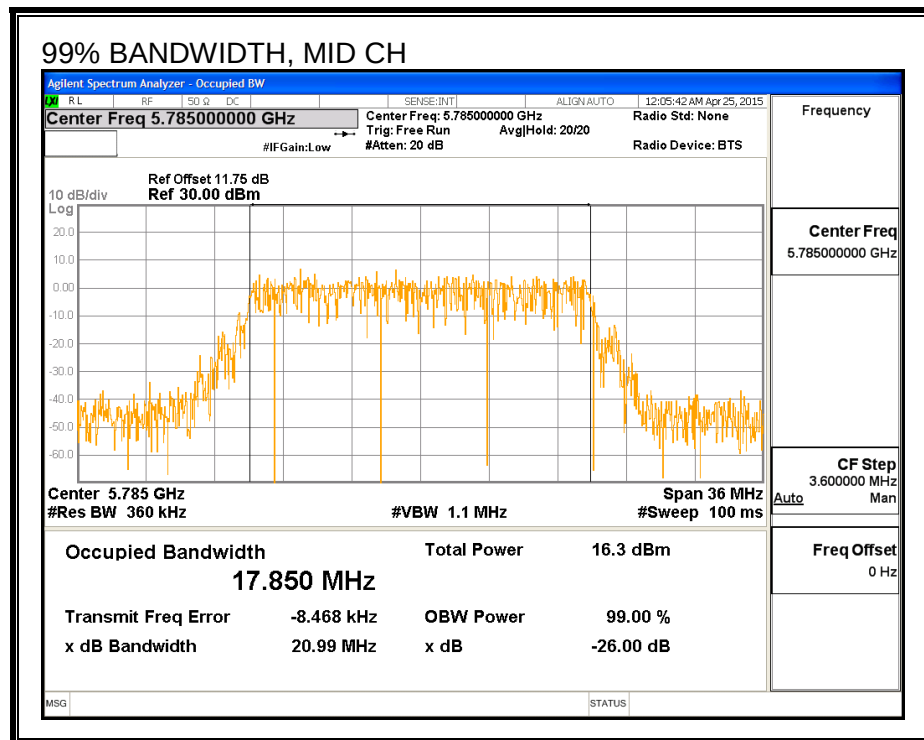
**99% BANDWIDTH, CHAIN 0**





**99% BANDWIDTH, CHAIN 1**





#### 8.39.4. AVERAGE POWER

##### LIMITS

None; for reporting purposes only.

##### RESULTS

| Channel | Frequency<br>(MHz) | Chain 0<br>Power<br>(dBm) | Chain 1<br>Power<br>(dBm) | Total<br>Power<br>(dBm) |
|---------|--------------------|---------------------------|---------------------------|-------------------------|
| Low     | 5745               | 15.90                     | 15.92                     | 18.92                   |
| Mid     | 5785               | 18.98                     | 19.35                     | 22.18                   |
| High    | 5825               | 16.88                     | 16.91                     | 19.91                   |

### 8.39.5. OUTPUT POWER

#### LIMITS

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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.

#### DIRECTIONAL ANTENNA GAIN

The TX chains are uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

| Chain 0<br>Antenna<br>Gain<br>(dBi) | Chain 1<br>Antenna<br>Gain<br>(dBi) | Uncorrelated Chains<br>Directional<br>Gain<br>(dBi) |
|-------------------------------------|-------------------------------------|-----------------------------------------------------|
| -4.33                               | -1.00                               | -2.35                                               |

## **RESULTS**

### **Antenna Gain and Limit**

| Channel | Frequency<br>(MHz) | Directional<br>Gain<br>for Power<br>(dBi) | Power<br>Limit<br>(dBm) |
|---------|--------------------|-------------------------------------------|-------------------------|
| Low     | 5745               | -2.35                                     | 30.00                   |
| Mid     | 5785               | -2.35                                     | 30.00                   |
| High    | 5825               | -2.35                                     | 30.00                   |

|                           |      |                                                 |
|---------------------------|------|-------------------------------------------------|
| <b>Duty Cycle CF (dB)</b> | 0.00 | <b>Included in Calculations of Corr'd Power</b> |
|---------------------------|------|-------------------------------------------------|

### **Output Power Results**

| Channel | Frequency<br>(MHz) | Chain 0<br>Meas<br>Power<br>(dBm) | Chain 1<br>Meas<br>Power<br>(dBm) | Total<br>Corr'd<br>Power<br>(dBm) | Power<br>Limit<br>(dBm) | Power<br>Margin<br>(dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low     | 5745               | 15.90                             | 15.92                             | 18.92                             | 30.00                   | -11.08                  |
| Mid     | 5785               | 18.98                             | 19.35                             | 22.18                             | 30.00                   | -7.82                   |
| High    | 5825               | 16.88                             | 16.91                             | 19.91                             | 30.00                   | -10.09                  |

### 8.39.6. PSD

#### LIMITS

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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.

#### DIRECTIONAL ANTENNA GAIN

The TX chains are correlated and the antenna gain is unequal among the chains. The directional gain is:

| Chain 0<br>Antenna<br>Gain<br>(dBi) | Chain 1<br>Antenna<br>Gain<br>(dBi) | Correlated Chains<br>Directional<br>Gain<br>(dBi) |
|-------------------------------------|-------------------------------------|---------------------------------------------------|
| -4.33                               | -1.00                               | 0.50                                              |

## **RESULTS**

### **Antenna Gain and Limits**

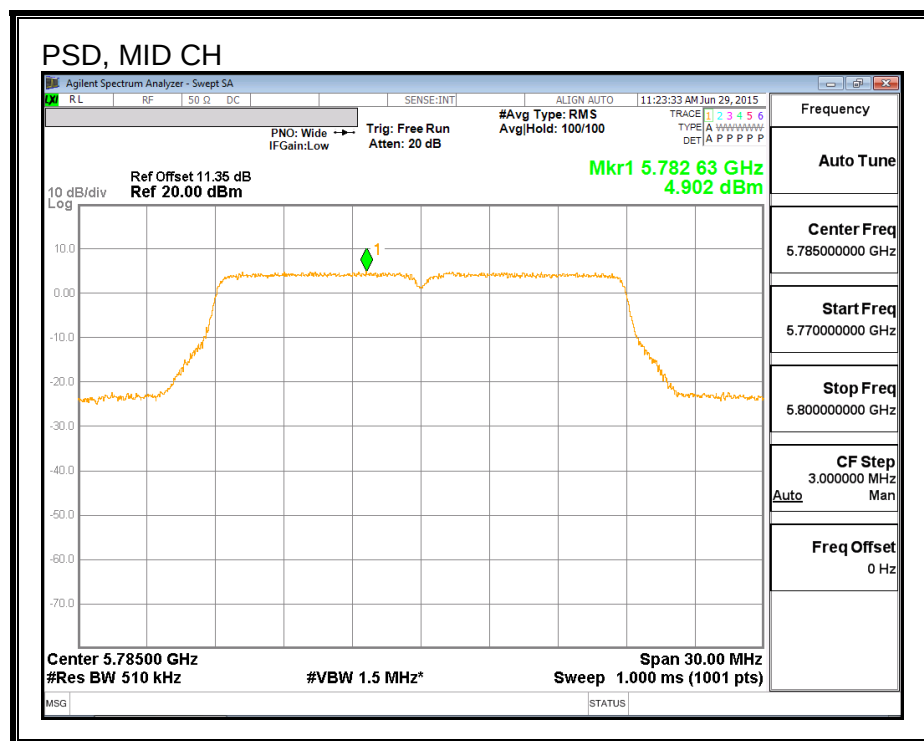
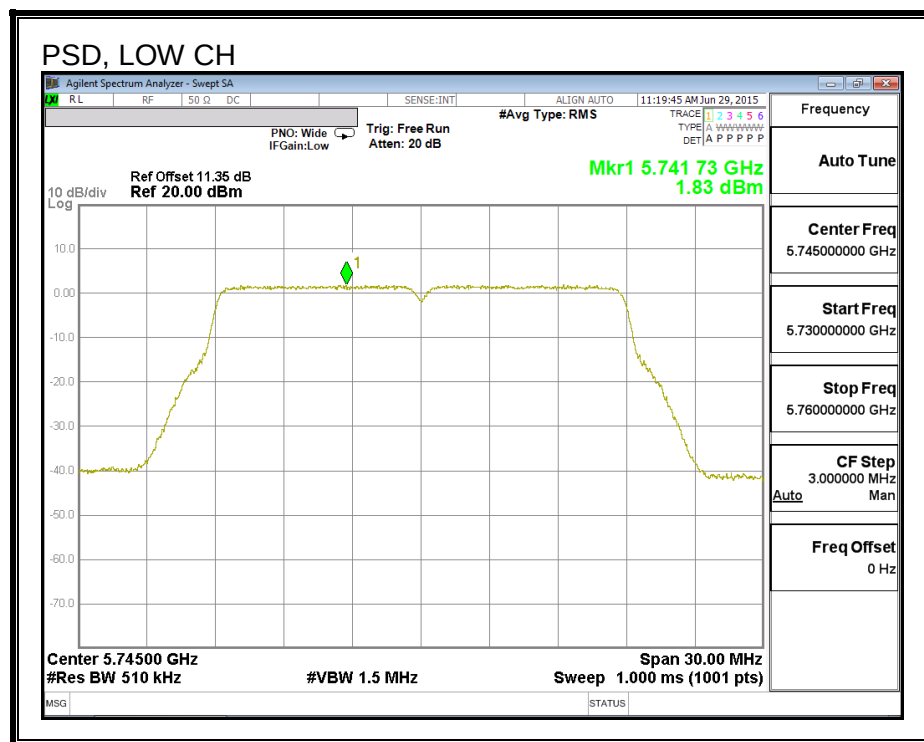
| Channel | Frequency<br>(MHz) | Directional<br>Gain<br>(dBi) | PSD<br>Limit<br>(dBm) |
|---------|--------------------|------------------------------|-----------------------|
| Low     | 5745               | 0.50                         | 30.00                 |
| Mid     | 5785               | 0.50                         | 30.00                 |
| High    | 5825               | 0.50                         | 30.00                 |

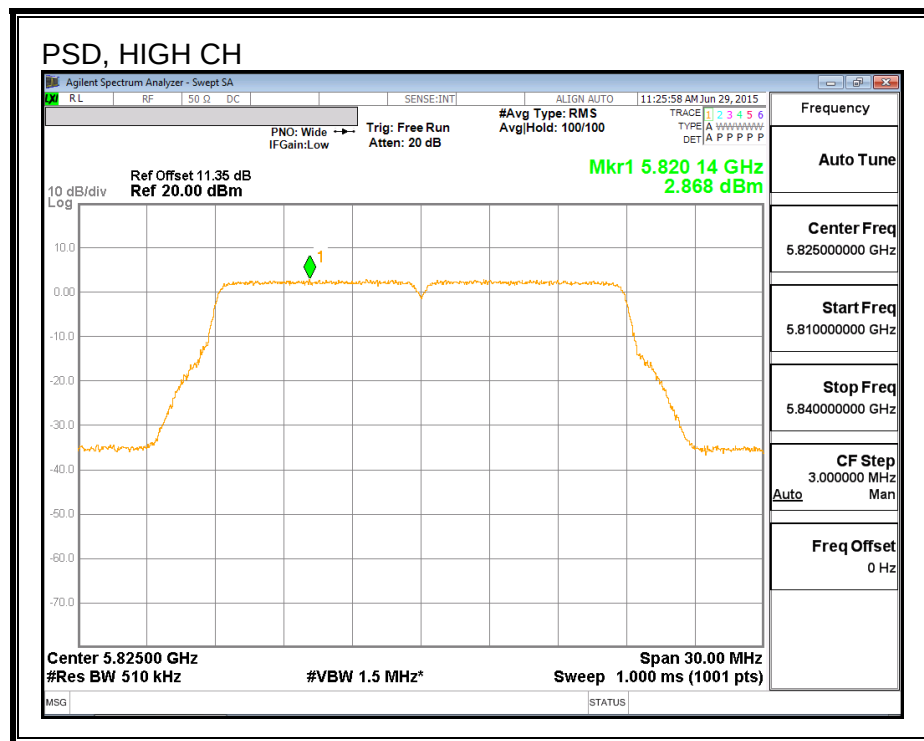
|                           |      |                                               |
|---------------------------|------|-----------------------------------------------|
| <b>Duty Cycle CF (dB)</b> | 0.00 | <b>Included in Calculations of Corr'd PSD</b> |
|---------------------------|------|-----------------------------------------------|

### **PSD Results**

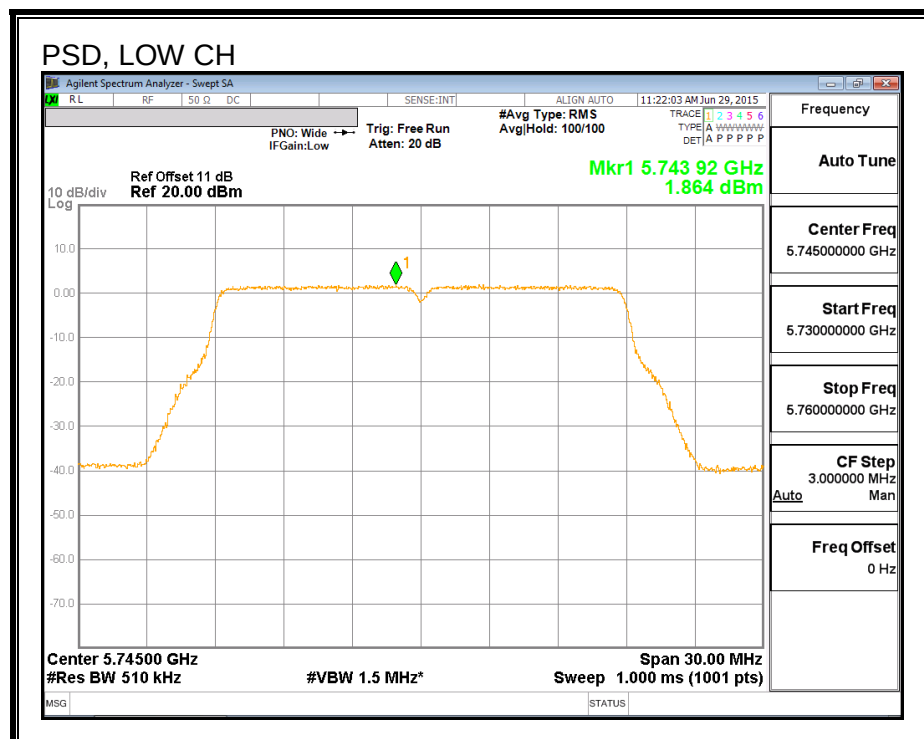
| Channel | Frequency<br>(MHz) | Chain 0<br>Meas<br>PSD<br>(dBm) | Chain 1<br>Meas<br>PSD<br>(dBm) | Total<br>Corr'd<br>PSD<br>(dBm) | PSD<br>Limit<br>(dBm) | PSD<br>Margin<br>(dB) |
|---------|--------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------|-----------------------|
| Low     | 5745               | 1.83                            | 1.86                            | 4.86                            | 30.00                 | -25.14                |
| Mid     | 5785               | 4.90                            | 5.21                            | 8.07                            | 30.00                 | -21.93                |
| High    | 5825               | 2.87                            | 2.93                            | 5.91                            | 30.00                 | -24.09                |

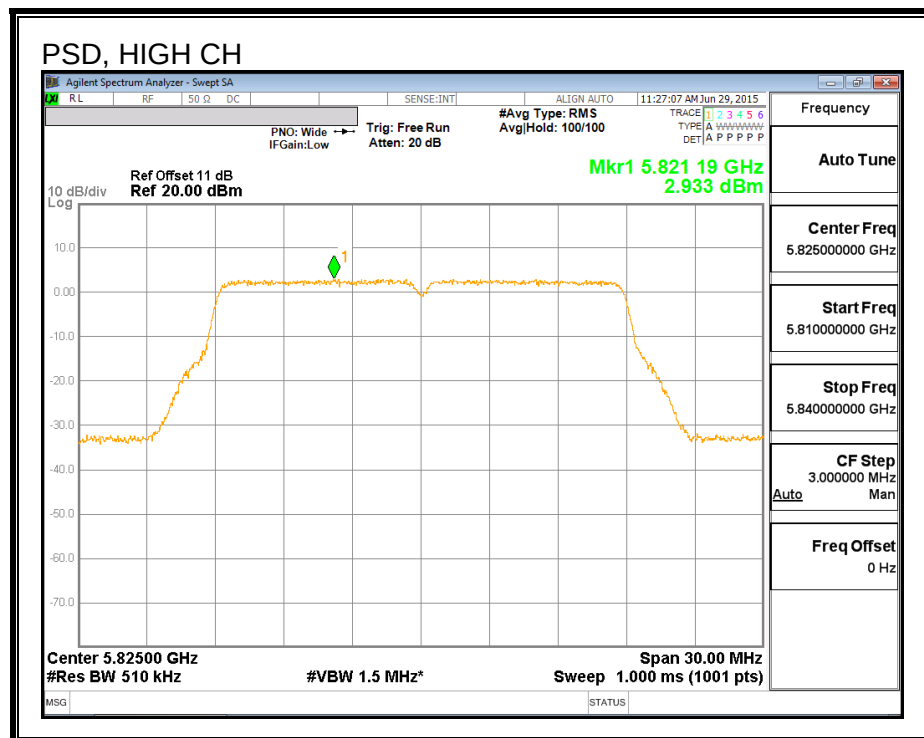
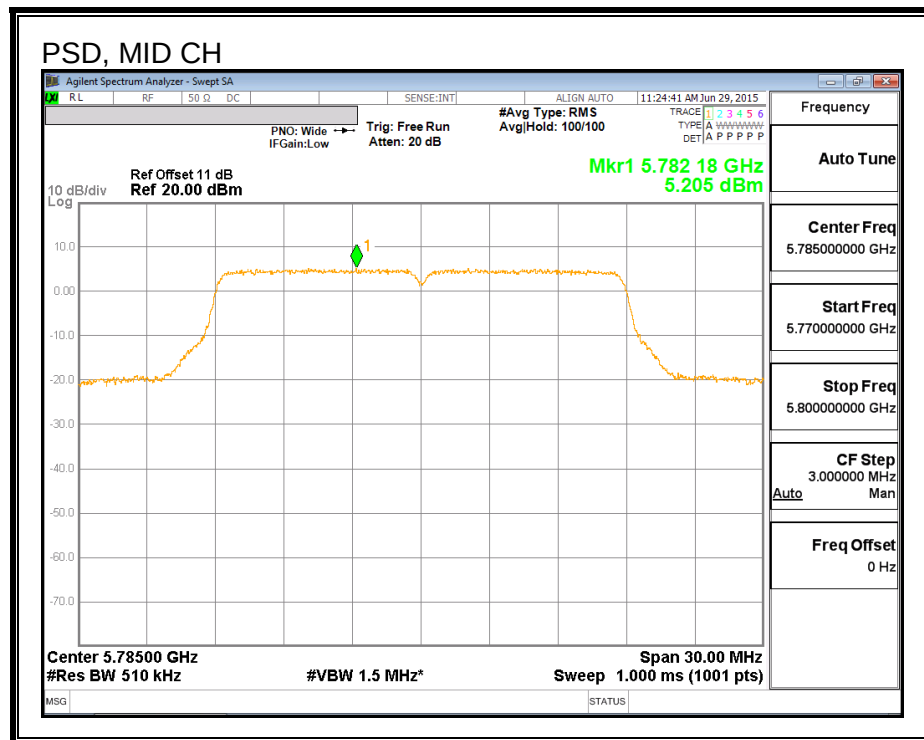
PSD,





**PSD, CHAIN 1**





#### **8.40. 802.11n HT20 2Tx STBC MODE IN THE 5.8 GHz BAND**

**Note:** Covered by 802.11n HT20 2Tx CDD MODE

## **8.41. 802.11n HT40 CHAIN 0 MODE IN THE 5.8 GHz BAND**

### **8.41.1. 6 dB BANDWIDTH**

#### **LIMITS**

FCC §15.407 (e)

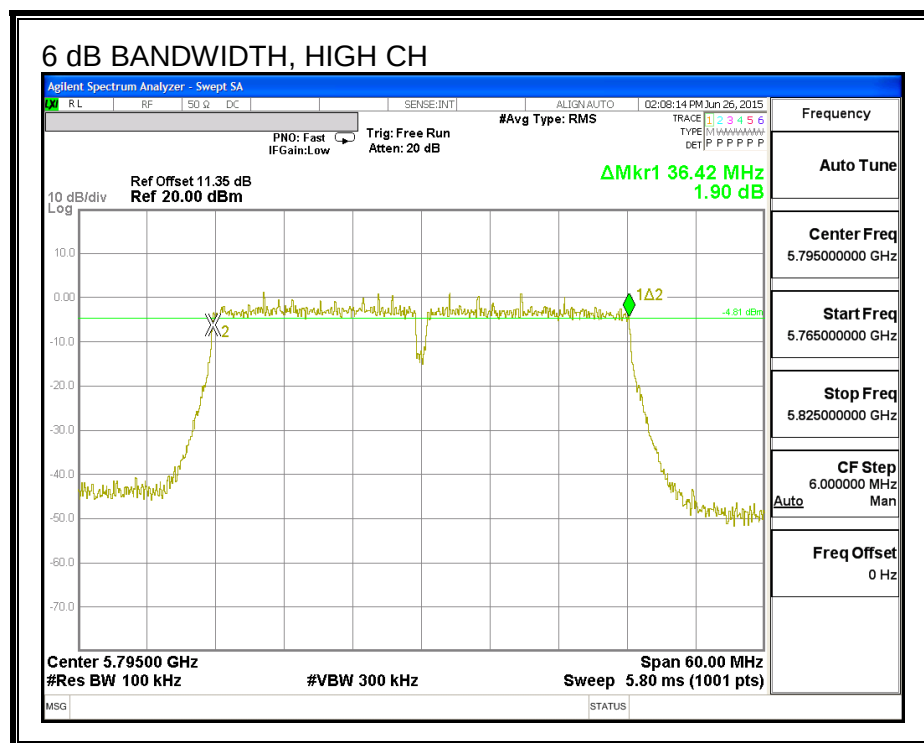
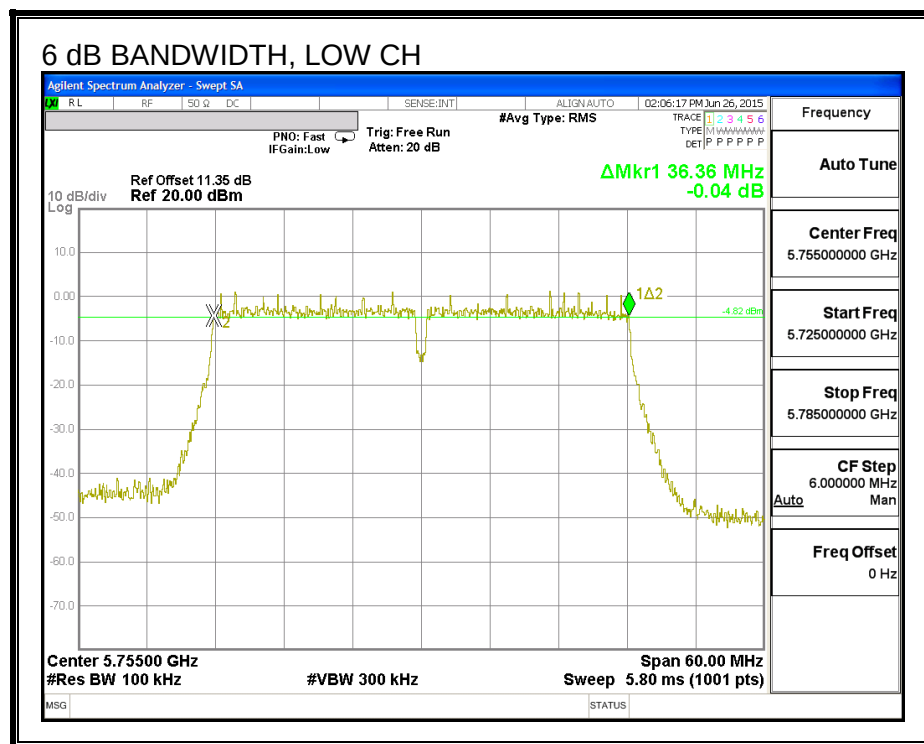
IC RSS-247 (6.2.4) (1)

The minimum 6 dB bandwidth shall be at least 500 kHz.

#### **RESULTS**

| Channel | Frequency<br>(MHz) | 6 dB Bandwidth<br>(MHz) | Minimum Limit<br>(MHz) |
|---------|--------------------|-------------------------|------------------------|
| Low     | 5755               | 36.36                   | 0.5                    |
| High    | 5795               | 36.42                   | 0.5                    |

## 6 dB BANDWIDTH



### 8.41.2. 26 dB BANDWIDTH

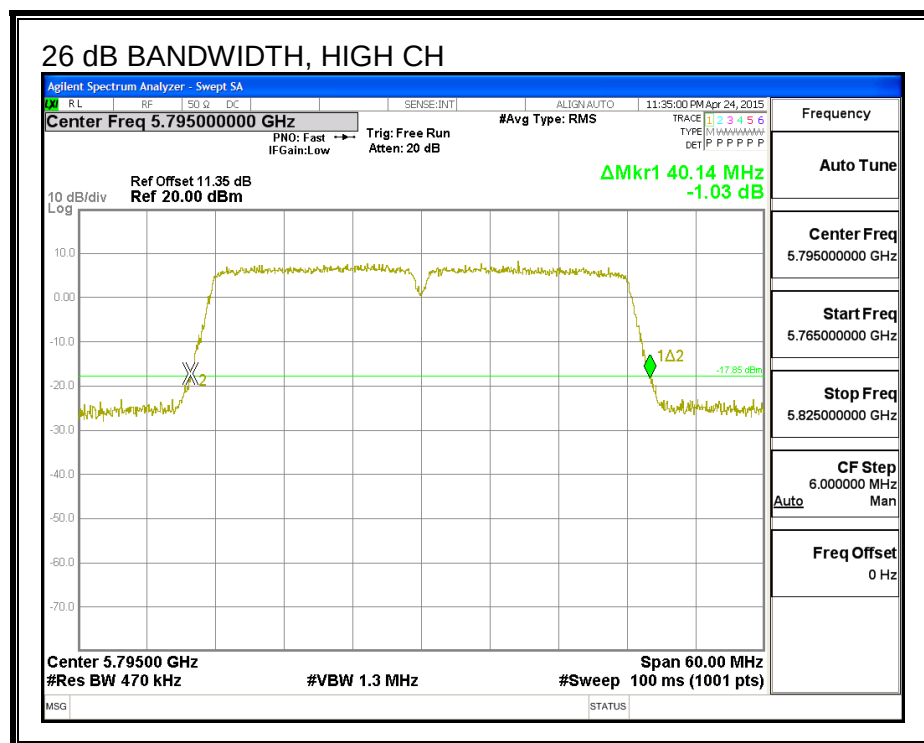
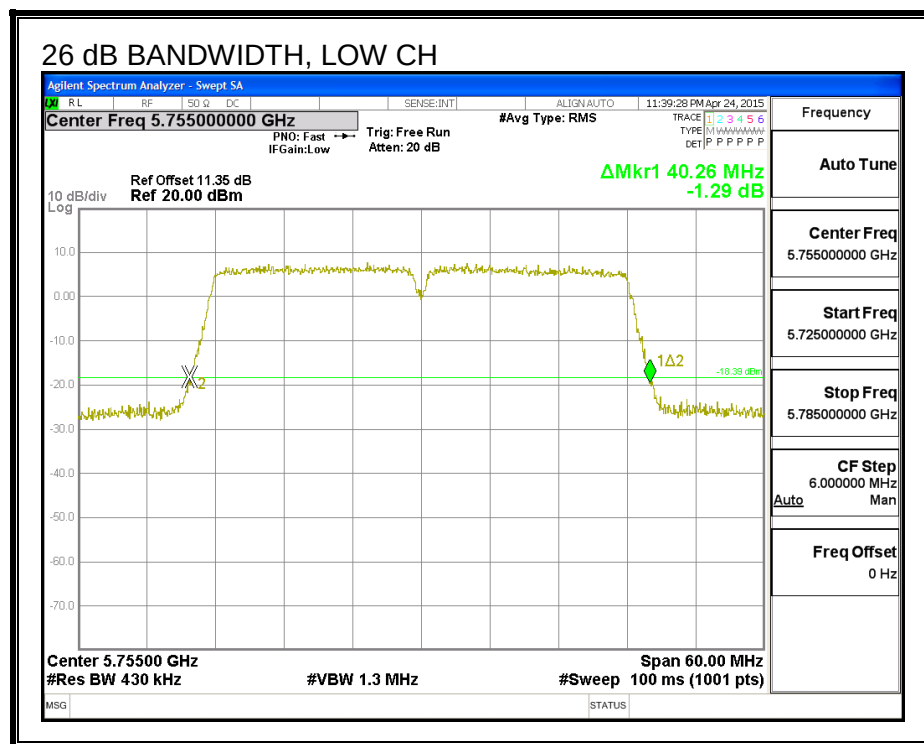
#### LIMITS

None, for reporting purposes only.

#### RESULTS

| Channel | Frequency<br>(MHz) | 26 dB Bandwidth<br>(MHz) |
|---------|--------------------|--------------------------|
| Low     | 5755               | 40.26                    |
| High    | 5795               | 40.14                    |

## 26 dB BANDWIDTH



### 8.41.3. 99% BANDWIDTH

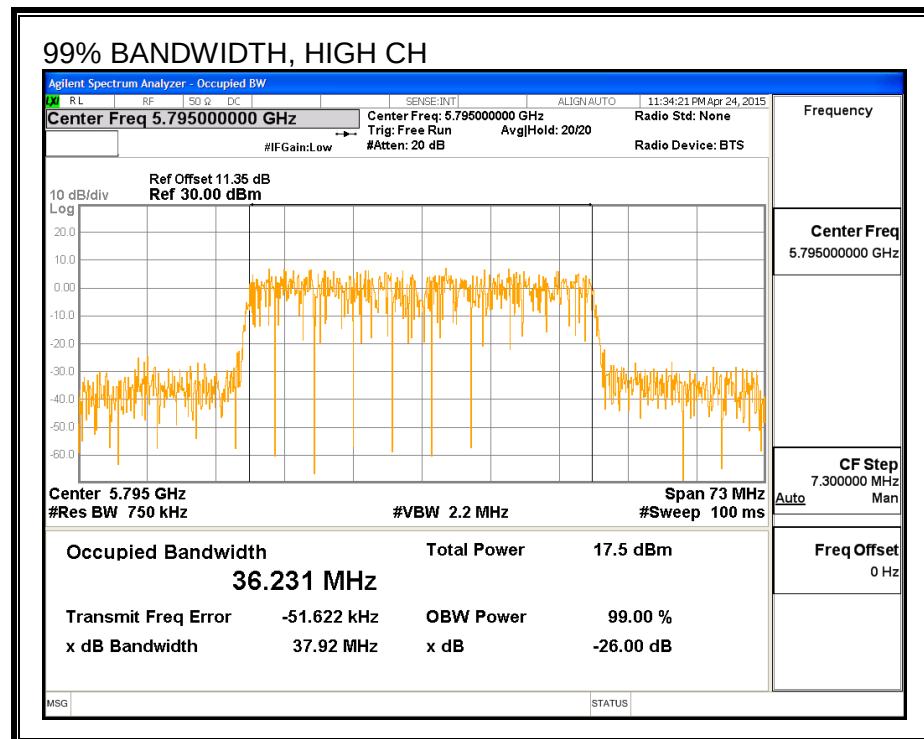
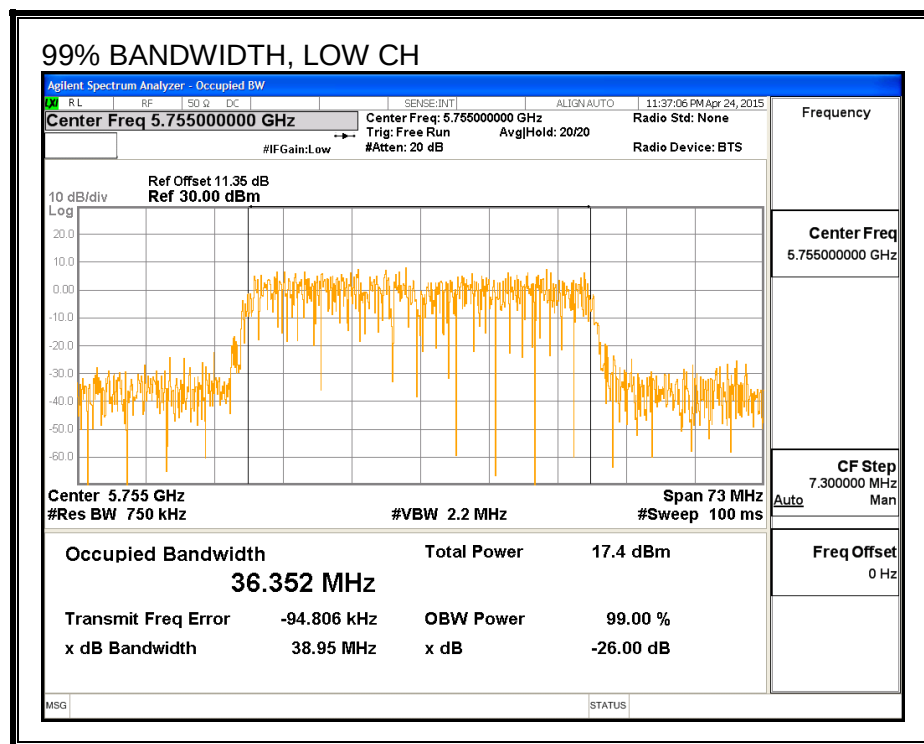
#### LIMITS

None; for reporting purposes only.

#### RESULTS

| Channel | Frequency<br>(MHz) | 99% Bandwidth<br>(MHz) |
|---------|--------------------|------------------------|
| Low     | 5755               | 36.352                 |
| High    | 5795               | 36.231                 |

**99% BANDWIDTH**



#### **8.41.4. AVERAGE POWER**

##### **LIMITS**

None; for reporting purposes only.

##### **RESULTS**

| Channel | Frequency<br>(MHz) | Power<br>(dBm) |
|---------|--------------------|----------------|
| Low     | 5755               | 14.96          |
| High    | 5795               | 17.97          |

### **8.41.5. OUTPUT POWER**

#### **LIMITS**

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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.

#### **DIRECTIONAL ANTENNA GAIN**

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

## **RESULTS**

### **Antenna Gain and Limit**

| Channel | Frequency<br>(MHz) | Directional<br>Gain<br>(dBi) | Power<br>Limit<br>(dBm) |
|---------|--------------------|------------------------------|-------------------------|
| Low     | 5755               | -4.33                        | 30.00                   |
| High    | 5795               | -4.33                        | 30.00                   |

|                           |      |                                                 |
|---------------------------|------|-------------------------------------------------|
| <b>Duty Cycle CF (dB)</b> | 0.00 | <b>Included in Calculations of Corr'd Power</b> |
|---------------------------|------|-------------------------------------------------|

### **Output Power Results**

| Channel | Frequency<br>(MHz) | Chain 0<br>Meas<br>Power<br>(dBm) | Total<br>Corr'd<br>Power<br>(dBm) | Power<br>Limit<br>(dBm) | Power<br>Margin<br>(dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low     | 5755               | 14.96                             | 14.96                             | 30.00                   | -15.04                  |
| High    | 5795               | 17.97                             | 17.97                             | 30.00                   | -12.03                  |

#### **8.41.6. PSD**

##### **LIMITS**

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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.

##### **DIRECTIONAL ANTENNA GAIN**

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

## **RESULTS**

### **Antenna Gain and Limits**

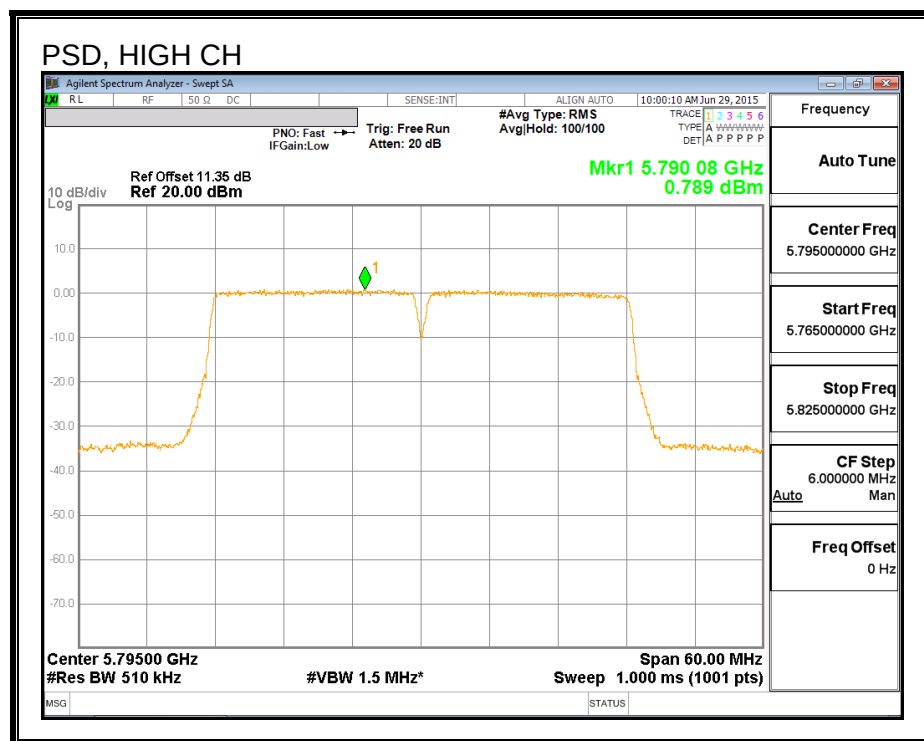
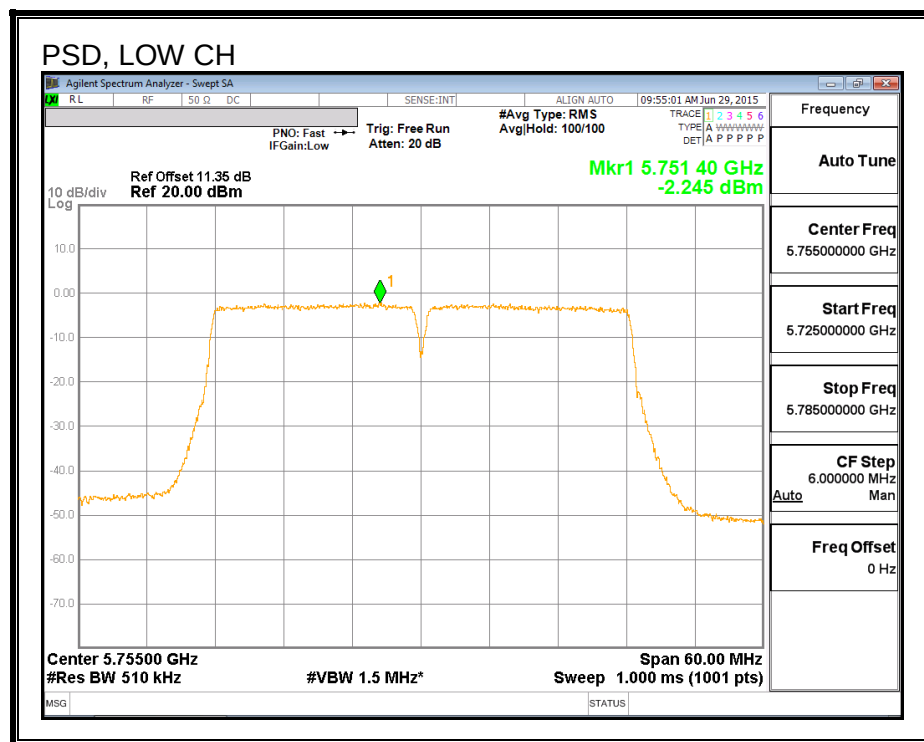
| Channel | Frequency<br>(MHz) | Directional<br>Gain<br>(dBi) | PSD<br>Limit<br>(dBm) |
|---------|--------------------|------------------------------|-----------------------|
| Low     | 5755               | -4.33                        | 30.00                 |
| High    | 5795               | -4.33                        | 30.00                 |

|                    |      |                                        |
|--------------------|------|----------------------------------------|
| Duty Cycle CF (dB) | 0.00 | Included in Calculations of Corr'd PSD |
|--------------------|------|----------------------------------------|

### **PSD Results**

| Channel | Frequency<br>(MHz) | Chain 0<br>Meas<br>PSD<br>(dBm) | Total<br>Corr'd<br>PSD<br>(dBm) | PSD<br>Limit<br>(dBm) | PSD<br>Margin<br>(dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------|-----------------------|
| Low     | 5755               | -2.25                           | -2.25                           | 30.00                 | -32.25                |
| High    | 5795               | 0.79                            | 0.79                            | 30.00                 | -29.21                |

PSD,



## **8.42. 802.11n HT40 CHAIN 1 MODE IN THE 5.8 GHz BAND**

### **8.42.1. 6 dB BANDWIDTH**

#### **LIMITS**

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

The minimum 6 dB bandwidth shall be at least 500 kHz.

#### **RESULTS**

| Channel | Frequency<br>(MHz) | 6 dB Bandwidth<br>(MHz) | Minimum Limit<br>(MHz) |
|---------|--------------------|-------------------------|------------------------|
| Low     | 5755               | 36.24                   | 0.5                    |
| High    | 5795               | 36.12                   | 0.5                    |



### 8.42.2. 26 dB BANDWIDTH

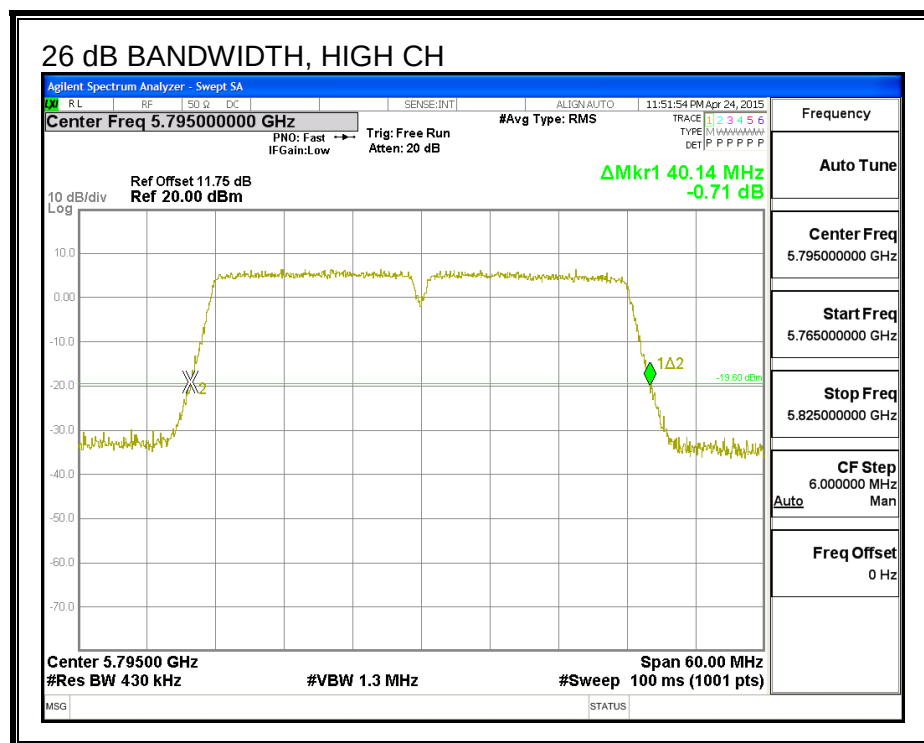
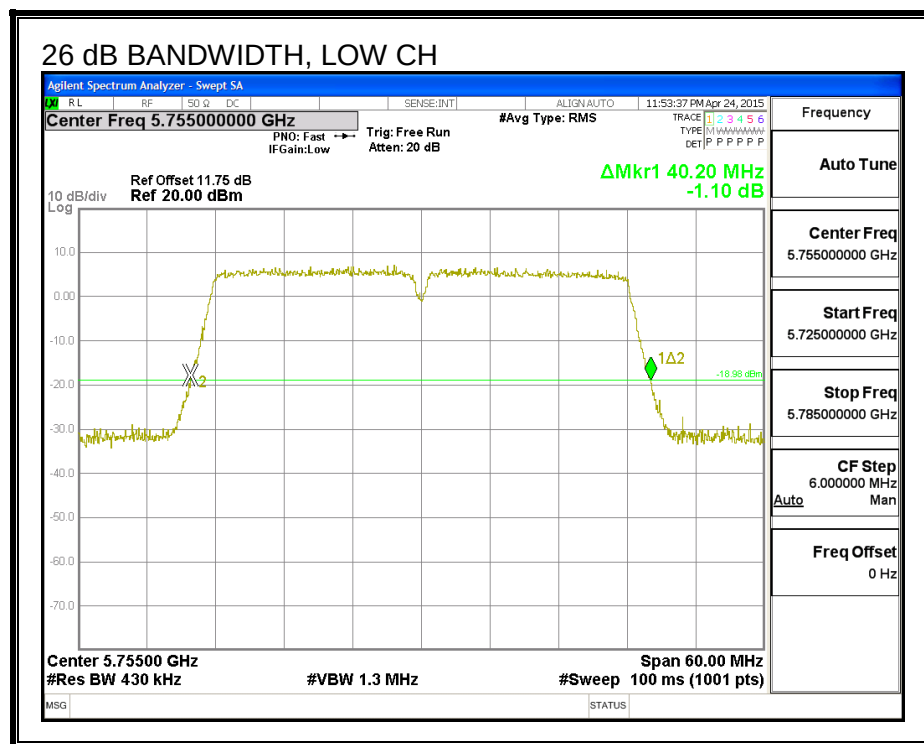
#### LIMITS

None, for reporting purposes only.

#### RESULTS

| Channel | Frequency<br>(MHz) | 26 dB Bandwidth<br>(MHz) |
|---------|--------------------|--------------------------|
| Low     | 5755               | 40.20                    |
| High    | 5795               | 40.14                    |

**26 dB BANDWIDTH**



### 8.42.3. 99% BANDWIDTH

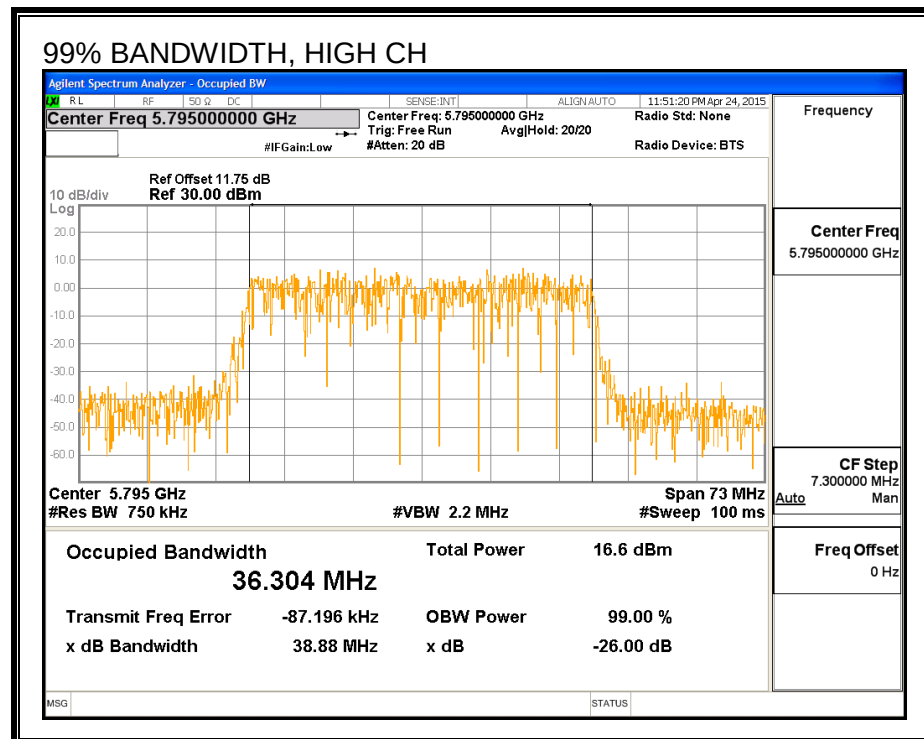
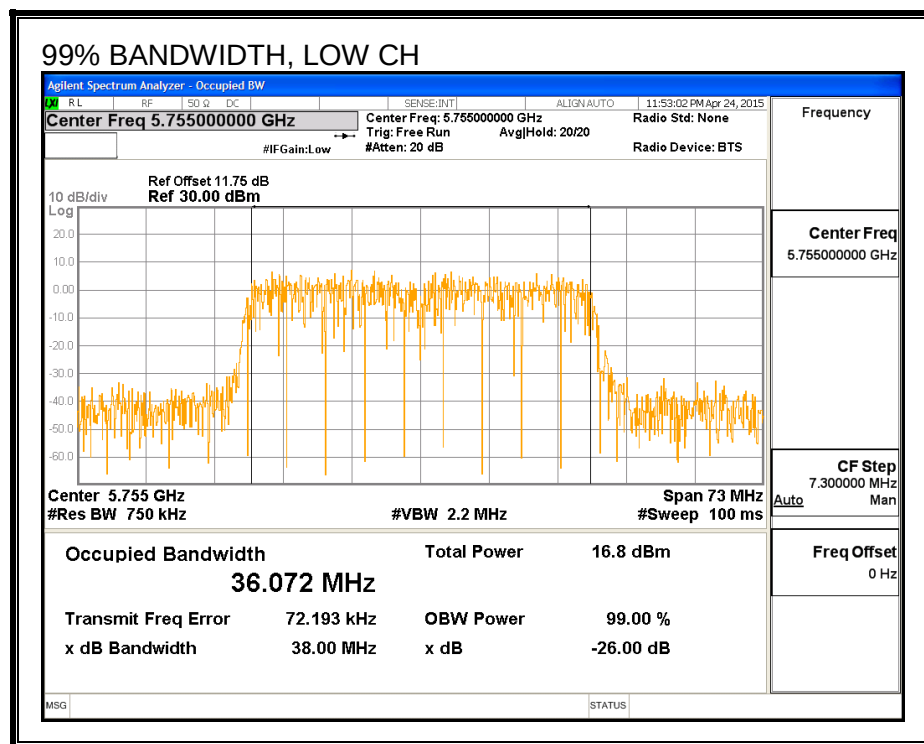
#### LIMITS

None; for reporting purposes only.

#### RESULTS

| Channel | Frequency<br>(MHz) | 99% Bandwidth<br>(MHz) |
|---------|--------------------|------------------------|
| Low     | 5755               | 36.072                 |
| High    | 5795               | 36.304                 |

**99% BANDWIDTH**



#### **8.42.4. AVERAGE POWER**

##### **LIMITS**

None; for reporting purposes only.

##### **RESULTS**

| Channel | Frequency<br>(MHz) | Power<br>(dBm) |
|---------|--------------------|----------------|
| Low     | 5755               | 14.98          |
| High    | 5795               | 17.95          |

#### **8.42.5. OUTPUT POWER**

##### **LIMITS**

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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.

##### **DIRECTIONAL ANTENNA GAIN**

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

## **RESULTS**

### **Antenna Gain and Limit**

| Channel | Frequency<br>(MHz) | Directional<br>Gain<br>(dBi) | Power<br>Limit<br>(dBm) |
|---------|--------------------|------------------------------|-------------------------|
| Low     | 5755               | -1.00                        | 30.00                   |
| High    | 5795               | -1.00                        | 30.00                   |

|                           |      |                                                 |
|---------------------------|------|-------------------------------------------------|
| <b>Duty Cycle CF (dB)</b> | 0.00 | <b>Included in Calculations of Corr'd Power</b> |
|---------------------------|------|-------------------------------------------------|

### **Output Power Results**

| Channel | Frequency<br>(MHz) | Chain 1<br>Meas<br>Power<br>(dBm) | Total<br>Corr'd<br>Power<br>(dBm) | Power<br>Limit<br>(dBm) | Power<br>Margin<br>(dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low     | 5755               | 14.98                             | 14.98                             | 30.00                   | -15.02                  |
| High    | 5795               | 17.95                             | 17.95                             | 30.00                   | -12.05                  |

#### **8.42.6. PSD**

##### **LIMITS**

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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.

##### **DIRECTIONAL ANTENNA GAIN**

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

## **RESULTS**

### **Antenna Gain and Limits**

| Channel | Frequency<br>(MHz) | Directional<br>Gain<br>(dBi) | PSD<br>Limit<br>(dBm) |
|---------|--------------------|------------------------------|-----------------------|
| Low     | 5755               | -1.00                        | 30.00                 |
| High    | 5795               | -1.00                        | 30.00                 |

|                           |      |                                               |
|---------------------------|------|-----------------------------------------------|
| <b>Duty Cycle CF (dB)</b> | 0.00 | <b>Included in Calculations of Corr'd PSD</b> |
|---------------------------|------|-----------------------------------------------|

### **PSD Results**

| Channel | Frequency<br>(MHz) | Chain 1<br>Meas<br>PSD<br>(dBm) | Total<br>Corr'd<br>PSD<br>(dBm) | PSD<br>Limit<br>(dBm) | PSD<br>Margin<br>(dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------|-----------------------|
| Low     | 5755               | -2.19                           | -2.19                           | 30.00                 | -32.19                |
| High    | 5795               | 0.97                            | 0.97                            | 30.00                 | -29.03                |



## **8.43. 802.11n HT40 2Tx CDD MODE IN THE 5.8 GHz BAND**

### **8.43.1. 6 dB BANDWIDTH**

#### **LIMITS**

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

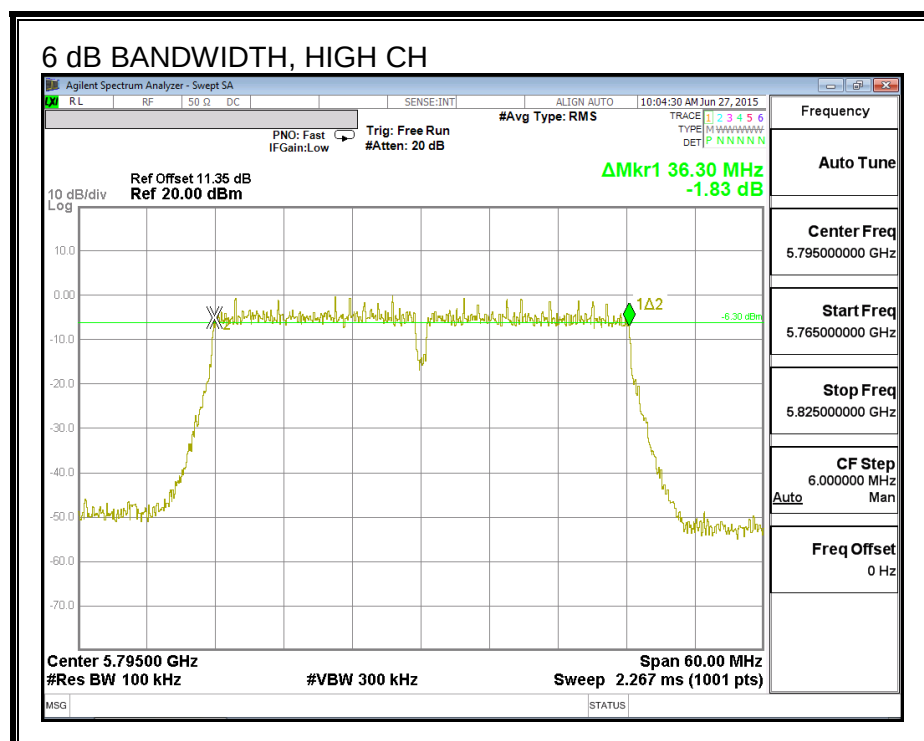
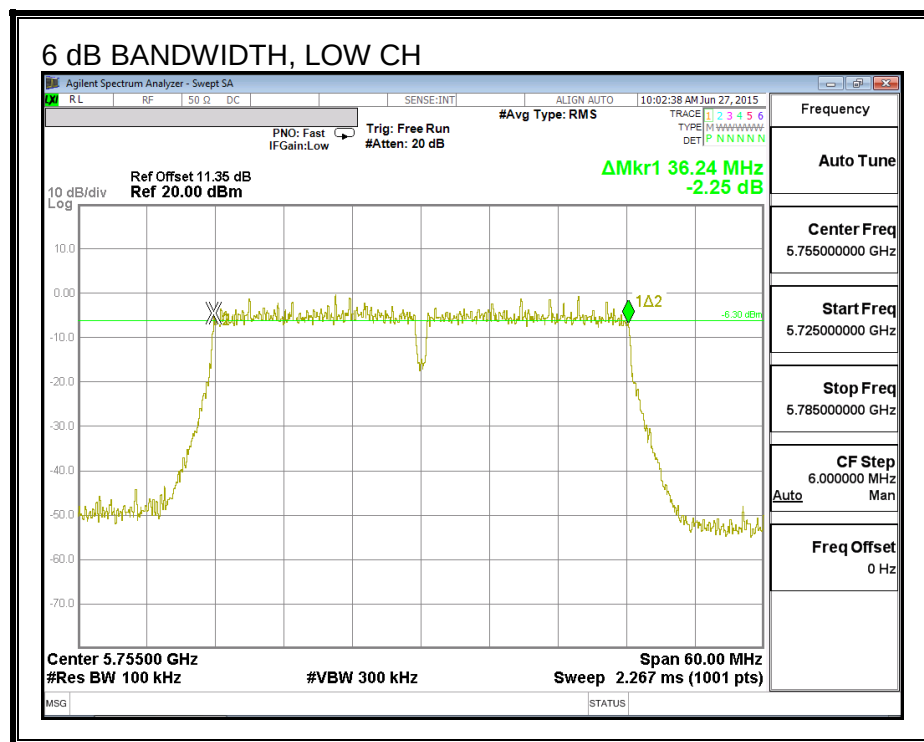
The minimum 6 dB bandwidth shall be at least 500 kHz.

#### **RESULTS**

| Channel | Frequency<br>(MHz) | 6 dB BW<br>Chain 0<br>(MHz) | 6 dB BW<br>Chain 1<br>(MHz) | Minimum<br>Limit<br>(MHz) |
|---------|--------------------|-----------------------------|-----------------------------|---------------------------|
| Low     | 5755               | 36.06                       | 36.24                       | 0.5                       |
| High    | 5795               | 36.18                       | 36.30                       | 0.5                       |



**6 dB BANDWIDTH, CHAIN 1**



### 8.43.2. 26 dB BANDWIDTH

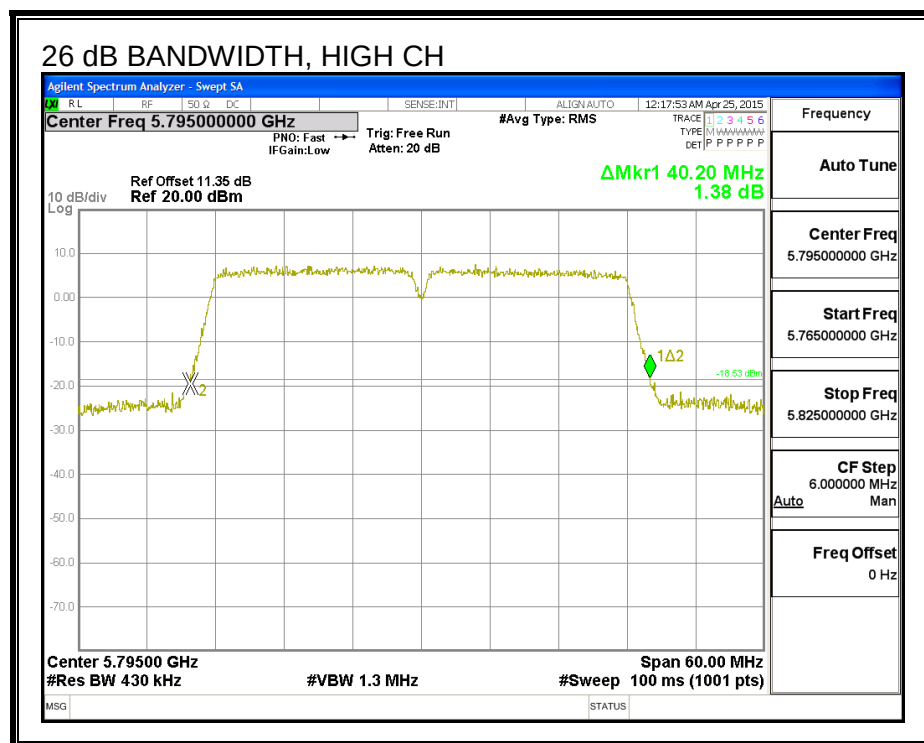
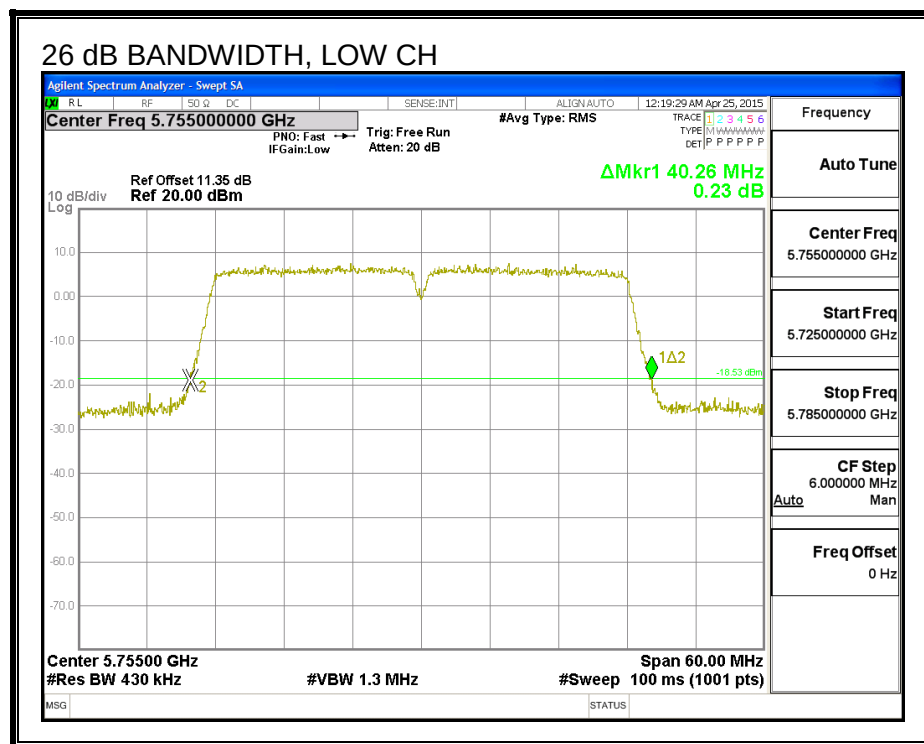
#### LIMITS

None, for reporting purposes only.

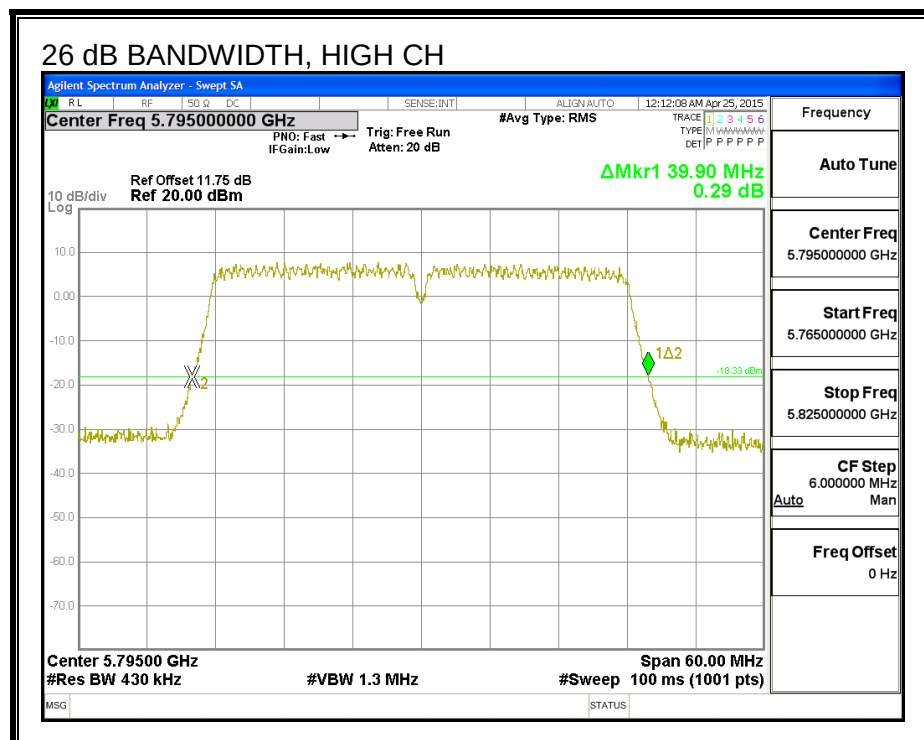
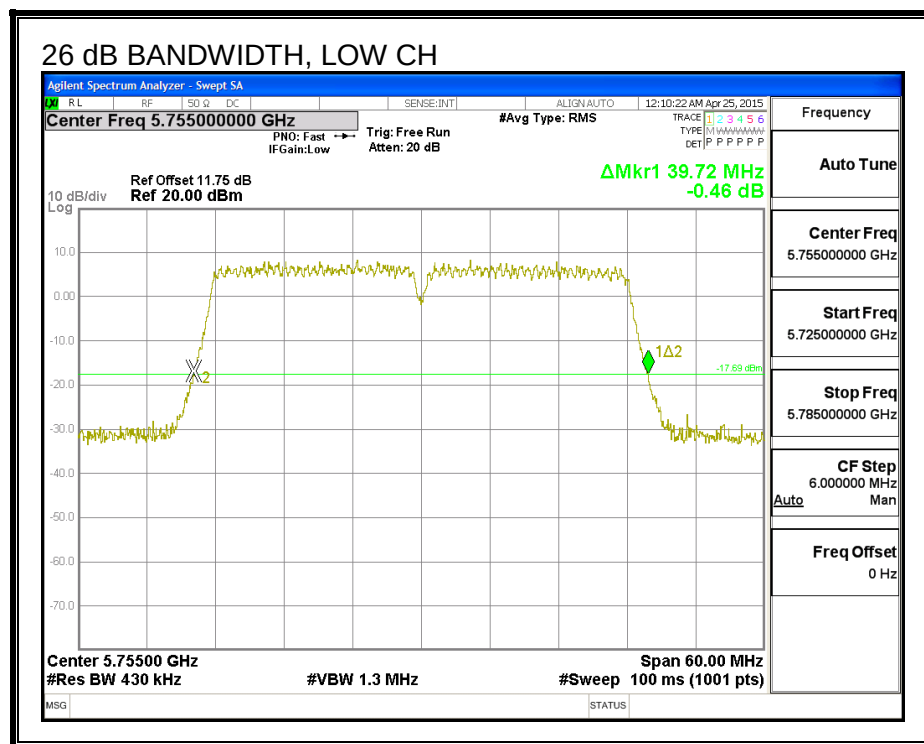
#### RESULTS

| Channel | Frequency<br>(MHz) | 26 dB BW<br>Chain 0<br>(MHz) | 26 dB BW<br>Chain 1<br>(MHz) |
|---------|--------------------|------------------------------|------------------------------|
| Low     | 5755               | 40.26                        | 39.72                        |
| High    | 5795               | 40.20                        | 39.90                        |

**26 dB BANDWIDTH, CHAIN 0**



**26 dB BANDWIDTH, CHAIN 1**



### 8.43.3. 99% BANDWIDTH

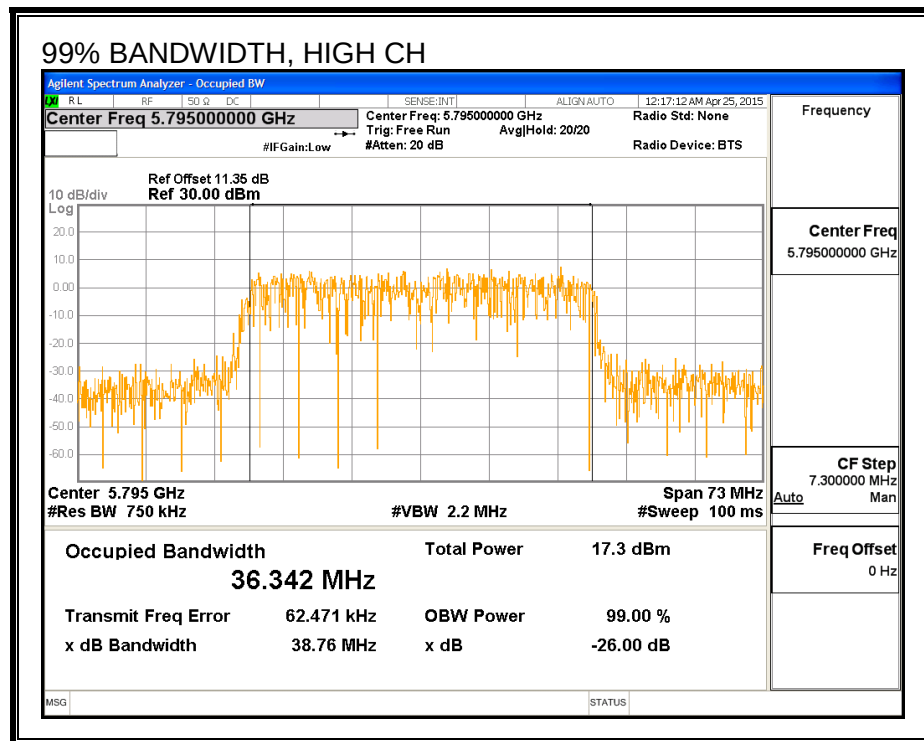
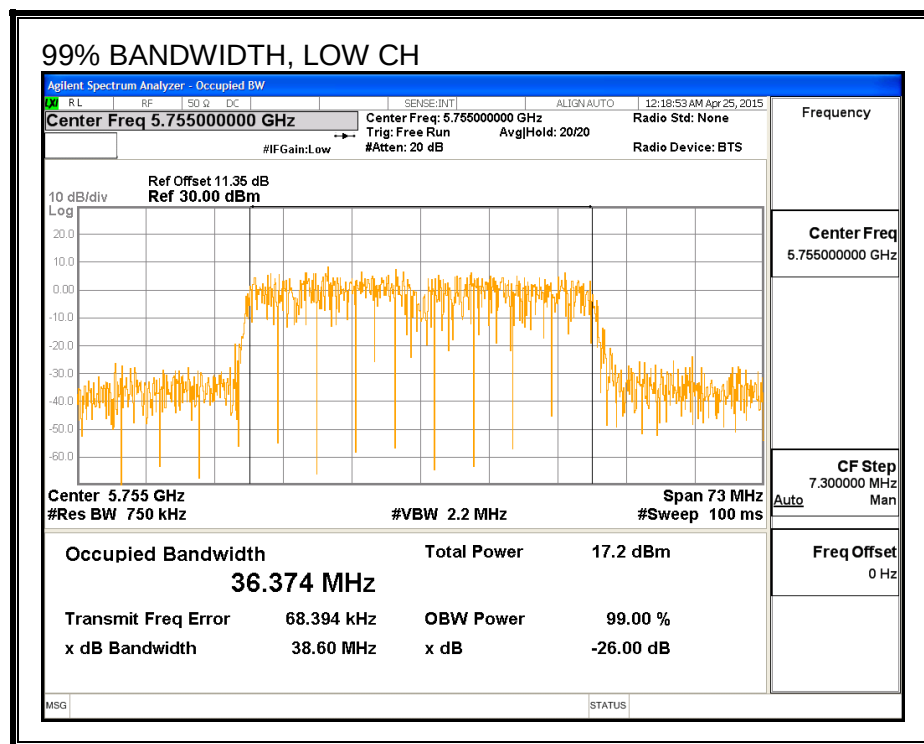
#### LIMITS

None; for reporting purposes only.

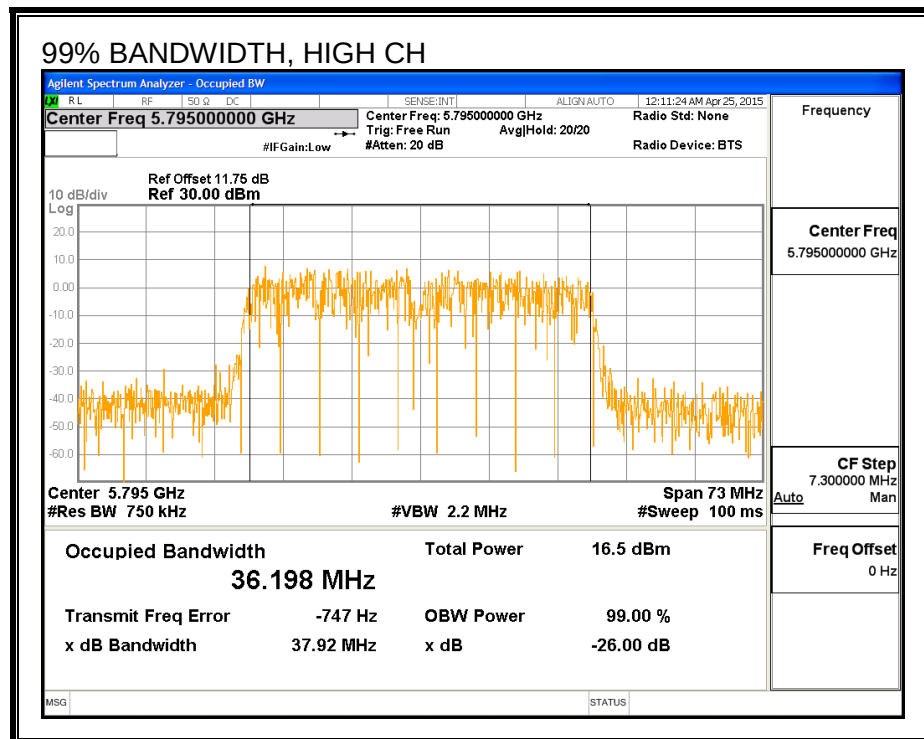
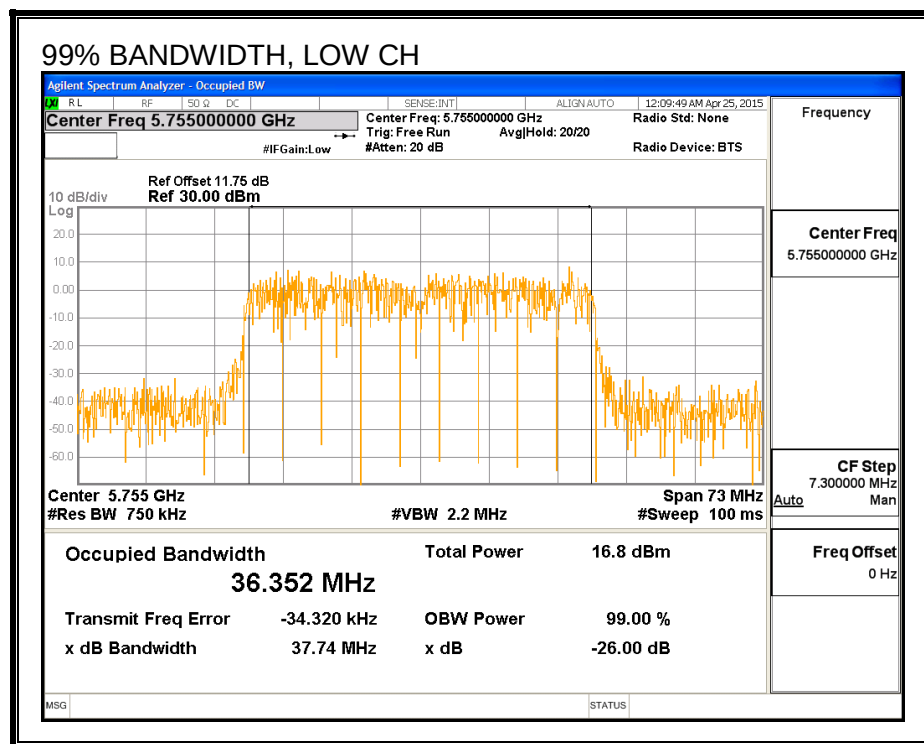
#### RESULTS

| Channel | Frequency<br>(MHz) | 99% BW<br>Chain 0<br>(MHz) | 99% BW<br>Chain 1<br>(MHz) |
|---------|--------------------|----------------------------|----------------------------|
| Low     | 5755               | 36.374                     | 36.352                     |
| High    | 5795               | 36.342                     | 36.198                     |

**99% BANDWIDTH, CHAIN 0**



**99% BANDWIDTH, CHAIN 1**



#### 8.43.4. AVERAGE POWER

##### LIMITS

None; for reporting purposes only.

##### RESULTS

| Channel | Frequency<br>(MHz) | Chain 0<br>Power<br>(dBm) | Chain 1<br>Power<br>(dBm) | Total<br>Power<br>(dBm) |
|---------|--------------------|---------------------------|---------------------------|-------------------------|
| Low     | 5755               | 15.00                     | 14.92                     | 17.97                   |
| High    | 5795               | 16.94                     | 16.96                     | 19.96                   |

### 8.43.5. OUTPUT POWER

#### LIMITS

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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.

#### DIRECTIONAL ANTENNA GAIN

The TX chains are uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

| Chain 0<br>Antenna<br>Gain<br>(dBi) | Chain 1<br>Antenna<br>Gain<br>(dBi) | Uncorrelated Chains<br>Directional<br>Gain<br>(dBi) |
|-------------------------------------|-------------------------------------|-----------------------------------------------------|
| -4.33                               | -1.00                               | -2.35                                               |

## **RESULTS**

### **Antenna Gain and Limit**

| Channel | Frequency<br>(MHz) | Directional<br>Gain<br>(dBi) | Power<br>Limit<br>(dBm) |
|---------|--------------------|------------------------------|-------------------------|
| Low     | 5755               | -2.35                        | 30.00                   |
| High    | 5795               | -2.35                        | 30.00                   |

|                           |      |                                                 |
|---------------------------|------|-------------------------------------------------|
| <b>Duty Cycle CF (dB)</b> | 0.00 | <b>Included in Calculations of Corr'd Power</b> |
|---------------------------|------|-------------------------------------------------|

### **Output Power Results**

| Channel | Frequency<br>(MHz) | Chain 0<br>Meas<br>Power<br>(dBm) | Chain 1<br>Meas<br>Power<br>(dBm) | Total<br>Corr'd<br>Power<br>(dBm) | Power<br>Limit<br>(dBm) | Power<br>Margin<br>(dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low     | 5755               | 15.00                             | 14.92                             | 17.97                             | 30.00                   | -12.03                  |
| High    | 5795               | 16.94                             | 16.96                             | 19.96                             | 30.00                   | -10.04                  |

### 8.43.6. PSD

#### LIMITS

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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.

#### DIRECTIONAL ANTENNA GAIN

The TX chains are correlated and the antenna gain is unequal among the chains. The directional gain is:

| Chain 0<br>Antenna<br>Gain<br>(dBi) | Chain 1<br>Antenna<br>Gain<br>(dBi) | Correlated Chains<br>Directional<br>Gain<br>(dBi) |
|-------------------------------------|-------------------------------------|---------------------------------------------------|
| -4.33                               | -1.00                               | 0.50                                              |

## **RESULTS**

### **Antenna Gain and Limit**

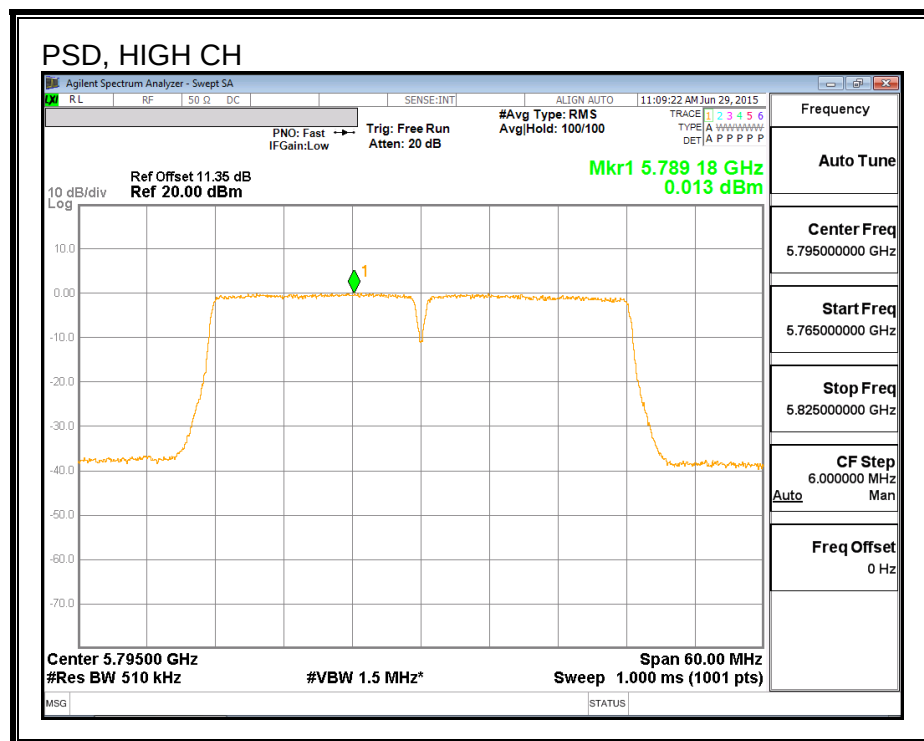
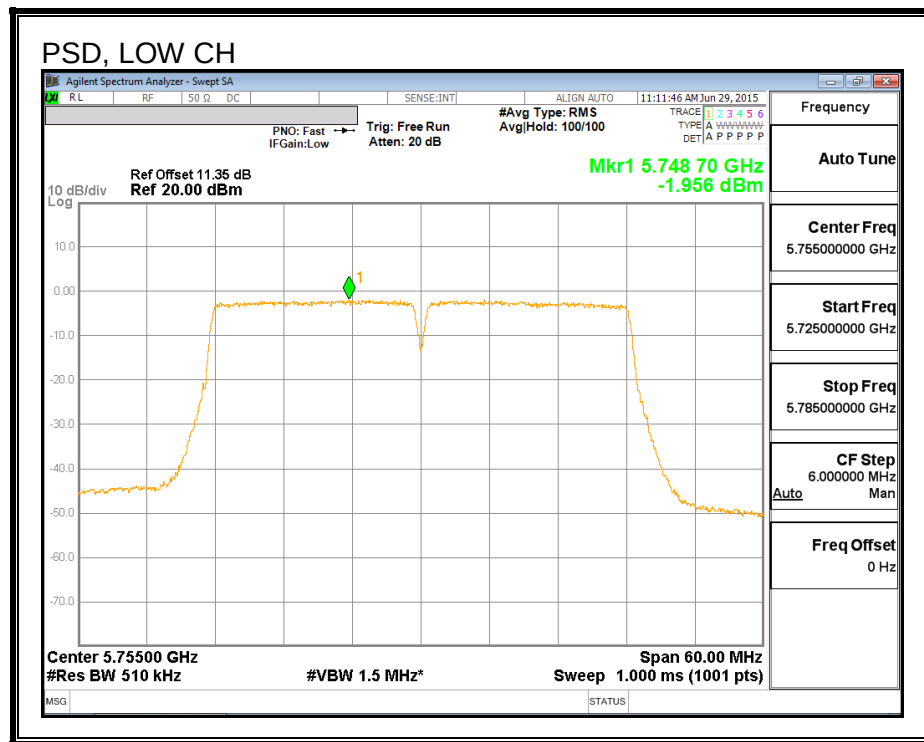
| Channel | Frequency<br>(MHz) | Directional<br>Gain<br>(dBi) | PSD<br>Limit<br>(dBm) |
|---------|--------------------|------------------------------|-----------------------|
| Low     | 5755               | 0.50                         | 30.00                 |
| High    | 5795               | 0.50                         | 30.00                 |

|                           |      |                                               |
|---------------------------|------|-----------------------------------------------|
| <b>Duty Cycle CF (dB)</b> | 0.00 | <b>Included in Calculations of Corr'd PSD</b> |
|---------------------------|------|-----------------------------------------------|

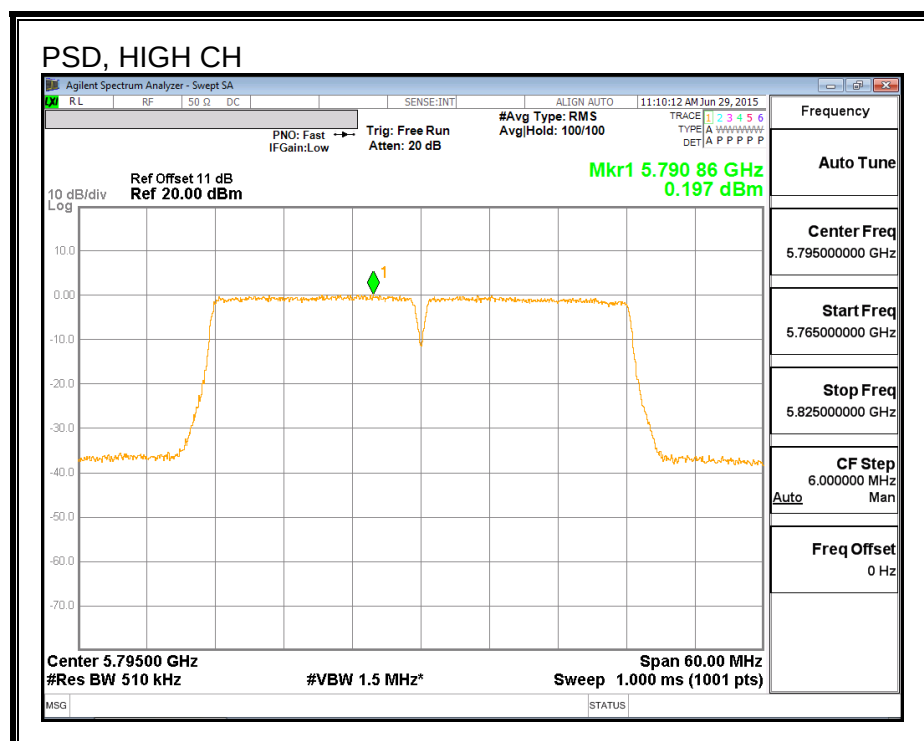
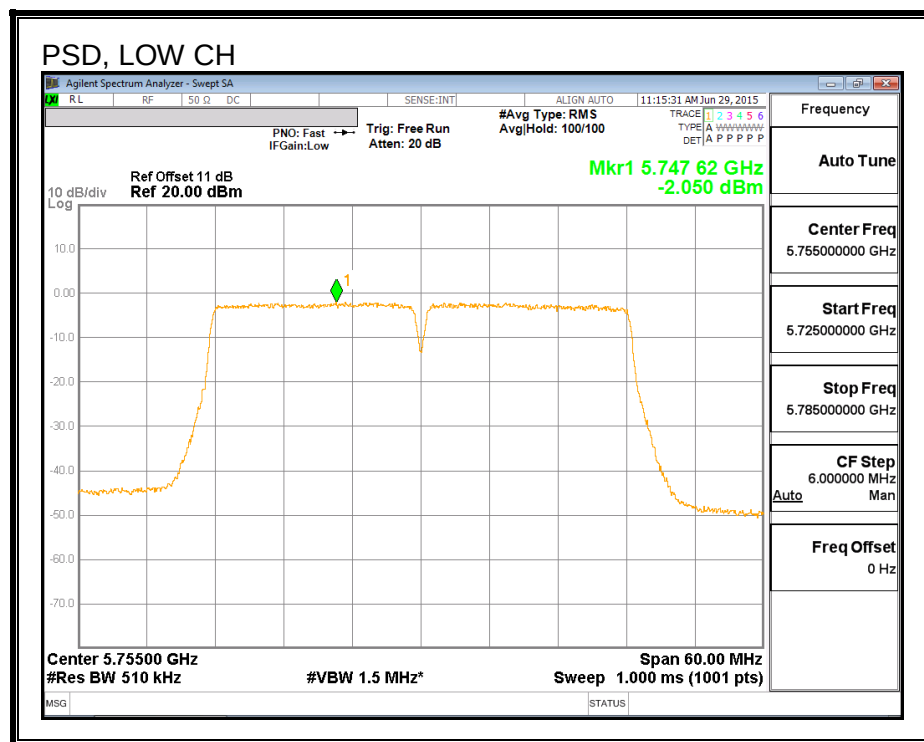
### **PSD Results**

| Channel | Frequency<br>(MHz) | Chain 0<br>Meas<br>PSD<br>(dBm) | Chain 1<br>Meas<br>PSD<br>(dBm) | Total<br>Corr'd<br>PSD<br>(dBm) | PSD<br>Limit<br>(dBm) | PSD<br>Margin<br>(dB) |
|---------|--------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------|-----------------------|
| Low     | 5755               | -1.96                           | -2.05                           | 1.01                            | 30.00                 | -28.99                |
| High    | 5795               | 0.01                            | 0.20                            | 3.12                            | 30.00                 | -26.88                |

PSD,



**PSD, CHAIN 1**



#### **8.44. 802.11n HT40 2Tx STBC MODE IN THE 5.8 GHz BAND**

**Note:** Covered by 802.11n HT40 2Tx CDD MODE

## 8.45. 802.11ac VHT80 CHAIN 0 MODE IN THE 5.8 GHz BAND

### 8.45.1. 6 dB BANDWIDTH

#### LIMITS

FCC §15.407 (e)

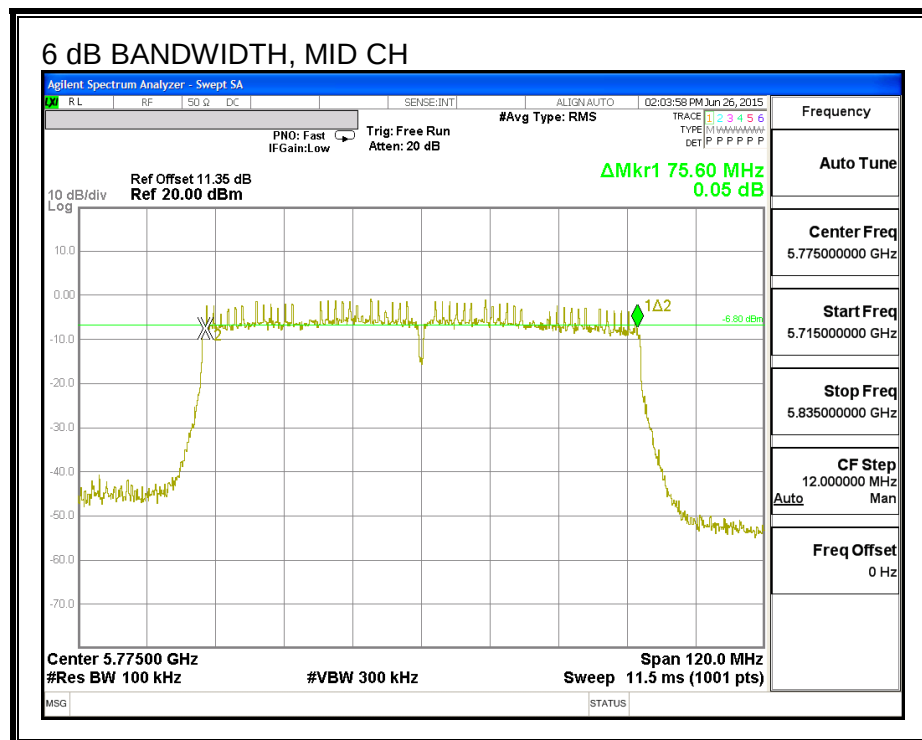
IC RSS-247 (6.2.4) (1)

The minimum 6 dB bandwidth shall be at least 500 kHz.

#### RESULTS

| Channel | Frequency<br>(MHz) | 6 dB Bandwidth<br>(MHz) | Minimum Limit<br>(MHz) |
|---------|--------------------|-------------------------|------------------------|
| Mid     | 5775               | 75.60                   | 0.5                    |

#### 6 dB BANDWIDTH



## 8.45.2. 26 dB BANDWIDTH

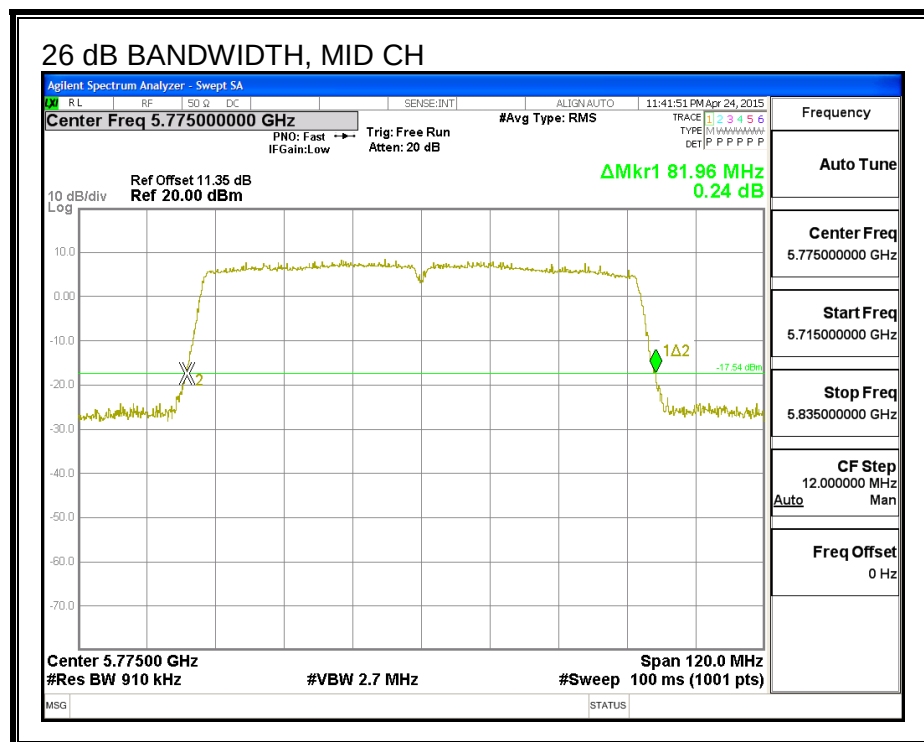
### LIMITS

None, for reporting purposes only.

### RESULTS

| Channel | Frequency<br>(MHz) | 26 dB Bandwidth<br>(MHz) |
|---------|--------------------|--------------------------|
| Mid     | 5775               | 81.96                    |

### 26 dB BANDWIDTH



### 8.45.3. 99% BANDWIDTH

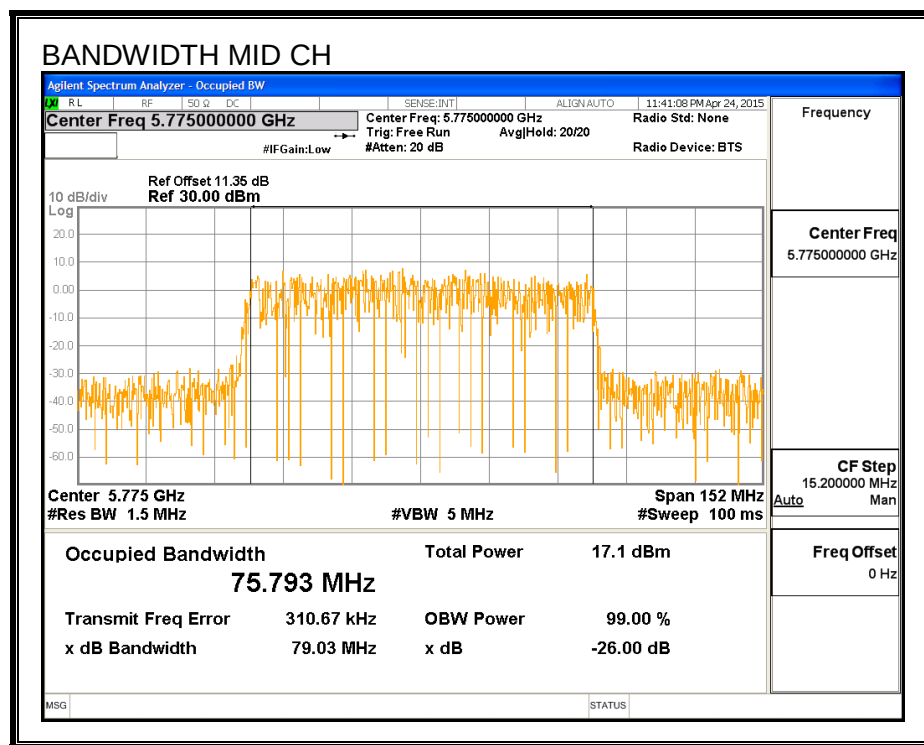
#### LIMITS

None; for reporting purposes only.

#### RESULTS

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|---------------------|
| Mid     | 5775            | 75.793              |

#### 99% BANDWIDTH



#### **8.45.4. AVERAGE POWER**

##### **LIMITS**

None; for reporting purposes only.

##### **RESULTS**

| Channel | Frequency<br>(MHz) | Power<br>(dBm) |
|---------|--------------------|----------------|
| Mid     | 5775               | 14.95          |

### **8.45.5. OUTPUT POWER**

#### **LIMITS**

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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.

#### **DIRECTIONAL ANTENNA GAIN**

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

## **RESULTS**

### **Antenna Gain and Limit**

| Channel | Frequency<br>(MHz) | Directional<br>Gain<br>(dBi) | Power<br>Limit<br>(dBm) |
|---------|--------------------|------------------------------|-------------------------|
| Mid     | 5775               | -4.33                        | 30.00                   |

|                    |      |                                          |
|--------------------|------|------------------------------------------|
| Duty Cycle CF (dB) | 0.21 | Included in Calculations of Corr'd Power |
|--------------------|------|------------------------------------------|

### **Output Power Results**

| Channel | Frequency<br>(MHz) | Chain 0<br>Meas<br>Power<br>(dBm) | Total<br>Corr'd<br>Power<br>(dBm) | Power<br>Limit<br>(dBm) | Power<br>Margin<br>(dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Mid     | 5775               | 14.95                             | 15.16                             | 30.00                   | -14.84                  |

## 8.45.6. PSD

### LIMITS

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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.

### DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

### RESULTS

#### Antenna Gain and Limits

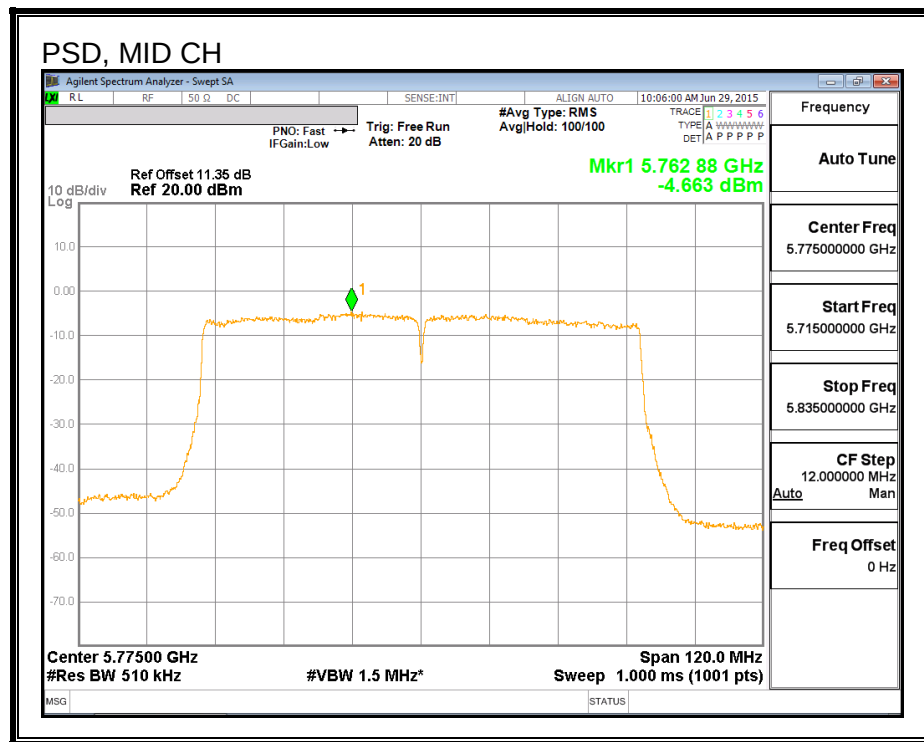
| Channel | Frequency<br>(MHz) | Directional<br>Gain<br>(dBi) | PSD<br>Limit<br>(dBm) |
|---------|--------------------|------------------------------|-----------------------|
| Mid     | 5775               | -4.33                        | 30.00                 |

|                    |      |                                        |
|--------------------|------|----------------------------------------|
| Duty Cycle CF (dB) | 0.21 | Included in Calculations of Corr'd PSD |
|--------------------|------|----------------------------------------|

#### PSD Results

| Channel | Frequency<br>(MHz) | Chain 0<br>Meas<br>PSD<br>(dBm) | Total<br>Corr'd<br>PSD<br>(dBm) | PSD<br>Limit<br>(dBm) | PSD<br>Margin<br>(dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------|-----------------------|
| Mid     | 5775               | -4.663                          | -4.45                           | 30.00                 | -34.45                |

**PSD,**



## 8.46. 802.11ac VHT80 CHAIN 1 MODE IN THE 5.8 GHz BAND

### 8.46.1. 6 dB BANDWIDTH

#### LIMITS

FCC §15.407 (e)

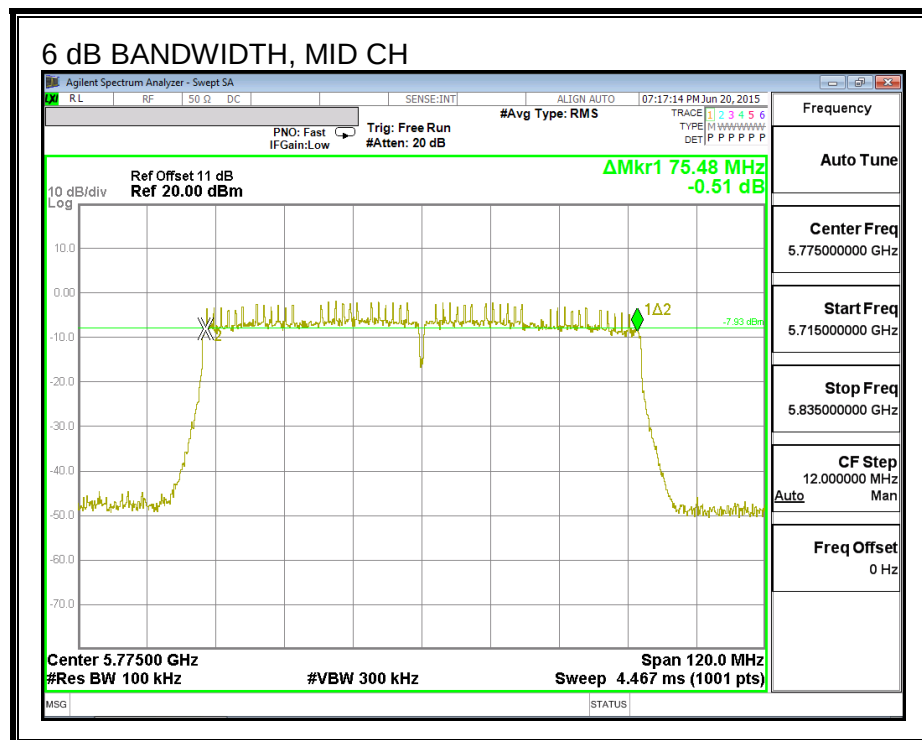
IC RSS-247 (6.2.4) (1)

The minimum 6 dB bandwidth shall be at least 500 kHz.

#### RESULTS

| Channel | Frequency<br>(MHz) | 6 dB Bandwidth<br>(MHz) | Minimum Limit<br>(MHz) |
|---------|--------------------|-------------------------|------------------------|
| Mid     | 5775               | 75.48                   | 0.5                    |

#### 6 dB BANDWIDTH



## 8.46.2. 26 dB BANDWIDTH

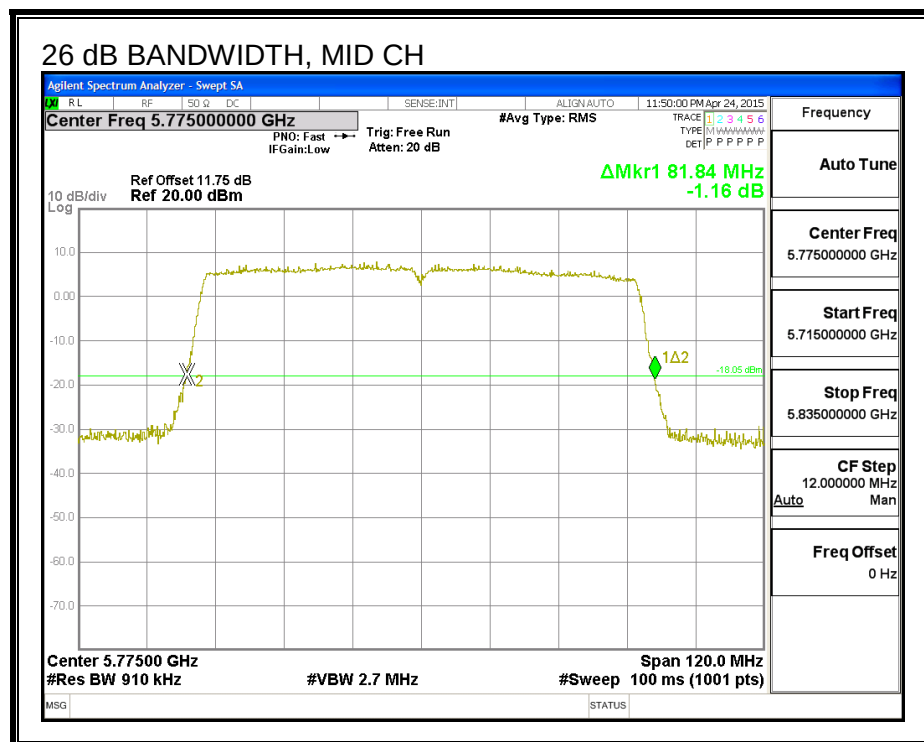
### LIMITS

None, for reporting purposes only.

### RESULTS

| Channel | Frequency<br>(MHz) | 26 dB Bandwidth<br>(MHz) |
|---------|--------------------|--------------------------|
| Mid     | 5775               | 81.84                    |

### 26 dB BANDWIDTH



### 8.46.3. 99% BANDWIDTH

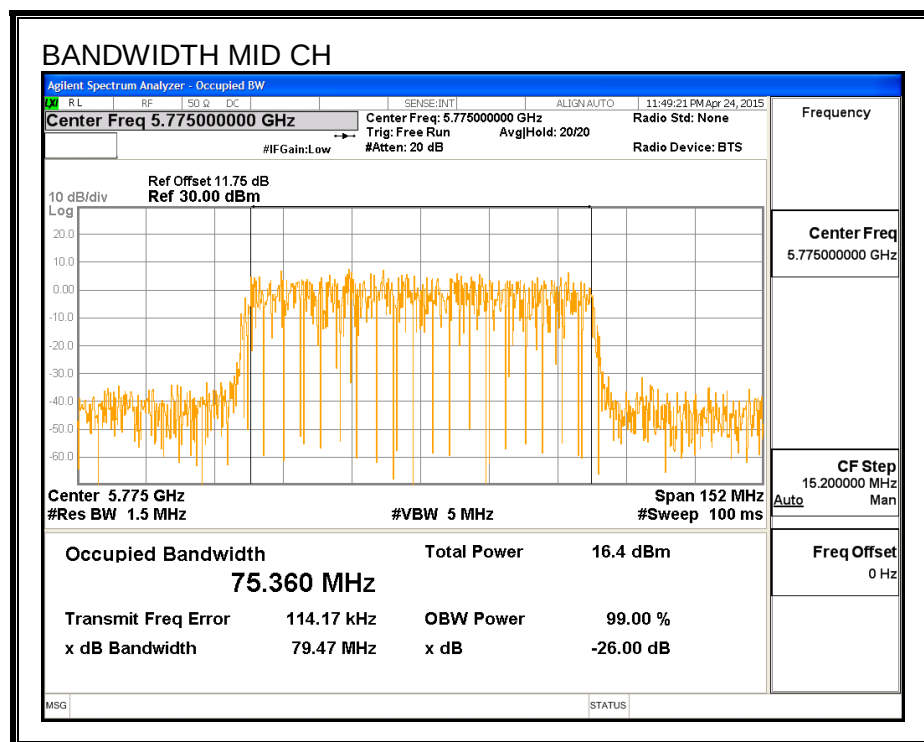
#### LIMITS

None; for reporting purposes only.

#### RESULTS

| Channel | Frequency<br>(MHz) | 99% Bandwidth<br>(MHz) |
|---------|--------------------|------------------------|
| Mid     | 5775               | 75.360                 |

#### 99% BANDWIDTH



#### **8.46.4. AVERAGE POWER**

##### **LIMITS**

None; for reporting purposes only.

##### **RESULTS**

| Channel | Frequency<br>(MHz) | Power<br>(dBm) |
|---------|--------------------|----------------|
| Mid     | 5775               | 14.89          |

## **8.46.5. OUTPUT POWER**

### **LIMITS**

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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.

### **DIRECTIONAL ANTENNA GAIN**

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

## **RESULTS**

### **Antenna Gain and Limit**

| Channel | Frequency<br>(MHz) | Directional<br>Gain<br>(dBi) | Power<br>Limit<br>(dBm) |
|---------|--------------------|------------------------------|-------------------------|
| Mid     | 5775               | -1.00                        | 30.00                   |

|                    |      |                                          |
|--------------------|------|------------------------------------------|
| Duty Cycle CF (dB) | 0.21 | Included in Calculations of Corr'd Power |
|--------------------|------|------------------------------------------|

### **Output Power Results**

| Channel | Frequency<br>(MHz) | Chain 1<br>Meas<br>Power<br>(dBm) | Total<br>Corr'd<br>Power<br>(dBm) | Power<br>Limit<br>(dBm) | Power<br>Margin<br>(dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Mid     | 5775               | 14.89                             | 15.10                             | 30.00                   | -14.90                  |

## 8.46.6. PSD

### LIMITS

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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.

### DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

### RESULTS

#### Antenna Gain and Limits

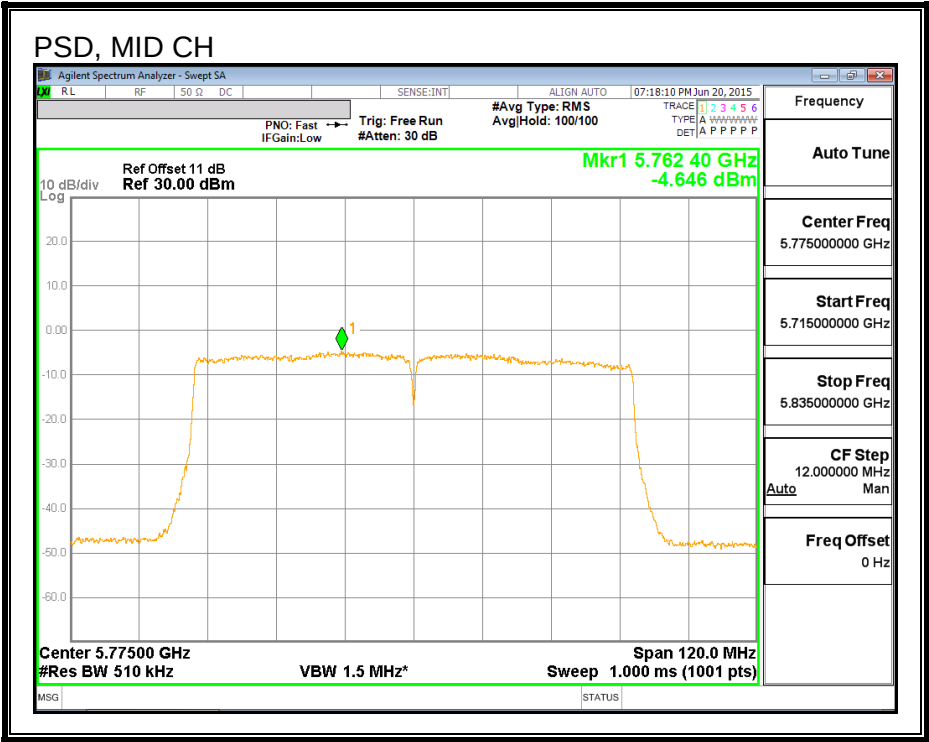
| Channel | Frequency<br>(MHz) | Directional<br>Gain<br>(dBi) | PSD<br>Limit<br>(dBm) |
|---------|--------------------|------------------------------|-----------------------|
| Mid     | 5775               | -1.00                        | 30.00                 |

|                    |      |                                        |
|--------------------|------|----------------------------------------|
| Duty Cycle CF (dB) | 0.21 | Included in Calculations of Corr'd PSD |
|--------------------|------|----------------------------------------|

#### PSD Results

| Channel | Frequency<br>(MHz) | Chain 1<br>Meas<br>PSD<br>(dBm) | Total<br>Corr'd<br>PSD<br>(dBm) | PSD<br>Limit<br>(dBm) | PSD<br>Margin<br>(dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------|-----------------------|
| Mid     | 5775               | -4.646                          | -4.44                           | 30.00                 | -34.44                |

PSD.



## **8.47. 802.11ac VHT80 2Tx CDD MODE IN THE 5.8 GHz BAND**

### **8.47.1. 6 dB BANDWIDTH**

#### **LIMITS**

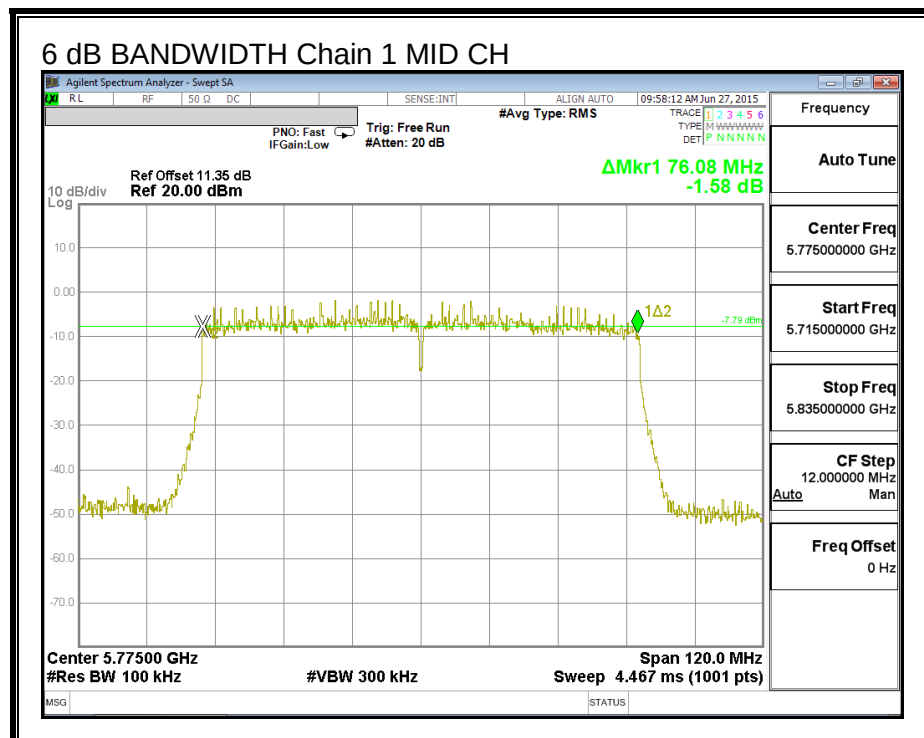
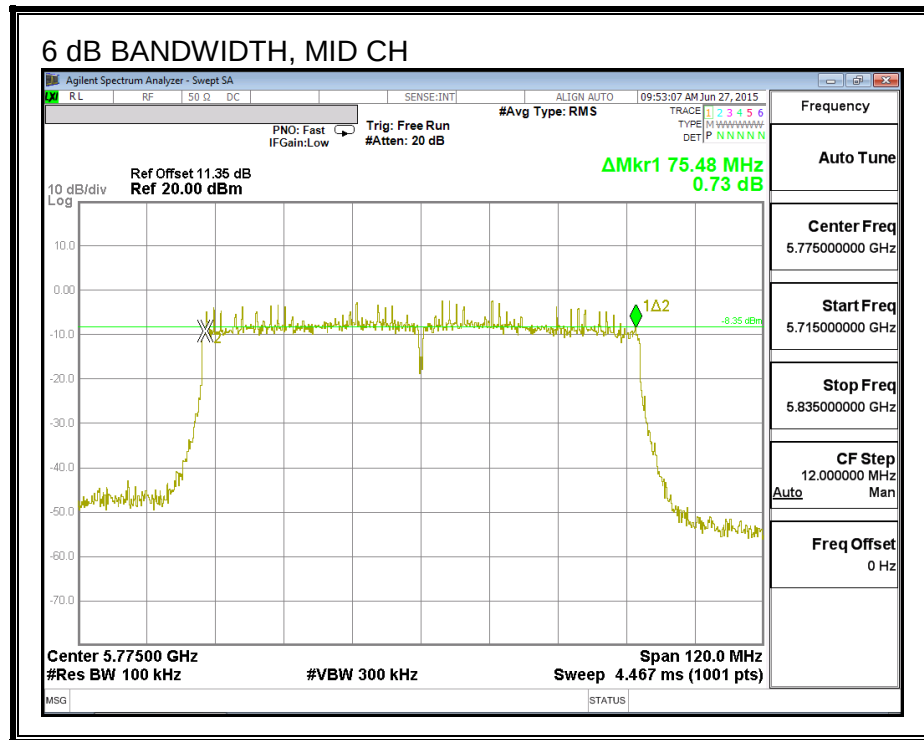
FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

The minimum 6 dB bandwidth shall be at least 500 kHz.

#### **RESULTS**

| Channel | Frequency<br>(MHz) | 6 dB BW<br>Chain 0<br>(MHz) | 6 dB BW<br>Chain 1<br>(MHz) | Minimum<br>Limit<br>(MHz) |
|---------|--------------------|-----------------------------|-----------------------------|---------------------------|
| Mid     | 5775               | 75.48                       | 76.08                       | 0.5                       |



### 8.47.2. 26 dB BANDWIDTH

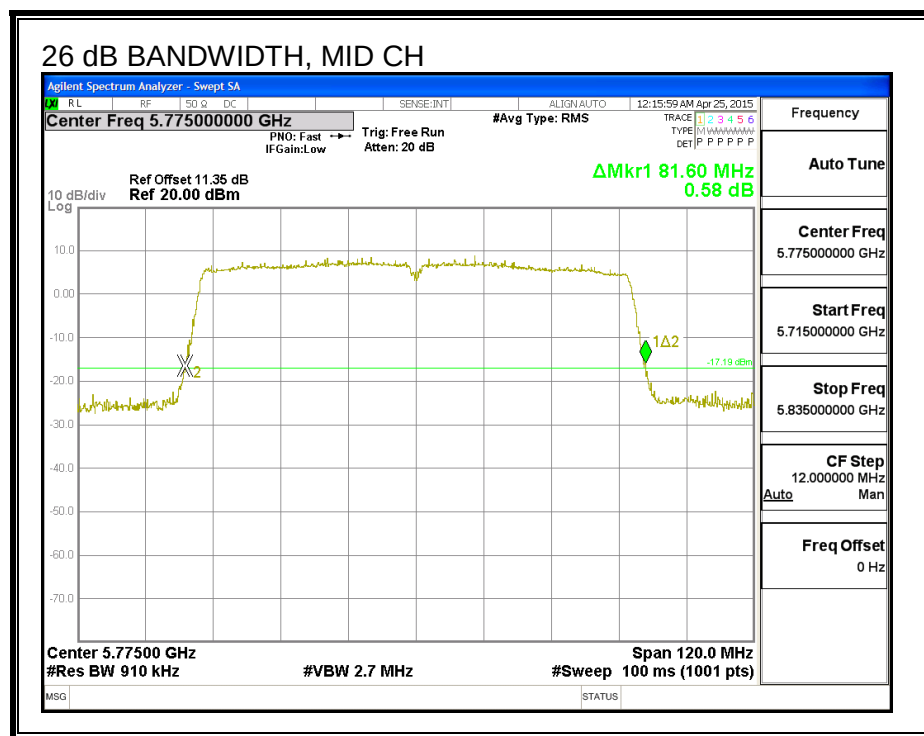
#### LIMITS

None, for reporting purposes only.

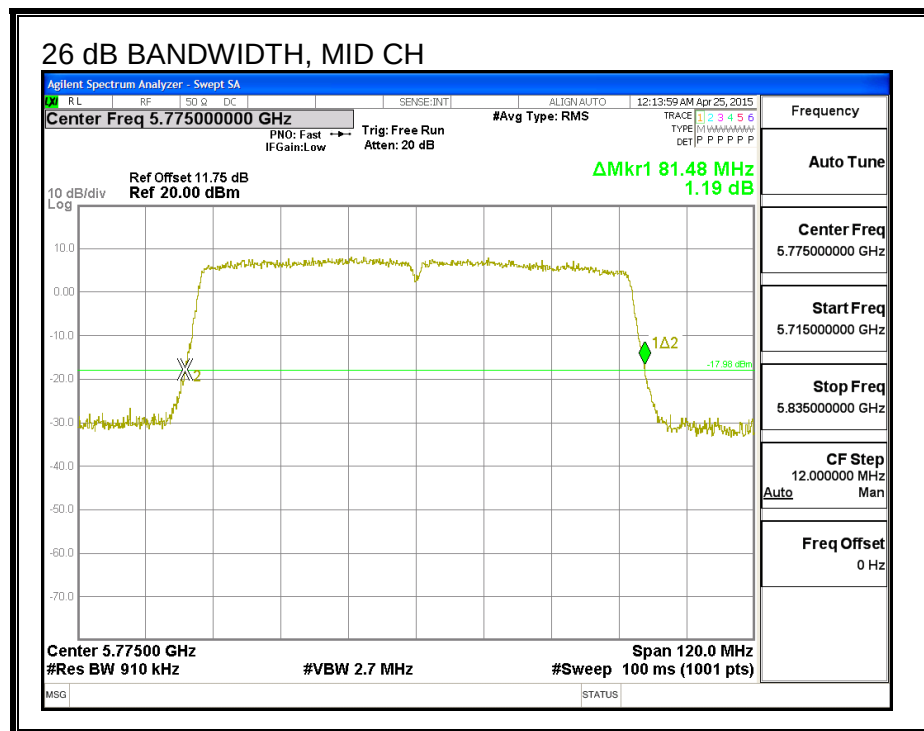
#### RESULTS

| Channel | Frequency<br>(MHz) | 26 dB BW<br>Chain 0<br>(MHz) | 26 dB BW<br>Chain 1<br>(MHz) |
|---------|--------------------|------------------------------|------------------------------|
| Mid     | 5775               | 81.60                        | 81.48                        |

**26 dB BANDWIDTH, CHAIN 0**



**26 dB BANDWIDTH, CHAIN 1**



### 8.47.3. 99% BANDWIDTH

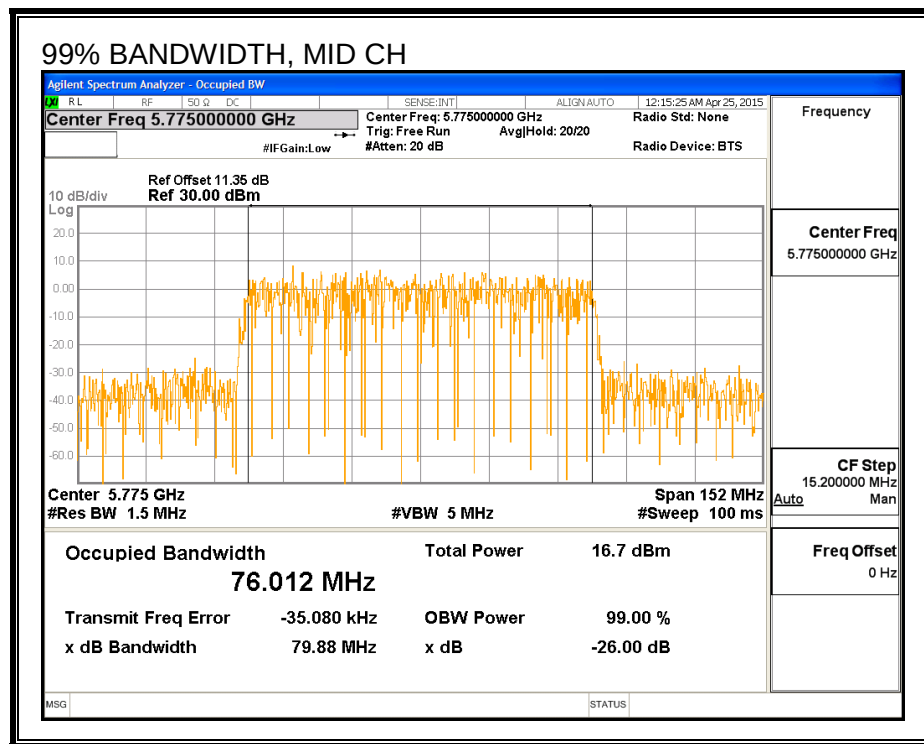
#### LIMITS

None; for reporting purposes only.

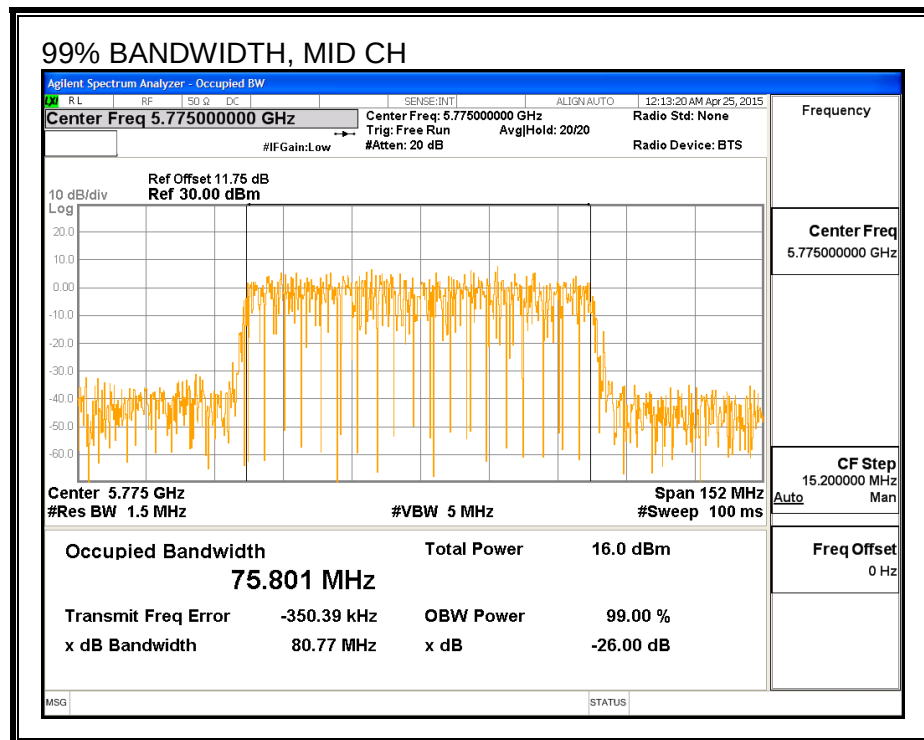
#### RESULTS

| Channel | Frequency<br>(MHz) | 99% BW<br>Chain 0<br>(MHz) | 99% BW<br>Chain 1<br>(MHz) |
|---------|--------------------|----------------------------|----------------------------|
| Mid     | 5775               | 76.012                     | 75.801                     |

**99% BANDWIDTH, CHAIN 0**



**99% BANDWIDTH, CHAIN 1**



#### 8.47.4. AVERAGE POWER

##### LIMITS

None; for reporting purposes only.

##### RESULTS

| Channel | Frequency<br>(MHz) | Chain 0<br>Power<br>(dBm) | Chain 1<br>Power<br>(dBm) | Total<br>Power<br>(dBm) |
|---------|--------------------|---------------------------|---------------------------|-------------------------|
| Mid     | 5775               | 14.98                     | 14.88                     | 17.94                   |

## 8.47.5. OUTPUT POWER

### LIMITS

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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.

### DIRECTIONAL ANTENNA GAIN

The TX chains are uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

| Chain 0<br>Antenna<br>Gain<br>(dBi) | Chain 1<br>Antenna<br>Gain<br>(dBi) | Uncorrelated Chains<br>Directional<br>Gain<br>(dBi) |
|-------------------------------------|-------------------------------------|-----------------------------------------------------|
| -4.33                               | -1.00                               | -2.35                                               |

## **RESULTS**

### **Antenna Gain and Limit**

| Channel | Frequency<br>(MHz) | Directional<br>Gain<br>(dBi) | Power<br>Limit<br>(dBm) |
|---------|--------------------|------------------------------|-------------------------|
| Mid     | 5775               | -2.35                        | 30.00                   |

|                           |      |                                                 |
|---------------------------|------|-------------------------------------------------|
| <b>Duty Cycle CF (dB)</b> | 0.22 | <b>Included in Calculations of Corr'd Power</b> |
|---------------------------|------|-------------------------------------------------|

### **Output Power Results**

| Channel | Frequency<br>(MHz) | Chain 0<br>Meas<br>Power<br>(dBm) | Chain 1<br>Meas<br>Power<br>(dBm) | Total<br>Corr'd<br>Power<br>(dBm) | Power<br>Limit<br>(dBm) | Power<br>Margin<br>(dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Mid     | 5775               | 14.98                             | 14.88                             | 18.16                             | 30.00                   | -11.84                  |

#### 8.47.6. PSD

##### LIMITS

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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.

##### DIRECTIONAL ANTENNA GAIN

The TX chains are correlated and the antenna gain is unequal among the chains. The directional gain is:

| Chain 0<br>Antenna<br>Gain<br>(dBi) | Chain 1<br>Antenna<br>Gain<br>(dBi) | Correlated Chains<br>Directional<br>Gain<br>(dBi) |
|-------------------------------------|-------------------------------------|---------------------------------------------------|
| -4.33                               | -1.00                               | 0.50                                              |

## **RESULTS**

### **Antenna Gain and Limit**

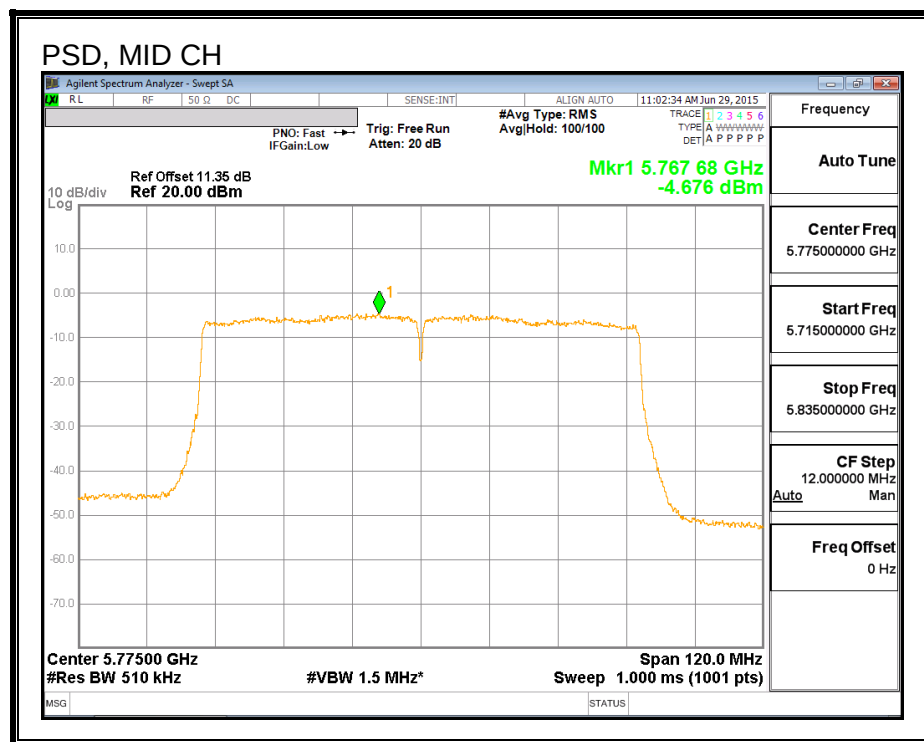
| Channel | Frequency<br>(MHz) | Directional<br>Gain<br>(dBi) | PSD<br>Limit<br>(dBm) |
|---------|--------------------|------------------------------|-----------------------|
| Mid     | 5775               | 0.50                         | 30.00                 |

|                           |      |                                               |
|---------------------------|------|-----------------------------------------------|
| <b>Duty Cycle CF (dB)</b> | 0.22 | <b>Included in Calculations of Corr'd PSD</b> |
|---------------------------|------|-----------------------------------------------|

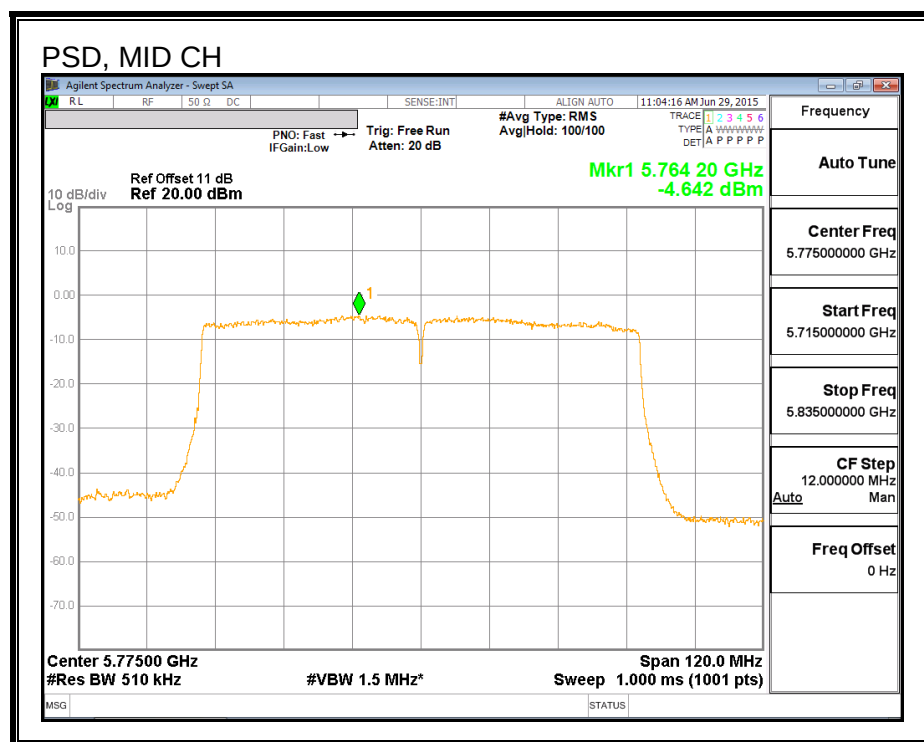
### **PSD Results**

| Channel | Frequency<br>(MHz) | Chain 0<br>Meas<br>PSD<br>(dBm) | Chain 1<br>Meas<br>PSD<br>(dBm) | Total<br>Corr'd<br>PSD<br>(dBm) | PSD<br>Limit<br>(dBm) | PSD<br>Margin<br>(dB) |
|---------|--------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------|-----------------------|
| Mid     | 5775               | -4.68                           | -4.64                           | -1.43                           | 30.00                 | -31.43                |

PSD,



PSD, CHAIN 1



**8.48. 802.11ac VHT80 2Tx STBC MODE IN THE 5.8 GHz BAND**

**Note:** Covered by 802.11ac VHT80 2Tx CDD MODE

## 9. ANTENNA PORT TEST RESULTS (MODEL: A1688)

For antenna port data, refer to Model A1633.

## 10. RADIATED TEST RESULTS (MODEL: A1633)

### 10.1. LIMITS AND PROCEDURE

#### LIMITS

FCC §15.205 and §15.209

IC RSS-GEN, Section 8.9 and 8.10.

| Frequency Range (MHz) | Field Strength Limit (uV/m) at 3 m | Field Strength Limit (dBuV/m) at 3 m |
|-----------------------|------------------------------------|--------------------------------------|
| 30 - 88               | 100                                | 40                                   |
| 88 - 216              | 150                                | 43.5                                 |
| 216 - 960             | 200                                | 46                                   |
| Above 960             | 500                                | 54                                   |

#### TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

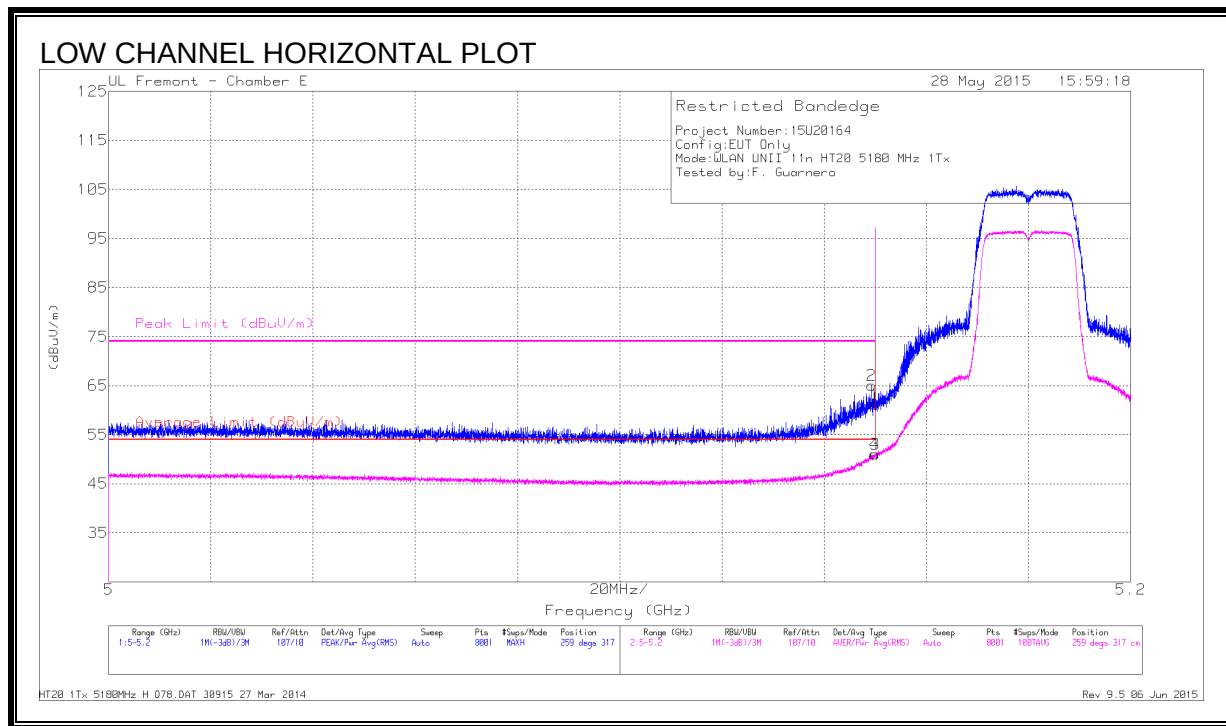
For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

## 10.2. 802.11n HT20 1Tx MODE IN THE 5.2 GHz BAND

### RESTRICTED BANDEDGE, CHAIN 0 (LOW CHANNEL)



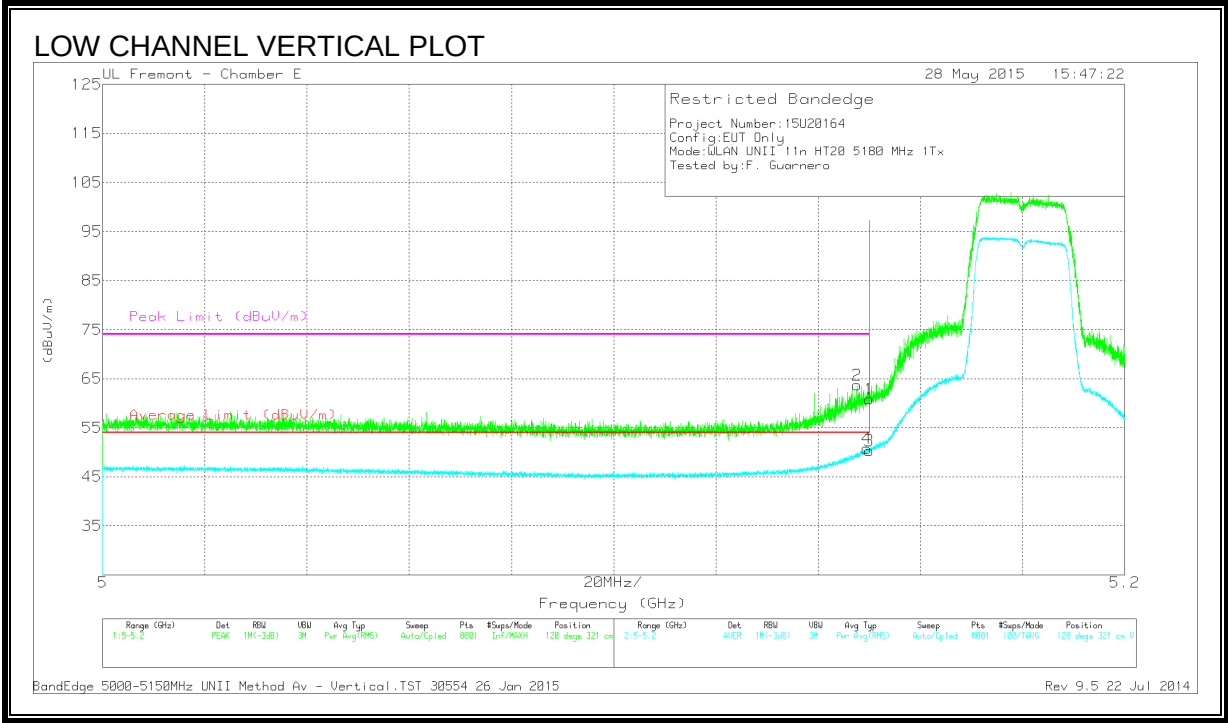
### DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T346 (dB/m) | Amp/Cbl/ Filt/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 5.15          | 48.36                | Pk  | 34.3           | -21.4                  | 61.26                      | -                      | -           | 74                  | -12.74         | 259            | 317         | H        |
| 2      | * 5.149         | 52.12                | Pk  | 34.3           | -21.4                  | 65.02                      | -                      | -           | 74                  | -8.98          | 259            | 317         | H        |
| 3      | * 5.15          | 38.31                | RMS | 34.3           | -21.4                  | 51.21                      | 54                     | -2.79       | -                   | -              | 259            | 317         | H        |
| 4      | * 5.15          | 38.22                | RMS | 34.3           | -21.4                  | 51.12                      | 54                     | -2.88       | -                   | -              | 259            | 317         | H        |

\* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector

RMS - RMS detection



**DATA**

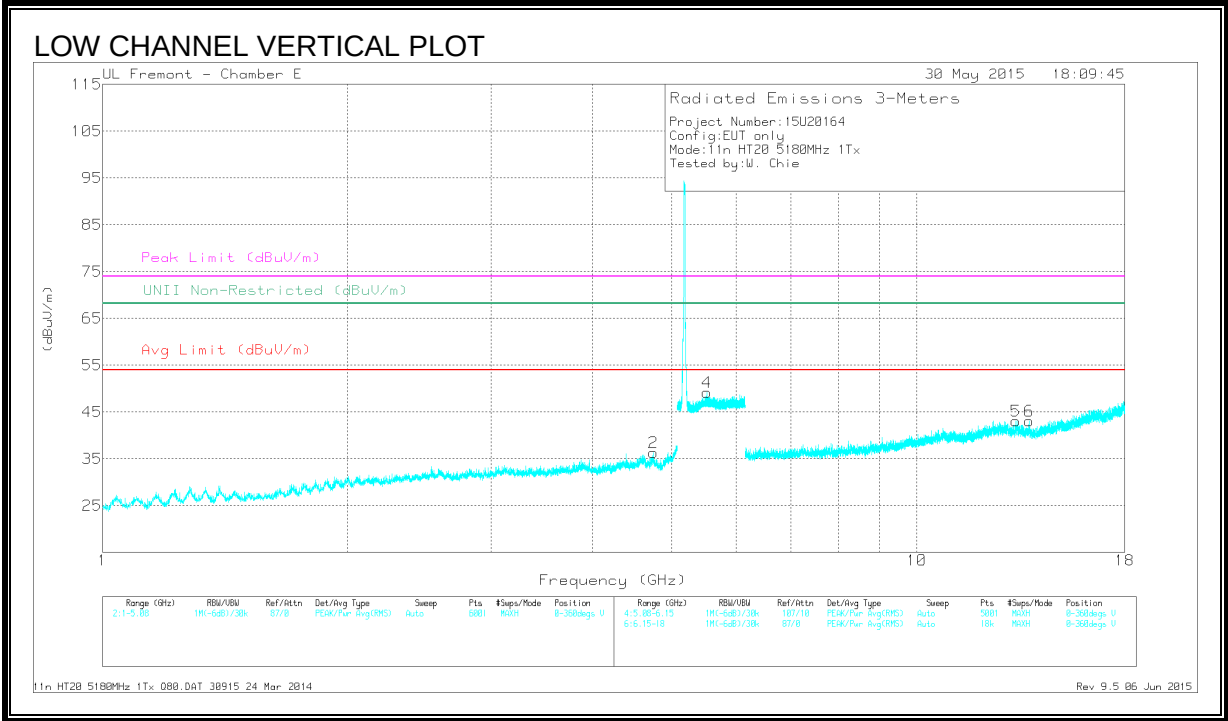
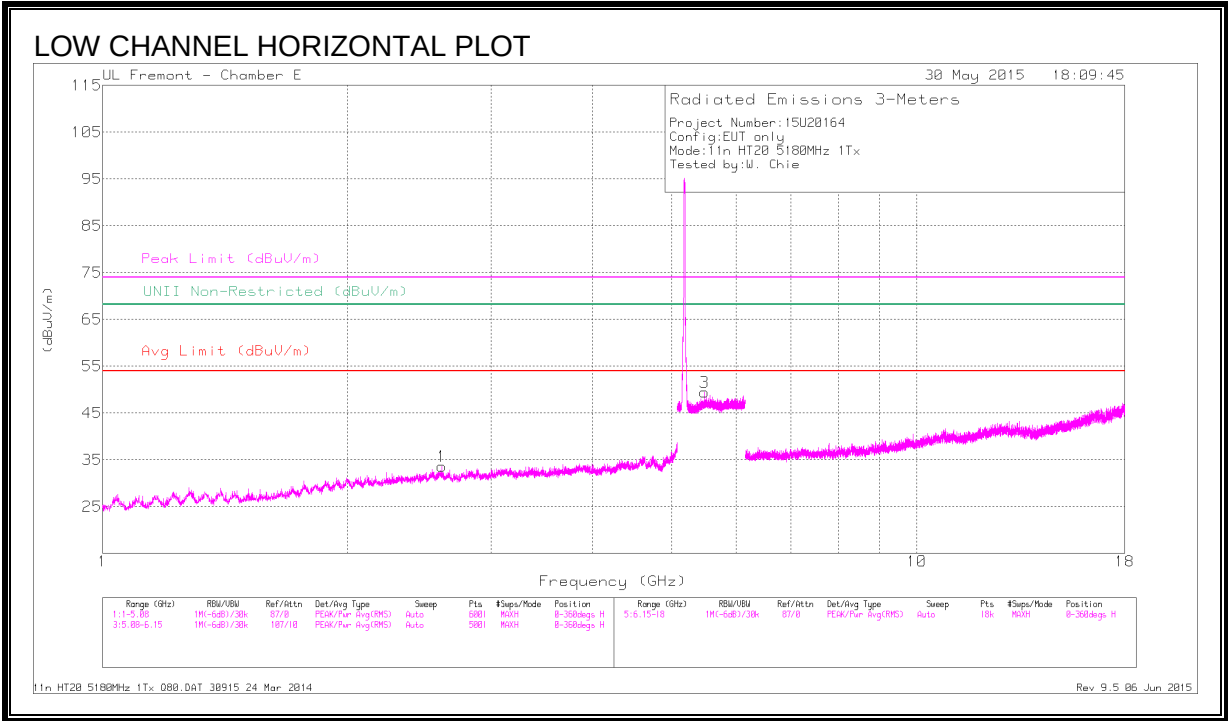
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AFT346 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 2      | * 5.148         | 50.77                | PK  | 34.3          | -21.4                  | 63.67                      | -                      | -           | 74                  | -10.33         | 120            | 321         | V        |
| 1      | * 5.15          | 47.89                | PK  | 34.3          | -21.4                  | 60.79                      | -                      | -           | 74                  | -13.21         | 120            | 321         | V        |
| 3      | * 5.15          | 37.73                | RMS | 34.3          | -21.4                  | 50.63                      | 54                     | -3.37       | -                   | -              | 120            | 321         | V        |
| 4      | * 5.15          | 38.27                | RMS | 34.3          | -21.4                  | 51.17                      | 54                     | -2.83       | -                   | -              | 120            | 321         | V        |

\* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.

PK - Peak detector

RMS - RMS detection

LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

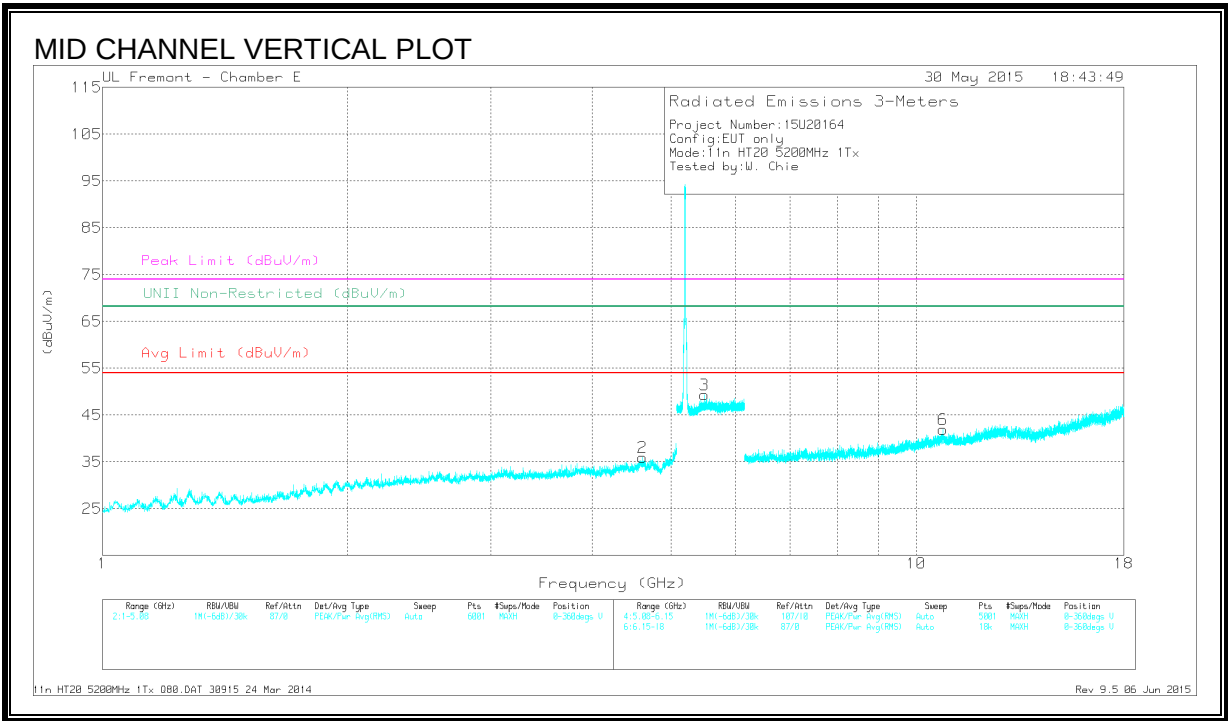
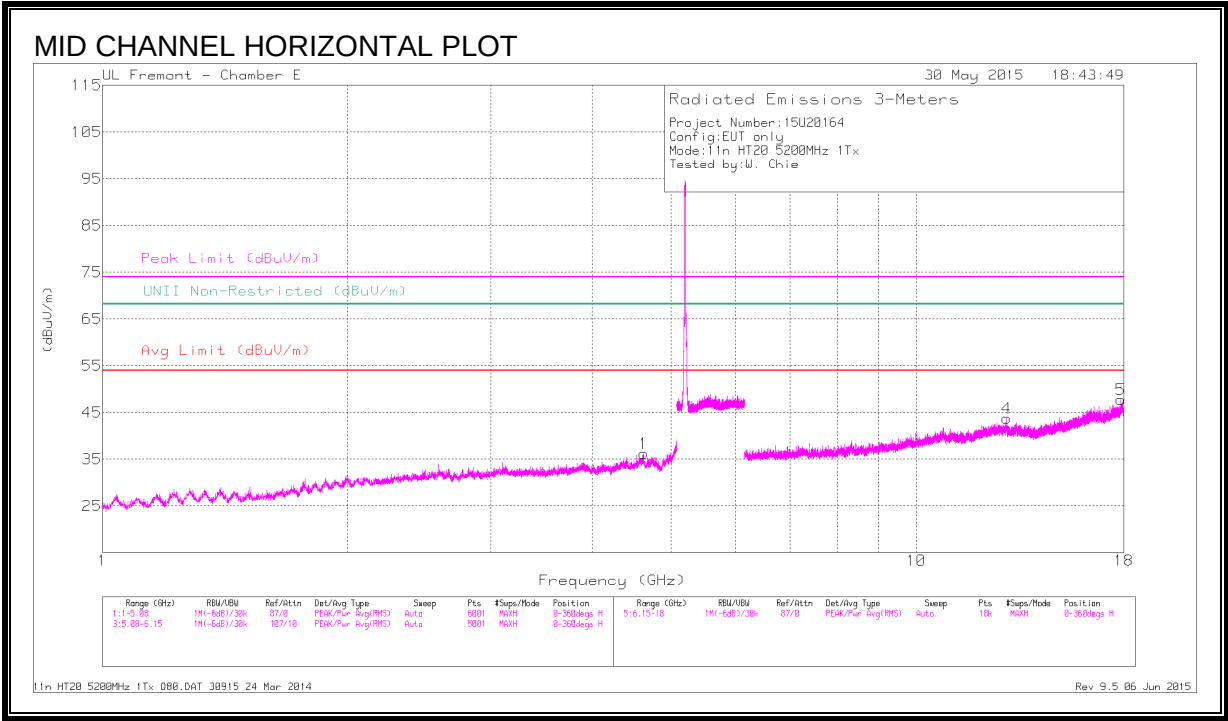
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T863 (dB/m) | Amp/Cbl/Fit r/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 2      | * 4.743         | 40.96                | PK3 | 34.2           | -31.6                  | 43.56                      | -                  | -           | 74                  | -30.44         | -                            | -              | 119            | 125         | V        |
|        | * 4.745         | 29.57                | ADR | 34.2           | -31.7                  | 32.07                      | 54                 | -21.93      | -                   | -              | -                            | -              | 119            | 125         | V        |
| 1      | 2.612           | 41.94                | PK3 | 32.5           | -33.3                  | 41.14                      | -                  | -           | 74                  | -32.86         | 68.2                         | -27.06         | 267            | 137         | H        |
| 3      | 5.482           | 42.43                | PK3 | 35.4           | -22.4                  | 55.43                      | -                  | -           | 74                  | -18.57         | 68.2                         | -12.77         | 227            | 167         | H        |
| 4      | 5.525           | 42.54                | PK3 | 35.4           | -22.4                  | 55.54                      | -                  | -           | 74                  | -18.46         | 68.2                         | -12.66         | 273            | 194         | V        |
| 5      | 13.235          | 36.86                | PK3 | 39.3           | -26                    | 50.16                      | -                  | -           | 74                  | -23.84         | 68.2                         | -18.04         | 242            | 211         | V        |
| 6      | 13.733          | 36.86                | PK3 | 39.1           | -25.6                  | 50.36                      | -                  | -           | 74                  | -23.64         | 68.2                         | -17.84         | 224            | 171         | V        |

\* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T863 (dB/m) | Amp/Cbl/Fit r/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1      | * 4.628         | 41.53                | PK3 | 34             | -32                    | 43.53                      | -                  | -           | 74                  | -30.47         | -                            | -              | 146            | 169         | H        |
|        | * 4.629         | 29.88                | ADR | 34.1           | -32                    | 31.98                      | 54                 | -22.02      | -                   | -              | -                            | -              | 146            | 169         | H        |
| 2      | * 4.612         | 41.48                | PK3 | 34             | -31.7                  | 43.78                      | -                  | -           | 74                  | -30.22         | -                            | -              | 79             | 202         | V        |
|        | * 4.614         | 29.71                | ADR | 34             | -31.7                  | 32.01                      | 54                 | -21.99      | -                   | -              | -                            | -              | 79             | 202         | V        |
| 5      | * 17.84         | 34.55                | PK3 | 41.9           | -22.1                  | 54.35                      | -                  | -           | 74                  | -19.65         | -                            | -              | 66             | 121         | H        |
|        | * 17.84         | 22.56                | ADR | 41.9           | -22.1                  | 42.36                      | 54                 | -11.64      | -                   | -              | -                            | -              | 66             | 121         | H        |
| 6      | * 10.785        | 35.84                | PK3 | 37.9           | -24.4                  | 49.34                      | -                  | -           | 74                  | -24.66         | -                            | -              | 328            | 113         | V        |
|        | * 10.784        | 24.07                | ADR | 37.9           | -24.4                  | 37.57                      | 54                 | -16.43      | -                   | -              | -                            | -              | 328            | 113         | V        |
| 3      | 5.496           | 43.23                | PK3 | 35.5           | -22.4                  | 56.33                      | -                  | -           | -                   | -              | 68.2                         | -11.87         | 183            | 240         | V        |
| 4      | 12.927          | 36.23                | PK3 | 39.4           | -24.7                  | 50.93                      | -                  | -           | -                   | -              | 68.2                         | -17.27         | 236            | 163         | H        |

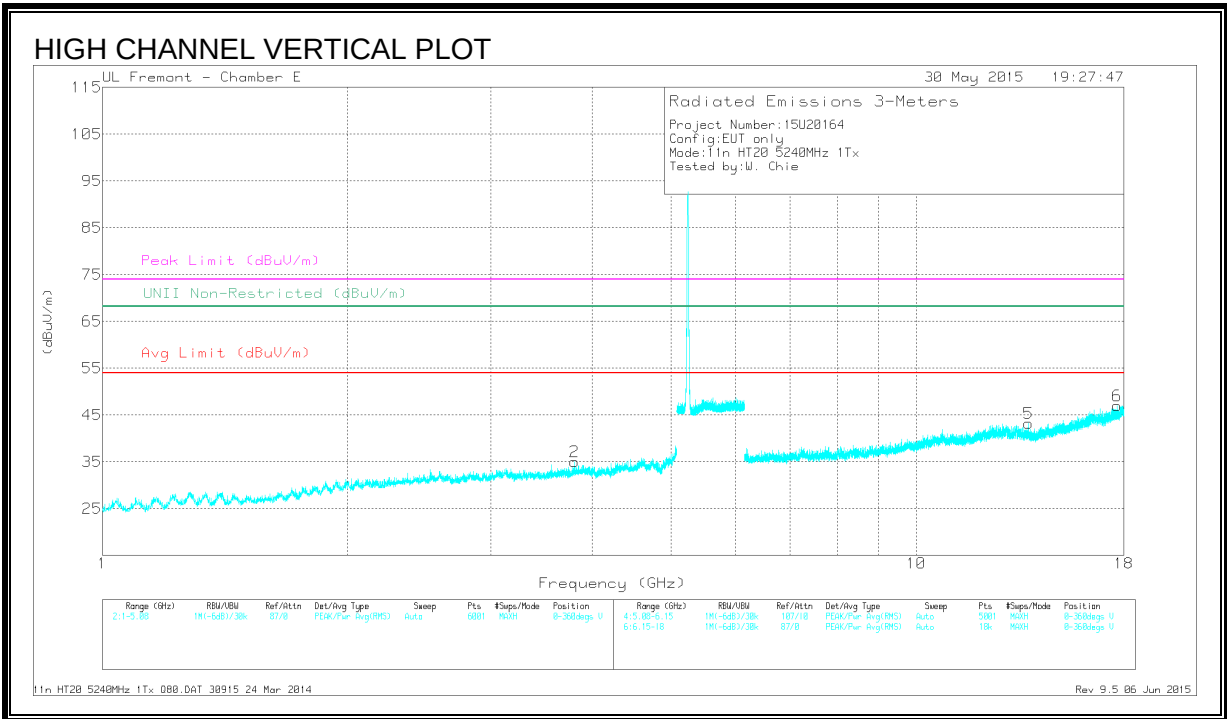
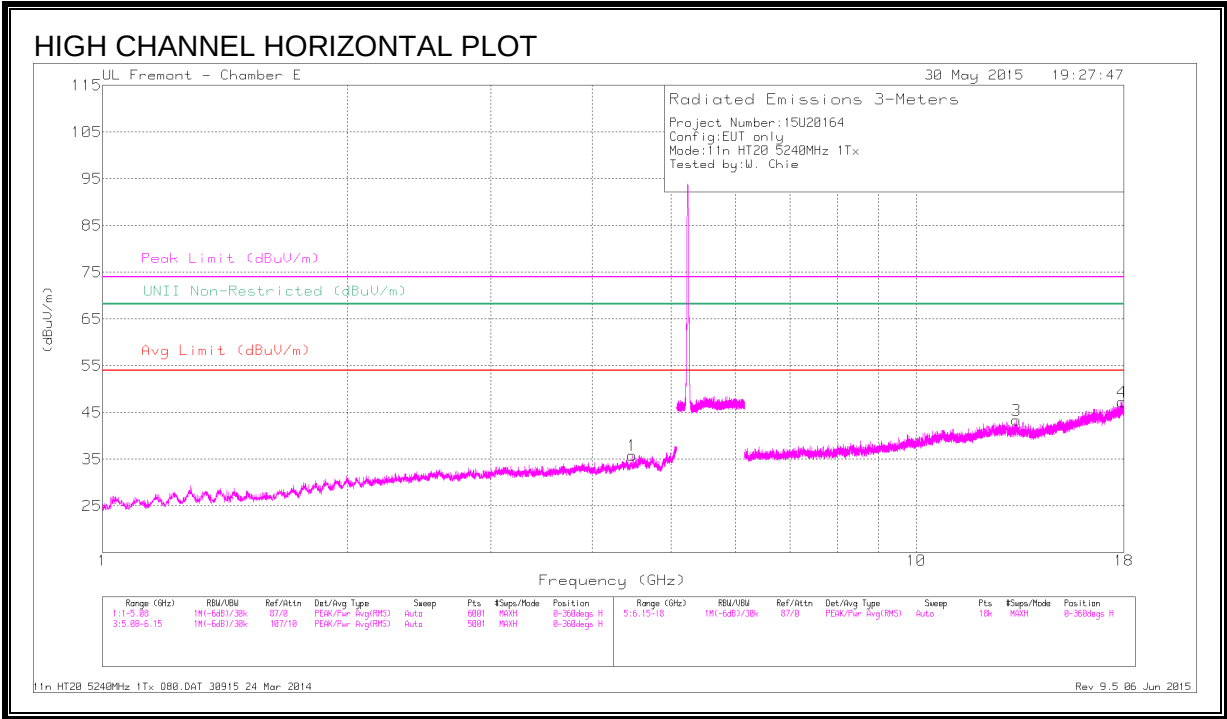
\* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK1 - KDB789033 Method: Peak

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T863 (dB/m) | Amp/Cbl/Fit r/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 2      | * 3.803         | 41.7                 | PK3 | 33.4           | -32.8                  | 42.3                       | -                  | -           | 74                  | -31.7          | -                            | -              | 302            | 340         | V        |
|        | * 3.804         | 29.76                | ADR | 33.4           | -32.8                  | 30.36                      | 54                 | -23.64      | -                   | -              | -                            | -              | 302            | 340         | V        |
| 3      | * 13.28         | 36.45                | PK3 | 39.4           | -25.2                  | 50.65                      | -                  | -           | 74                  | -23.35         | -                            | -              | 353            | 247         | H        |
|        | * 13.279        | 24.99                | ADR | 39.4           | -25.2                  | 39.19                      | 54                 | -14.81      | -                   | -              | -                            | -              | 353            | 247         | H        |
| 4      | * 17.903        | 33.4                 | PK3 | 41.9           | -20.9                  | 54.4                       | -                  | -           | 74                  | -19.6          | -                            | -              | 45             | 370         | H        |
|        | * 17.904        | 22.36                | ADR | 41.9           | -20.9                  | 43.36                      | 54                 | -10.64      | -                   | -              | -                            | -              | 45             | 370         | H        |
| 1      | 4.474           | 41.79                | PK3 | 33.8           | -32.7                  | 42.89                      | -                  | -           | -                   | -              | 68.2                         | -25.31         | 274            | 167         | H        |
| 5      | 13.732          | 37.07                | PK3 | 39.1           | -25.6                  | 50.57                      | -                  | -           | -                   | -              | 68.2                         | -17.63         | 176            | 248         | V        |
| 6      | 17.676          | 34.27                | PK3 | 42             | -22.3                  | 53.97                      | -                  | -           | -                   | -              | 68.2                         | -14.23         | 284            | 176         | V        |

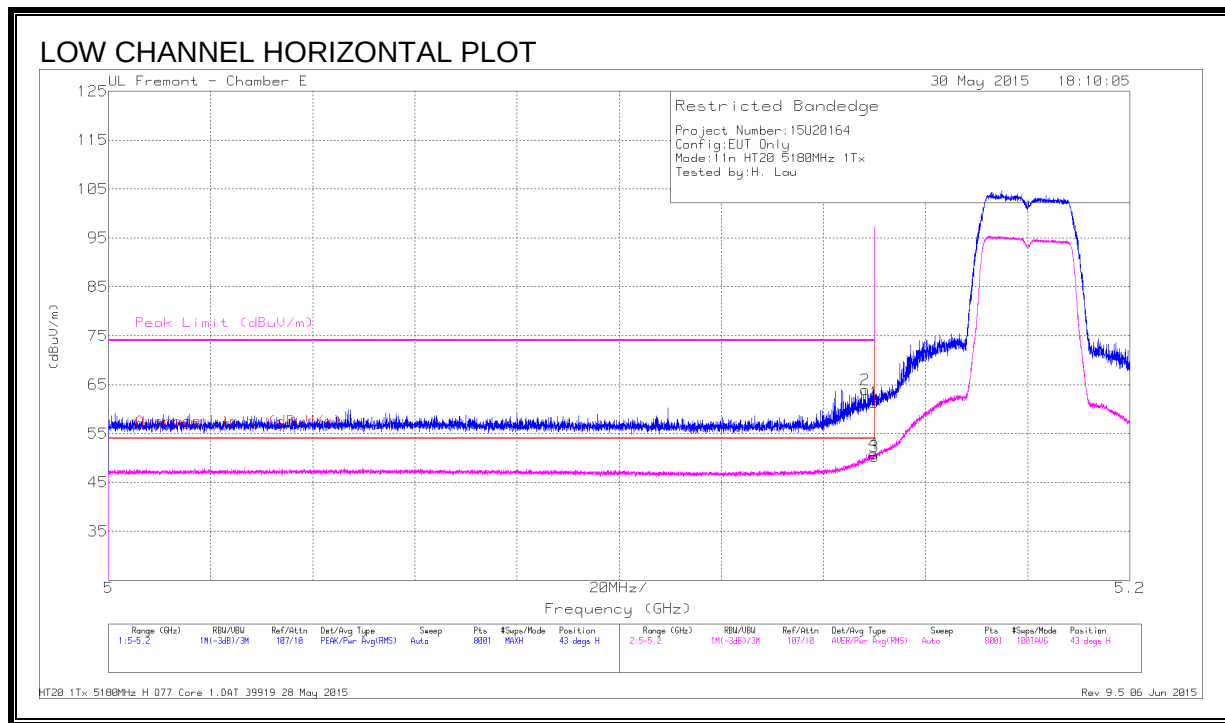
\* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK1 - KDB789033 Method: Peak

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

**RESTRICTED BANDEDGE, CHAIN 1 (LOW CHANNEL)**



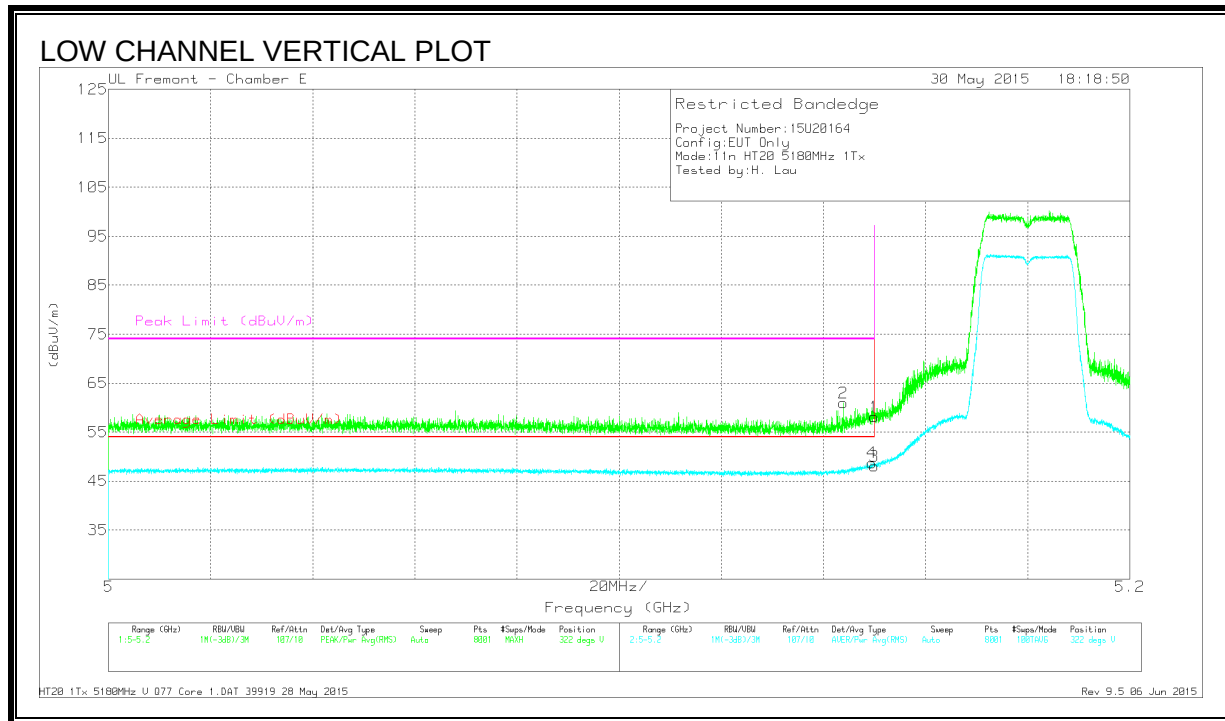
**DATA**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (dB/m) | Amp/Cbl/ Filt/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 2      | * 5.148         | 48.18                | Pk  | 34.3           | -18.5                  | 63.98                      | -                      | -           | 74                  | -10.02         | 43             | 258         | H        |
| 1      | * 5.15          | 45.56                | Pk  | 34.3           | -18.5                  | 61.36                      | -                      | -           | 74                  | -12.64         | 43             | 258         | H        |
| 3      | * 5.15          | 34.53                | RMS | 34.3           | -18.5                  | 50.33                      | 54                     | -3.67       | -                   | -              | 43             | 258         | H        |
| 4      | * 5.15          | 35.05                | RMS | 34.3           | -18.5                  | 50.85                      | 54                     | -3.15       | -                   | -              | 43             | 258         | H        |

\* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector

RMS - RMS detection



## DATA

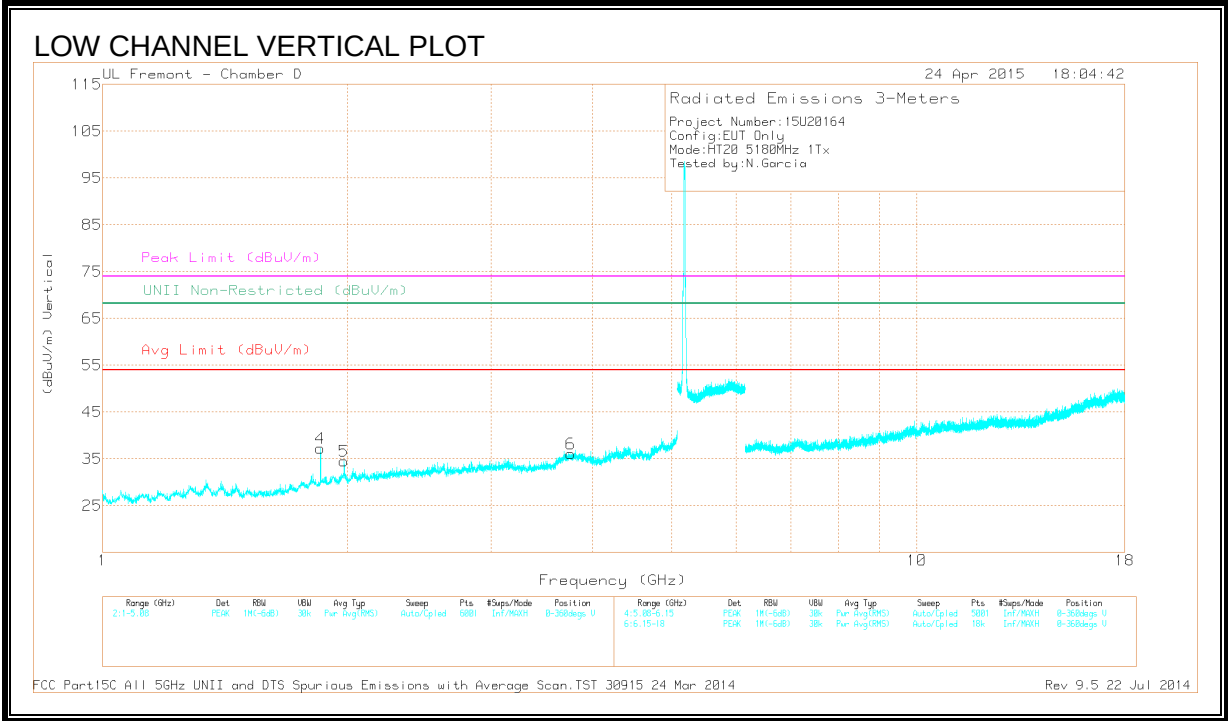
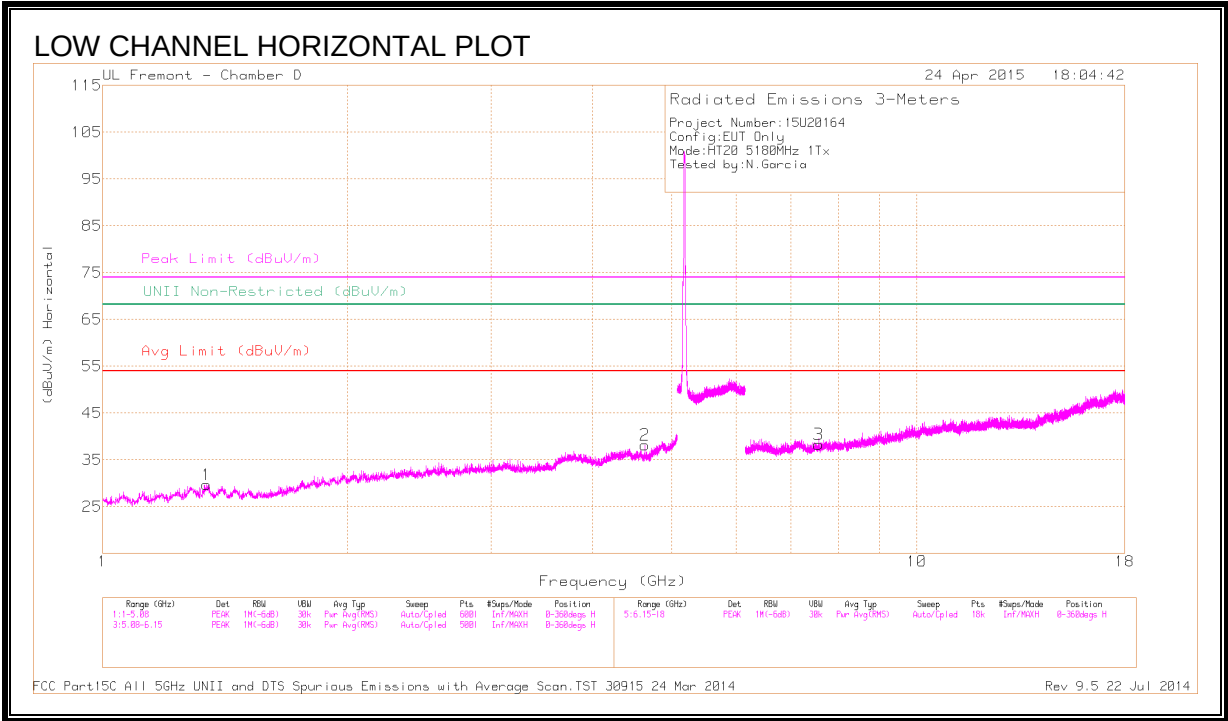
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (dB/m) | Amp/Cbl/ Filt/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 2      | * 5.144         | 45.22                | Pk  | 34.3           | -18.5                  | 61.02                      | -                      | -           | 74                  | -12.98         | 322            | 279         | V        |
| 1      | * 5.15          | 42.27                | Pk  | 34.3           | -18.5                  | 58.07                      | -                      | -           | 74                  | -15.93         | 322            | 279         | V        |
| 3      | * 5.15          | 32.25                | RMS | 34.3           | -18.5                  | 48.05                      | 54                     | -5.95       | -                   | -              | 322            | 279         | V        |
| 4      | * 5.15          | 32.94                | RMS | 34.3           | -18.5                  | 48.74                      | 54                     | -5.26       | -                   | -              | 322            | 279         | V        |

\* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

| Markers | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (dB/m) | Amp/Cbl/FI tr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1       | * 1.343         | 40.61                | PK1 | 28.8           | -31.5                  | 37.91                      | -                  | -           | 74                  | -36.09         | -                            | -              | 9              | 100         | H        |
|         | * 1.342         | 29.44                | AD1 | 28.8           | -31.5                  | 26.74                      | 54                 | -27.26      | -                   | -              | -                            | -              | 9              | 100         | H        |
| 2       | * 4.634         | 38.16                | PK1 | 34.1           | -27.1                  | 45.16                      | -                  | -           | 74                  | -28.84         | -                            | -              | 14             | 112         | H        |
|         | * 4.633         | 26.64                | AD1 | 34.1           | -27.1                  | 33.64                      | 54                 | -20.36      | -                   | -              | -                            | -              | 14             | 112         | H        |
| 6       | * 3.754         | 39.11                | PK1 | 33.3           | -29                    | 43.41                      | -                  | -           | 74                  | -30.59         | -                            | -              | 33             | 333         | V        |
|         | * 3.755         | 27.45                | AD1 | 33.3           | -29                    | 31.75                      | 54                 | -22.25      | -                   | -              | -                            | -              | 33             | 333         | V        |
| 3       | * 7.571         | 35.57                | PK1 | 35.6           | -25.2                  | 45.97                      | -                  | -           | 74                  | -28.03         | -                            | -              | 43             | 106         | H        |
|         | * 7.57          | 24.91                | AD1 | 35.6           | -25.2                  | 35.31                      | 54                 | -18.69      | -                   | -              | -                            | -              | 43             | 106         | H        |
| 4       | 1.852           | 40.32                | PK1 | 30.5           | -31.4                  | 39.42                      | -                  | -           | -                   | -              | 68.2                         | -28.78         | 243            | 126         | V        |
| 5       | 1.98            | 42.92                | PK1 | 31             | -30.8                  | 43.12                      | -                  | -           | -                   | -              | 68.2                         | -25.08         | 297            | 362         | V        |

\* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average