8.29.2. 99% BANDWIDTH

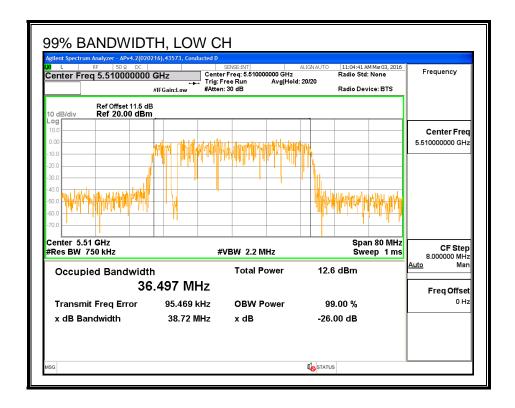
LIMITS

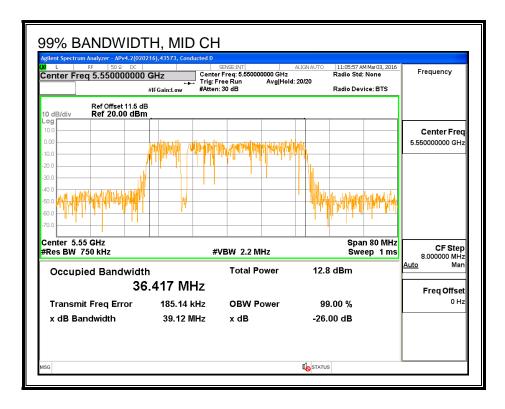
None; for reporting purposes only.

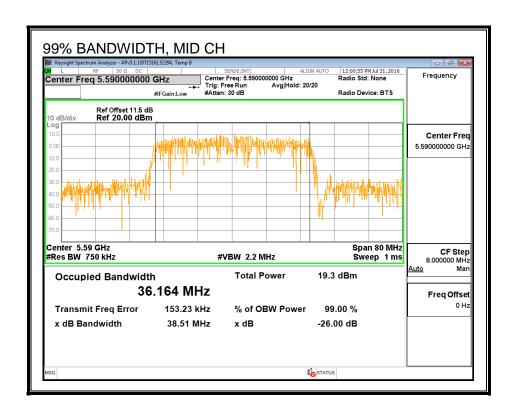
RESULTS

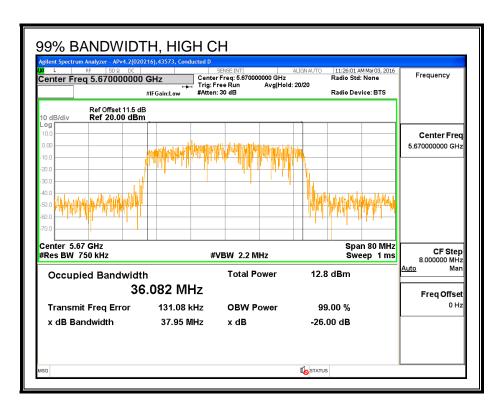
Channel Frequency		99% BW	99% BW	
		Chain 0	Chain 1	
	(MHz)	(MHz)	(MHz)	
Low	5510	36.497	36.464	
Mid	5550	36.417	36.402	
Mid	5590	36.164	36.322	
High	5670	36.082	36.377	
142	5710	36.294	36.349	

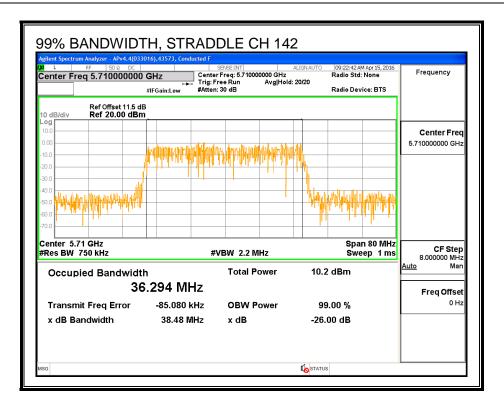
99% BANDWIDTH, CHAIN 0



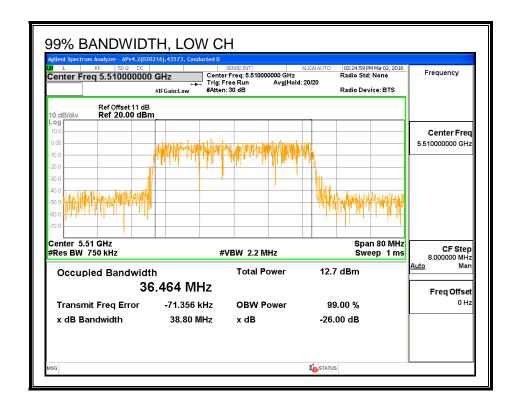


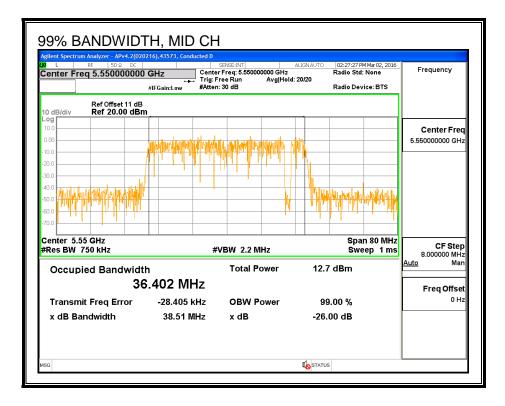


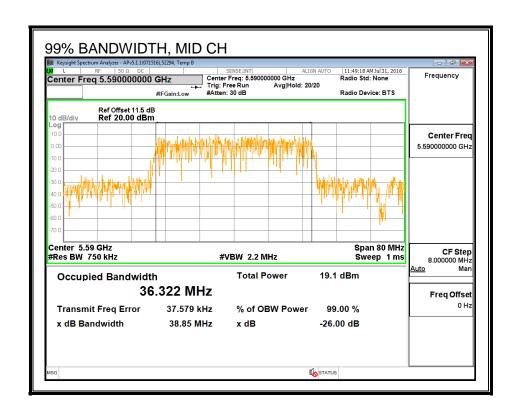


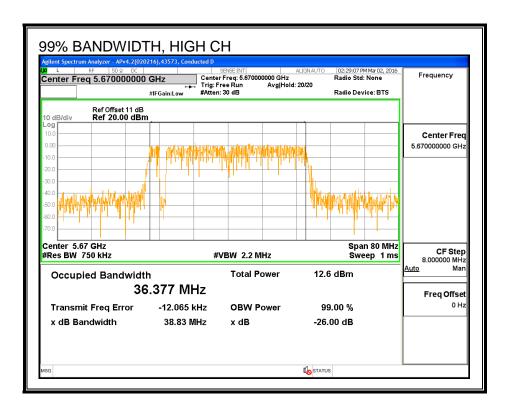


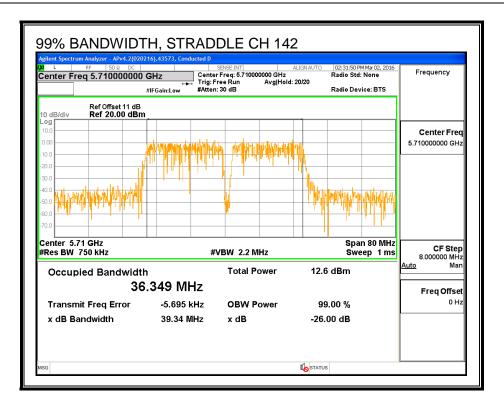
99% BANDWIDTH, CHAIN 1











8.29.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	52279	Date:	7/13/16
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Average Power Results

Channel	Frequency	Chain 0	Chain 1	Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Low	5510	13.98	14.00	17.00
Mid 5550		16.44	18.35	20.51
Mid	5590	16.40	19.46	21.20
High	5670	15.46	15.49	18.49
142	5710	16.38	18.80	20.77

8.29.4. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 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.

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	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
0.17	-0.80	-0.29

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

Chain 0	Chain 1	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
0.17	-0.80	2.71

RESULTS

ID:	52279	Date:	7/13/16

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	40.26	36.464	-0.29	2.71	24.00	11.00
Mid	5550	39.90	36.402	-0.29	2.71	24.00	11.00
Mid	5590	40.63	36.164	-0.29	2.71	24.00	11.00
High	5670	39.96	36.082	-0.29	2.71	24.00	11.00

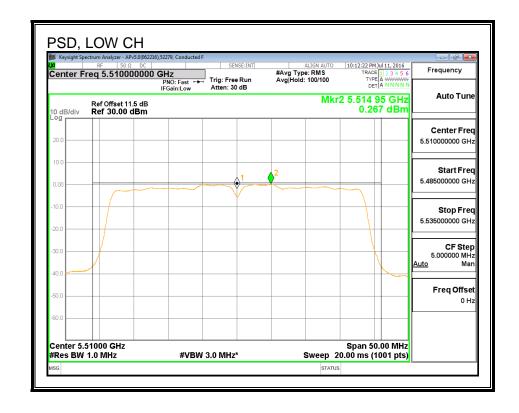
Duty Cycle CF (dB) 0.00	Included in Calculations of Corr'd PSD
-------------------------	--

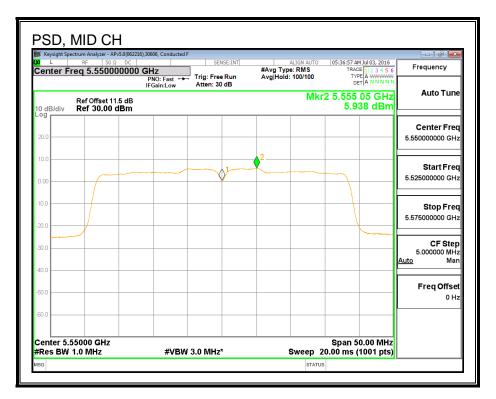
Output Power Results

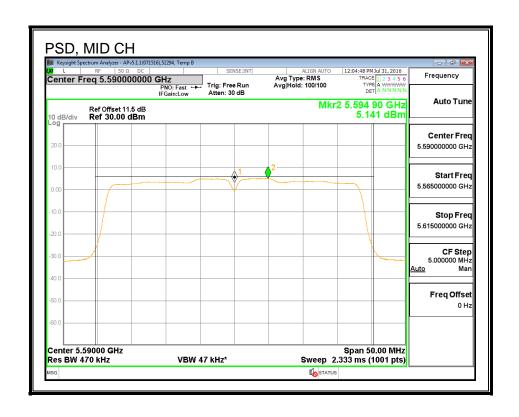
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	13.98	14.00	17.00	24.00	-7.00
Mid	5550	16.44	18.35	20.51	24.00	-3.49
Mid	5590	16.40	19.46	21.20	24.00	-2.80
High	5670	15.46	15.49	18.48	24.00	-5.52

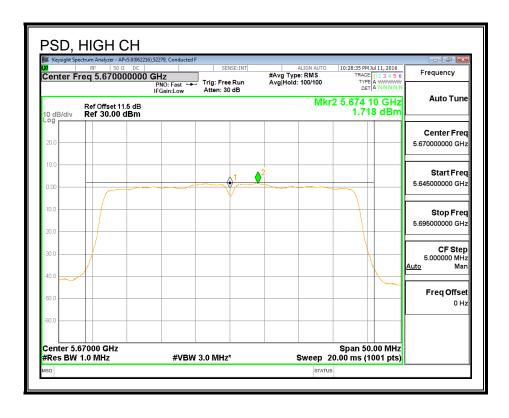
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	0.27	0.15	3.22	11.00	-7.78
Mid	5550	5.94	5.68	8.82	11.00	-2.18
Mid	5590	5.14	5.18	8.17	11.00	-2.83
High	5670	1.72	1.57	4.65	11.00	-6.35

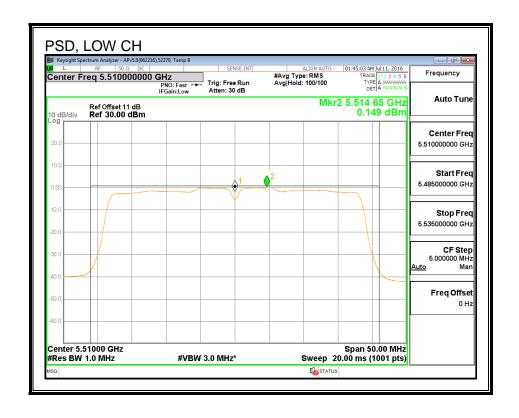
PSD, CHAIN 0

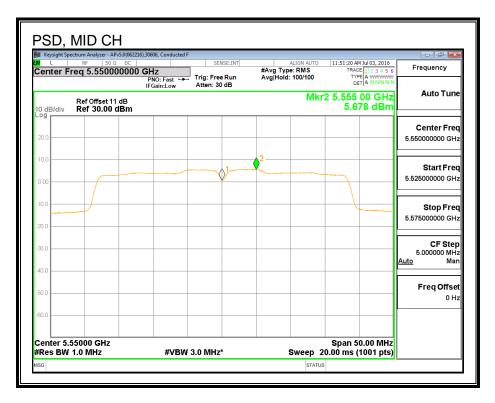


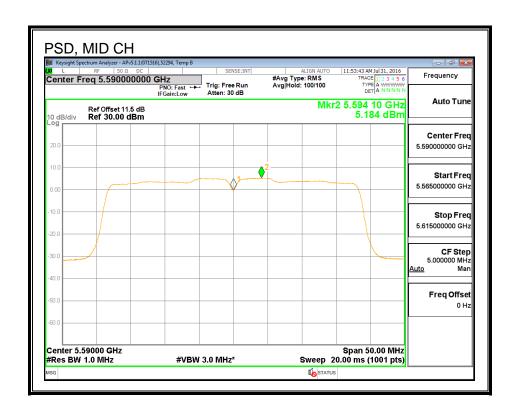


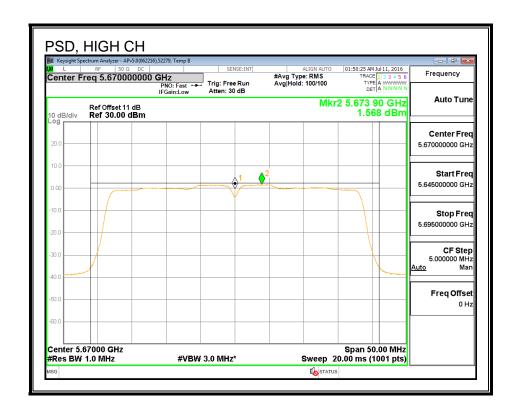












8.30. 802.11ac VHT40 2Tx CDD STRADDLE CHANNEL 142 RESULTS 8.30.1. OUTPUT POWER AND PSD

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	35.29	-0.29	2.71	24.00	11.00

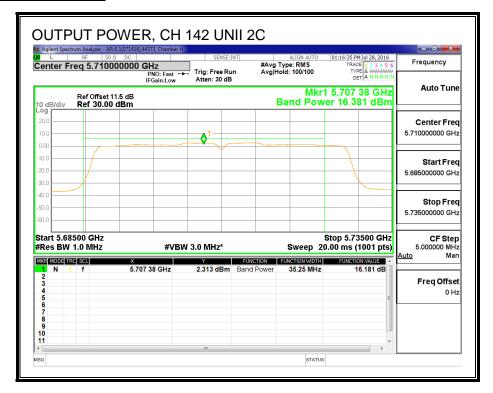
Duty Cycle CF (dB) 0.00	Included in Calculations of Corr'd Power & PSD
-------------------------	--

Output Power Results

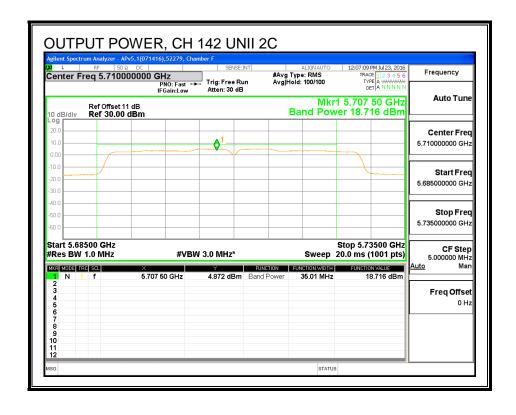
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	16.38	18.72	20.71	24.00	-3.29

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	2.79	5.15	7.14	11.00	-3.86

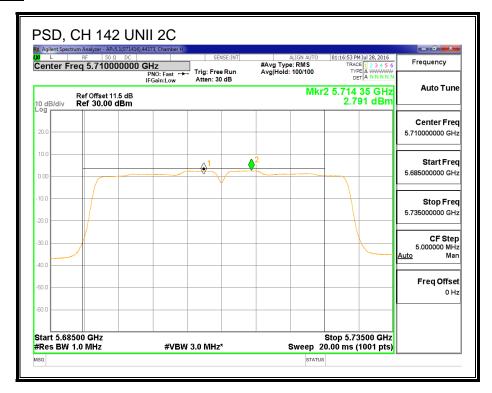
OUTPUT POWER, CHAIN 0



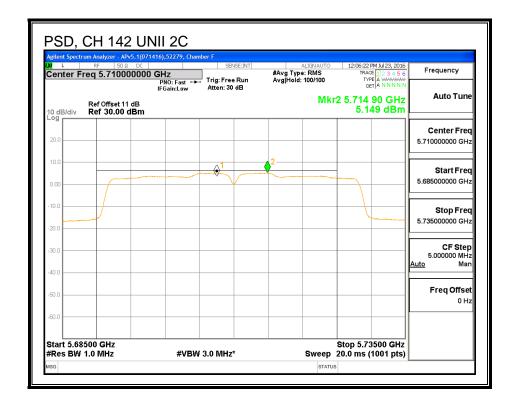
OUTPUT POWER, CHAIN 1



PSD, CHAIN 0



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	6.00	-0.29	2.71	30.00	30.00

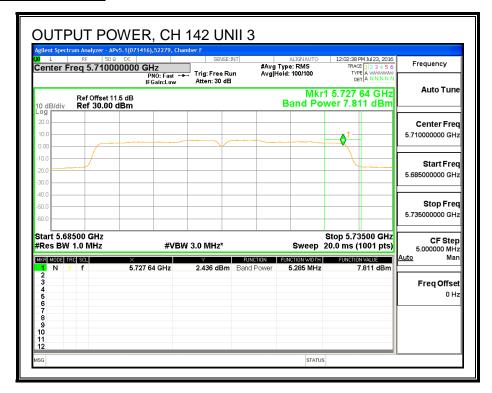
Duty Cycle CF (dB) 0.00 Included in Calculations of Corr'd Power	er & PSD
--	----------

Output Power Results

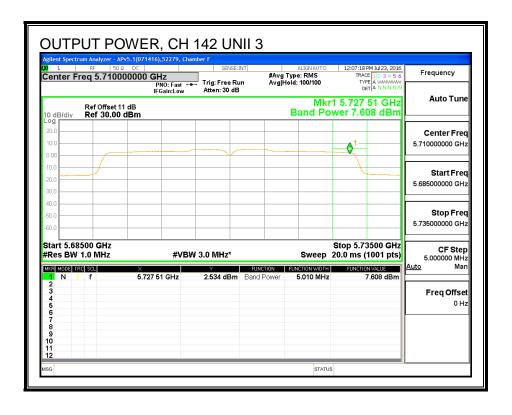
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	7.81	7.61	10.72	30.00	-19.28

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	0.37	0.08	3.23	30.00	-26.77

OUTPUT POWER, CHAIN 0

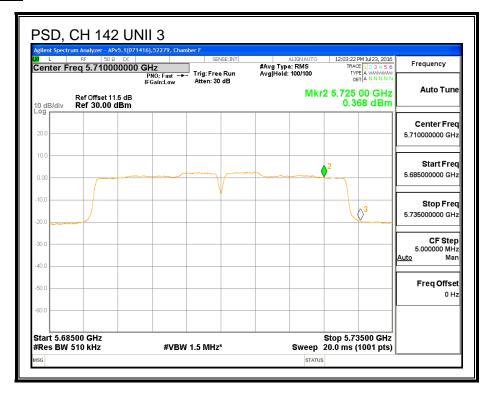


OUTPUT POWER, CHAIN 1

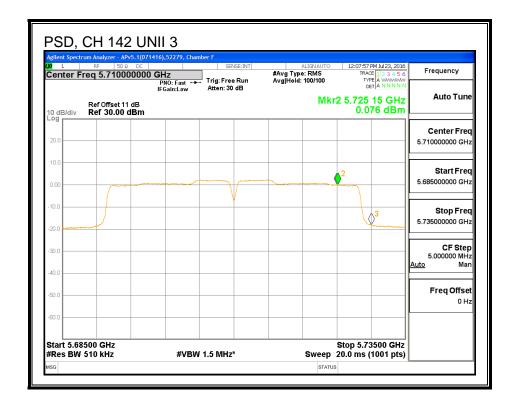


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PSD, CHAIN 0



PSD, CHAIN 1



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8.30.2. 6 dB BANDWIDTH

LIMITS

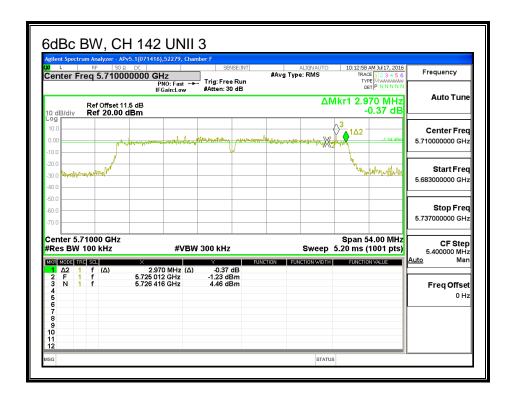
FCC §15.407 (e)

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

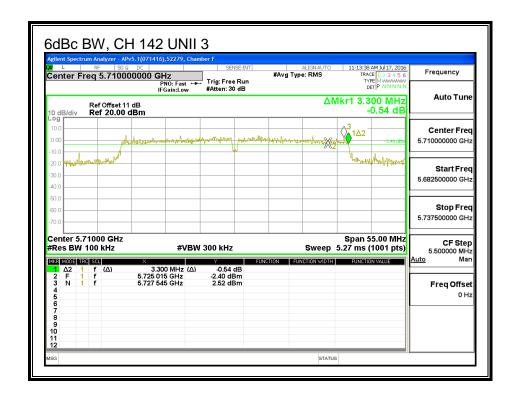
RESULTS

Channel	Frequency	6 dB BW	6 dB BW
		Chain 0	Chain 1
	(MHz)	(MHz)	(MHz)
142	5710	2.97	3.30

CHAIN 0



CHAIN 1



8.31. 802.11ac VHT80 CHAIN 0 MODE IN THE 5.6 GHz BAND

8.31.1. 26 dB BANDWIDTH

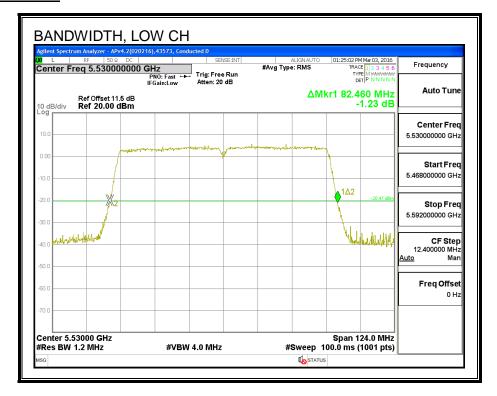
LIMITS

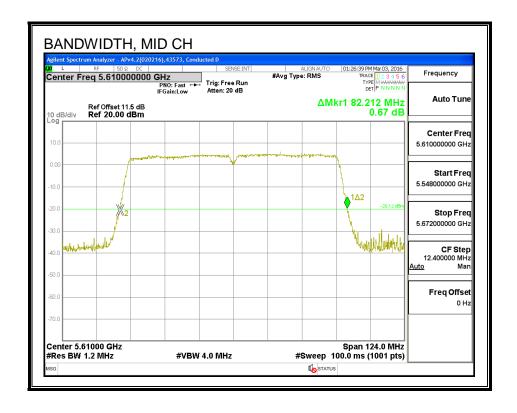
None; for reporting purposes only.

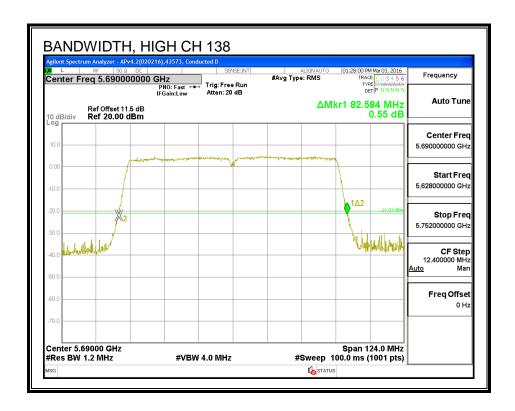
RESULTS

Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Low	5530	82.46
Mid	5610	82.21
High	5690	82.58

26 dB BANDWIDTH







8.31.2. 99% BANDWIDTH

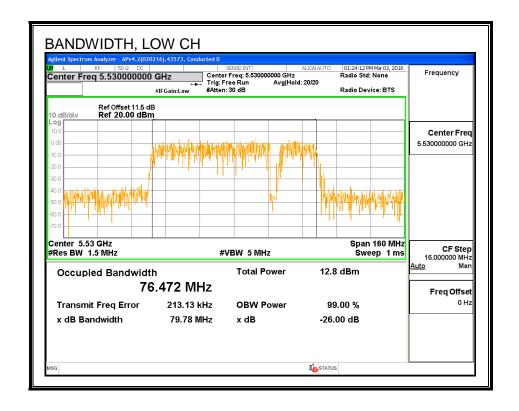
LIMITS

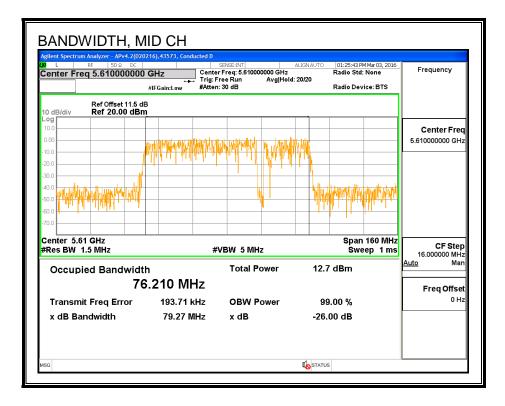
None; for reporting purposes only.

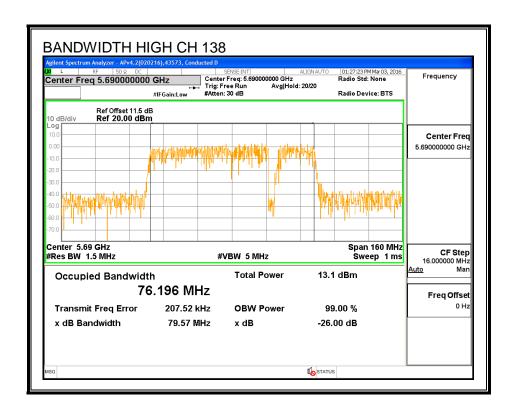
RESULTS

Frequency	99% Bandwidth
(MHz)	(MHz)
5530	76.472
5610	76.210
5690	76.196

99% BANDWIDTH







8.31.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	52279	Date:	7/13/16
-----	-------	-------	---------

Channel	Frequency	Power
	(MHz)	(dBm)
Low	5530	14.08
Mid	5610	16.54
High	5690	16.50

8.31.4. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

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

TEST PROCEDURE

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

Straddle channel power is measured using PXA spectrum analyzer, duty cycle correction factor is required.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

ID.	52279	Date:	7/13/16
ID.	32273	Date.	1/13/10

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Min	Directional	Power	PSD
		26 dB	99%	Gain	Limit	Limit
		BW	BW			
	(MHz)	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
Low	5530	82.46	76.472	0.17	24.00	11.00
High	5610	82.21	76.210	0.17	24.00	11.00

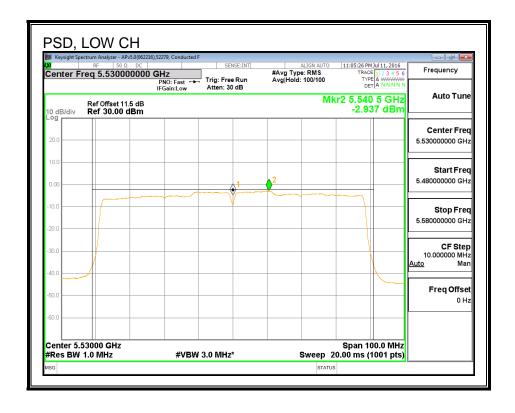
Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd PSD
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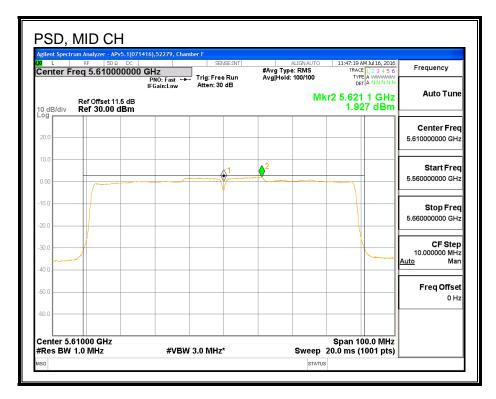
Output Power Results

Channel	Frequency	Chain 0	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(5.5)				
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	(MHz) 5530	(dBm) 13.92	(dBm) 14.08	(dBm) 24.00	-9.93

	. • = 1.000.10							
Channe	Frequency	Chain 0	Total	PSD	PSD			
		Meas	Corr'd	Limit	Margin			
		PSD	PSD					
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)			
Low	5530	-2.94	-2.78	11.00	-13.78			
High	5610	1.93	2.09	11.00	-8.91			

<u>PSD</u>





8.31.5. STRADDLE CHANNEL 138 RESULTS

UNII-2C BAND

Bandwidth, Antenna Gain, and Limits

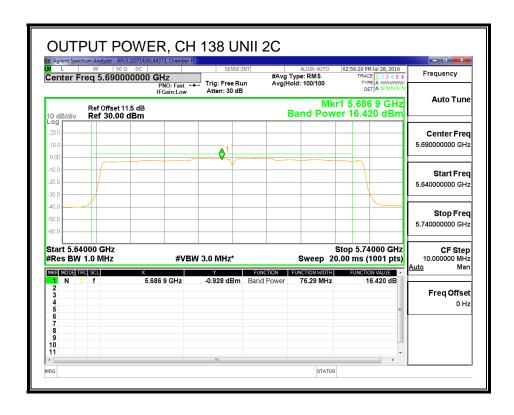
Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
138	5690	76.29	0.17	0.17	24.00	11.00

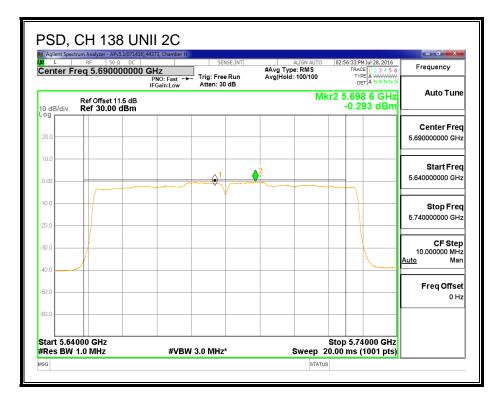
Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd Power & PSD
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Output Power Results

Channel	Frequency	Chain 0	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	16.42	16.58	24.00	-7.42

Channel	Frequency	Chain 0	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	-0.29	-0.13	11.00	-11.13





UNII-3 BAND

Antenna Gain and Limit

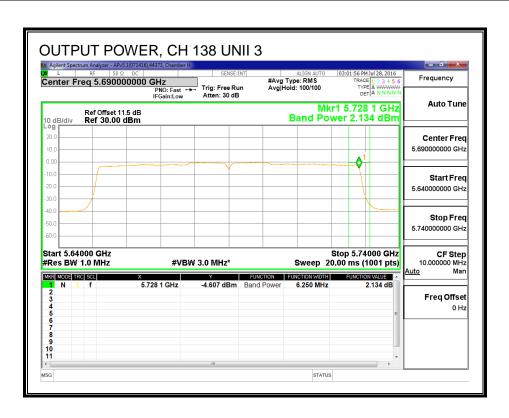
Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
138	5690	6.29	0.17	30.00	30.00

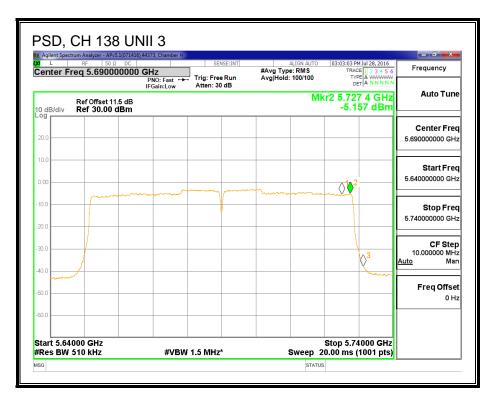
Duty Cycle CF (dB) 0.	16 Included in Ca	alculations of Corr'd Power & PSD
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Output Power Results

Channel	Frequency	Chain 0	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	2.13	2.29	30.00	-27.71

Channe	I Frequency	Chain 0	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	-5.16	-5.00	30.00	-35.00





8.31.7. 6 dB BANDWIDTH

LIMITS

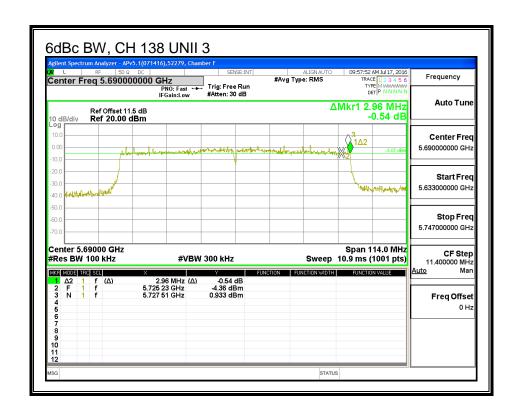
FCC §15.407 (e)

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

RESULTS

Channel	Frequency	6 dB Bandwidth	
	(MHz)	(MHz)	
High	5690	2.96	

6 dB BANDWIDTH



8.32. 802.11ac VHT80 CHAIN 1 MODE IN THE 5.6 GHz BAND

8.32.1. 26 dB BANDWIDTH

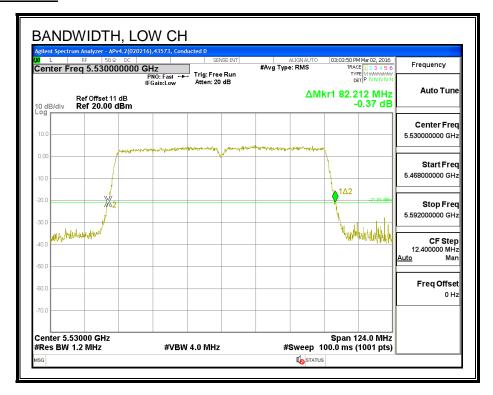
LIMITS

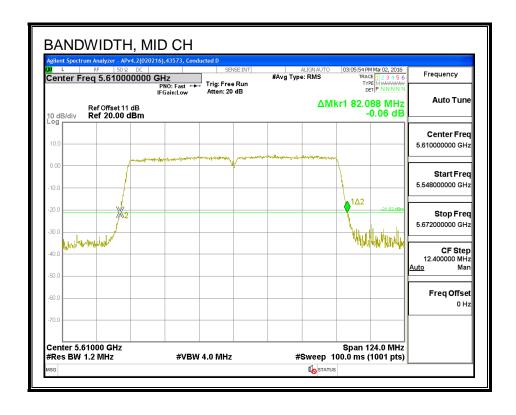
None; for reporting purposes only.

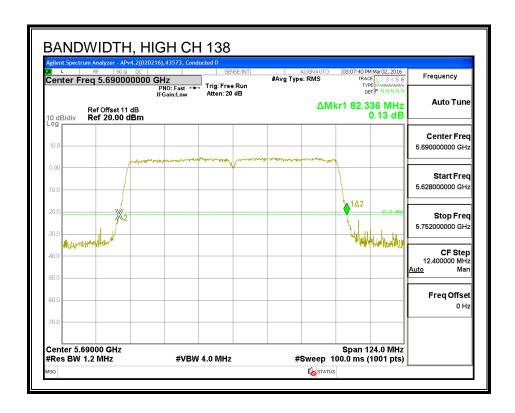
RESULTS

Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Low	5530	82.21
Mid	5610	82.09
High	5690	82.34

26 dB BANDWIDTH







8.32.2. 99% BANDWIDTH

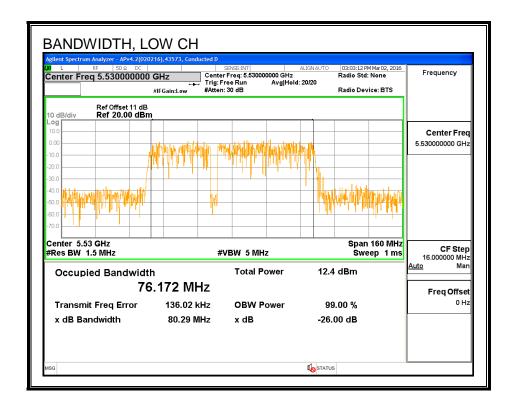
LIMITS

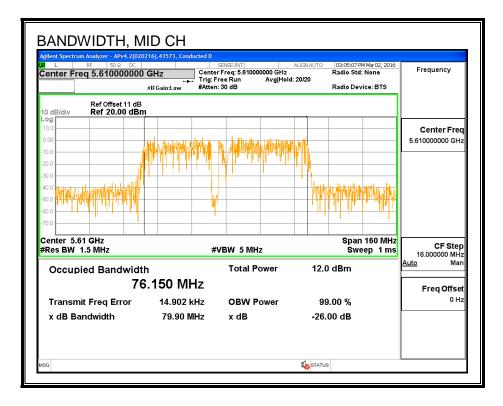
None; for reporting purposes only.

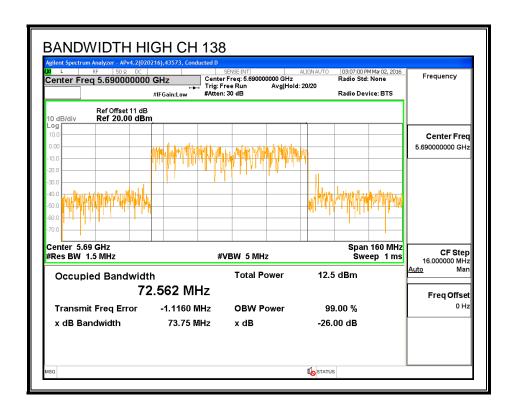
RESULTS

Frequency	99% Bandwidth
(MHz)	(MHz)
5530	76.172
5610	76.150
5690	72.562

99% BANDWIDTH







8.32.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	52279	Date:	7/17/16
-----	-------	-------	---------

Channel	Frequency	Power
	(MHz)	(dBm)
Low	5530	14.06
Mid	5610	19.00
High	5690	19.00

8.32.4. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

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

TEST PROCEDURE

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

Straddle channel power is measured using PXA spectrum analyzer, duty cycle correction factor is required.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

ID:	52279	Date:	7/17/16

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Min	Directional	Power	PSD
		26 dB	99%	Gain	Limit	Limit
		BW	BW			
	(MHz)	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
Low	5530	82.21	76.172	-0.80	24.00	11.00
High	5610	82.09	76.150	-0.80	24.00	11.00

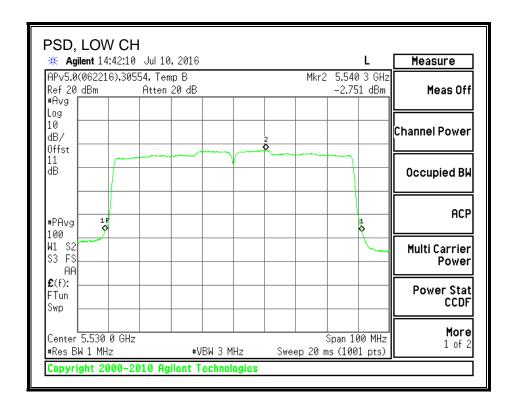
Duty Cycle CF (dB) 0.16	Included in Calculations of Corr'd PSD
-------------------------	--

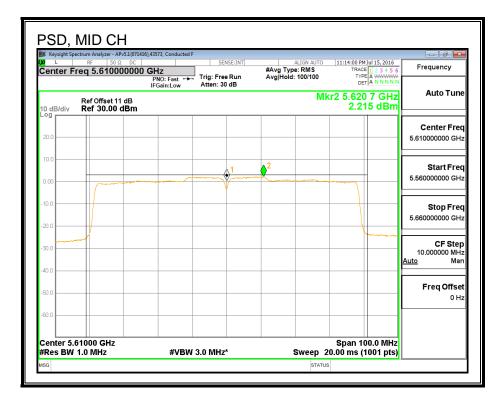
Output Power Results

Channel	Frequency	Chain 1	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	(MHz) 5530	(dBm) 13.90	(dBm) 14.06	(dBm) 24.00	(dB) -9.94

	. O I NOCULE					
Channel	Frequency	Chain 1	Total	PSD	PSD	
		Meas	Corr'd	Limit	Margin	
		PSD	PSD			
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)	
Low	5530	-2.75	-2.59	11.00	-13.59	
High	5610	2.22	2.38	11.00	-8.63	

PSD





8.32.5. STRADDLE CHANNEL 138 RESULTS

UNII-2C BAND

Bandwidth, Antenna Gain, and Limits

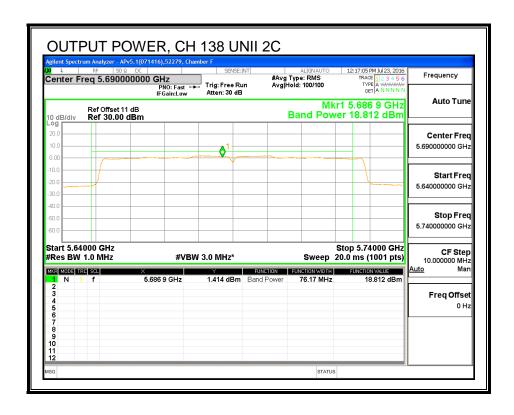
Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
138	5690	76.17	-0.80	-0.80	24.00	11.00

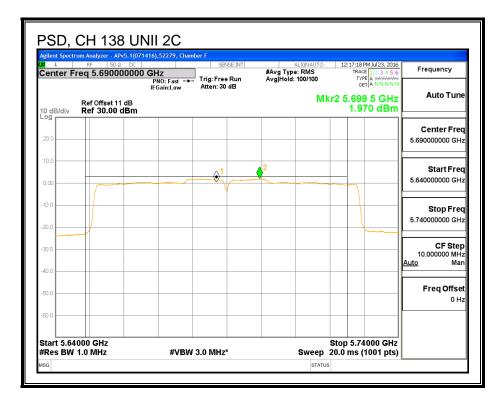
Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd Power & PSD
--------------------	------	--

Output Power Results

Channel	Frequency	Chain 1	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	18.81	18.97	24.00	-5.03

Channel	Frequency	Chain 1	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
	, ,	()	((/	` '





UNII-3 BAND

Antenna Gain and Limit

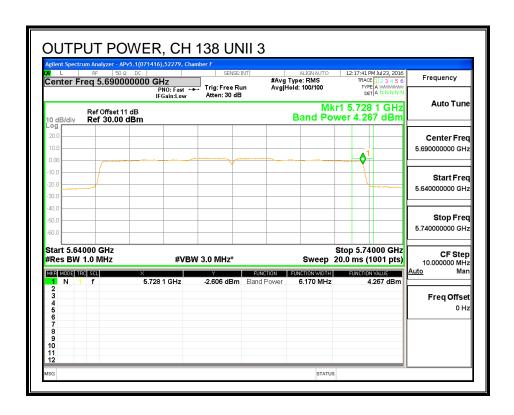
Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
138	5690	6.17	-0.80	30.00	30.00

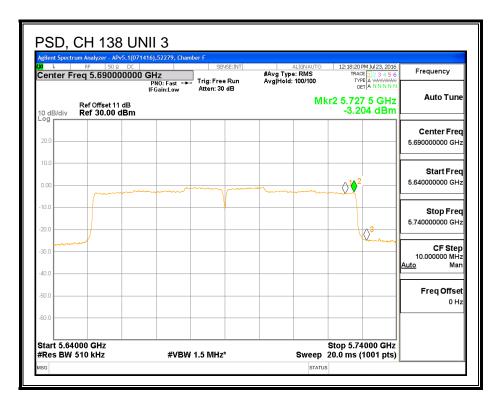
Duty Cycle CF (dB) 0.16	Included in Calculations of Corr'd Power & PSD
-------------------------	--

Output Power Results

Channel	Frequency	Chain 1	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	4.27	4.43	30.00	-25.57

Channel	Frequency	Chain 1	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	-3.20	-3.04	30.00	-33.04





8.32.7. 6 dB BANDWIDTH

LIMITS

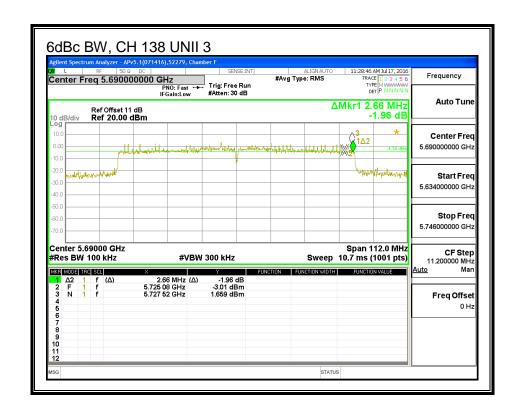
FCC §15.407 (e)

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

RESULTS

Channel Frequency		6 dB Bandwidth	
(MHz)		(MHz)	
High	5690	2.66	

6 dB BANDWIDTH



802.11ac VHT80 2Tx CDD MODE IN THE 5.6 GHz BAND (5610MHz for 8.33. FCC only)

8.33.1. 26 dB BANDWIDTH

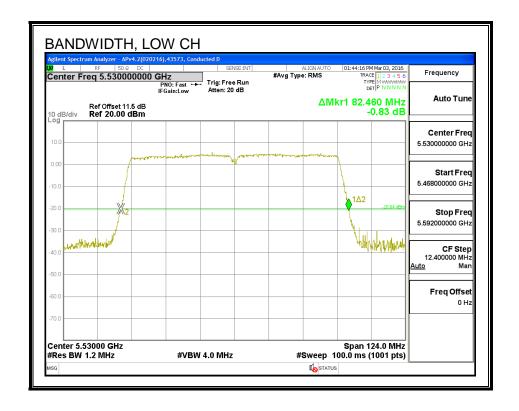
LIMITS

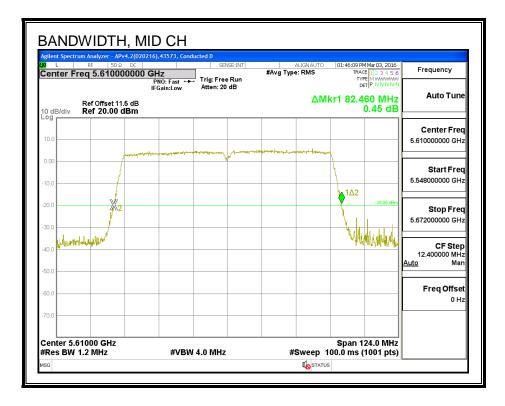
None; for reporting purposes only.

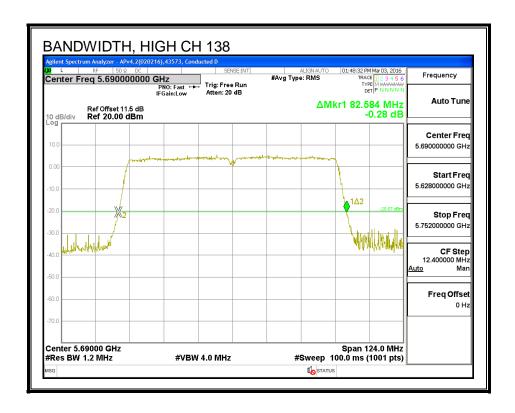
RESULTS

Channel	Frequency	26 dB BW	26 dB BW
		Chain 0	Chain 1
	(MHz)	(MHz)	(MHz)
Low	5530	82.46	82.46
Mid	5610	82.46	82.34
High	5690	82.58	82.13

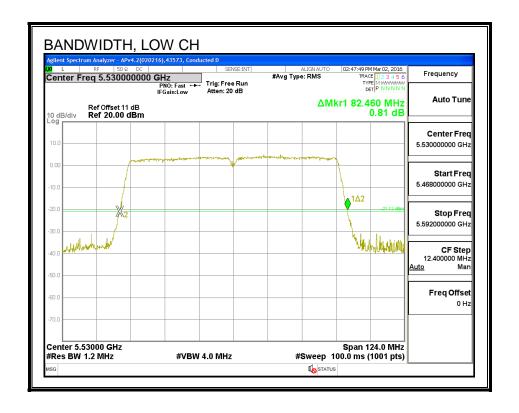
26 dB BANDWIDTH, CHAIN 0



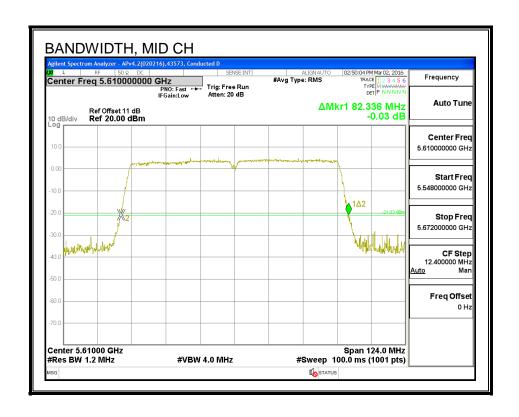


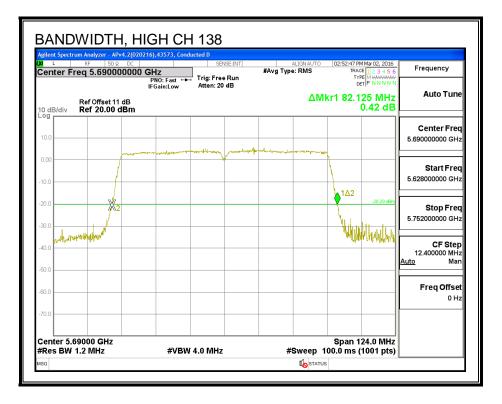


26 dB BANDWIDTH, CHAIN 1



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8.33.2. 99% BANDWIDTH

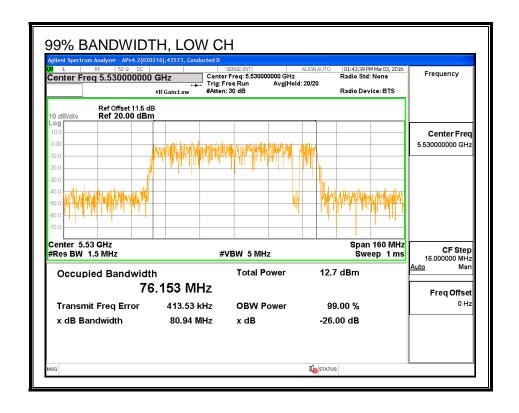
LIMITS

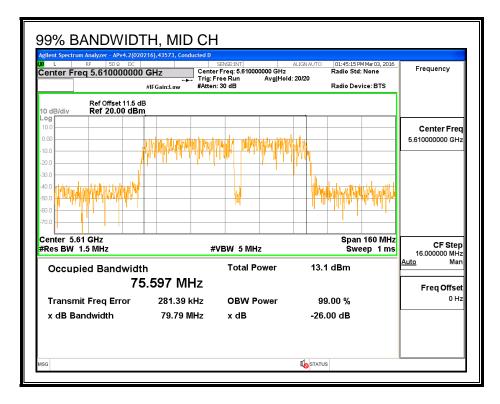
None; for reporting purposes only.

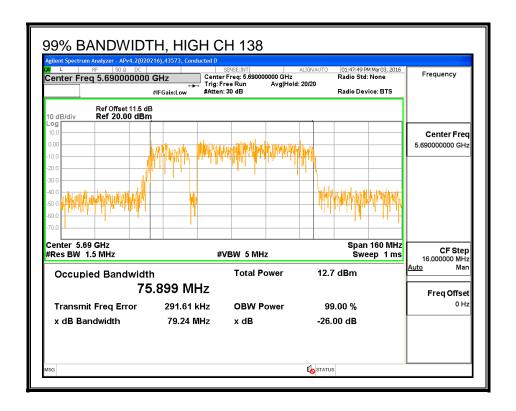
RESULTS

Channel	Frequency	99% BW	99% BW
		Chain 0	Chain 1
	(MHz)	(MHz)	(MHz)
Low	5530	76.153	72.743
Mid	5610	75.597	76.377
High	5690	75.899	75.954

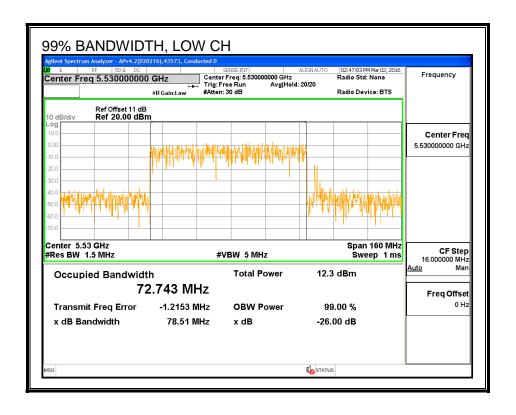
99% BANDWIDTH, CHAIN 0

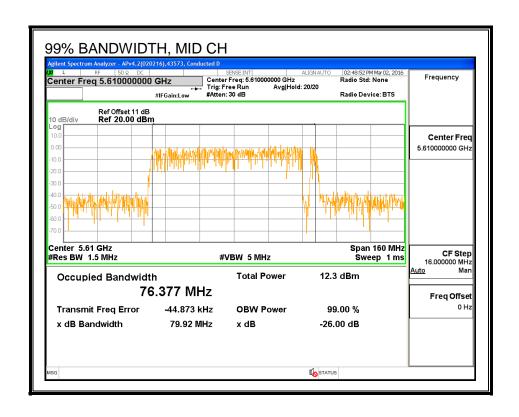


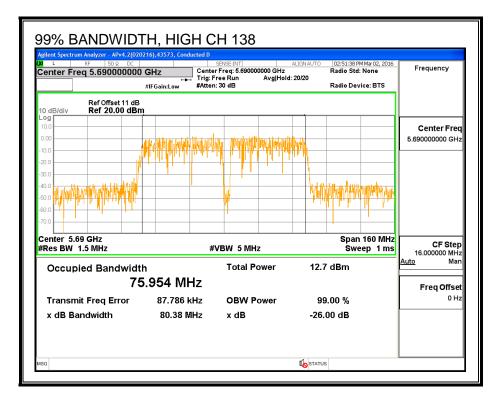




99% BANDWIDTH, CHAIN 1







8.33.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID: 5	52279	Date:	7/13/16
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Average Power Results

Channel	Frequency	Chain 0	Chain 1	Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Low	5530	13.91	13.87	17.09
Mid	5610	16.44	19.00	21.11
High	5690	16.50	18.90	21.06

8.33.4. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

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

TEST PROCEDURE

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

Straddle channel power is measured using PXA spectrum analyzer, duty cycle correction factor is required.

DIRECTIONAL ANTENNA GAIN

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

Chain 0	Chain 1	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
0.17	-0.80	-0.29

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

Chain 0	Chain 1	Correlated Chains	
Antenna	Antenna	Directional	
Gain	Gain	Gain	
(dBi)	(dBi)	(dBi)	
0.17	-0.80	2.71	

RESULTS

ID:	52279	Date:	7/13/16
ID.	02210	Date.	17 10/10

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	(MHz) 5530	(MHz) 82.46	(MHz) 72.743	(dBi) -0.290	(dBi) 2.710	(dBm) 24.00	(dBm) 11.00

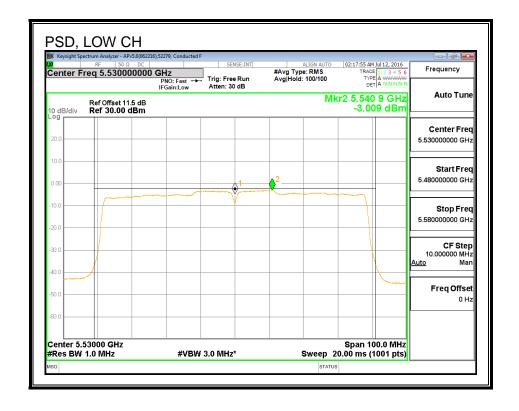
Duty Cycle CF (dB) 0.19	Included in Calculations of Corr'd PSD
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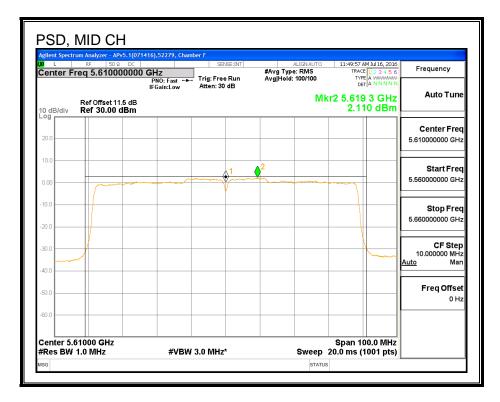
Output Power Results

Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
	(1411 12)	(abiii)	(abiii)	(abiii)	(abiii)	(GD)
Low	5530	13.91	13.87	17.09	24.00	-6.91

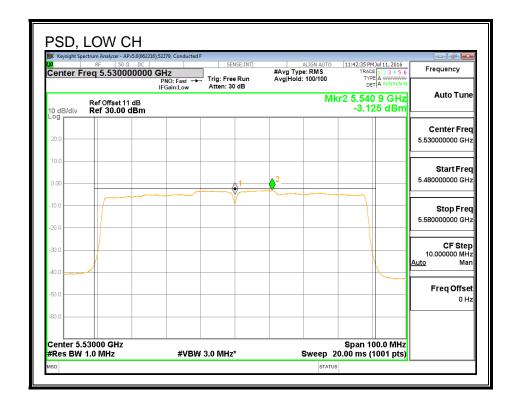
I OD NOS	1113					
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5530	-3.01	-3.13	0.13	11.00	-10.87
High	5610	2.11	2.10	5.31	11.00	-5.69

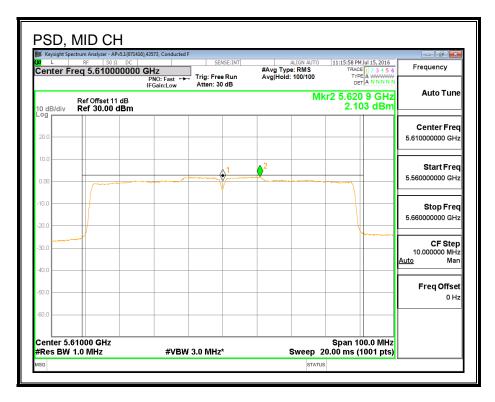
PSD, CHAIN 0





PSD, CHAIN 1





8.33.5. 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	76.00	-0.29	2.71	24.00	11.00

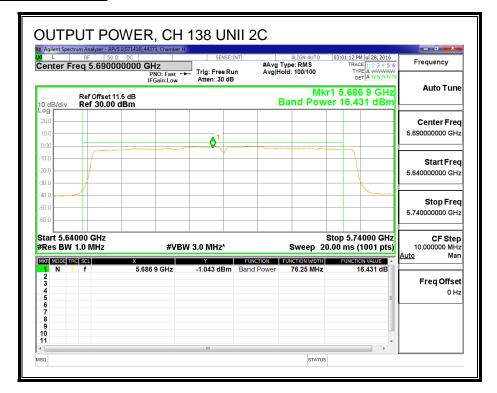
Duty Cycle Cr (db) 0.10 lincided in Calculations of Corr d Power & Ps	Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd Power & PSD
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Output Power Results

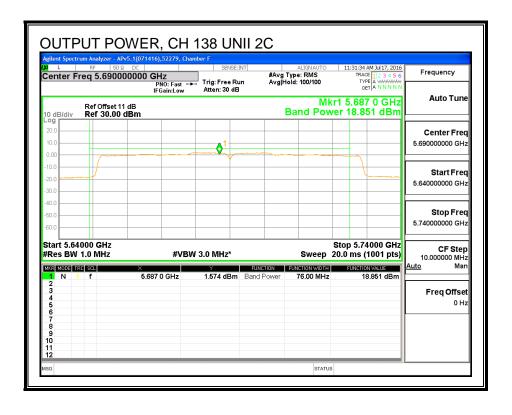
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	16.43	18.85	20.98	24.00	-3.02

(Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
			Meas	Meas	Corr'd	Limit	Margin
			PSD	PSD	PSD		
		(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Γ	138	5690	-0.29	2.03	4.19	11.00	-6.81

OUTPUT POWER, CHAIN 0

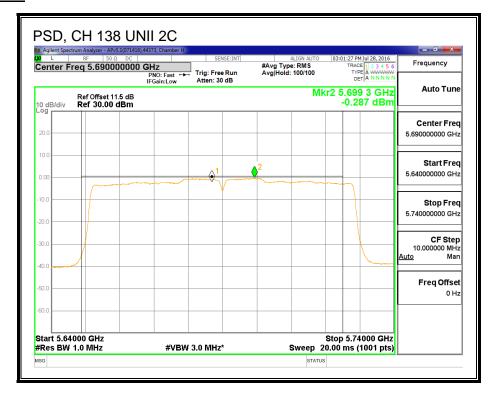


OUTPUT POWER, CHAIN 1

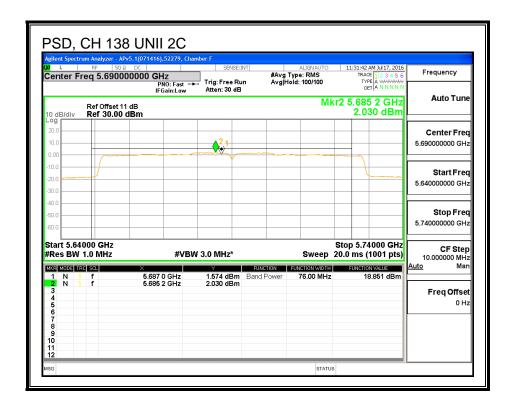


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PSD, CHAIN 0



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				
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
138	5690	6.00	-0.29	2.71	30.00	30.00

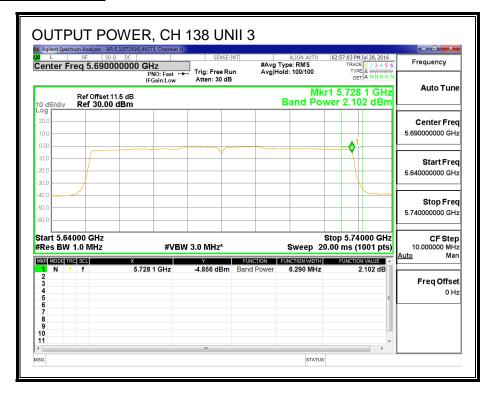
Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd Power & PSD
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Output Power Results

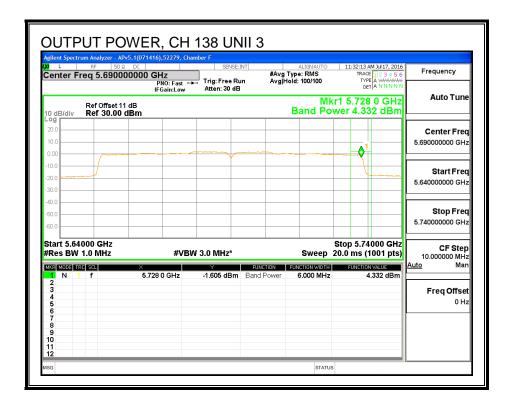
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	2.10	4.33	6.53	30.00	-23.47

Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	-5.30	-3.39	-1.07	30.00	-31.07

OUTPUT POWER, CHAIN 0

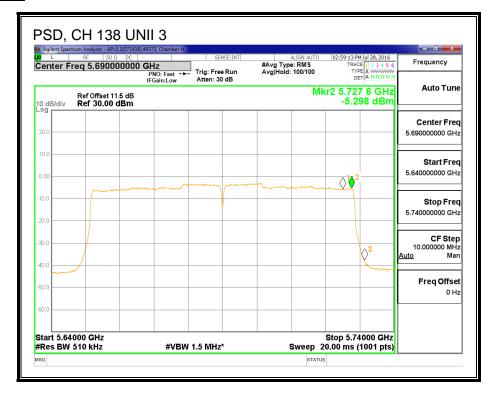


OUTPUT POWER, CHAIN 1

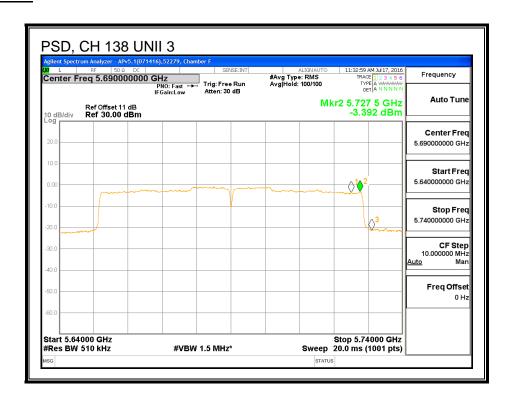


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PSD, CHAIN 0



PSD, CHAIN 1



8.33.7. 6 dB BANDWIDTH

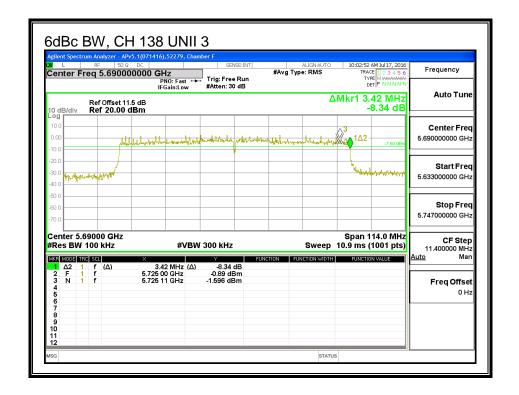
LIMITS

FCC §15.407 (e)

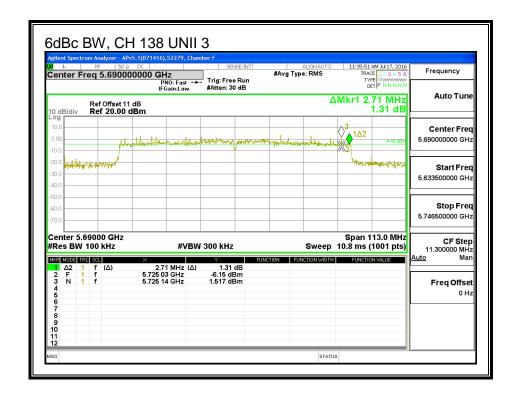
The minimum 6 dB bandwidth shall be at least 500 kHz.

Channel	Channel Frequency		6 dB BW	
		Chain 0	Chain 1	
	(MHz)	(MHz)	(MHz)	
High	5690	3.42	2.71	

CHAIN 0



CHAIN 1



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8.34. 802.11n HT20 CHAIN 0 MODE IN THE 5.8 GHz BAND

8.34.1. 6 dB BANDWIDTH

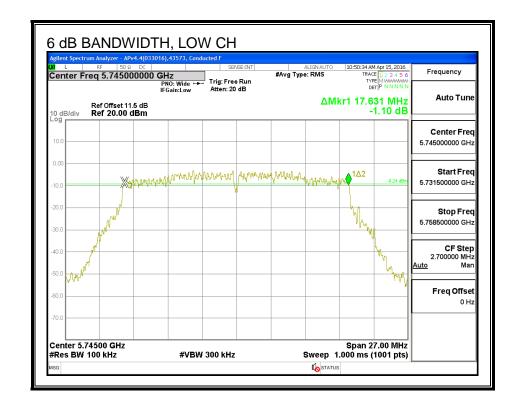
LIMITS

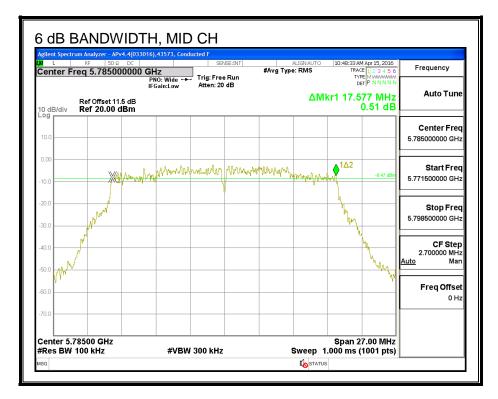
FCC §15.407 (e)

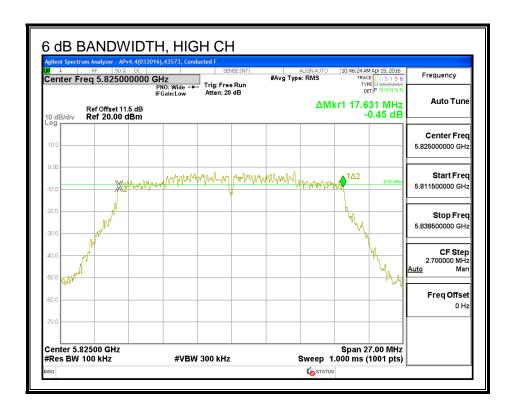
The minimum 6 dB bandwidth shall be at least 500 kHz.

Channel	Frequency	6 dB Bandwidth	Minimum Limit
	(MHz)	(MHz)	(MHz)
Low	5745	17.63	0.5
Mid	5785	17.58	0.5
High	5825	17.63	0.5

6 dB BANDWIDTH







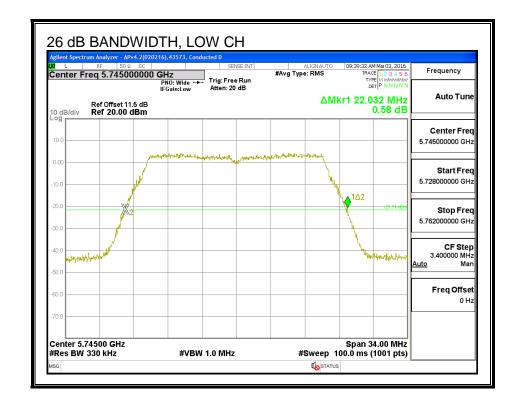
8.34.2. 26 dB BANDWIDTH

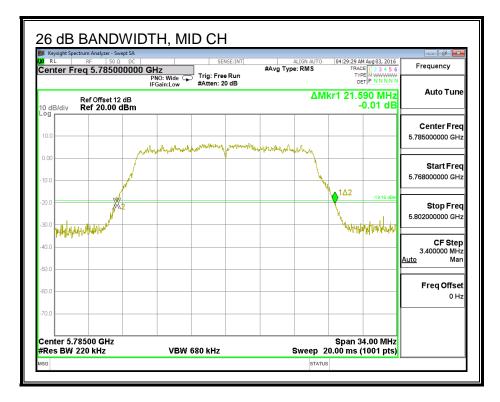
LIMITS

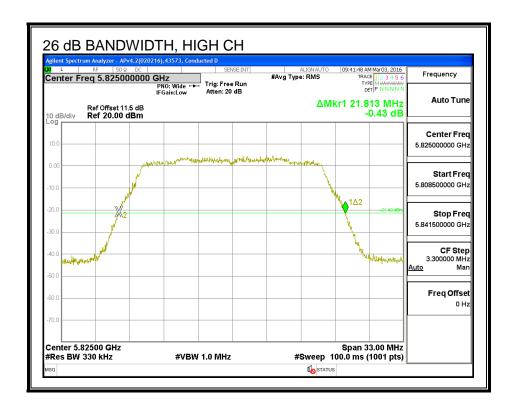
None, for reporting purposes only

Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Low	5745	22.03
Mid	5785	21.59
High	5825	21.81

26 dB BANDWIDTH







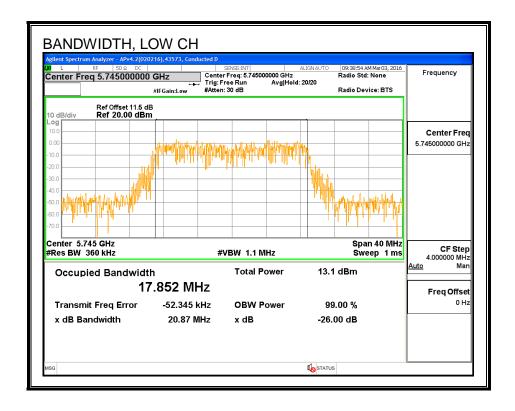
8.34.3. 99% BANDWIDTH

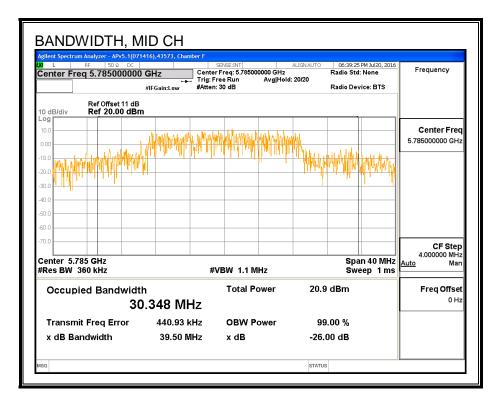
LIMITS

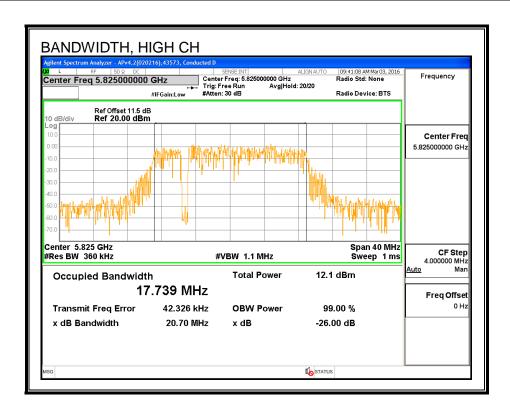
None; for reporting purposes only.

Frequency	99% Bandwidth
(MHz)	(MHz)
5745	17.852
5785	30.348
5825	17.739

99% BANDWIDTH







8.34.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

ID:	52279	Date:	7/13/16
-----	-------	-------	---------

Channel	Frequency	Power
	(MHz)	(dBm)
Low	5745	16.41
Mid	5785	16.37
High	5825	16.50

8.34.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

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

TEST PROCEDURE

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

ID:	52279	Date:	7/13/16
ID.	02210	Date.	17 10/10

Antenna Gain and Limit

Channel	Frequency	Directional	Power	
		Gain	Limit	
		for Power		
	(MHz)	(dBi)	(dBm)	
Low	5745	0.22	30.00	
Mid	5785	0.22	30.00	
High	5825	0.22	30.00	

Output Power Results

Output I ower results						
Channel	Frequency	Chain 0	Total	Power	Power	
		Meas	Corr'd	Limit	Margin	
		Power	Power			
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)	
Low	5745	16.41	16.41	30.00	-13.59	
Mid	5785	16.37	16.37	30.00	-13.63	
High	5825	16.50	16.50	30.00	-13.50	

8.34.6. PSD

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Antenna Gain and Limits

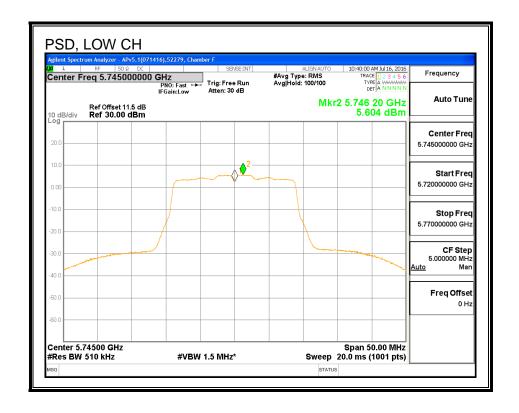
Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Low	5745	0.22	30.00
Mid	5785	0.22	30.00
High	5825	0.22	30.00

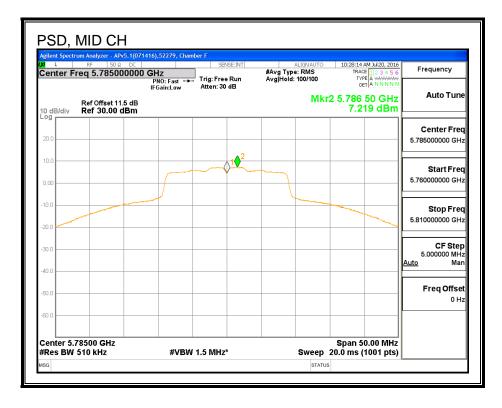
The state of the s		
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

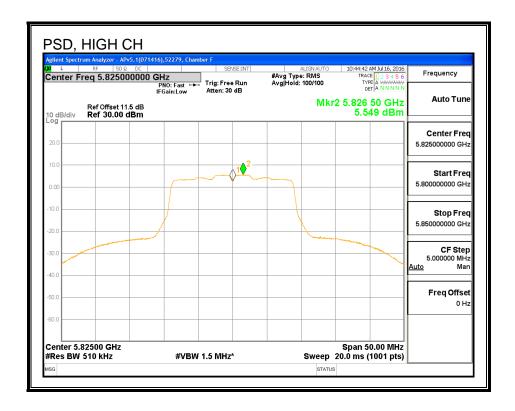
PSD Results

Channel	Frequency	Chain 0	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5745	5.60	5.60	30.00	-24.40
Mid	5785	7.22	7.22	30.00	-22.78
High	5825	5.55	5.55	30.00	-24.45

<u>PSD</u>







802.11n HT20 CHAIN 1 MODE IN THE 5.8 GHz BAND 8.35.

8.35.1. 6 dB BANDWIDTH

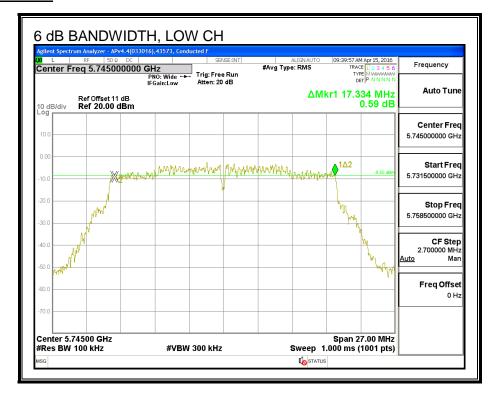
LIMITS

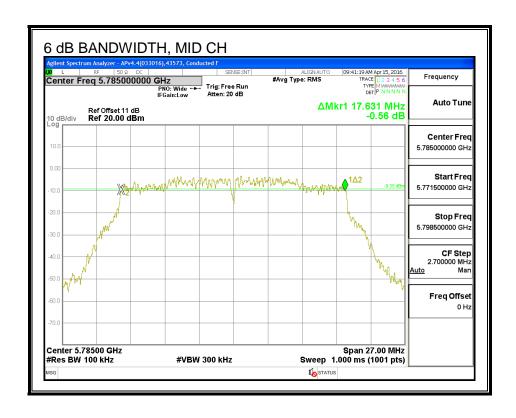
FCC §15.407 (e)

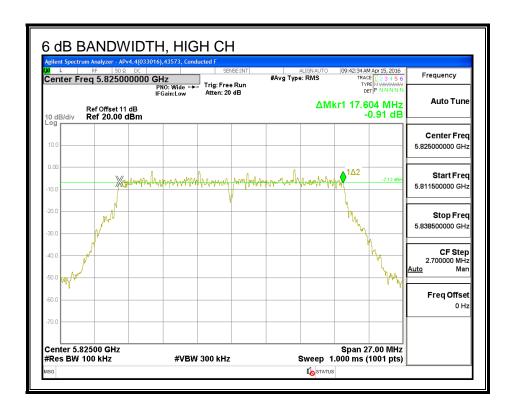
The minimum 6 dB bandwidth shall be at least 500 kHz.

Channel	Frequency	6 dB Bandwidth	Minimum Limit
	(MHz)	(MHz)	(MHz)
Low	5745	17.33	0.5
Mid	5785	17.63	0.5
High	5825	17.60	0.5

6 dB BANDWIDTH







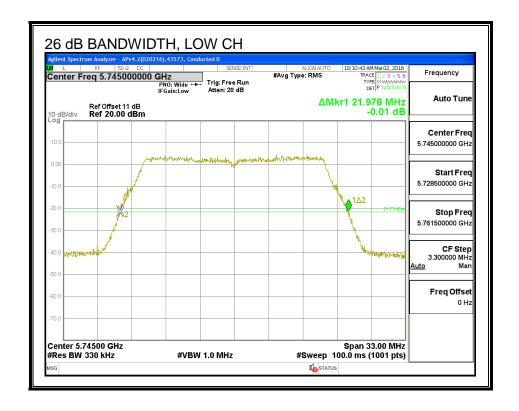
8.35.2. 26 dB BANDWIDTH

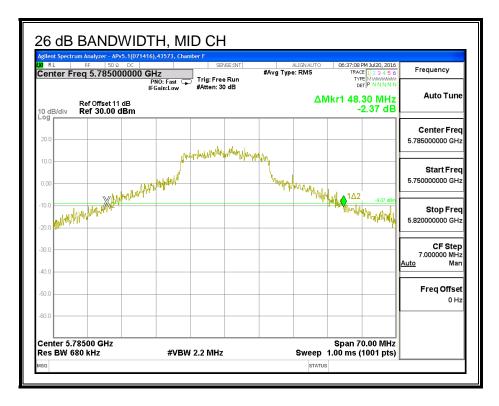
LIMITS

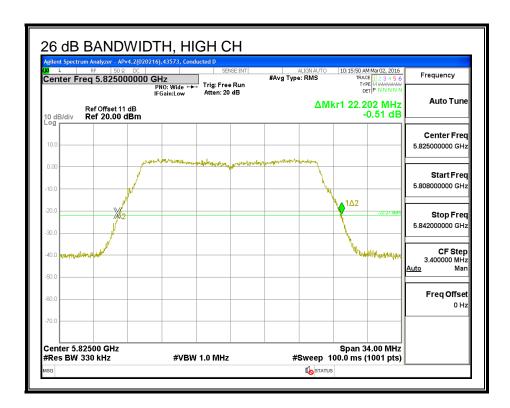
None, for reporting purposes only

Channel	Frequency	26 dB Bandwidth	
	(MHz)	(MHz)	
Low	5745	21.98	
Mid	5785	48.30	
High	5825	22.20	

26 dB BANDWIDTH







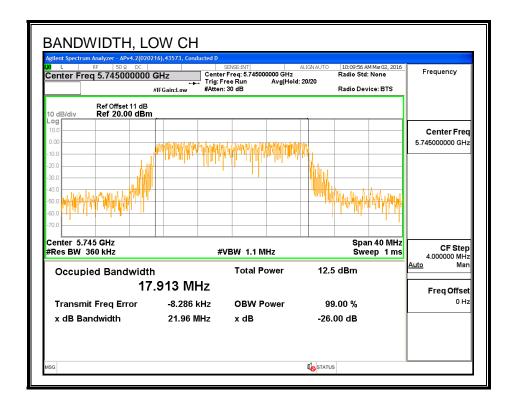
8.35.3. 99% BANDWIDTH

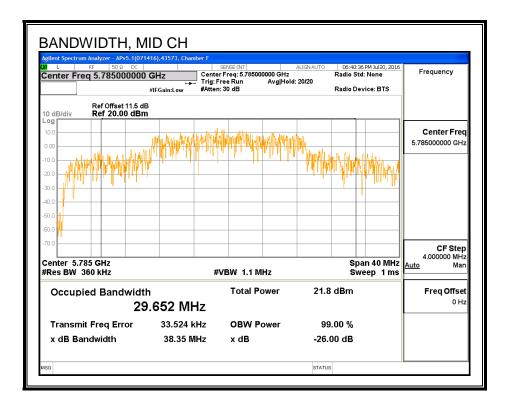
LIMITS

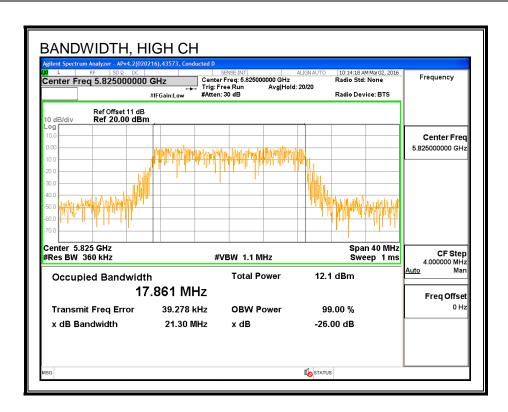
None; for reporting purposes only.

Channel	Frequency	99% Bandwidth
	(MHz)	(MHz)
Low	5745	17.913
Mid	5785	29.652
High	5825	17.861

99% BANDWIDTH







8.35.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

ID:	52279	Date:	7/16/16
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Channel	Frequency	Power
	(MHz)	(dBm)
Low	5745	19.46
Mid	5785	20.48
High	5825	19.36