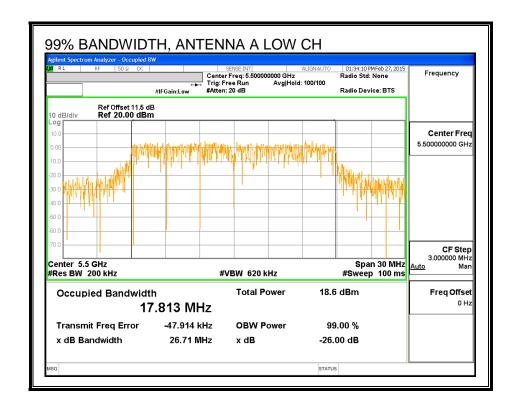
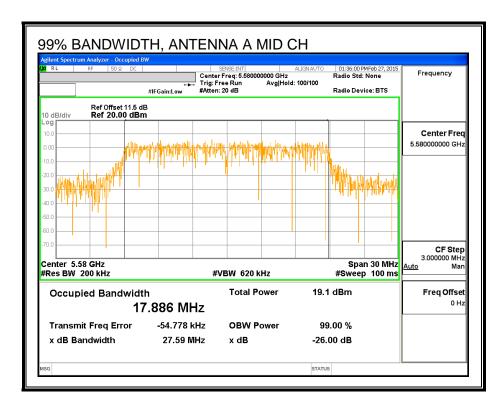
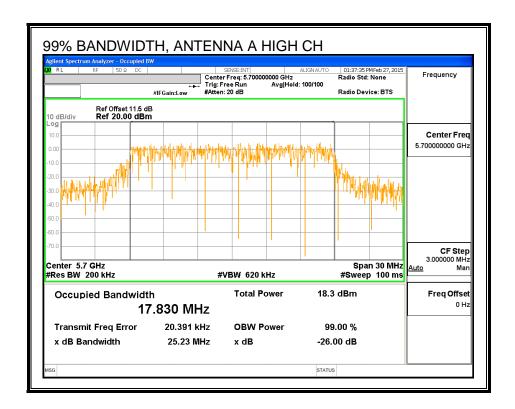
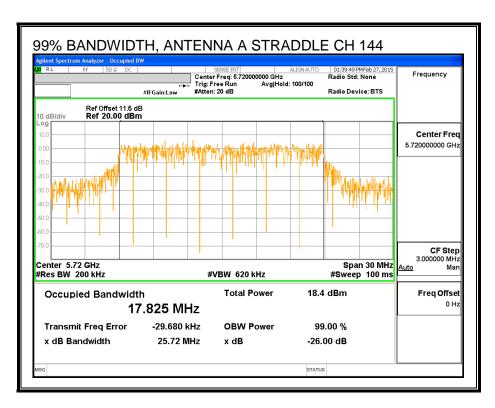


#### 99% BANDWIDTH, ANTENNA A









FCC ID: BCGA1538

# 8.25.3. AVERAGE POWER

## **LIMITS**

None; for reporting purposes only.

## **RESULTS**

## **Average Power Results**

Channel	Frequency	Antenna B	Antenna B Antenna A	
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Low	5500	15.04	15.07	18.07
Mid	5580	14.92	15.00	17.97
High	5700	13.90	14.02	16.97
144	5720	14.94	15.03	18.00

FCC ID: BCGA1538

# 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 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.

## **DIRECTIONAL ANTENNA GAIN**

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

Antenna B	Antenna A	Uncorrelated Chains	
Antenna	Antenna	Directional	
Gain	Gain	Gain	
(dBi)	(dBi)	(dBi)	
4.80	3.20	4.07	

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

Antenna B	Antenna A	<b>Correlated Chains</b>
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.80	3.20	7.05

FCC ID: BCGA1538

# **RESULTS**

## Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
Low	5500	21.78	4.07	7.05	24.00	9.95
Mid	5580	21.75	4.07	7.05	24.00	9.95
High	5700	21.75	4.07	7.05	24.00	9.95

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

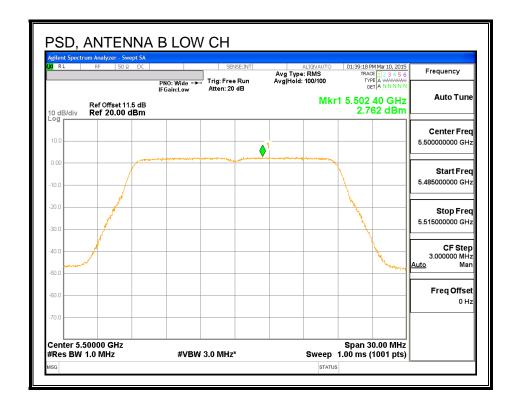
## **Output Power Results**

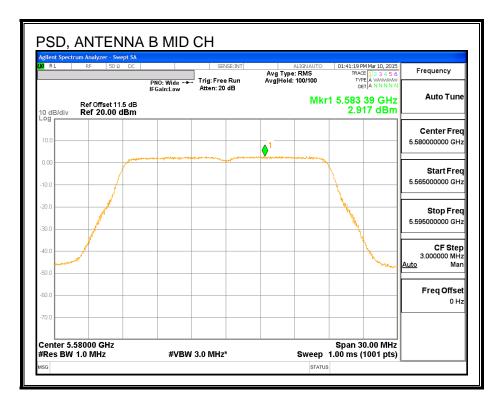
Channel	Frequency	Antenna B	Antenna A	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5500	15.04	15.07	18.07	24.00	-5.93
Mid	5580	14.92	15.00	17.97	24.00	-6.03
High	5700	13.90	14.02	16.97	24.00	-7.03

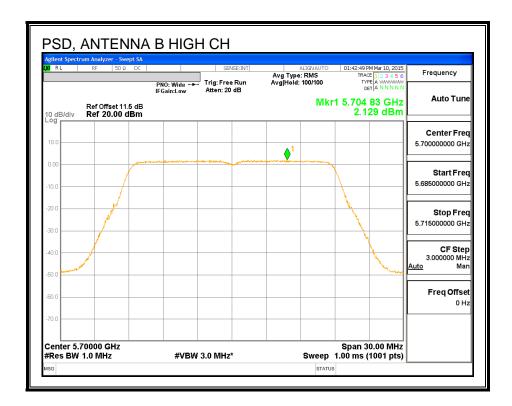
#### **PSD Results**

Channel	Frequency	Antenna B	Antenna A	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5500	2.76	3.64	6.23	9.95	-3.72
Mid	5580	2.92	4.06	6.53	9.95	-3.42
High	5700	2.13	3.25	5.74	9.95	-4.21

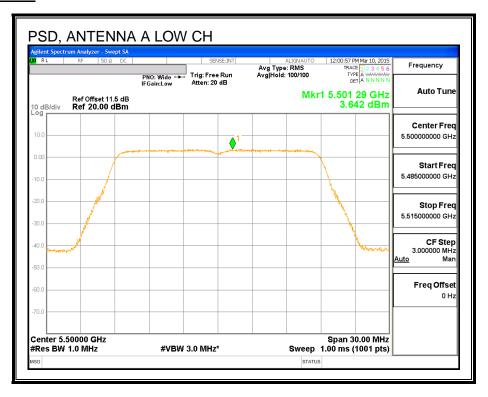
## **PSD, ANTENNA B**

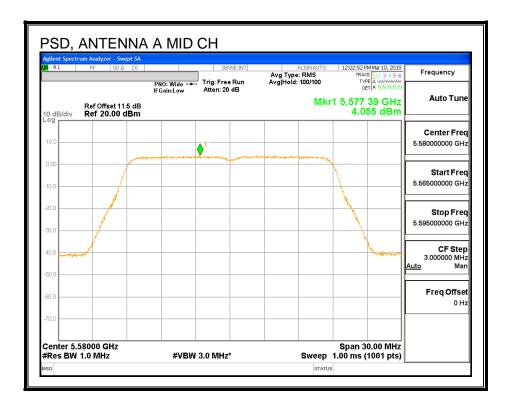


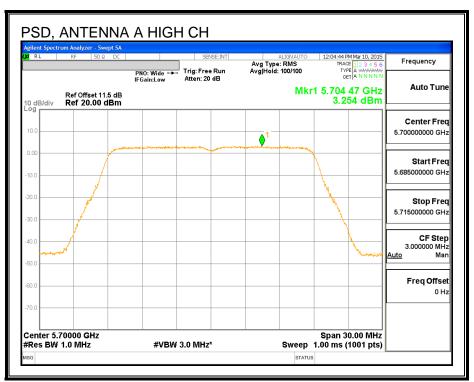




#### **PSD, ANTENNA A**







FCC ID: BCGA1538

## **STRADDLE CHANNEL 144 RESULTS**

## **UNII-2C BAND**

#### Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
144	5720	15.95	4.07	7.05	23.03	9.95

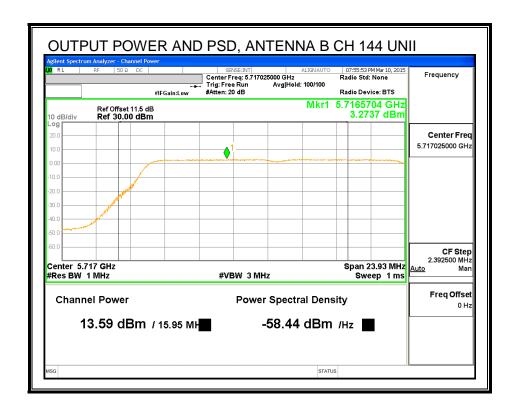
Duty Cycle CF (dB) 0.00	Included in Calculations of Corr'd Power & PSD
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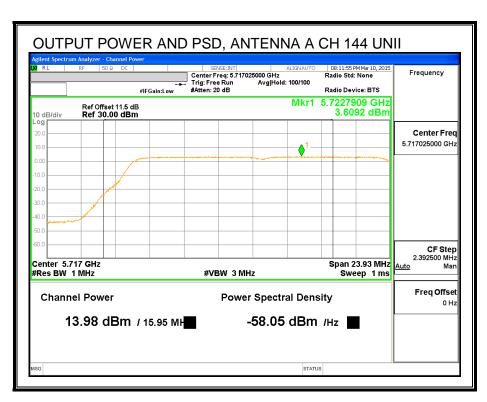
## **Output Power Results**

Channel	Frequency	Antenna B	Antenna A	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
144	5720	13.59	13.98	16.80	23.03	-6.23

#### **PSD Results**

Channel	Frequency	Antenna B	Antenna A	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
144	5720	3.27	3.61	6.45	9.95	-3.50





FCC ID: BCGA1538

# **UNII-3 BAND**

#### **Antenna Gain and Limit**

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	For Power	For PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
144	5720	5.95	4.07	7.05	30.00	28.95

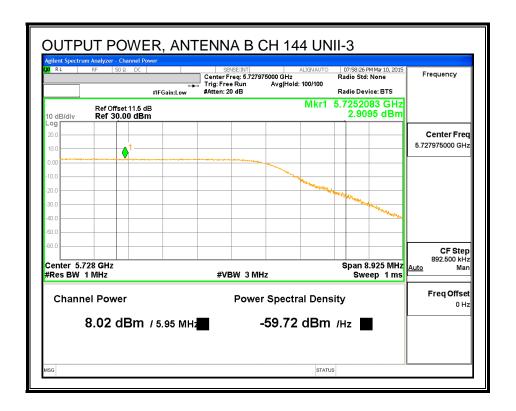
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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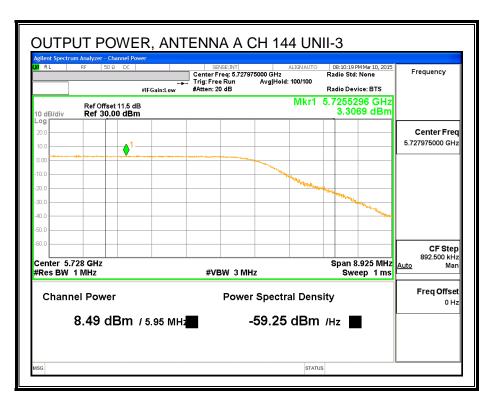
# **Output Power Results**

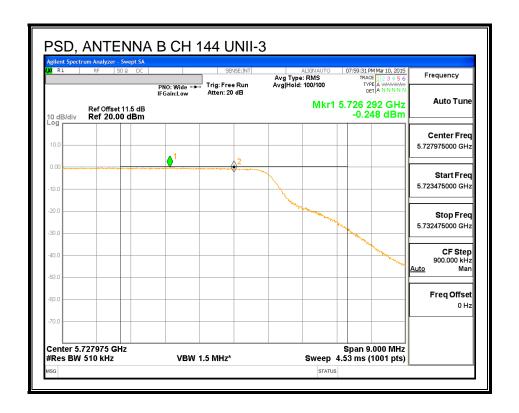
Channel	Frequency	Antenna B	Antenna A	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
144	5720	8.02	8.49	11.27	30.00	-18.73

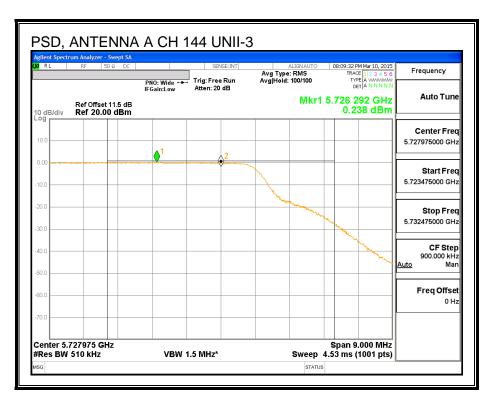
#### **PSD** Results

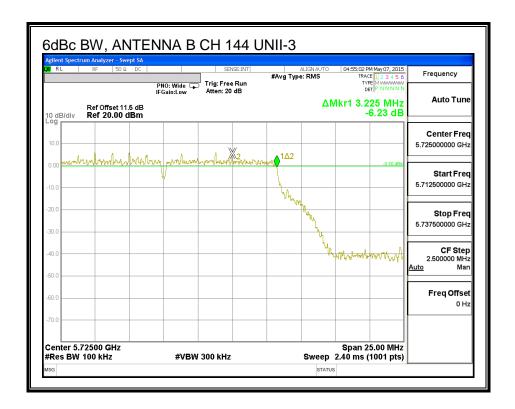
Channel	Frequency	Antenna B	Antenna A	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
144	5720	-0.25	0.24	3.01	28.95	-25.94

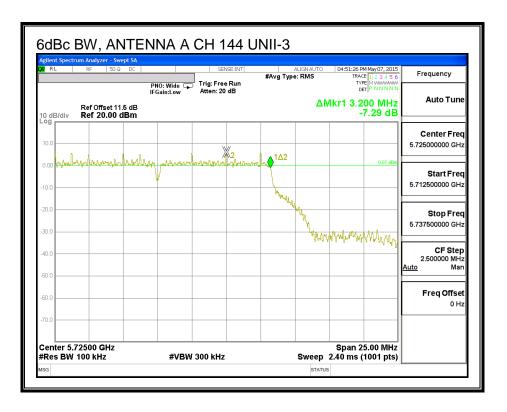












FCC ID: BCGA1538

# 8.26. 802.11n HT40 SISO MODE IN THE 5.6 GHz BAND ANTENNA B

## 8.26.1. 26 dB BANDWIDTH

# **LIMITS**

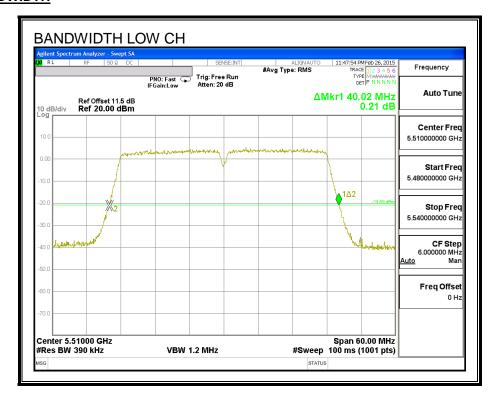
None; for reporting purposes only.

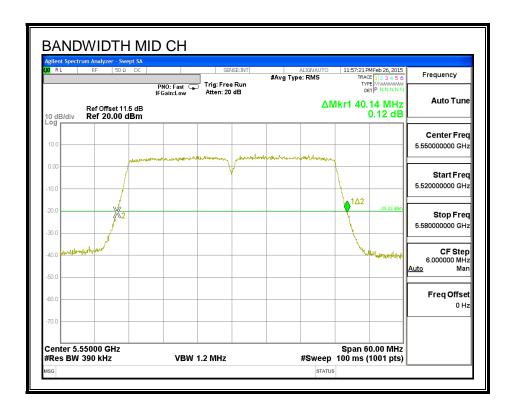
## **RESULTS**

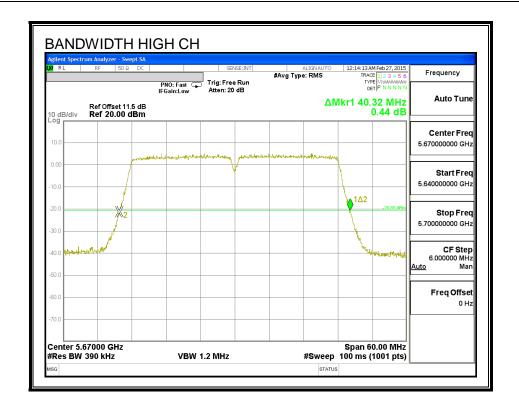
Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Low	5510	40.02
Mid	5550	40.14
High	5670	40.32
142	5710	40.26

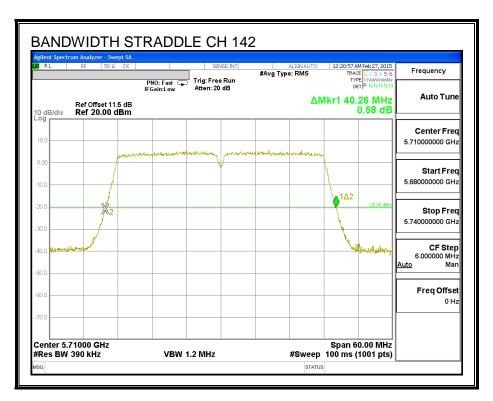
REPORT NO: 14U19186-E5C DATE: JULY 20, 2015 FCC ID: BCGA1538

# **26 dB BANDWIDTH**









FCC ID: BCGA1538

# 8.26.2. 99% BANDWIDTH

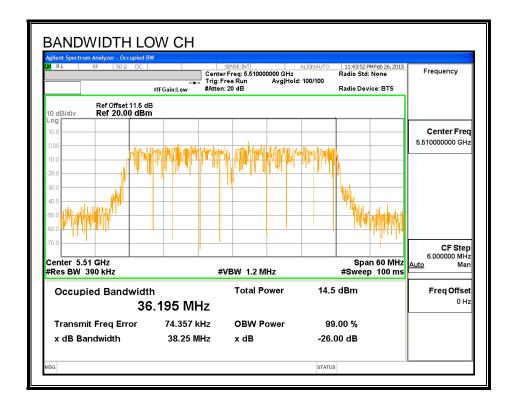
## **LIMITS**

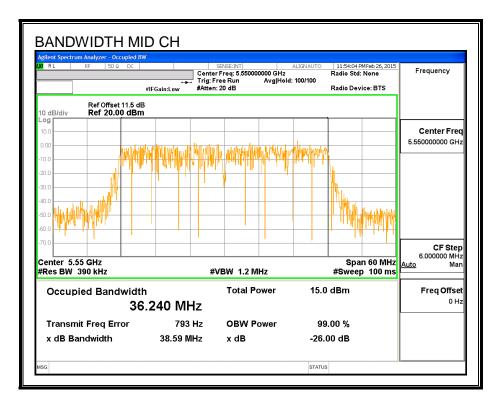
None; for reporting purposes only.

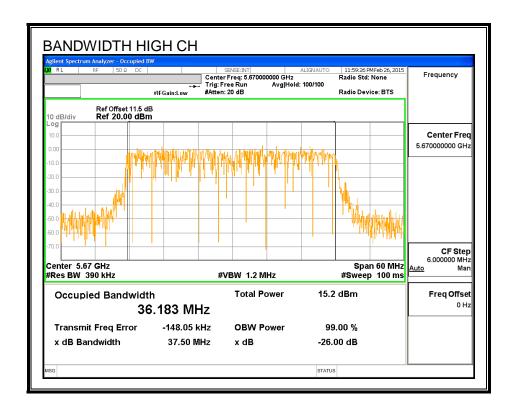
# **RESULTS**

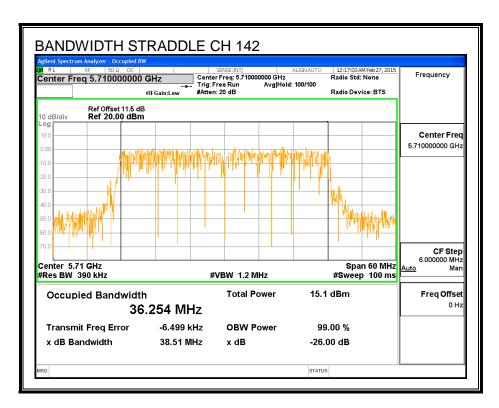
Channel	Frequency	99% Bandwidth
	(MHz)	(MHz)
Low	5510	36.195
Mid	5550	36.240
High	5670	36.183
142	5710	36.254

#### 99% BANDWIDTH









FCC ID: BCGA1538

#### 8.26.3. **AVERAGE POWER**

## **LIMITS**

None; for reporting purposes only.

## **RESULTS**

Channel	Frequency	Power
	(MHz)	(dBm)
Low	5510	14.00
Mid	5550	15.04
High	5670	14.99
142	5710	14.45

REPORT NO: 14U19186-E5C DATE: JULY 20, 2015 FCC ID: BCGA1538

#### 8.26.4. 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 peak 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.

#### **DIRECTIONAL ANTENNA GAIN**

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

FCC ID: BCGA1538

## **RESULTS**

# Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
Low	5510	40.02	4.80	24.00	11.00
Mid	5550	40.14	4.80	24.00	11.00
High	5670	40.32	4.80	24.00	11.00

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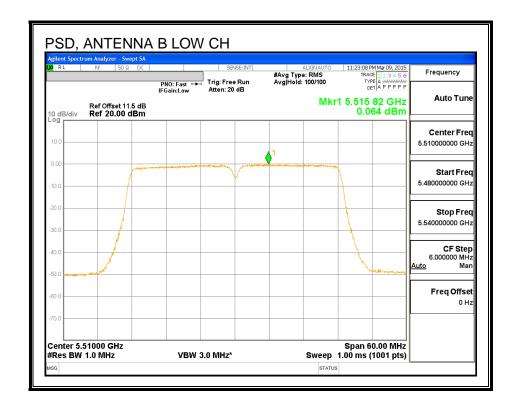
#### **Output Power Results**

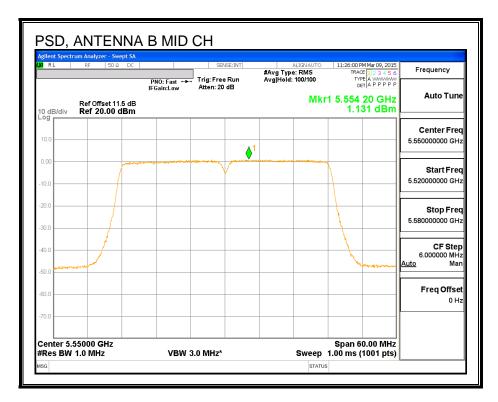
	_			_	_
Channel	Frequency	Antenna B	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	14.00	14.00	24.00	-10.00
Mid	5550	15.04	15.04	24.00	-8.96
High	5670	14.99	14.99	24.00	-9.01

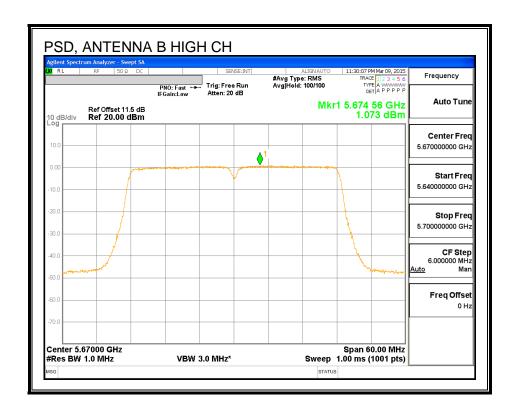
## **PSD** Results

Channel	Frequency	Antenna B	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	0.06	0.06	11.00	-10.94
Mid	5550	1.13	1.13	11.00	-9.87
High	5670	1.07	1.07	11.00	-9.93

#### **PSD, ANTENNA B**







FCC ID: BCGA1538

# **STRADDLE CH 142 RESULTS**

# **UNII-2C BAND**

## Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
142	5710	35.13	4.80	4.80	24.00	11.00

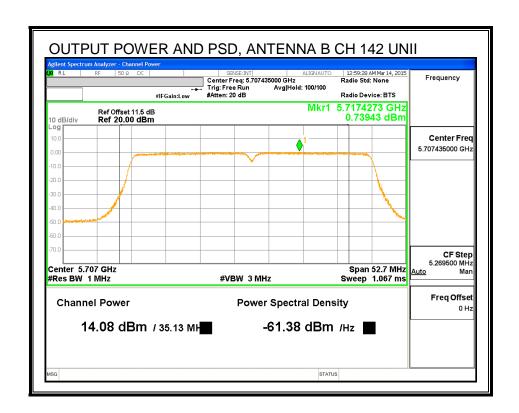
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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#### **Output Power Results**

Channel	Frequency	Antenna B	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	14.08	14.08	24.00	-9.92

#### **PSD** Results

Channel	Frequency	Antenna B	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	0.74	0.74	11.00	-10.26



FCC ID: BCGA1538

# **UNII-3 BAND**

#### **Antenna Gain and Limit**

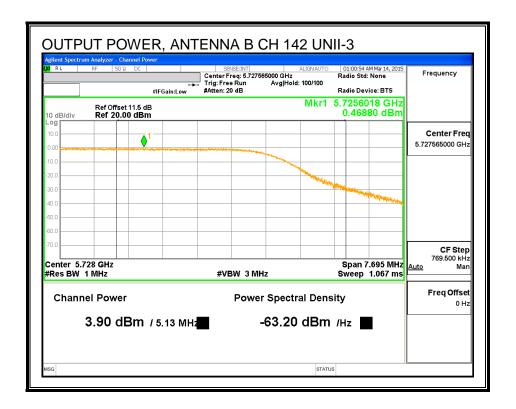
Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
142	5710	5.13	4.80	30.00	30.00

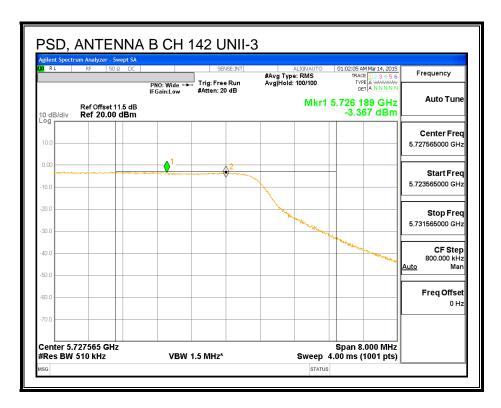
## **Output Power Results**

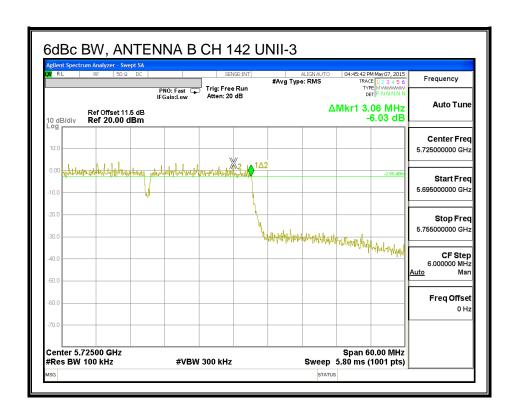
Channel	Frequency	Antenna B	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	3.90	3.90	30.00	-26.10

#### **PSD Results**

. 02 1000110					
Channel	Frequency	Antenna B	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-3.37	-3.37	30.00	-33.37







REPORT NO: 14U19186-E5C DATE: JULY 20, 2015 FCC ID: BCGA1538

# 8.27. 802.11n HT40 SISO MODE IN THE 5.6 GHz BAND ANTENNA A

## 8.27.1. 26 dB BANDWIDTH

## **LIMITS**

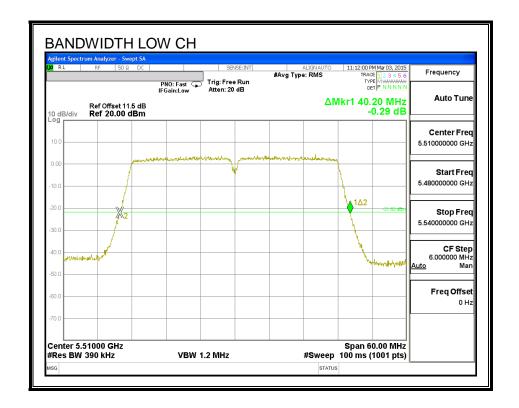
None; for reporting purposes only.

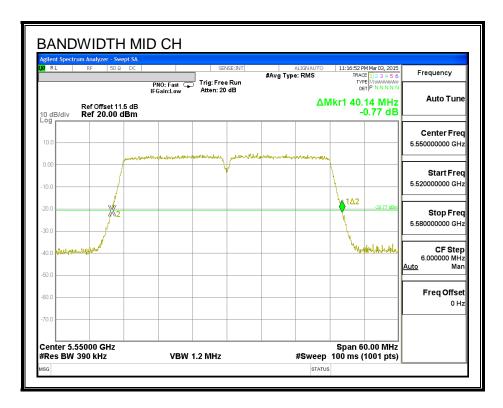
## **RESULTS**

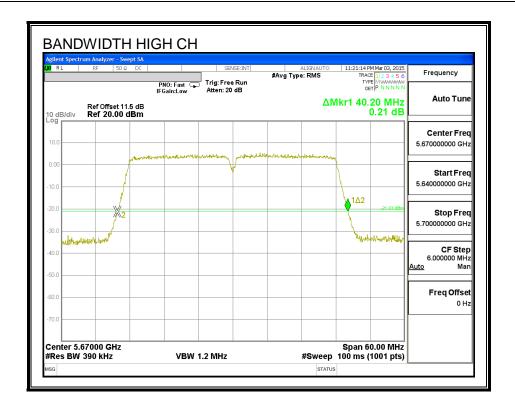
Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Low	5510	40.20
Mid	5550	40.14
High	5670	40.20
142	5710	40.08

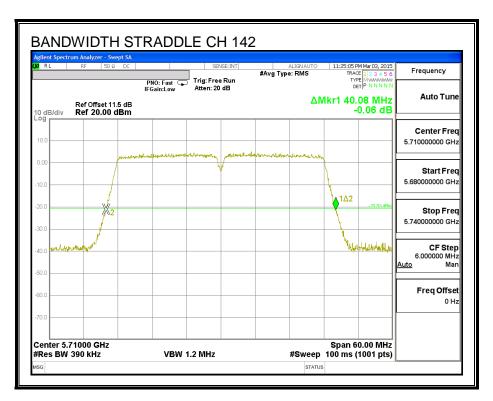
REPORT NO: 14U19186-E5C DATE: JULY 20, 2015 FCC ID: BCGA1538

# **26 dB BANDWIDTH**









FCC ID: BCGA1538

# 8.27.2. 99% BANDWIDTH

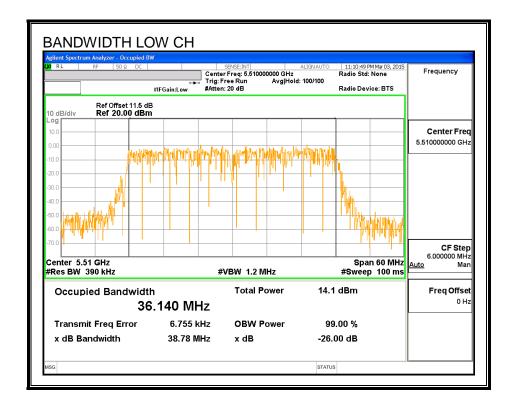
## **LIMITS**

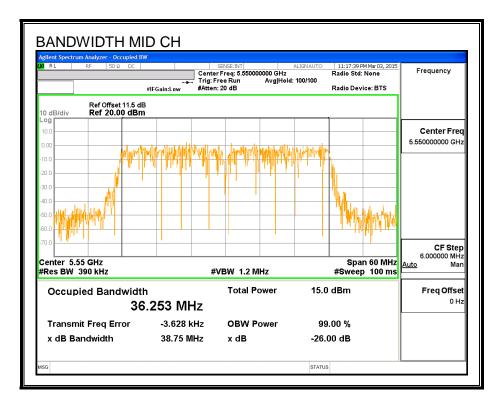
None; for reporting purposes only.

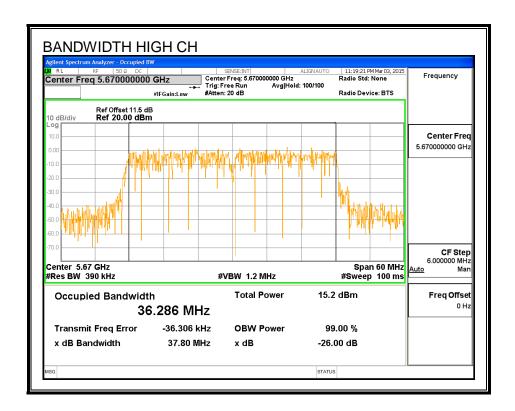
# **RESULTS**

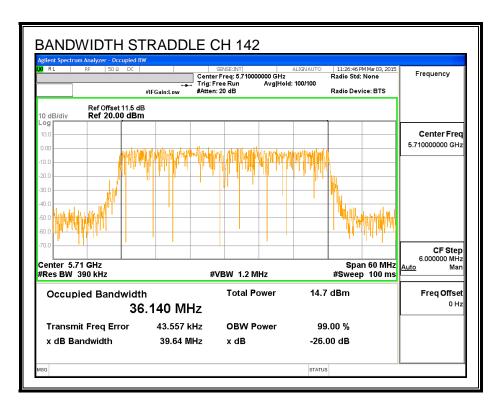
Channel	Frequency	99% Bandwidth
	(MHz)	(MHz)
Low	5510	36.140
Mid	5550	36.253
High	5670	36.286
142	5710	36.140

#### 99% BANDWIDTH









FCC ID: BCGA1538

# 8.27.3. AVERAGE POWER

# **LIMITS**

None; for reporting purposes only.

### **RESULTS**

Channel	Frequency	Power
	(MHz)	(dBm)
Low	5510	13.98
Mid	5550	15.00
High	5670	14.96
142	5710	14.49

REPORT NO: 14U19186-E5C DATE: JULY 20, 2015 FCC ID: BCGA1538

#### **OUTPUT POWER AND PSD** 8.27.4.

#### 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 peak 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.

#### **DIRECTIONAL ANTENNA GAIN**

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

FCC ID: BCGA1538

### **RESULTS**

# Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
Low	5510	40.20	3.20	24.00	11.00
Mid	5550	40.14	3.20	24.00	11.00
High	5670	40.20	3.20	24.00	11.00

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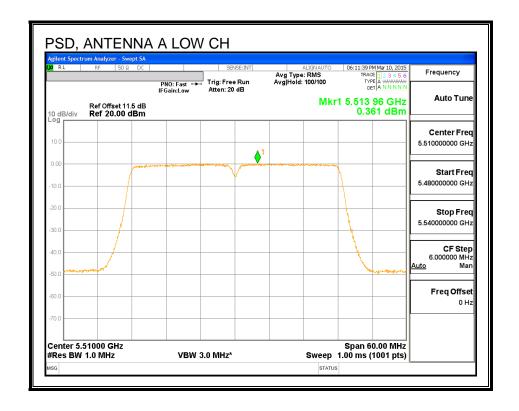
# **Output Power Results**

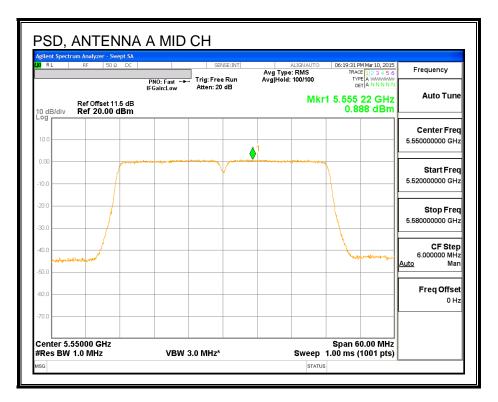
Channel	Frequency	Antenna A	Total	Power	Power			
		Meas	Corr'd	Limit	Margin			
		Power	Power					
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)			
Low	5510	13.98	13.98	24.00	-10.02			
Mid	5550	15.00	15.00	24.00	-9.00			
High	5670	14.96	14.96	24.00	-9.04			

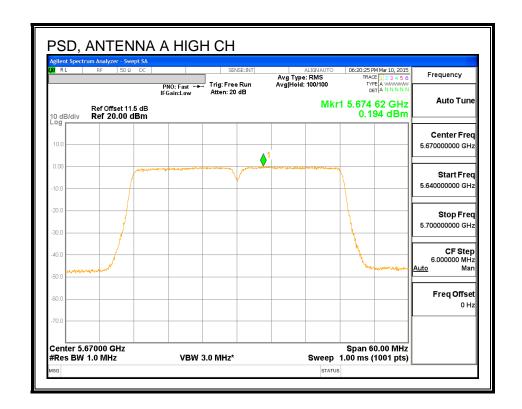
### **PSD Results**

Channel	Frequency	Antenna A	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	0.36	0.36	11.00	-10.64
Mid	5550	0.89	0.89	11.00	-10.11
High	5670	0.19	0.19	11.00	-10.81

### **PSD, ANTENNA A**







FCC ID: BCGA1538

# **STRADDLE CH 142 RESULTS**

# **UNII-2C BAND**

### Bandwidth, Antenna Gain, and Limits

Char	nnel	Frequency	Min	Directional	Directional	Power	PSD
			26 dB	Gain	Gain	Limit	Limit
			BW	for Power	for PSD		
		(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
14	2	5710	35.04	3.20	3.20	24.00	11.00

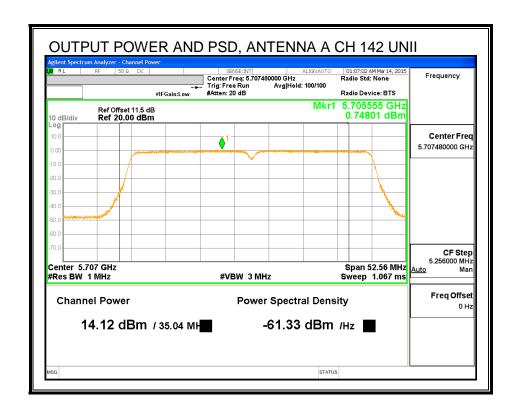
Duty Cycle CF (dB) 0.00	Included in Calculations of Corr'd Power & PSD
-------------------------	--

#### **Output Power Results**

	Channel	Frequency	Antenna A Meas	Total Corr'd	Power Limit	Power Margin
			Power	Power		
		(MHz)	(dBm)	(dBm)	(dBm)	(dB)
ſ	142	5710	14.12	14.12	24.00	-9.88

#### **PSD** Results

Channel	Frequency	Antenna A	Total	PSD	PSD			
		Meas	Corr'd	Limit	Margin			
		PSD	PSD					
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)			
142	5710	0.75	0.75	11.00	-10.25			



FCC ID: BCGA1538

# **UNII-3 BAND**

#### **Antenna Gain and Limit**

Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
142	5710	5.04	3.20	30.00	30.00

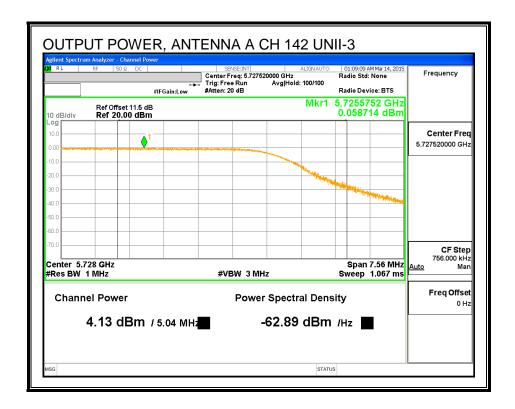
Duty Cycle CF (dB) 0.00 Included in Calculations of Corr'd	Power & PSD
--	-------------

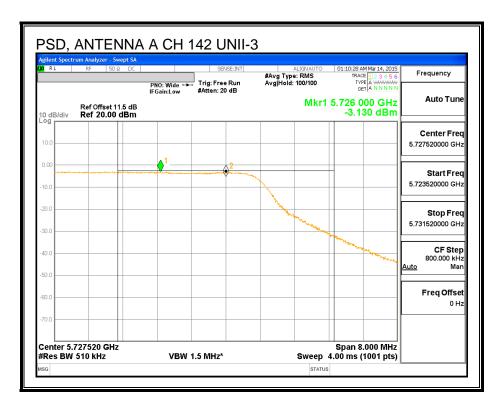
### **Output Power Results**

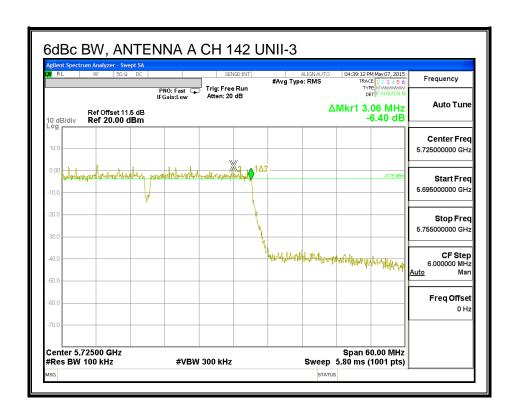
Channel	Frequency	Antenna A	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	4.13	4.13	30.00	-25.87

#### **PSD** Results

Channel	Frequency	Antenna A	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-3.13	-3.13	30.00	-33.13







FCC ID: BCGA1538

# 8.28. 802.11n HT40 2Tx CDD MODE IN THE 5.6 GHz BAND

### 8.28.1. 26 dB BANDWIDTH

# **LIMITS**

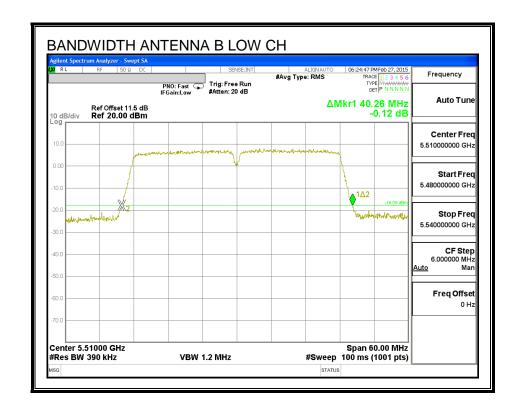
None; for reporting purposes only.

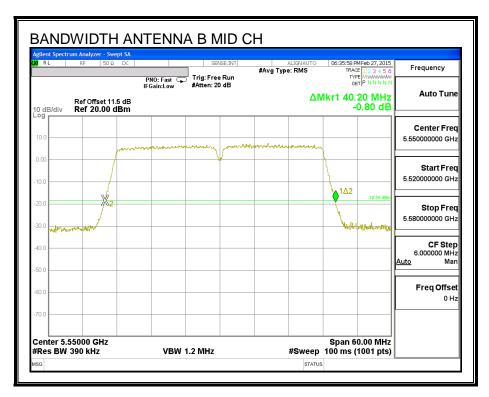
### **RESULTS**

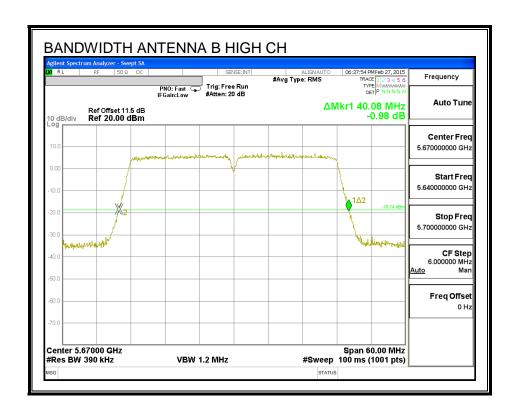
Channel	Frequency	26 dB BW	26 dB BW
		Antenna B	Antenna A
	(MHz)	(MHz)	(MHz)
Low	5510	40.26	40.02
Mid	5550	40.20	40.08
High	5670	40.08	39.96
142	5710	40.20	40.38

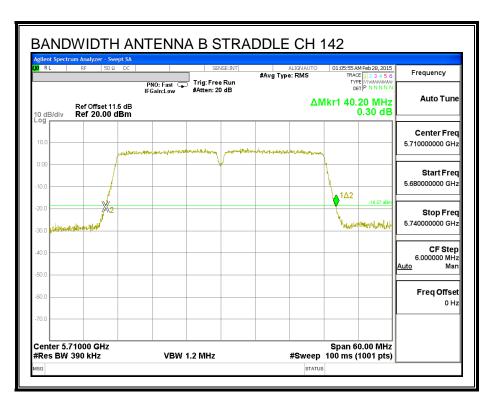
REPORT NO: 14U19186-E5C DATE: JULY 20, 2015 FCC ID: BCGA1538

# 26 dB BANDWIDTH, ANTENNA B



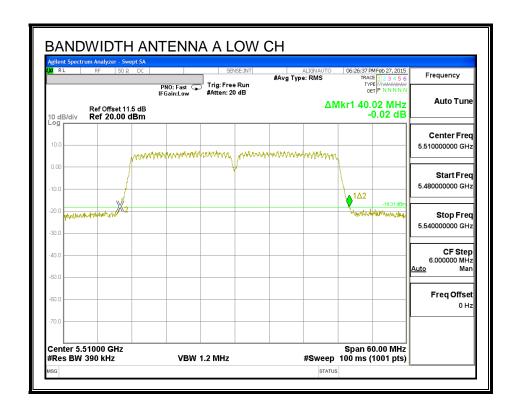


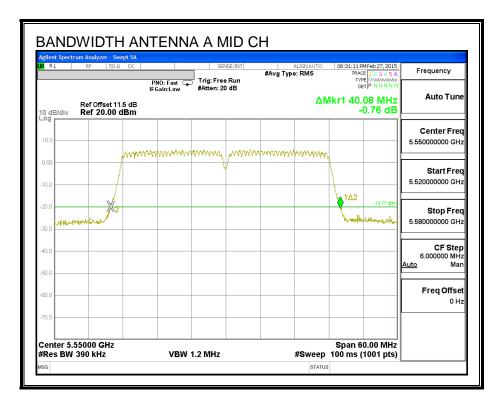


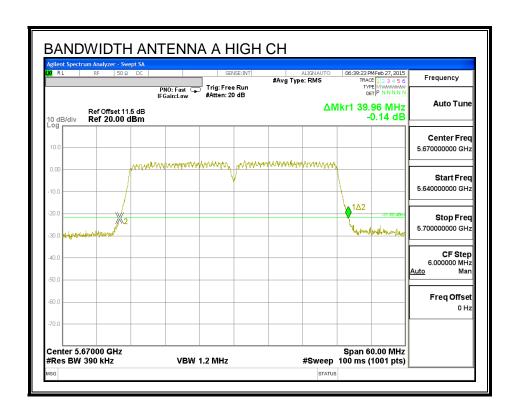


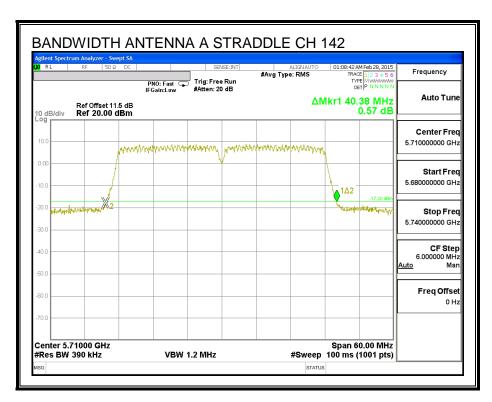
FCC ID: BCGA1538

### 26 dB BANDWIDTH, ANTENNA A









FCC ID: BCGA1538

# 8.28.2. 99% BANDWIDTH

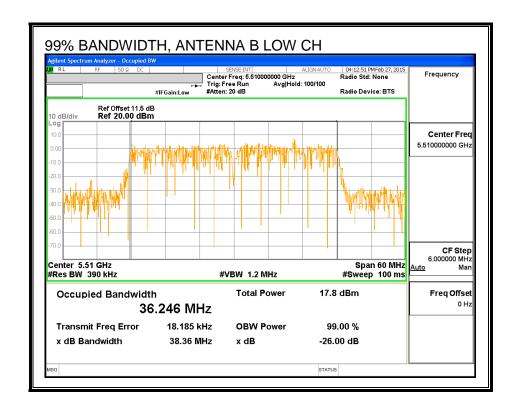
### **LIMITS**

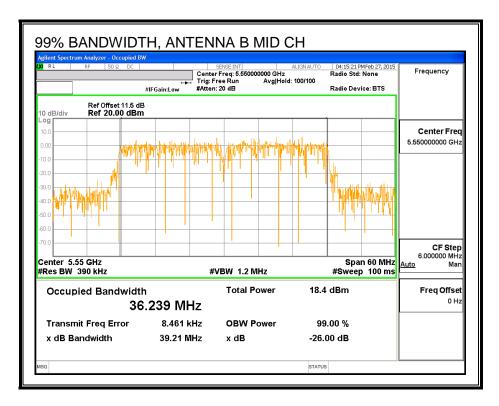
None; for reporting purposes only.

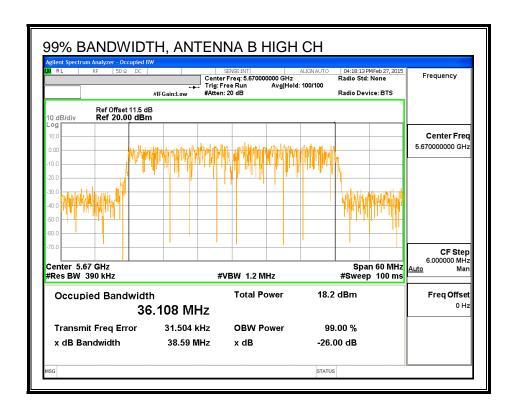
# **RESULTS**

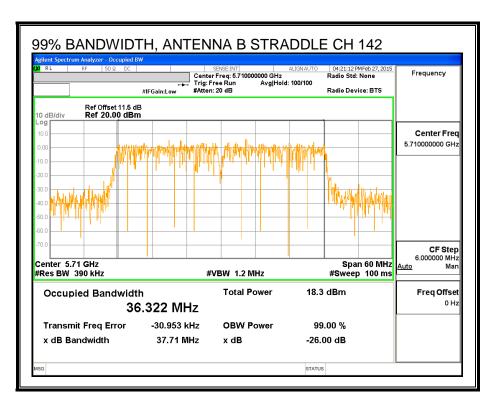
Channel	Frequency	99% BW	99% BW
		Antenna B	Antenna A
	(MHz)	(MHz)	(MHz)
Low	5510	36.246	36.266
Mid	5590	36.239	36.402
High	5670	36.108	36.241
142	5710	36.222	36.155

### 99% BANDWIDTH, ANTENNA B

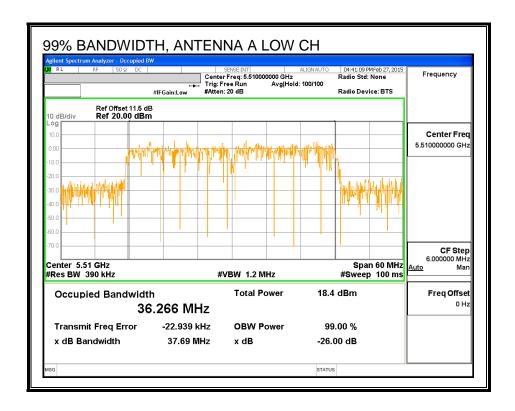


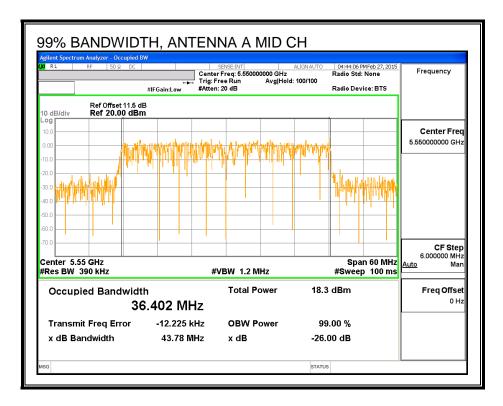


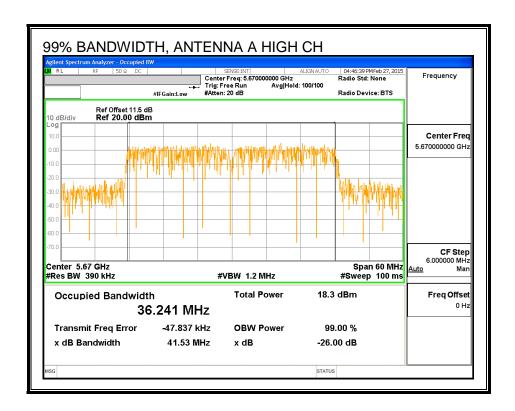


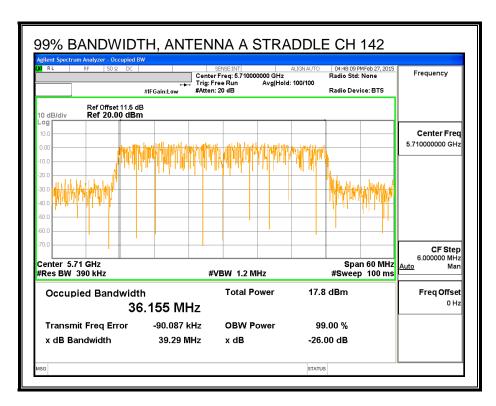


### 99% BANDWIDTH, ANTENNA A









FCC ID: BCGA1538

# 8.28.3. AVERAGE POWER

# **LIMITS**

None; for reporting purposes only.

### **RESULTS**

### **Average Power Results**

Channel	Frequency	Antenna B	Antenna A	Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Low	5510	13.00	12.95	15.99
Mid	5550	15.12	15.00	18.07
High	5670	13.90	13.90	16.91
142	5710	14.01	13.95	16.99

FCC ID: BCGA1538

# 8.28.4. 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.

### **DIRECTIONAL ANTENNA GAIN**

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

Antenna B	Antenna A	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.80	3.20	4.07

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

Antenna B	Antenna A	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.80	3.20	7.05

REPORT NO: 14U19186-E5C DATE: JULY 20, 2015 FCC ID: BCGA1538

# **RESULTS**

# Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
Low	5510	40.02	4.07	7.05	24.00	9.95
Mid	5550	40.08	4.07	7.05	24.00	9.95
High	5670	39.96	4.07	7.05	24.00	9.95

Duty Cycle CF (dB)	.00	Included in Calculations of Corr'd Power & PSD
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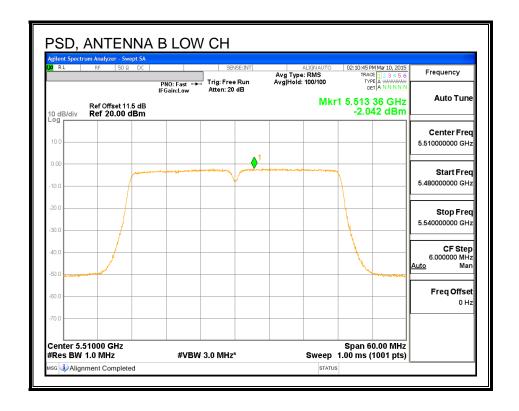
#### **Output Power Results**

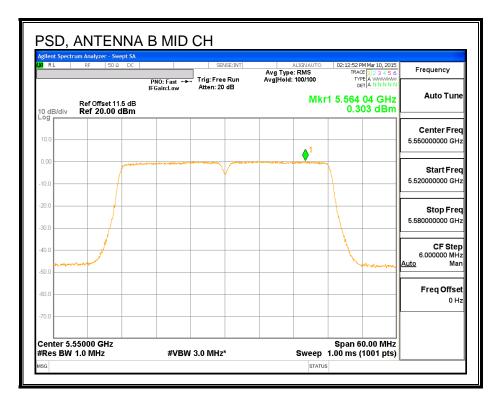
Channel	Frequency	Antenna B	Antenna A	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	13.00	12.95	15.99	24.00	-8.01
Mid	5550	15.12	15.00	18.07	24.00	-5.93
High	5670	13.90	13.90	16.91	24.00	-7.09

#### **PSD Results**

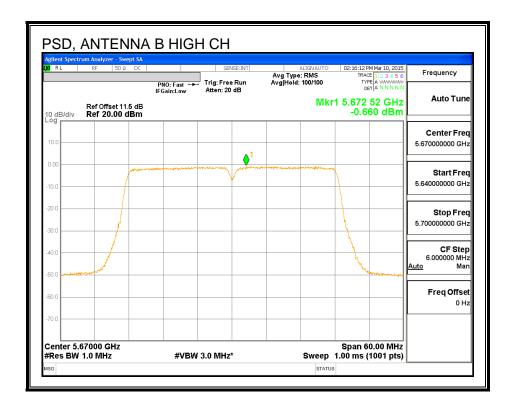
Channel	Frequency	Antenna B	Antenna A	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	-2.04	-1.08	1.48	9.95	-8.47
Mid	5550	0.30	0.94	3.64	9.95	-6.31
High	5670	-0.66	-0.03	2.68	9.95	-7.27

### **PSD, ANTENNA B**

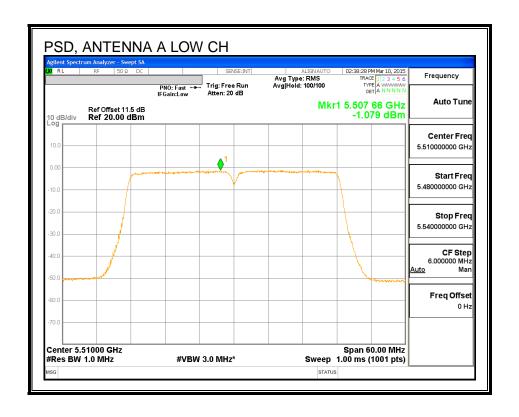


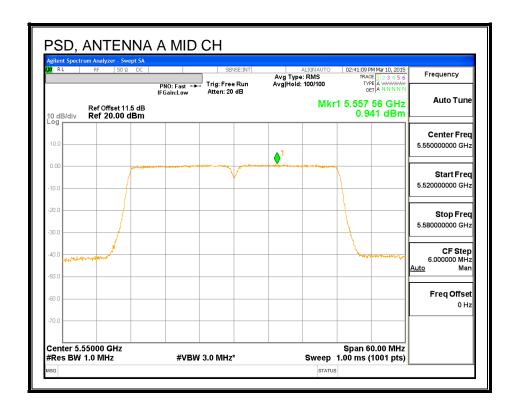


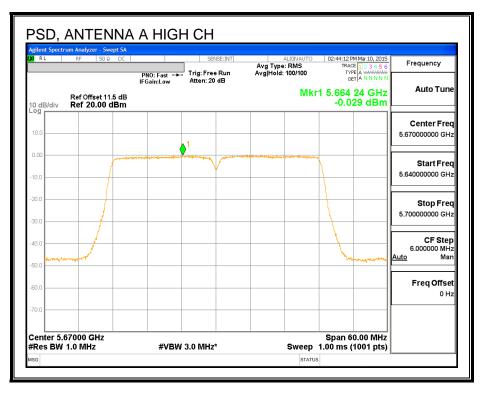
FCC ID: BCGA1538



#### PSD, ANTENNA A







REPORT NO: 14U19186-E5C DATE: JULY 20, 2015 FCC ID: BCGA1538

# **STRADDLE CHANNEL 142 RESULTS**

# **UNII-2C BAND**

#### Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
142	5710	35.19	4.07	7.05	24.00	9.95

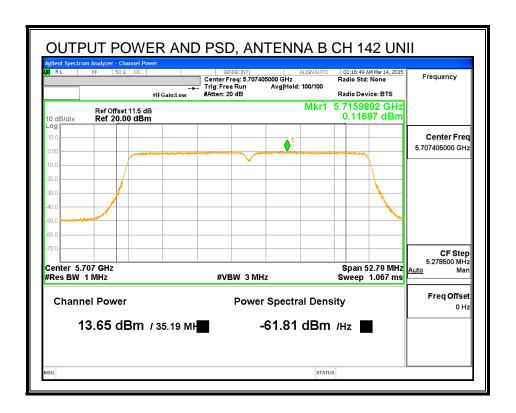
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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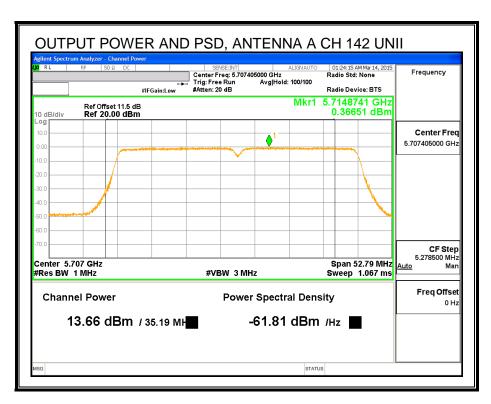
#### **Output Power Results**

Channel	Frequency	Antenna B	Antenna A	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	13.65	13.66	16.67	24.00	-7.33

#### **PSD Results**

Channel	Frequency	Antenna B	Antenna A	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	0.12	0.37	3.25	9.95	-6.70





FCC ID: BCGA1538

# **UNII-3 BAND**

### **Antenna Gain and Limit**

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	For Power	For PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
142	5710	5.19	4.07	7.05	30.00	28.95

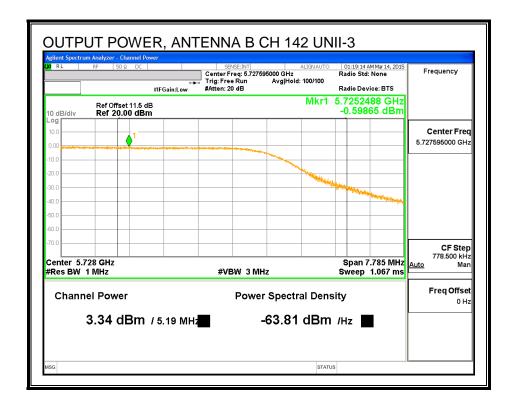
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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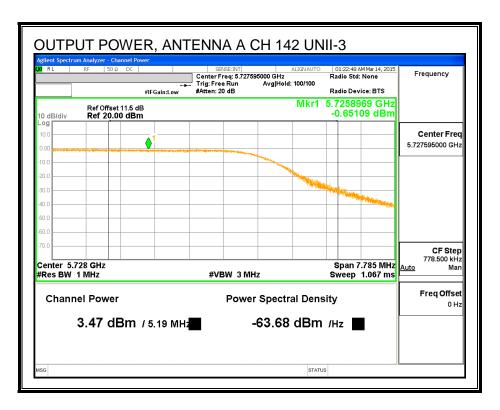
### **Output Power Results**

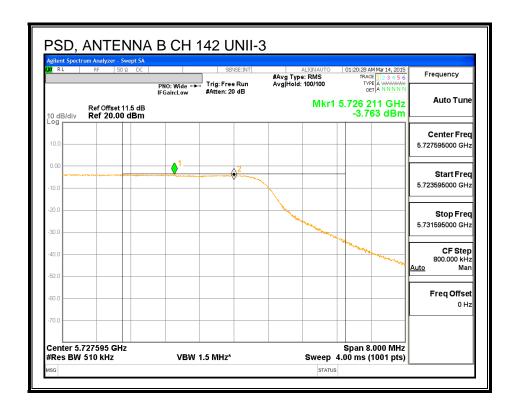
Channel	Frequency	Antenna B	Antenna A	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	3.34	3.47	6.42	30.00	-23.58

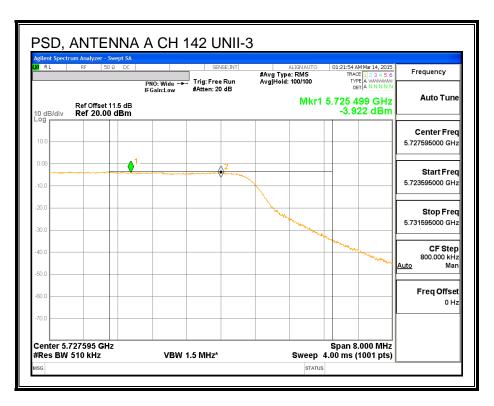
#### **PSD** Results

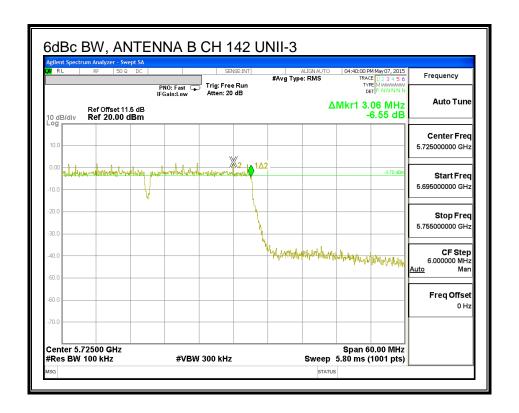
Channel	Frequency	Antenna B	Antenna A	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-3.76	-3.92	-0.83	28.95	-29.78

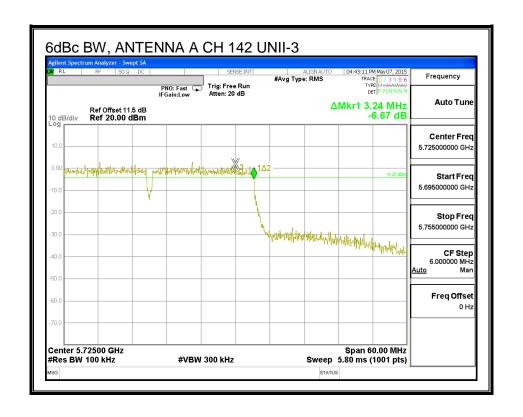












FCC ID: BCGA1538

# 8.29. 802.11ac VHT80 SISO MODE IN THE 5.6 GHz BAND ANTENNA B

### 8.29.1. 26 dB BANDWIDTH

### **LIMITS**

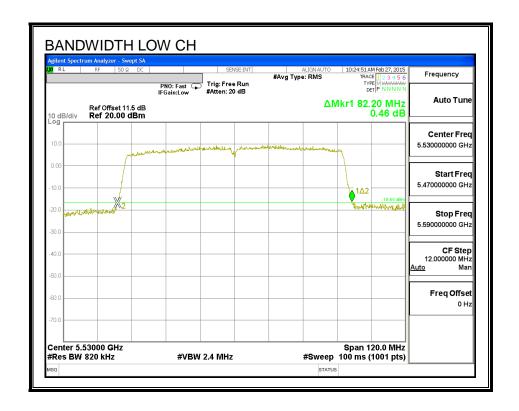
None; for reporting purposes only.

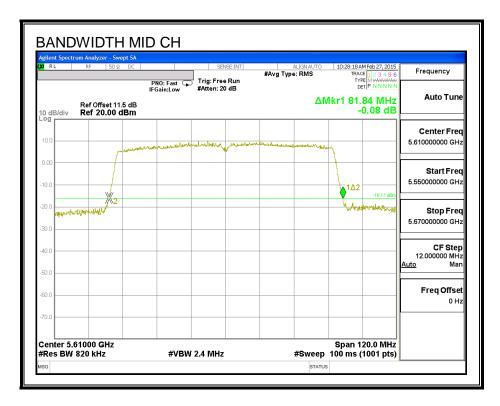
### **RESULTS**

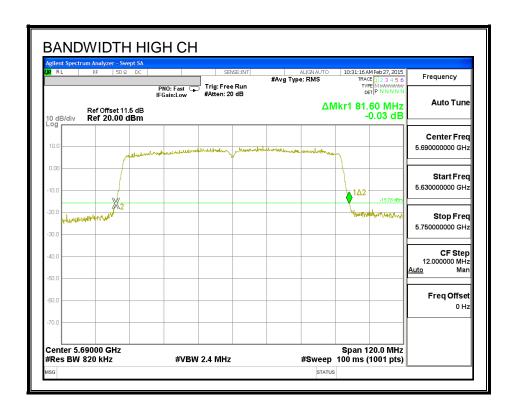
Channel Frequency		26 dB Bandwidth		
	(MHz)	(MHz)		
Low	5530	82.20		
Mid	5610	81.84		
High	5690	81.60		

REPORT NO: 14U19186-E5C DATE: JULY 20, 2015 FCC ID: BCGA1538

# **26 dB BANDWIDTH**







FCC ID: BCGA1538

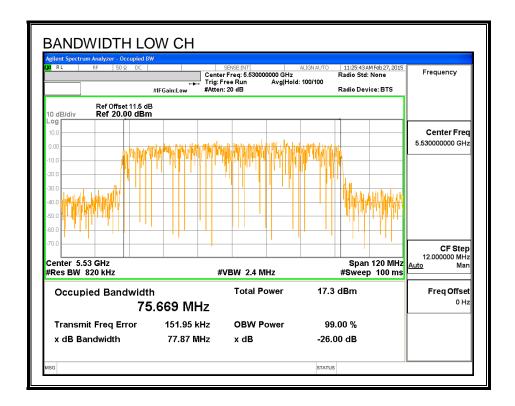
# 8.29.2. 99% BANDWIDTH

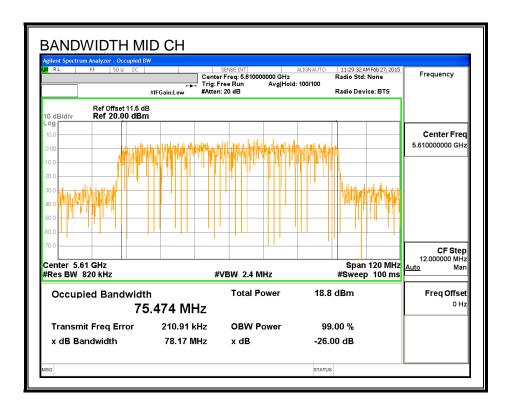
### **LIMITS**

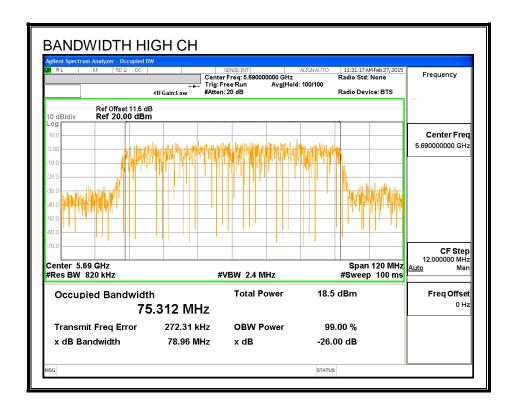
None; for reporting purposes only.

Channel	Frequency	99% Bandwidth
	(MHz)	(MHz)
Low	5530	75.6690
Mid	5610	75.4740
High	5690	75.3120

### 99% BANDWIDTH







FCC ID: BCGA1538

# 8.29.3. AVERAGE POWER

### **LIMITS**

None; for reporting purposes only.

Channel	Frequency	Power
	(MHz)	(dBm)
Low	5530	12.99
Mid	5610	14.96
High	5690	14.90

REPORT NO: 14U19186-E5C DATE: JULY 20, 2015 FCC ID: BCGA1538

#### **OUTPUT POWER AND PSD** 8.29.4.

### 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.

### **DIRECTIONAL ANTENNA GAIN**

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

FCC ID: BCGA1538

# **RESULTS**

# Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
Low	5530	82.20	4.80	24.00	11.00
Mid	5610	81.84	4.80	24.00	11.00

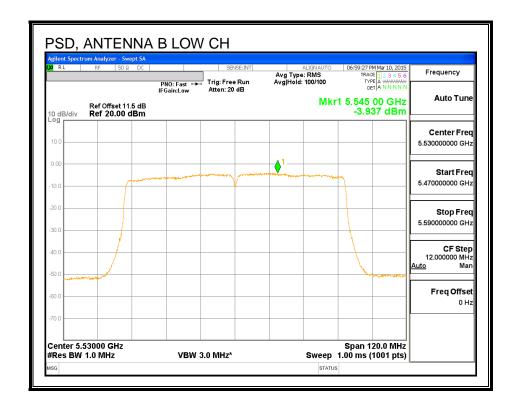
Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd Power & PSD
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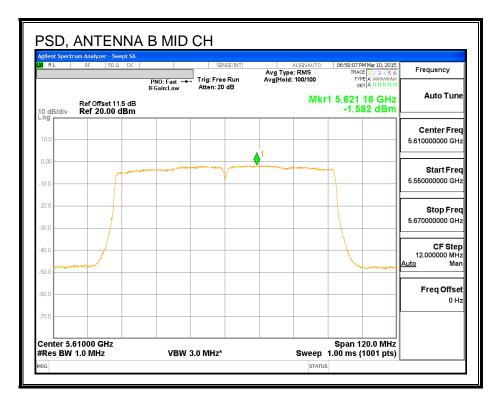
### **Output Power Results**

Channel	Frequency	Antenna B	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5530	12.99	13.15	24.00	-10.85
Mid	5610	14.96	15.12	24.00	-8.88

. 02 1.0001.0					
Channel	Frequency	Antenna B	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5530	-3.94	-3.78	11.00	-14.78
Mid	5610	-1.58	-1.42	11.00	-12.42

### **PSD, ANTENNA B**





FCC ID: BCGA1538

# **STRADDLE CHANNEL 138 RESULTS**

# **UNII-2C BAND**

### Bandwidth, Antenna Gain, and Limits

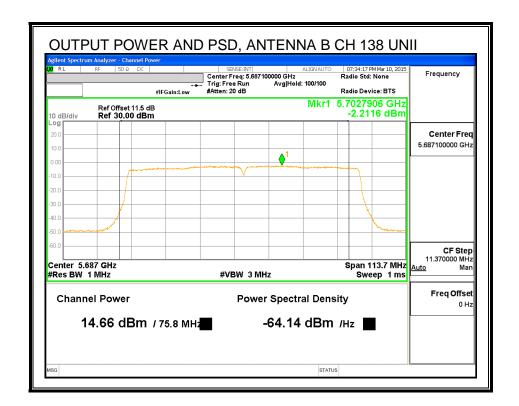
Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
138	5690	75.80	4.80	4.80	24.00	11.00

Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd Power & PSD
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### **Output Power Results**

Channel	Frequency	Antenna B	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	14.66	14.82	24.00	-9.18

Channel	Frequency	Antenna B	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	-2.21	-2.05	11.00	-13.05



FCC ID: BCGA1538

# **UNII-3 BAND**

### **Antenna Gain and Limit**

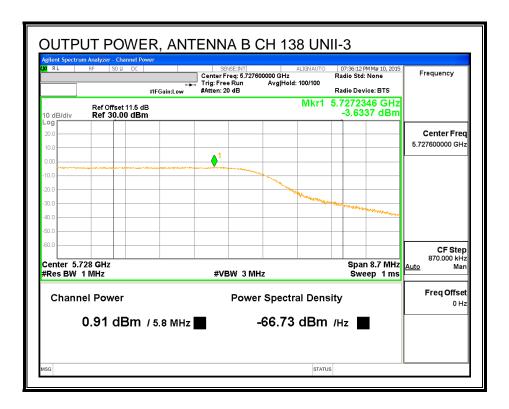
Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
138	5690	5.80	4.80	30.00	30.00

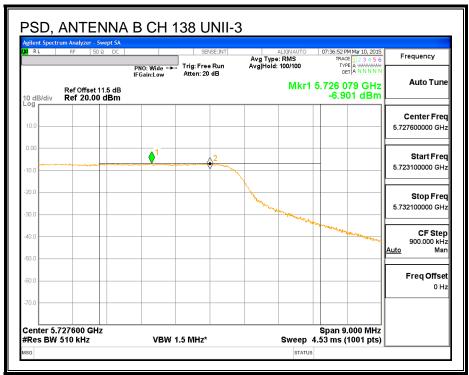
Duty Cycle CF (dB) 0.16	Included in Calculations of Corr'd Power & PSD
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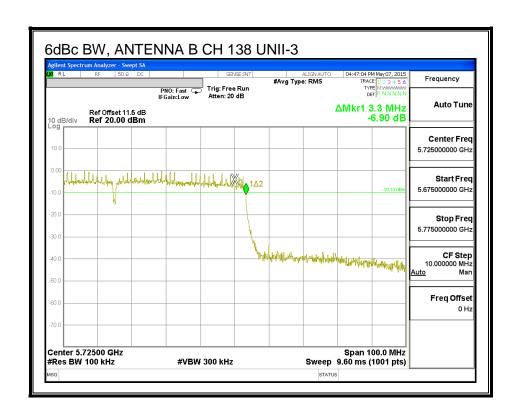
### **Output Power Results**

Channel	Frequency	Antenna B	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	0.91	1.07	30.00	-28.93

Ī	Channel	Frequency	Antenna B	Total	PSD	PSD		
ı			Meas	Corr'd	Limit	Margin		
ı			PSD	PSD				
ı		(MHz)	(dBm)	(dBm)	(dBm)	(dB)		
Ī	138	5690	-6.90	-6.74	30.00	-36.74		







FCC ID: BCGA1538

# 8.30. 802.11ac VHT80 SISO MODE IN THE 5.6 GHz BAND ANTENNA A

### 8.30.1. 26 dB BANDWIDTH

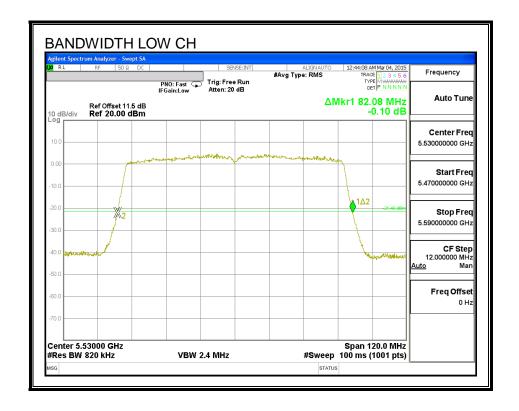
### **LIMITS**

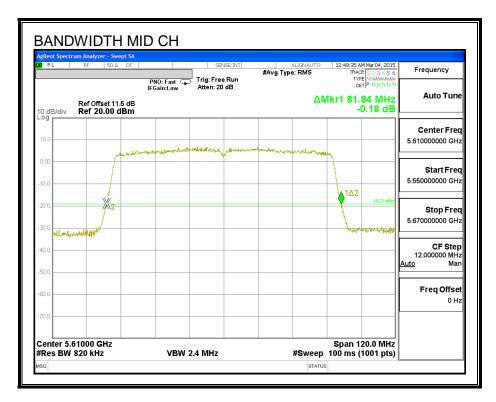
None; for reporting purposes only.

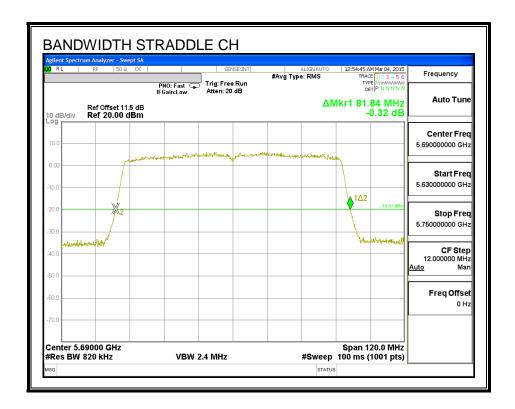
Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Low	5530	82.08
Mid	5610	81.84
Straddle	5690	81.84

REPORT NO: 14U19186-E5C DATE: JULY 20, 2015 FCC ID: BCGA1538

# **26 dB BANDWIDTH**







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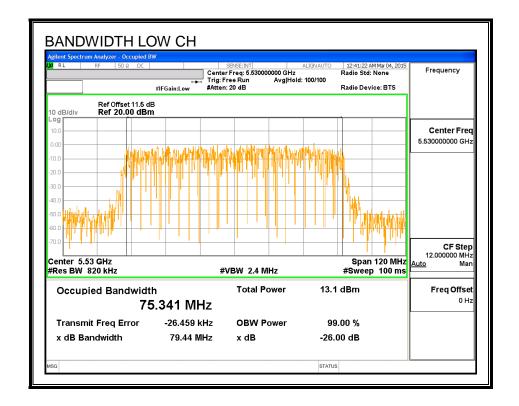
# 8.30.2. 99% BANDWIDTH

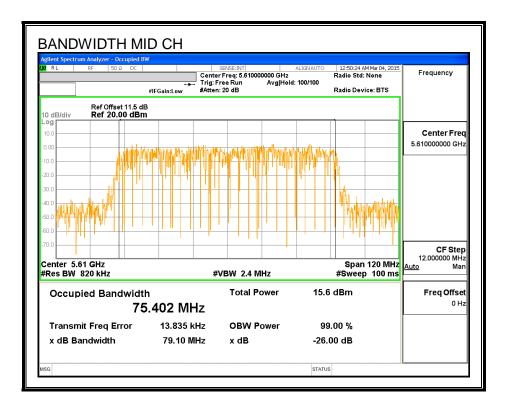
### **LIMITS**

None; for reporting purposes only.

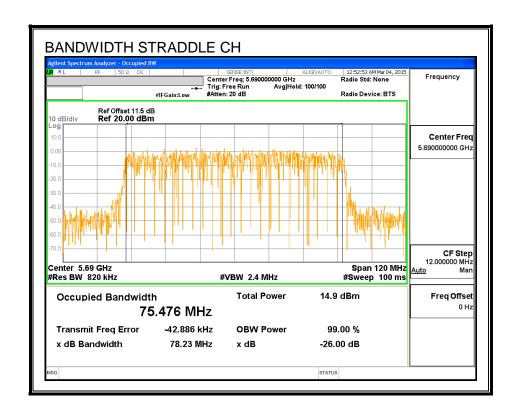
Channel	Frequency	99% Bandwidth
	(MHz)	(MHz)
Low	5530	75.3410
Mid	5610	75.4020
Straddle	5690	75.4760

### 99% BANDWIDTH





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# 8.30.3. AVERAGE POWER

### **LIMITS**

None; for reporting purposes only.

Channel	Frequency	Power
	(MHz)	(dBm)
Low	5530	13.02
Mid	5610	15.03
Straddle	5690	15.06

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### 8.30.4. 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.

### **DIRECTIONAL ANTENNA GAIN**

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

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### **RESULTS**

# Bandwidth, Antenna Gain, and Limits

Channel	Frequency Min		Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
Low	5530	82.08	3.20	24.00	11.00
Mid	5610	81.84	3.20	24.00	11.00

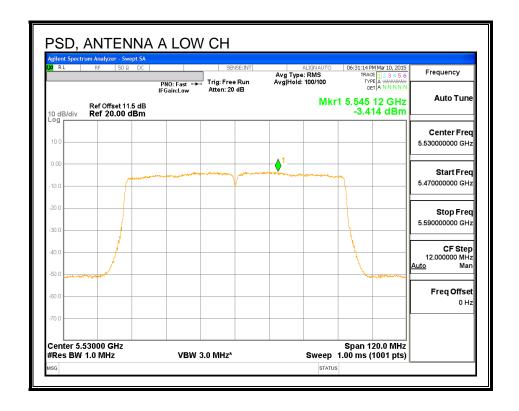
Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd Power & PSD
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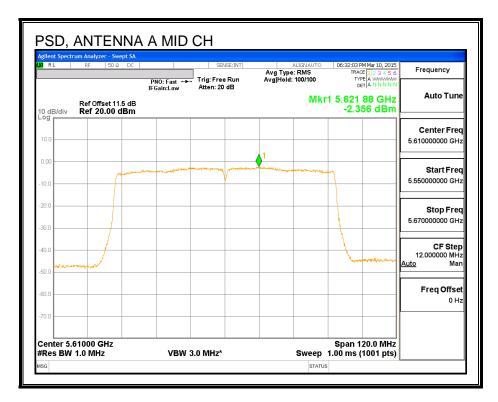
# **Output Power Results**

Channel	Frequency	Antenna A	Total	Power	Power		
		Meas	Corr'd	Limit	Margin		
		Power	Power				
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)		
Low	5530	13.02	13.18	24.00	-10.82		
Mid	5610	15.03	15.19	24.00	-8.81		

Channel	Frequency Antenna A		Total	PSD	PSD		
		Meas	Corr'd	Limit	Margin		
		PSD	PSD				
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)		
Low	(MHz) 5530	(dBm) -3.41	(dBm) -3.25	(dBm) 11.00	( <b>dB</b> ) -14.25		

### **PSD, ANTENNA A**





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# **STRADDLE CHANNEL 138 RESULTS**

# **UNII-2C BAND**

### Bandwidth, Antenna Gain, and Limits

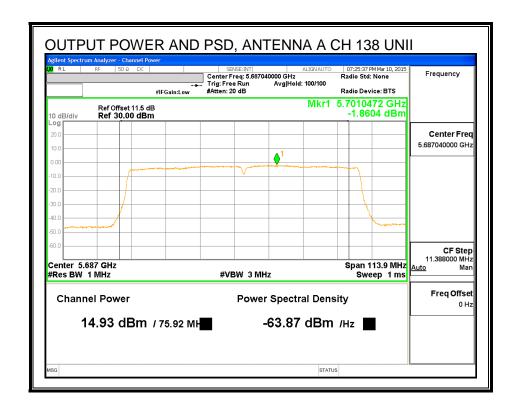
Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
138	5690	75.92	3.20	3.20	24.00	11.00

Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd Power & PSD
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### **Output Power Results**

Channel	Frequency	Antenna A	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	14.93	15.09	24.00	-8.91

Channel	Frequency	Antenna A	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	-1.86	-1.70	11.00	-12.70



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# **UNII-3 BAND**

### **Antenna Gain and Limit**

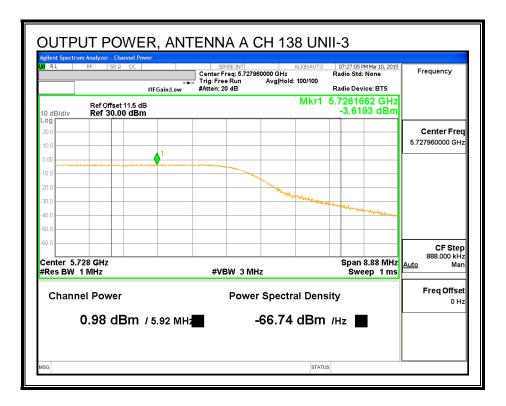
Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
138	5690	5.92	3.20	30.00	30.00

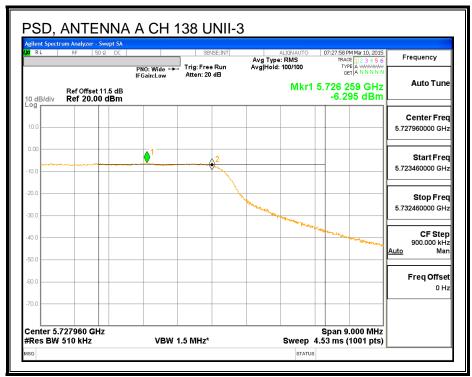
Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd Power & PSD
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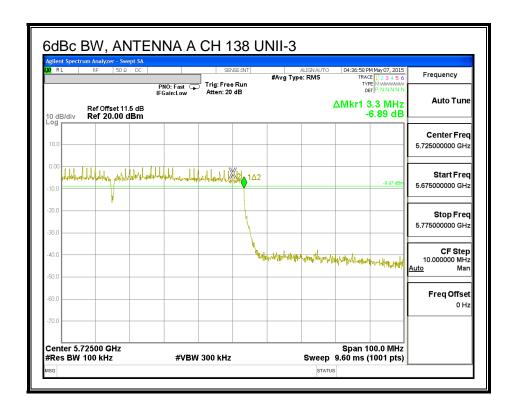
### **Output Power Results**

Channel	Frequency	Antenna A	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	0.98	1.14	30.00	-28.86

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Channel	Frequency	Antenna A	Total	PSD	PSD	
		Meas	Corr'd	Limit	Margin	
		PSD	PSD			
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)	
138	5690	-6.30	-6.14	30.00	-36.14	







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# 8.31. 802.11ac VHT80 2Tx CDD MODE IN THE 5.6 GHz BAND

### 8.31.1. 26 dB BANDWIDTH

# **LIMITS**

None; for reporting purposes only.

Channel Frequency		26 dB BW	26 dB BW	
		Antenna B	Antenna A	
	(MHz)	(MHz)	(MHz)	
Low	5530	81.84	81.84	
Mid	5610	81.84	81.24	
Straddle	5690	81.72	81.72	