8.31.3. AVERAGE POWER

<u>LIMITS</u>

None; for reporting purposes only.

<u>RESULTS</u>

Channel	Frequency	Chain 0	Chain 1	Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Low	5510	15.96	15.91	18.95
Mid	5590	18.45	18.92	21.70
High	5670	16.41	16.42	19.43
142	5710	18.47	18.46	21.48

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8.31.4. 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.

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)
-3.40	-0.44	-1.67

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)
-3.40	-0.44	1.22

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0.00

RESULTS

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	40.18	36.491	-1.67	1.22	24.00	11.00
Mid	5550	40.18	36.358	-1.67	1.22	24.00	11.00
High	5670	40.00	36.435	-1.67	1.22	24.00	11.00

Duty Cycle CF (dB)

Included in Calculations of Corr'd Power & PSD

Output Power Results

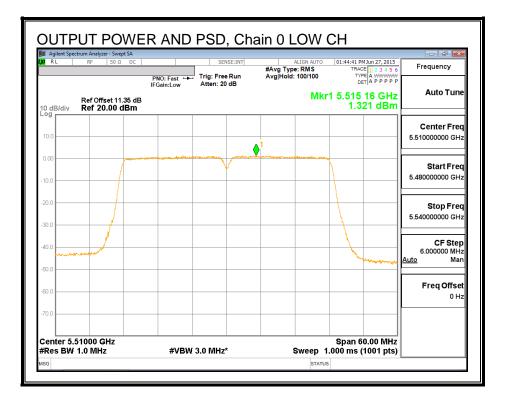
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	15.96	15.91	18.95	24.00	-5.05
Mid	5550	18.45	18.92	21.70	24.00	-2.30
High	5670	16.41	16.42	19.43	24.00	-4.57

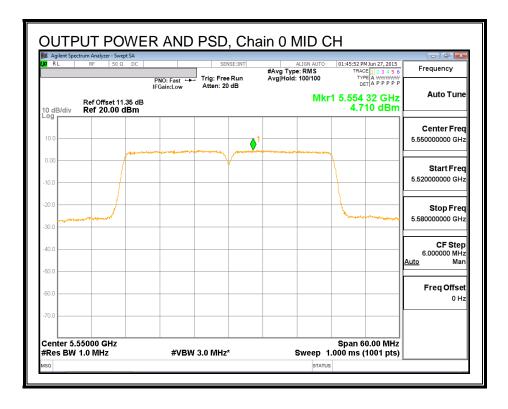
PSD Results

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	1.32	1.66	4.50	11.00	-6.50
Mid	5550	4.71	4.54	7.64	11.00	-3.36
High	5670	2.01	2.21	5.12	11.00	-5.88

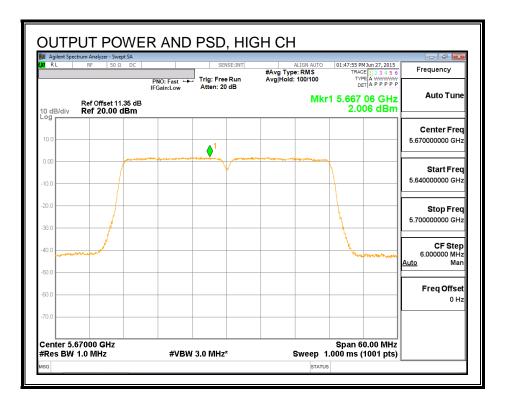
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OUTPUT POWER AND PSD, CHAIN 0

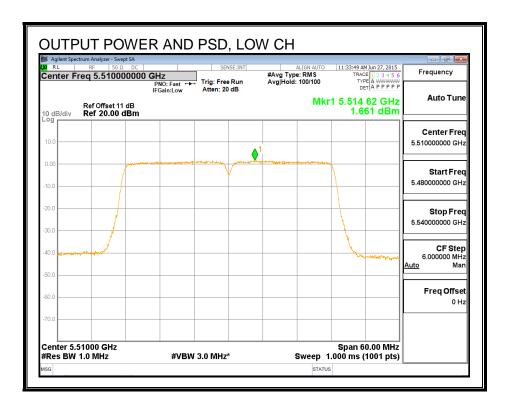




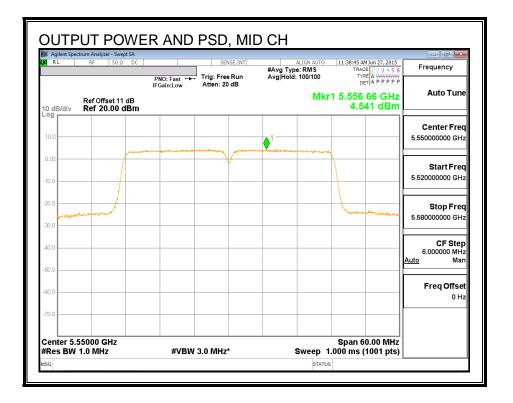
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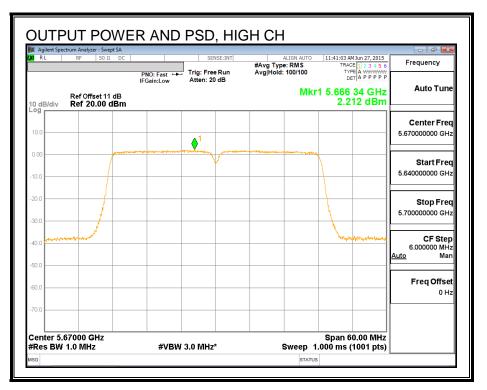


OUTPUT POWER AND PSD, CHAIN 1



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8.31.5. STRADDLE CHANNEL 142 RESULTS

UNII-2C BAND

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
142	5710	34.97	-3.40	-0.44	24.00	11.00

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

Output Power Results

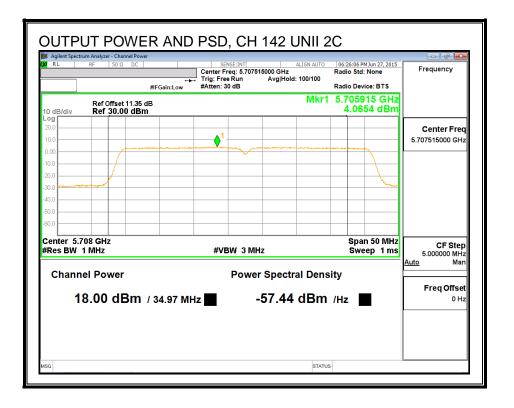
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	18.00	17.94	20.98	24.00	-3.02

PSD Results

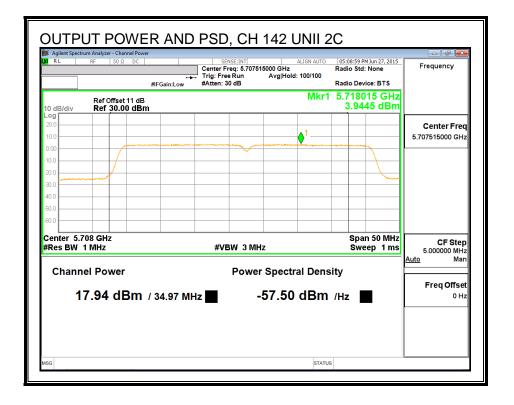
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	4.07	3.94	7.02	11.00	-3.98

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CHAIN 0



<u>CHAIN 1</u>



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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	4.97	-3.40	-0.44	30.00	30.00

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

Output Power Results

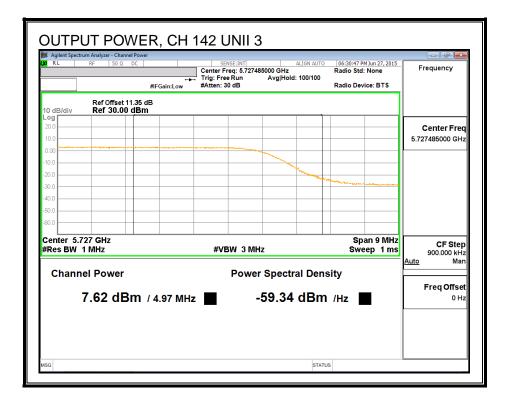
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	7.62	7.24	10.44	30.00	-19.56

PSD Results

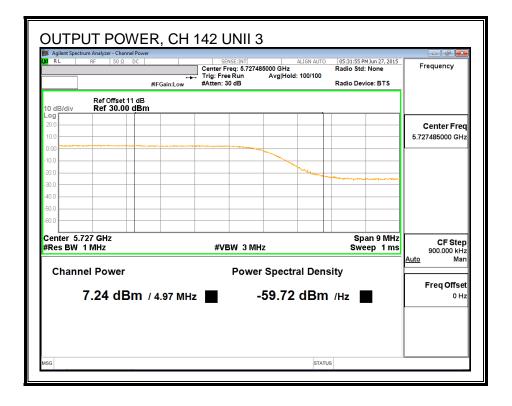
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	3.36	2.79	6.09	30.00	-23.91

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CHAIN 0

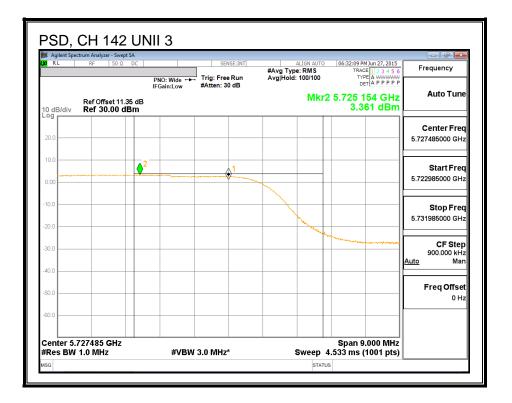


<u>CHAIN 1</u>

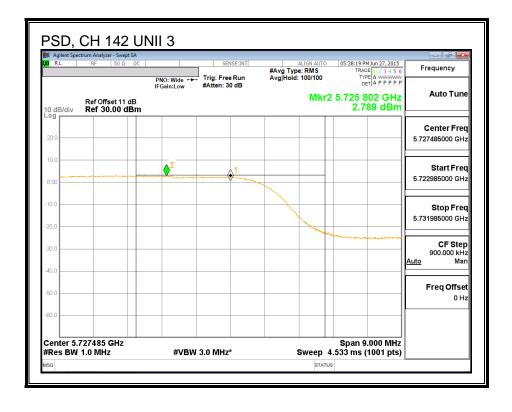


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CHAIN 0



<u>CHAIN 1</u>



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8.31.6. 6 dB BBANDWIDTH

LIMITS

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

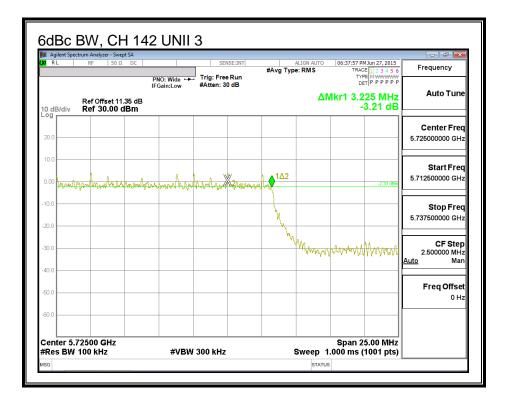
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

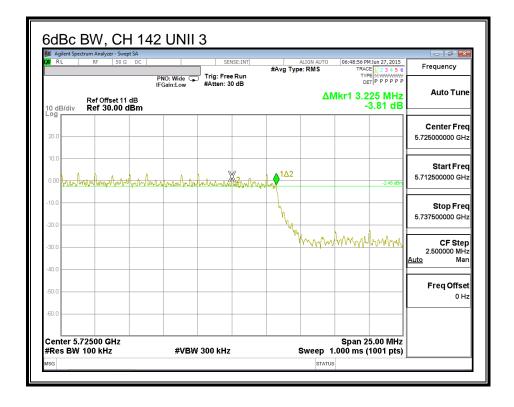
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CHAIN 0



CHAIN 1



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

Note: Covered by 802.11n HT40 2Tx CDD MODE

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

8.33.1. 26 dB BANDWIDTH

<u>LIMITS</u>

None; for reporting purposes only.

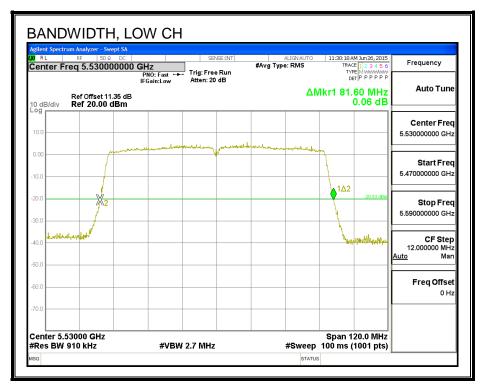
RESULTS

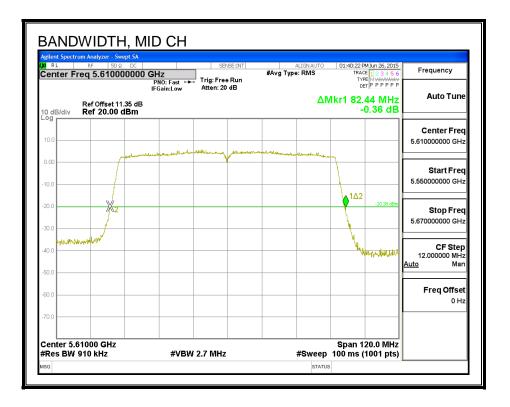
Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Low	5530	81.60
Mid	5610	82.44
High	5690	81.96

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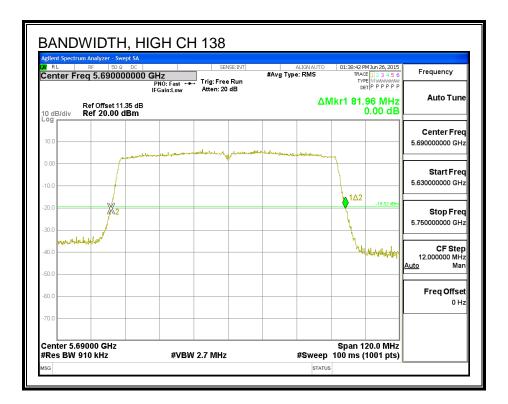
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26 dB BANDWIDTH





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8.33.2. 99% BANDWIDTH

<u>LIMITS</u>

None; for reporting purposes only.

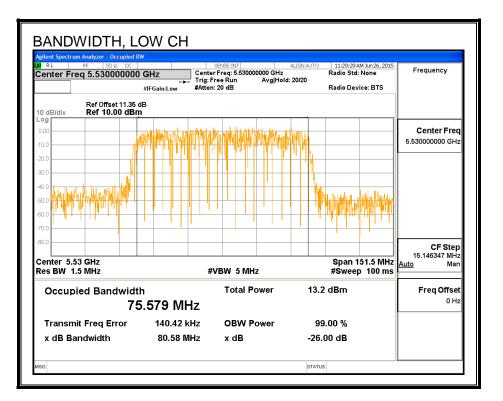
RESULTS

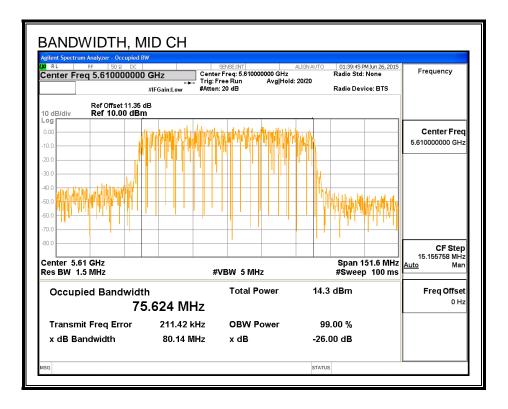
Frequency	99% Bandwidth
(MHz)	(MHz)
5530	75.579
5610	75.624
5690	75.247

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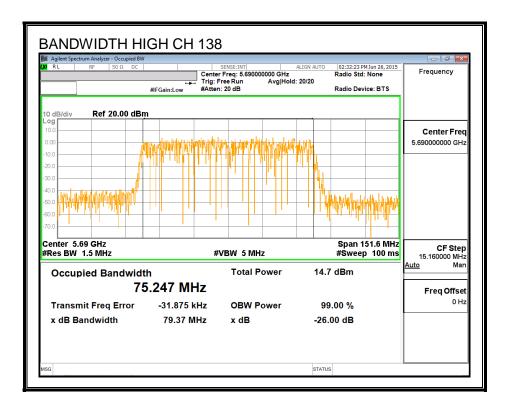
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99% BANDWIDTH





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8.33.3. AVERAGE POWER

<u>LIMITS</u>

None; for reporting purposes only.

<u>RESULTS</u>

Channel	Frequency	Power
	(MHz)	(dBm)
Low	5530	13.97
Mid	5610	16.94
High	5690	18.33

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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.

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.

DIRECTIONAL ANTENNA GAIN

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

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RESULTS

Bandwidth, Antenna Gain, and Limits

Frequency	Min	Min	Directional	Power	PSD
	26 dB	99%	Gain	Limit	Limit
	BW	BW			
(MHz)	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
5530	81.60	75.58	-3.40	24.00	11.00
5610	82.44	75.62	-3.40	24.00	11.00
	(MHz) 5530	26 dB BW (MHz) (MHz) 5530 81.60	26 dB 99% BW BW (MHz) (MHz) 5530 81.60 75.58	26 dB 99% Gain BW BW Harrow (MHz) (MHz) (MHz) (dBi) 5530 81.60 75.58 -3.40	26 dB 99% Gain Limit BW BW EW (MHz) (dBi) (dBm) 5530 81.60 75.58 -3.40 24.00

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

Output Power Results

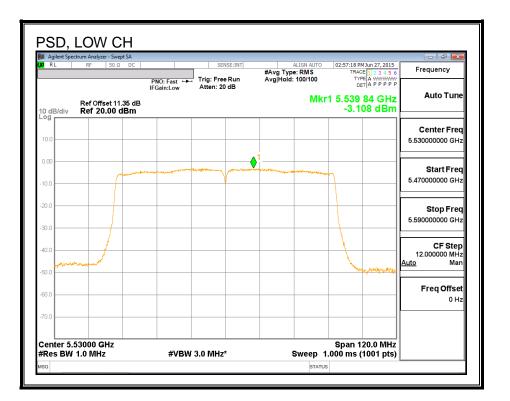
Channel	Frequency	Chain 0	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5530	13.97	14.18	24.00	-9.82
LOW	0000	13.97	11.10	21.00	0.02

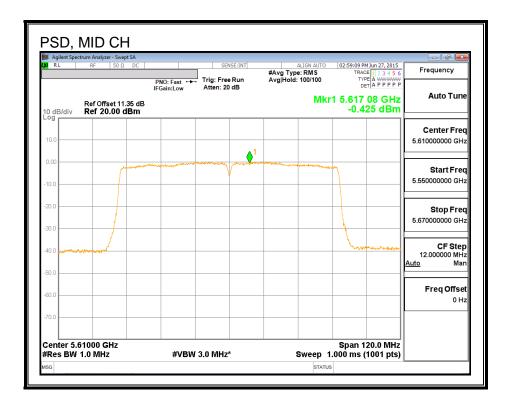
PSD Results

Channel	Frequency	Chain 0	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5530	-3.11	-2.90	11.00	-13.90
LOW	5550	0.11	2.00	11.00	10.00

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PSD,





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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	75.81	-3.40	-3.40	24.00	11.00

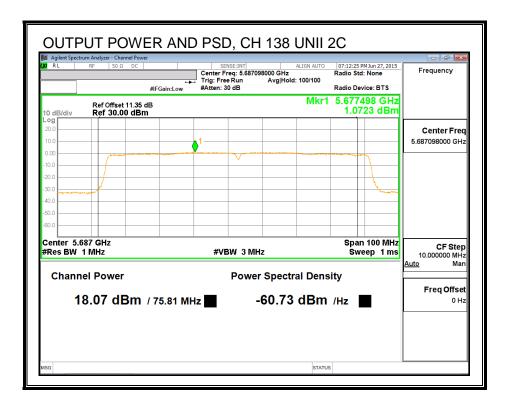
Output Power Results

Channel	Frequency	Chain 0	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	18.07	18.28	24.00	-5.72

PSD Results

Channel	Frequency	Chain 0	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	1.07	1.28	11.00	-9.72

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UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
138	5690	5.81	-3.40	30.00	30.00

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

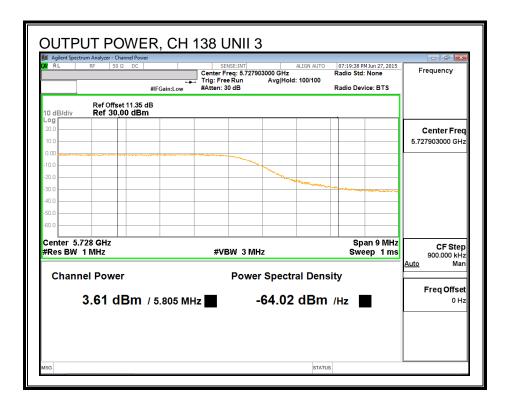
Output Power Results

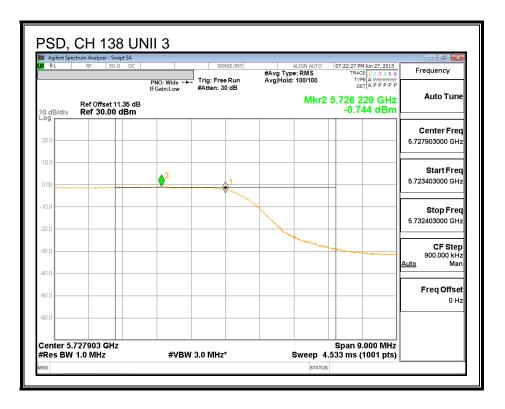
Channel	Frequency	Chain 0	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	3.61	3.82	30.00	-26.18

PSD Results

Channel	Frequency	Chain 0	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	-0.74	-0.53	30.00	-30.53

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8.33.6. 6 dB BANDWIDTH

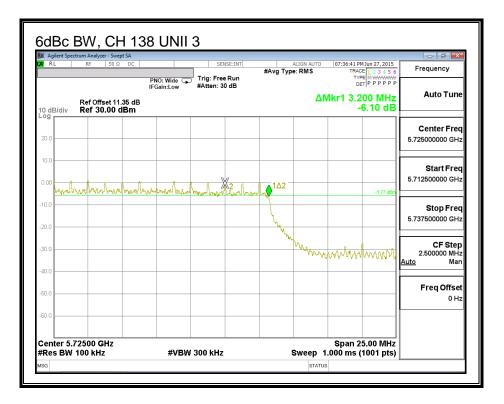
LIMITS

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

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

RESULTS



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

8.34.1. 26 dB BANDWIDTH

<u>LIMITS</u>

None; for reporting purposes only.

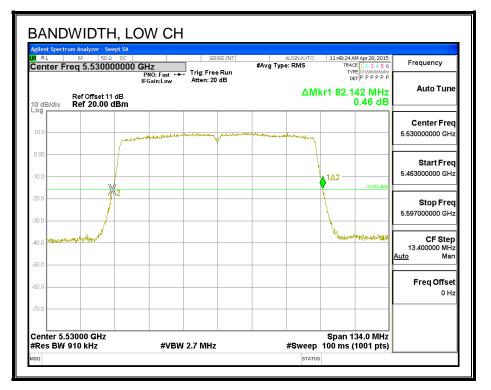
RESULTS

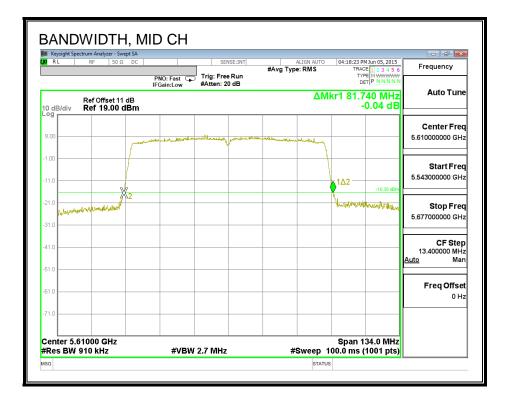
Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Low	5530	82.14
Mid	5610	81.74
High	5690	81.61

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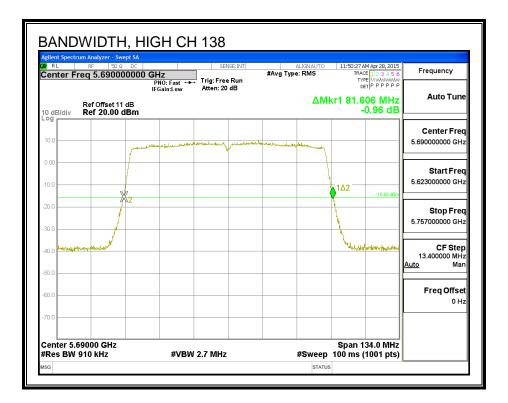
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26 dB BANDWIDTH





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8.34.2. 99% BANDWIDTH

<u>LIMITS</u>

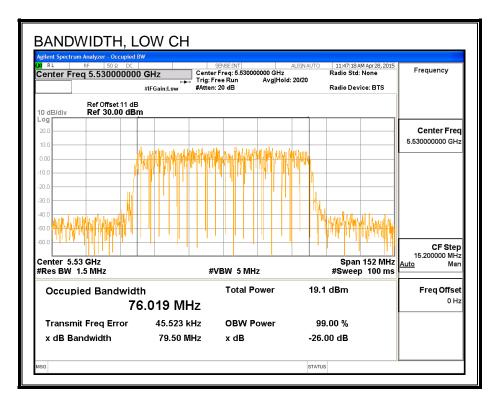
None; for reporting purposes only.

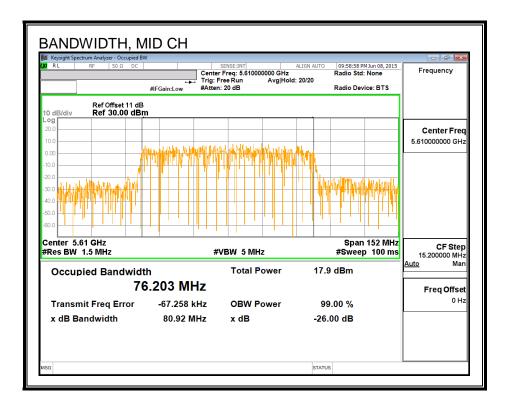
<u>RESULTS</u>

Channel	Frequency	99% Bandwidth
	(MHz)	(MHz)
Low	5530	76.019
Mid	5610	76.203
High	5690	75.549

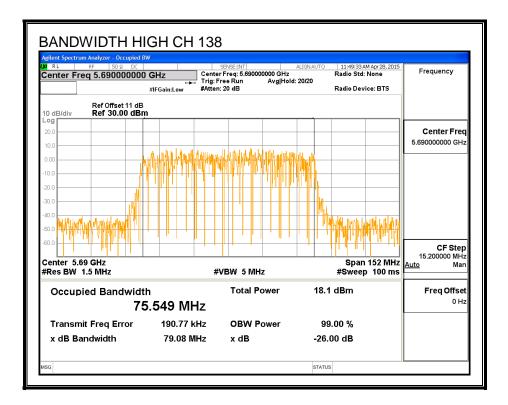
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99% BANDWIDTH





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8.34.3. AVERAGE POWER

<u>LIMITS</u>

None; for reporting purposes only.

RESULTS

Channel	Frequency	Power
	(MHz)	(dBm)
Low	5530	13.94
Mid	5610	16.76
High	5690	18.83

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8.34.4. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

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

DIRECTIONAL ANTENNA GAIN

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

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RESULTS

Bandwidth, Antenna Gain, and Limits

Frequency	Min	Min	Directional	Power	PSD
	26 dB	99%	Gain	Limit	Limit
	BW	BW			
(MHz)	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
5530	82.14	76.02	-0.44	24.00	11.00
5610	81.74	76.20	-0.44	24.00	11.00
	(MHz) 5530	26 dB BW (MHz) (MHz) 5530 82.14	26 dB 99% BW BW (MHz) (MHz) 5530 82.14	26 dB 99% Gain BW BW Gain (MHz) (MHz) (MHz) (dBi) 5530 82.14 76.02 -0.44	26 dB 99% Gain Limit BW BW Image: Compare the second s

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

Output Power Results

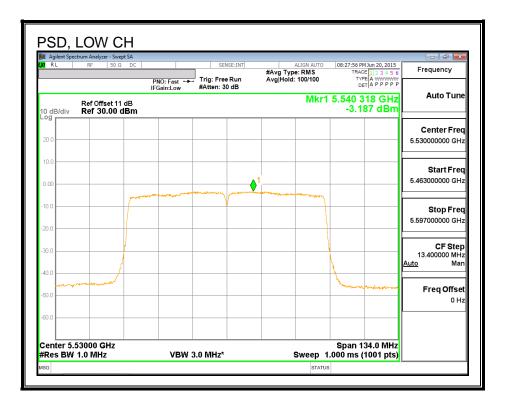
Channel	Frequency	Chain 1	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5530	13.94	14.15	24.00	-9.85

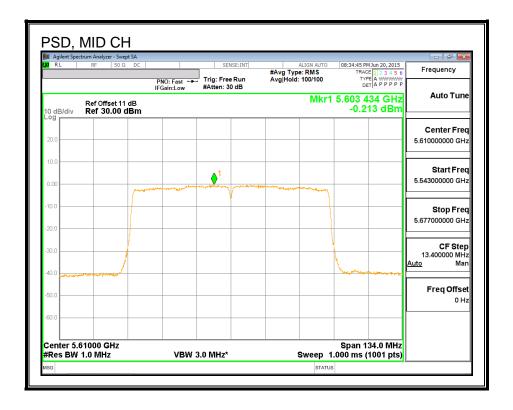
PSD Results

Channel	Frequency	Chain 1	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5530	-3.19	-2.98	11.00	-13.98
	5610	-0.21	0.00	11.00	-11.00

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PSD,





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8.34.5. 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	75.81	-0.44	-0.44	24.00	11.00

Calculations of Corr'd Power & PSD

Duty Cycle CF ((dB) 0.21	Included in

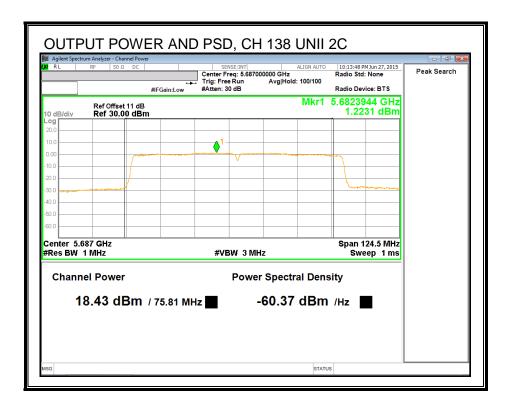
Output Power Results

Channel	Frequency	Chain 1	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	18.43	18.64	24.00	-5.36

PSD Results

Channel	Frequency	Chain 1	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	1.22	1.43	11.00	-9.57

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UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
138	5690	5.81	-0.44	30.00	30.00

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

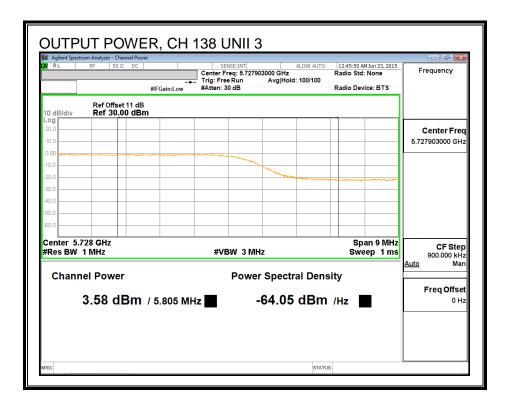
Output Power Results

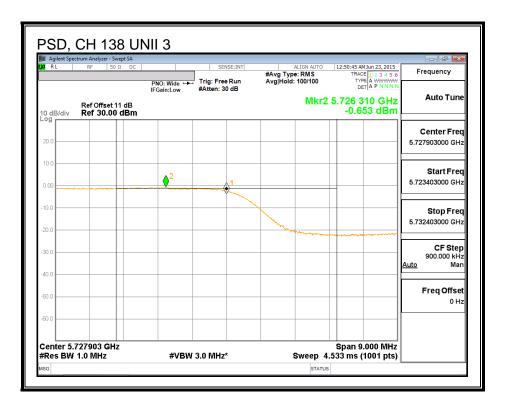
Channel	Frequency	Chain 1	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	3.58	3.79	30.00	-26.21

PSD Results

Channel	Frequency	Chain 1	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	-0.65	-0.44	30.00	-30.44

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8.34.6. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

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

RESULTS

R L	ectrum Analyzer - Swept SA RF 50 Ω DC	PNO: Wide G	SENSE:INT	ALIGN AUTO #Avg Type: RMS	01:18:50 AM Jun 23, 2015 TRACE 1 2 3 4 5 6 TYPE M	
0 dB/div	Ref Offset 11 dB Ref 30.00 dBm	IFGail.Low		Δ١	Wkr1 3.200 MHz -6.36 dB	
20.0						Center Fred 5.725000000 GHz
10.0 0.00	huntringtown	Ammanulau	malasal	1Δ2	-5.61 dBm	Start Free 5.712500000 GH;
					mhulum	Stop Fred 5.737500000 GH:
10.0				" "Ind Party	N I Î M Î VU Î VU Î VI Î VI Î VI Î VI Î VI Î VI	CF Step 2.500000 MH Auto Mar
0.0						Freq Offse 0 Ha
	.72500 GHz / 100 kHz		300 kHz		Span 25.00 MHz 1.000 ms (1001 pts)	

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8.35. 802.11ac HT80 2Tx CDD MODE IN THE 5.6 GHz BAND (5610MHz for FCC only)

8.35.1. 26 dB BANDWIDTH

<u>LIMITS</u>

None; for reporting purposes only.

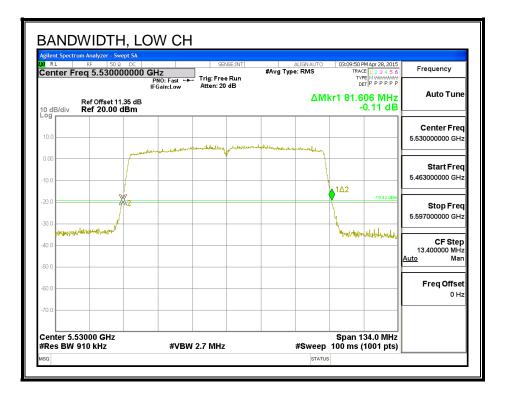
RESULTS

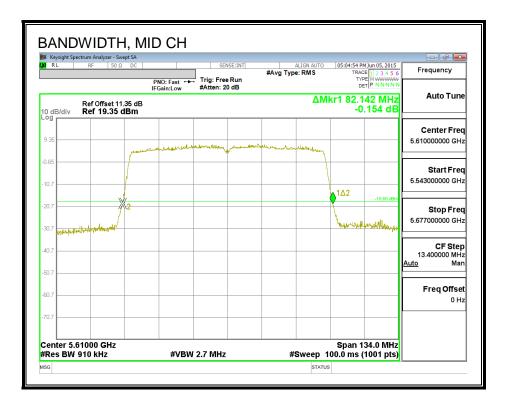
Channel	Frequency	26 dB BW	26 dB BW
		Chain 0	Chain 1
	(MHz)	(MHz)	(MHz)
Low	5530	81.61	81.34
Mid	5610	82.14	81.74
High	5690	82.01	81.07

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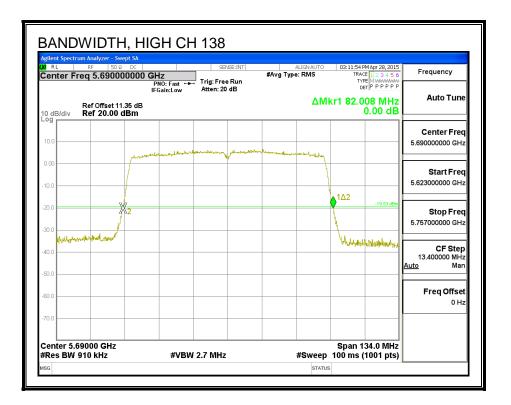
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26 dB BANDWIDTH, CHAIN 0

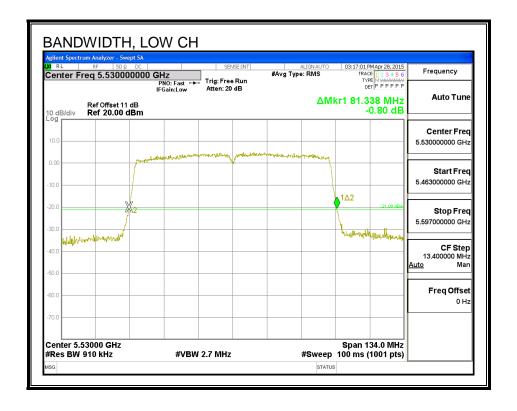




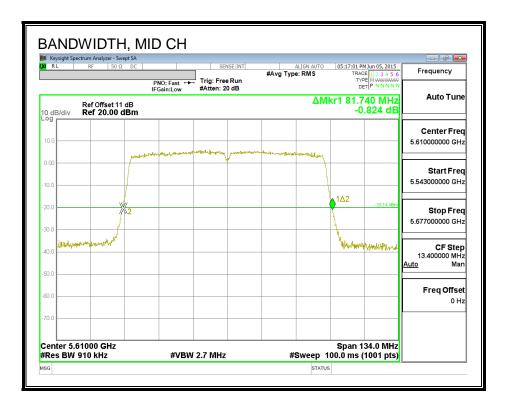
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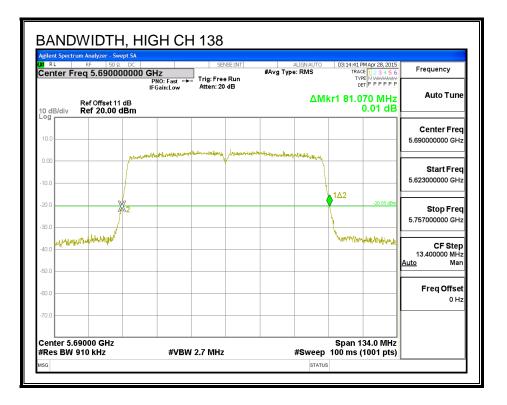


26 dB BANDWIDTH, CHAIN 1



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8.35.2. 99% BANDWIDTH

<u>LIMITS</u>

None; for reporting purposes only.

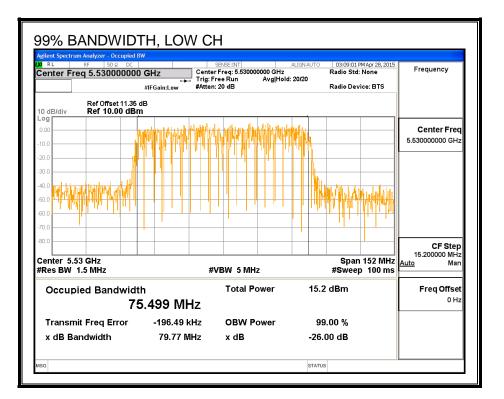
<u>RESULTS</u>

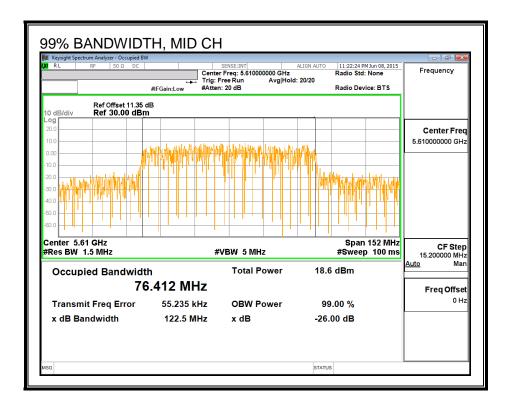
Channel	Frequency	99% BW	99% BW
		Chain 0	Chain 1
	(MHz)	(MHz)	(MHz)
Low	5530	75.499	75.656
Mid	5610	76.412	74.614
High	5690	75.939	76.049

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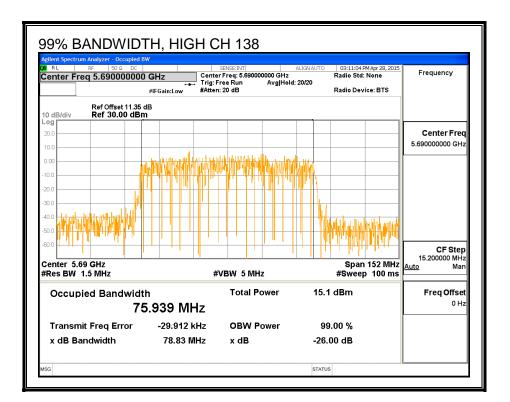
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99% BANDWIDTH, CHAIN 0

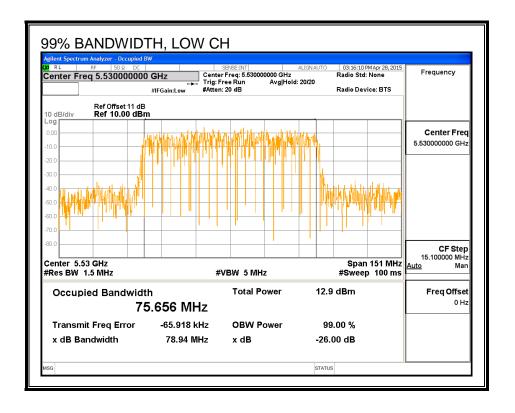




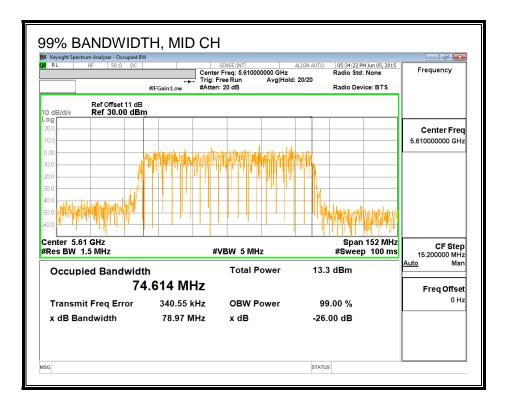
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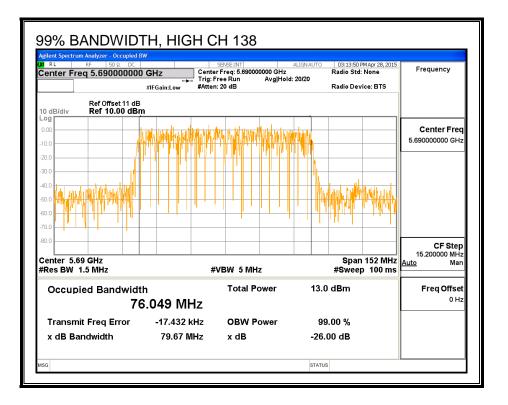


99% BANDWIDTH, CHAIN 1



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8.35.3. AVERAGE POWER

<u>LIMITS</u>

None; for reporting purposes only.

<u>RESULTS</u>

Channel	Frequency	Chain 0	Chain 1	Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Low	5530	13.94	13.96	16.96
Mid	5610	15.89	15.92	18.92
High	5690	18.16	18.38	21.28

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8.35.4. 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.

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)	
-3.40	-0.44	-1.67	

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)	
-3.40	-0.44	1.22	

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RESULTS

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	5530	81.61	75.66	-1.67	1.22	24.00	11.00
High	5610	82.14	74.61	-1.67	1.22	24.00	11.00

Duty Cycle CF (dB) 0.22 Included in C

Included in Calculations of Corr'd Power & PSD

Output Power Results

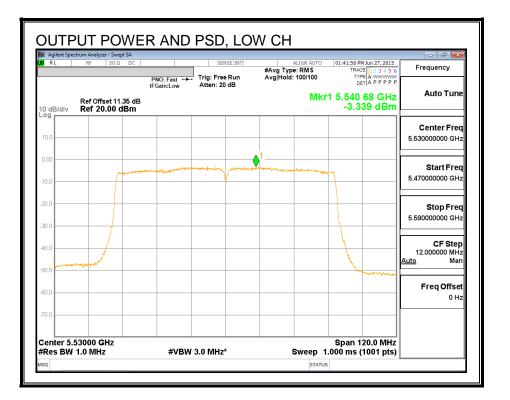
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas Power	Meas Power	Corr'd Power	Limit	Margin
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5530	13.94	13.96	17.18	24.00	-6.82
High	5610	15.89	15.92	19.14	24.00	-4.86

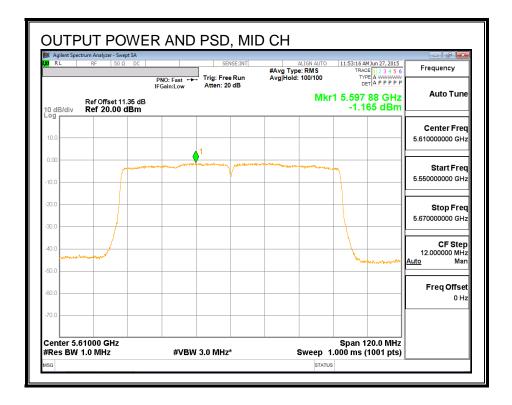
PSD Results

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	5530	-3.34	-3.16	-0.02	11.00	-11.02

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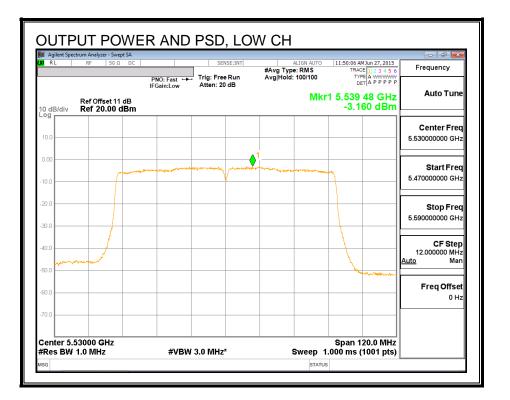
OUTPUT POWER AND PSD, CHAIN 0

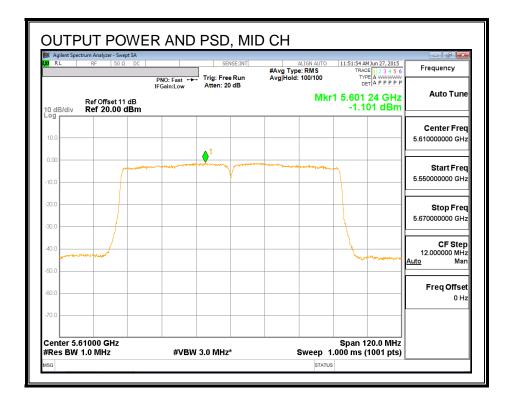




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OUTPUT POWER AND PSD, CHAIN 1





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8.35.5. 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	76.01	-1.67	1.22	24.00	11.00

Duty Cycle CF (dB) 0.22 Included in Calculations of Corr'd Power & PSD

Output Power Results

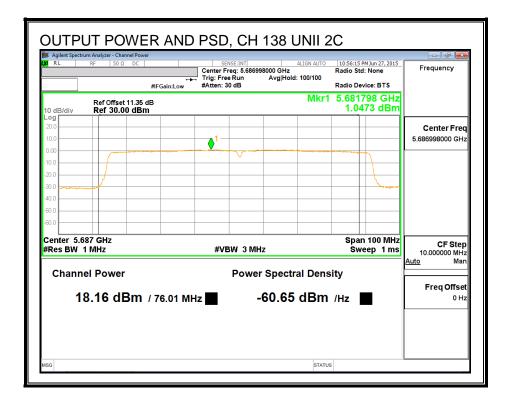
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	18.16	18.38	21.50	24.00	-2.50

PSD Results

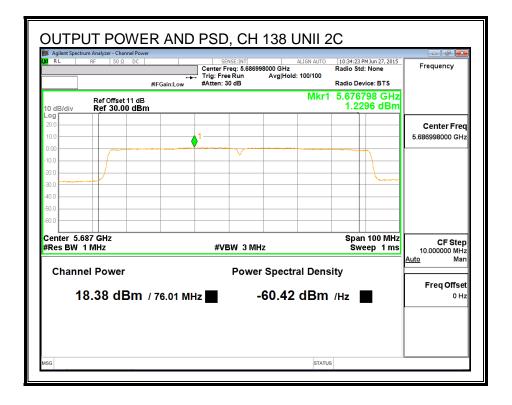
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	1.05	1.23	4.37	11.00	-6.63

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CHAIN 0



<u>CHAIN 1</u>



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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	6.01	-1.67	1.22	30.00	30.00

Duty Cycle CF (dB)	0.22	Included in Calculations of Corr'd Power & PSD
--------------------	------	--

Output Power Results

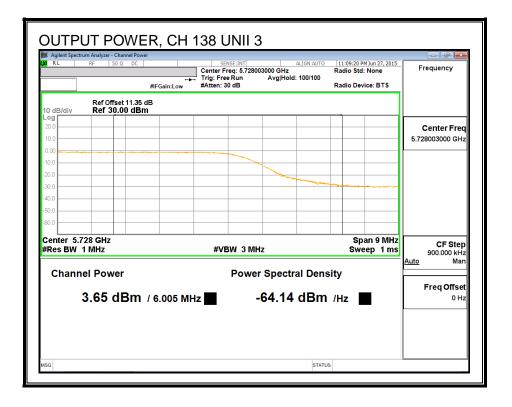
Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	3.65	3.55	6.83	30.00	-23.17

PSD Results

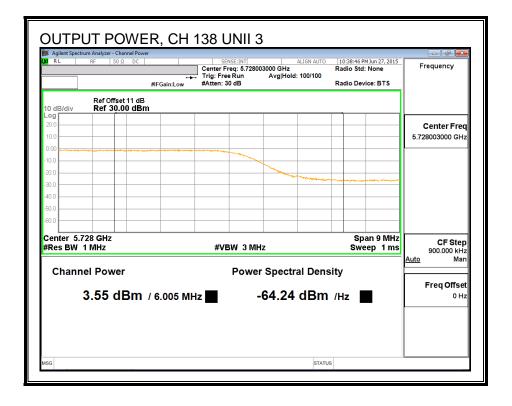
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	-0.84	-0.95	2.34	30.00	-27.66

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CHAIN 0

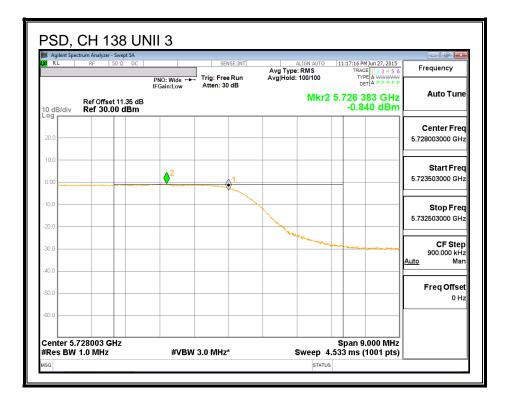


<u>CHAIN 1</u>

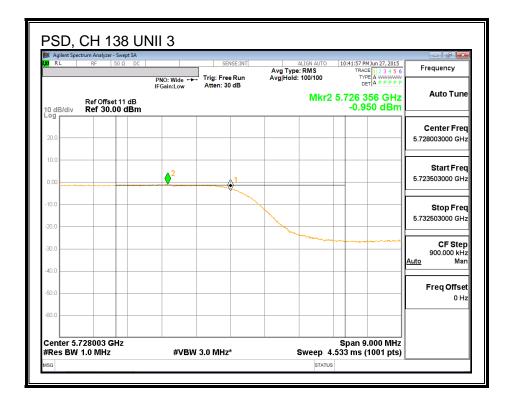


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CHAIN 0



<u>CHAIN 1</u>



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8.35.6. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

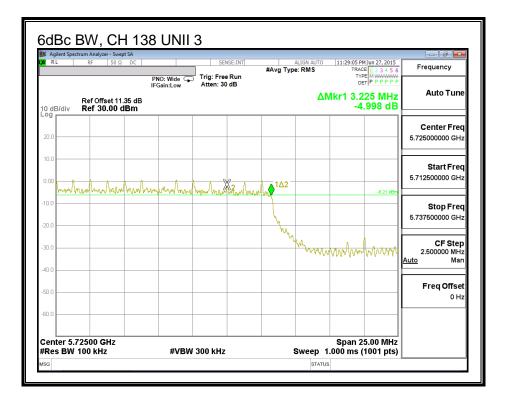
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

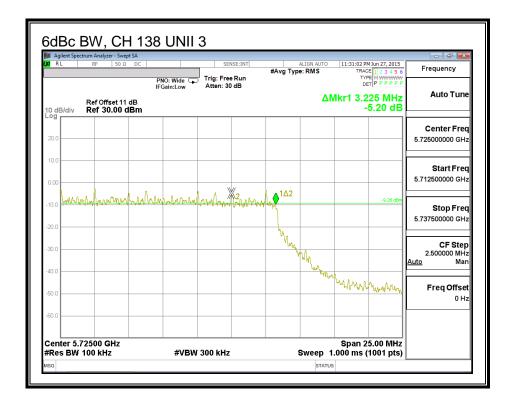
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CHAIN 0



CHAIN 1



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8.36. 802.11ac HT80 2Tx STBC MODE IN THE 5.6 GHz BAND (5610MHz for FCC only)

Note: Covered by 802.11n HT80 2Tx CDD MODE

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

8.37.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

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

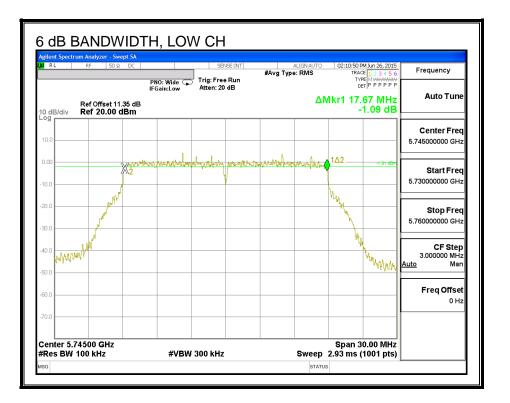
RESULTS

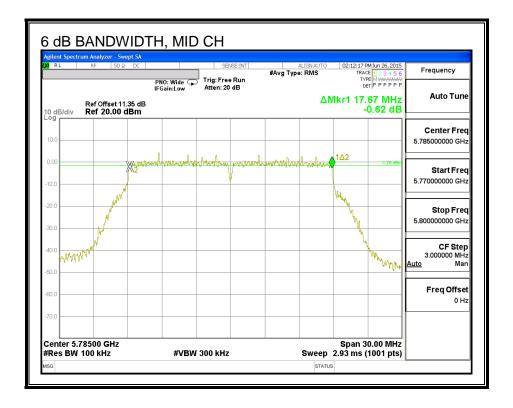
Channel	Frequency	6 dB Bandwidth	Minimum Limit
	(MHz)	(MHz)	(MHz)
Low	5745	17.67	0.5
Mid	5785	17.67	0.5
High	5825	17.64	0.5

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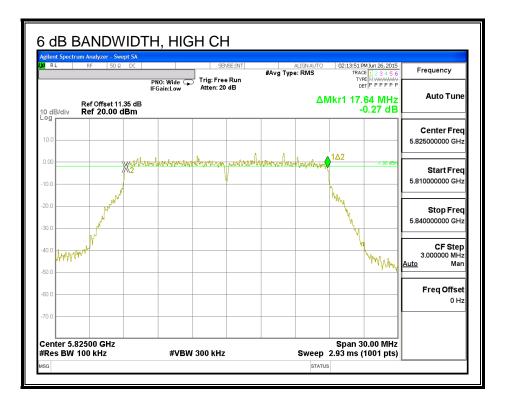
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6 dB BANDWIDTH





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8.37.2. 26 dB BANDWIDTH

LIMITS

None, for reporting purposes only

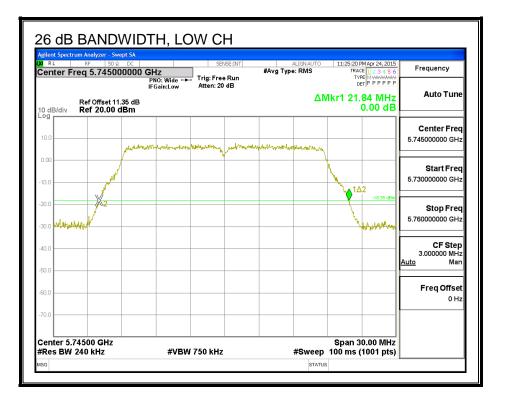
RESULTS

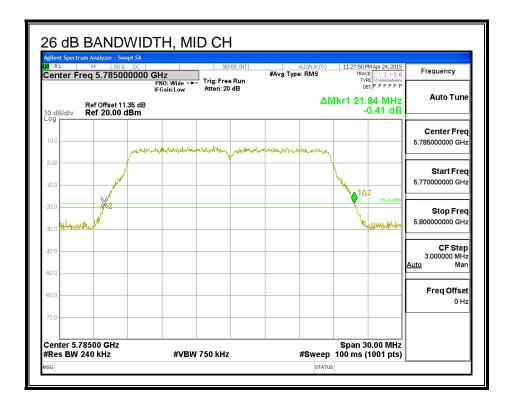
Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Low	5745	21.84
Mid	5785	21.84
High	5825	21.87

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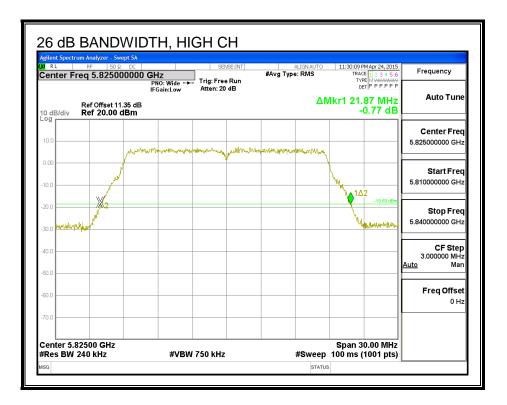
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26 dB BANDWIDTH





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8.37.3. 99% BANDWIDTH

<u>LIMITS</u>

None; for reporting purposes only.

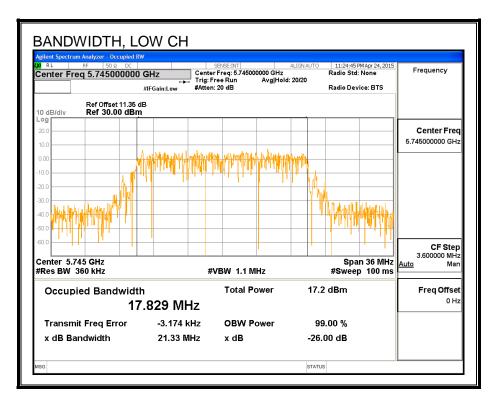
RESULTS

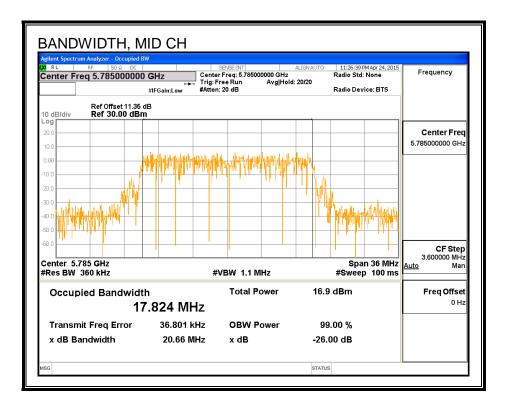
Frequency	99% Bandwidth
(MHz)	(MHz)
5745	17.829
5785	17.824
5825	17.739

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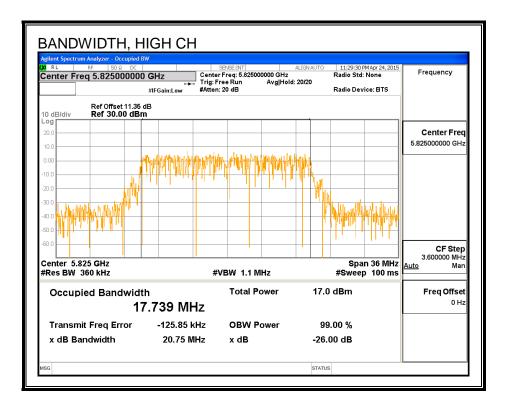
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99% BANDWIDTH





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8.37.4. AVERAGE POWER

<u>LIMITS</u>

None; for reporting purposes only.

<u>RESULTS</u>

Channel	Frequency	Power
	(MHz)	(dBm)
Low	5745	15.89
Mid	5785	18.96
High	5825	16.95

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8.37.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

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RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
		for Power	
	(MHz)	(dBi)	(dBm)
Low	5745	-4.33	30.00
Mid	5785	-4.33	30.00
High	5825	-4.33	30.00

Duty Cycle CF (dB) 0.00

Included in Calculations of Corr'd Power

Output Power Results

Channel	Frequency	Chain 0	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5745	15.89	15.89	30.00	-14.11
Mid	5785	18.96	18.96	30.00	-11.04
High	5825	16.95	16.95	30.00	-13.05

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8.37.6. PSD

<u>LIMITS</u>

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Antenna Gain and Limits

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Low	5745	-4.33	30.00
Mid	5785	-4.33	30.00
High	5825	-4.33	30.00

Duty Cycle CF (dB) 0.00

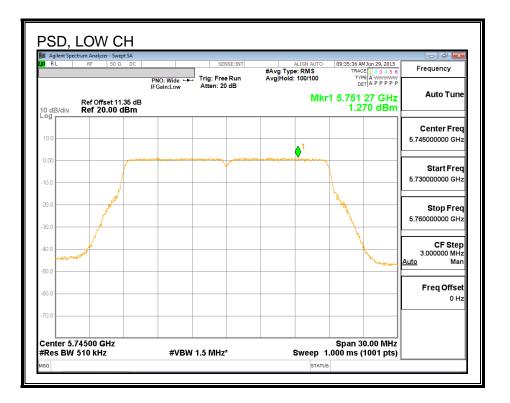
Included in Calculations of Corr'd PSD

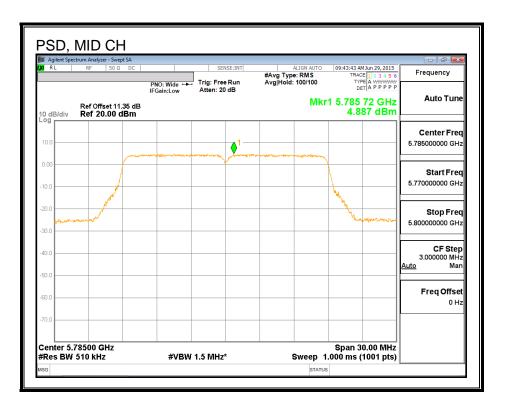
PSD Results

Channel	Frequency	Chain 0	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5745	1.27	1.27	30.00	-28.73
Mid	5785	4.89	4.89	30.00	-25.11
High	5825	2.57	2.57	30.00	-27.43

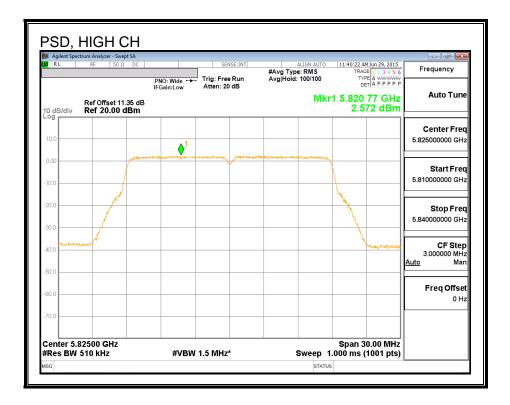
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8.38. 802.11n HT20 CHAIN 1 MODE IN THE 5.8 GHz BAND

8.38.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

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

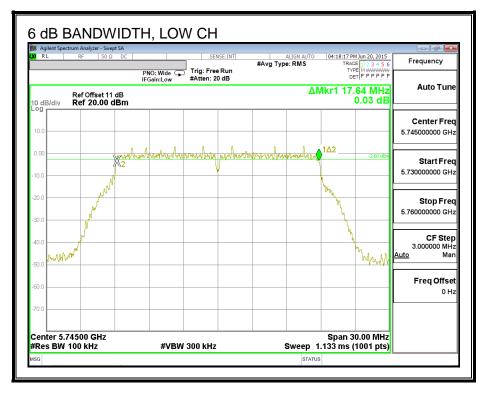
RESULTS

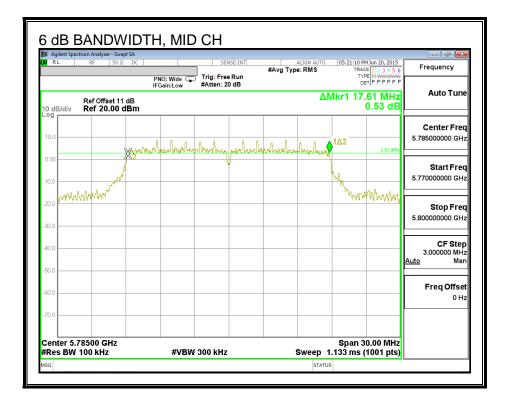
Channel	Frequency	6 dB Bandwidth	Minimum Limit
	(MHz)	(MHz)	(MHz)
Low	5745	17.64	0.5
Mid	5785	17.61	0.5
High	5825	17.61	0.5

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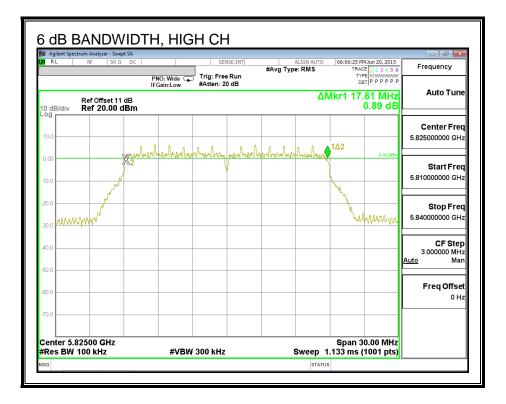
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6 dB BANDWIDTH





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8.38.2. 26 dB BANDWIDTH

LIMITS

None, for reporting purposes only

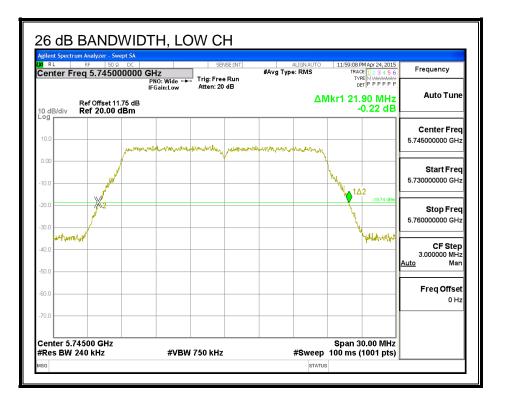
RESULTS

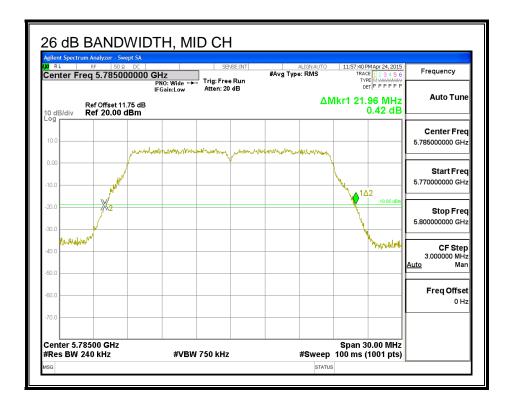
Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Low	5745	21.90
Mid	5785	21.96
High	5825	21.87

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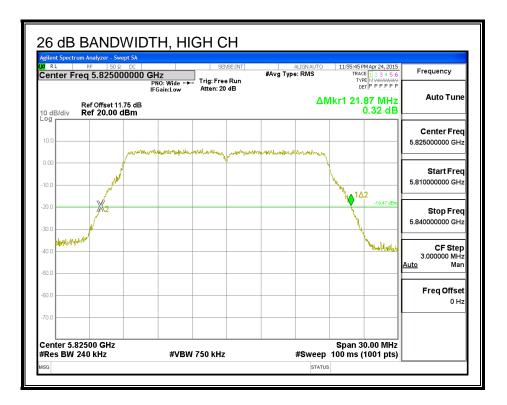
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26 dB BANDWIDTH





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8.38.3. 99% BANDWIDTH

<u>LIMITS</u>

None; for reporting purposes only.

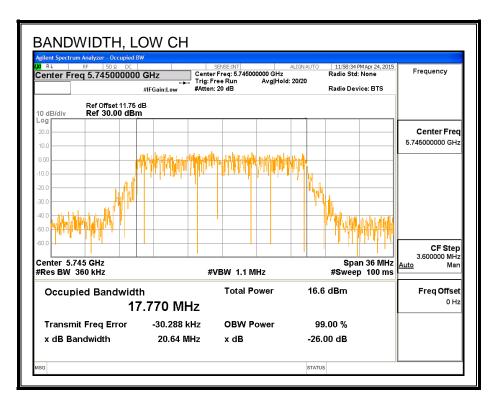
<u>RESULTS</u>

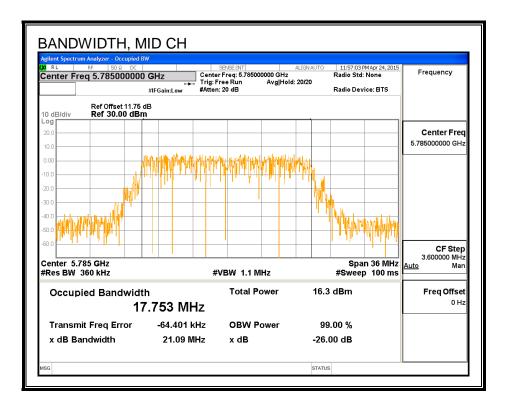
Channel	Frequency	99% Bandwidth
	(MHz)	(MHz)
Low	5745	17.770
Mid	5785	17.753
High	5825	17.870

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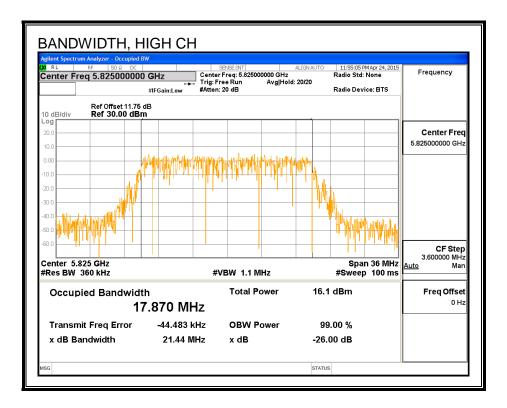
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99% BANDWIDTH





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8.38.4. AVERAGE POWER

<u>LIMITS</u>

None; for reporting purposes only.

<u>RESULTS</u>

Channel	Frequency	Power
	(MHz)	(dBm)
Low	5745	15.97
Mid	5785	19.46
High	5825	16.99

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8.38.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

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RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
		for Power	
	(MHz)	(dBi)	(dBm)
Low	5745	-1.00	30.00
Mid	5785	-1.00	30.00
High	5825	-1.00	30.00

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

Output Power Results

Channel	Frequency	Chain 1	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5745	15.97	15.97	30.00	-14.03
Mid	5785	19.46	19.46	30.00	-10.54
High	5825	16.99	16.99	30.00	-13.01

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8.38.6. PSD

<u>LIMITS</u>

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Antenna Gain and Limits

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Low	5745	-1.00	30.00
Mid	5785	-1.00	30.00
High	5825	-1.00	30.00

Duty Cycle CF (dB) 0.00

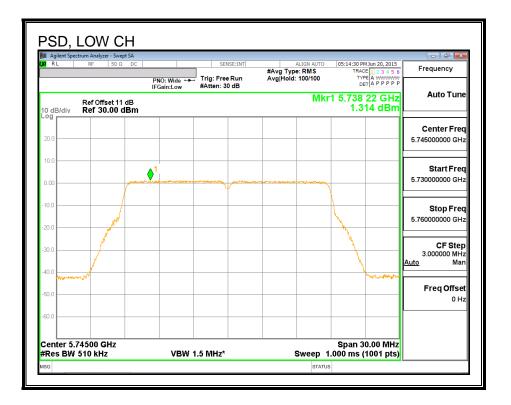
Included in Calculations of Corr'd PSD

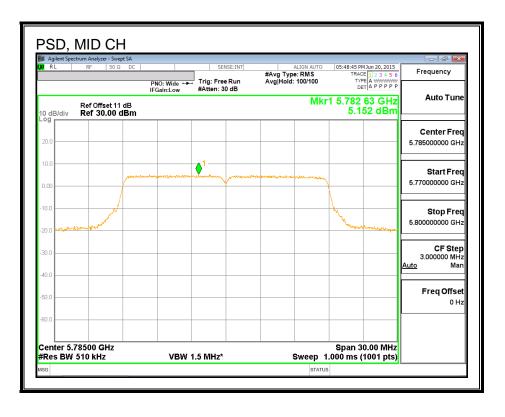
PSD Results

Channel	Frequency	Chain 1	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5745	1.31	1.31	30.00	-28.69
Mid	5785	5.15	5.15	30.00	-24.85
High	5825	2.61	2.61	30.00	-27.39

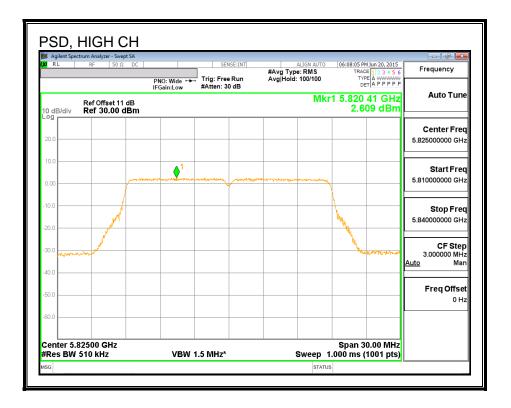
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PSD,





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8.39. 802.11n HT20 2Tx CDD MODE IN THE 5.8 GHz BAND

8.39.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

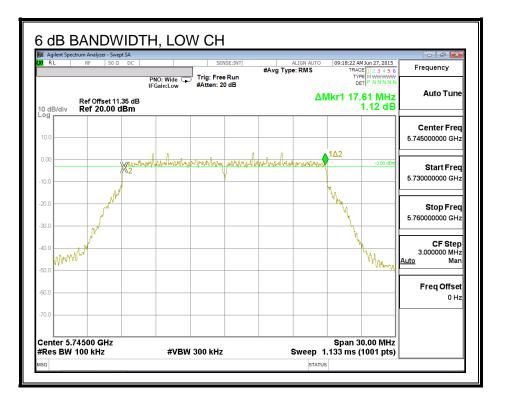
The minimum 6 dB bandwidth shall be at least 500 kHz.

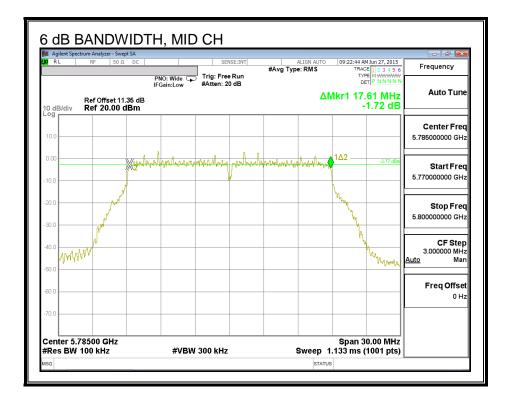
RESULTS

Channel	Frequency	6 dB BW	6 dB BW	Minimum
		Chain 0	Chain 1	Limit
	(MHz)	(MHz)	(MHz)	(MHz)
Low	5745	17.61	17.76	0.5
Mid	5785	17.61	17.61	0.5
High	5825	17.64	17.64	0.5

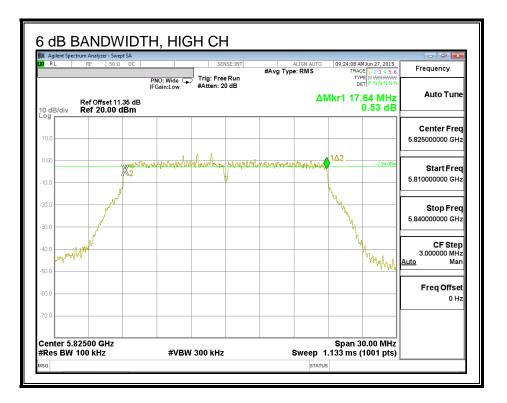
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6 dB BANDWIDTH, CHAIN 0

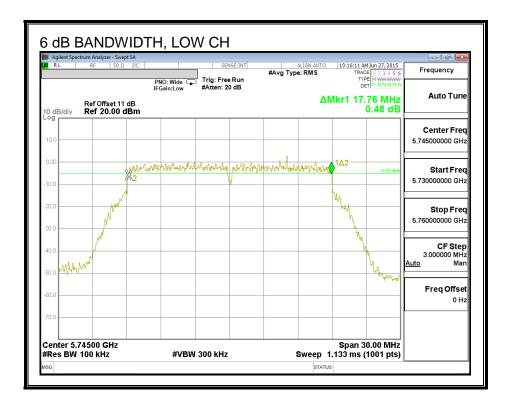




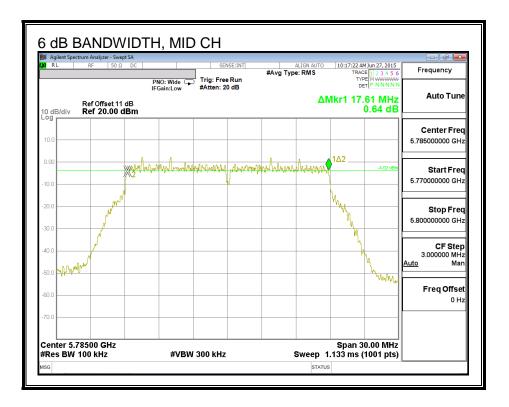
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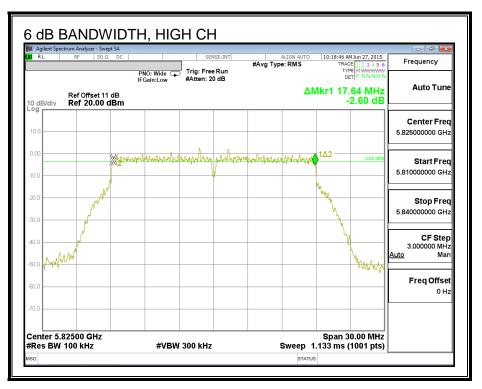


6 dB BANDWIDTH, CHAIN 1



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8.39.2. 26 dB BANDWIDTH

LIMITS

None, for reporting purposes only.

<u>RESULTS</u>

Channel	Frequency	26 dB BW	26 dB BW	
		Chain 0	Chain 1	
	(MHz)	(MHz)	(MHz)	
Low	5745	21.87	21.75	
Mid	5785	22.08	21.84	
High	5825	21.96	21.81	

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