

## **7.49. 802.11n HT20 2Tx CDD MODE IN THE 5.8 GHz BAND**

### **7.49.1. 6 dB BANDWIDTH**

#### **LIMITS**

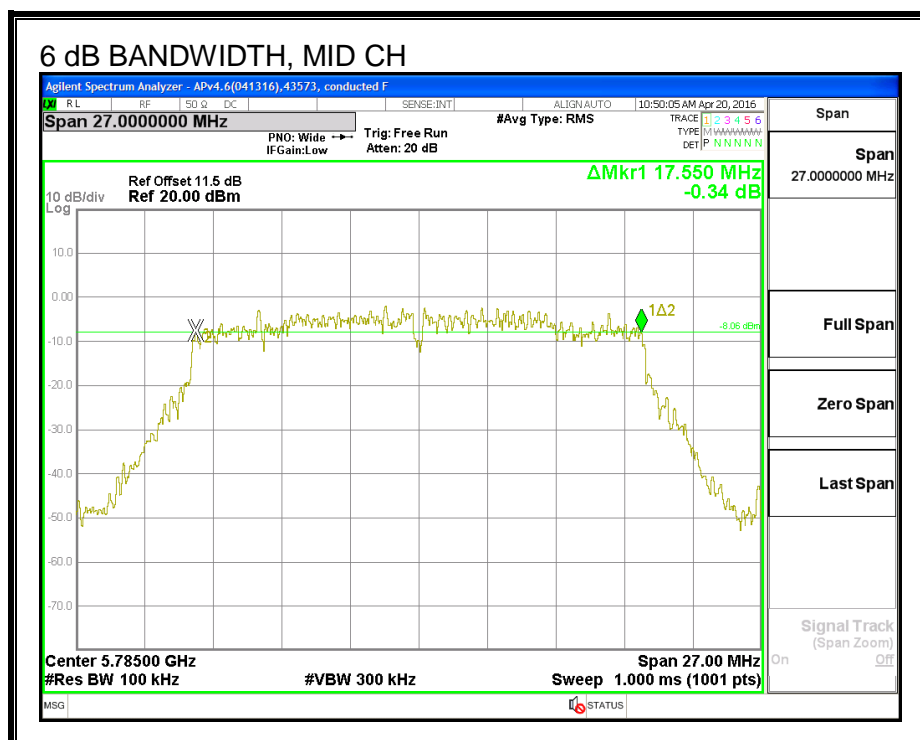
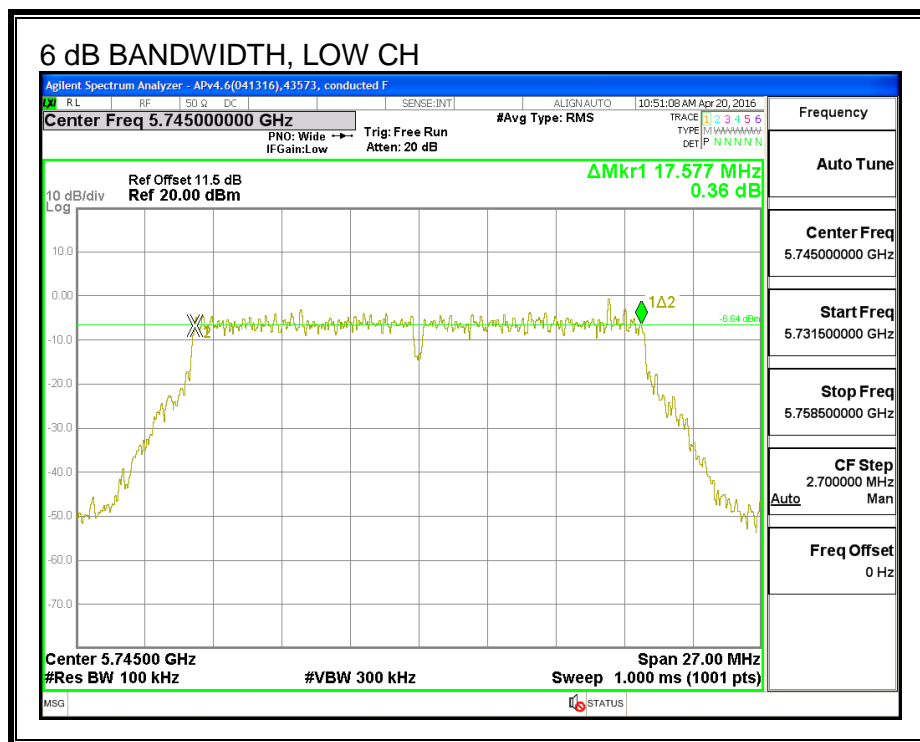
FCC §15.407 (e)

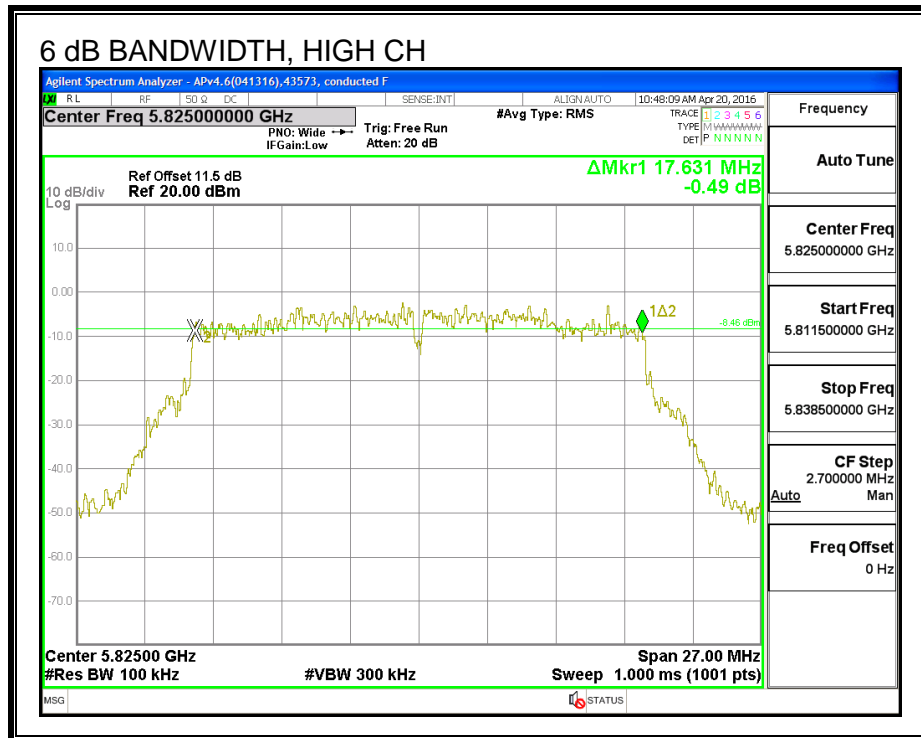
The minimum 6 dB bandwidth shall be at least 500 kHz.

#### **RESULTS**

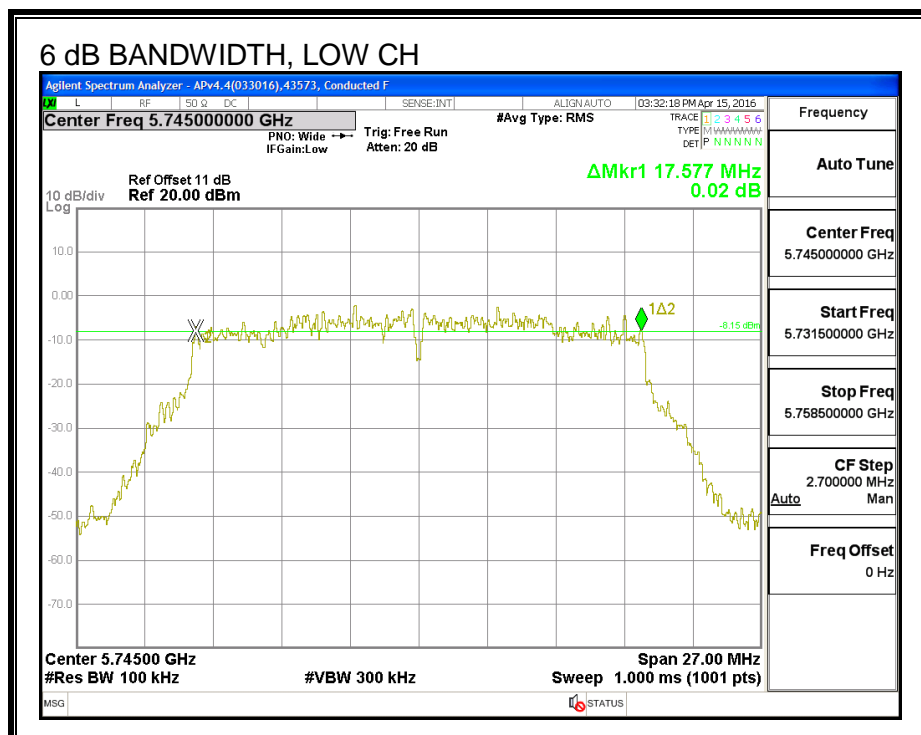
Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	5745	17.58	17.58	0.5
Mid	5785	17.55	17.58	0.5
High	5825	17.63	17.60	0.5

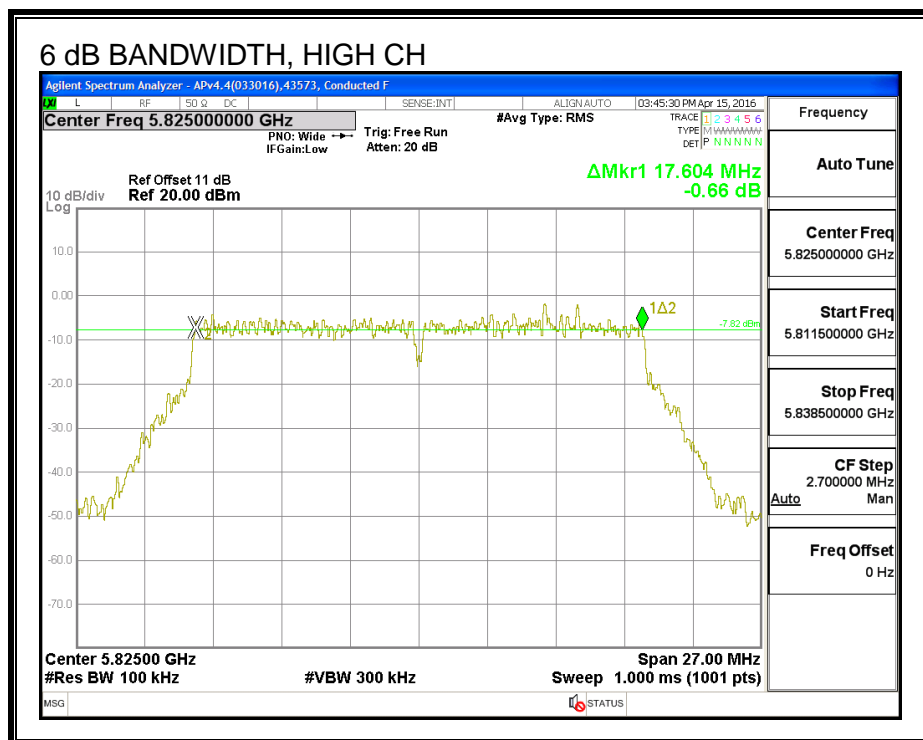
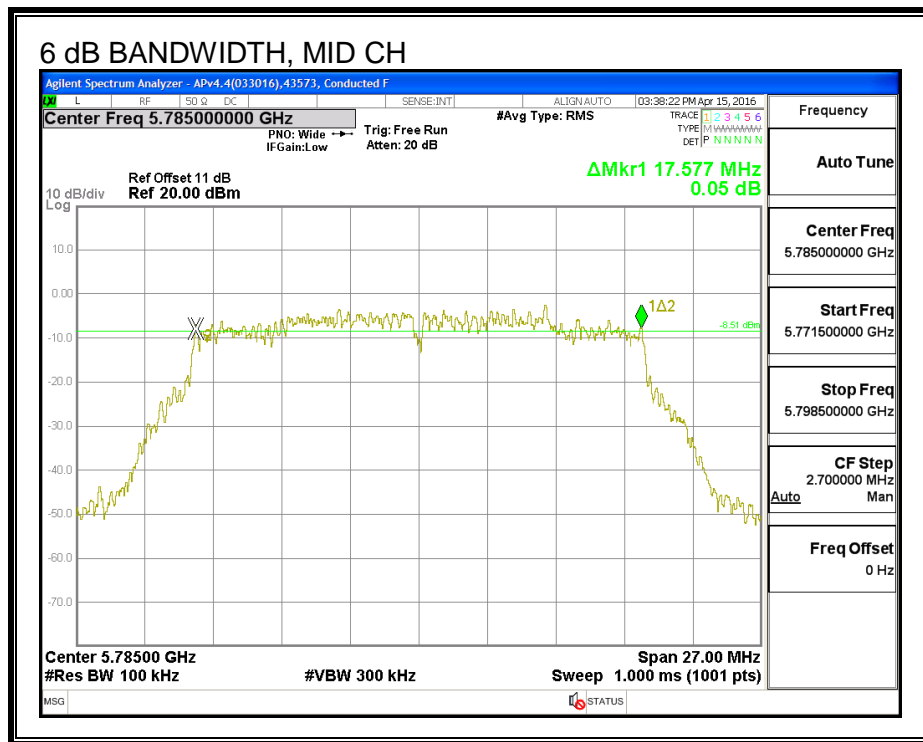
# **6 dB BANDWIDTH, CHAIN 0**





**6 dB BANDWIDTH, CHAIN 1**





### 7.49.2. 26 dB BANDWIDTH

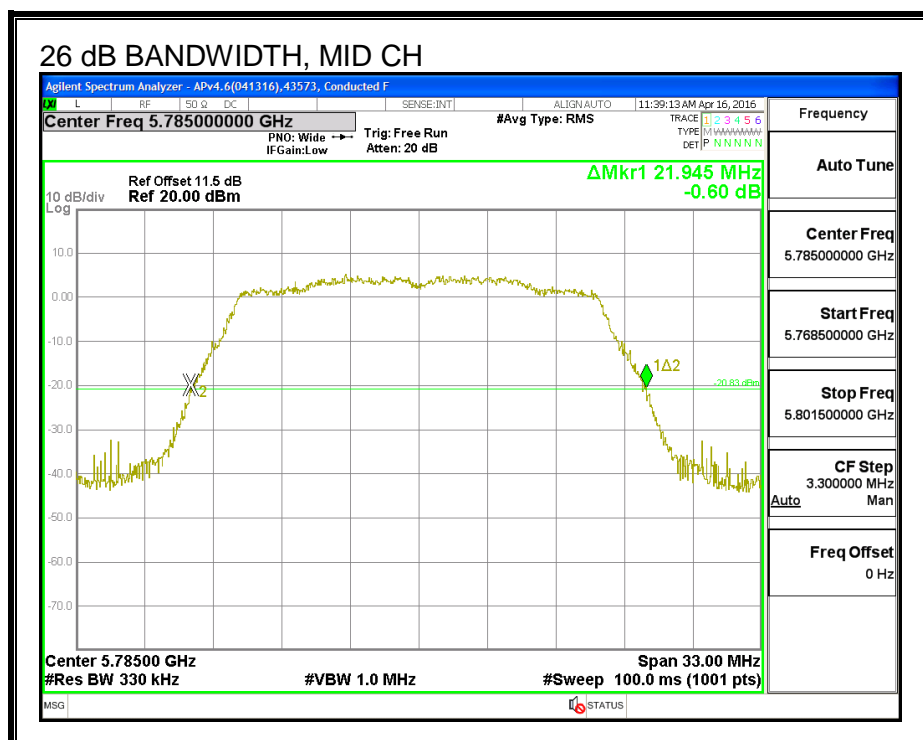
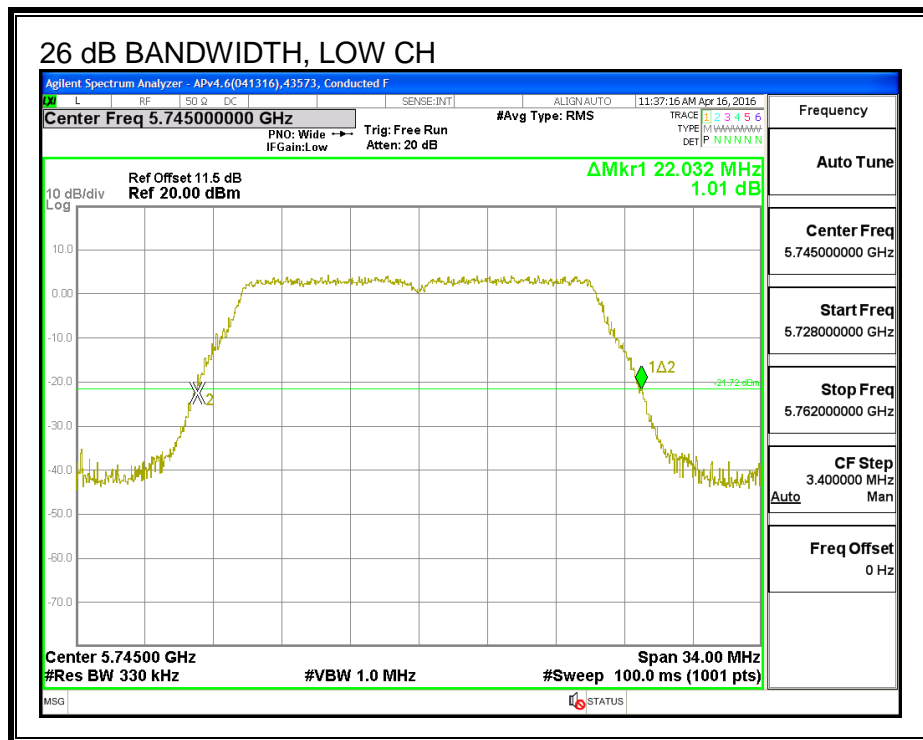
#### LIMITS

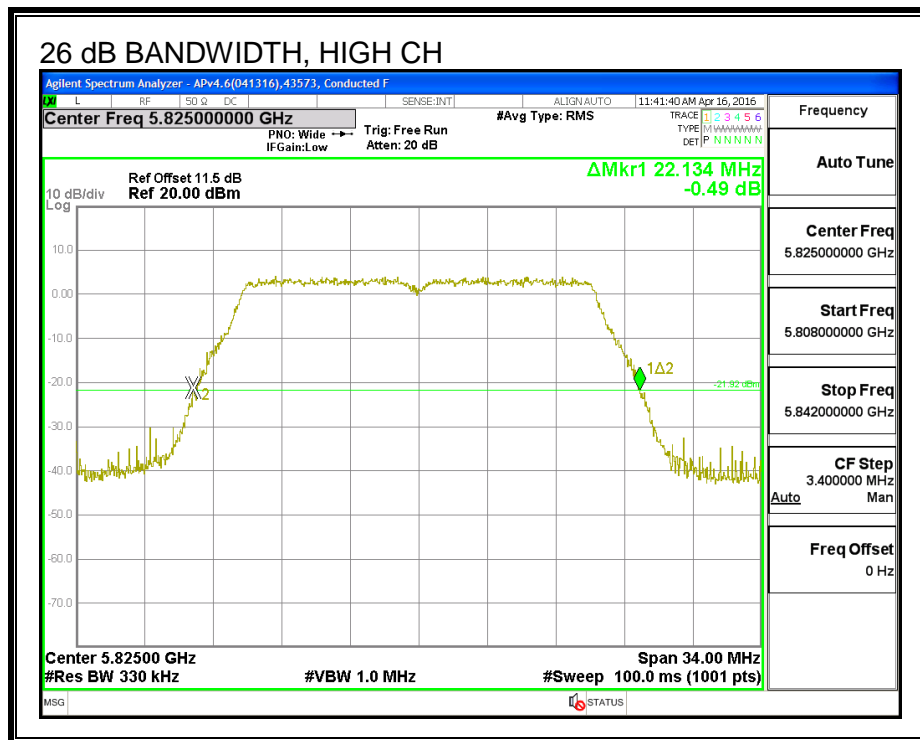
None, for reporting purposes only.

#### RESULTS

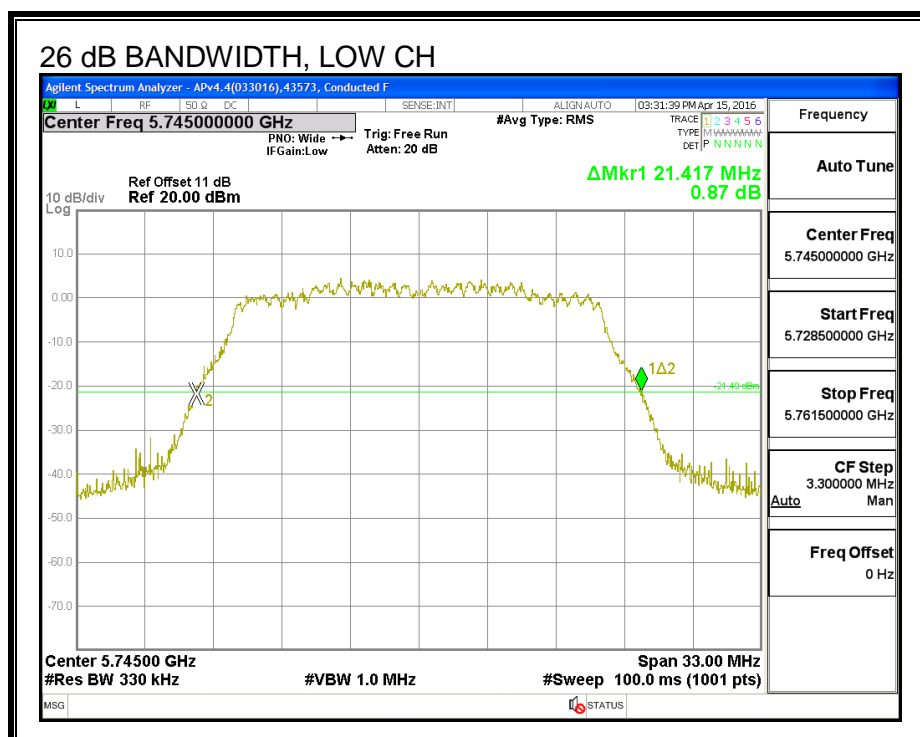
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5745	22.03	21.42
Mid	5785	21.95	21.55
High	5825	22.13	21.88

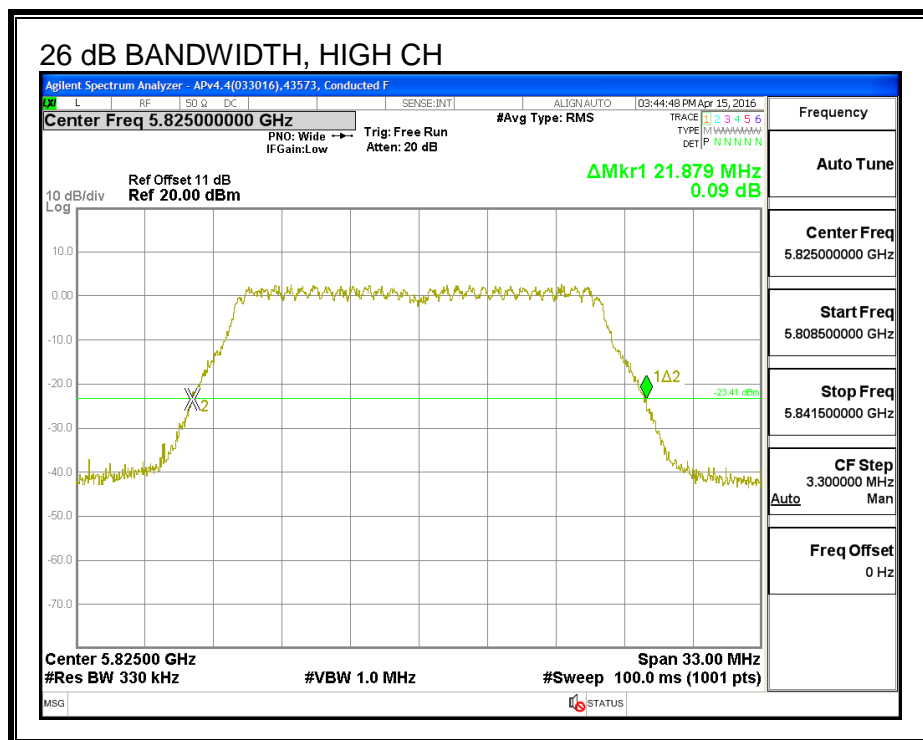
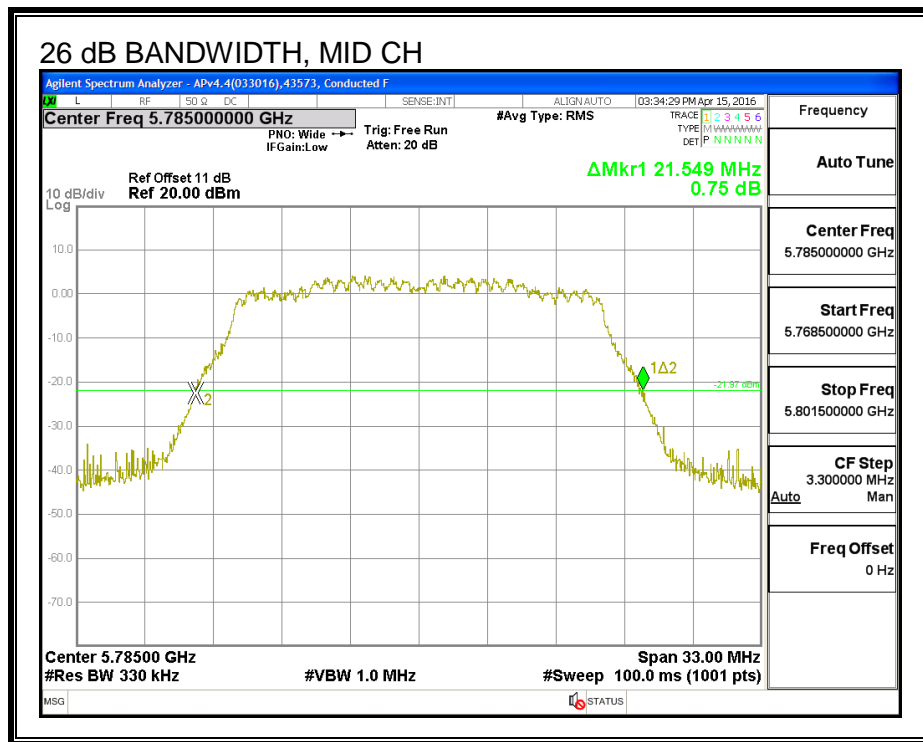
**26 dB BANDWIDTH, CHAIN 0**





### 26 dB BANDWIDTH, CHAIN 1







### 7.49.3. 99% BANDWIDTH

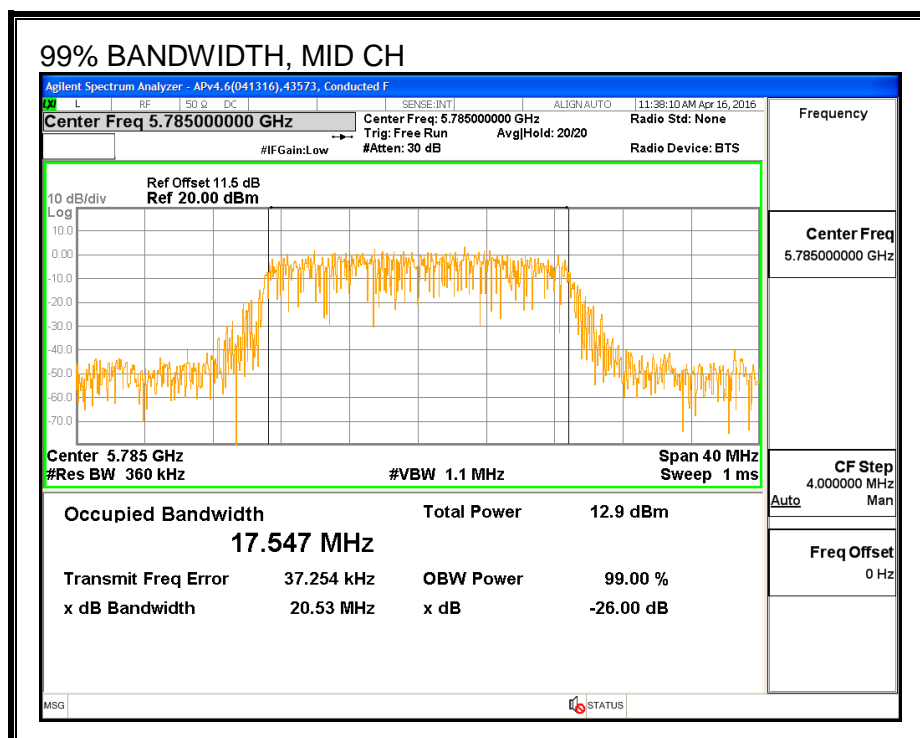
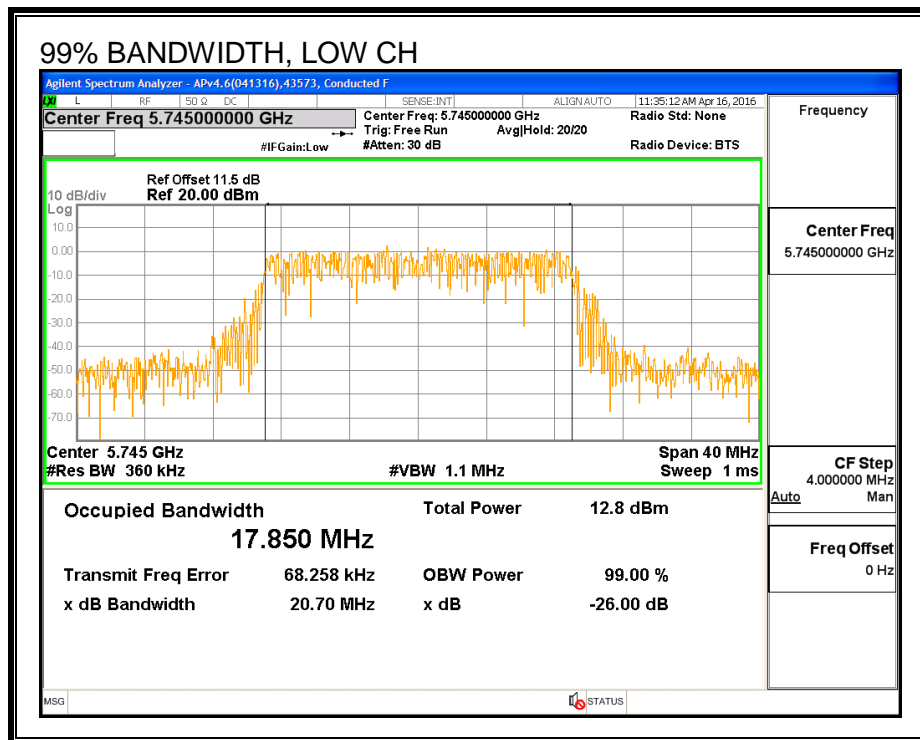
#### LIMITS

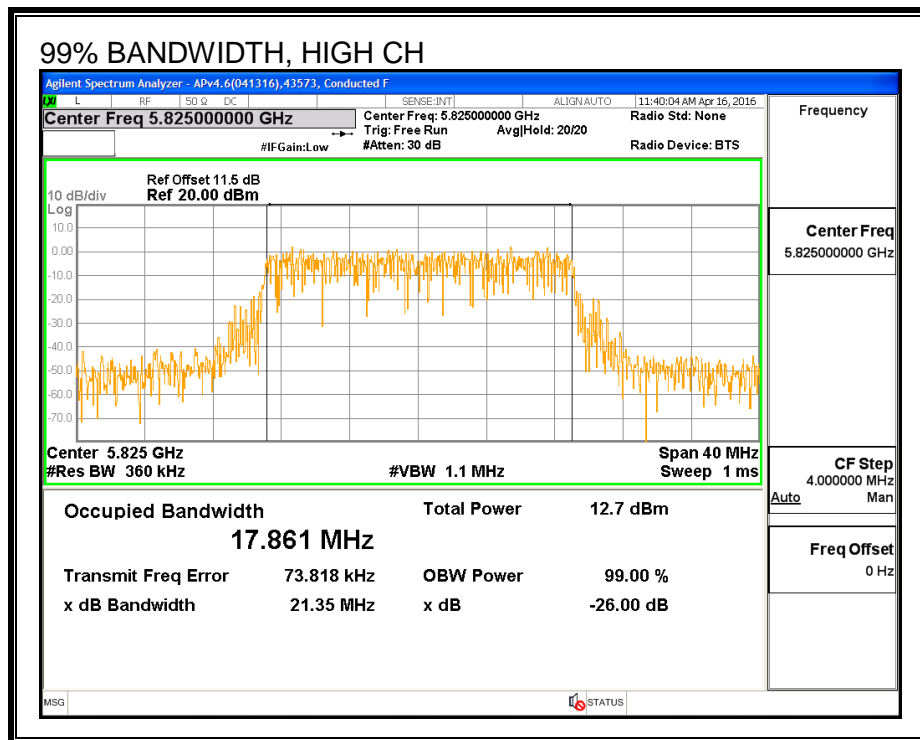
None; for reporting purposes only.

#### RESULTS

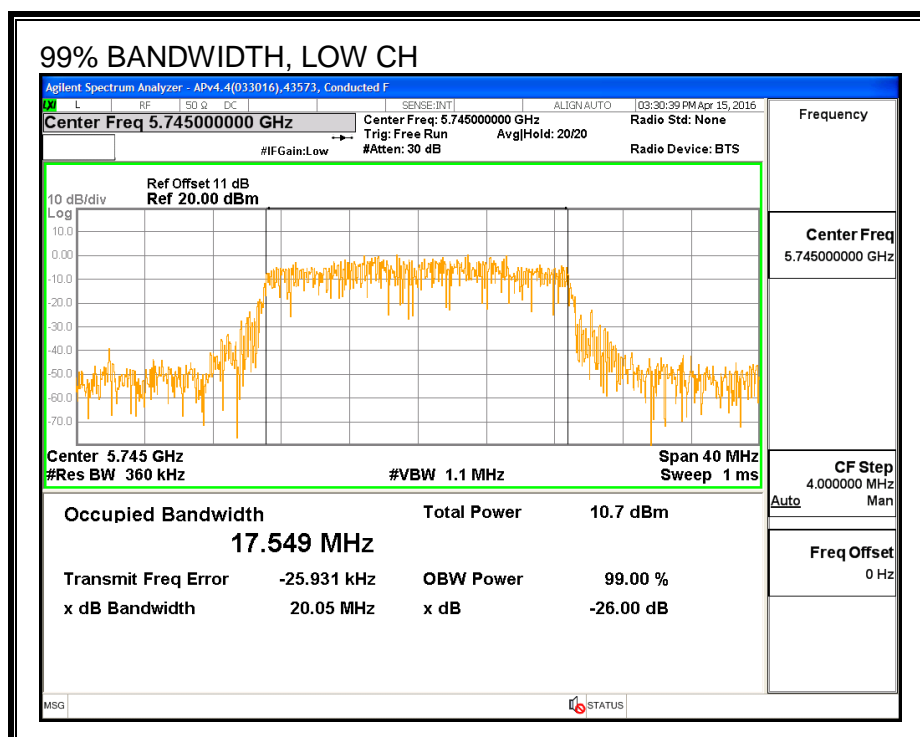
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5745	17.850	17.549
Mid	5785	17.547	17.730
High	5825	17.861	17.744

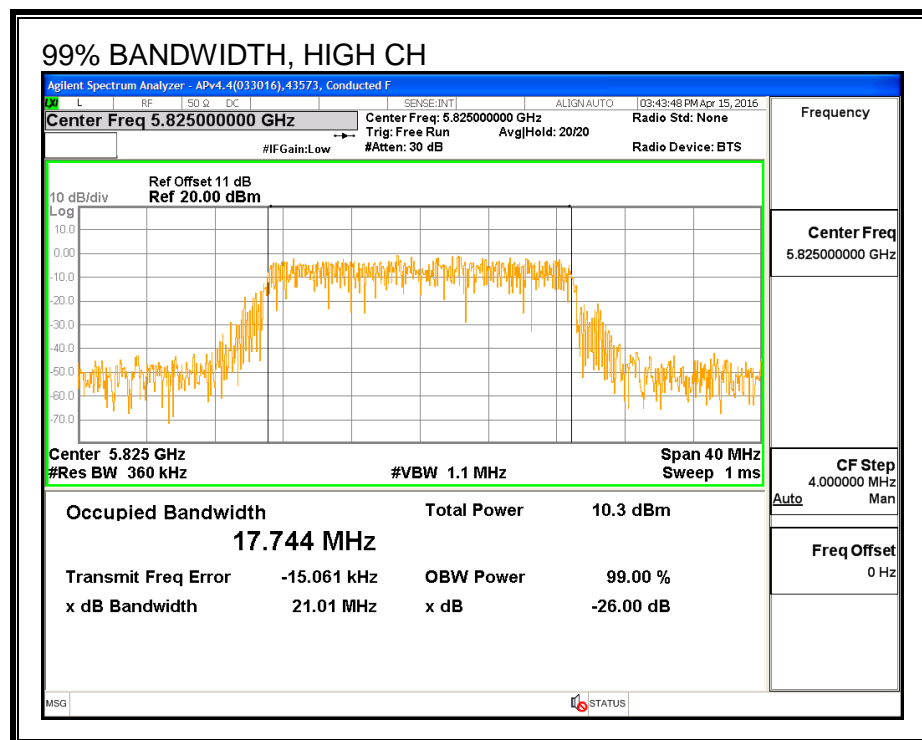
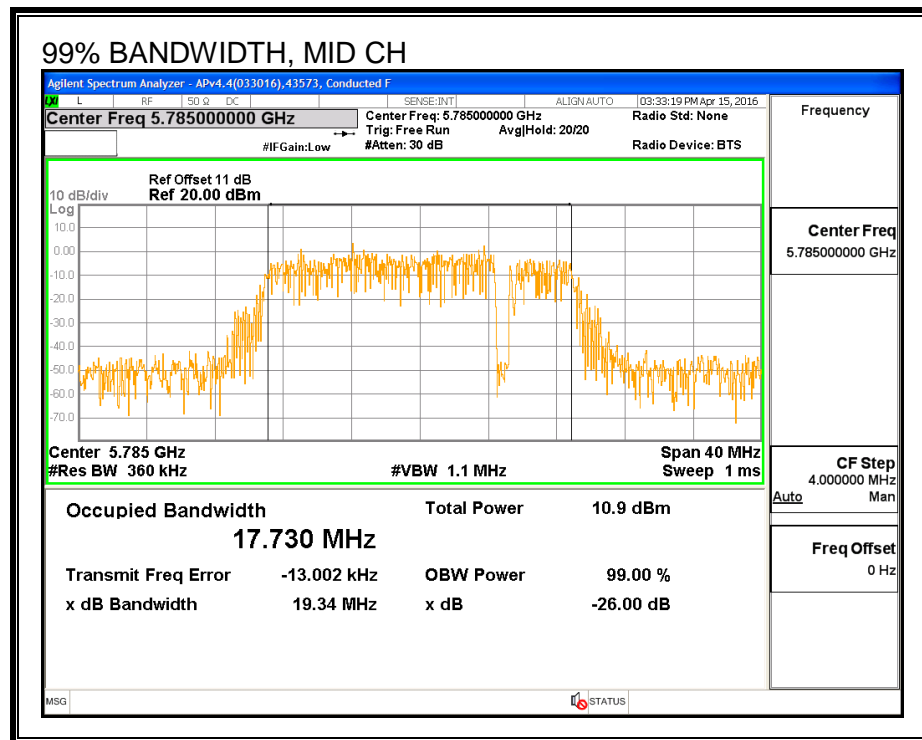
**99% BANDWIDTH, CHAIN 0**





**99% BANDWIDTH, CHAIN 1**





#### 7.49.4. AVERAGE POWER

##### LIMITS

None; for reporting purposes only.

##### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

##### RESULTS

<b>ID:</b>	30554	<b>Date:</b>	6/9/16
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<b>Channel</b>	<b>Frequency (MHz)</b>	<b>Chain 0 Power (dBm)</b>	<b>Chain 1 Power (dBm)</b>	<b>Total Power (dBm)</b>
Low	5745	16.80	19.00	21.05
Mid	5785	16.80	19.00	21.05
High	5825	16.80	19.00	21.05

## 7.49.5. OUTPUT POWER

### LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

### DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-2.73	-5.52	-3.90

## RESULTS

<b>ID:</b>	30554	<b>Date:</b>	6/9/16
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### Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	-3.90	30.00
Mid	5785	-3.90	30.00
High	5825	-3.90	30.00

### Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	16.80	19.00	21.05	30.00	-8.95
Mid	5785	16.80	19.00	21.05	30.00	-8.95
High	5825	16.80	19.00	21.05	30.00	-8.95

#### 7.49.6. PSD

##### LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

##### DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-2.73	-5.52	-1.00



## RESULTS

### Antenna Gain and Limits

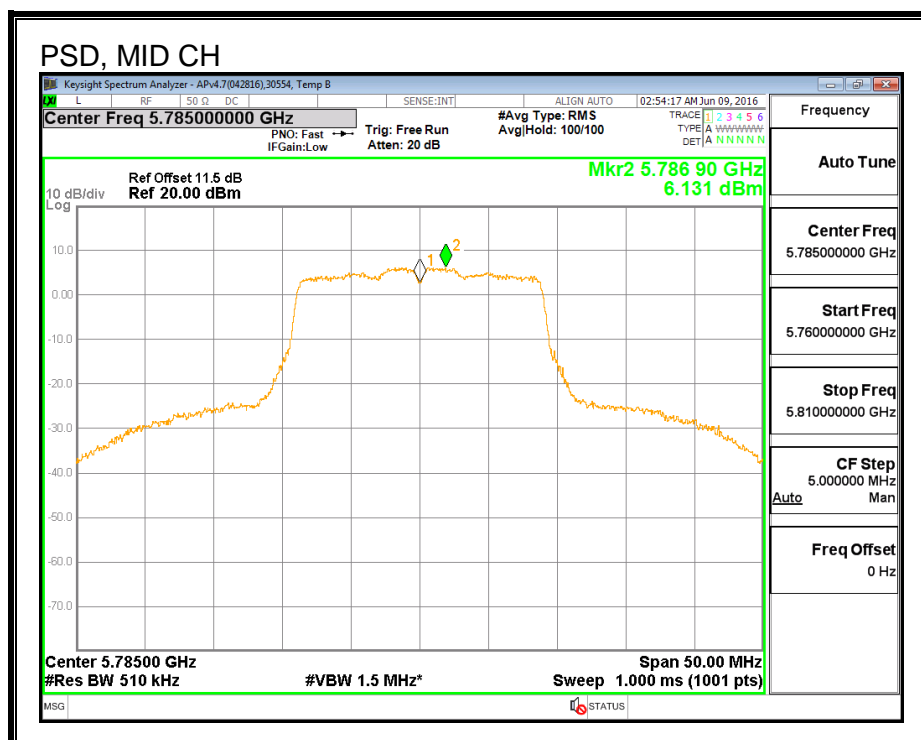
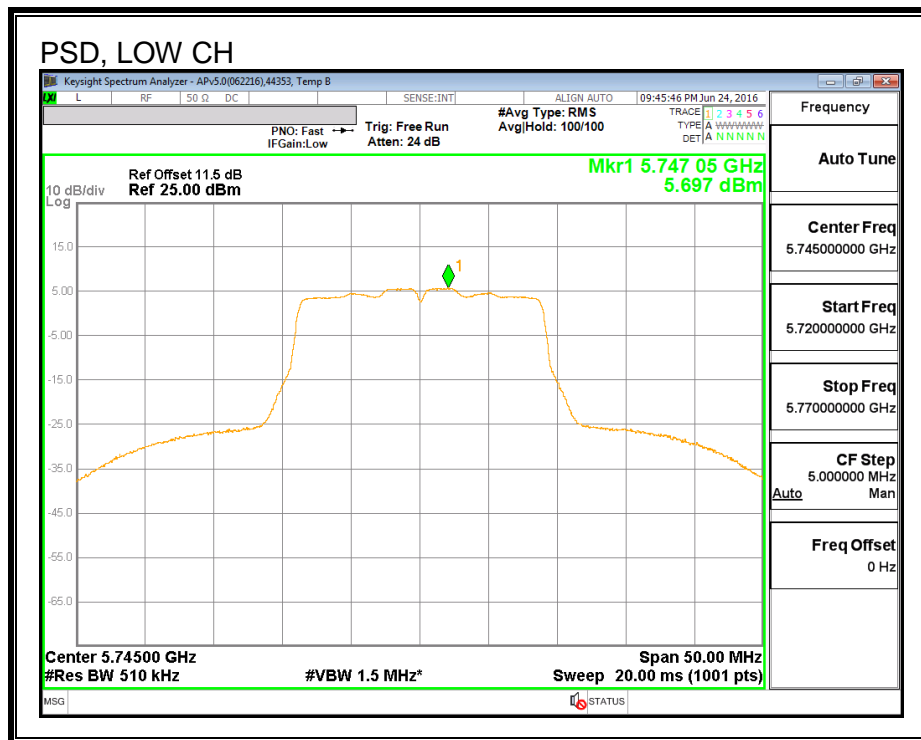
Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5745	-1.00	30.00
Mid	5785	-1.00	30.00
High	5825	-1.00	30.00

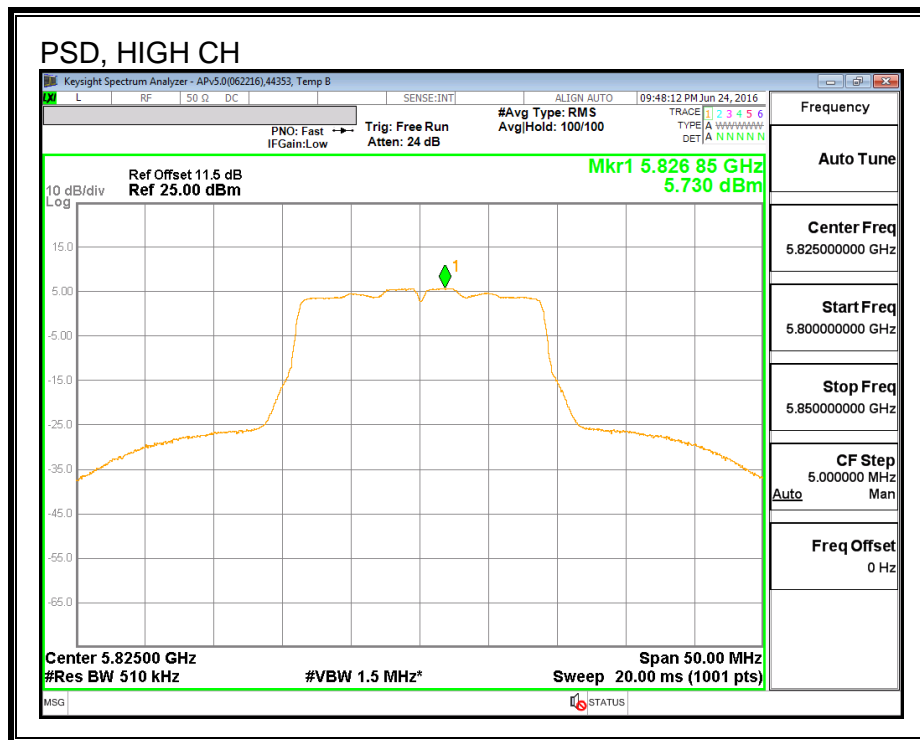
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
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### PSD Results

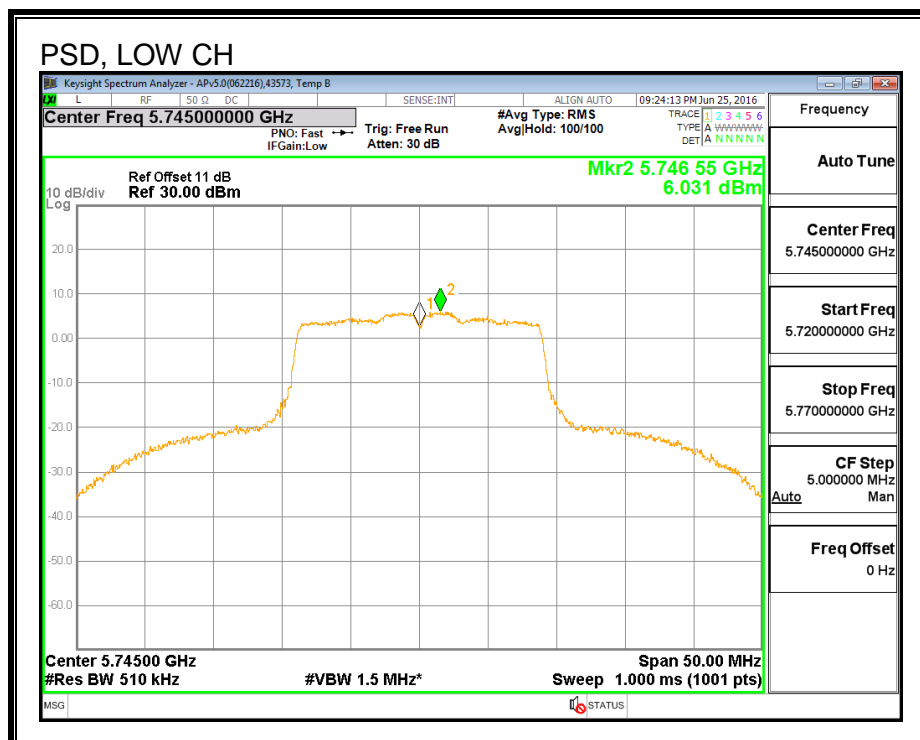
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5745	5.70	6.03	8.88	30.00	-21.12
Mid	5785	6.13	6.16	9.15	30.00	-20.85
High	5825	5.73	5.97	8.86	30.00	-21.14

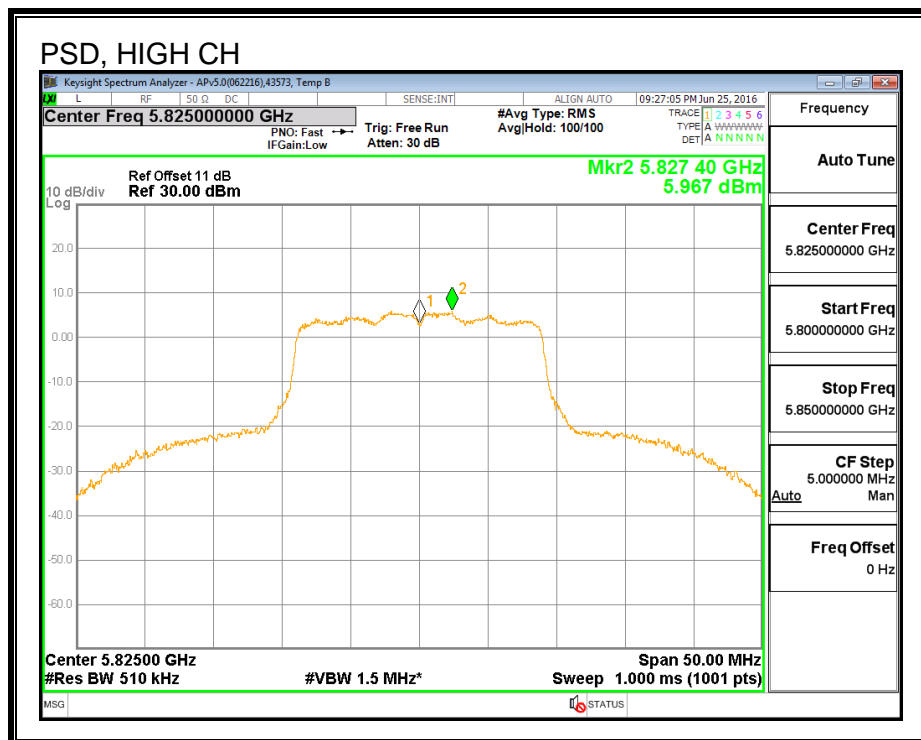
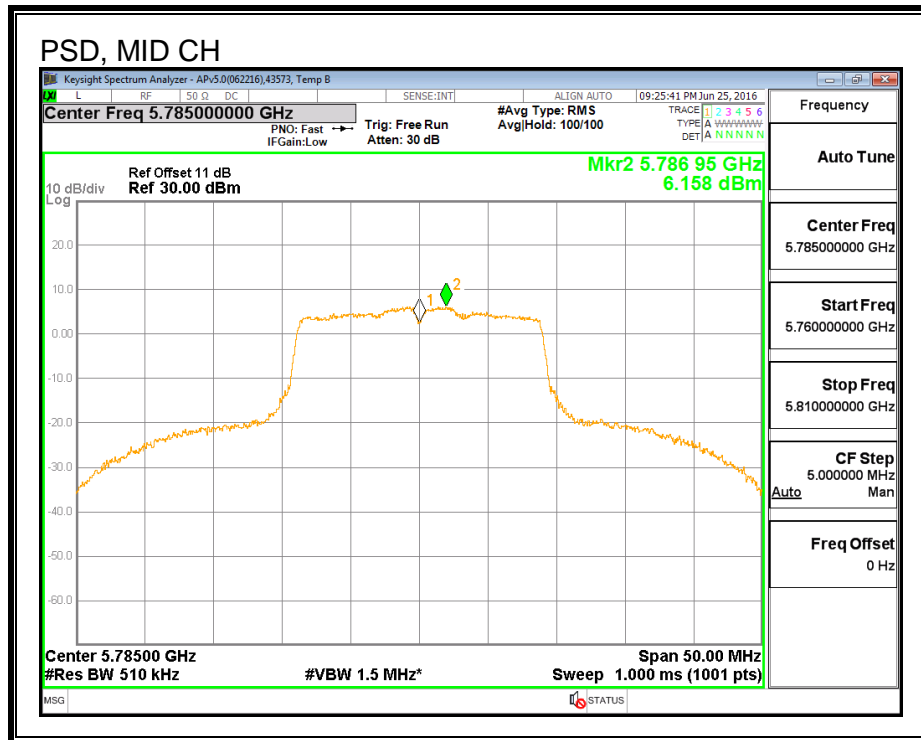
**PSD, CHAIN 0**





**PSD, CHAIN 1**





## **7.50. 802.11n HT20 2Tx STBC MODE IN THE 5.8 GHz BAND**

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

## **7.51. 802.11n HT40 CHAIN 0 MODE IN THE 5.8 GHz BAND**

### **7.51.1. 6 dB BANDWIDTH**

#### **LIMITS**

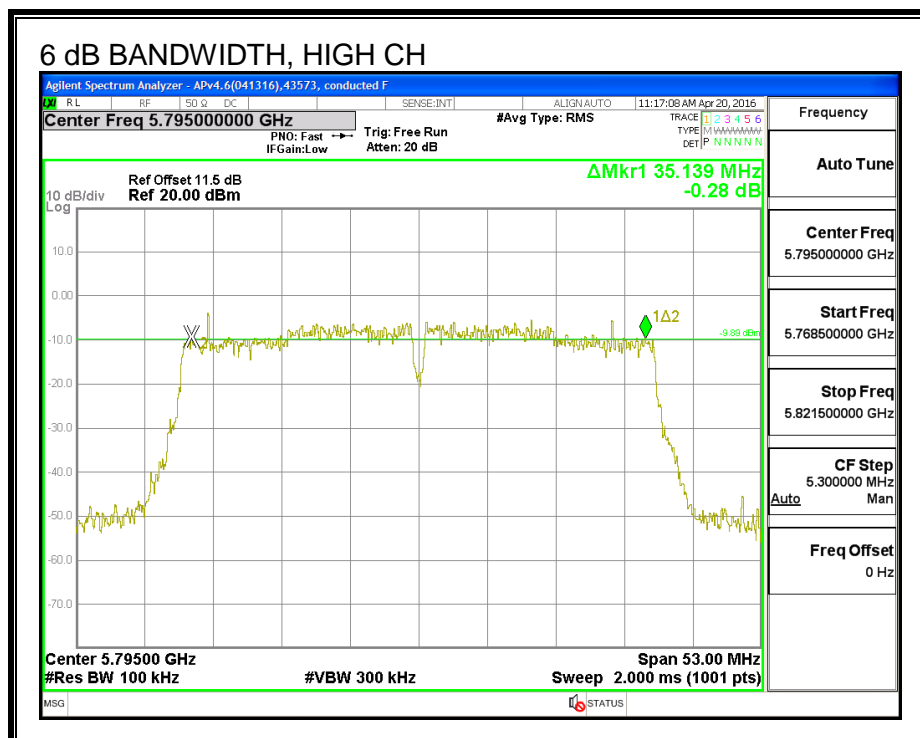
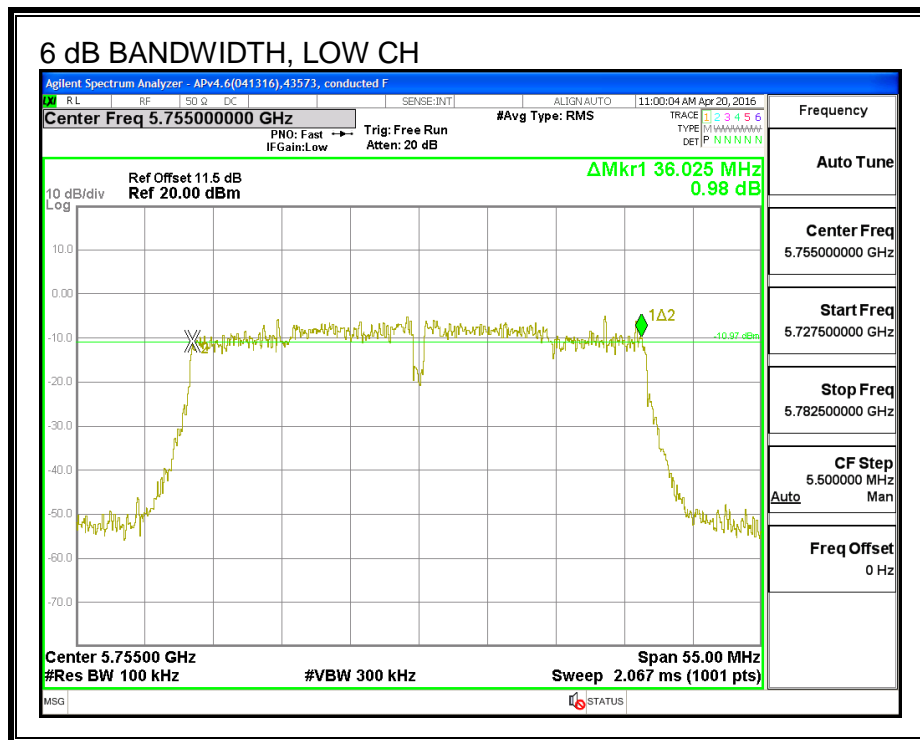
FCC §15.407 (e)

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

#### **RESULTS**

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	36.03	0.5
High	5795	35.14	0.5

## 6 dB BANDWIDTH



### 7.51.2. 26 dB BANDWIDTH

#### LIMITS

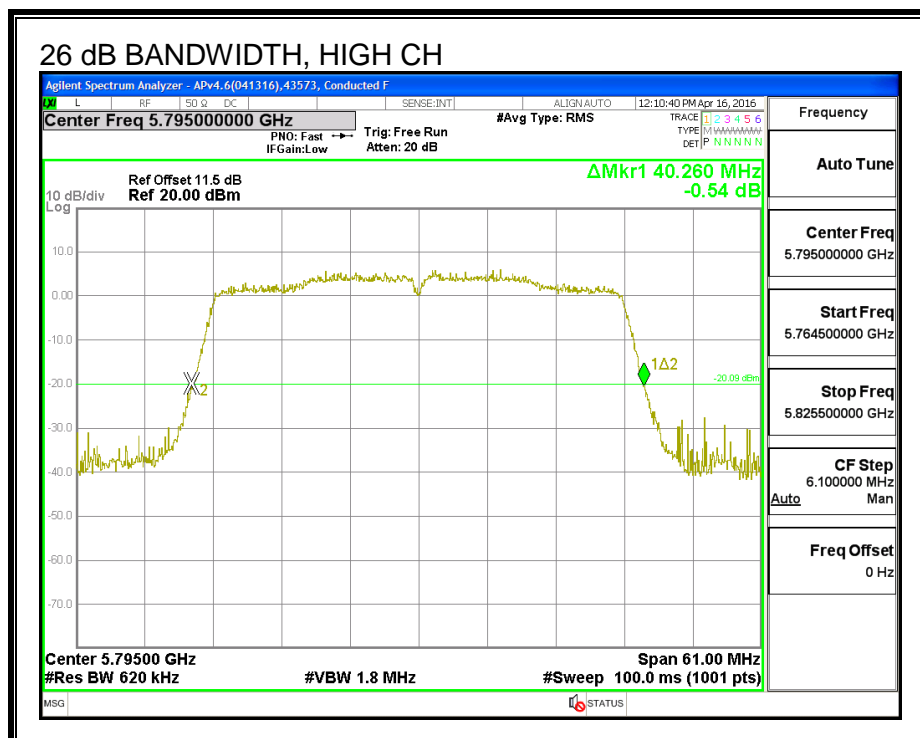
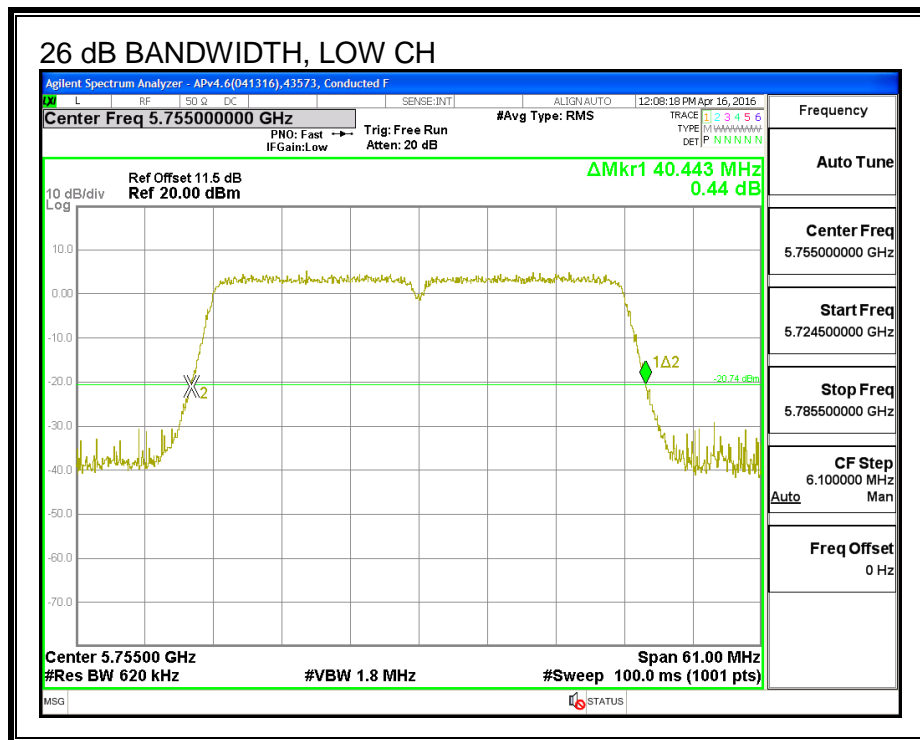
None, for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5755	40.44
High	5795	40.26



## 26 dB BANDWIDTH



### 7.51.3. 99% BANDWIDTH

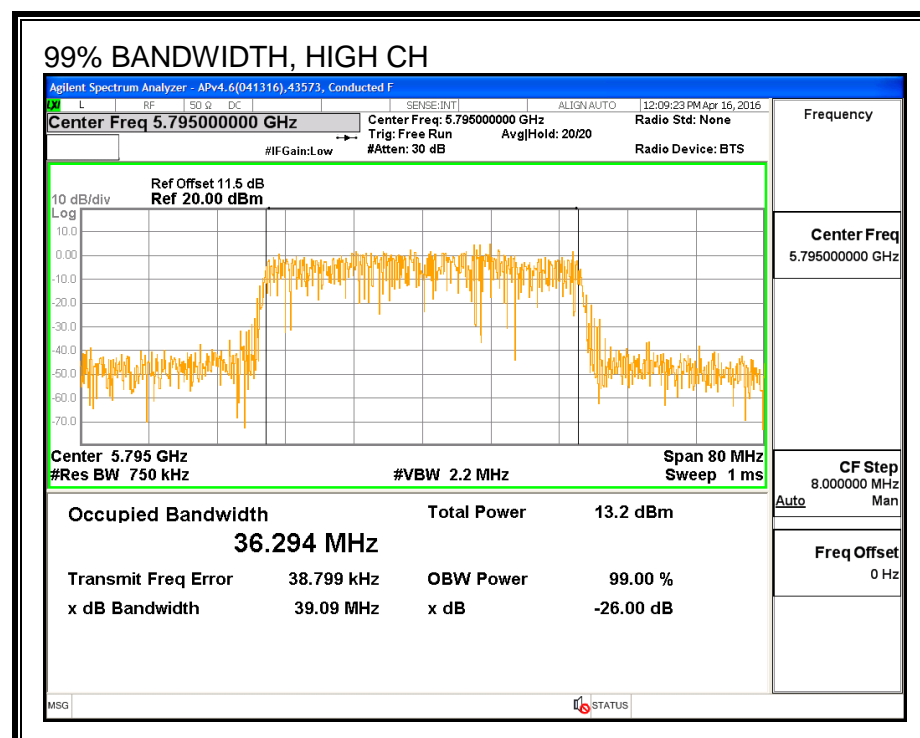
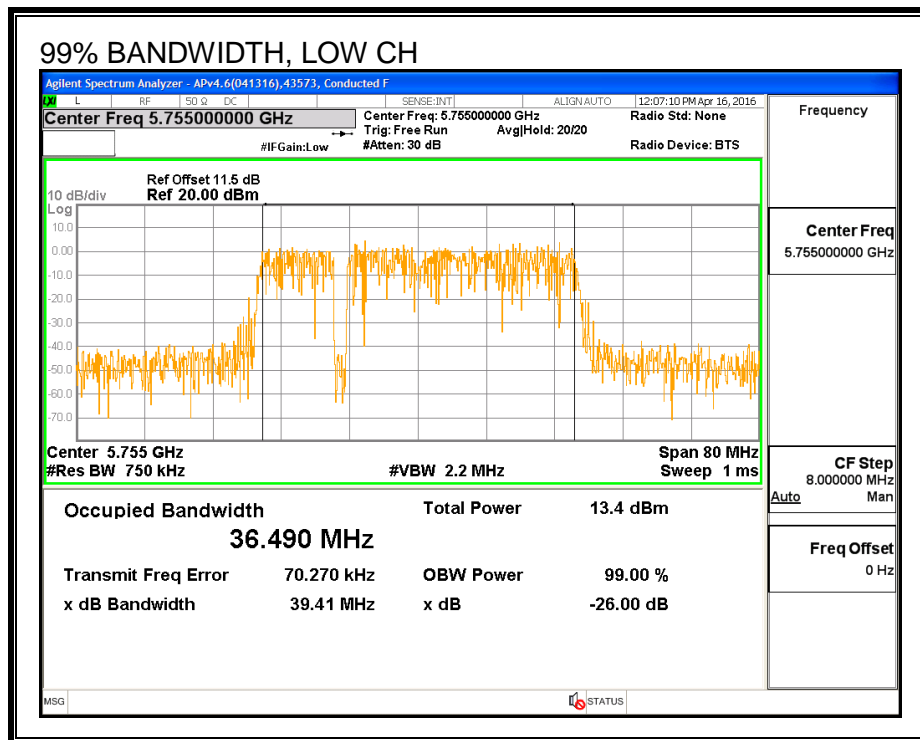
#### LIMITS

None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	36.490
High	5795	36.294

**99% BANDWIDTH**



#### 7.51.4. AVERAGE POWER

##### LIMITS

None; for reporting purposes only.

##### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

##### RESULTS

<b>ID:</b>	30554	<b>Date:</b>	6/9/16
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Channel	Frequency (MHz)	Power (dBm)
Low	5755	18.78
High	5795	18.92

### **7.51.5. OUTPUT POWER**

#### **LIMITS**

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### **TEST PROCEDURE**

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

#### **DIRECTIONAL ANTENNA GAIN**

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

## RESULTS

<b>ID:</b>	30554	<b>Date:</b>	6/9/16
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### Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	-2.73	30.00
High	5795	-2.73	30.00

### Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	18.78	18.78	30.00	-11.22
High	5795	18.92	18.92	30.00	-11.08

### **7.51.6. PSD**

#### **LIMITS**

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### **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 (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5755	-2.73	30.00
High	5795	-2.73	30.00

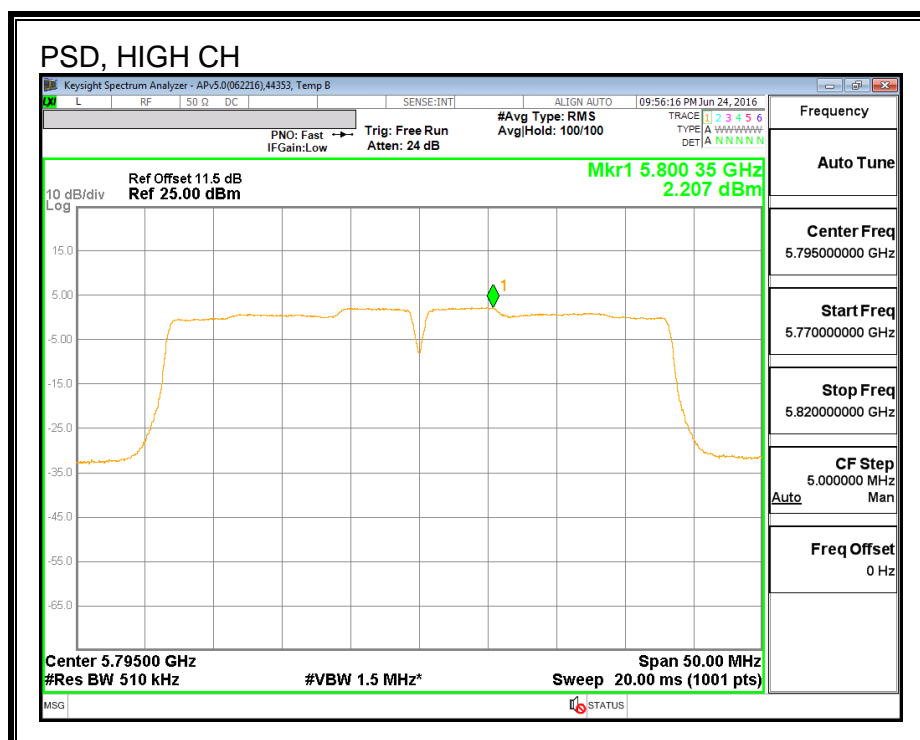
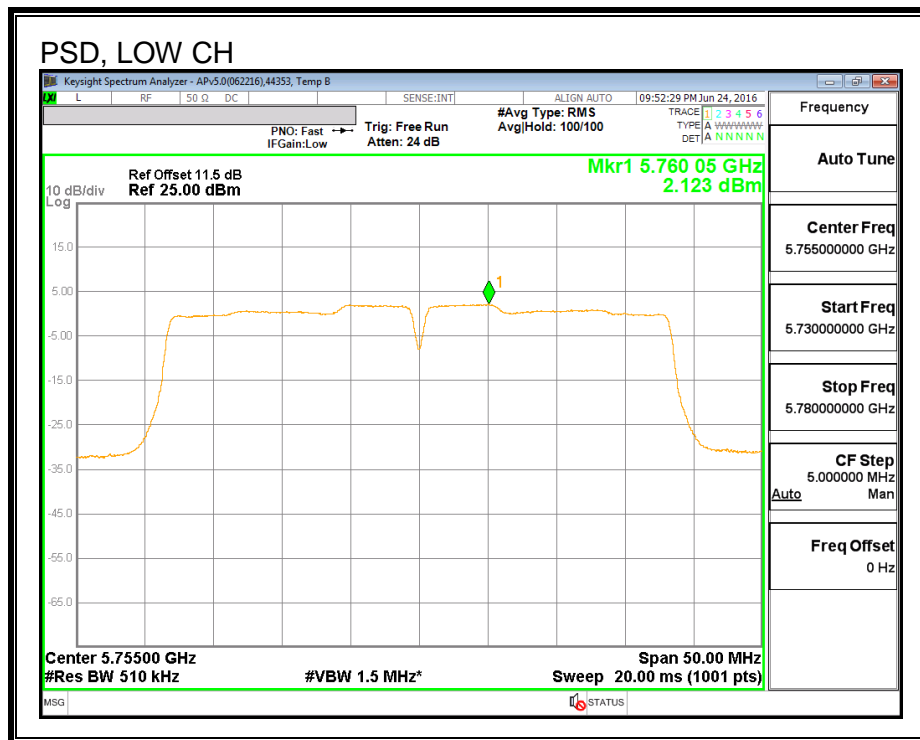
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
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### PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5755	2.12	2.12	30.00	-27.88
High	5795	2.21	2.21	30.00	-27.79



**PSD**



## **7.52. 802.11n HT40 CHAIN 1 MODE IN THE 5.8 GHz BAND**

### **7.52.1. 6 dB BANDWIDTH**

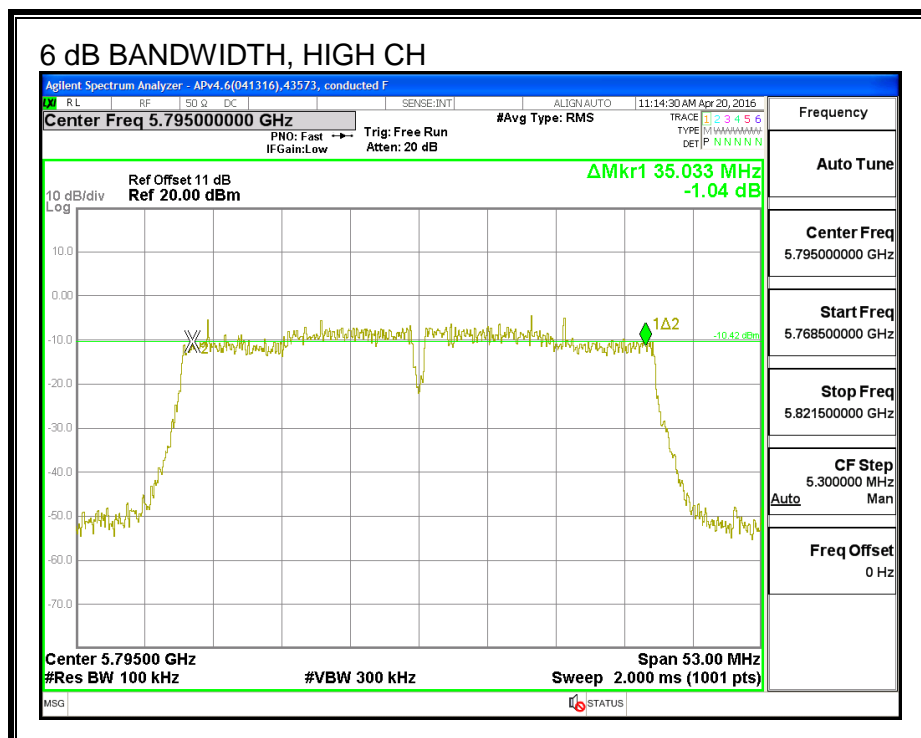
#### **LIMITS**

FCC §15.407 (e)

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

#### **RESULTS**

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	35.48	0.5
High	5795	35.03	0.5



### 7.52.2. 26 dB BANDWIDTH

#### LIMITS

None, for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5755	40.63
High	5795	40.20



### 7.52.3. 99% BANDWIDTH

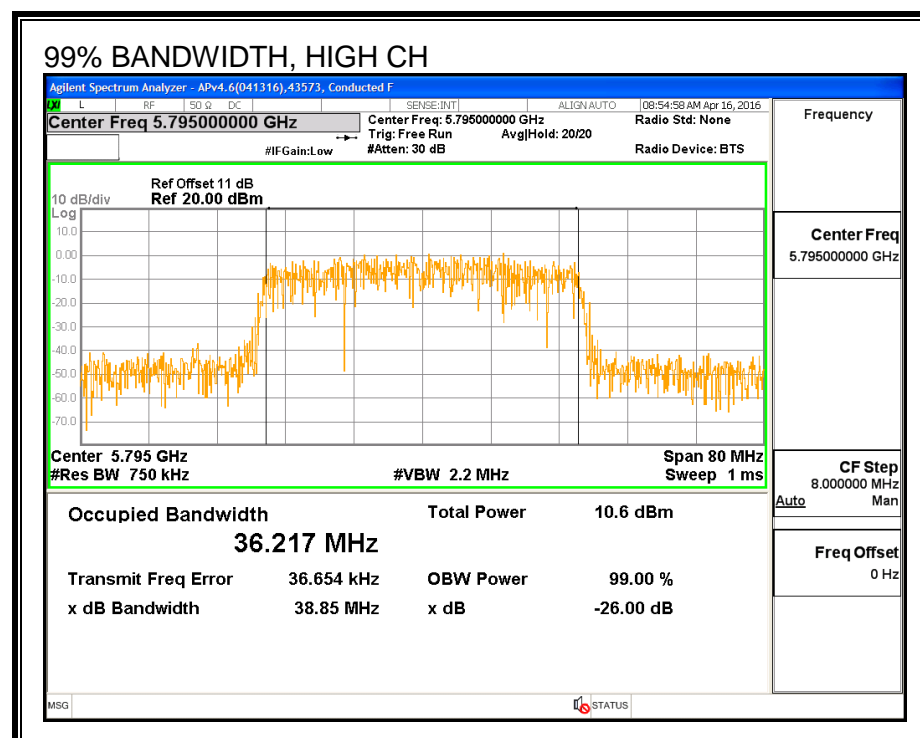
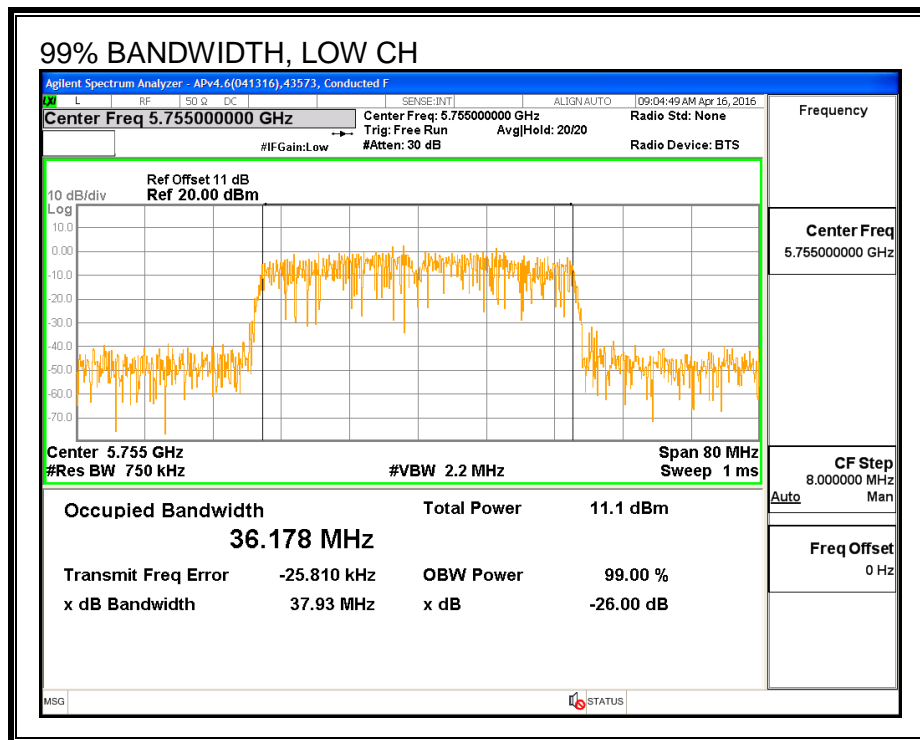
#### LIMITS

None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	36.178
High	5795	36.217

**99% BANDWIDTH**



#### 7.52.4. AVERAGE POWER

##### LIMITS

None; for reporting purposes only.

##### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

##### RESULTS

<b>ID:</b>	30554	<b>Date:</b>	6/9/16
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Channel	Frequency (MHz)	Power (dBm)
Low	5755	18.76
High	5795	19.00



## **7.52.5. OUTPUT POWER**

### **LIMITS**

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### **TEST PROCEDURE**

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

### **DIRECTIONAL ANTENNA GAIN**

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

## RESULTS

<b>ID:</b>	30554	<b>Date:</b>	6/9/16
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### Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	-5.52	30.00
High	5795	-5.52	30.00

### Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	18.76	18.76	30.00	-11.24
High	5795	19.00	19.00	30.00	-11.00

### **7.52.6. PSD**

#### **LIMITS**

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### **DIRECTIONAL ANTENNA GAIN**

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

## RESULTS

### Antenna Gain and Limits

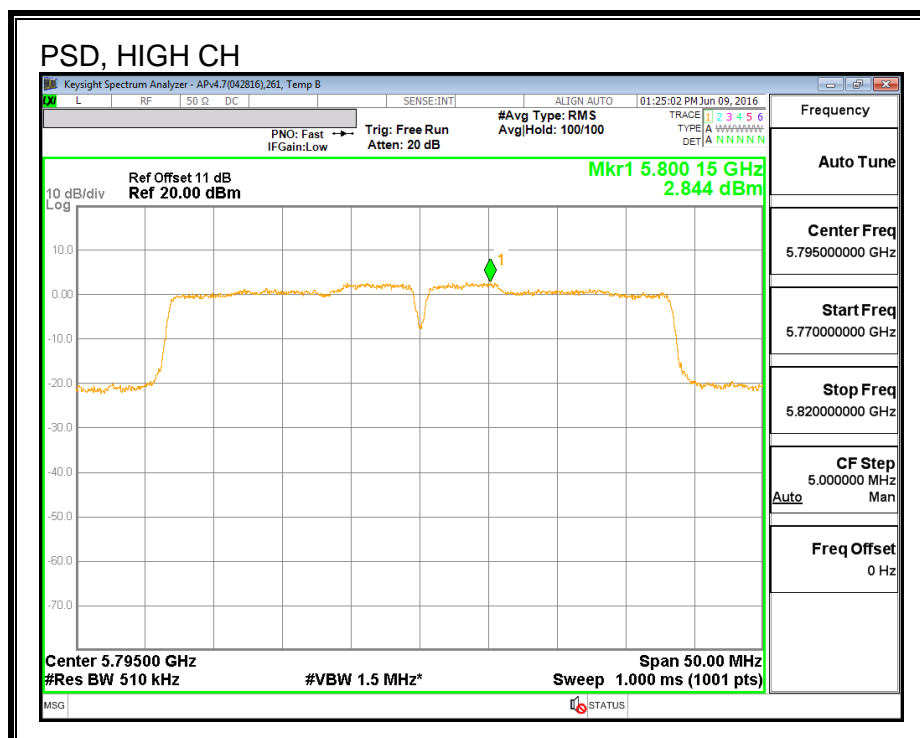
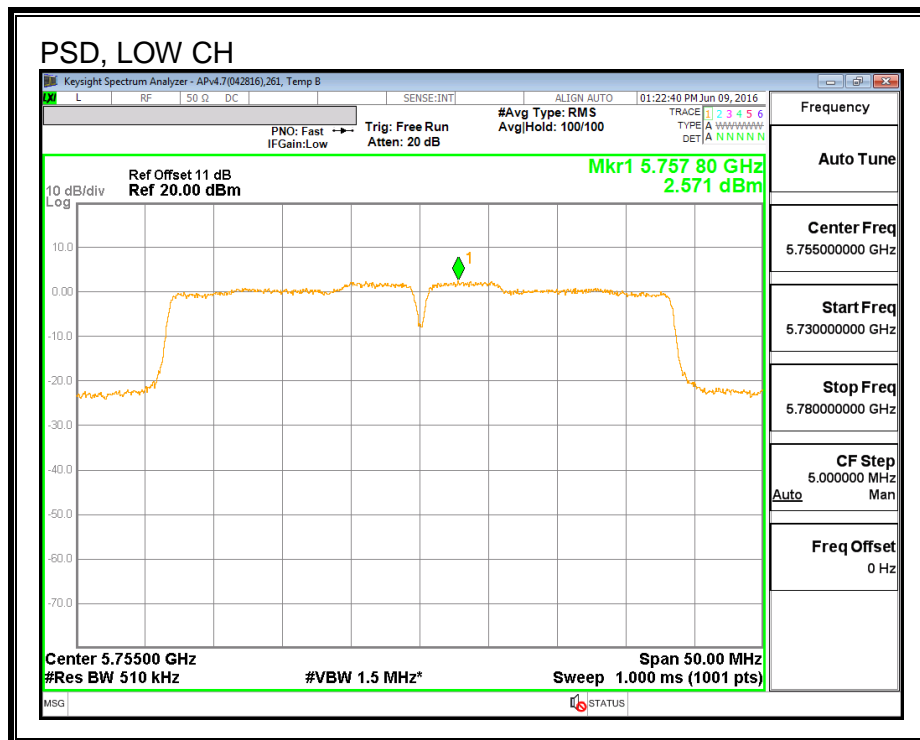
Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5755	-5.52	30.00
High	5795	-5.52	30.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
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### PSD Results

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5755	2.57	2.57	30.00	-27.43
High	5795	2.84	2.84	30.00	-27.16

**PSD**



## **7.53. 802.11n HT40 2Tx CDD MODE IN THE 5.8 GHz BAND**

### **7.53.1. 6 dB BANDWIDTH**

#### **LIMITS**

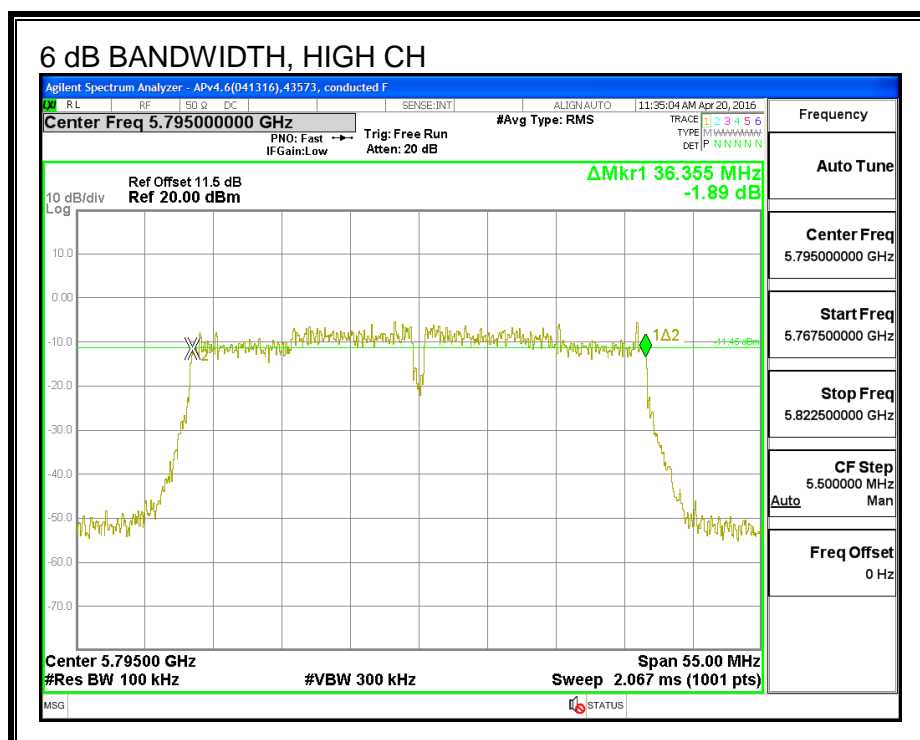
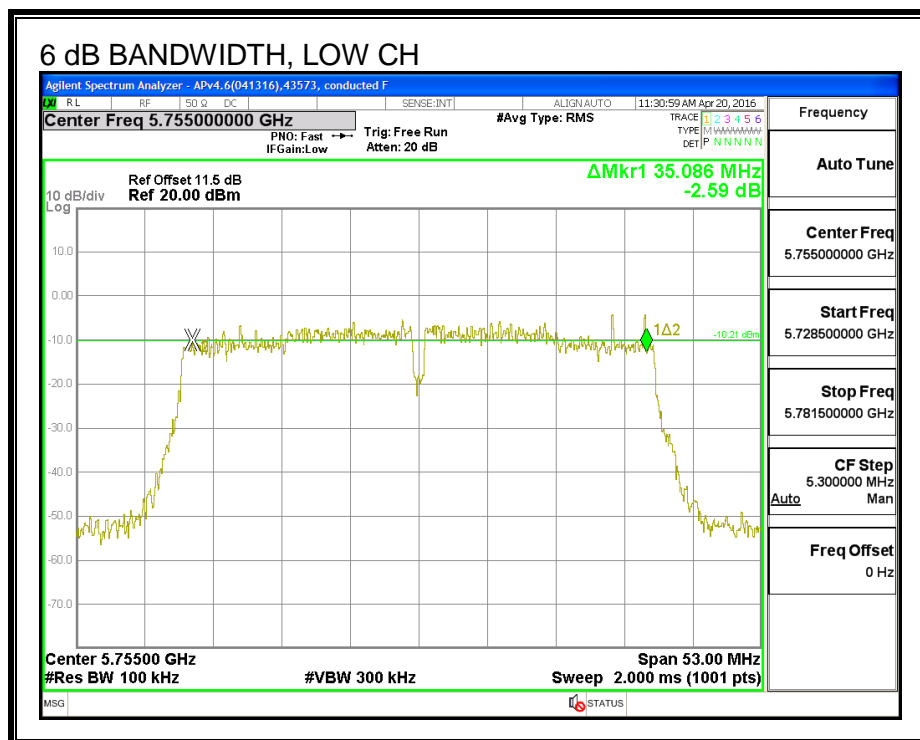
FCC §15.407 (e)

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

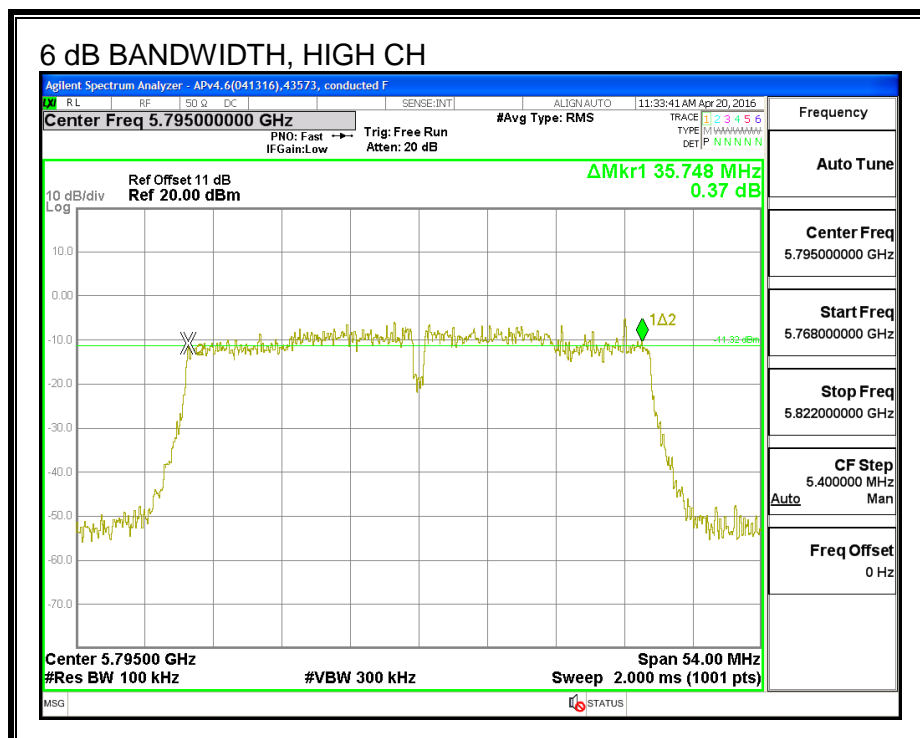
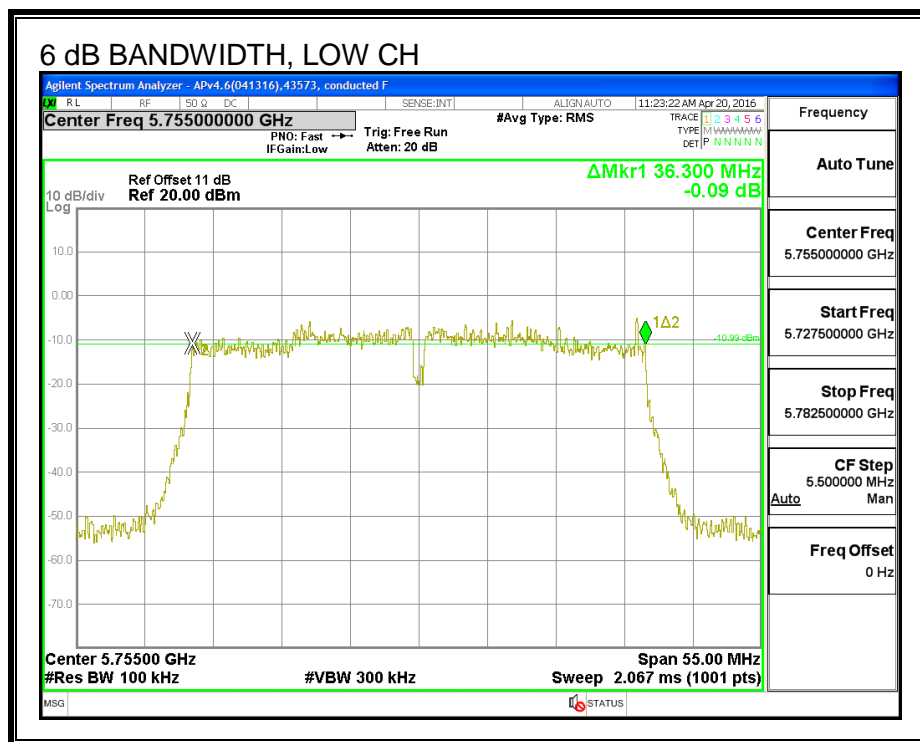
#### **RESULTS**

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	5755	35.09	36.30	0.5
High	5795	36.36	35.75	0.5

**6 dB BANDWIDTH, CHAIN 0**



**6 dB BANDWIDTH, CHAIN 1**





### 7.53.2. 26 dB BANDWIDTH

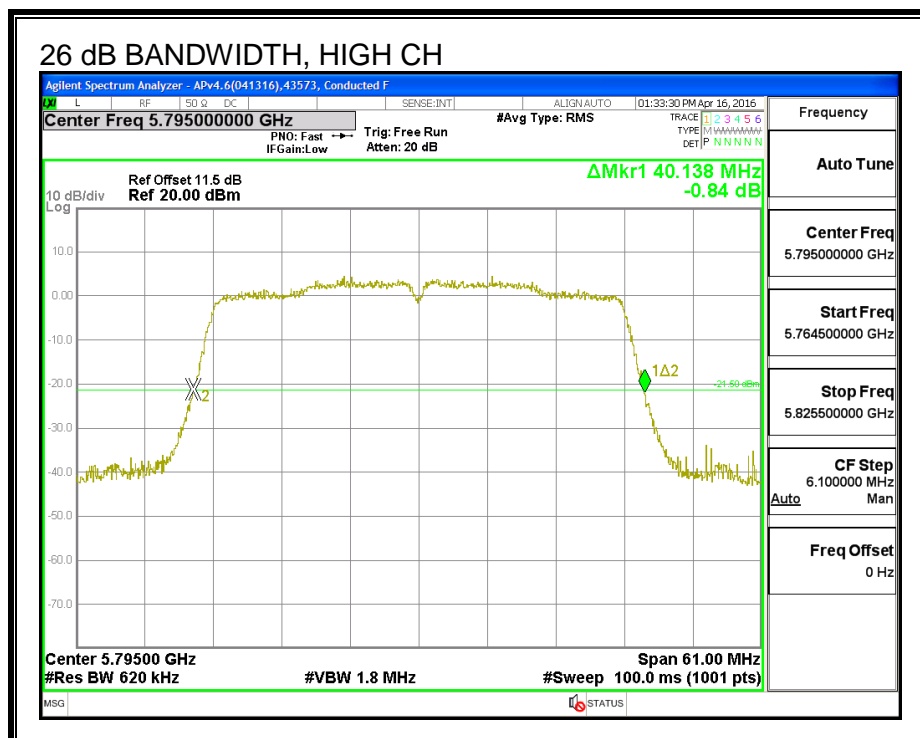
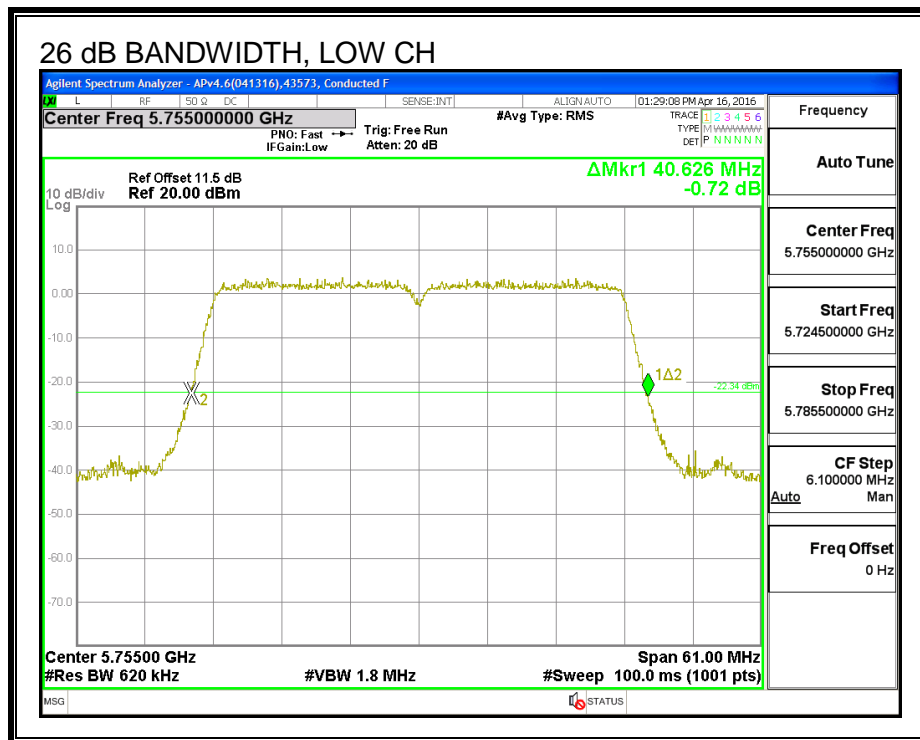
#### LIMITS

None, for reporting purposes only.

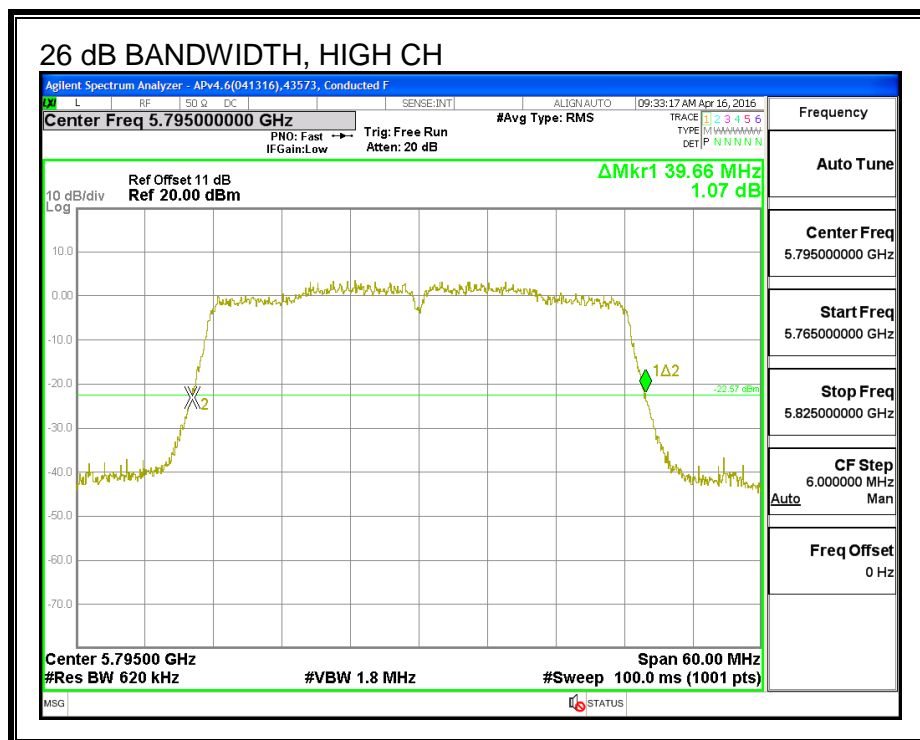
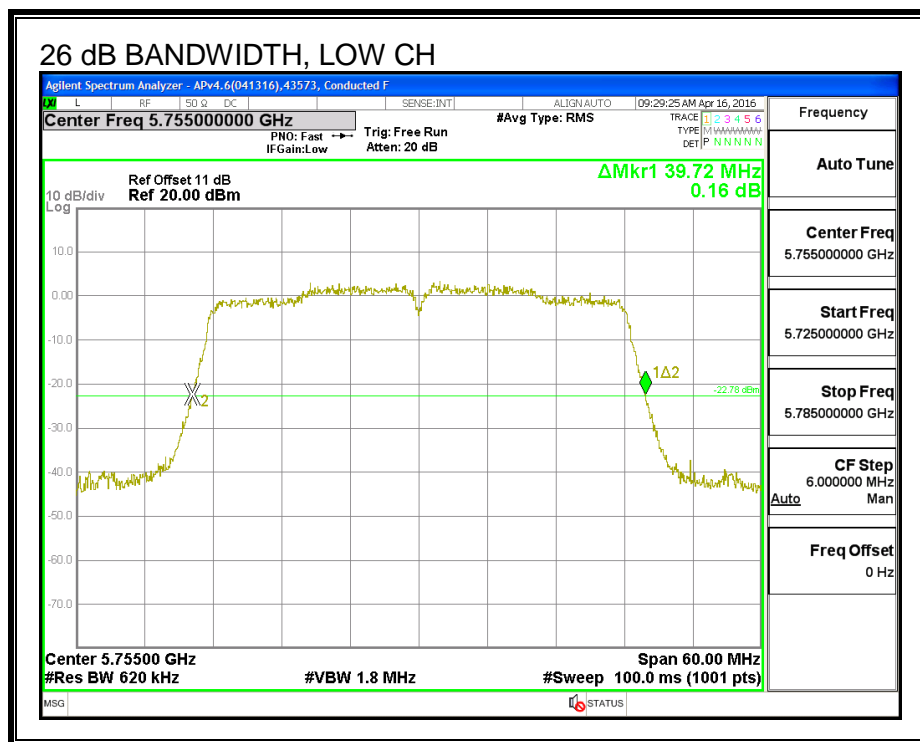
#### RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5755	40.63	39.72
High	5795	40.14	39.68

**26 dB BANDWIDTH, CHAIN 0**



**26 dB BANDWIDTH, CHAIN 1**



### 7.53.3. 99% BANDWIDTH

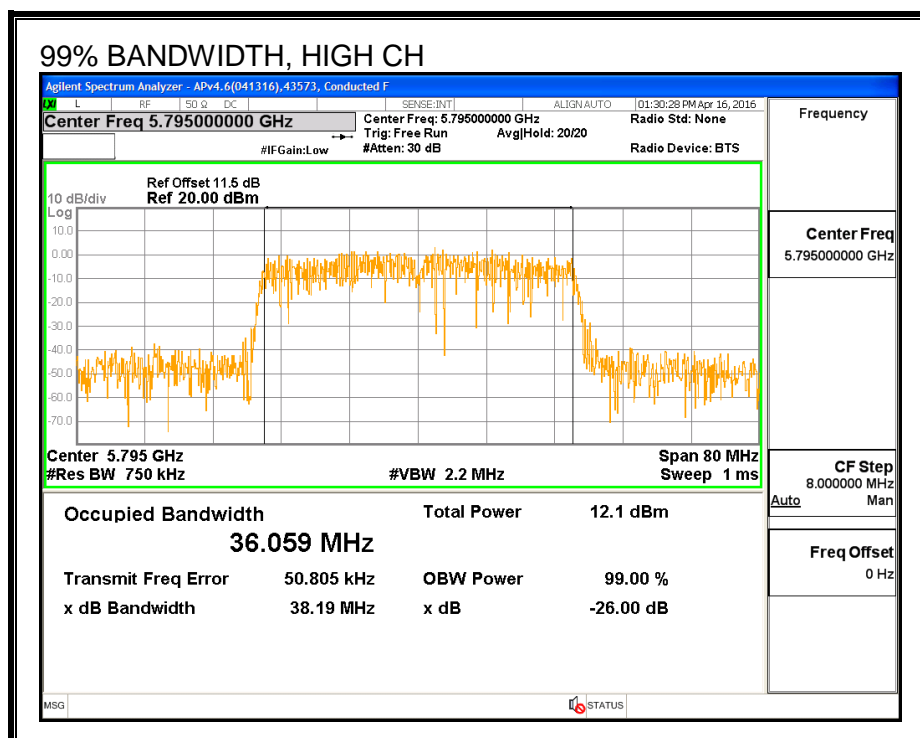
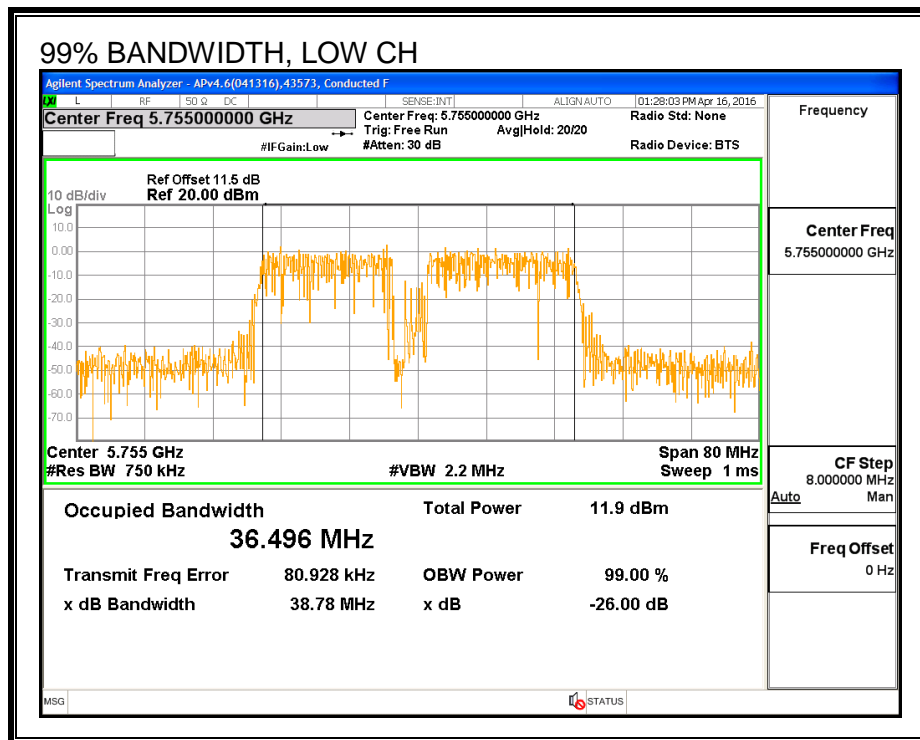
#### LIMITS

None; for reporting purposes only.

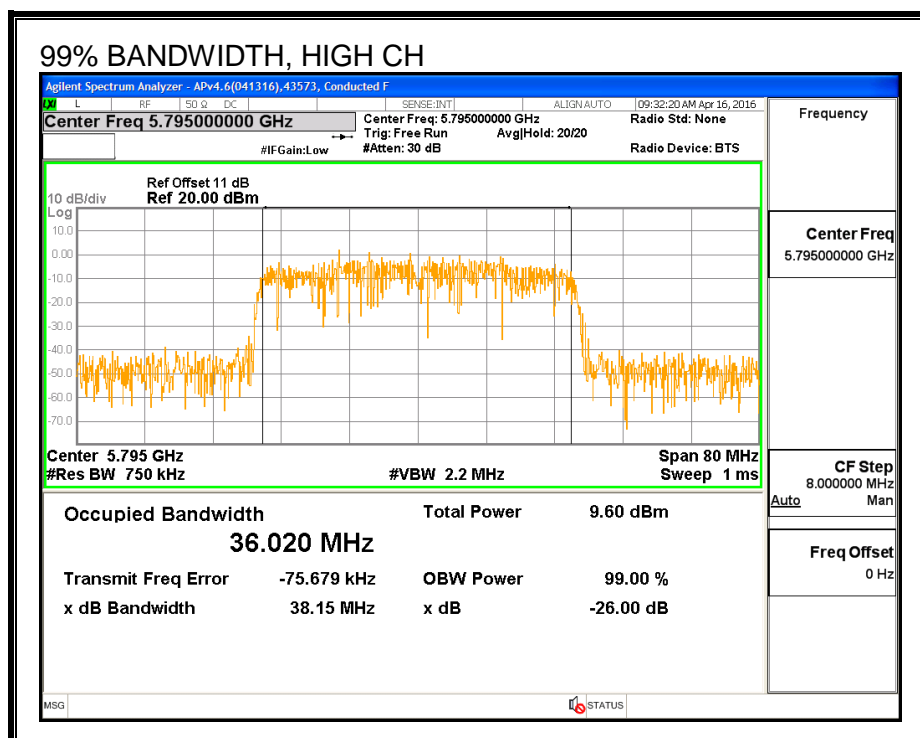
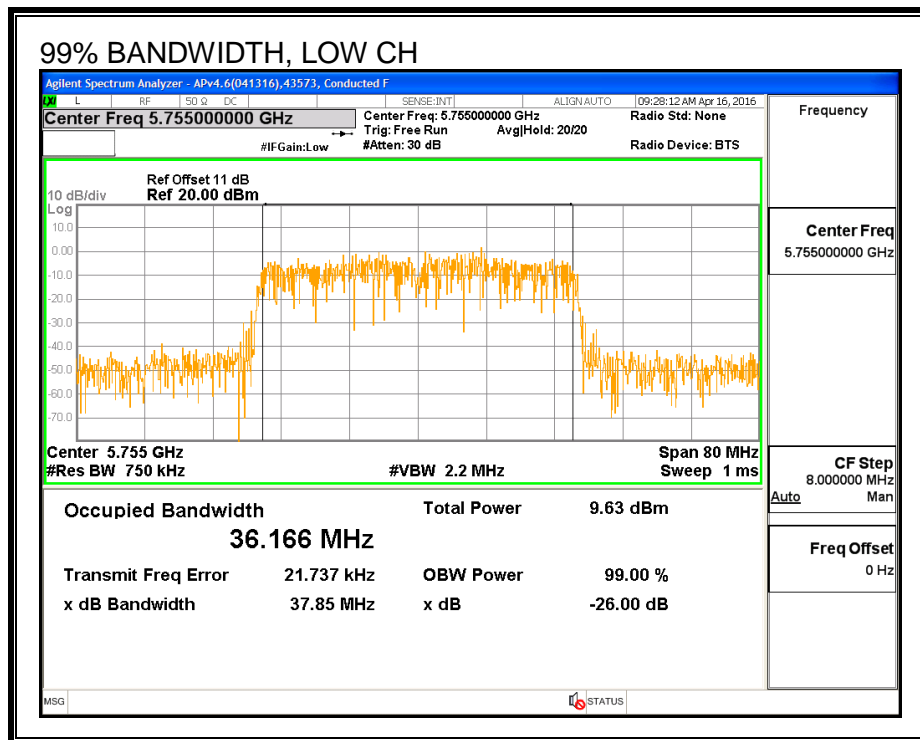
#### RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5755	36.496	36.166
High	5795	36.059	36.020

**99% BANDWIDTH, CHAIN 0**



**99% BANDWIDTH, CHAIN 1**



#### 7.53.4. AVERAGE POWER

##### LIMITS

None; for reporting purposes only.

##### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

##### RESULTS

<b>ID:</b>	30554	<b>Date:</b>	6/9/16
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<b>Channel</b>	<b>Frequency (MHz)</b>	<b>Chain 0 Power (dBm)</b>	<b>Chain 1 Power (dBm)</b>	<b>Total Power (dBm)</b>
Low	5755	16.80	18.98	21.04
High	5795	16.80	18.92	21.00

### 7.53.5. OUTPUT POWER

#### LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

#### DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-2.73	-5.52	-3.90



## RESULTS

<b>ID:</b>	30554	<b>Date:</b>	6/9/16
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### Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	-3.90	30.00
High	5795	-3.90	30.00

### Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	16.80	18.98	21.04	30.00	-8.96
High	5795	16.80	18.92	21.00	30.00	-9.00

### 7.53.6. PSD

#### LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-2.73	-5.52	-1.00

## RESULTS

### Antenna Gain and Limit

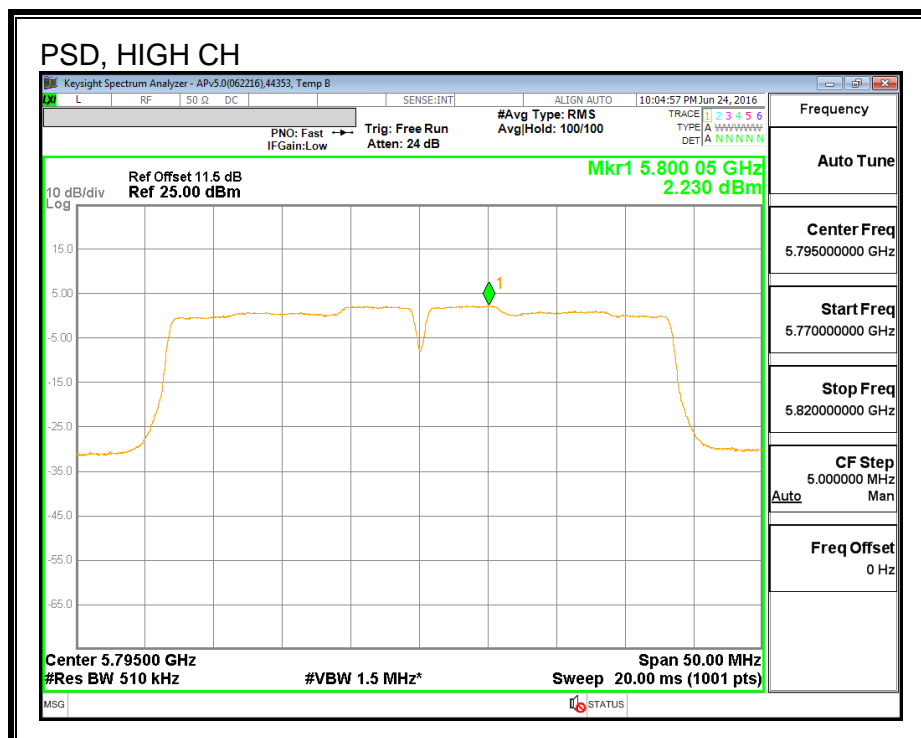
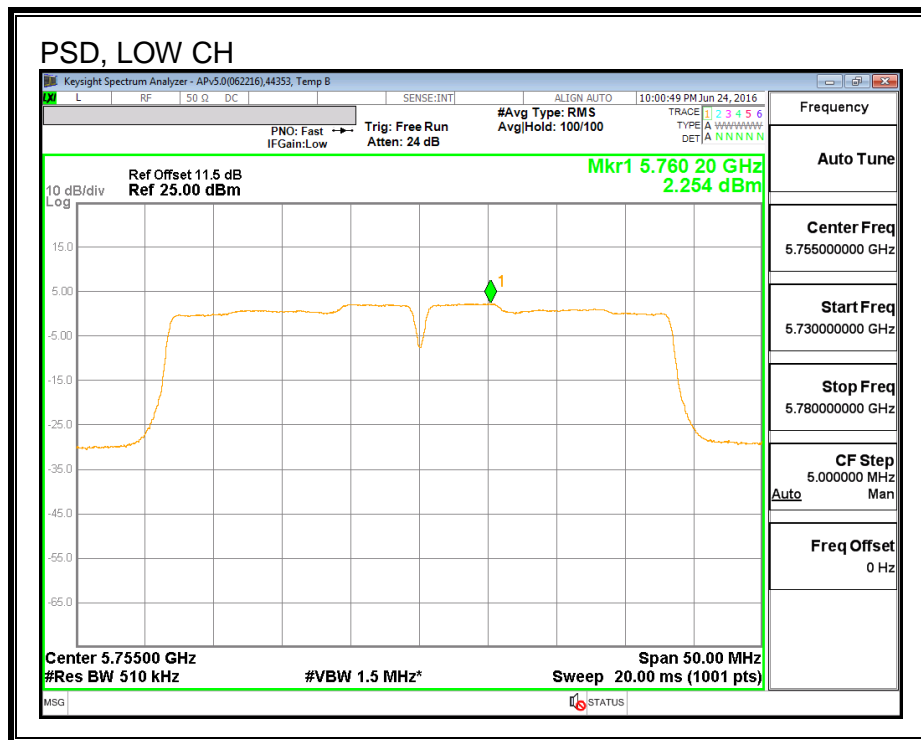
Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5755	-1.00	30.00
High	5795	-1.00	30.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
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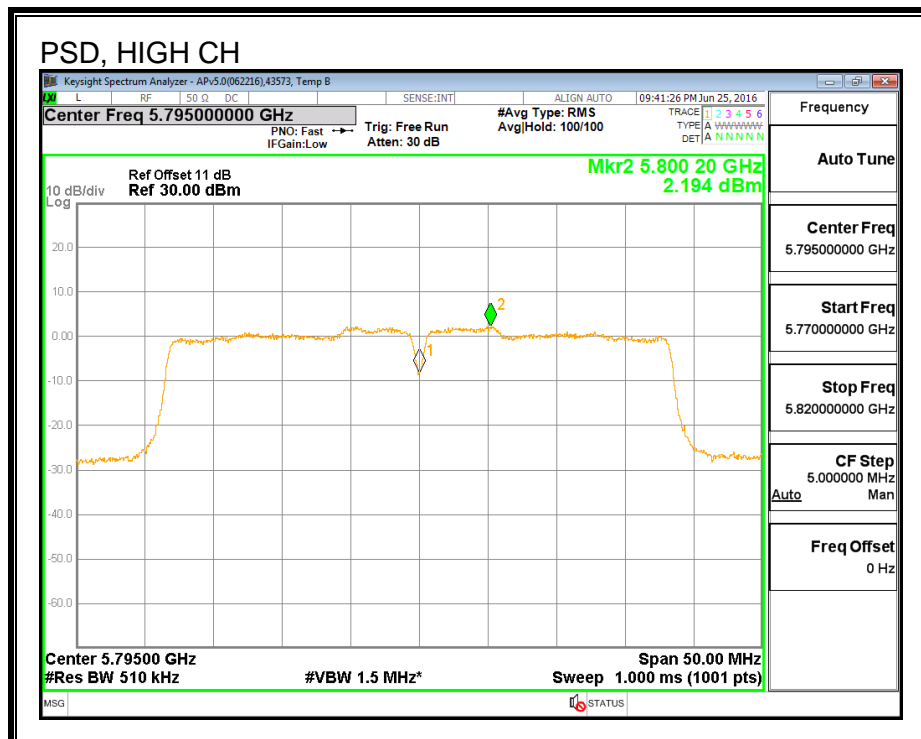
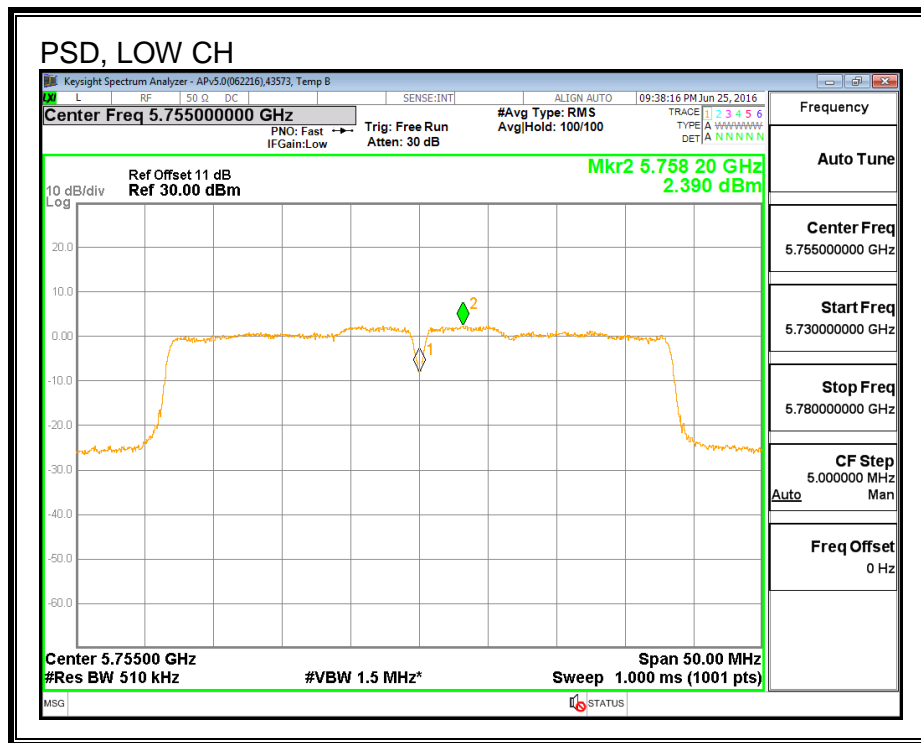
### PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5755	2.25	2.39	5.33	30.00	-24.67
High	5795	2.23	2.19	5.22	30.00	-24.78

**PSD, CHAIN 0**



**PSD, CHAIN 1**



## **7.54. 802.11n HT40 2Tx STBC MODE IN THE 5.8 GHz BAND**

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

## 7.55. 802.11ac VHT80 CHAIN 0 MODE IN THE 5.8 GHz BAND

### 7.55.1. 6 dB BANDWIDTH

#### LIMITS

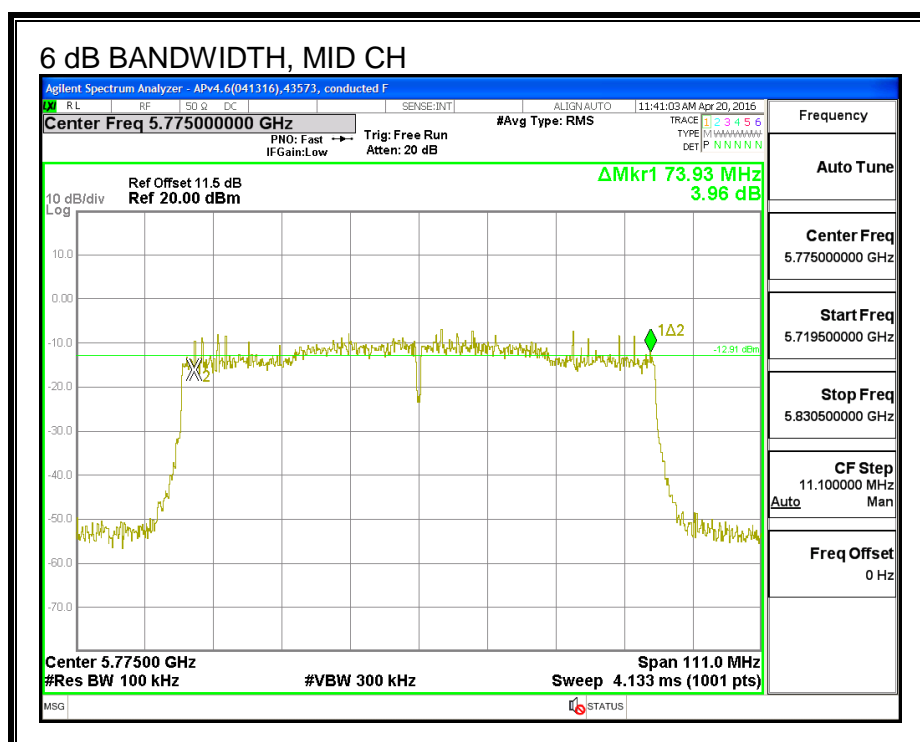
FCC §15.407 (e)

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

#### RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	73.93	0.5

#### 6 dB BANDWIDTH



## 7.55.2. 26 dB BANDWIDTH

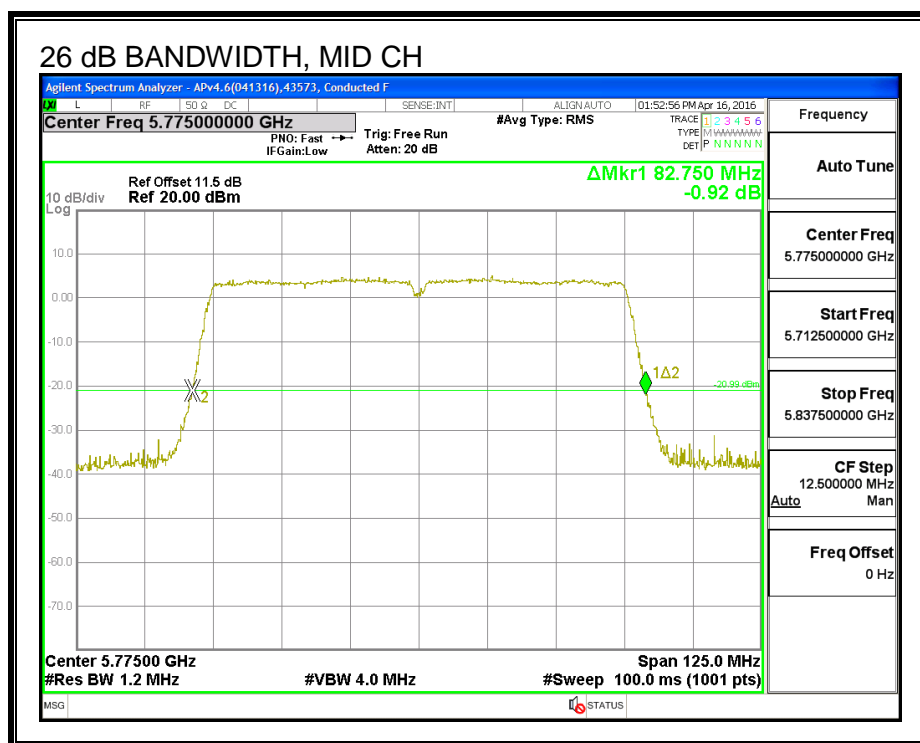
### LIMITS

None, for reporting purposes only.

### RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5775	82.75

### 26 dB BANDWIDTH





### 7.55.3. 99% BANDWIDTH

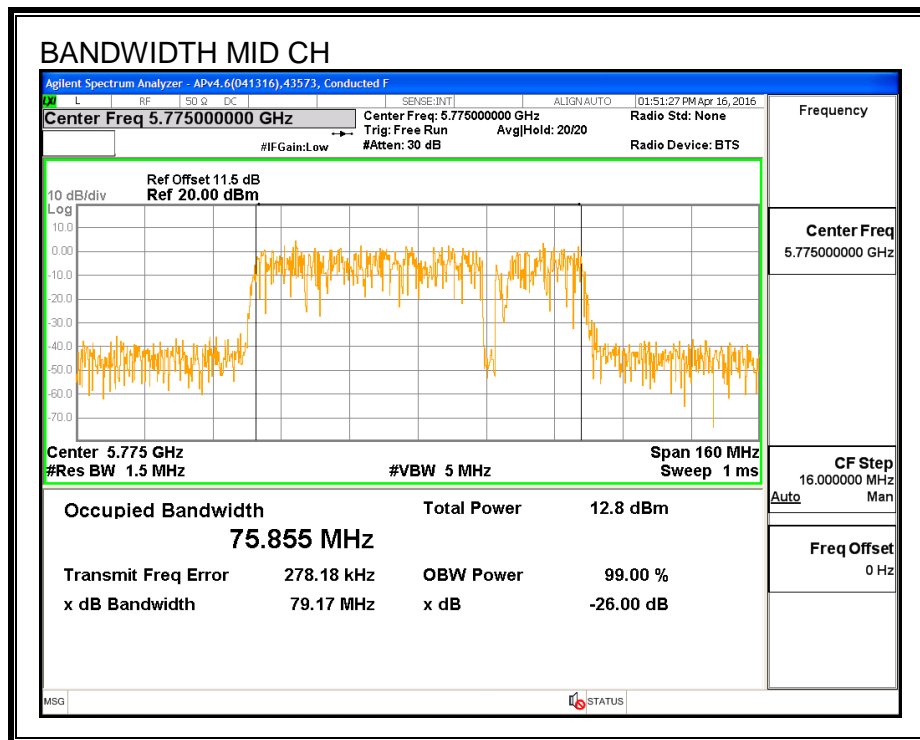
#### LIMITS

None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Mid	5775	75.855

#### 99% BANDWIDTH



#### 7.55.4. AVERAGE POWER

##### LIMITS

None; for reporting purposes only.

##### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

##### RESULTS

<b>ID:</b>	30554	<b>Date:</b>	6/9/16
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Channel	Frequency (MHz)	Power (dBm)
Mid	5775	18.86

### **7.55.5. OUTPUT POWER**

#### **LIMITS**

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### **TEST PROCEDURE**

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

#### **DIRECTIONAL ANTENNA GAIN**

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

## RESULTS

<b>ID:</b>	30554	<b>Date:</b>	6/9/16
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### Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Mid	5775	-2.73	30.00

### Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5775	18.86	18.86	30.00	-11.14

## 7.55.6. PSD

### LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### DIRECTIONAL ANTENNA GAIN

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

### RESULTS

#### Antenna Gain and Limits

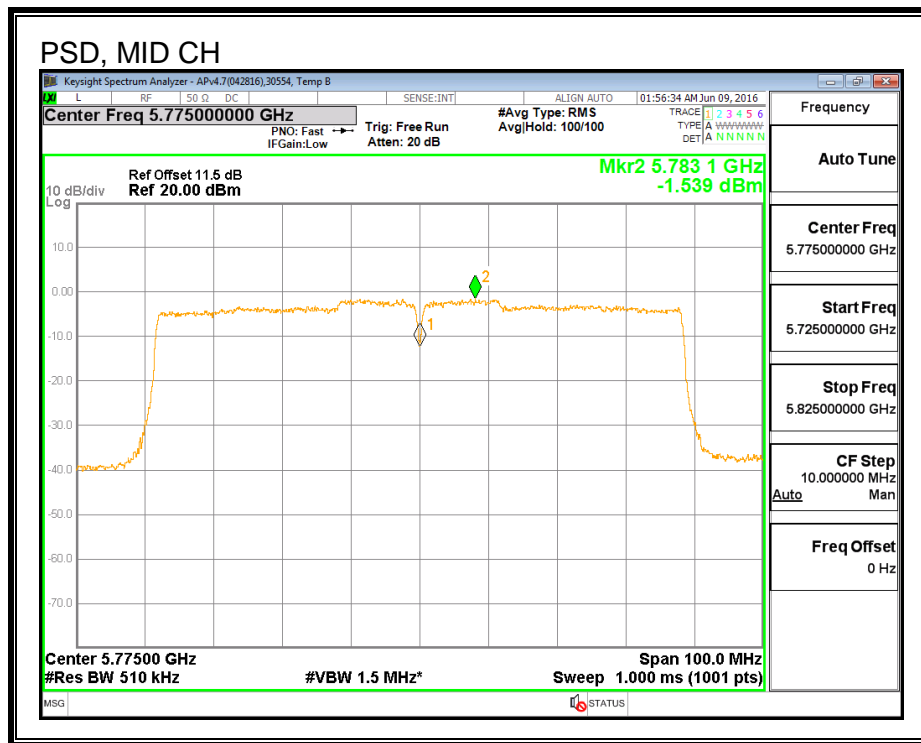
Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Mid	5775	-2.73	30.00

Duty Cycle CF (dB)	0.15	Included in Calculations of Corr'd PSD
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#### PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5775	-1.54	-1.39	30.00	-31.39

**PSD**



## 7.56. 802.11ac VHT80 CHAIN 1 MODE IN THE 5.8 GHz BAND

### 7.56.1. 6 dB BANDWIDTH

#### LIMITS

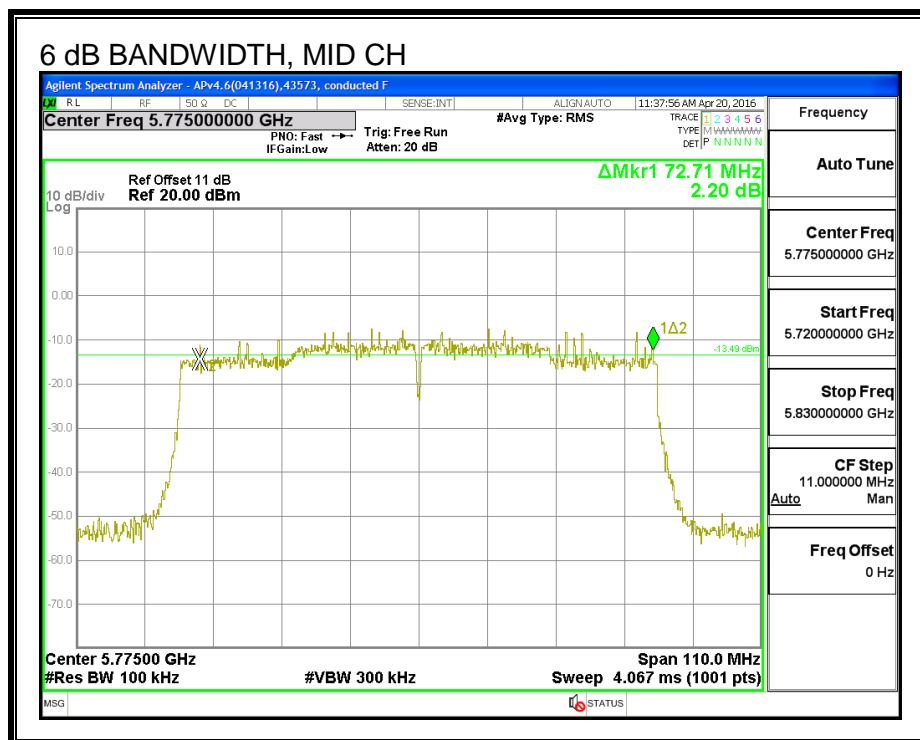
FCC §15.407 (e)

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

#### RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	72.71	0.5

#### 6 dB BANDWIDTH



## 7.56.2. 26 dB BANDWIDTH

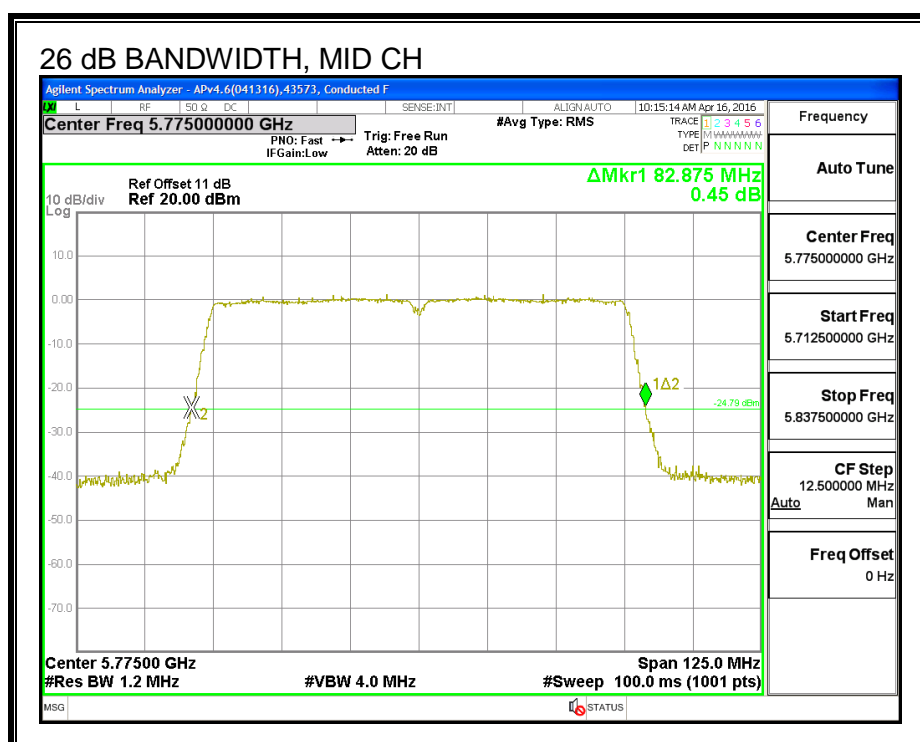
### LIMITS

None, for reporting purposes only.

### RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5775	82.88

### 26 dB BANDWIDTH





### 7.56.3. 99% BANDWIDTH

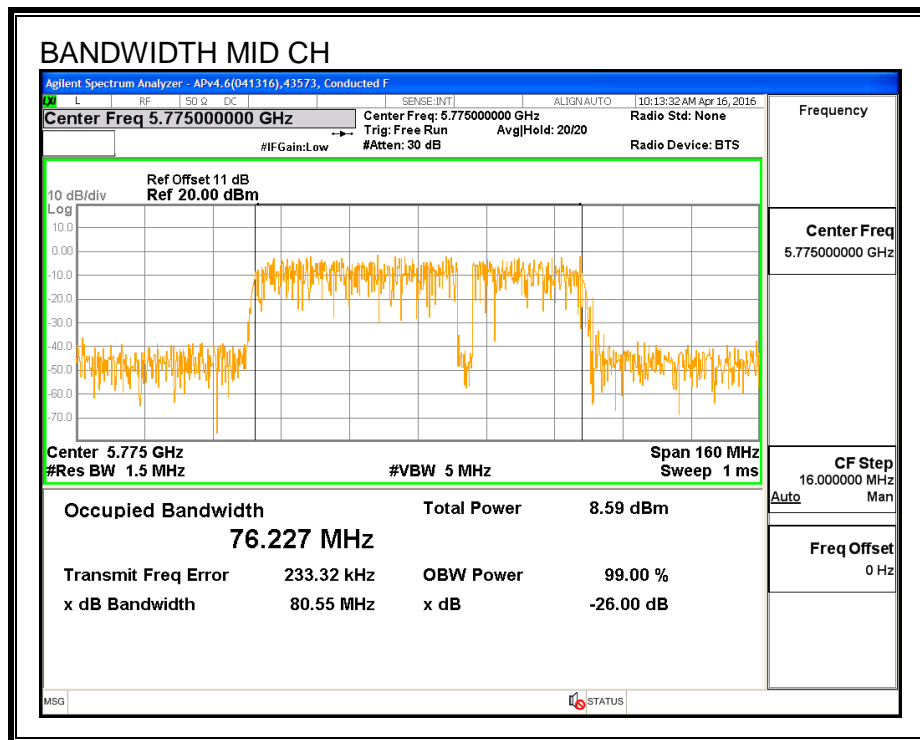
#### LIMITS

None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Mid	5775	76.227

#### 99% BANDWIDTH



#### 7.56.4. AVERAGE POWER

##### LIMITS

None; for reporting purposes only.

##### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

##### RESULTS

<b>ID:</b>	30554	<b>Date:</b>	6/9/16
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Channel	Frequency (MHz)	Power (dBm)
Mid	5775	18.80

### **7.56.5. OUTPUT POWER**

#### **LIMITS**

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### **TEST PROCEDURE**

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

#### **DIRECTIONAL ANTENNA GAIN**

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

## RESULTS

<b>ID:</b>	30554	<b>Date:</b>	6/9/16
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### Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Mid	5775	-5.52	30.00

### Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5775	18.80	18.80	30.00	-11.20

## 7.56.6. PSD

### LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### DIRECTIONAL ANTENNA GAIN

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

### RESULTS

#### Antenna Gain and Limits

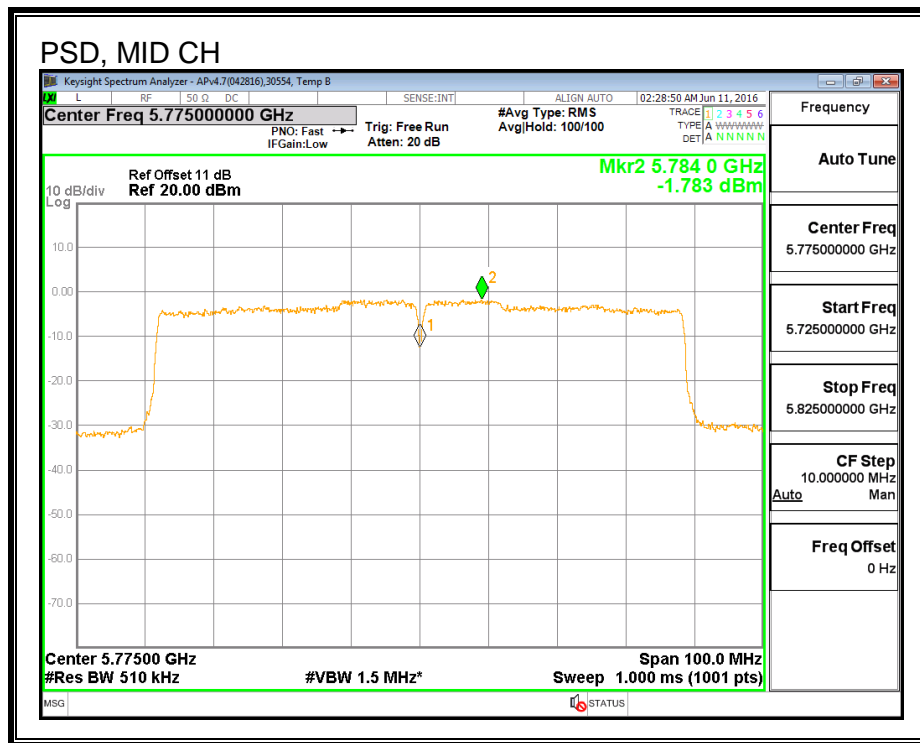
Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Mid	5775	-5.52	30.00

Duty Cycle CF (dB)	0.15	Included in Calculations of Corr'd PSD
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#### PSD Results

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5775	-1.78	-1.63	30.00	-31.63

**PSD**



## **7.57. 802.11ac VHT80 2Tx CDD MODE IN THE 5.8 GHz BAND**

### **7.57.1. 6 dB BANDWIDTH**

#### **LIMITS**

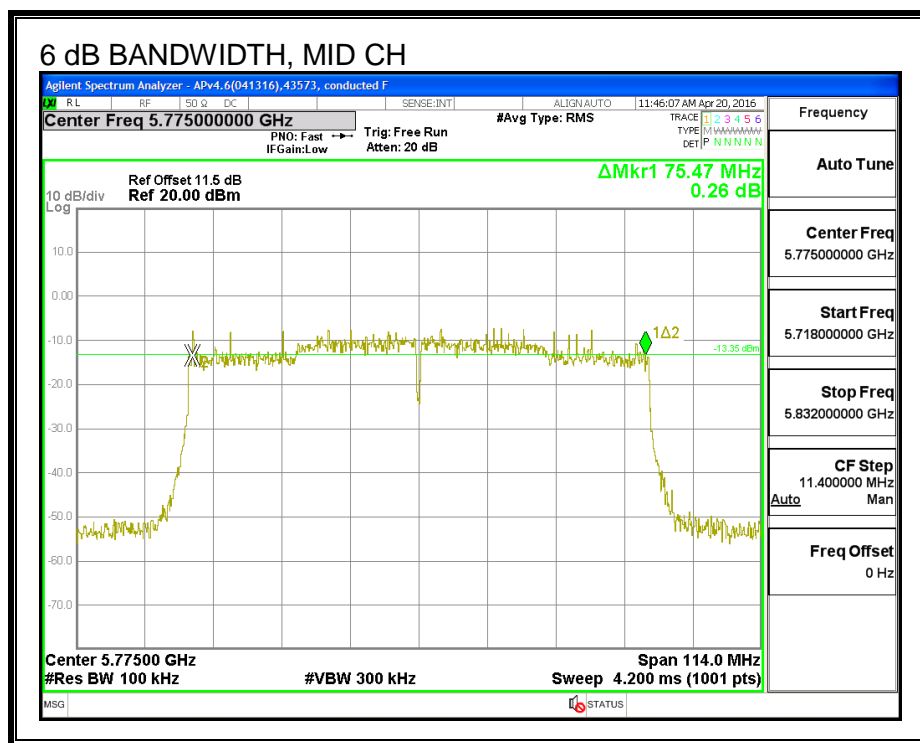
FCC §15.407 (e)

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

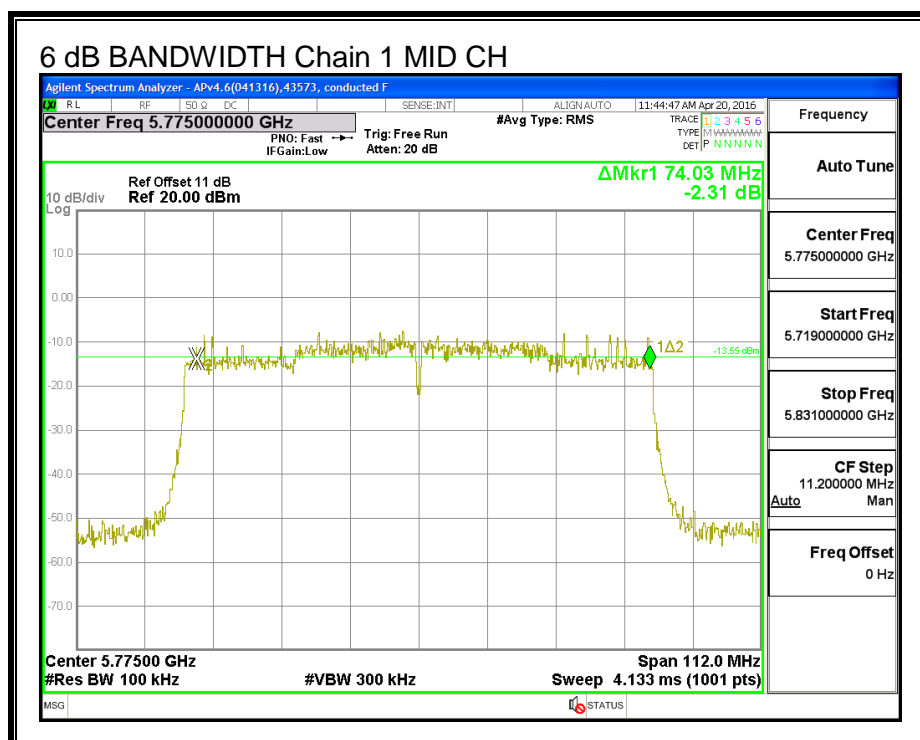
#### **RESULTS**

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Mid	5775	75.47	74.03	0.5

**6 dB BANDWIDTH, CHAIN 0**



**6 DB BANDWIDTH, CHAIN 1**





## 7.57.2. 26 dB BANDWIDTH

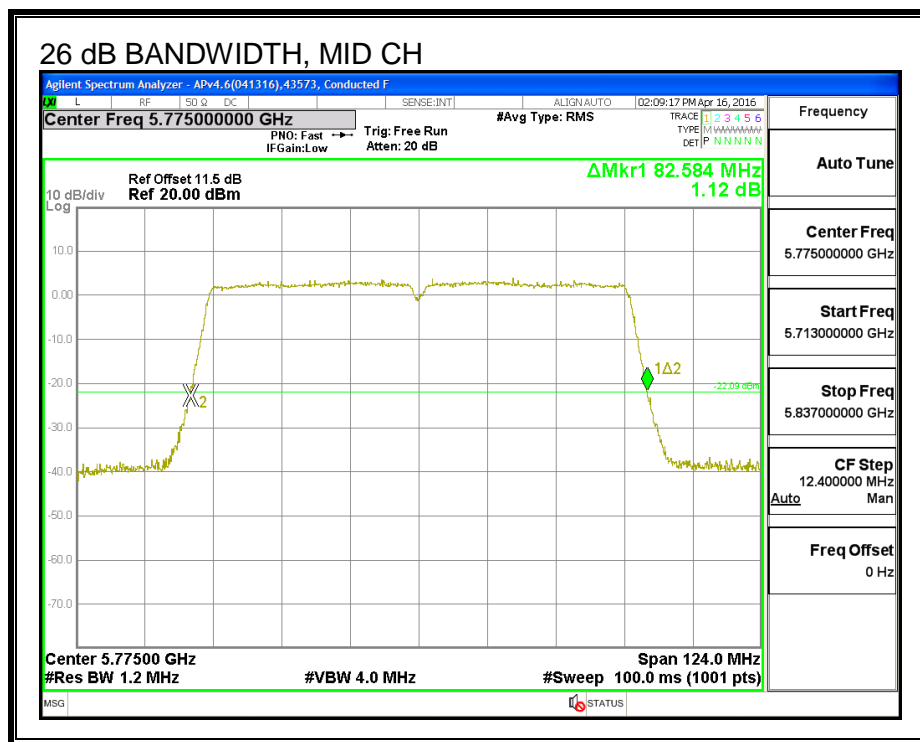
### LIMITS

None, for reporting purposes only.

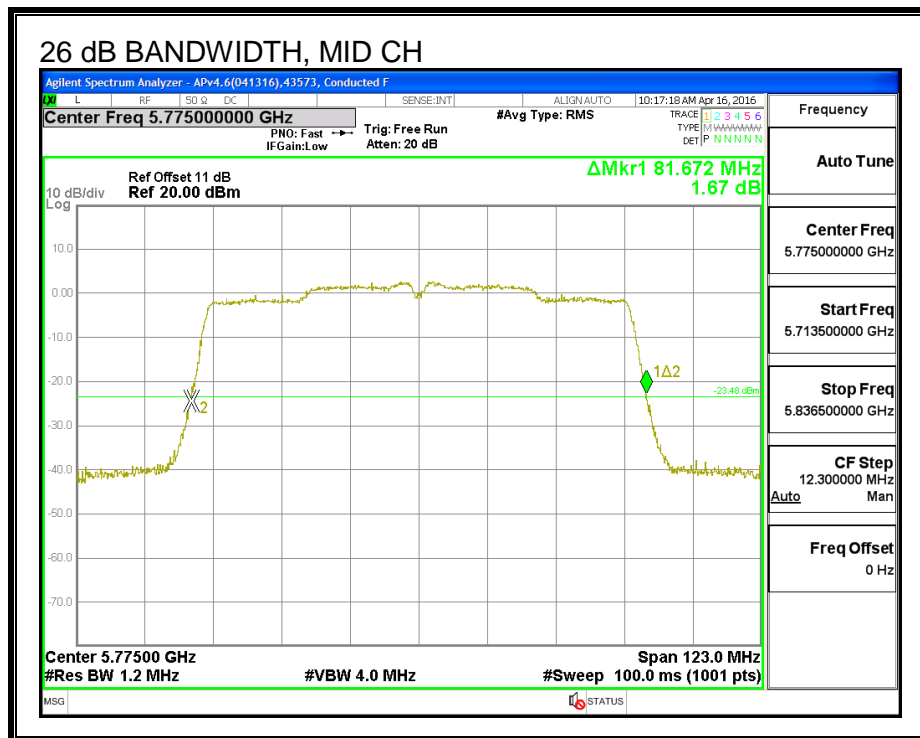
### RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Mid	5775	82.58	81.67

### 26 dB BANDWIDTH, CHAIN 0



**26 dB BANDWIDTH, CHAIN 1**



### 7.57.3. 99% BANDWIDTH

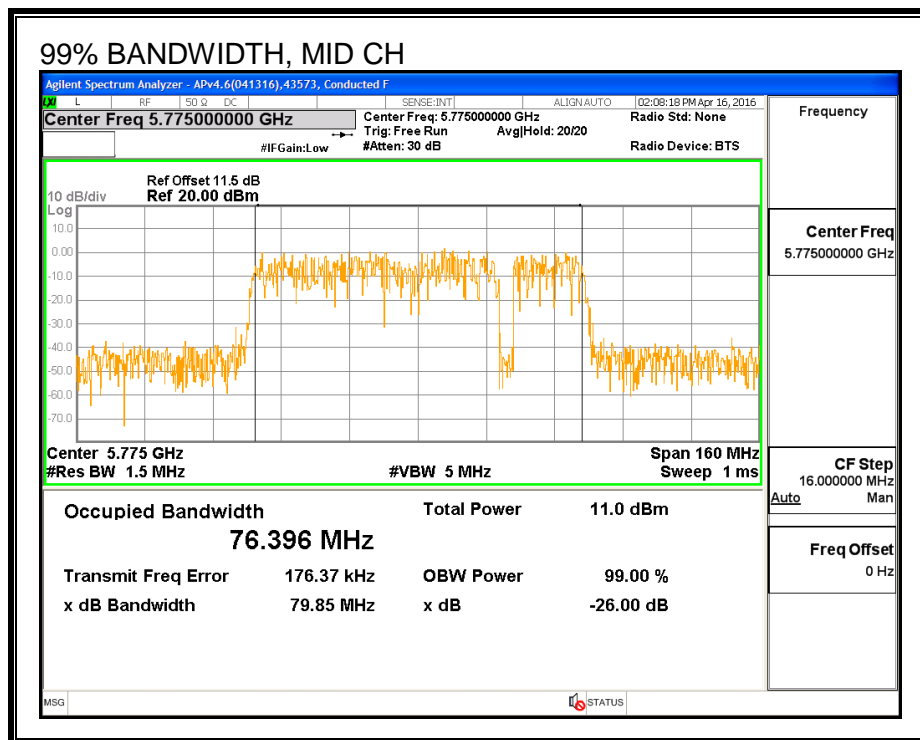
#### LIMITS

None; for reporting purposes only.

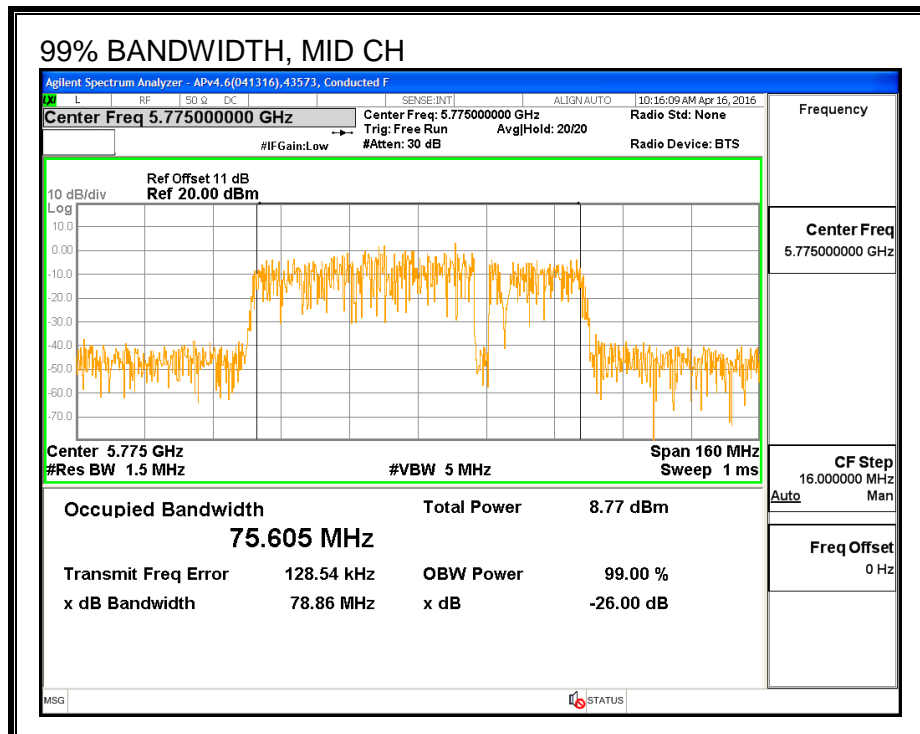
#### RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Mid	5775	76.396	75.605

**99% BANDWIDTH, CHAIN 0**



**99% BANDWIDTH, CHAIN 1**



#### 7.57.4. AVERAGE POWER

##### LIMITS

None; for reporting purposes only.

##### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

##### RESULTS

<b>ID:</b>	30554	<b>Date:</b>	6/9/16
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<b>Channel</b>	<b>Frequency (MHz)</b>	<b>Chain 0 Power (dBm)</b>	<b>Chain 1 Power (dBm)</b>	<b>Total Power (dBm)</b>
Mid	5775	16.80	18.26	20.60

### 7.57.5. OUTPUT POWER

#### LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

#### DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-2.73	-5.52	-3.90

## RESULTS

<b>ID:</b>	30554	<b>Date:</b>	6/9/16
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### Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Mid	5775	-3.90	30.00

### Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5775	16.80	18.26	20.60	30.00	-9.40

### 7.57.6. PSD

#### LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-2.73	-5.52	-1.00



## RESULTS

### Antenna Gain and Limit

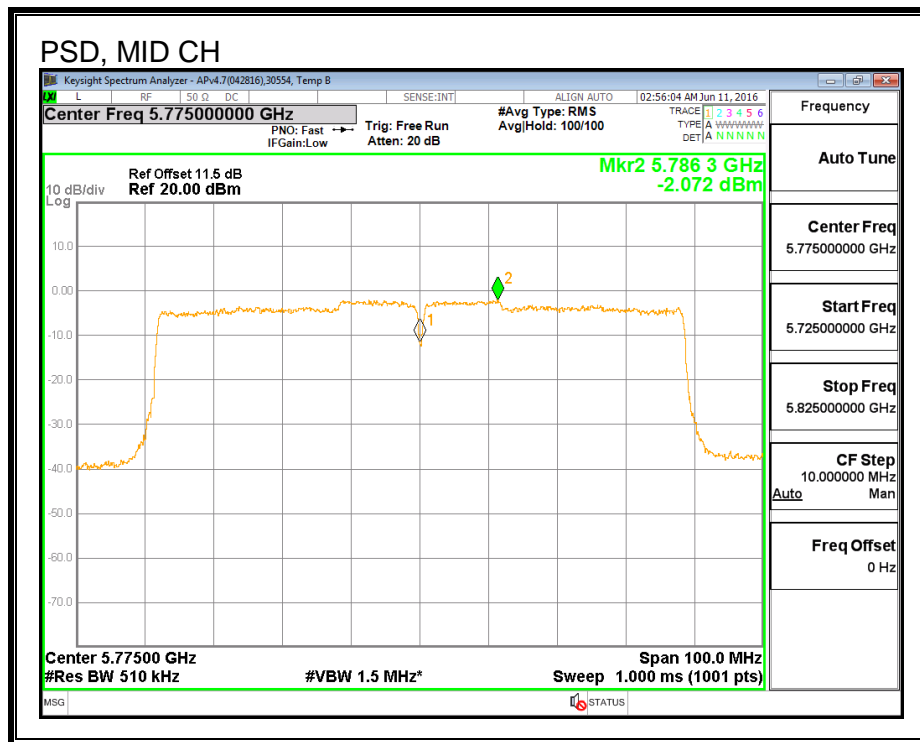
Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Mid	5775	-1.00	30.00

Duty Cycle CF (dB)	0.19	Included in Calculations of Corr'd PSD
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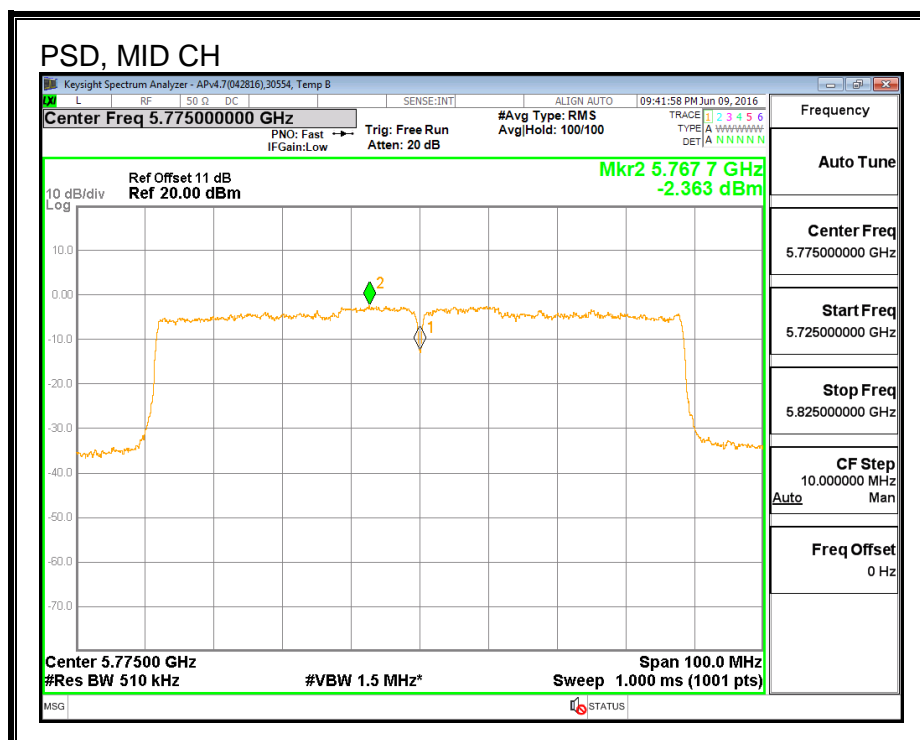
### PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5775	-2.07	-2.36	0.99	30.00	-29.01

**PSD, CHAIN 0**



**PSD, CHAIN 1**



## **7.58. 802.11ac VHT80 2Tx STBC MODE IN THE 5.8 GHz BAND**

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

## 8. RADIATED TEST RESULTS

### 8.1.LIMITS AND PROCEDURE

#### LIMITS

FCC §15.205 and §15.209

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 pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30KHz for peak measurements.

For final 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.

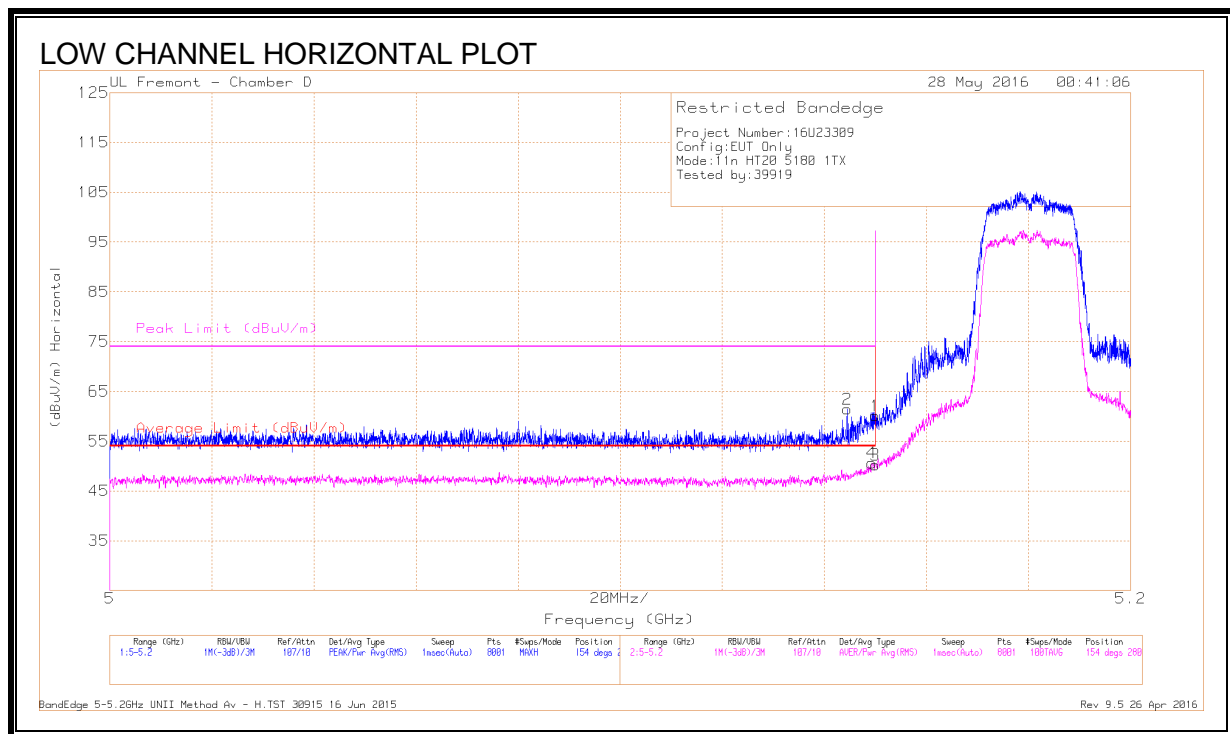
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

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.

Radiated emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

## 8.2.802.11n HT20 1Tx MODE IN THE 5.2 GHz BAND

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



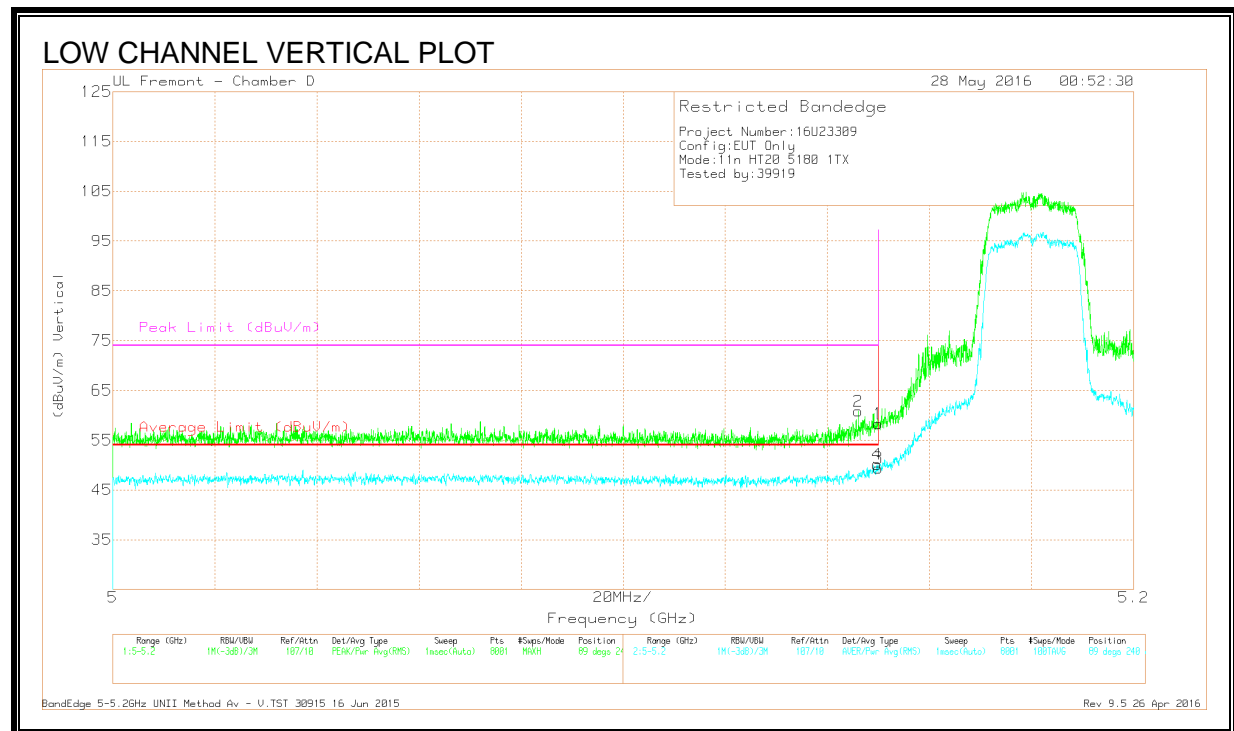
### DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Filr/Pa d (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	45.51	Pk	34.1	-18.2	61.41	-	-	74	-12.59	154	280	H
4	* 5.149	34.74	RMS	34.1	-18.2	50.64	54	-3.36	-	-	154	280	H
1	5.15	44.18	Pk	34.1	-18.2	60.08	-	-	74	-13.92	154	280	H
3	5.15	34.33	RMS	34.1	-18.2	50.23	54	-3.77	-	-	154	280	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection



## DATA

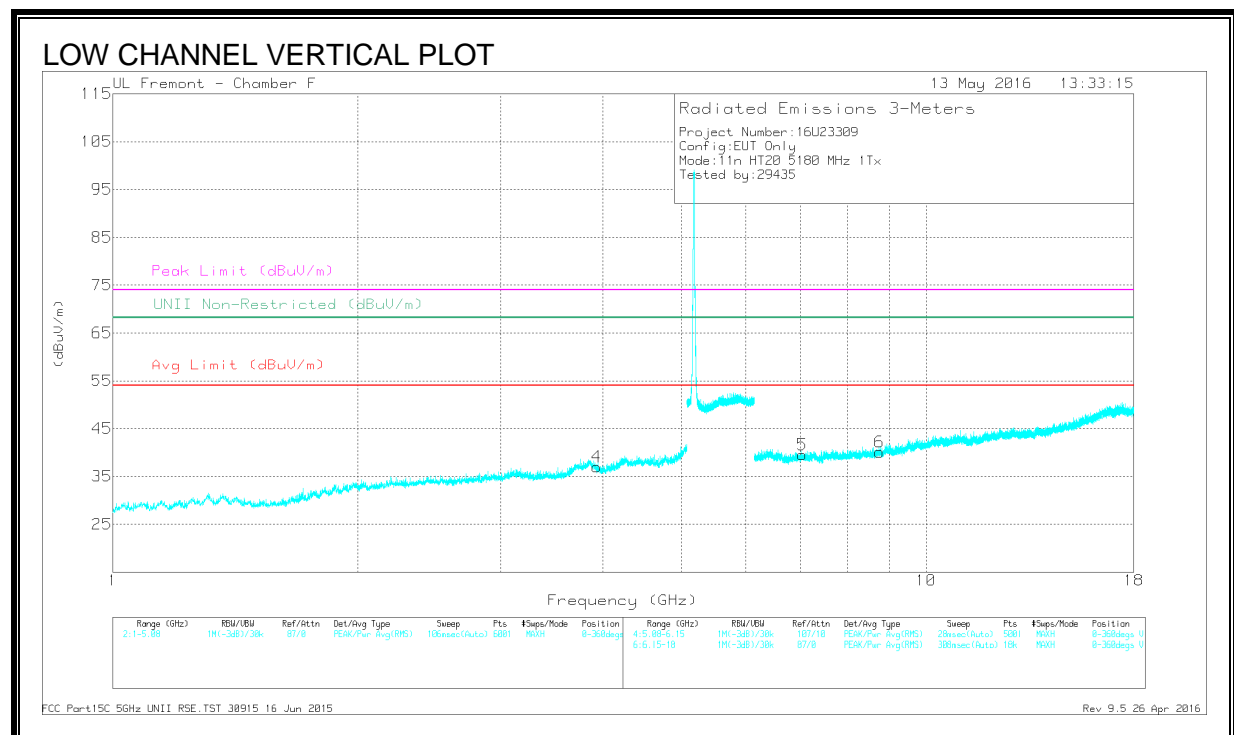
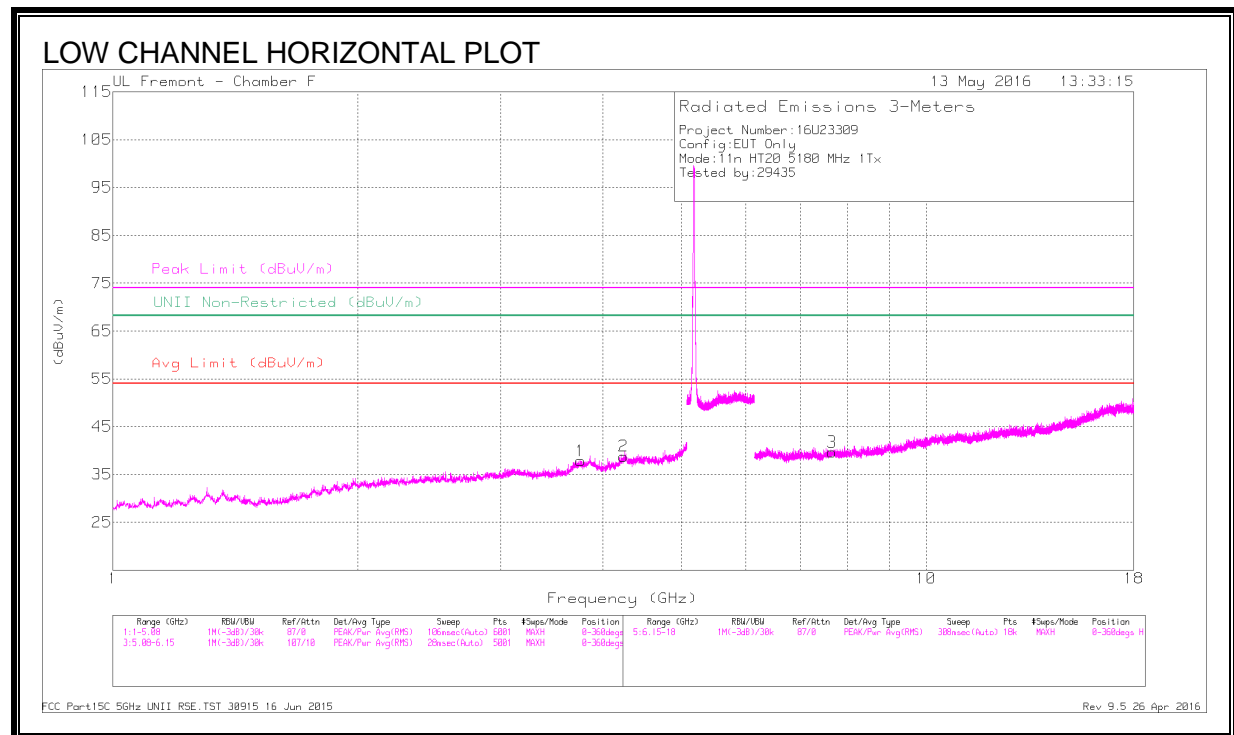
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Filr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.146	44.91	Pk	34.1	-18.2	60.81	-	-	74	-13.19	89	240	V
4	* 5.15	34.25	RMS	34.1	-18.2	50.15	54	-3.85	-	-	89	240	V
1	5.15	42.39	Pk	34.1	-18.2	58.29	-	-	74	-15.71	89	240	V
3	5.15	33.49	RMS	34.1	-18.2	49.39	54	-4.61	-	-	89	240	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

## LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cb/Fltr/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	* 3.758	38.25	PK-U	33.4	-29.2	42.45	-	-	74	-31.55	-	-	60	122	H
	* 3.758	28.08	ADR	33.4	-29.2	32.28	54	-21.72	-	-	-	-	60	122	H
2	* 4.245	36.81	PK-U	33.7	-26.7	43.81	-	-	74	-30.19	-	-	134	145	H
	* 4.243	26.69	ADR	33.7	-26.7	33.69	54	-20.31	-	-	-	-	134	145	H
4	* 3.933	39	PK-U	33.4	-29.2	43.2	-	-	74	-30.8	-	-	156	211	V
	* 3.934	28.13	ADR	33.4	-29.2	32.33	54	-21.67	-	-	-	-	156	211	V
3	* 7.66	35.81	PK-U	35.7	-25.1	46.41	-	-	74	-27.59	-	-	193	265	H
	* 7.659	25.71	ADR	35.7	-25.1	36.31	54	-17.69	-	-	-	-	193	265	H
5	7.04	36.02	PK-U	35.6	-25.5	46.12	-	-	-	-	68.2	-22.08	228	288	V
	7.038	26.07	ADR	35.6	-25.5	36.17	-	-	-	-	-	-	228	288	V
6	8.758	35.32	PK-U	35.9	-23.7	47.52	-	-	-	-	68.2	-20.68	216	310	V
	8.761	24.44	ADR	35.9	-23.6	36.74	-	-	-	-	-	-	216	310	V

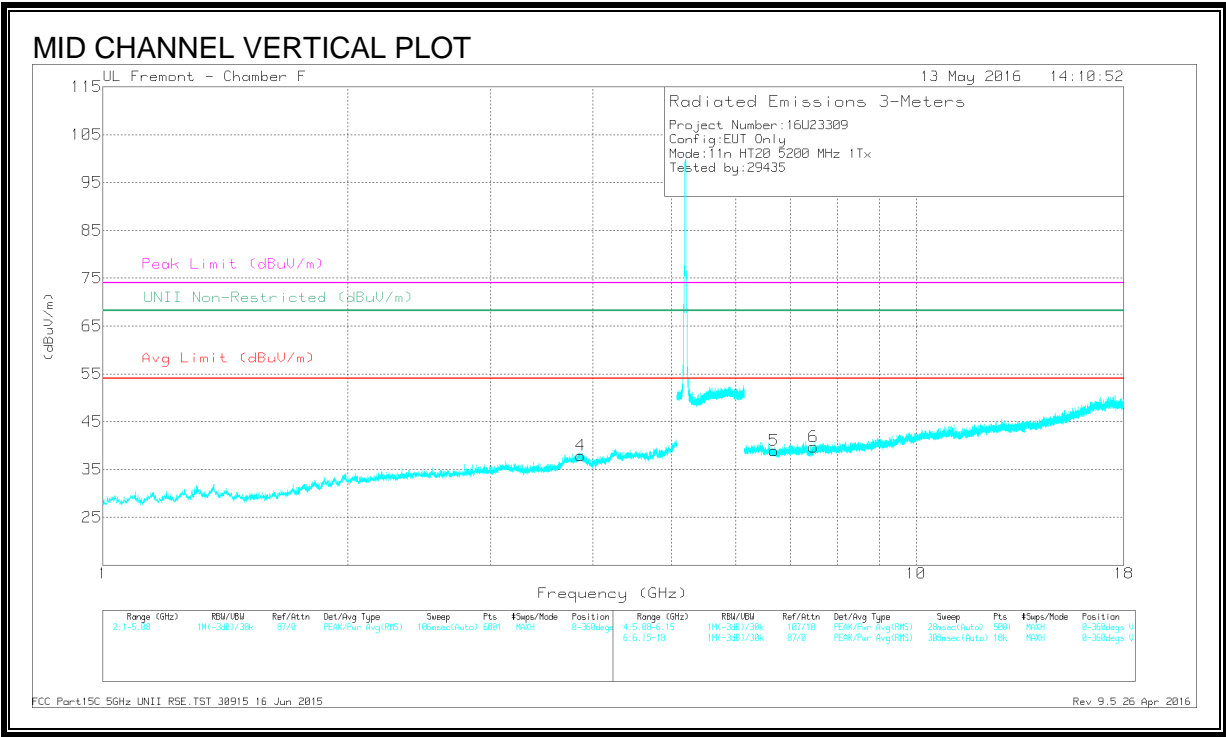
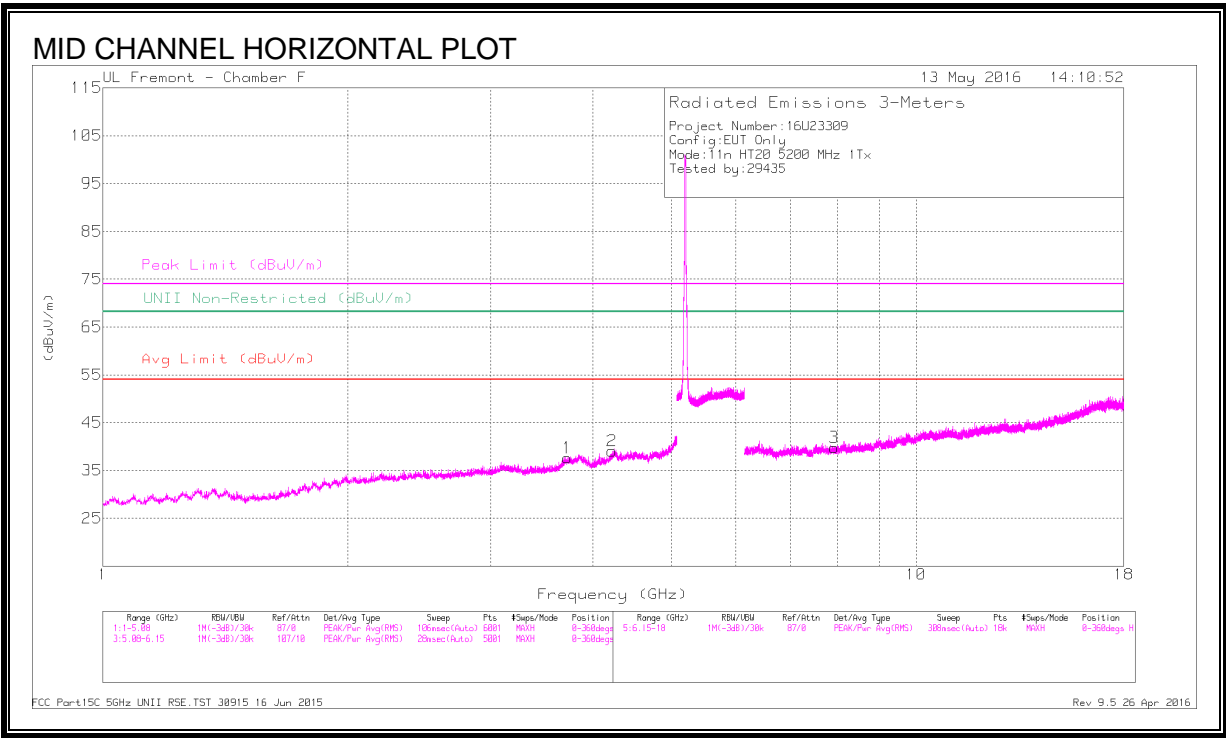
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



MID CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

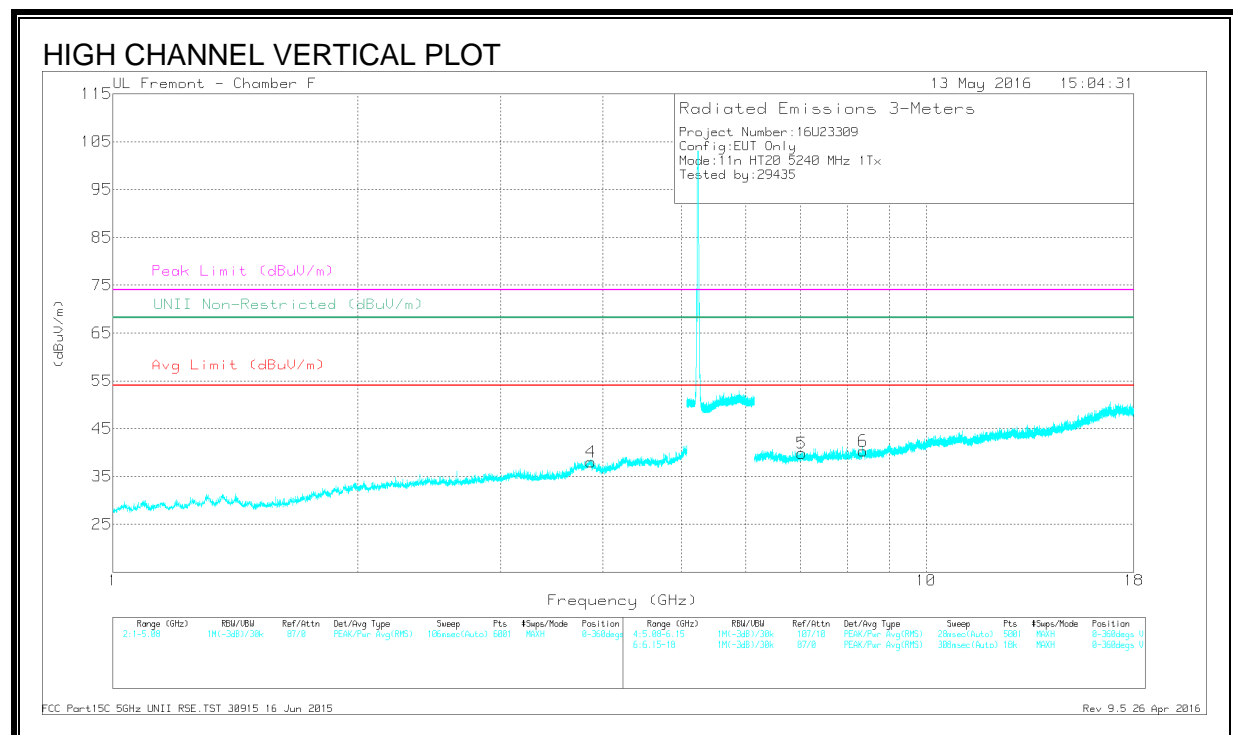
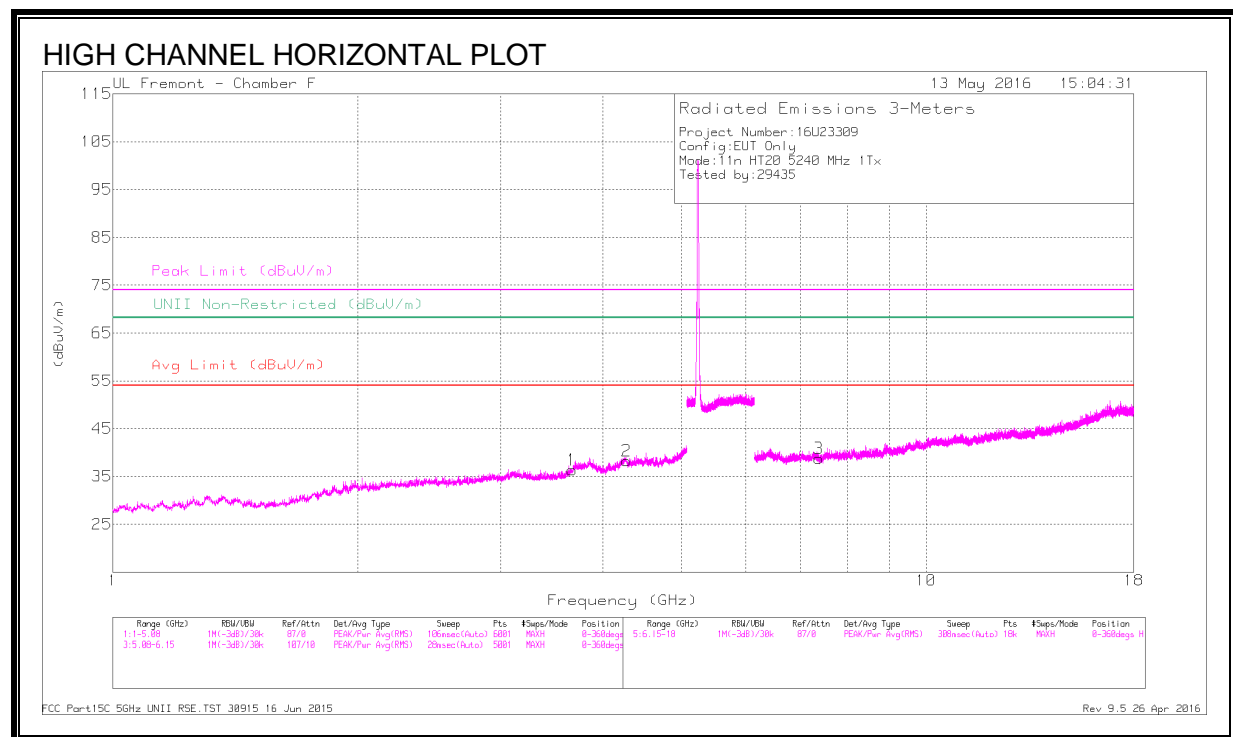
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cb/Filt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.724	38.1	PK-U	33.4	-29.1	42.4	-	-	74	-31.6	-	-	330	119	H
	* 3.726	28.07	ADR	33.4	-29.1	32.37	54	-21.63	-	-	-	-	330	119	H
2	* 4.229	37.09	PK-U	33.7	-27.1	43.69	-	-	74	-30.31	-	-	301	141	H
	* 4.227	27.18	ADR	33.7	-27.2	33.68	54	-20.32	-	-	-	-	301	141	H
4	* 3.869	38.91	PK-U	33.4	-28.6	43.71	-	-	74	-30.29	-	-	265	162	V
	* 3.867	28.31	ADR	33.4	-28.5	33.21	54	-20.79	-	-	-	-	265	162	V
3	7.932	35.73	PK-U	35.8	-25.4	46.13	-	-	-	-	68.2	-22.07	288	215	H
	7.932	26.06	ADR	35.8	-25.4	36.46	-	-	-	-	-	-	288	215	H
5	6.686	36.26	PK-U	35.5	-26.9	44.86	-	-	-	-	68.2	-23.34	263	202	V
	6.686	26.97	ADR	35.5	-26.9	35.57	-	-	-	-	-	-	263	202	V
6	* 7.476	36.18	PK-U	35.6	-25.6	46.18	-	-	74	-27.82	-	-	286	186	V
	* 7.477	26.49	ADR	35.6	-25.6	36.49	54	-17.51	-	-	-	-	286	186	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

## HIGH CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

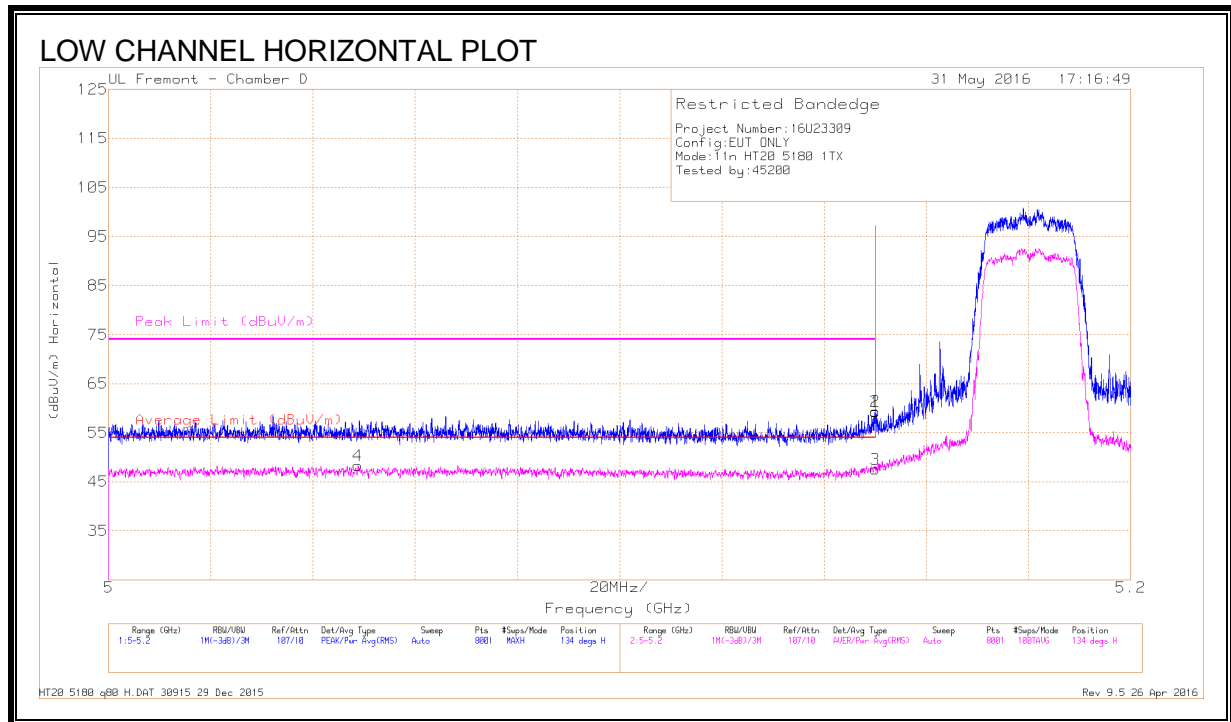
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cb/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNI Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.67	37.84	PK-U	33.2	-29	42.04	-	-	74	-31.96	-	-	330	215	H
	* 3.668	28	ADR	33.2	-29	32.2	54	-21.8	-	-	-	-	330	215	H
2	* 4.28	36.93	PK-U	33.7	-26.8	43.83	-	-	74	-30.17	-	-	286	227	H
	* 4.28	27.34	ADR	33.7	-26.8	34.24	54	-19.76	-	-	-	-	286	227	H
4	* 3.871	38.39	PK-U	33.4	-28.6	43.19	-	-	74	-30.81	-	-	251	248	V
	* 3.873	28.22	ADR	33.4	-28.6	33.02	54	-20.98	-	-	-	-	251	248	V
3	* 7.375	36.58	PK-U	35.6	-26.2	45.98	-	-	74	-28.02	-	-	282	218	H
	* 7.374	26.58	ADR	35.6	-26.2	35.98	54	-18.02	-	-	-	-	282	218	H
5	7.029	36.08	PK-U	35.6	-25.6	46.08	-	-	-	-	68.2	-22.12	236	258	V
	7.028	26.34	ADR	35.6	-25.6	36.34	-	-	-	-	-	-	236	258	V
6	* 8.36	35.4	PK-U	35.7	-24.3	46.8	-	-	74	-27.2	-	-	120	275	V
	* 8.361	25.48	ADR	35.7	-24.2	36.98	54	-17.02	-	-	-	-	120	275	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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



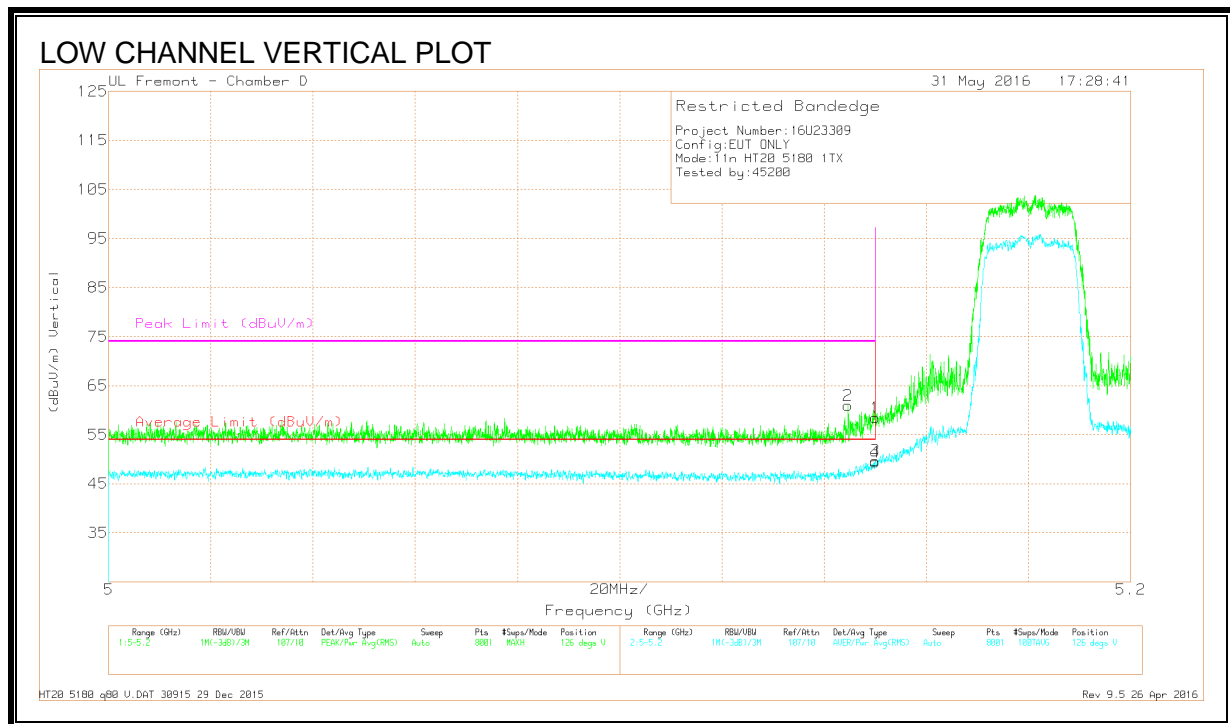
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Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.15	43.46	Pk	34.1	-18.2	59.36	-	-	74	-14.64	134	295	H
4	* 5.049	32.35	RMS	34	-18	48.35	54	-5.65	-	-	134	295	H
1	5.15	43.35	Pk	34.1	-18.2	59.25	-	-	74	-14.75	134	295	H
3	5.15	31.67	RMS	34.1	-18.2	47.57	54	-6.43	-	-	134	295	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection



## DATA

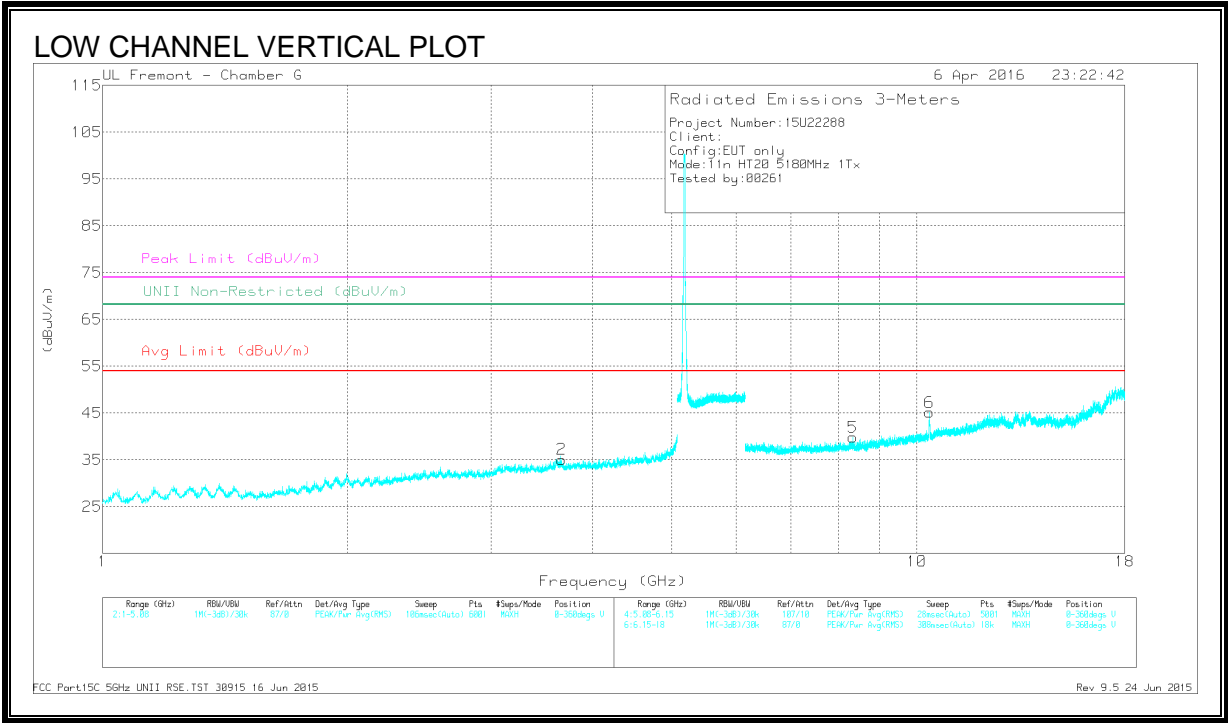
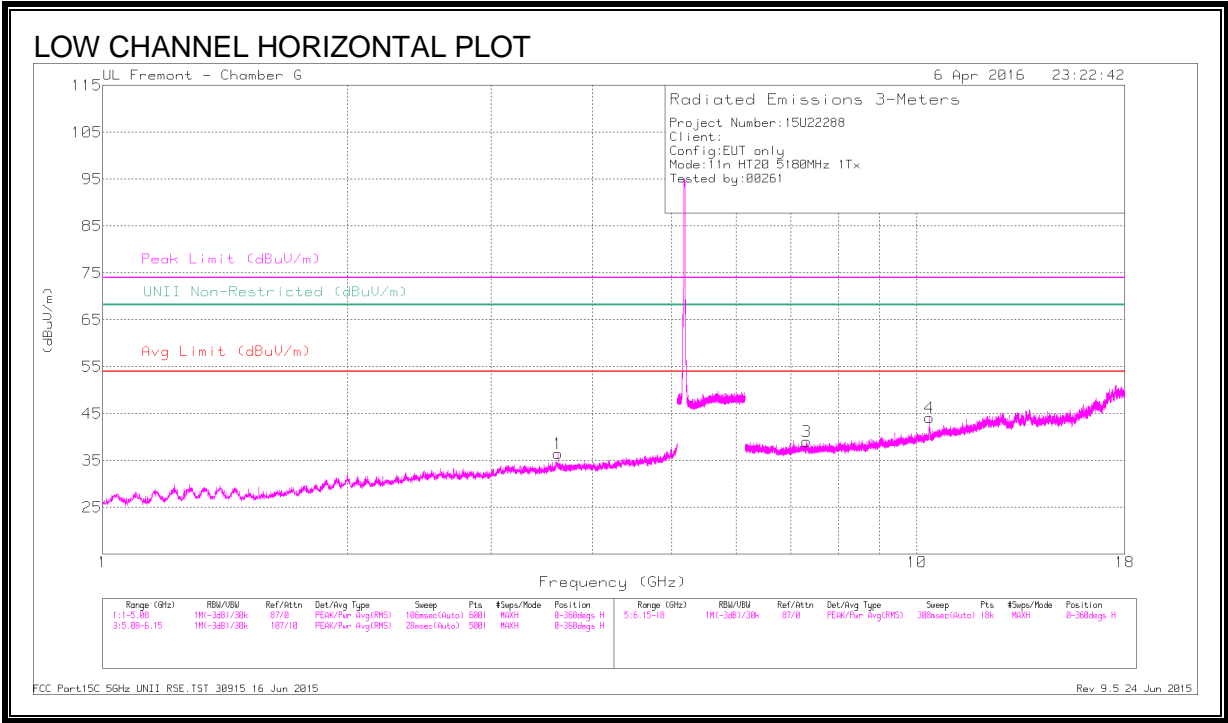
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.145	45.02	Pk	34.1	-18.2	60.92	-	-	74	-13.08	126	113	V
4	* 5.15	33.57	RMS	34.1	-18.2	49.47	54	-4.53	-	-	126	113	V
1	5.15	42.55	Pk	34.1	-18.2	58.45	-	-	74	-15.55	126	113	V
3	5.15	33.83	RMS	34.1	-18.2	49.73	54	-4.27	-	-	126	113	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (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	* 3.621	41.29	PK-U	33.1	-32.9	41.49	-	-	74	-32.51	-	-	203	177	H
	* 3.623	29.73	ADR	33.1	-32.9	29.93	54	-24.07	-	-	-	-	203	177	H
2	* 3.661	42.13	PK-U	33.1	-32.9	42.33	-	-	74	-31.67	-	-	129	138	V
	* 3.661	30.24	ADR	33.1	-32.9	30.44	54	-23.56	-	-	-	-	129	138	V
3	* 7.328	41.68	PK-U	35.6	-31	46.28	-	-	74	-27.72	-	-	263	165	H
	* 7.329	29.24	ADR	35.6	-31	33.84	54	-20.16	-	-	-	-	263	165	H
5	* 8.344	38.5	PK-U	35.7	-29	45.2	-	-	74	-28.8	-	-	351	280	V
	* 8.342	27.55	ADR	35.7	-29	34.25	54	-19.75	-	-	-	-	351	280	V
6	10.357	41.95	PK-U	37.2	-27.4	51.75	-	-	-	-	68.2	-16.45	341	262	V
4	10.36	38.06	PK-U	37.2	-27.4	47.86	-	-	-	-	68.2	-20.34	247	185	H

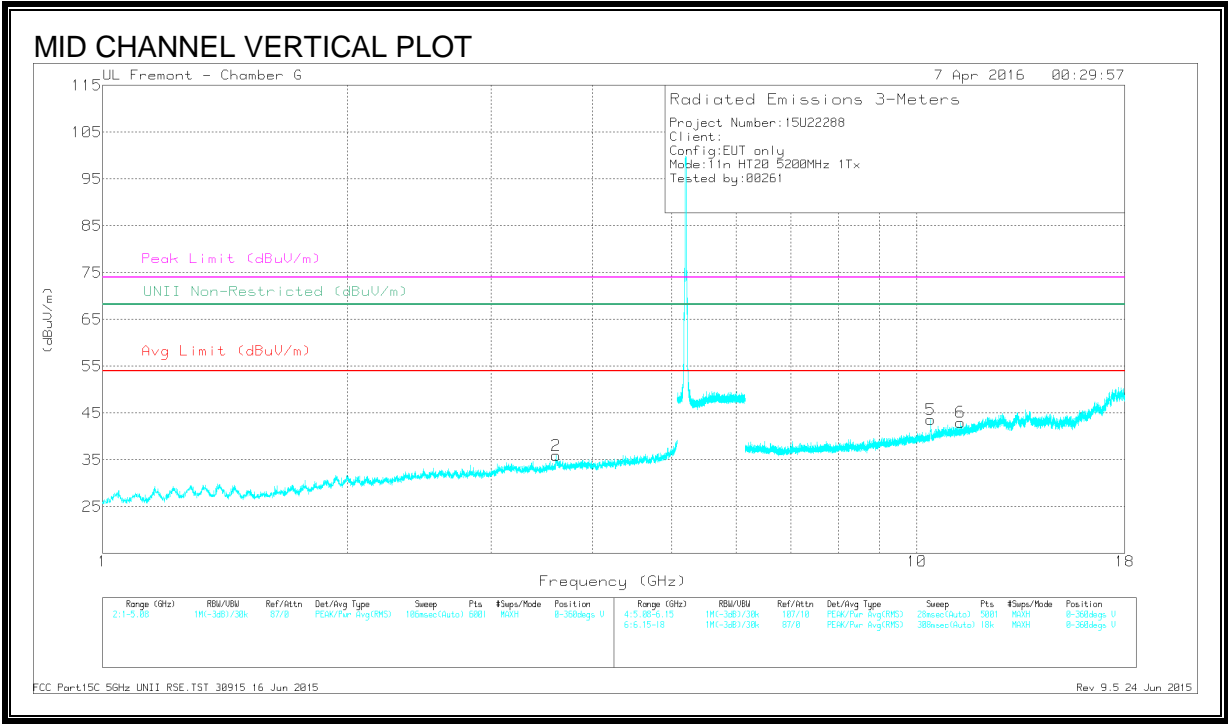
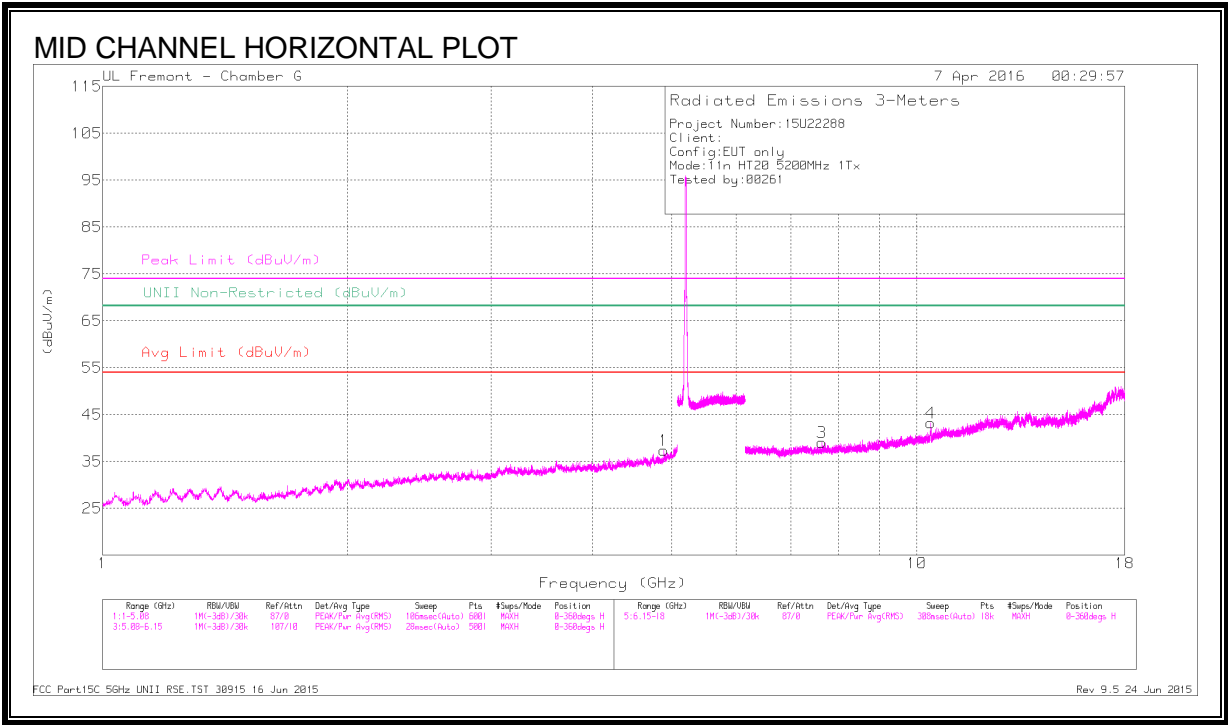
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



MID CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

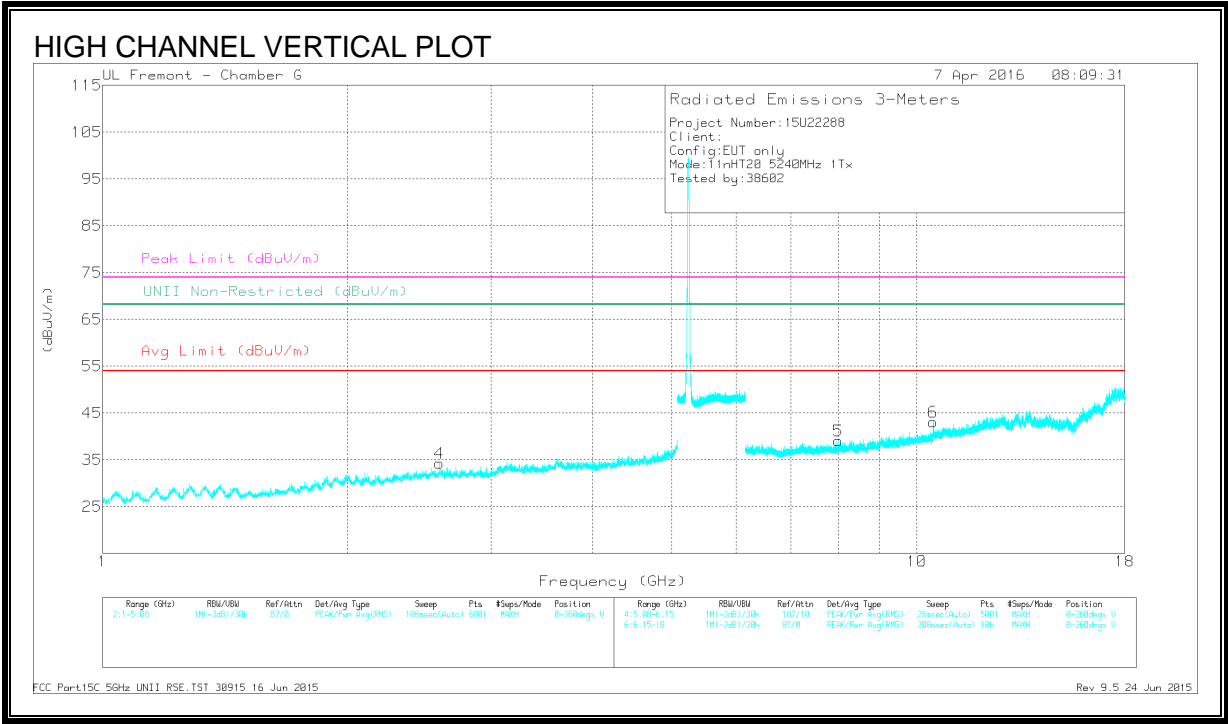
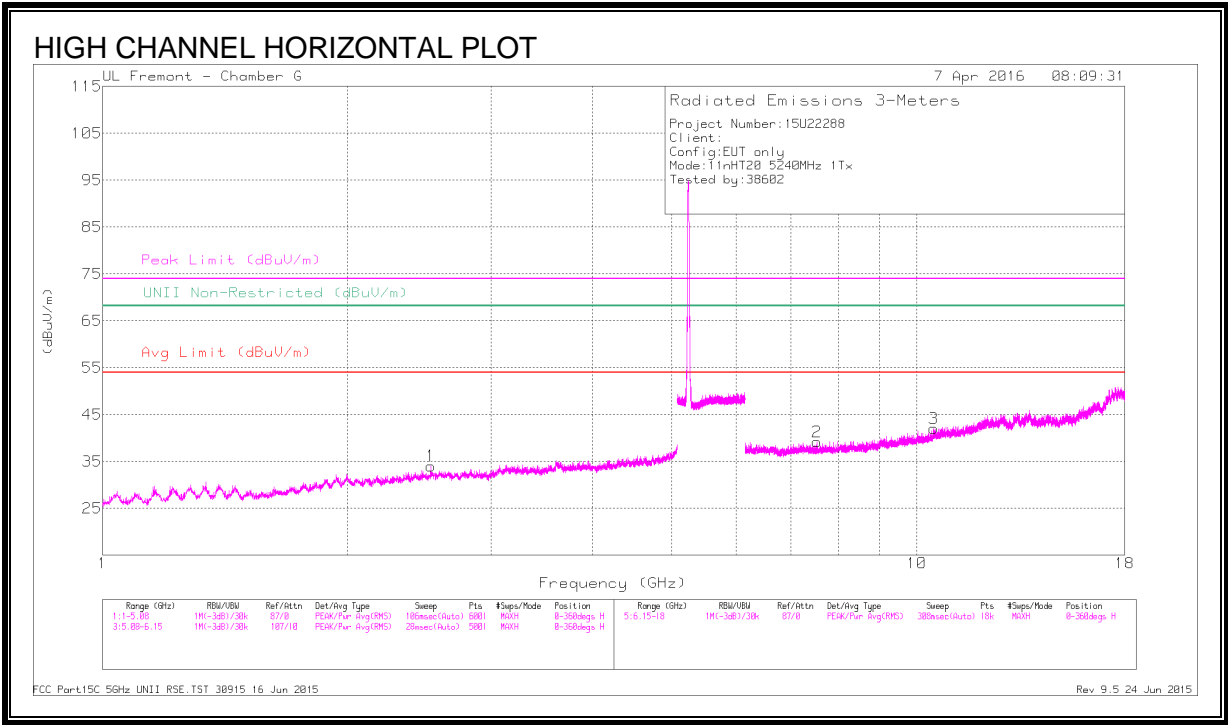
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.891	39.95	PK-U	34.1	-31.5	42.55	-	-	74	-31.45	-	-	215	163	H
	* 4.893	28.45	ADR	34.1	-31.5	31.05	54	-22.95	-	-	-	-	215	163	H
2	* 3.606	41.72	PK-U	33.1	-32.8	42.02	-	-	74	-31.98	-	-	227	176	V
	* 3.603	30.43	ADR	33.1	-32.8	30.73	54	-23.27	-	-	-	-	227	176	V
3	* 7.643	40.81	PK-U	35.6	-30.1	46.31	-	-	74	-27.69	-	-	204	194	H
	* 7.643	28.85	ADR	35.6	-30.2	34.25	54	-19.75	-	-	-	-	204	194	H
6	* 11.309	36.8	PK-U	38	-26.3	48.5	-	-	74	-25.5	-	-	72	343	V
	* 11.312	25.18	ADR	38	-26.1	37.08	54	-16.92	-	-	-	-	72	343	V
4	10.398	38.48	PK-U	37.3	-27.3	48.48	-	-	-	-	68.2	-19.72	255	217	H
5	10.403	38.27	PK-U	37.3	-27.3	48.27	-	-	-	-	68.2	-19.93	190	257	V

\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - 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 T862 (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
2	* 7.536	39.98	PK-U	35.6	-30.3	45.28	-	-	74	-28.72	-	-	30	154	H
	* 7.539	28.45	ADR	35.6	-30.3	33.75	54	-20.25	-	-	-	-	30	154	H
1	2.529	42.72	PK-U	32.4	-33.9	41.22	-	-	-	-	68.2	-26.98	14	216	H
4	2.591	42.82	PK-U	32.4	-33.7	41.52	-	-	-	-	68.2	-26.68	35	215	V
5	8.006	40.47	PK-U	35.7	-30	46.17	-	-	-	-	68.2	-22.03	341	140	V
6	10.477	44.78	PK-U	37.5	-27.5	54.78	-	-	-	-	68.2	-13.42	237	174	V
3	10.483	42.27	PK-U	37.5	-27.4	52.37	-	-	-	-	68.2	-15.83	172	165	H

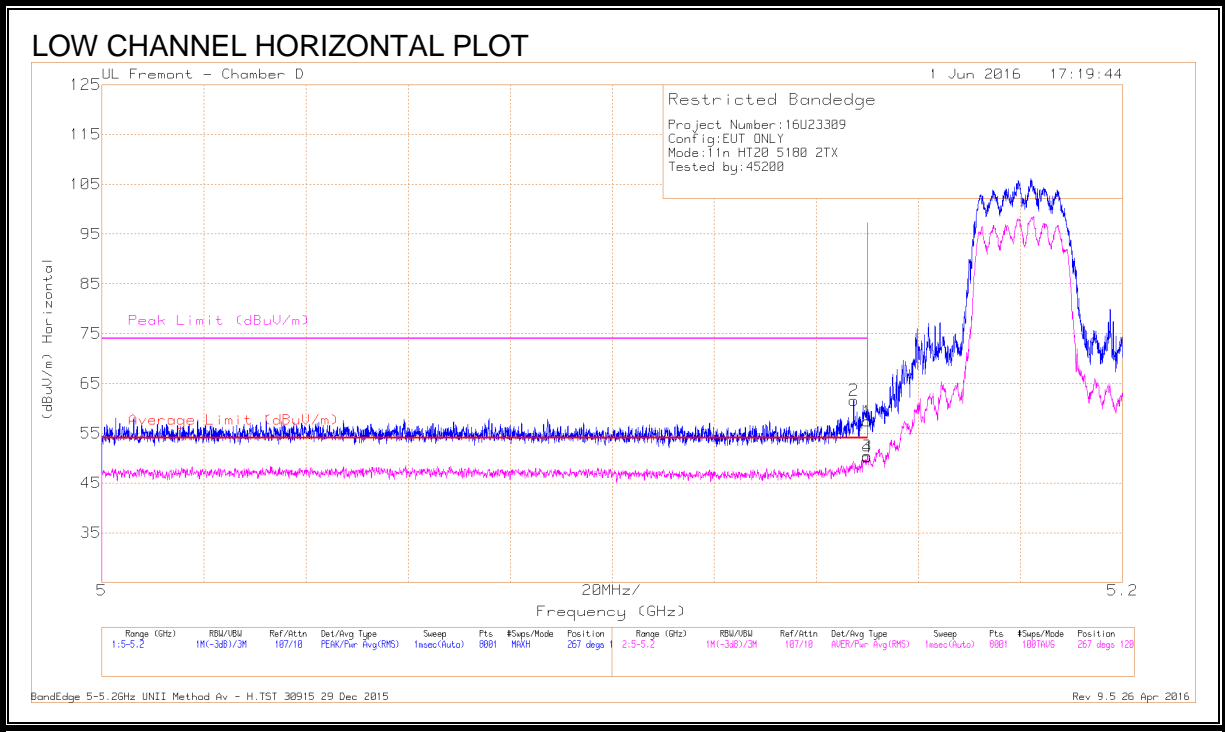
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

8.3.802.11n HT20 2Tx CDD MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



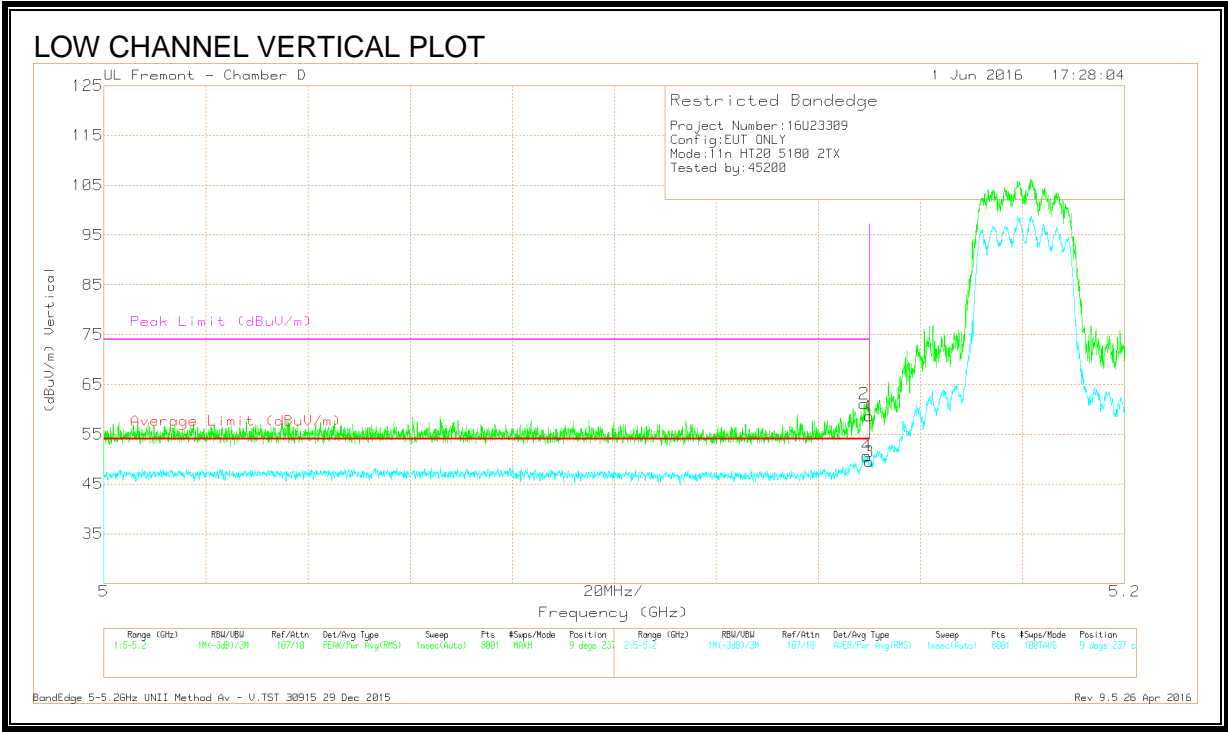
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Marker	Frequency(G Hz)	MeterReading(dBuV)	Det	AF T712 (dB/m)	Amp/Cb/Filter/Pad (dB)	CorrectedReading(dBuV/m)	Average Limit (dBuV/m)	Margin(dB)	Peak Limit (dBuV/m)	PK Margin(dB)	Azimuth(Deg s)	Height(cm)	Polarity
2	* 5.147	45.69	Pk	34.1	-18.2	61.59	-	-	74	-12.41	267	120	H
4	* 5.15	34.27	RMS	34.1	-18.2	50.17	54	-3.83	-	-	267	120	H
1	5.15	41.49	Pk	34.1	-18.2	57.39	-	-	74	-16.61	267	120	H
3	5.15	34.51	RMS	34.1	-18.2	50.41	54	-3.59	-	-	267	120	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection



DATA

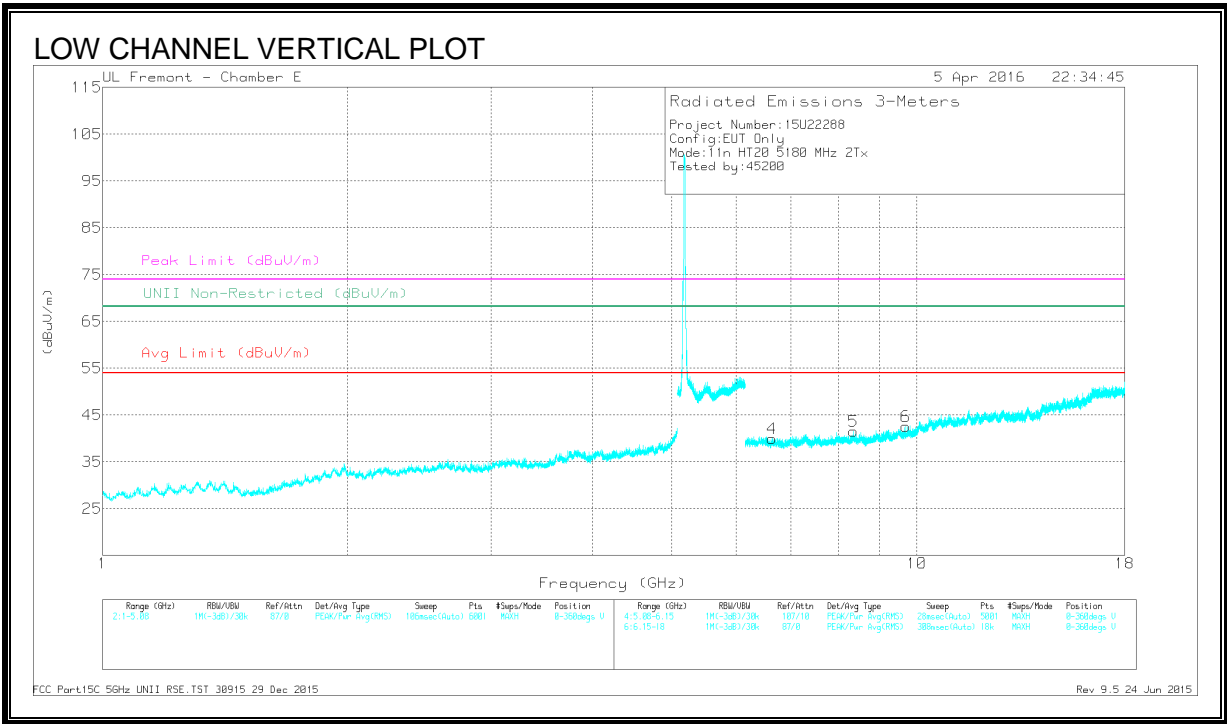
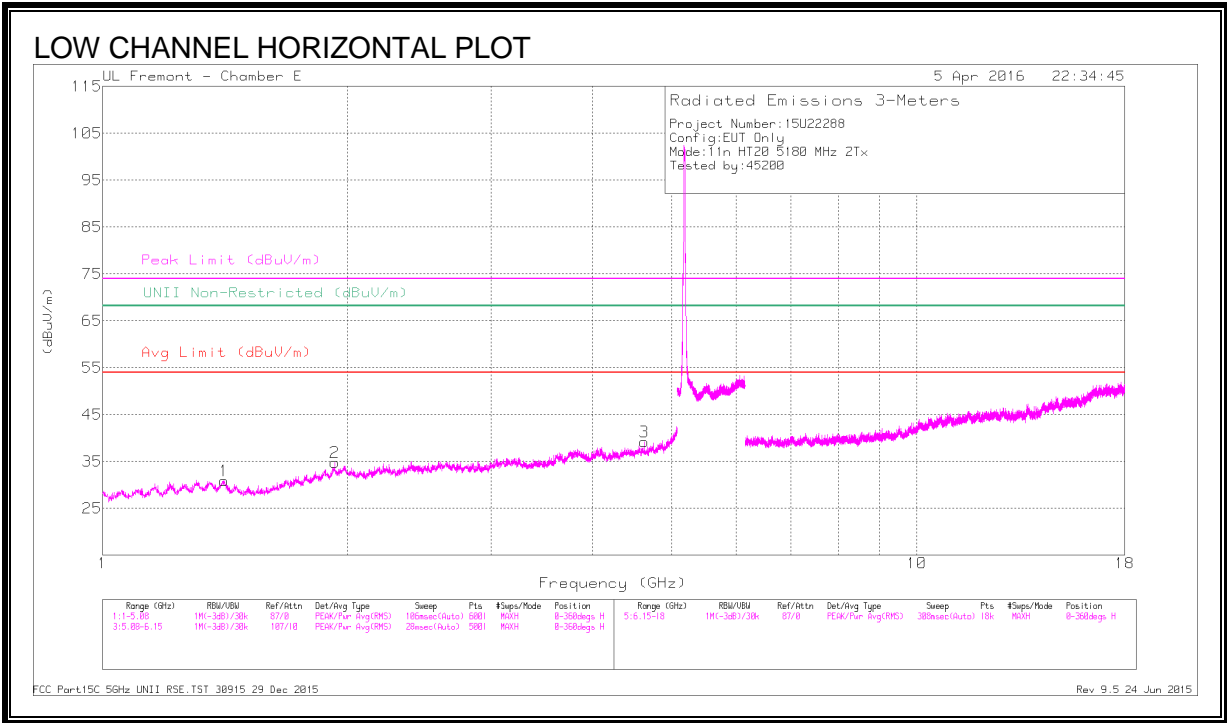
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.149	45.21	Pk	34.1	-18.2	61.11	-	-	74	-12.89	9	237	V
4	* 5.15	34.74	RMS	34.1	-18.2	50.64	54	-3.36	-	-	9	237	V
1	5.15	42.72	Pk	34.1	-18.2	58.62	-	-	74	-15.38	9	237	V
3	5.15	33.57	RMS	34.1	-18.2	49.47	54	-4.53	-	-	9	237	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

### Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/F ltr/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	* 1.41	44.46	PK-U	28.9	-34.6	38.76	-	-	74	-35.24	-	-	45	173	H
	* 1.409	32.22	ADR	28.9	-34.6	26.52	54	-27.48	-	-	-	-	45	173	H
3	* 4.625	41.33	PK-U	33.9	-29.7	45.53	-	-	74	-28.47	-	-	251	230	H
	* 4.625	29.84	ADR	33.9	-29.7	34.04	54	-19.96	-	-	-	-	251	230	H
5	* 8.355	38.77	PK-U	35.7	-26.7	47.77	-	-	74	-26.23	-	-	58	202	V
	* 8.351	27.21	ADR	35.7	-26.7	36.21	54	-17.79	-	-	-	-	58	202	V
2	1.93	43.41	PK-U	31.5	-32.9	42.01	-	-	-	-	68.2	-26.19	24	360	H
4	6.641	38.09	PK-U	35.6	-26.8	46.89	-	-	-	-	68.2	-21.31	209	319	V
6	9.683	37.86	PK-U	36.7	-25.4	49.16	-	-	-	-	68.2	-19.04	296	226	V

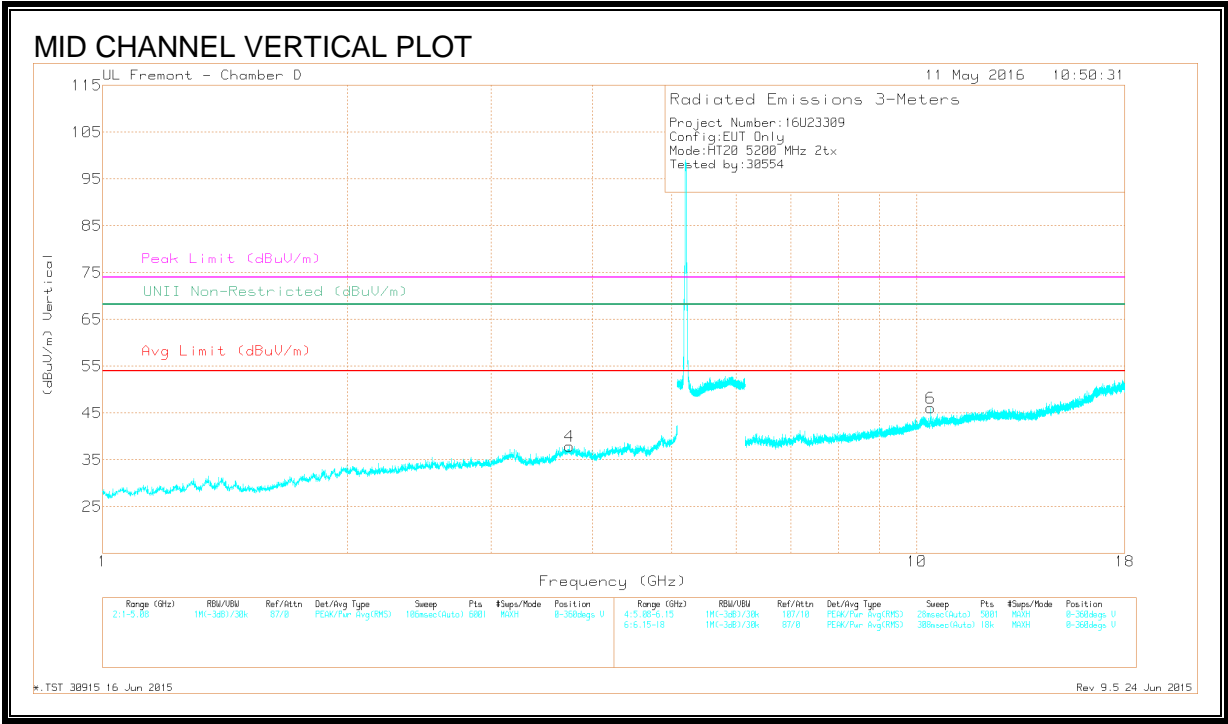
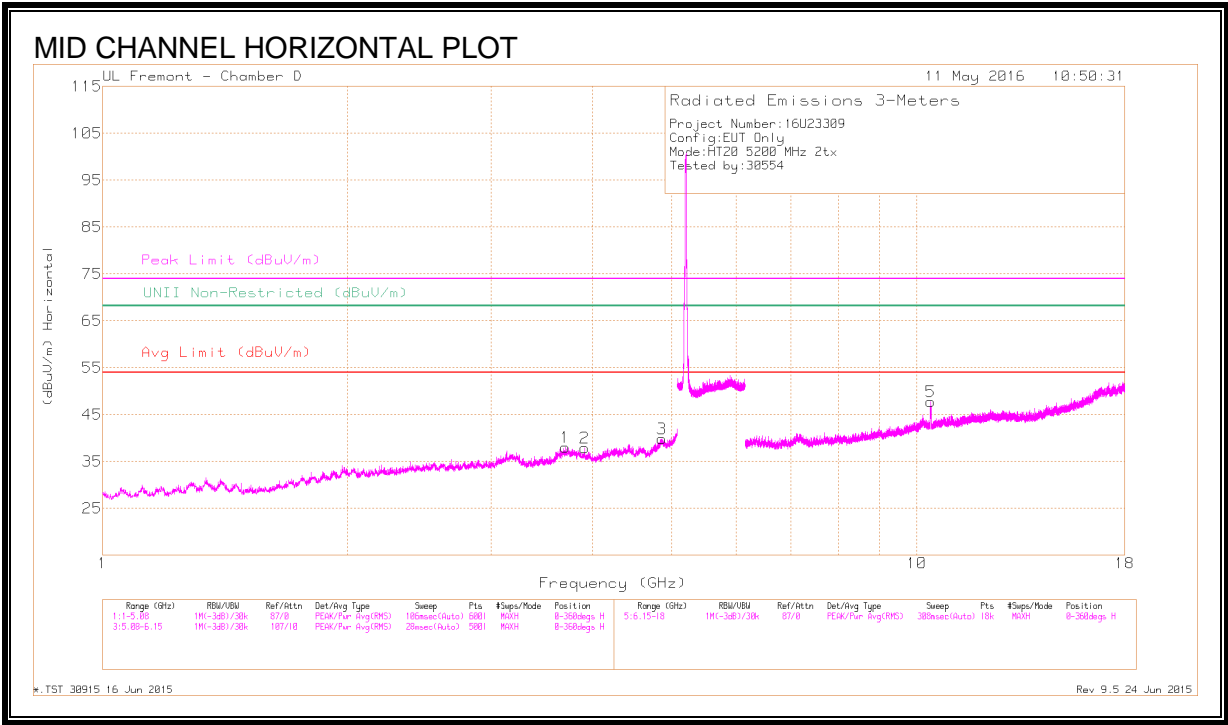
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



MID CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

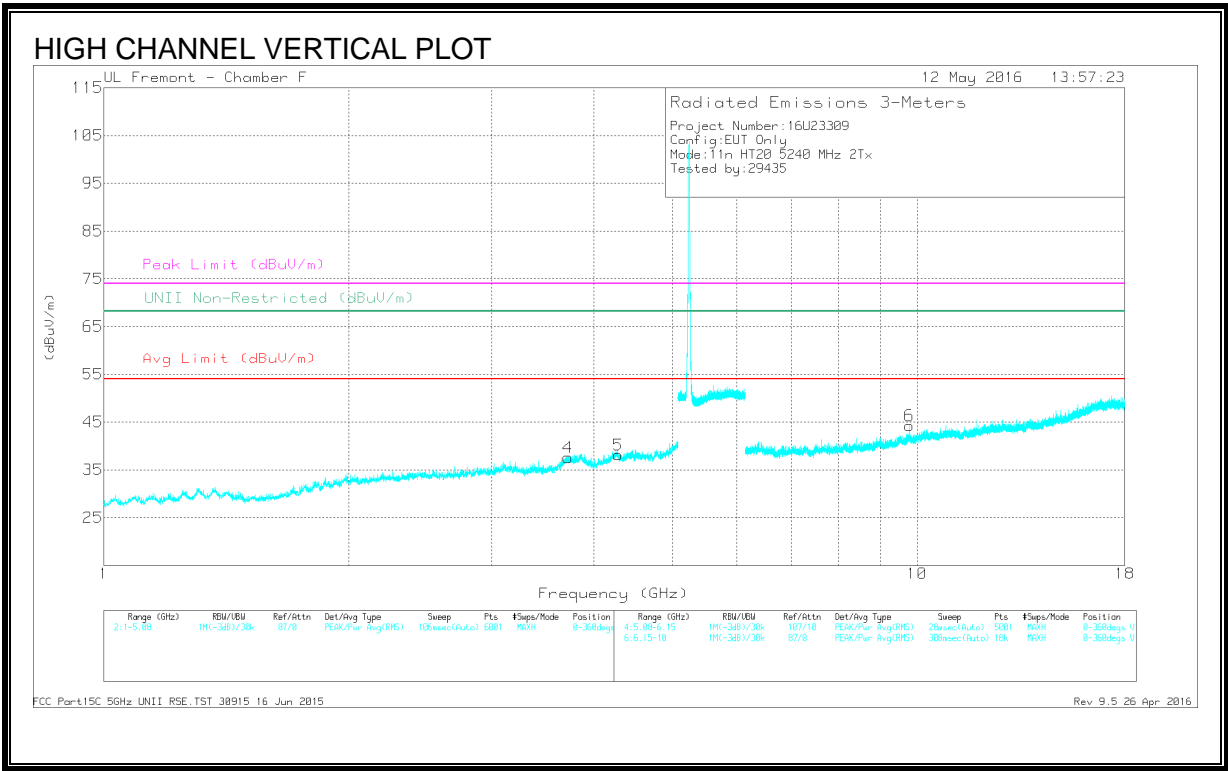
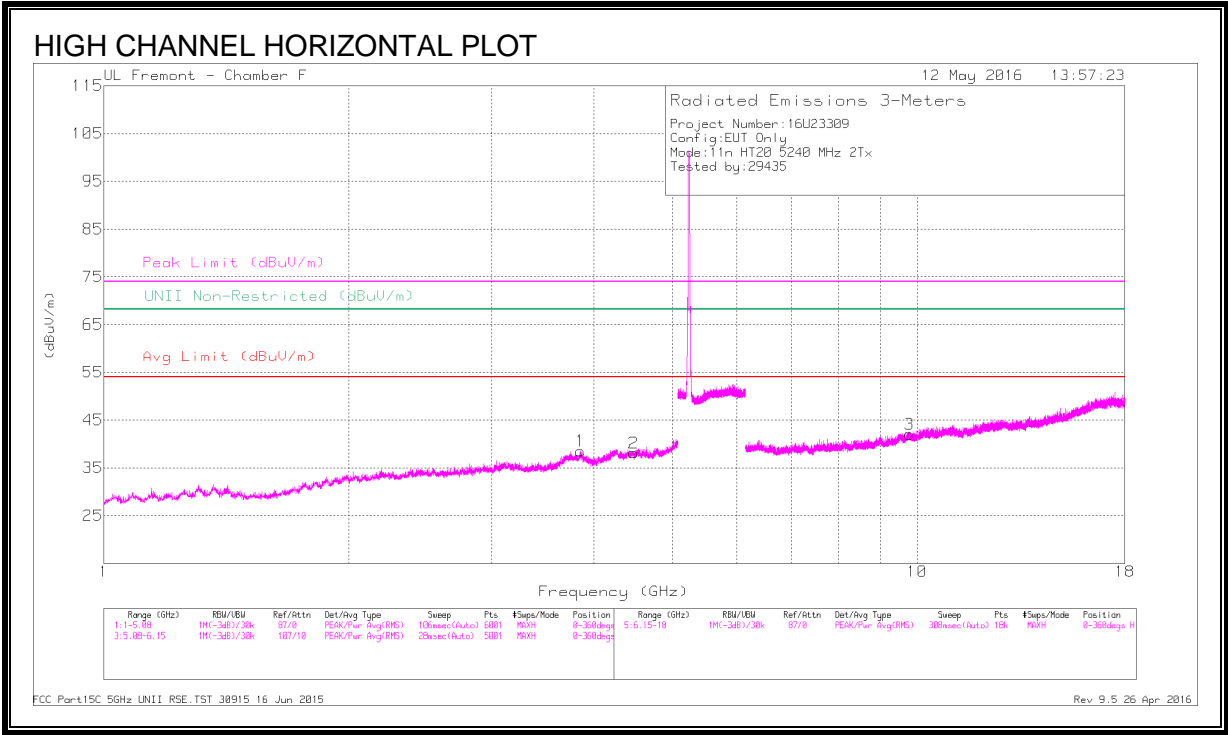
Markers	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.701	39.17	PK-U	33.5	-29	43.67	-	-	74	-30.33	-	-	0	102	H
	* 3.702	27.46	ADR	33.5	-29	31.96	54	-22.04	-	-	-	-	0	102	H
2	* 3.911	39.27	PK-U	33.5	-28.5	44.27	-	-	74	-29.73	-	-	0	102	H
	* 3.91	27.44	ADR	33.5	-28.6	32.34	54	-21.66	-	-	-	-	0	102	H
3	* 4.86	37.6	PK-U	34.1	-25.2	46.5	-	-	74	-27.5	-	-	0	102	H
	* 4.861	25.88	ADR	34.1	-25.2	34.78	54	-19.22	-	-	-	-	0	102	H
4	* 3.745	38.48	PK-U	33.5	-28.8	43.18	-	-	74	-30.82	-	-	0	102	V
	* 3.743	27.23	ADR	33.5	-28.8	31.93	54	-22.07	-	-	-	-	0	102	V
5	10.387	34.31	PK-U	37.6	-21.4	50.51	-	-	-	-	68.2	-17.69	282	174	H
6	10.394	34.73	PK-U	37.6	-21.4	50.93	-	-	-	-	68.2	-17.27	331	241	V

\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - 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 T344 (dB/m)	Amp/Ch/Flt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNIT Non-Restricted (dBuV/m)	PK Margin (dB)	Acimuth (Degs)	Height (cm)	Polarity
1	* 3.857	38.83	PK2	33.4	-28.4	43.83	-	-	74	-30.17	-	-	301	122	H
	* 3.858	28.17	MAv1	33.4	-28.4	33.17	54	-20.83	-	-	-	-	301	122	H
2	4.483	37.1	PK2	34	-27.2	43.9	-	-	-	-	68.2	-24.3	290	151	H
	4.482	27.25	MAv1	34	-27.1	34.15	-	-	-	-	-	-	290	151	H
4	* 3.72	38.9	PK2	33.4	-29.1	43.2	-	-	74	-30.8	-	-	261	171	V
	* 3.722	28.33	MAv1	33.4	-29.1	32.63	54	-21.37	-	-	-	-	261	171	V
5	* 4.287	37.07	PK2	33.7	-27.1	43.67	-	-	74	-30.33	-	-	249	185	V
	* 4.287	27.05	MAv1	33.7	-27.1	33.65	54	-20.35	-	-	-	-	249	185	V
3	9.785	33.24	PK2	36.8	-21.4	48.64	-	-	-	-	68.2	-19.56	239	205	H
	9.788	23.37	MAv1	36.8	-21.4	38.77	-	-	-	-	-	-	239	205	H
6	9.79	33.96	PK2	36.8	-21.4	49.36	-	-	-	-	68.2	-18.84	268	226	V
	9.79	23.39	MAv1	36.8	-21.4	38.79	-	-	-	-	-	-	268	226	V

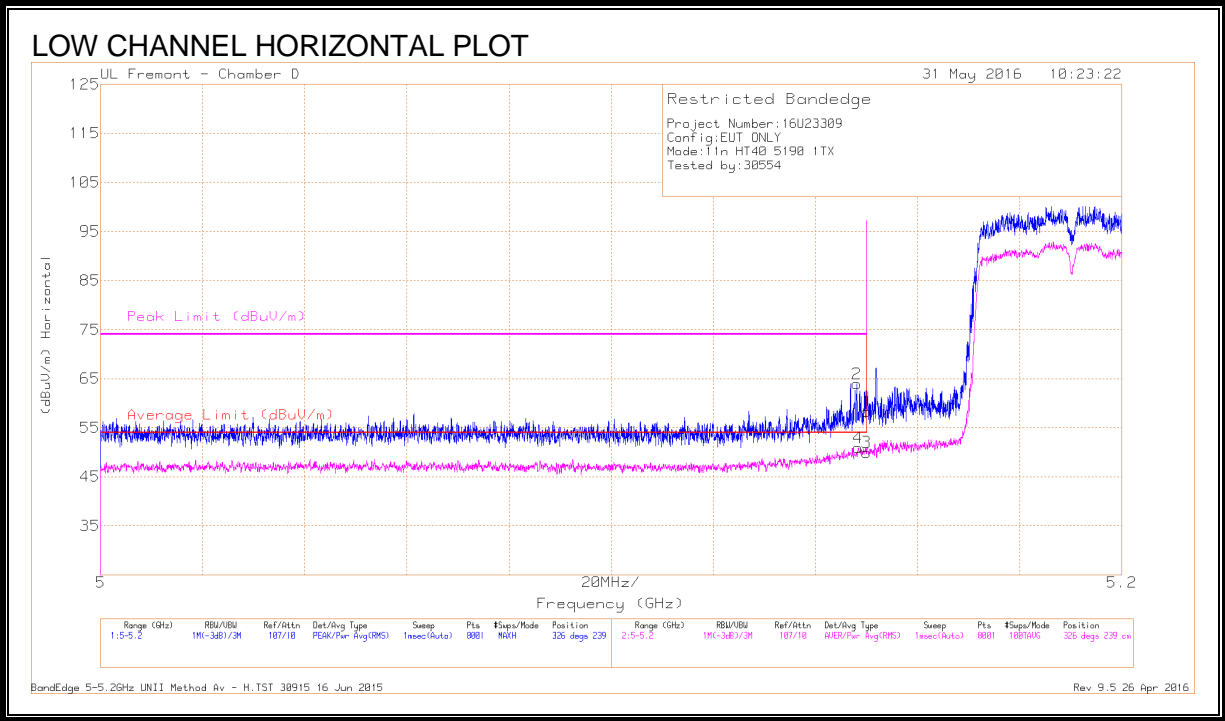
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

8.4.802.11n HT40 1Tx MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE, CHAIN 0 (LOW CHANNEL)



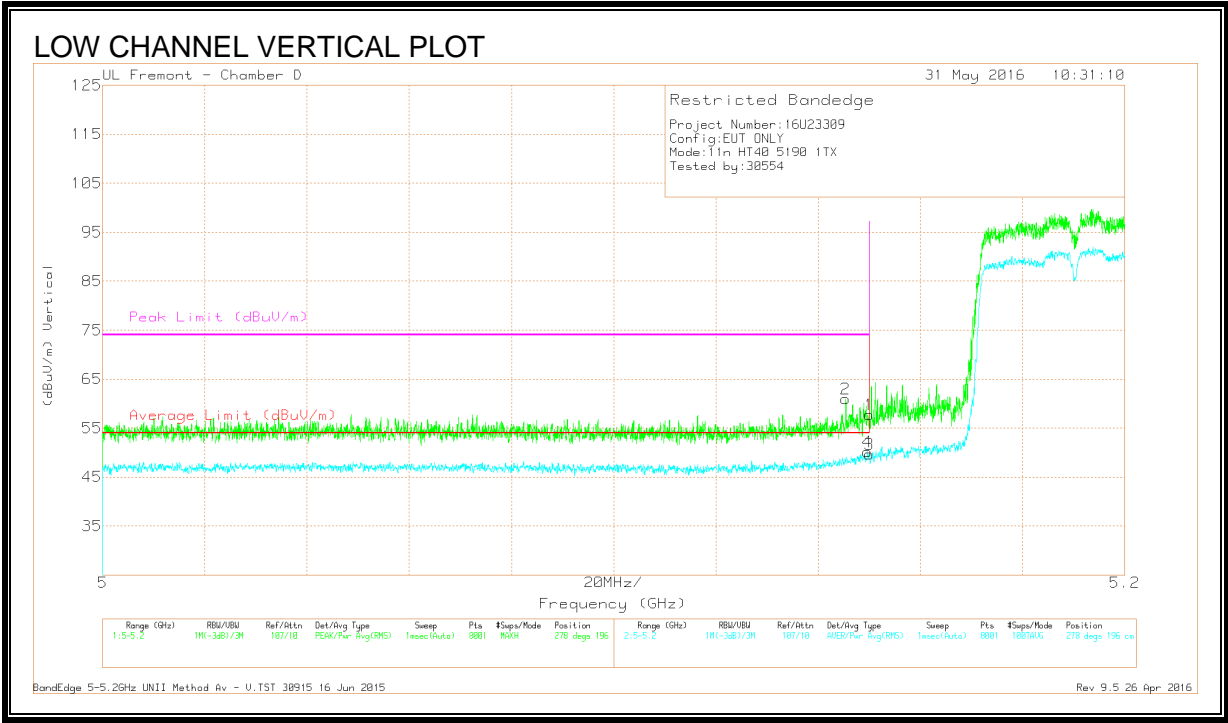
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fitr/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	48.09	Pk	34.1	-18.2	63.99	-	-	74	-10.01	326	239	H
4	* 5.148	34.96	RMS	34.1	-18.2	50.86	54	-3.14	-	-	326	239	H
1	5.15	42.36	Pk	34.1	-18.2	58.26	-	-	74	-15.74	326	239	H
3	5.15	34.08	RMS	34.1	-18.2	49.98	54	-4.02	-	-	326	239	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection



DATA

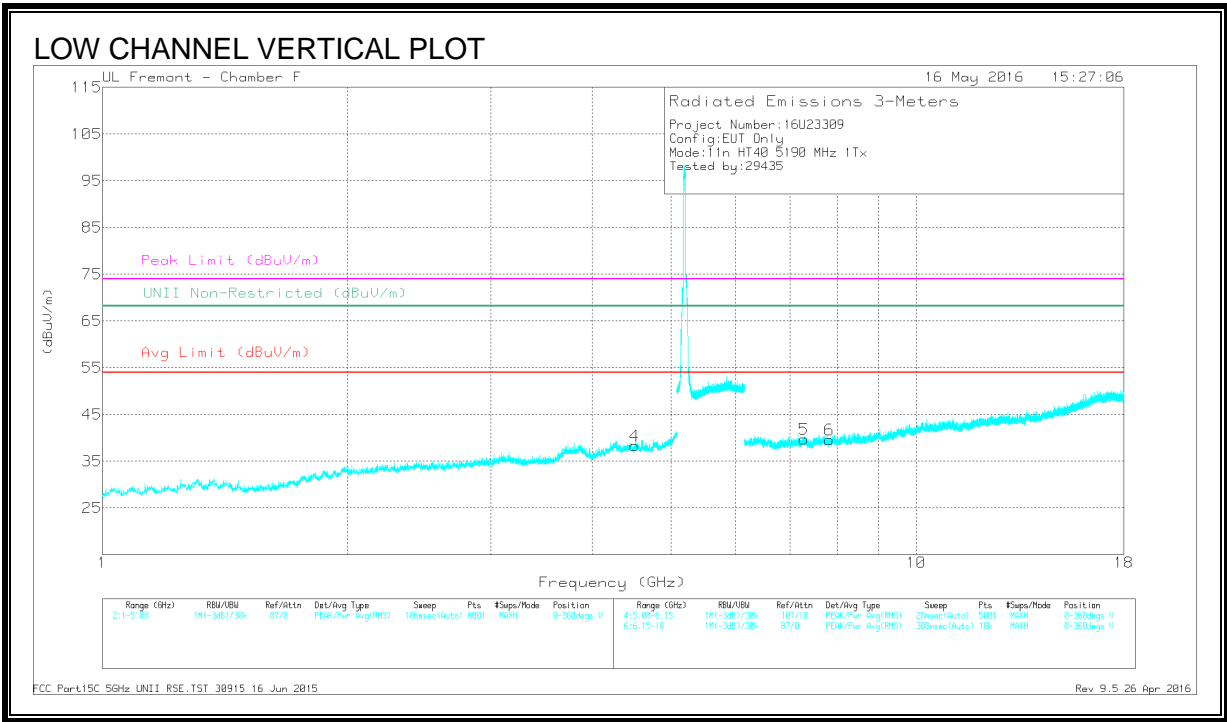
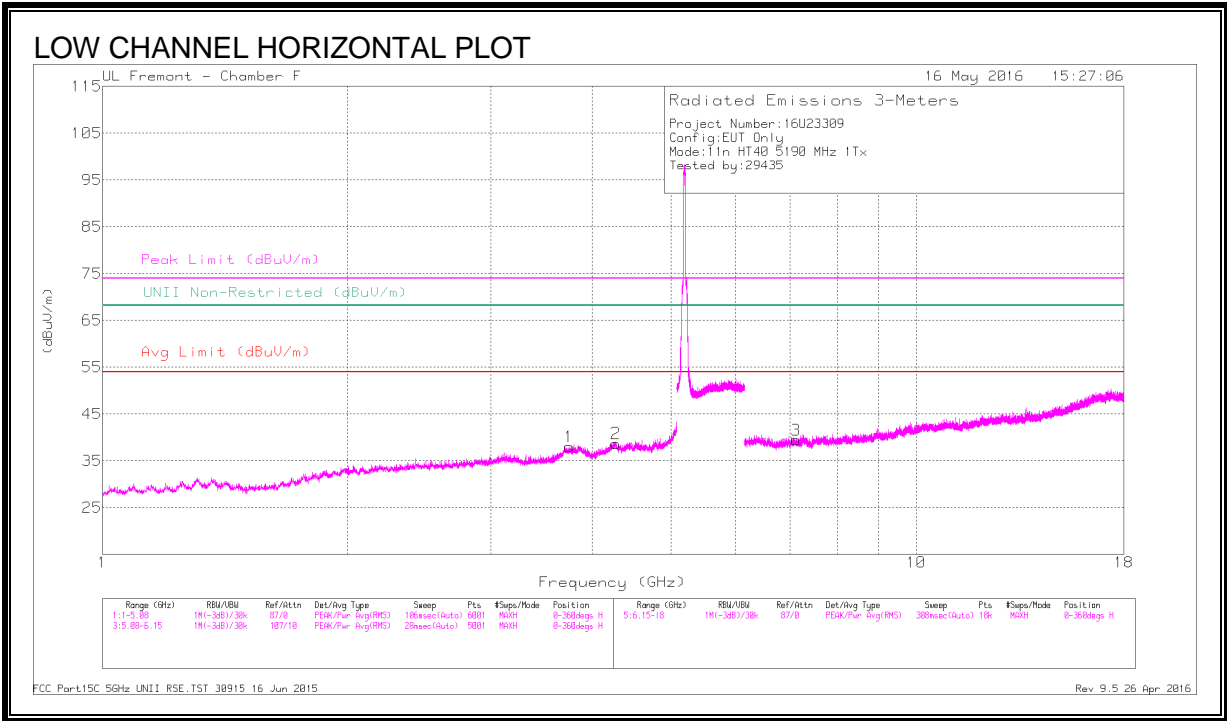
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cb/Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.145	45.11	Pk	34.1	-18.2	61.01	-	-	74	-12.99	278	196	V
4	* 5.15	34.26	RMS	34.1	-18.2	50.16	54	-3.84	-	-	278	196	V
1	5.15	41.8	Pk	34.1	-18.2	57.7	-	-	74	-16.3	278	196	V
3	5.15	33.77	RMS	34.1	-18.2	49.67	54	-4.33	-	-	278	196	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cb/Filt/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	* 3.748	38.78	PK-U	33.4	-29.2	42.98	-	-	74	-31.02	-	-	60	111	H
	* 3.748	28.38	ADR	33.4	-29.2	32.58	54	-21.42	-	-	-	-	60	111	H
2	* 4.273	37.44	PK-U	33.7	-26.6	44.54	-	-	74	-29.46	-	-	132	132	H
	* 4.271	27.08	ADR	33.7	-26.5	34.28	54	-19.72	-	-	-	-	132	132	H
4	* 4.512	37.25	PK-U	34	-27.2	44.05	-	-	74	-29.95	-	-	111	162	V
	* 4.512	27.31	ADR	34	-27.2	34.11	54	-19.89	-	-	-	-	111	162	V
3	7.12	36.88	PK-U	35.6	-26.6	45.88	-	-	-	-	68.2	-22.32	123	186	H
	7.119	26.69	ADR	35.6	-26.6	35.69	-	-	-	-	-	-	123	186	H
5	* 7.278	35.55	PK-U	35.5	-25.2	45.85	-	-	74	-28.15	-	-	113	204	V
	* 7.278	25.79	ADR	35.5	-25.2	36.09	54	-17.91	-	-	-	-	113	204	V
6	7.828	35.94	PK-U	35.8	-25.4	46.34	-	-	-	-	68.2	-21.86	176	220	V
	7.83	25.79	ADR	35.8	-25.4	36.19	-	-	-	-	-	-	176	220	V

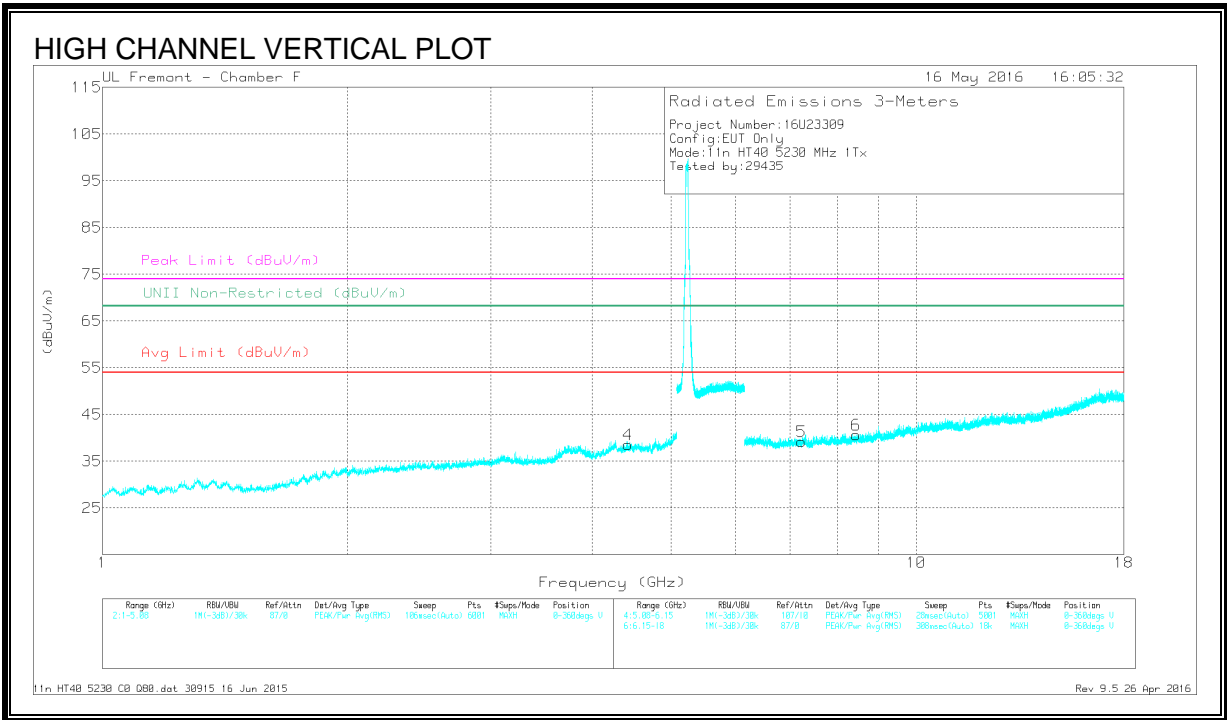
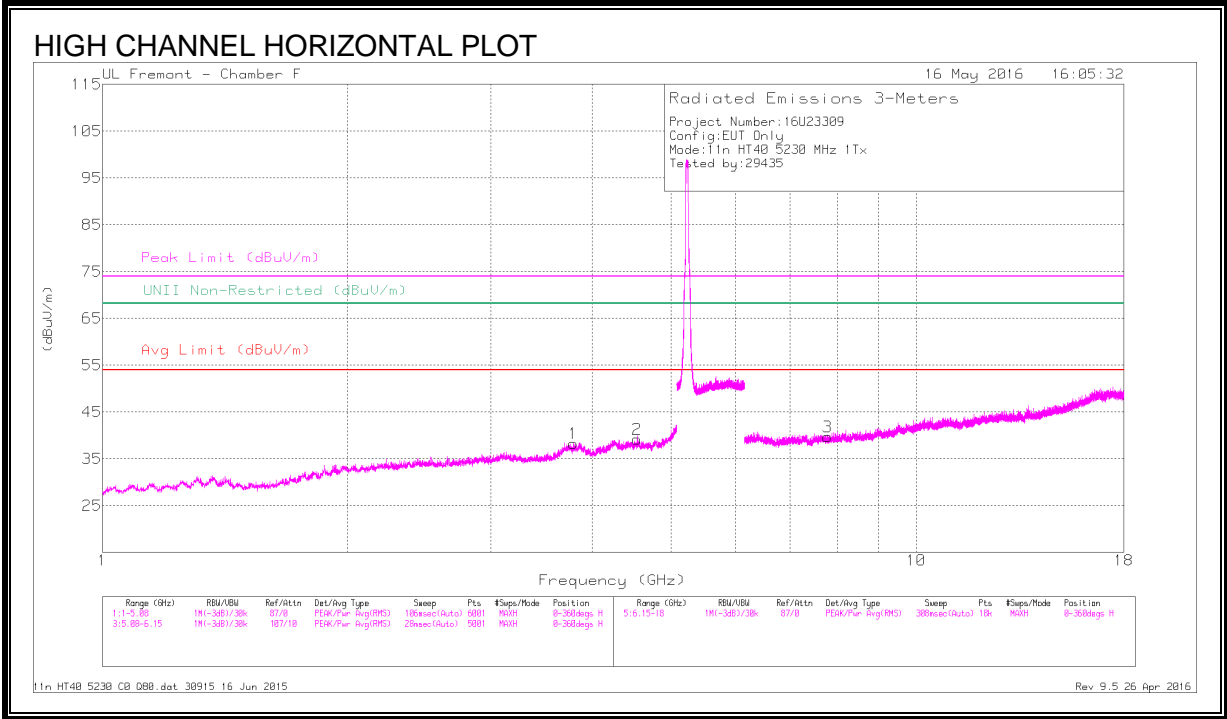
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



HIGH CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

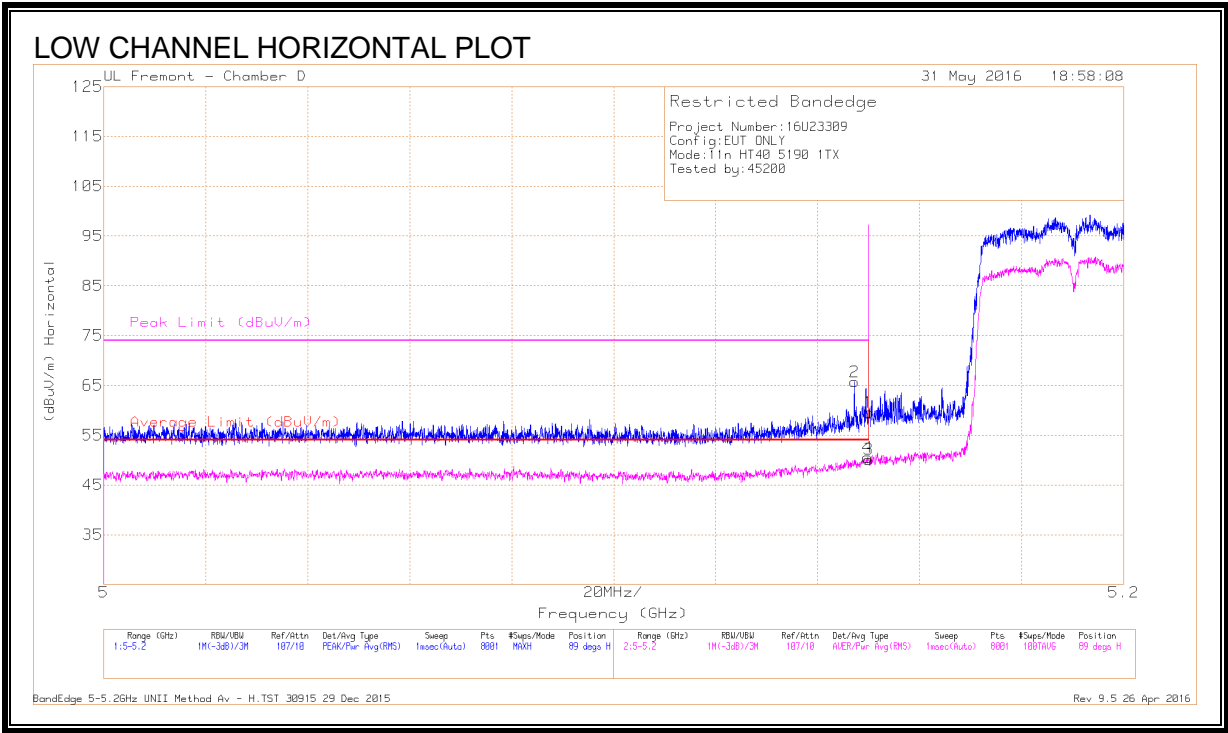
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT344 (dB/m)	Amp/Ch/Filt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 3.79	39.26	PK-U	33.4	-29.4	43.26	-	-	74	-30.74	-	-	70	111	H
	* 3.791	28.51	ADR	33.4	-29.4	32.51	54	-21.49	-	-	-	-	70	111	H
2	* 4.54	38.26	PK-U	34	-28	44.26	-	-	74	-29.74	-	-	100	148	H
	* 4.54	28.02	ADR	34	-28	34.02	54	-19.98	-	-	-	-	100	148	H
4	4.422	38.31	PK-U	34	-27.9	44.41	-	-	-	-	68.2	-23.79	110	172	V
	4.42	27.98	ADR	34	-28	33.98	-	-	-	-	-	-	110	172	V
3	7.788	35.84	PK-U	35.7	-25.4	46.14	-	-	-	-	68.2	-22.06	145	188	H
	7.789	25.86	ADR	35.7	-25.5	36.06	-	-	-	-	-	-	145	188	H
5	7.229	36.11	PK-U	35.6	-26.2	45.51	-	-	-	-	68.2	-22.69	156	219	V
	7.229	26.43	ADR	35.6	-26.2	35.83	-	-	-	-	-	-	156	219	V
6	* 8.441	34.77	PK-U	35.7	-24.2	46.27	-	-	74	-27.73	-	-	118	235	V
	* 8.44	24.77	ADR	35.7	-24.2	36.27	54	-17.73	-	-	-	-	118	235	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

RESTRICTED BANDEDGE, CHAIN 1 (LOW CHANNEL)



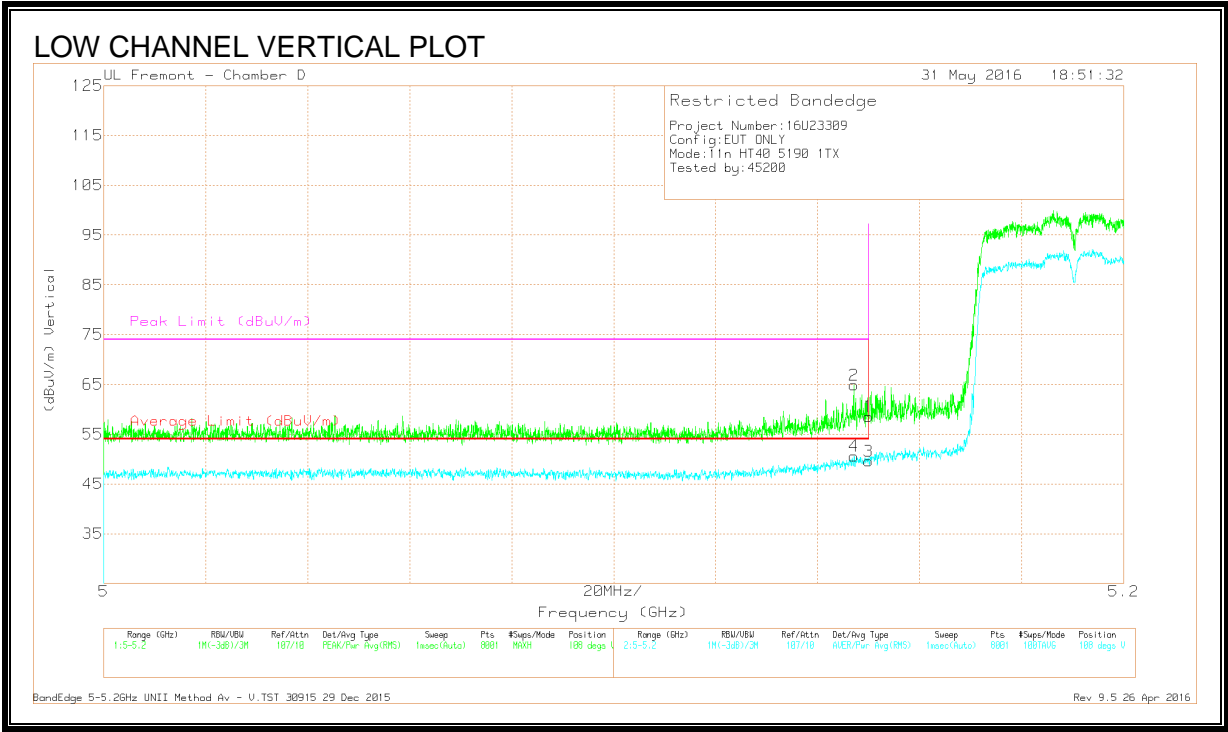
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Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.147	49.79	Pk	34.1	-18.2	65.69	-	-	74	-8.31	89	108	H
4	* 5.15	34.62	RMS	34.1	-18.2	50.52	54	-3.48	-	-	89	108	H
1	5.15	43.67	Pk	34.1	-18.2	59.57	-	-	74	-14.43	89	108	H
3	5.15	34.24	RMS	34.1	-18.2	50.14	54	-3.86	-	-	89	108	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection



DATA

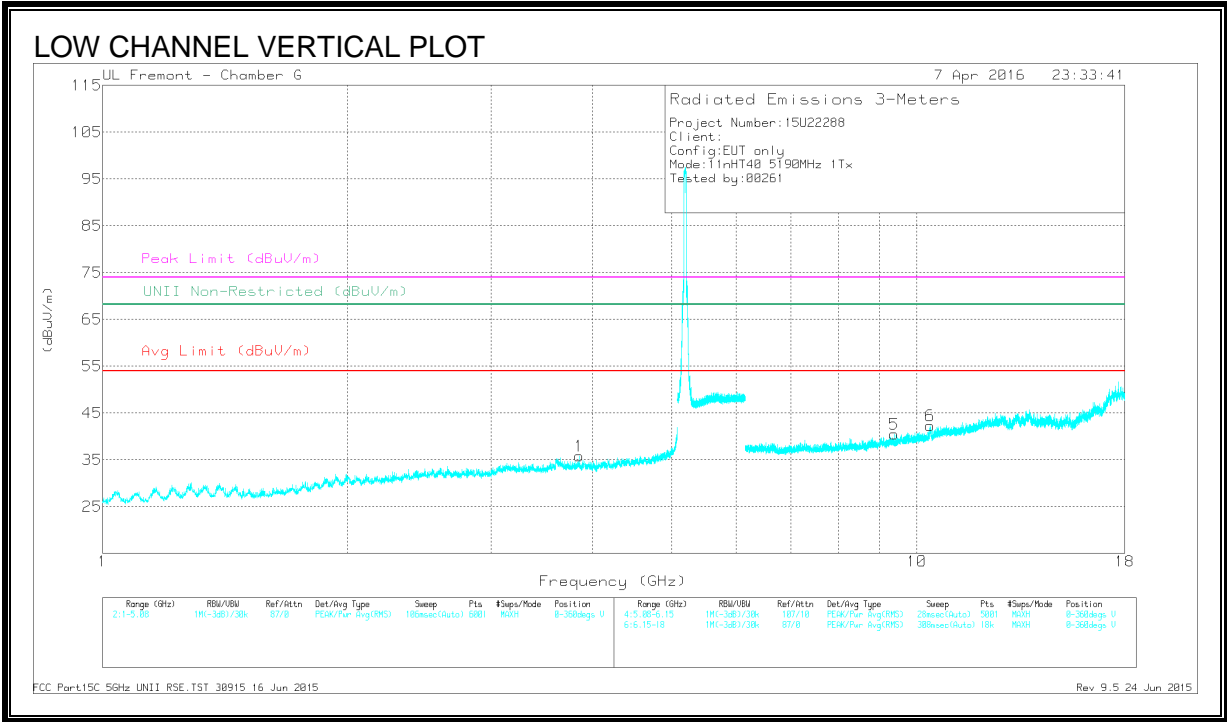
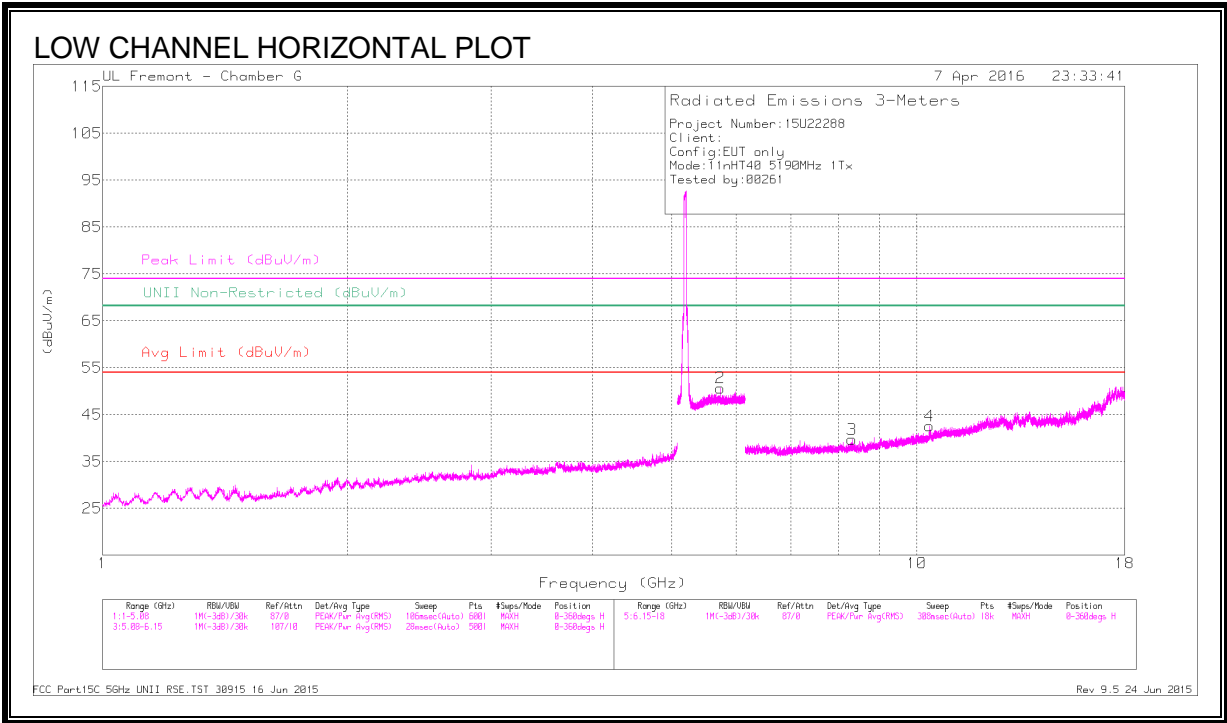
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.147	48.95	Pk	34.1	-18.2	64.85	-	-	74	-9.15	108	118	V
4	* 5.147	34.69	RMS	34.1	-18.2	50.59	54	-3.41	-	-	108	118	V
1	5.15	42.66	Pk	34.1	-18.2	58.56	-	-	74	-15.44	108	118	V
3	5.15	33.7	RMS	34.1	-18.2	49.6	54	-4.4	-	-	108	118	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

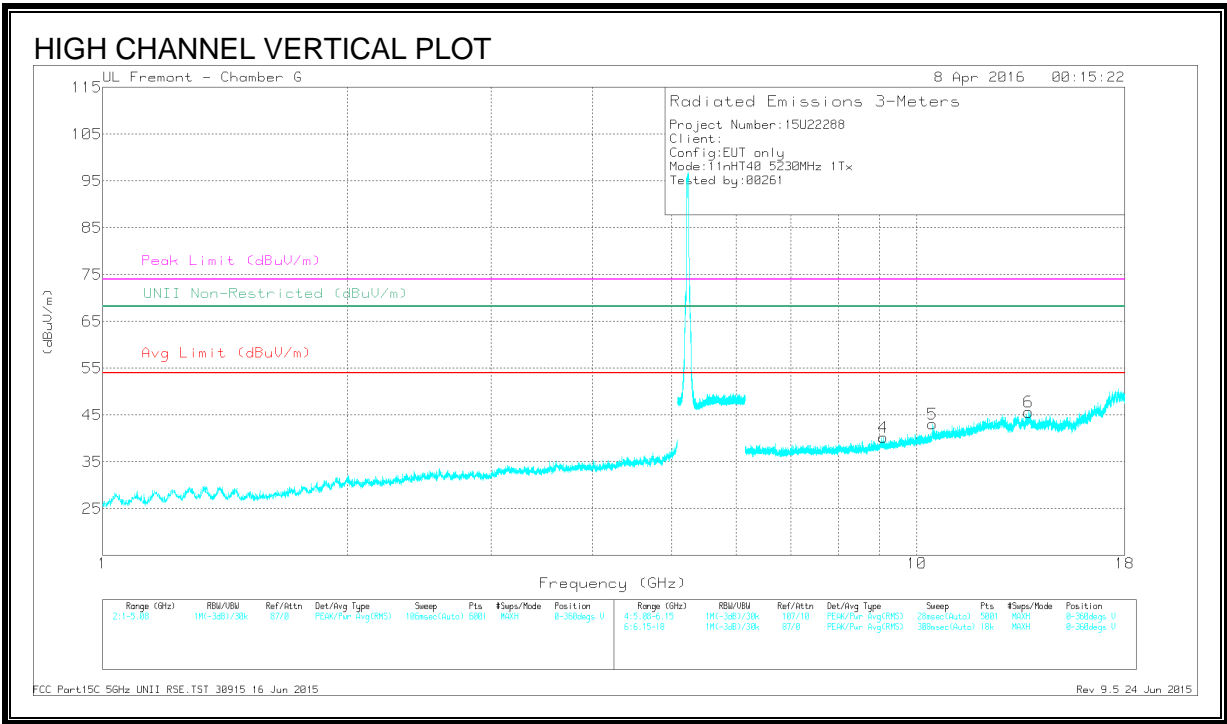
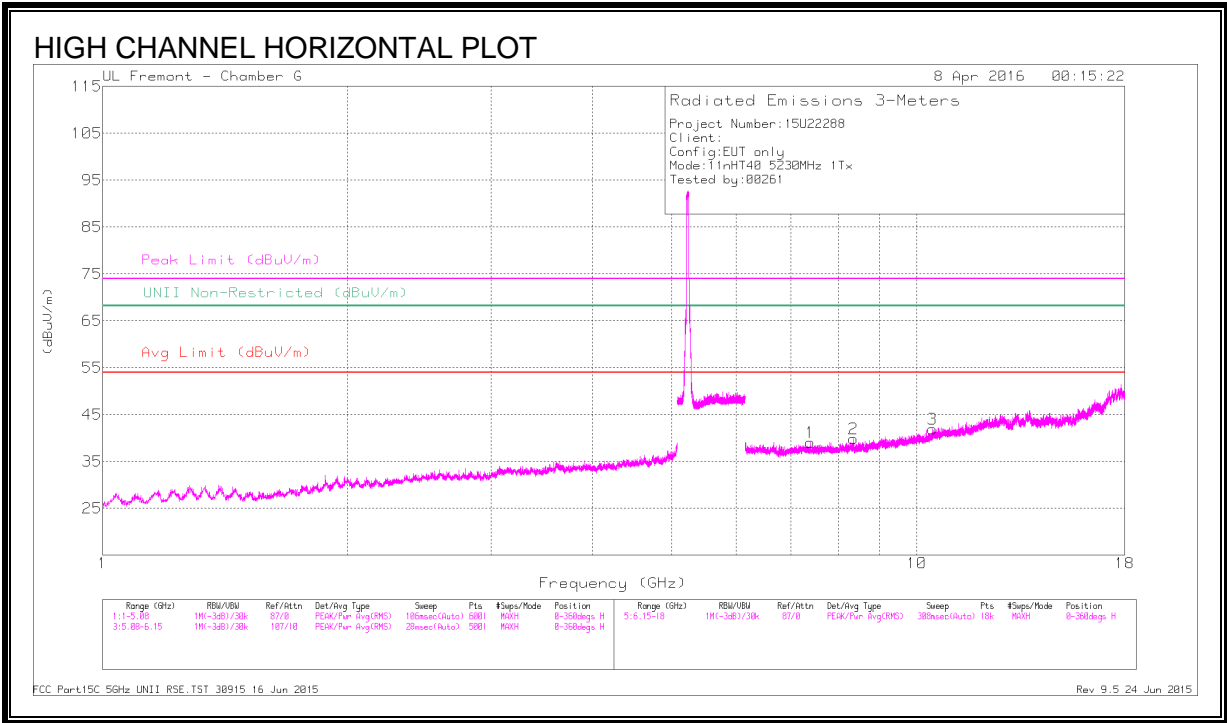
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.845	42.1	PK-U	33.1	-32.7	42.5	-	-	74	-31.5	-	-	125	201	V
	* 3.847	30.63	ADR	33.1	-32.7	31.03	54	-22.97	-	-	-	-	125	201	V
3	* 8.324	39.58	PK-U	35.7	-29.1	46.18	-	-	74	-27.82	-	-	278	144	H
	* 8.322	27.55	ADR	35.7	-29.1	34.15	54	-19.85	-	-	-	-	278	144	H
5	* 9.375	38.8	PK-U	36.5	-28.8	46.5	-	-	74	-27.5	-	-	91	292	V
	* 9.373	27	ADR	36.5	-28.8	34.7	54	-19.3	-	-	-	-	91	292	V
2	5.732	44.17	PK-U	35	-22.9	56.27	-	-	-	-	68.2	-11.93	243	168	H
4	10.372	38.6	PK-U	37.3	-27.2	48.7	-	-	-	-	68.2	-19.5	287	186	H
6	10.381	38.54	PK-U	37.3	-27.1	48.74	-	-	-	-	68.2	-19.46	139	309	V

\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - 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 T862 (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	* 7.396	40.06	PK-U	35.6	-30.7	44.96	-	-	74	-29.04	-	-	344	165	H
	* 7.394	28.76	ADR	35.6	-30.7	33.66	54	-20.34	-	-	-	-	344	165	H
2	* 8.357	39.59	PK-U	35.7	-29.3	45.99	-	-	74	-28.01	-	-	173	107	H
	* 8.356	27.71	ADR	35.7	-29.2	34.21	54	-19.79	-	-	-	-	173	107	H
4	* 9.087	38.64	PK-U	36.2	-28.3	46.54	-	-	74	-27.46	-	-	296	132	V
	* 9.086	27.06	ADR	36.2	-28.3	34.96	54	-19.04	-	-	-	-	296	132	V
5	10.458	41.52	PK-U	37.4	-27.6	51.32	-	-	-	-	68.2	-16.88	235	270	V
3	10.46	37.96	PK-U	37.4	-27.6	47.76	-	-	-	-	68.2	-20.44	242	169	H
6	13.709	38.71	PK-U	39.2	-25.6	52.31	-	-	-	-	68.2	-15.89	34	266	V

\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

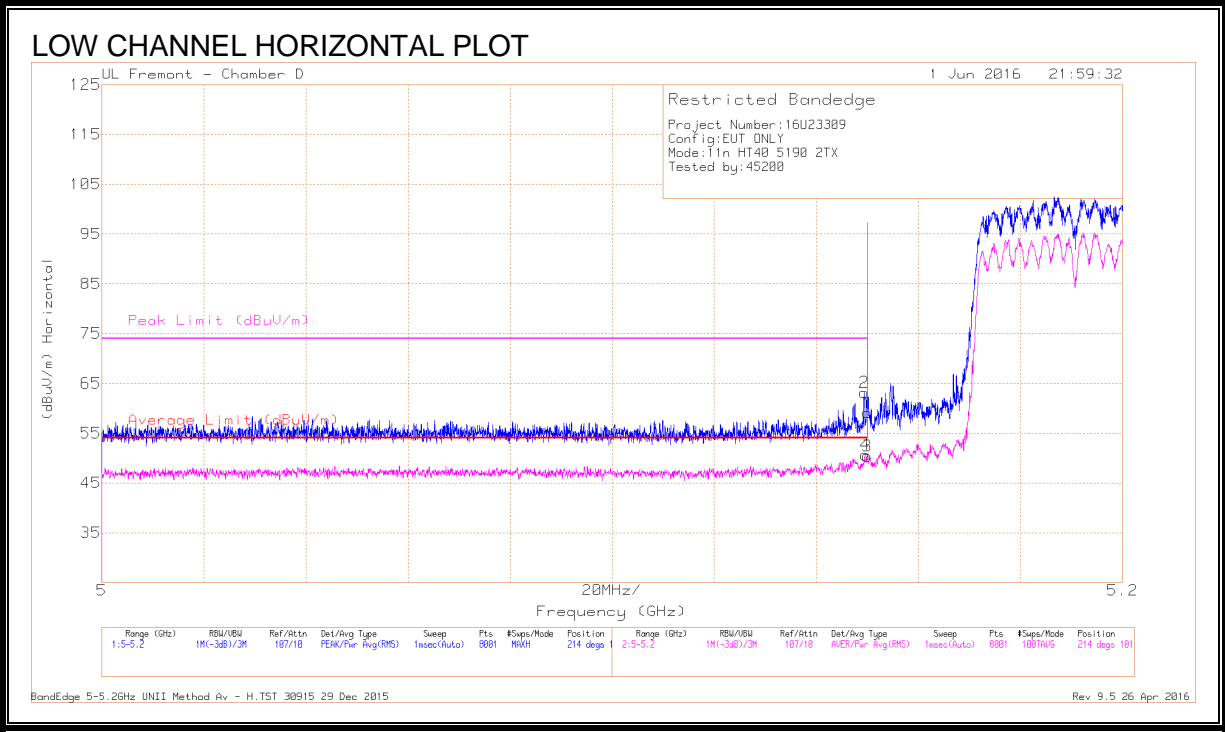
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



8.5.802.11n HT40 2Tx CDD MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



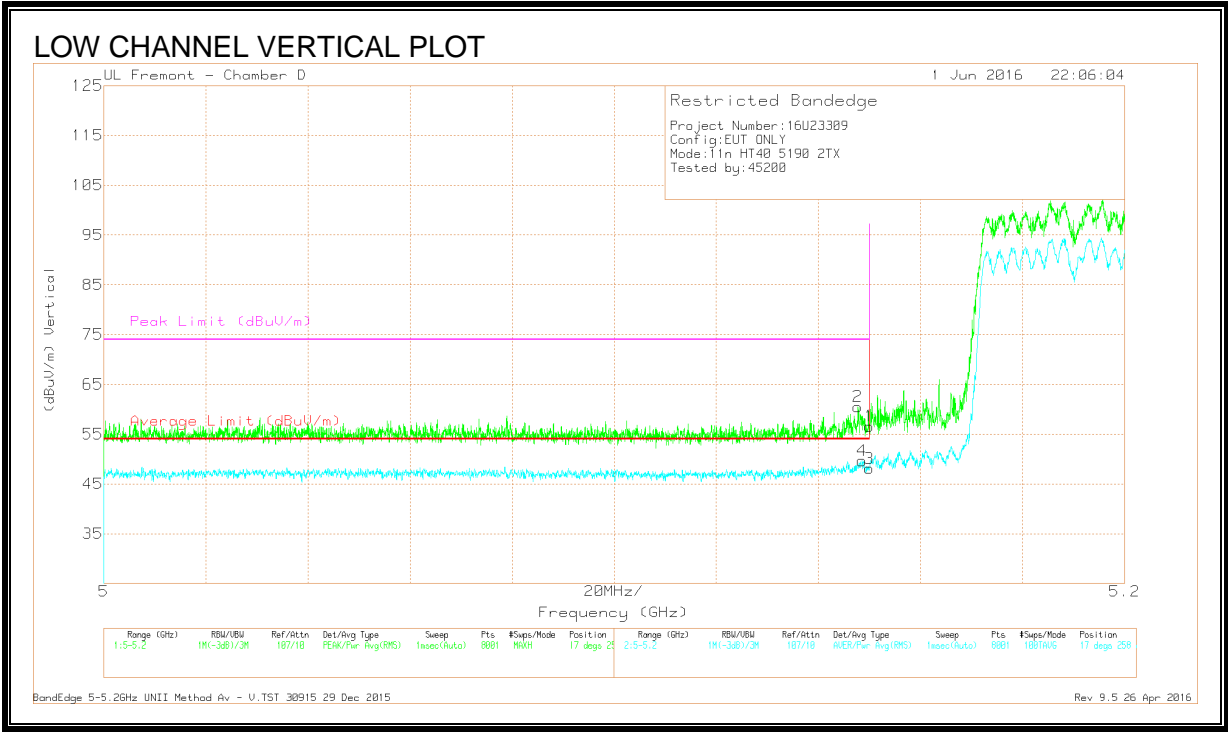
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (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	* 5.149	47.27	Pk	34.1	-18.2	63.17	-	-	74	-10.83	214	101	H
4	* 5.15	34.75	RMS	34.1	-18.2	50.65	54	-3.35	-	-	214	101	H
1	5.15	43.2	Pk	34.1	-18.2	59.1	-	-	74	-14.9	214	101	H
3	5.15	34.51	RMS	34.1	-18.2	50.41	54	-3.59	-	-	214	101	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection



DATA

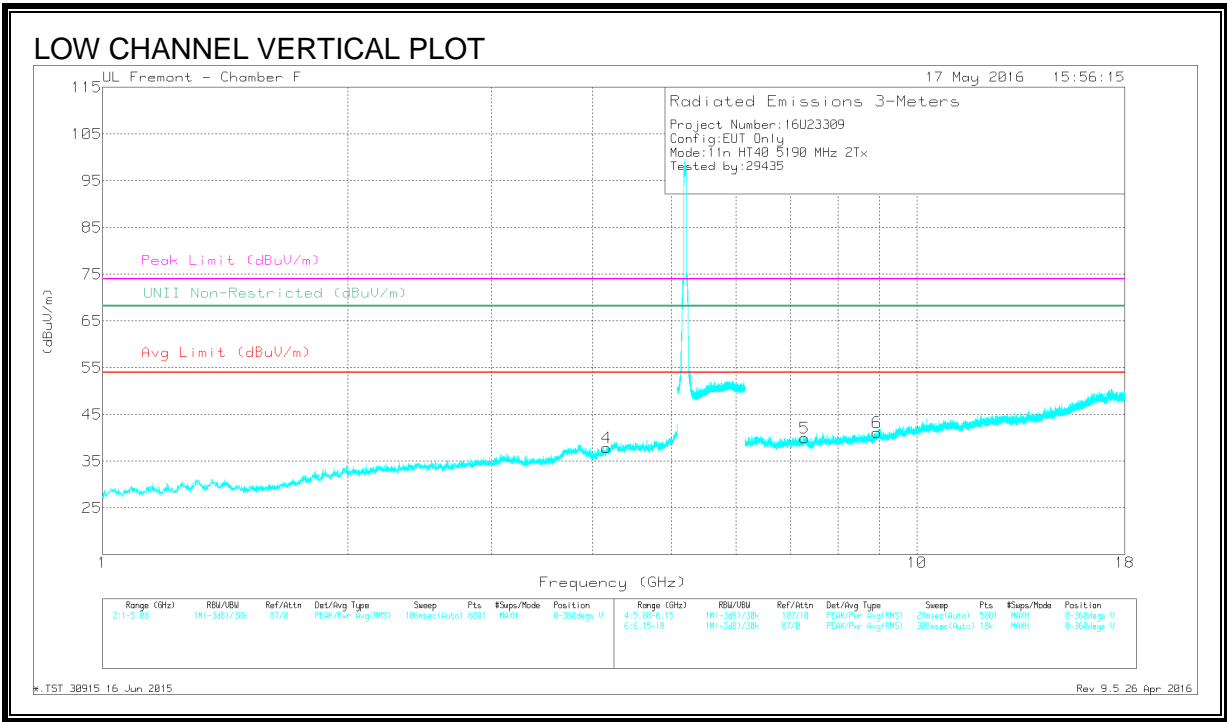
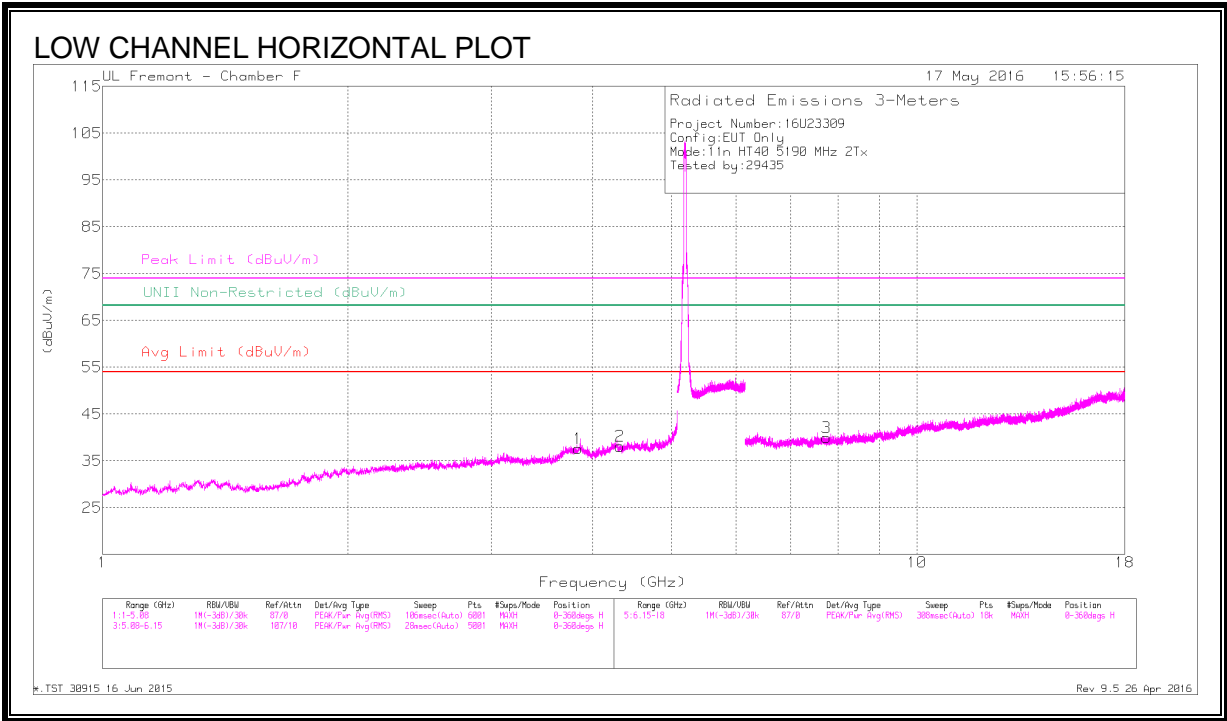
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.148	44.63	Pk	34.1	-18.2	60.53	-	-	74	-13.47	17	258	V
4	* 5.149	33.77	RMS	34.1	-18.2	49.67	54	-4.33	-	-	17	258	V
1	5.15	40.72	Pk	34.1	-18.2	56.62	-	-	74	-17.38	17	258	V
3	5.15	32.24	RMS	34.1	-18.2	48.14	54	-5.86	-	-	17	258	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

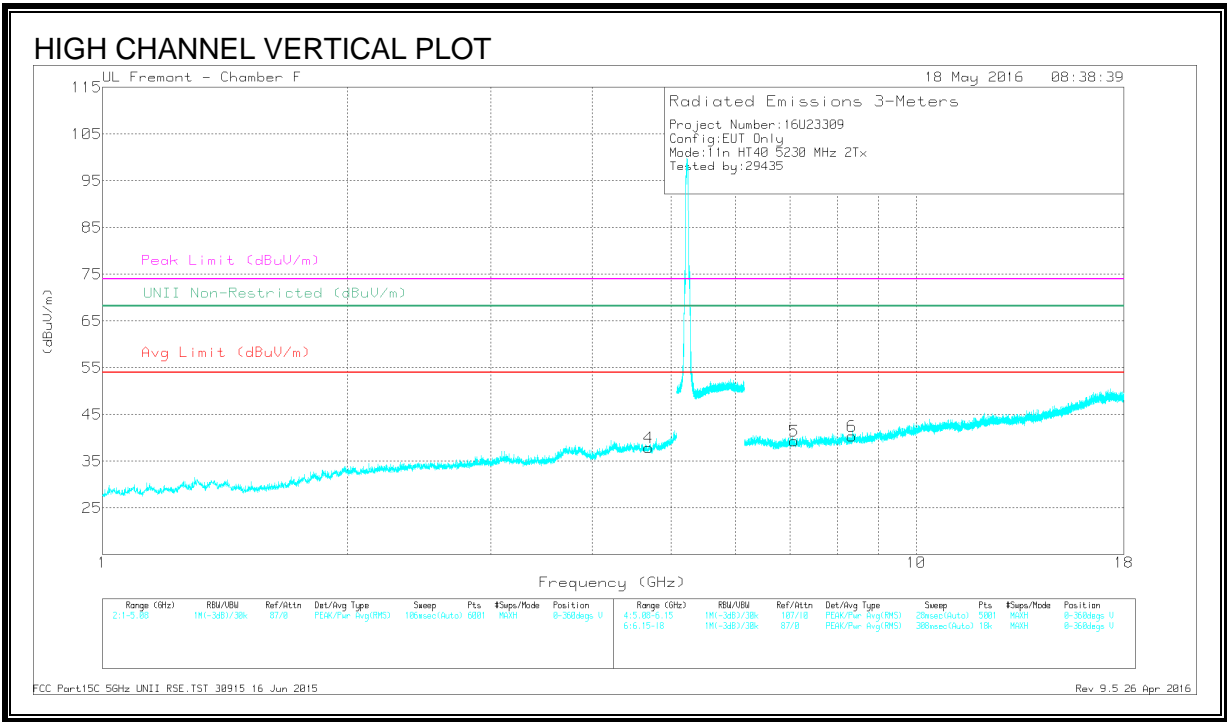
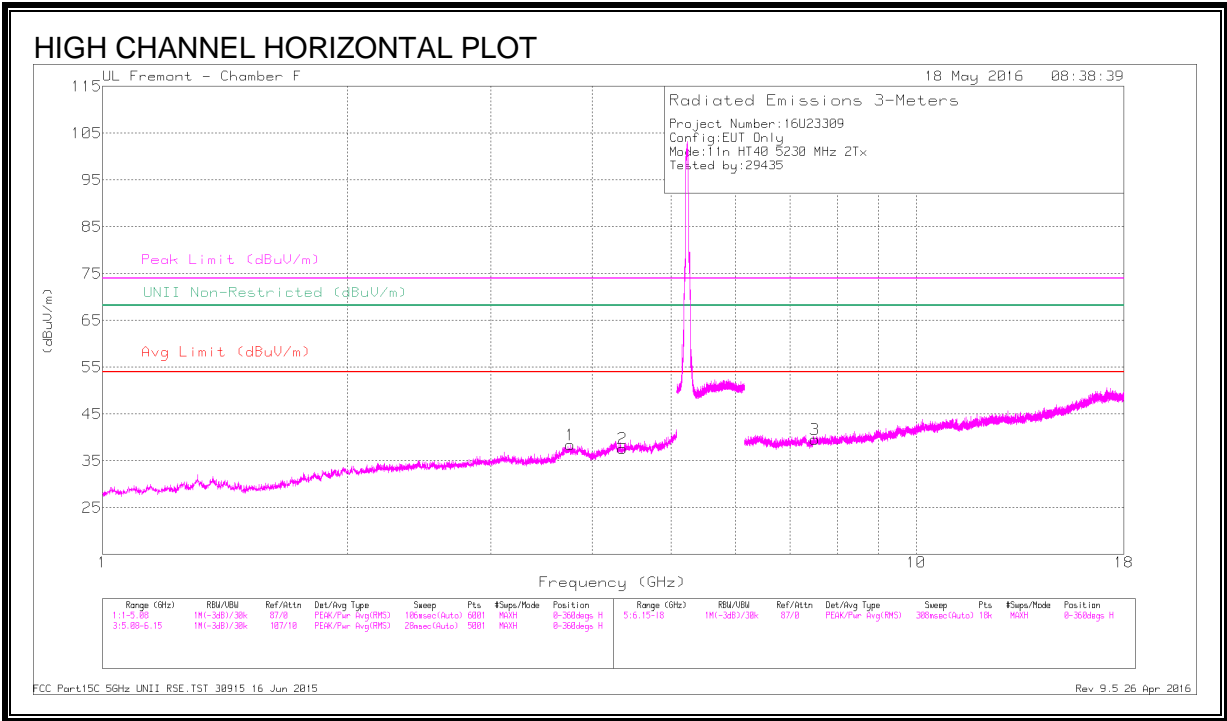
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Ch/Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.838	38.2	PK-U	33.4	-28.7	42.9	-	-	74	-31.1	-	-	75	116	H
	* 3.838	28.18	ADR	33.4	-28.7	32.88	54	-21.12	-	-	-	-	75	116	H
2	* 4.322	37.93	PK-U	33.8	-28.3	43.43	-	-	74	-30.57	-	-	82	133	H
	* 4.324	28.1	ADR	33.8	-28.3	33.6	54	-20.4	-	-	-	-	82	133	H
4	* 4.159	38.78	PK-U	33.7	-29.1	43.38	-	-	74	-30.62	-	-	97	149	V
	* 4.159	28.55	ADR	33.7	-29.1	33.15	54	-20.85	-	-	-	-	97	149	V
3	* 7.744	36.42	PK-U	35.7	-25.9	46.22	-	-	74	-27.78	-	-	86	167	H
	* 7.745	26.19	ADR	35.7	-25.9	35.99	54	-18.01	-	-	-	-	86	167	H
5	* 7.278	36.07	PK-U	35.5	-25.2	46.37	-	-	74	-27.63	-	-	123	188	V
	* 7.277	25.86	ADR	35.5	-25.2	36.16	54	-17.84	-	-	-	-	123	188	V
6	8.931	34.15	PK-U	35.9	-23.2	46.85	-	-	-	-	68.2	-21.35	163	206	V
	8.931	24.66	ADR	35.9	-23.2	37.36	-	-	-	-	-	-	163	206	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - 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 T344 (dB/m)	Amp/Cb/Filt/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	* 3.759	38.36	PK-U	33.4	-29.3	42.46	-	-	74	-31.54	-	-	45	114	H
	* 3.761	28.54	ADR	33.4	-29.3	32.64	54	-21.36	-	-	-	-	45	114	H
2	* 4.356	38.12	PK-U	33.9	-28.8	43.22	-	-	74	-30.78	-	-	60	129	H
	* 4.356	28.07	ADR	33.9	-28.8	33.17	54	-20.83	-	-	-	-	60	129	H
4	* 4.693	37.91	PK-U	34.2	-27.2	44.91	-	-	74	-29.09	-	-	77	155	V
	* 4.692	27.54	ADR	34.2	-27.2	34.54	54	-19.46	-	-	-	-	77	155	V
3	* 7.506	35.66	PK-U	35.6	-25	46.26	-	-	74	-27.74	-	-	89	207	H
	* 7.504	26.12	ADR	35.6	-25	36.72	54	-17.28	-	-	-	-	89	207	H
5	7.081	36.43	PK-U	35.6	-25.9	46.13	-	-	-	-	68.2	-22.07	103	228	V
	7.084	26.27	ADR	35.6	-26	35.87	-	-	-	-	-	-	103	228	V
6	* 8.34	36.17	PK-U	35.7	-24.8	47.07	-	-	74	-26.93	-	-	136	209	V
	* 8.341	25.75	ADR	35.7	-24.8	36.65	54	-17.35	-	-	-	-	136	209	V

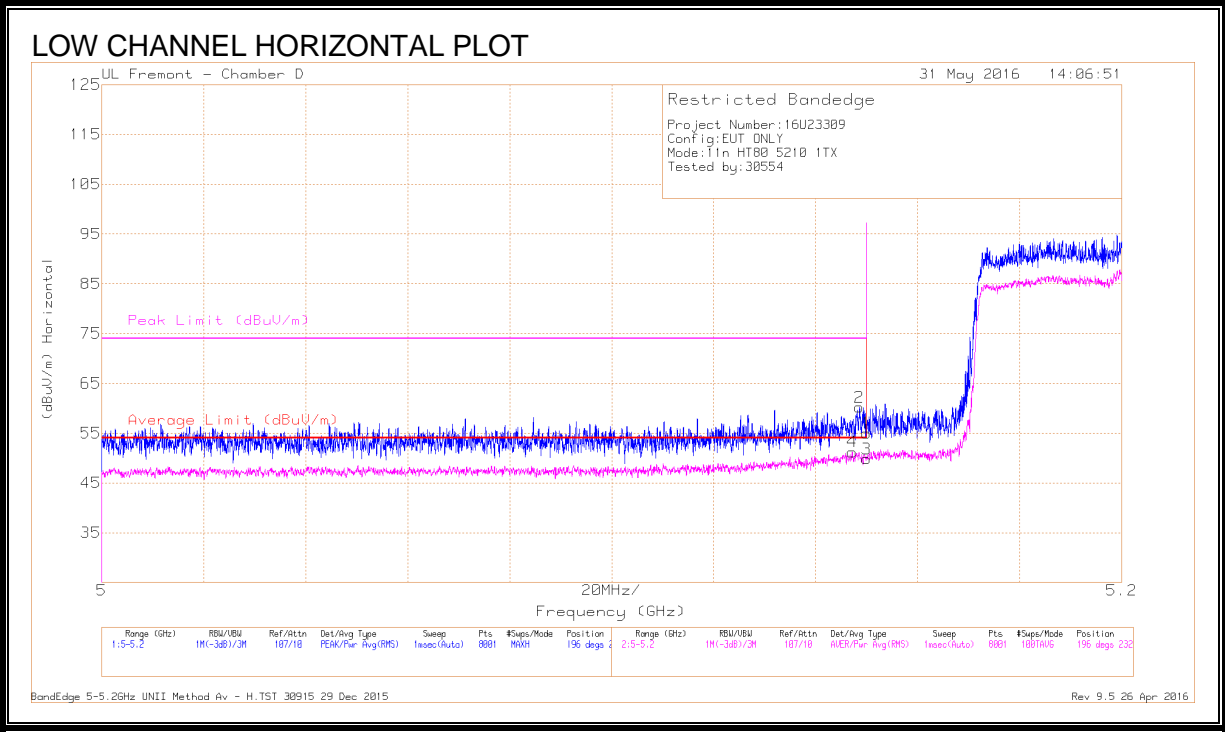
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

8.6.802.11ac VHT80 1Tx MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE, CHAIN 0 (LOW CHANNEL, CH 42)

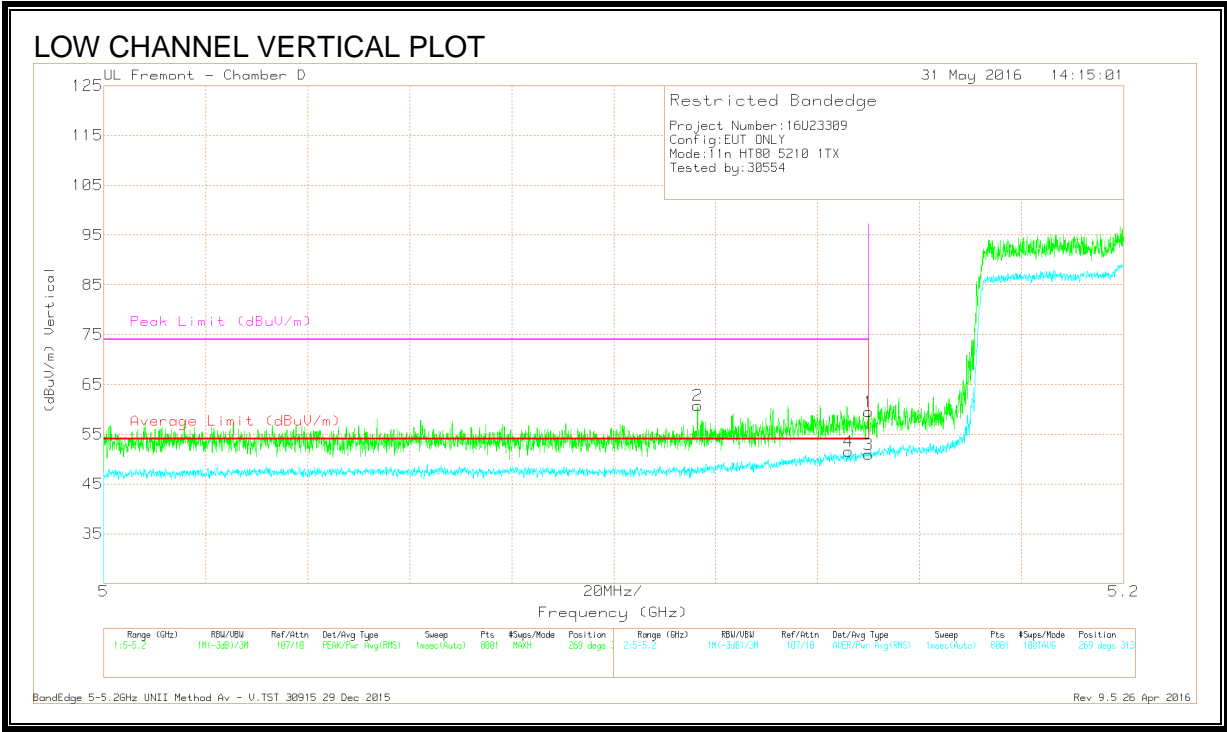


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Chl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.149	44.3	Pk	34.1	-18.2	0	60.2	-	-	74	-13.8	196	232	H
4	* 5.147	35.19	RMS	34.1	-18.2	.15	51.24	54	-2.76	-	-	196	232	H
1	5.15	39.12	Pk	34.1	-18.2	0	55.02	-	-	74	-18.98	196	232	H
3	5.15	33.79	RMS	34.1	-18.2	.15	49.84	54	-4.16	-	-	196	232	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector  
RMS - RMS detection



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.116	44.87	Pk	34.1	-18.2	0	60.77	-	-	74	-13.23	269	313	V
4	* 5.146	35.5	RMS	34.1	-18.2	.15	51.55	54	-2.45	-	-	269	313	V
1	5.15	43.58	Pk	34.1	-18.2	0	59.48	-	-	74	-14.52	269	313	V
3	5.15	34.89	RMS	34.1	-18.2	.15	50.94	54	-3.06	-	-	269	313	V

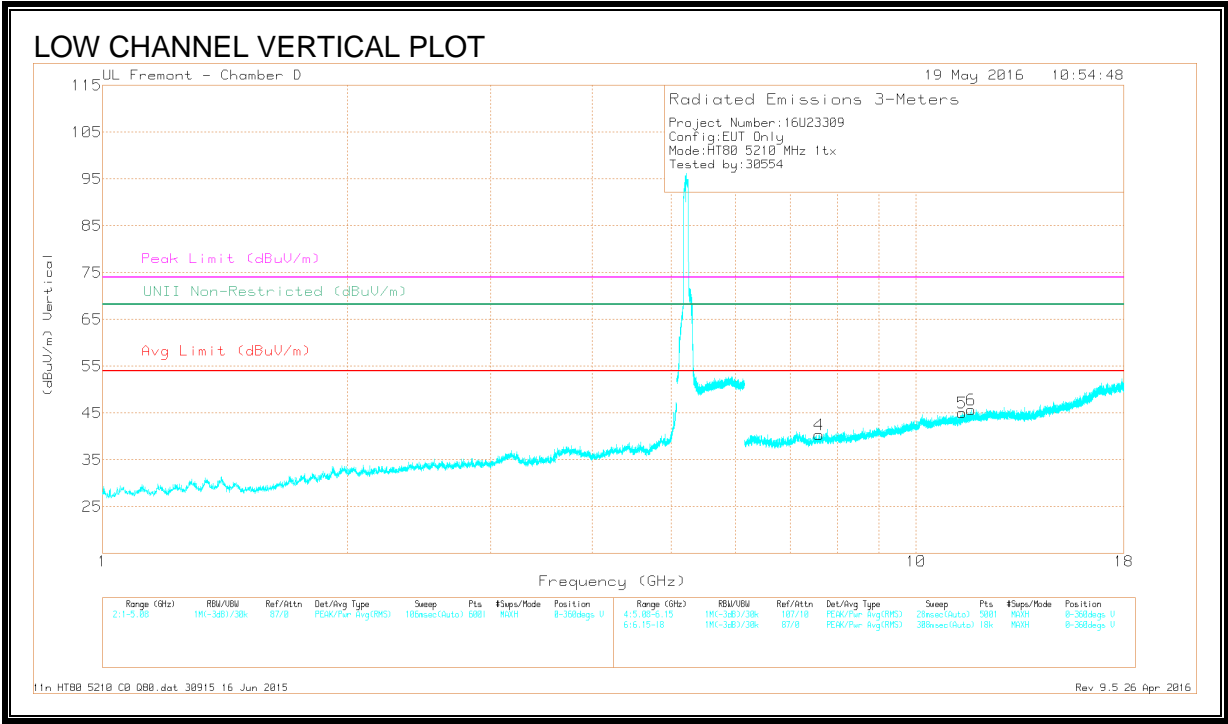
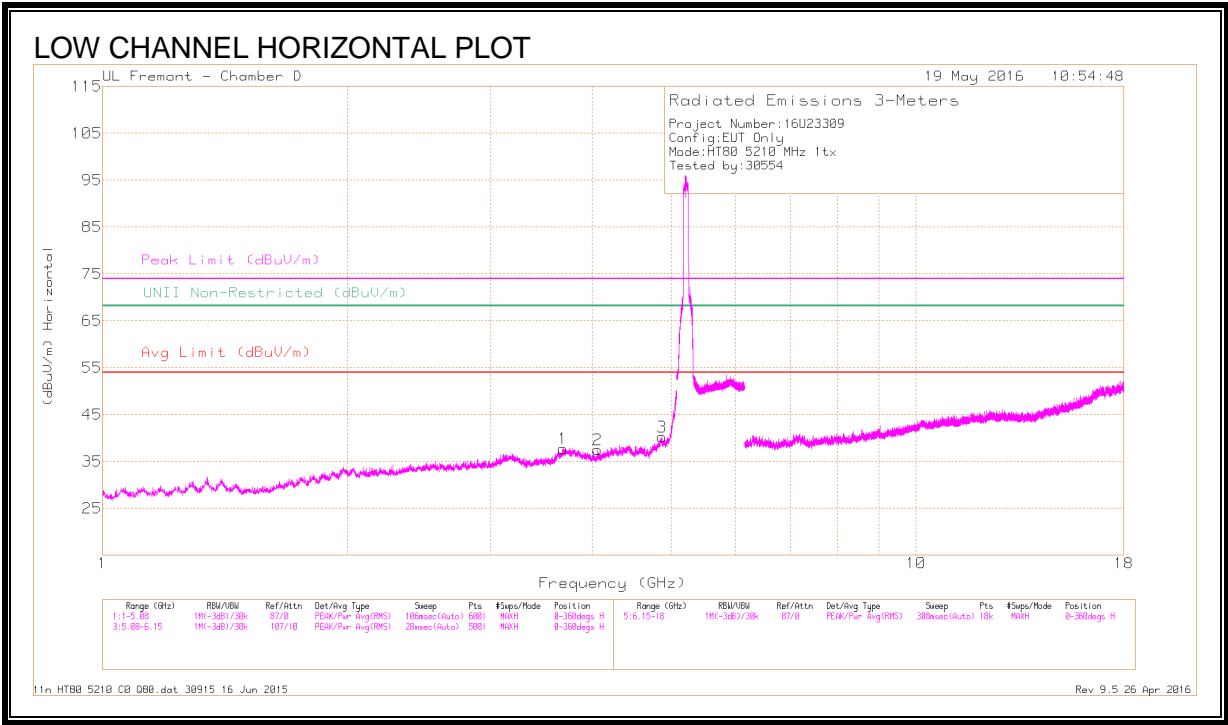
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection



LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

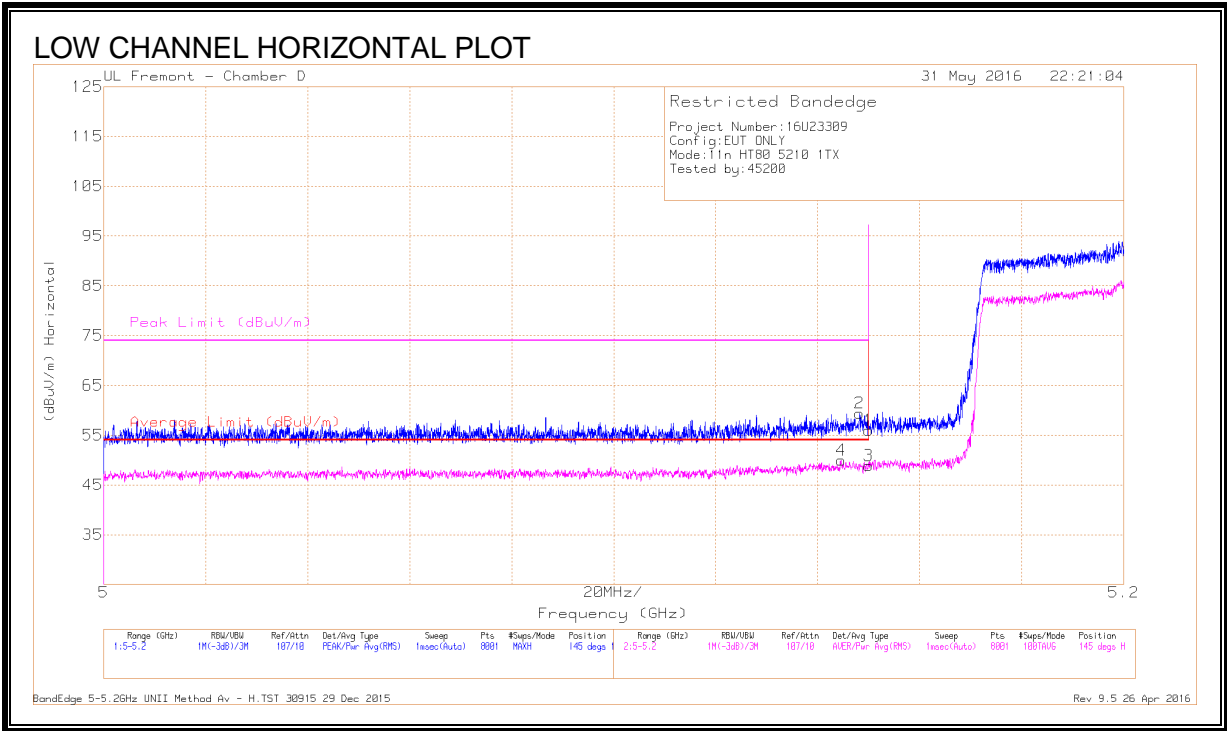
Markers	Frequency (GHz)	Meter Reading (dBm)	Det	AF1712 (dB/m)	Amp/CM/1ft/Pad (dB)	DC Corr (dB)	Corrected Reading (dBm/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 3.683	38.17	PK-U	33.5	-28.9	0	42.77	-	-	74	-31.23	-	-	156	226	H
	* 3.683	27.89	ADR	33.5	-28.9	.15	32.64	54	-21.36	-	-	-	-	156	226	H
2	* 4.056	37.81	PK-U	33.5	-28.6	0	42.71	-	-	74	-31.29	-	-	148	158	H
	* 4.059	27.7	ADR	33.5	-28.6	.15	32.75	54	-21.25	-	-	-	-	148	158	H
3	* 4.872	37.87	PK-U	34.1	-25.2	0	46.77	-	-	74	-27.23	-	-	45	147	H
	* 4.871	26.48	ADR	34.1	-25.2	.15	35.53	54	-18.47	-	-	-	-	45	147	H
4	* 7.598	36.27	PK-U	35.8	-25.1	0	46.97	-	-	74	-27.03	-	-	98	142	V
	* 7.598	25.67	ADR	35.8	-25.1	.15	36.52	54	-17.48	-	-	-	-	98	142	V
5	* 11.381	34.25	PK-U	38.3	-21.2	0	51.35	-	-	74	-22.65	-	-	100	212	V
	* 11.382	23.8	ADR	38.3	-21.2	.15	41.05	54	-12.95	-	-	-	-	100	212	V
6	* 11.684	34.55	PK-U	38.6	-20.6	0	52.55	-	-	74	-21.45	-	-	163	233	V
	* 11.684	23.5	ADR	38.6	-20.6	.15	41.65	54	-12.35	-	-	-	-	163	233	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

RESTRICTED BANDEDGE, CHAIN 1 (LOW CHANNEL, CH 42)



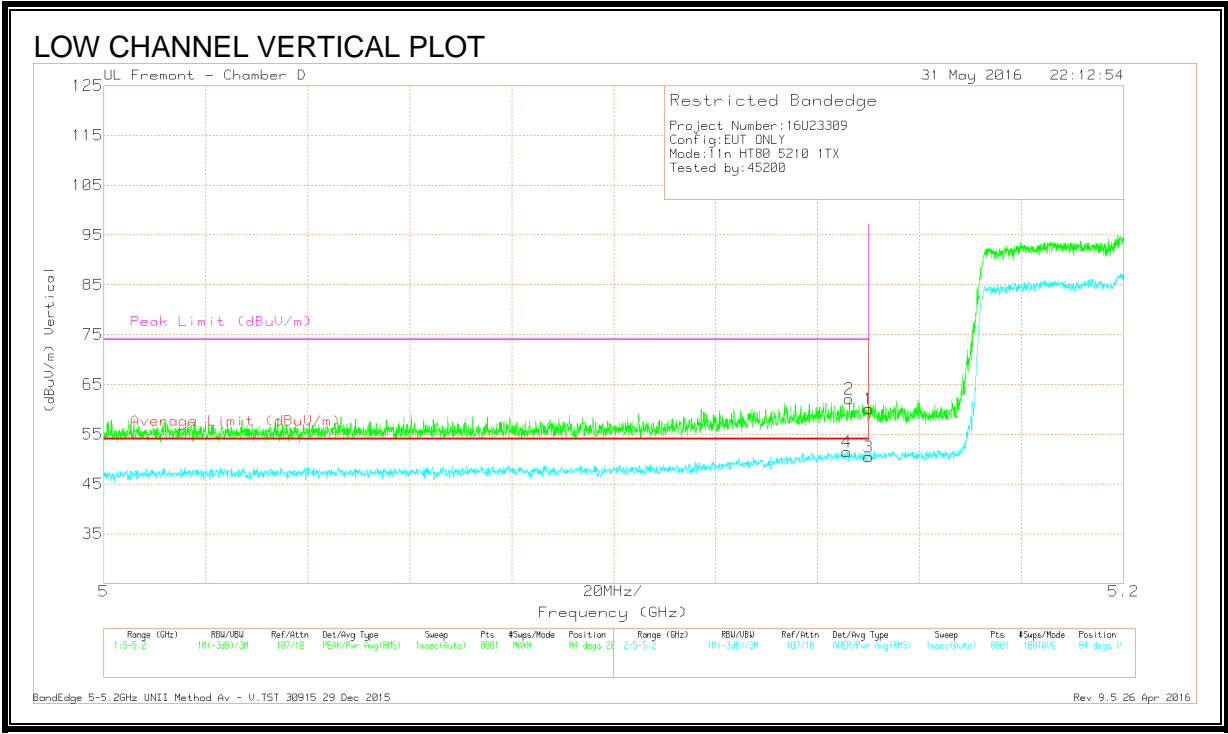
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (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	43.52	Pk	34.1	-18.2	0	59.42	-	-	74	-14.58	145	101	H
4	* 5.145	34.08	RMS	34.1	-18.2	.15	50.13	54	-3.87	-	-	145	101	H
1	5.15	40.09	Pk	34.1	-18.2	0	55.99	-	-	74	-18.01	145	101	H
3	5.15	33.01	RMS	34.1	-18.2	.15	49.06	54	-4.94	-	-	145	101	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection



DATA

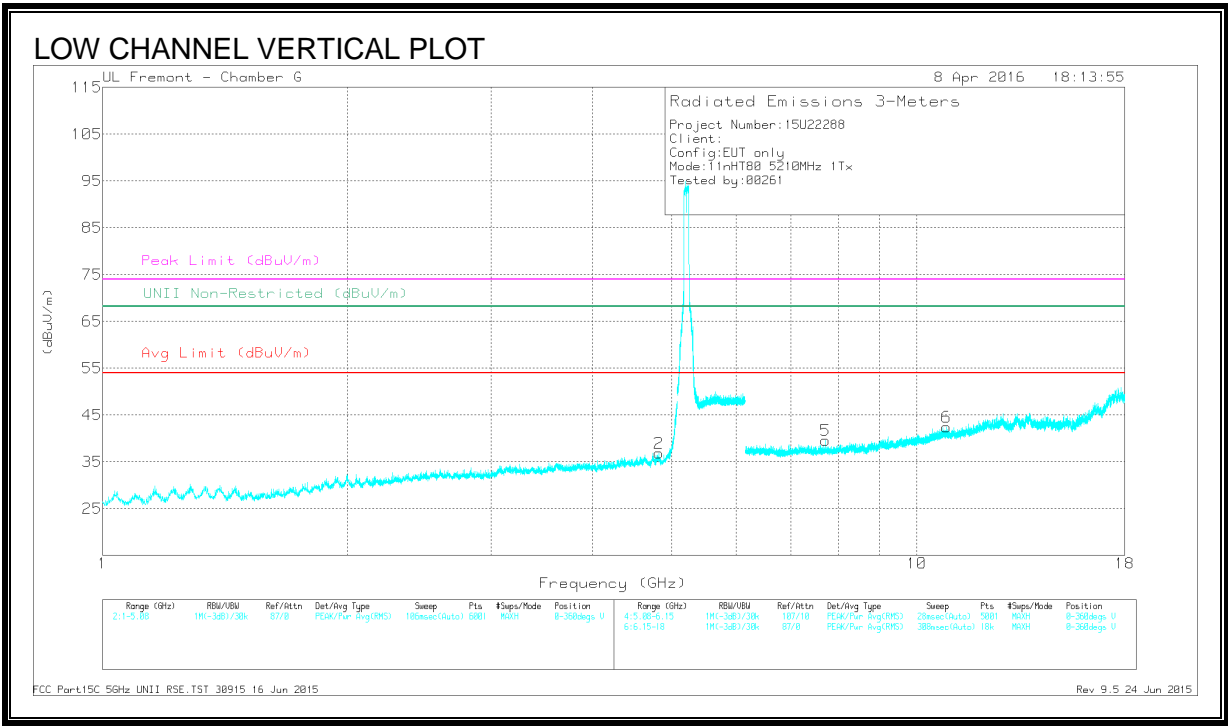
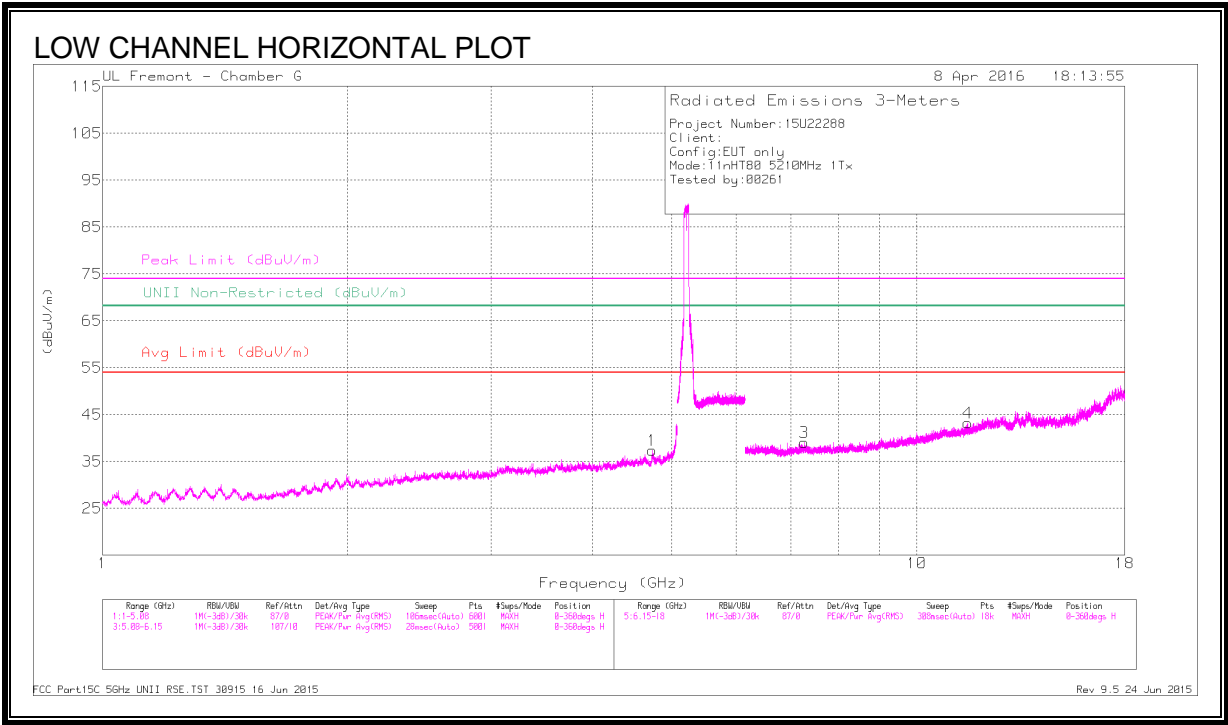
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.146	46.17	Pk	34.1	-18.2	62.07	-	-	74	-11.93	84	284	V
4	* 5.146	35.55	RMS	34.1	-18.2	51.45	54	-2.55	-	-	84	284	V
1	5.15	44.17	Pk	34.1	-18.2	60.07	-	-	74	-13.93	84	284	V
3	5.15	34.52	RMS	34.1	-18.2	50.42	54	-3.58	-	-	84	284	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

Maker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	DC Corr (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	* 4.732	42.24	PK-U	33.9	-31.9	0	44.24	-	-	74	-29.76	-	-	319	153	H
	* 4.736	29.74	ADR	33.9	-31.9	.15	31.89	54	-22.11	-	-	-	-	319	153	H
2	* 4.821	41.94	PK-U	34	-32.2	0	43.74	-	-	74	-30.26	-	-	222	146	V
	* 4.824	30.59	ADR	34	-32.1	.15	32.64	54	-21.36	-	-	-	-	222	146	V
3	* 7.274	40.87	PK-U	35.6	-30.8	0	45.67	-	-	74	-28.33	-	-	266	176	H
	* 7.276	29.08	ADR	35.6	-30.8	.15	34.03	54	-19.97	-	-	-	-	266	176	H
4	* 11.542	37.3	PK-U	38.3	-26.4	0	49.2	-	-	74	-24.8	-	-	210	324	H
	* 11.546	25.47	ADR	38.3	-26.4	.15	37.52	54	-16.48	-	-	-	-	210	324	H
5	* 7.717	40.35	PK-U	35.6	-30.2	0	45.75	-	-	74	-28.25	-	-	307	127	V
	* 7.719	28.62	ADR	35.6	-30.3	.15	34.07	54	-19.93	-	-	-	-	307	127	V
6	* 10.873	37.39	PK-U	37.9	-26.5	0	48.79	-	-	74	-25.21	-	-	193	365	V
	* 10.872	25.44	ADR	37.9	-26.4	.15	37.09	54	-16.91	-	-	-	-	193	365	V

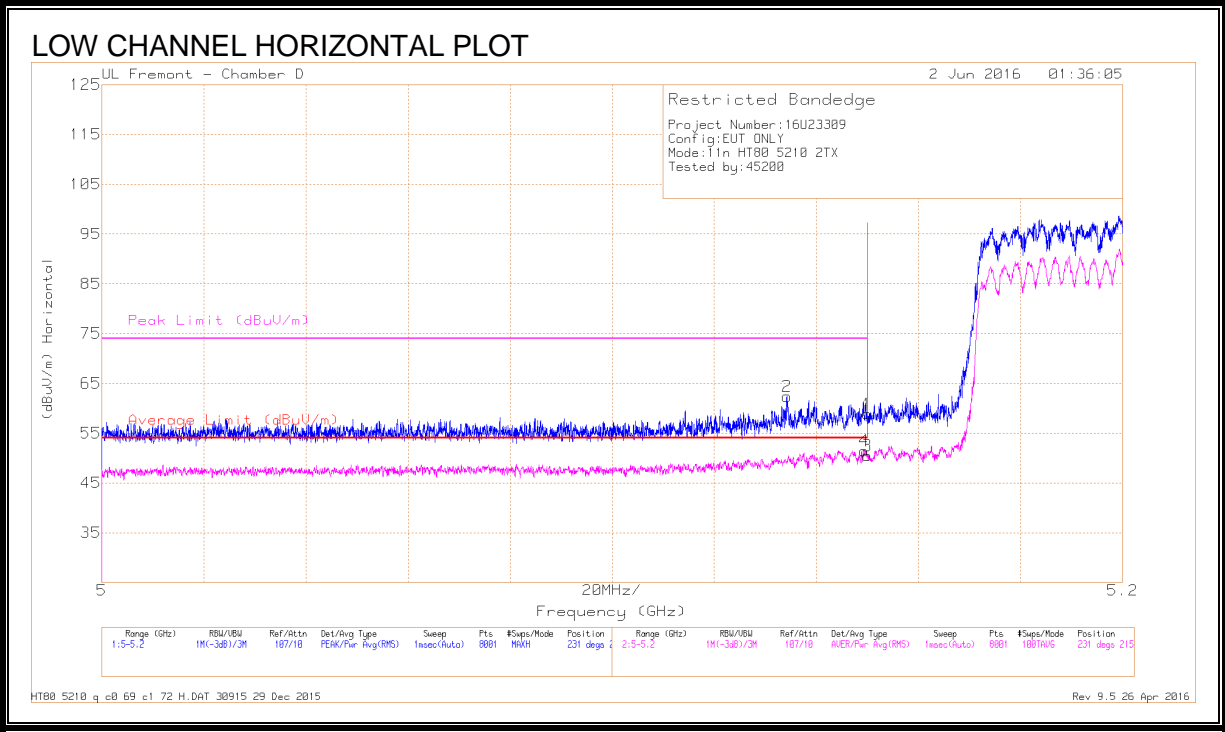
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

8.7.802.11ac VHT80 2Tx CDD MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL, CH 42)



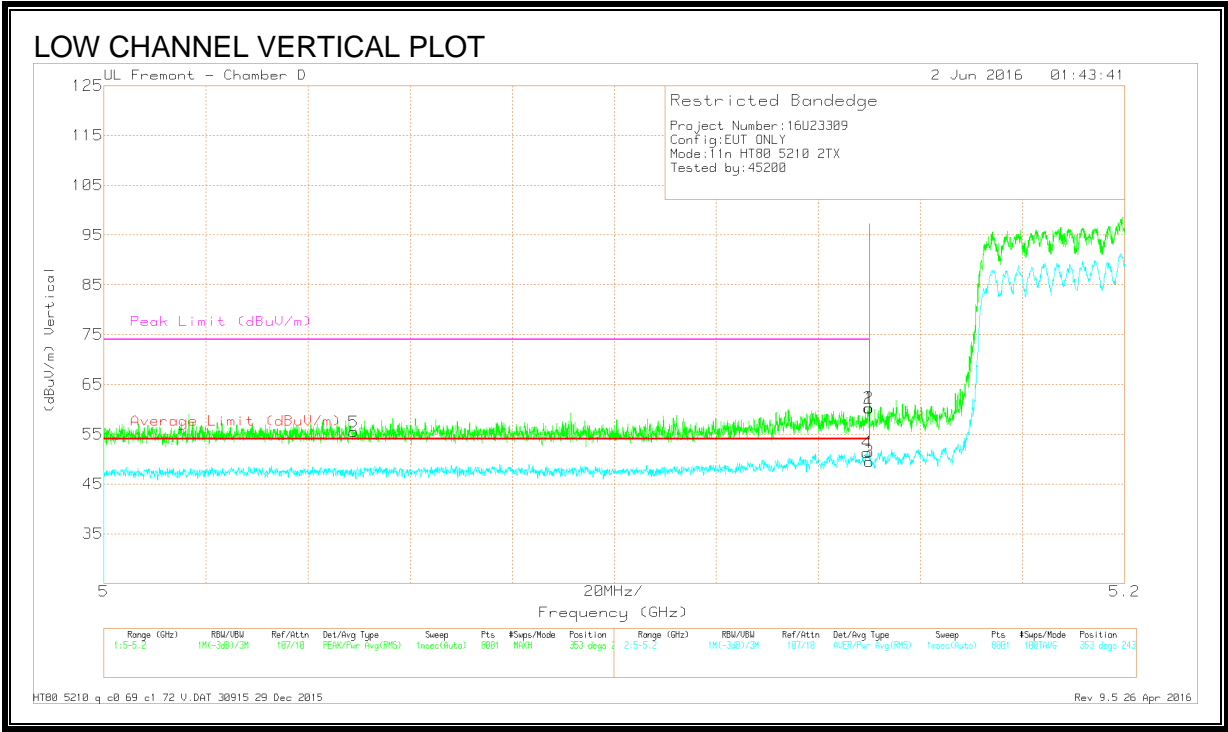
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cb/Filtz/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.134	46.47	Pk	34.1	-18.2	0	62.37	-	-	74	-11.63	231	215	H
4	* 5.149	35.57	RMS	34.1	-18.2	.19	51.67	54	-2.33	-	-	231	215	H
1	5.15	42.97	Pk	34.1	-18.2	0	58.87	-	-	74	-15.13	231	215	H
3	5.15	34.59	RMS	34.1	-18.2	.19	50.69	54	-3.31	-	-	231	215	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cb/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.15	44.37	Pk	34.1	-18.2	0	60.27	-	-	74	-13.73	353	243	V
5	* 5.049	39.46	Pk	34	-18	0	55.46	-	-	74	-18.54	353	243	V
4	* 5.15	35.43	RMS	34.1	-18.2	.2	51.53	54	-2.47	-	-	353	243	V
1	5.15	44.37	Pk	34.1	-18.2	0	60.27	-	-	74	-13.73	353	243	V
3	5.15	33.61	RMS	34.1	-18.2	.2	49.71	54	-4.29	-	-	353	243	V

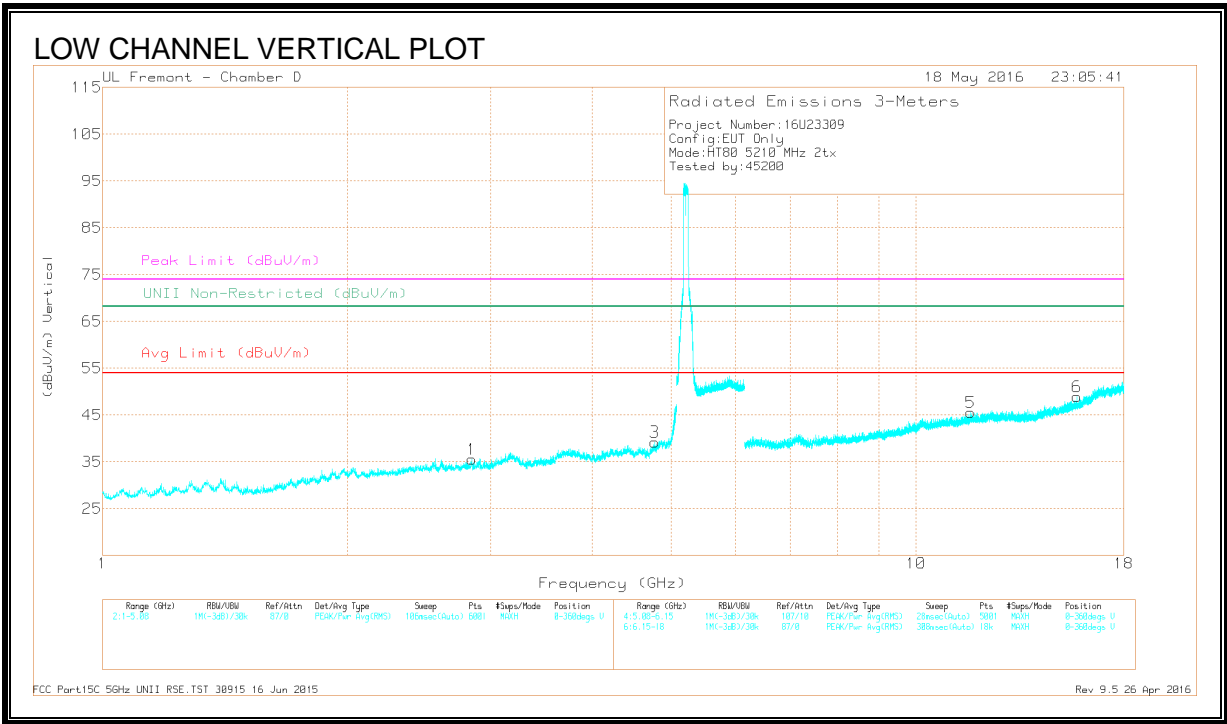
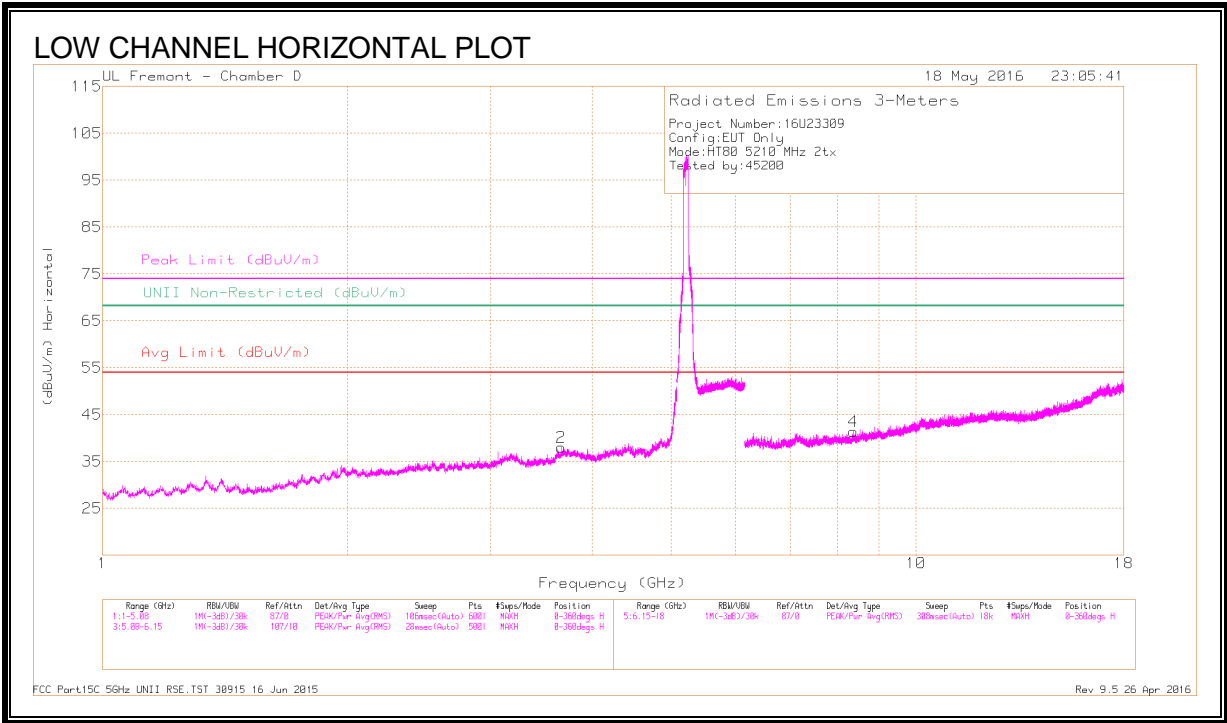
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection



LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS



## DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF 1712 (dB/m)	Amp/Ch/Flt/Pad (dB)	DC Corr (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
* 3.66	37.96	PK-U	33.4	-29	0	42.36	-	-	74	-31.64	-	-	64	137	H
* 3.662	27.81	ADR	33.4	-28.9	.19	32.51	54	-21.49	-	-	-	-	64	137	H
* 2.843	38.87	PK-U	32.3	-29.1	0	42.07	-	-	74	-31.93	-	-	274	385	V
* 2.842	28.1	ADR	32.3	-29.1	.19	31.5	54	-22.5	-	-	-	-	274	385	V
* 4.767	37.51	PK-U	34	-27.2	0	44.31	-	-	74	-29.69	-	-	126	221	V
* 4.768	27.68	ADR	34	-27.2	.19	34.68	54	-19.32	-	-	-	-	126	221	V
* 8.368	34.82	PK-U	35.8	-23.1	0	47.52	-	-	74	-26.48	-	-	51	312	H
* 8.37	24.4	ADR	35.8	-23.1	.19	37.3	54	-16.7	-	-	-	-	51	312	H
* 11.67	33.05	PK-U	38.6	-20.5	0	51.15	-	-	74	-22.85	-	-	314	242	V
* 11.67	23.27	ADR	38.6	-20.5	.19	41.57	54	-12.43	-	-	-	-	314	242	V
* 15.757	33.85	PK-U	40.3	-20	0	54.15	-	-	74	-19.85	-	-	75	176	V
* 15.757	24.03	ADR	40.3	-20	.19	44.53	54	-9.47	-	-	-	-	75	176	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average