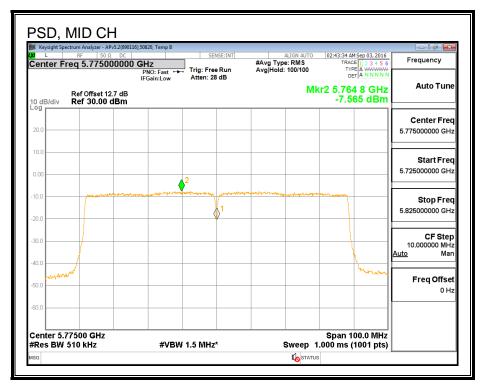
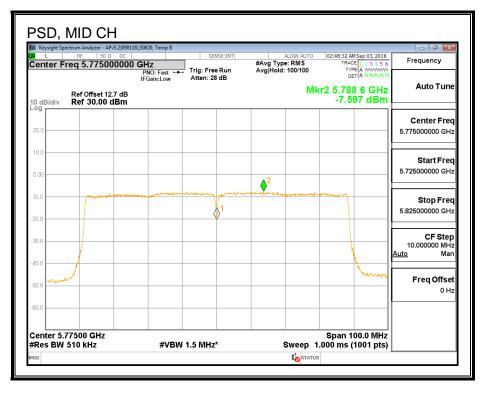
PSD, CHAIN 0



PSD, CHAIN 2



Page 801 of 1002

8.35.7. AVERAGE POWER (IC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

Channel	Frequency	Chain 0 Power	Chain 2 Power	Total Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5775	10.49	10.45	13.48

Page 802 of 1002

8.35.8. OUTPUT POWER (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

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

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

Chain 0	Chain 2	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	4.70	4.36

Page 803 of 1002

RESULTS

ID: 30554 Date: 9/16/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)

Output Power Results

Channel	Frequency	Chain 0	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	10.49	10.45	13.48	30.00	-16.52

Page 804 of 1002

8.35.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0	Chain 2	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	4.70	7.37

Page 805 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	7.37	28.63

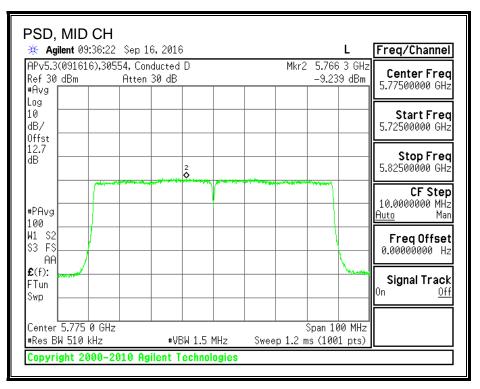
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD

PSD Results

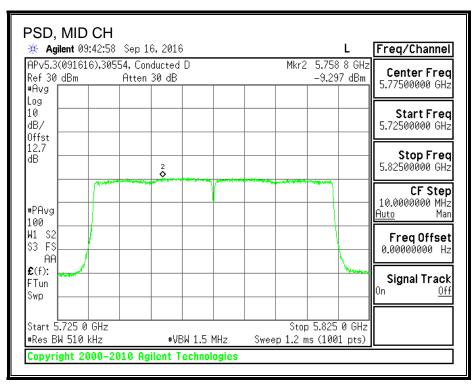
Channel	Frequency	Chain 0	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-9.24	-9.30	-6.08	28.63	-34.71

Page 806 of 1002

PSD, CHAIN 0



PSD, CHAIN 2



Page 807 of 1002

8.36. 802.11ac VHT80 2Tx (CHAIN 1 + CHAIN 2) CDD MODE IN THE 5.8 GHz BAND

8.36.1. 6 dB BANDWIDTH

<u>LIMITS</u>

FCC §15.407 (e)

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

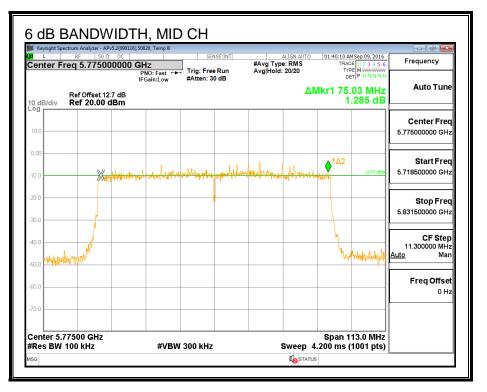
RESULTS

Channel	Frequency	6 dB BW	6 dB BW	Minimum
		Chain 1	Chain 2	Limit
	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	75.030	74.210	0.5

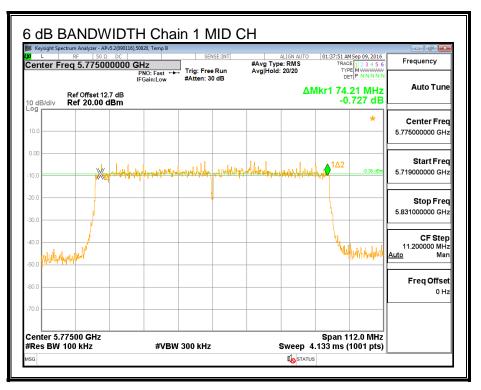
UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA TEL: (510) 771-1000 FAX: (510) 661-0888 This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

Page 808 of 1002

6 dB BANDWIDTH, CHAIN 1



6 DB BANDWIDTH, CHAIN 2



Page 809 of 1002

8.36.2. **26 dB BANDWIDTH**

<u>LIMITS</u>

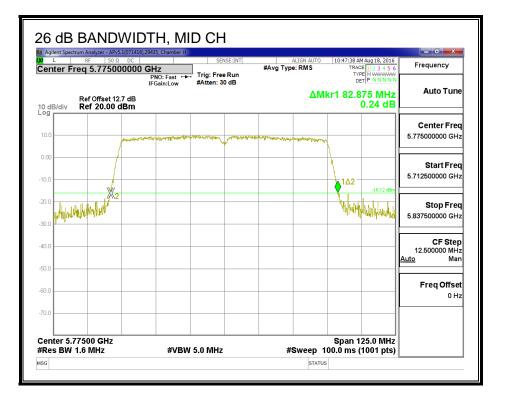
None, for reporting purposes only.

RESULTS

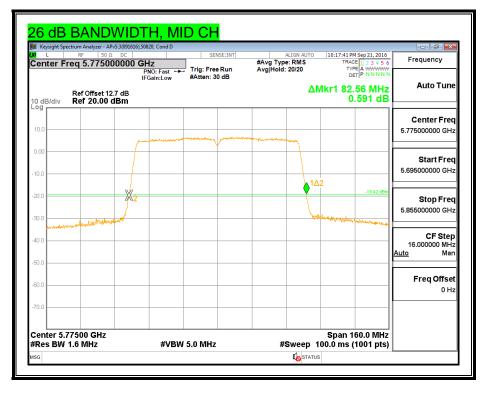
Channel	Frequency	26 dB BW	26 dB BW
		Chain 1	Chain 2
	(MHz)	(MHz)	(MHz)
Mid	5775	82.875	82.560

Page 810 of 1002

26 dB BANDWIDTH, CHAIN 1



26 dB BANDWIDTH, CHAIN 2



Page 811 of 1002

8.36.3. 99% BANDWIDTH

<u>LIMITS</u>

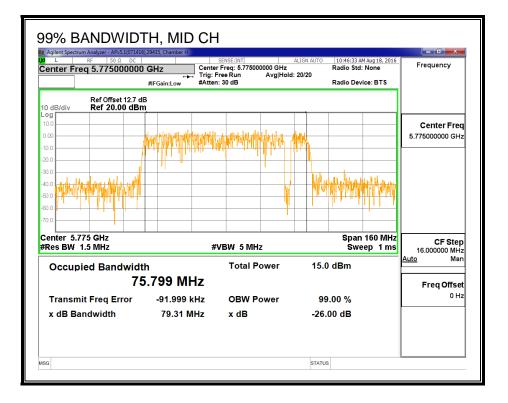
None; for reporting purposes only.

RESULTS

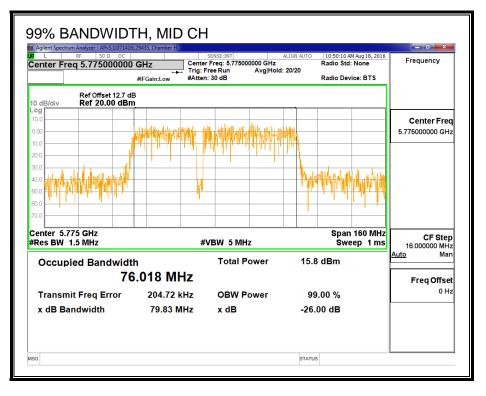
Channel	Frequency	99% BW	99% BW
		Chain 1	Chain 2
	(MHz)	(MHz)	(MHz)
Mid	5775	75.799	76.018

Page 812 of 1002

99% BANDWIDTH, CHAIN 1



99% BANDWIDTH, CHAIN 2



Page 813 of 1002

8.36.4. AVERAGE POWER (FCC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID: 435/3 Date: 9/7/16

Channel	Frequency	Chain 1	Chain 2	Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5775	12.73	12.65	15.70

Page 814 of 1002

8.36.5. OUTPUT POWER (FCC)

<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.

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

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

Chain 1	Chain 2	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
6.30	4.70	5.57

Page 815 of 1002

RESULTS

ID: 43573 **Date:** 9/7/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
	· · ·	()	()

Output Power Results

Channel	Frequency	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	12.73	12.65	15.70	30.00	-14.30

Page 816 of 1002

8.36.6. PSD (FCC)

<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

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

Chain 1	Chain 2	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
6.30	4.70	8.55

Page 817 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	8.55	27.45

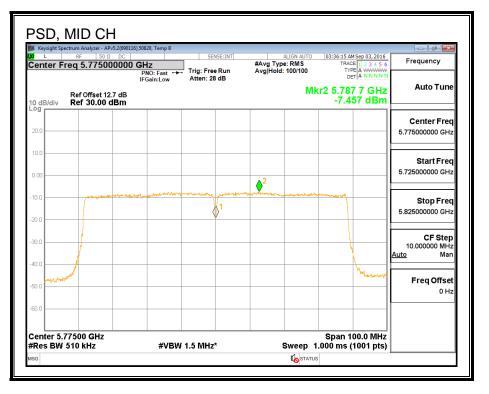
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD

PSD Results

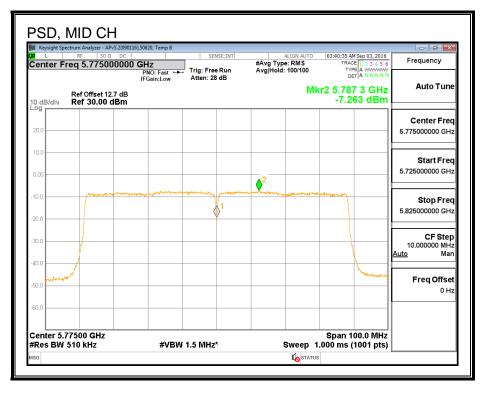
Channel	Frequency	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-7.46	-7.26	-4.17	27.45	-31.62

Page 818 of 1002

PSD, CHAIN 1



PSD, CHAIN 2



Page 819 of 1002

8.36.7. AVERAGE POWER (IC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

Channel	Frequency	Chain 1 Power	Chain 2 Power	Total Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5775	10.45	10.48	13.48

Page 820 of 1002

8.36.8. OUTPUT POWER (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

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

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

Chain 1	Chain 2	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
6.30	4.70	5.57

Page 821 of 1002

RESULTS

ID: 30554 Date: 9/16/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)

Output Power Results

Channel	Frequency	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	10.45	10.48	13.48	30.00	-16.52

Page 822 of 1002

8.36.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 1	Chain 2	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
6.30	4.70	8.55

Page 823 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	8.55	27.45

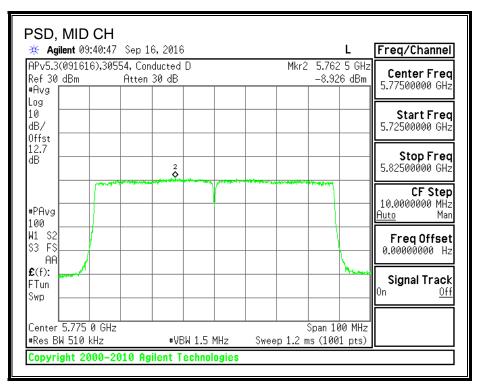
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD

PSD Results

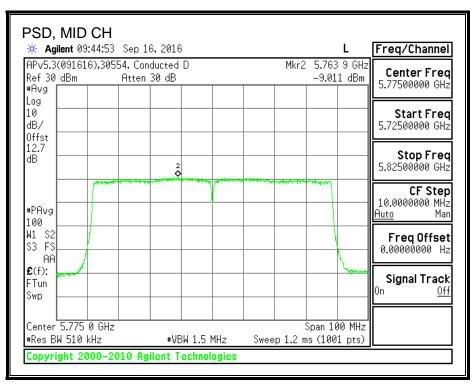
Channel	Frequency	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-8.93	-9.01	-5.78	27.45	-33.23

Page 824 of 1002

PSD, CHAIN 1



PSD, CHAIN 2



Page 825 of 1002

8.37. 802.11ac VHT80 2Tx (CHAIN 0 + CHAIN 1) STBC MODE IN THE 5.8 GHz BAND

8.37.1. 6 dB BANDWIDTH

<u>LIMITS</u>

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

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

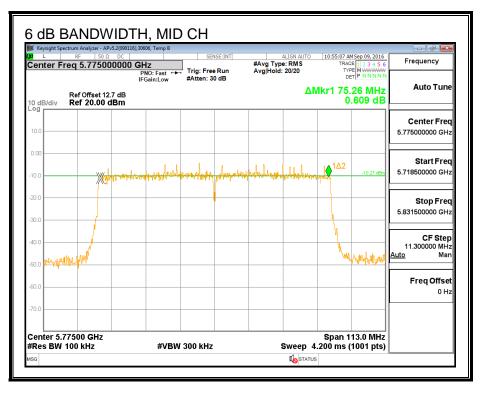
RESULTS

Channel	Frequency	6 dB BW	6 dB BW	Minimum
		Chain 0	Chain 1	Limit
	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	75.26	76.02	0.5

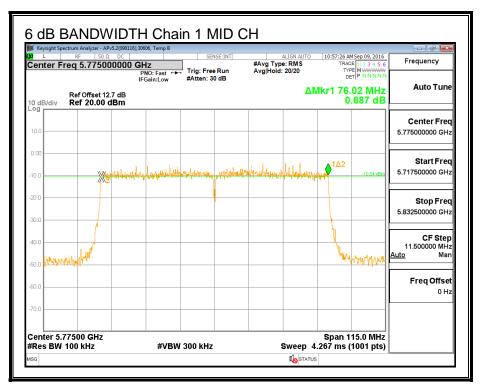
UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

Page 826 of 1002

6 dB BANDWIDTH, CHAIN 0



6 DB BANDWIDTH, CHAIN 1



Page 827 of 1002

8.37.2. **26 dB BANDWIDTH**

<u>LIMITS</u>

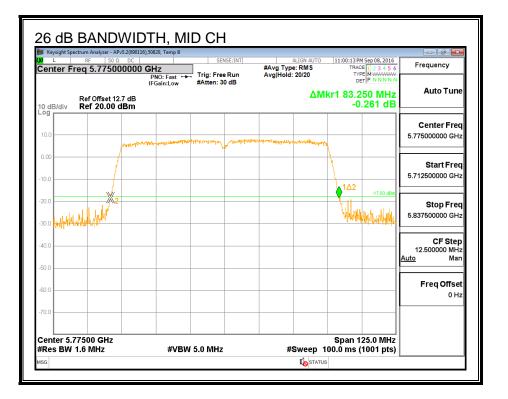
None, for reporting purposes only.

RESULTS

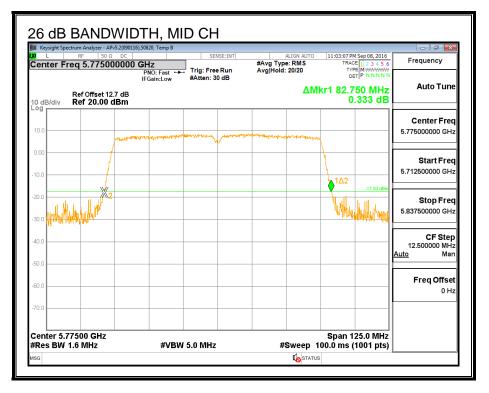
Channel	Frequency	26 dB BW	26 dB BW
		Chain 0	Chain 1
	(MHz)	(MHz)	(MHz)
Mid	5775	83.25	82.75

Page 828 of 1002

26 dB BANDWIDTH, CHAIN 0



26 dB BANDWIDTH, CHAIN 1



Page 829 of 1002

8.37.3. 99% BANDWIDTH

<u>LIMITS</u>

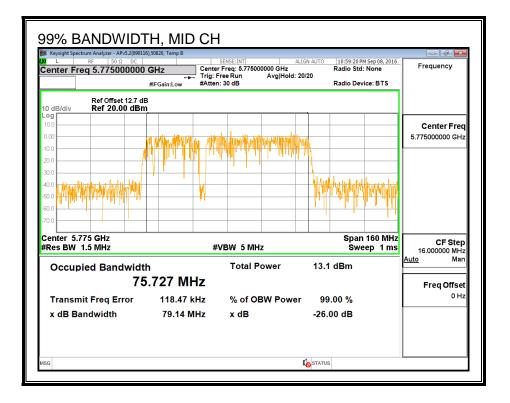
None; for reporting purposes only.

RESULTS

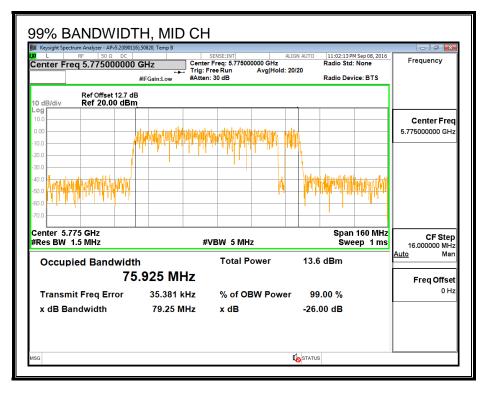
Channel	Frequency	99% BW	99% BW
		Chain 0	Chain 1
	(MHz)	(MHz)	(MHz)
Mid	5775	75.727	75.925

Page 830 of 1002

99% BANDWIDTH, CHAIN 0



99% BANDWIDTH, CHAIN 1



Page 831 of 1002

8.37.4. AVERAGE POWER (FCC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	43573	Date:	9/7/16

Channel	Frequency	Chain 0 Power	Chain 1 Power	Total Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5775	12.65	12.63	15.65

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.

Page 832 of 1002

8.37.5. OUTPUT POWER (FCC)

<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.

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

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

Chain 0	Chain 1	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	6.30	5.30

Page 833 of 1002

<u>RESULTS</u>

Antenna Gain and Limit

Channel	Frequency	Directional	Power	
		Gain	Limit	
	(MHz)	(dBi)	(dBm)	
Mid	5775	5.30	30.00	

Output Power Results

Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	12.65	12.63	15.65	30.00	-14.35

Page 834 of 1002

8.37.6. PSD (FCC)

<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

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

Chain 0	Chain 1	Uncorrelated Chains	
Antenna	Antenna	Directional	
Gain	Gain	Gain	
(dBi)	(dBi)	(dBi)	
4.00	6.30	5.30	

Page 835 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD	
		Gain	Limit	
	(MHz)	(dBi)	(dBm)	
Mid	5775	5.30	30.00	

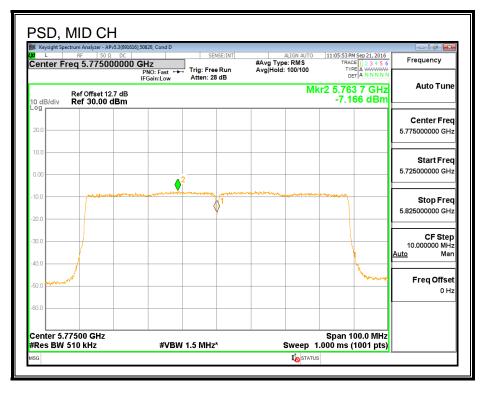
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD
	0.10	

PSD Results

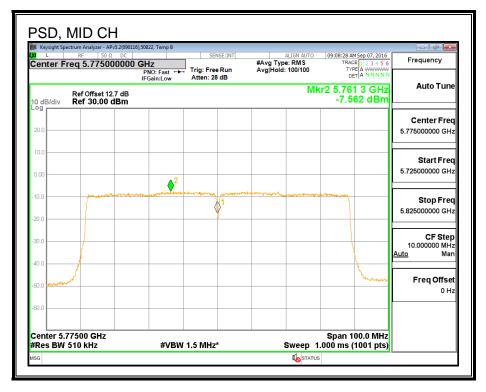
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-7.17	-7.56	-4.17	30.00	-34.17

Page 836 of 1002

PSD, CHAIN 0



PSD, CHAIN 1



Page 837 of 1002

8.37.7. AVERAGE POWER (IC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	30554	Date:	9/16/16

Channel	Frequency	Chain 0 Power	Chain 1 Power	Total Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5775	10.42	10.36	13.40

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.

Page 838 of 1002

8.37.8. OUTPUT POWER (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

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

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

Chain 0	Chain 1	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	6.30	5.30

Page 839 of 1002

<u>RESULTS</u>

ID:	30554	Date:	9/16/16
ID.	30334	Date.	3/10/10

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	5.30	30.00

Output Power Results

Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	10.42	10.36	13.40	30.00	-16.60

Page 840 of 1002

8.37.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0	Chain 1	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	6.30	5.30

Page 841 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	5.30	30.00

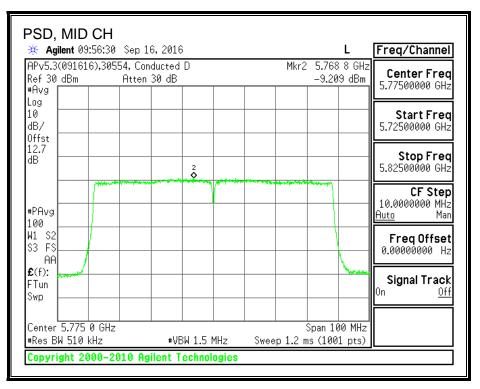
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD

PSD Results

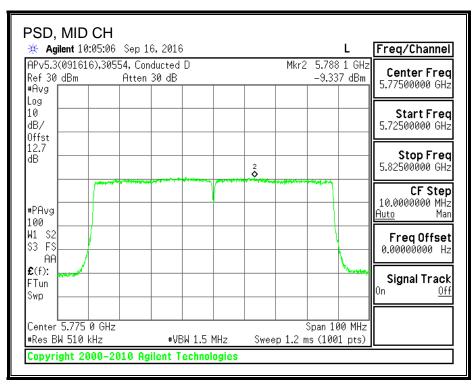
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-9.21	-9.34	-6.08	30.00	-36.08

Page 842 of 1002

PSD, CHAIN 0



PSD, CHAIN 1



Page 843 of 1002

8.38. 802.11ac VHT80 2Tx (CHAIN 0 + CHAIN 2) STBC MODE IN THE 5.8 GHz BAND

8.38.1. 6 dB BANDWIDTH

<u>LIMITS</u>

FCC §15.407 (e)

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

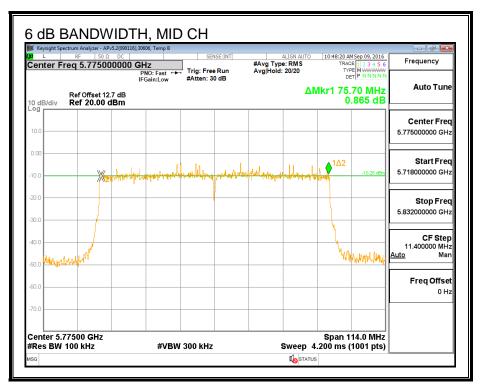
RESULTS

Channel	Frequency	6 dB BW	6 dB BW	Minimum
		Chain 0	Chain 2	Limit
	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	75.700	75.150	0.5

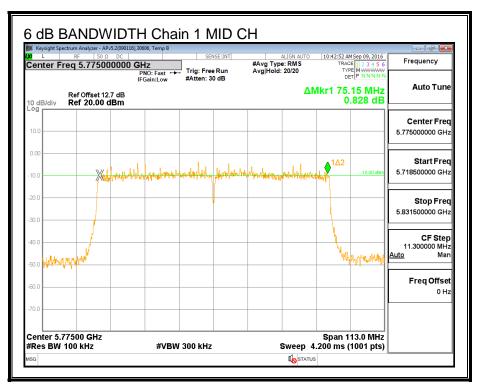
UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA TEL: (510) 771-1000 FAX: (510) 661-0888 This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

Page 844 of 1002

6 dB BANDWIDTH, CHAIN 0



6 DB BANDWIDTH, CHAIN 2



Page 845 of 1002

8.38.2. **26 dB BANDWIDTH**

<u>LIMITS</u>

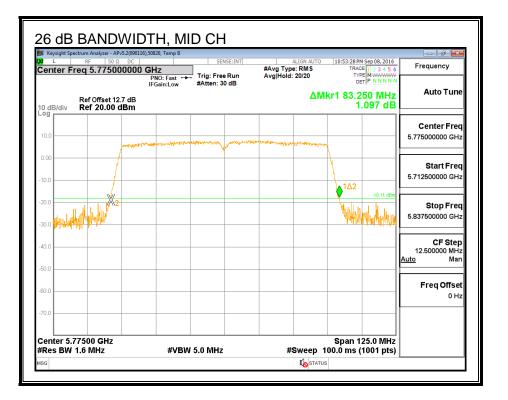
None, for reporting purposes only.

RESULTS

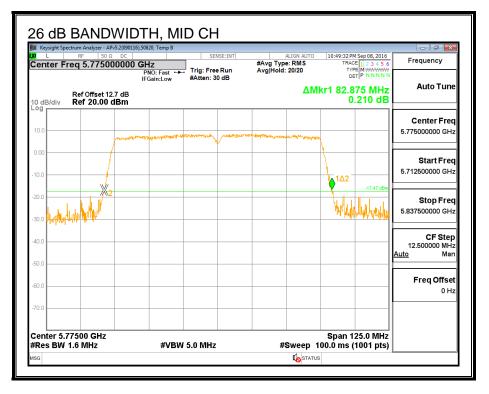
Channel	Frequency	26 dB BW	26 dB BW
		Chain 0	Chain 2
	(MHz)	(MHz)	(MHz)
Mid	5775	83.250	82.875

Page 846 of 1002

26 dB BANDWIDTH, CHAIN 0



26 dB BANDWIDTH, CHAIN 2



Page 847 of 1002

8.38.3. 99% BANDWIDTH

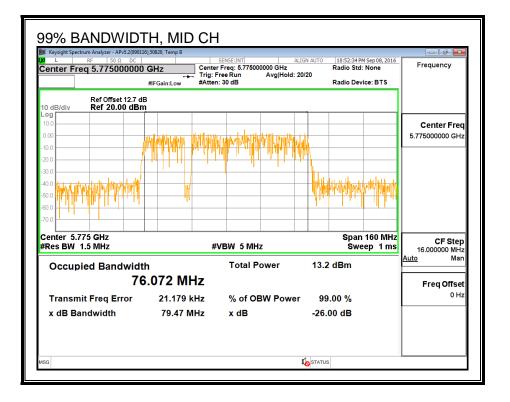
<u>LIMITS</u>

None; for reporting purposes only.

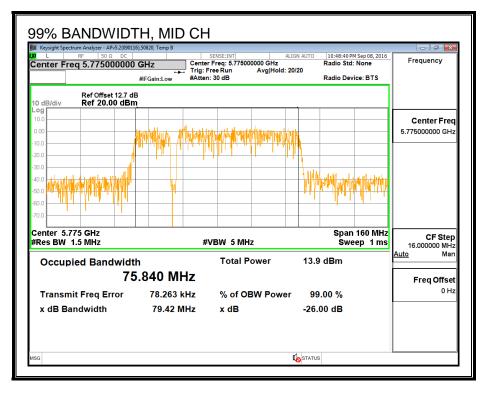
RESULTS

Channel	Frequency	99% BW	99% BW	
		Chain 0	Chain 2	
	(MHz)	(MHz)	(MHz)	
Mid	5775	76.072	75.840	

99% BANDWIDTH, CHAIN 0



99% BANDWIDTH, CHAIN 2



Page 849 of 1002

8.38.4. AVERAGE POWER (FCC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID: 43573	Date:	9/7/16	
------------------	-------	--------	--

Channel	Frequency	Chain 0 Chain 2		Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5775	12.60	12.55	15.59

Page 850 of 1002

8.38.5. OUTPUT POWER (FCC)

<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.

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

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

Chain 0	Chain 2	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	4.70	4.36

Page 851 of 1002

RESULTS

ID: 43573 **Date:** 9/7/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)

Output Power Results

Channel	Frequency	Chain 0	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	12.60	12.55	15.59	30.00	-14.41

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.

Page 852 of 1002

8.38.6. PSD (FCC)

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0	Chain 2	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	4.70	4.36

Page 853 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	4.36	30.00

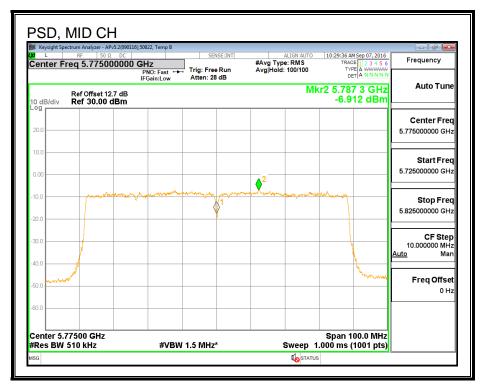
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD
	00	

PSD Results

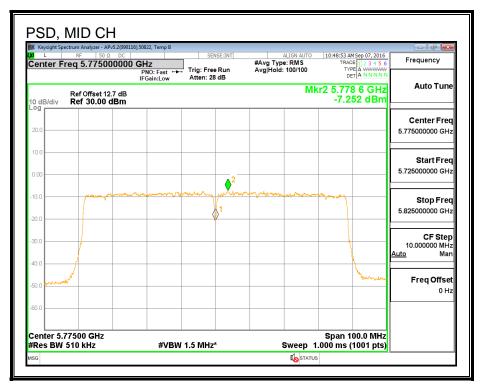
Channel	Frequency	Chain 0	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-6.91	-7.25	-3.89	30.00	-33.89

Page 854 of 1002

PSD, CHAIN 0



PSD, CHAIN 2



Page 855 of 1002

8.38.7. AVERAGE POWER (IC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

Channel			Chain 2 Power	Total Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5775	10.35	10.39	13.38

Page 856 of 1002

8.38.8. OUTPUT POWER (IC)

LIMITS

IC RSS-247 (6.2.4) (1)

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

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

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

Chain 0	Chain 2	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	4.70	4.36

Page 857 of 1002

RESULTS

ID: 30554 Date: 9/16/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
	(11112)	(UDI)	(ubiii)

Output Power Results

Channel	Frequency	Chain 0	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	10.35	10.39	13.38	30.00	-16.62

Page 858 of 1002

8.38.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0	Chain 2	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	4.70	4.36

Page 859 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	4.36	30.00

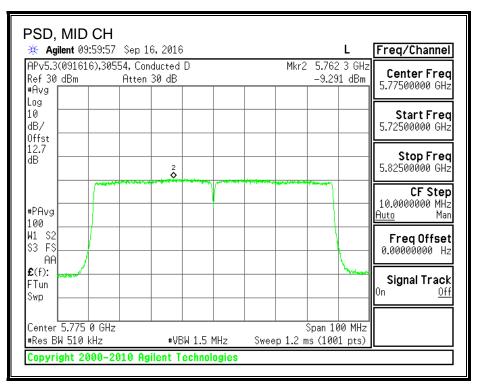
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD

PSD Results

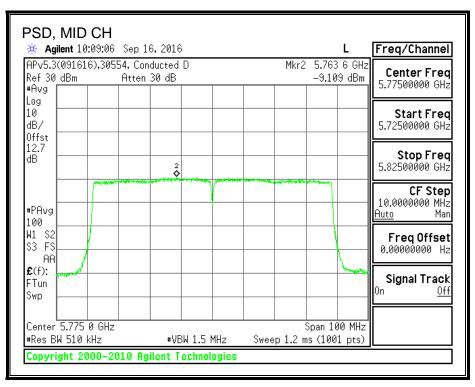
Channel	Frequency	Chain 0	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-9.29	-9.11	-6.01	30.00	-36.01

Page 860 of 1002

PSD, CHAIN 0



PSD, CHAIN 2



Page 861 of 1002

8.39. 802.11ac VHT80 2Tx (CHAIN 1 + CHAIN 2) STBC MODE IN THE 5.8 GHz BAND

8.39.1. 6 dB BANDWIDTH

<u>LIMITS</u>

FCC §15.407 (e)

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

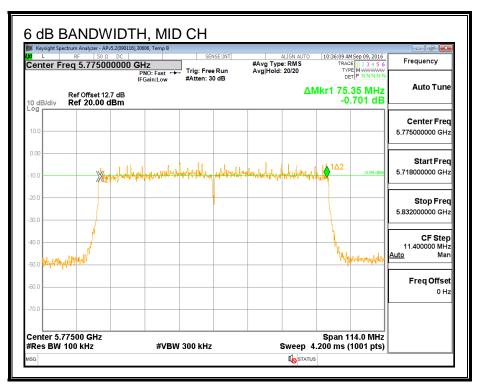
RESULTS

Channel	Frequency	6 dB BW	6 dB BW	Minimum
		Chain 1	Chain 2	Limit
	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	75.350	75.580	0.5

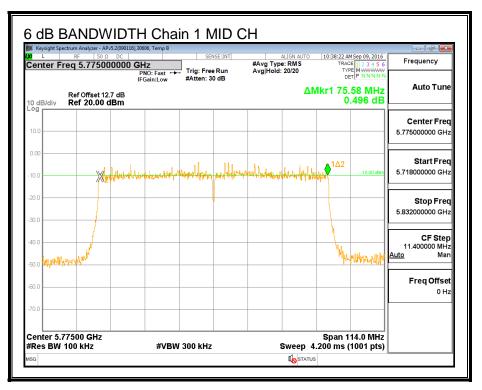
UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA TEL: (510) 771-1000 FAX: (510) 661-0888 This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

Page 862 of 1002

6 dB BANDWIDTH, CHAIN 1



6 DB BANDWIDTH, CHAIN 2



Page 863 of 1002

8.39.2. **26 dB BANDWIDTH**

<u>LIMITS</u>

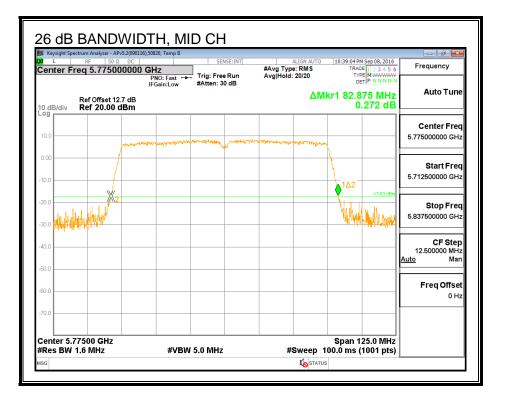
None, for reporting purposes only.

RESULTS

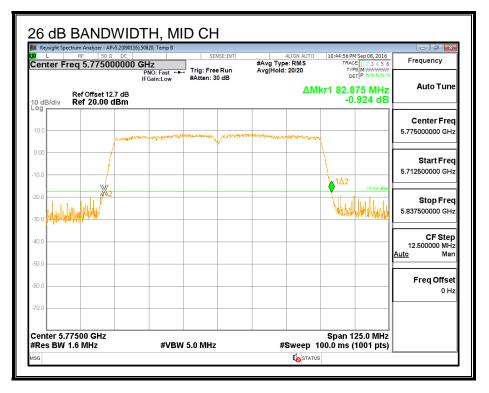
Channel	Frequency	26 dB BW	26 dB BW
		Chain 1	Chain 2
	(MHz)	(MHz)	(MHz)
Mid	5775	82.875	82.875

Page 864 of 1002

26 dB BANDWIDTH, CHAIN 1



26 dB BANDWIDTH, CHAIN 2



Page 865 of 1002

8.39.3. 99% BANDWIDTH

<u>LIMITS</u>

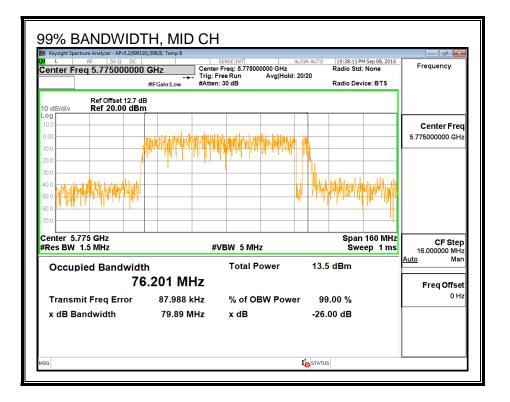
None; for reporting purposes only.

RESULTS

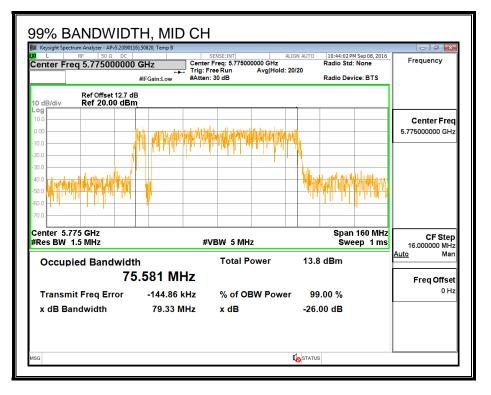
Channel	Frequency	99% BW	99% BW
		Chain 1	Chain 2
	(MHz)	(MHz)	(MHz)
Mid	5775	76.201	75.581

Page 866 of 1002

99% BANDWIDTH, CHAIN 1



99% BANDWIDTH, CHAIN 2



Page 867 of 1002

8.39.4. AVERAGE POWER (FCC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

	ID:	43573	Date:	9/7/16	
--	-----	-------	-------	--------	--

Channel	Frequency	Chain 1	Chain 2	Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5775	12.70	12.65	15.69

Page 868 of 1002

8.39.5. OUTPUT POWER (FCC)

<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.

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

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

Chain 1	Chain 2	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
6.30	4.70	5.57

Page 869 of 1002

RESULTS

ID: 43573 **Date:** 9/7/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain Limit	
	(MHz)	(dBi)	(dBm)

Output Power Results

Channel	Frequency	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	12.70	12.65	15.69	30.00	-14.31

Page 870 of 1002

8.39.6. PSD (FCC)

<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

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

Chain 1	Chain 2	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
6.30	4.70	5.57

Page 871 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD	
		Gain	Limit	
	(MHz)	(dBi)	(dBm)	
Mid	5775	5.57	30.00	

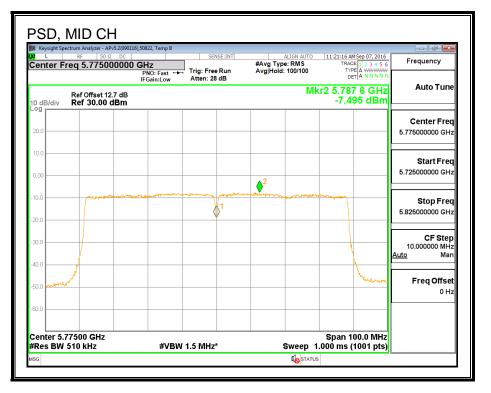
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD
,		

PSD Results

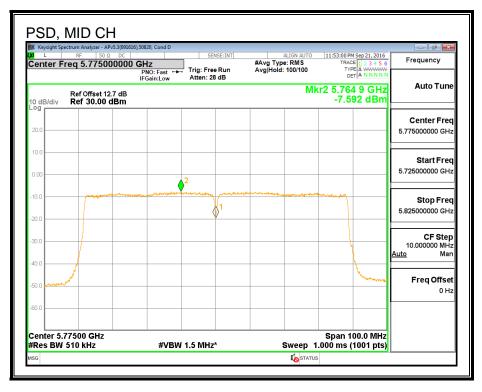
Channel	Frequency	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-7.50	-7.59	-4.35	30.00	-34.35

Page 872 of 1002

PSD, CHAIN 1



PSD, CHAIN 2



Page 873 of 1002

8.39.7. AVERAGE POWER (IC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	30554	Date:	9/16/16	
-----	-------	-------	---------	--

Channel	Frequency	Chain 1 Power	Chain 2 Power	Total Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5775	10.45	10.46	13.47

Page 874 of 1002

8.39.8. OUTPUT POWER (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

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

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

Chain 1	Chain 2	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
6.30	4.70	5.57

Page 875 of 1002

RESULTS

ID: 30554 Date: 9/16/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
	· · ·	· · ·	· /

Output Power Results

Channel	Frequency	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	10.45	10.46	13.47	30.00	-16.53

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.

Page 876 of 1002

8.39.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 1	Chain 2	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
6.30	4.70	5.57

Page 877 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	5.57	30.00

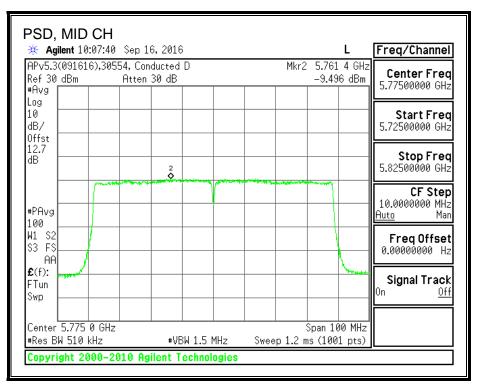
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD

PSD Results

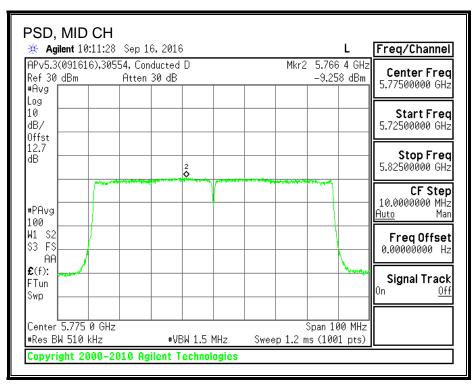
Channel	Frequency	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-9.50	-9.26	-6.19	30.00	-36.19

Page 878 of 1002

PSD, CHAIN 1



PSD, CHAIN 2



Page 879 of 1002

8.40. 802.11ac VHT80 2Tx (CHAIN 0 + CHAIN 1) BEAM FORMING MODE IN THE 5.8 GHz BAND

8.40.1. 6 dB BANDWIDTH

<u>LIMITS</u>

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

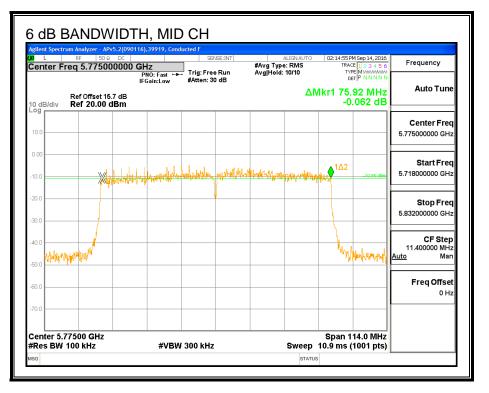
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

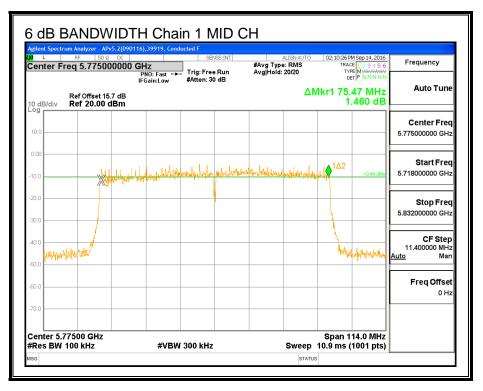
Channel	Frequency	6 dB BW	6 dB BW	Minimum
		Chain 0	Chain 1	Limit
	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	75.92	75.47	0.5

Page 880 of 1002

6 dB BANDWIDTH, CHAIN 0



6 DB BANDWIDTH, CHAIN 1



Page 881 of 1002

8.40.2. **26 dB BANDWIDTH**

<u>LIMITS</u>

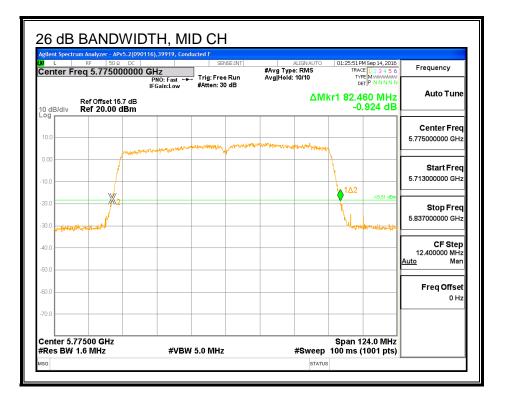
None, for reporting purposes only.

RESULTS

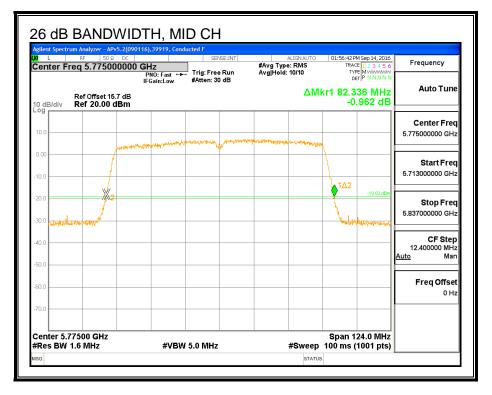
Channel	Frequency	26 dB BW	26 dB BW
		Chain 0	Chain 1
	(MHz)	(MHz)	(MHz)
Mid	5775	82.46	82.34

Page 882 of 1002

26 dB BANDWIDTH, CHAIN 0



26 dB BANDWIDTH, CHAIN 1



Page 883 of 1002

8.40.3. 99% BANDWIDTH

<u>LIMITS</u>

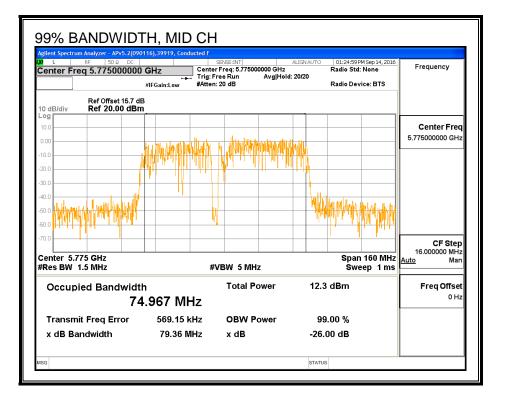
None; for reporting purposes only.

<u>RESULTS</u>

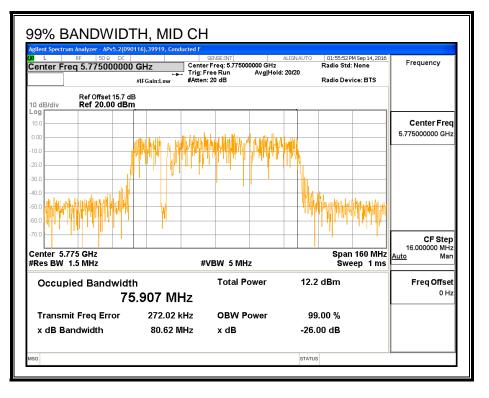
Channel	Frequency	99% BW	99% BW
		Chain 0	Chain 1
	(MHz)	(MHz)	(MHz)
Mid	5775	74.967	75.907

Page 884 of 1002

99% BANDWIDTH, CHAIN 0



99% BANDWIDTH, CHAIN 1



Page 885 of 1002

8.40.4. AVERAGE POWER (FCC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID: 44366	Date:	9/14/16	
------------------	-------	---------	--

Channel	Frequency	Chain 0 Power	Chain 1 Power	Total Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5775	12.65	12.60	15.64

Page 886 of 1002

8.40.5. OUTPUT POWER (FCC)

<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.

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

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

Chain 0	Chain 1	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	6.30	8.24

Page 887 of 1002

<u>RESULTS</u>

ID:	44366	Date:	9/14/16
ID .	4400	Date.	3/14/10

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	8.24	27.76

Output Power Results

Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	12.65	12.60	15.64	27.76	-12.12

Page 888 of 1002

8.40.6. PSD (FCC)

<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

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

Chain 0	Chain 1	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	6.30	8.24

Page 889 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	8.24	27.76

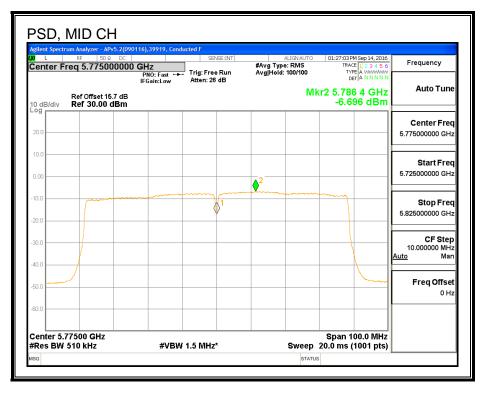
Duty Cycle CF (dB)	0.72	Included in Calculations of Corr'd PSD
	-	

PSD Results

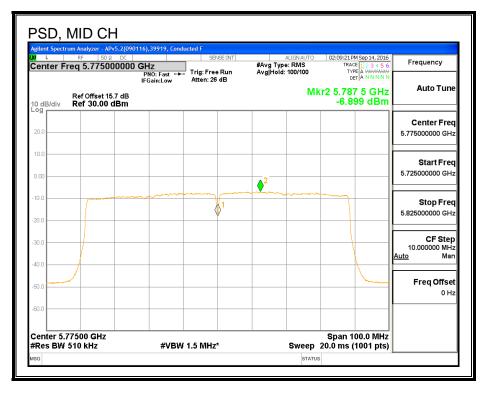
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-6.70	-6.90	-3.07	27.76	-30.83

Page 890 of 1002

PSD, CHAIN 0



PSD, CHAIN 1



Page 891 of 1002

8.40.7. AVERAGE POWER (IC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

	-		
ID:	30554	Date:	9/16/16

Channel	Frequency	Chain 0 Power	Chain 1 Power	Total Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5775	7.92	7.96	10.95

UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

Page 892 of 1002

8.40.8. OUTPUT POWER (IC)

<u>LIMITS</u>

FCC §15.407 (a) (3)

IC RSS-247 (6.2.4) (1)

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

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

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

Chain 0	Chain 1	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	6.30	8.24

Page 893 of 1002

<u>RESULTS</u>

ID:	30554	Date:	9/16/16
10.	00001	Date.	0/10/10

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	8.24	27.76

Output Power Results

Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	7.92	7.96	10.95	27.76	-16.81

Page 894 of 1002

8.40.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0	Chain 1	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	6.30	8.24

Page 895 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	8.24	27.76

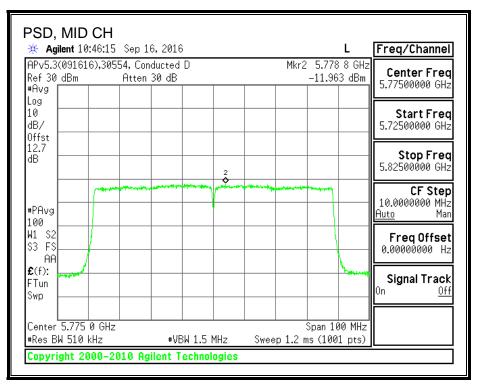
Duty Cycle CF (dB)	0.72	Included in Calculations of Corr'd PSD
	-	

PSD Results

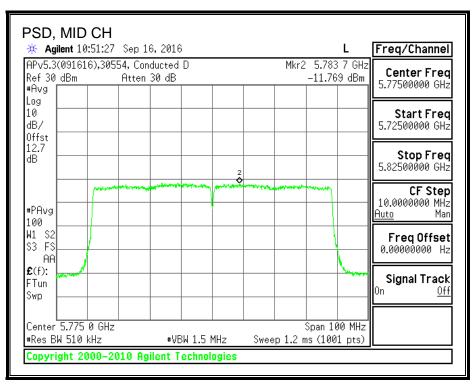
Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-11.96	-11.77	-8.13	27.76	-35.89

Page 896 of 1002

PSD, CHAIN 0



PSD, CHAIN 1



Page 897 of 1002

8.41. 802.11ac VHT80 2Tx (CHAIN 0 + CHAIN 2) BEAM FORMING MODE IN THE 5.8 GHz BAND

8.41.1. 6 dB BANDWIDTH

<u>LIMITS</u>

FCC §15.407 (e)

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

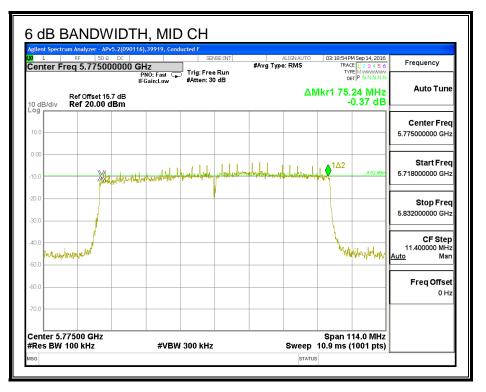
RESULTS

Channel	Frequency	6 dB BW	6 dB BW	Minimum
		Chain 0	Chain 2	Limit
	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	75.240	75.810	0.5

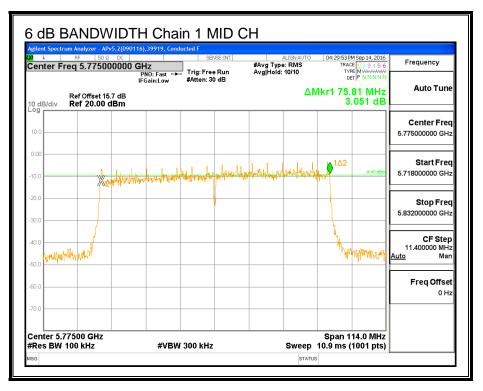
UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA TEL: (510) 771-1000 FAX: (510) 661-0888 This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

Page 898 of 1002

6 dB BANDWIDTH, CHAIN 0



6 DB BANDWIDTH, CHAIN 2



Page 899 of 1002

8.41.2. **26 dB BANDWIDTH**

<u>LIMITS</u>

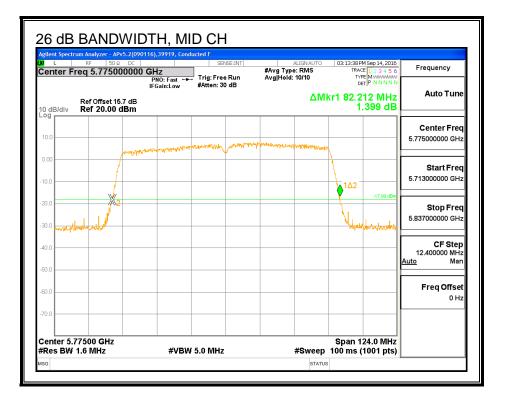
None, for reporting purposes only.

RESULTS

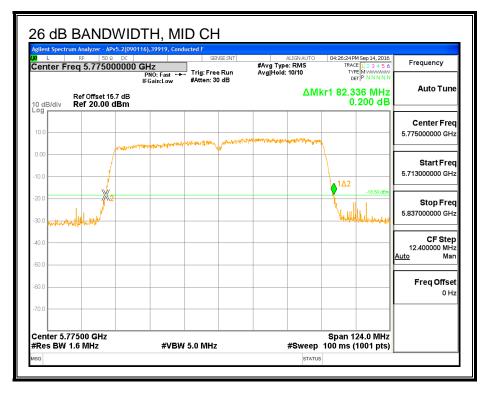
Channel	Frequency	26 dB BW	26 dB BW
		Chain 0	Chain 2
	(MHz)	(MHz)	(MHz)
Mid	5775	82.212	82.336

Page 900 of 1002

26 dB BANDWIDTH, CHAIN 0



26 dB BANDWIDTH, CHAIN 2



Page 901 of 1002

8.41.3. 99% BANDWIDTH

<u>LIMITS</u>

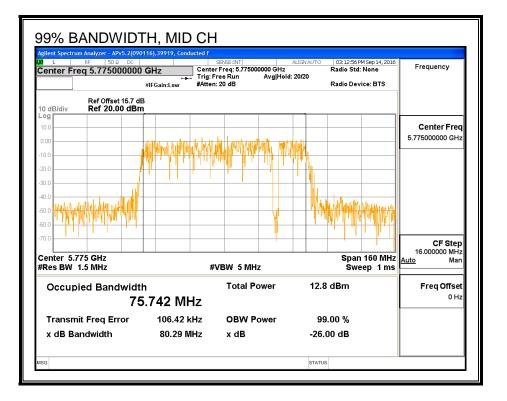
None; for reporting purposes only.

RESULTS

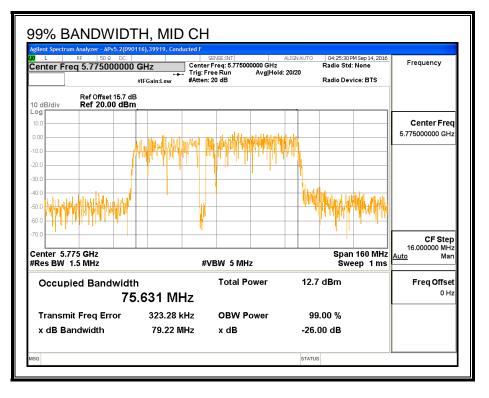
Channel	Frequency	99% BW	99% BW
		Chain 0	Chain 2
	(MHz)	(MHz)	(MHz)
Mid	5775	75.742	75.631

Page 902 of 1002

99% BANDWIDTH, CHAIN 0



99% BANDWIDTH, CHAIN 2



Page 903 of 1002

8.41.4. AVERAGE POWER (FCC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID: 44366	Date:	9/14/16	
------------------	-------	---------	--

Channel	Frequency	Chain 0 Power	Chain 2 Power	Total Power	
	(MHz)	(dBm)	(dBm)	(dBm)	
Mid	5775	12.75	12.65	15.71	

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.

Page 904 of 1002

8.41.5. OUTPUT POWER (FCC)

<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.

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

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

Chain 0	Chain 2	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	4.70	7.37

Page 905 of 1002

RESULTS

ID: 44366 **Date:** 9/14/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dDm)
		(UDI)	(dBm)

Output Power Results

Channel	Frequency	Chain 0	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	12.75	12.65	15.71	28.63	-12.92

Page 906 of 1002

8.41.6. PSD (FCC)

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0	Chain 2	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	4.70	7.37

Page 907 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	7.37	28.63

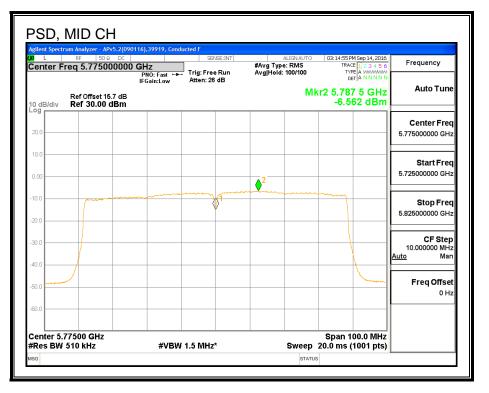
Duty Cycle CF (dB) 0.72 Included in Calculations
--

PSD Results

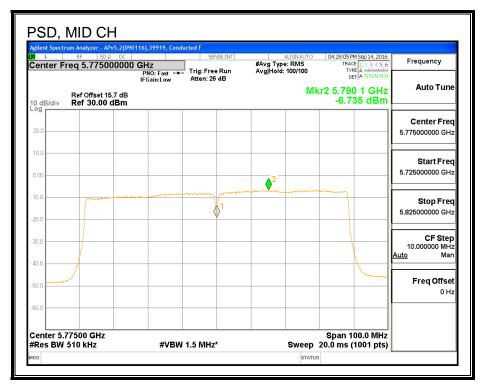
Channel	Frequency	Chain 0	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-6.56	-6.74	-2.92	28.63	-31.55

Page 908 of 1002

PSD, CHAIN 0



PSD, CHAIN 2



Page 909 of 1002

8.41.7. AVERAGE POWER (IC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

Channel	Frequency	Chain 0 Power	Chain 2 Power	Total Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5775	7.89	7.98	10.95

Page 910 of 1002

8.41.8. OUTPUT POWER (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

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

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

Chain 0	Chain 2	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	4.70	7.37

Page 911 of 1002

RESULTS

ID: 30554 Date: 9/16/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	7.37	28.63

Output Power Results

Channel	Frequency	Chain 0	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	7.89	7.98	10.95	28.63	-17.68

Page 912 of 1002

8.41.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0	Chain 2	Correlated Chains	
Antenna	Antenna	Directional	
Gain	Gain	Gain	
(dBi)	(dBi)	(dBi)	
4.00	4.70	7.37	

Page 913 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	7.37	28.63

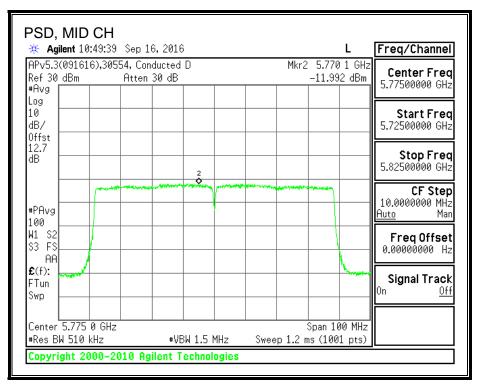
Duty Cycle CF (dB)	0.72	Included in Calculations of Corr'd PSD

PSD Results

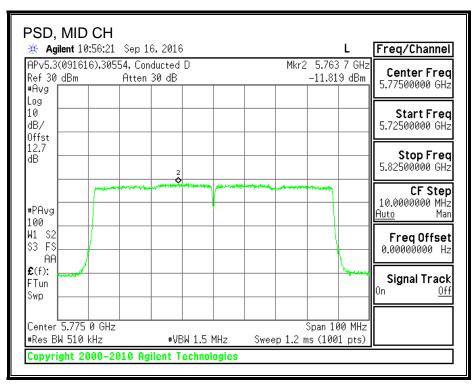
Channel	Frequency	Chain 0	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-11.99	-11.82	-8.17	28.63	-36.80

Page 914 of 1002

PSD, CHAIN 0



PSD, CHAIN 2



Page 915 of 1002

8.42. 802.11ac VHT80 2Tx (CHAIN 1 + CHAIN 2) BEAM FORMING MODE IN THE 5.8 GHz BAND

8.42.1. 6 dB BANDWIDTH

<u>LIMITS</u>

FCC §15.407 (e)

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

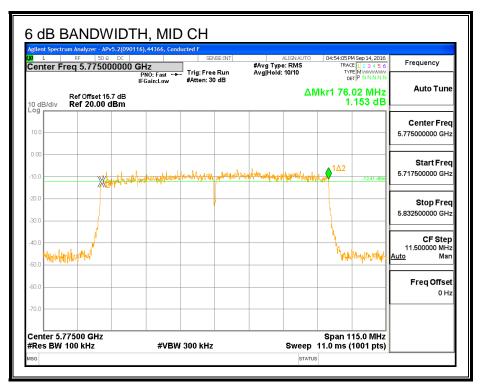
RESULTS

Channel	Frequency	6 dB BW	6 dB BW	Minimum
		Chain 1	Chain 2	Limit
	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	76.020	75.580	0.5

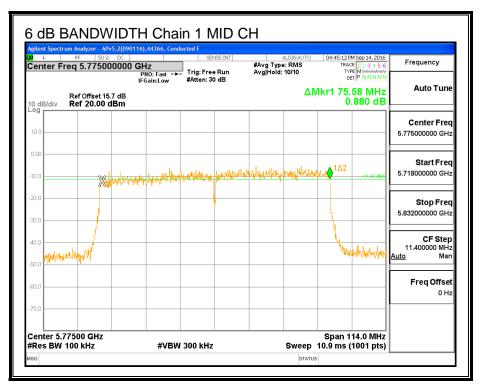
UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA TEL: (510) 771-1000 FAX: (510) 661-0888 This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

Page 916 of 1002

6 dB BANDWIDTH, CHAIN 1



6 DB BANDWIDTH, CHAIN 2



Page 917 of 1002

8.42.2. **26 dB BANDWIDTH**

<u>LIMITS</u>

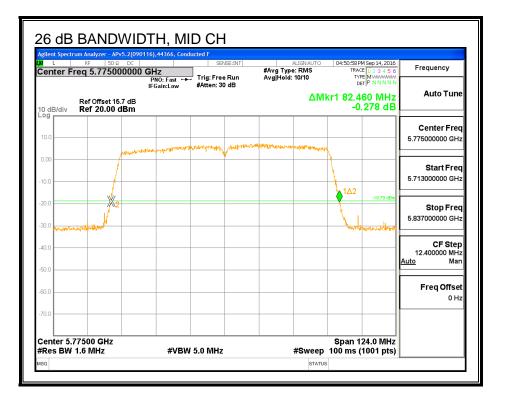
None, for reporting purposes only.

RESULTS

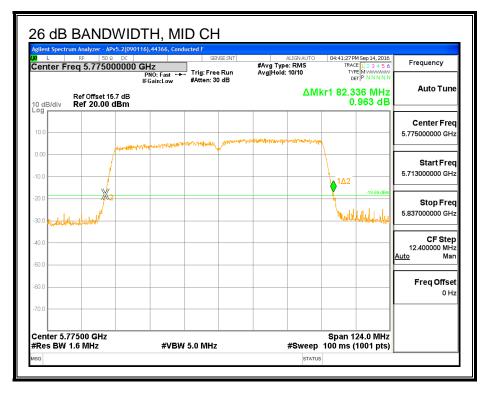
Channel	Frequency	26 dB BW	26 dB BW
		Chain 1	Chain 2
	(MHz)	(MHz)	(MHz)
Mid	5775	82.460	82.336

Page 918 of 1002

26 dB BANDWIDTH, CHAIN 1



26 dB BANDWIDTH, CHAIN 2



Page 919 of 1002

8.42.3. 99% BANDWIDTH

<u>LIMITS</u>

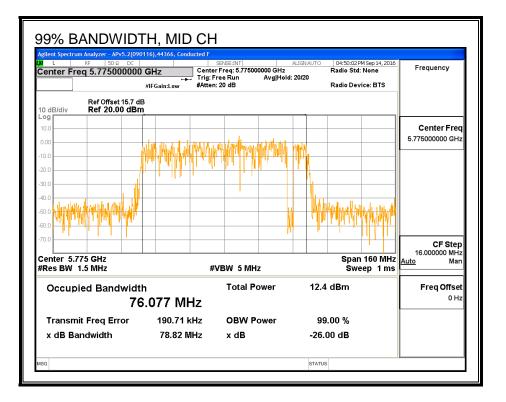
None; for reporting purposes only.

RESULTS

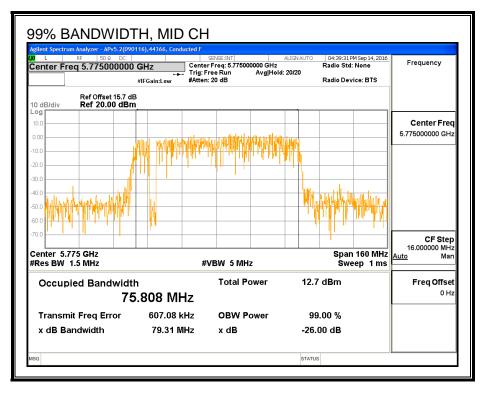
Channel	Frequency	99% BW	99% BW
		Chain 1	Chain 2
	(MHz)	(MHz)	(MHz)
Mid	5775	76.077	75.808

Page 920 of 1002

99% BANDWIDTH, CHAIN 1



99% BANDWIDTH, CHAIN 2



Page 921 of 1002

8.42.4. AVERAGE POWER (FCC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID: 44366	Date:	9/14/16	
------------------	-------	---------	--

Channel	Frequency	Chain 1 Power	Chain 2 Power	Total Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5775	12.54	12.65	15.61

Page 922 of 1002

8.42.5. OUTPUT POWER (FCC)

<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.

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

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

Chain 1	Chain 2	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
6.30	4.70	8.55

Page 923 of 1002

RESULTS

ID: 44366 **Date:** 9/14/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid			

Output Power Results

Channel	Frequency	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	12.54	12.65	15.61	27.45	-11.84

Page 924 of 1002

8.42.6. PSD (FCC)

<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

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

Chain 1	Chain 2	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
6.30	4.70	8.55

Page 925 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	8.55	27.45

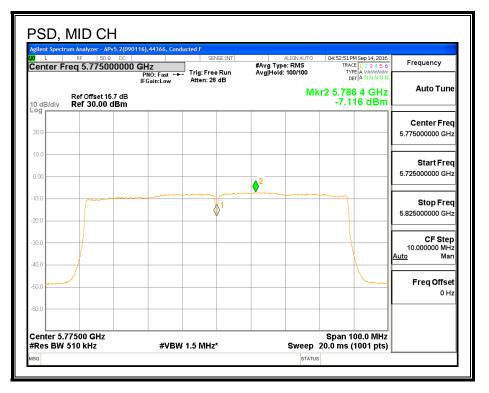
Duty Cycle CF (dB)	0.72	Included in Calculations of Corr'd PSD

PSD Results

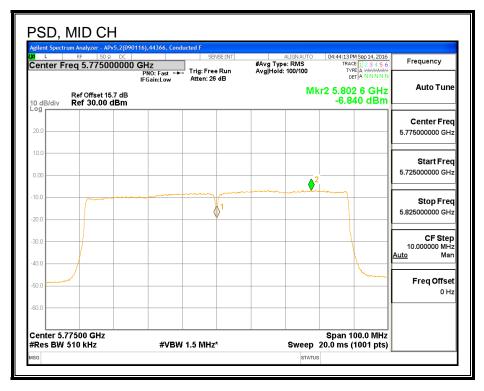
Channel	Frequency	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-7.12	-6.84	-3.25	27.45	-30.70

Page 926 of 1002

PSD, CHAIN 1



PSD, CHAIN 2



Page 927 of 1002

8.42.7. AVERAGE POWER (IC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	30554	Date:	9/16/16	
-----	-------	-------	---------	--

Channel	Frequency	Chain 1 Power	Chain 2 Power	Total Power
	(MHz)	(dBm)	(dBm)	(dBm)
Mid	5775	7.96	7.97	10.98

Page 928 of 1002

8.42.8. OUTPUT POWER (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

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

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

Chain 1	Chain 2	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
6.30	4.70	8.55

Page 929 of 1002

RESULTS

ID: 30554 Date: 9/16/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)

Output Power Results

Channel	Frequency	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	7.96	7.97	10.98	27.45	-16.47

Page 930 of 1002

8.42.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 1	Chain 2	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
6.30	4.70	8.55

Page 931 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	8.55	27.45

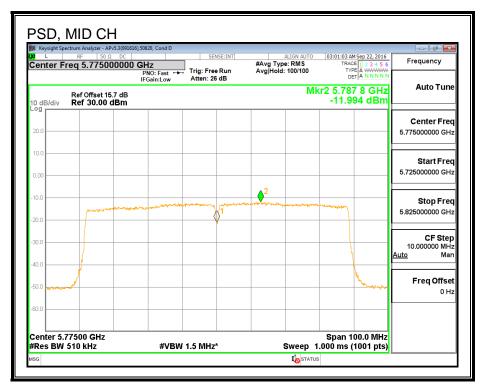
Duty Cycle CF (dB)	0.72	Included in Calculations of Corr'd PSD
	0.72	

PSD Results

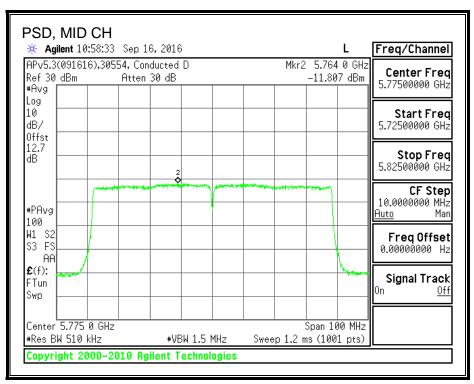
Channel	Frequency	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-11.99	-11.81	-8.17	27.45	-35.62

Page 932 of 1002

PSD, CHAIN 1



PSD, CHAIN 2



Page 933 of 1002

8.43. 802.11ac VHT80 3Tx CDD MODE IN THE 5.8 GHz BAND

8.43.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

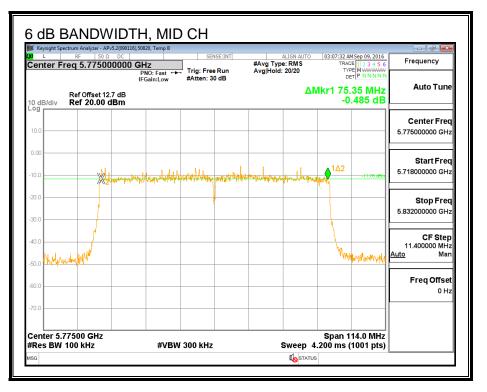
The minimum 6 dB bandwidth shall be at least 500 kHz.

<u>RESULTS</u>

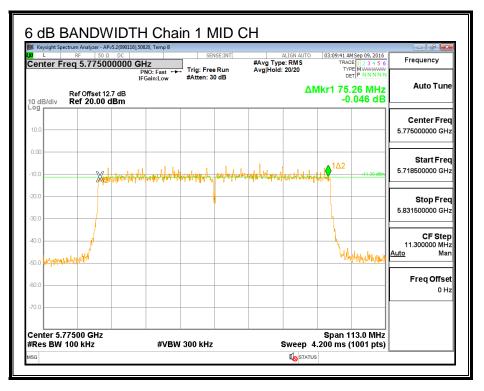
Channel	Frequency	6 dB BW	6 dB BW	6 dB BW	Minimum
		Chain 0	Chain 1	Chain 2	Limit
	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	75.350	75.260	75.260	0.5

Page 934 of 1002

6 dB BANDWIDTH, CHAIN 0

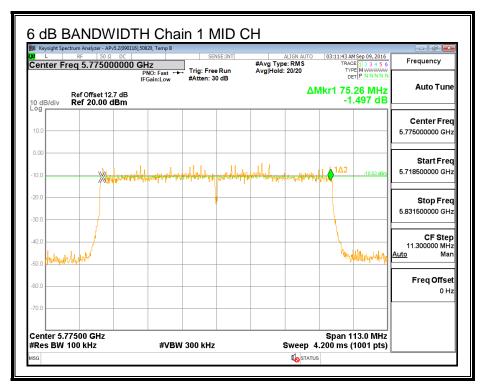


6 DB BANDWIDTH, CHAIN 1



Page 935 of 1002

6 DB BANDWIDTH, CHAIN 2



Page 936 of 1002

8.43.2. **26 dB BANDWIDTH**

LIMITS

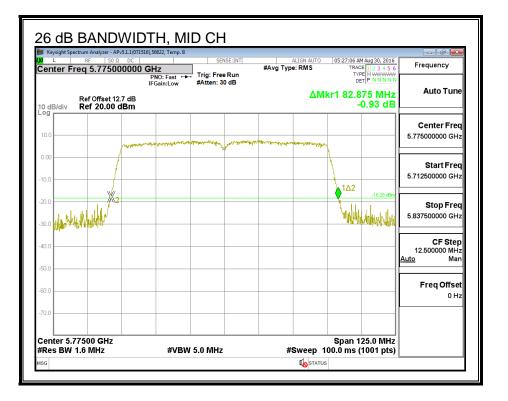
None, for reporting purposes only.

RESULTS

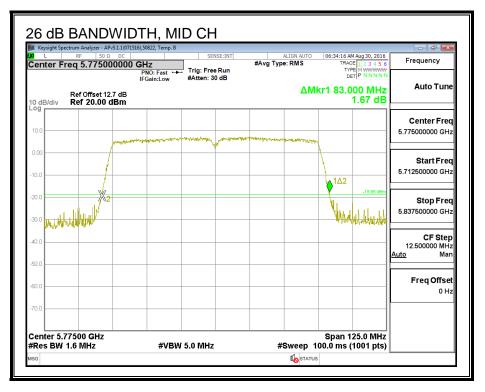
Channel	Frequency	26 dB BW	26 dB BW	26 dB BW
		Chain 0	Chain 1	Chain 2
	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	82.875	83.000	83.000

Page 937 of 1002

26 dB BANDWIDTH, CHAIN 0

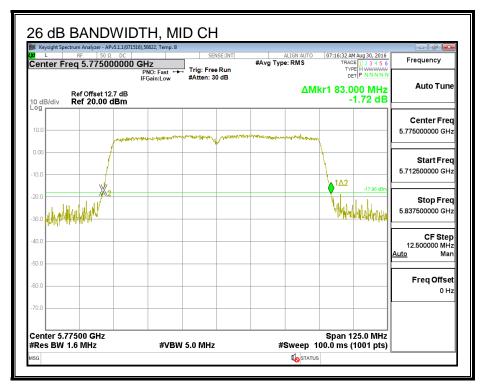


26 dB BANDWIDTH, CHAIN 1



Page 938 of 1002

26 dB BANDWIDTH, CHAIN 2



Page 939 of 1002

8.43.3. 99% BANDWIDTH

<u>LIMITS</u>

None; for reporting purposes only.

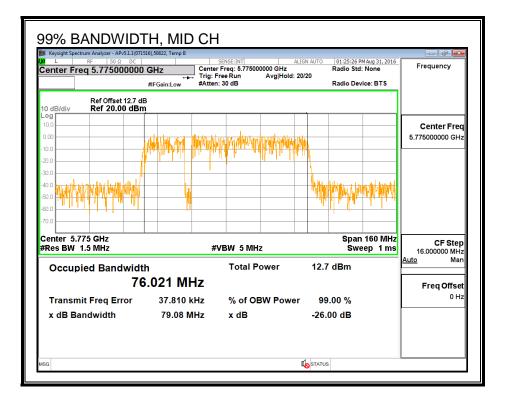
RESULTS

Channel	Frequency	99% BW	99% BW	99% BW
		Chain 0	Chain 1	Chain 2
	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	76.021	73.318	76.156

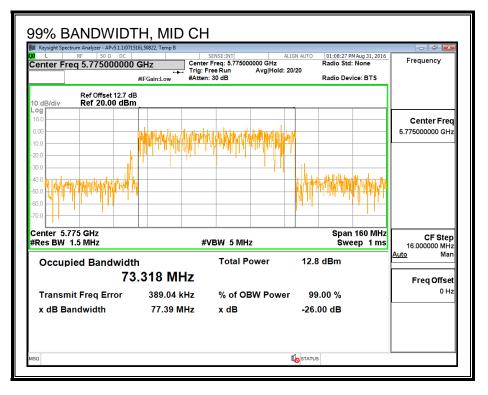
UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

Page 940 of 1002

99% BANDWIDTH, CHAIN 0

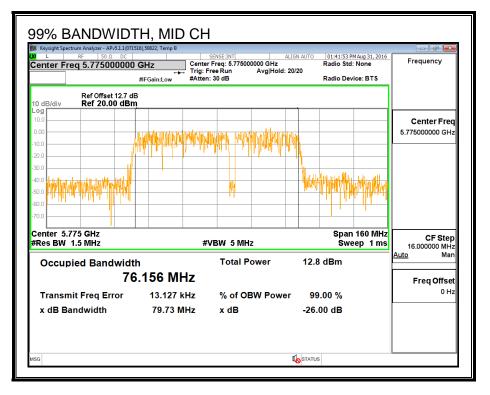


99% BANDWIDTH, CHAIN 1



Page 941 of 1002

99% BANDWIDTH, CHAIN 2



Page 942 of 1002

8.43.4. AVERAGE POWER (FCC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total
		Power	Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)
Mid	5775	12.70	12.68	12.71	17.47

Page 943 of 1002

8.43.5. OUTPUT POWER (FCC)

<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.

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

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

Chain 0	Chain 1	Chain 2	Uncorrelated Chains
Antenna	Antenna	Antenna	Directional
Gain	Gain	Gain	Gain
(dBi)	(dBi)	(dBi)	(dBi)
4.00	6.30	4.70	5.11

Page 944 of 1002

RESULTS

ID: 43573 Date: 9/7/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)

Output Power Results

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	12.70	12.68	12.71	17.47	30.00	-12.53

Page 945 of 1002

8.43.6. PSD (FCC)

<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

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

Chain 0	Chain 1	Chain 2	Correlated Chains
Antenna	Antenna	Antenna	Directional
Gain	Gain	Gain	Gain
(dBi)	(dBi)	(dBi)	(dBi)
4.00	6.30	4.70	9.83

Page 946 of 1002

RESULTS

Antenna Gain and Limit

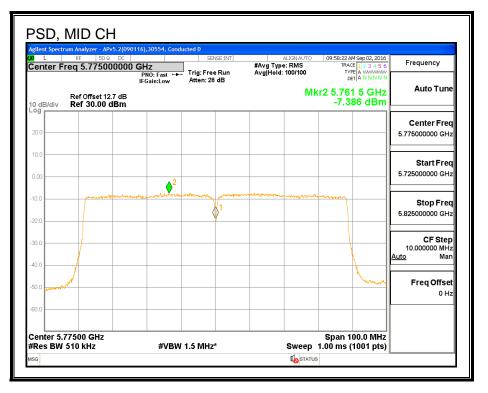
Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	9.83	26.17

Duty Cycle CF (dB) 0.18	Included in Calculations of Corr'd PSD
-------------------------	--

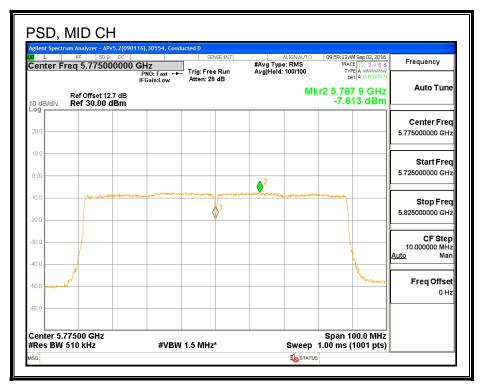
PSD Results

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-7.39	-7.61	-7.39	-2.51	26.17	-28.68

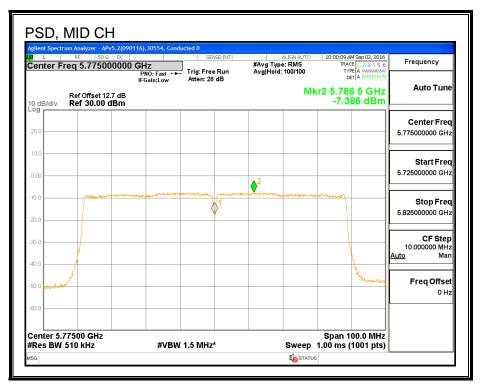
Page 947 of 1002



PSD, CHAIN 1



Page 948 of 1002



Page 949 of 1002

8.43.7. AVERAGE POWER (IC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total
		Power	Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)
Mid	5775	7.36	7.48	7.45	12.20

Page 950 of 1002

8.43.8. OUTPUT POWER (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

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

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

Chain 0	Chain 1	Chain 2	Uncorrelated Chains
Antenna	Antenna	Antenna	Directional
Gain	Gain	Gain	Gain
(dBi)	(dBi)	(dBi)	(dBi)
4.00	6.30	4.70	5.11

Page 951 of 1002

RESULTS

ID: 30554 Date: 9/16/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(8.4.1.1.)		
	(MHz)	(dBi)	(dBm)

Output Power Results

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	7.36	7.48	7.45	12.20	30.00	-17.80

Page 952 of 1002

8.43.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0	Chain 1	Chain 2	Correlated Chains
Antenna	Antenna	Antenna	Directional
Gain	Gain	Gain	Gain
(dBi)	(dBi)	(dBi)	(dBi)
4.00	6.30	4.70	9.83

Page 953 of 1002

RESULTS

Antenna Gain and Limit

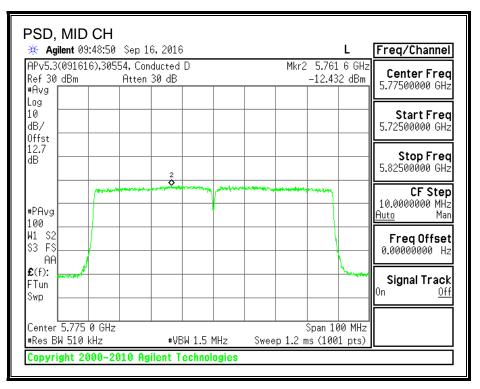
Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	9.83	26.17

Duty Cycle CF (dB) 0.18	Included in Calculations of Corr'd PSD
-------------------------	--

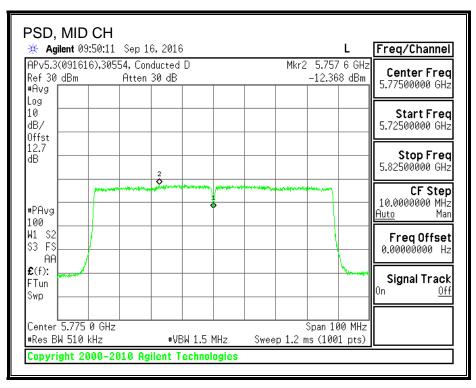
PSD Results

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-12.43	-12.37	-12.29	-7.41	26.17	-33.58

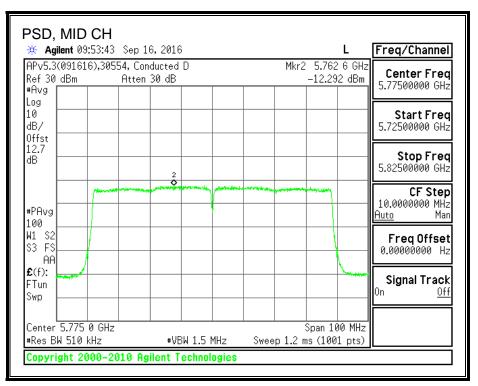
Page 954 of 1002



PSD, CHAIN 1



Page 955 of 1002



Page 956 of 1002

8.44. 802.11ac VHT80 3Tx STBC MODE IN THE 5.8 GHz BAND

8.44.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

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

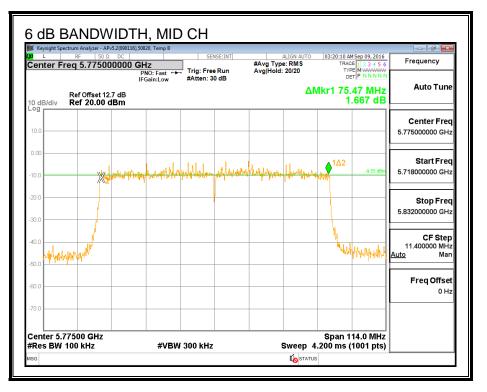
RESULTS

Channel	Frequency	6 dB BW	6 dB BW	6 dB BW	Minimum
		Chain 0	Chain 1	Chain 2	Limit
	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	75.470	76.360	75.150	0.5

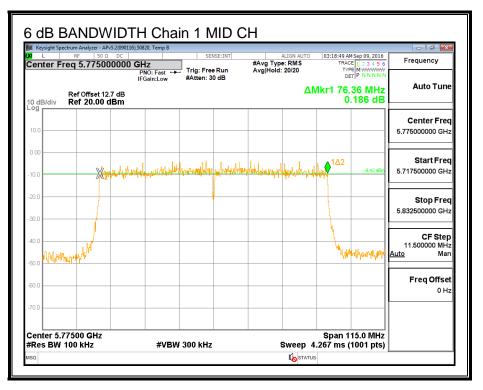
UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

Page 957 of 1002

6 dB BANDWIDTH, CHAIN 0

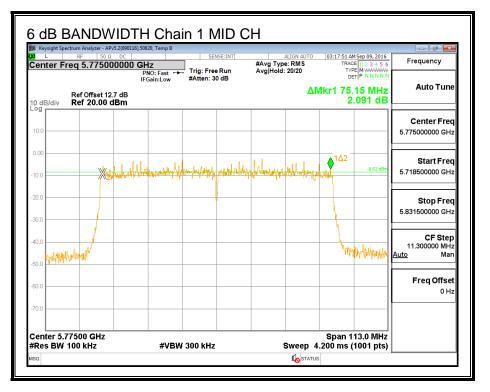


6 DB BANDWIDTH, CHAIN 1



Page 958 of 1002

6 DB BANDWIDTH, CHAIN 2



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.

Page 959 of 1002

8.44.2. **26 dB BANDWIDTH**

<u>LIMITS</u>

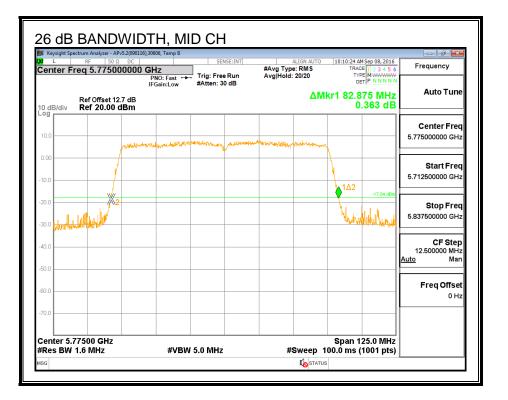
None, for reporting purposes only.

RESULTS

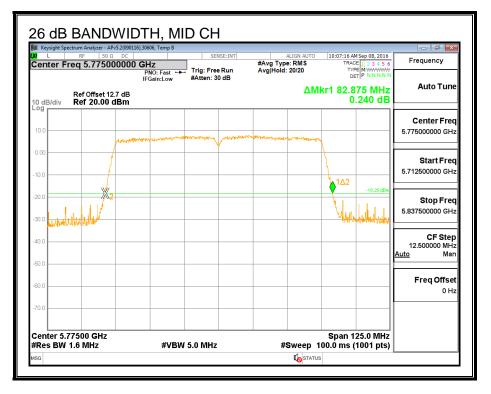
Channel	Frequency	26 dB BW	26 dB BW	26 dB BW
		Chain 0	Chain 1	Chain 2
	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	82.875	82.875	82.875

Page 960 of 1002

26 dB BANDWIDTH, CHAIN 0

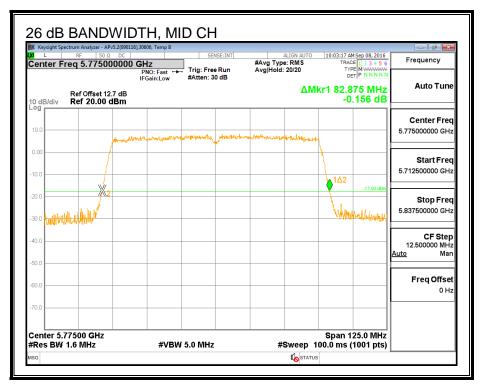


26 dB BANDWIDTH, CHAIN 1



Page 961 of 1002

26 dB BANDWIDTH, CHAIN 2



Page 962 of 1002

8.44.3. 99% BANDWIDTH

<u>LIMITS</u>

None; for reporting purposes only.

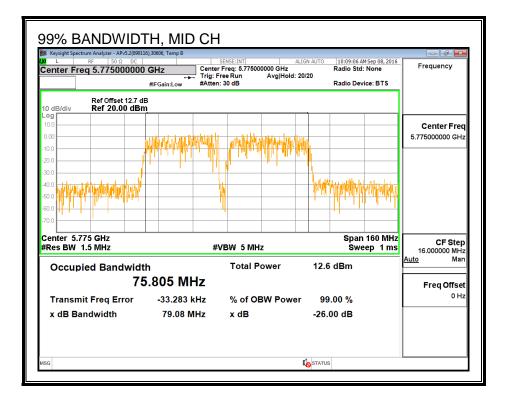
RESULTS

Channel	Frequency	99% BW	99% BW	99% BW
		Chain 0	Chain 1	Chain 2
	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	75.805	75.900	75.833

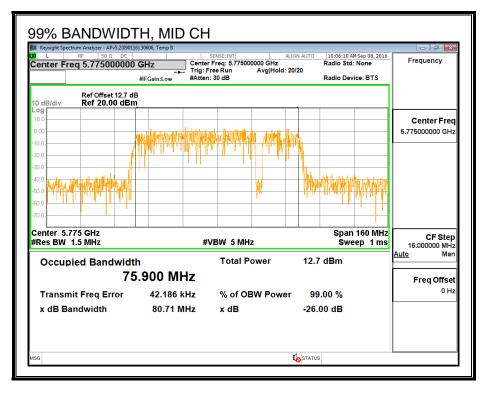
UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

Page 963 of 1002

99% BANDWIDTH, CHAIN 0

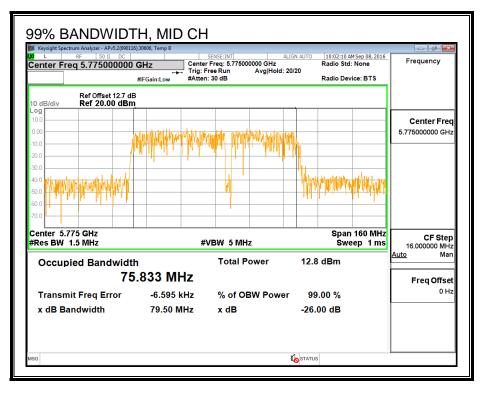


99% BANDWIDTH, CHAIN 1



Page 964 of 1002

99% BANDWIDTH, CHAIN 2



Page 965 of 1002

8.44.4. AVERAGE POWER (FCC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID: 43573	Date:	9/7/16	ĺ
-----------	-------	--------	---

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total
		Power	Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)
Mid	5775	12.74	12.63	12.68	17.45

Page 966 of 1002

8.44.5. OUTPUT POWER (FCC)

<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.

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

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

Chain 0	Chain 1	Chain 2	Uncorrelated Chains
Antenna	Antenna	Antenna	Directional
Gain	Gain	Gain	Gain
(dBi)	(dBi)	(dBi)	(dBi)
4.00	6.30	4.70	5.11

Page 967 of 1002

RESULTS

ID: 43573 Date: 9/7/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)

Output Power Results

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	12.74	12.63	12.63	17.44	30.00	-12.56

Page 968 of 1002

8.44.6. PSD (FCC)

<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

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

Chain 0	Chain 1	Chain 2	Uncorrelated Chains
Antenna	Antenna	Antenna	Directional
Gain	Gain	Gain	Gain
(dBi)	(dBi)	(dBi)	(dBi)
4.00	6.30	4.70	5.11

Page 969 of 1002

RESULTS

Antenna Gain and Limit

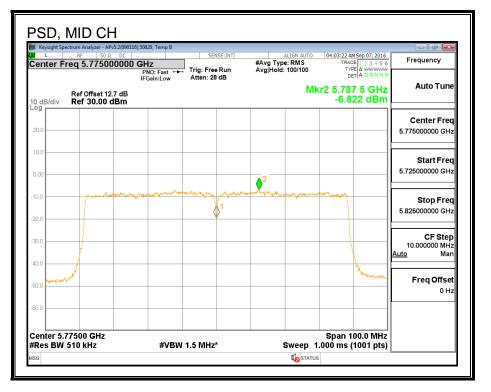
Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	5.11	30.00

Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD
--------------------	------	--

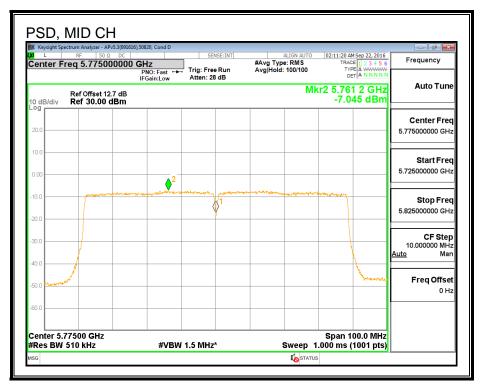
PSD Results

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-6.82	-7.05	-6.85	-1.95	30.00	-31.95

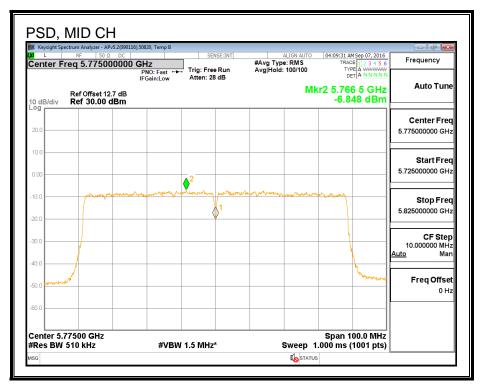
Page 970 of 1002



PSD, CHAIN 1



Page 971 of 1002



Page 972 of 1002

8.44.7. AVERAGE POWER (IC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID: 30554 Date: 9/16/16

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total
		Power	Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)
Mid	5775	10.46	10.43	10.39	15.20

Page 973 of 1002

8.44.8. OUTPUT POWER (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

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

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

Chain 0	Chain 1	Chain 2	Uncorrelated Chains
Antenna	Antenna	Antenna	Directional
Gain	Gain	Gain	Gain
(dBi)	(dBi)	(dBi)	(dBi)
4.00	6.30	4.70	5.11

Page 974 of 1002

REPORT NO: 16U23800-E4V2 FCC ID: BCGA1707

RESULTS

ID: 30554 Date: 9/16/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	5.11	30.00

Output Power Results

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	10.46	10.43	10.39	15.20	30.00	-14.80

Page 975 of 1002

8.44.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0	Chain 1	Chain 2	Uncorrelated Chains
Antenna	Antenna	Antenna	Directional
Gain	Gain	Gain	Gain
(dBi)	(dBi)	(dBi)	(dBi)
4.00	6.30	4.70	5.11

Page 976 of 1002

RESULTS

Antenna Gain and Limit

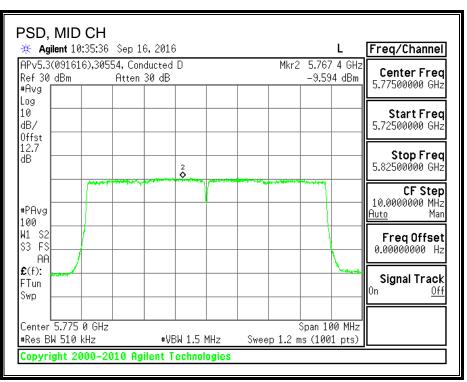
Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	5.11	30.00

Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD

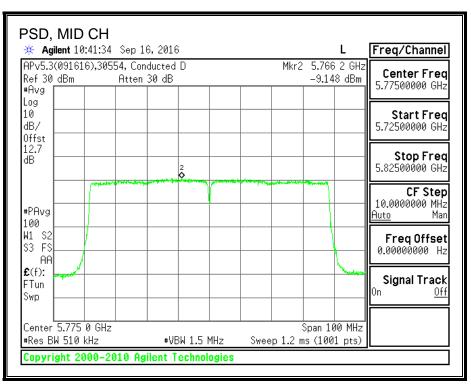
PSD Results

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-9.59	-9.15	-9.29	-4.39	30.00	-34.39

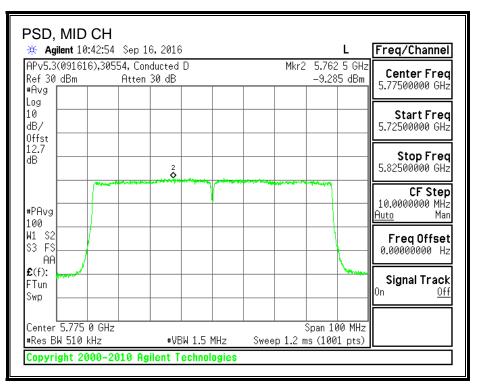
Page 977 of 1002



PSD, CHAIN 1



Page 978 of 1002



Page 979 of 1002

8.45. 802.11ac VHT80 3Tx BEAM FORMING MODE IN THE 5.8 GHz BAND

8.45.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

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

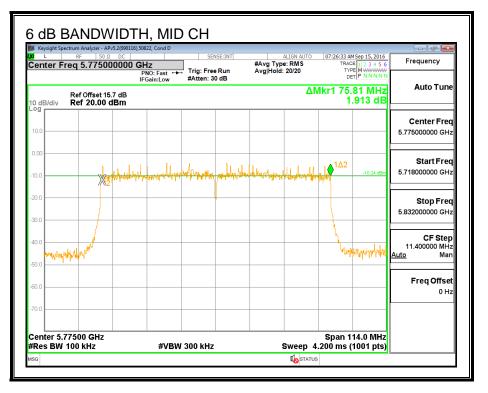
RESULTS

Channel	Frequency	6 dB BW	6 dB BW	6 dB BW	Minimum
		Chain 0	Chain 1	Chain 2	Limit
	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	75.810	75.470	75.150	0.5

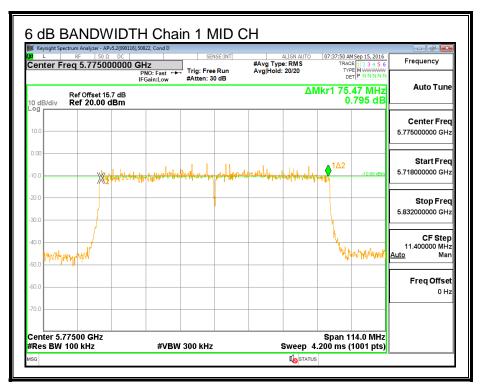
UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA TEL: (510) 771-1000 FAX: (510) 661-0888 This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

Page 980 of 1002

6 dB BANDWIDTH, CHAIN 0

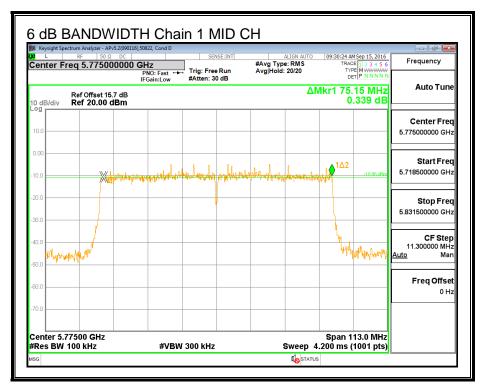


6 DB BANDWIDTH, CHAIN 1



Page 981 of 1002

6 DB BANDWIDTH, CHAIN 2



Page 982 of 1002

8.45.2. **26 dB BANDWIDTH**

<u>LIMITS</u>

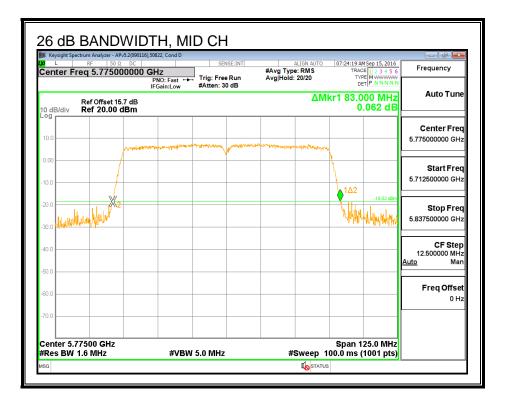
None, for reporting purposes only.

RESULTS

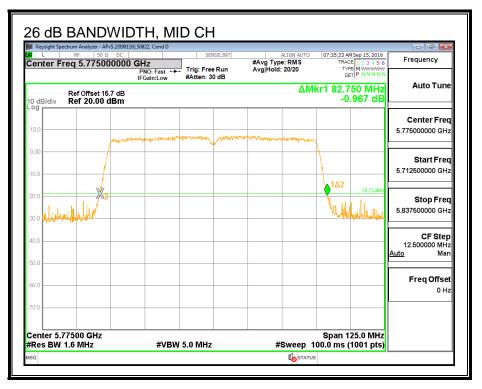
Channel	Frequency	26 dB BW	26 dB BW	26 dB BW
		Chain 0	Chain 1	Chain 2
	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	83.000	82.750	82.212

UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

Page 983 of 1002

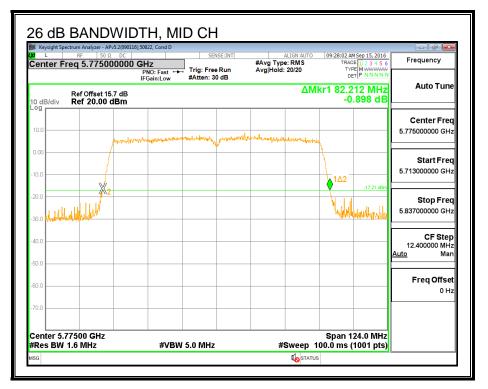


26 dB BANDWIDTH, CHAIN 1



Page 984 of 1002

26 dB BANDWIDTH, CHAIN 2



Page 985 of 1002

8.45.3. 99% BANDWIDTH

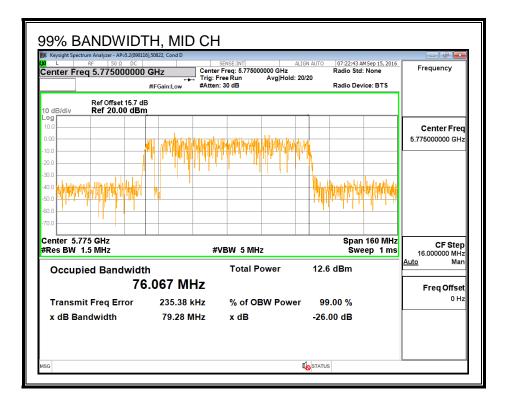
<u>LIMITS</u>

None; for reporting purposes only.

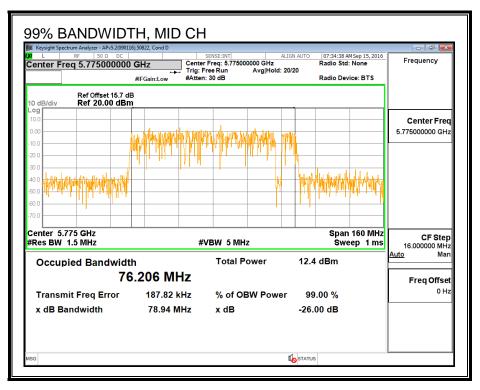
RESULTS

Channel Frequency		99% BW 99% BW		99% BW
		Chain 0	Chain 1	Chain 2
	(MHz)	(MHz)	(MHz)	(MHz)
Mid	5775	76.067	76.206	75.821

Page 986 of 1002

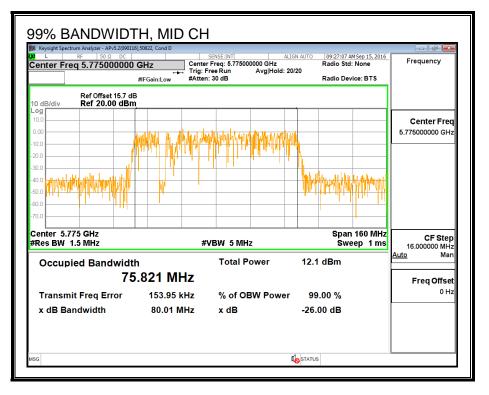


99% BANDWIDTH, CHAIN 1



Page 987 of 1002

99% BANDWIDTH, CHAIN 2



Page 988 of 1002

8.45.4. AVERAGE POWER (FCC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID: 44366	Date:	9/14/16	Ĩ
-----------	-------	---------	---

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total
		Power	Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)
Mid	5775	12.73	12.56	12.40	17.34

Page 989 of 1002

8.45.5. OUTPUT POWER (FCC)

<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.

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

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

Chain 0	Chain 1	Chain 2	Correlated Chains
Antenna	Antenna	Antenna	Directional
Gain	Gain	Gain	Gain
(dBi)	(dBi)	(dBi)	(dBi)
4.00	6.30	4.70	9.83

Page 990 of 1002

REPORT NO: 16U23800-E4V2 FCC ID: BCGA1707

RESULTS

ID: 44366 **Date:** 9/14/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)

Output Power Results

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	12.73	12.56	12.40	17.34	26.17	-8.83

Page 991 of 1002

8.45.6. PSD (FCC)

<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

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

Chain 0	Chain 1	Chain 2	Correlated Chains
Antenna	Antenna	Antenna	Directional
Gain	Gain	Gain	Gain
(dBi)	(dBi)	(dBi)	(dBi)
4.00	6.30	4.70	9.83

Page 992 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	9.83	26.17

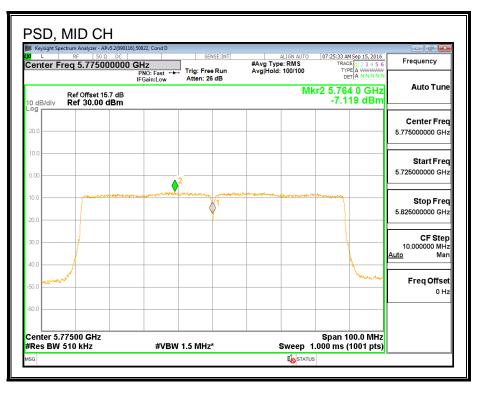
Duty Cycle CF (dB)	0.62	Included in Calculations of Corr'd PSD
	0.04	

PSD Results

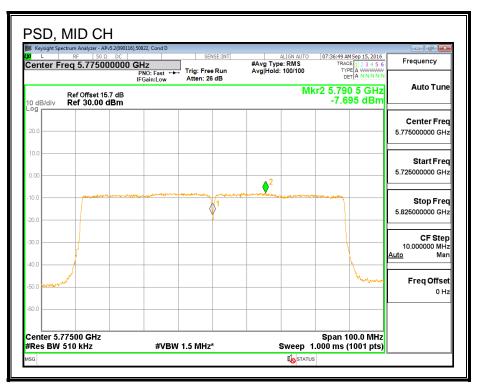
Channel	Frequency	Chain 0	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-7.119	-7.695	-7.73	-2.11	26.17	-28.28

Page 993 of 1002

PSD, CHAIN 0

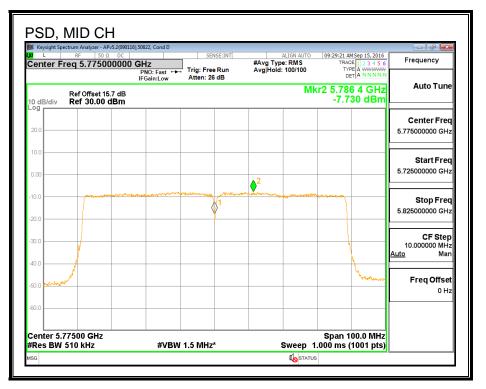


PSD, CHAIN 1



Page 994 of 1002

PSD, CHAIN 2



Page 995 of 1002

8.45.7. AVERAGE POWER (IC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total
		Power	Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)
Mid	5775	7.48	7.44	7.45	12.23

Page 996 of 1002

8.45.8. OUTPUT POWER (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

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

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

Chain 0	Chain 1	Chain 2	Correlated Chains
Antenna	Antenna	Antenna	Directional
Gain	Gain	Gain	Gain
(dBi)	(dBi)	(dBi)	(dBi)
4.00	6.30	4.70	9.83

Page 997 of 1002

RESULTS

ID: 30554 Date: 9/16/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
		• •	• •

Output Power Results

Channel	Frequency	Chain 0	Chain 1	Chain 2	Total	Power	Power
		Meas	Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	7.48	7.44	7.45	12.23	26.17	-13.94

Page 998 of 1002

8.45.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0	Chain 1	Chain 2	Correlated Chains
Antenna	Antenna	Antenna	Directional
Gain	Gain	Gain	Gain
(dBi)	(dBi)	(dBi)	(dBi)
4.00	6.30	4.70	9.83

Page 999 of 1002

RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Mid	5775	9.83	26.17

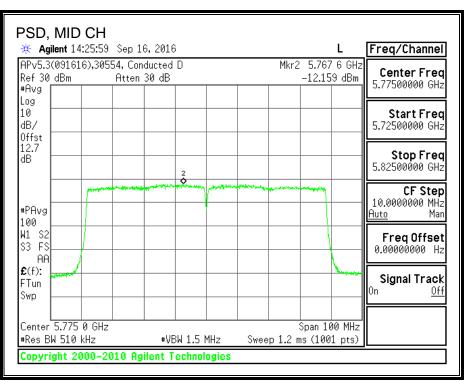
Duty Cycle CF (dB)	0.62	Included in Calculations of Corr'd PSD

PSD Results

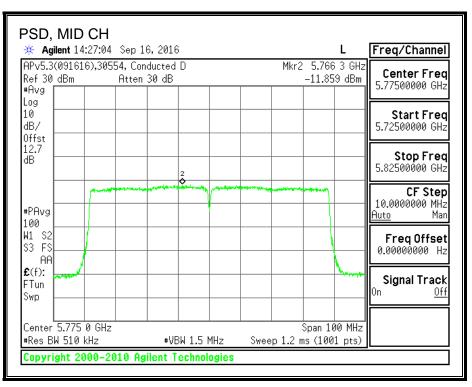
Channel	Frequency	Chain 0	Chain 1	Chain 2	Total	PSD	PSD
		Meas	Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5775	-12.159	-11.859	-11.935	-6.59	26.17	-32.76

Page 1000 of 1002

PSD, CHAIN 0

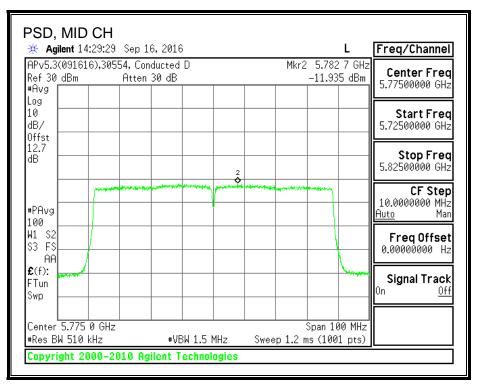


PSD, CHAIN 1



Page 1001 of 1002

PSD, CHAIN 2



END OF REPORT

Page 1002 of 1002