

## 8.14. 802.11n HT20 ANTENNA B MODE IN THE 5.3 GHz BAND

### 8.14.1. 26 dB BANDWIDTH

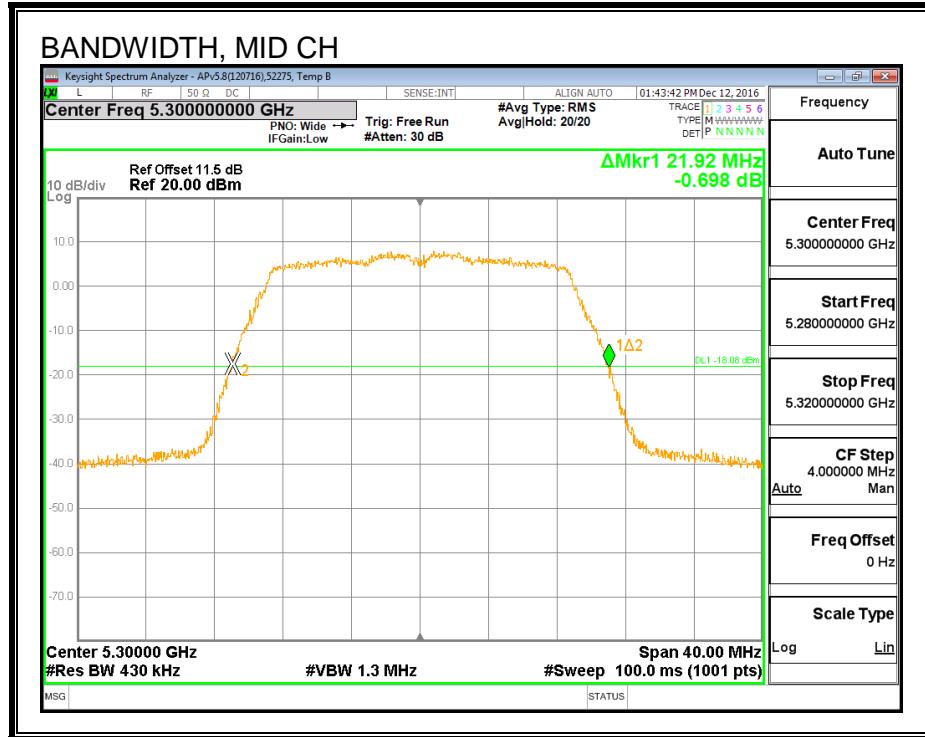
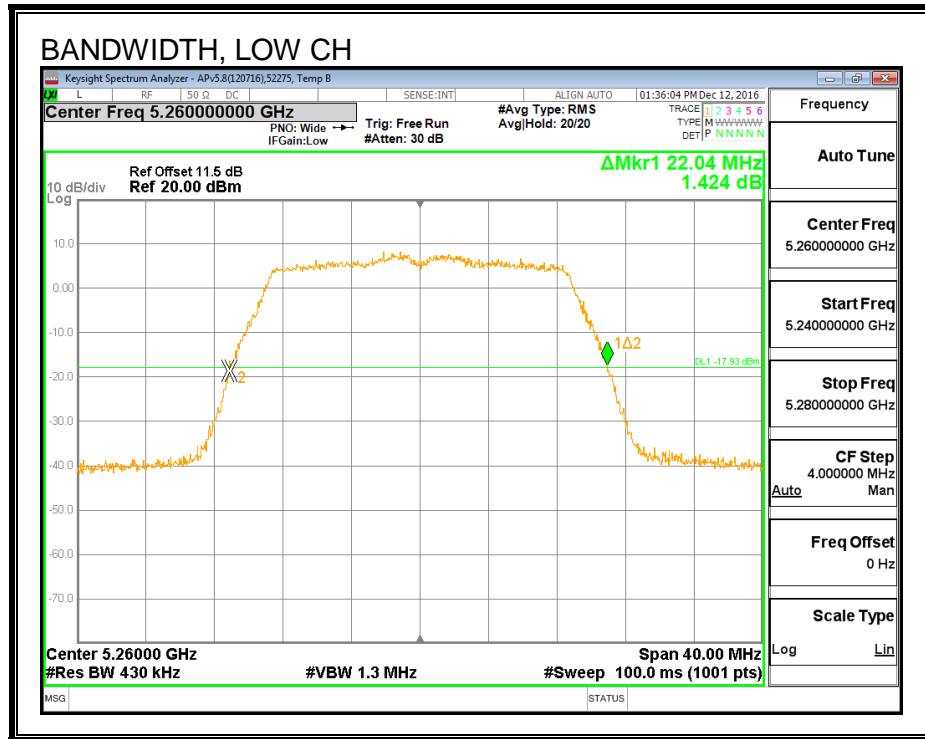
#### LIMITS

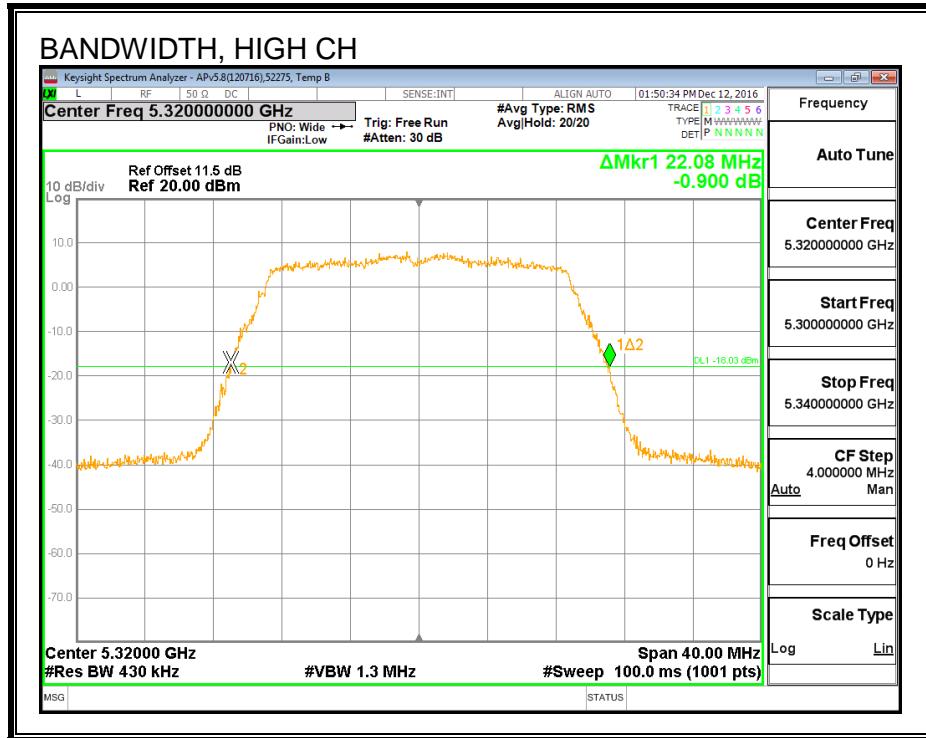
None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	22.04
Mid	5300	21.92
High	5320	22.08

## 26 dB BANDWIDTH





### 8.14.2. 99% BANDWIDTH

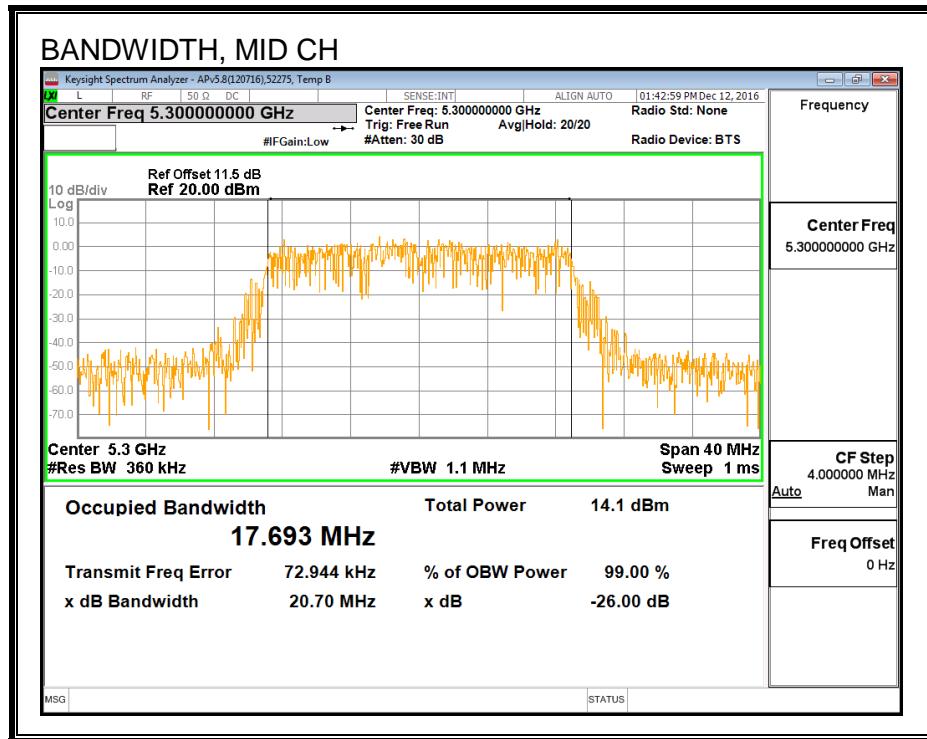
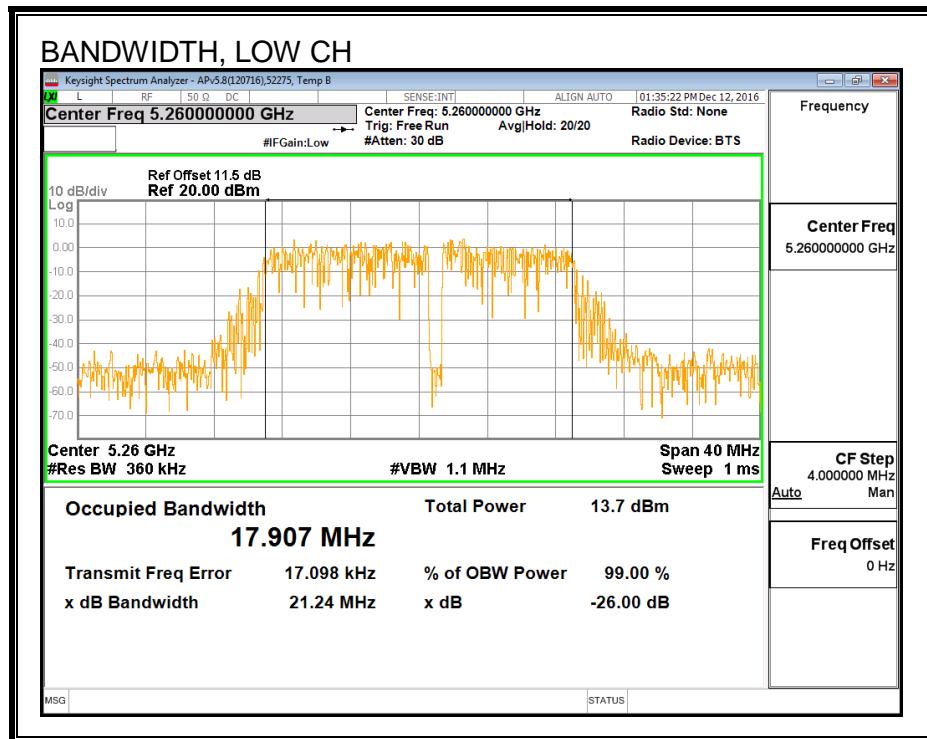
#### LIMITS

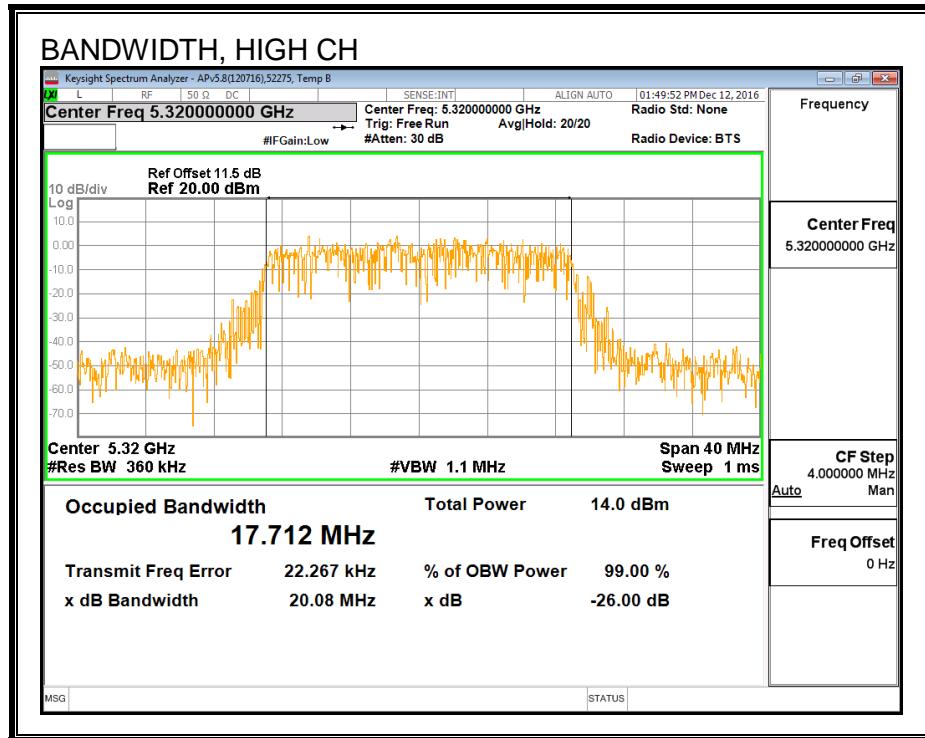
None; for reporting purposes only.

#### RESULTS

Frequency (MHz)	99% Bandwidth (MHz)
5260	17.907
5300	17.693
5320	17.712

**99% BANDWIDTH**





### 8.14.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

#### RESULTS

ID:	43578	Date:	1/21/17
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Channel	Frequency (MHz)	Power (dBm)
Low	5260	16.44
Mid	5300	16.47
High	5320	15.89

#### 8.14.4. OUTPUT POWER AND PSD

##### LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in 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.

##### 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

ID:	43578	Date:	1/21/17
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### Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min BW (MHz)	Min BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5260	22.04	17.907	2.81	23.53	11.00
Mid	5300	21.92	17.693	2.81	23.48	11.00
High	5320	22.08	17.712	2.81	23.48	11.00

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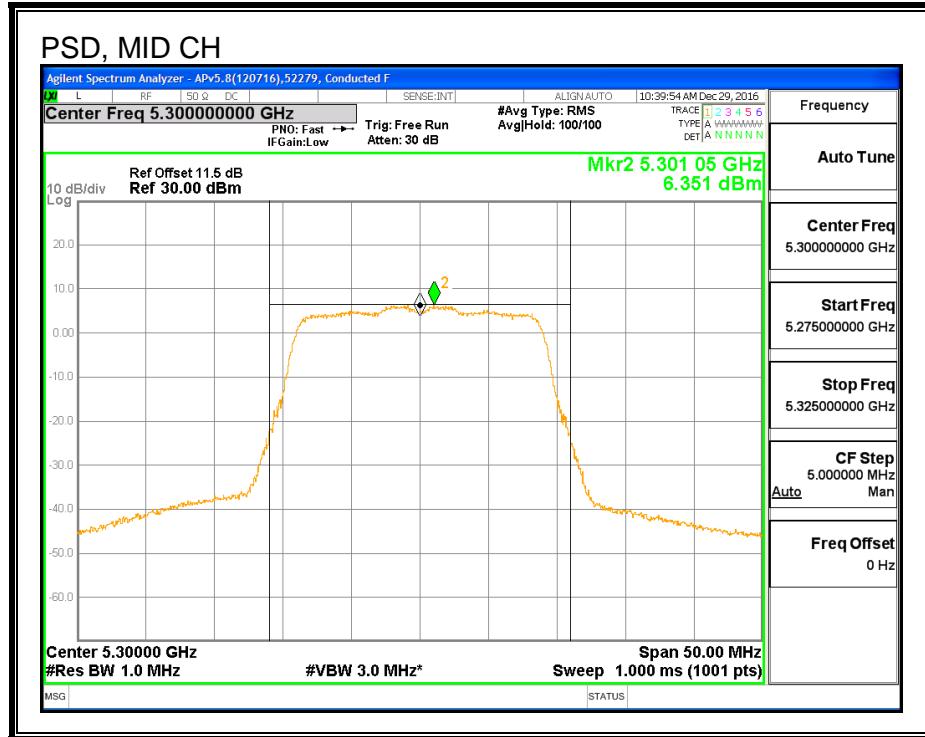
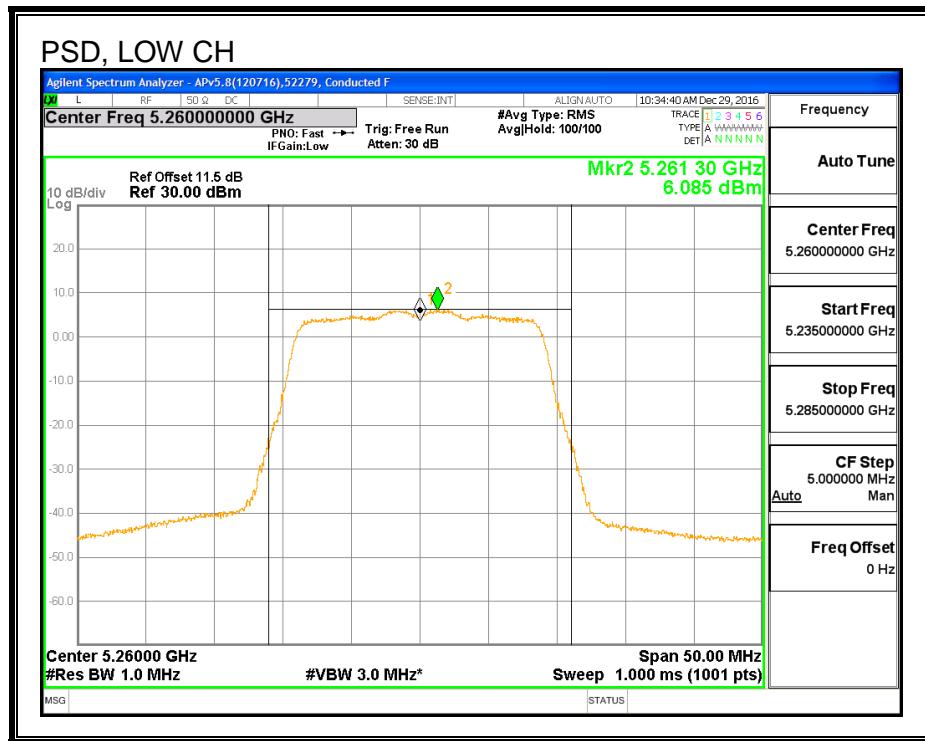
### Output Power Results

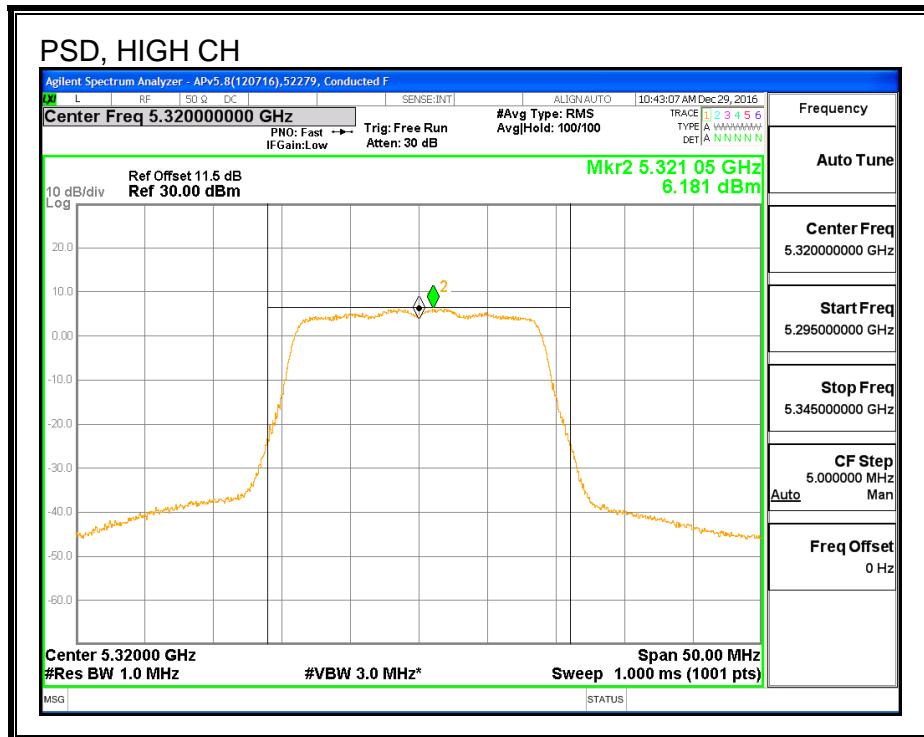
Channel	Frequency (MHz)	Ant B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	16.44	16.44	23.53	-7.09
Mid	5300	16.47	16.47	23.48	-7.01
High	5320	15.89	15.89	23.48	-7.59

### PSD Results

Channel	Frequency (MHz)	Ant B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5260	6.09	6.09	11.00	-4.92
Mid	5300	6.35	6.35	11.00	-4.65
High	5320	6.18	6.18	11.00	-4.82

PSD





## 8.15. 802.11n HT20 2Tx (ANTENNA A + ANTENNA B) CDD MODE IN THE 5.3 GHz BAND

### 8.15.1. 26 dB BANDWIDTH

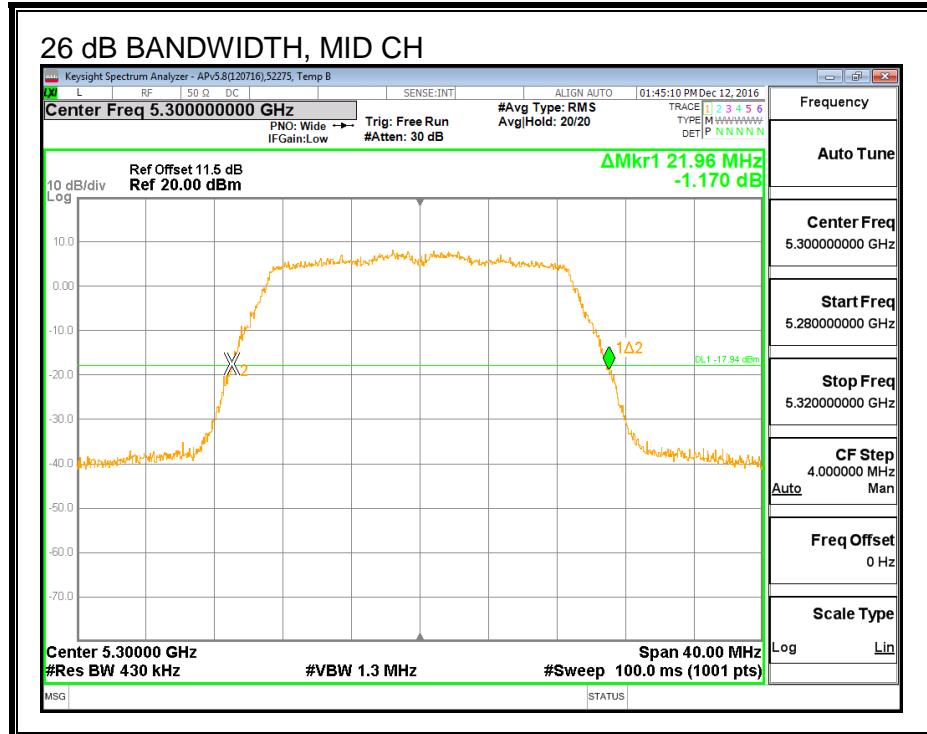
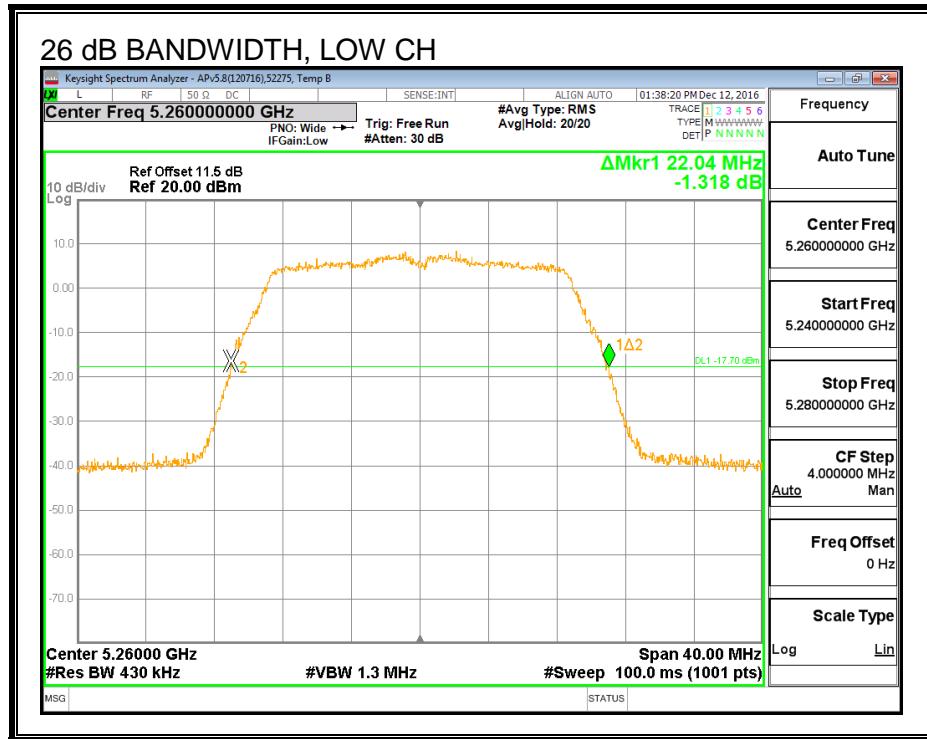
#### LIMITS

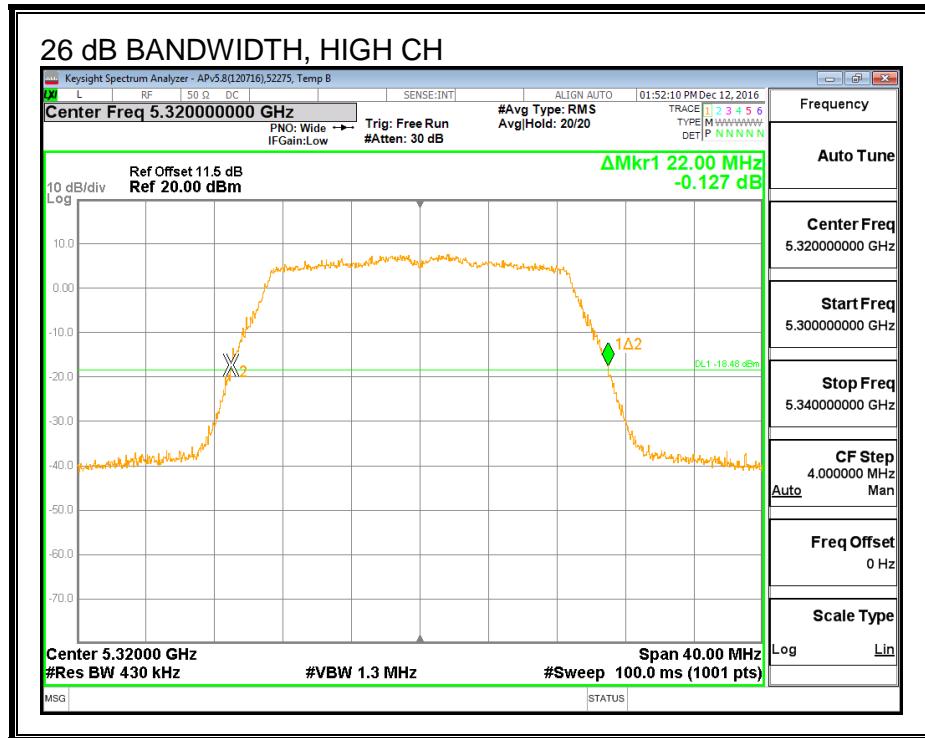
None; for reporting purposes only.

#### RESULTS

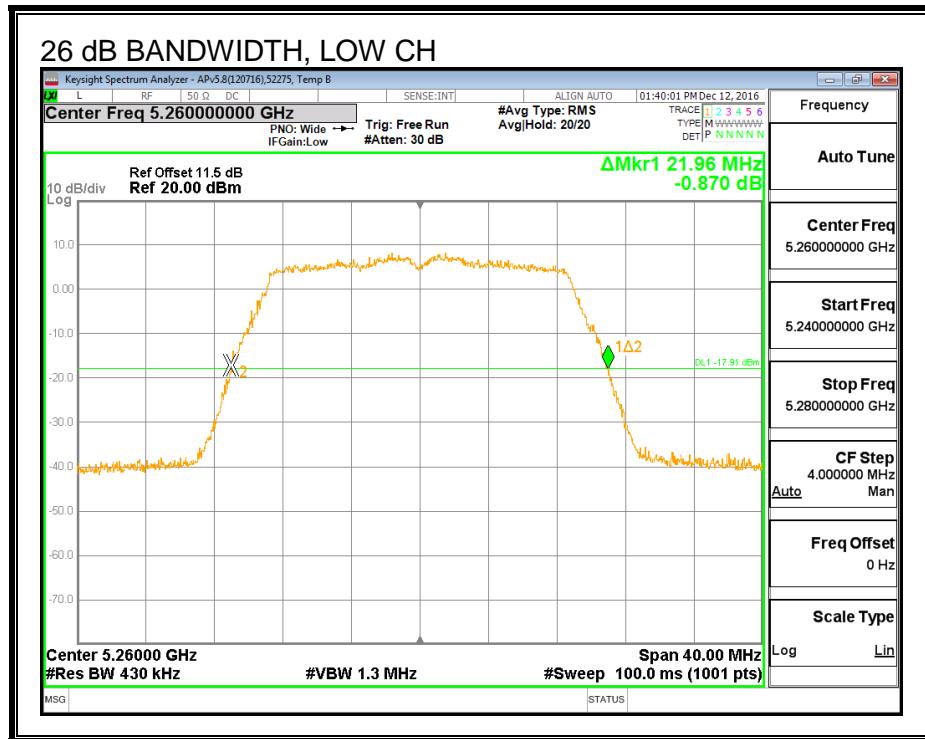
Frequency (MHz)	26 dB BW Ant A (MHz)	26 dB BW Ant B (MHz)
5260	22.04	21.96
5300	21.96	22.04
5320	22.00	22.04

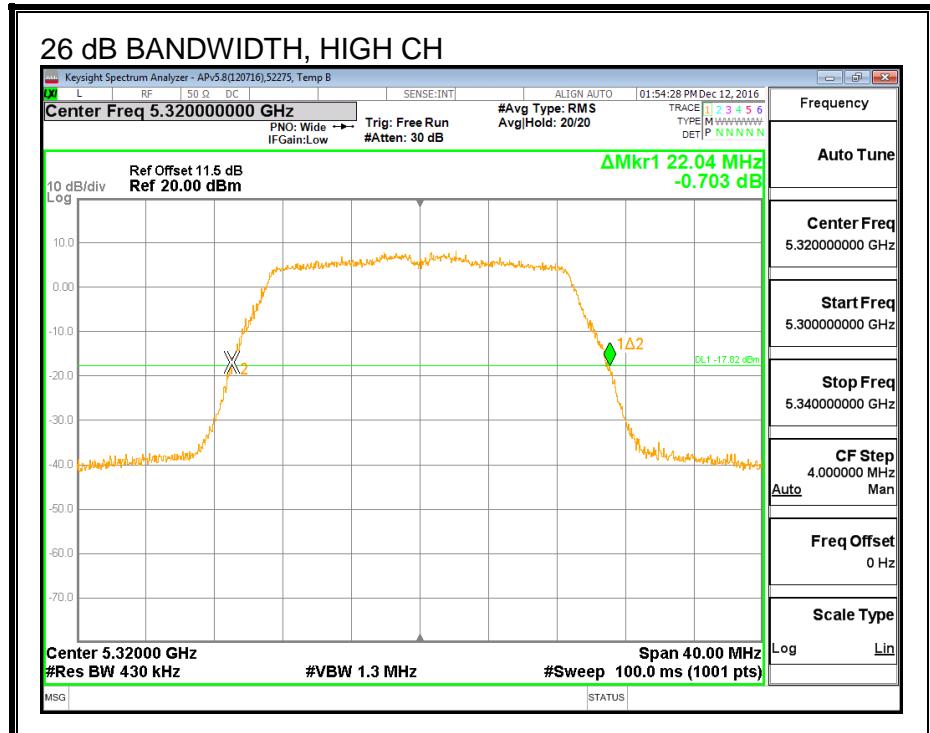
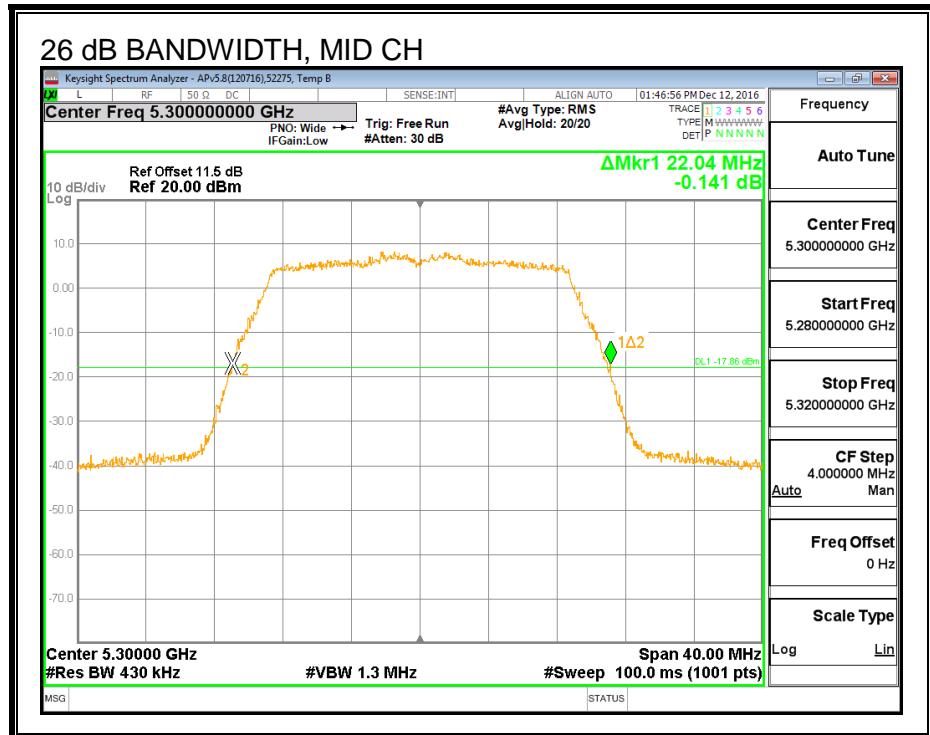
**26 dB BANDWIDTH, ANTENNA A**





### 26 dB BANDWIDTH, ANTENNA B





### 8.15.2. 99% BANDWIDTH

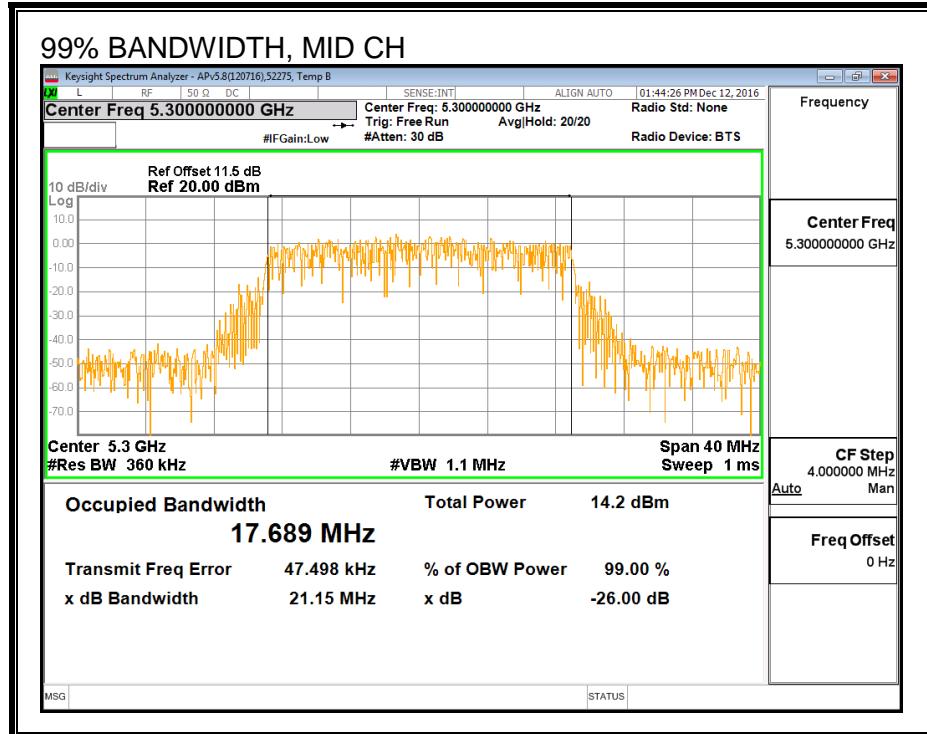
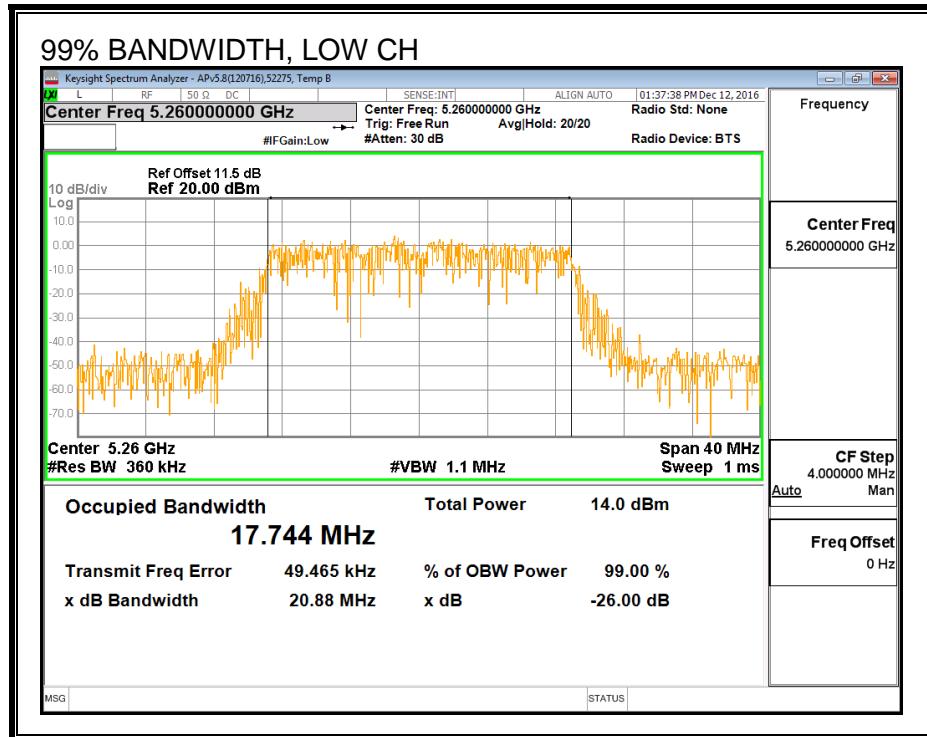
#### LIMITS

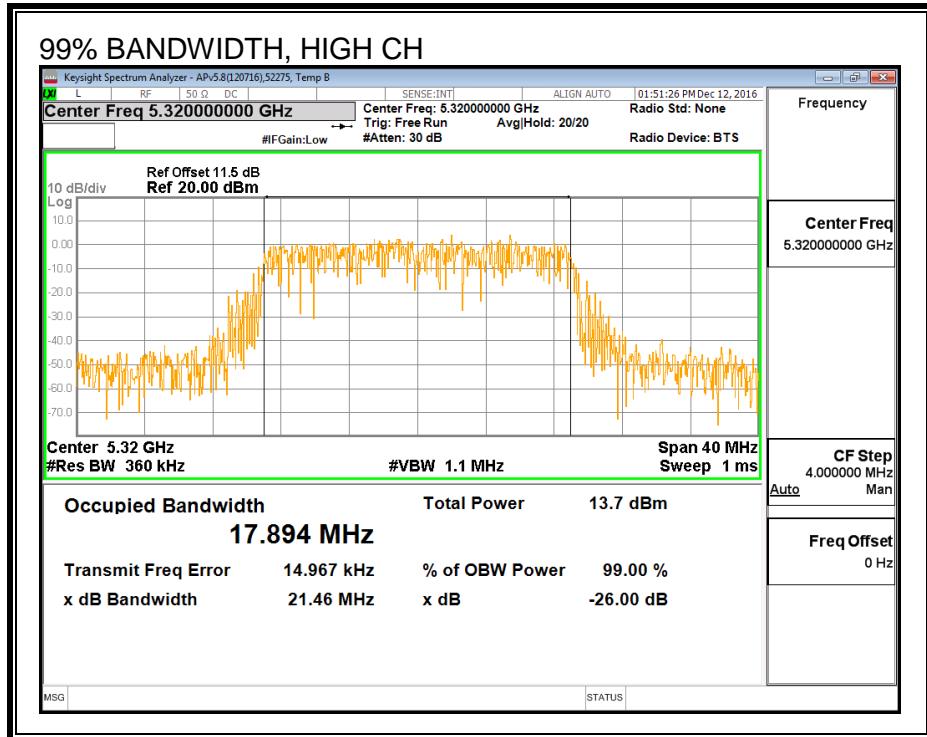
None; for reporting purposes only.

#### RESULTS

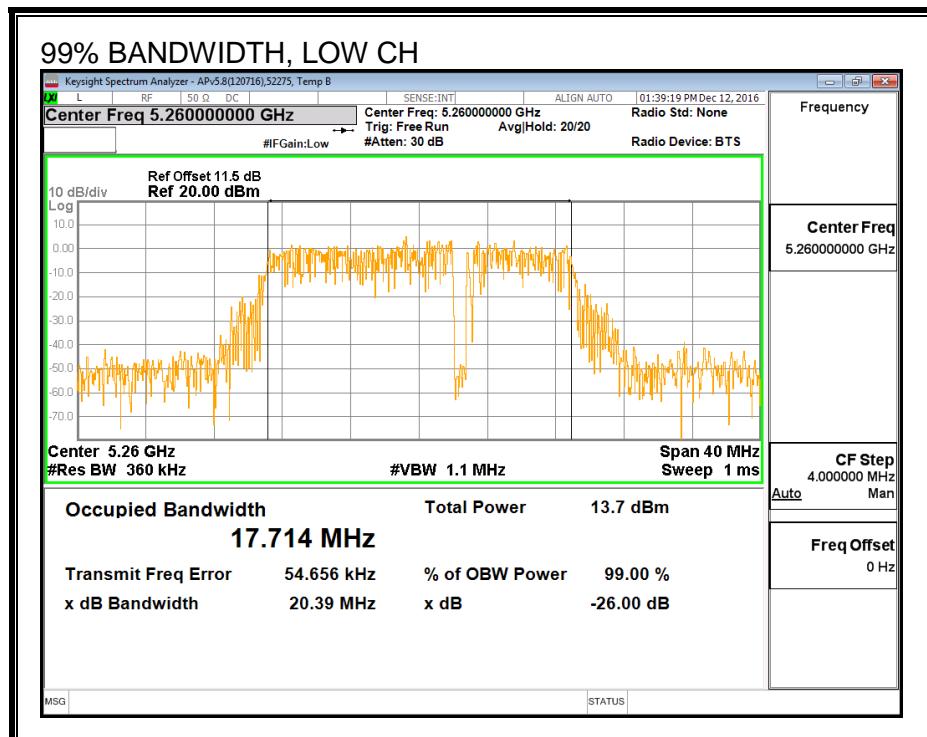
Channel	Frequency (MHz)	99% BW Ant A (MHz)	99% BW Ant B (MHz)
Low	5260	17.744	17.714
Mid	5300	17.689	17.737
High	5320	17.894	17.758

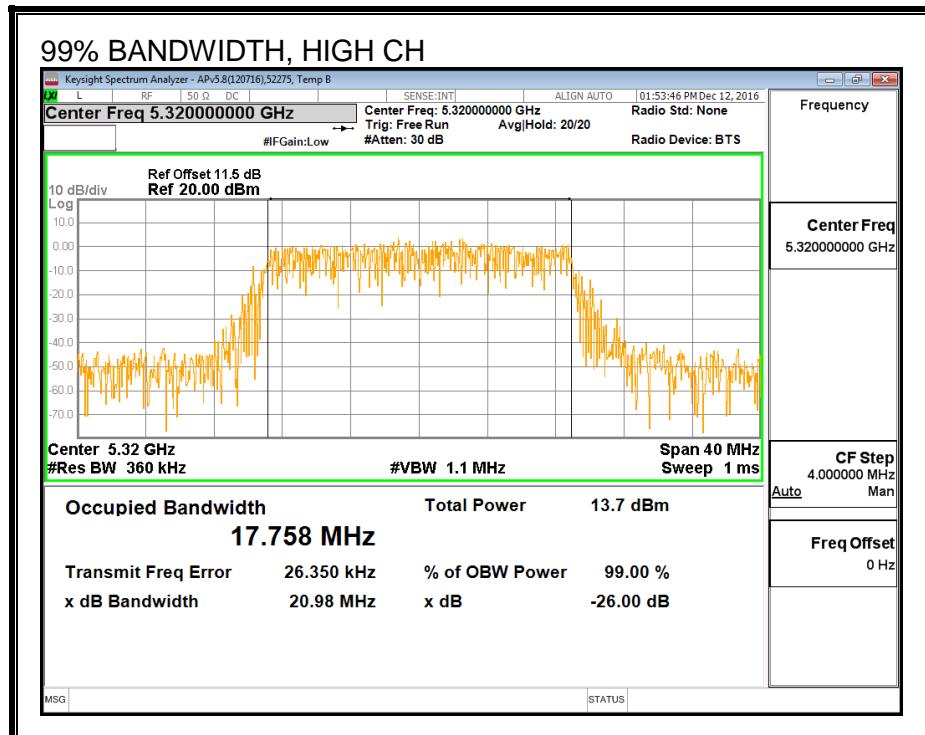
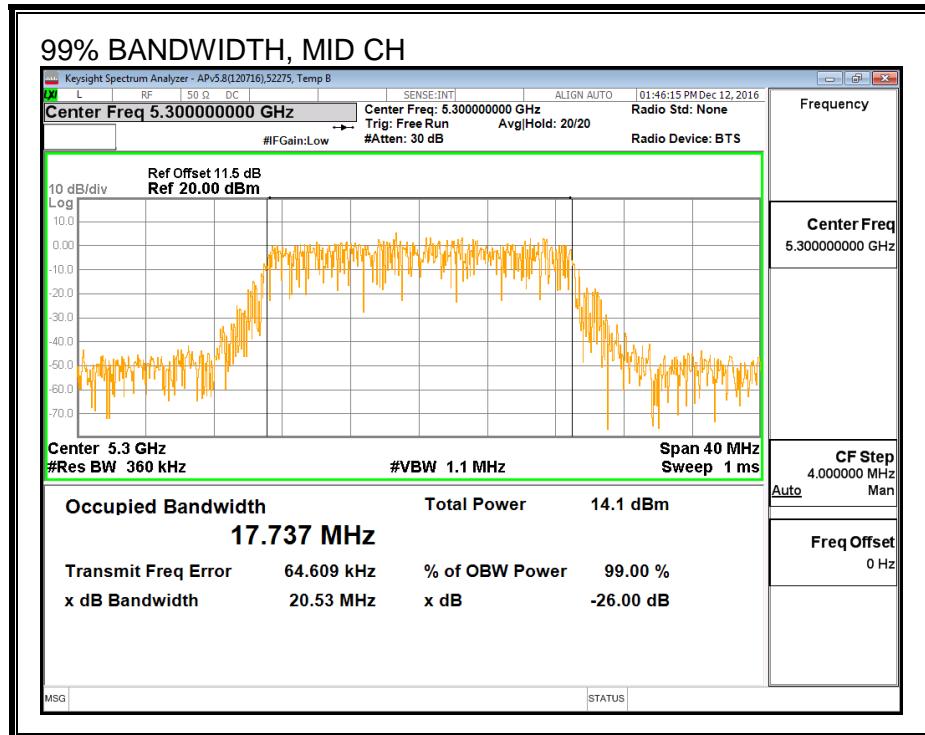
**99% BANDWIDTH, ANTENNA A**





## **99% BANDWIDTH, ANTENNA B**





### 8.15.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

#### RESULTS

<b>ID:</b>	43578	<b>Date:</b>	1/21/17
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##### Average Power Results

Channel	Frequency (MHz)	Ant A Power (dBm)	Ant B Power (dBm)	Total Power (dBm)
Low	5260	16.44	16.48	19.47
Mid	5300	16.41	16.49	19.46
High	5320	14.43	14.46	17.46

#### 8.15.4. OUTPUT POWER AND PSD

##### LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in 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.

##### 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:

Ant A Antenna Gain (dBi)	Ant B Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
2.28	2.81	2.55

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

Ant A Antenna Gain (dBi)	Ant B Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
2.28	2.81	5.56

## RESULTS

ID:	43578	Date:	1/21/17
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### 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	5260	21.96	17.714	2.55	5.56	23.48	11.00
Mid	5300	21.96	17.689	2.55	5.56	23.48	11.00
High	5320	22.00	17.758	2.55	5.56	23.49	11.00

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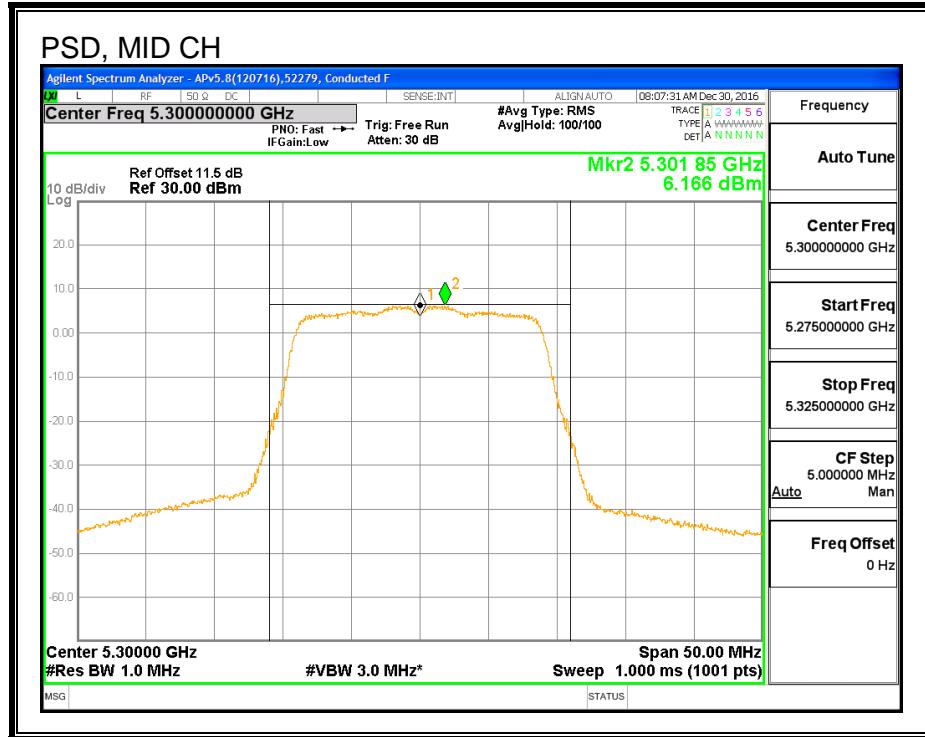
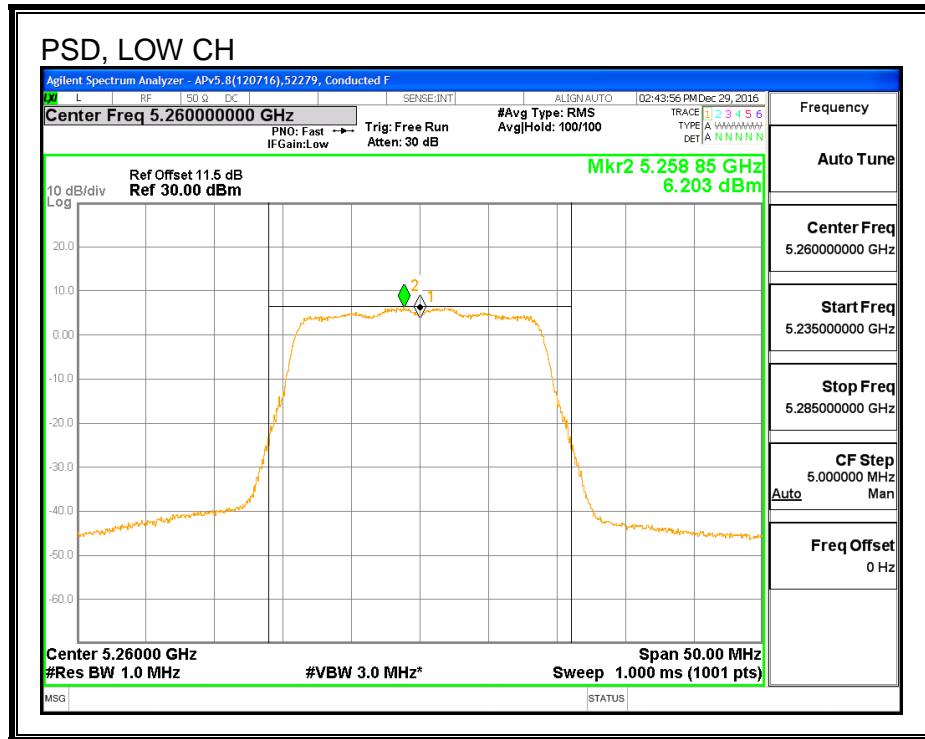
### Output Power Results

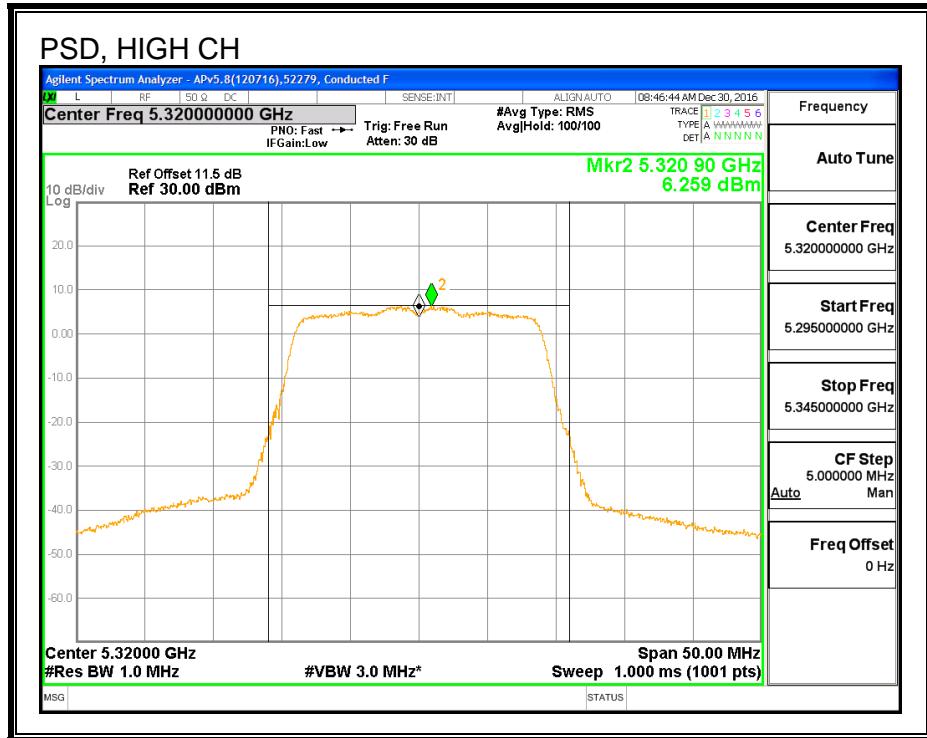
Channel	Frequency (MHz)	Ant A Meas Power (dBm)	Ant B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	16.44	16.48	19.47	23.48	-4.01
Mid	5300	16.41	16.49	19.46	23.48	-4.02
High	5320	14.43	14.46	17.46	23.49	-6.04

### PSD Results

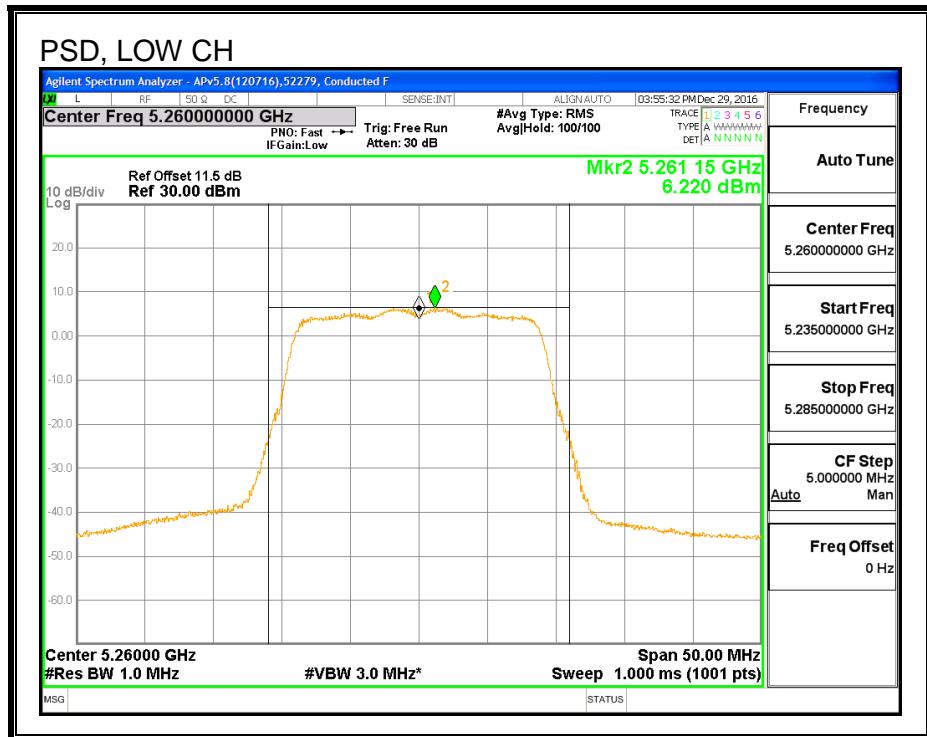
Channel	Frequency (MHz)	Ant A Meas PSD (dBm)	Ant B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5260	6.20	6.22	9.22	11.00	-1.78
Mid	5300	6.17	6.04	9.11	11.00	-1.89
High	5320	6.26	6.56	9.42	11.00	-1.58

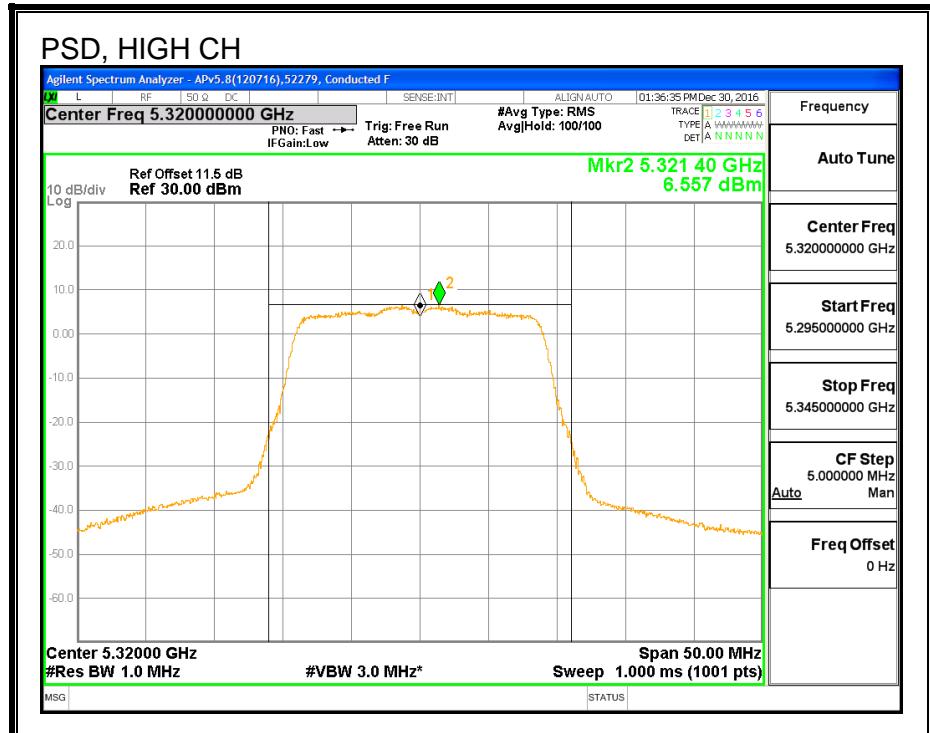
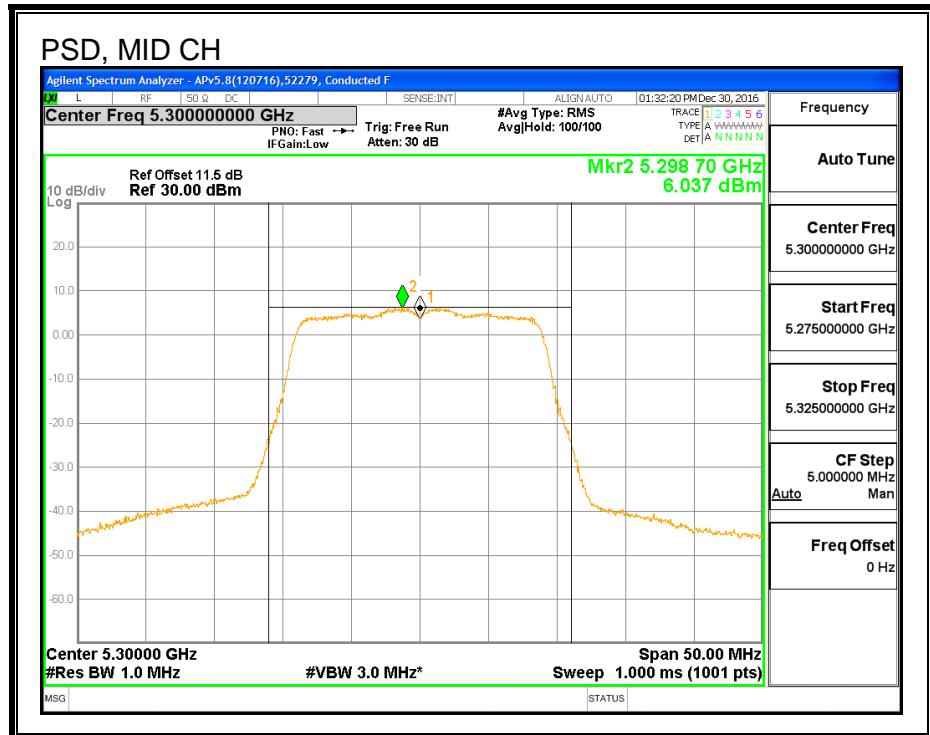
**PSD, ANTENNA A**





**PSD, ANTENNA B**





### **8.16. 802.11n HT20 2Tx (ANTENNA A + ANTENNA B) STBC MODE IN THE 5.3 GHz BAND**

**Noted:** Covered by 802.11n HT20 2Tx (ANTENNA A + ANTENNA B) CDD MODE IN THE 5.3 GHz BAND

## 8.17. 802.11n HT40 ANTENNA A MODE IN THE 5.3 GHz BAND

### 8.17.1. 26 dB BANDWIDTH

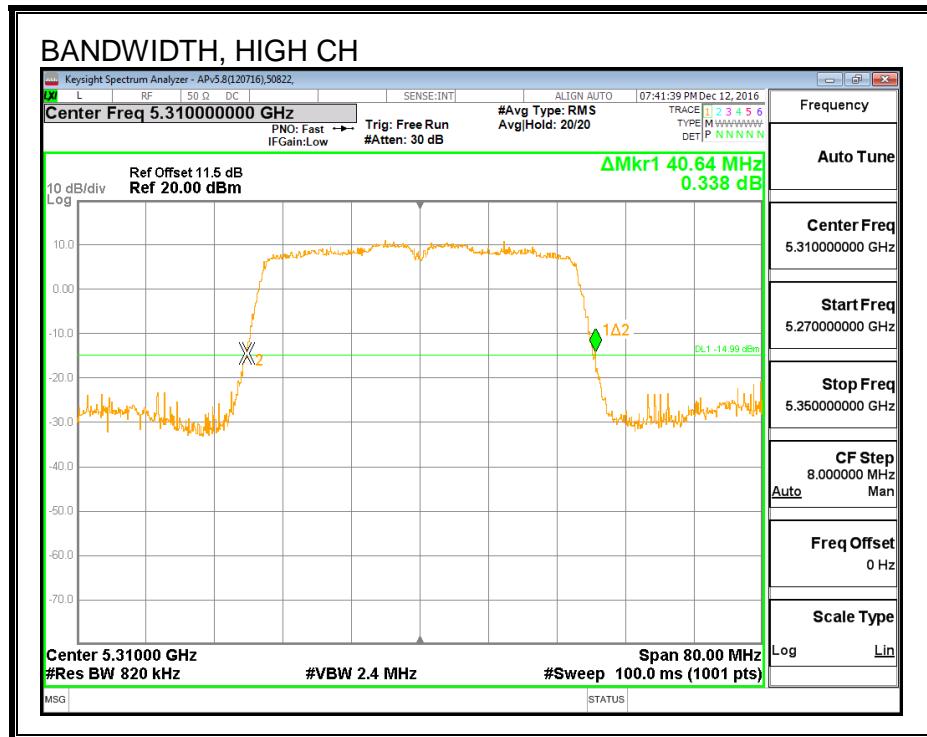
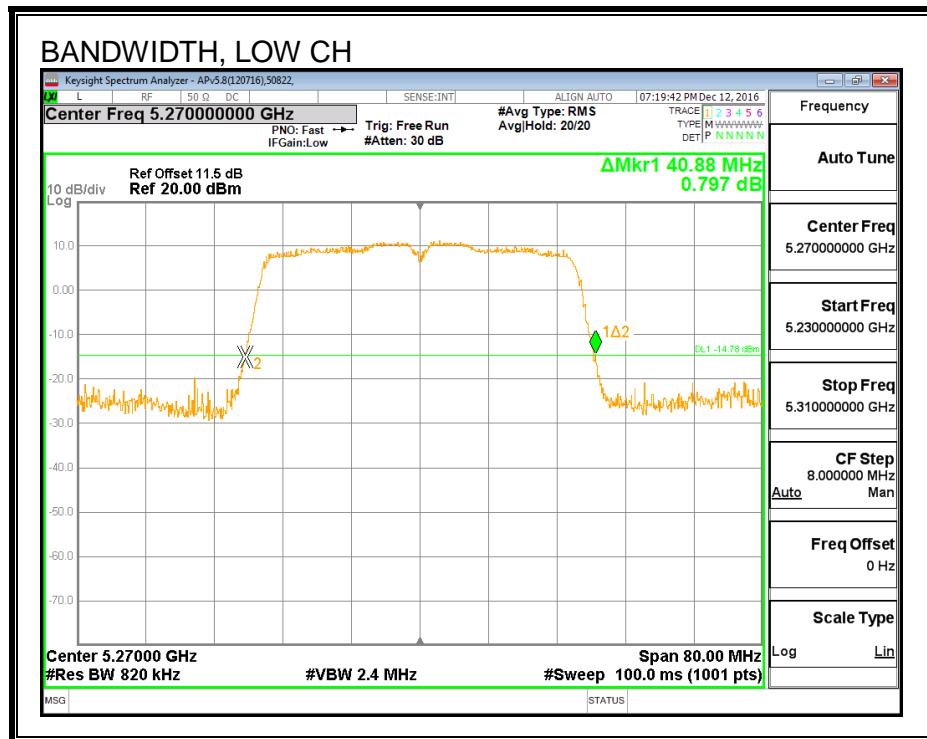
#### LIMITS

None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5270	40.88
High	5310	40.64

## 26 dB BANDWIDTH



### 8.17.2. 99% BANDWIDTH

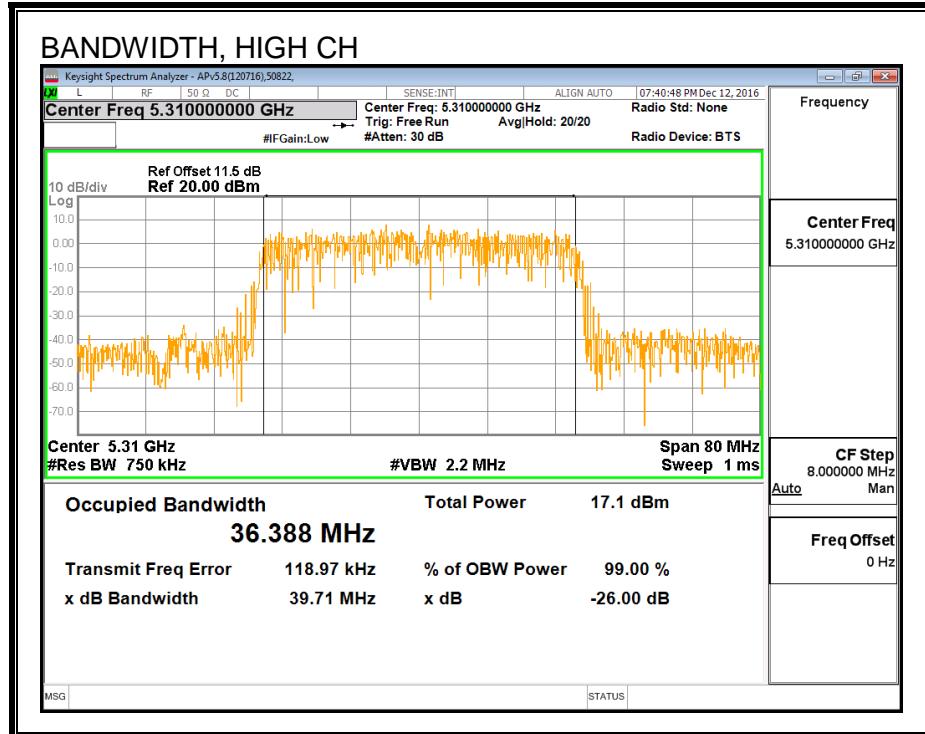
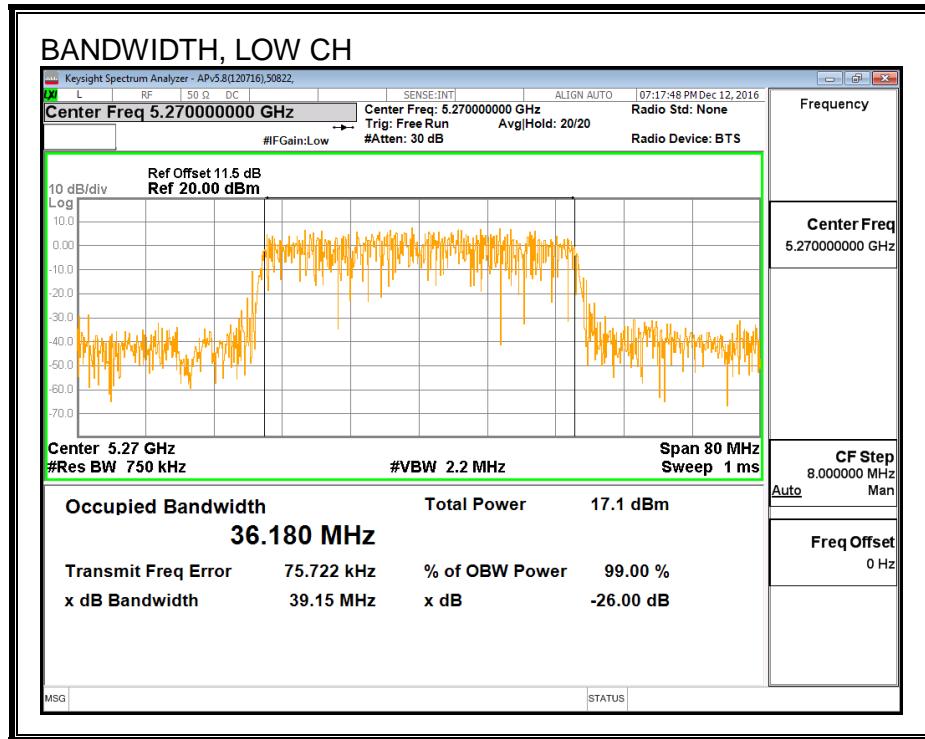
#### LIMITS

None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5270	36.180
High	5310	36.388

**99% BANDWIDTH**



### 8.17.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

#### RESULTS

ID:	43578	Date:	1/21/17
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Channel	Frequency (MHz)	Power (dBm)
Low	5270	16.45
High	5310	14.39

#### 8.17.4. OUTPUT POWER AND PSD

##### LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in 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.

##### 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

ID:	43578	Date:	1/21/17
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### 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	5270	40.88	36.180	2.28	24.00	11.00
High	5310	40.64	36.388	2.28	24.00	11.00

Duty Cycle CF (dB)	0.10	Included in Calculations of Corr'd PSD
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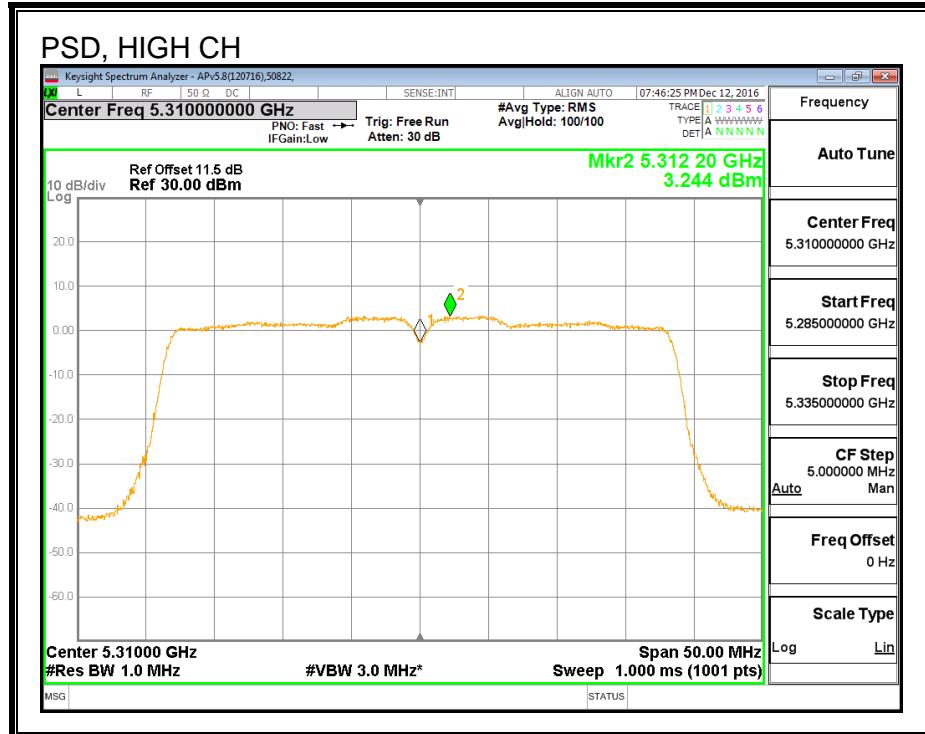
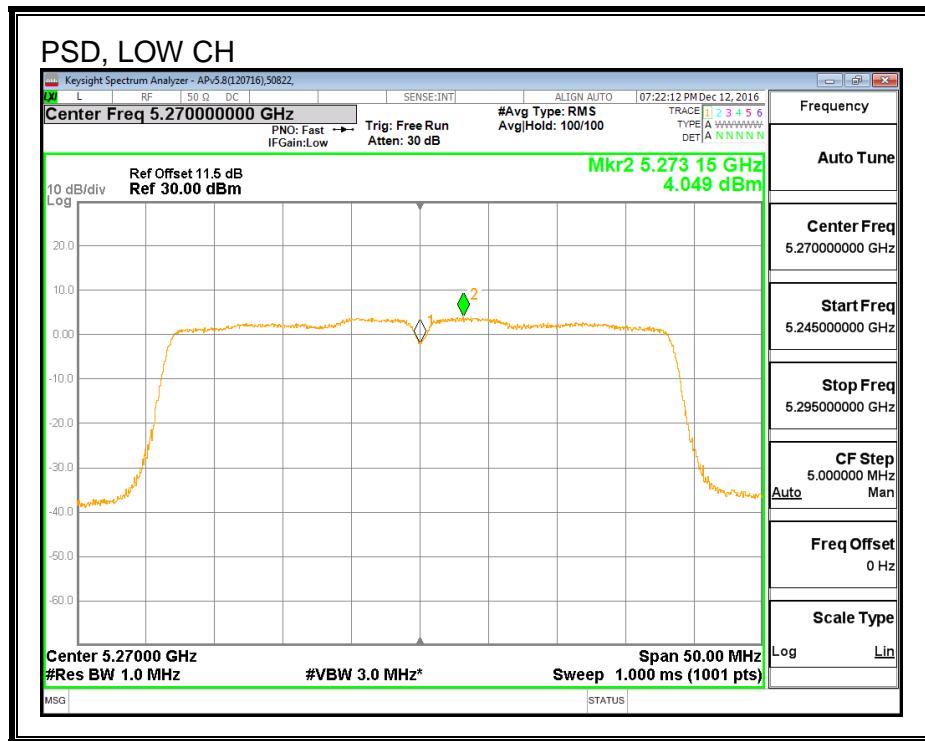
### Output Power Results

Channel	Frequency (MHz)	Ant A Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	16.45	16.45	24.00	-7.55
High	5310	14.39	14.39	24.00	-9.61

### PSD Results

Channel	Frequency (MHz)	Ant A Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5270	4.05	4.15	11.00	-6.85
High	5310	3.24	3.34	11.00	-7.66

PSD



## 8.18. 802.11n HT40 ANTENNA B MODE IN THE 5.3 GHz BAND

### 8.18.1. 26 dB BANDWIDTH

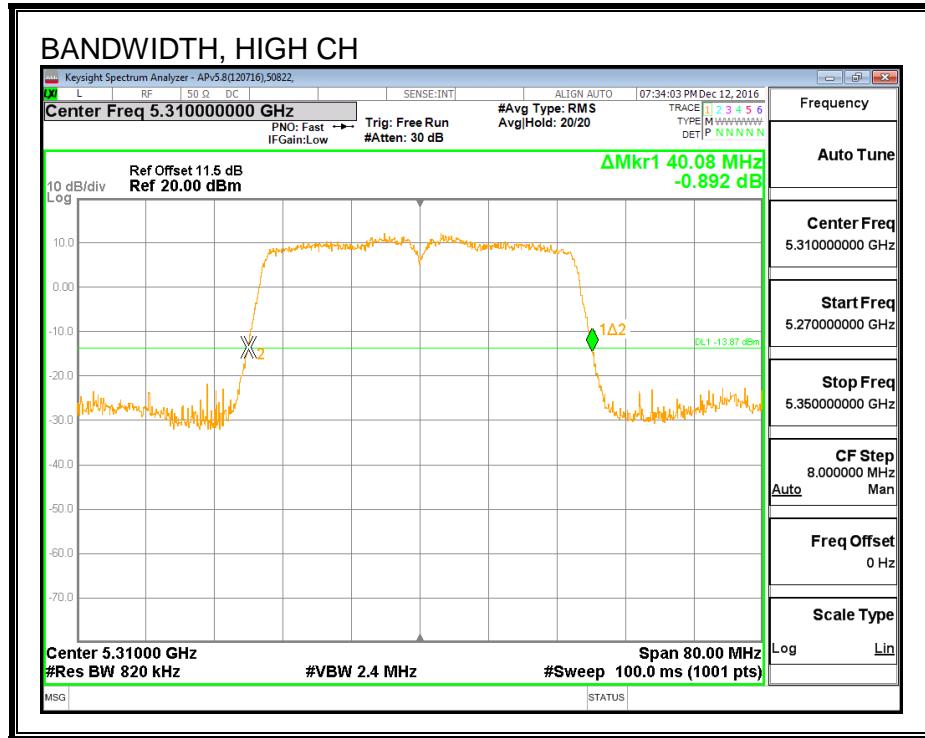
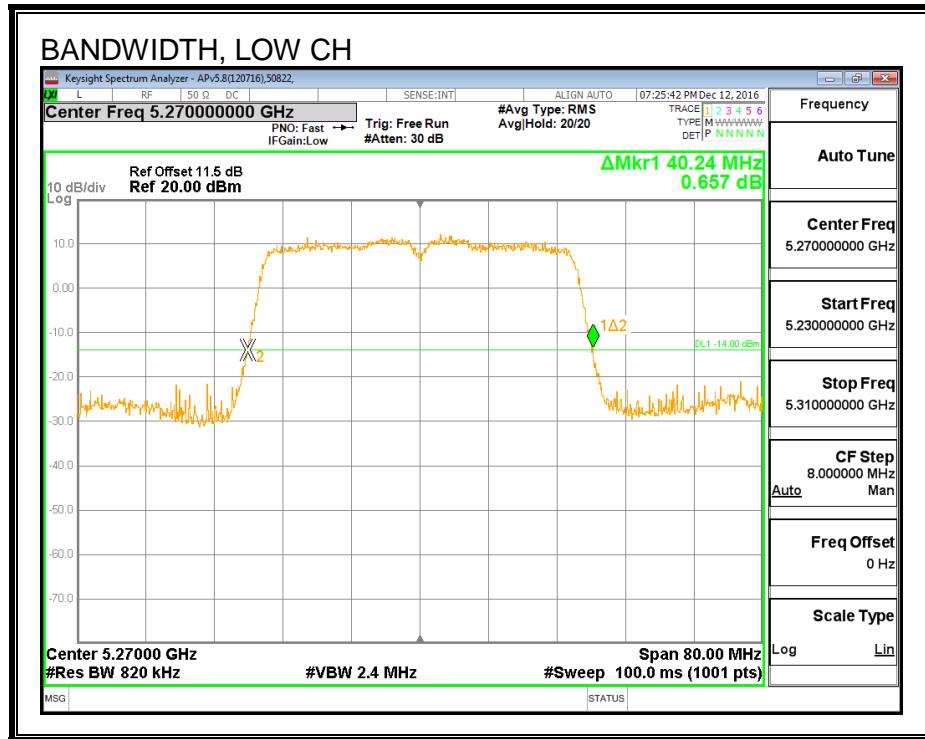
#### LIMITS

None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5270	40.24
High	5310	40.08

## 26 dB BANDWIDTH



### 8.18.2. 99% BANDWIDTH

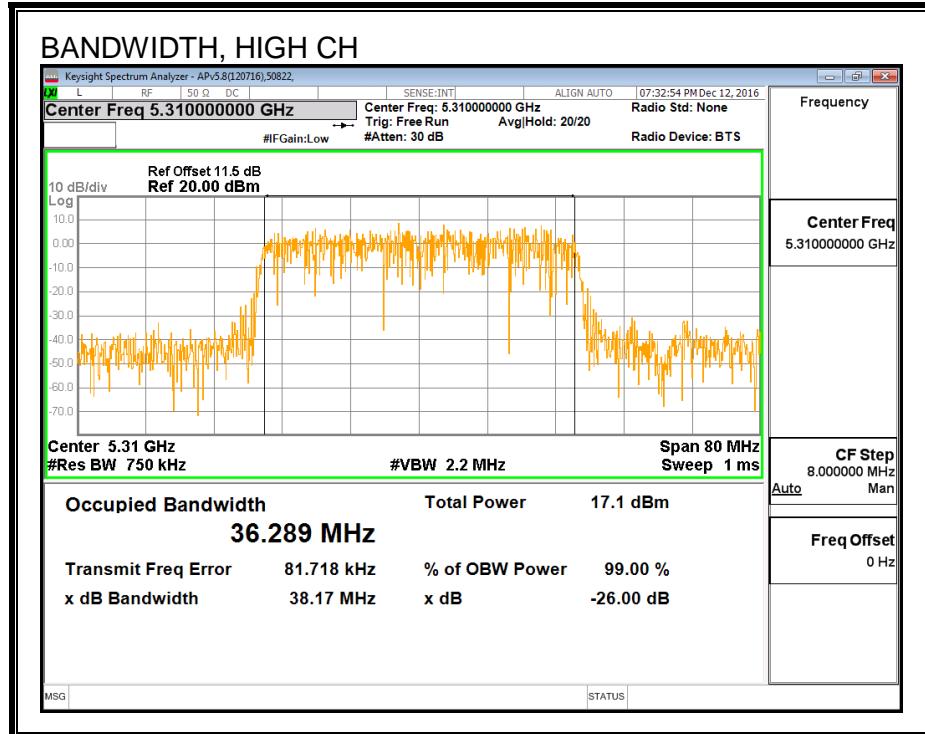
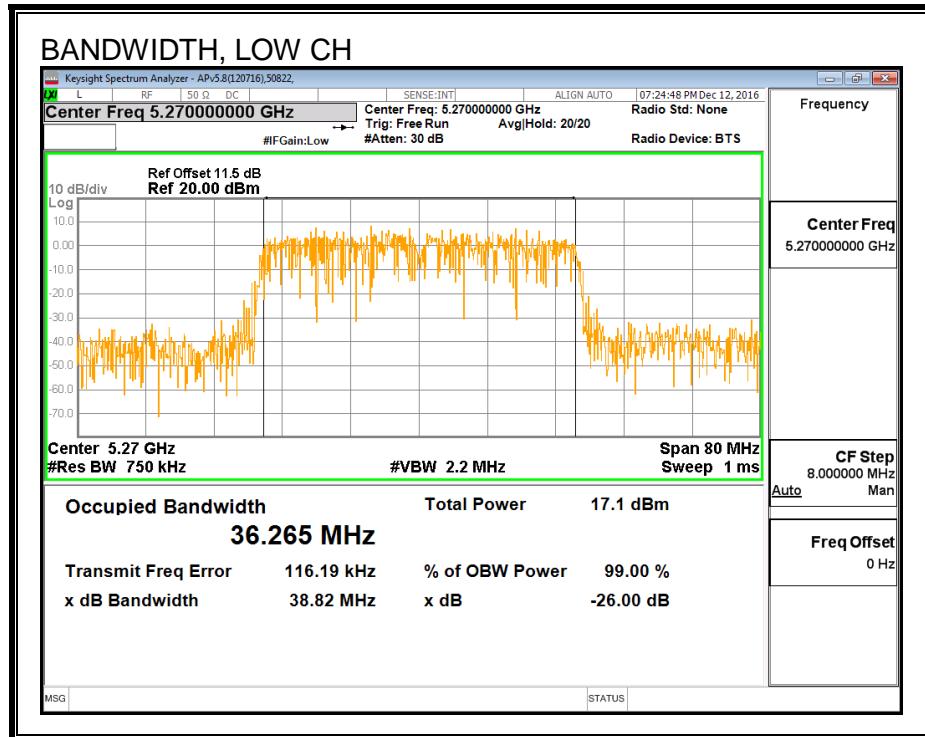
#### LIMITS

None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5270	36.265
High	5310	36.289

**99% BANDWIDTH**



### 8.18.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

#### RESULTS

ID:	43578	Date:	1/21/17
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Channel	Frequency (MHz)	Power (dBm)
Low	5270	16.48
High	5310	14.48

#### 8.18.4. OUTPUT POWER AND PSD

##### LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in 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.

##### 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

ID:	43578	Date:	1/21/17
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### 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	5270	40.24	36.265	2.81	24.00	11.00
High	5310	40.08	36.289	2.81	24.00	11.00

Duty Cycle CF (dB)	0.10	Included in Calculations of Corr'd PSD
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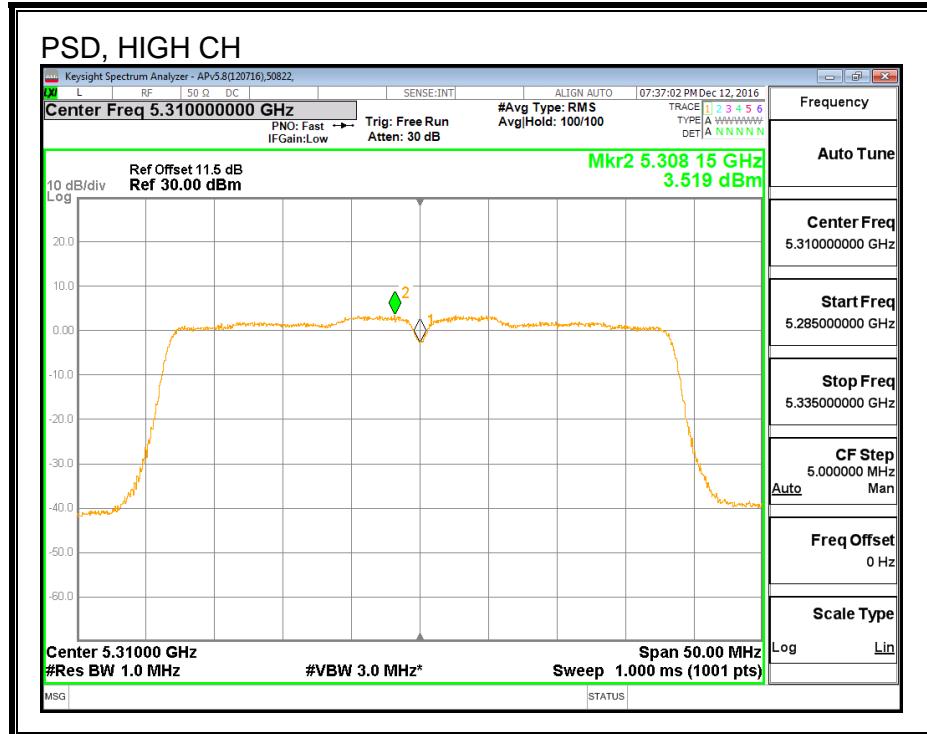
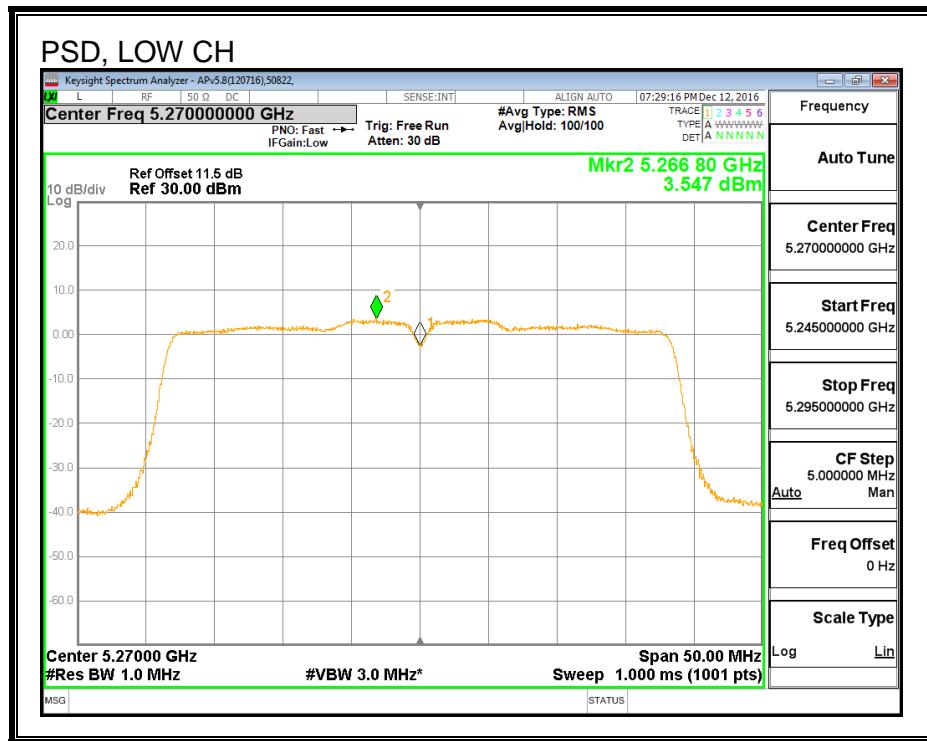
### Output Power Results

Channel	Frequency (MHz)	Ant B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	16.48	16.48	24.00	-7.52
High	5310	14.48	14.48	24.00	-9.52

### PSD Results

Channel	Frequency (MHz)	Ant B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5270	3.55	3.65	11.00	-7.35
High	5310	3.52	3.62	11.00	-7.38

PSD



## 8.19. 802.11n HT40 2Tx (ANTENNA A + ANTENNA B) CDD MODE IN THE 5.3 GHz BAND

### 8.19.1. 26 dB BANDWIDTH

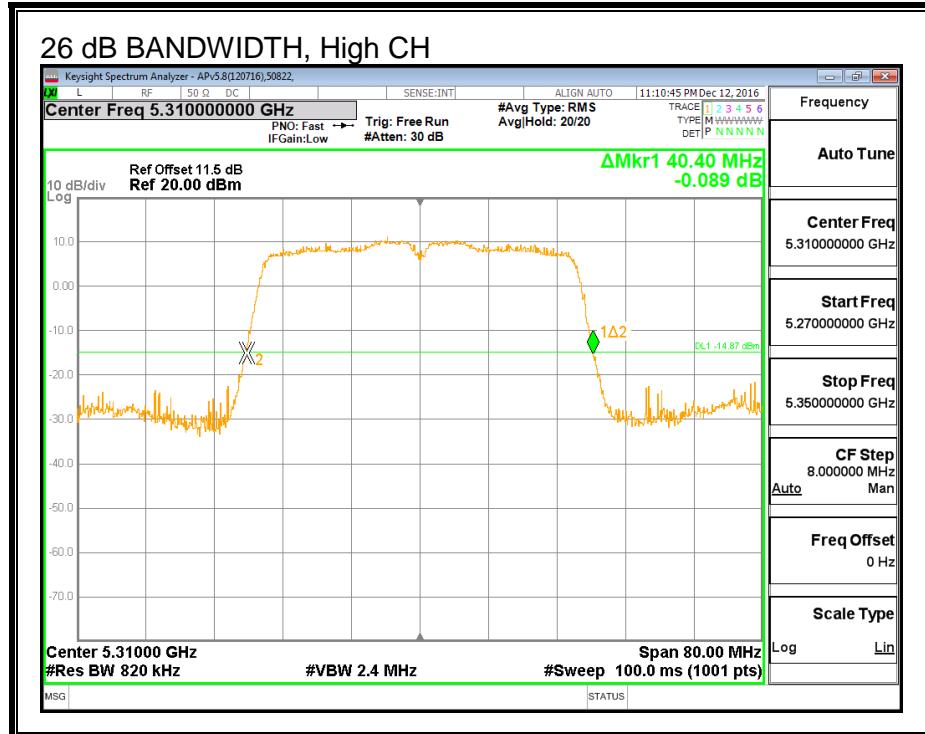
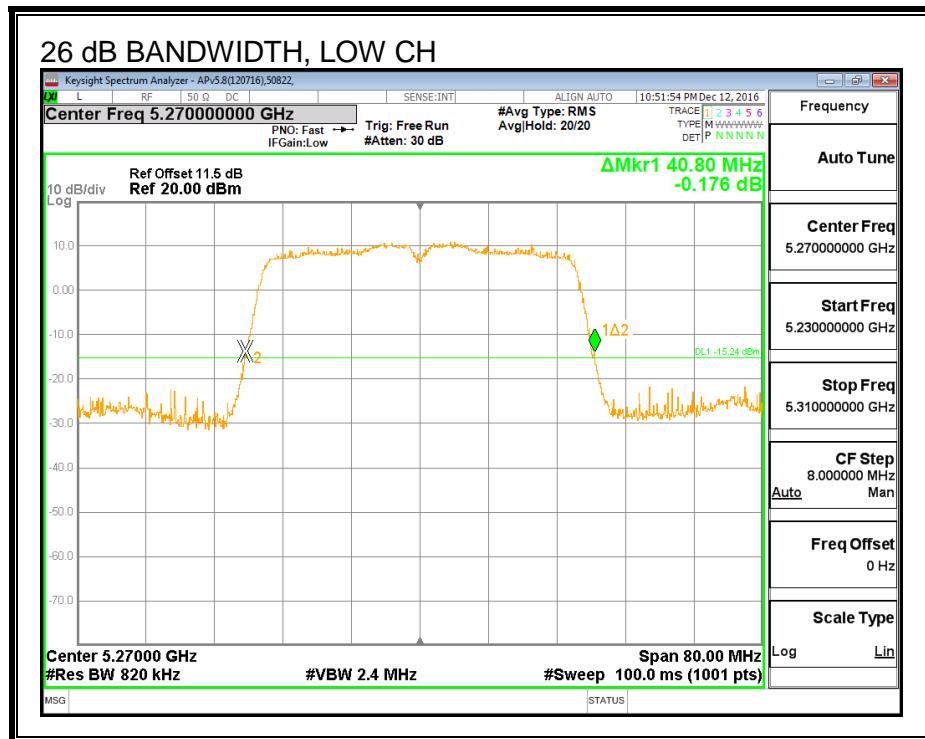
#### LIMITS

None; for reporting purposes only.

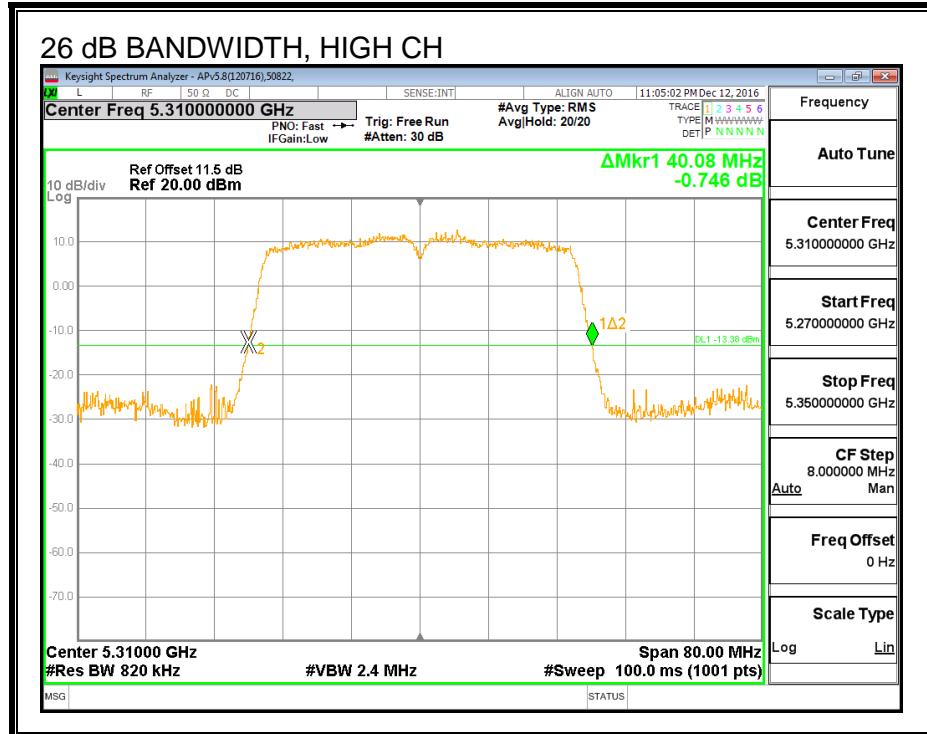
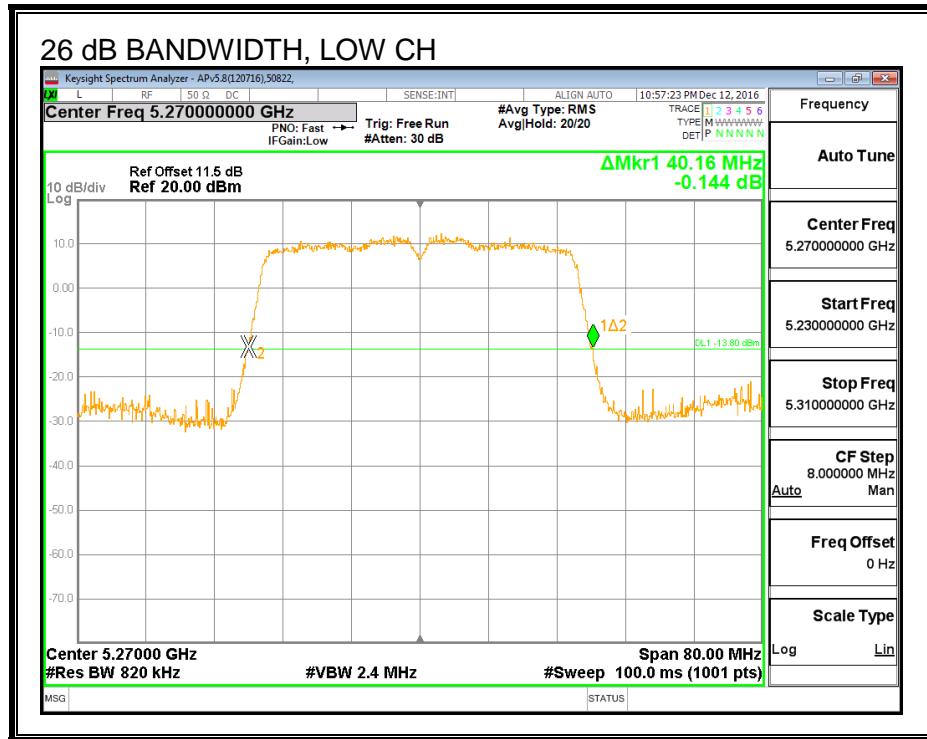
#### RESULTS

Channel	Frequency (MHz)	26 dB BW Ant A (MHz)	26 dB BW Ant B (MHz)
Low	5270	40.80	40.16
High	5310	40.40	40.08

## 26 DB BANDWIDTH, ANTENNA A



**26 DB BANDWIDTH, ANTENNA B**



### 8.19.2. 99% BANDWIDTH

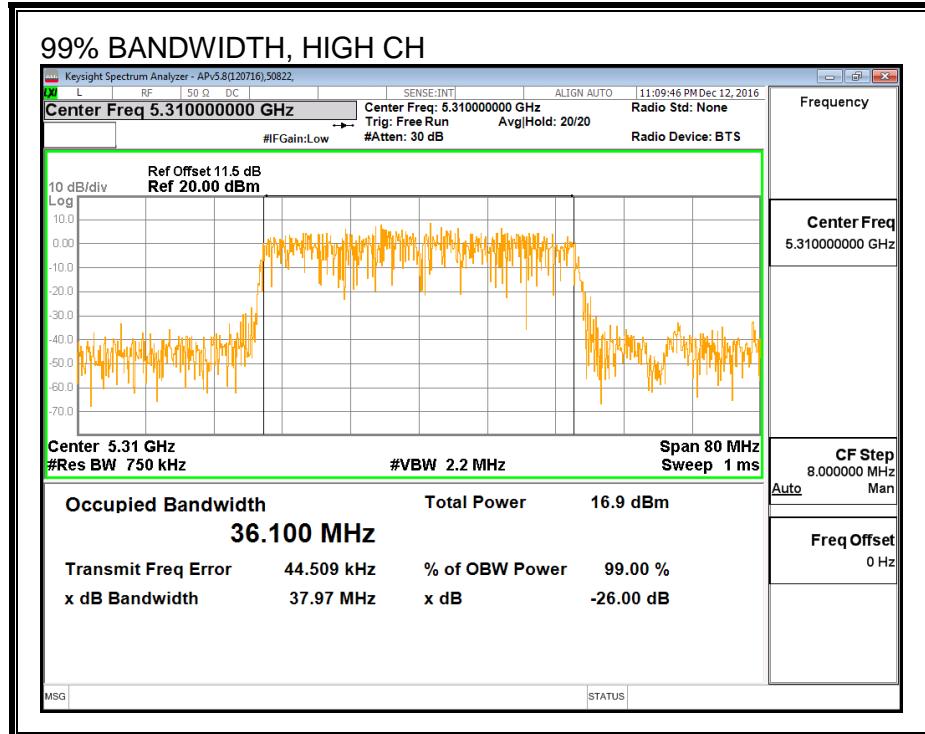
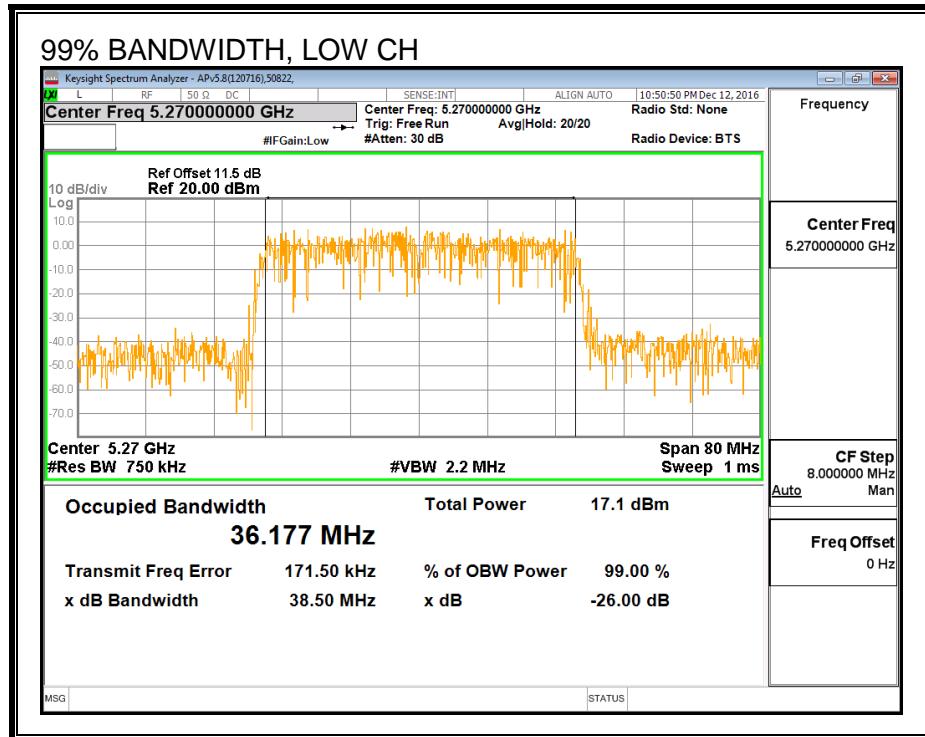
#### LIMITS

None; for reporting purposes only.

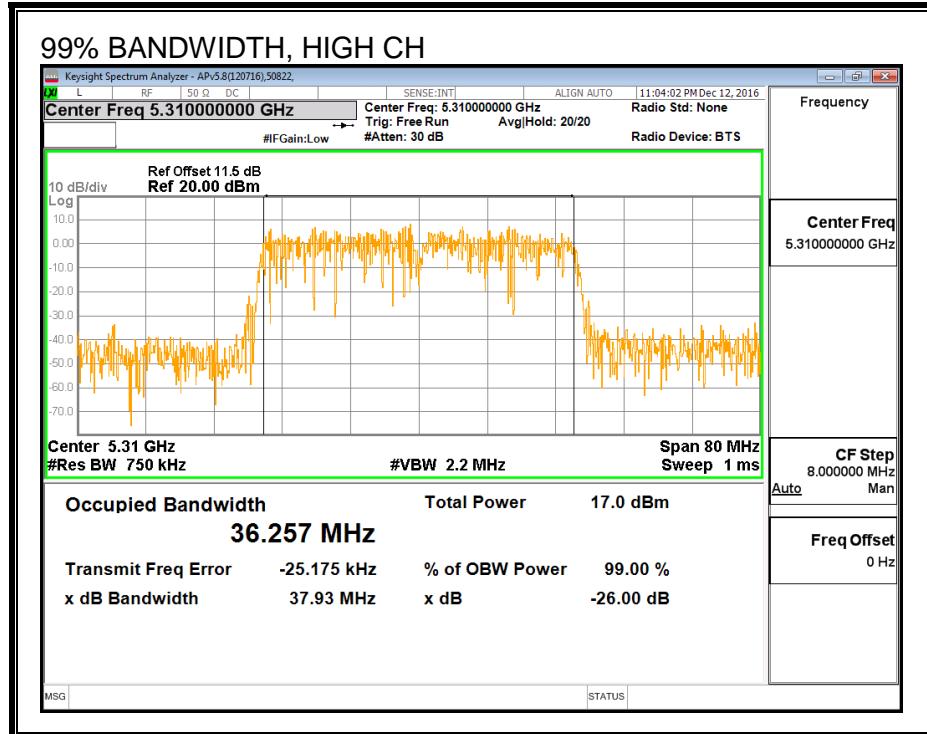
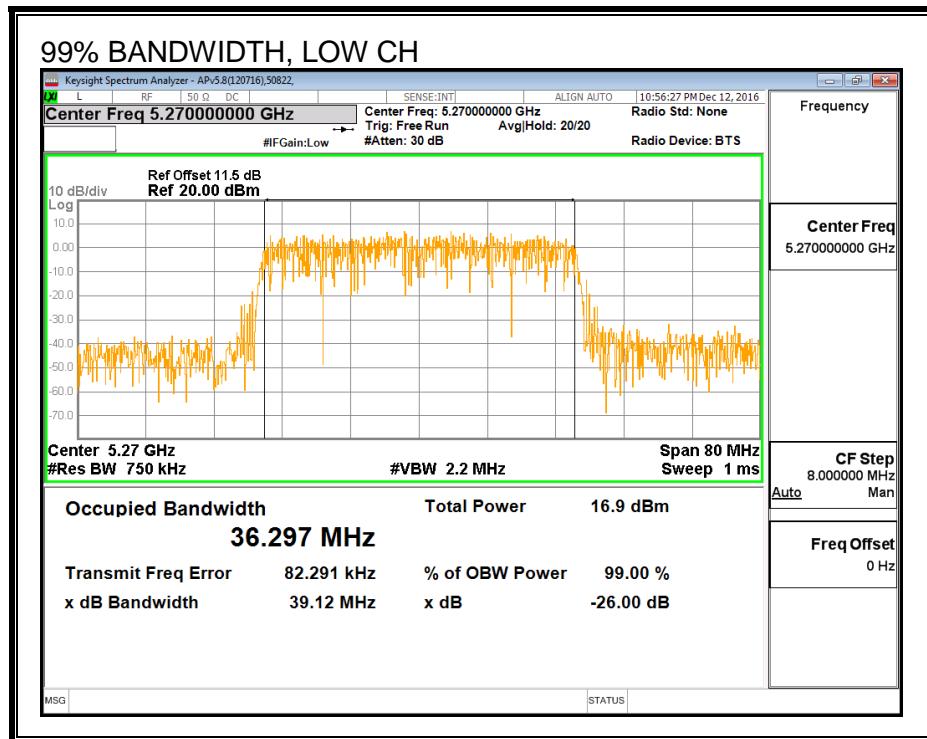
#### RESULTS

Channel	Frequency (MHz)	99% BW Ant A (MHz)	99% BW Ant B (MHz)
Low	5270	36.177	36.297
High	5310	36.100	36.257

**99% BANDWIDTH, ANTENNA A**



**99% BANDWIDTH, ANTENNA B**



### 8.19.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

#### RESULTS

<b>ID:</b>	43578	<b>Date:</b>	1/21/17
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#### Average Power Results

Channel	Frequency (MHz)	Ant A Power (dBm)	Ant B Power (dBm)	Total Power (dBm)
Low	5270	16.41	16.46	19.45
High	5310	12.94	12.97	15.97

#### 8.19.4. OUTPUT POWER AND PSD

##### LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in 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.

##### 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:

Ant A Antenna Gain (dBi)	Ant B Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
2.28	2.81	2.55

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

Ant A Antenna Gain (dBi)	Ant B Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
2.28	2.81	5.56

## RESULTS

ID:	43578	Date:	1/21/17
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### 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	5270	40.16	36.177	2.55	5.56	24.00	11.00
High	5310	40.08	36.100	2.55	5.56	24.00	11.00

Duty Cycle CF (dB)	0.11	Included in Calculations of Corr'd PSD
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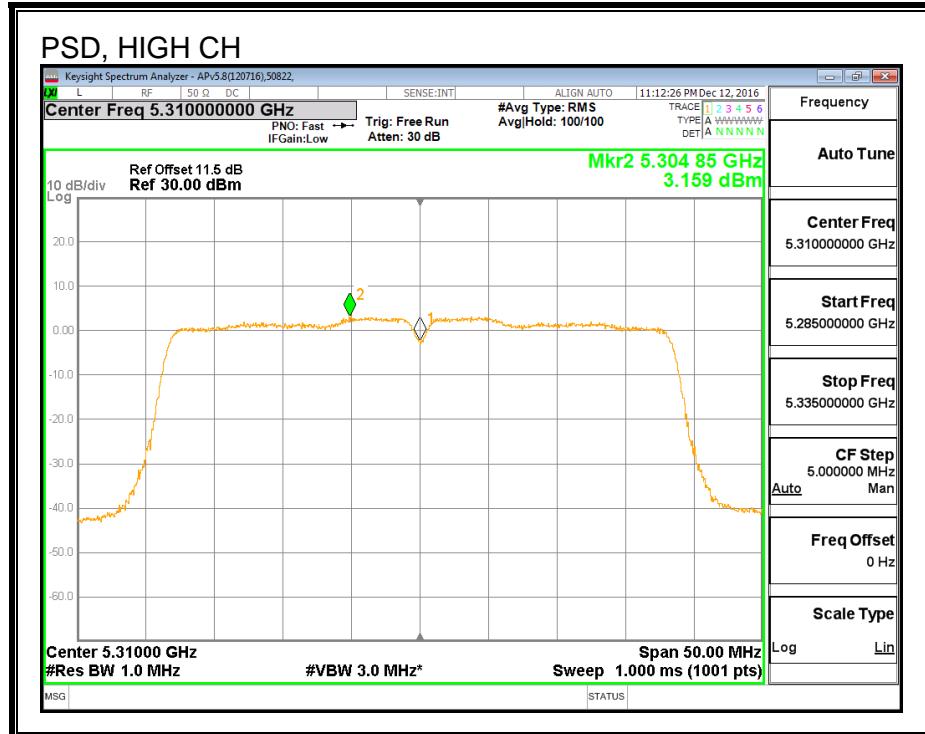
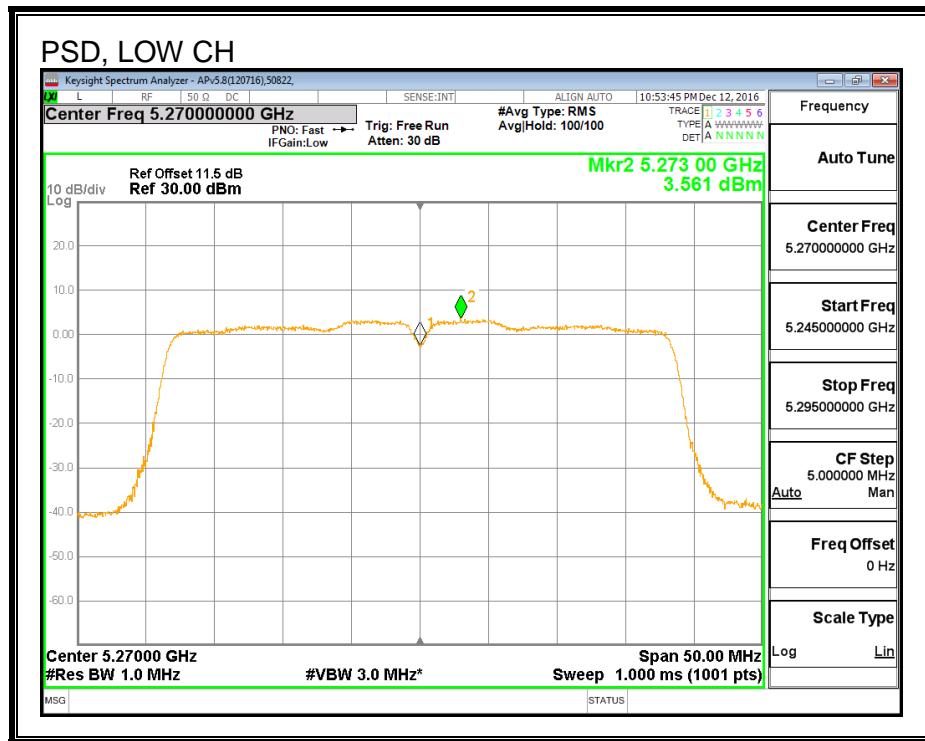
### Output Power Results

Channel	Frequency (MHz)	Ant A Meas Power (dBm)	Ant B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	16.41	16.46	19.45	24.00	-4.55
High	5310	12.94	12.97	15.97	24.00	-8.03

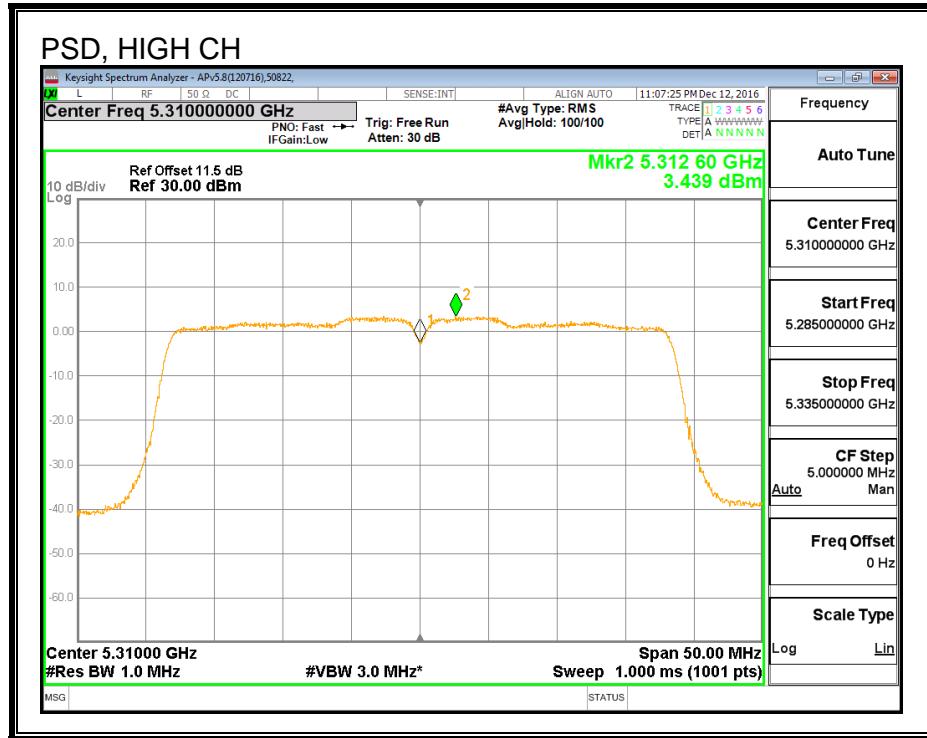
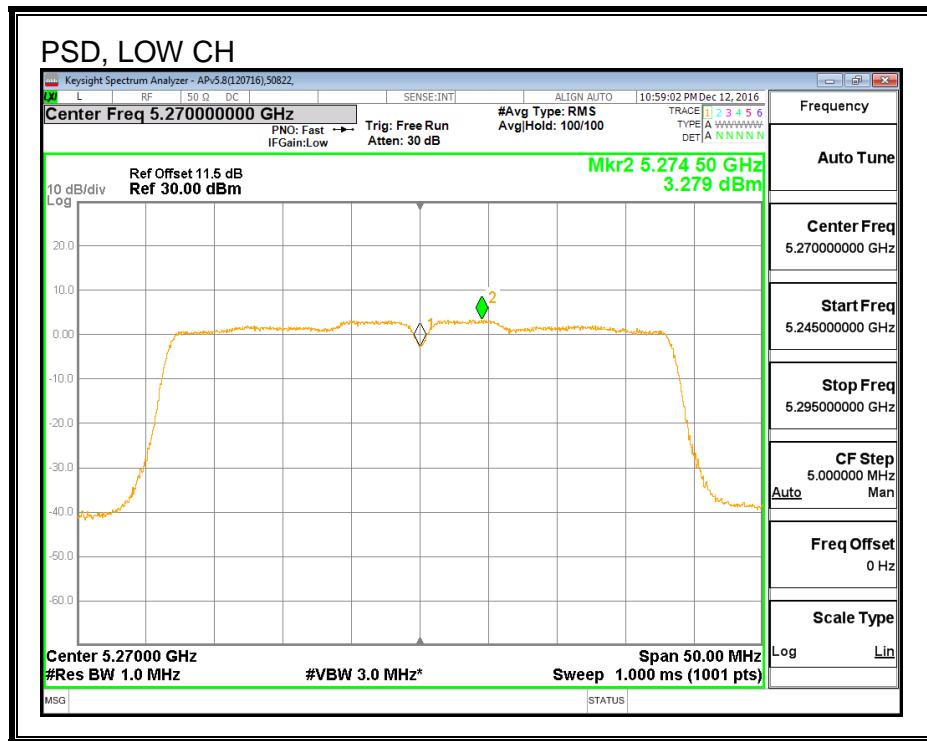
### PSD Results

Channel	Frequency (MHz)	Ant A Meas PSD (dBm)	Ant B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5270	3.56	3.28	6.54	11.00	-4.46
High	5310	3.16	3.44	6.42	11.00	-4.58

**PSD, ANTENNA A**



**PSD, ANTENNA B**



## 8.20. 802.11n HT40 2Tx (ANTENNA A + ANTENNA B) STBC MODE IN THE 5.3 GHz BAND

**Noted:** Covered by 802.11n HT40 2Tx (ANTENNA A + ANTENNA B) CDD MODE IN THE 5.3 GHz BAND

## 8.21. 802.11ac VHT80 ANTENNA A MODE IN THE 5.3 GHz BAND

### 8.21.1. 26 dB BANDWIDTH

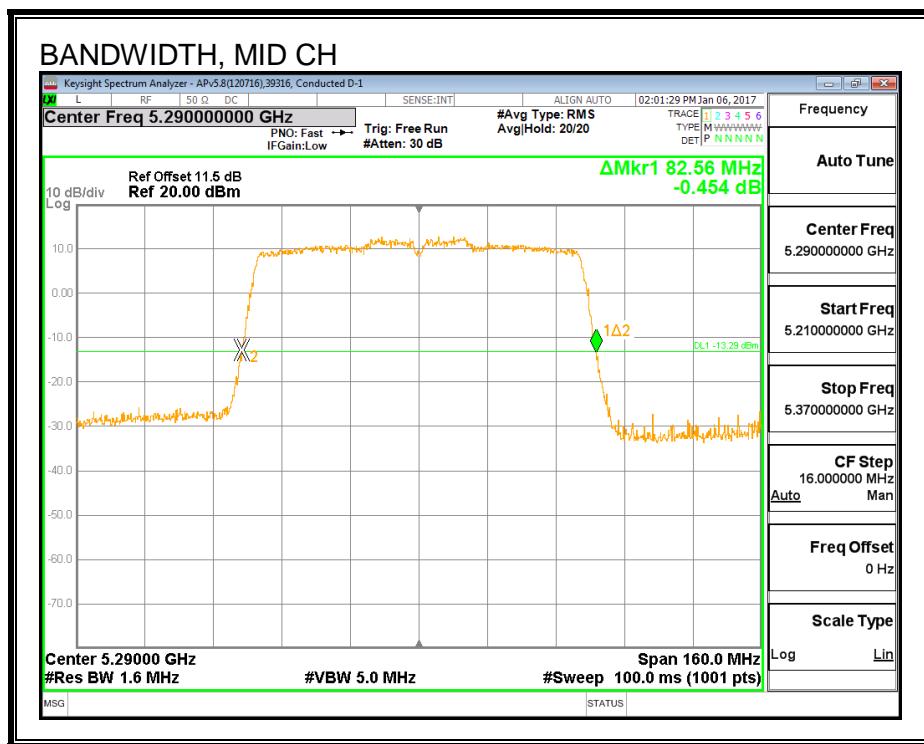
#### LIMITS

None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5290	82.56

#### 26 dB BANDWIDTH



## 8.21.2. 99% BANDWIDTH

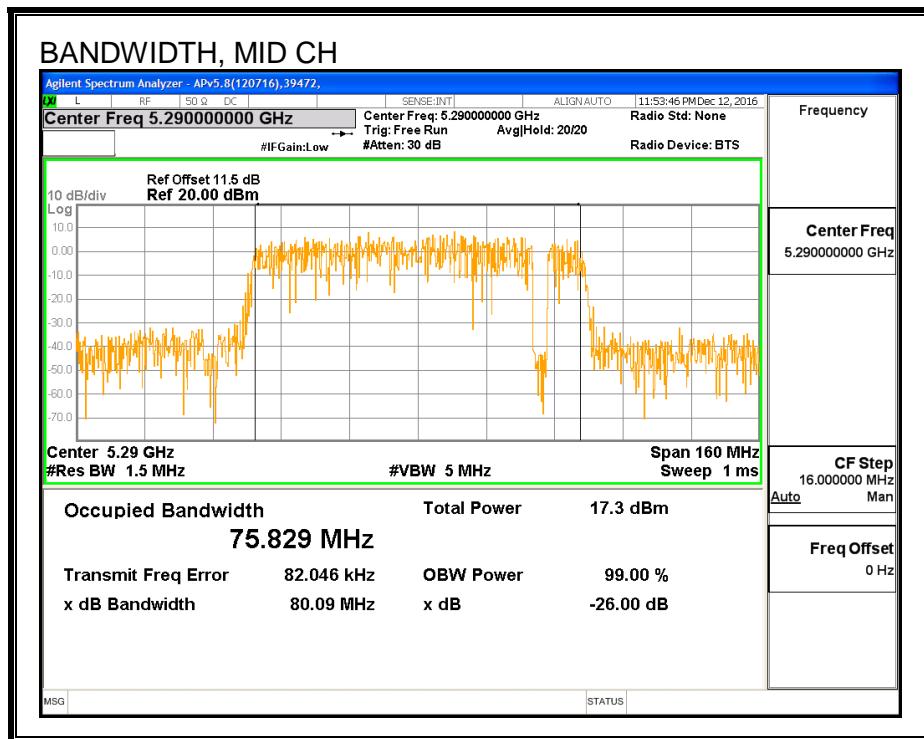
## LIMITS

None; for reporting purposes only.

## **RESULTS**

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Mid	5290	75.829

## 99% BANDWIDTH



### 8.21.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

#### RESULTS

<b>ID:</b>	43578	<b>Date:</b>	1/21/17
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Channel	Frequency (MHz)	Power (dBm)
Mid	5290	12.92

#### 8.21.4. OUTPUT POWER AND PSD

##### LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in 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.

##### 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

ID:	43578	Date:	1/21/17
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### Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min BW (MHz)	Min BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Mid	5290	82.56	75.829	2.28	24.00	11.00

Duty Cycle CF (dB)	0.20	Included in Calculations of Corr'd PSD
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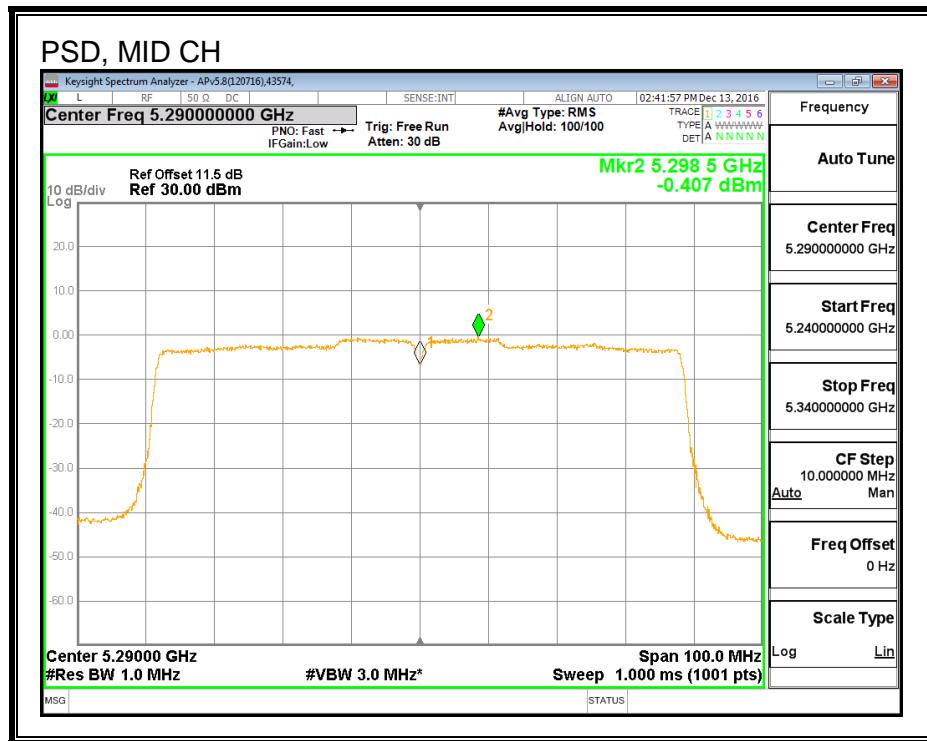
### Output Power Results

Channel	Frequency (MHz)	Ant A Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	12.92	12.92	24.00	-11.08

### PPSD Results

Channel	Frequency (MHz)	Ant A Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5290	-0.41	-0.21	11.00	-11.21

**PSD**



## 8.22. 802.11ac VHT80 ANTENNA B MODE IN THE 5.3 GHz BAND

### 8.22.1. 26 dB BANDWIDTH

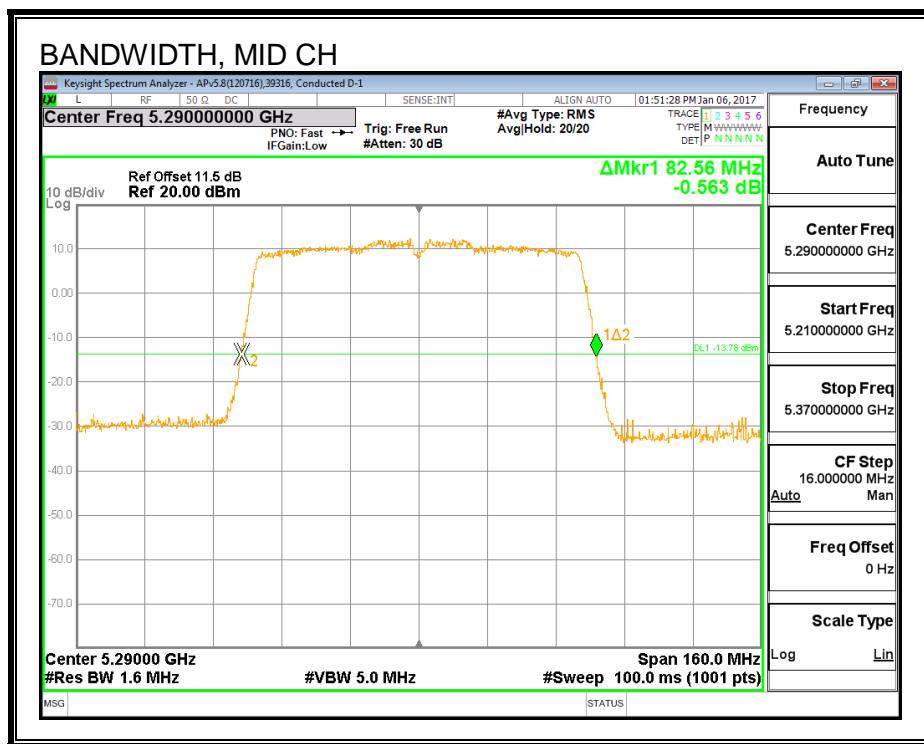
#### LIMITS

None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5290	82.56

#### 26 dB BANDWIDTH



## 8.22.2. 99% BANDWIDTH

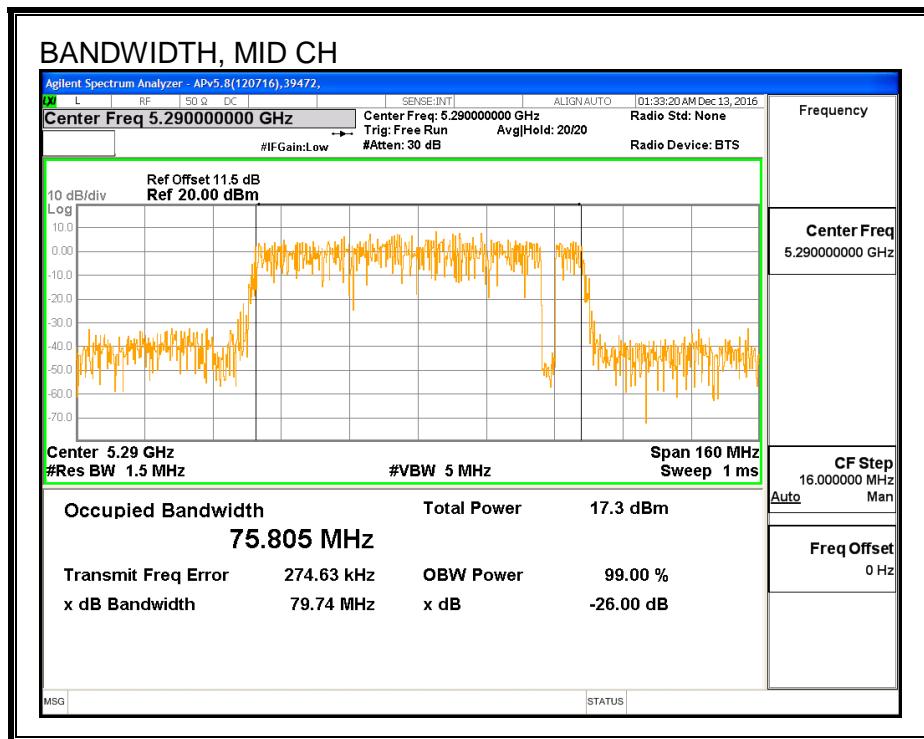
### LIMITS

None; for reporting purposes only.

### RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Mid	5290	75.805

### 99% BANDWIDTH



### 8.22.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

#### RESULTS

<b>ID:</b>	43578	<b>Date:</b>	1/21/17
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Channel	Frequency (MHz)	Power (dBm)
Mid	5290	12.97

#### 8.22.4. OUTPUT POWER AND PSD

##### LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in 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.

##### 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

ID:	43578	Date:	1/21/17
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### Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min BW (MHz)	Min BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Mid	5290	82.56	75.805	2.81	24.00	11.00

Duty Cycle CF (dB)	0.20	Included in Calculations of Corr'd PSD
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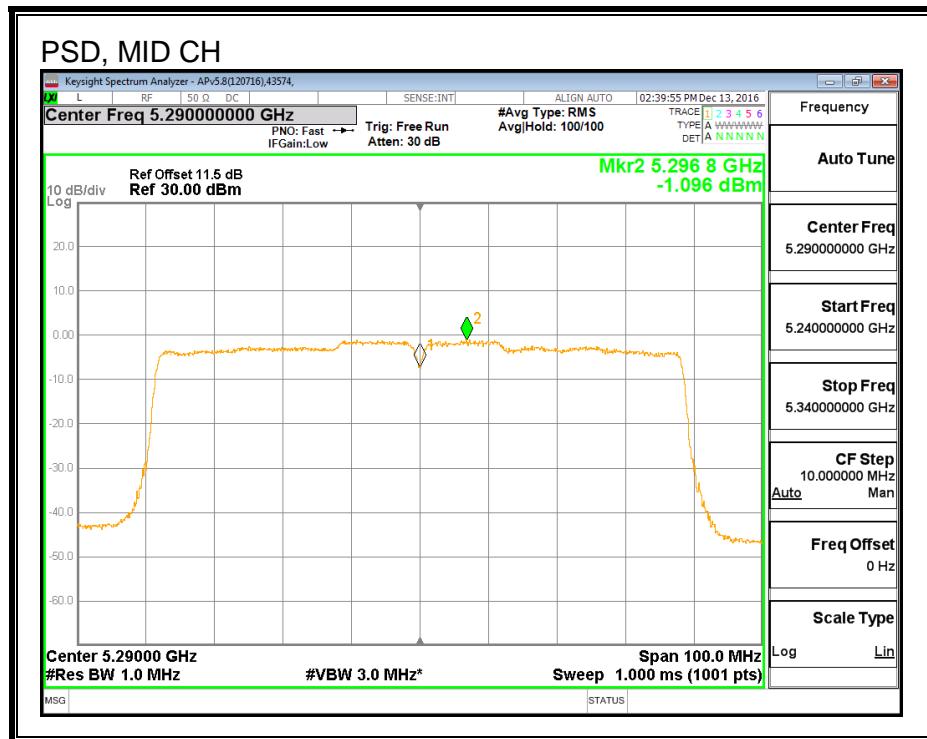
### Output Power Results

Channel	Frequency (MHz)	Ant B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	12.97	12.97	24.00	-11.03

### PPSD Results

Channel	Frequency (MHz)	Ant B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5290	-1.10	-0.90	11.00	-11.90

**PSD**



## 8.23. 802.11ac VHT80 2Tx (ANTENNA A + ANTENNA B) CDD MODE IN THE 5.3 GHz BAND

### 8.23.1. 26 dB BANDWIDTH

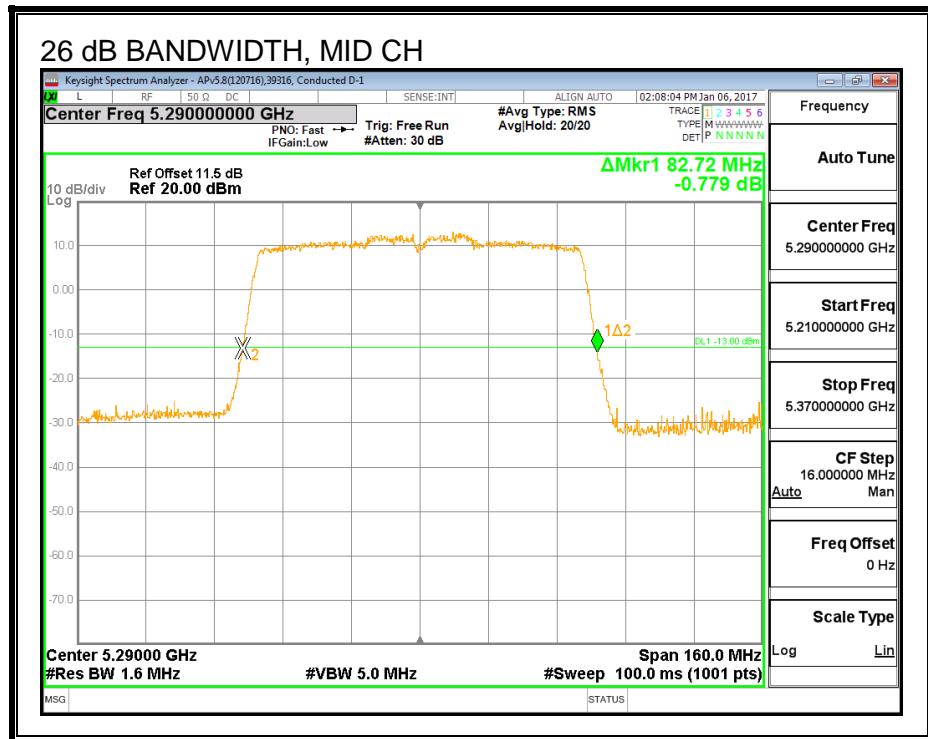
#### LIMITS

None; for reporting purposes only.

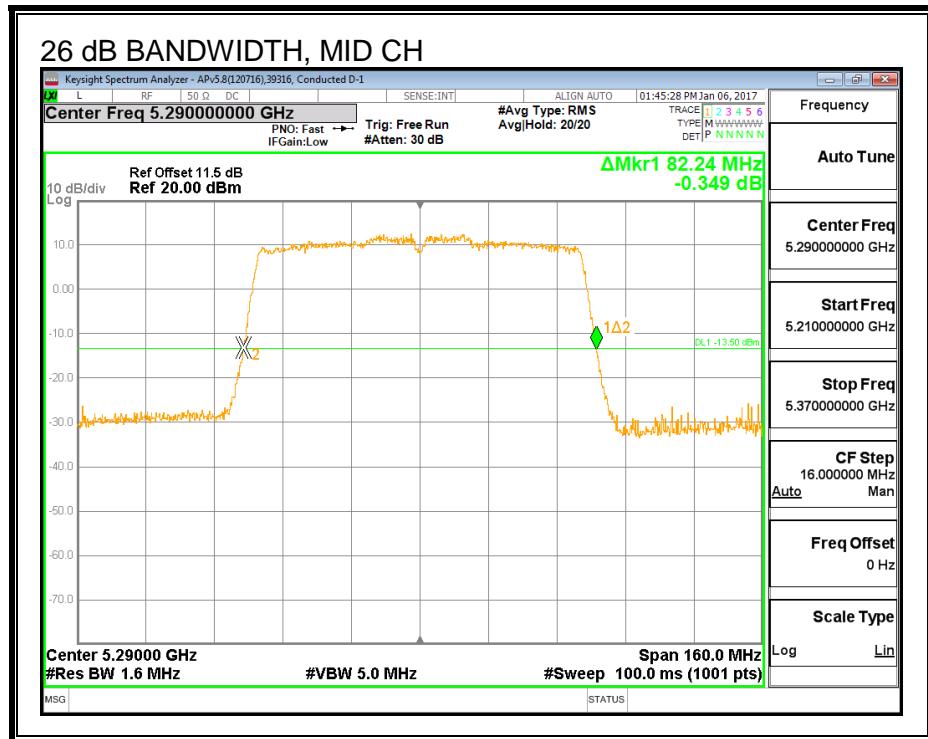
#### RESULTS

Channel	Frequency (MHz)	26 dB BW Ant A (MHz)	26 dB BW Ant B (MHz)
Mid	5290	82.72	82.24

## 26 DB BANDWIDTH, ANTENNA A



## 26 DB BANDWIDTH, ANTENNA B



### 8.23.2. 99% BANDWIDTH

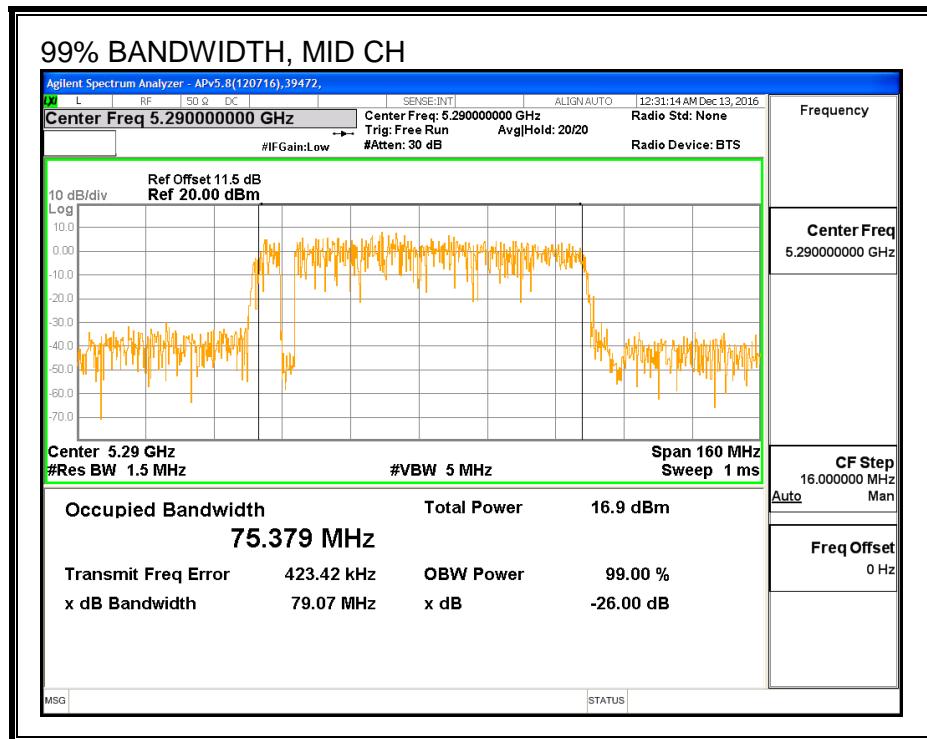
#### LIMITS

None; for reporting purposes only.

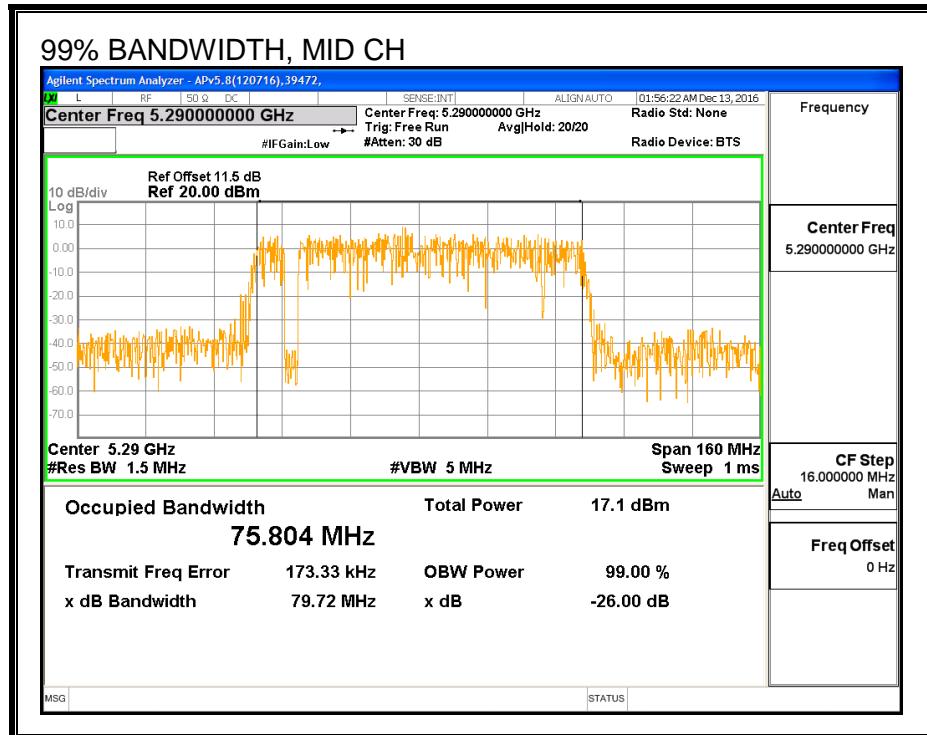
#### RESULTS

Channel	Frequency (MHz)	99% BW Ant A (MHz)	99% BW Ant B (MHz)
Mid	5290	75.379	75.804

## 99% BANDWIDTH, ANTENNA A



## 99% BANDWIDTH, ANTENNA B



### 8.23.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

#### RESULTS

<b>ID:</b>	43578	<b>Date:</b>	1/21/17
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#### Average Power Results

Channel	Frequency (MHz)	Ant A Power (dBm)	Ant B Power (dBm)	Total Power (dBm)
Mid	5290	11.49	11.48	14.50

#### 8.23.4. OUTPUT POWER AND PSD

##### LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in 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.

##### 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:

Ant A Antenna Gain (dBi)	Ant B Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
2.28	2.81	2.55

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

Ant A Antenna Gain (dBi)	Ant B Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
2.28	2.81	5.56

## RESULTS

ID:	43578	Date:	1/21/17
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### Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min BW (MHz)	Min BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Mid	5290	82.24	75.379	2.55	5.56	24.00	11.00

Duty Cycle CF (dB)	0.20	Included in Calculations of Corr'd PSD
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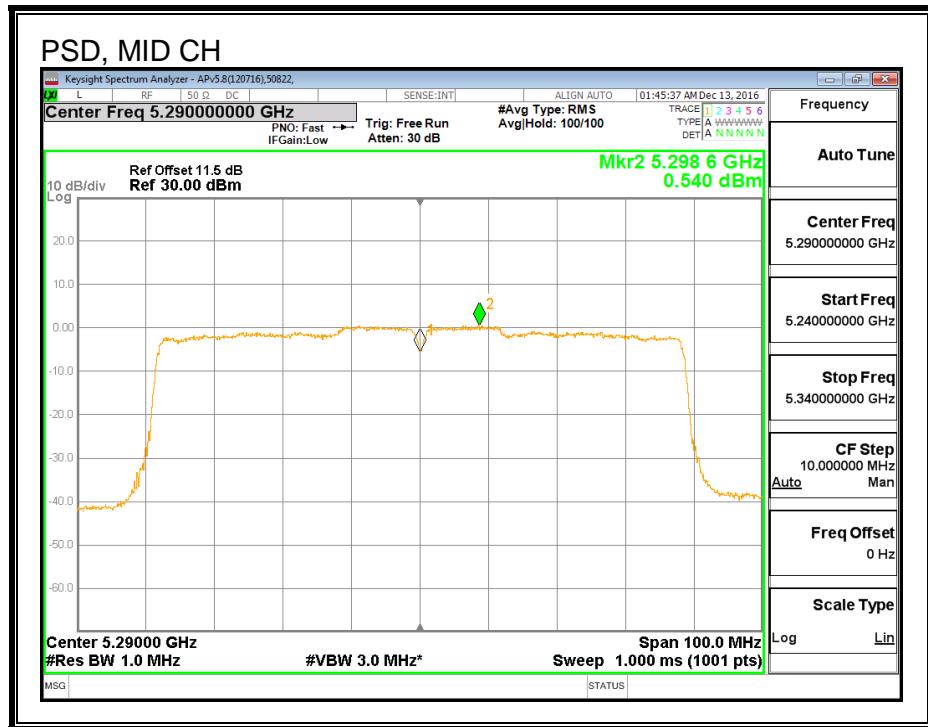
### Output Power Results

Channel	Frequency (MHz)	Ant A Meas Power (dBm)	Ant B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	11.49	11.48	14.50	24.00	-9.50

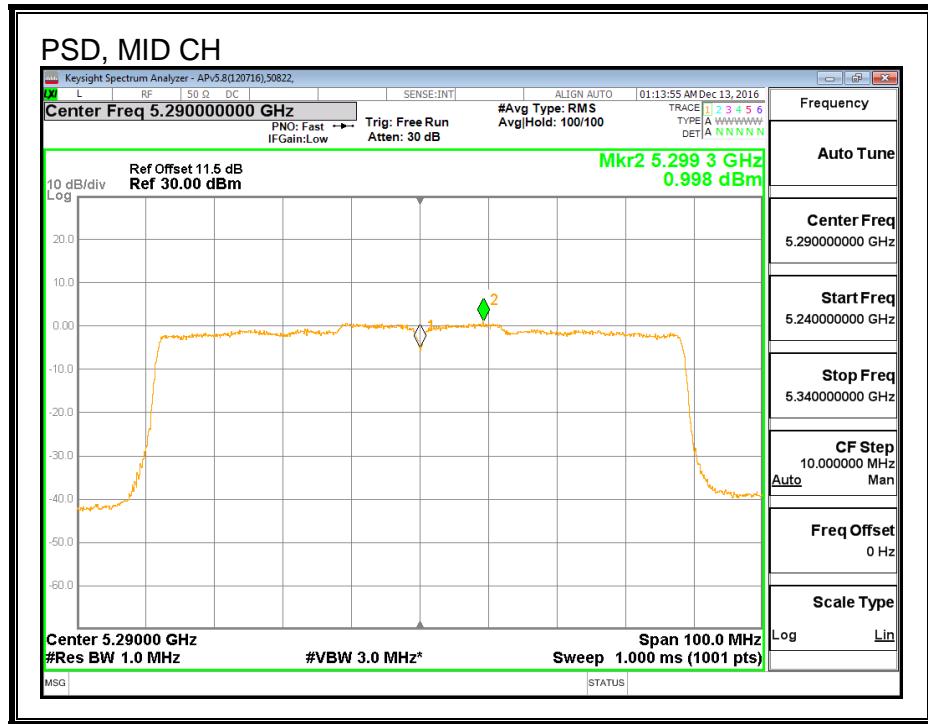
### PSD Results

Channel	Frequency (MHz)	Ant A Meas PSD (dBm)	Ant B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5290	0.54	1.00	3.99	11.00	-7.01

## PSD, ANTENNA A



## PSD, ANTENNA B



#### **8.24. 802.11ac VHT80 2Tx (ANTENNA A + ANTENNA B) STBC MODE IN THE 5.3 GHz BAND**

**Noted:** Covered by 802.11ac VHT80 2Tx (ANTENNA A + ANTENNA B) CDD MODE IN THE 5.3 GHz BAND

## 8.25. 802.11n HT20 ANTENNA A MODE IN THE 5.6 GHz BAND

### 8.25.1. 26 dB BANDWIDTH

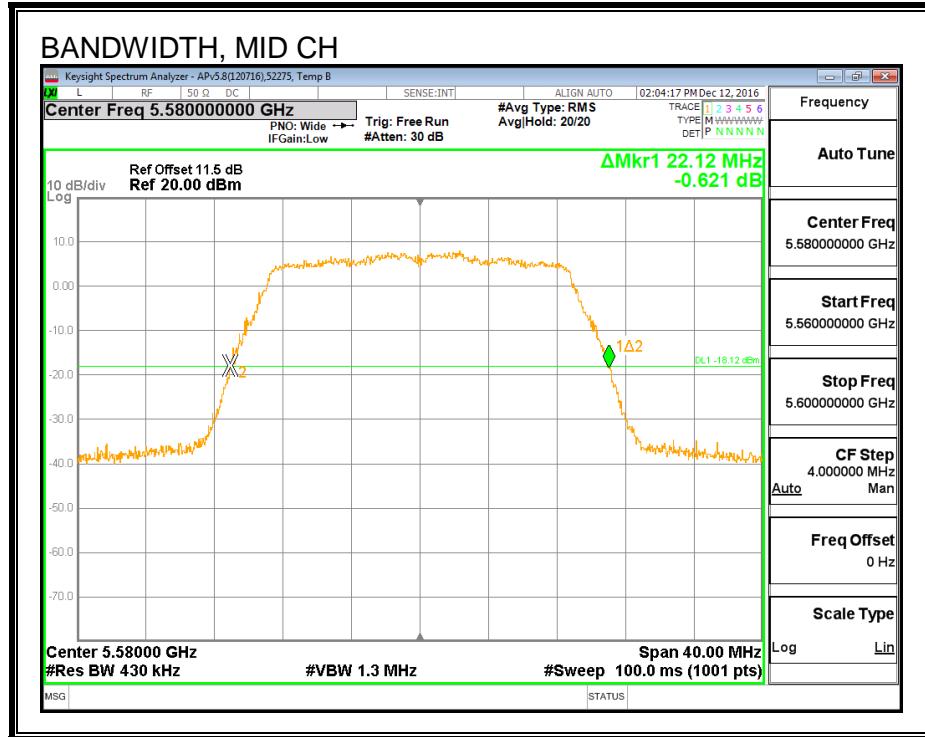
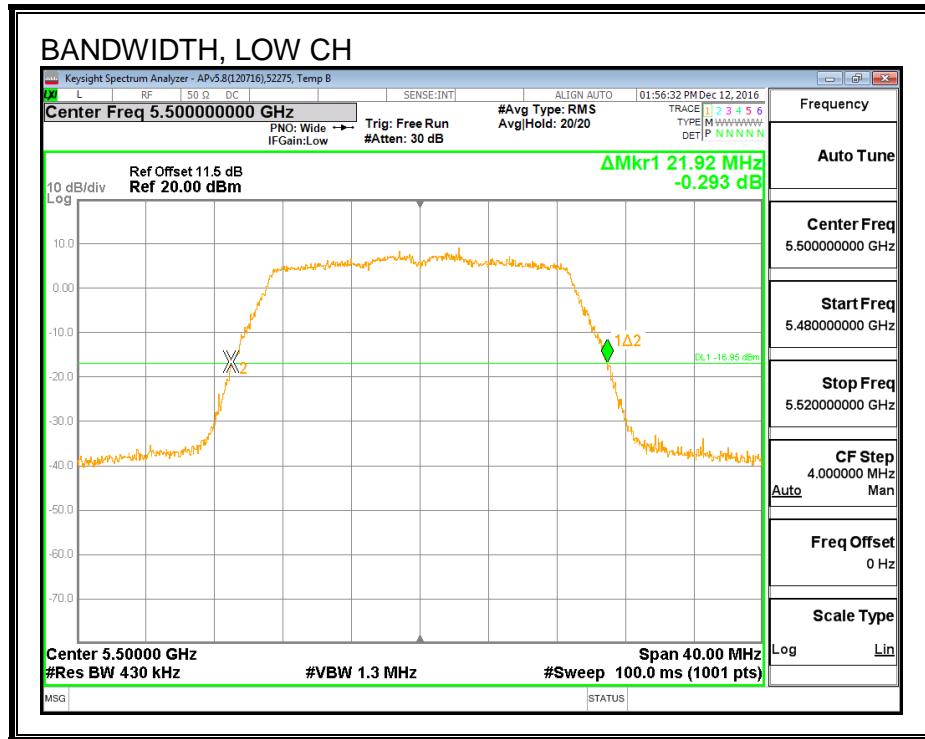
#### LIMITS

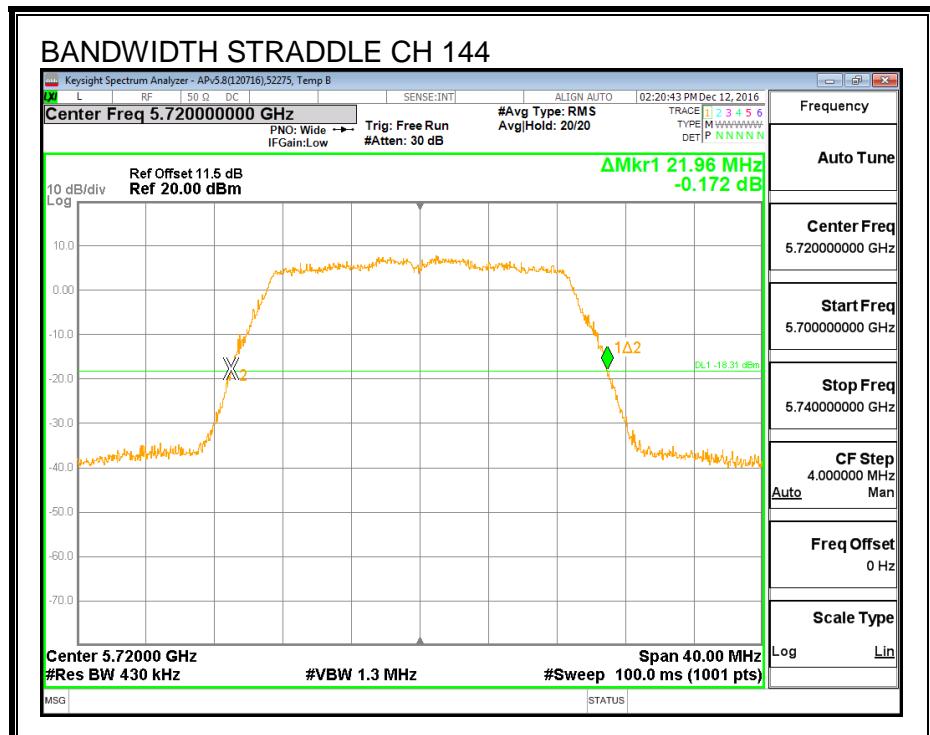
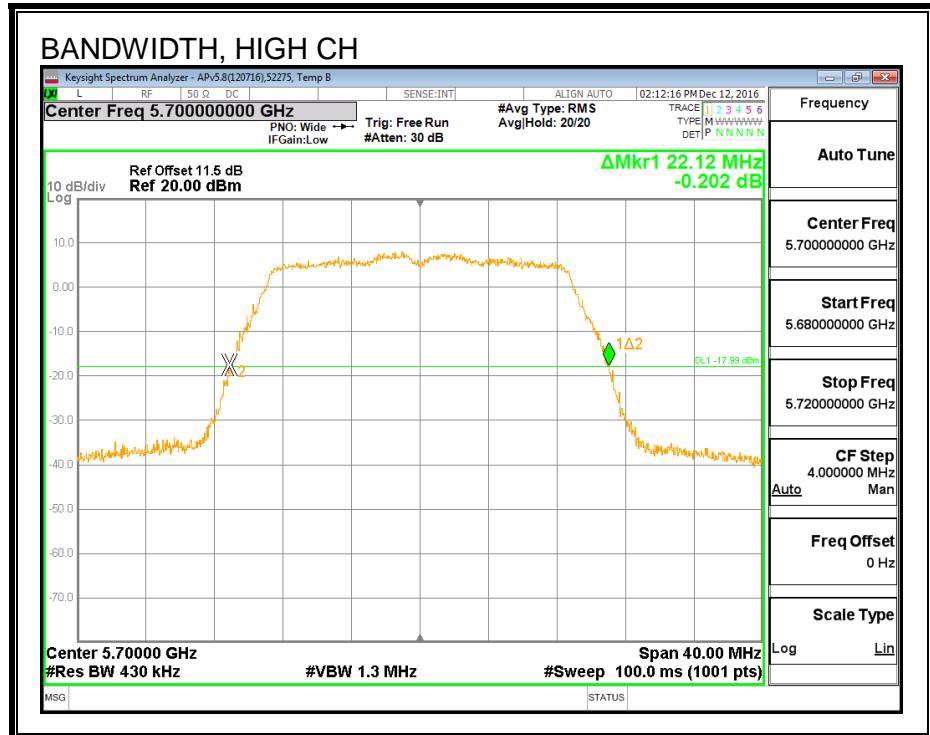
None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	21.92
Mid	5580	22.12
High	5700	22.12
144	5720	21.96

## 26 dB BANDWIDTH





### 8.25.2. 99% BANDWIDTH

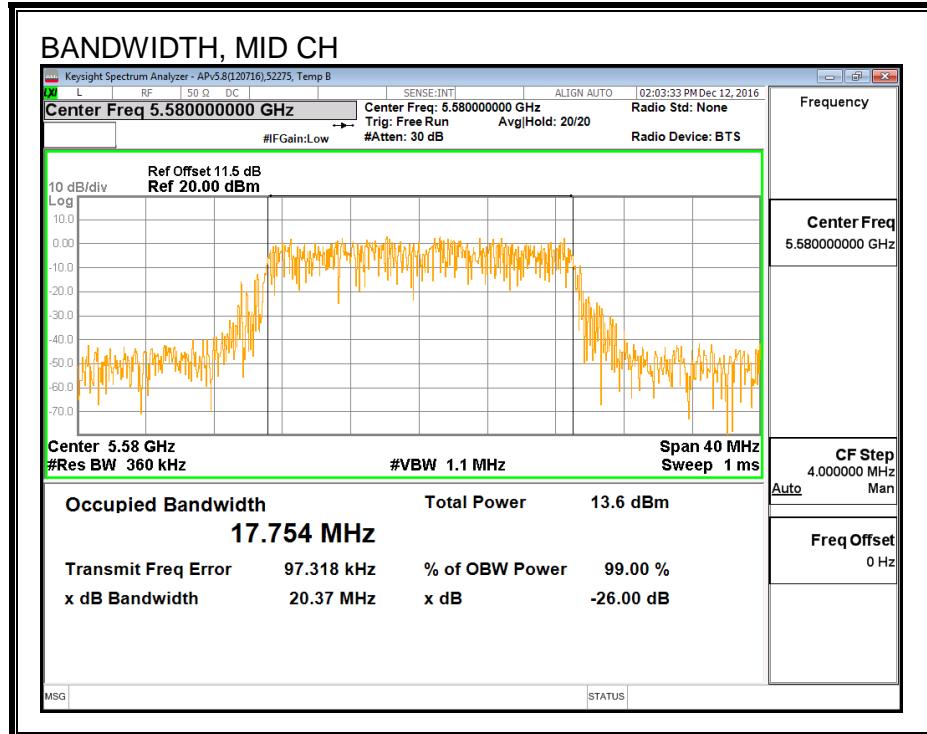
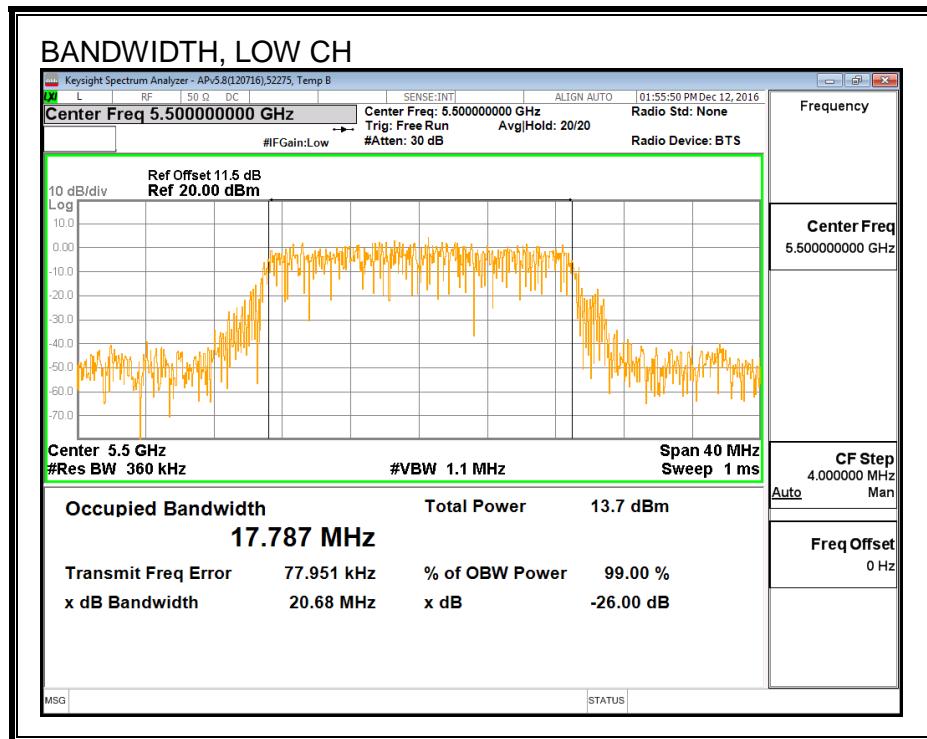
#### LIMITS

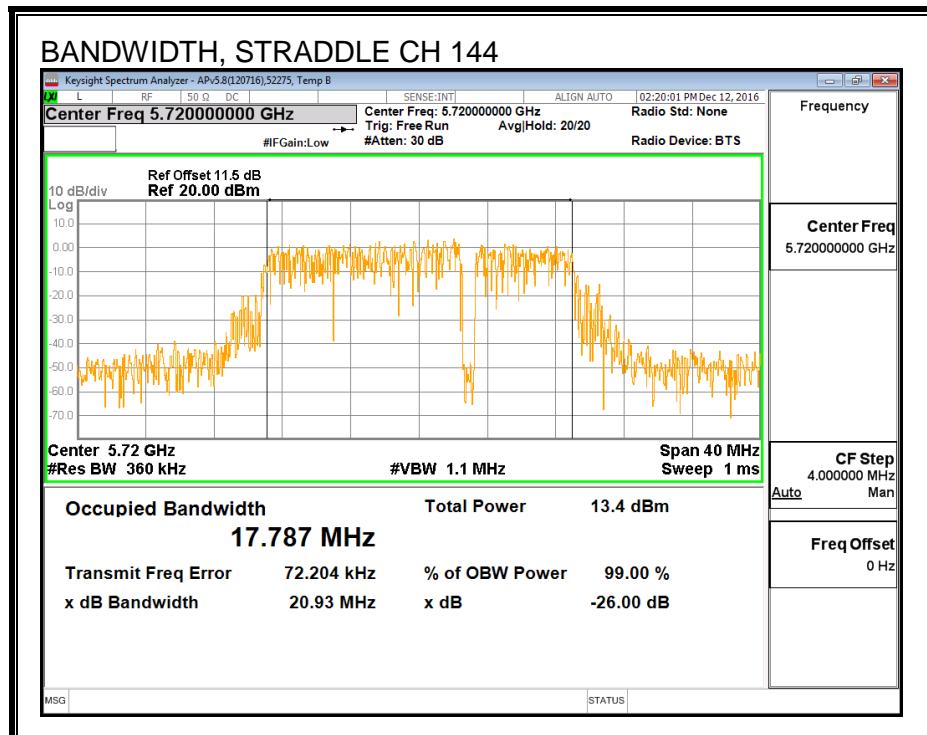
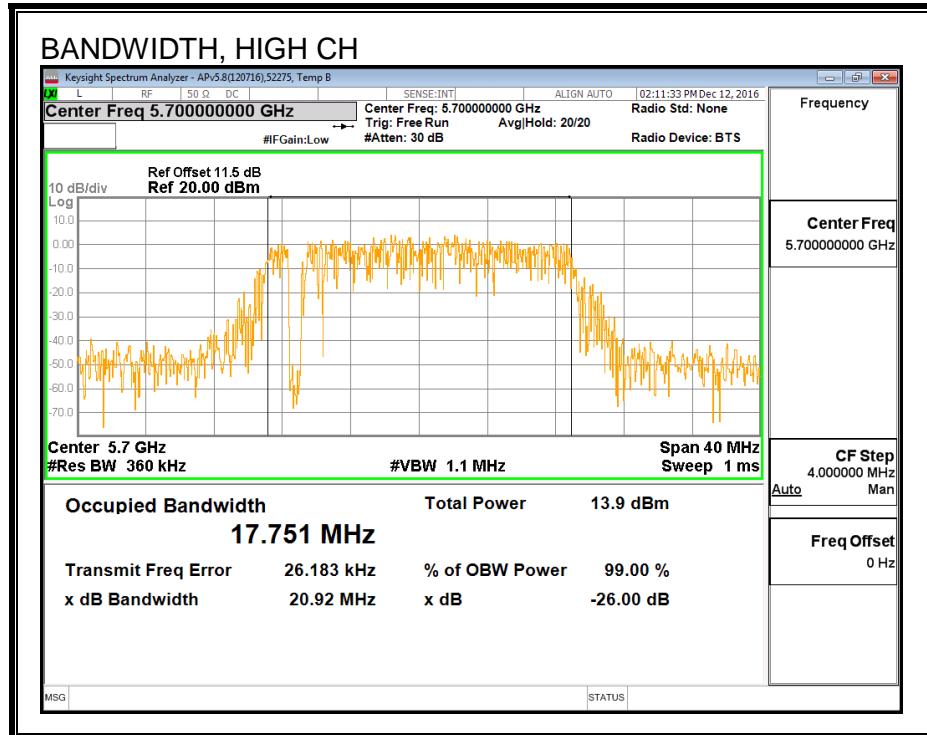
None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	17.787
Mid	5580	17.754
High	5700	17.751
144	5720	17.787

**99% BANDWIDTH**





### 8.25.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

#### RESULTS

ID:	43578	Date:	1/21/17
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Channel	Frequency (MHz)	Power (dBm)
Low	5500	14.89
Mid	5580	14.98
High	5700	14.89
144	5720	14.93

#### 8.25.4. 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.

##### 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.

Straddle channel power is measured using PXA spectrum analyzer, 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

ID:	43578	Date:	1/21/17
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### Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min BW (MHz)	Min BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5500	21.92	17.787	3.77	23.50	11.00
Mid	5580	22.12	17.754	3.77	23.49	11.00
High	5700	22.12	17.751	3.77	23.49	11.00
Duty Cycle CF (dB)		0.00	Included in Calculations of Corr'd PSD			

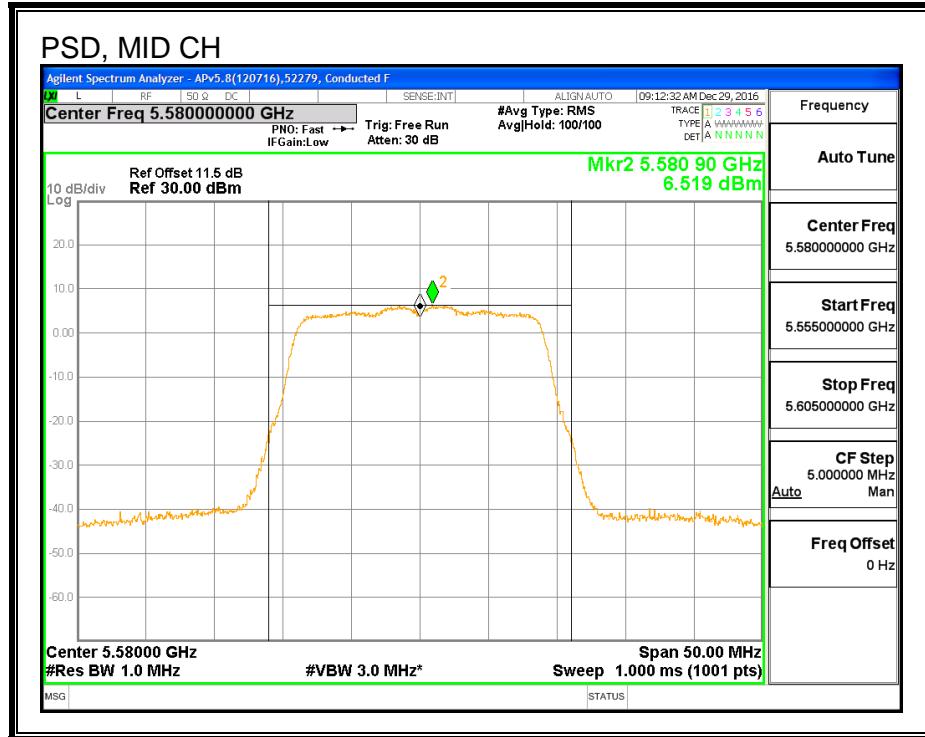
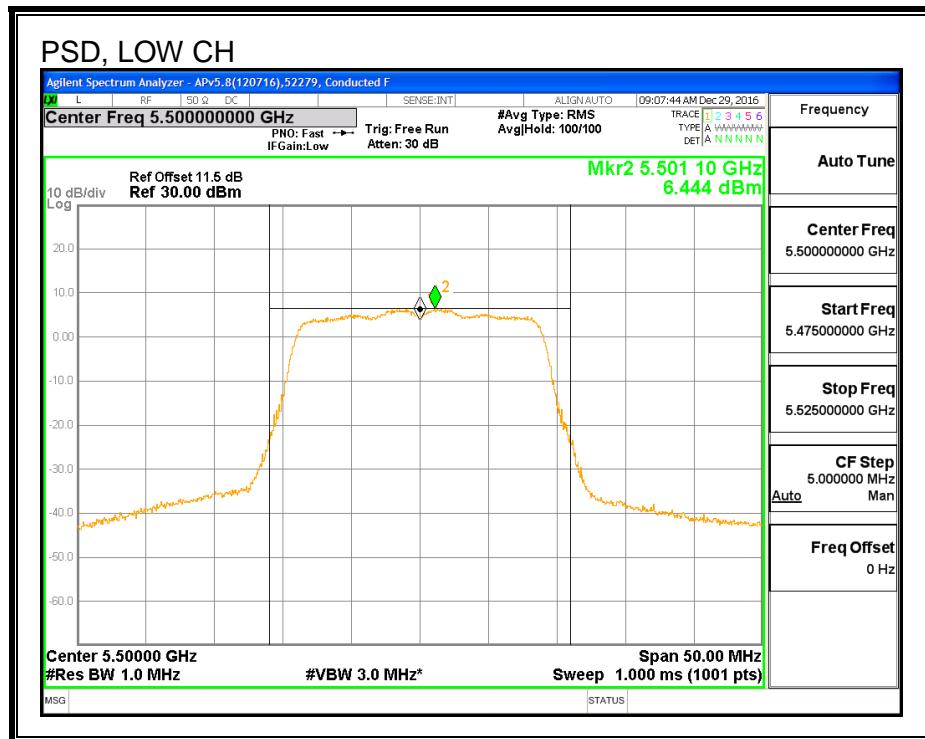
### Output Power Results

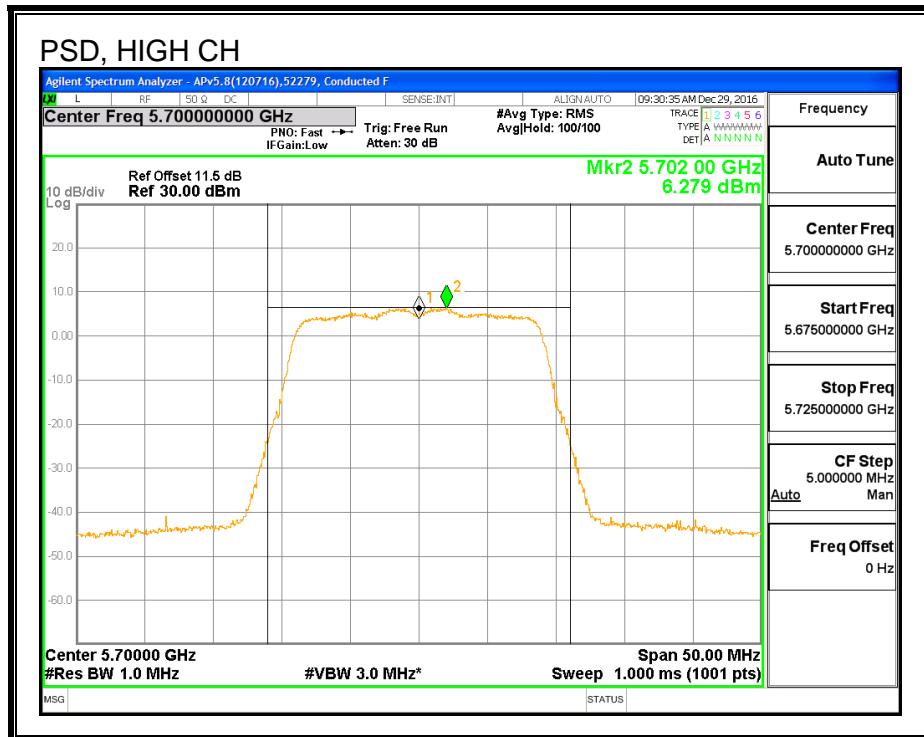
Channel	Frequency (MHz)	Ant A Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	14.89	14.89	23.50	-8.61
Mid	5580	14.98	14.98	23.49	-8.51
High	5700	14.89	14.89	23.49	-8.60

### PSD Results

Channel	Frequency (MHz)	Ant A Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	6.44	6.44	11.00	-4.56
Mid	5580	6.52	6.52	11.00	-4.48
High	5700	6.28	6.28	11.00	-4.72

PSD





## 8.26. 802.11ac VHT20 ANTENNA A STRADDLE CHANNEL 144 RESULTS

### 8.26.1. OUTPUT POWER AND PSD

#### 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)
144	5720	15.98	3.77	3.77	23.04	11.00

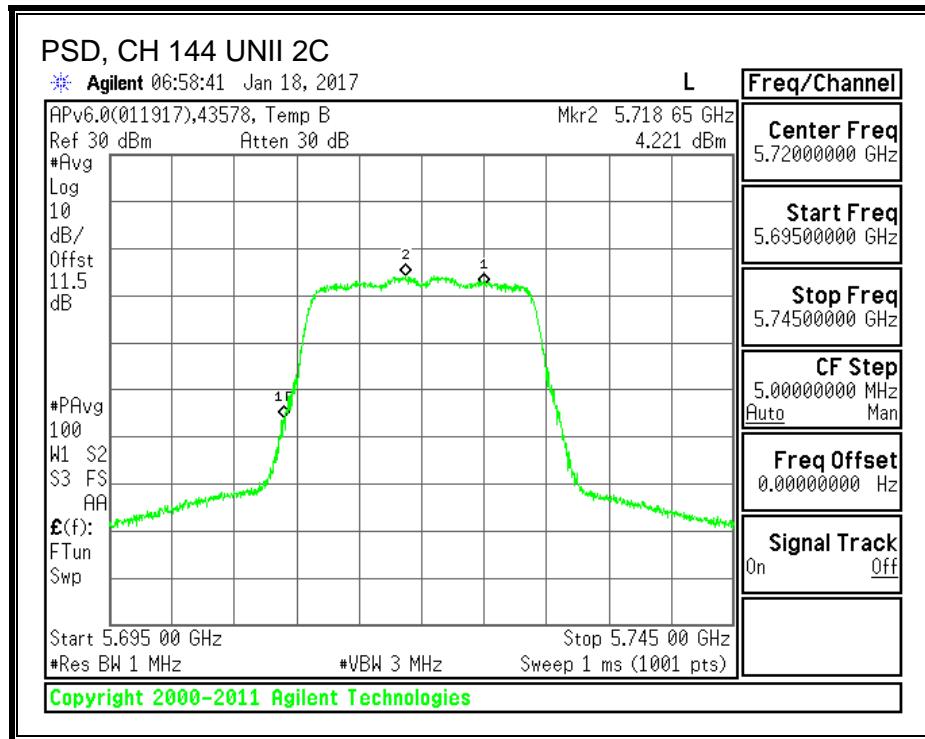
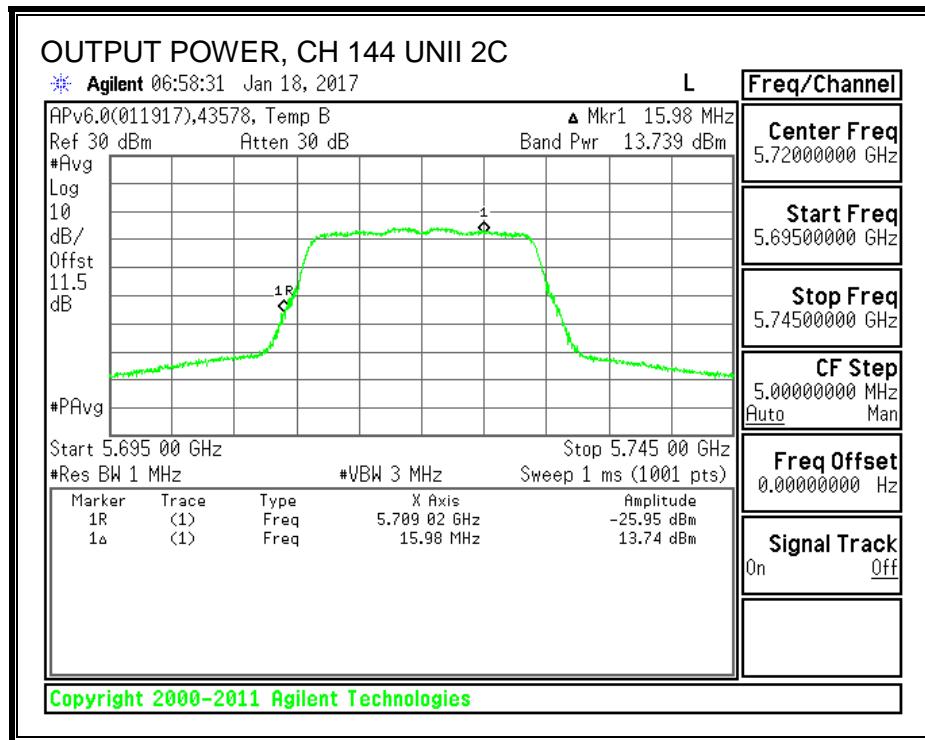
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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##### Output Power Results

Channel	Frequency (MHz)	Ant A Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	13.74	13.74	23.04	-9.30

##### PSD Results

Channel	Frequency (MHz)	Ant A Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	4.22	4.22	11.00	-6.78



**UNII-3 BAND**

**Antenna Gain and Limit**

Channel	Frequency	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	5.98	3.40	30.00	30.00

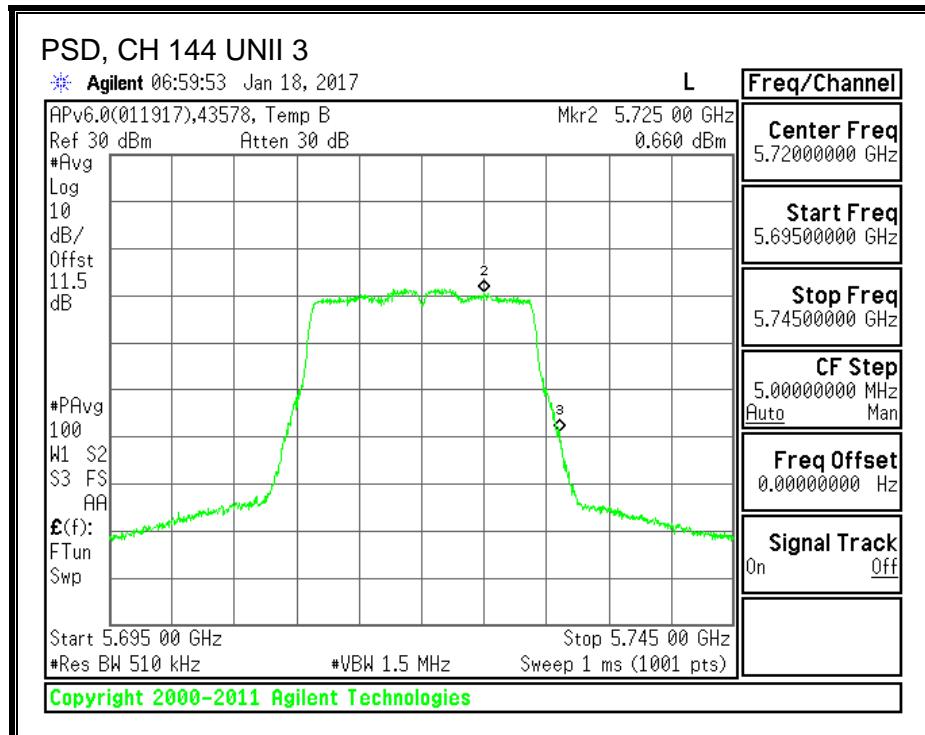
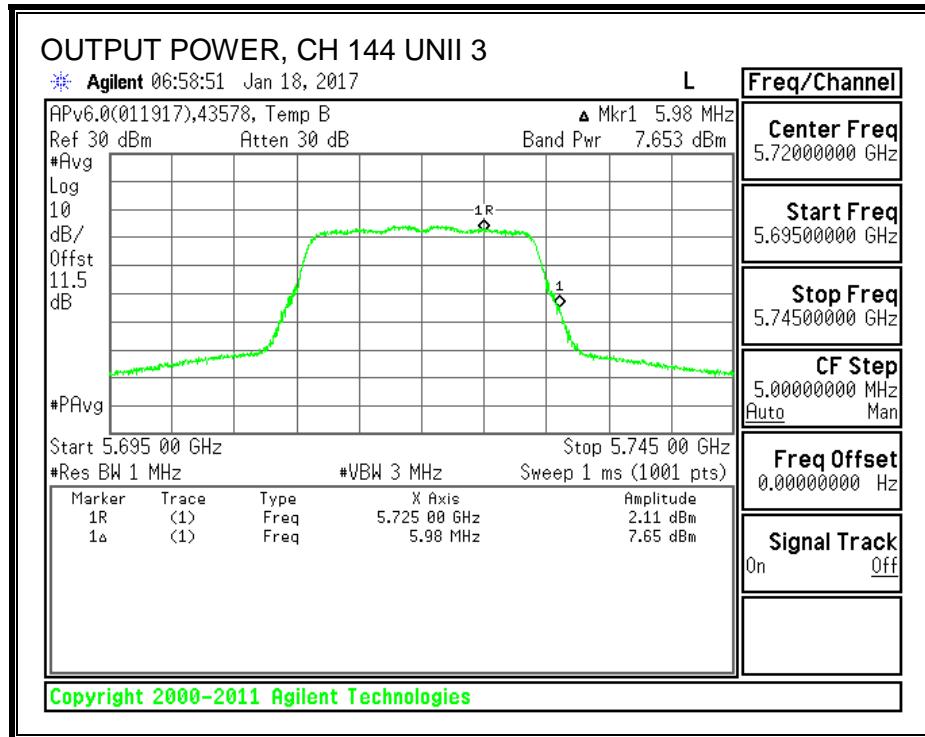
<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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**Output Power Results**

Channel	Frequency	Ant A Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	7.65	7.65	30.00	-22.35

**PSD Results**

Channel	Frequency	Ant A Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	0.66	0.66	30.00	-29.34



## 8.26.2. 6 dB BANDWIDTH

### LIMITS

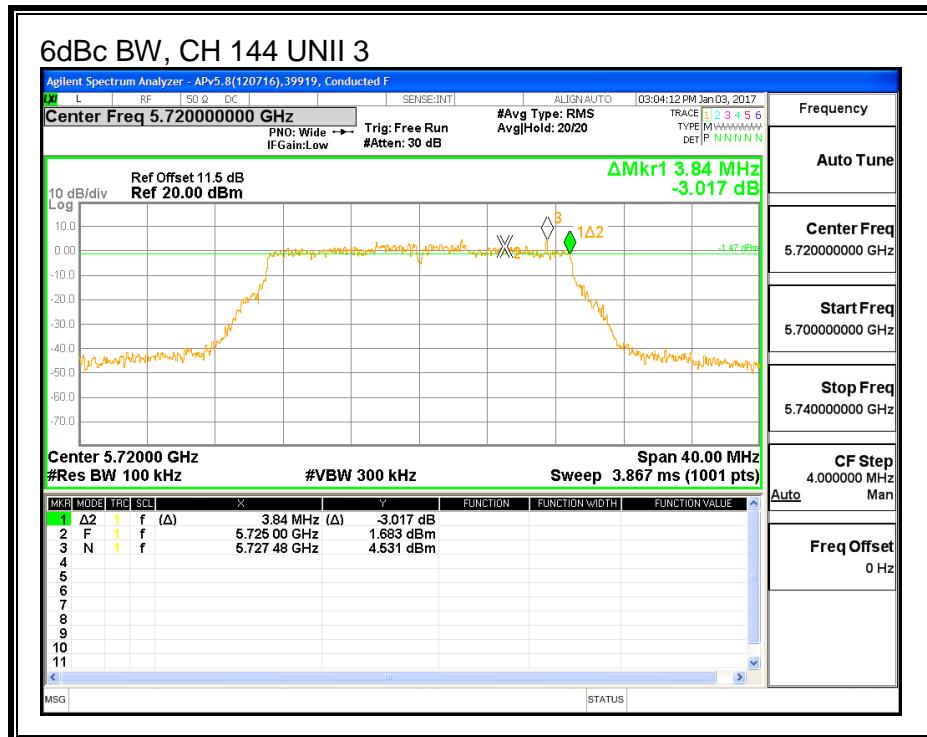
FCC §15.407 (e)

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

### RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)
144	5720	3.84

### 6 dB BANDWIDTH



## 8.27. 802.11n HT20 ANTENNA B MODE IN THE 5.6 GHz BAND

### 8.27.1. 26 dB BANDWIDTH

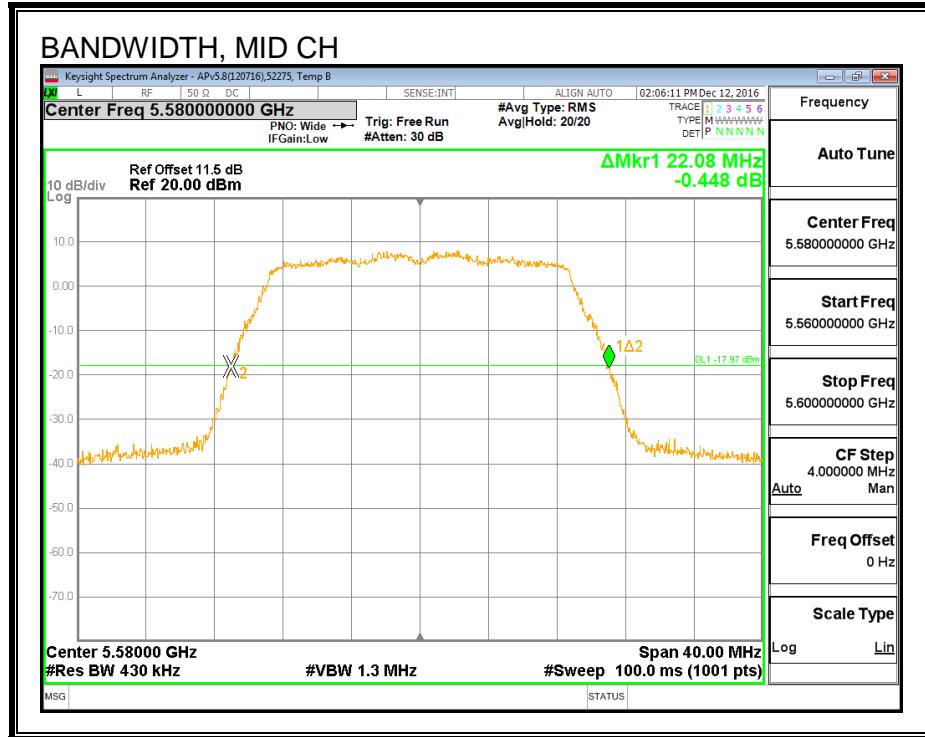
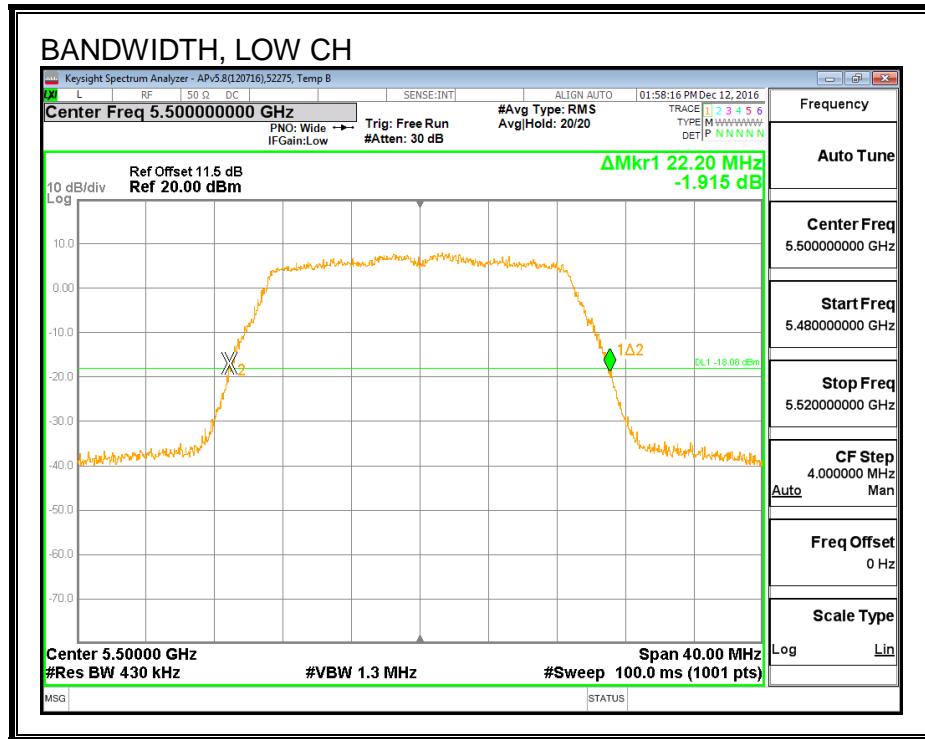
#### LIMITS

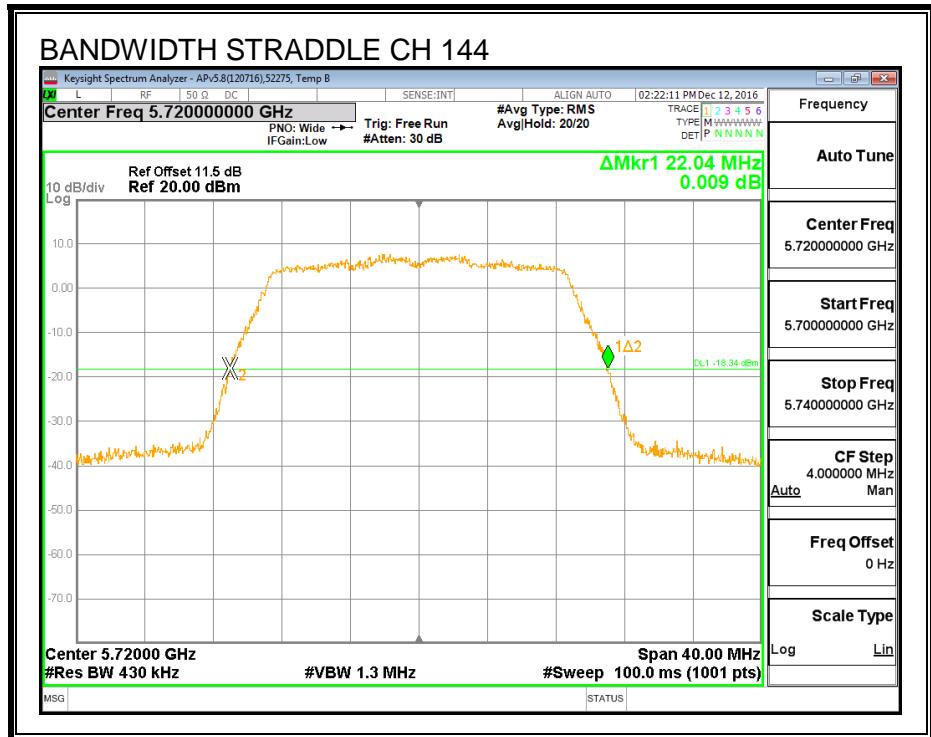
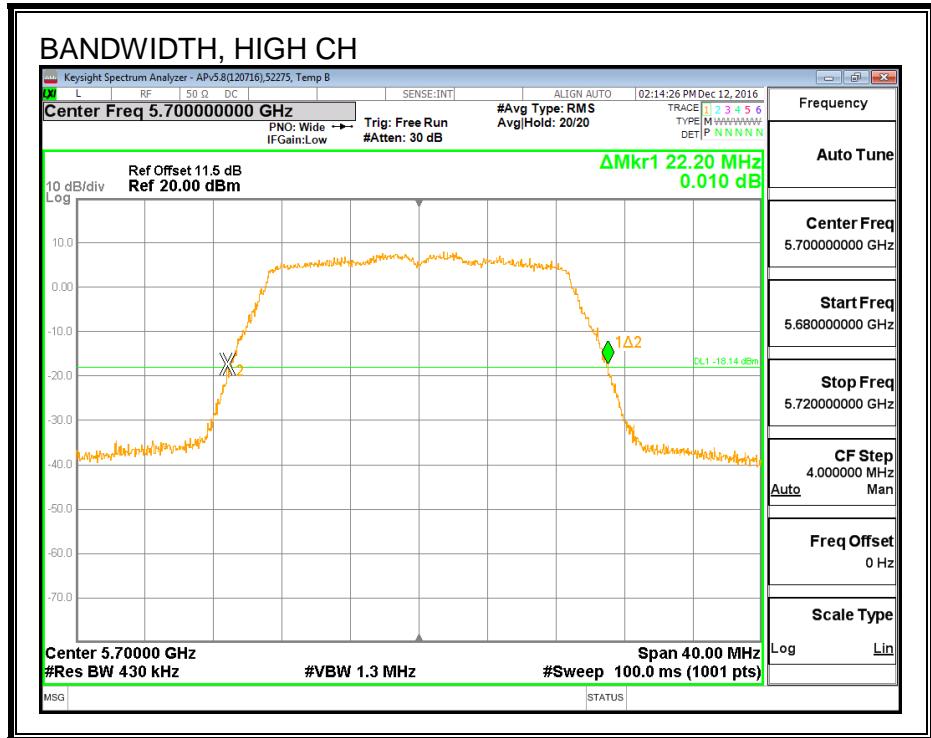
None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	22.20
Mid	5580	22.08
High	5700	22.20
144	5720	22.04

## 26 dB BANDWIDTH





### 8.27.2. 99% BANDWIDTH

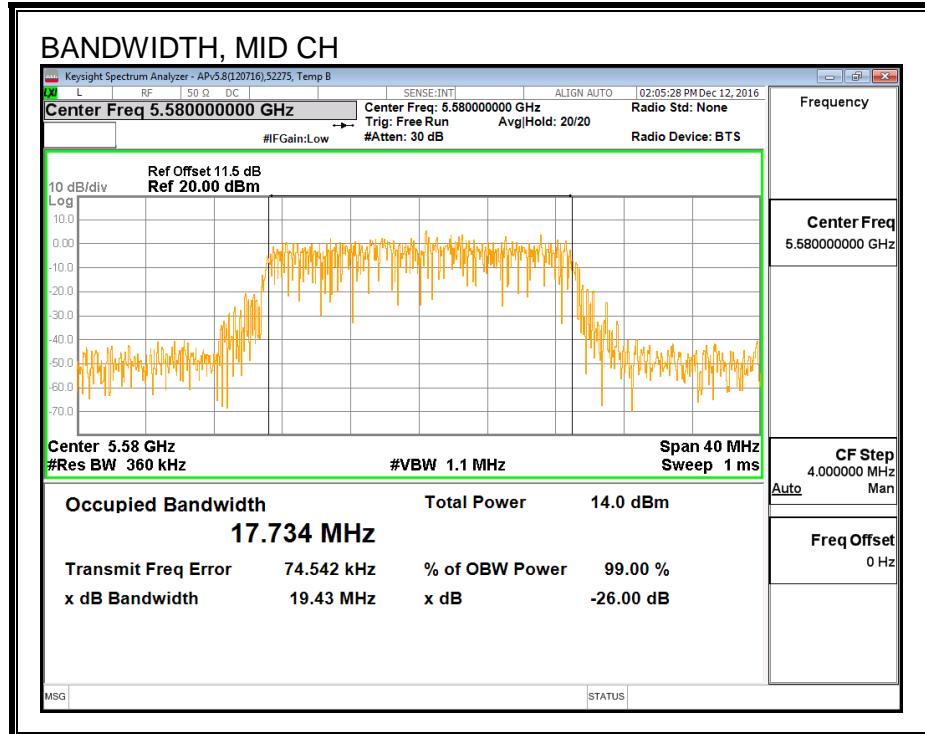
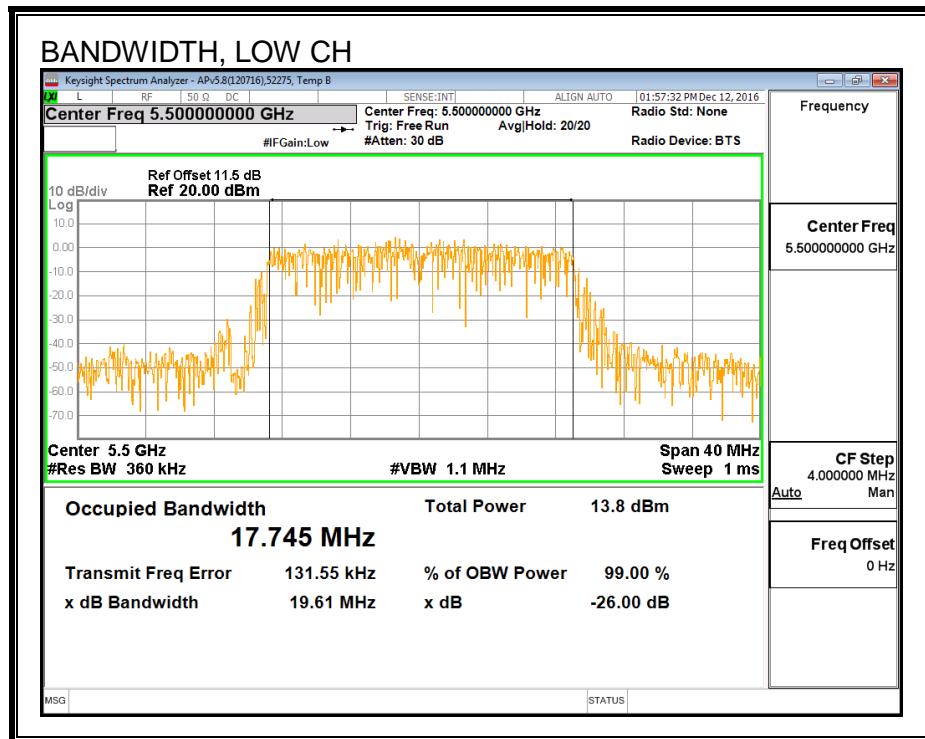
#### LIMITS

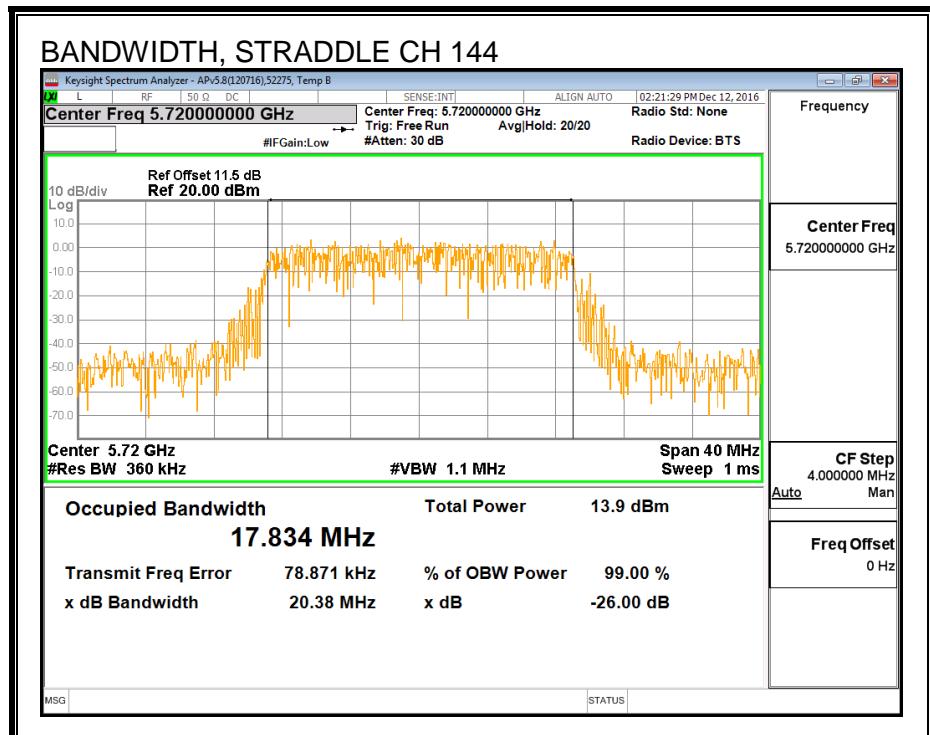
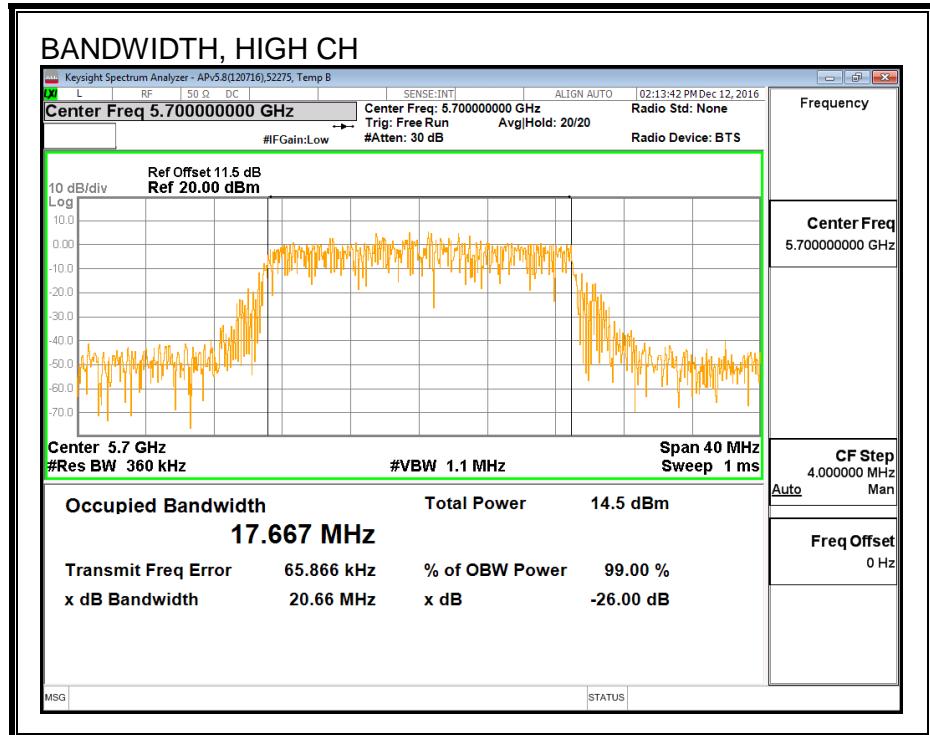
None; for reporting purposes only.

#### RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	17.745
Mid	5580	17.734
High	5700	17.667
144	5720	17.834

**99% BANDWIDTH**





### 8.27.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

#### RESULTS

ID:	43578	Date:	1/21/17
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Channel	Frequency (MHz)	Power (dBm)
Low	5500	14.96
Mid	5580	14.98
High	5700	14.91
144	5720	14.93

#### 8.27.4. 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 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.

##### 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.

Straddle channel power is measured using PXA spectrum analyzer, 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

ID:	43578	Date:	1/21/17
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### Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min BW (MHz)	Min BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5500	22.20	17.745	3.10	23.49	11.00
Mid	5580	22.08	17.734	3.10	23.49	11.00
High	5700	22.20	17.667	3.10	23.47	11.00

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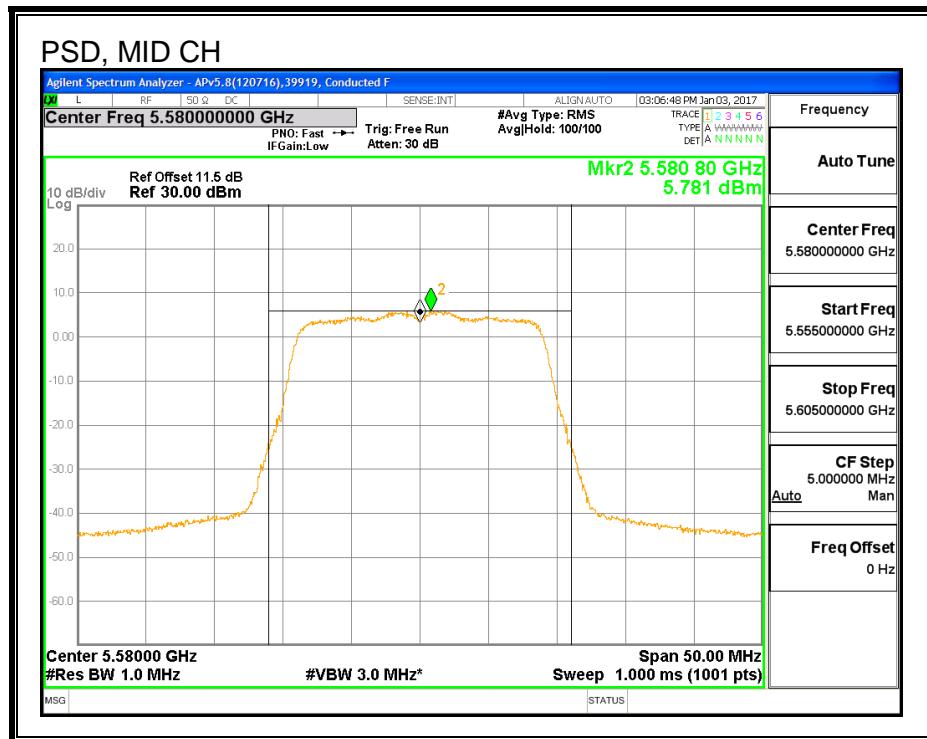
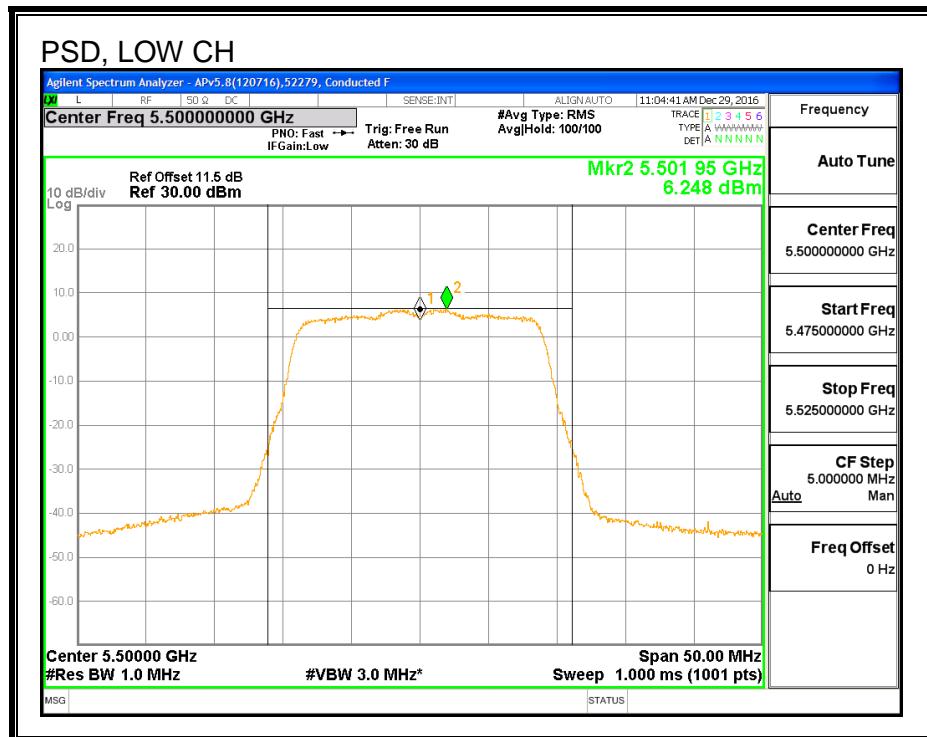
### Output Power Results

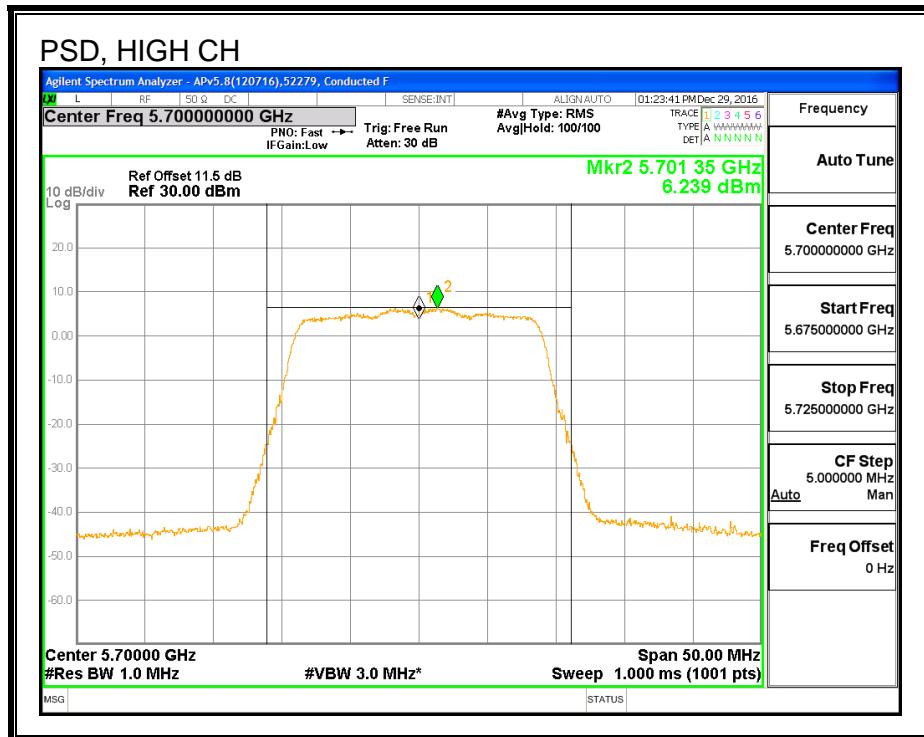
Channel	Frequency (MHz)	Ant B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	14.96	14.96	23.49	-8.53
Mid	5580	14.98	14.98	23.49	-8.51
High	5700	14.91	14.91	23.47	-8.56

### PSD Results

Channel	Frequency (MHz)	Ant B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	6.25	6.25	11.00	-4.75
Mid	5580	5.78	5.78	11.00	-5.22
High	5700	6.24	6.24	11.00	-4.76

PSD





## 8.28. 802.11ac VHT20 ANTENNA B STRADDLE CHANNEL 144 RESULTS

### 8.28.1. OUTPUT POWER AND PSD

#### 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)
144	5720	16.02	3.10	3.10	23.05	11.00

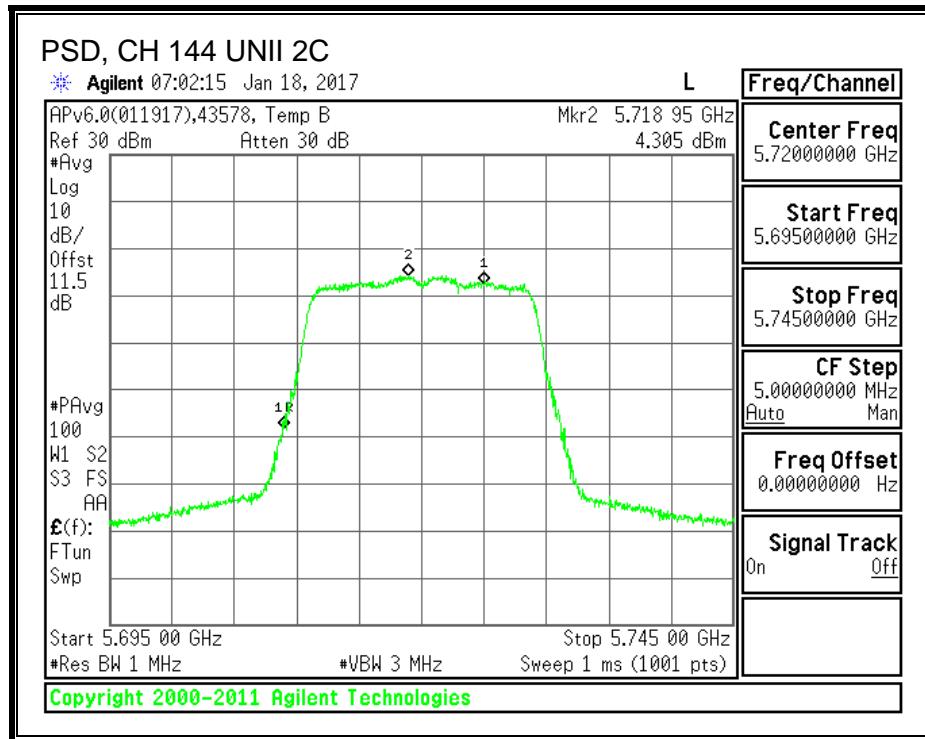
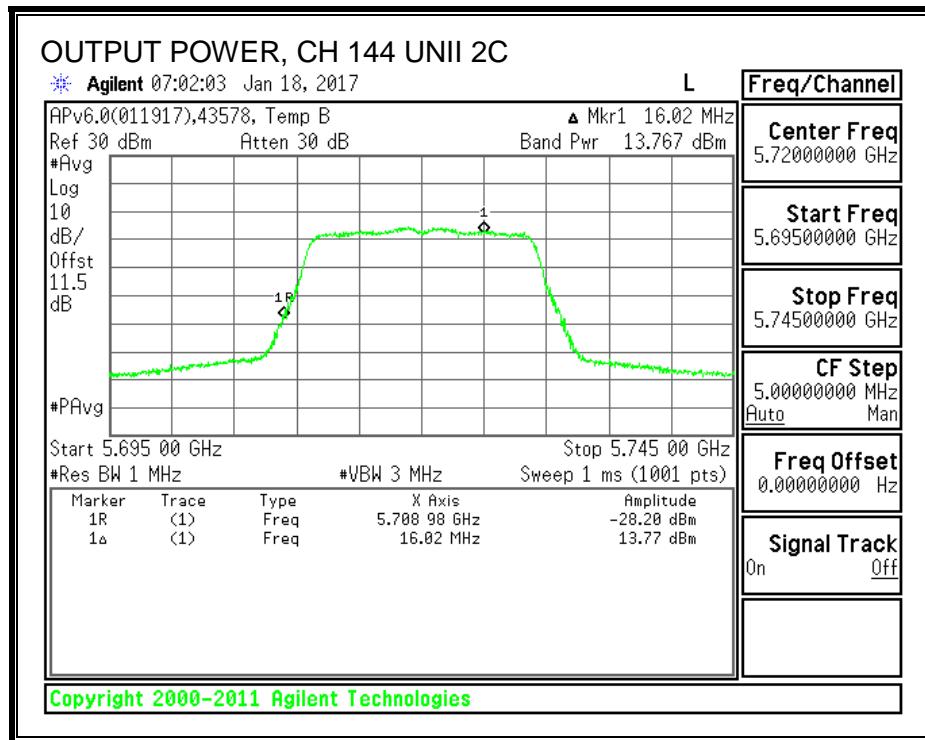
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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##### Output Power Results

Channel	Frequency (MHz)	Ant B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	13.77	13.77	23.05	-9.28

##### PSD Results

Channel	Frequency (MHz)	Ant B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	4.31	4.31	11.00	-6.70



**UNII-3 BAND**

**Antenna Gain and Limit**

Channel	Frequency	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	6.02	3.18	30.00	30.00

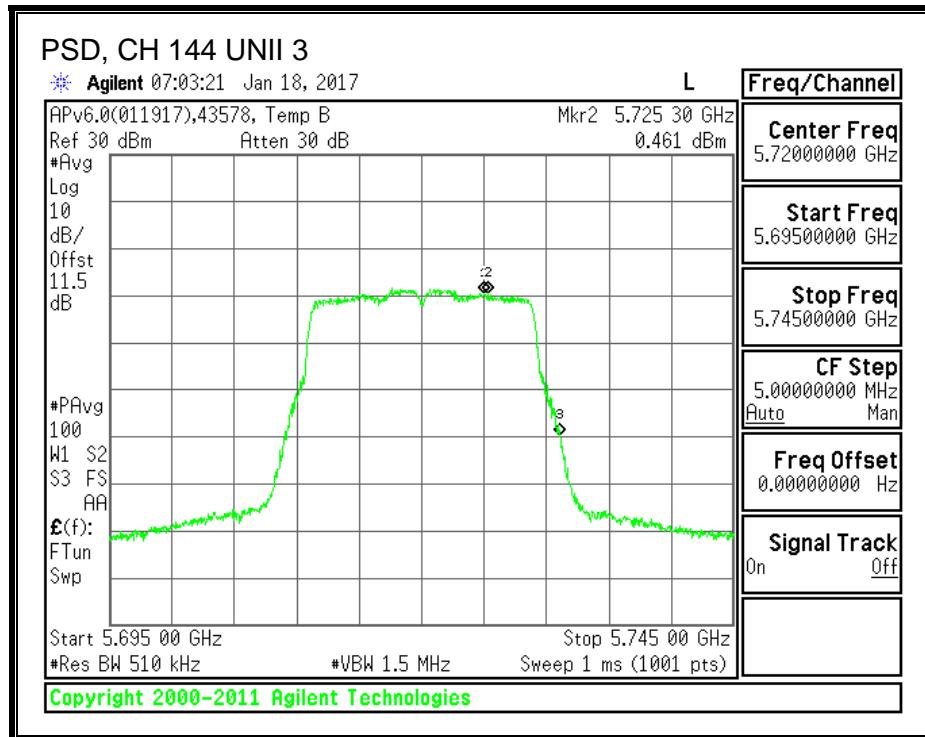
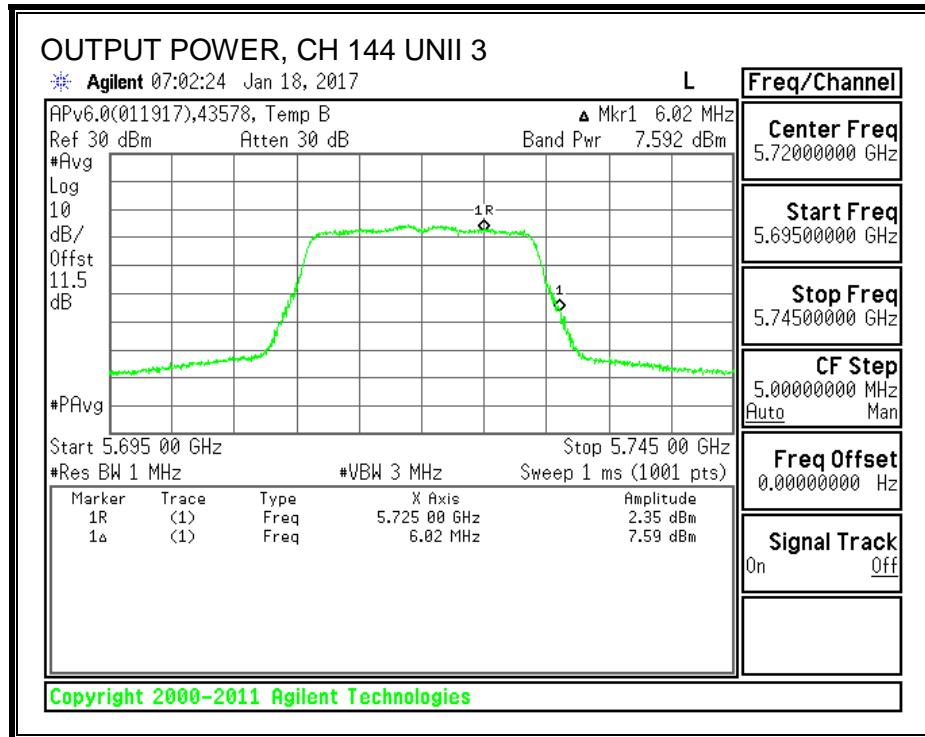
<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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**Output Power Results**

Channel	Frequency	Ant B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	7.59	7.59	30.00	-22.41

**PSD Results**

Channel	Frequency	Ant B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	0.46	0.46	30.00	-29.54



## 8.28.2. 6 dB BANDWIDTH

### LIMITS

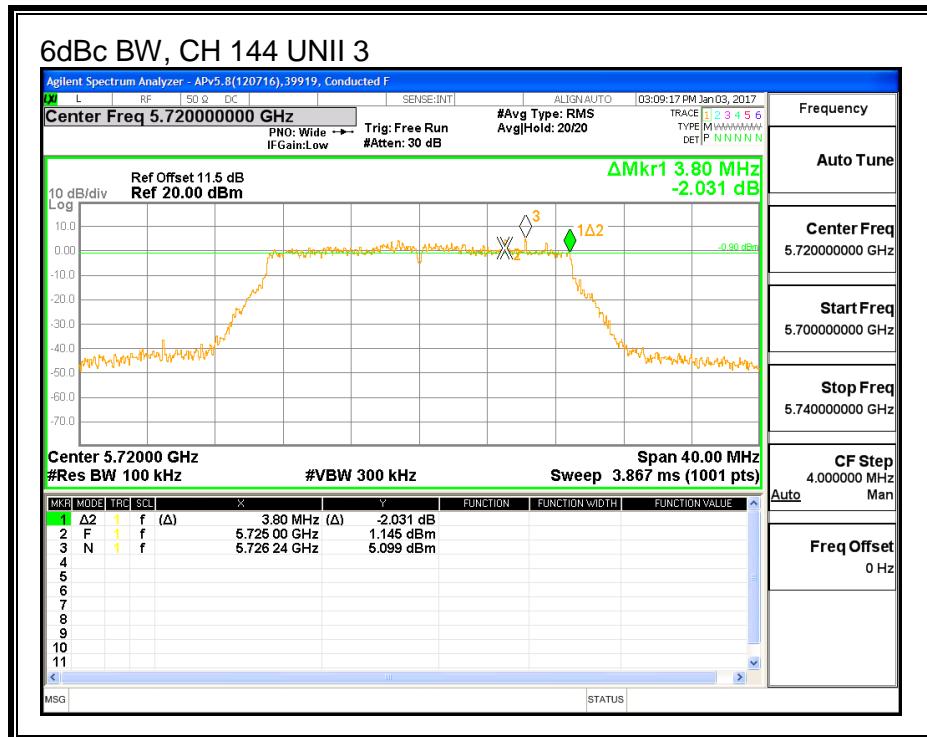
FCC §15.407 (e)

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

### RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)
144	5720	3.80

### 6 dB BANDWIDTH



## 8.29. 802.11n HT20 2Tx (ANTENNA A + ANTENNA B) CDD MODE IN THE 5.6 GHz BAND

### 8.29.1. 26 dB BANDWIDTH

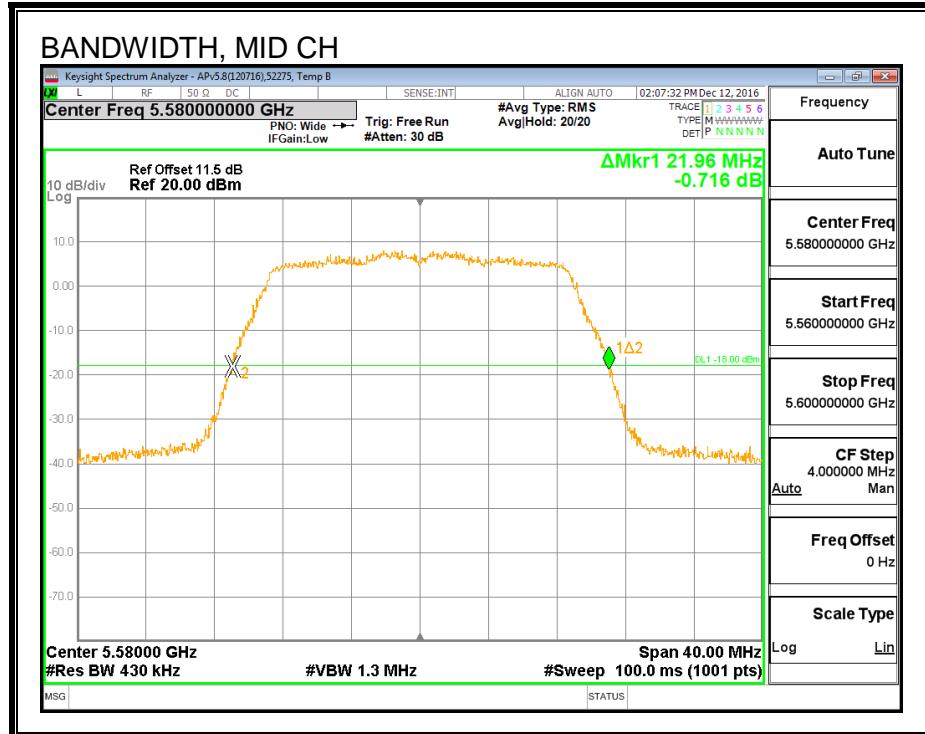
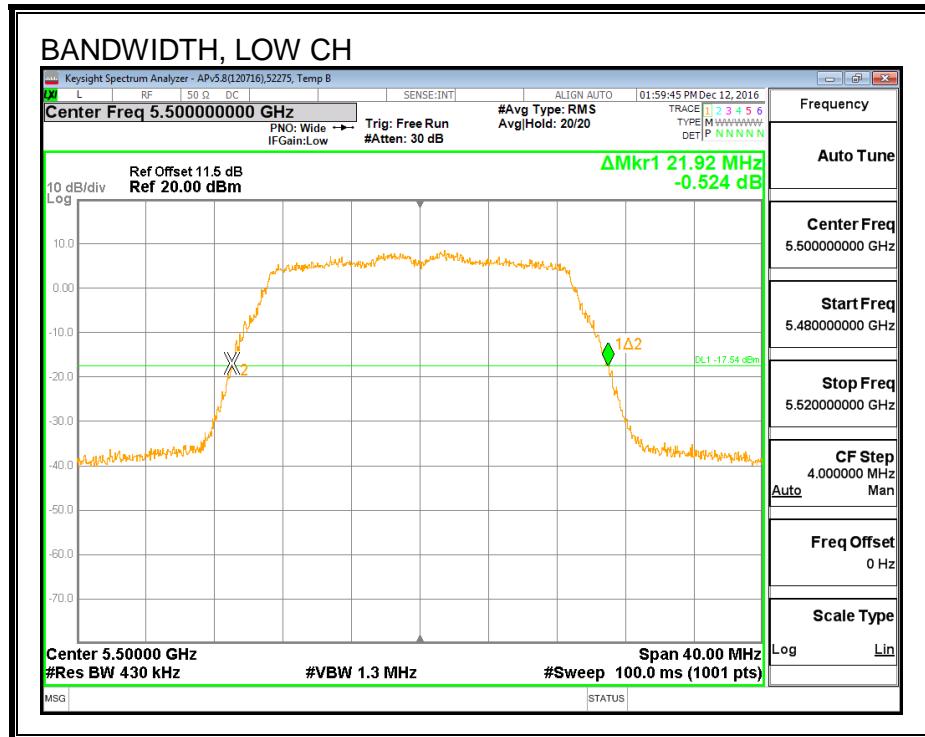
#### LIMITS

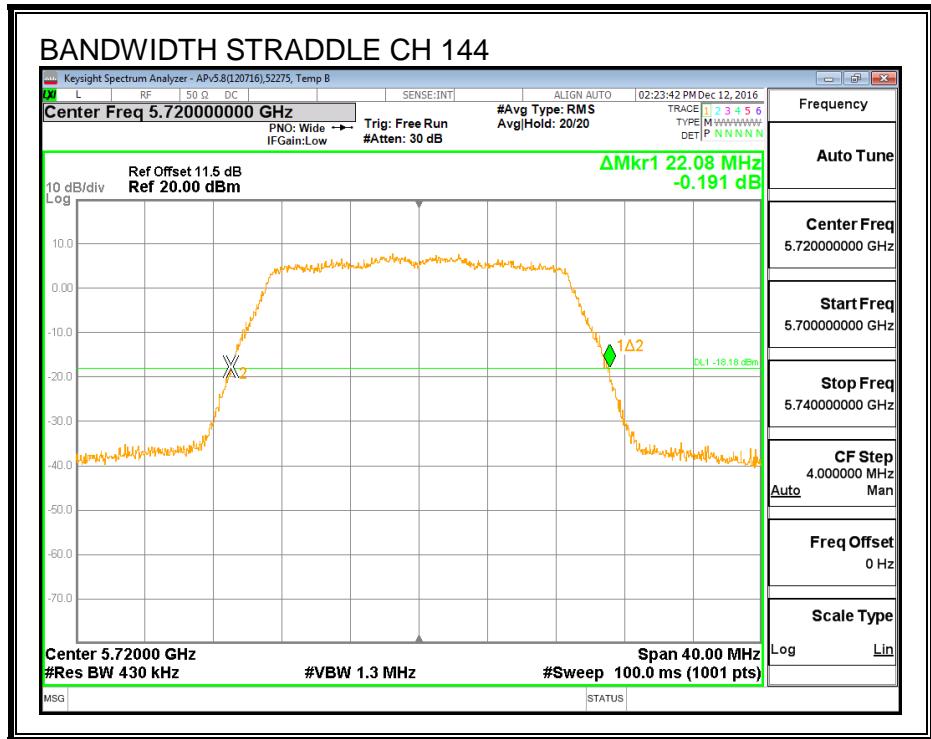
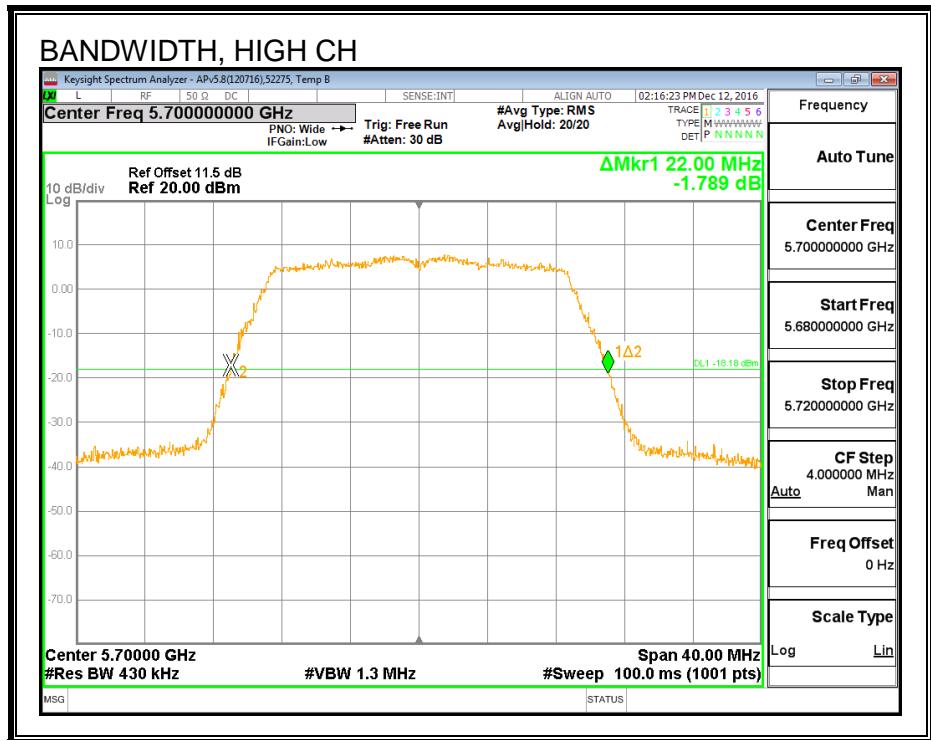
None; for reporting purposes only.

#### RESULTS

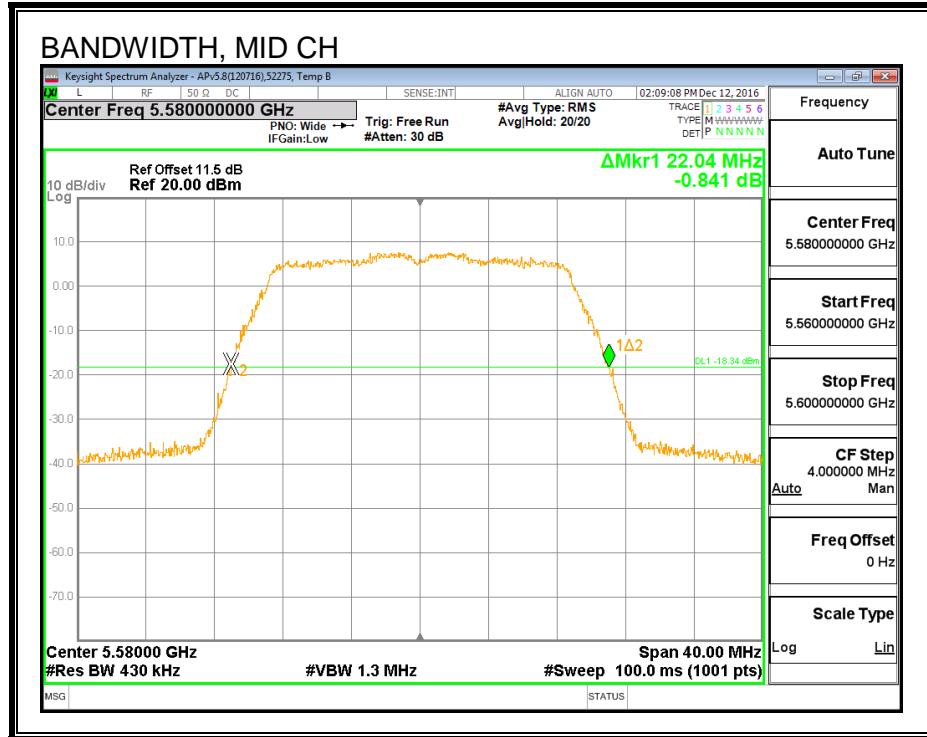
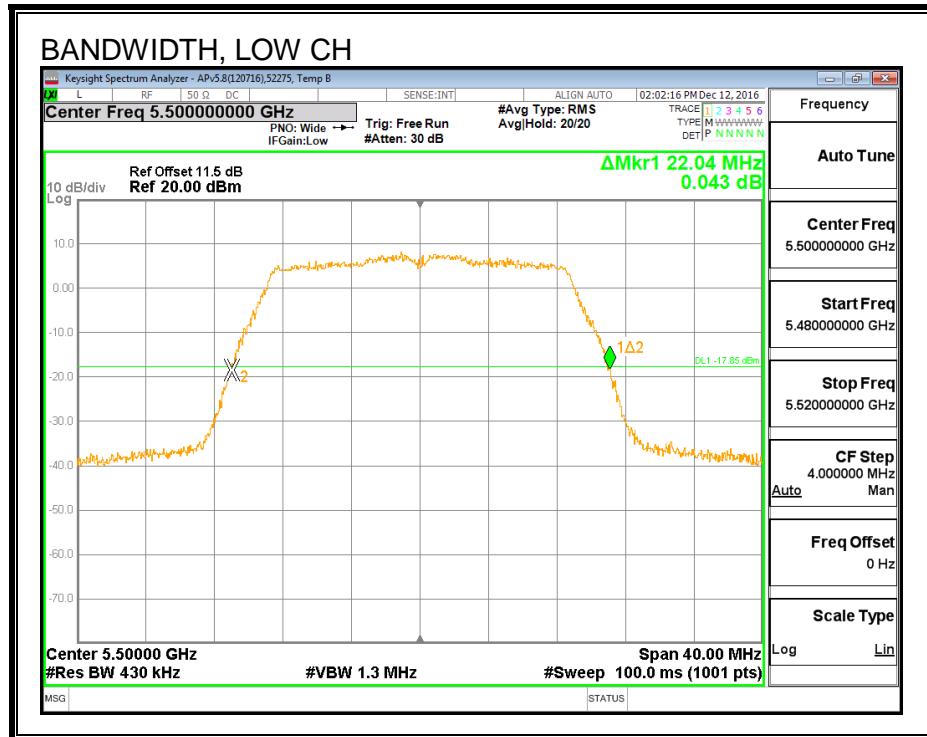
Channel	Frequency (MHz)	26 dB BW Ant A (MHz)	26 dB BW Ant B (MHz)
Low	5500	21.92	22.04
Mid	5580	21.96	22.04
High	5700	22.00	22.16
144	5720	22.08	21.96

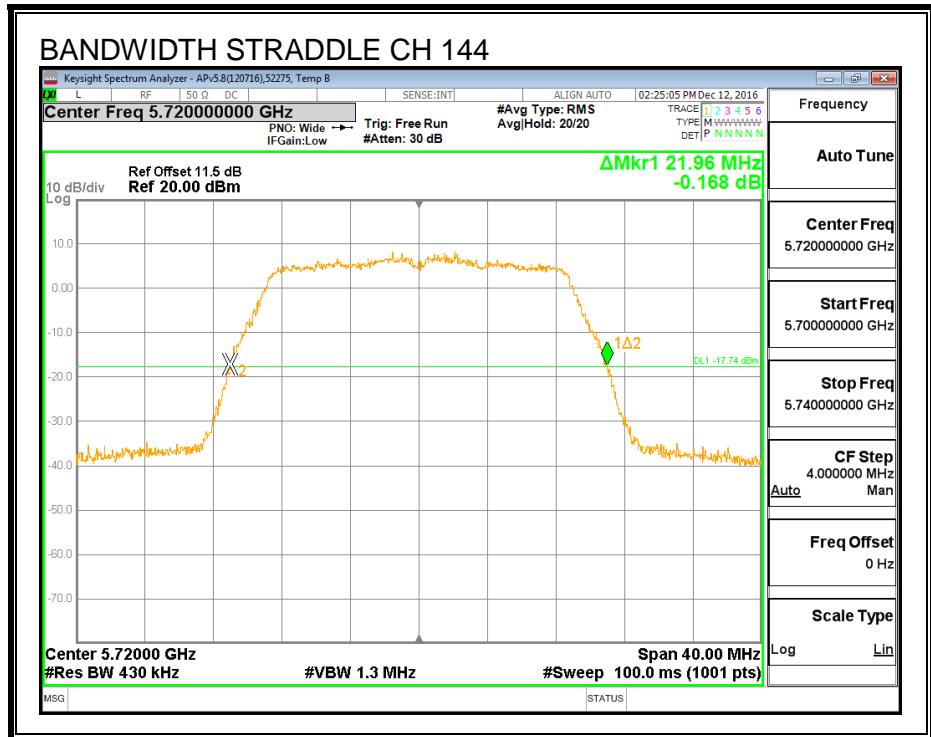
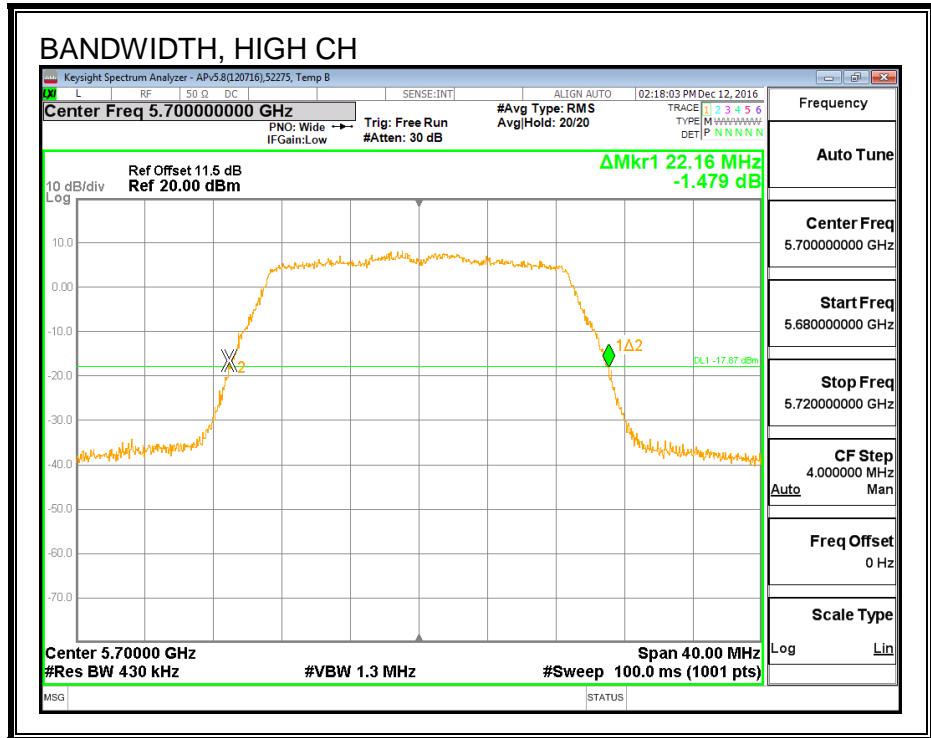
**26 dB BANDWIDTH, ANTENNA A**





**26 dB BANDWIDTH, ANTENNA B**





### 8.29.2. 99% BANDWIDTH

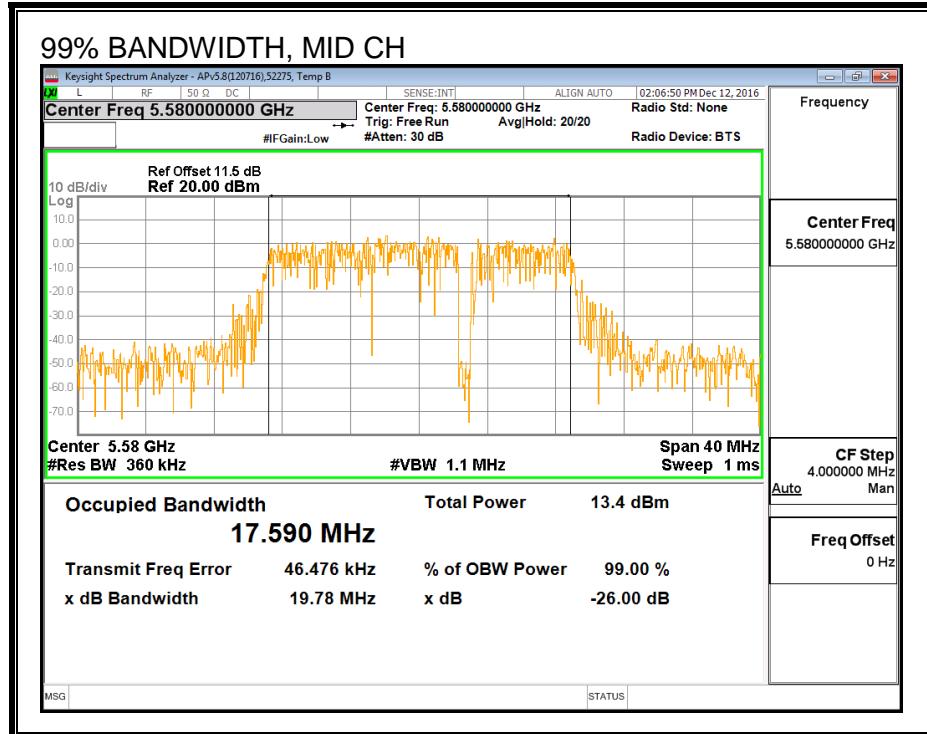
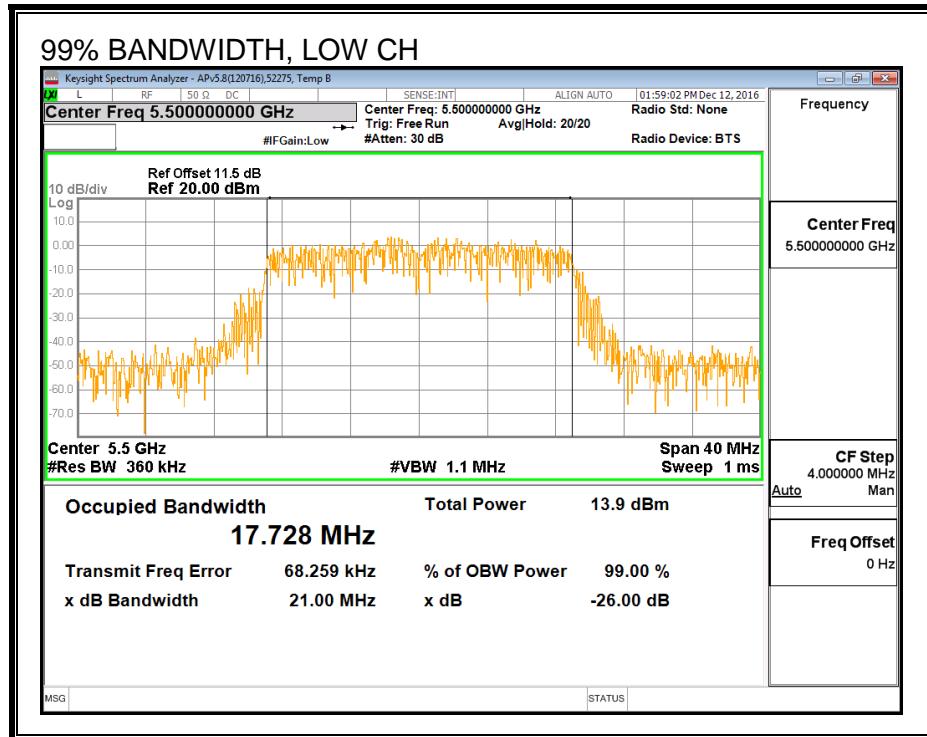
#### LIMITS

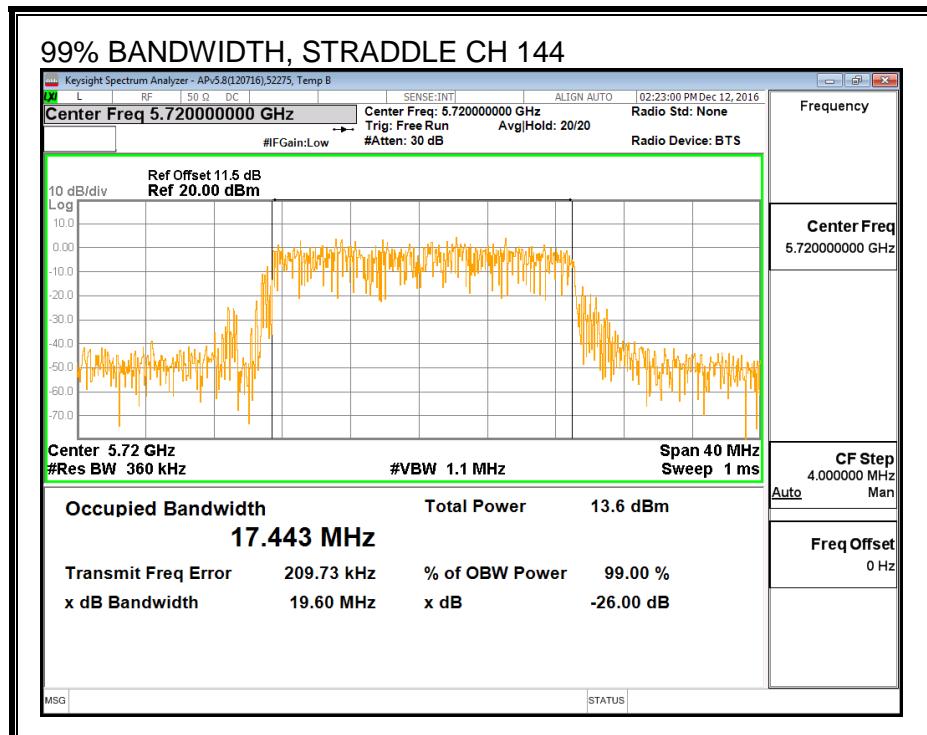
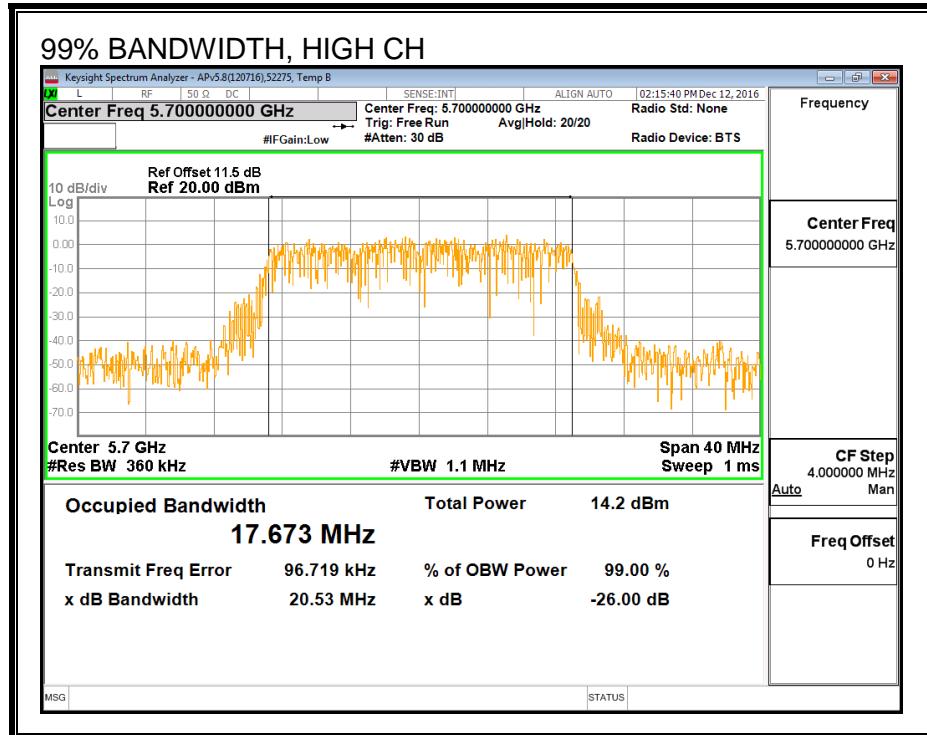
None; for reporting purposes only.

#### RESULTS

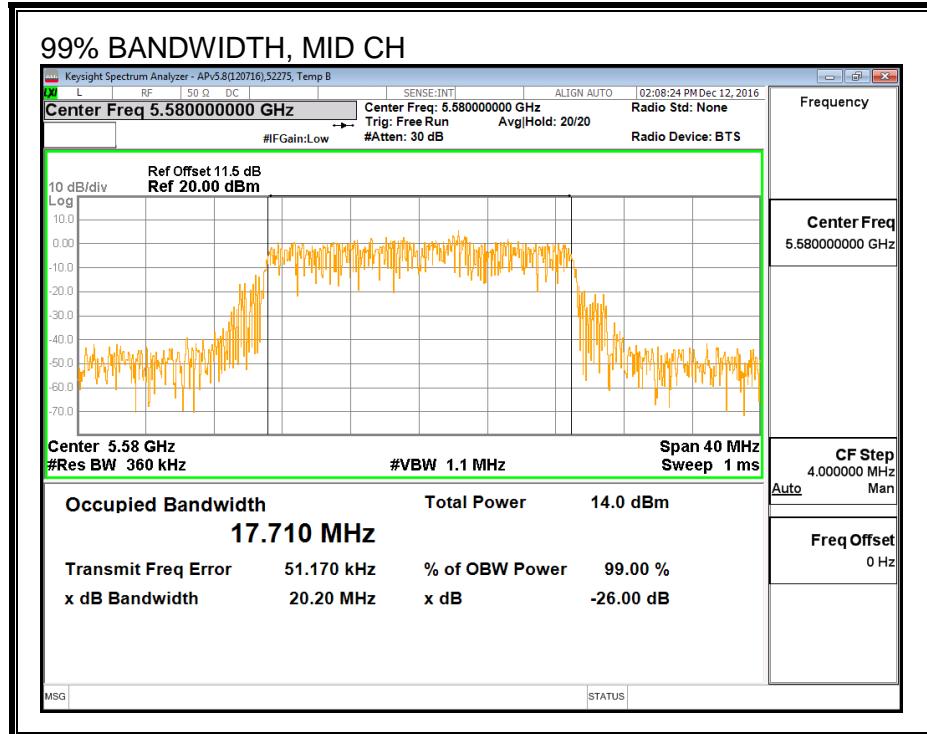
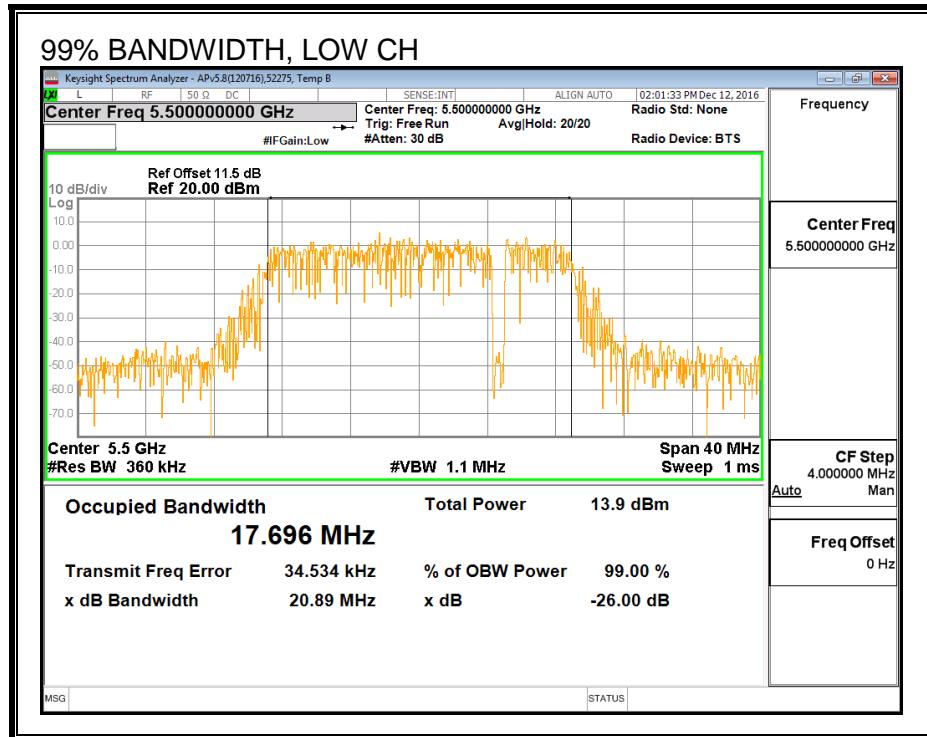
Channel	Frequency (MHz)	99% BW Ant A (MHz)	99% BW Ant B (MHz)
Low	5500	17.728	17.696
Mid	5580	17.590	17.710
High	5700	17.673	17.680
144	5720	17.443	17.773

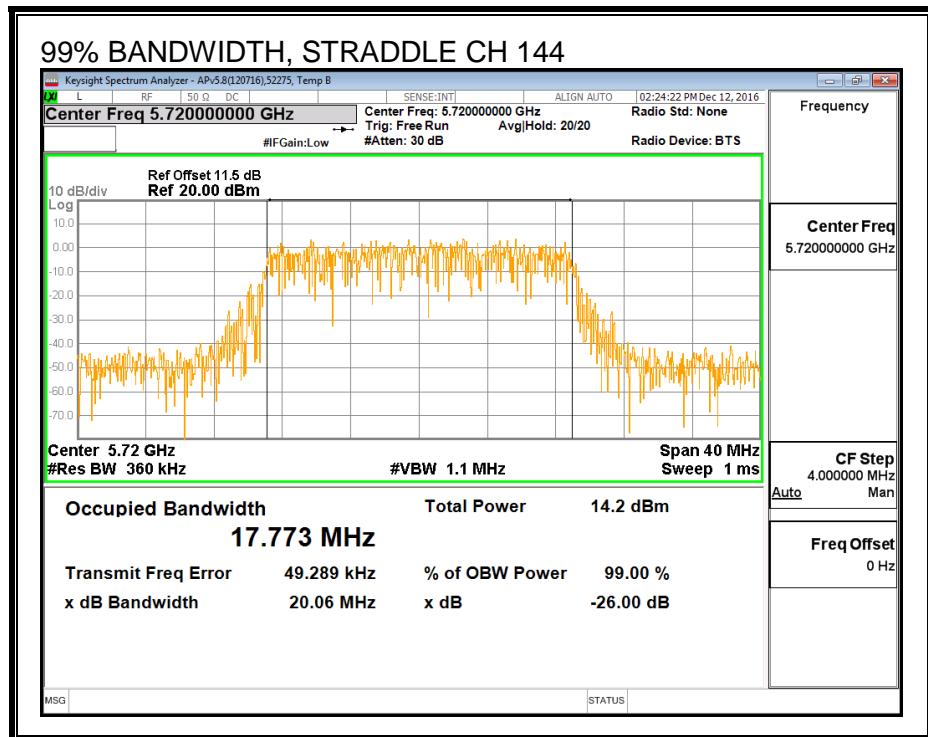
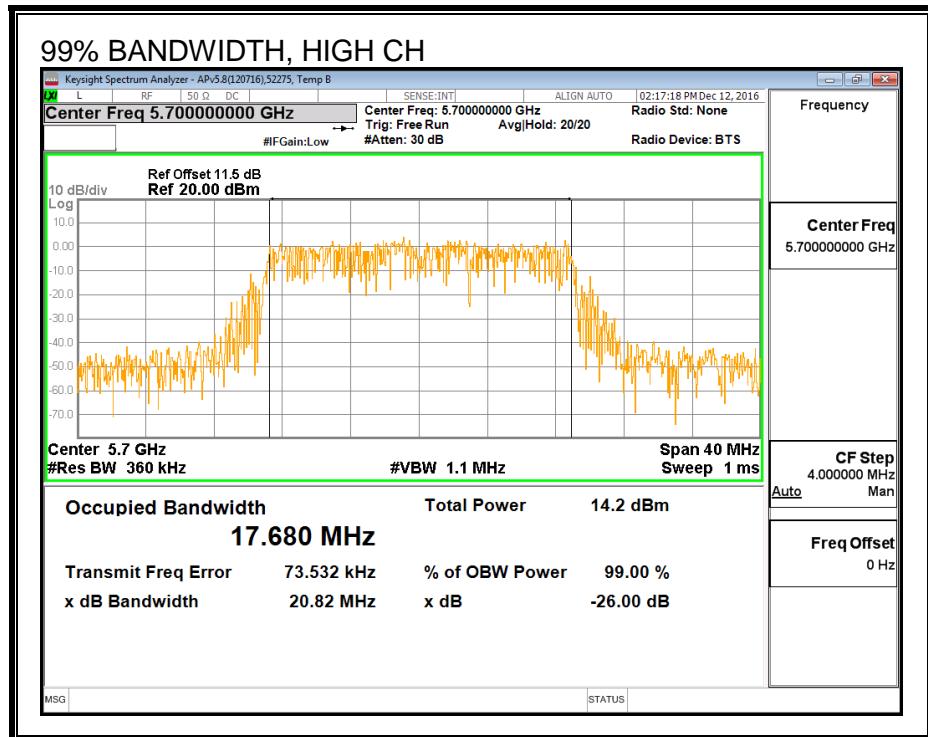
**99% BANDWIDTH, ANTENNA A**





**99% BANDWIDTH, ANTENNA B**





### 8.29.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

#### RESULTS

<b>ID:</b>	43578	<b>Date:</b>	1/21/17
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##### Average Power Results

Channel	Frequency (MHz)	Ant A Power (dBm)	Ant B Power (dBm)	Total Power (dBm)
Low	5500	14.89	14.94	17.93
Mid	5580	14.92	14.91	17.93
High	5700	13.39	13.44	16.43
144	5720	14.89	14.89	17.90

#### 8.29.4. 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.

##### 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.

Straddle channel power is measured using PXA spectrum analyzer, 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:

<b>Ant A Antenna Gain (dBi)</b>	<b>Ant B Antenna Gain (dBi)</b>	<b>Uncorrelated Chains Directional Gain (dBi)</b>
3.77	3.10	3.45

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

<b>Ant A Antenna Gain (dBi)</b>	<b>Ant B Antenna Gain (dBi)</b>	<b>Correlated Chains Directional Gain (dBi)</b>
3.77	3.10	6.45

## RESULTS

ID:	43578	Date:	1/21/17
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### Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Min BW (MHz)	Min BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5500	21.92	17.696	3.45	6.45	23.48	10.55
Mid	5580	21.96	17.59	3.45	6.45	23.45	10.55
High	5700	22.00	17.763	3.45	6.45	23.50	10.55

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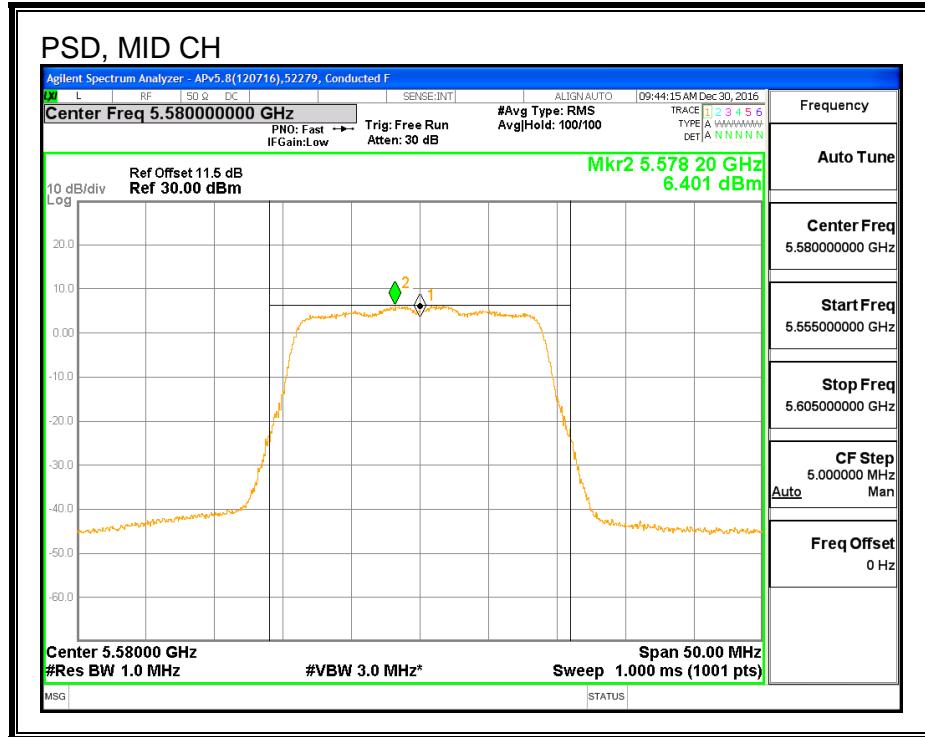
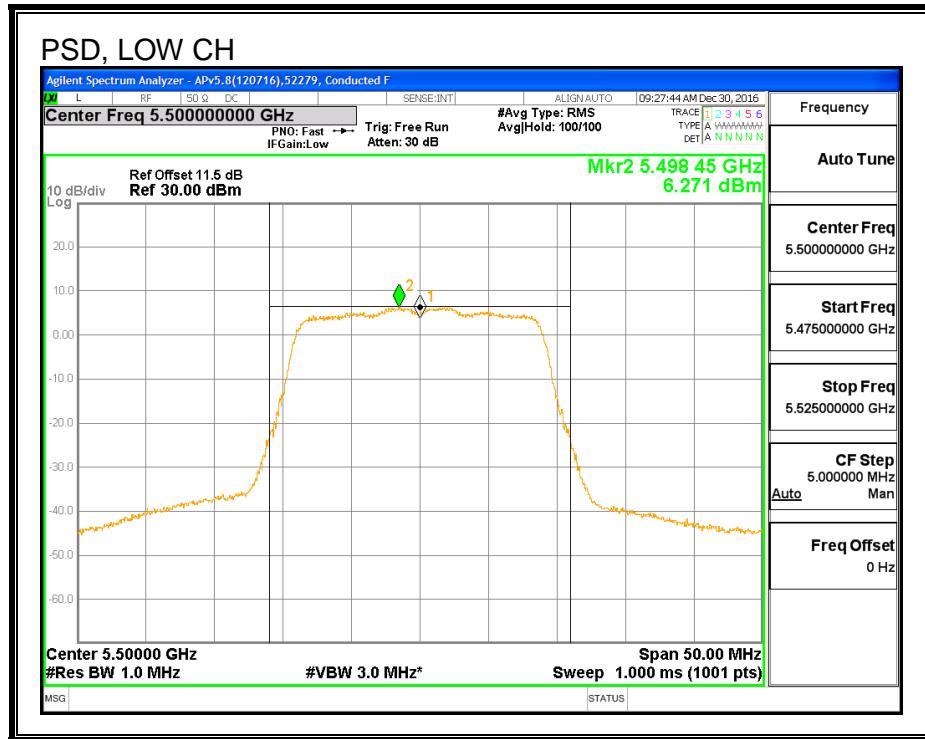
### Output Power Results

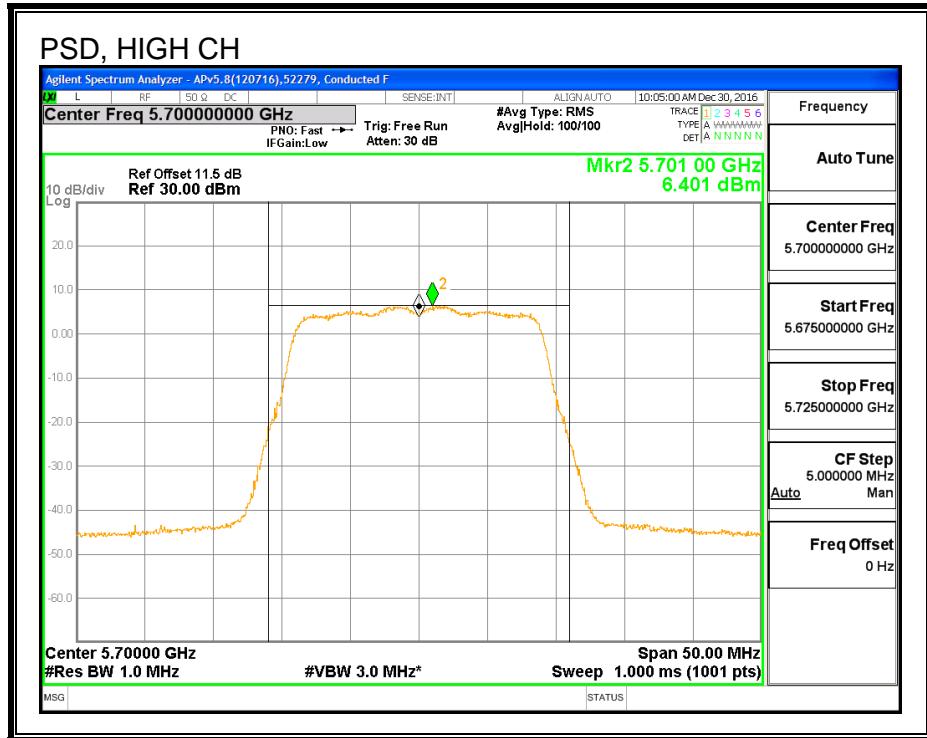
Channel	Frequency (MHz)	Ant A Meas Power (dBm)	Ant B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	14.89	14.94	17.93	23.48	-5.55
Mid	5580	14.92	14.91	17.93	23.45	-5.53
High	5700	13.39	13.44	16.43	23.50	-7.07

### PSD Results

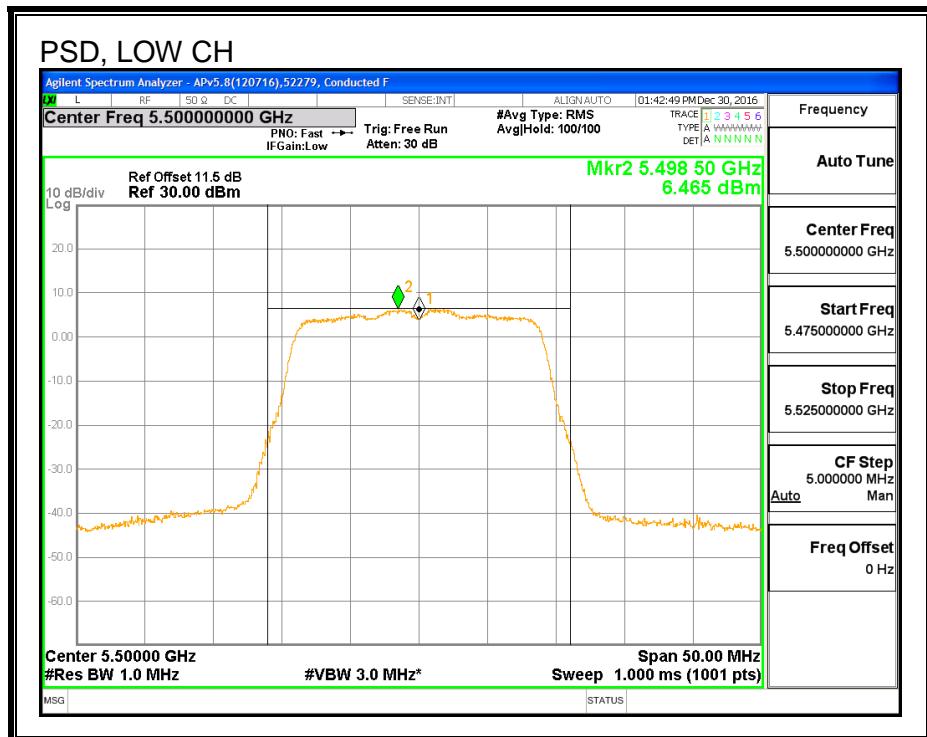
Channel	Frequency (MHz)	Ant A Meas PSD (dBm)	Ant B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	6.27	6.47	9.38	10.55	-1.17
Mid	5580	6.40	6.58	9.50	10.55	-1.05
High	5700	6.40	6.22	9.32	10.55	-1.23

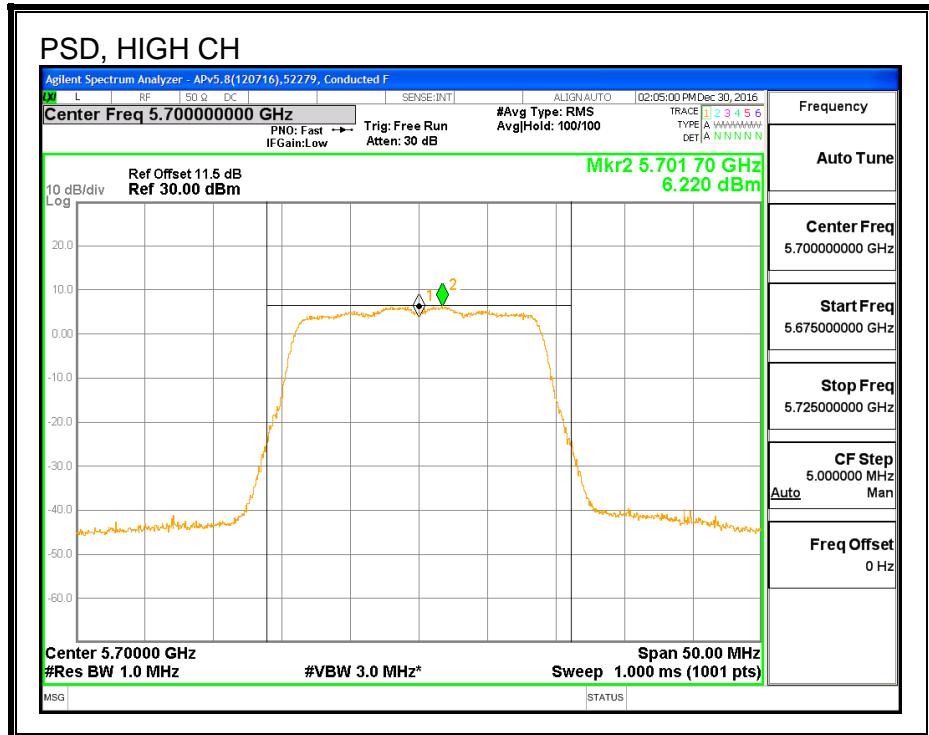
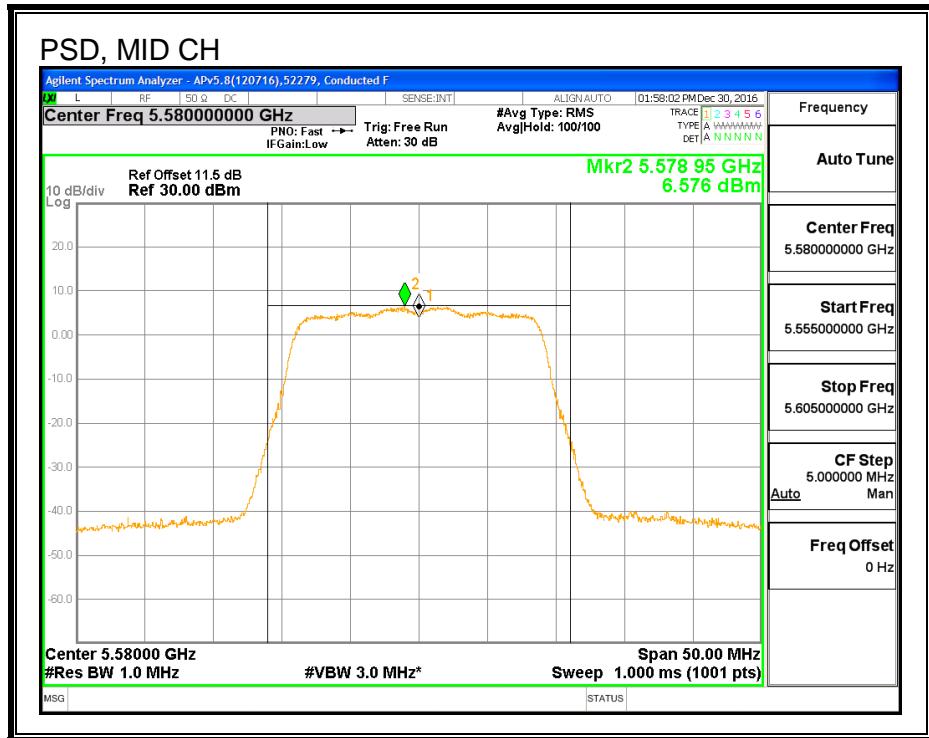
**PSD, ANTENNA A**





## PSD, ANTENNA B





## 8.30. 802.11ac VHT20 2Tx (ANTENNA A + ANTENNA B) CDD STRADDLE CHANNEL 144 RESULTS

### 8.30.1. OUTPUT POWER AND PSD

#### 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)
144	5720	15.98	3.45	6.45	23.04	10.55

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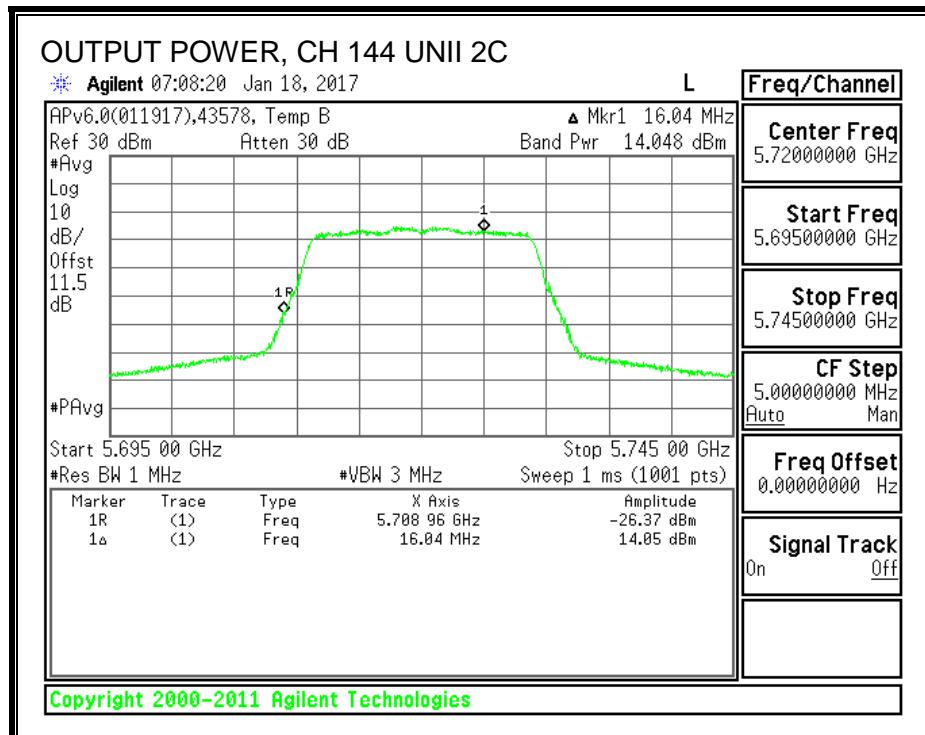
##### Output Power Results

Channel	Frequency (MHz)	Ant A Meas Power (dBm)	Ant B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	14.05	13.94	17.00	23.04	-6.03

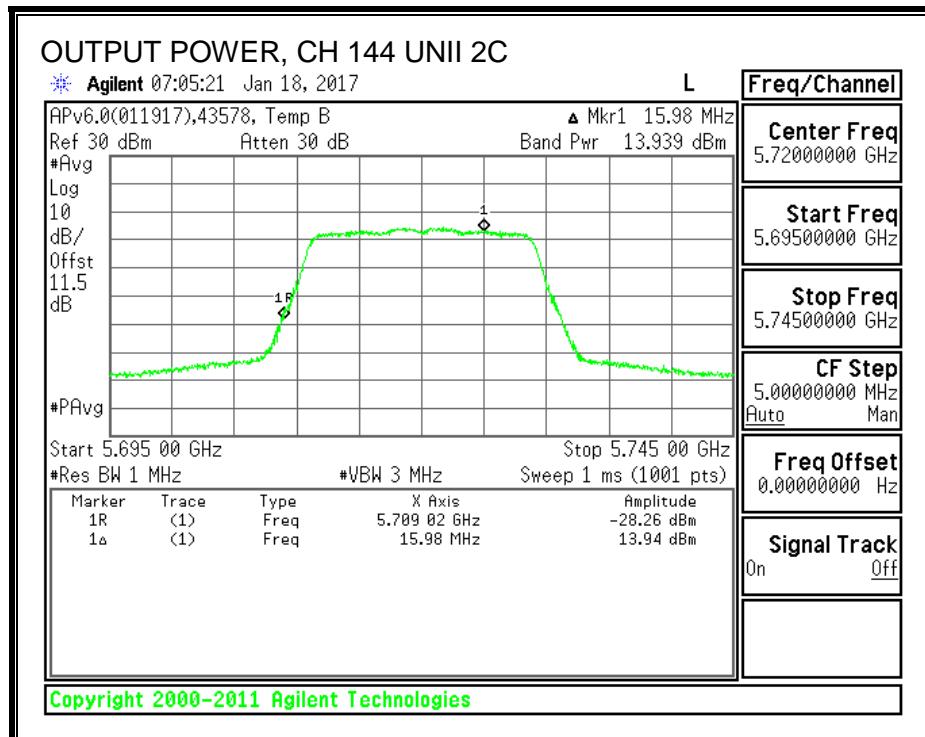
##### PSD Results

Channel	Frequency (MHz)	Ant A Meas PSD (dBm)	Ant B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	4.65	4.49	7.58	10.55	-2.97

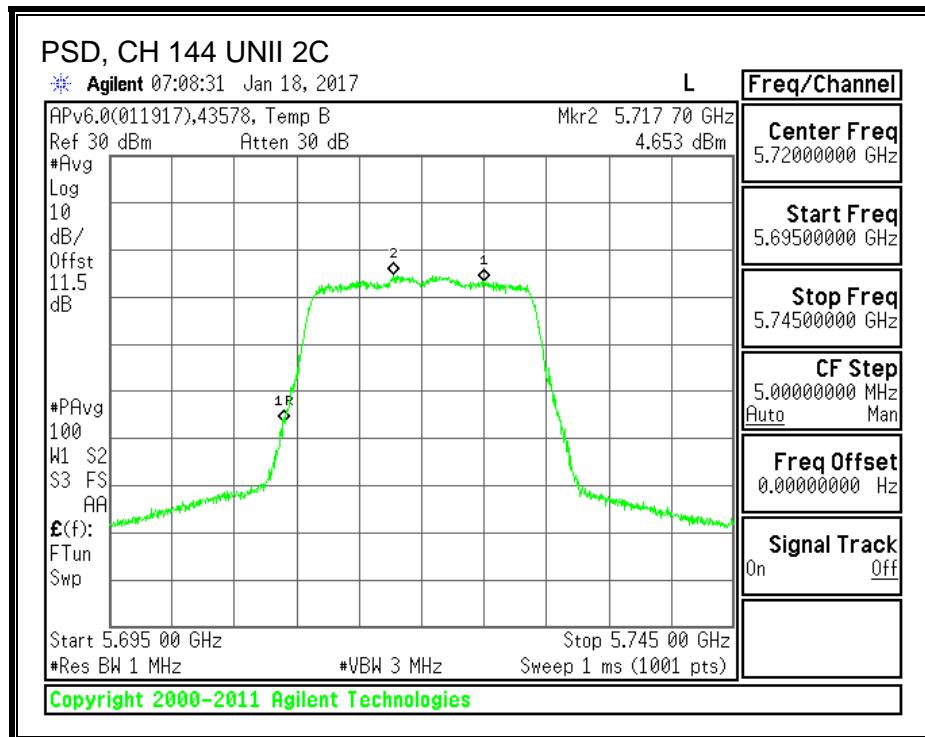
## OUTPUT POWER, ANTENNA A



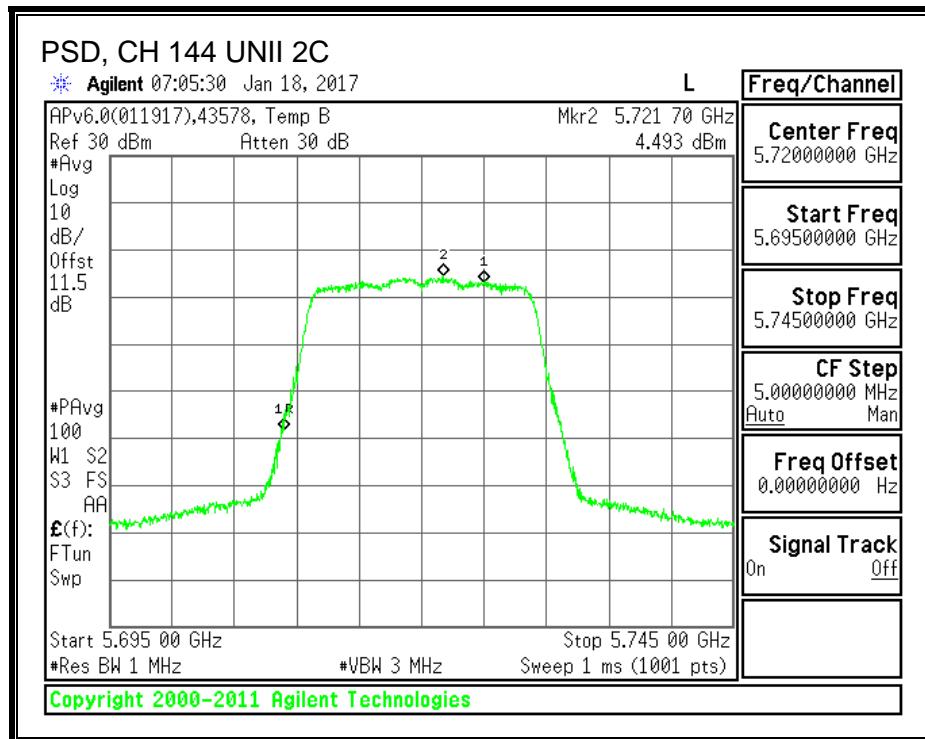
## OUTPUT POWER, ANTENNA B



### PSD, ANTENNA A



### PSD, ANTENNA B



**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)
144	5720	5.98	3.29	6.30	30.00	29.70

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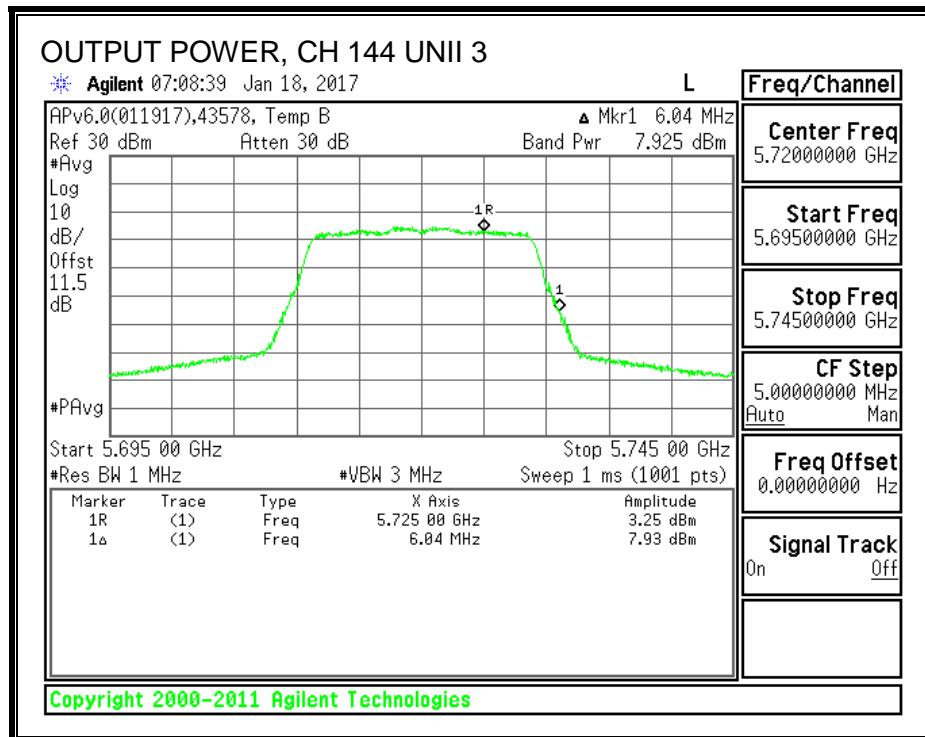
**Output Power Results**

Channel	Frequency (MHz)	Ant A Meas Power (dBm)	Ant B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	7.93	7.81	10.88	30.00	-19.12

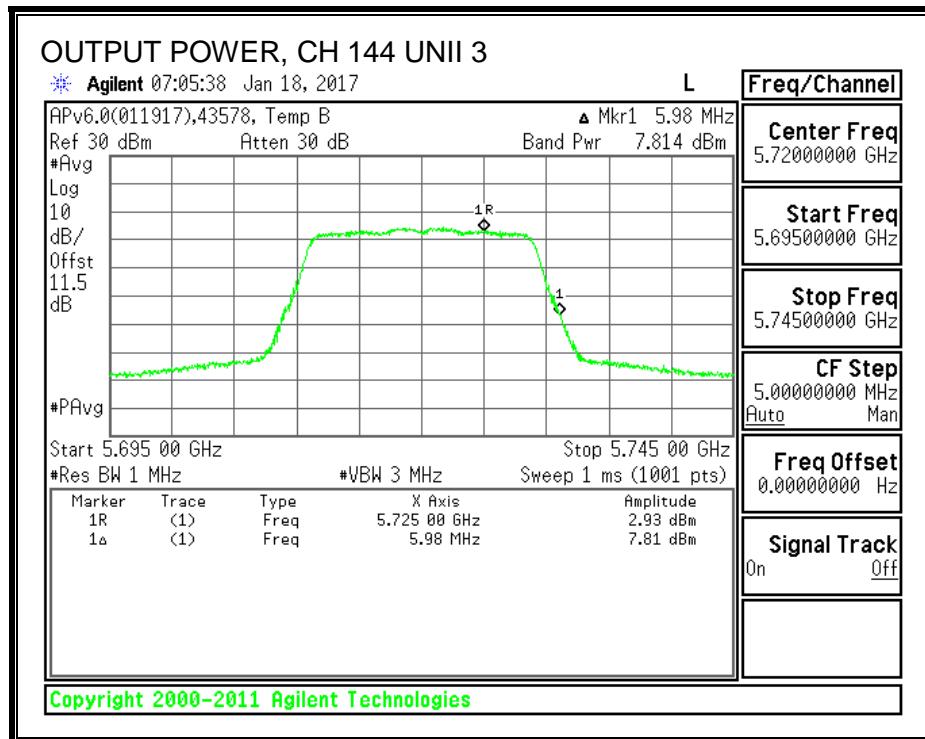
**PSD Results**

Channel	Frequency (MHz)	Ant A Meas PSD (dBm)	Ant B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	0.46	0.27	3.38	29.70	-26.32

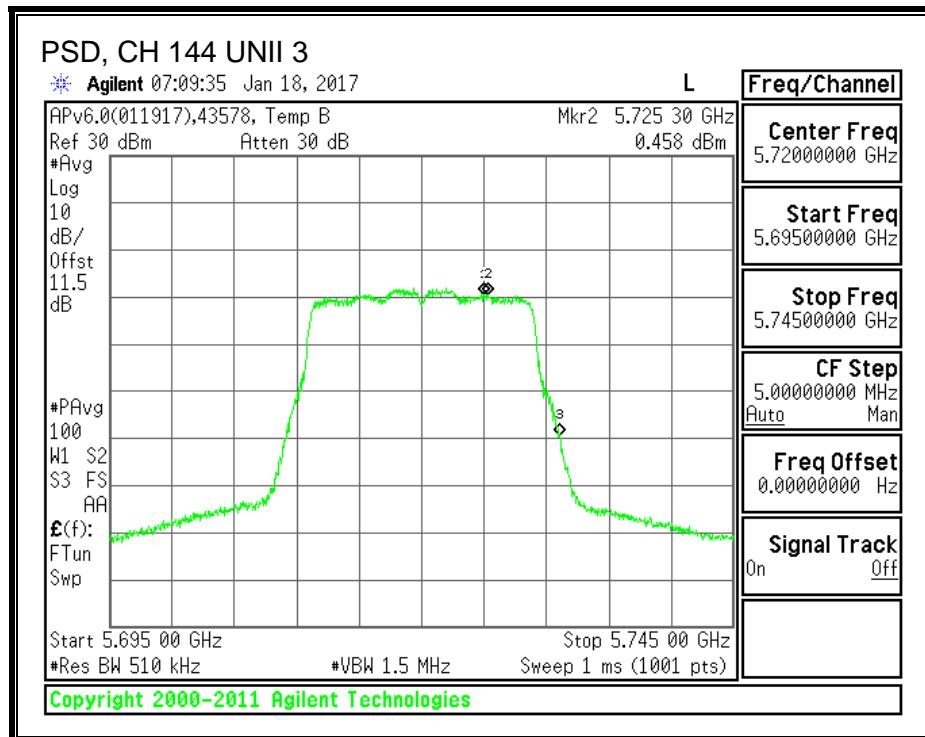
## OUTPUT POWER, ANTENNA A



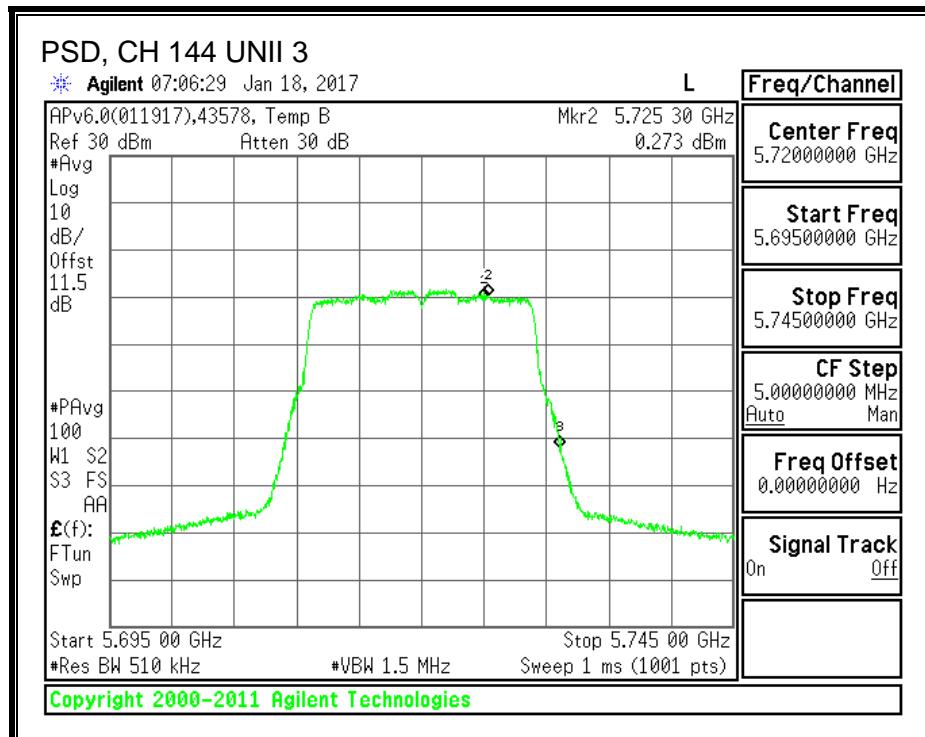
## OUTPUT POWER, ANTENNA B



### PSD, ANTENNA A



### PSD, ANTENNA B



### 8.30.2. 6 dB BANDWIDTH

#### LIMITS

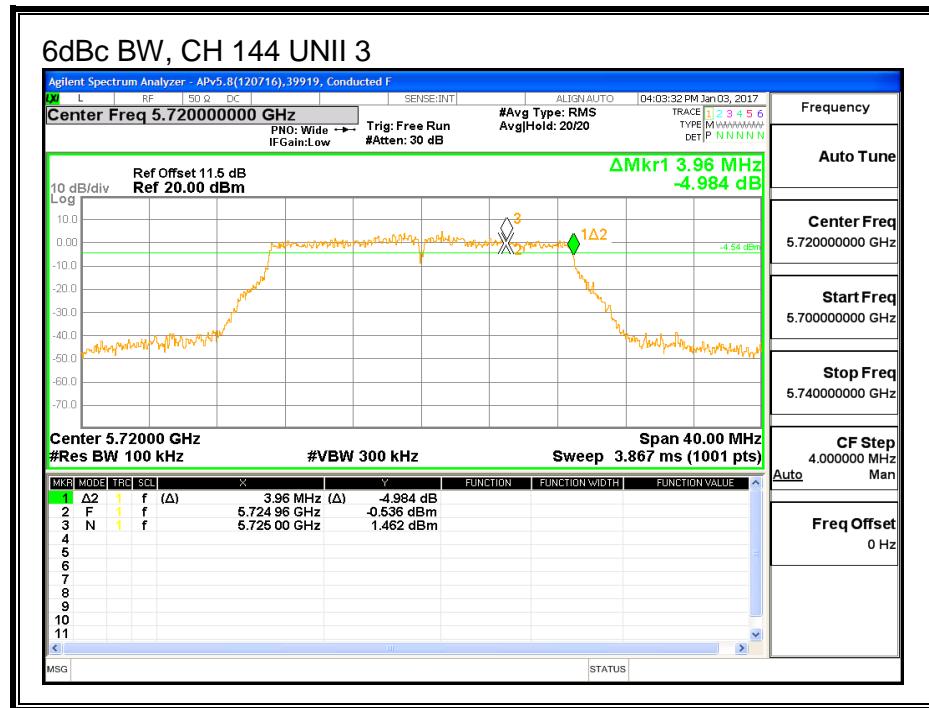
FCC §15.407 (e)

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

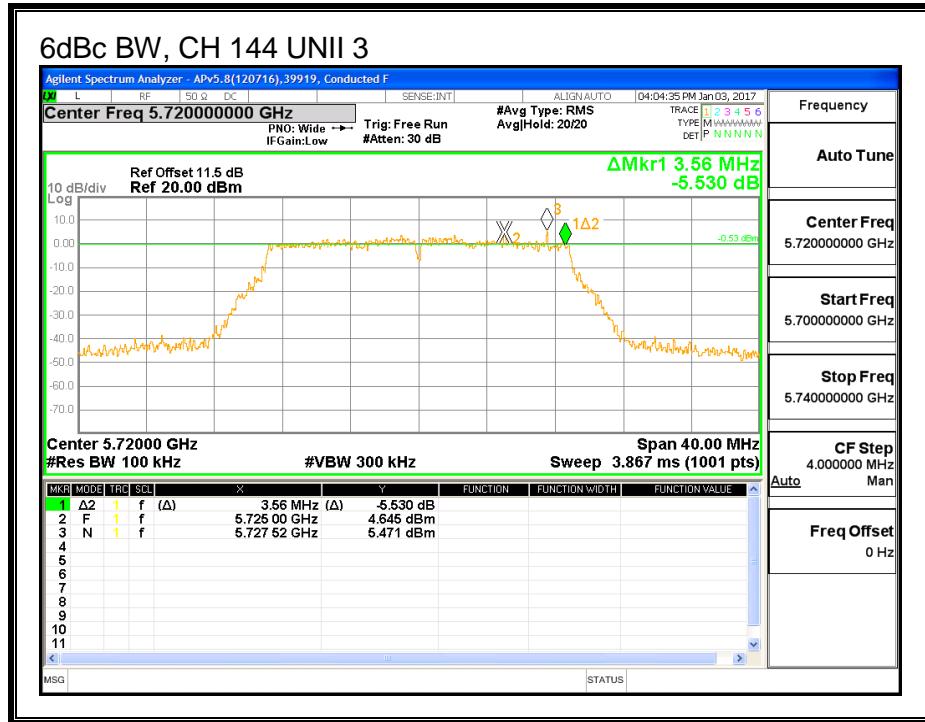
#### RESULTS

Channel	Frequency (MHz)	6 dB BW Ant A (MHz)	6 dB BW Ant B (MHz)
144	5720	3.96	3.56

ANTENNA A



ANTENNA B



### **8.31. 802.11n HT20 2Tx (ANTENNA A + ANTENNA B) STBC MODE IN THE 5.6 GHz BAND**

**Noted:** Covered by 802.11n HT20 2Tx (ANTENNA A + ANTENNA B) CDD MODE IN THE 5.6 GHz BAND