

### 8.31.2. 99% BANDWIDTH

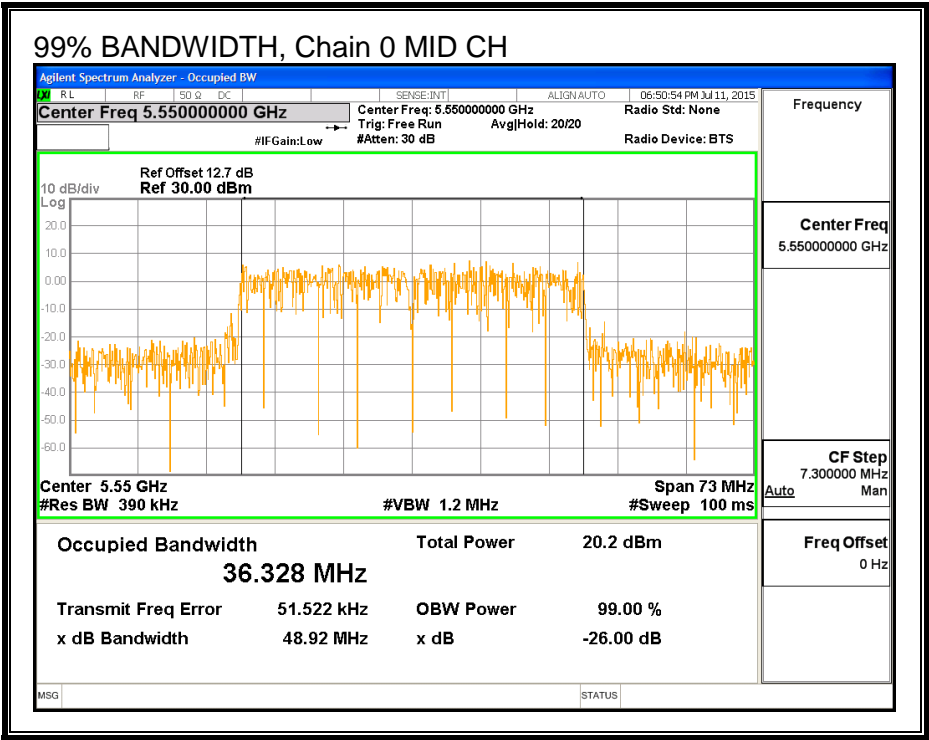
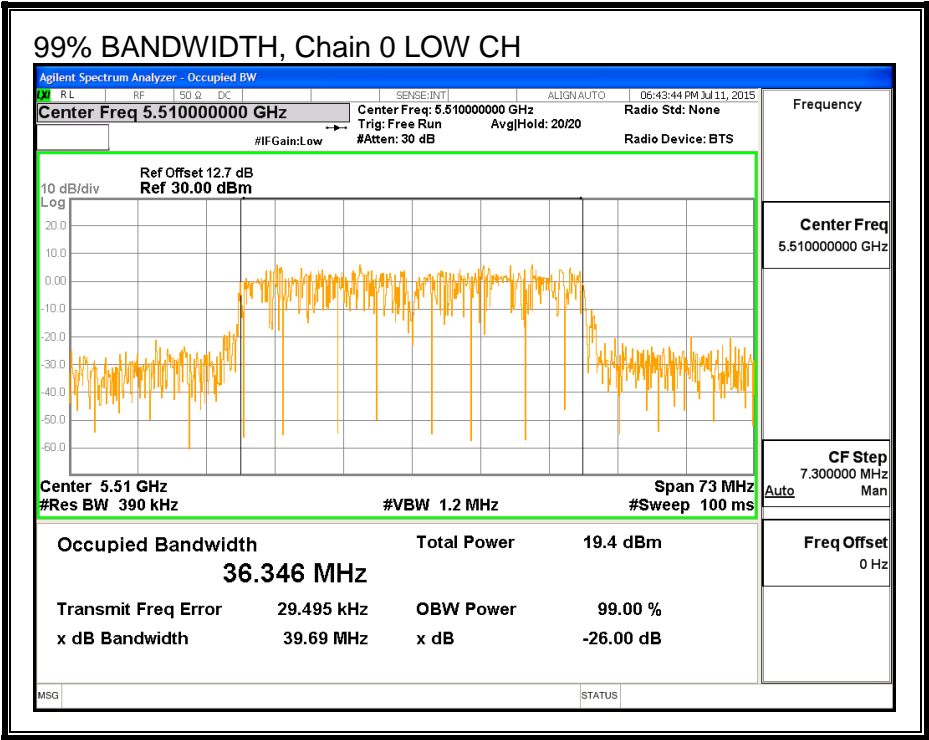
#### LIMITS

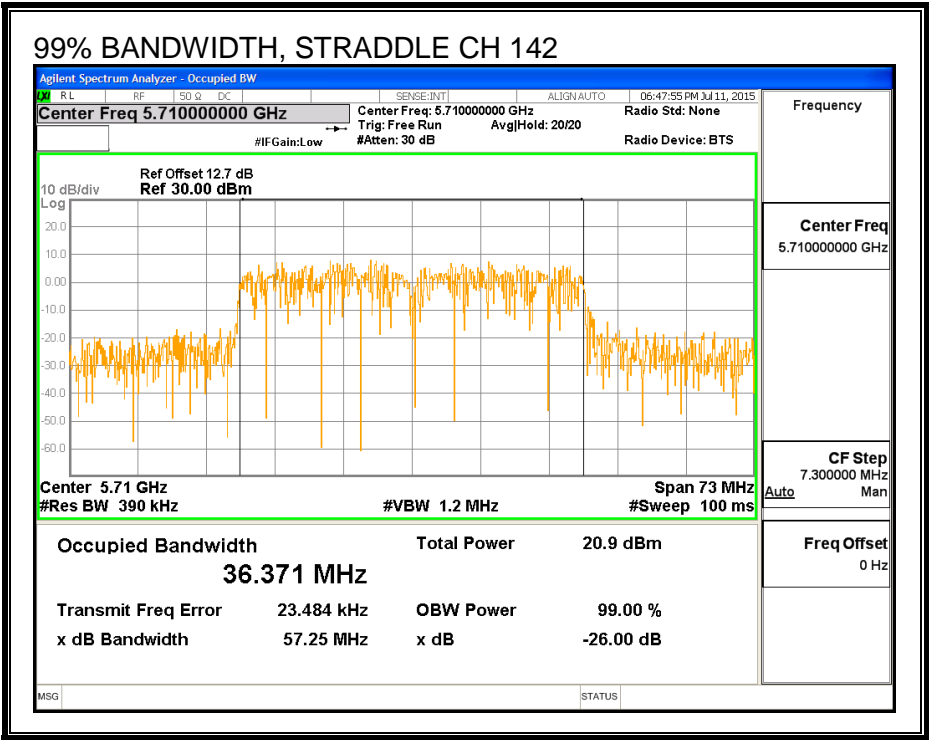
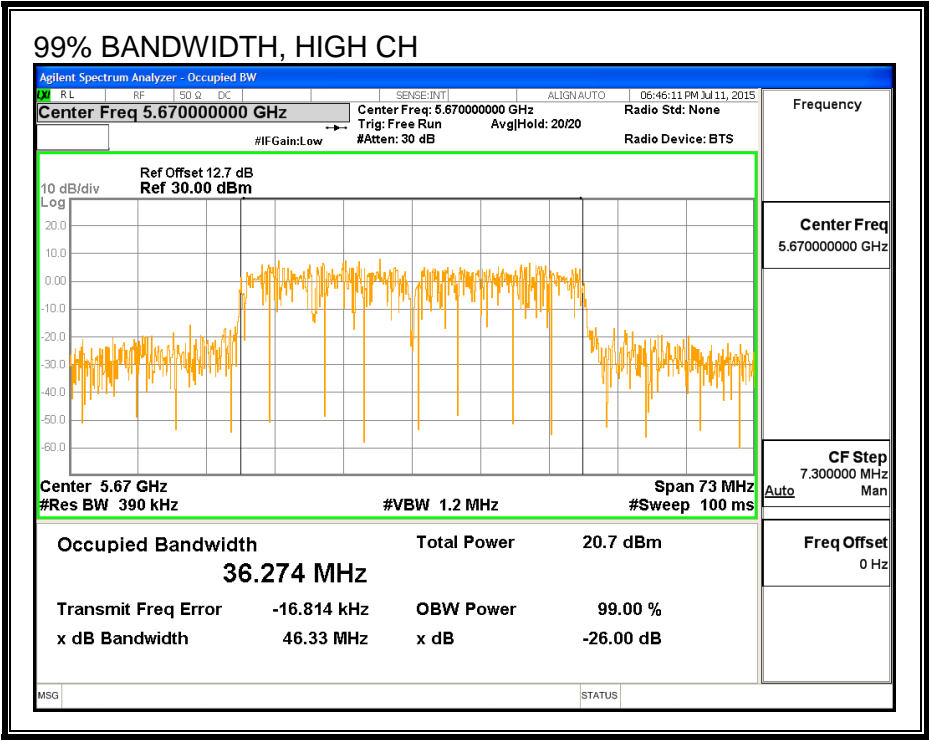
None; for reporting purposes only.

#### RESULTS

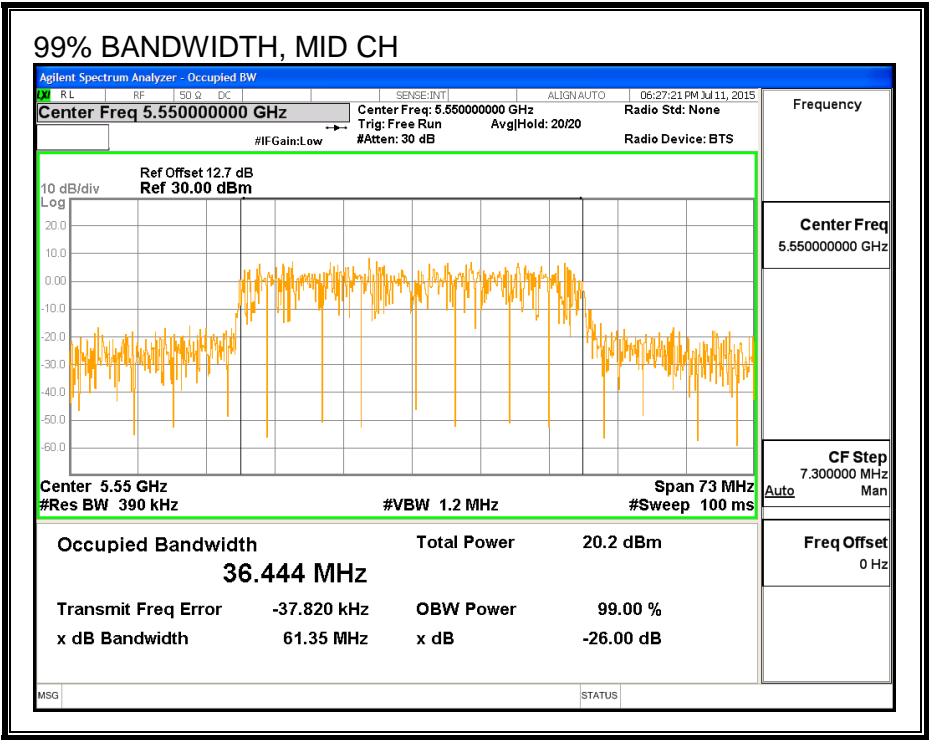
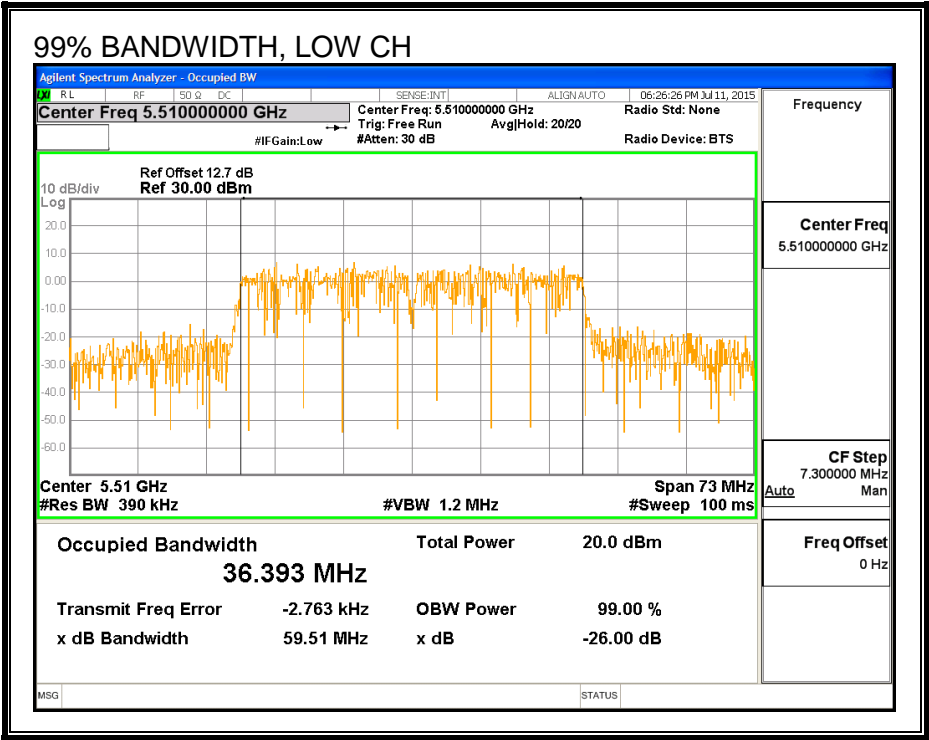
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5510	36.346	36.393
Mid	5550	36.328	36.444
High	5670	36.274	36.458
142	5710	36.371	36.358

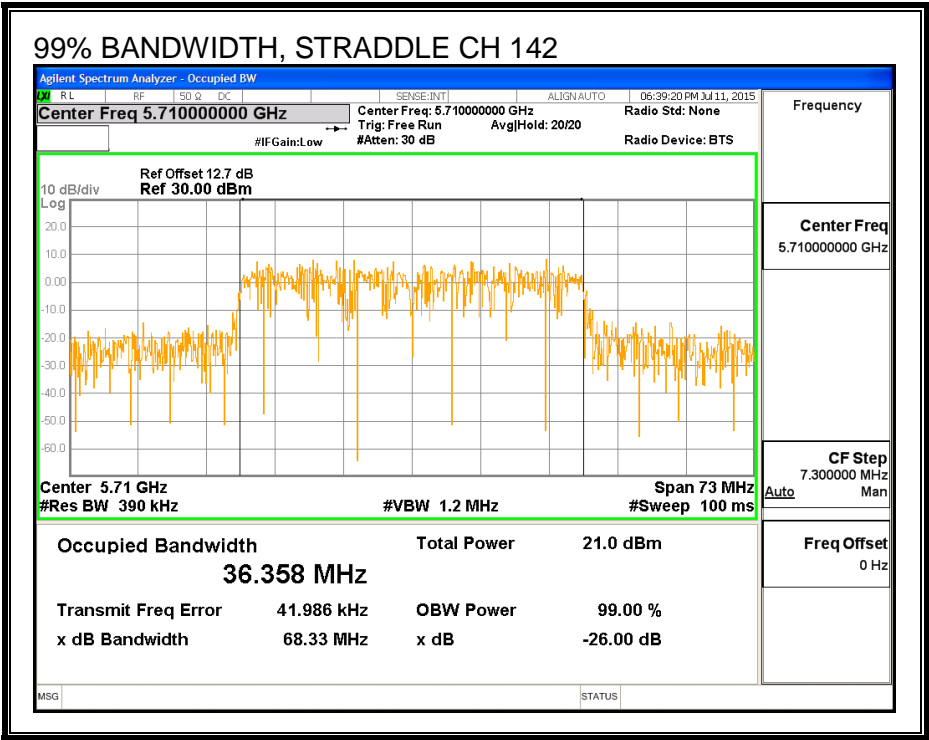
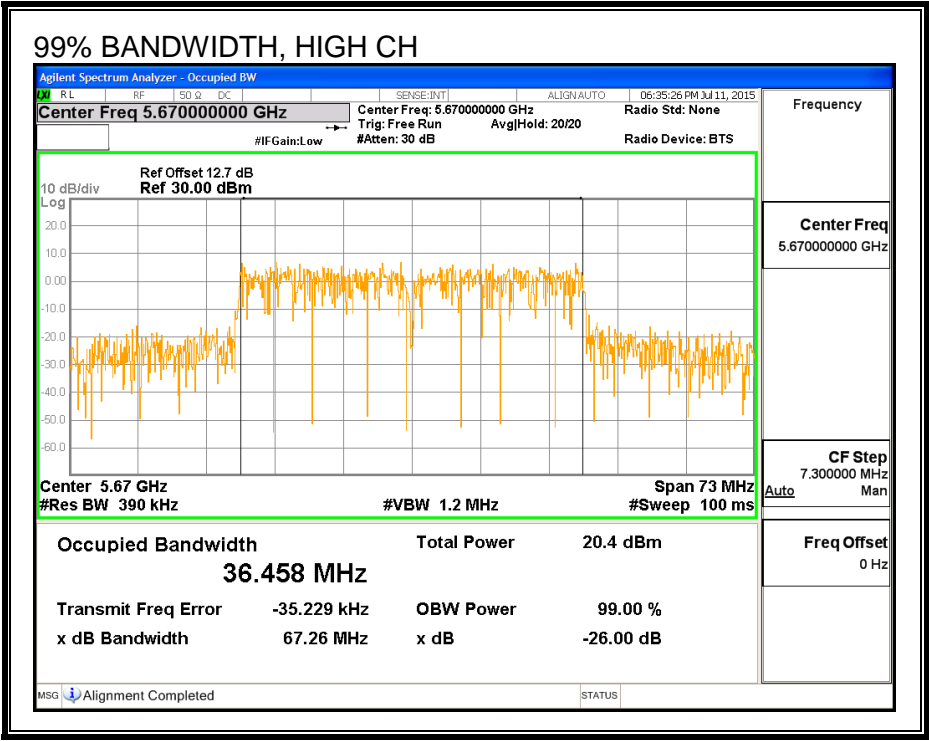
99% BANDWIDTH, CHAIN 0





99% BANDWIDTH, CHAIN 1





### 8.31.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5510	13.95	13.93	16.95
Mid	5590	17.39	17.96	20.69
High	5670	14.96	14.92	17.95
142	5710	17.41	17.97	20.71

#### 8.31.4. OUTPUT POWER AND PSD

##### LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-247 (6.2.3) (1)

The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

##### 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)
-0.12	0.27	0.08

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)
-0.12	0.27	3.09



## RESULTS

### Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5510	40.46	36.393	0.08	3.09	24.00	11.00
Mid	5550	40.60	36.444	0.08	3.09	24.00	11.00
High	5670	40.32	36.458	0.08	3.09	24.00	11.00

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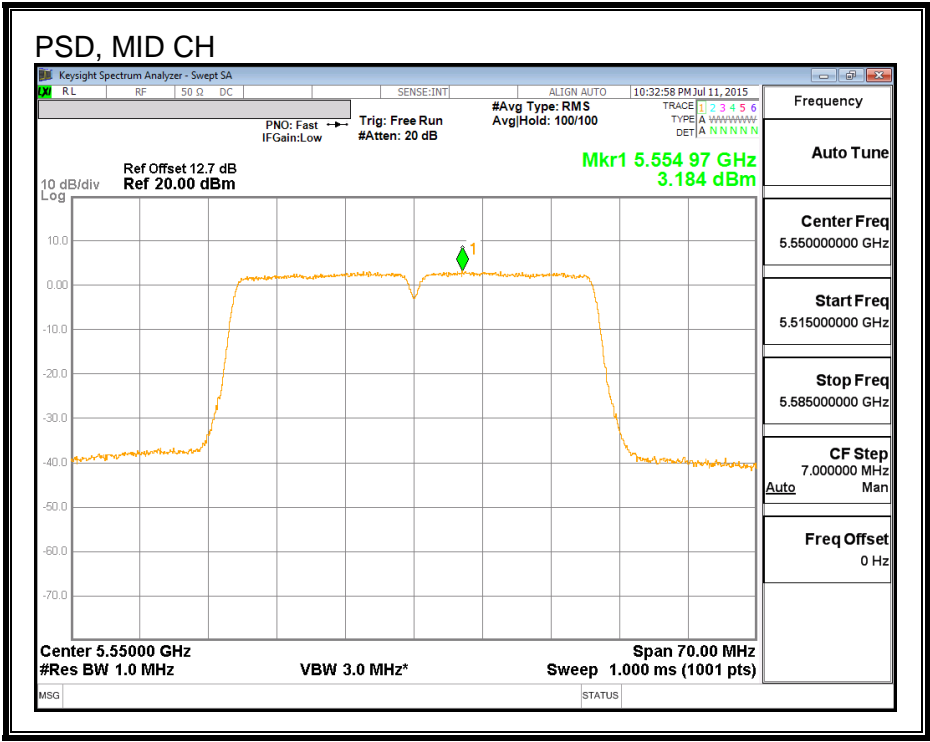
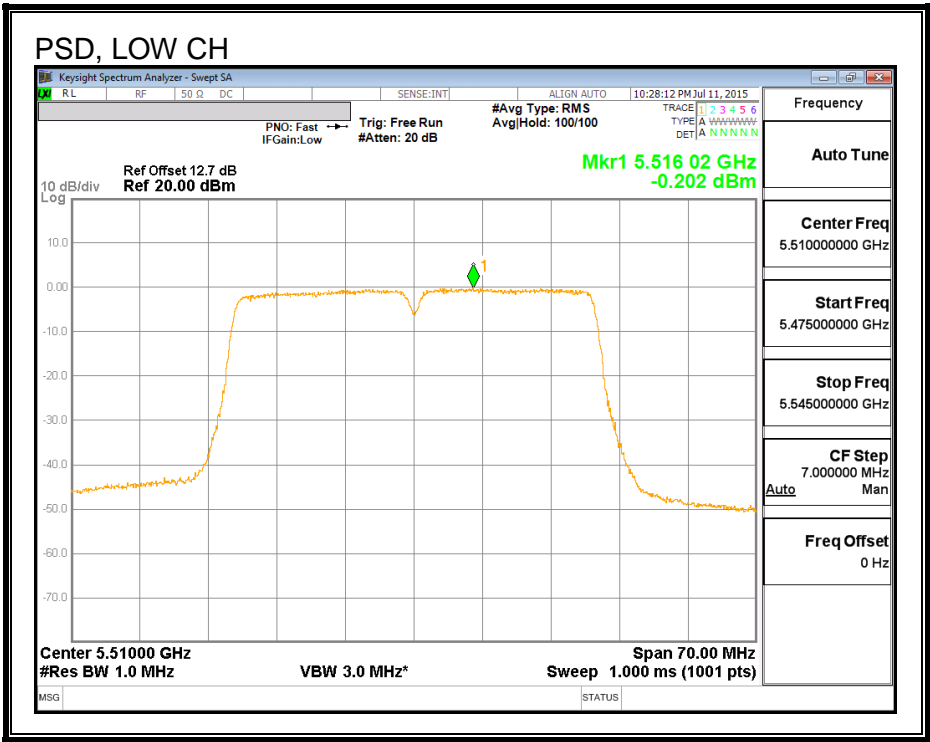
### Output Power Results

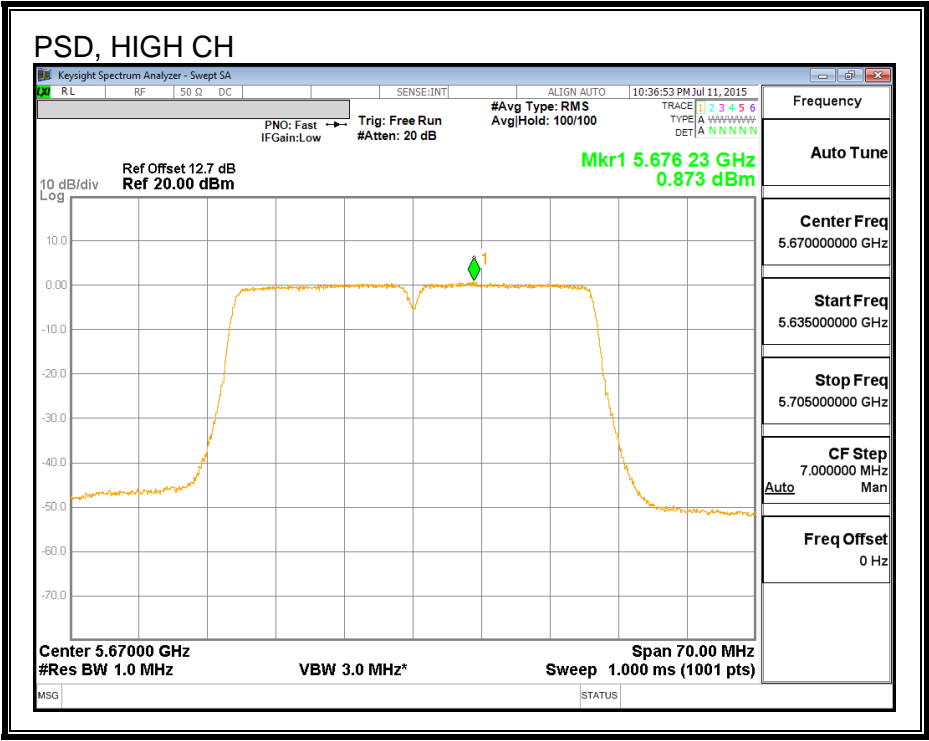
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	13.95	13.93	16.95	24.00	-7.05
Mid	5550	17.39	17.96	20.69	24.00	-3.31
High	5670	14.96	14.92	17.95	24.00	-6.05

### PSD Results

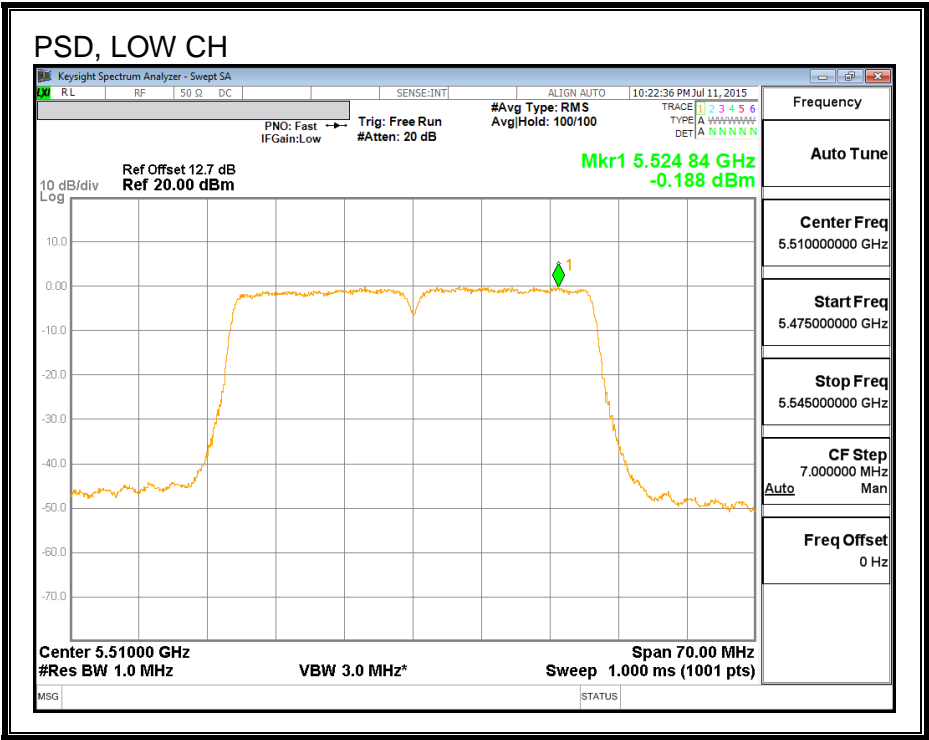
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5510	-0.20	-0.19	2.82	11.00	-8.18
Mid	5550	3.18	3.63	6.42	11.00	-4.58
High	5670	0.87	0.82	3.86	11.00	-7.14

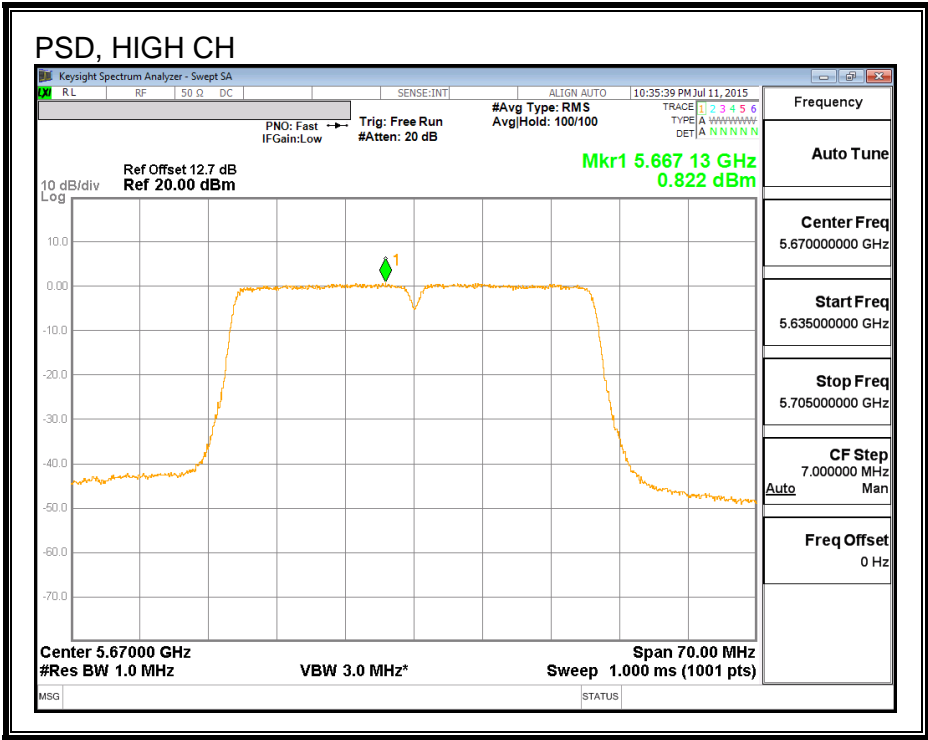
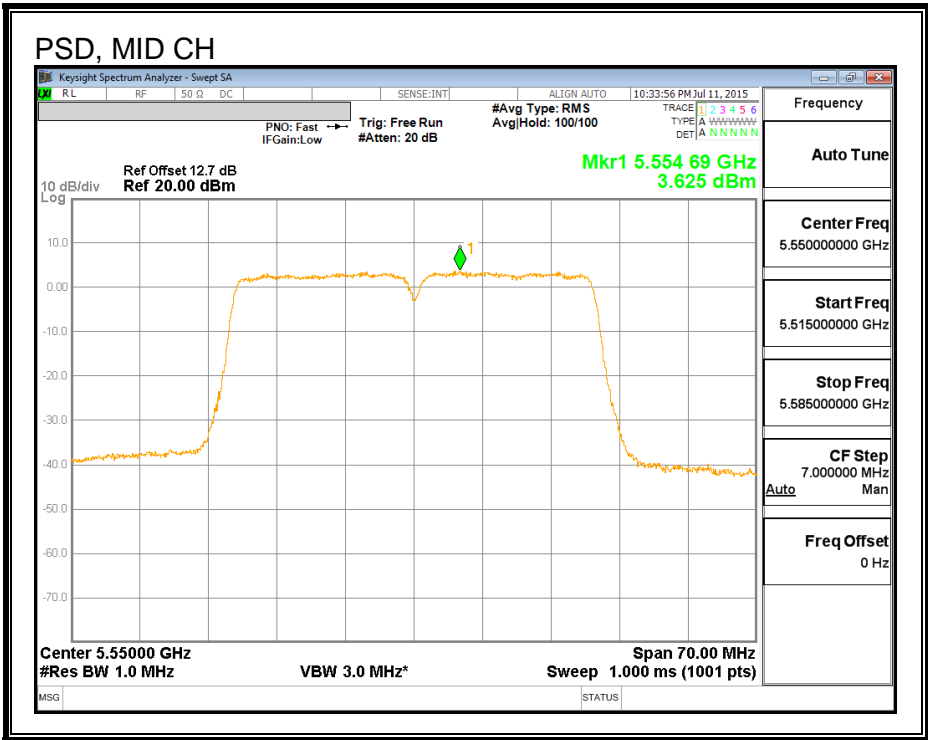
OUTPUT POWER AND PSD, CHAIN 0





OUTPUT POWER AND PSD, CHAIN 1





### 8.31.5. STRADDLE CHANNEL 142 RESULTS

#### UNII-2C BAND

##### Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
142	5710	34.95	0.08	3.09	24.00	11.00

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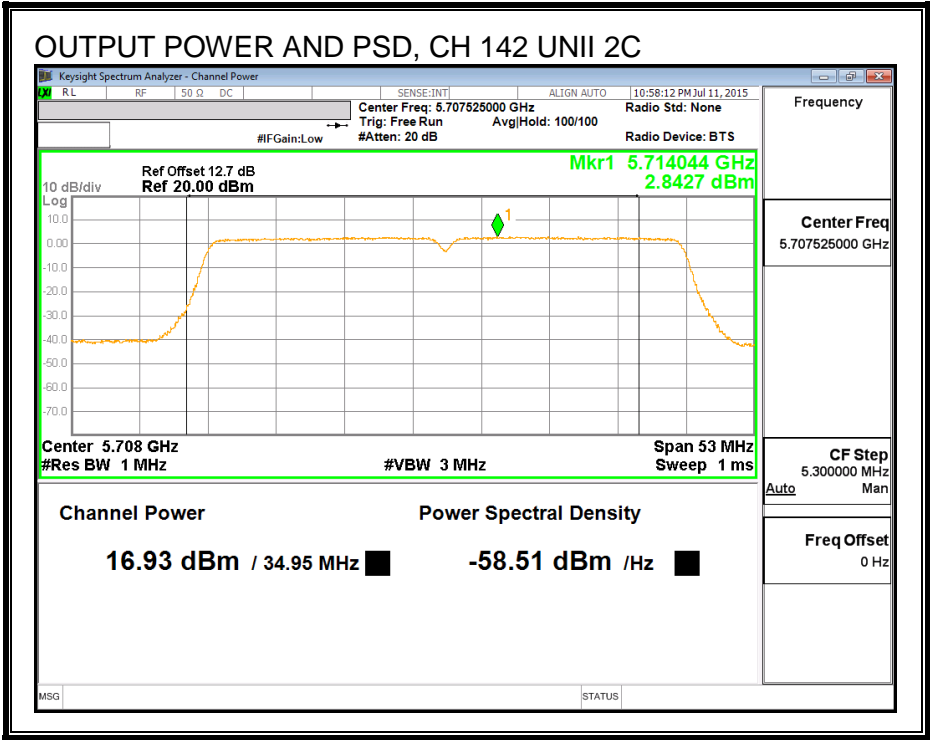
##### Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
142	5710	16.93	17.60	20.29	24.00	-3.71

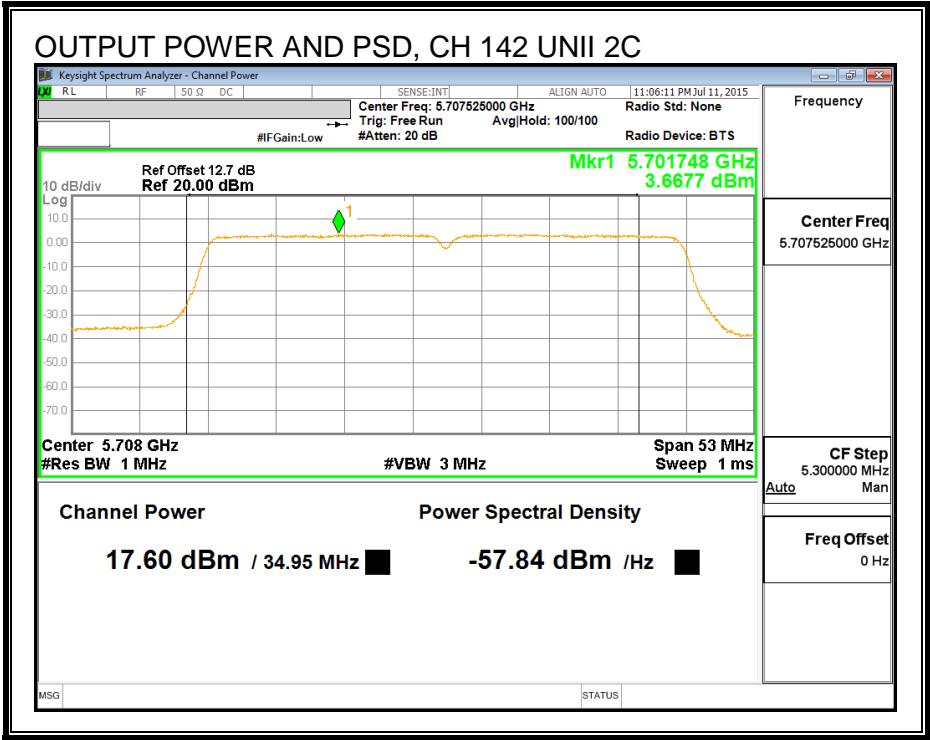
##### PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
142	5710	2.84	3.67	6.29	11.00	-4.71

OUTPUT POWER AND PSD, CHAIN 0



OUTPUT POWER AND PSD, CHAIN 1



# **UNII-3 BAND**

## **Antenna Gain and Limit**

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain For Power (dBi)	Directional Gain For PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
142	5710	4.95	-0.10	3.00	30.00	30.00

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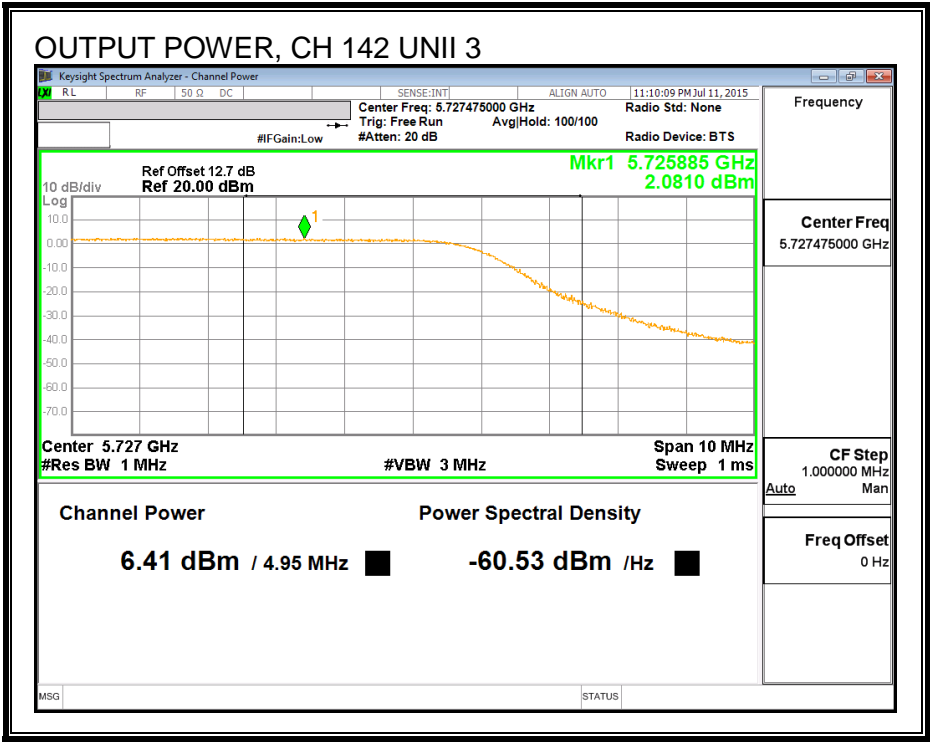
## **Output Power Results**

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
142	5710	6.41	6.80	9.62	30.00	-20.38

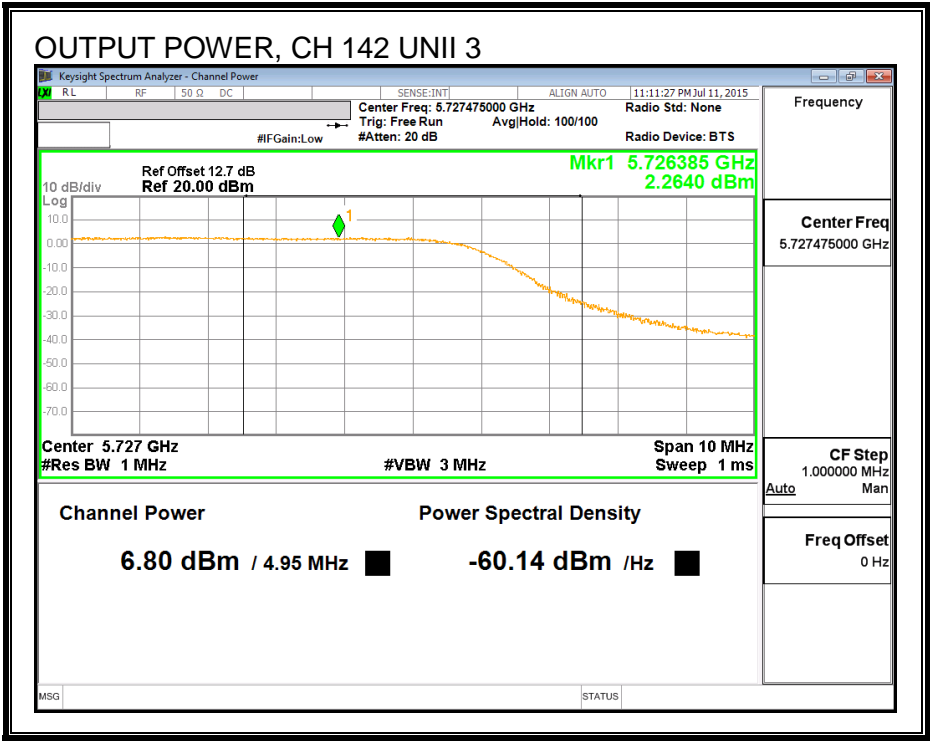
## **PSD Results**

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
142	5710	-1.18	-0.79	2.03	30.00	-27.97

OUTPUT POWER, CHAIN 0

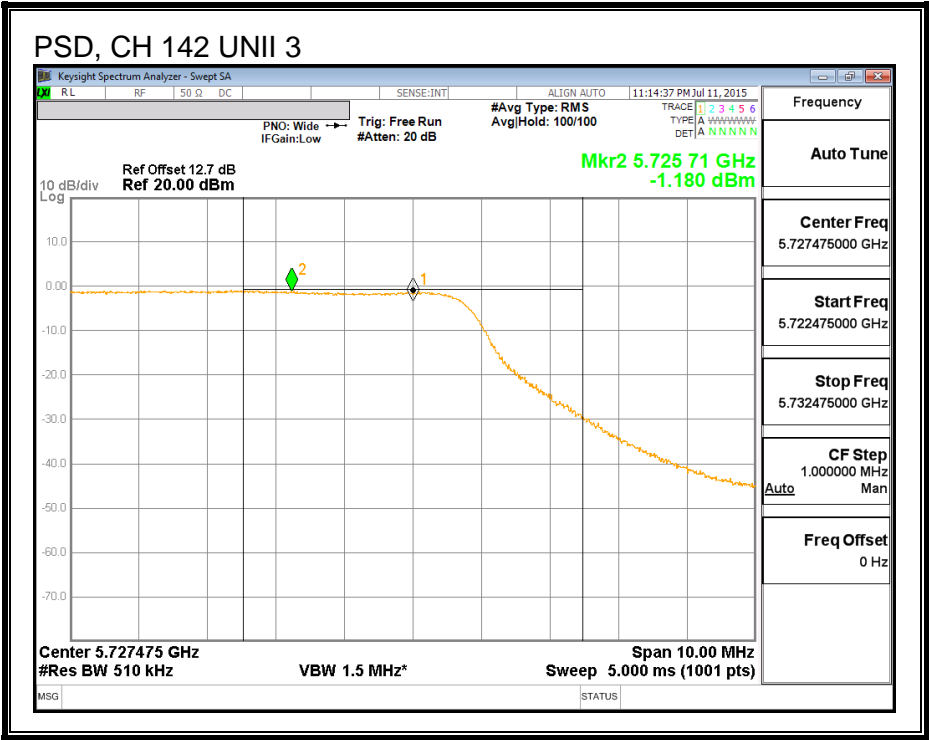


OUTPUT POWER, CHAIN 1

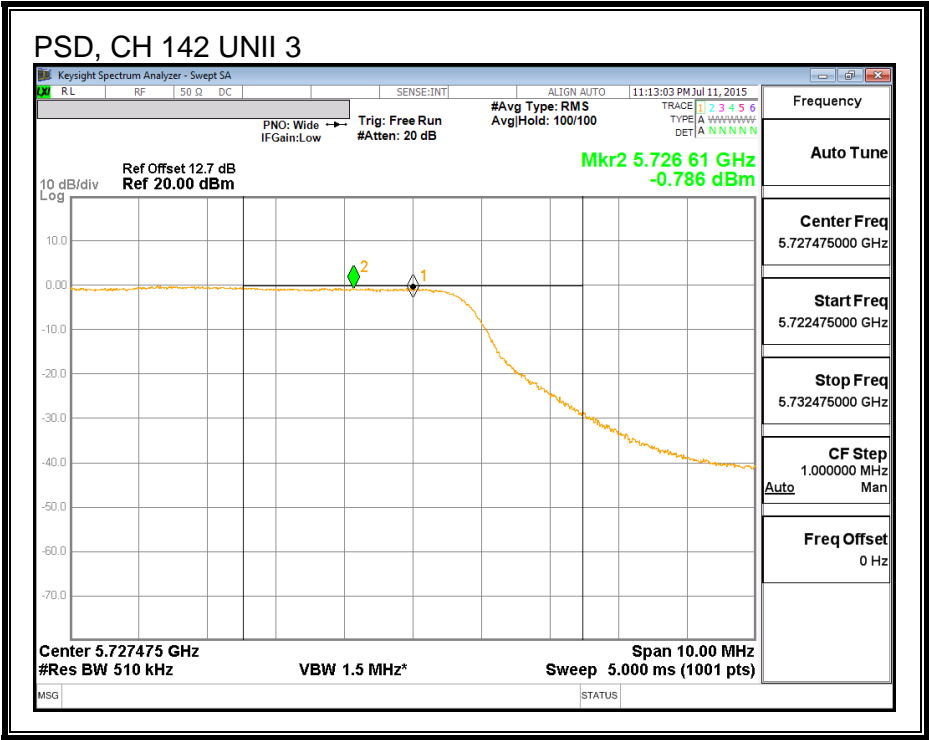




PSD, CHAIN 0



PSD, CHAIN 1



### **8.31.6. 6 dB BBANDWIDTH**

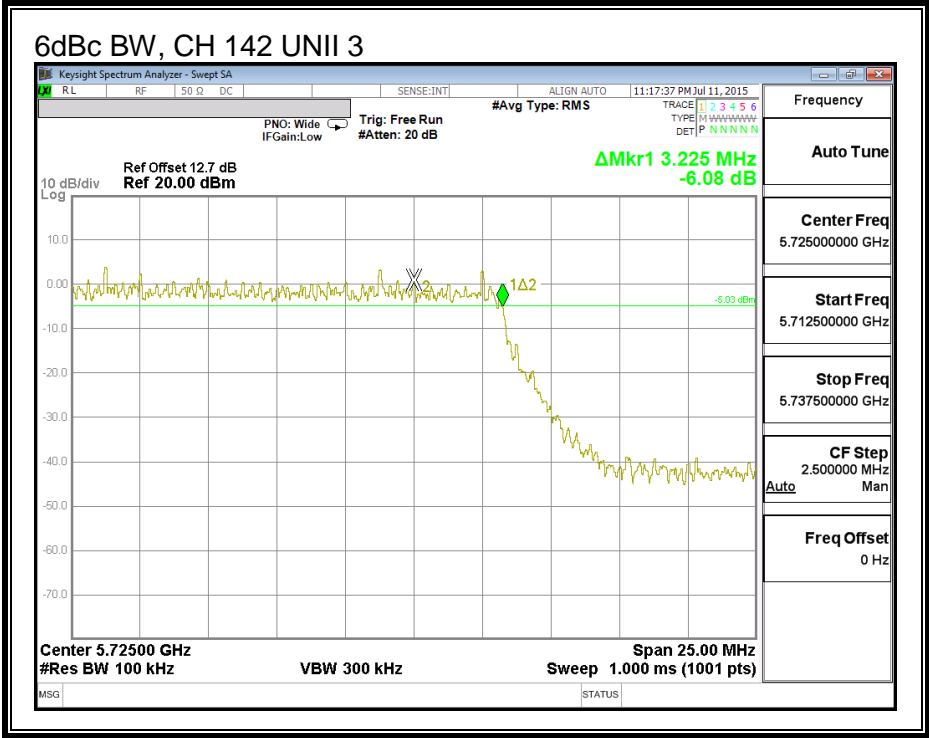
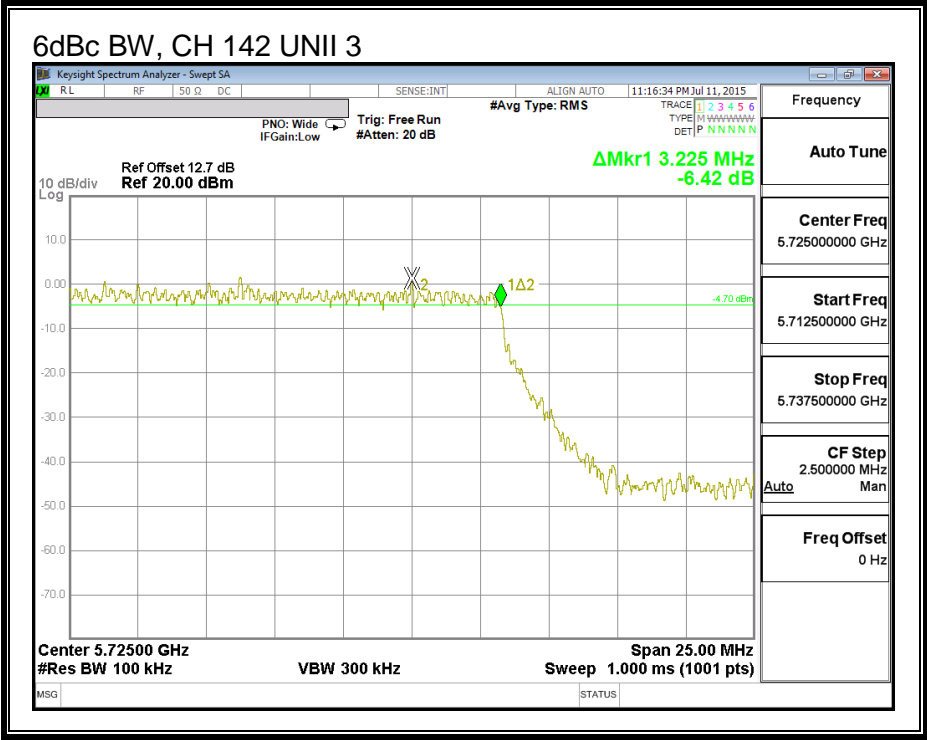
#### **LIMITS**

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

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

#### **RESULTS**



### **8.32. 802.11n HT40 2Tx STBC MODE IN THE 5.6 GHz BAND**

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

### **8.33. 802.11ac HT80 CHAIN 0 MODE IN THE 5.6 GHz BAND**

#### **8.33.1. 26 dB BANDWIDTH**

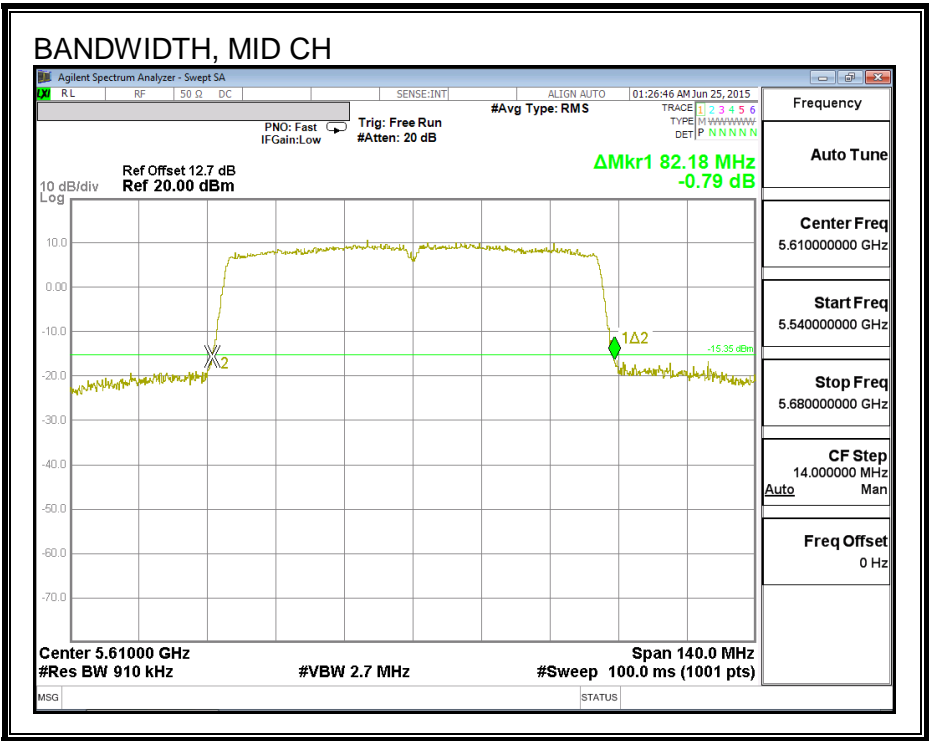
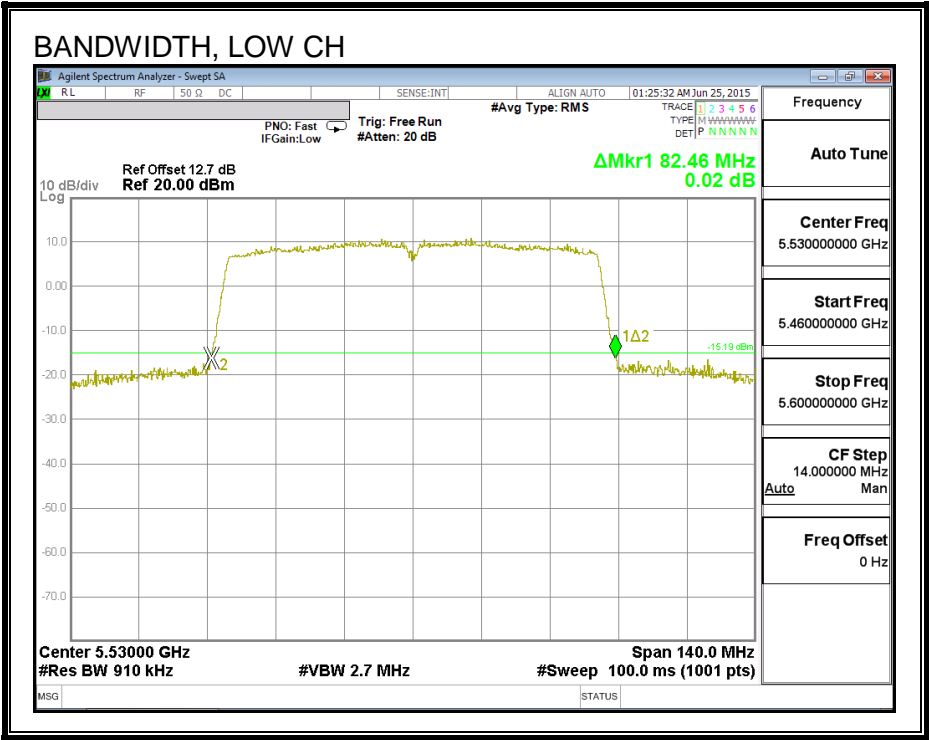
##### **LIMITS**

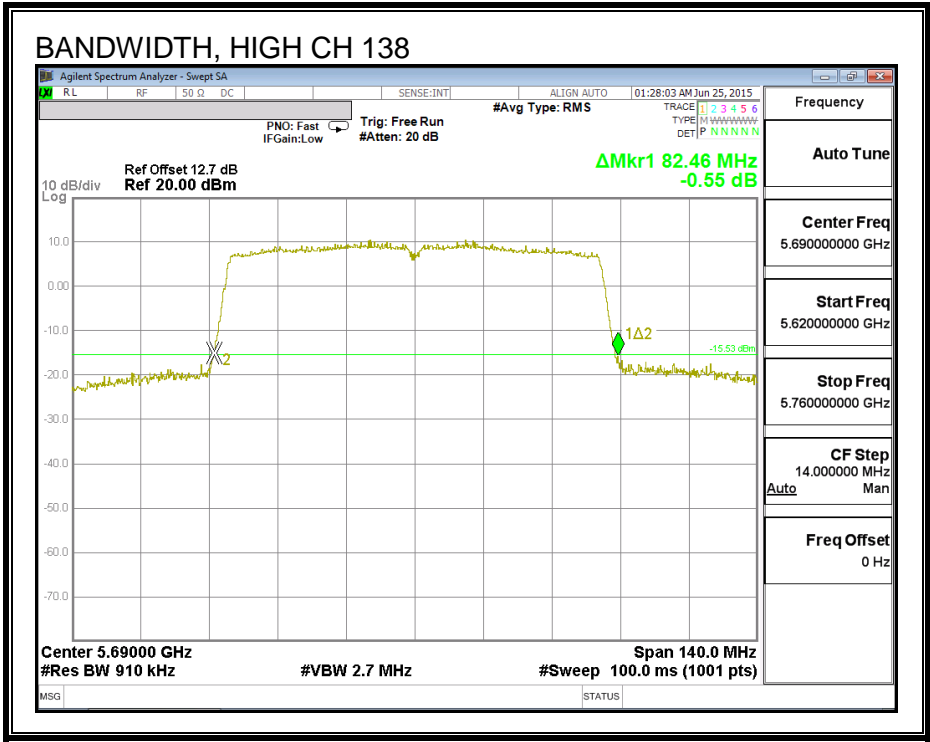
None; for reporting purposes only.

##### **RESULTS**

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5530	82.46
Mid	5610	82.18
High	5690	82.46

26 dB BANDWIDTH





### 8.33.2. 99% BANDWIDTH

#### LIMITS

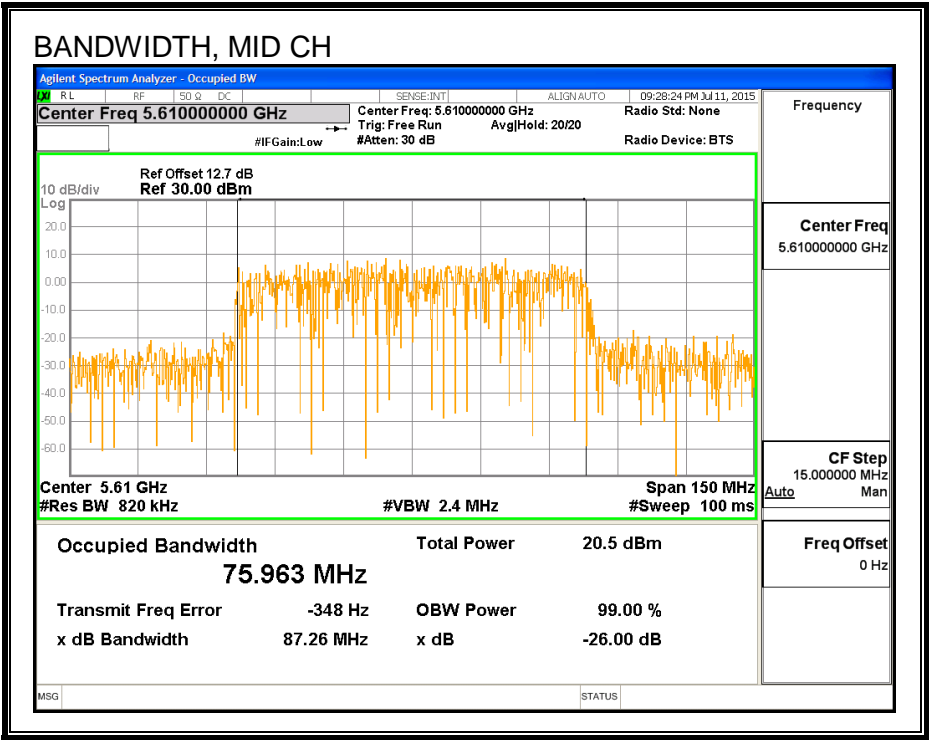
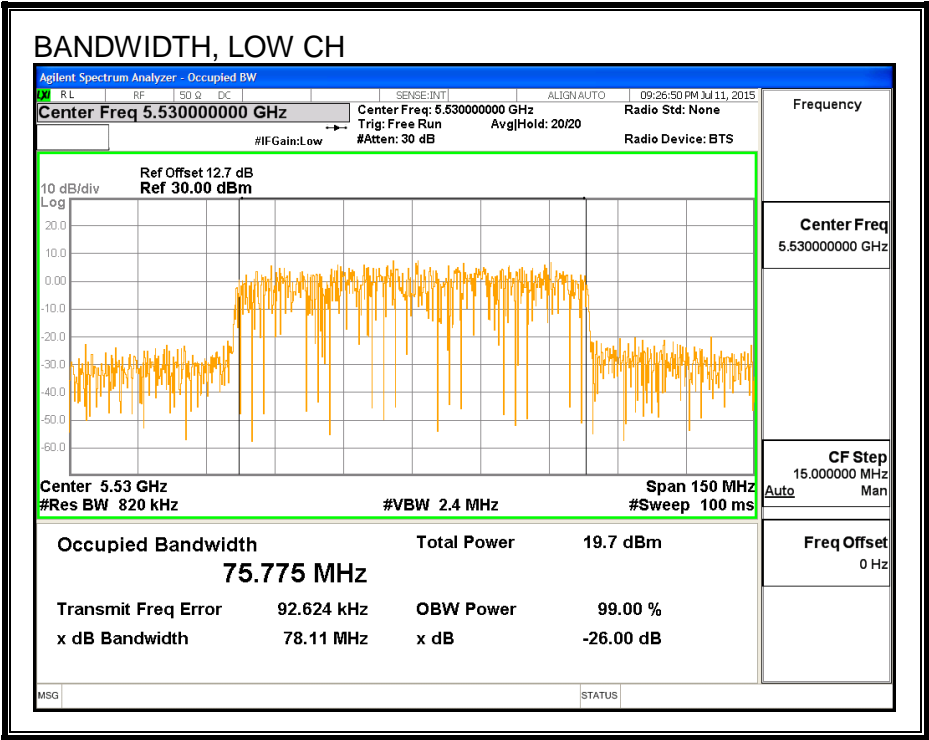
None; for reporting purposes only.

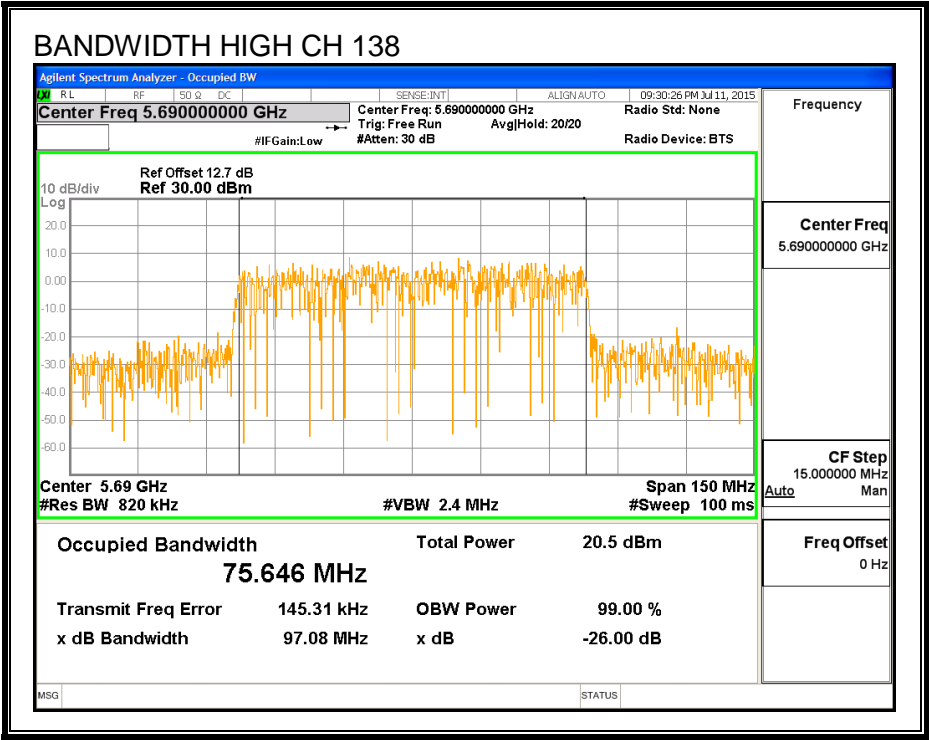
#### RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5530	75.775
Mid	5610	75.963
High	5690	75.646



99% BANDWIDTH





### 8.33.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5530	12.97
Mid	5610	17.45
High	5690	17.42

#### **8.33.4. OUTPUT POWER AND PSD**

##### **LIMITS**

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-247 (6.2.3) (1)

The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

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

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

## RESULTS

### Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5530	82.46	75.775	-0.12	24.00	11.00
High	5610	82.18	75.963	-0.12	24.00	11.00

Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd Power & PSD
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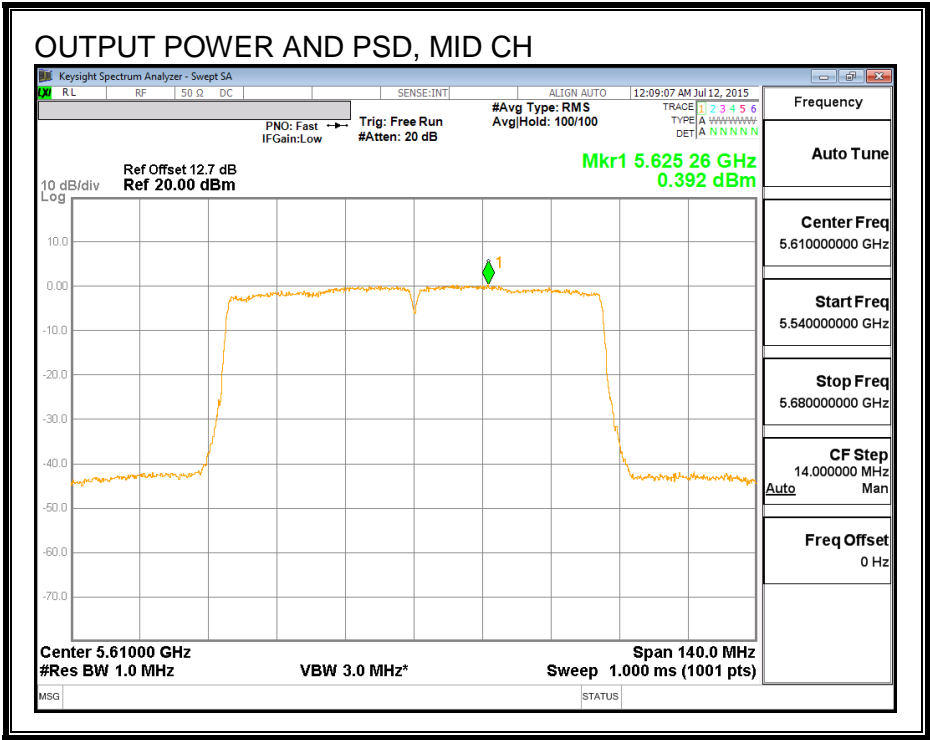
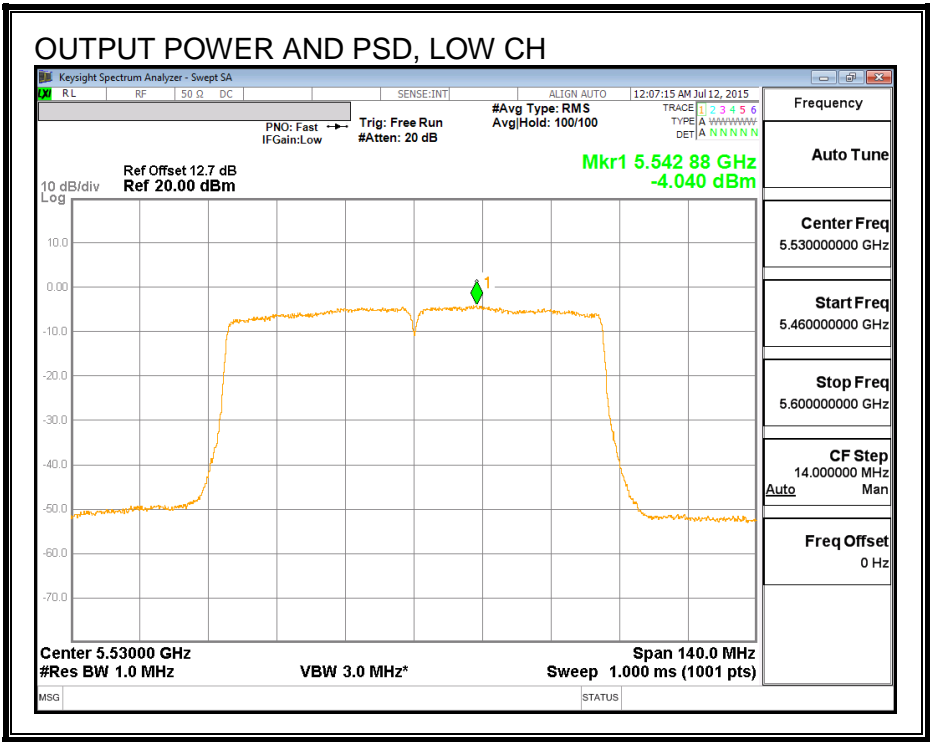
### Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5530	12.97	13.15	24.00	-10.85
High	5610	17.45	17.63	24.00	-6.37

### PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5530	-4.04	-3.86	11.00	-14.86
High	5610	0.39	0.57	11.00	-10.43

OUTPUT POWER AND PSD,



### 8.33.5. STRADDLE CHANNEL 138 RESULTS

#### UNII-2C BAND

##### Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
138	5690	76.23	-0.12	-0.12	24.00	11.00

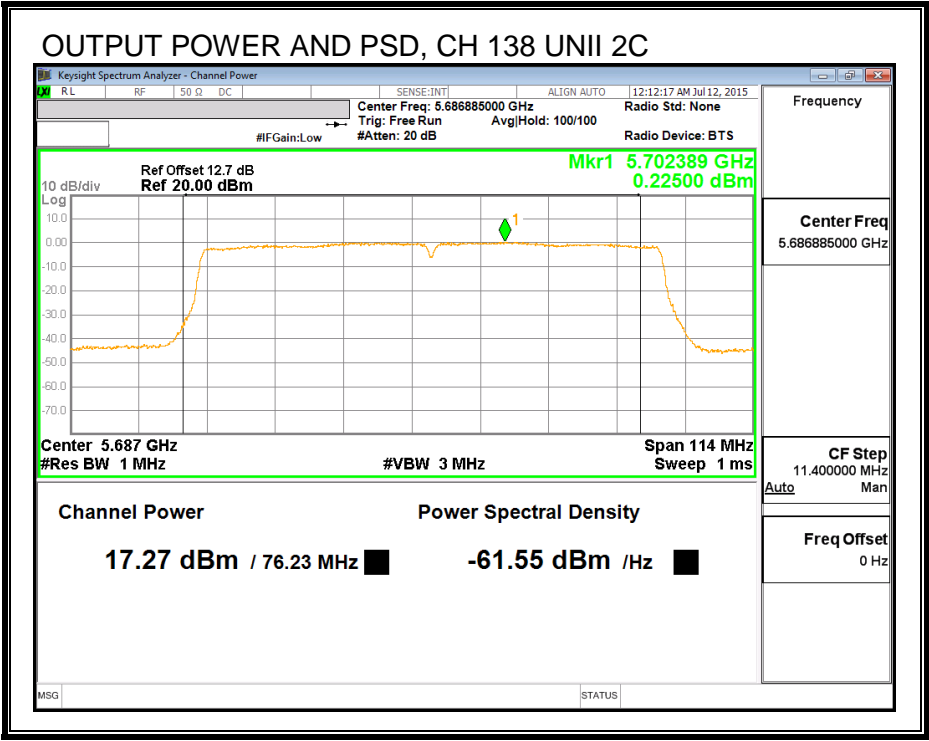
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd Power & PSD
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##### Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	17.27	17.45	24.00	-6.55

##### PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
138	5690	0.23	0.41	11.00	-10.60





# **UNII-3 BAND**

## **Antenna Gain and Limit**

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
138	5690	6.23	-0.10	30.00	30.00

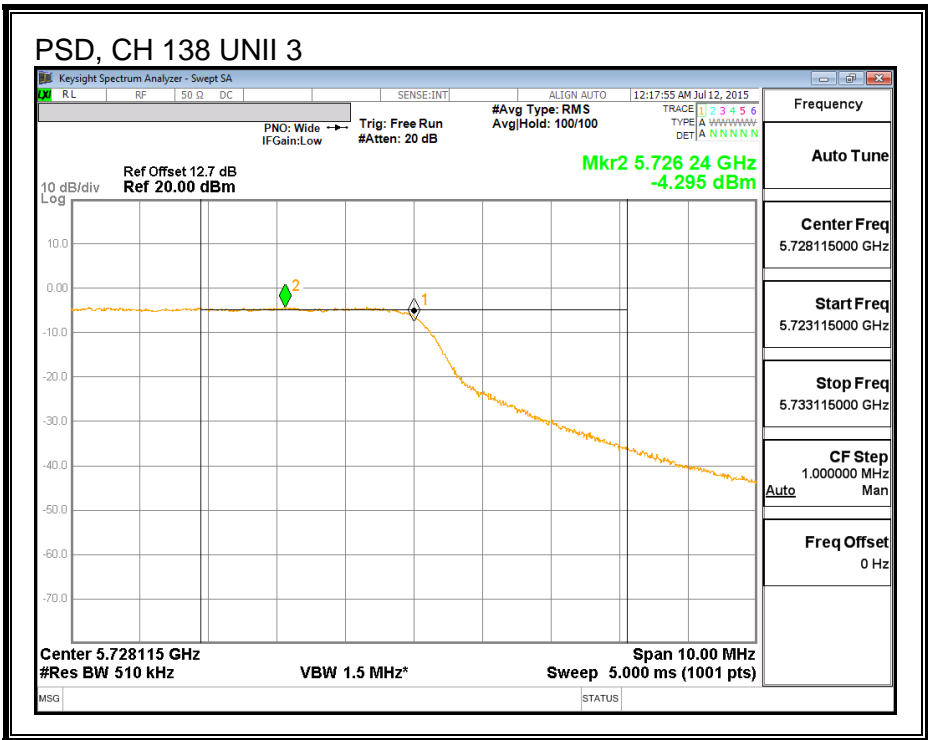
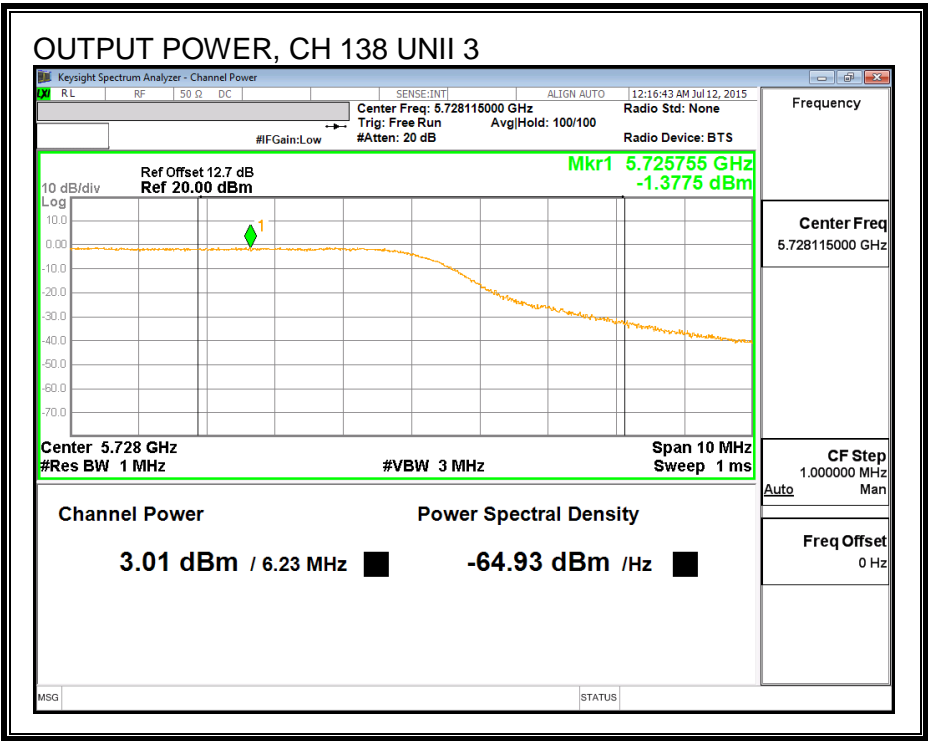
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd Power & PSD
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## **Output Power Results**

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	3.01	3.19	30.00	-26.81

## **PSD Results**

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
138	5690	-4.30	-4.12	30.00	-34.12





### **8.34. 802.11ac HT80 CHAIN 1 MODE IN THE 5.6 GHz BAND**

#### **8.34.1. 26 dB BANDWIDTH**

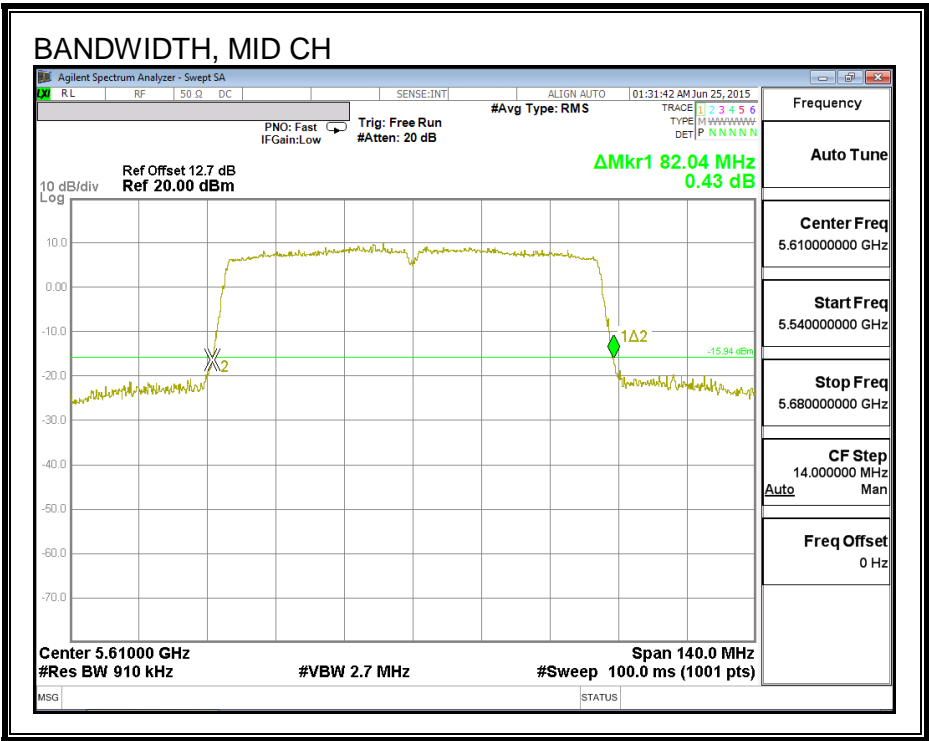
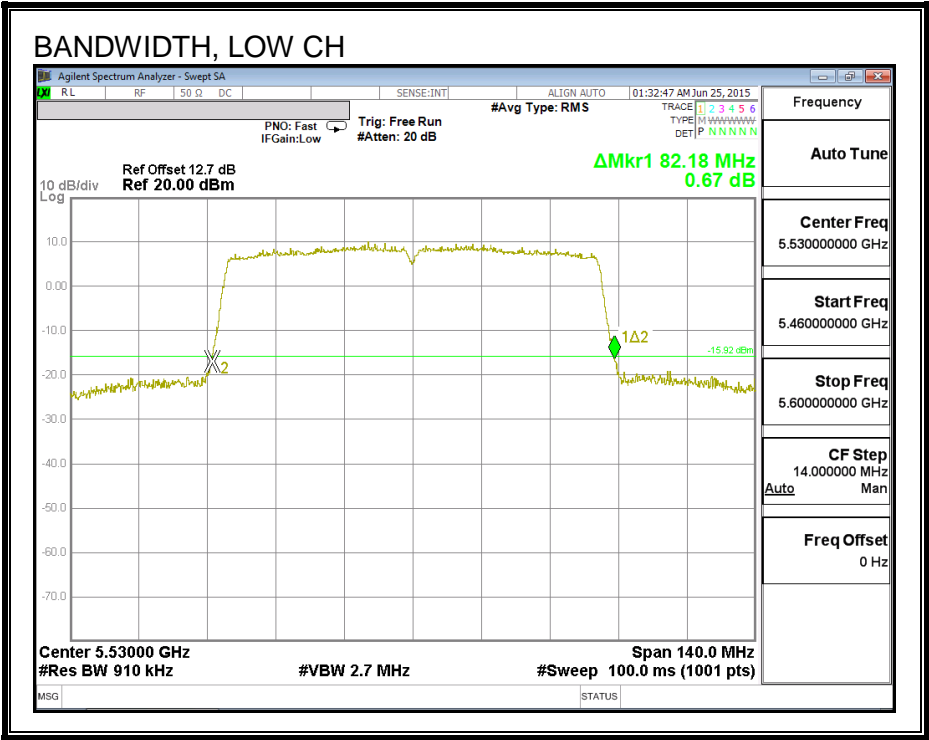
##### **LIMITS**

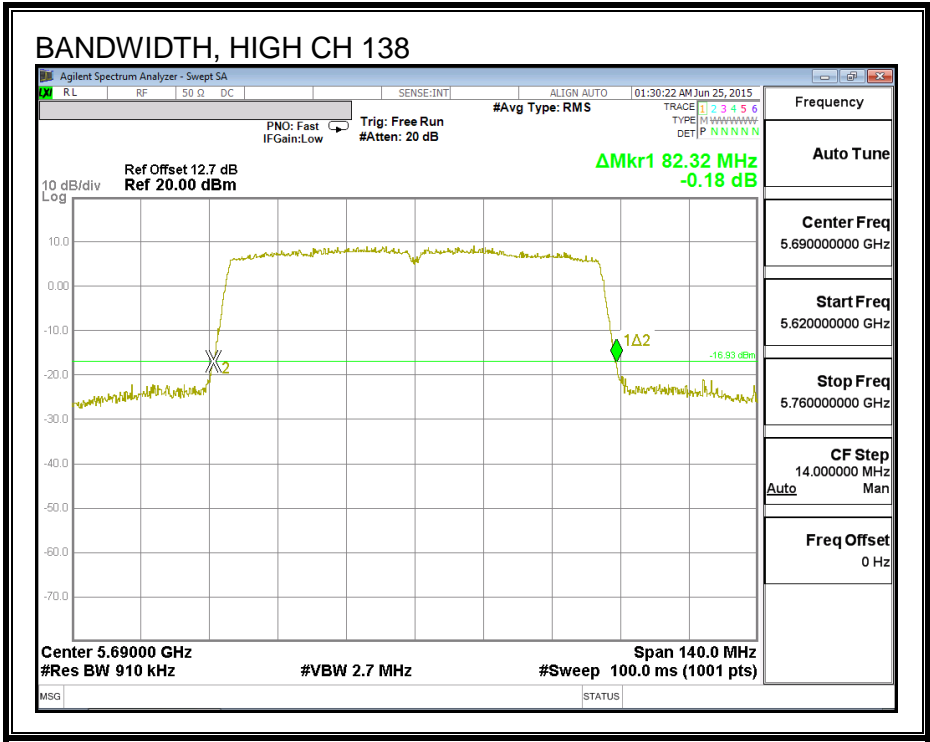
None; for reporting purposes only.

##### **RESULTS**

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5530	82.18
Mid	5610	82.04
High	5690	82.32

26 dB BANDWIDTH





### 8.34.2. 99% BANDWIDTH

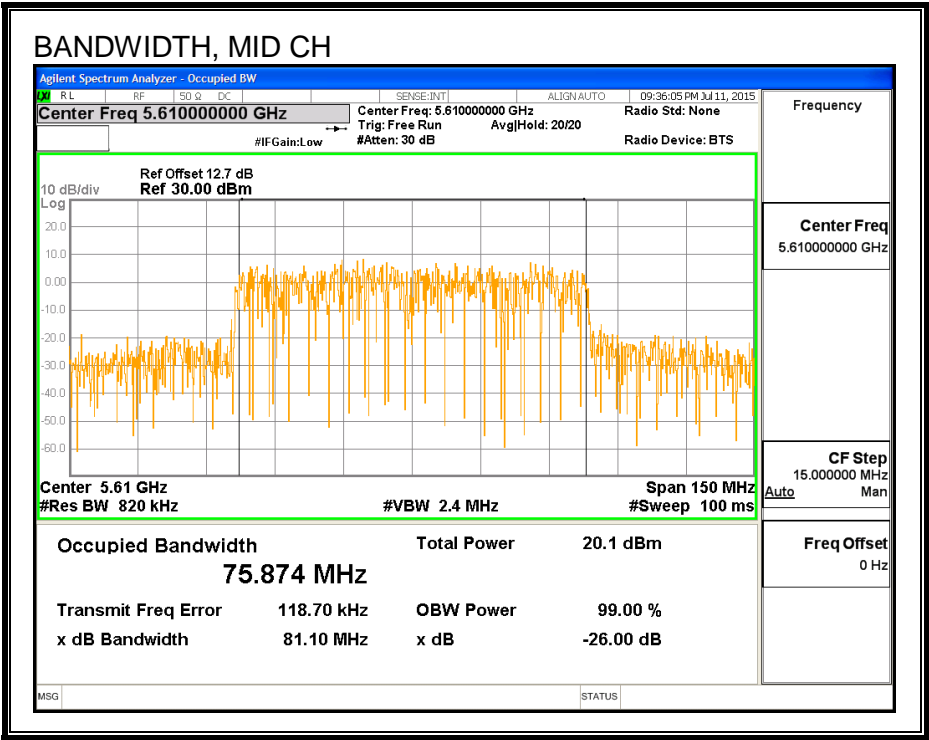
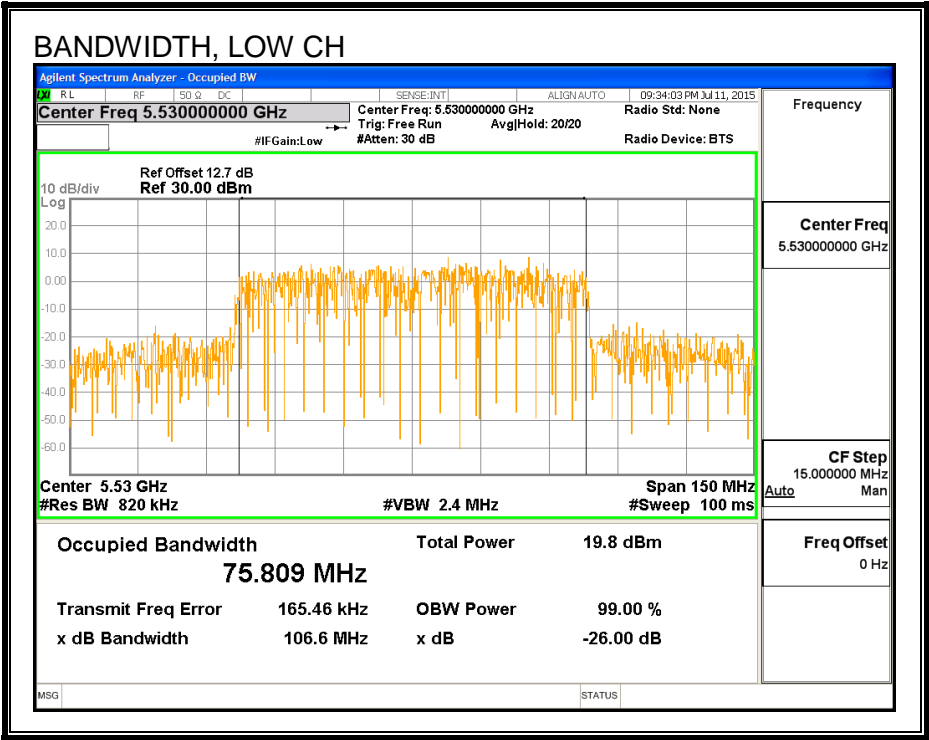
#### LIMITS

None; for reporting purposes only.

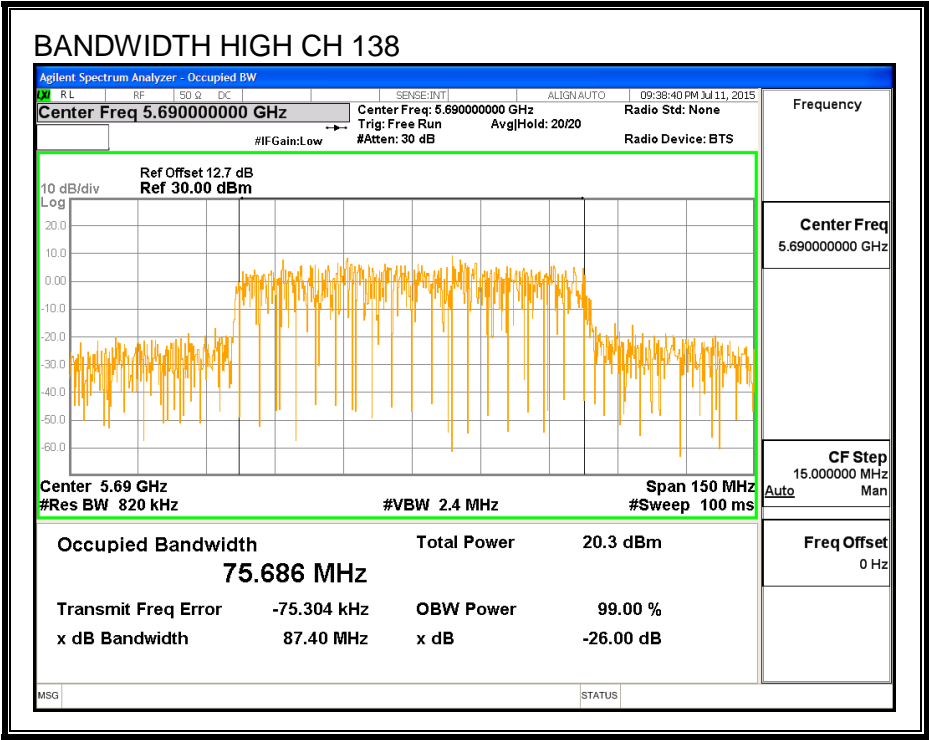
#### RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5530	75.809
Mid	5610	75.874
High	5690	75.686

99% BANDWIDTH







### 8.34.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5530	12.75
Mid	5610	17.81
High	5690	17.96

#### **8.34.4. OUTPUT POWER AND PSD**

##### **LIMITS**

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-247 (6.2.3) (1)

The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

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

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

## RESULTS

### Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5530	82.18	75.809	0.27	24.00	11.00
High	5610	82.04	75.874	0.27	24.00	11.00

Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd Power & PSD
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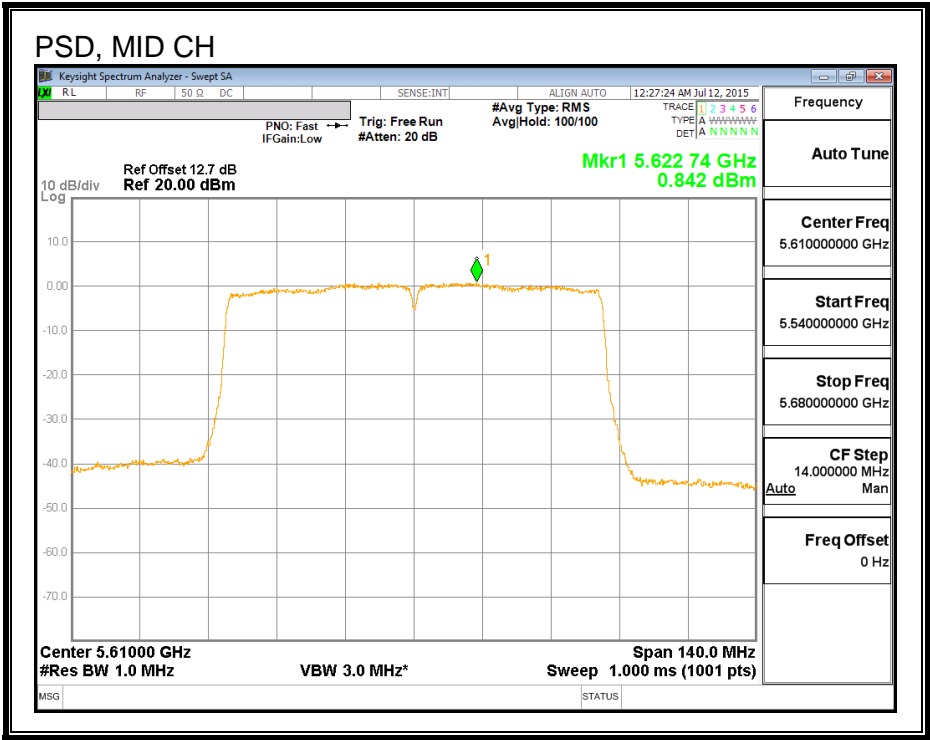
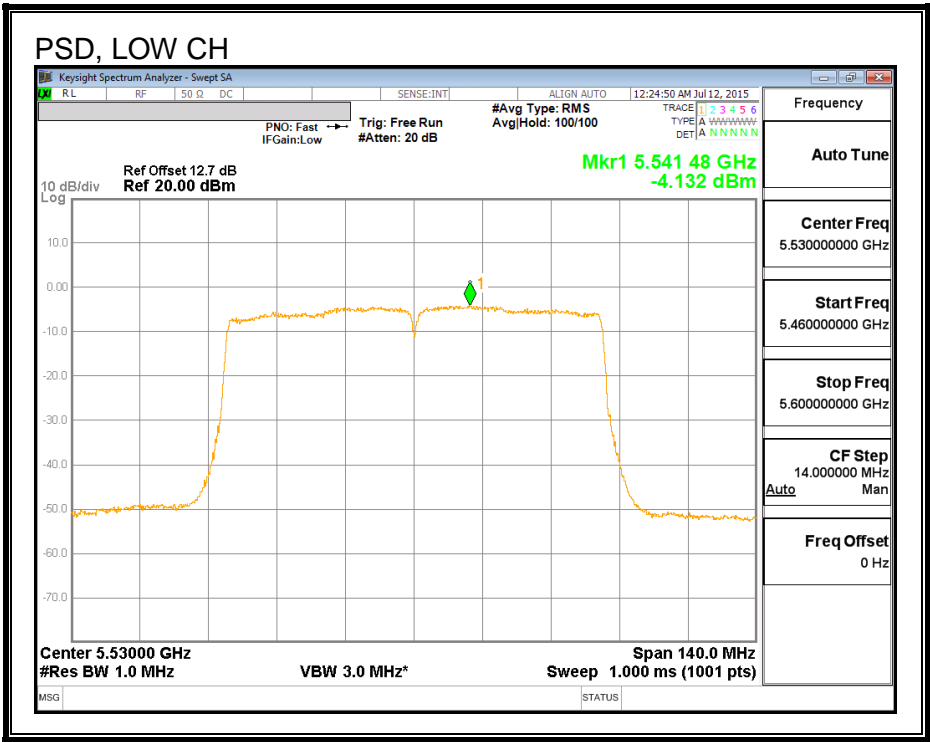
### Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5530	12.75	12.93	24.00	-11.07
High	5610	17.81	17.99	24.00	-6.01

### PSD Results

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5530	-4.13	-3.95	11.00	-14.95
High	5610	0.84	1.02	11.00	-9.98

PSD,



### 8.34.5. STRADDLE CHANNEL 138 RESULTS

#### UNII-2C BAND

##### Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
138	5690	76.16	0.27	0.27	24.00	11.00

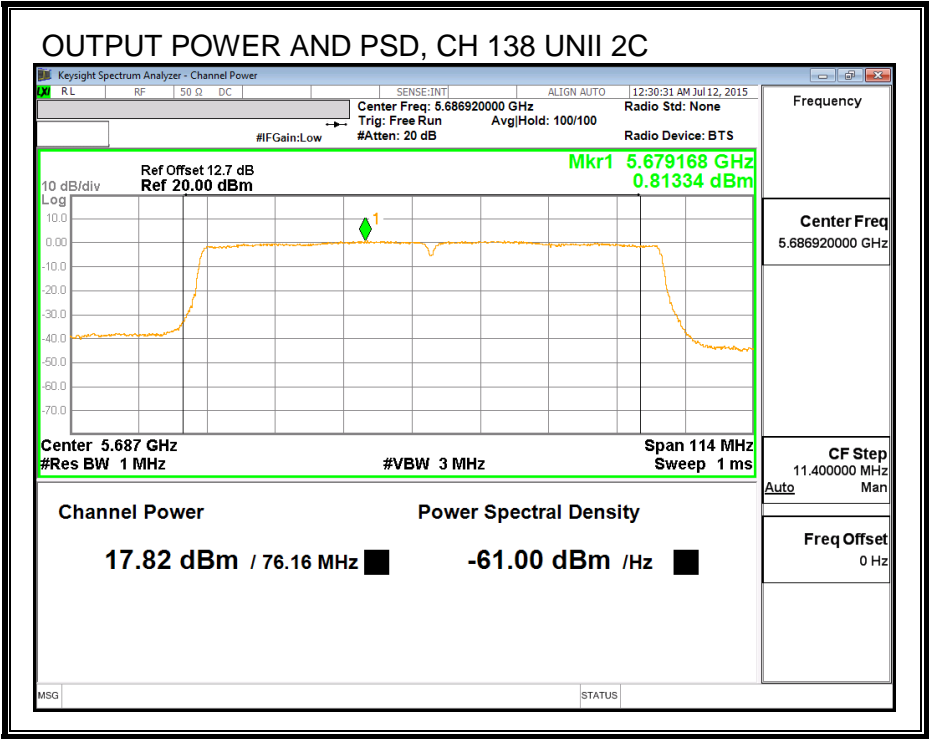
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd Power & PSD
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##### Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	17.82	18.00	24.00	-6.00

##### PSD Results

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
138	5690	0.81	0.99	11.00	-10.01



# **UNII-3 BAND**

## **Antenna Gain and Limit**

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
138	5690	6.16	0.30	30.00	30.00

Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd Power & PSD
--------------------	------	--

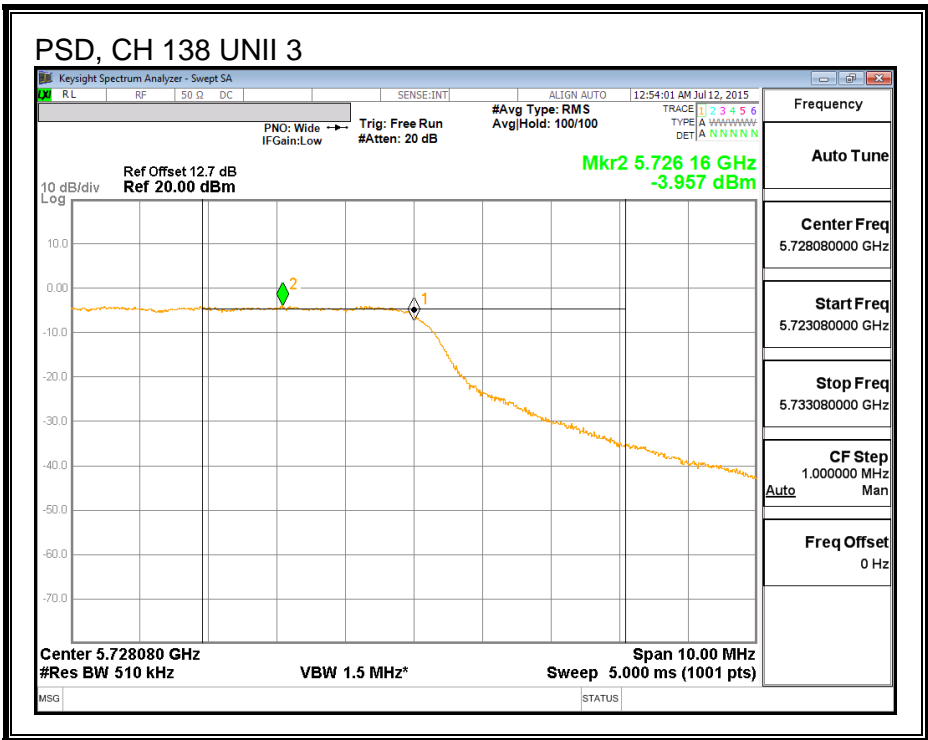
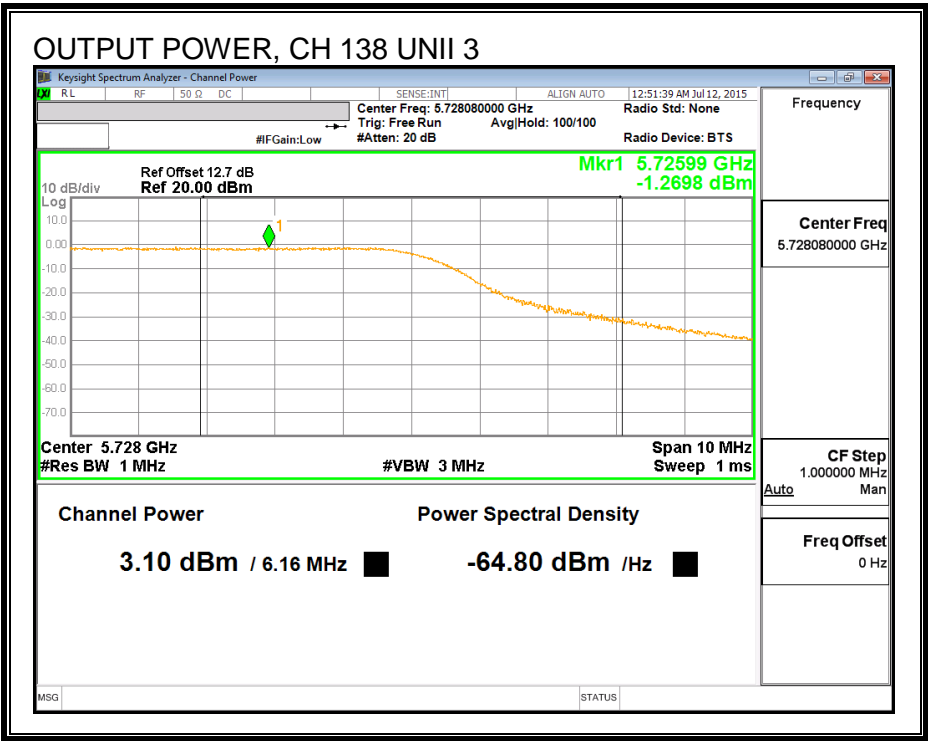
## **Output Power Results**

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	3.10	3.28	30.00	-26.72

## **PSD Results**

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
138	5690	-3.96	-3.78	30.00	-33.78





### 8.34.6. 6 dB BANDWIDTH

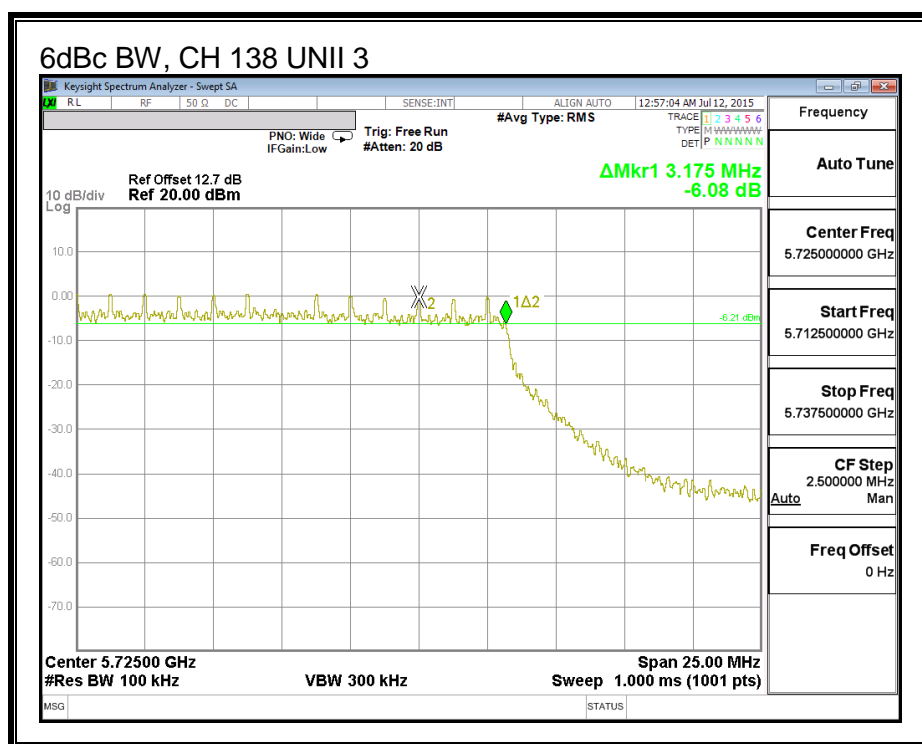
#### LIMITS

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

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

#### RESULTS



### **8.35. 802.11ac HT80 2Tx CDD MODE IN THE 5.6 GHz BAND (5610MHz)**

#### **8.35.1. 26 dB BANDWIDTH**

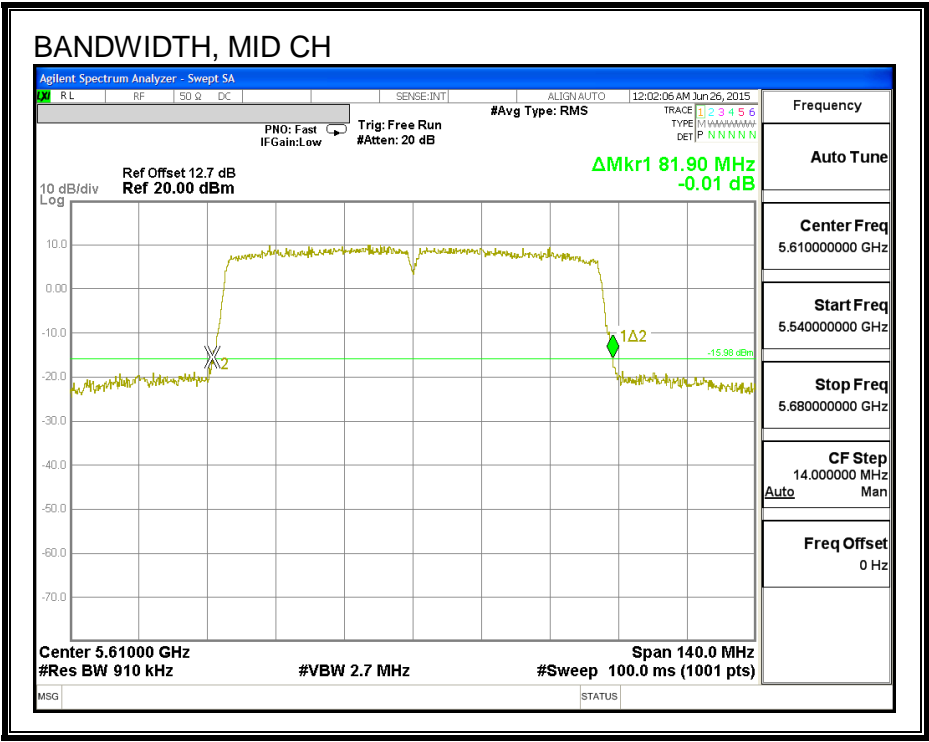
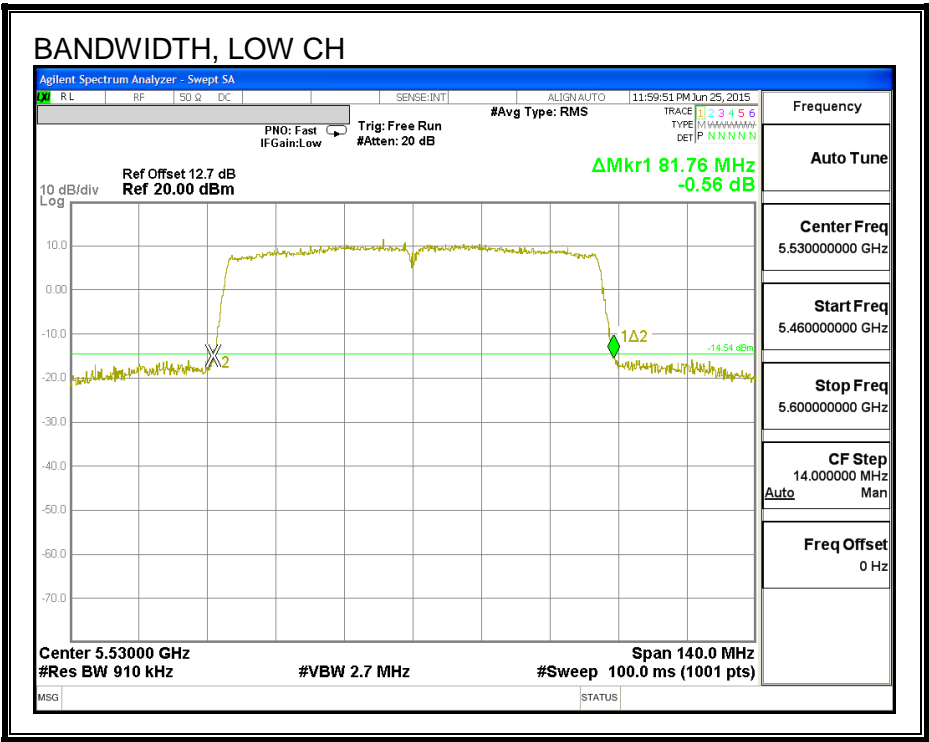
##### **LIMITS**

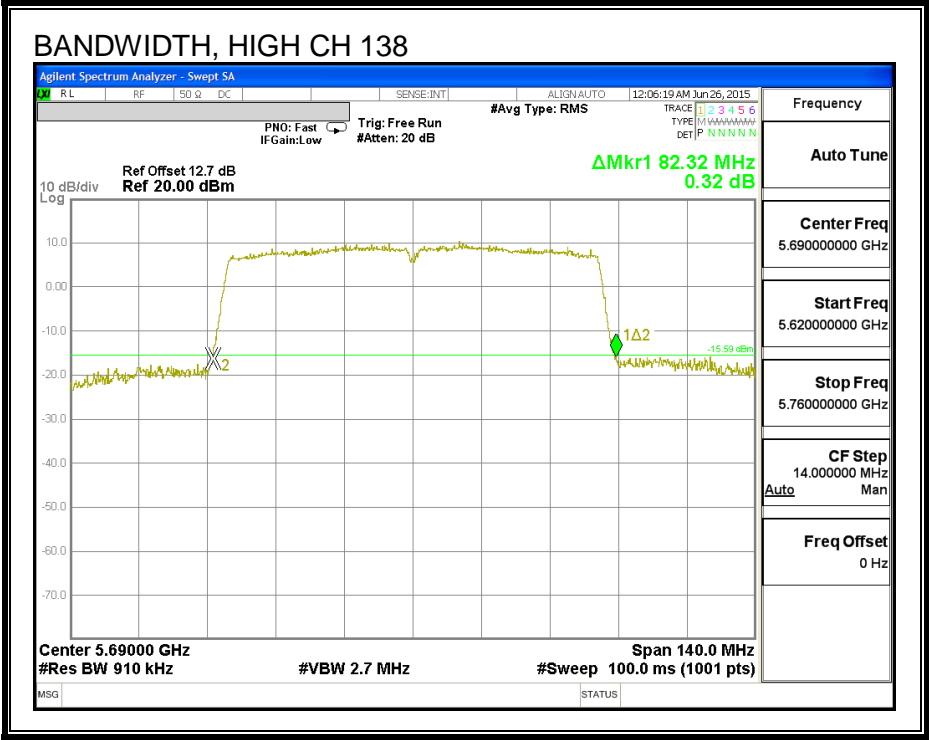
None; for reporting purposes only.

##### **RESULTS**

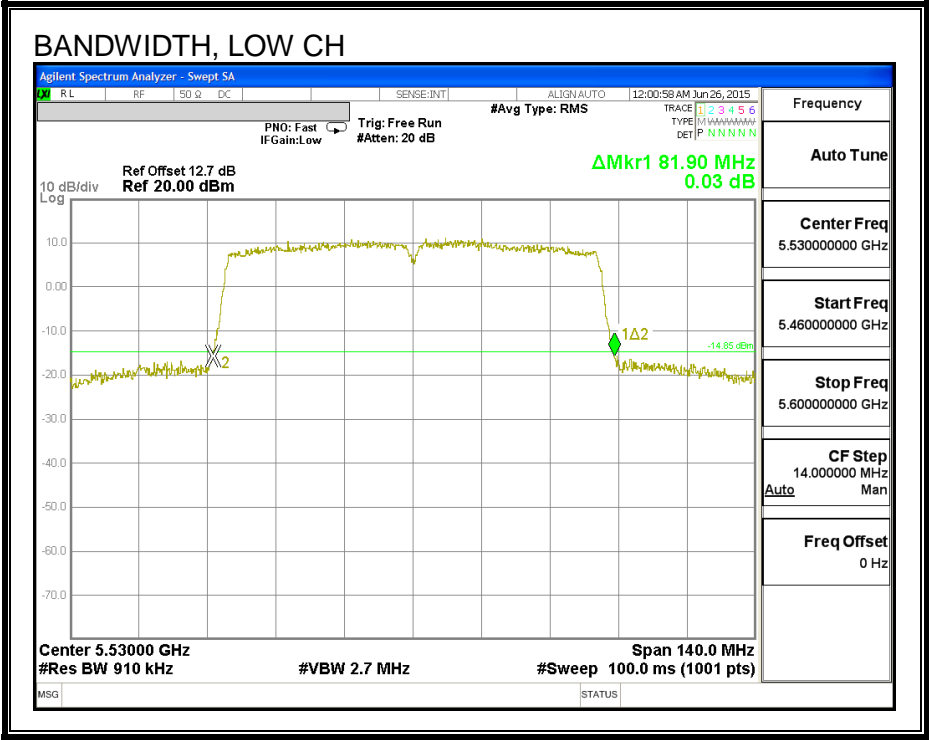
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5530	81.76	81.90
Mid	5610	81.90	81.62
High	5690	82.32	81.76

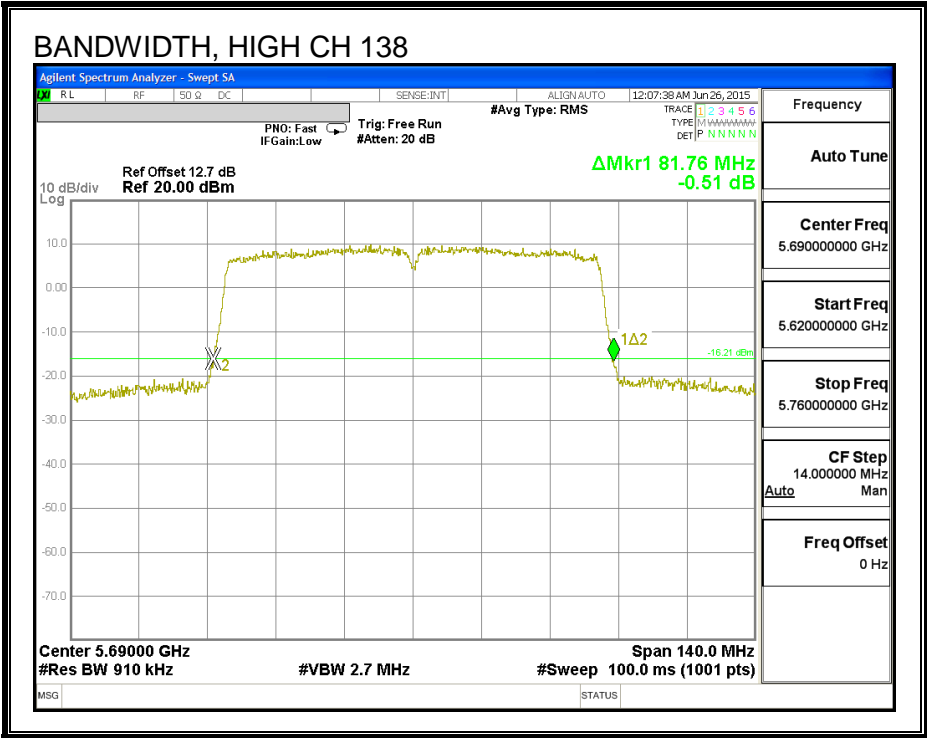
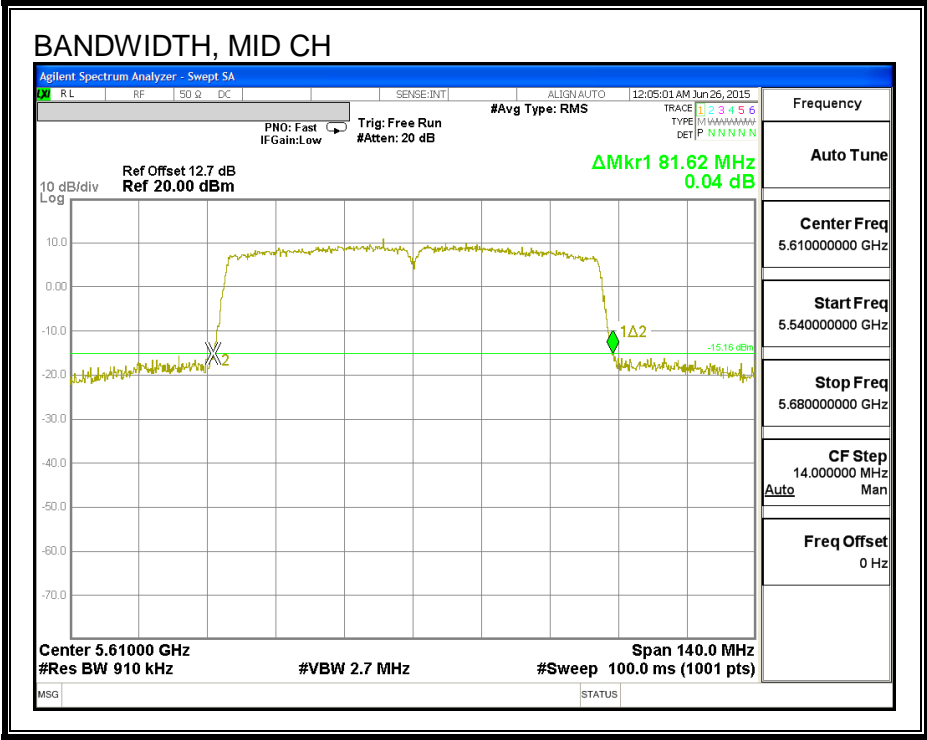
26 dB BANDWIDTH, CHAIN 0





**26 dB BANDWIDTH, CHAIN 1**





### 8.35.2. 99% BANDWIDTH

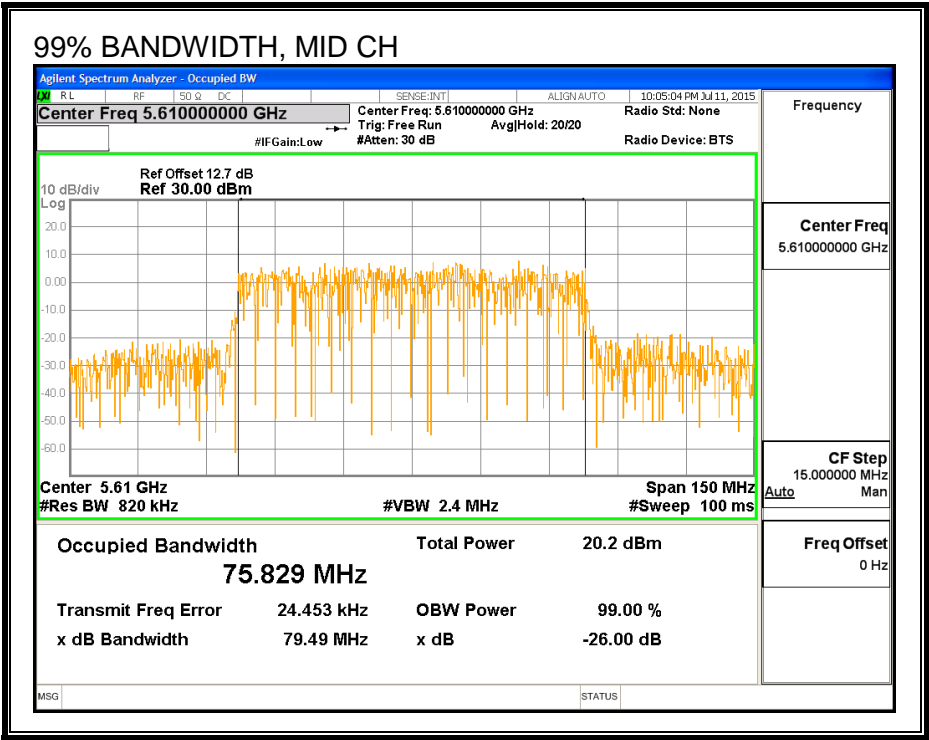
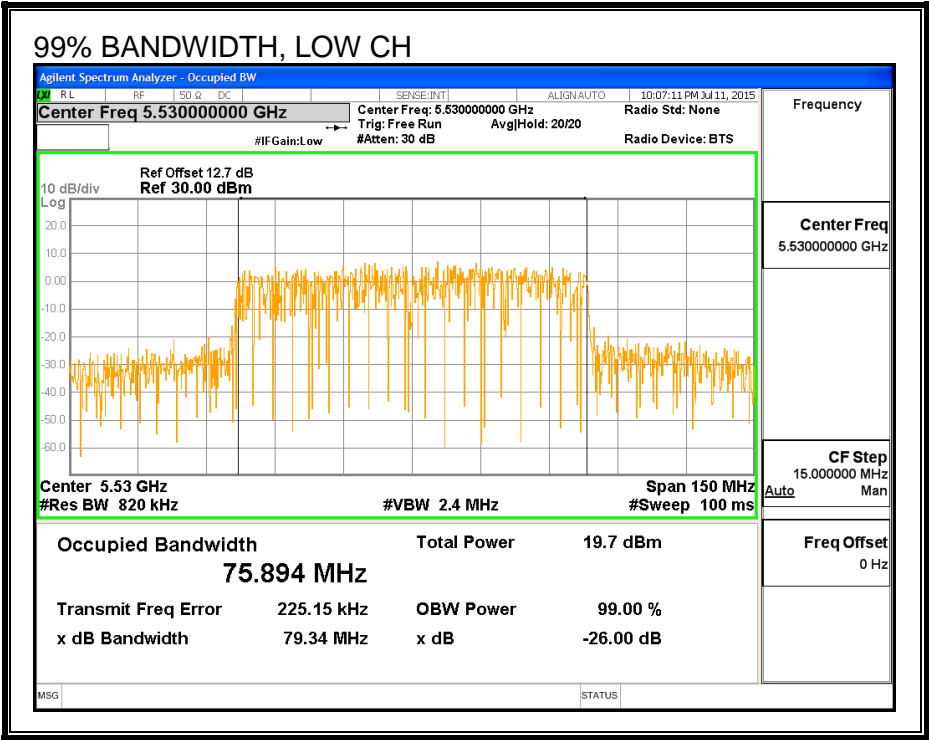
#### LIMITS

None; for reporting purposes only.

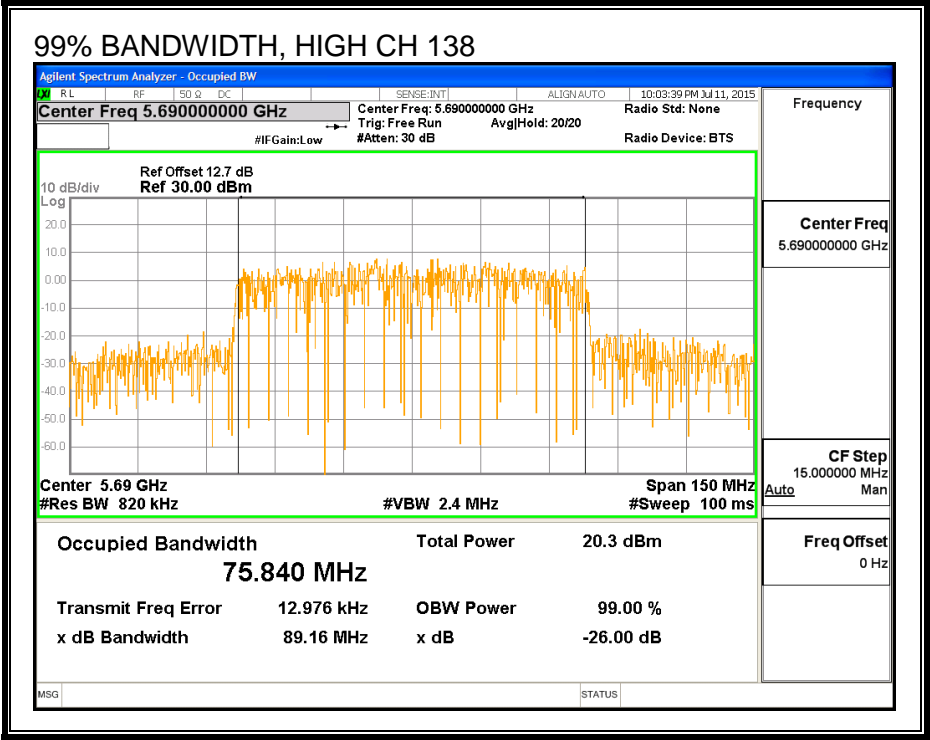
#### RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5530	75.894	75.872
Mid	5610	75.829	75.628
High	5690	75.840	75.829

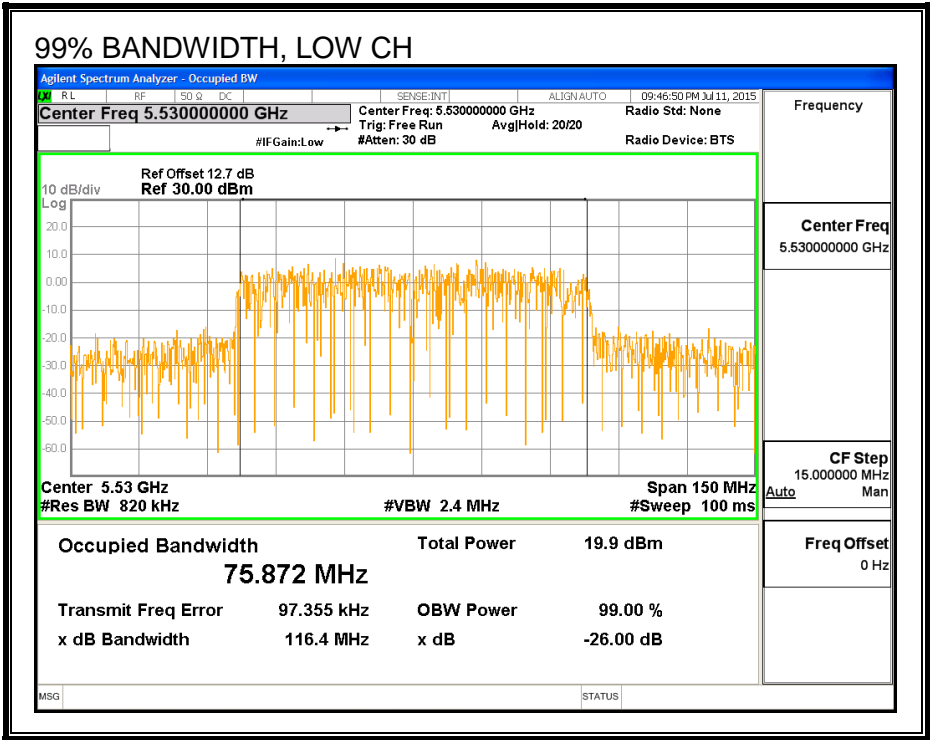
99% BANDWIDTH, CHAIN 0

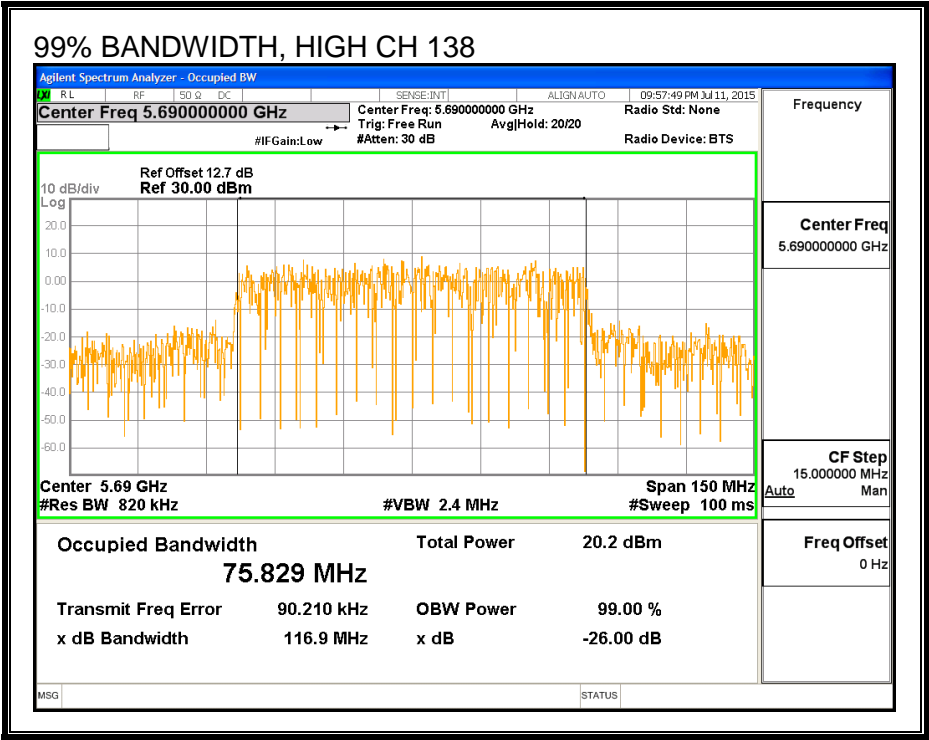
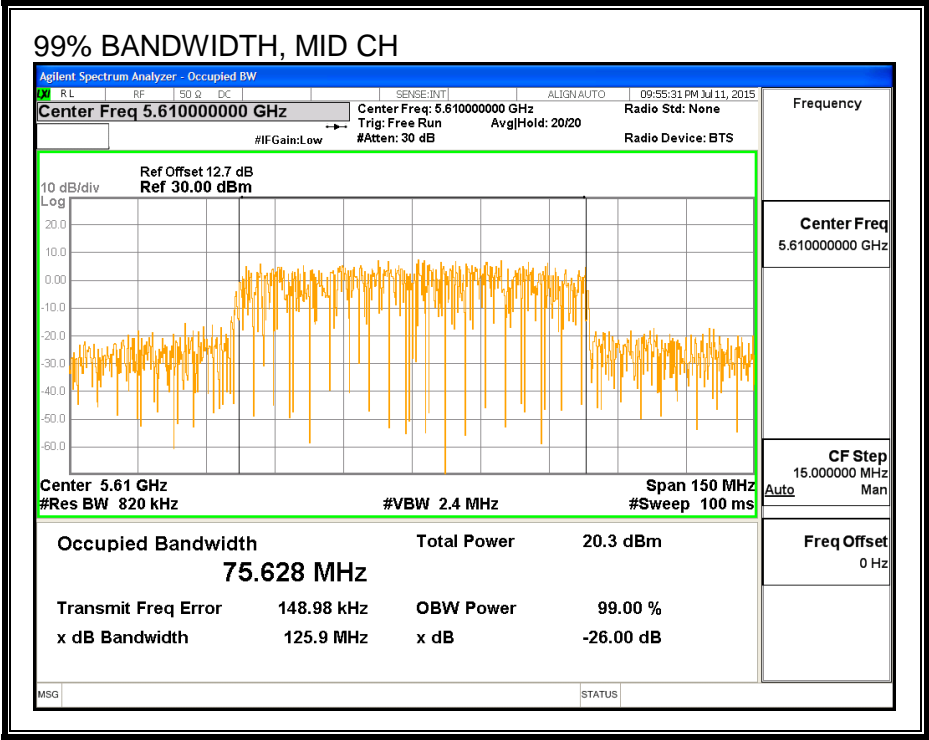






99% BANDWIDTH, CHAIN 1





### 8.35.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### RESULTS

##### Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5530	11.91	11.94	14.94
Mid	5610	17.42	17.96	20.71
High	5690	17.43	17.96	20.71

#### 8.35.4. OUTPUT POWER AND PSD

##### LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-247 (6.2.3) (1)

The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

##### 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)
-0.12	0.27	0.08

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)
-0.12	0.27	3.09

## RESULTS

### Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5530	81.90	75.89	0.08	3.09	0.03	11.00
High	5610	81.90	75.83	0.08	3.09	0.03	11.00

Duty Cycle CF (dB)	0.21	Included in Calculations of Corr'd Power & PSD
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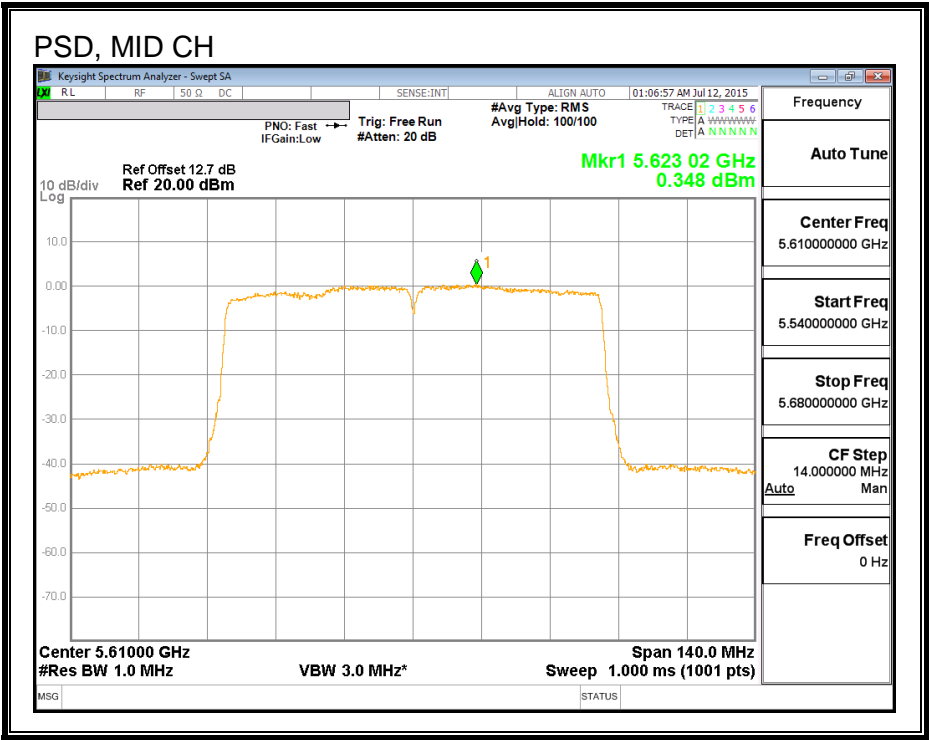
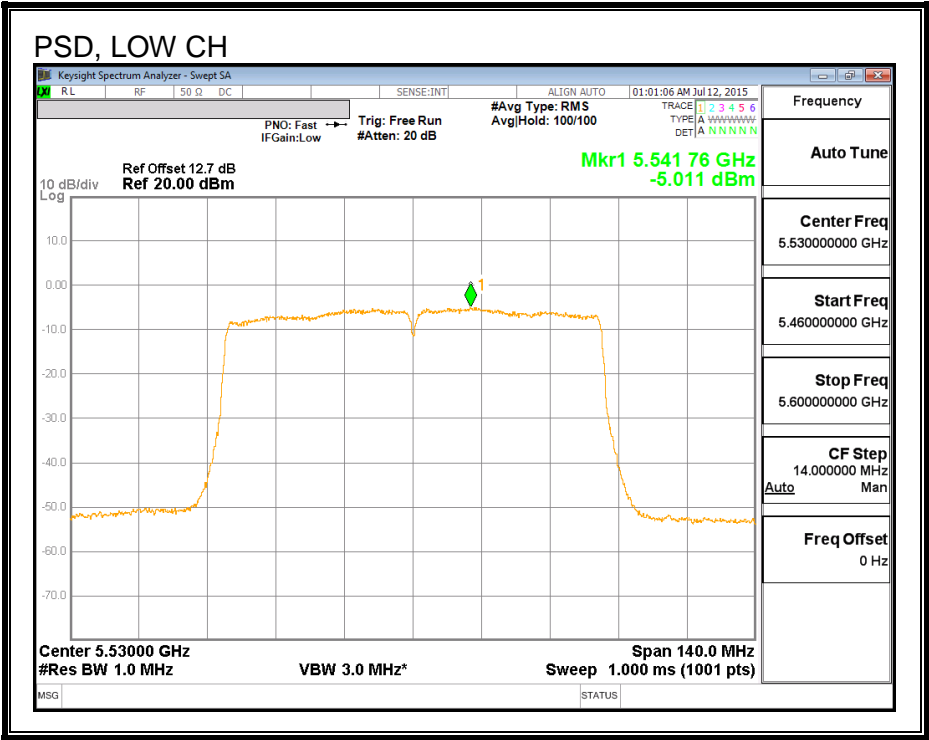
### Output Power Results

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	5530	11.91	11.94	15.15	0.03	15.11
High	5610	17.42	17.96	20.92	0.03	20.89

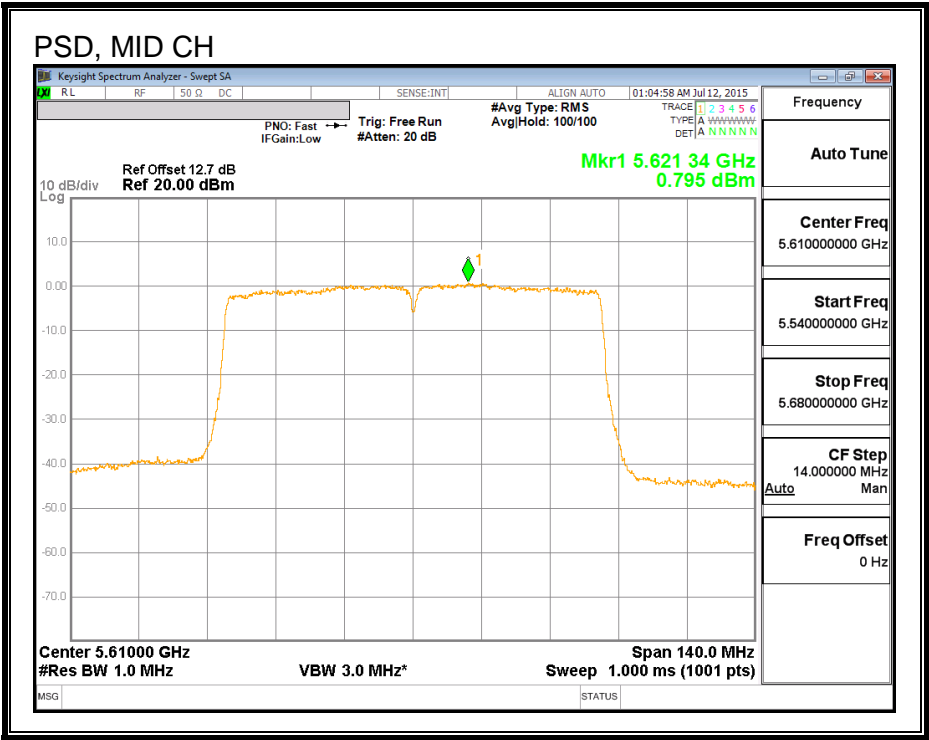
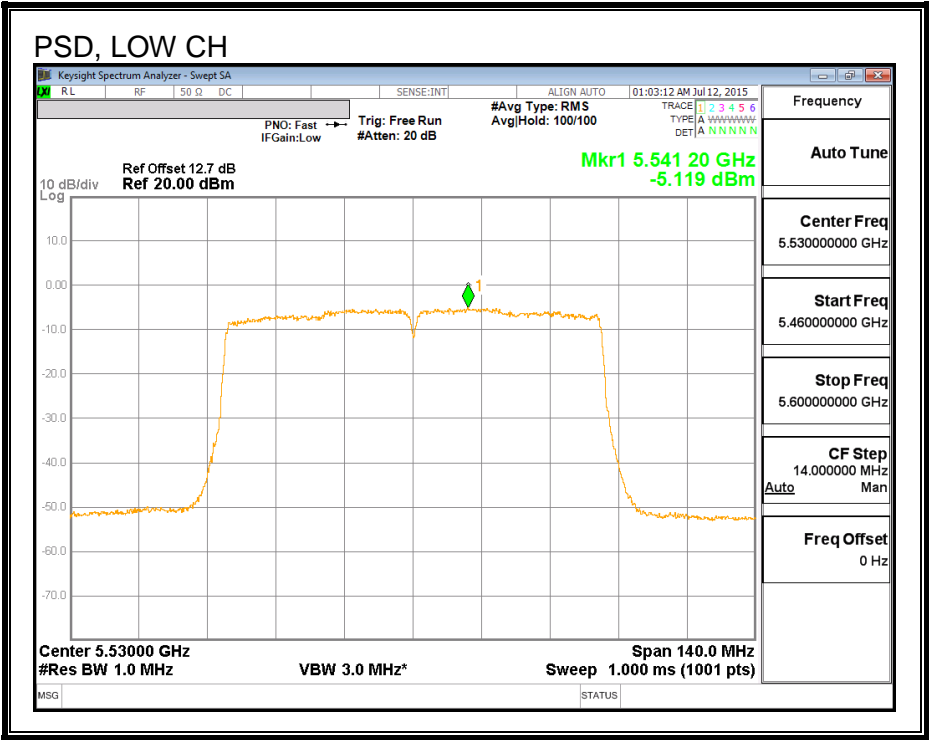
### PSD Results

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	5530	-5.01	-5.12	-1.84	11.00	-12.84
High	5610	0.35	0.80	3.80	11.00	-7.20

PSD, CHAIN 0



PSD, CHAIN 1



### 8.35.5. STRADDLE CHANNEL 138 RESULTS

#### UNII-2C BAND

##### Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
138	5690	76.16	0.08	3.09	24.00	11.00

Duty Cycle CF (dB)	0.21	Included in Calculations of Corr'd Power & PSD
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##### Output Power Results

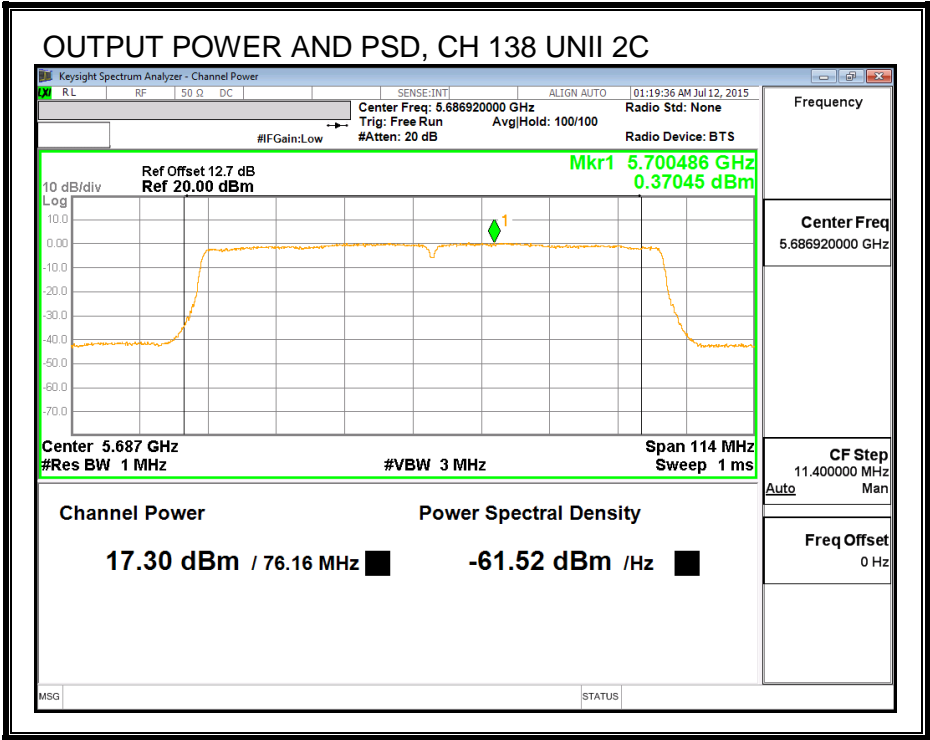
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	17.30	17.83	20.79	24.00	-3.21

##### PSD Results

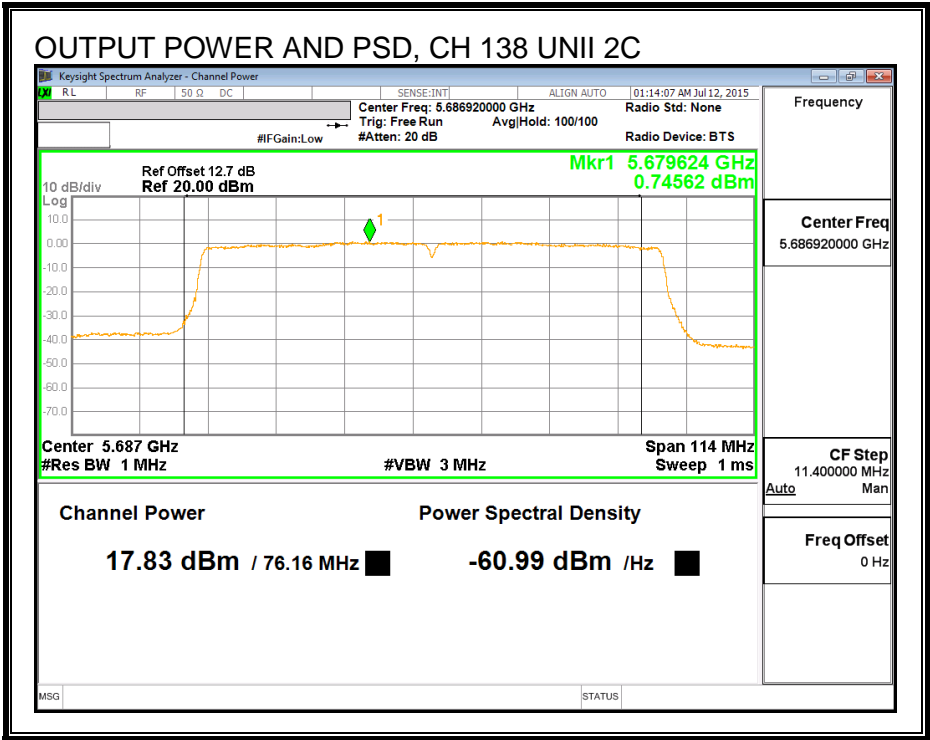
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
138	5690	0.37	0.75	3.78	11.00	-7.22



OUTPUT POWER & PSD, CHAIN 0



OUTPUT POWER & PSD, CHAIN 1



### UNII-3 BAND

#### Antenna Gain and Limit

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
138	5690	6.16	-0.10	0.30	30.00	30.00

Duty Cycle CF (dB)	0.21	Included in Calculations of Corr'd Power & PSD
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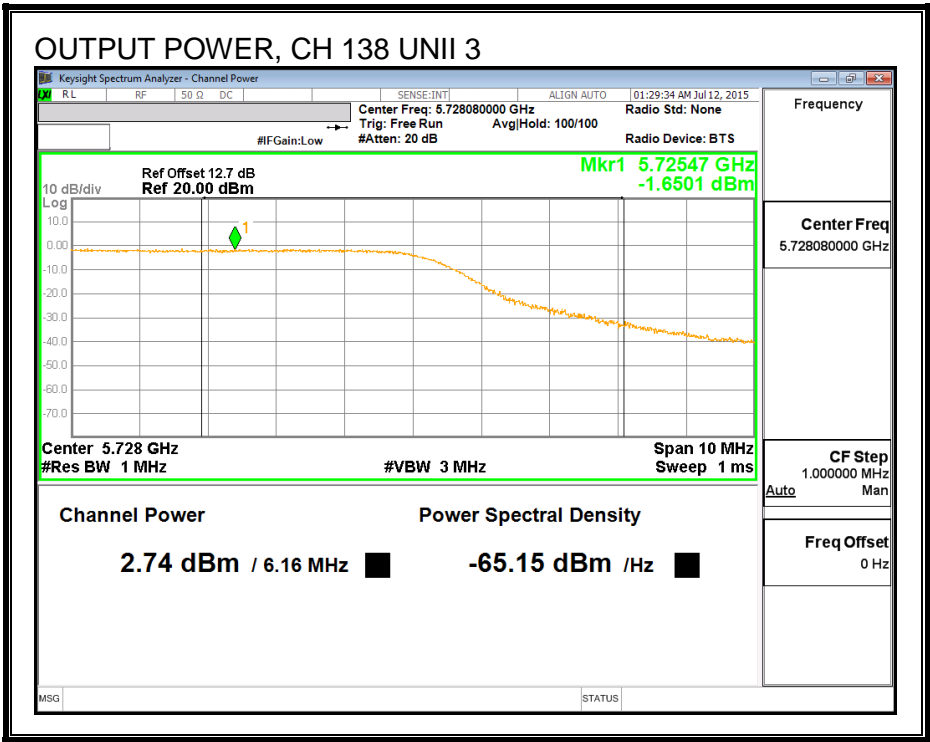
#### Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	2.74	2.95	6.07	30.00	-23.93

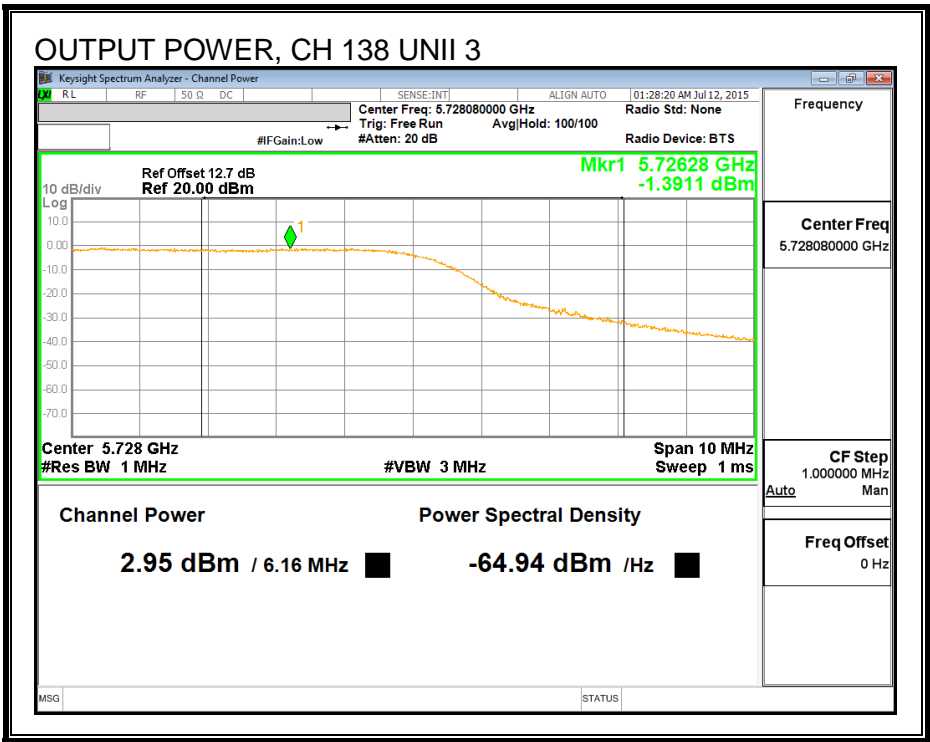
#### PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
138	5690	-4.51	-4.36	-1.21	30.00	-31.21

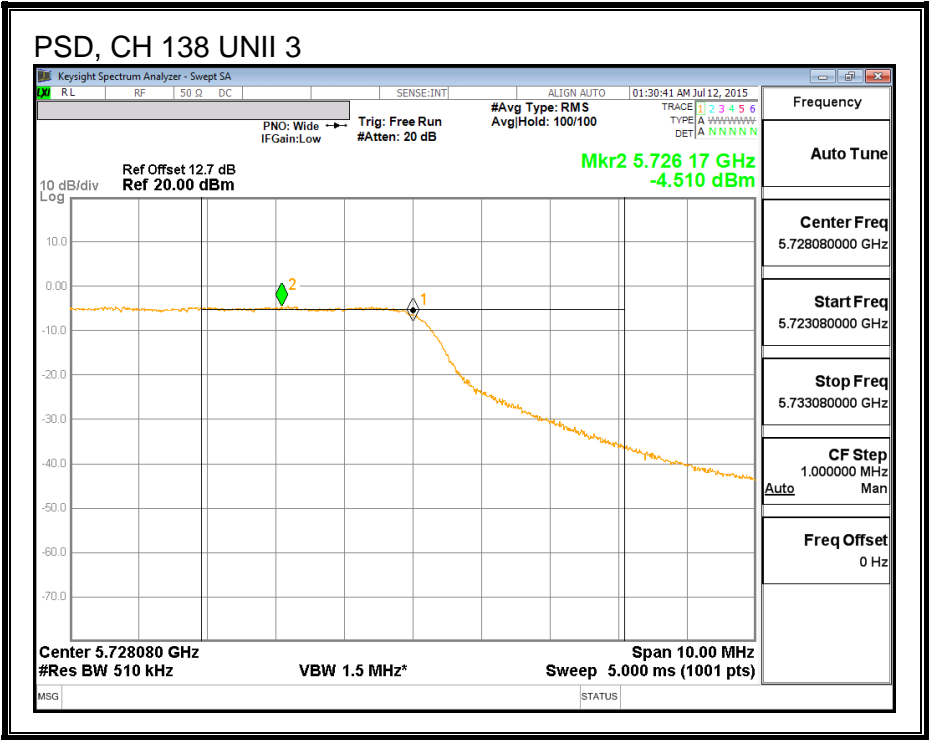
OUTPUT POWER, CHAIN 0



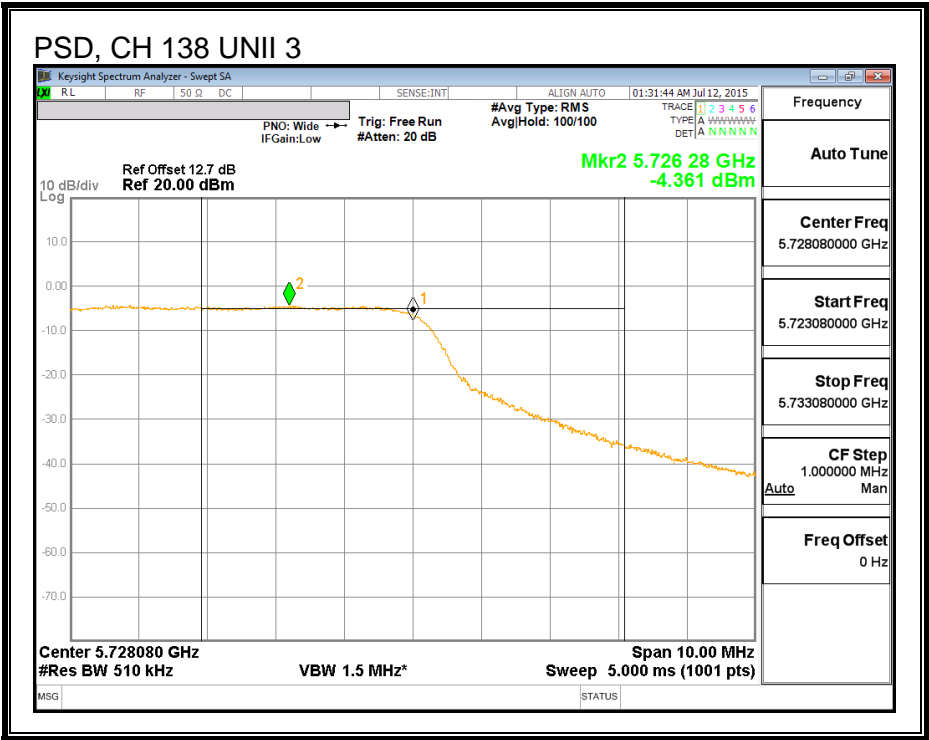
OUTPUT POWER, CHAIN 1



PSD, CHAIN 0



PSD, CHAIN 1



### **8.35.6. 6 dB BANDWIDTH**

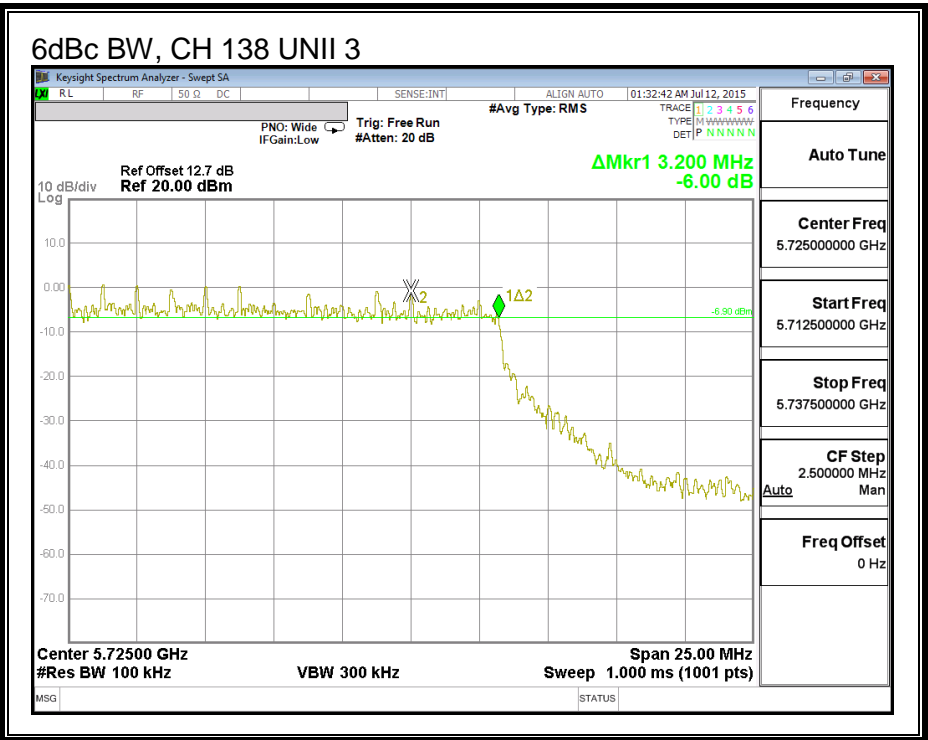
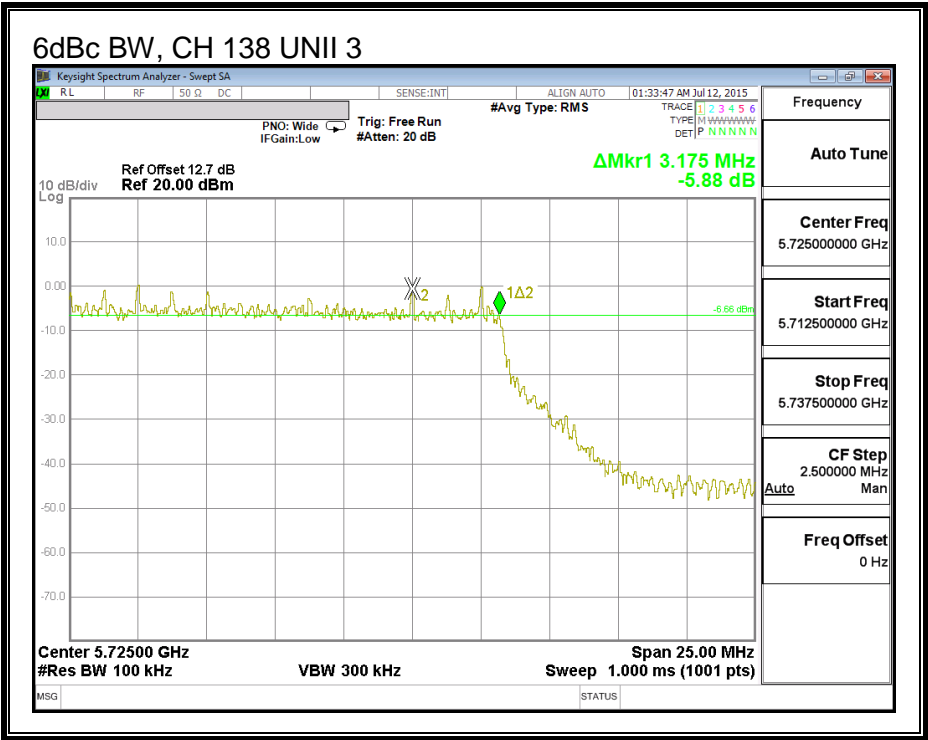
#### **LIMITS**

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

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

#### **RESULTS**



### **8.36. 802.11ac HT80 2Tx STBC MODE IN THE 5.6 GHz BAND (5610MHz)**

**Note:** Covered by 802.11n HT80 2Tx CDD MODE

## **8.37. 802.11n HT20 CHAIN 0 MODE IN THE 5.8 GHz BAND**

### **8.37.1. 6 dB BANDWIDTH**

#### **LIMITS**

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

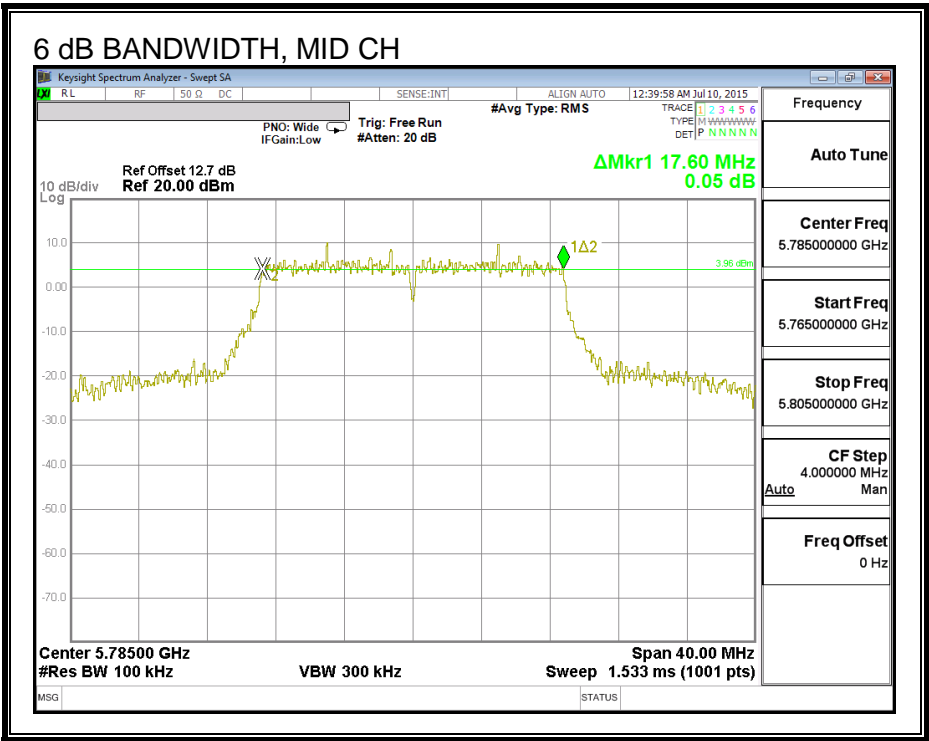
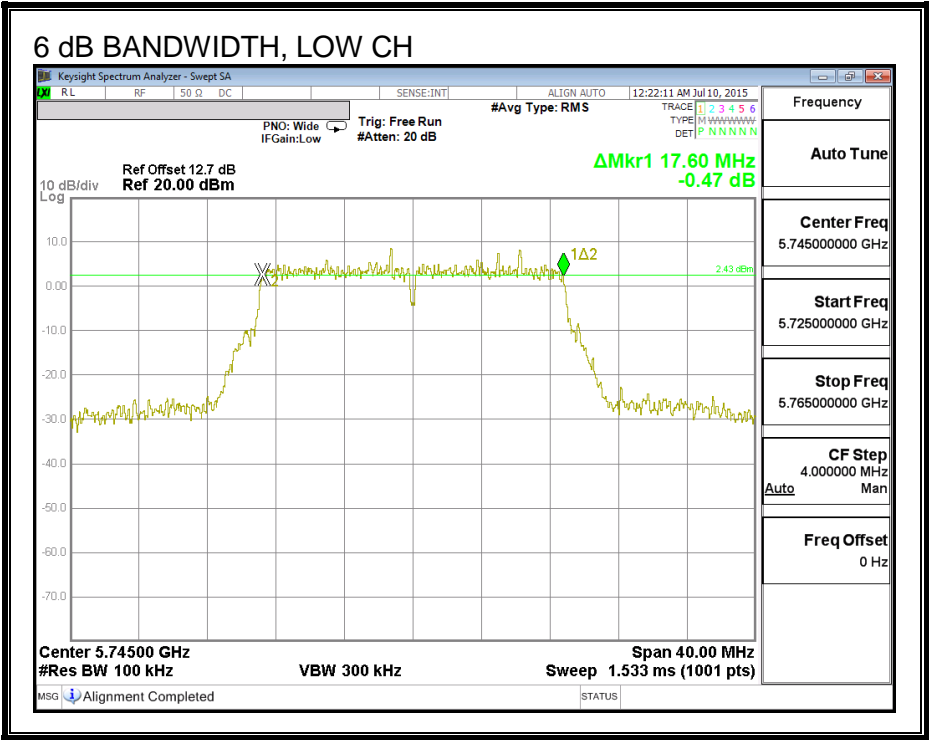
The minimum 6 dB bandwidth shall be at least 500 kHz.

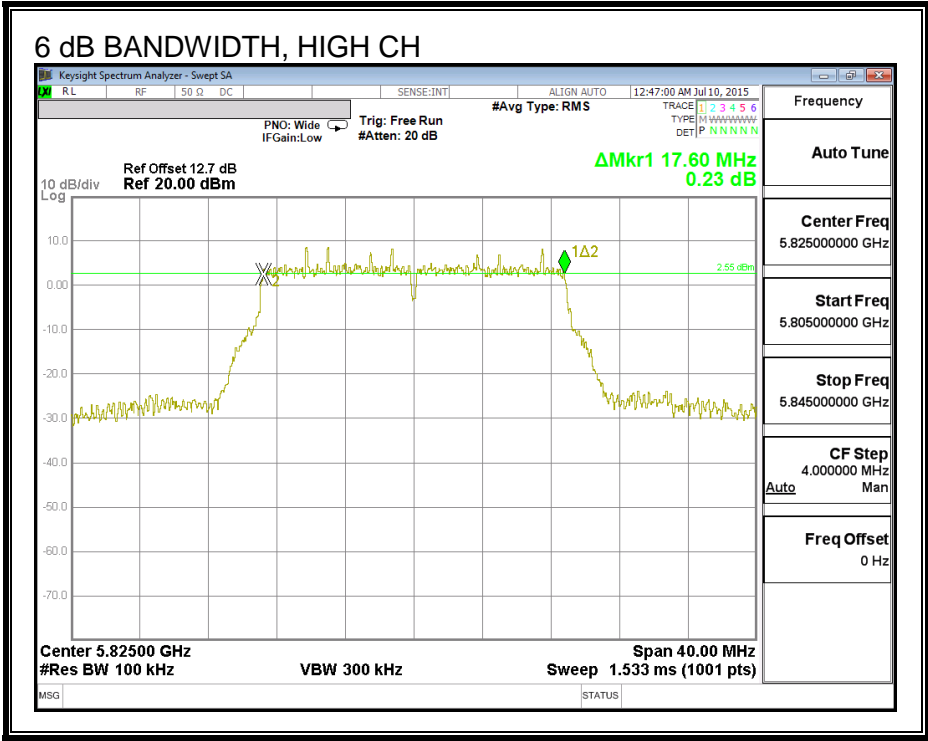
#### **RESULTS**

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	17.60	0.5
Mid	5785	17.60	0.5
High	5825	17.60	0.5



6 dB BANDWIDTH





### 8.37.2. 26 dB BANDWIDTH

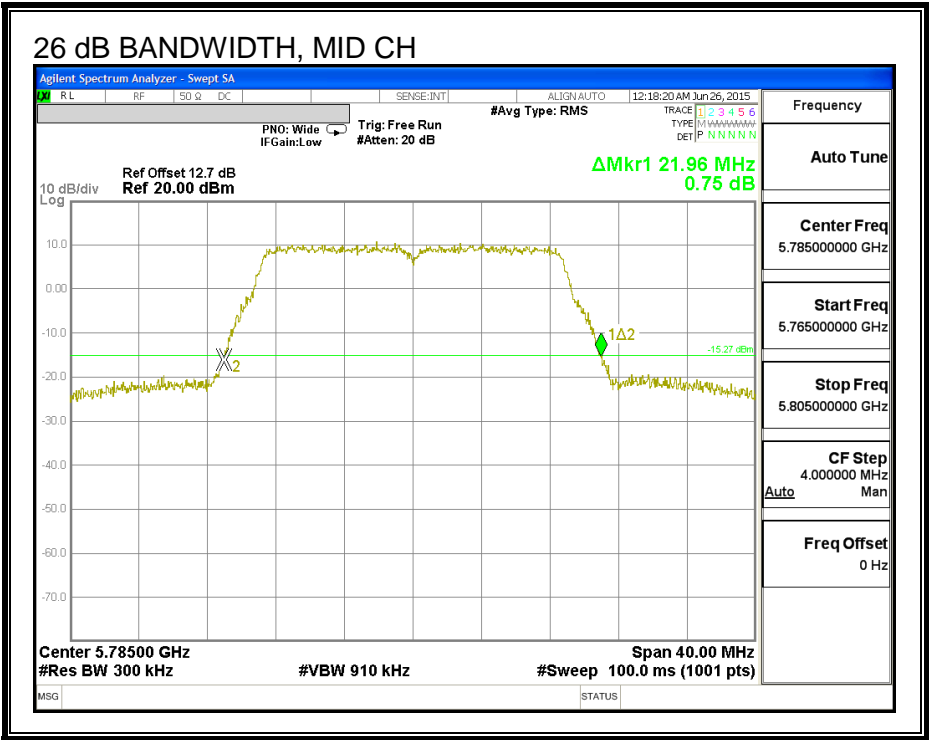
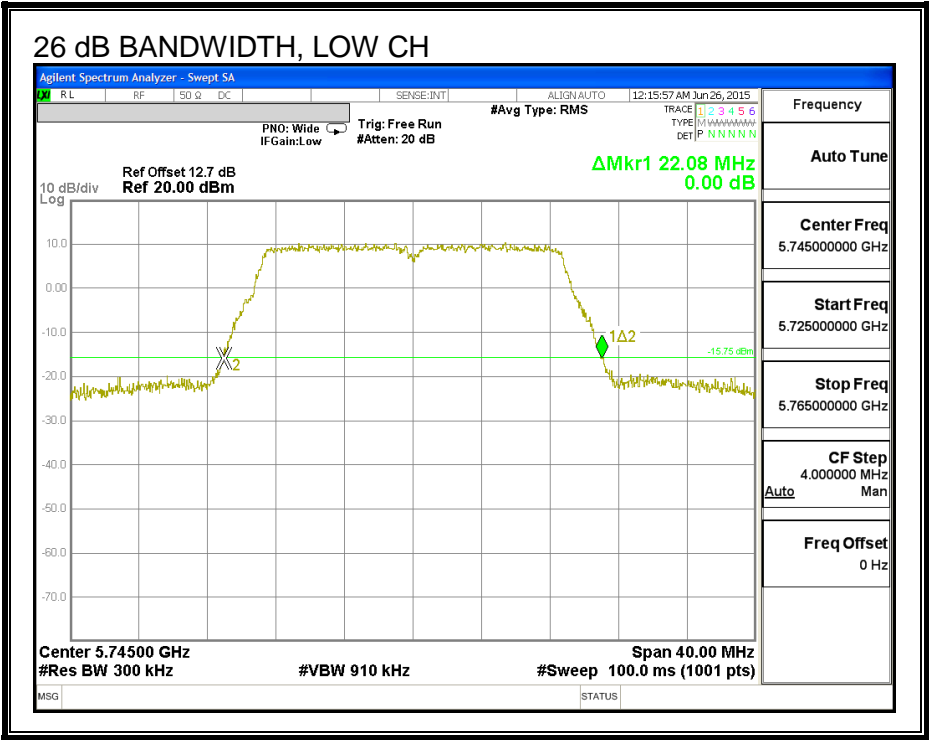
#### LIMITS

None, for reporting purposes only

#### RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	22.08
Mid	5785	21.96
High	5825	22.08

26 dB BANDWIDTH





### 8.37.3. 99% BANDWIDTH

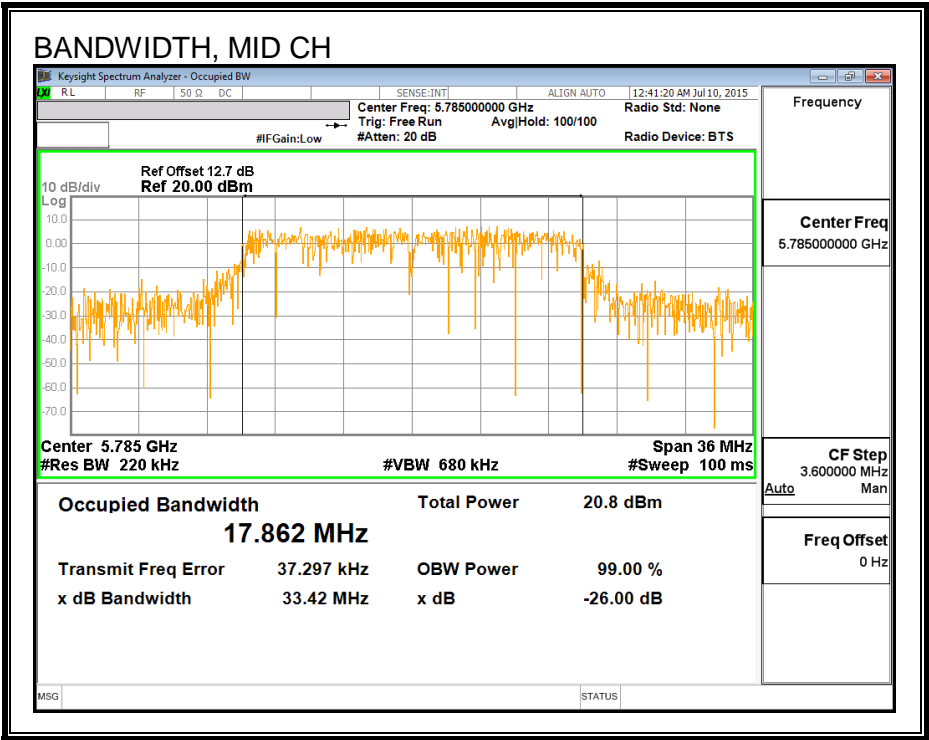
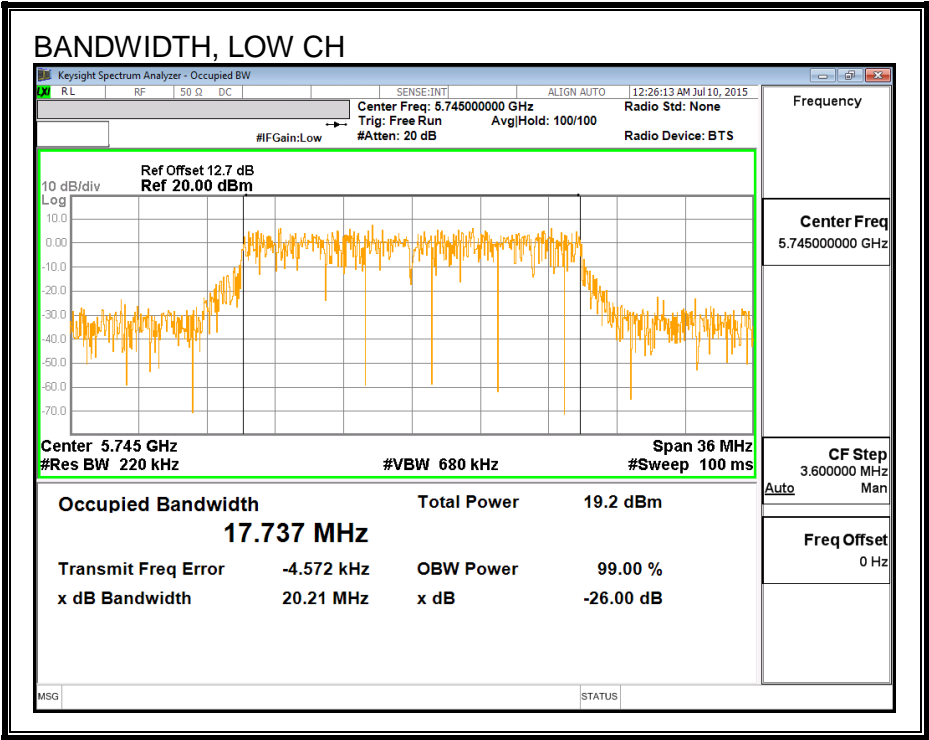
#### LIMITS

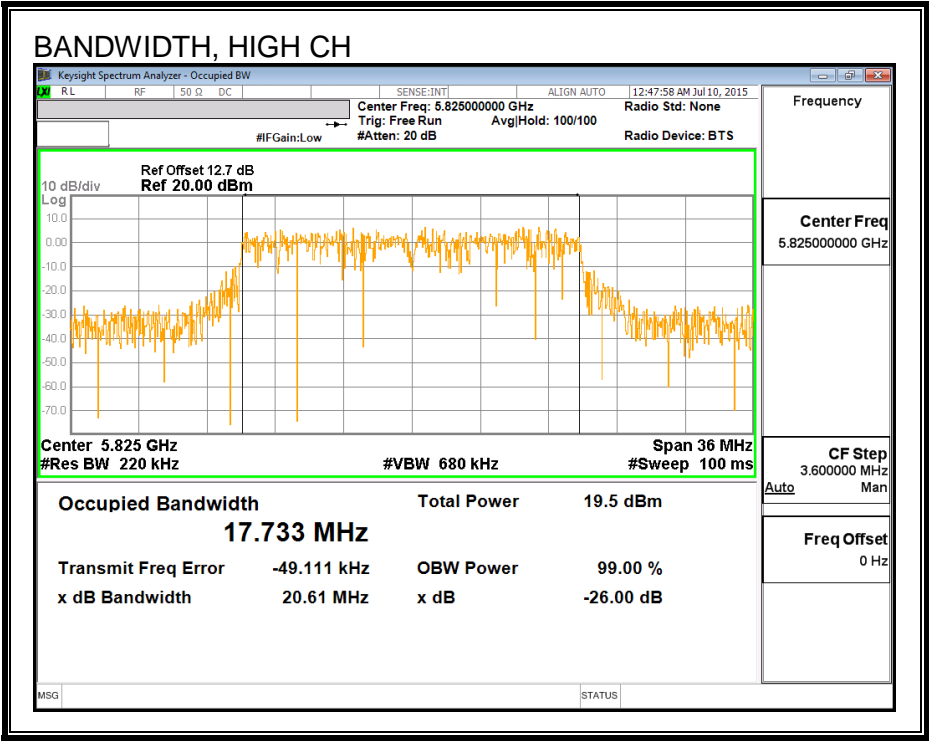
None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	17.737
Mid	5785	17.862
High	5825	17.733

99% BANDWIDTH







### 8.37.4. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5745	15.97
Mid	5785	17.94
High	5825	17.46

### **8.37.5. 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 (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	-0.07	30.00
Mid	5785	-0.07	30.00
High	5825	-0.07	30.00

<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd Power</b>
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### **Output Power Results**

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	15.97	15.97	30.00	-14.03
Mid	5785	17.94	17.94	30.00	-12.06
High	5825	17.46	17.46	30.00	-12.54

### 8.37.6. 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

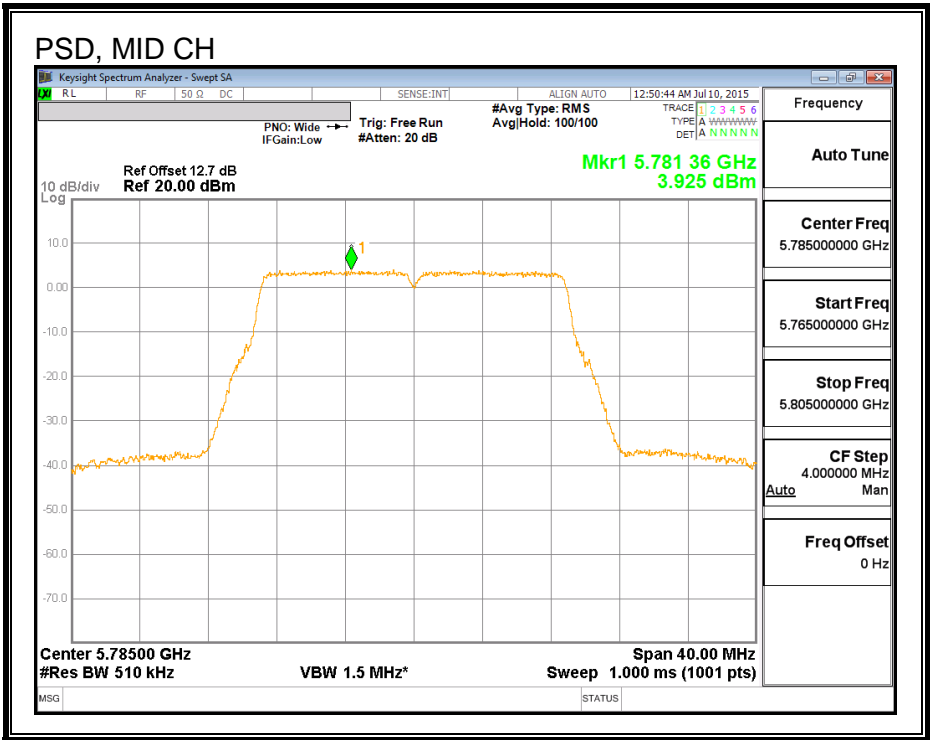
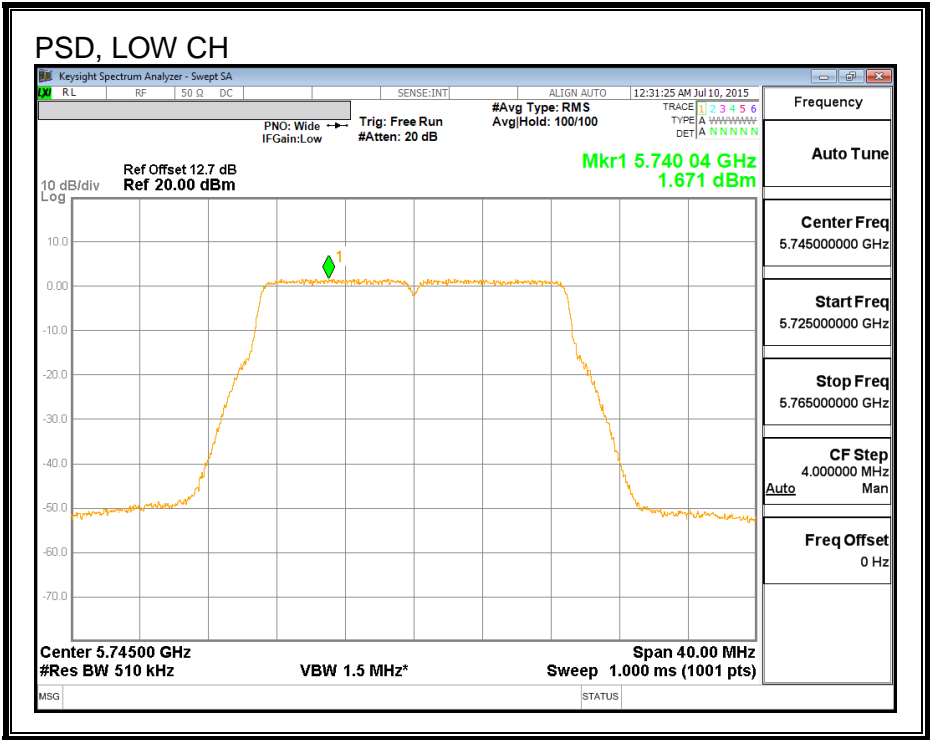
Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5745	-0.70	30.00
Mid	5785	-0.70	30.00
High	5825	-0.70	30.00

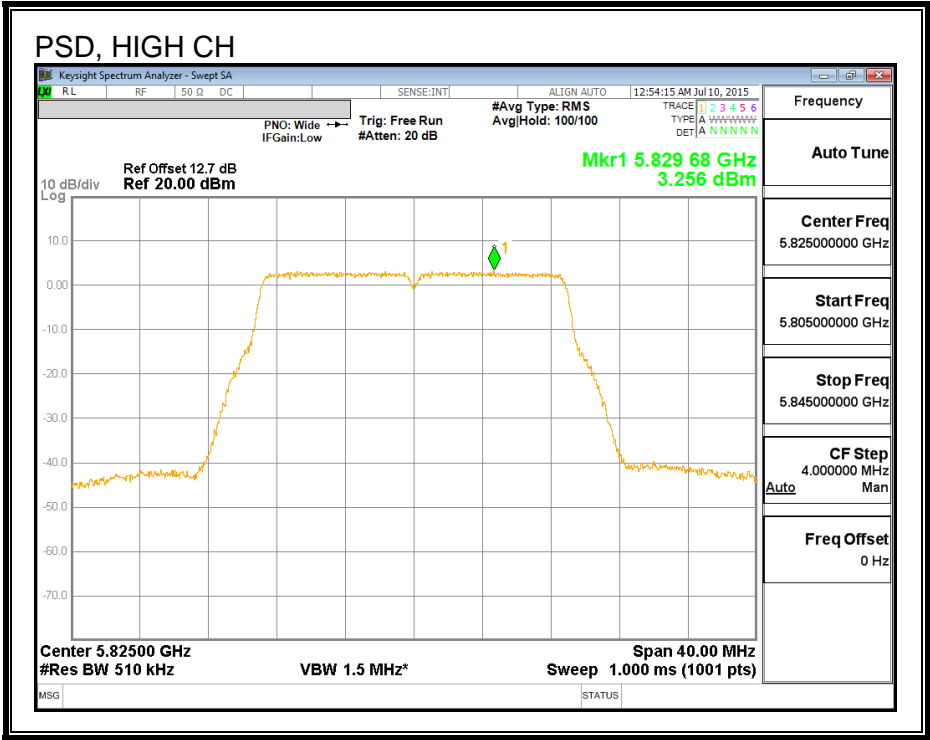
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
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##### PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5745	1.67	1.67	30.00	-28.33
Mid	5785	3.93	3.93	30.00	-26.08
High	5825	3.26	3.26	30.00	-26.74

PSD, CHAIN 0





## **8.38. 802.11n HT20 CHAIN 1 MODE IN THE 5.8 GHz BAND**

### **8.38.1. 6 dB BANDWIDTH**

#### **LIMITS**

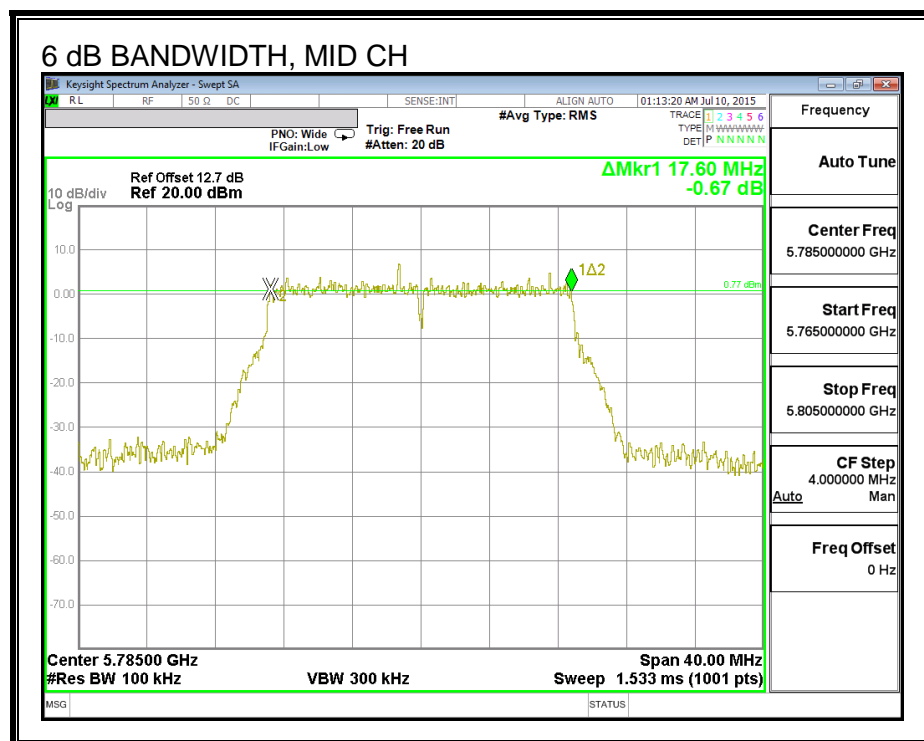
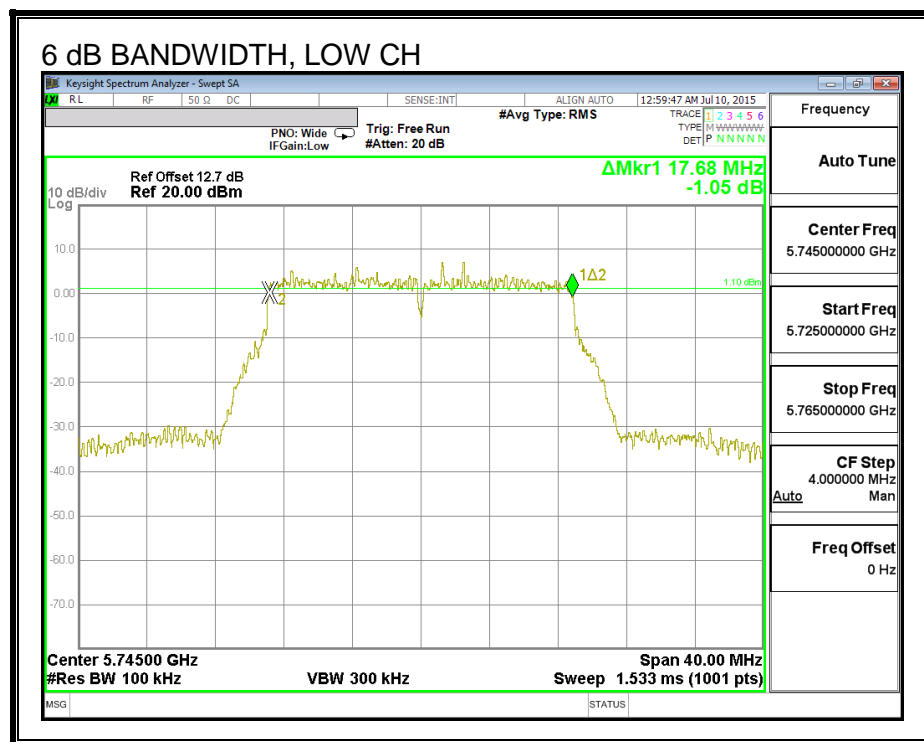
FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

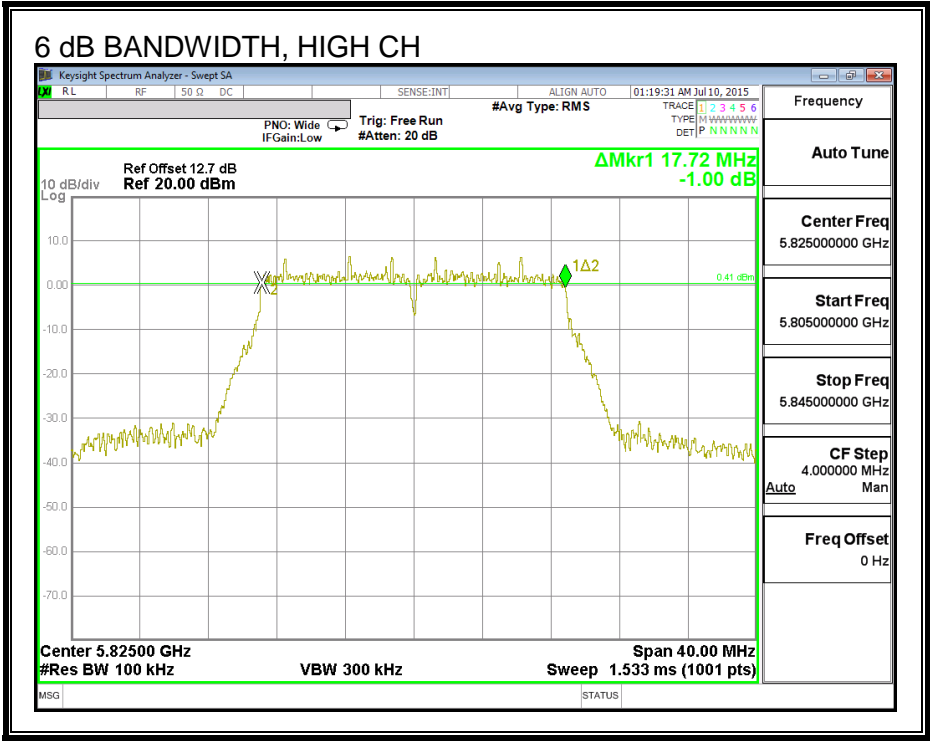
The minimum 6 dB bandwidth shall be at least 500 kHz.

#### **RESULTS**

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	17.68	0.5
Mid	5785	17.60	0.5
High	5825	17.72	0.5







### 8.38.2. 26 dB BANDWIDTH

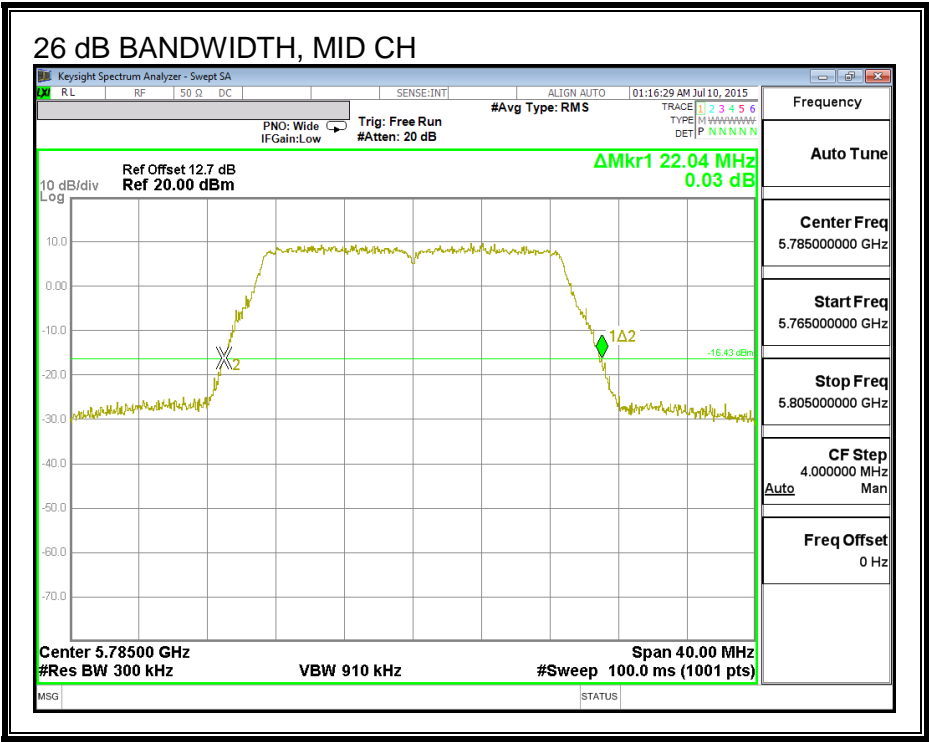
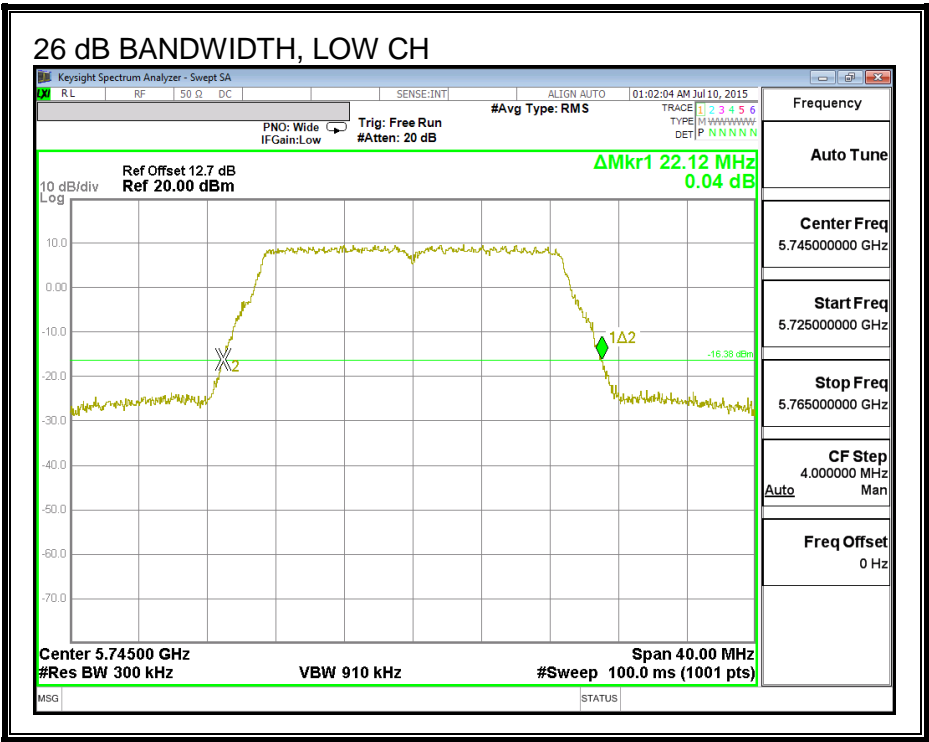
#### LIMITS

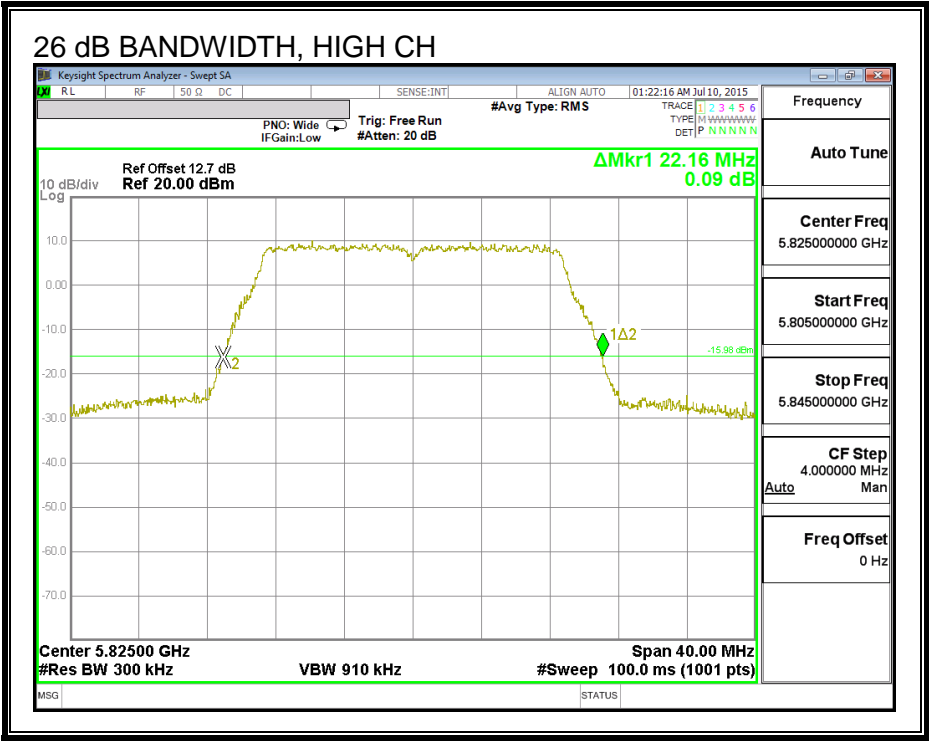
None, for reporting purposes only

#### RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	22.12
Mid	5785	22.04
High	5825	22.16

26 dB BANDWIDTH





### 8.38.3. 99% BANDWIDTH

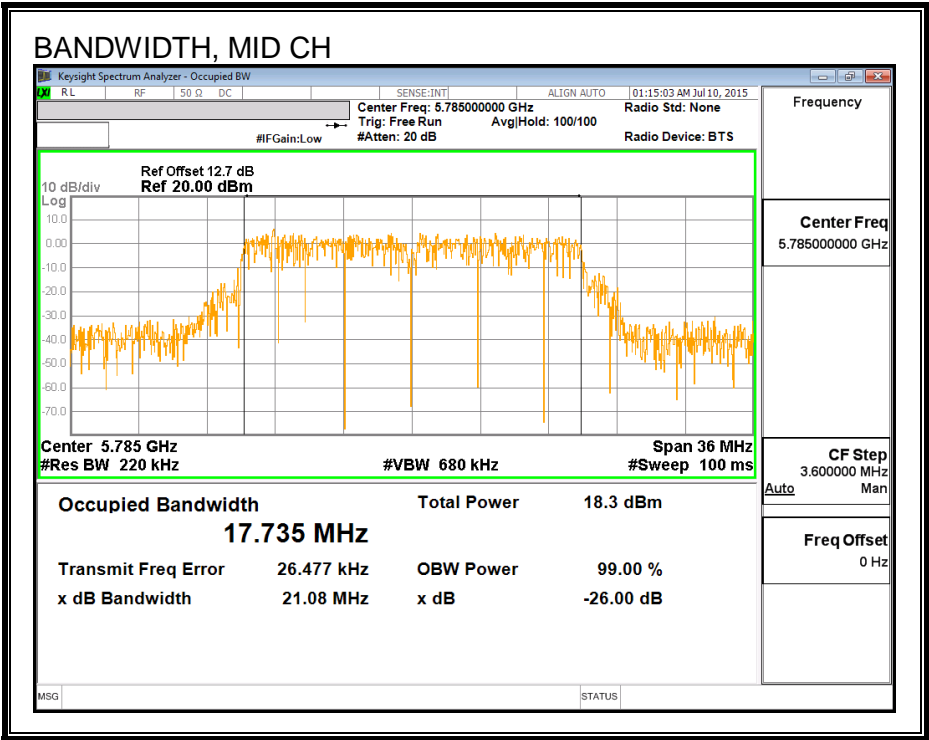
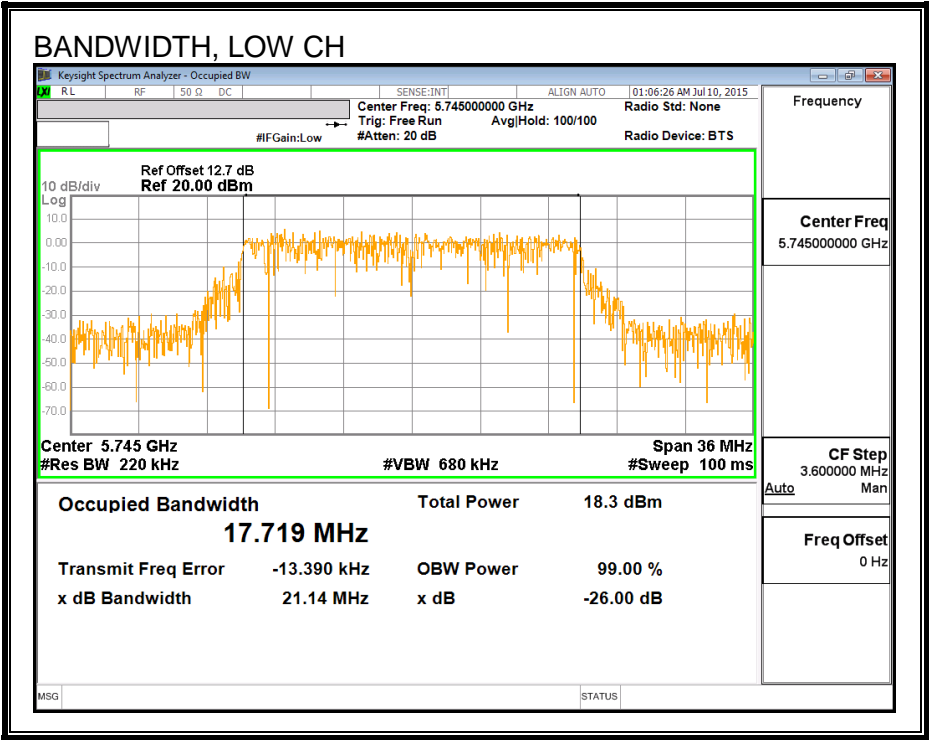
#### LIMITS

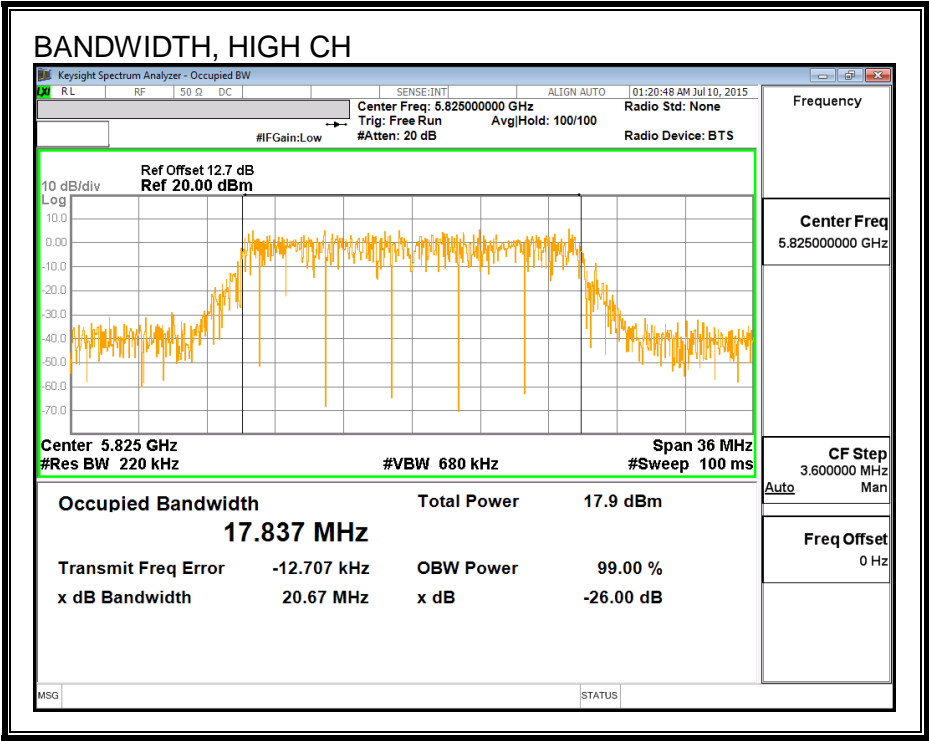
None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	17.719
Mid	5785	17.735
High	5825	17.837

99% BANDWIDTH





#### 8.38.4. AVERAGE POWER

##### LIMITS

None; for reporting purposes only.

##### RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5745	15.94
Mid	5785	17.97
High	5825	17.46



### **8.38.5. 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 (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	-1.35	30.00
Mid	5785	-1.35	30.00
High	5825	-1.35	30.00

<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd Power</b>
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### **Output Power Results**

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	15.94	15.94	30.00	-14.06
Mid	5785	17.97	17.97	30.00	-12.03
High	5825	17.46	17.46	30.00	-12.54

### 8.38.6. 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 (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5745	-1.35	30.00
Mid	5785	-1.35	30.00
High	5825	-1.35	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	5745	1.78	1.78	30.00	-28.22
Mid	5785	3.90	3.90	30.00	-26.10
High	5825	3.02	3.02	30.00	-26.98

PSD, CHAIN 1

