, CH MID					
🔆 Agilent 20:36:05	May 19, 2017			L	Measure
APv6.7(050417),4433 Ref 30 dBm #Avg	99, Conducted F Atten 30 dB			5.298 1 GHz 5.589 dBm	Meas Off
Log 10 dB/ Offst		2	**** ** ******************************		Channel Power
15.9 1.8 dB				1	Occupied BW
#PAvg					ACP
Center 5.290 0 GHz #Res BW 1 MHz Marker Trace	Туре	3 MHz X Axis	Sweep 1 ms A	Implitude	Multi Carrier Power
$ \begin{array}{cccc} 1R & (1) \\ 1_{\Delta} & (1) \\ 2 & (1) \end{array} $	Freq	5.248 8 GHz 82.4 MHz 5.298 1 GHz	21	1.28 dBm 1.29 dBm 5.59 dBm	Power Stat CCDF
					More 1 of 2
Copyright 2000-20)10 Agilent Tec	hnologies			

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8.18. 11ac HT80 2TX CDD MIMO MODE IN THE 5.3GHz BAND

8.18.1. 26 dB BANDWIDTH

<u>LIMITS</u>

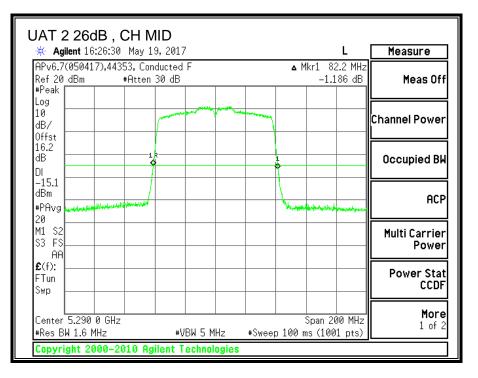
None; for reporting purposes only.

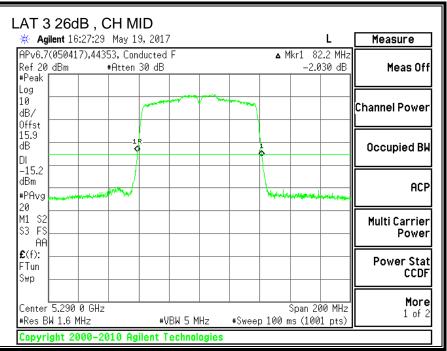
RESULTS

Channel	Frequency	26 dB BW UAT 2	LAT 3
		(MHz)	(MHz)
Mid	5290	82.2	82.2

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REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A

DATE: AUGUST 28, 2017 FCC ID: BCG-E3161A

8.18.2. 99% BANDWIDTH

<u>LIMITS</u>

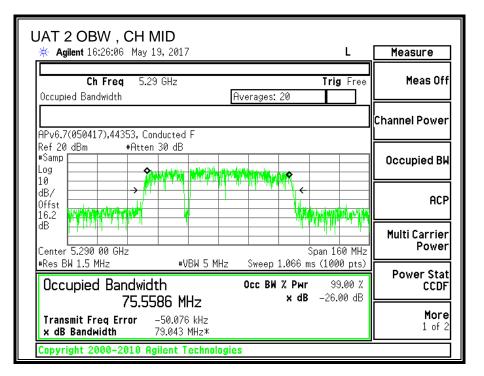
None; for reporting purposes only.

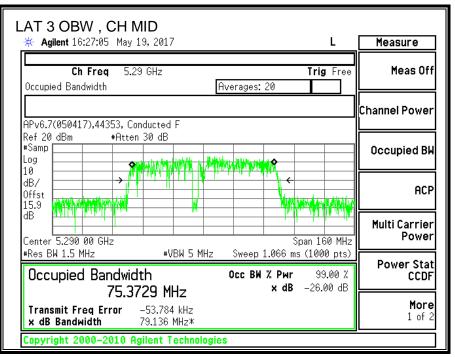
RESULTS

Channel	Frequency	99% BW UAT 2 (MHz)	99% BW LAT 3 (MHz)
		((

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8.18.3. AVERAGE POWER

ID: 30554 **Date:** 7/28/2017

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

<u>RESULTS</u>

Channel	Frequency	UAT 2	LAT 3	Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5290	16.42	16.40	19.42

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8.18.4. OUTPUT POWER AND PPSD

<u>LIMITS</u>

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1– MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

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

PSD test procedure: KDB 789033 D02 v01r04 Section F (SA-2 method)

DIRECTIONAL ANTENNA GAIN

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

UAT 2	LAT 3	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
-3.27	-6.98	-4.74

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

UAT 2	LAT 3	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
-3.27	-6.98	-1.92

REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A 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/1MHz)
Mid	5290	82.20	75.37	-4.74	-1.92	24	11.0

Duty Cycle CF (dB) 0.19 Included

Included in Calculations of Corr'd PSD

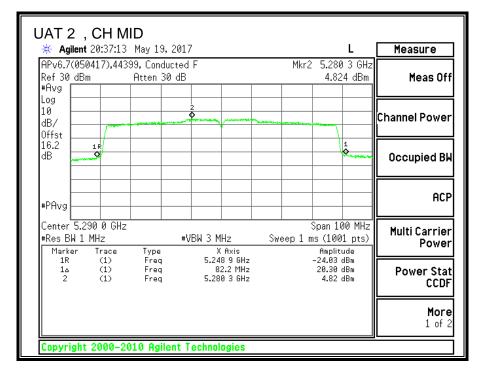
Output Power Results

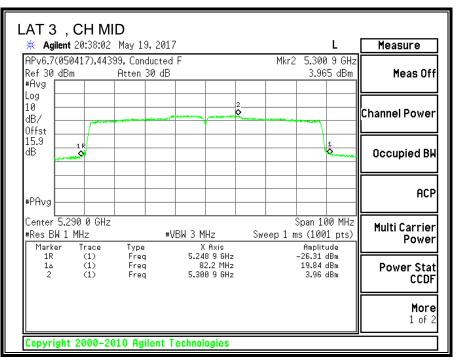
Channel	Frequency	UAT 2	LAT 3	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5290	16.42	16.40	19.42	24.00	-4.58

PSD Results

Channel	Frequency	UAT 2	LAT 3	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Mid	5290	4.82	3.97	7.62	11.00	-3.38

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8.19. 11n HT20 UAT 2 SISO MODE IN THE 5.6GHz BAND

8.19.1. 26 dB BANDWIDTH

<u>LIMITS</u>

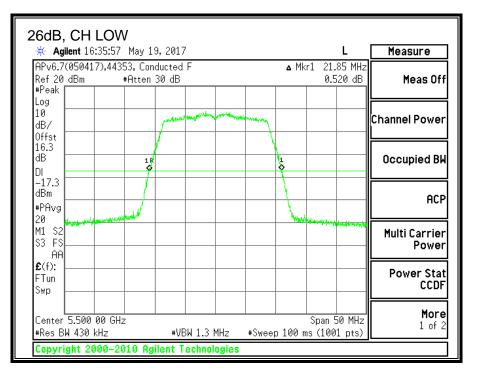
None; for reporting purposes only.

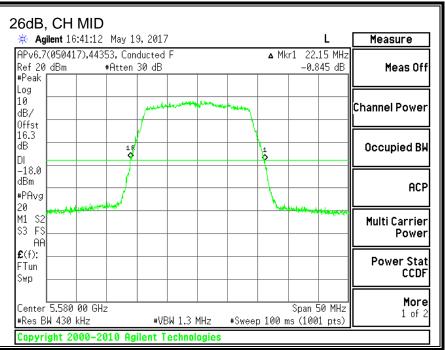
RESULTS

Channel	Frequency	26 dB BW UAT 2 (MHz)
Low	5500	21.85
Mid	5580	22.15
High	5700	22.00
144	5720	22.05

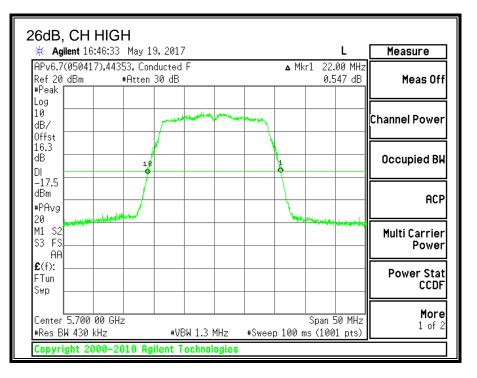
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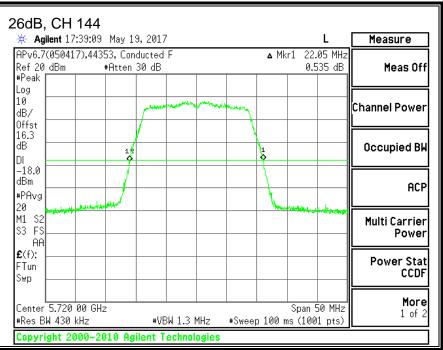
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REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A

8.19.2. 99% BANDWIDTH

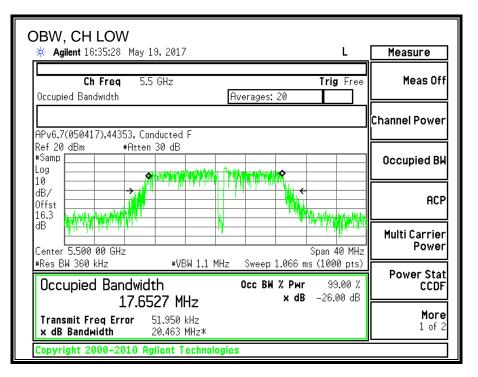
LIMITS

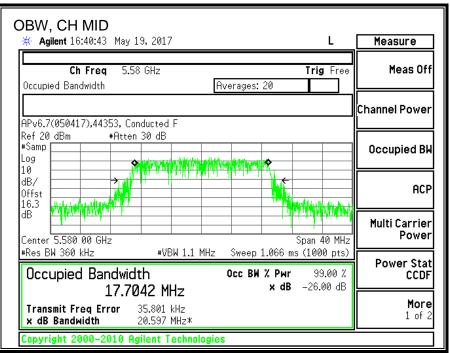
None; for reporting purposes only.

RESULTS

Channel	Frequency	99% BW UAT 2 (MHz)
Low	5500	17.6527
Mid	5580	17.7042
High	5700	17.7397
144	5720	17.6500

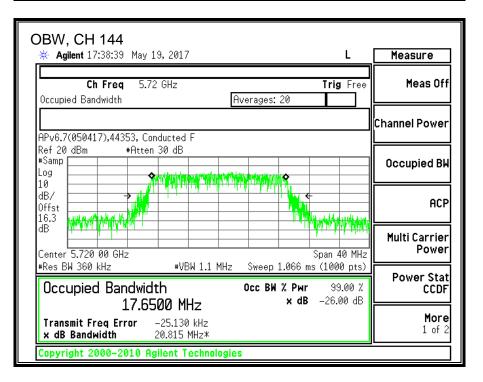
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DBW, CH HIGH	
🔆 Agilent 16:46:04 May 19, 2017 🛛 🛛 🖁 🕹	Measure
Ch Freq 5.7 GHz Trig Free Occupied Bandwidth Averages: 20	Meas Off
APv6.7(050417),44353, Conducted F	Channel Power
Ref 20 dBm #Atten 30 dB #Samp Log ▲ the two of the state	Occupied BW
10 dB/ Offst dB dB/ dB/ dB/ dB/ dB/ dB/ dB/	ACP
Center 5.700 00 GHz Span 40 MHz	Multi Carrier Power
*Res BW 360 kHz *VBW 1.1 MHz Sweep 1.066 ms (1000 pts) Occupied Bandwidth Occ BW % Pwr 99.00 % 17.7397 MHz × dB -26.00 dB	Power Stat CCDF
Transmit Freq Error 7.332 kHz x dB Bandwidth 20.596 MHz*	More 1 of 2
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8.19.3. AVERAGE POWER

ID: 30554 Date: 7/28/2017

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

Channel	Frequency	Power UAT 2 (dBm)
Low	5500	18.89
Mid	5580	20.78
High	5700	18.78
144	5720	20.82

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8.19.4. OUTPUT POWER AND PPSD

<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.

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.

PSD test procedure: KDB 789033 D02 v01r04 Section F (SA-2 method)

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.

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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/1MHz)
Low	5500	21.85	17.65	-2.77	23.47	11.00
Mid	5580	22.15	17.70	-2.77	23.48	11.00
High	5700	22.00	17.74	-2.77	23.49	11.00

Duty Cycle CF (dB)	0.00	Inclu

Included in Calculations of Corr'd PSD

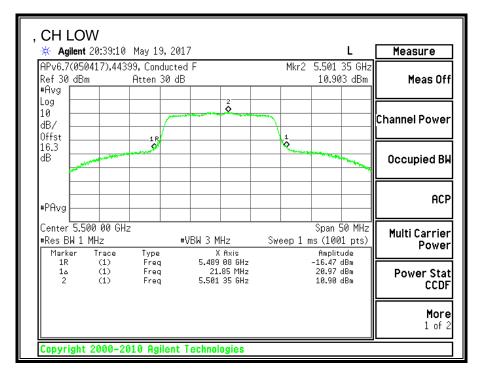
Output Power Results

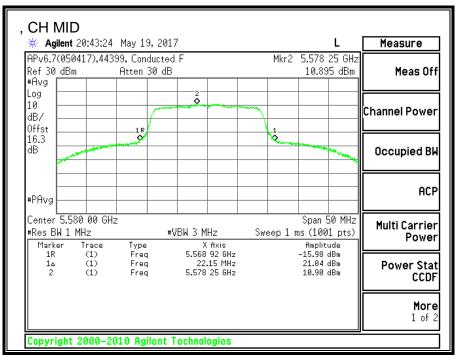
Channel	Frequency	UAT 2	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5500	18.89	18.89	23.47	-4.58
Mid	5580	20.78	20.78	23.48	-2.70
High	5700	18.78	18.78	23.49	-4.71

PSD Results

Channel	Frequency	UAT 2	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5500	10.90	10.90	11.00	-0.10
Mid	5580	10.90	10.90	11.00	-0.11
High	5700	10.66	10.66	11.00	-0.34

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🤃 Agilent	20:47:49	May 19, 2	017			L	Measure
APv6.7(0504 Ref 30 dBm ⊧Avg [99, Conduct Atten 30 (Mkr	2 5.701 10.65	30 GHz 59 dBm	Meas Of
.og L0 JB/			2 \$	-			Channel Power
)ffst .6.3 JB		1R		1. 			Occupied Bk
#PAvg							ACI
Center 5.70 Res BW 1 N Marker		і і Z Түре	#VBW 3 MHz X Axis	Sweep :	Span ! 1 ms (100 Amplit		Multi Carrie Powei
1R 14 2	(1) (1) (1)	Freq Freq Freq	5.689 00 G 22.00 M 5.701 30 G	Hz	-15.96 20.87 10.66	dBm dBm	Power Stat CCDF
							More 1 of 2

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8.20. 11ac HT20 UAT 2 SISO STRADDLE CHANNEL 144

8.20.1. OUTPUT POWER AND PPSD

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/1MHz)
144	5720	22.05	-2.77	-2.77	24.00	11.00

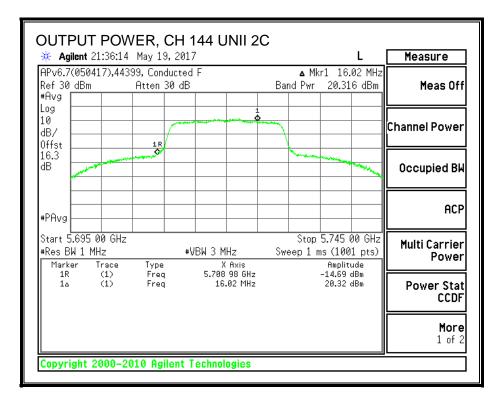
Duty Cycle CF (dB) 0.00 Included in C	Calculations of Corr'd Power & PSD
---------------------------------------	------------------------------------

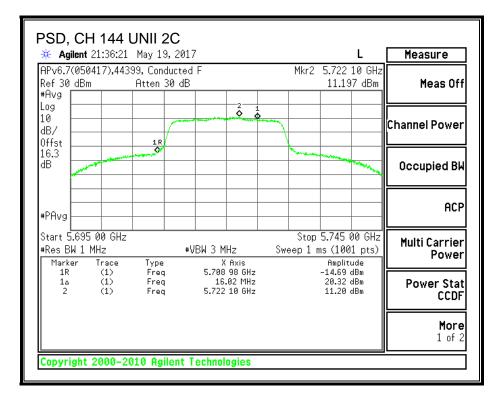
Output Power Results

Channel	Frequency	UAT 2	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
144	5720	20.32	20.32	24.00	-3.68

PSD Results

Channel	Frequency	UAT 2	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
144	5720	11.20	11.20	11.00	0.20





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Antenna Gain and Limit

Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
144	5720	22.05	-3.57	30.00	30.00

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

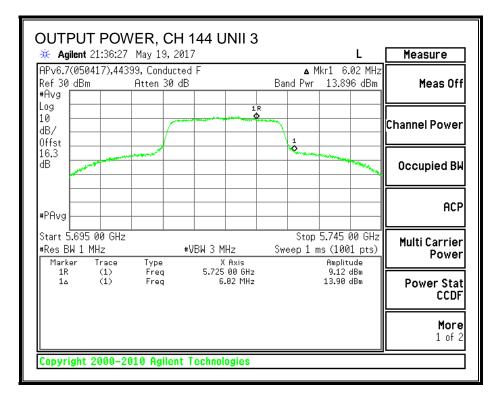
Output Power Results

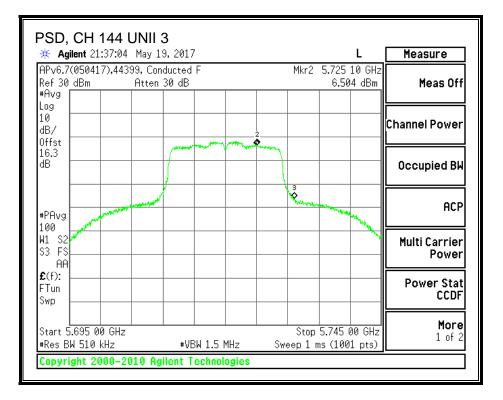
Channel	Frequency	UAT 2	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
144	5720	13.896	13.896	30.00	-16.10

PSD Results

Channel	Frequency	UAT 2	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
144	5720	6.504	6.504	30.00	-23.50

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8.20.2. 6 dB BANDWIDTH

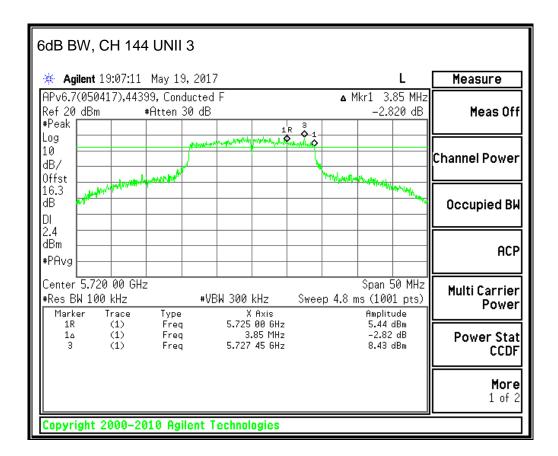
<u>LIMITS</u>

FCC §15.407 (e)

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

RESULTS

Channel	Frequency	6 dB Bandwidth
	(MHz)	(MHz)
144	5720	3.85



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8.21. 11n HT20 LAT 3 SISO MODE IN THE 5.6GHz BAND

8.21.1. 26 dB BANDWIDTH

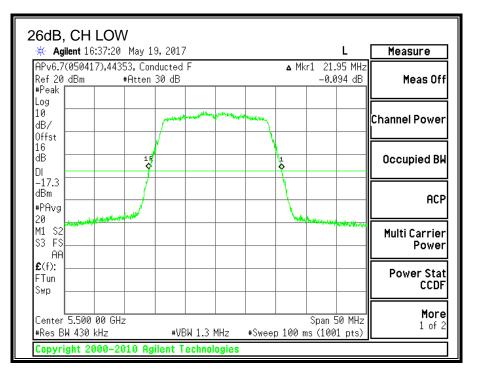
<u>LIMITS</u>

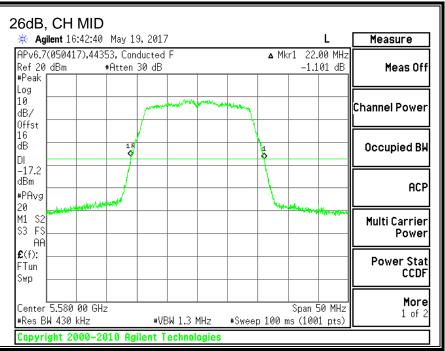
None; for reporting purposes only.

RESULTS

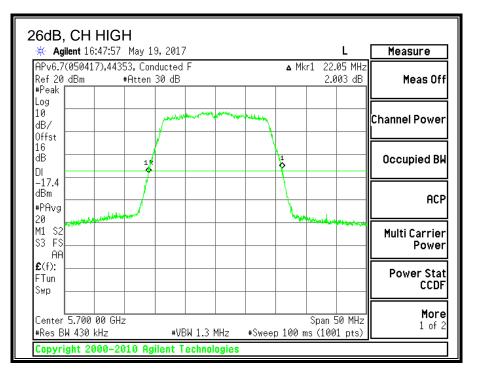
Channel	Frequency	26 dB BW LAT 3 (MHz)
Low	5500	21.95
Mid	5580	22.00
High	5700	22.05
144	5720	22.10

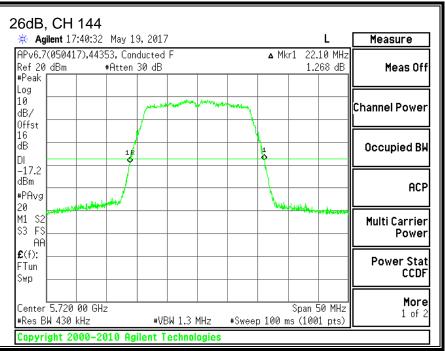
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REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A

8.21.2. 99% BANDWIDTH

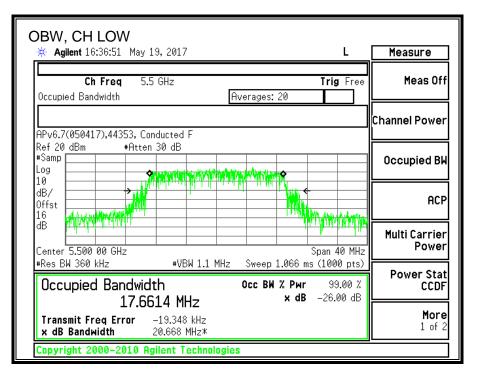
<u>LIMITS</u>

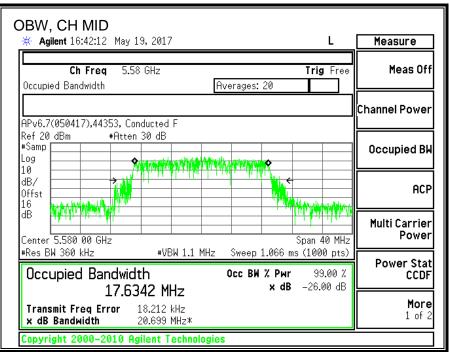
None; for reporting purposes only.

RESULTS

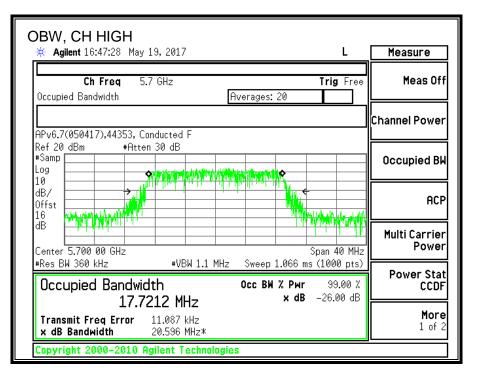
Channel	Frequency	99% BW LAT 3 (MHz)
Low	5500	17.6614
Mid	5580	17.6342
High	5700	17.7212
144	5720	17.6166

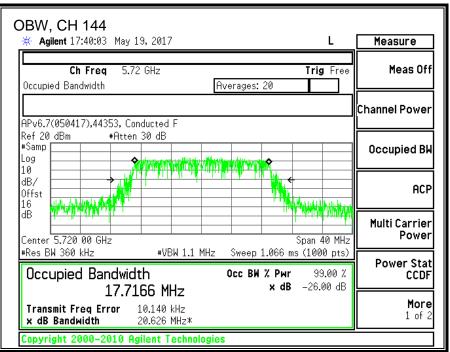
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8.21.3. AVERAGE POWER

ID: 30554 **Date:** 7/28/2017

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

Channel	Frequency	Power LAT 3 (dBm)		
Low	5500	18.82		
Mid	5580	20.82		
High	5700	18.86		
144	5720	20.87		

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8.21.4. OUTPUT POWER AND PPSD

<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.

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.

PSD test procedure: KDB 789033 D02 v01r04 Section F (SA-2 method)

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.

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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/1MHz)
Low	5500	21.95	17.66	-6.89	23.47	11.00
Mid	5580	22.00	17.63	-6.89	23.46	11.00
High	5700	22.05	17.72	-6.89	23.48	11.00

Duty Cycle CF (dB) 0.00 Inclu

Included in Calculations of Corr'd PSD

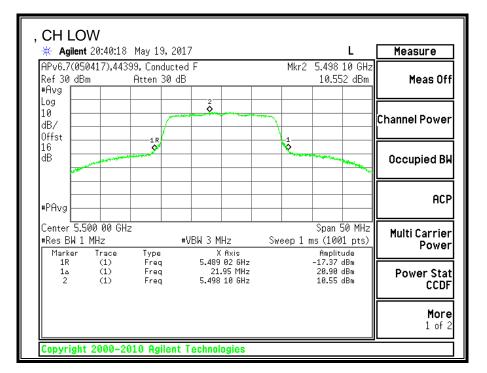
Output Power Results

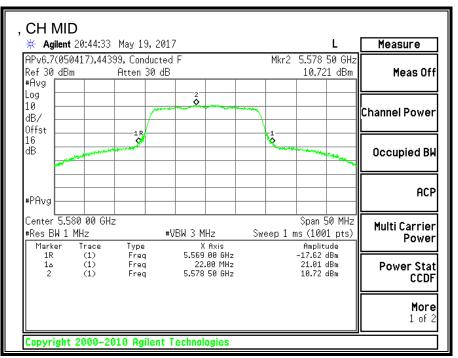
Channel	Frequency	LAT 3	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5500	18.82	18.82	23.47	-4.65
Mid	5580	20.82	20.82	23.46	-2.64
High	5700	18.86	18.86	23.48	-4.62

PSD Results

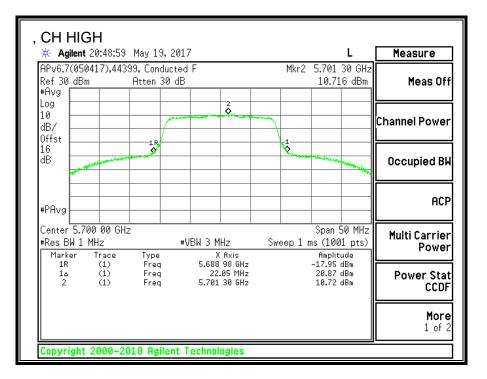
Channel	Frequency	LAT 3	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5500	10.55	10.55	11.00	-0.45
Mid	5580	10.72	10.72	11.00	-0.28
High	5700	10.72	10.72	11.00	-0.28

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8.22. 11ac HT20 LAT 3 SISO STRADDLE CHANNEL 144

8.22.1. OUTPUT POWER AND PPSD

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/1MHz)
144	5720	22.10	-6.89	-6.89	24.00	11.00

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

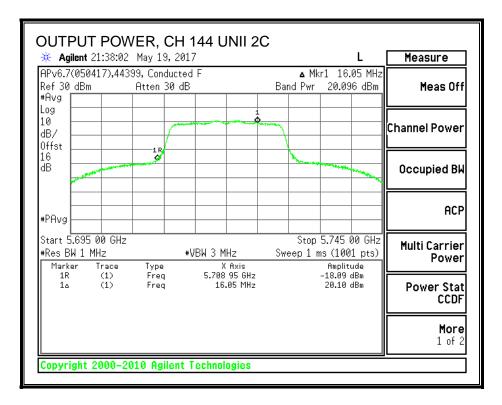
Output Power Results

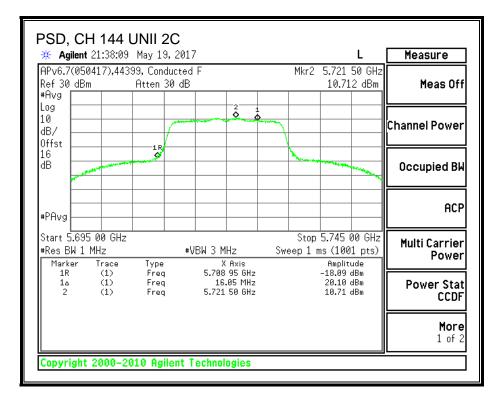
Channel	Frequency	LAT 3	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
144	5720	20.10	20.10	24.00	-3.90

PSD Results

Channel	Frequency	LAT 3	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)

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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)
144	5720	22.10	-6.31	30.00	30.00

Duty Cycle CF (dB) 0	0.00	Included in Calculations of Corr'd Power & PSD
----------------------	------	--

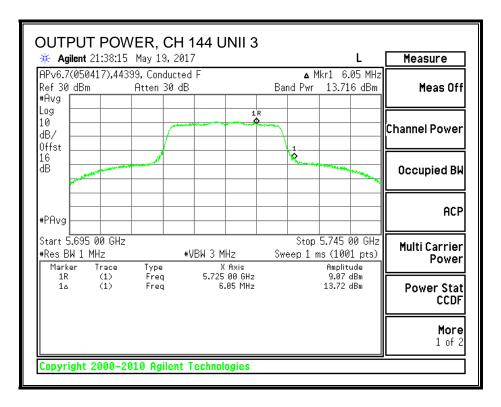
Output Power Results

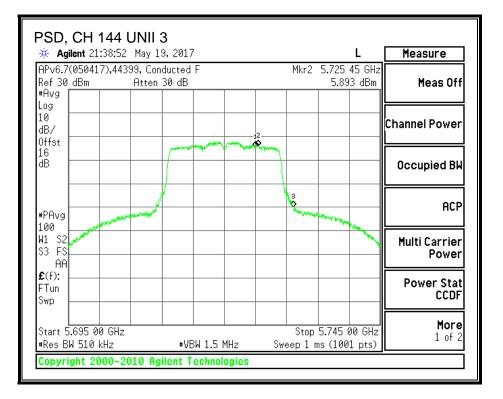
Channel	Frequency	LAT 3	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
144	5720	13.716	13.716	30.00	-16.28

PSD Results

Channel	Frequency	LAT 3	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
144	5720	5.893	5.893	30.00	-24.11

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8.22.2. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

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

RESULTS

Channel	Frequency	6 dB Bandwidth	
(MHz)		(MHz)	
144 5720		3.95	

6dB BW, CH 144				
🔆 Agilent 19:07:59	May 19, 2017		L	Measure
APv6.7(050417),443 Ref 20 dBm #Peak	99, Conducted F #Atten 30 dB	∆ 1 R	Mkr1 3.95 MHz -4.130 dB	Meas Off
Log 10 dB/ Offst		Whythe water and the state of t		Channel Power
Offst 16 dB DI 0.1			uniter and a state of the state	Occupied BW
dBm #PAvg Center 5.720 00 GHz			Span 50 MHz	ACP
#Res BW 100 kHz Marker Trace 1R (1)	#VBW 300 Type X	kHz Sweep 4.8 Axis 95 GHz	ms (1001 pts) Amplitude 4.34 dBm	Multi Carrier Power
	Freq 3.	95 MHz 25 GHz	-4.13 dB 6.13 dBm	Power Stat CCDF
				More 1 of 2
Copyright 2000-20	10 Agilent Technol	ogies		

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8.23. 11n HT20 2TX CDD MIMO MODE IN THE 5.6GHz BAND

8.23.1. 26 dB BANDWIDTH

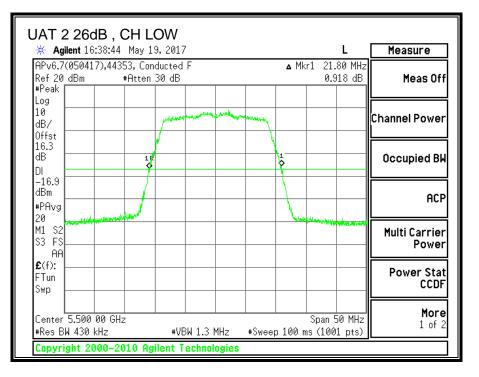
<u>LIMITS</u>

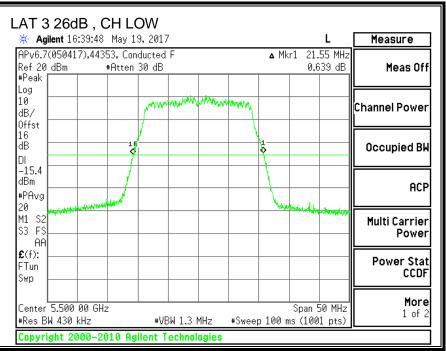
None; for reporting purposes only.

RESULTS

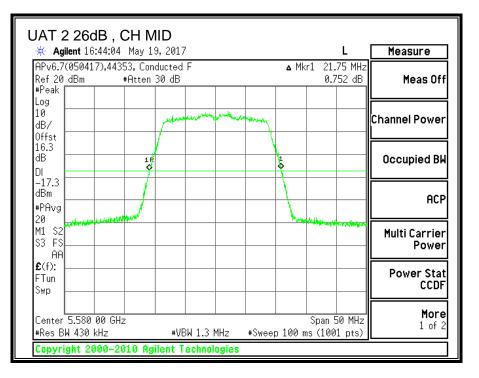
Channel	Frequency		26 dB BW LAT 3 (MHz)
Low	5500	21.80	21.55
Mid	5580	21.75	21.60
High	5700	21.95	21.60
144	5720	21.85	21.65

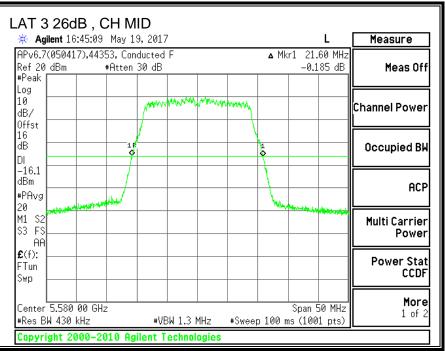
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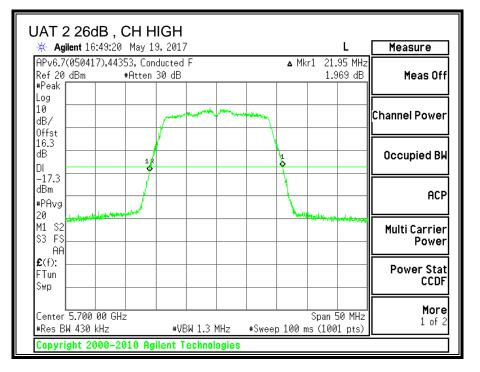


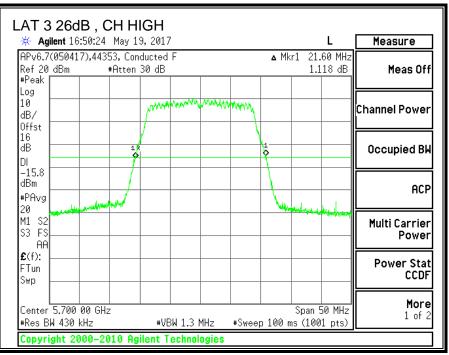
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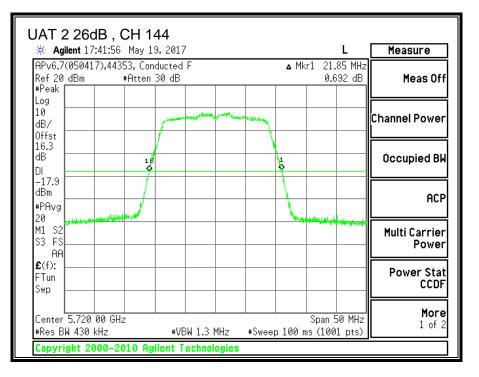


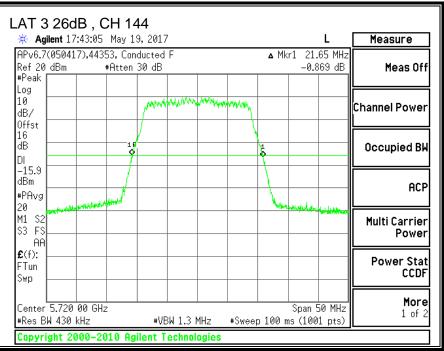
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REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A

DATE: AUGUST 28, 2017 FCC ID: BCG-E3161A

8.23.2. 99% BANDWIDTH

<u>LIMITS</u>

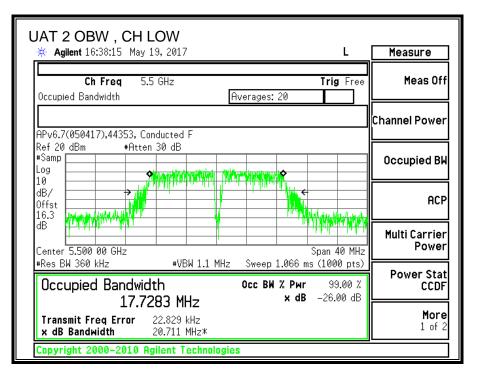
None; for reporting purposes only.

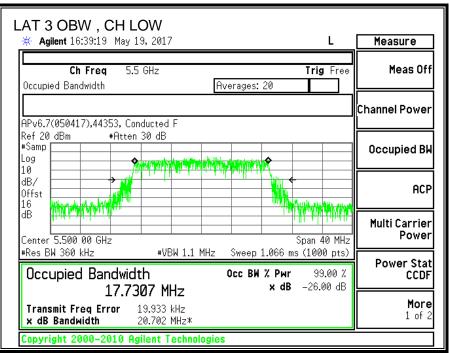
RESULTS

		99% BW	99% BW
Channel	Frequency	UAT 2	LAT 3
		(MHz)	(MHz)
Low	5500	17.7283	17.7307
Mid	5580	17.5615	17.6537
High	5700	17.7261	17.7056
144	5720	17.7070	17.6885

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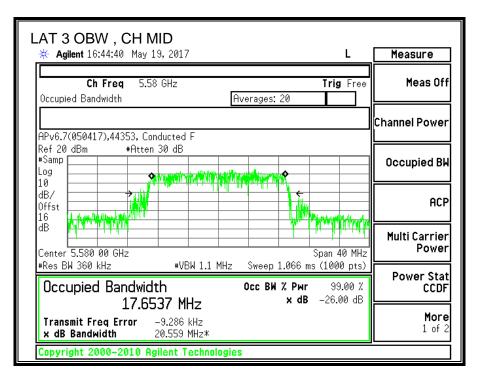
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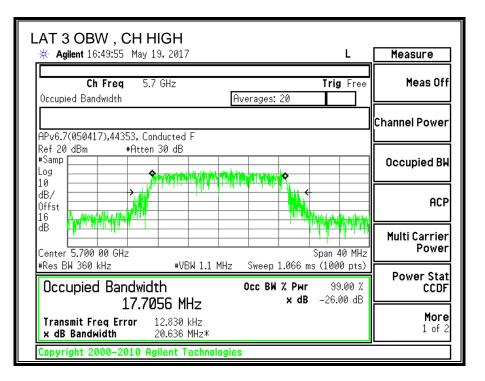
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JAT 2 OBW , CH MID	
✤ Agilent 16:43:35 May 19, 2017	Measure
Ch Freq 5.58 GHz Trig Free Occupied Bandwidth Averages: 20	Meas Off
APv6.7(050417),44353, Conducted F	Channel Power
Ref 20 dBm	
#Samp	Occupied BW
Log 10 dB/ Offst 16.3 uhr w alth from 1 10 10 10 10 10 10 10 10 10 1	ACP
Center 5.580 00 GHz Span 40 MHz	Multi Carrier Power
#Res BW 360 kHz	Day your Chat
Оссиріеd Bandwidth Осс ВМ % Рыг 99.00 % 17.5615 MHz × dB -26.00 dB	Power Stat CCDF
Transmit Freq Error -13.643 kHz × dB Bandwidth 20.692 MHz*	More 1 of 2
Copyright 2000–2010 Agilent Technologies	-



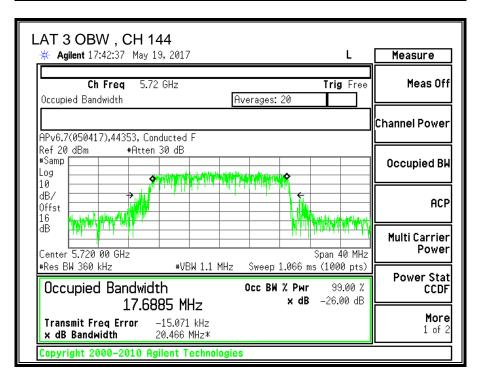
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	Measure
ዡ Agilent 16:48:52 May 19, 2017 L	rieasure
Ch Freq 5.7 GHz Trig Free Occupied Bandwidth Averages: 20	Meas Off
	Channel Power
APv6.7(050417),44353, Conducted F Ref 20 dBm #Atten 30 dB	
#Samp	Occupied BW
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	ACP
Center 5.700 00 GHz Span 40 MHz	Multi Carrier Power
#Res BW 360 kHz	
Оссирied Bandwidth Осс ВМ % Рыг 99.00 % 17.7261 MHz × dB -26.00 dB	Power Stat CCDF
Transmit Freq Error 1.544 kHz x dB Bandwidth 20.614 MHz*	More 1 of 2
Copyright 2000–2010 Agilent Technologies	



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JAT 2 OBW , CH 144	
★ Agilent 17:41:27 May 19, 2017	Measure
Ch Freq 5.72 GHz Trig Free Occupied Bandwidth Averages: 20	ee Meas Off
APv6.7(050417),44353, Conducted F	Channel Power
Ref 20 dBm #Atten 30 dB #Samp Log	Occupied BW
dB/ → + + + + + + + + + + + + + + + + + +	ACP
dB The property is a second seco	
Occupied Bandwidth Occ BW % Pwr 99.00 17.7070 MHz × dB -26.00 d	Power Stat ۲ CCDF
Transmit Freq Error 3.970 kHz x dB Bandwidth 20.712 MHz*	More 1 of 2
Copyright 2000–2010 Agilent Technologies	



8.23.3. AVERAGE POWER

ID: 30554 **Date:** 7/28/2017

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RES	ULT	S	
			-

Channel	Frequency	UAT 2	LAT 3	Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Low	5500	17.93	17.88	20.92
Mid	5580	17.86	17.91	20.90
High	5700	17.93	17.85	20.90
144	5720	17.91	17.84	20.89

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8.23.4. OUTPUT POWER AND PPSD

<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.

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.

PSD test procedure: KDB 789033 D02 v01r04 Section F (SA-2 method)

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

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DIRECTIONAL ANTENNA GAIN

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

UAT 2	LAT 3	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
-2.77	-6.89	-4.36

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

UAT 2	LAT 3	Correlated Chains	
Antenna	Antenna	Directional	
Gain	Gain	Gain	
(dBi)	(dBi)	(dBi)	
-2.77	-6.89	-1.58	

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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/1MHz
Low	5500	21.55	17.728	-4.36	-1.58	23.49	11.00
Mid	5580	21.60	17.561	-4.36	-1.58	23.45	11.00
High	5700	21.60	17.706	-4.36	-1.58	23.48	11.00

Duty Cycle CF (dB)

0.00

Included in Calculations of Corr'd PSD

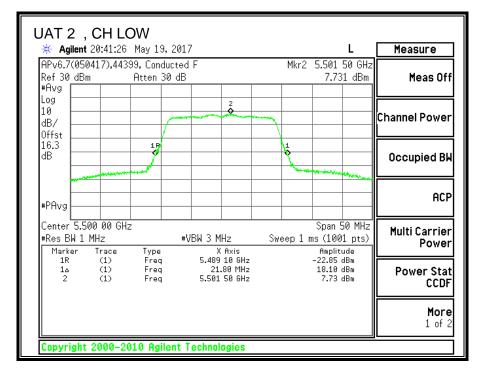
Output Power Results

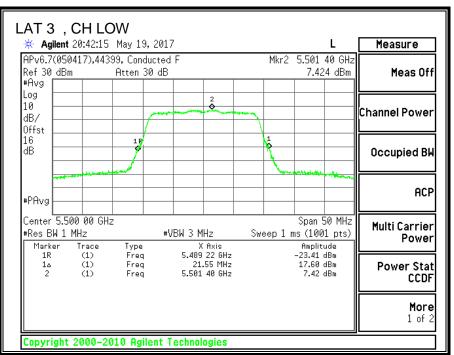
Channel	Frequency	UAT 2	LAT 3	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5500	17.93	17.88	20.92	23.49	-2.57
Mid	5580	17.86	17.91	20.90	23.45	-2.55
High	5700	17.93	17.85	20.90	23.48	-2.58

PSD Results

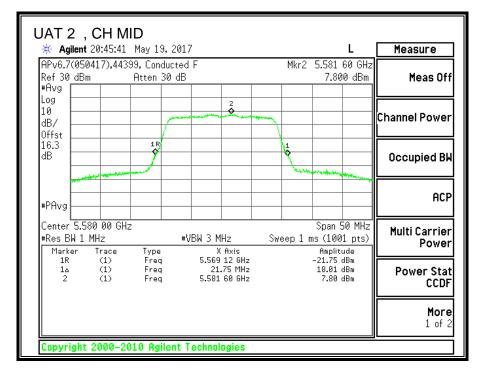
Channel	Frequency	UAT 2	LAT 3	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5500	7.73	7.42	10.59	11.00	-0.41
Mid	5580	7.80	7.81	10.81	11.00	-0.19
High	5700	7.79	7.99	10.90	11.00	-0.10

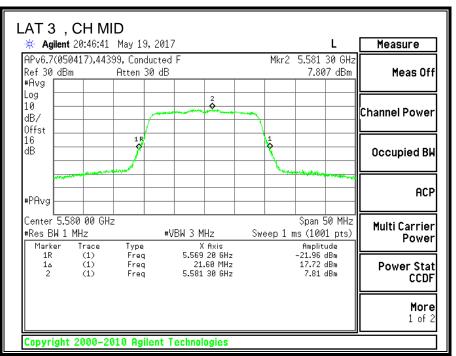
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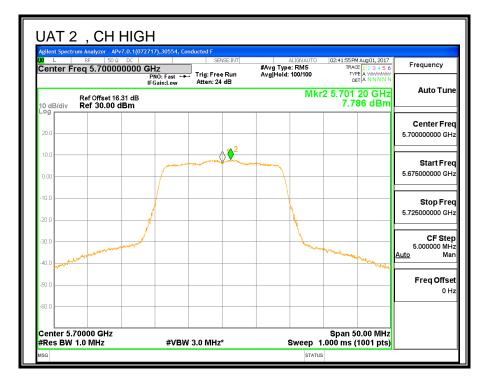


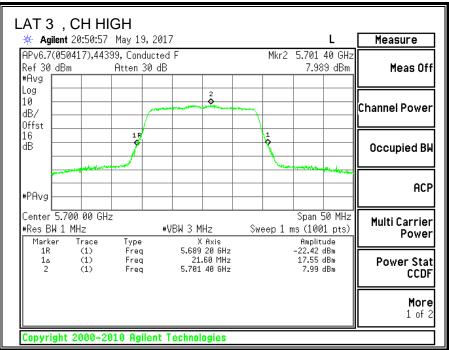
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8.24. 11ac HT20 2TX CDD MIMO STRADDLE CHANNEL 144

8.24.1. OUTPUT POWER AND PPSD

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/1MHz)
144	5720	21.65	-4.36	-1.58	24.00	11.00

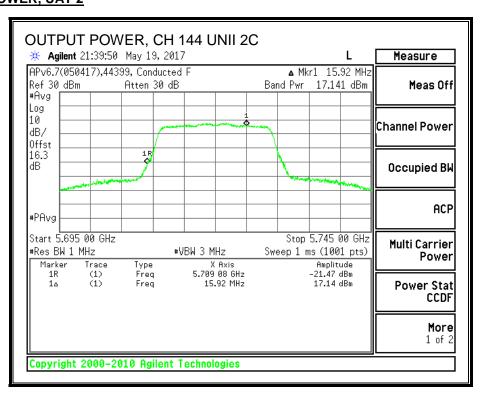
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
--------------------	------	--

Output Power Results

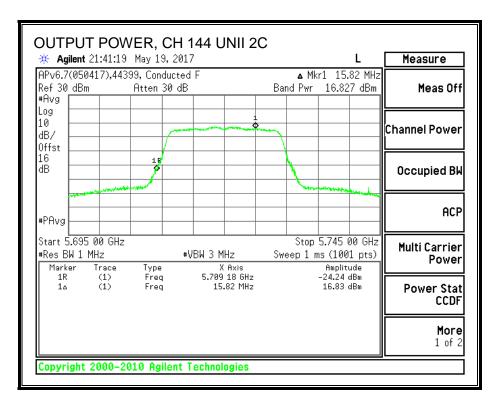
Channel	Frequency	UAT 2	LAT 3	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
144	5720	17.14	16.83	20.00	24.00	-4.00

PSD Results

Channel	Frequency	UAT 2	LAT 3	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
144			7.54	10.69	11.00	-0.31

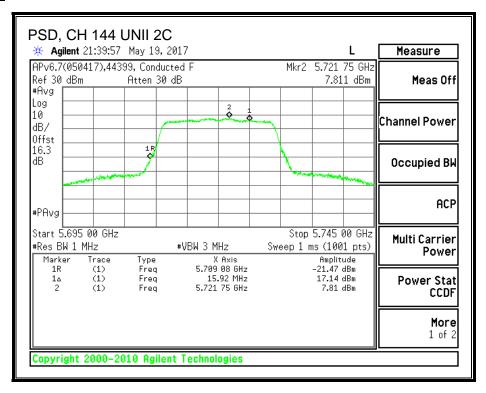


OUTPUT POWER, LAT 3

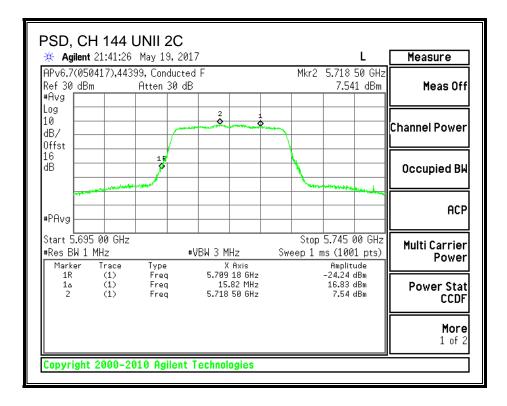


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PSD, UAT 2



<u>PSD, LAT 3</u>



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UNII-3 BAND

Antenna Gain and Limit

Cł	nannel	Frequency	Min	Directional	Directional	Power	PSD
			26 dB	Gain	Gain	Limit	Limit
			BW	For Power	For PSD		
		(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
	144	5720	21.65	-4.73	-1.82	30.00	30.00

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

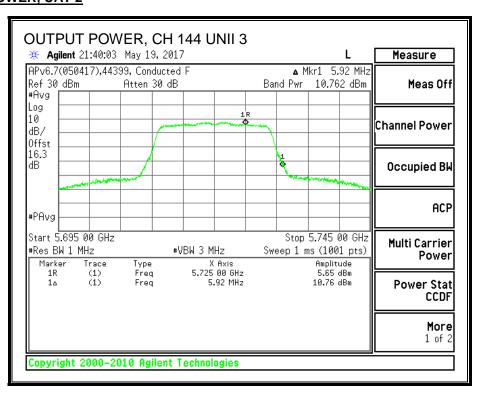
Output Power Results

Channel	Frequency	UAT 2	LAT 3	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
144	5720	10.76	10.50	13.64	30.00	-16.36

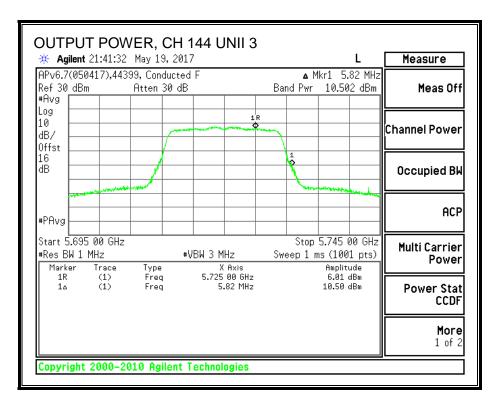
PSD Results

Channel	Frequency	UAT 2	LAT 3	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
144	5720	3.38	2.94	6.18	30.00	-23.82

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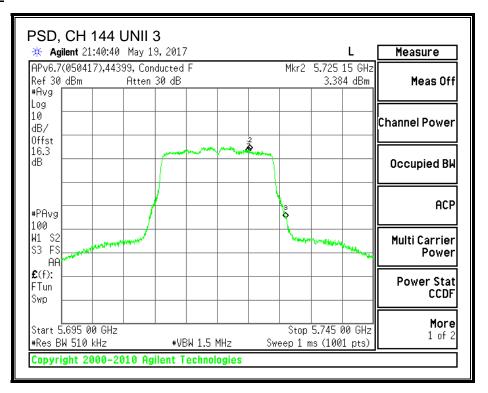


OUTPUT POWER, LAT 3

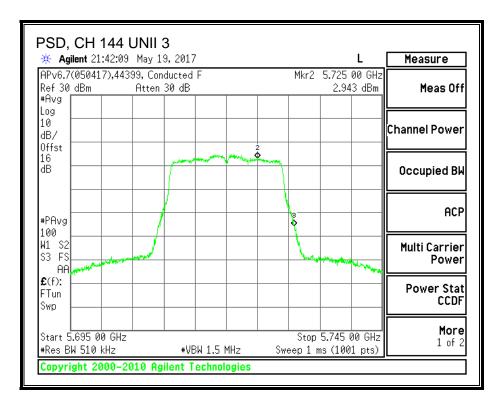


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<u>PSD, UAT 2</u>



PSD, LAT 3



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8.24.2. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

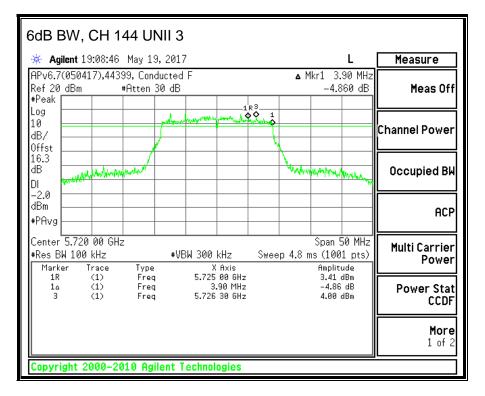
The minimum 6 dB bandwidth shall be at least 500 kHz.

<u>RESULTS</u>

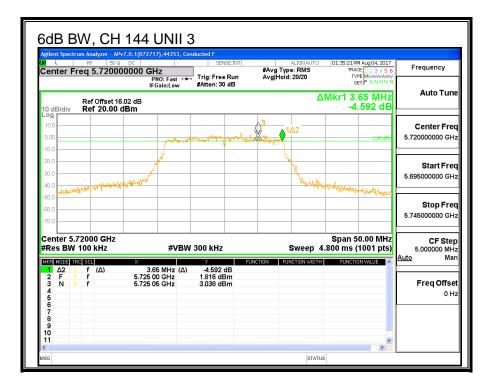
Channel	Frequency	6 dB BW	6 dB BW
		UAT 2	LAT 3
	(MHz)	(MHz)	(MHz)
144	5720	3.90	3.65

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<u>UAT 2</u>



<u>LAT 3</u>



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8.25. 11n HT40 UAT 2 SISO MODE IN THE 5.6GHz BAND

8.25.1. 26 dB BANDWIDTH

<u>LIMITS</u>

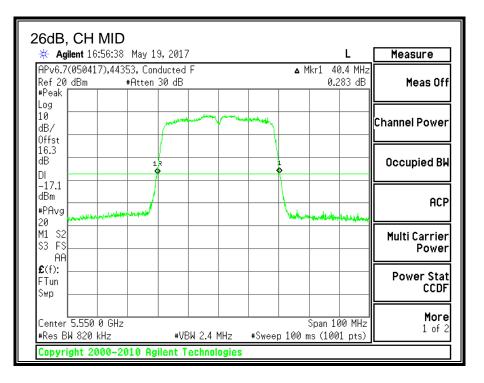
None; for reporting purposes only.

RESULTS

Channel	Frequency	26 dB BW UAT 2 (MHz)
Low	5510	40.6
Mid	5550	40.4
High	5670	40.5
142	5710	40.4

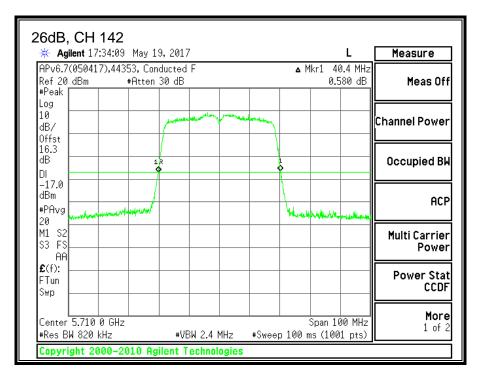
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					7	4.0. 0.04		CH LO	
Measure	L				./	19,201	43 May	ent 16:51:4	🔆 Agi
Meas Off	kr1 40.6 MHz –0.770 dB	▲ M	6.7(050417),44353, Conducted F 20 dBm #Atten 30 dB						
Channel Power				m	Alexandre .	- June			Log 10 dB/ Offst
Occupied BW		1				1.R •			16.3 dB DI -17.0
ACP	marter and the public designs	handharaa				┦─			dBm
Multi Carrier Power									M1 S2 S3 FS AA
Power Stat CCDF									€(f): FTun Swp
More 1 of 2	Span 100 MHz s (1001 pts)		#Swe	MHz_	/BW 2. <u>4</u>		Hz	5.510 0 GH 820 kHz	
_				logies	Techno	Agilent	-2010 A	ht 2000-	Copyri



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							Н	HIG	СН	26dB,
Measure	L				7	9,2017	May 1	:01:35	lent 17	🔆 Agi
Meas Off	kr1 40.5 MHz -0.826 dB	∧ M		/6.7(050417),44353, Conducted F 20 dBm #Atten 30 dB						
Channel Power			braining	~~~~	****					Log 10 dB/ Offst
Occupied BW		1 \$				2	1			16.3 dB DI -17.5
ACP		Anaperte					an show	يەر بىدىمىيە 14 رامىدىمىيە		dBm
Multi Carrier Power										M1 S2 S3 FS AA
Power Stat CCDF										£ (f): FTun Swp
More 1 of 2	Span 100 MHz s (1001 pts)		#Swee	 MHz	 3W 2.4	 #VE				Center #Res B
				ogies	echnol	ilent T	010 Ag	000-20	ght 20	Copyri



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REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A

8.25.2. 99% BANDWIDTH

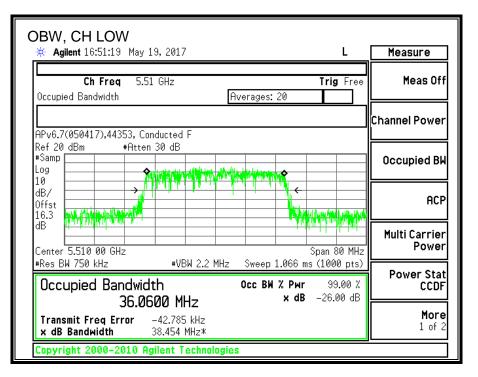
<u>LIMITS</u>

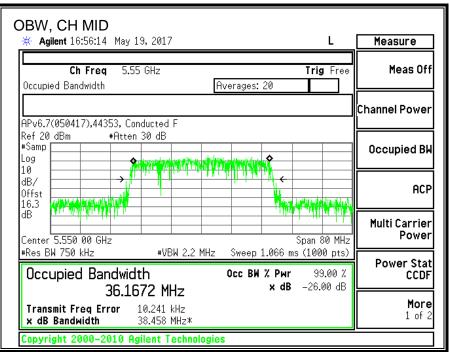
None; for reporting purposes only.

RESULTS

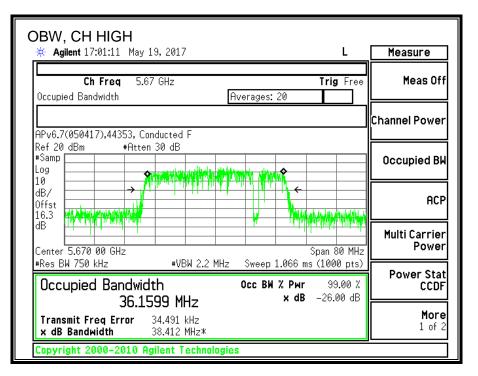
Channel	Frequency	99% BW UAT 2 (MHz)
Low	5510	36.0600
Mid	5550	36.1672
High	5670	36.1599
142	5710	36.0809

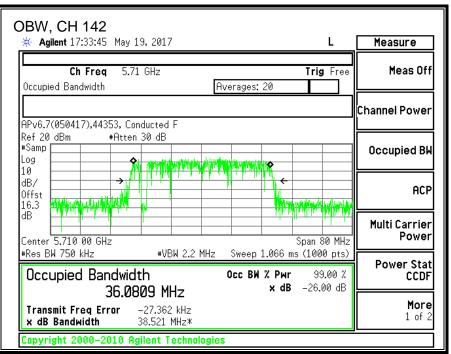
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8.25.3. AVERAGE POWER

ID: 30554 **Date:** 7/28/2017

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

Channel	Frequency	Power UAT 2 (dBm)
Low	5510	17.79
Mid	5550	19.42
High	5670	19.39
142	5710	19.43

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8.25.4. OUTPUT POWER AND PPSD

<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.

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.

PSD test procedure: KDB 789033 D02 v01r04 Section F (SA-2 method)

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.

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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/1MHz)
Low	5510	40.60	36.060	-2.77	24.00	11.00
Mid	5550	40.40	36.167	-2.77	24.00	11.00
High	5670	40.50	36.160	-2.77	24.00	11.00

Duty Cycle CF (dB) 0.10

Included in Calculations of Corr'd PSD

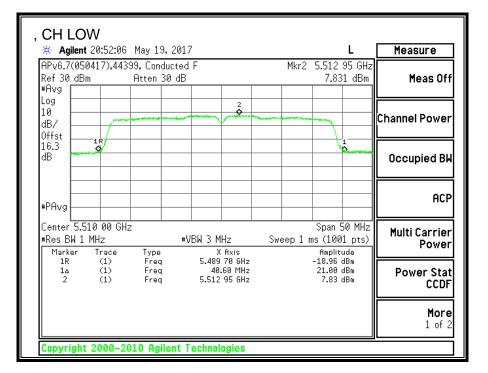
Output Power Results

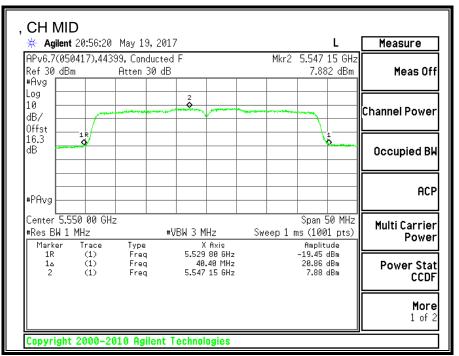
Channel	Frequency	UAT 2	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	17.79	17.79	24.00	-6.21
Mid	5550	19.42	19.42	24.00	-4.58
High	5670	19.39	19.39	24.00	-4.61

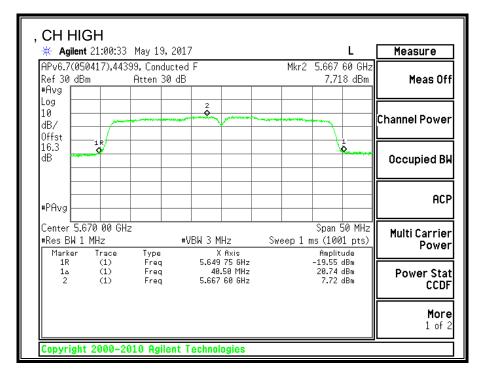
PSD Results

Channel	Frequency	UAT 2	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5510	7.83	7.93	11.00	-3.07
Mid	5550	7.88	7.98	11.00	-3.02
High	5670	7.72	7.82	11.00	-3.18

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8.26. 11ac HT40 UAT 2 SISO STRADDLE CHANNEL 142

8.26.1. OUTPUT POWER AND PPSD

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/1MHz
142	5710	40.40	-2.77	-2.77	24.00	11.00

Duty Cycle CF (dB) 0.10	Included in Calculations of Corr'd Power & PSD
-------------------------	--

Output Power Results

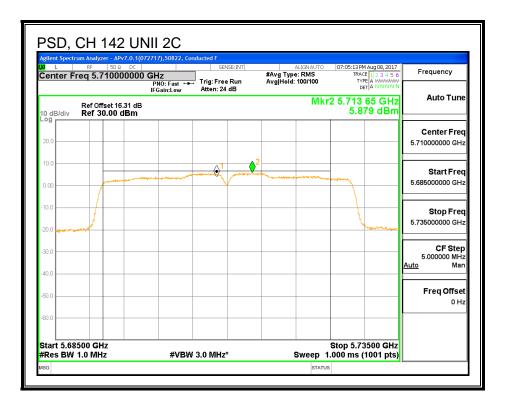
Channel	Frequency	UAT 2	Total	Power	Power
		Meas Corr'd		Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	18.85	18.95	24.00	-5.05

PSD Results

Channel	Frequency	UAT 2	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(8411-)				
	(MHz)	(abm/1wHz)	(dBm/1MHz)	(abm/tivinz)	(dB)
	(IVIHZ)	(abm/1wHz)	(dBm/1MHZ)	(abm/nwnz)	(UB)

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L			SENSE:INT	ALIGNAUTO #Avg Type: RMS Avg Hold: 100/100	07:04:51PM Aug08, 2017 TRACE 1 2 3 4 5 6 TYPE A WWWWWW	Frequency
0 dB/div	Ref Offset 16 Ref 30.00 (Atten: 24 dB		1 5.707 40 GHz ver 18.851 dBm	Auto Tune
	Kei 30.00 (Center Freq
10.0 			0 ¹			5.710000000 GHz
0.0						Start Fred
0.0		+				5.685000000 GH:
0.0	_					Stop Fred 5.735000000 GH;
Res BW	8500 GHz 1.0 MHz	#VB	SW 3.0 MHz*	Sweep 1.	Stop 5.73500 GHz 1.000 ms (1001 pts)	CF Step 5.000000 MH: Auto Mar
kr mode tr <mark>1</mark> N 1 2	rc scl 1 f	× 5.707 40 GHz		nd Power 35.20 MHz	FUNCTION VALUE	<u>Auto</u>
2 3 4 5 6						Freq Offse 0 Hi
7 8 9						
10 11					×	



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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)
142	5710	22.05	-3.57	30.00	30.00

Duty Cycle CF (dB)	0.10	Included in Calculations of Corr'd Power & PSD
--------------------	------	--

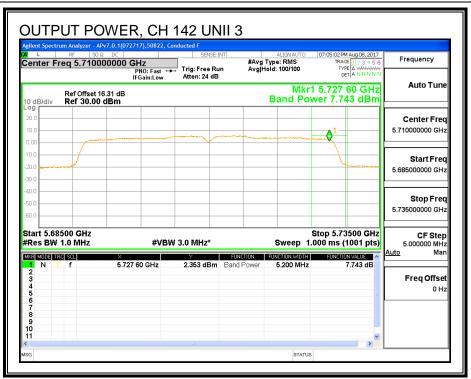
Output Power Results

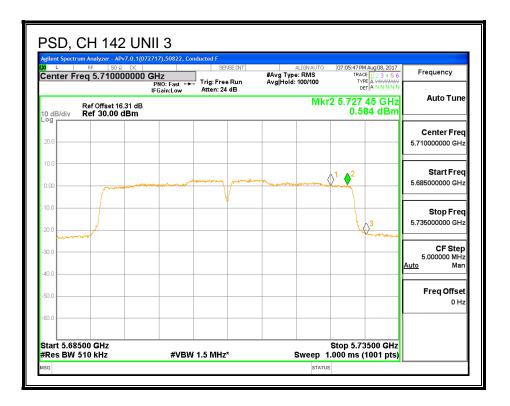
Channel	Frequency	UAT 2	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power Power			
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	7.74	7.84	30.00	-22.16

PSD Results

Channel	Frequency	UAT 2	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	0.58	0.68	30.00	-29.32

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8.26.2. 6 dB BANDWIDTH

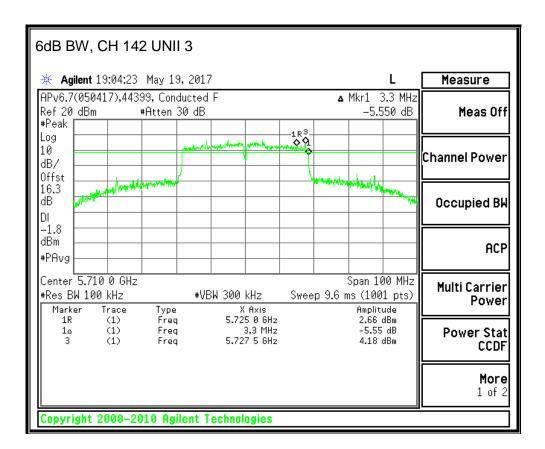
<u>LIMITS</u>

FCC §15.407 (e)

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

RESULTS

Channel	Frequency	6 dB Bandwidth		
	(MHz)	(MHz)		
142	5710	3.30		



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8.27. 11n HT40 LAT 3 SISO MODE IN THE 5.6GHz BAND

8.27.1. 26 dB BANDWIDTH

<u>LIMITS</u>

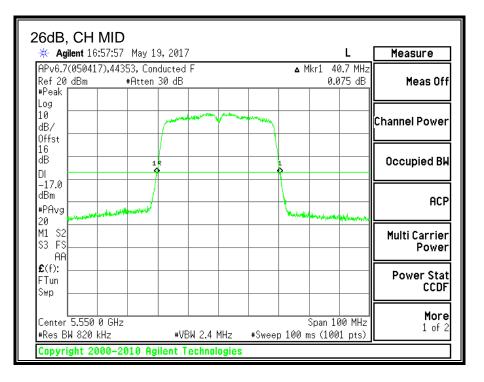
None; for reporting purposes only.

RESULTS

Channel	Frequency	26 dB BW LAT 3 (MHz)
Low	5510	40.7
Mid	5550	40.7
High	5670	40.7
142	5710	40.7

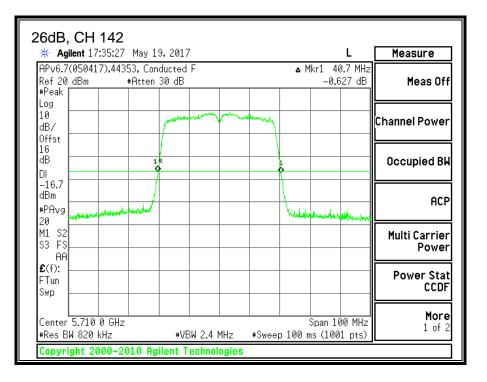
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					_					26dB,
Measure	L				7	.9,2017	May 1	53:01	lent 16	🔆 Ag
Meas Off	kr1 40.7 MHz 1.183 dB	▲ M			F		353, Cor #Atten			Ref 20 #Peak
Channel Power			many							Log 10 dB/ Offst
Occupied BW		1				. R	1			16 dB DI
ACP		Korran					Anne	a, ferina da ar	ware first fr	-16.7 dBm #PAvg 20
Multi Carrier Power										M1 S2 S3 FS AA
Power Stat CCDF										£ (f): FTun Swp
More 1 of 2	Span 100 MHz is (1001 pts)		#Swee	MHz	BW 2.4					Center #Res B
				logies	(echno	jilent T	010 Ag	000-2	ght 20	Copyri



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Manager					47		HIGH		
Measure	L				17	May 19, 20:	102:54	lent 17	🔆 Ag
	kr1 40.7 MHz 0.963 dB	▲ M				3, Conducte Atten 30 dE			APv6.7 Ref20 #Peak
Channel Power			-	V					Log 10 dB/ Offst
Occupied BW		1				1.8			16 dB DI -16.4
ACP	hour marked house	Innana				ww	an side and the		dBm
Multi Carrier Power									M1 S2 S3 FS AA
Power Stat CCDF									£ (f): FTun Swp
	opan 100 MHz s (1001 pts)		#Swee	MHz	VBW 2.4	#			Center #Res B
				logies	Techno	.0 Agilent	000-20	ght 20	Copyri



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REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A

8.27.2. 99% BANDWIDTH

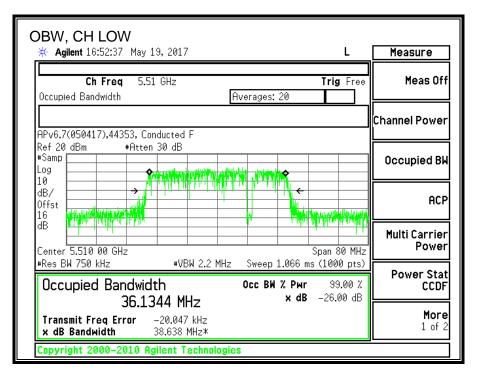
<u>LIMITS</u>

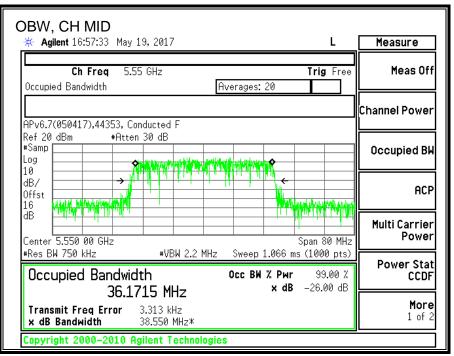
None; for reporting purposes only.

RESULTS

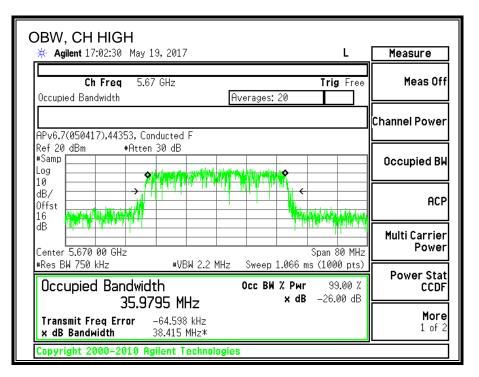
Channel	Frequency	99% BW LAT 3 (MHz)
Low	5510	36.1344
Mid	5550	36.1715
High	5670	35.9795
142	5710	36.2129

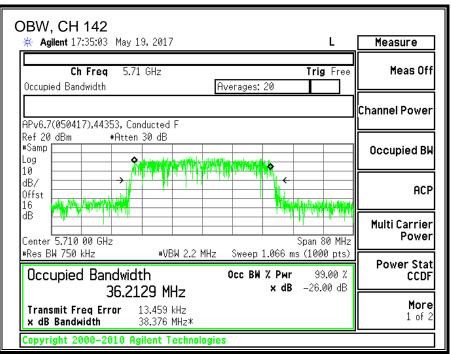
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8.27.3. AVERAGE POWER

ID: 30554 **Date:** 7/28/2017

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

Channel	Frequency	Power LAT 3 (dBm)
Low	5510	17.86
Mid	5550	19.36
High	5670	19.41
142	5710	19.45

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8.27.4. OUTPUT POWER AND PPSD

<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.

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.

PSD test procedure: KDB 789033 D02 v01r04 Section F (SA-2 method)

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.

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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/1MHz)
Low	5510	40.70	36.13	-6.89	24.00	11.00
Mid	5550	40.70	36.17	-6.89	24.00	11.00
High	5670	40.70	35.98	-6.89	24.00	11.00

Duty Cycle CF (dB) 0.10

Included in Calculations of Corr'd PSD

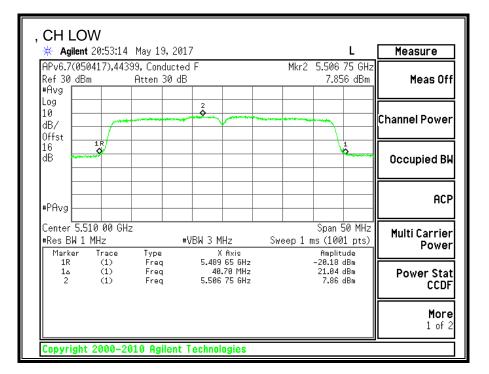
Output Power Results

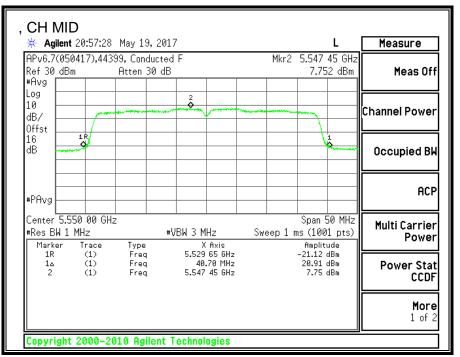
Channel	Frequency	LAT 3	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	17.86	17.86	24.00	-6.14
Mid	5550	19.36	19.36	24.00	-4.64
High	5670	19.41	19.41	24.00	-4.59

PSD Results

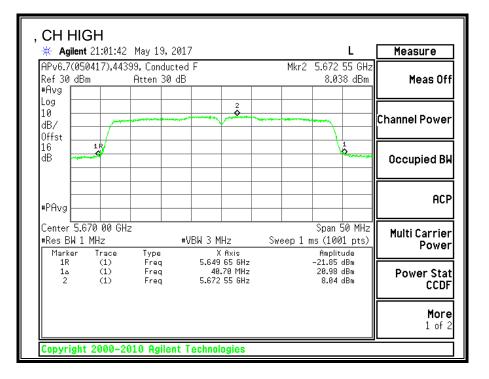
Channel	Frequency	LAT 3	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5510	7.86	7.96	11.00	-3.04
Mid	5550	7.75	7.85	11.00	-3.15
High	5670	8.04	8.14	11.00	-2.86

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11ac HT40 LAT 3 SISO STRADDLE CHANNEL 142 8.28.

8.28.1. OUTPUT POWER AND PPSD

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/1MHz)
142	5710	40.70	-6.89	-6.89	24.00	11.00

Duty Cycle CF (dB)	0.10	Included in Calculations of Corr'd Power & PSD
--------------------	------	--

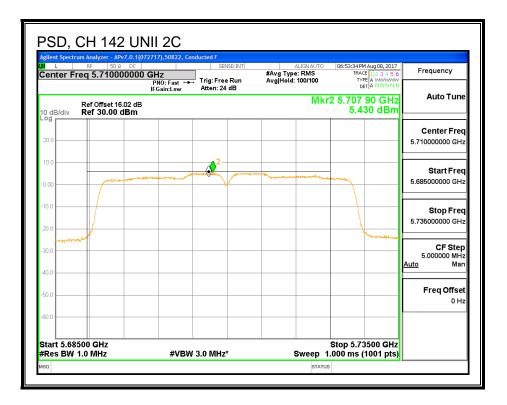
Output Power Results

Channel	Frequency	LAT 3	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	18.50	18.60	24.00	-5.40

PSD Results

Channel	Frequency	LAT 3	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)

enter F	RF 50 Ω DC Freq 5.7100000		SENSE:INT	ALIGNAUTO #Avg Type: RMS Avg Hold: 100/100	06:53:28 PM Aug 08, 2017 TRACE 1 2 3 4 5 6 TYPE A WWWWW	Frequency
dB/div	Ref Offset 16.02 Ref 30.00 dBr		Atten: 24 dB		t 5.707 33 GHz ver 18.499 dBm	Auto Tune
9 0.0 0.0			0 ¹			Center Free 5.710000000 GH
0.0 0.0						Start Free 5.685000000 GH
0.0 0.0 0.0						Stop Free 5.735000000 GH
Res BW	8500 GHz V 1.0 MHz		₩ 3.0 MHz*	Sweep 1.	Stop 5.73500 GHz .000 ms (1001 pts)	CF Step 5.000000 MH Auto Mar
KE MODE 1 N 2 3 4 5 5 6 6 7 8 9 0 1		× 5.707 33 GHz		URGETON WIGHT Ind Power 35.35 MHz		Freq Offse 0 H



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Antenna Gain and Limit

Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)
142	5710	40.70	-6.31	30.00	30.00

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

Output Power Results

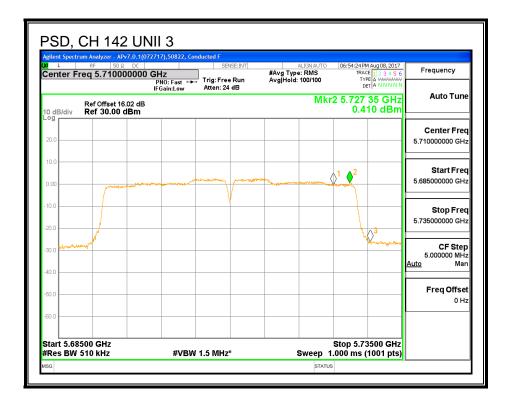
Channel	Frequency	LAT 3	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	7.40	7.50	30.00	-22.51

PSD Results

Channel	Frequency	LAT 3	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	0.41	0.51	30.00	-29.49

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Frequency	53:39 PM Aug 08, 2017 TRACE 1 2 3 4 5 6 TYPE A WWWWW DET A N N N N N	ALIGNAUTO DE pe: RMS d: 100/100	#Avg	SENSE:II	7.0.1(072717),50822, DC 100000 GHz PN0: Fast		L
Auto Tune	727 68 GHz 7.395 dBm			Atten: 24 dB		Ref Offset 1 Ref 30.00	0 dB/div
Center Fred 5.710000000 GH:	Q1						og 20.0 10.0
Start Fred 5.685000000 GH						-	10.0 20.0 30.0
Stop Fred 5.735000000 GH:							40.0 50.0 50.0
CF Step 5.000000 MH	5.73500 GHz ms (1001 pts)			W 3.0 MHz*	#VB	500 GHz 1.0 MHz	
Auto Mar Freq Offse 0 Hz	FUNCTION VALUE 7.395 dB	5.350 MHz	FUNCTION Band Power	Y 1.979 dBm	× 5.727 68 GHz	RC SCL	KR MODE I 1 N 2 3 4 5
							5 6 7 8 9



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8.28.2. 6 dB BANDWIDTH

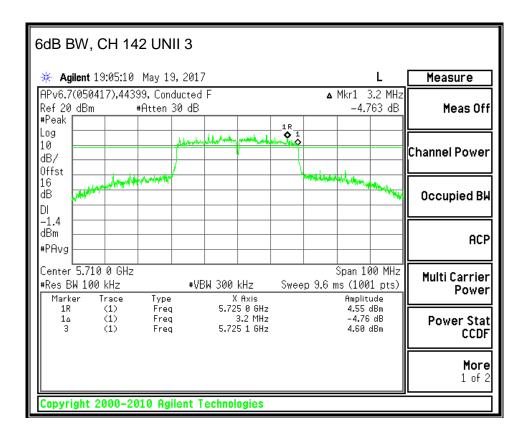
<u>LIMITS</u>

FCC §15.407 (e)

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

RESULTS

Channel	Frequency	6 dB Bandwidth
	(MHz)	(MHz)
142	5710	3.20



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8.29. 11n HT40 2TX CDD MIMO MODE IN THE 5.6GHz BAND

8.29.1. 26 dB BANDWIDTH

<u>LIMITS</u>

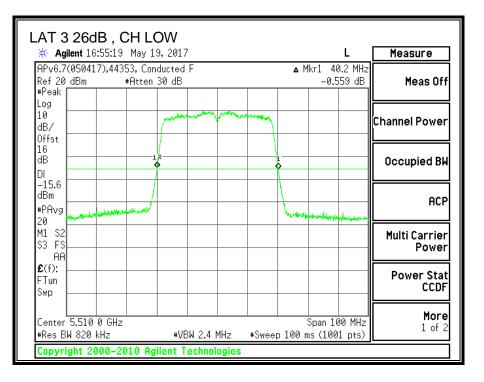
None; for reporting purposes only.

RESULTS

Channel	Frequency	26 dB BW UAT 2 (MHz)	26 dB BW LAT 3 (MHz)
Low	5510	40.6	40.2
Mid	5550	40.7	40.1
High	5670	40.6	40.1
142	5710	40.6	40.1

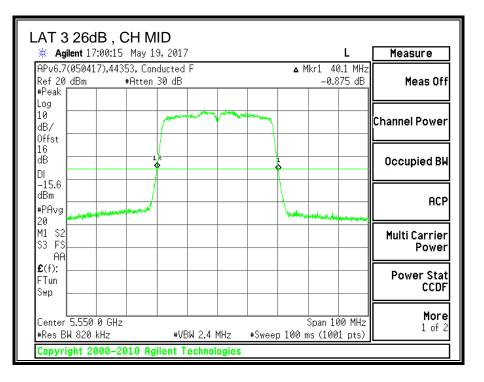
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Measure	L					7					JAT 2 🔆 Agi
	- 1.6 MHz 38 dB	lkr1 40 -0.2	م ۲	1			ducted	-	7),443	(05041	APv6.7 Ref 20 #Peak I
Channel Power				aline and a	~		from				Log 10 dB/ Offst
Occupied BW			1				×	1			16.3 dB DI -17.1
ACP	whitena	dun dim	L.					essellmar	gyblice warbe		dBm
Multi Carrier Power											M1 S2 S3 FS AA
Power Stat CCDF											£ (f): FTun Swp
More 1 of 2		Span 10 1s (100		#Swee	MHz	 3W 2.4	 #VE				Center #Res Bl
					ogies	echnol	ilent T	010 Ag	00-20	ght 20	Copyri



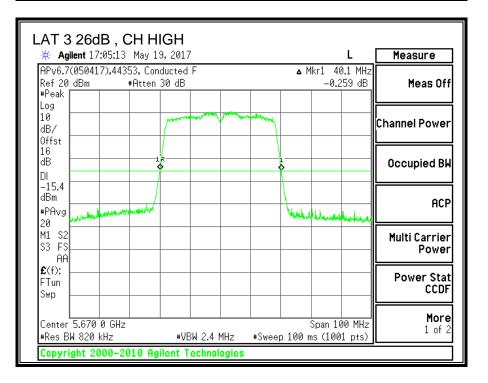
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						_					JAT 2
Measure	L					(9,201.	May 1	:59:16	lent 16	🔆 Agi
Meas Off	0.7 MHz i20 dB		▲ M			F		53, Cor #Atten			APv6.7 Ref20 #Peak
Channel Power				Anna	mune	and a strength with the	funder				Log 10 dB/ Offst
Occupied BW			1				R 8	1			16.3 dB DI
ACP	alphanous							and have	ant the second	ر	-17.3 dBm #PAvg 20
Multi Carrier Power											M1 S2 S3 FS AA
Power Stat CCDF											£ (f): FTun Swp
More 1 of 2		Span 10 ns (100	p 100 m	#Swee	 MHz	 3W 2.4	 #V{				Center #Res B
_					ogies	echno	jilent T	010 Ag	000-20	ght 2	Copyri



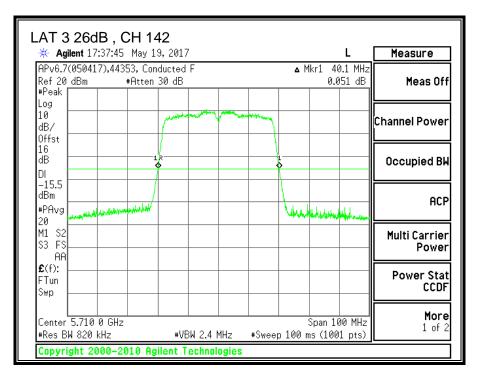
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🔆 Agilent 17	-				L	Measure
AP∨6.7(05041 Ref 20 dBm #Peak [7),44353, Cor. #Atten			▲ Mkr	1 40.6 MHz 0.385 dB	Meas Off
Log 10 dB/ Offst		for the second s	V			Channel Power
16.3 dB DI -17.7				•		Occupied BW
dBm	and a second second			Hermonlander	hun han har marke	ACP
M1 S2 S3 FS AA						Multi Carrier Power
£ (f): FTun Swp						Power Stat CCDF
Center 5.670 #Res BW 820		#VBW 2.4	MHz #Swe		an 100 MHz (1001 pts)	More 1 of 2



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					_					JAT 2
Measure	L				/	.9,201	May 1	': 36:46	lent $1/$	💥 Ag
Meas Off	kr1 40.6 MHz 0.153 dB	▲ M					853, Cor #Atten			Ref 20 #Peak
Channel Power			لله الم	~		, may				Log 10 dB/ Offst
Occupied BW		1				R	1			16.3 dB DI
ACP	-hearing the frances	Martin					-		munderali	-17.3 dBm #PAvg 20
Multi Carrier Power										M1 S2 S3 FS AA
Power Stat CCDF										£ (f): FTun Swp
More 1 of 2	Span 100 MHz is (1001 pts)		#Sw	MHz	 BW 2.4	#V				Center #Res B
				logies	l echno	jilent 1	010 Ag	000-2	ght 2	Copyri



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REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A

DATE: AUGUST 28, 2017 FCC ID: BCG-E3161A

8.29.2. 99% BANDWIDTH

<u>LIMITS</u>

None; for reporting purposes only.

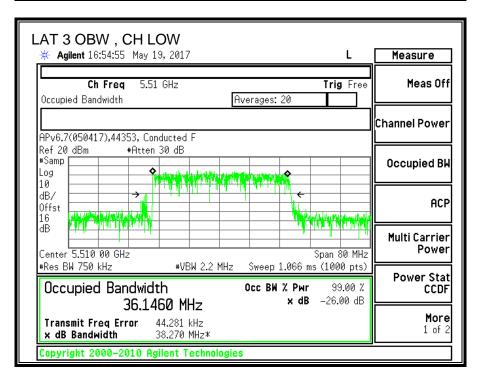
RESULTS

		99% BW	99% BW
Channel	Frequency	UAT 2	LAT 3
		(MHz)	(MHz)
Low	5510	36.1290	36.1460
Mid	5550	36.1169	36.1565
High	5670	36.1923	36.1662
142	5710	36.1961	36.1349

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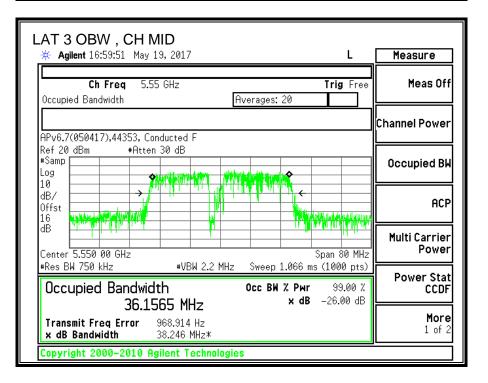
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JAT 2 OBW , CH LOW	Managuna
★ Agilent 16:53:55 May 19, 2017	Measure
Ch Freq 5.51 GHz Trig Free Occupied Bandwidth Averages: 20	Meas Off
	Channel Power
APv6.7(050417),44353, Conducted F	
Ref 20 dBm + Atten 30 dB + Samp Log	Occupied BW
10 dB/ offst 16.3 All has been seen as a second	ACF
dB Center 5.510 00 GHz Span 80 MHz	Multi Carrier Power
#Res BW 750 kHz	
Occupied Bandwidth Осс ВИ % Риг 99.00 % 36.1290 MHz × dB -26.00 dB	Power Stat CCDF
Transmit Freq Error 33.734 kHz x dB Bandwidth 38.456 MHz*	More 1 of 2
Copyright 2000-2010 Agilent Technologies	



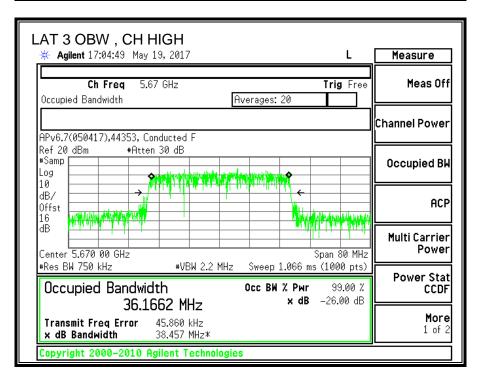
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JAT 2 OBW , CH MID	1	Measure
Agilent 10.30.31 May 13, 2017		neasure
Ch Freq 5.55 GHz	Trig Free	Meas Off
Occupied Bandwidth Avera	iges: 20	
APv6.7(050417),44353, Conducted F		Channel Power
Ref 20 dBm #Atten 30 dB		
#\$amp		Occupied BW
Log 10 An and a standard and a standard and a standard a standard a standard a standard a standard a standard a st		
dB/ →		
Offst		ACF
		Multi Carrier
Center 5.550 00 GHz	Span 80 MHz	Power
#Res BW 750 kHz #VBW 2.2 MHz Sw	eep 1.066 ms (1000 pts)	
Occupied Bandwidth Occ	с ВW % Рwr 99.00 %	Power Stat CCDF
36.1169 MHz	x dB -26.00 dB	
		More
Transmit Freq Error -14.831 kHz x dB Bandwidth 38.594 MHz*		1 of 2
Copyright 2000-2010 Agilent Technologies		

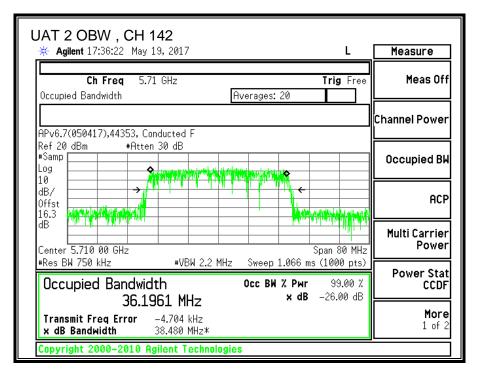


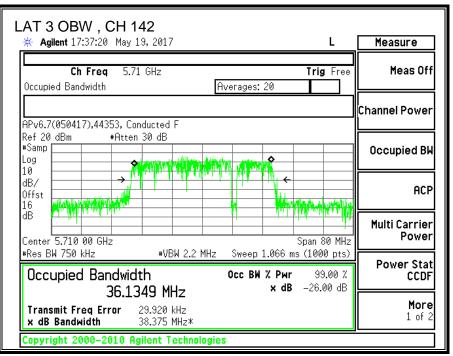
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JAT 2 OBW , CH HIGH	Measure
Ch Freq 5.67 GHz Trig Free	Meas Off
Occupied Bandwidth Averages: 20	Channel Power
APv6.7(050417),44353, Conducted F Ref 20 dBm	Occupied BW
Log 10 dB/ 0ffst	ACP
16.3 dB	Multi Carrier Power
Center 5.670 00 GHz Span 80 MHz #Res BW 750 kHz #VBW 2.2 MHz Sweep 1.066 ms (1000 pts)	Power Stat
Occupied Bandwidth Осс вм % Рыг 99.00 % 36.1923 MHz × dB -26.00 dB	CCDF
Transmit Freq Error -12.699 kHz x dB Bandwidth 38.544 MHz*	More 1 of 2
Copyright 2000–2010 Agilent Technologies	



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8.29.3. AVERAGE POWER

ID: 30554 **Date:** 7/28/2017

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS						
Channel	Frequency	UAT 2	LAT 3	Total		
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)		
Low	5510	16.92	16.86	19.90		
Mid	5550	19.42	19.39	22.42		
High	5670	19.43	19.40	22.43		
142	5710	19.39	19.46	22.44		

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8.29.4. OUTPUT POWER AND PPSD

<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.

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.

PSD test procedure: KDB 789033 D02 v01r04 Section F (SA-2 method)

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

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DIRECTIONAL ANTENNA GAIN

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

UAT 2	LAT 3	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
-2.77	-6.89	-4.36

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

UAT 2	LAT 3	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
-2.77	-6.89	-1.58

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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/1MHz)
Low	5510	40.20	36.129	-4.36	-1.58	24.00	11.00
Mid	5550	40.10	36.117	-4.36	-1.58	24.00	11.00
High	5670	40.10	36.166	-4.36	-1.58	24.00	11.00

Duty Cycle CF (dB)

0.10

Included in Calculations of Corr'd PSD

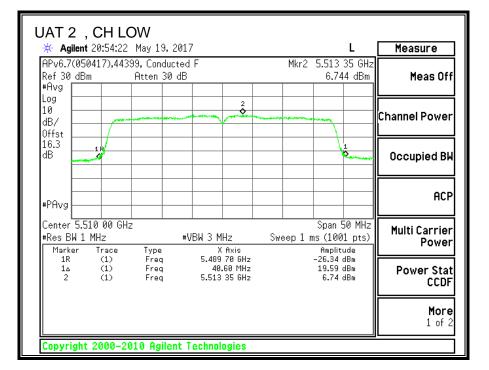
Output Power Results

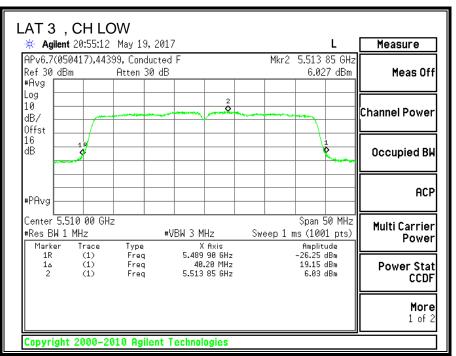
Channel	Frequency	UAT 2	LAT 3	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5510	16.92	16.86	19.90	24.00	-4.10
Mid	5550	19.42	19.39	22.42	24.00	-1.58
High	5670	19.43	19.40	22.43	24.00	-1.57

PSD Results

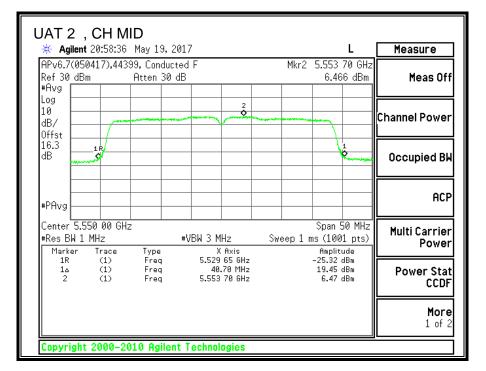
Channel	Frequency	UAT 2	LAT 3	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5510	6.74	6.03	9.51	11.00	-1.49
Mid	5550	6.47	5.82	9.26	11.00	-1.74
High	5670	6.42	5.93	9.29	11.00	-1.71

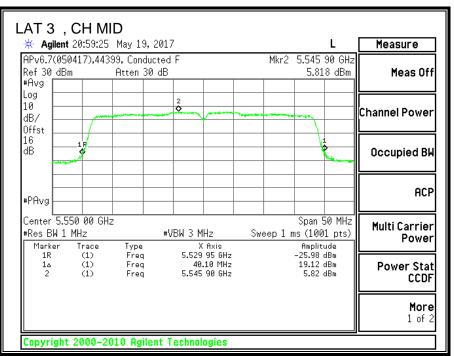
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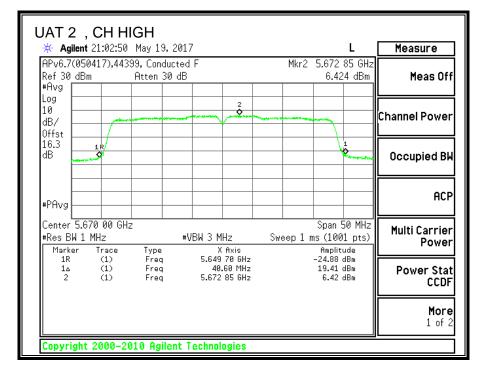


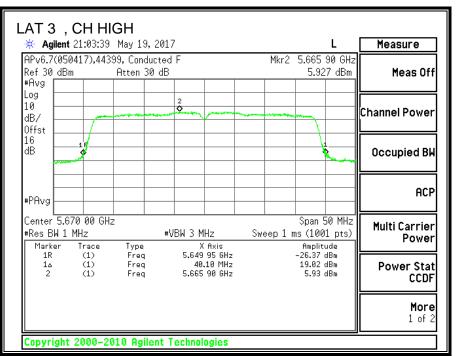
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8.30. 11ac HT40 2TX CDD MIMO STRADDLE CHANNEL 142

8.30.1. OUTPUT POWER AND PPSD

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/1MHz
142	5710	40.10	-4.36	-1.58	24.00	11.00

Duty Cycle CF (dB)	0.10	Included in Calculations of Corr'd Power & PSD
--------------------	------	--

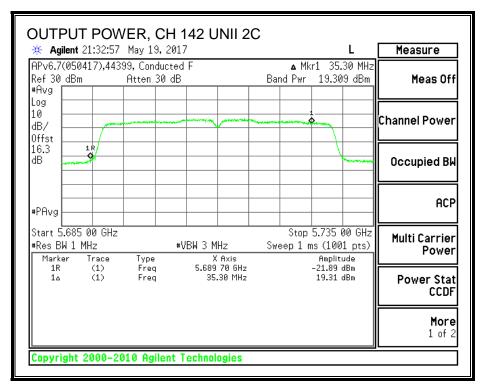
Output Power Results

Channel	Frequency	UAT 2	LAT 3	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	19.31	18.86	22.20	24.00	-1.80

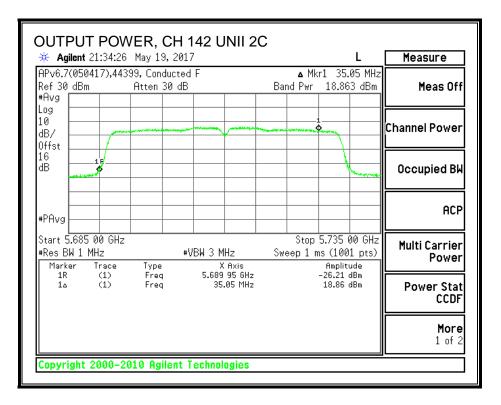
PSD Results

Channel	Frequency	UAT 2	LAT 3	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
	()	(((((/
	()	((42.11 1.1.12)	(()	()

OUTPUT POWER, UAT 2

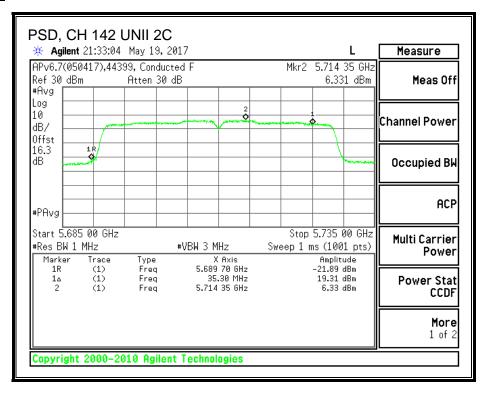


OUTPUT POWER, LAT 3

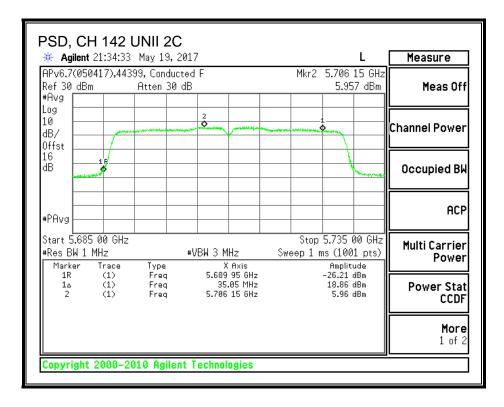


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<u>PSD, UAT 2</u>



PSD, LAT 3



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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	40.10	-4.73	-1.82	30.00	30.00

Duty Cycle CF (dB)	0.10	Included in Calculations of Corr'd Power & PSD
Duty Oyole Of (ub)	0.10	

Output Power Results

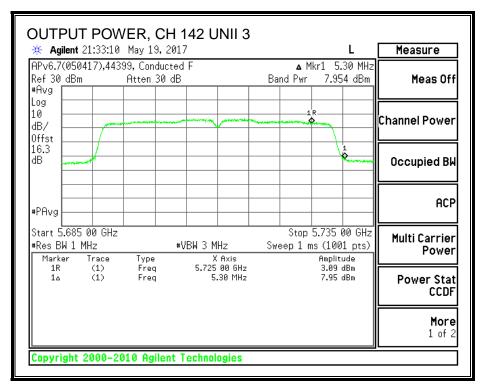
Channel	Frequency	UAT 2	LAT 3	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	7.95	7.50	10.84	30.00	-19.16

PSD Results

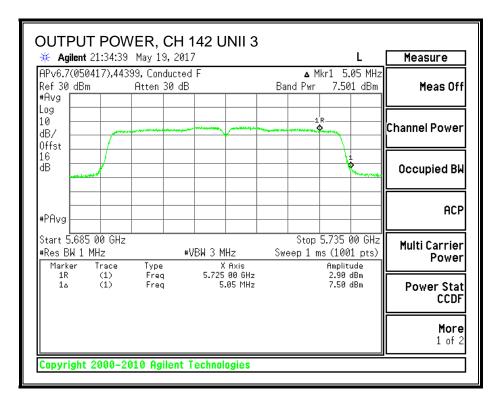
Channel	Frequency	UAT 2	LAT 3	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
142	5710	0.88	0.72	3.91	30.00	-26.09

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OUTPUT POWER, UAT 2

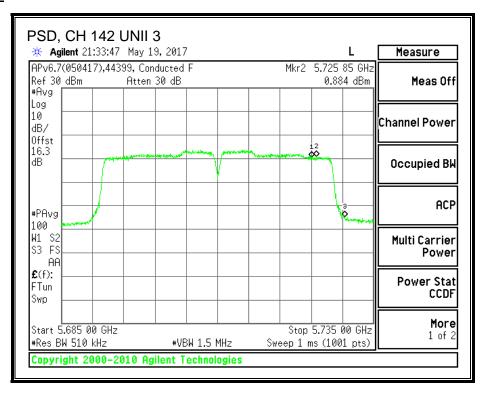


OUTPUT POWER, LAT 3

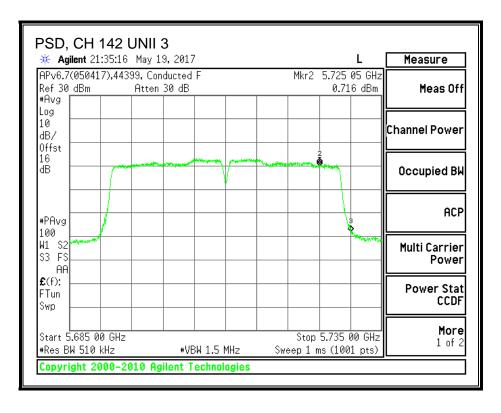


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<u>PSD, UAT 2</u>



PSD, LAT 3



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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.

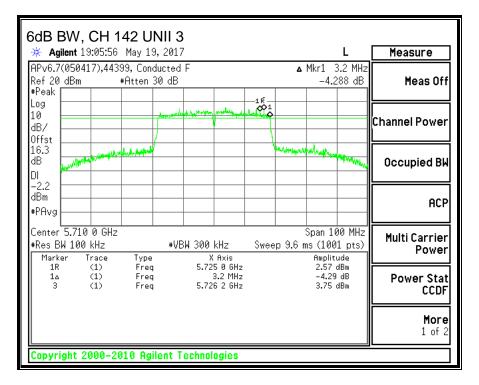
RESULTS

Channel	Frequency	6 dB BW	6 dB BW
		UAT 2	LAT 3
	(MHz)	(MHz)	(MHz)
142	5710	-4.29	-3.86

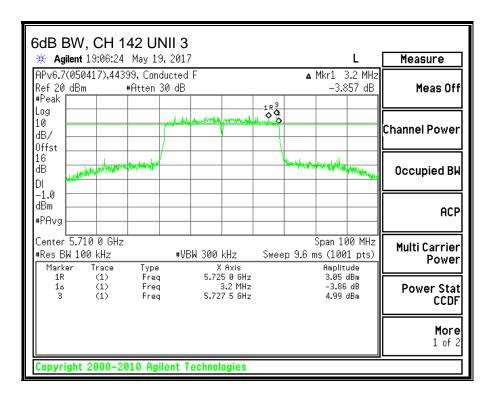
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<u>UAT 2</u>



<u>LAT 3</u>



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8.31. 11ac HT80 UAT 2 SISO MODE IN THE 5.6GHz BAND

8.31.1. 26 dB BANDWIDTH

<u>LIMITS</u>

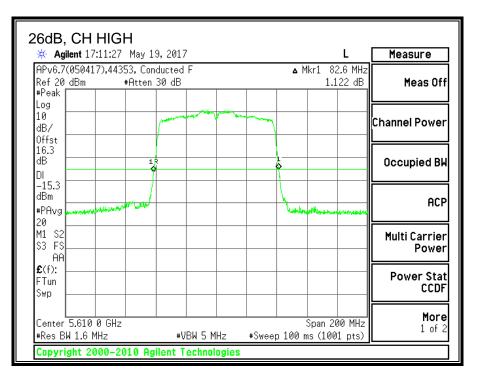
None; for reporting purposes only.

RESULTS

Channel	Frequency	26 dB BW UAT 2 (MHz)
Low	5530	82.2
High	5610	82.6
138	5690	82.6

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				_		LOW		
Measure	L			/	ay 19, 2011	:06:32 N	lent 17	🔆 Ag
Meas Off	kr1 82.2 MHz -1.116 dB	∧ M		F	Conducted tten 30 dB			APv6.7 Ref20 #Peak
Channel Power								Log 10 dB/ Offst
Occupied BW					1R			16.3 dB DI
ACP	ng fashi a Anara Manai Alasi a	hardwise			,	alaminda model	Line and the	-15.3 dBm #PAvg 20
Multi Carrier Power								M1 S2 S3 FS AA
Power Stat CCDF								€(f): FTun Swp
More 1 of 2	Span 200 MHz ns (1001 pts)		lz #S	 /BW 5 M				Center #Res B
			gies	echnol) Agilent 1	000-201	ght 20	Copyri



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26dB, CH 138		Measure
	L	measure
APv6.7(050417),44353, Conducted F Ref 20 dBm #Atten 30 dB #Peak	▲ Mkr1 82.6 MHz 0.173 dB	Meas Off
Log		Channel Power
16.3 dB 1R DI 6		Occupied BW
-15.7 dBm #PAvg	Linter March Contractor	ACP
М1 S2 S3 FS АА		Multi Carrier Power
£(f): FTun Swp		Power Stat CCDF
Center 5.690 0 GHz #Res BW 1.6 MHz #VBW 5	Span 200 MHz MHz *Sweep 100 ms (1001 pts)	More 1 of 2
Copyright 2000-2010 Agilent Tech	ologies	

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REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A

8.31.2. 99% BANDWIDTH

<u>LIMITS</u>

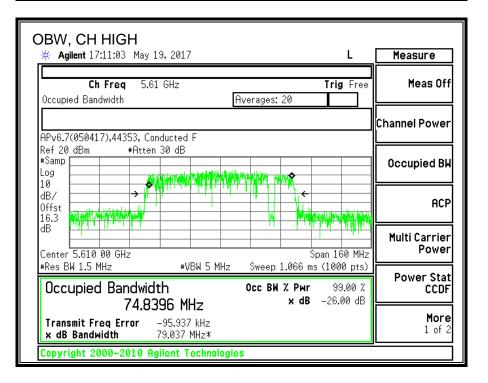
None; for reporting purposes only.

RESULTS

Channel	Frequency	99% BW UAT 2 (MHz)
Low	5530	74.8562
High	5610	74.8396
138	5690	75.2653

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DBW, CH LOW	
🔆 Agilent 17:06:08 May 19, 2017 🛛 🛛 🖁 📙	Measure
Ch Freq 5.53 GHz Trig Free Occupied Bandwidth Averages: 20	Meas Off
APv6.7(050417),44353, Conducted F	Channel Power
Ref 20 dBm #Atten 30 dB #Samp	Occupied BW
10 dB/ offst 16.3 dB/ offst 16.3	ACP
dBCenter 5.530 00 GHzSpan 160 MHz	Multi Carrier Power
#Res BW 1.5 MHz #VBW 5 MHz Sweep 1.066 ms (1000 pts)	
Occupied Bandwidth Осс ВИ % Рыг 99.00 % 74.8562 MHz × dB -26.00 dB	Power Stat CCDF
74.0002 11⊓2 Transmit Freq Error −13.929 kHz × dB Bandwidth 79.405 MHz*	More 1 of 2
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DBW, CH 138	Measure
Ch Freq 5.69 GHz Trig Free	Meas Off
Occupied Bandwidth Averages: 20	
	Channel Power
APv6.7(050417),44353, Conducted F	
Ref 20 dBm #Atten 30 dB	
#Samp	Occupied BW
	-
	ACP
	M
	Multi Carrier
Center 5.690 00 GHz Span 160 MH	Z Power
#Res BW 1.5 MHz	
Occupied Bandwidth Occ BW % Pwr 99.00 %	Power Stat CCDF
75.2653 MHz × dB -26.00 dB	
	More
Transmit Freq Error 1.546 kHz	1 of 2
x dB Bandwidth 79.115 MHz*	
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8.31.3. AVERAGE POWER

ID: 30554 **Date:** 7/28/2017

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

Channel	Frequency	Power UAT 2 (dBm)
Low	5530	17.41
High	5610	19.35
138	5690	19.42

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8.31.4. OUTPUT POWER AND PPSD

<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.

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.

PSD test procedure: KDB 789033 D02 v01r04 Section F (SA-2 method)

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.

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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/1MHz)
Low	5530	82.20	74.86	-2.77	24.00	11.00
Mid	5610	82.60	74.84	-2.77	24.00	11.00

Duty Cycle CF (dB) 0.19 Included i

Included in Calculations of Corr'd PSD

Output Power Results

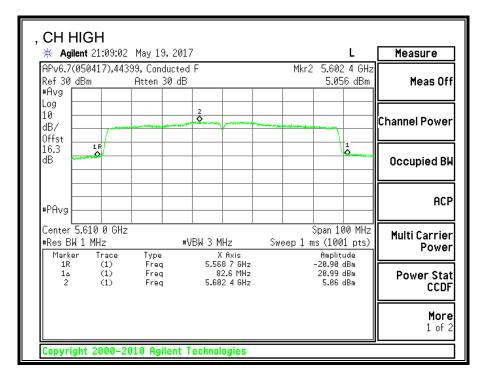
Channel	Frequency	UAT 2	LAT 3	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5530	17.41	17.41	24.00	-6.59

PSD Results

Channel	Frequency	UAT 2	LAT 3	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5530	5.32	5.51	11.00	-5.49
Mid	5610	5.06	5.25	11.00	-5.75

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CH LO		May 19, 2	2017					L	Measure
APv6.7(050 Ref 30 dBm #Avg		99, Conduc Atten 30				Mkr2		?7GHz 8dBm	Meas Off
Log 10 dB/ Offst			2				·····		Channel Power
16.3 dB								1 ¢	Occupied BW
#PAvg									ACP
Center 5.53 #Res BW 1 Marker	MHz Trace	Туре		Axis	Swee	ep 1 m	s (100 Ampliti	ude	Multi Carrier Power
1R 14 2	(1) (1) (1)	Freq Freq Freq	82	3 9 GHz 2.2 MHz 2 7 GHz			-20.67 (21.07 (5.32 (dBm	Power Stat CCDF
									More 1 of 2



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/1MHz)
138	5690	82.60	-2.77	-2.77	24.00	11.00

Duty Cycle CF (dB)	0.19	Included in Calculations of Corr'd Power & PSD
	0.10	

Output Power Results

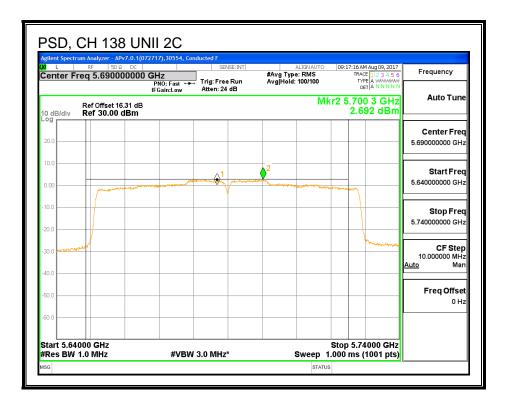
Channel	Frequency	UAT 2	LAT 3	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	18.73	18.92	24.00	-5.09

PSD Results

Channel	Frequency	UAT 2	LAT 3	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
138	5690	2.69	2.88	11.00	-8.12

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L	RF 50 Ω			ISE:INT	ALIGNAUTO	09:17:09 AM Aug 09, 2017	Frequency
enter F	req 5.6900	000000 GHz PNO: Fast IFGain:Low		Run Avg	g Type: RMS Hold: 100/100	TRACE 1 2 3 4 5 6 TYPE A WWWWW DET A N N N N N	Frequency
) dB/div	Ref Offset 1 Ref 30.00					r1 5.686 9 GHz er 18.725 dBm	Auto Tune
0.0							Center Fred
0.0							5.69000000 GH
0.0							Start Fred
0.0						- hanne	5.640000000 GH;
0.0							Stop Free
0.0	_						5.740000000 GH
	1000 GHz 1.0 MHz	#VI	BW 3.0 MHz*	k		Stop 5.74000 GHz 000 ms (1001 pts)	CF Step 10.000000 MH
Krimode t	RC SCL	× 5.686 9 GHz	ĭ 1.893 d⊟		FUNCTION WIDTH 76.30 MHz	FUNCTION VALUE	<u>Auto</u> Mar
2 3 4		0.000 0 0.12	1.000 42		10.00 111 12	10.120 42	Freq Offse
5 6 7							
8 9							
10 1						~	



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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	82.60	-3.57	30.00	30.00

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

Output Power Results

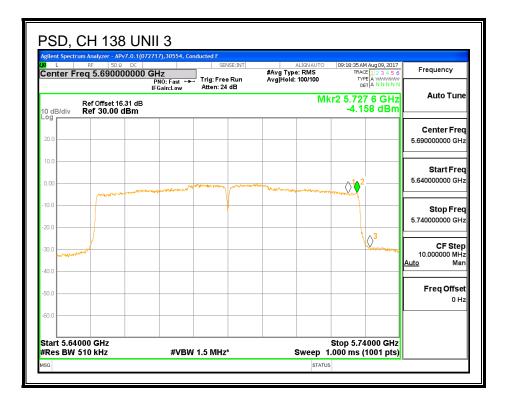
Channel	Frequency	UAT 2	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	3.26	3.45	30.00	-26.55

PSD Results

Channel	Frequency	UAT 2	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	-4.16	-3.97	30.00	-33.97

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	PNO: Fast	SENSE:INT	ALIGNAUTO #Avg Type: RMS Avg Hold: 100/100	09:17:23 AM Aug 09, 2017 TRACE 1 2 3 4 5 6 TYPE A WWWWW DET A N N N N N	Frequency
Ref Offse dB/div Ref 30.0		Atten: 24 dB		r1 5.728 2 GHz wer 3.259 dBm	Auto Tune
og 20.0 10.0				0 ¹	Center Fred 5.690000000 GH:
0.0					Start Fred 5.640000000 GH;
0.0					Stop Freq 5.740000000 GHz
tart 5.64000 GHz Res BW 1.0 MHz	#VE	W 3.0 MHz*		Stop 5.74000 GHz 000 ms (1001 pts)	CF Step 10.000000 MH
KR MODE TRC SCL 1 N 1 f 2 3	× 5.728 2 GHz		NCTION FUNCTION WIDTH d Power 6.300 MHz	FUNCTION VALUE	Auto Mar FreqOffse
4 5 6 7 8				=	0 H:
9 10 11				×.	



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8.31.6. 6 dB BANDWIDTH

<u>LIMITS</u>

FCC §15.407 (e)

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

<u>RESULTS</u>

Channel	Frequency	6 dB Bandwidth
	(MHz)	(MHz)
High	5690	3.00

6 dB BANDWIDTH

🔆 Agi	lent 19	:01:35	May 19	9,2017						L	Measure
APv6.7 Ref20 #Peak			99, Cono #Atten :		F			<u>۵</u>		3.0 MHz 108 dB	Meas Off
Log 10 dB/				<u>h hybrach ha</u>	lit franker		1 Ŕ				Channel Power
DI	know	yulu wala	abilities and						****	mention of the	Occupied Bk
-3.5 dBm #PAvg											ACP
Center #Res Bl Marke	₩ 100 er T	kHz race	Туре			Axis			Span 20 ns (100 Amplit	1 pts) ude	Multi Carrier Power
1R 1 ₀ 3			Freq Freq Freq			5 0 GHz 3.0 MHz 7 4 GHz			0.72 -4.41 2.46	dB	Power Stat CCDF
											More 1 of 2

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8.32. 11ac HT80 LAT 3 SISO MODE IN THE 5.6GHz BAND

8.32.1. 26 dB BANDWIDTH

<u>LIMITS</u>

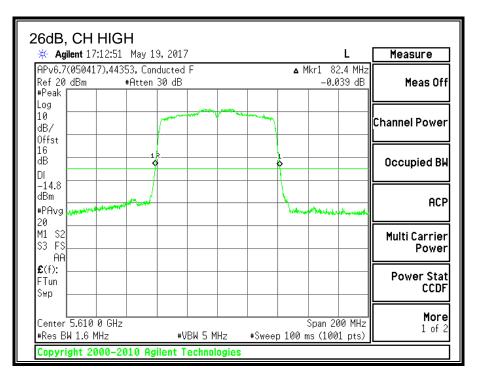
None; for reporting purposes only.

RESULTS

Channel	Frequency	26 dB BW LAT 3 (MHz)
Low	5530	82.4
High	5610	82.4
138	5690	82.2

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				_		LOW		
Measure	L			7	4ay 19, 2013	:07:50	lent 17	🔆 Ag
Meas Off	kr1 82.4 MHz 0.396 dB	∧ M		F	, Conducted Itten 30 dB			APv6.7 Ref20 #Peak
Channel Power			and and a second					Log 10 dB/ Offst
Occupied BW					1R			16 dB DI
ACP	Aller Constantion	h			~~/	Americano	n the section of the sec	-15.0 dBm #PAvg 20
Multi Carrier Power								M1 S2 S3 FS AA
Power Stat CCDF								£ (f): FTun Swp
More 1 of 2	Span 200 MHz is (1001 pts)		z #S	 /BW 5 M	#\			Center #Res B
			gies	echnol	0 Agilent 1	00-201	ght 20	Copyri



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6dB, CH 138	L	Measure
APv6.7(050417),44353, Conducted F Ref 20 dBm #Atten 30 dB #Peak	▲ Mkr1 82.2 MHz 0.651 dB	Meas Off
Log 10 dB/ 0ffst		Channel Power
16R dBR DI		Occupied BW
-14.8 dBm #PAvg 20	here here here here here here here here	ACP
M1 S2 S3 FS AA		Multi Carrier Power
£(f):		Power Stat CCDF
Center 5.690 0 GHz #Res BW 1.6 MHz #VBW 5 MHz	Span 200 MHz #Sweep 100 ms (1001 pts)	More 1 of 2

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REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A

8.32.2. 99% BANDWIDTH

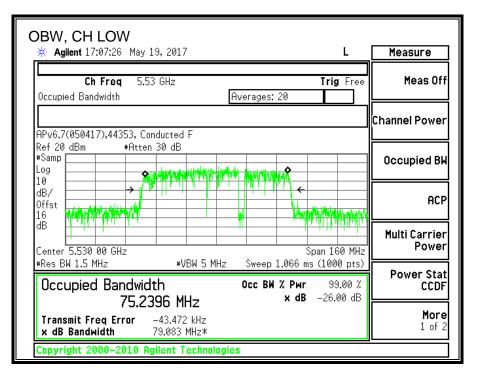
<u>LIMITS</u>

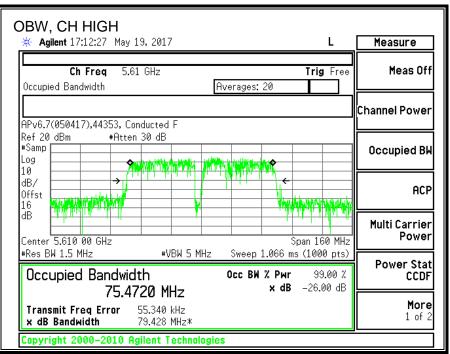
None; for reporting purposes only.

RESULTS

Channel	Frequency	99% BW LAT 3 (MHz)
Low	5530	75.2396
High	5610	75.4720
138	5690	75.1567

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OBW, CH 138 ★ Agilent 17:30:08 May 19, 2017 L	Measure
Ch Freq 5.69 GHz Trig Fre Occupied Bandwidth Averages: 20	
APv6.7(050417),44353, Conducted F	Channel Power
Ref 20 dBm #Atten 30 dB	
*Samp Log	Occupied BW
	ACP
Offst 16 partier and a state of the state of	
Center 5.690 00 GHz Span 160 MH	Multi Carrier Power
#Res BW 1.5 MHz #VBW 5 MHz Sweep 1.066 ms (1000 pts	s)
Occupied Bandwidth Occ BW % Pwr 99.00 3	
75.1567 MHz × dB -26.00 dE	More
Transmit Freq Error 207.008 kHz × dB Bandwidth 79.194 MHz*	1 of 2
Copyright 2000–2010 Agilent Technologies	

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8.32.3. AVERAGE POWER

ID: 30554 **Date:** 7/28/2017

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

Channel	Frequency	Power LAT 3 (dBm)
Low	5530	17.41
High	5610	19.35
138	5690	19.47

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8.32.4. OUTPUT POWER AND PPSD

<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.

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.

PSD test procedure: KDB 789033 D02 v01r04 Section F (SA-2 method)

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.

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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/1MHz)
Low	5530	82.40	75.24	-6.89	24.00	11.00
Mid	5610	82.40	75.47	-6.89	24.00	11.00

Duty Cycle CF (dB) 0.19

Included in Calculations of Corr'd PSD

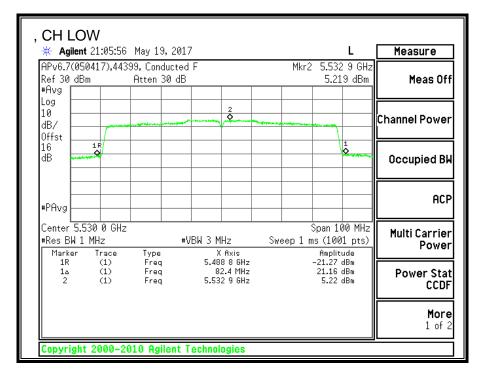
Output Power Results

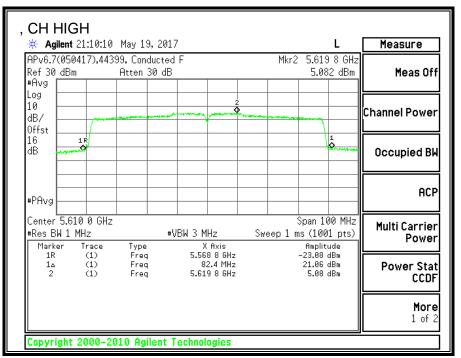
Channel	Frequency	LAT 3	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5530	17.41	17.41	24.00	-6.59
Mid	5610	19.35	19.35	24.00	-4.65

PSD Results

Channel	Frequency	LAT 3	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5530	5.22	5.41	11.00	-5.59
Mid	5610	5.08	5.27	11.00	-5.73

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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/1MHz)
138	5690	82.2	-6.89	-6.89	24.00	11.00

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

Output Power Results

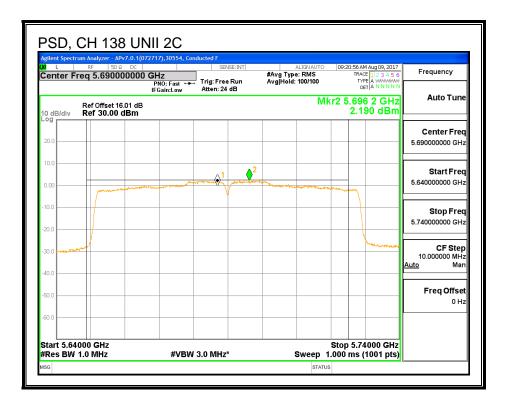
Channel	Frequency	LAT 3	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	18.27	18.46	24.00	-5.54

PSD Results

Channel	Frequency	LAT 3	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
138	5690	2.19	2.38	11.00	-8.62

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	- APv7.0.1(072717),30554, 50 Ω DC 00000000 GHz	SENSE	#Avg	Type: RMS	09:20:51 AM Aug 09, 2017 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast IFGain:Low	Trig: Free R Atten: 24 dB		lold: 100/100	DET A NNNNN	Auto Tune
dB/div Ref 30.	et 16.01 dB .00 dBm				5.687 0 GHz 18.267 dBm	Auto Tune
.0						Center Fred
.0		1				5.69000000 GHz
			an has - that we define the second			
0					1	Start Fred 5.64000000 GHz
.0						5.64000000 GH2
0					[Stop Fred
0						5.740000000 GHz
art 5.64000 GHz es BW 1.0 MHz		W 3.0 MHz*			op 5.74000 GHz 0 ms (1001 pts)	CF Step 10.000000 MHz
N 1 f	× 5.687 0 GHz	1 217 dBm	FUNCTION Band Power	FUNCTION WIDTH 76.10 MHz	FUNCTION VALUE	<u>Auto</u> Mar
	5.007 0 0112	1.217 GBH	Dand Power	70.10 MHZ	18.207 dB	Freq Offse
					=	0 Ha
					F	



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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	82.20	-6.31	30.00	30.00

Duty Cyclo CE (dB)	0.10	Included in Calculations of Corr'd Power & PSD
Duty Cycle CF (dB)	0.19	included in Calculations of Corr d Power & PSD

Output Power Results

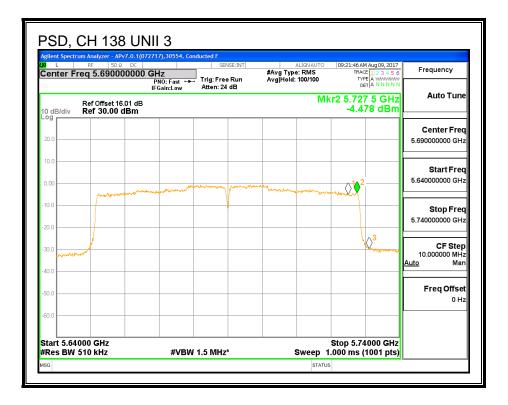
Channel	Frequency	LAT 3	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	2.75	2.94	30.00	-27.06

PSD Results

Channel	Frequency	LAT 3	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	-4.48	-4.29	30.00	-34.29

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Frequency	09:21:01 AM Aug 09, 2017			SENSE:I	OΩ DC	
	TRACE 1 2 3 4 5 6 TYPE A WWWWWW DET A N N N N N	Type: RMS Iold: 100/100		Trig: Free Ru Atten: 24 dB	1000000 GHz PNO: Fast IFGain:Low	Freq 5.690
Auto Tune	5.728 1 GHz er 2.751 dBm					Ref Offset Ref 30.0
Center Freq						
5.69000000 GHz	A1					
		and a state of the				
Start Freq 5.64000000 GHz						
	Careford and the second second					
Stop Freq						
5.74000000 GHz						
CF Step 10.000000 MHz	op 5.74000 GHz 10 ms (1001 pts)			SW 3.0 MHz*	#VE	64000 GHz N 1.0 MHz
<u>Auto</u> Man	FUNCTION VALUE	FUNCTION WIDTH 6.100 MHz	FUNCTION Band Power	Y -3.996 dBm	× 5.728 1 GHz	TRC SCL
Freq Offset 0 Hz						



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8.32.6. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

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

<u>RESULTS</u>

Channel	Frequency	6 dB Bandwidth
	(MHz)	(MHz)
High	5690	3.00

6 dB BANDWIDTH

Center Freq 5.6		East ↔ Trig: Fre	eeRun AvgjHo	ALIGNAUTO ype: RMS Id: 20/20	02:19:52 PM Aug 03, 2017 TRACE 1 2 3 4 5 6 TYPE MWWWWWW DET P N N N N N	Frequency
	IFGain: set 16.01 dB 0.00 dBm	Low #Atten: \$	30 dB	Δ	Mkr1 3.0 MHz -6.272 dB	Auto Tune
10.0 0.00	بنام	when we	hyphopharalling Handard	3 1Δ2	-9.53 dBm	Center Free 5.690000000 GH
-20.0	www.whetherweight					Start Free 5.590000000 GH:
-50.0 -60.0 -70.0					h-pillihih-lettparthi-metalmane	Stop Free 5.790000000 GH:
Center 5.6900 Gi #Res BW 100 kH		#VBW 300 kH;	FUNCTION		Span 200.0 MHz 13 ms (1001 pts) FUNCTION VALUE	CF Step 20.000000 MH Auto Mar
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$) 3.0 MI 5.725 0 GI 5.725 0 GI		IBm		1	Freq Offse 0 H:
8 9 10 11					×	

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8.33. 11ac HT80 2TX CDD MIMO MODE IN THE 5.6GHz BAND

8.33.1. 26 dB BANDWIDTH

<u>LIMITS</u>

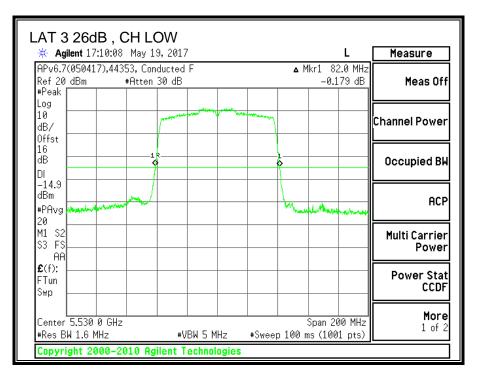
None; for reporting purposes only.

RESULTS

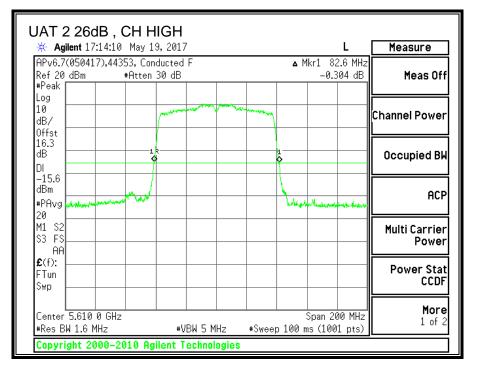
Channel	Frequency		26 dB BW LAT 3 (MHz)
Low	5530	82.4	82.0
High	5610	82.6	82.2
138	5690	82.4	82.4

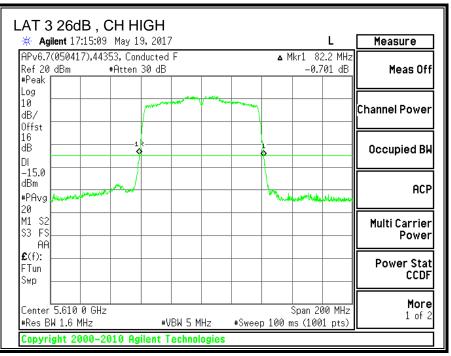
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JAT 2 26dB , CH L				Maaauna
🔆 Agilent 17:09:09 May 1		L	Measure	
APv6.7(050417),44353, Con Ref 20 dBm #Atten #Peak		▲ Mkr1 0	82.4 MHz .724 dB	Meas Off
Log 10 dB/ 0ffst				Channel Power
16.3 dB DI	2			Occupied BW
-15.3 dBm #PAvg waterweithhlawtor the			والإيد والمار المارية	ACP
20 M1 S2 S3 FS AA				Multi Carrier Power
£(f): FTun Swp				Power Stat CCDF
Center 5.530 0 GHz #Res BW 1.6 MHz	#VBW 5 MHz	Span #Sweep 100 ms (10	200 MHz 001 pts)	More 1 of 2
Copyright 2000-2010 Ag	ilent Technologie	S		



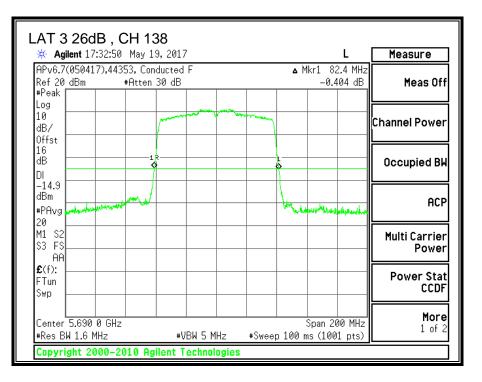
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Measure				7	138 19, 2017				
	L					-			
	kr1 82.4 MHz 0.070 dB	M &		F	nducted n 30 dB	-			APv6.7 Ref20 #Peak
Channel Power			**************************************						Log 10 dB/ Offst
Occupied BW		1 Ø			1 R	1			16.3 dB DI -15.6
ACP	- Muntanisk dan viran	Lann			/	mad			-15.6 dBm #PAvg 20
Multi Carrier Power									M1 S2 S3 FS AA
Power Stat CCDF									€(f): FTun Swp
	Span 200 MHz ns (1001 pts)			/BW 5 M			1Hz	1.6 N	Center #Res B
			es	echnol	gilent T)10 Ag	00-20	ght 20	Copyri



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REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A

DATE: AUGUST 28, 2017 FCC ID: BCG-E3161A

8.33.2. 99% BANDWIDTH

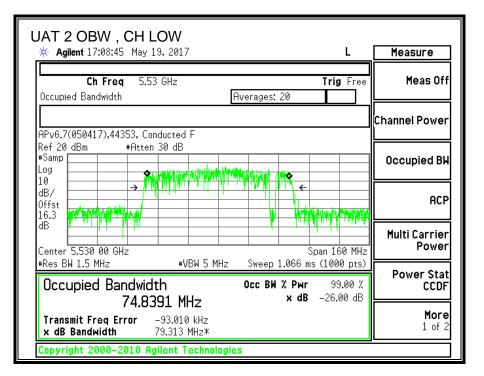
<u>LIMITS</u>

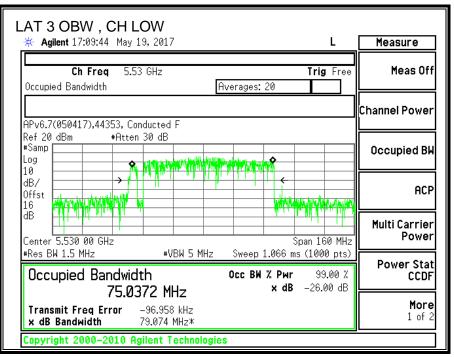
None; for reporting purposes only.

RESULTS

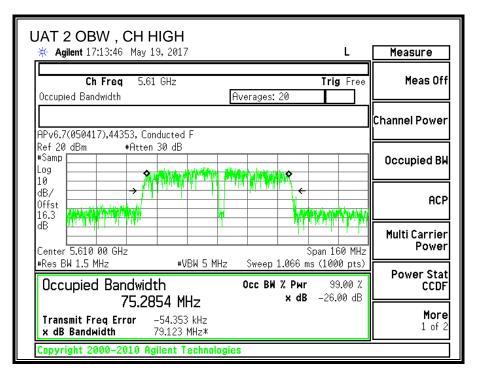
Channel	Frequency	99% BW UAT 2 (MHz)	99% BW LAT 3 (MHz)
Low	5530	74.8391	75.0372
High	5610	75.2854	75.3430
138	5690	75.3850	75.3184

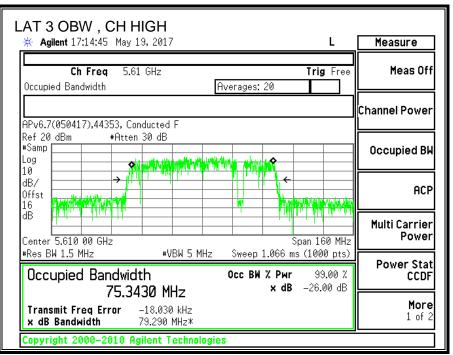
Page 358 of 829 UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA TEL: (510) 771-1000 FAX: (510) 661-0888 This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.



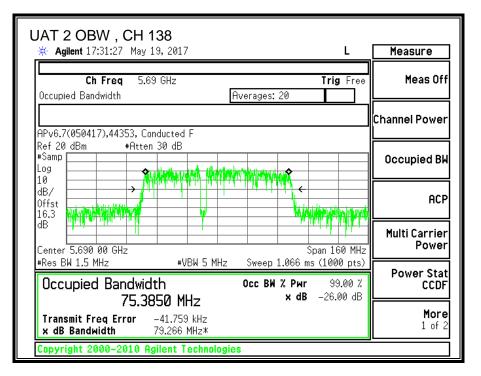


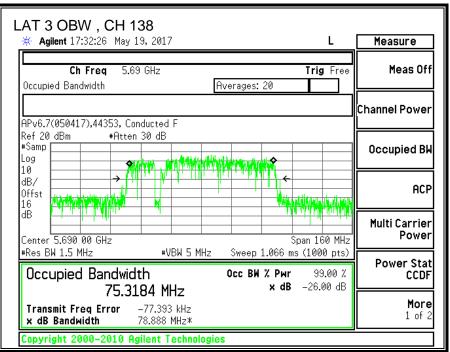
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8.33.3. AVERAGE POWER

ID: 30554 **Date:** 7/28/2017

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS	

Channel	Frequency	UAT 2	LAT 3	Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Low	5530	16.42	16.39	19.42
Mid	5610	19.41	19.43	22.43
High	5690	19.47	19.37	22.43

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8.33.4. OUTPUT POWER AND PPSD

<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.

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.

PSD test procedure: KDB 789033 D02 v01r04 Section F (SA-2 method)

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

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DIRECTIONAL ANTENNA GAIN

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

UAT 2	LAT 3	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
-2.77	-6.89	-4.36

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

UAT 2	LAT 3	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
-2.77	-6.89	-1.58

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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/1MHz)
Low	5530	82.00	74.839	-4.36	-1.58	24.00	11.00
High	5610	82.20	75.285	-4.36	-1.58	24.00	11.00

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

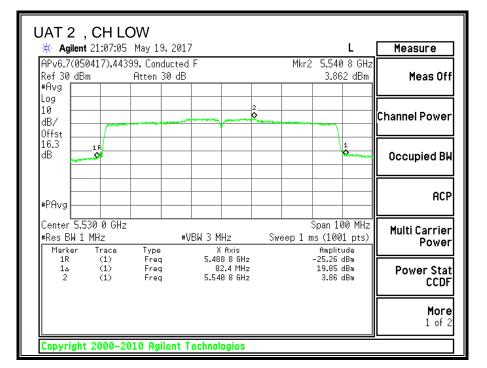
Output Power Results

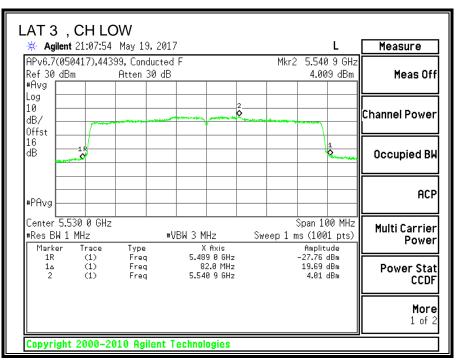
Channel	Frequency	UAT 2	LAT 3	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5530	16.42	16.39	19.42	24.00	-4.58
High	5610	19.41	19.43	22.43	24.00	-1.57

PSD Results

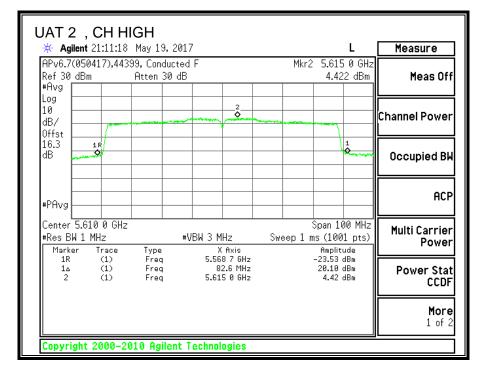
Channel	Frequency	UAT 2	LAT 3	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5530	3.86	4.01	7.14	11.00	-3.86
High	5610	4.42	3.75	7.30	11.00	-3.70

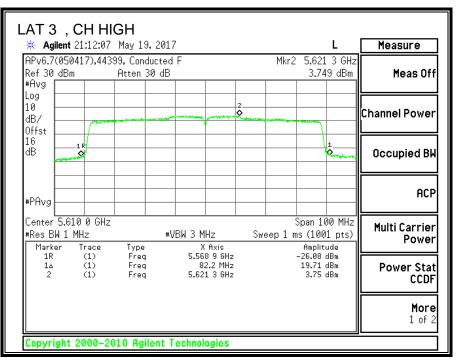
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8.33.5. STRADDLE CHANNEL 138 RESULTS

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/1MHz)
138	5690	82.40	-4.36	-1.58	24.00	11.00

Duty Cycle CF (dB)	0.19	Included in Calculations of Corr'd Power & PSD
	0.15	

Output Power Results

Channel	Frequency	UAT 2	LAT 3	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	18.61	18.29	21.65	24.00	-2.35

PSD Results

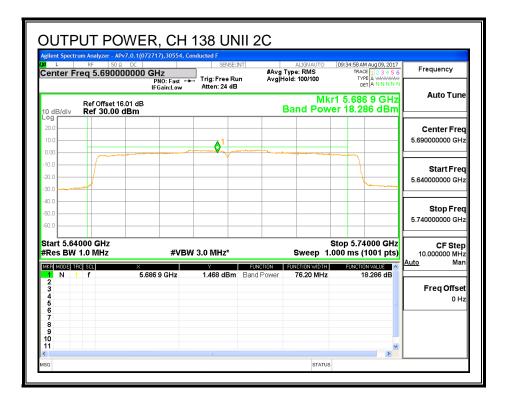
Channel	Frequency	UAT 2	LAT 3	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
						(ab)
	(19172)					(00)

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OUTPUT POWER, UAT 2

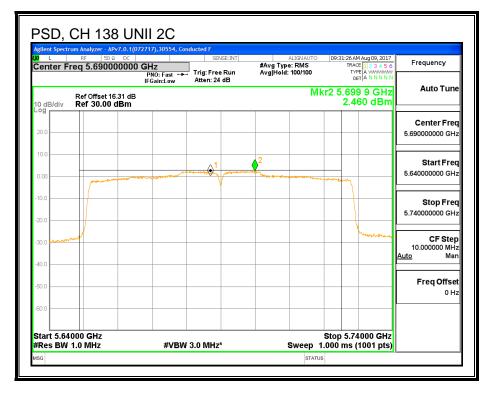
	F 50 Ω DC 5.690000000	GHz PNO: Fast ↔		Run A	ALIGN Avg Type: RM /g Hold: 100/1	IS	TYPE A	ug 09, 2017 L 2 3 4 5 6 A WWWWWW A N N N N N	Frequency
B/div Re	ef Offset 16.31 dB ef 30.00 dBm				Band	Mkr1 { Power			Auto Tune
									Center Fred
			1						5.69000000 GHz
					******		m l		
									Start Fred
anone	4						1		5.640000000 GH
								r	
									Stop Fred 5.740000000 GHz
								I	
rt 5.64000 s BW 1.0		#VBI	N 3.0 MHz*		Swe	Stoj ep 1.000	o 5.7400 ms (10	01 pts)	CF Step 10.000000 MH
MODE TRC SO N 1 f		686 9 GHz	ĭ 1.557 dB	FUNCTION m Band Pov		WIDTH	FUNCTION V 18.6	ALUE	<u>Auto</u> Mar
									Freq Offse
								=	0 Hz

OUTPUT POWER, LAT 3

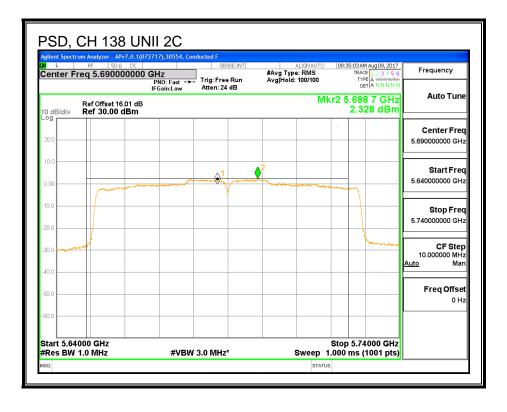


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<u>PSD, UAT 2</u>



PSD, LAT 3



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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	Power	PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm)
138	5690	82.40	-4.73	-1.82	30.00	30.00

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

Output Power Results

Channel	Frequency	UAT 2	LAT 3	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	3.13	2.95	6.24	30.00	-23.76

PSD Results

Channel	Frequency	UAT 2	LAT 3	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
138	5690	-4.13	-4.58	-1.15	30.00	-31.15

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OUTPUT POWER, UAT 2

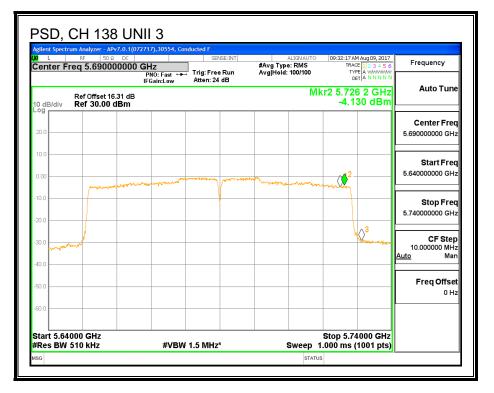
L enter F	RF 5	οΩ DC	Hz			Avg Type: I	RMS	TRACE	Aug09,2017	Frequency
			PNO: Fast ← FGain:Low	Trig: Free Atten: 24		Avg Hold: 10	00/100	TYPE DET	ANNNN	
) dB/div	Ref Offset Ref 30.0					Bar	Mkr1 nd Powe		1 GHz 1 dBm	Auto Tune
0.0										Center Fred
0.0										5.69000000 GHz
.00					, , , , , , , , , , , , , , , , , , ,			- A		
0.0										Start Fred
).0) () 								L.	······	5.64000000 GH
0.0										
0.0										Stop Frec 5.740000000 GHz
1.0										5.74000000 GH
	4000 GHz (1.0 MHz		<i>#</i>) (D)	W 3.0 MHz*		•			000 GHz	CF Step
R MODE		×	#VB	W 3.0 WHZ"	FUNCTIO		veep 1.00	u ms (1 FUNCTION	<u> </u>	10.000000 MHz <u>Auto</u> Mar
1 N	1 f		8 1 GHz	-3.789 dB			200 MHz		.131 dB	
2 3 4										Freq Offset
4 5 5									=	0 Hz
5 7 3										
9 9 0										
1									~	

OUTPUT POWER, LAT 3

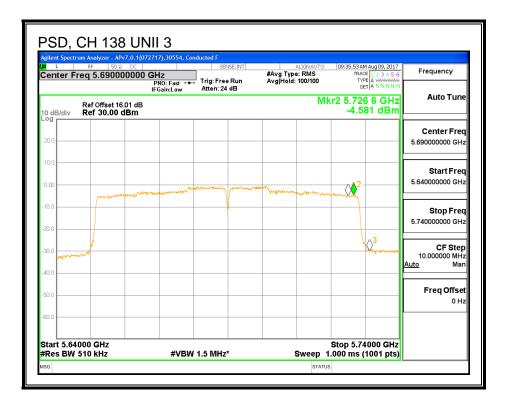
Center F	RF 50 Ω ແ req 5.6900000	000 GHz PNO: Fast ↔	SENSE:INT		ALIGNAUTO (ype: RMS old: 100/100	19:35:08 AM Aug 09, 2017 TRACE 1 2 3 4 5 6 TYPE A WWWWWW DET A N N N N N	Frequency
10 dB/div	Ref Offset 16.01 Ref 30.00 dB		Atten: 24 dB			5.728 1 GHz er 2.953 dBm	Auto Tune
20.0 10.0							Center Freq 5.69000000 GHz
-10.0							Start Freq 5.640000000 GHz
-40.0 -50.0 -60.0							Stop Freq 5.740000000 GHz
	Start 5.64000 GHz Stop 5.74000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts)						CF Step 10.000000 MHz Auto Man
MKR MODE T 1 N 1 2 3 4 5 6 7 8 9 10		× 5.728 1 GHz	-3.816 dBm Ba		FUNCTION WIDTH	FUNCTION VALUE	Freq Offset 0 Hz

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<u>PSD, UAT 2</u>



PSD, LAT 3



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8.33.6. 6 dB BANDWIDTH

<u>LIMITS</u>

FCC §15.407 (e)

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

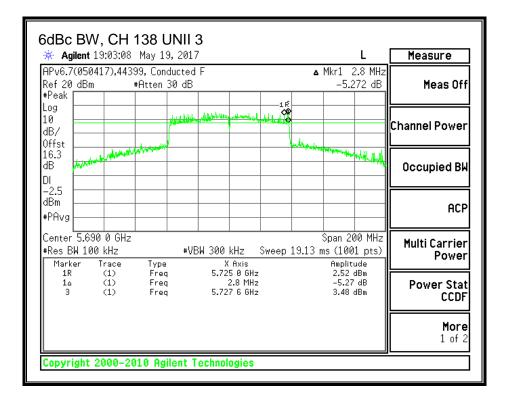
RESULTS

Channel	Frequency	6 dB BW	6 dB BW
		UAT 2	LAT 3
	(MHz)	(MHz)	(MHz)
High	5690	2.80	2.80

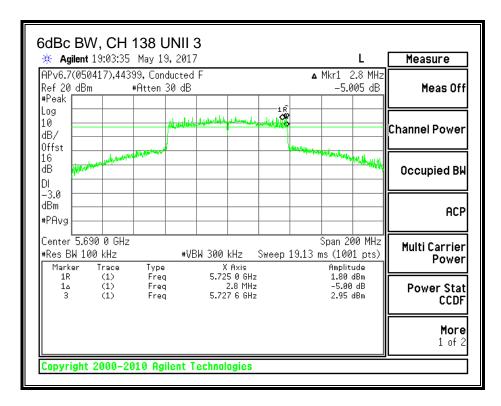
UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA TEL: (510) 771-1000 FAX: (510) 661-0888 This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

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<u>UAT 2</u>



<u>LAT 3</u>



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8.34. 11n HT20 UAT 2 SISO MODE IN THE 5.8GHz BAND

8.34.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

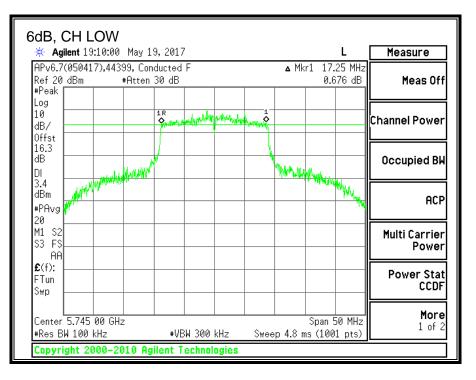
The minimum 6 dB bandwidth shall be at least 500 kHz.

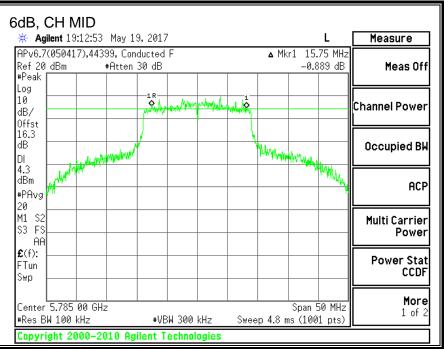
RESULTS

Channel	Frequency	6 dB BW UAT 2 (MHz)	Minimum Limit (MHz)
Low	5745	17.25	0.5
Mid	5785	15.75	0.5
High	5825	17.55	0.5

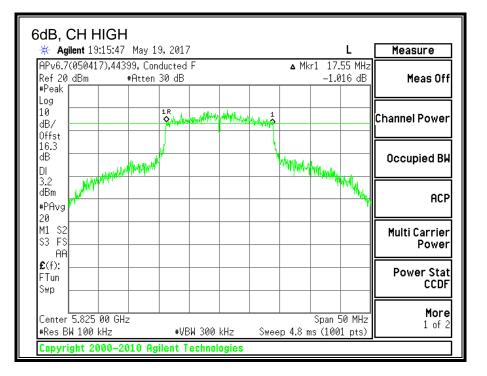
UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA TEL: (510) 771-1000 FAX: (510) 661-0888 This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

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REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A

8.34.2. 26 dB BANDWIDTH

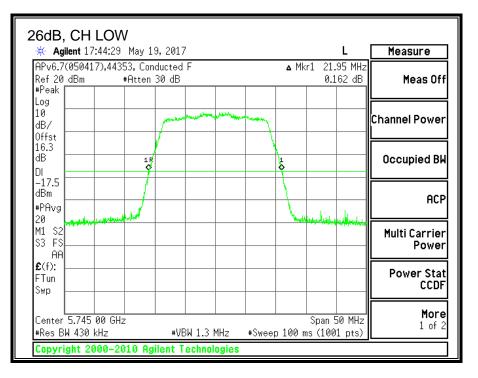
<u>LIMITS</u>

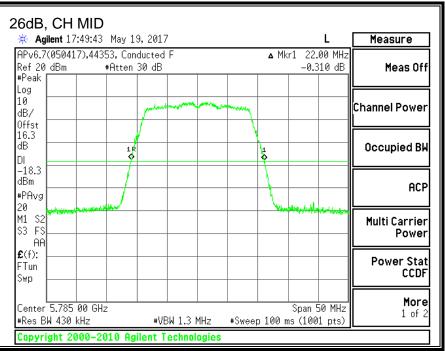
None; for reporting purposes only.

RESULTS

Channel	Frequency	26 dB BW UAT 2 (MHz)
Low	5745	21.95
Mid	5785	22.00
High	5825	22.10

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						_					26dB,
Measure	L					/	9,2017	May 1	:54:59	ent 17	💥 Ag
	.10 MHz 426 dB		▲ Mk			F		53, Con #Atten			APv6.7 Ref20 #Peak
Channel Power				annan 1	h a some and		- man				Log 10 dB/ Offst
Occupied BW			1				Y	15			16.3 dB DI
ACP	t	ary de divide							d,h,h,u,ed,		-18.1 dBm #PAvg 20
Multi Carrier Power										~*#**** *	M1 S2 S3 FS AA
Power Stat CCDF											€(f): FTun Swp
	50 MHz 1 pts)		p 100 m	#Swee	 MHz	 3W 1.3	 #VE	2			Center #Res B
					ogies	echno	ilent T)10 Ag	000-20	ght 20	Copyri

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REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A

8.34.3. 99% BANDWIDTH

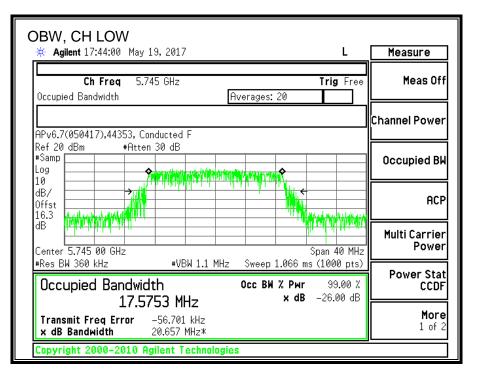
<u>LIMITS</u>

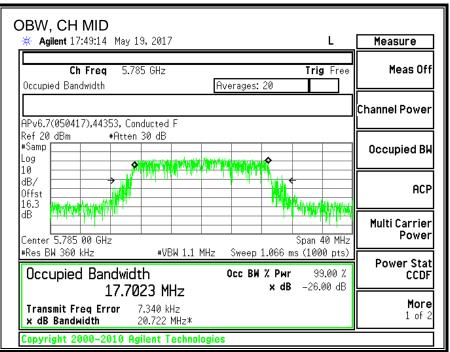
None; for reporting purposes only.

RESULTS

Channel	Frequency	99% BW UAT 2 (MHz)
Low	5745	17.5753
Mid	5785	17.7023
High	5825	17.6985

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OBW, CH HIGH ∦ Agilent 17:54:31 May 19, 2	017	L	Measure
Ch Freq 5.825 Gl Occupied Bandwidth	Hz Averages: 20	Trig Free	Meas Off
APv6.7(050417),44353, Conduct			Channel Power
Ref 20 dBm #Atten 30 d #Samp Log			Occupied BW
10 dB/ Offst ap dB/ 16.3 http://db/ db/ db/ db/ db/ db/ db/ db/		in although and a second of a	ACP
dB		Span 40 MHz	Multi Carrier Power
*Res BW 360 kHz Occupied Bandwidth 17.6985	VBW 1.1 MHz Sweep 1.066 m Occ BW % Pwr		Power Stat CCDF
Transmit Freq Error 16.13	ΠC		More 1 of 2
Copyright 2000–2010 Agilen	t Technologies		

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8.34.4. AVERAGE POWER

ID: 30554 **Date:** 7/28/2017

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

Channel	Frequency	Power UAT 2 (dBm)
Low	5745	21.43
Mid	5785	21.39
High	5825	21.40

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8.34.5. OUTPUT POWER

ID: 30554	Date:	7/28/2017
-----------	-------	-----------

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.

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Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
		for Power	
	(MHz)	(dBi)	(dBm)
Low	5745	-3.57	30.00
Mid	5785	-3.57	30.00
High	5825	-3.57	30.00

Output Power Results

Channel	Frequency	UAT 2	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5745	21.43	21.43	30.00	-8.57
Mid	5785	21.39	21.39	30.00	-8.61
High	5825	21.40	21.40	30.00	-8.60

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8.34.6. POWER SPECTRAL DENSITY

<u>LIMITS</u>

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.

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Antenna Gain and Limits

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm/500K
			Hz)
Low	5745	-3.57	30.00
Mid	5785	-3.57	30.00
High	5825	-3.57	30.00

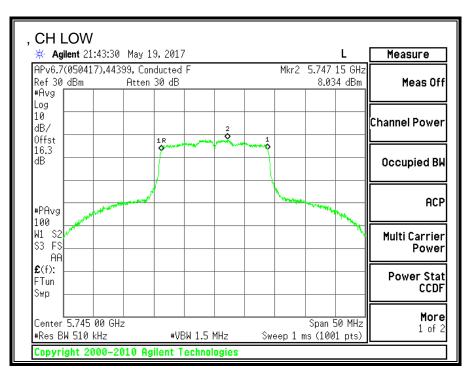
Duty Cycle CF (dB)

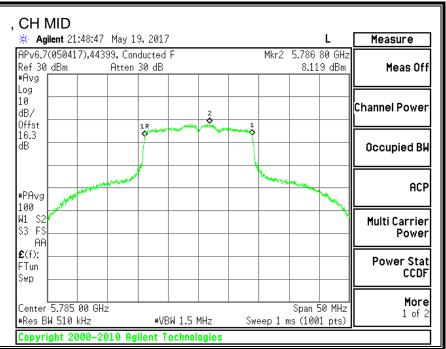
Included in Calculations of Corr'd PSD

PSD Results

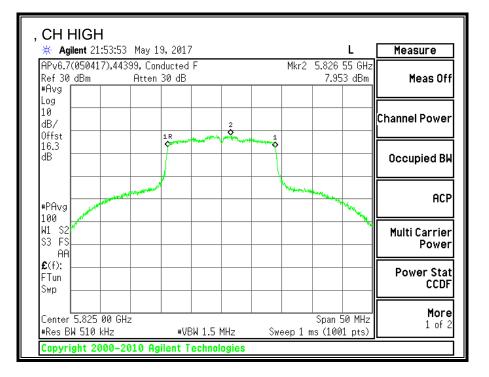
Channel	Frequency	UAT 2	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/500K	(dBm/500K	(dBm/500K	(dB)
		Hz)	Hz)	Hz)	
Low	5745	8.034	8.034	30.00	-21.97
Mid	5785	8.119	8.119	30.00	-21.88
High	5825	7.953	7.953	30.00	-22.05

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8.35. 11n HT20 LAT 3 SISO MODE IN THE 5.8GHz BAND

8.35.1. 6 dB BANDWIDTH

LIMITS

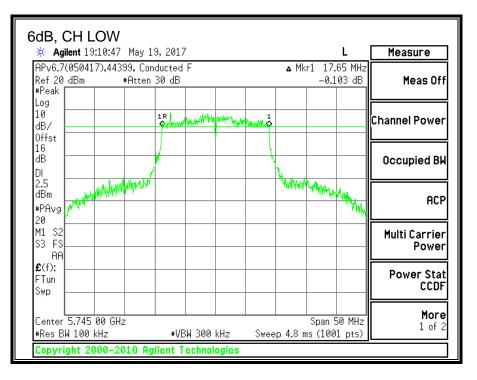
FCC §15.407 (e)

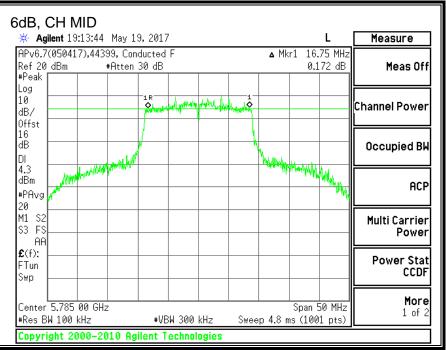
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Frequency	6 dB BW LAT 3 (MHz)	Minimum Limit (MHz)
Low	5745	17.65	0.5
Mid	5785	16.75	0.5
High	5825	17.60	0.5

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6 dB, CH HIGH	9, 2017	L	Measure
APv6.7(050417),44399, Con Ref 20 dBm #Atten #Peak		▲ Mkr1 17.60 MHz 0.415 dB	Meas Off
Log 10 dB/			Channel Power
Offst 16 dB DI		Multipline .	Occupied BW
DI 2.9 dBm #PAvg //		North March March March	ACP
M1 S2 S3 FS AA			Multi Carrier Power
£(f): FTun Swp			Power Stat CCDF
Center 5.825 00 GHz #Res BW 100 kHz	#VBW 300 kHz Swee	Span 50 MHz p 4.8 ms (1001 pts)	More 1 of 2

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REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A

8.35.2. 26 dB BANDWIDTH

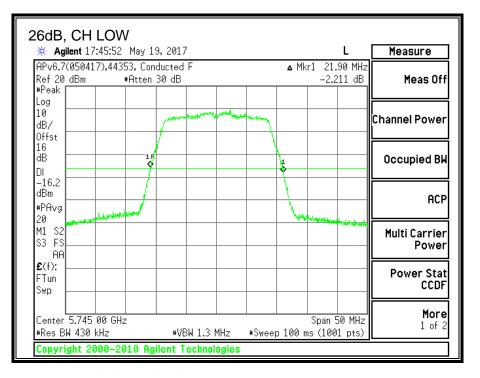
<u>LIMITS</u>

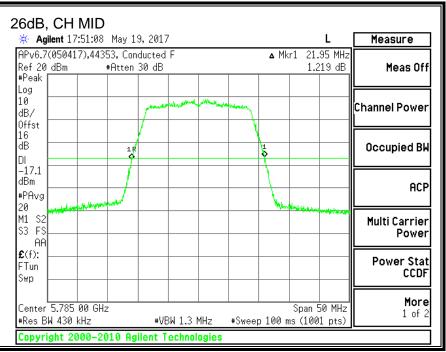
None; for reporting purposes only.

RESULTS

Channel	Frequency	26 dB BW LAT 3 (MHz)
Low	5745	21.90
Mid	5785	21.95
High	5825	22.10

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								Н	HIG	СН	26dB,
Measure	L					7	9,2017	May 1	2:56: 23	lent 17	🔆 Agi
Meas Off	APv6.7(050417),44353, Conducted F ▲ Mkr1 22.10 MHz Ref 20 dBm #Atten 30 dB -0.287 dB #Peak										
Channel Power				-		er an					Log 10 dB/ Offst
Occupied BW			1					1			16 dB DI
ACP		a ya ta bahar	1 June					Hart	ann an the	والبلوس ا	-17.8 dBm #PAvg 20
Multi Carrier Power	- A Changer										M1 S2 S3 FS AA
Power Stat CCDF											£ (f): FTun Swp
More 1 of 2	50 MHz 1 pts)		p 100 m	#Swee	 MHz	 3W 1.3	 #VE	z			Center #Res B
-					ogies	echnol	ilent T	010 Ag	000-2	ght 2	Copyri

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REPORT NO: 11792114-E4V2 EUT MODEL: 579C-E3161A

8.35.3. 99% BANDWIDTH

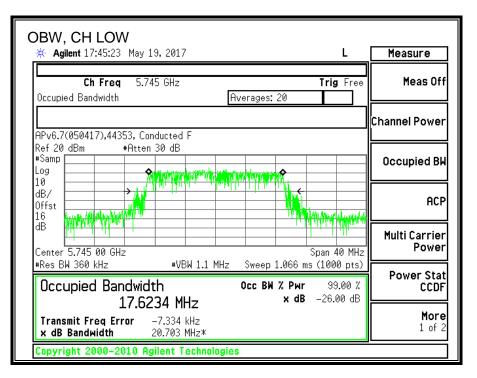
<u>LIMITS</u>

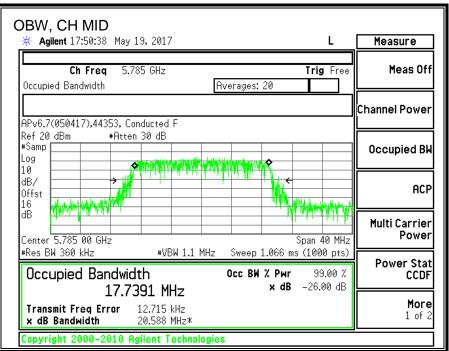
None; for reporting purposes only.

RESULTS

Channel	Frequency	99% BW LAT 3 (MHz)
Low	5745	17.6234
Mid	5785	17.7391
High	5825	17.7393

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DBW, CH HIGH ⋇ Agilent 17:55:55 May 19, 2017 L	Macaura
	Measure
Ch Freq 5.825 GHz Trig Free Occupied Bandwidth Averages: 20	Meas Off
	Channel Power
APv6.7(050417),44353, Conducted F	
Ref 20 dBm #Atten 30 dB #Samp Log 10 Provide a transformed and transformed an	Occupied BW
10 dB/ Offst 16 P	ACP
Center 5.825 00 GHz Span 40 MHz	Multi Carrier Power
#Res BW 360 kHz	Power Stat
Оссирied Bandwidth Осс ВИ % Рыг 99.00 % 17.7393 MHz × dB -26.00 dB	CCDF
	More
Transmit Freq Error 16.076 kHz x dB Bandwidth 20.614 MHz*	1 of 2
Copyright 2000–2010 Agilent Technologies	

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