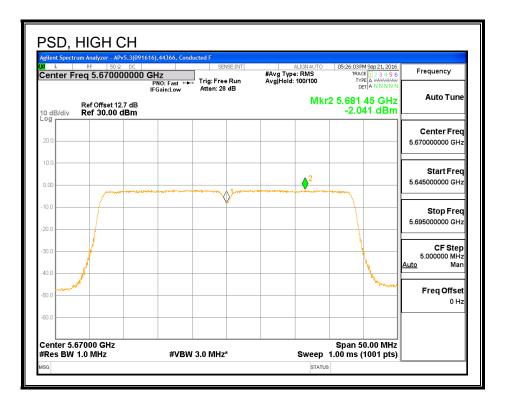
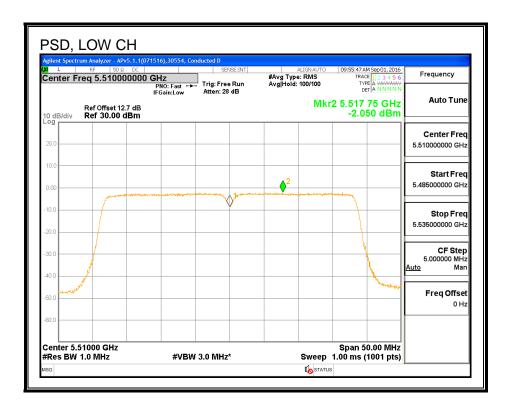
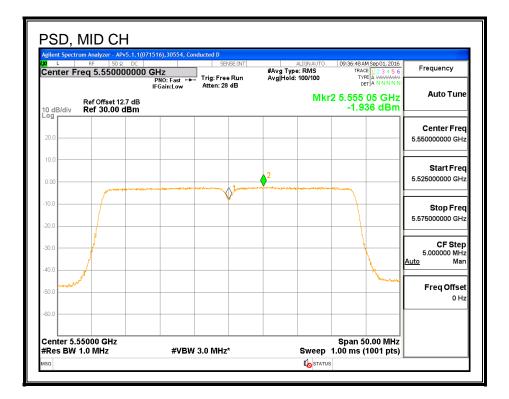


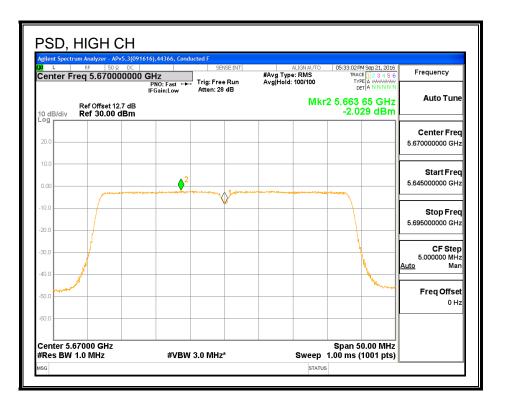
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# 8.62. 802.11ac VHT40 2Tx (CHAIN 1 + CHAIN 2) CDD STRADDLE CHANNEL 142 RESULTS (FCC)

## 8.62.1. OUTPUT POWER AND PSD

### 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	35.25	6.44	9.38	23.56	7.62

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

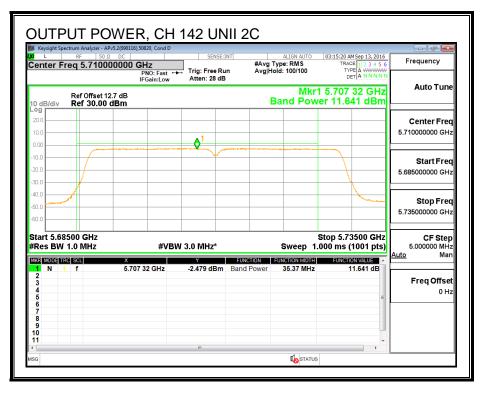
#### **Output Power Results**

Channel	Frequency	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	11.64	11.62	14.64	23.56	-8.92

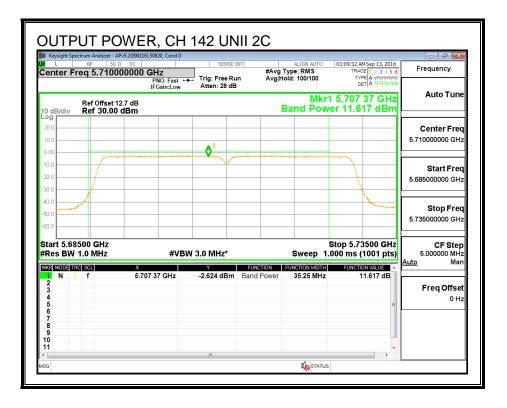
#### **PSD Results**

Channel	Frequency	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-2.47	-2.39	0.58	7.62	-7.04

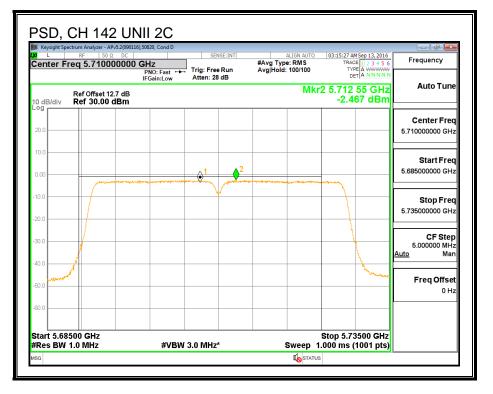
## OUTPUT POWER, CHAIN 1



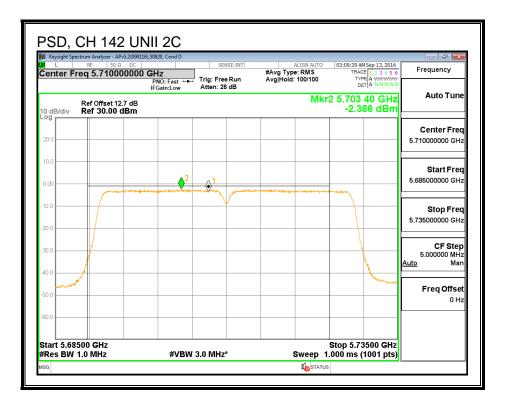
#### **OUTPUT POWER, CHAIN 2**



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#### PSD, CHAIN 2



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## 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	5.25	6.44	9.38	29.56	26.62

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

#### **Output Power Results**

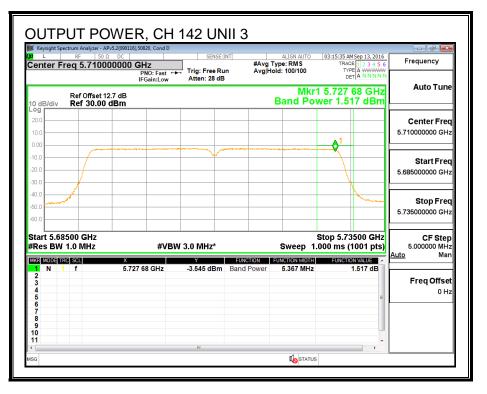
Channel	Frequency	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	1.52	1.44	4.49	29.56	-25.07

#### **PSD Results**

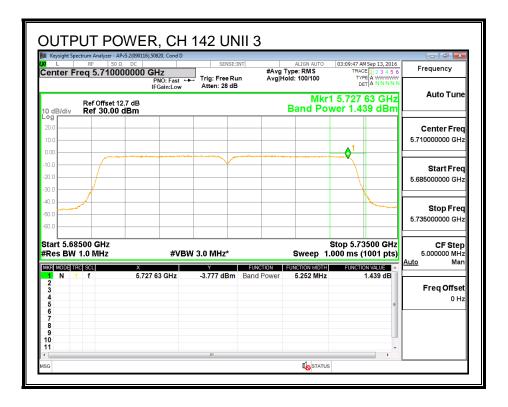
Channel	Frequency	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-5.94	-5.29	-2.59	26.62	-29.21

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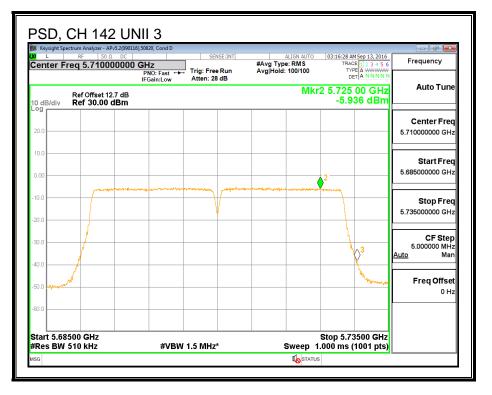
## OUTPUT POWER, CHAIN 1



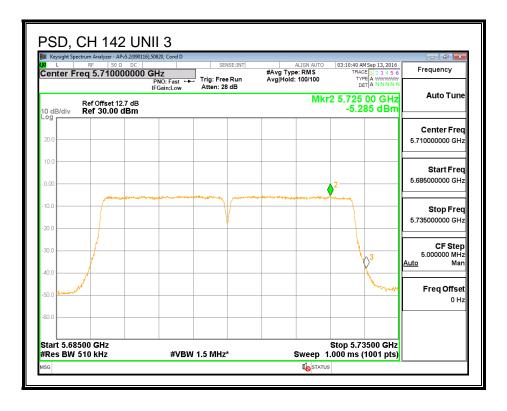
#### **OUTPUT POWER, CHAIN 2**



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#### PSD, CHAIN 2



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# 8.63. 802.11ac VHT40 2Tx (CHAIN 1 + CHAIN 2 ) CDD STRADDLE CHANNEL 142 RESULTS (IC)

## 8.63.1. OUTPUT POWER AND PSD

#### UNII-2C BAND

#### Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		99%	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
142	5710	33.190	6.44	9.38	23.56	7.62

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

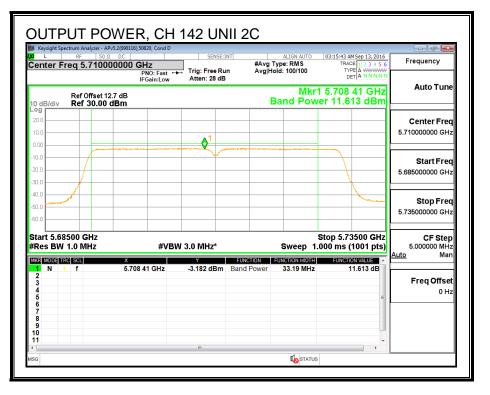
#### **Output Power Results**

Channel	Frequency	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	11.61	11.59	14.61	23.56	-8.95

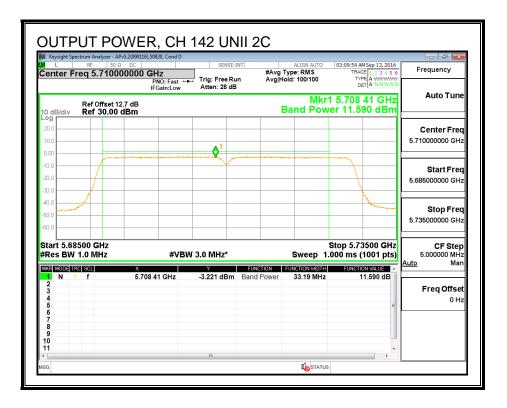
#### **PSD** Results

Channel	Frequency	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-2.47	-2.39	0.58	7.62	-7.04

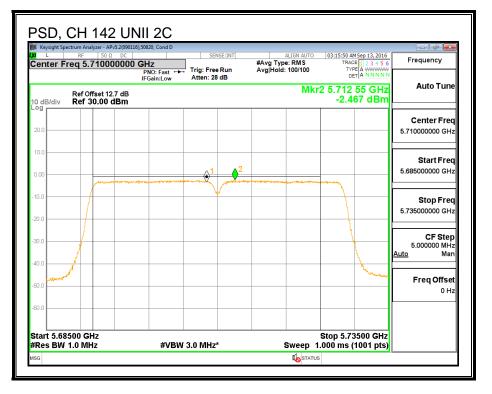
## OUTPUT POWER, CHAIN 1



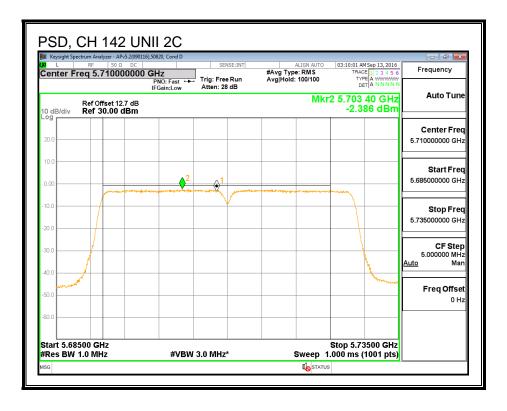
#### **OUTPUT POWER, CHAIN 2**



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#### PSD, CHAIN 2



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## UNII-3 BAND

#### Antenna Gain and Limit

Channel	Frequency	Min	Directional	Directional	Power	PSD
		99%	Gain	Gain	Limit	Limit
		BW	For Power	For PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
142	5710	3.188	6.44	9.38	29.56	26.62

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

#### **Output Power Results**

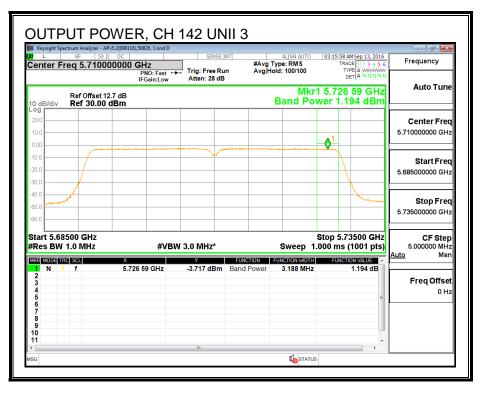
Channel	Frequency	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	1.19	1.11	4.16	29.56	-25.40

#### **PSD** Results

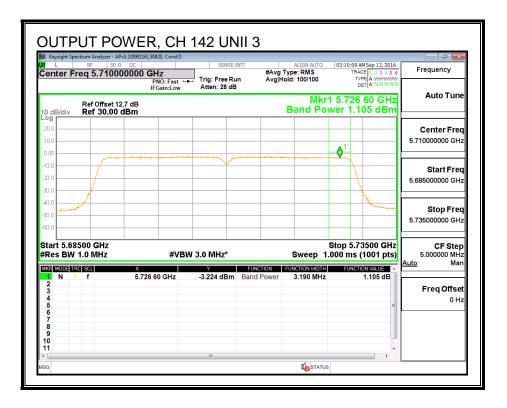
Channel	Frequency	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-5.94	-5.29	-2.59	26.62	-29.21

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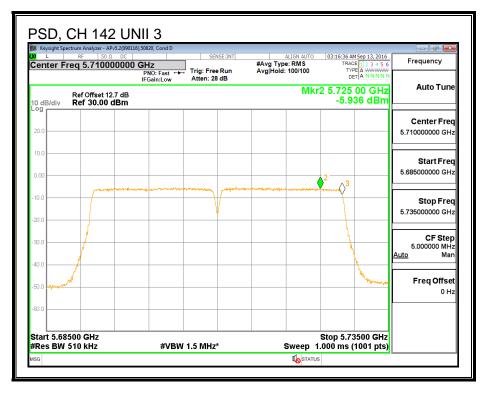
## **OUTPUT POWER, CHAIN 1**



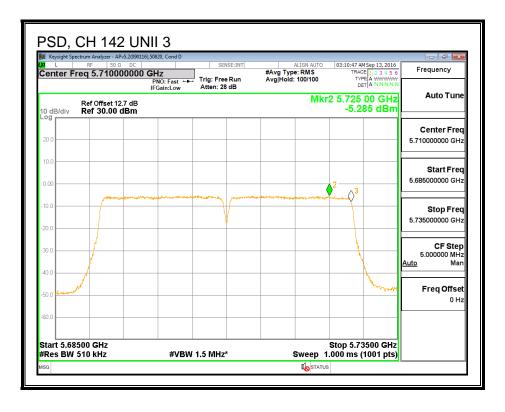
#### **OUTPUT POWER, CHAIN 2**



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#### PSD, CHAIN 2



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## 8.63.2. 6 dB BBANDWIDTH

## LIMITS

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

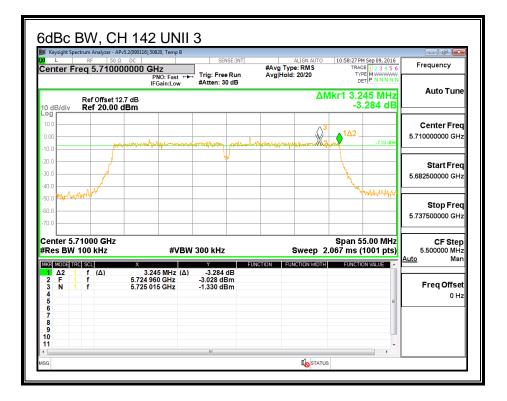
The minimum 6 dB bandwidth shall be at least 500 kHz.

## <u>RESULTS</u>

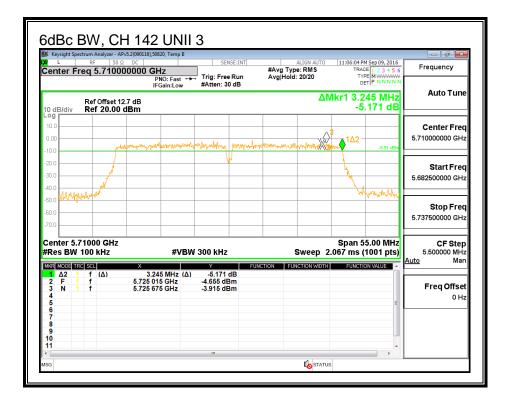
Channel	Frequency	6 dB BW	6 dB BW
		Chain 1	Chain 2
	(MHz)	(MHz)	(MHz)
142	5710	3.245	3.245

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## CHAIN 1



#### CHAIN 2



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# 8.64. 802.11n HT40 2Tx (CHAIN 0 + CHAIN 1) STBC MODE IN THE 5.6 GHz BAND

## 8.64.1. **26 dB BANDWIDTH**

## <u>LIMITS</u>

None; for reporting purposes only.

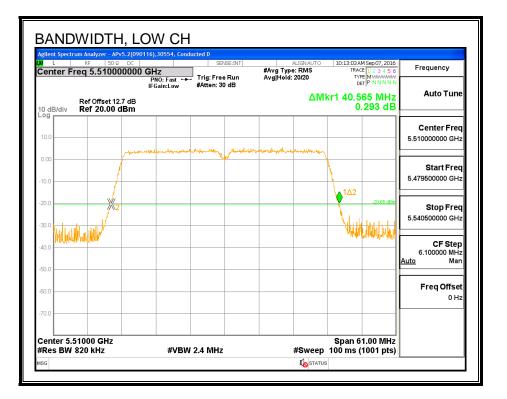
## **RESULTS**

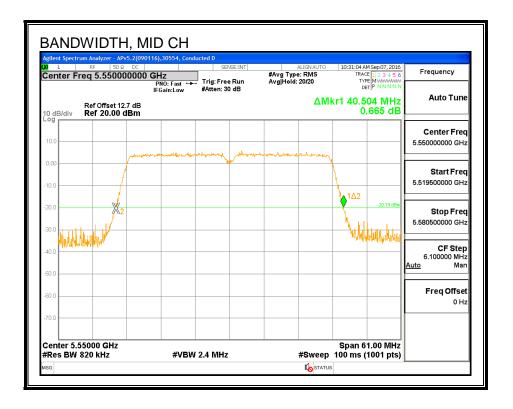
Channel	Frequency	26 dB BW	26 dB BW
		Chain 0	Chain 1
	(MHz)	(MHz)	(MHz)
Low	5510	40.565	40.504
Mid	5550	40.504	40.443
High	5670	40.565	40.565
142	5710	40.734	40.796

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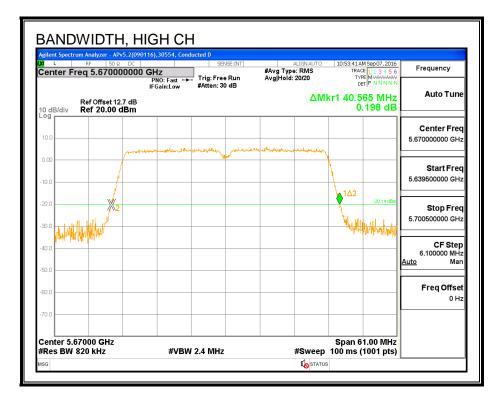
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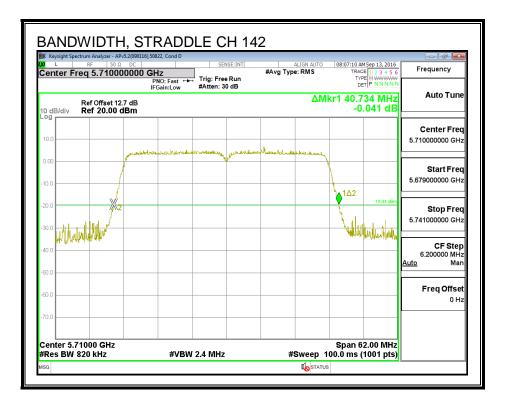
## 26 dB BANDWIDTH, CHAIN 0





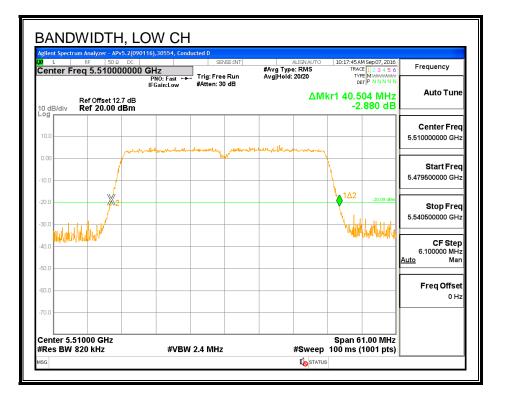
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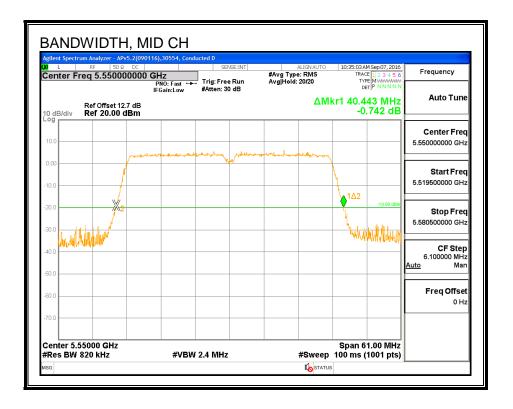




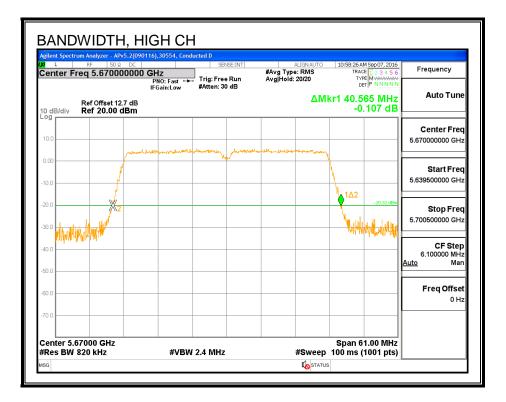
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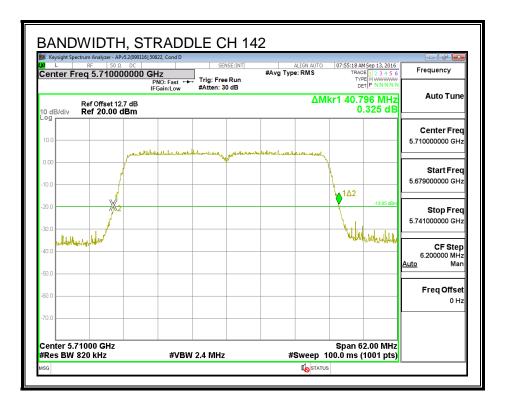
## 26 dB BANDWIDTH, CHAIN 1





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## 8.64.2. 99% BANDWIDTH

#### <u>LIMITS</u>

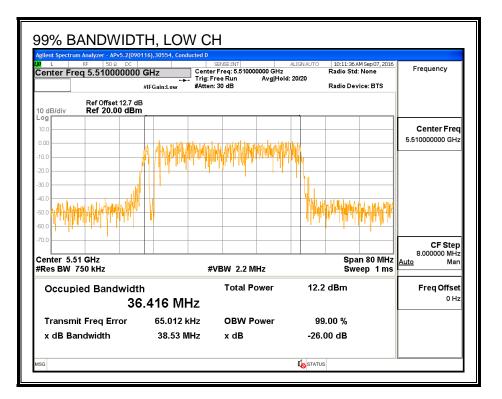
None; for reporting purposes only.

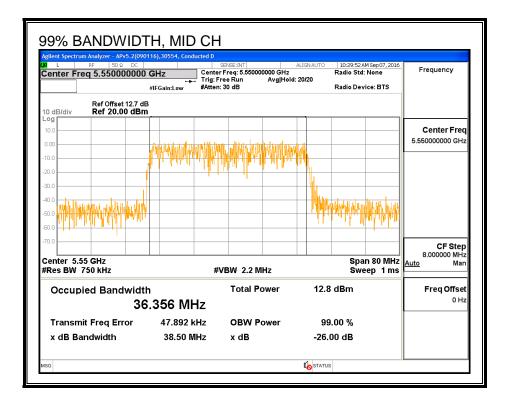
## **RESULTS**

Channel	Frequency	99% BW	99% BW
		Chain 0	Chain 1
	(MHz)	(MHz)	(MHz)
Low	5510	36.416	36.527
Mid	5550	36.356	36.239
High	5670	36.340	36.085
142	5710	36.388	36.389

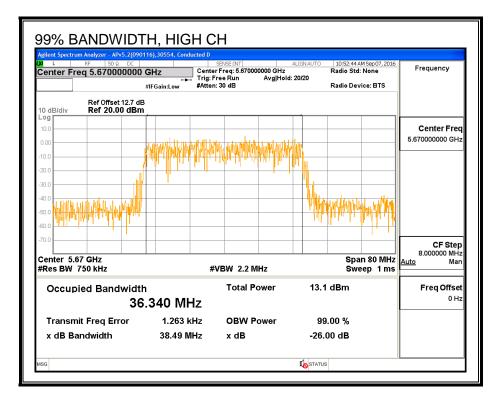
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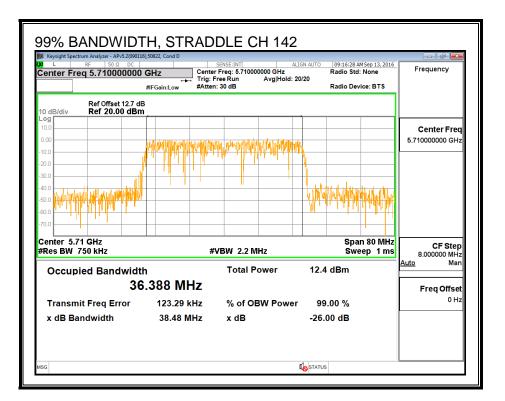
## 99% BANDWIDTH, CHAIN 0





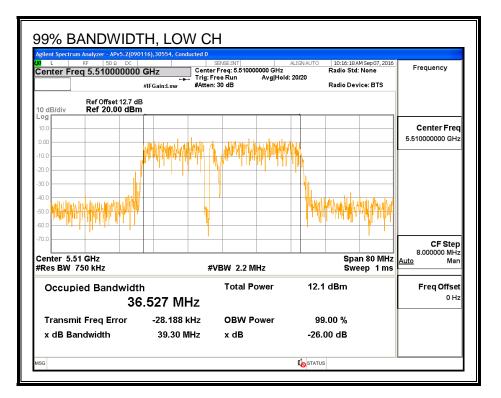
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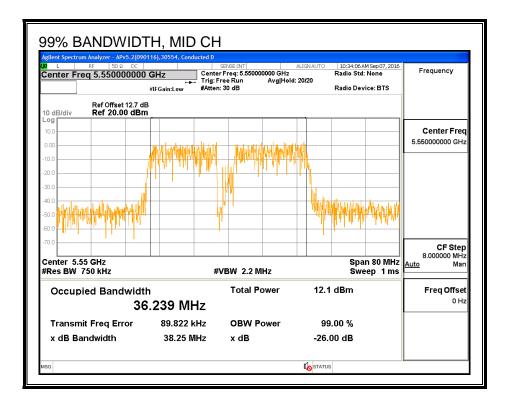




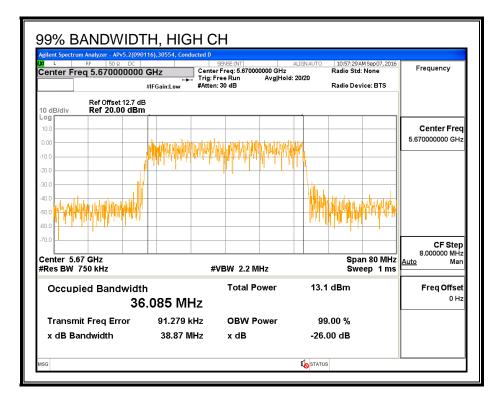
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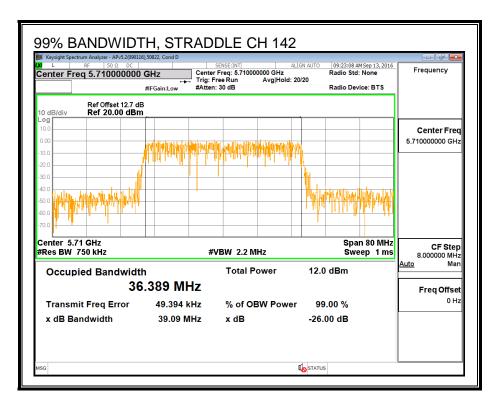
## 99% BANDWIDTH, CHAIN 1





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## 8.64.3. **AVERAGE POWER**

## **LIMITS**

None; for reporting purposes only.

### TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

	=		
ID:	43573	Date:	9/7/16

Channel	Frequency	Chain 0 Chain 1		Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Low	5510	11.84	11.92	14.89
Mid	5590	12.17	12.20	15.20
High	5670	12.19	12.18	15.20
142	5710	12.19	12.24	15.23

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## 8.64.4. OUTPUT POWER AND PSD

## <u>LIMITS</u>

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.

IC RSS-247 (6.2.3) (1)

The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

## 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.

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### DIRECTIONAL ANTENNA GAIN

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

Chain 0	Chain 1	<b>Uncorrelated Chains</b>	
Antenna	Antenna	Directional	
Gain	Gain	Gain	
(dBi)	(dBi)	(dBi)	
4.90	7.40	6.33	

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## **RESULTS**

<b>ID:</b> 43573	Date:	9/7/16
------------------	-------	--------

#### Bandwidth, Antenna Gain and Limits

0.00

Channel	Frequency	Min	Min	Directional	Directional	Power	PSD
		26 dB	99%	Gain	Gain	Limit	Limit
		BW	BW	for Power	for PSD		
	(MHz)	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
Low	5510	40.50	36.416	6.33	6.33	24.00	10.67
Mid	5550	40.44	36.239	6.33	6.33	24.00	10.67
High	5670	40.57	36.085	6.33	6.33	24.00	10.67

Duty Cycle CF (dB)

Included in Calculations of Corr'd PSD

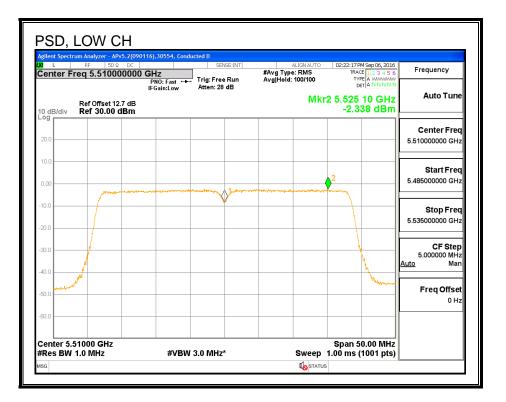
#### **Output Power Results**

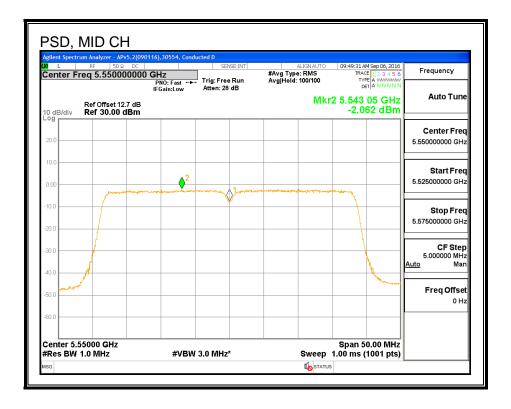
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	11.84	11.92	14.89	24.00	-9.11
Mid	5550	12.17	12.20	15.20	24.00	-8.80
High	5670	12.19	12.18	15.20	24.00	-8.80

#### **PSD** Results

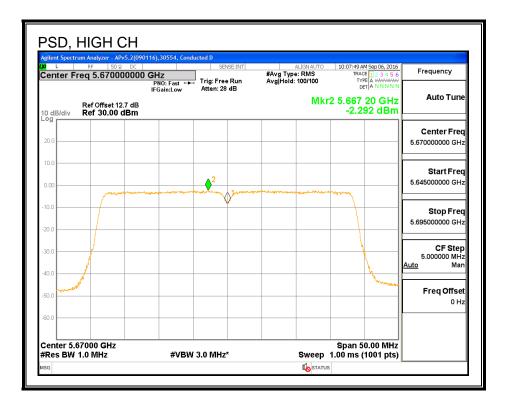
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	-2.34	-2.44	0.62	10.67	-10.05
Mid	5550	-2.06	-2.08	0.94	10.67	-9.73
High	5670	-2.29	-2.15	0.79	10.67	-9.88

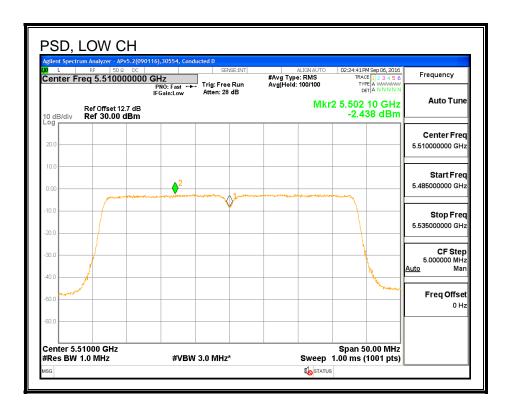
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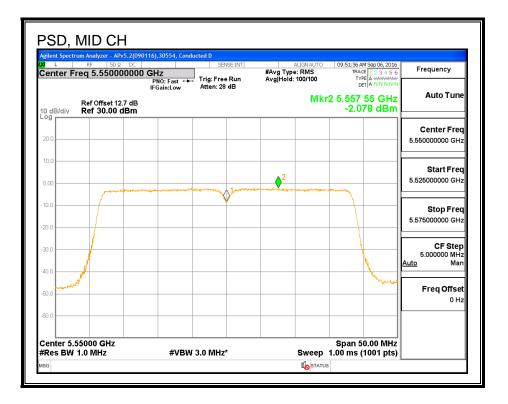


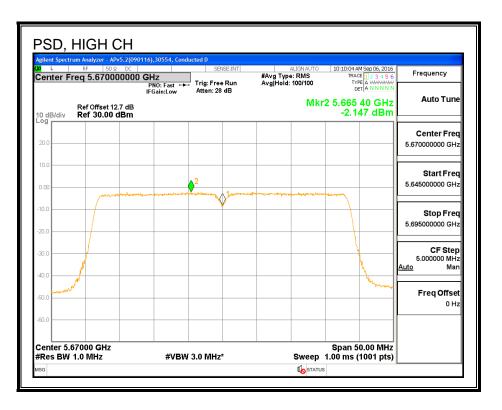
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# 8.65. 802.11ac VHT40 2Tx (CHAIN 0 + CHAIN 1) STBC STRADDLE CHANNEL 142 RESULTS (FCC)

## 8.65.1. OUTPUT POWER AND PSD

#### 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	35.37	6.33	6.33	23.67	10.67

#### **Output Power Results**

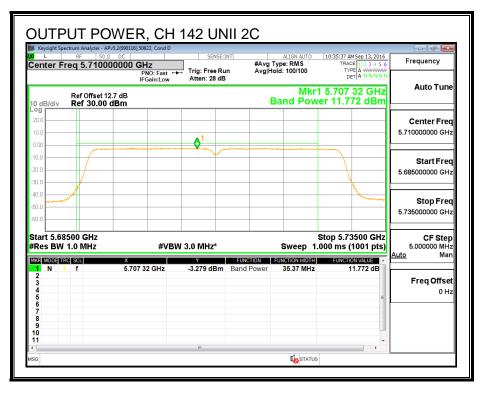
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	11.77	11.80	14.80	23.67	-8.87

#### **PSD** Results

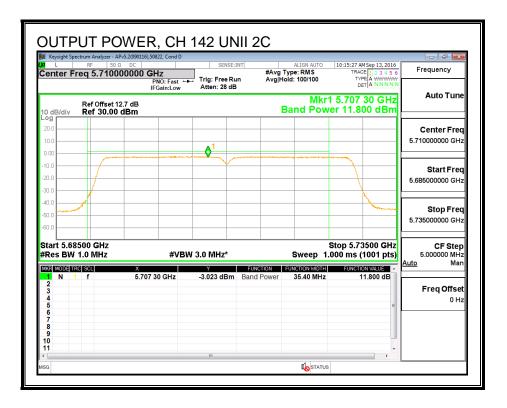
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-2.26	-2.19	0.78	10.67	-9.89

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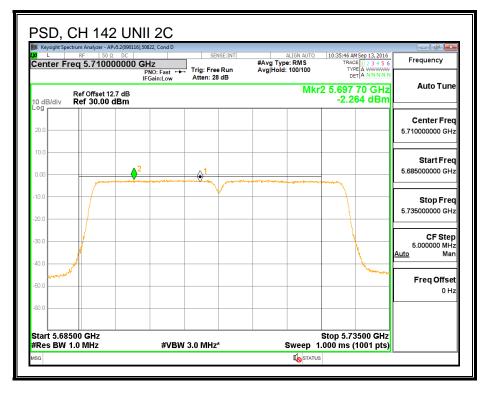
## OUTPUT POWER, CHAIN 0



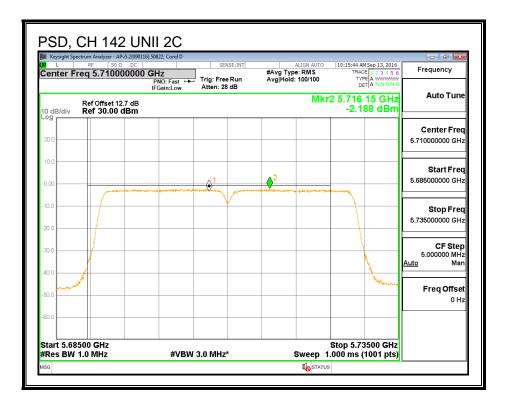
#### **OUTPUT POWER, CHAIN 1**



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#### PSD, CHAIN 1



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## 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	5.37	6.33	6.33	29.67	29.67

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

#### **Output Power Results**

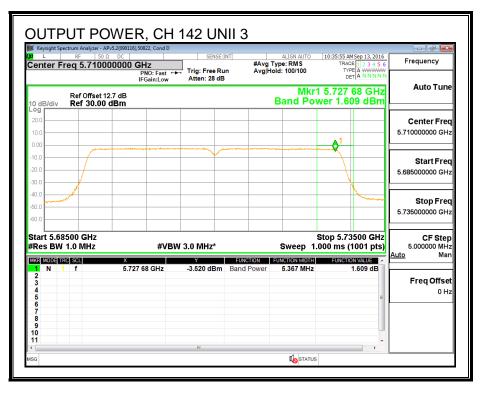
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	1.61	1.72	4.68	29.67	-24.99

#### **PSD** Results

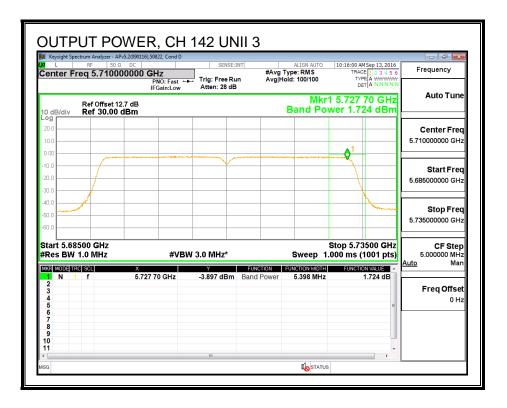
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-5.65	-5.46	-2.54	29.67	-32.21

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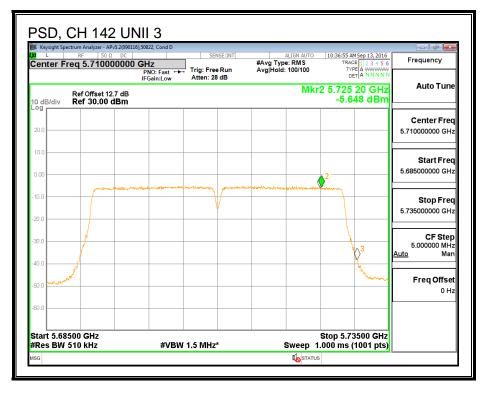
## OUTPUT POWER, CHAIN 0



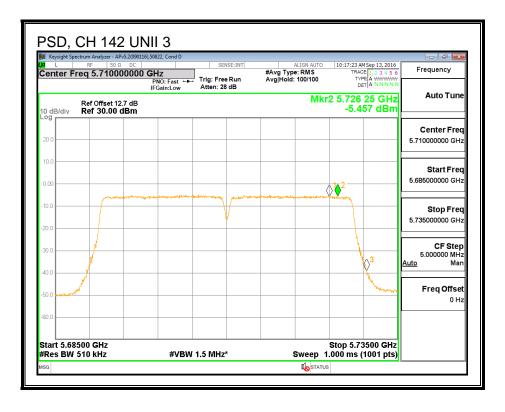
#### **OUTPUT POWER, CHAIN 1**



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#### PSD, CHAIN 1



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# 8.66. 802.11ac VHT40 2Tx (CHAIN 0 + CHAIN 1) STBC STRADDLE CHANNEL 142 RESULTS (IC)

## 8.66.1. OUTPUT POWER AND PSD

#### UNII-2C BAND

### Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		99%	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
142	5710	33.190	6.33	6.33	23.67	10.67

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

#### **Output Power Results**

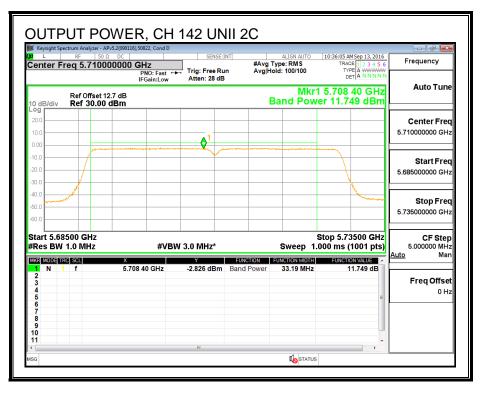
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	11.75	11.78	14.77	23.67	-8.90

#### **PSD** Results

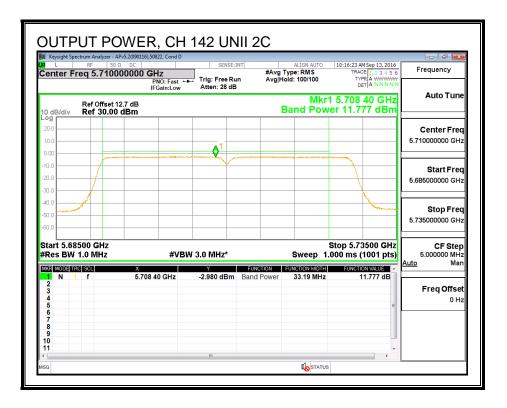
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-2.26	-2.19	0.78	10.67	-9.89

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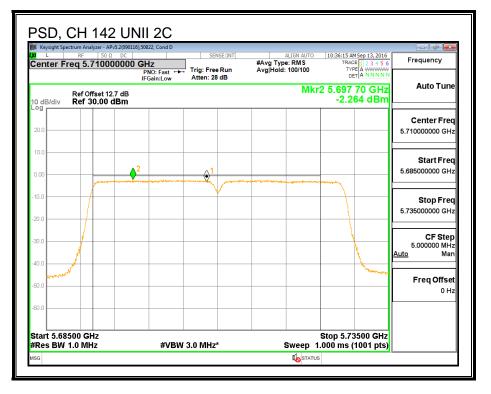
## OUTPUT POWER, CHAIN 0



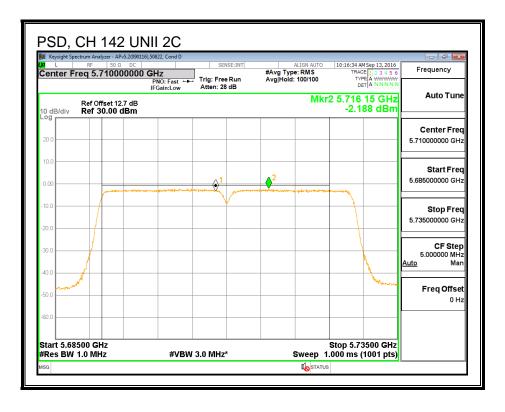
#### **OUTPUT POWER, CHAIN 1**



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#### PSD, CHAIN 1



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## UNII-3 BAND

#### Antenna Gain and Limit

Channel	Frequency	Min	Directional	Directional	Power	PSD
		99%	Gain	Gain	Limit	Limit
		BW	For Power	For PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
142	5710	3.194	6.33	6.33	29.67	29.67

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
	0.00	included in calculations of contait ower at 5D

#### **Output Power Results**

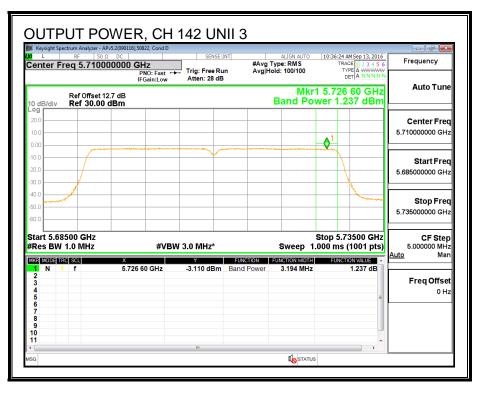
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	1.24	1.37	4.32	29.67	-25.35

#### **PSD** Results

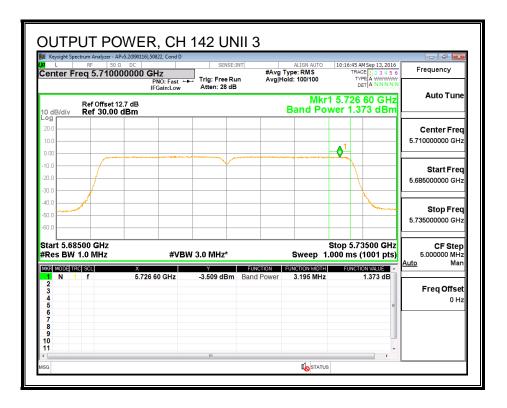
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-5.65	-5.46	-2.54	29.67	-32.21

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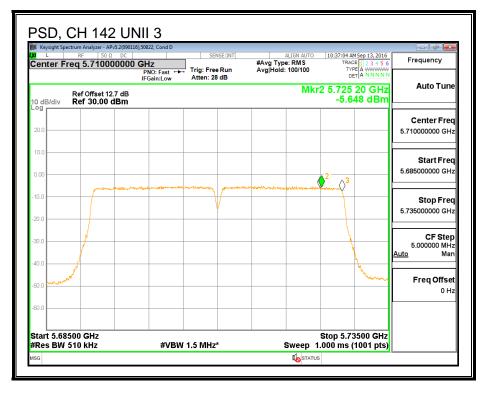
## OUTPUT POWER, CHAIN 0



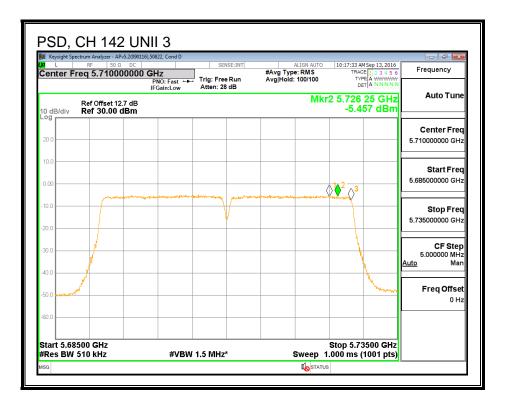
#### **OUTPUT POWER, CHAIN 1**



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#### PSD, CHAIN 1



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# 8.66.2. 6 dB BBANDWIDTH

## LIMITS

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

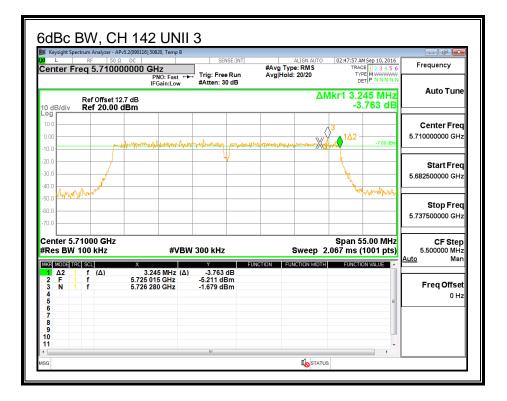
The minimum 6 dB bandwidth shall be at least 500 kHz.

## <u>RESULTS</u>

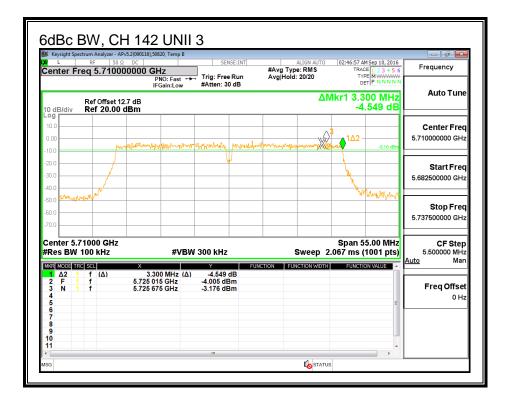
Channel	Frequency	6 dB BW	6 dB BW	
		Chain 0	Chain 1	
	(MHz)	(MHz)	(MHz)	
142	5710	3.25	3.30	

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## CHAIN 0



#### CHAIN 1



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# 8.67. 802.11n HT40 2Tx (CHAIN 0 + CHAIN 2) STBC MODE IN THE 5.6 GHz BAND

# 8.67.1. 26 dB BANDWIDTH

## <u>LIMITS</u>

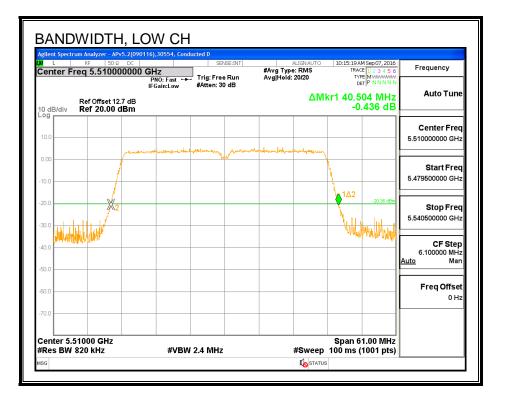
None; for reporting purposes only.

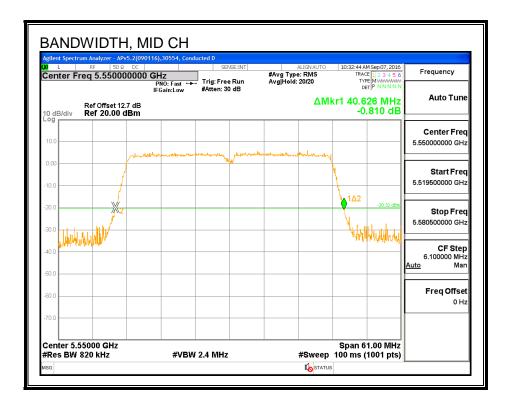
## **RESULTS**

Channel	Frequency	26 dB BW	26 dB BW
		Chain 0	Chain 2
	(MHz)	(MHz)	(MHz)
Low	5510	40.504	40.504
Mid	5550	40.626	40.626
High	5670	40.565	40.565
142	5710	40.858	40.321

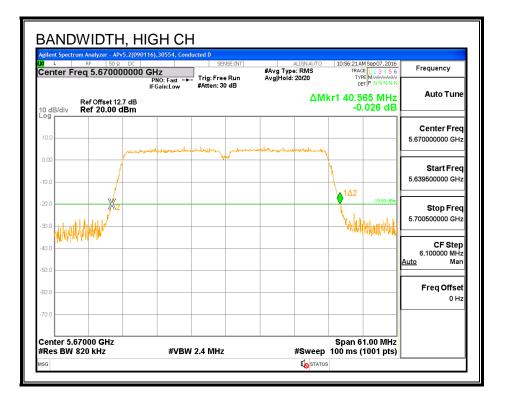
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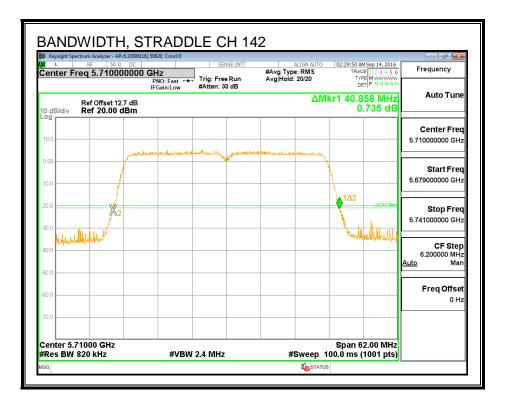
## 26 dB BANDWIDTH, CHAIN 0





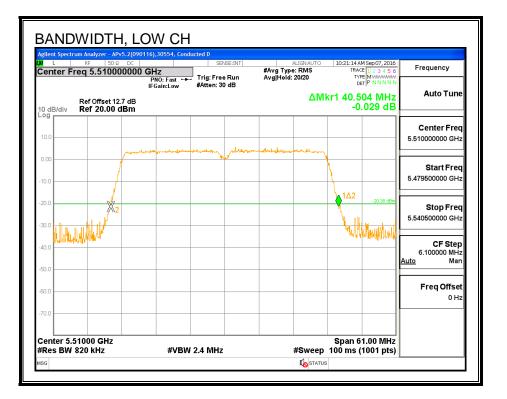
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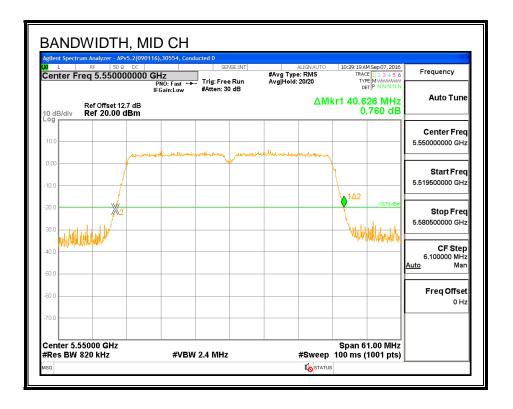




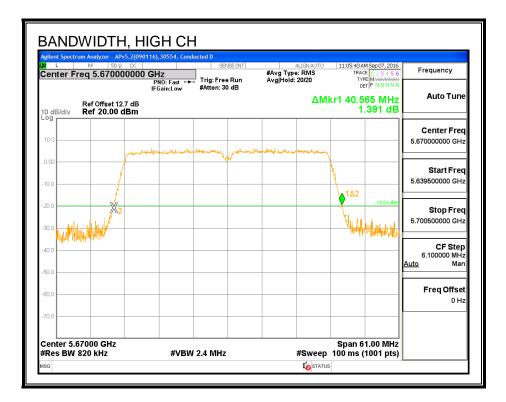
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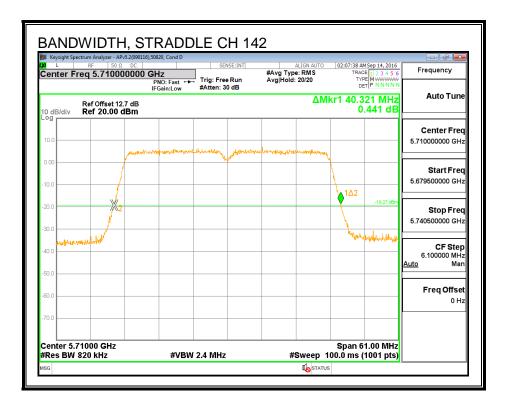
## 26 dB BANDWIDTH, CHAIN 2





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## 8.67.2. 99% BANDWIDTH

### <u>LIMITS</u>

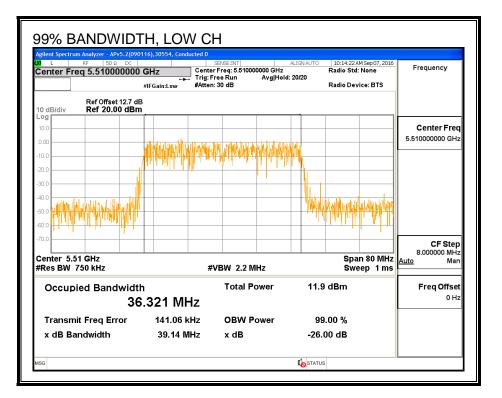
None; for reporting purposes only.

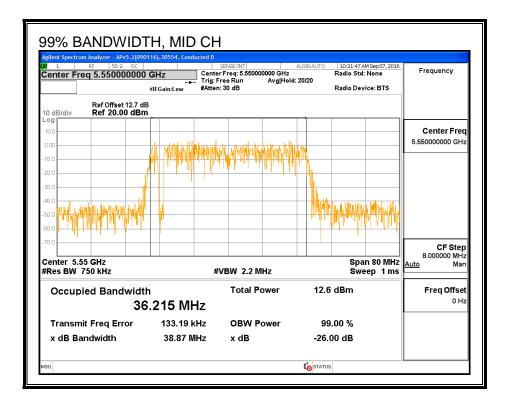
## **RESULTS**

Channel	Frequency	99% BW	99% BW
			Chain 2
	(MHz)	(MHz)	(MHz)
Low	5510	36.321	36.434
Mid	5550	36.215	36.283
High	5670	36.263	36.359
142	5710	36.382	36.393

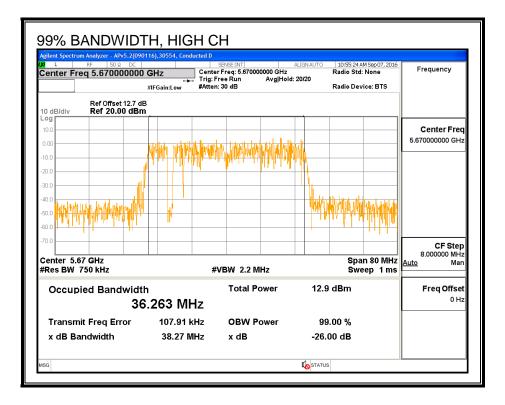
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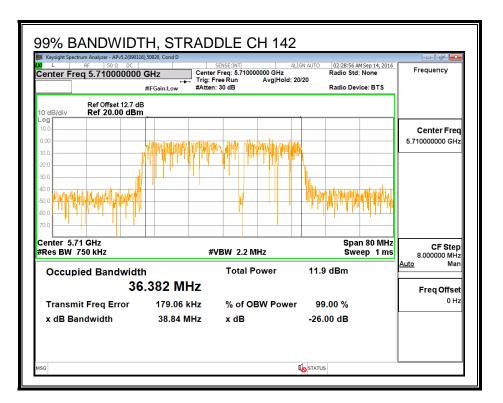
## 99% BANDWIDTH, CHAIN 0





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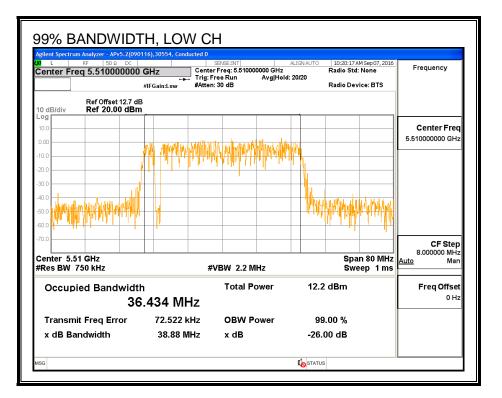


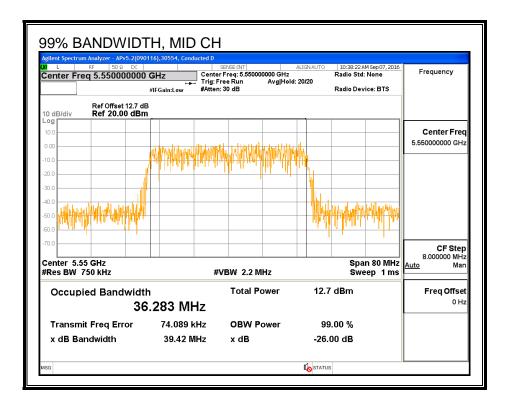


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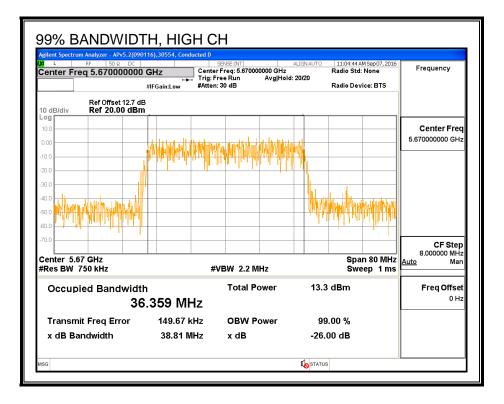
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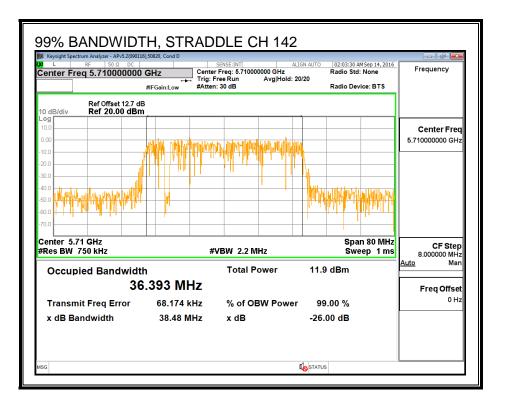
## 99% BANDWIDTH, CHAIN 2





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# 8.67.3. **AVERAGE POWER**

## <u>LIMITS</u>

None; for reporting purposes only.

## TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

### **RESULTS**

	-		
ID:	43573	Date:	9/7/16

#### Average Power Results

Channel	Frequency	Chain 0 Chain 2		Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Low	5510	11.89	11.87	14.89
Mid	5550	12.21	12.17	15.20
High	5670	12.17	12.19	15.19
142	5710	12.08	12.25	15.18

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# 8.67.4. OUTPUT POWER AND PSD

## <u>LIMITS</u>

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.

IC RSS-247 (6.2.3) (1)

The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

## 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.

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## **DIRECTIONAL ANTENNA GAIN**

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

Chain 0	Chain 2	<b>Uncorrelated Chains</b>
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.90	5.20	5.05

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## <u>RESULTS</u>

<b>ID:</b> 43573	Date:	9/7/16
------------------	-------	--------

0.00

## Bandwidth, Antenna Gain and Limits

Channel	Frequency	Min	Min	Directional	Directional	Power	PSD
		26 dB	99%	Gain	Gain	Limit	Limit
		BW	BW	for Power	for PSD		
	(MHz)	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
Low	5510	40.50	36.321	5.05	5.05	24.00	11.00
Mid	5550	40.63	36.215	5.05	5.05	24.00	11.00
High	5670	40.57	36.263	5.05	5.05	24.00	11.00

Duty Cycle CF (dB)

Included in Calculations of Corr'd PSD

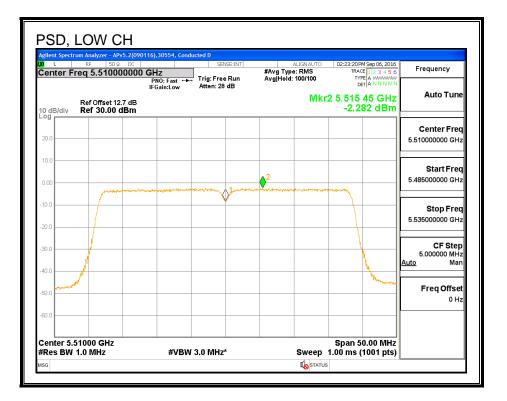
### **Output Power Results**

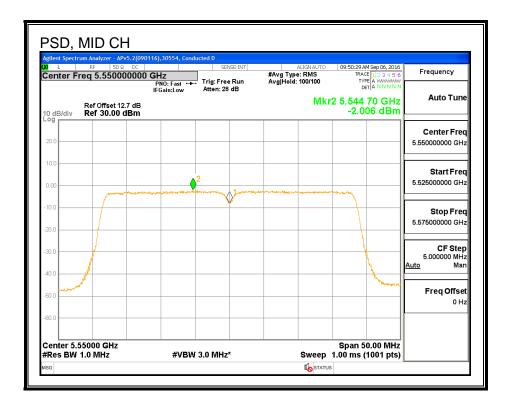
Channel	Frequency	Chain 0	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	11.89	11.87	14.89	24.00	-9.11
Mid	5550	12.21	12.17	15.20	24.00	-8.80
High	5670	12.17	12.19	15.19	24.00	-8.81

## **PSD Results**

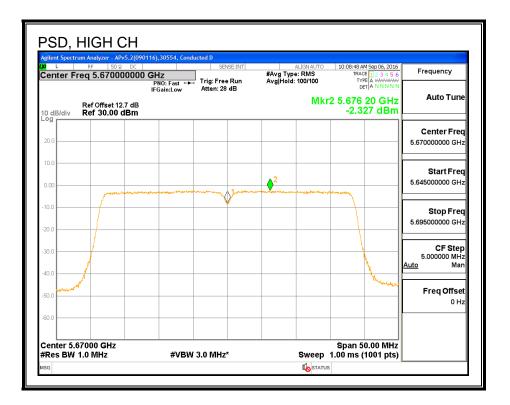
Channel	Frequency	Chain 0	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	-2.282	-2.139	0.80	11.00	-10.20
Mid	5550	-2.006	-2.141	0.94	11.00	-10.06
High	5670	-2.327	-2.099	0.80	11.00	-10.20

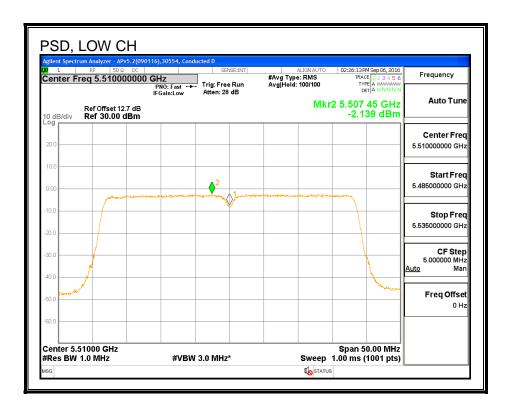
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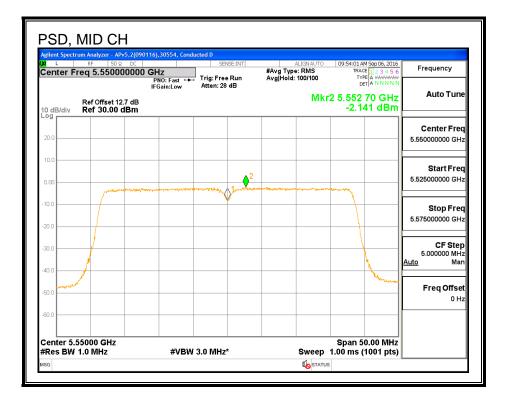


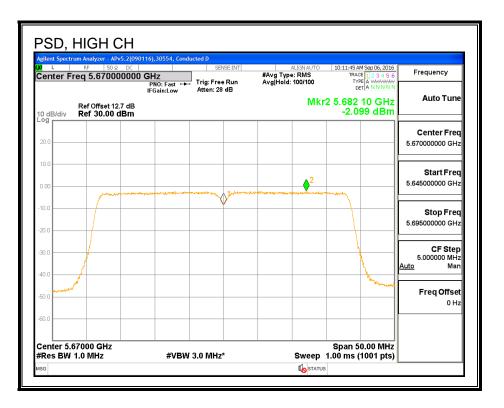
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# 8.68. 802.11ac VHT40 2Tx (CHAIN 0 + CHAIN 2) STBC STRADDLE CHANNEL 142 RESULTS (FCC)

## 8.68.1. OUTPUT POWER AND PSD

#### 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	35.16	5.05	5.05	24.00	11.00

#### **Output Power Results**

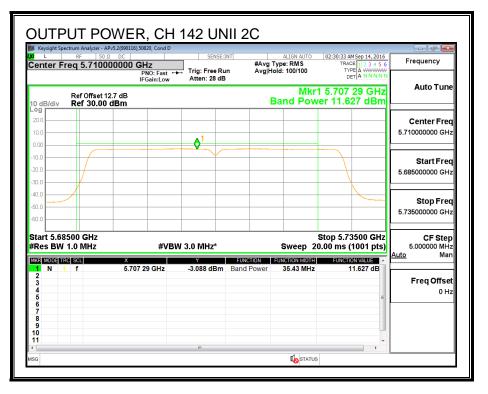
Channel	Frequency	Chain 0	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	11.63	11.82	14.74	24.00	-9.26

#### **PSD** Results

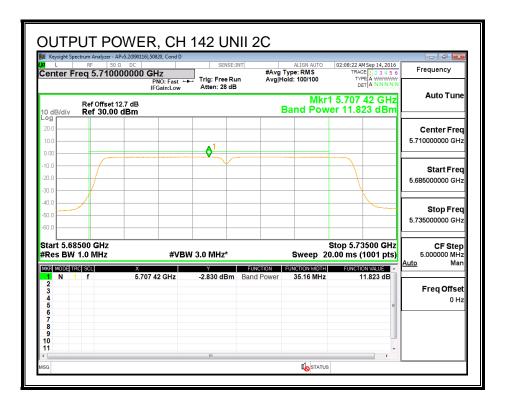
Channel	Frequency	Chain 0	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-2.90	-2.66	0.23	11.00	-10.77

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## OUTPUT POWER, CHAIN 0



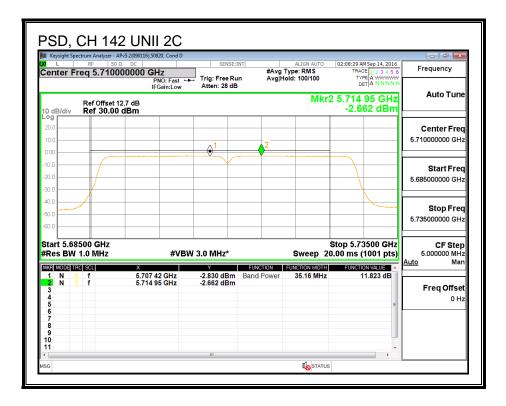
#### **OUTPUT POWER, CHAIN 2**



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L	ctrum Analyzer - APv5.2(09 RF 50 Ω DC eq 5.71000000		SENSE:INT → Trig: Free Run Atten: 28 dB	ALIGN AUTO #Avg Type: RMS Avg Hold: 100/100	02:30:40 AM Sep 14, 2016 TRACE 1 2 3 4 5 6 TYPE A WWWW DET A N N N N	
dB/div	Ref Offset 12.7 dE Ref 30.00 dBm			Mk	r2 5.703 90 GHz -2.900 dBm	Auto Tune
99 0.0 0.0			2 01			Center Free 5.710000000 GH
.00 0.0 0.0						Start Free 5.685000000 GH
0.0						Stop Free 5.735000000 GH
Res BW		#VB	₩ 3.0 MHz*	•	Stop 5.73500 GHz 20.00 ms (1001 pts)	CF Step 5.000000 MH Auto Mar
R MODE TR 1 N 1 2 N 1 3 4 5 6 7	f	5.707 29 GHz 5.703 90 GHz	Y -3.088 dBm ⊟ -2.900 dBm	FUNCTION FUNCTION WIDT and Power 35.43 MH		Freq Offse
8 9 0 1			111		•	

### PSD, CHAIN 2



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## 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	5.16	5.05	5.05	30.00	30.00

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

#### **Output Power Results**

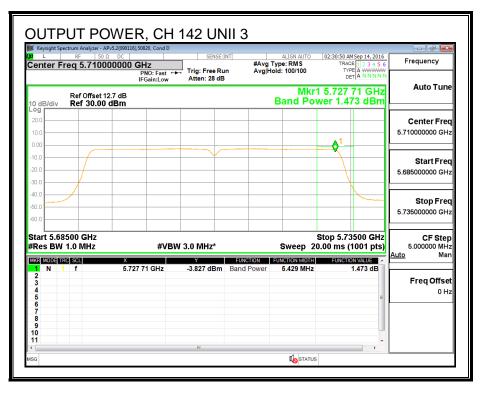
Channel	Frequency	Chain 0	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	1.47	1.66	4.58	30.00	-25.42

#### **PSD** Results

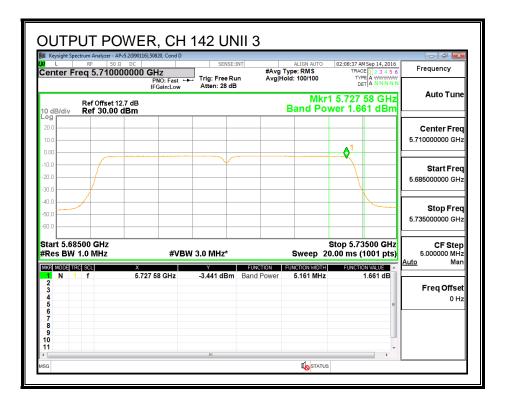
Channel	Frequency	Chain 0	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-6.06	-5.83	-2.93	30.00	-32.93

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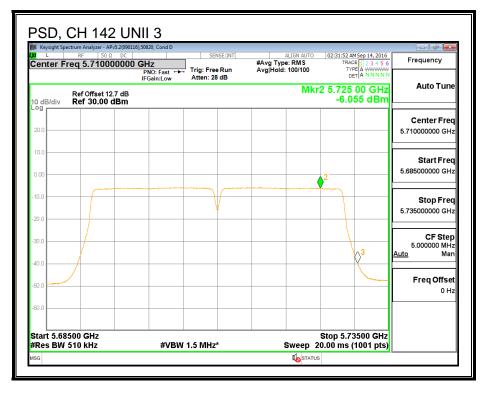
## OUTPUT POWER, CHAIN 0



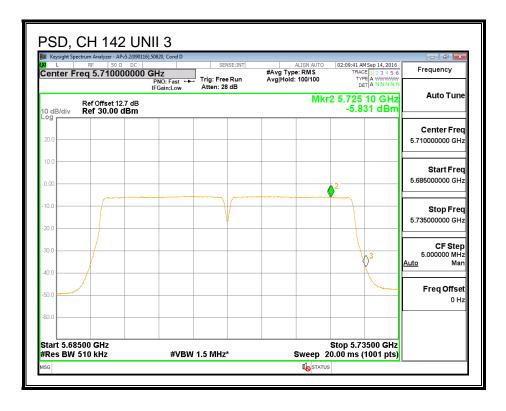
#### **OUTPUT POWER, CHAIN 2**



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#### PSD, CHAIN 2



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# 8.69. 802.11ac VHT40 2Tx (CHAIN 0 + CHAIN 2 ) STBC STRADDLE CHANNEL 142 RESULTS (IC)

## 8.69.1. OUTPUT POWER AND PSD

### UNII-2C BAND

### Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		99%	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
142	5710	33.190	5.05	5.05	24.00	11.00

Duty Cycle CF (dB) 0.	00	Included in Calculations of Corr'd Power & PSD
-----------------------	----	--

#### **Output Power Results**

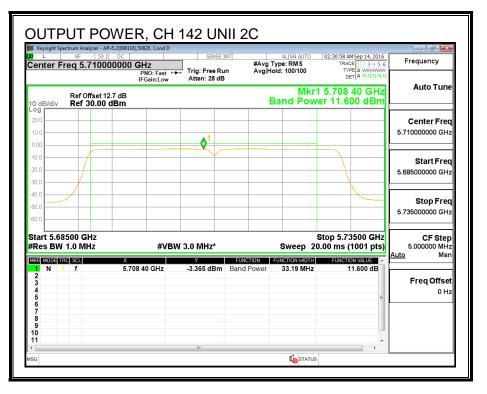
Channel	Frequency	Chain 0	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	11.60	11.80	14.71	24.00	-9.29

#### **PSD** Results

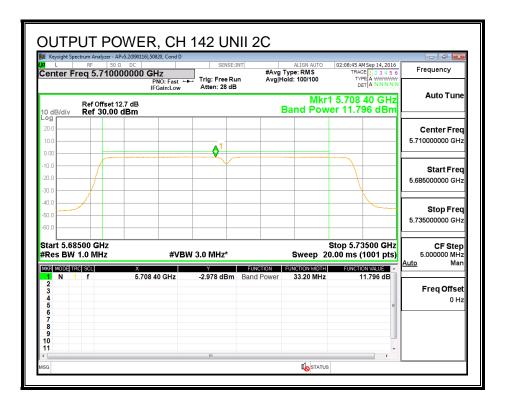
Channel	Frequency	Chain 0	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-2.90	-2.66	0.23	11.00	-10.77

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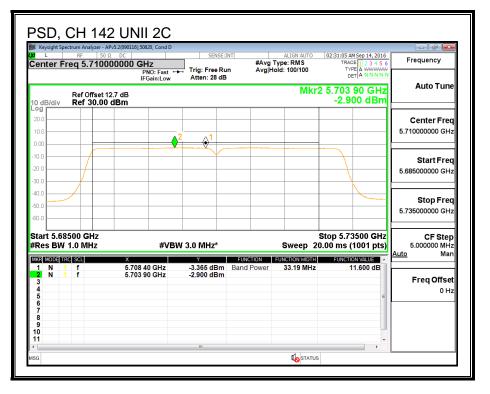
## OUTPUT POWER, CHAIN 0



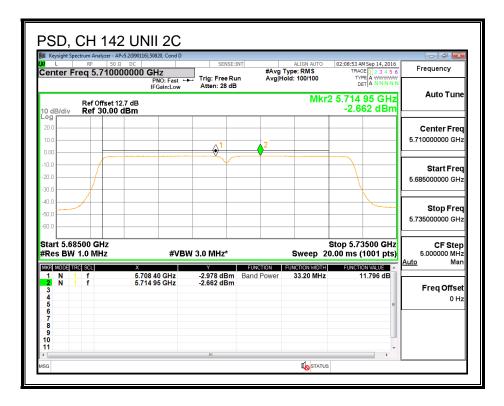
#### **OUTPUT POWER, CHAIN 2**



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#### PSD, CHAIN 2



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## UNII-3 BAND

#### Antenna Gain and Limit

Channel	Frequency	Min	Directional	Directional	Power	PSD
		99%	Gain	Gain	Limit	Limit
		BW	For Power	For PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
142	5710	3.191	5.05	5.05	30.00	30.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
Duly Cycle CF (ub)	0.00	Included in Calculations of Cont & Fower & For

#### **Output Power Results**

Channel	Frequency	Chain 0	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	1.16	1.35	4.26	30.00	-25.74

#### **PSD** Results

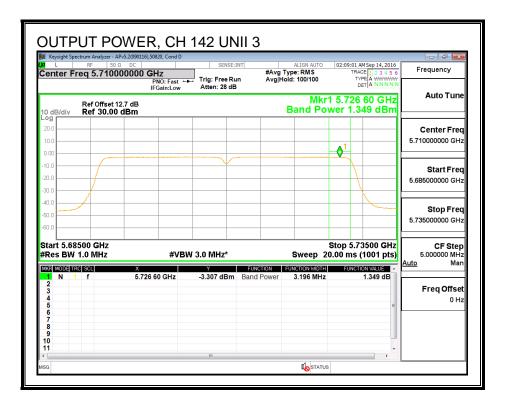
Channel	Frequency	Chain 0	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	-6.06	-5.83	-2.93	30.00	-32.93

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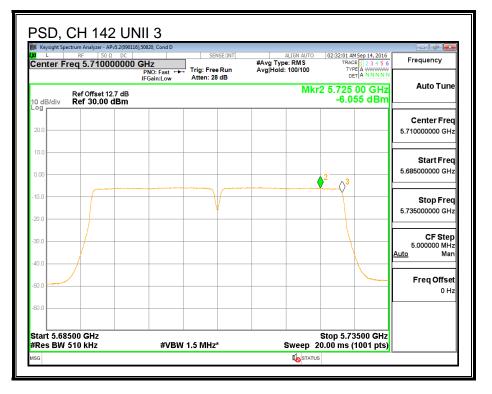
## OUTPUT POWER, CHAIN 0

L	RF 50 Ω DC		SENSE:INT Trig: Free Run Atten: 28 dB	#Avg	ALIGN AUTO Type: RMS Iold: 100/100	TE	4 AM Sep 14, 2016 RACE 1 2 3 4 5 6 TYPE A WWWW DET A N N N N N	Frequency
dB/div	Ref Offset 12.7 dB Ref 30.00 dBm				Mkr Band Por		6 60 GHz 155 dBm	Auto Tune
								Center Free 5.710000000 GH:
I.O I.O								Start Free 5.685000000 GH
1.0 1.0								<b>Stop Fred</b> 5.735000000 GH:
	8500 GHz 1.0 MHz	#VB\	V 3.0 MHz*	FUNCTION		0.00 ms	73500 GHz 5 (1001 pts)	CF Step 5.000000 MH <u>Auto</u> Mar
		726 60 GHz	-3.463 dBm		3.191 MHz		1.155 dB	Freq Offse 0 H:

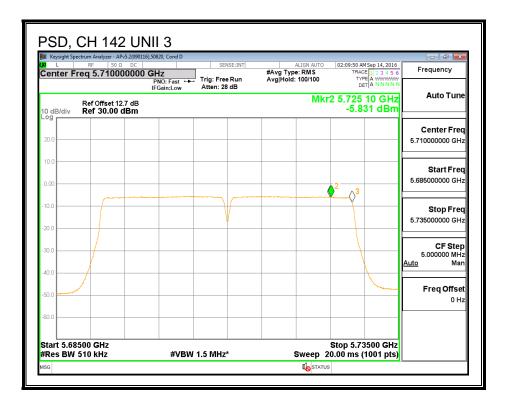
#### **OUTPUT POWER, CHAIN 2**



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#### PSD, CHAIN 2



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# 8.69.2. 6 dB BBANDWIDTH

## LIMITS

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

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

## <u>RESULTS</u>

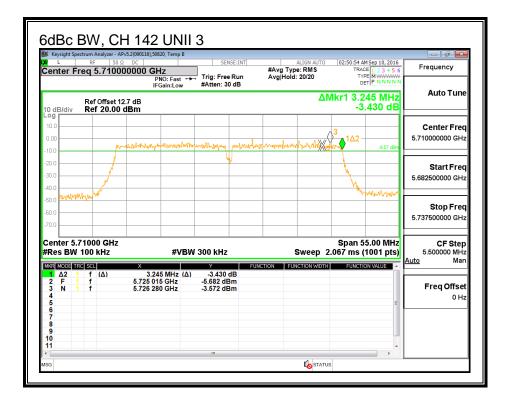
Channel	Frequency	6 dB BW	6 dB BW	
		Chain 0	Chain 2	
	(MHz)	(MHz)	(MHz)	
142	5710	3.245	3.245	

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## CHAIN 0

L	RF 50 Ω	v5.2(090116),50820, Tem DC D00000 GHz PNO: Fa IFGain:Lo	st +++ Trig: Fre		ALIGN AUT #Avg Type: RMS Avg Hold: 20/20	TR	AM Sep 10, 2016 ACE 1 2 3 4 5 6 YPE M WWWWW DET P N N N N N	Frequency
0 dB/div	Ref Offset 12 Ref 20.00					ΔMkr1 3.	245 MHz 1.498 dB	Auto Tune
og 10.0						0.3		Center Freq
0.0	بلريز	markanghrhamp	malina	, m-fupusqu	antropolistic	√21∆2	-7.34 dBm	5.710000000 GHz
0.0				Ly · · ·				Start Fred
0.0	- de la composición de la comp							5.682500000 GHz
0.0 0.0 promile	Whater					- <sup>1</sup>	munny	
0.0								Stop Freq
0.0								5.737500000 GH2
enter 5.7 Res BW	'1000 GHz 100 kHz	#	VBW 300 kH:	z	Sweep	Span 2.067 ms	55.00 MHz (1001 pts)	CF Step 5.500000 MH
	f (Δ)	X 3.245 MH;	Υ z (Δ) -1.498	FUNC	TION FUNCTION WIL	OTH FUNCT		<u>Auto</u> Mar
2 F 1 3 N 1	f f	5.725 015 GHz 5.727 545 GHz	-6.633 d	Bm				Freq Offset
4 5							=	0 H:
6 7								
8 9 0								
1								

#### CHAIN 2



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# 8.70. 802.11n HT40 2Tx (CHAIN 1 + CHAIN 2) STBC MODE IN THE 5.6 GHz BAND

# 8.70.1. 26 dB BANDWIDTH

## <u>LIMITS</u>

None; for reporting purposes only.

## **RESULTS**

Channel	Frequency	26 dB BW	26 dB BW	
		Chain 1	Chain 2	
	(MHz)	(MHz)	(MHz)	
Low	5510	40.443	40.626	
Mid	5550	40.565	40.565	
High	5670	40.626	40.565	
142	5710	40.982	40.382	

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