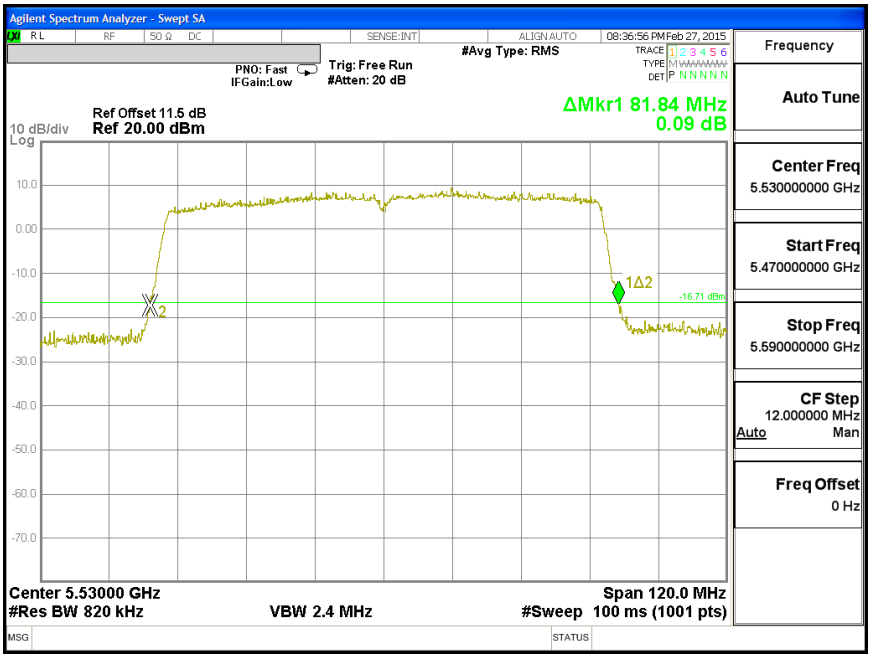
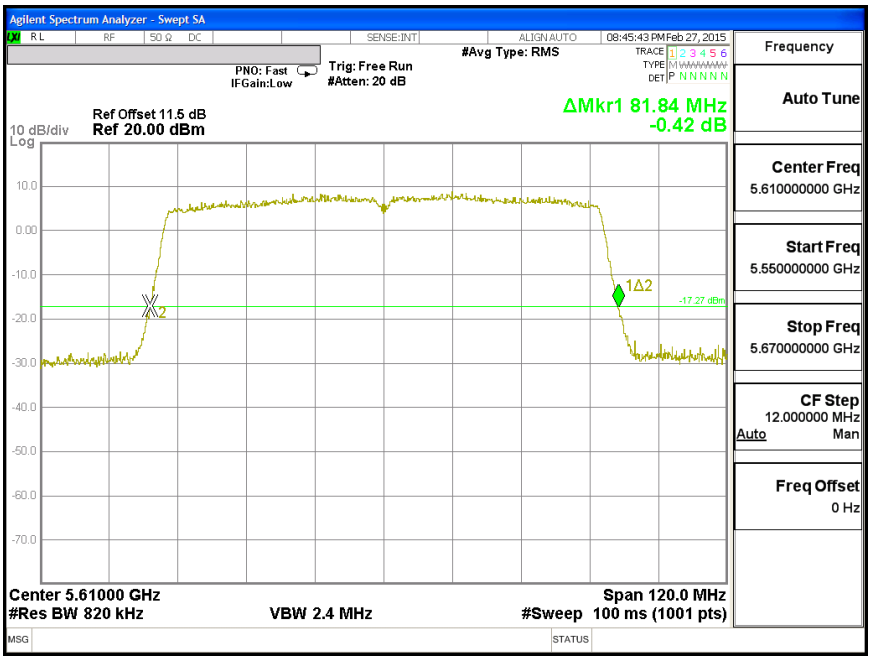
26 dB BANDWIDTH, ANTENNA B

BANDWIDTH ANTENNA B LOW CH



BANDWIDTH ANTENNA B MID CH



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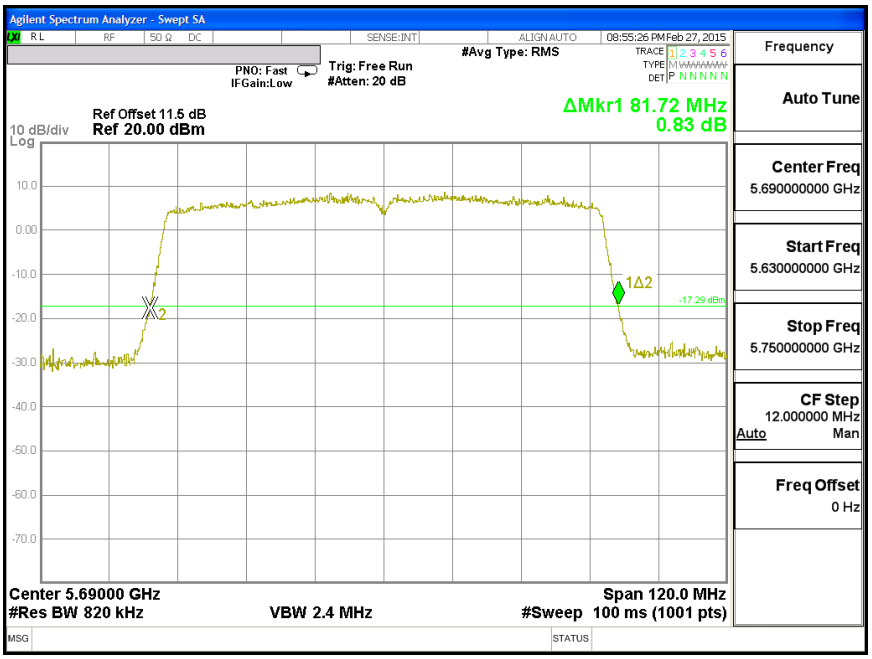
BANDWIDTH ANTENNA B HIGH CH



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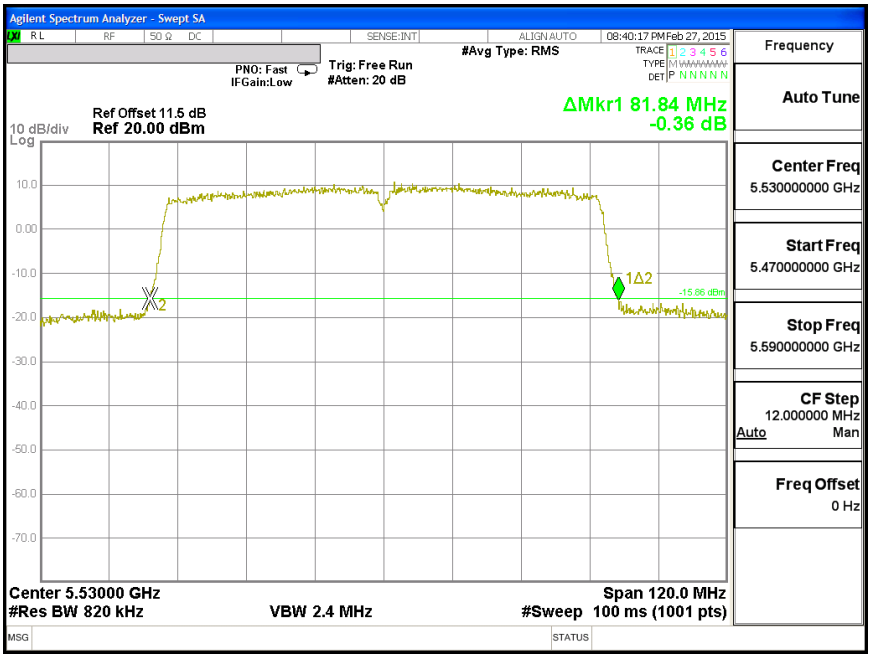
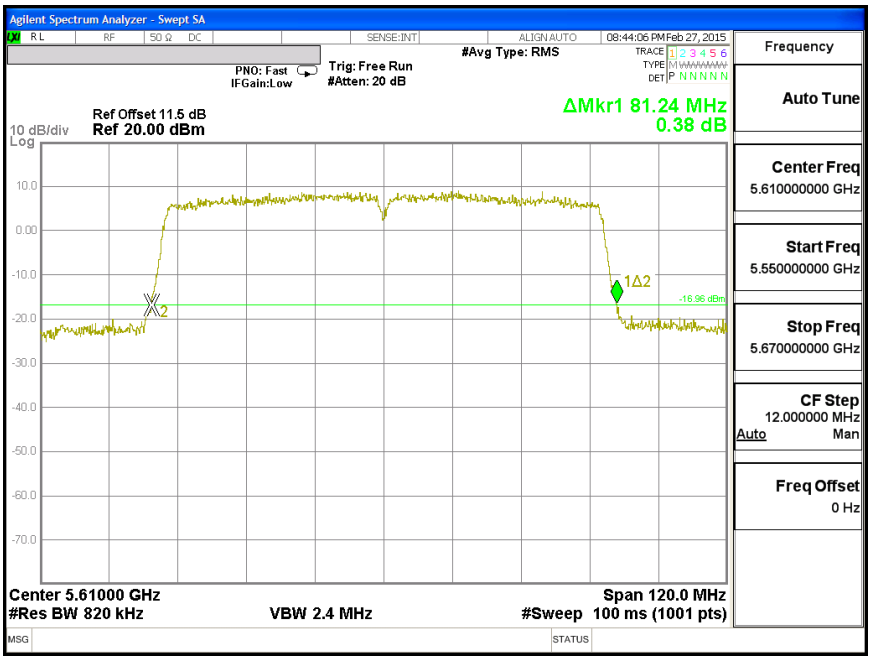
26 dB BANDWIDTH, ANTENNA A

BANDWIDTH ANTENNA A LOW CH



BANDWIDTH ANTENNA A MID CH



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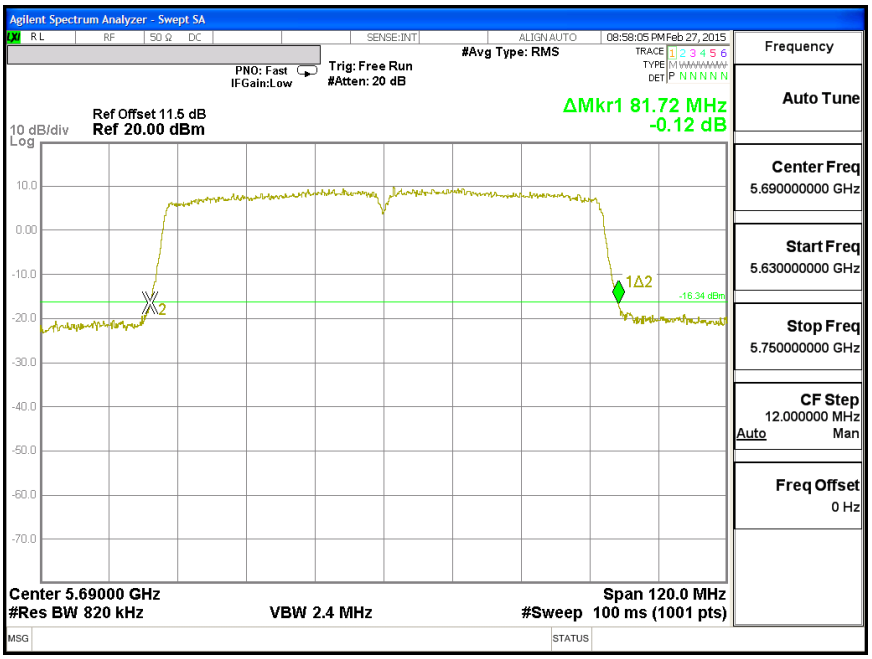
BANDWIDTH ANTENNA A HIGH CH



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8.31.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% BW Antenna B (MHz)	99% BW Antenna A (MHz)
Low	5530	75.1150	75.3650
Mid	5610	75.5920	75.7750
Straddle	5690	75.0050	75.8420

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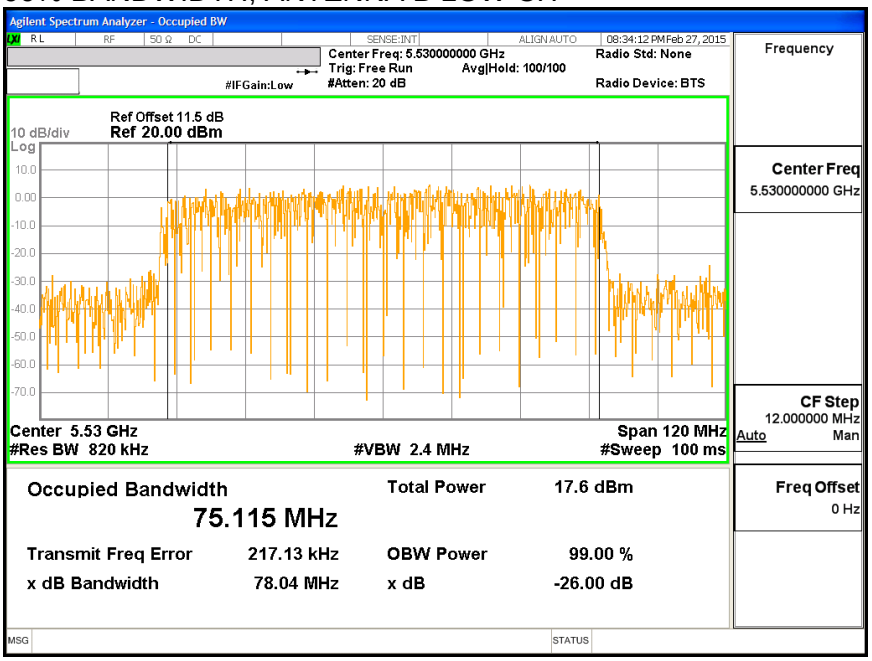
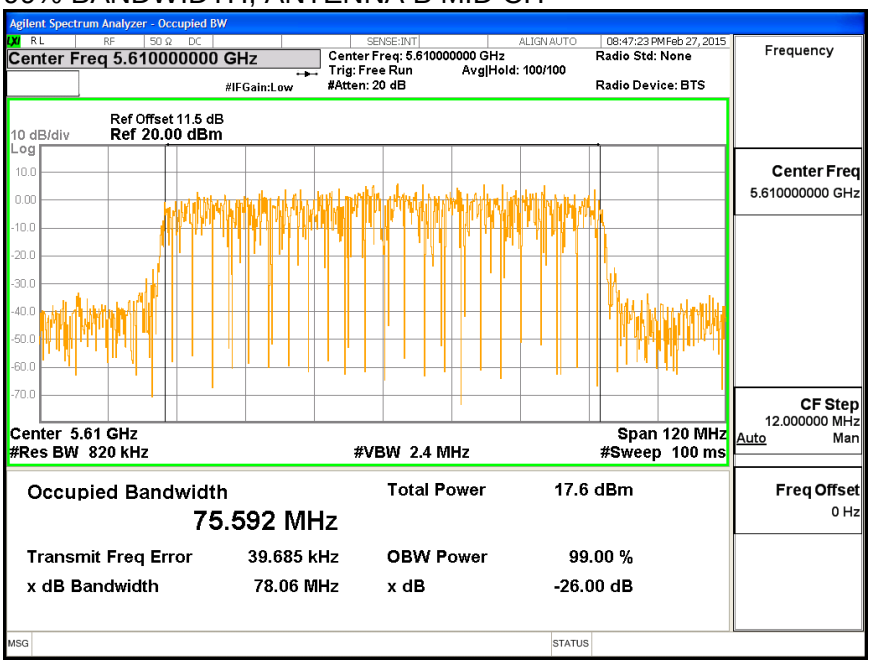
99% BANDWIDTH, ANTENNA B

99% BANDWIDTH, ANTENNA B LOW CH



99% BANDWIDTH, ANTENNA B MID CH



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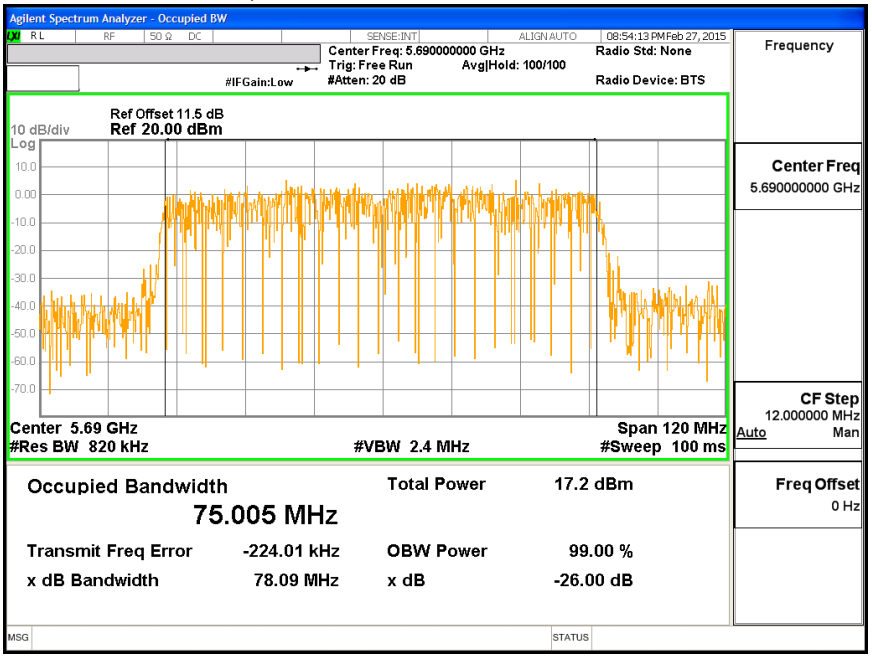
99% BANDWIDTH, ANTENNA B HIGH CH



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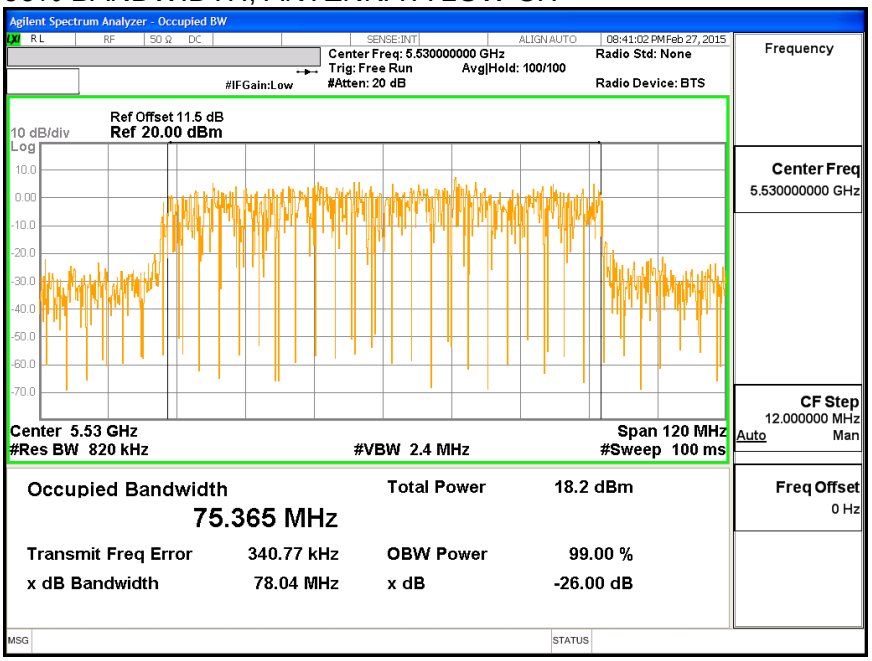
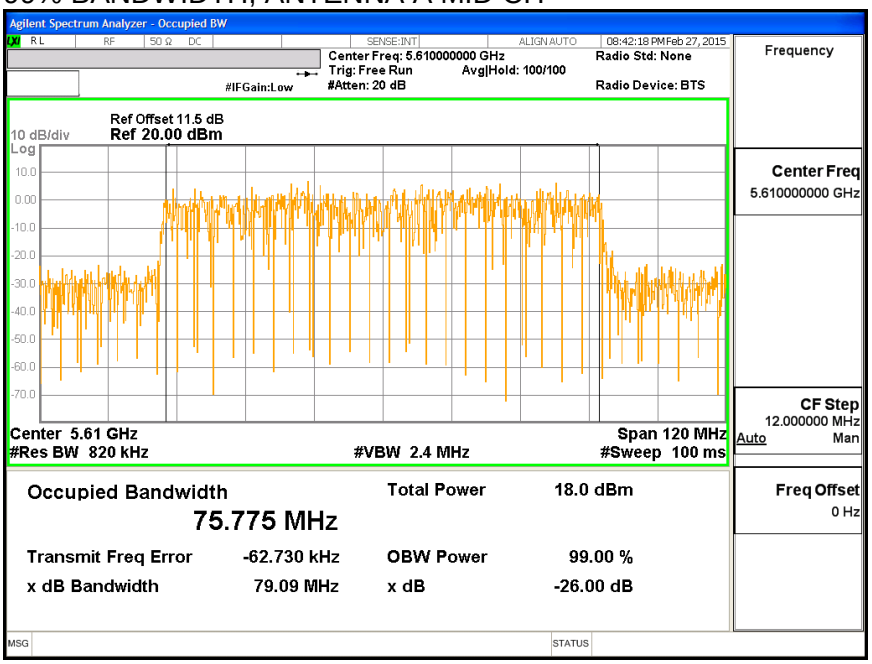
99% BANDWIDTH, ANTENNA A

99% BANDWIDTH, ANTENNA A LOW CH



99% BANDWIDTH, ANTENNA A MID CH



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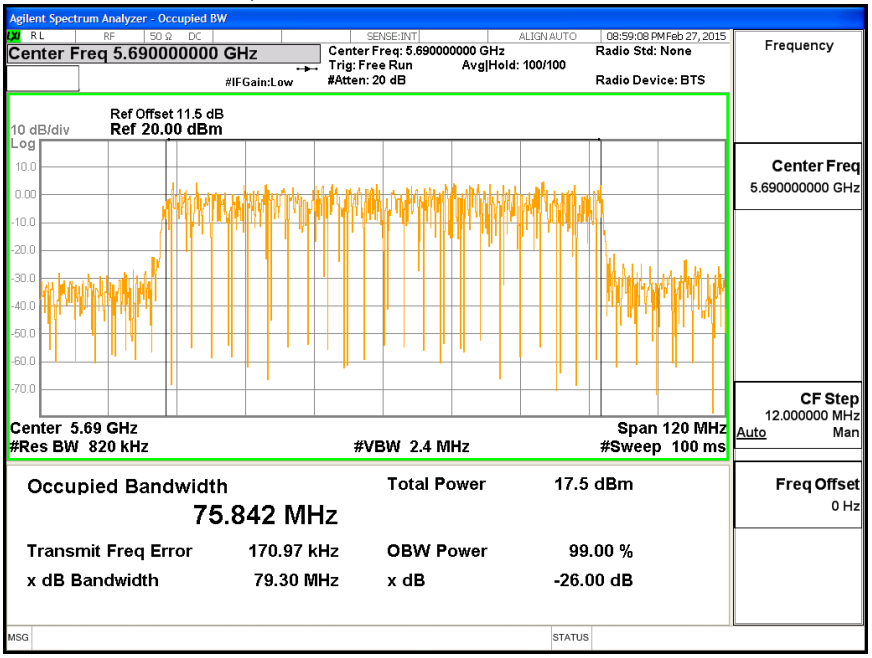
99% BANDWIDTH, ANTENNA A HIGH CH



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8.31.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

RESULTS

Average Power Results

Channel	Frequency (MHz)	Antenna B Power (dBm)	Antenna A Power (dBm)	Total Power (dBm)
Low	5530	12.10	12.06	15.09
Mid	5610	14.95	14.96	17.97
Straddle	5690	15.06	15.05	18.07

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8.31.4. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

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

DIRECTIONAL ANTENNA GAIN

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

Antenna B Antenna Gain (dBi)	Antenna A Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
4.80	3.20	4.07

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

Antenna B Antenna Gain (dBi)	Antenna A Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
4.80	3.20	7.05

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RESULTS

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5530	81.84	4.07	7.05	24.00	9.95
Mid	5610	81.24	4.07	7.05	24.00	9.95

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

Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Antenna A Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5530	12.10	12.06	15.30	24.00	-8.70
Mid	5610	14.95	14.96	18.18	24.00	-5.82

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Antenna A Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5530	-4.53	-4.48	-1.29	9.95	-11.24
Mid	5610	-1.81	-1.63	1.50	9.95	-8.45

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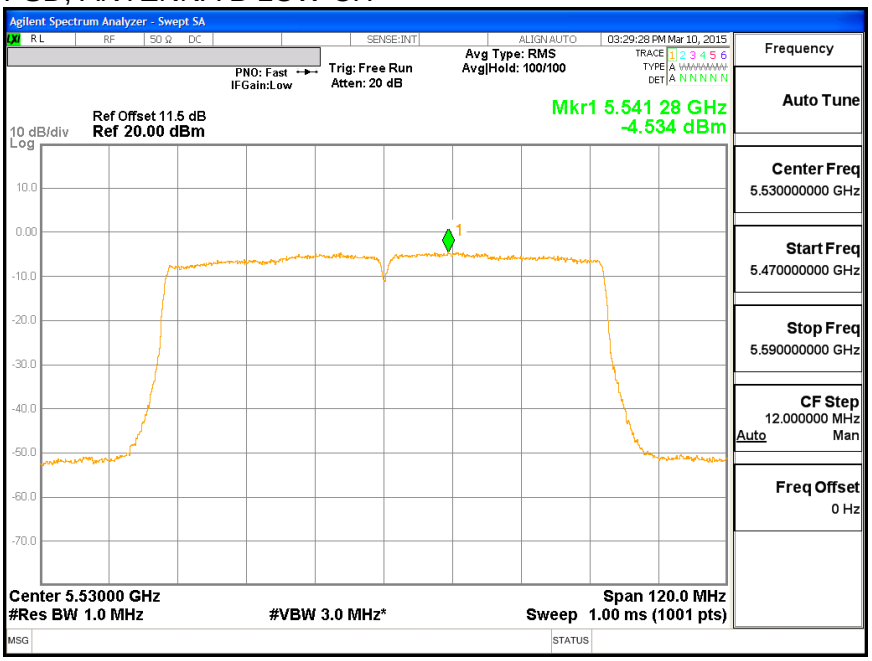
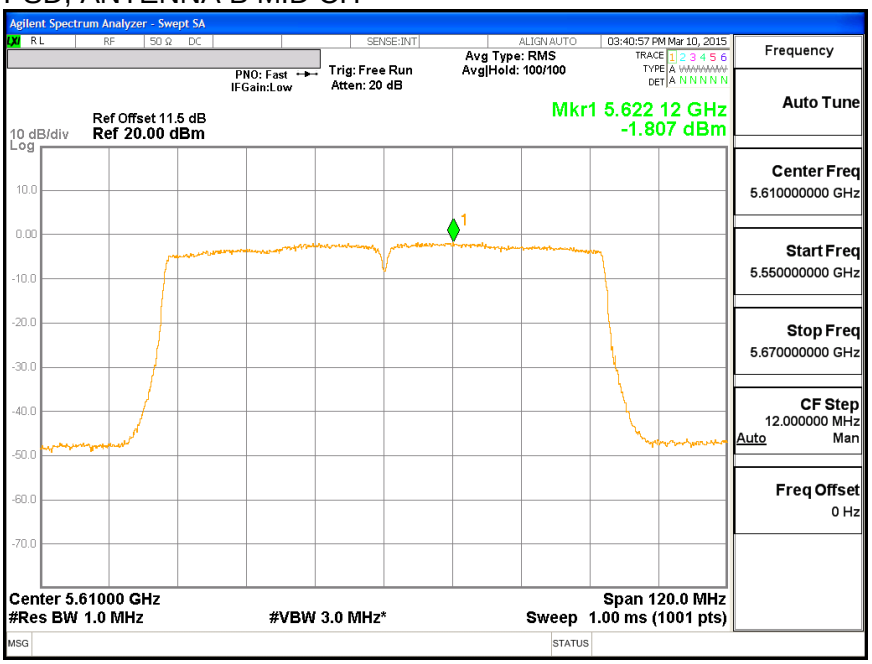
PSD, ANTENNA B

PSD, ANTENNA B LOW CH



PSD, ANTENNA B MID CH



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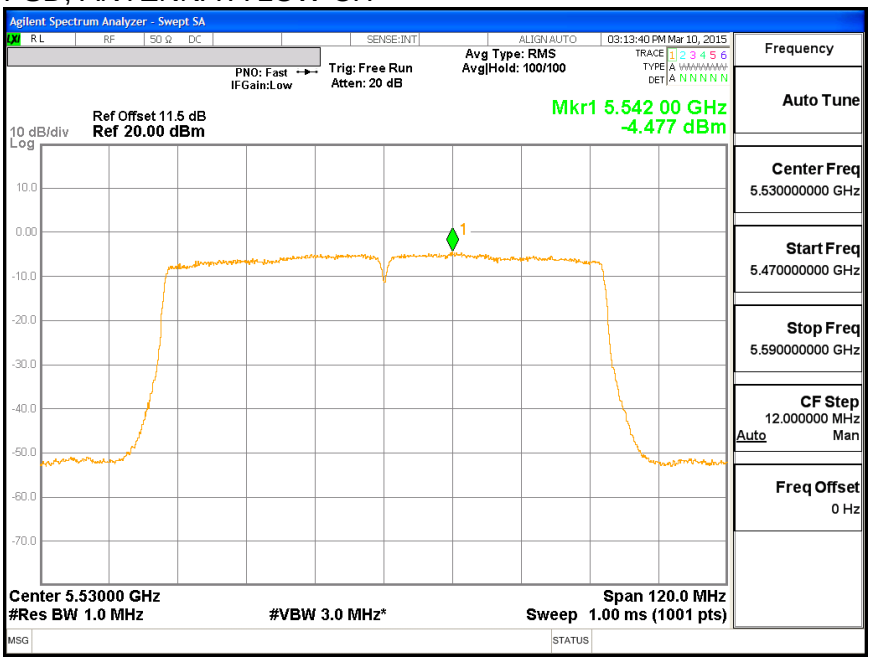
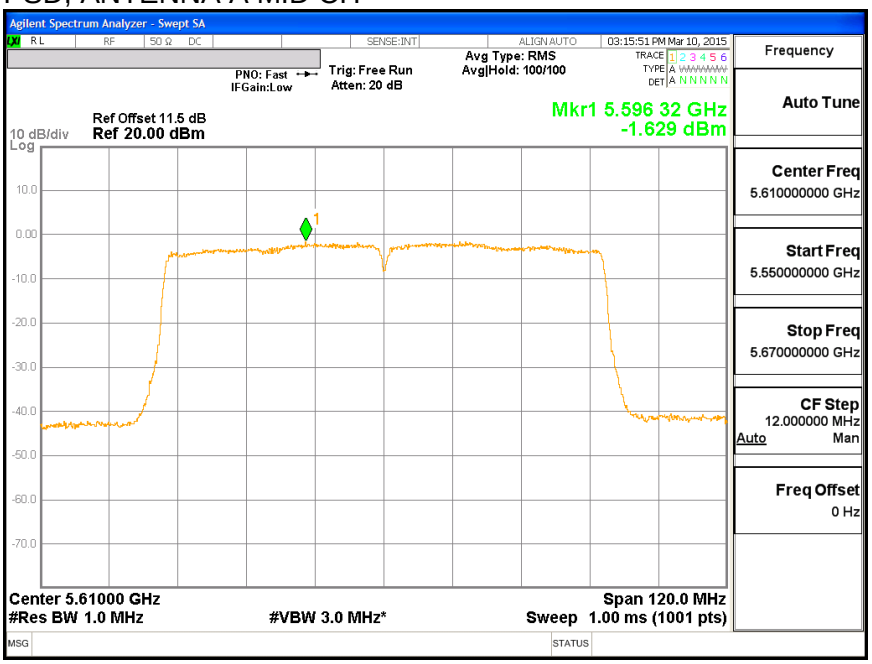
PSD, ANTENNA A

PSD, ANTENNA A LOW CH



PSD, ANTENNA A MID CH



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STRADDLE CHANNEL 138 RESULTS

UNII-2C BAND

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
138	5690	75.86	4.07	7.05	24.00	9.95

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

Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Antenna A Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	14.92	14.67	18.02	24.00	-5.98

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Antenna A Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
138	5690	-2.02	-2.09	1.17	9.95	-8.78

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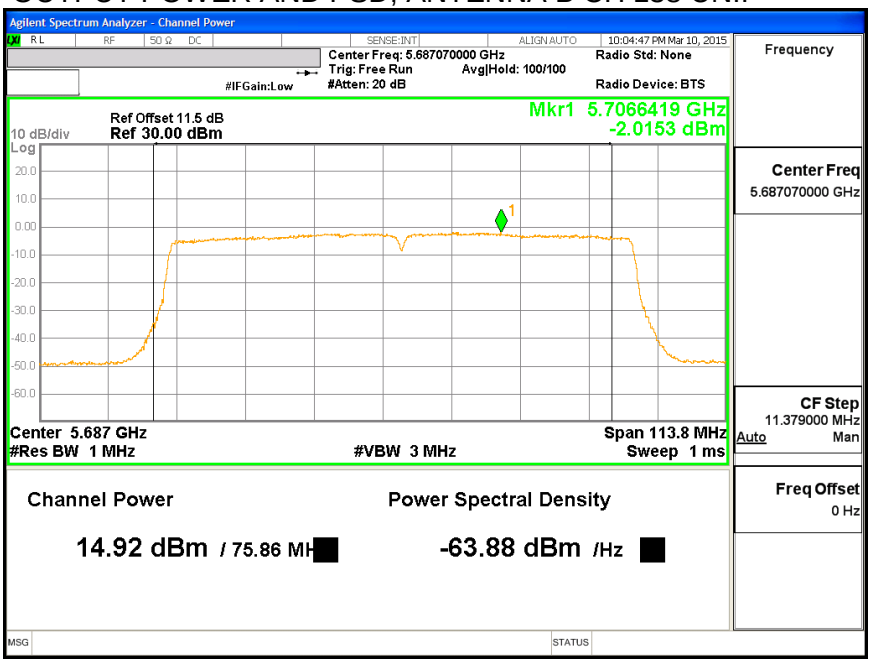
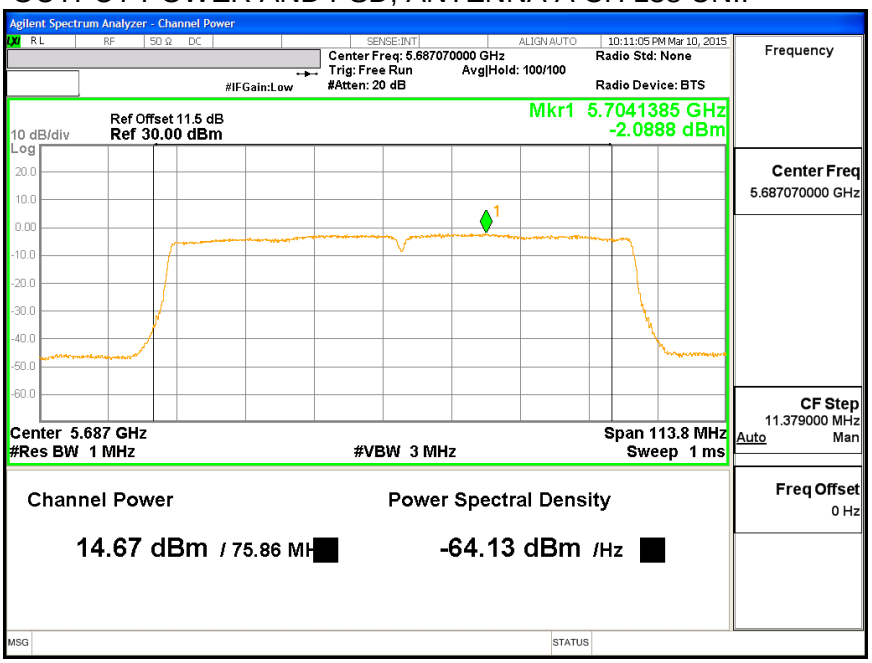
OUTPUT POWER AND PSD, ANTENNA B CH 138 UNII



OUTPUT POWER AND PSD, ANTENNA A CH 138 UNII



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UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain For Power (dBi)	Directional Gain For PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
138	5690	5.86	4.07	7.05	30.00	28.95

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

Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Antenna A Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	0.87	0.68	4.00	30.00	-26.00

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Antenna A Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
138	5690	-6.28	-6.53	-3.18	28.95	-32.13

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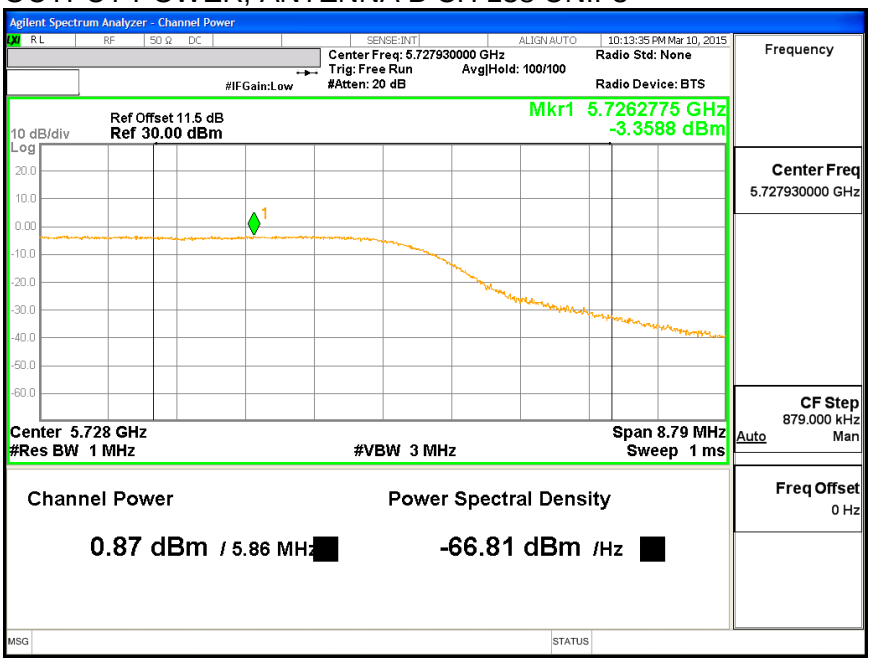
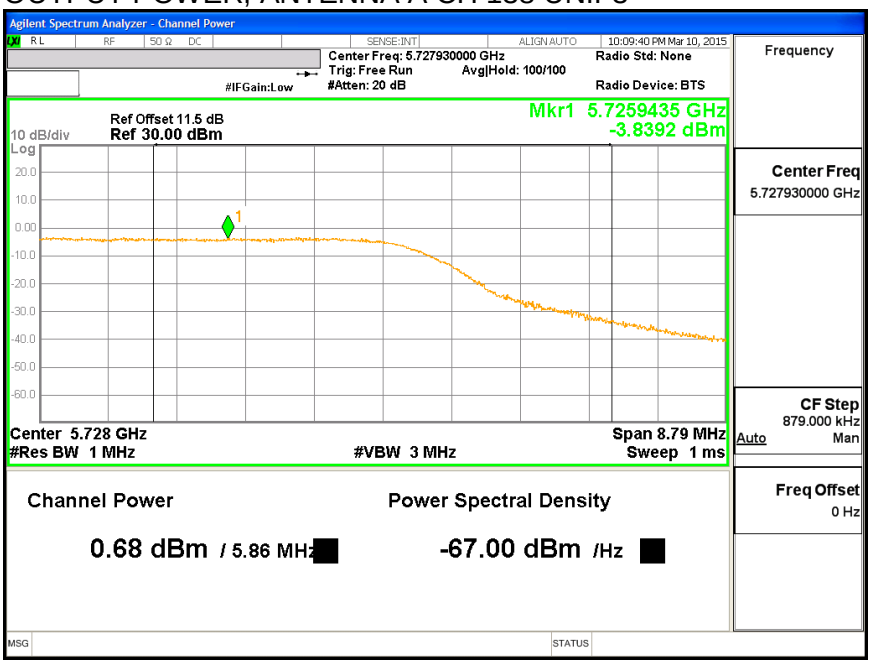
OUTPUT POWER, ANTENNA B CH 138 UNII-3



OUTPUT POWER, ANTENNA A CH 138 UNII-3



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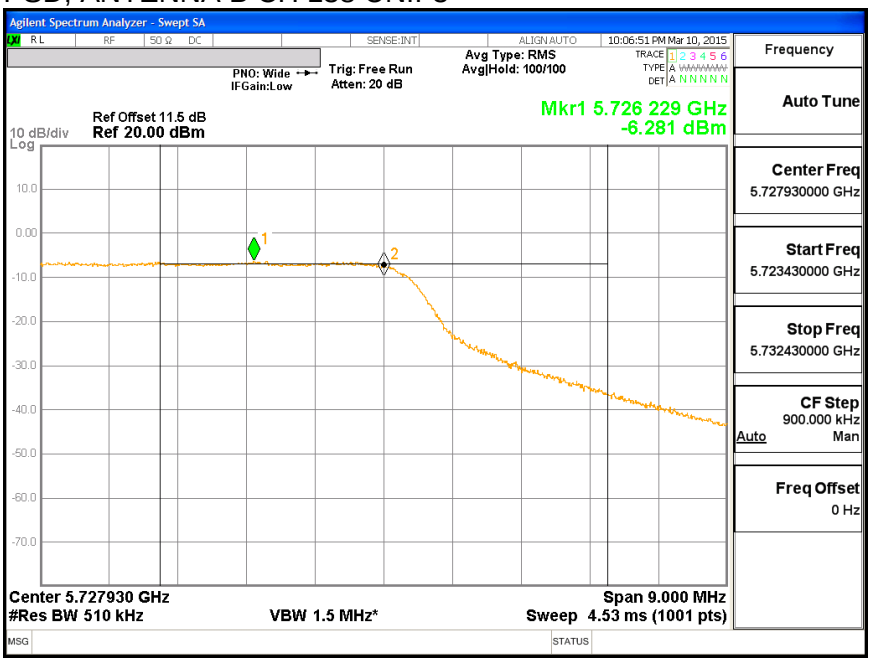
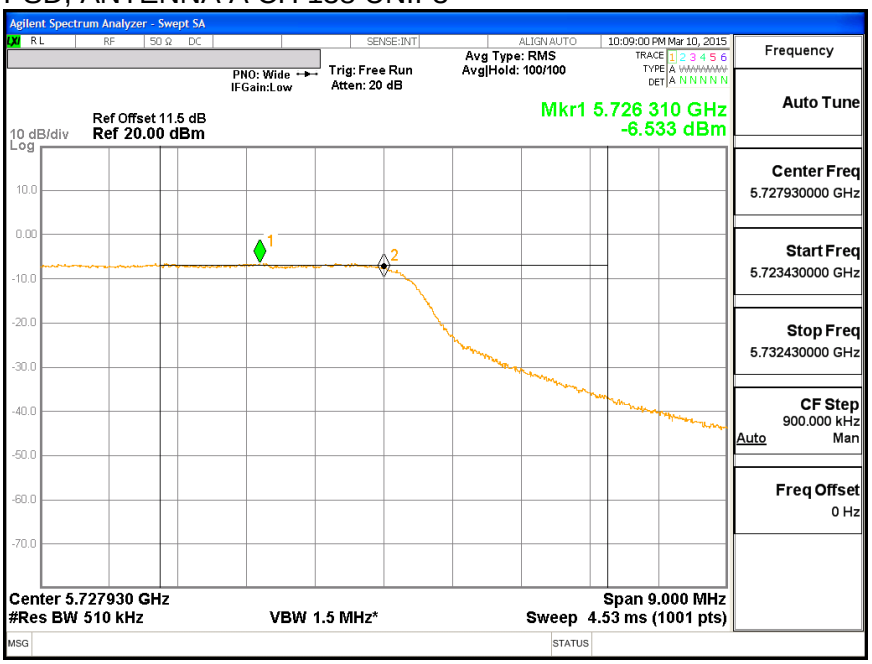
PSD, ANTENNA B CH 138 UNII-3



PSD, ANTENNA A CH 138 UNII-3



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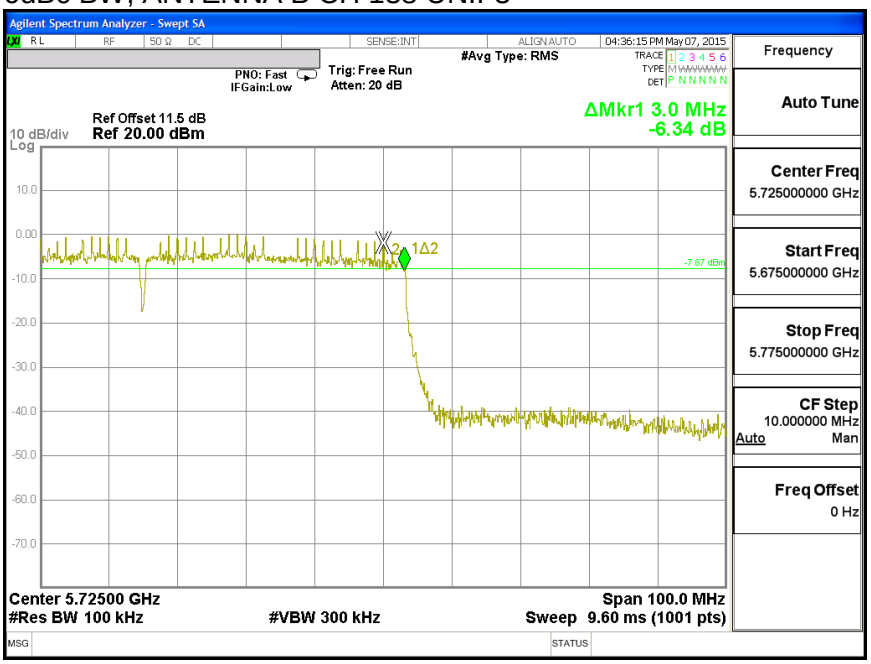
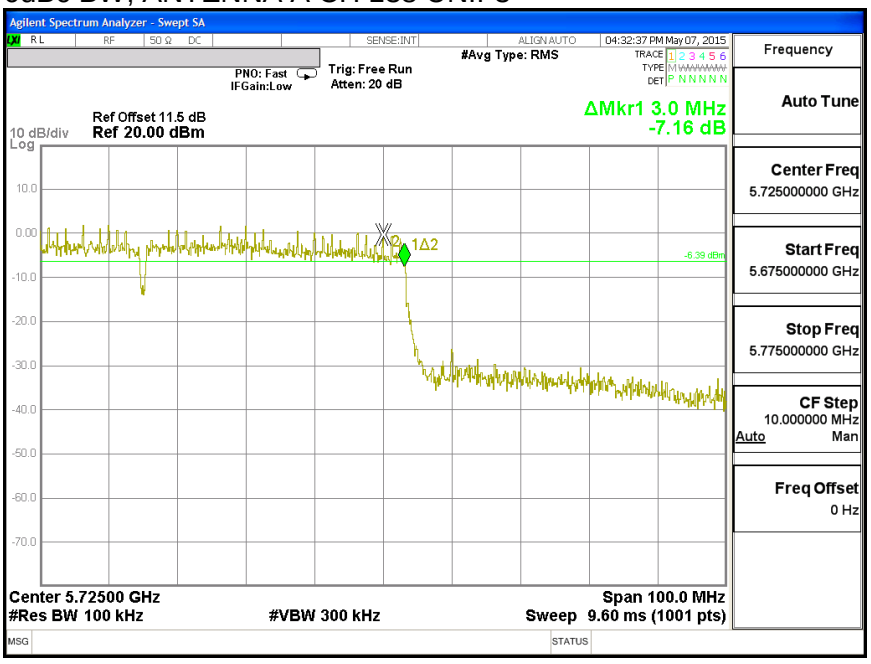
6dBc BW, ANTENNA B CH 138 UNII-3



6dBc BW, ANTENNA A CH 138 UNII-3



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8.32. 802.11n HT20 SISO MODE IN THE 5.8 GHz BAND ANTENNA B

8.32.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

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

RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	17.64	0.5
Mid	5785	17.61	0.5
High	5825	17.58	0.5

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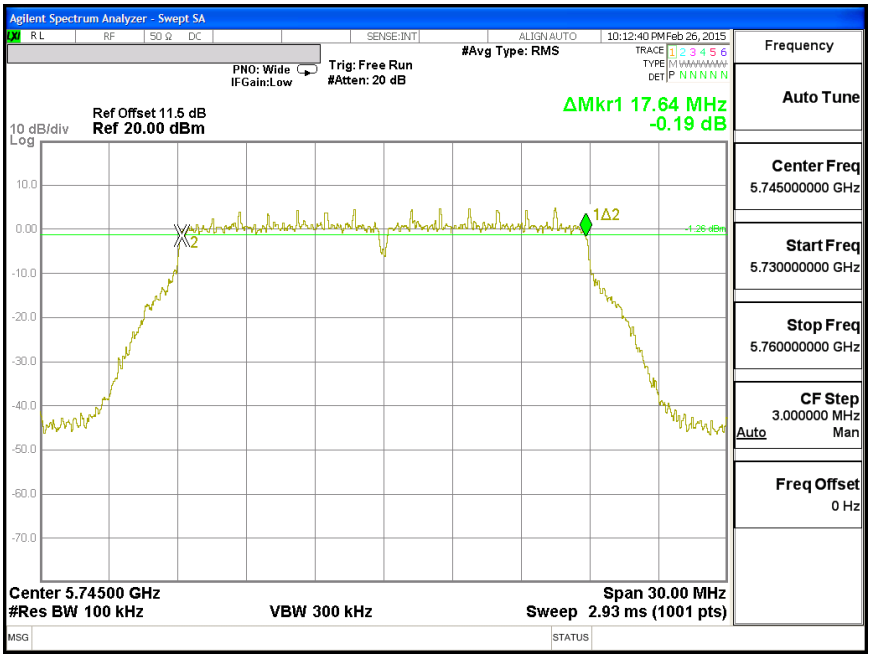
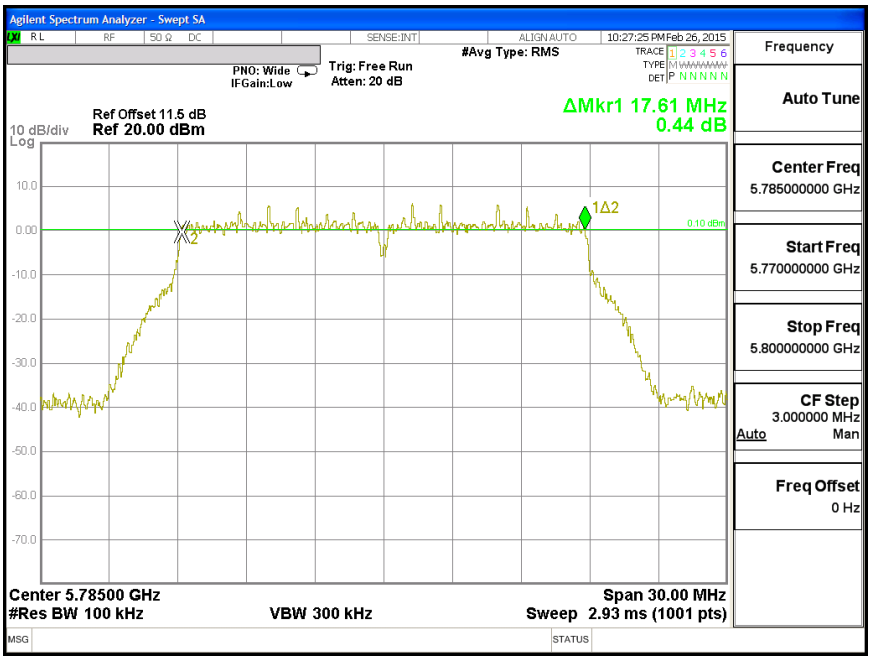
6 dB BANDWIDTH

6 dB BANDWIDTH LOW CH



6 dB BANDWIDTH MID CH



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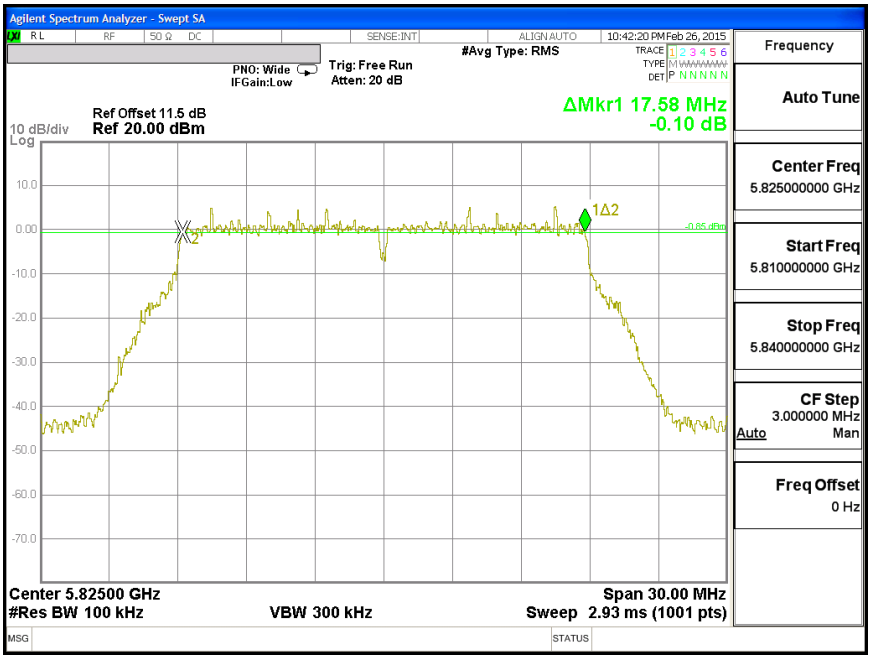
6 dB BANDWIDTH HIGH CH



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8.32.2. 26 dB BANDWIDTH

LIMITS

None, for reporting purposes only

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	21.9900
Mid	5785	21.9600
High	5825	22.0200

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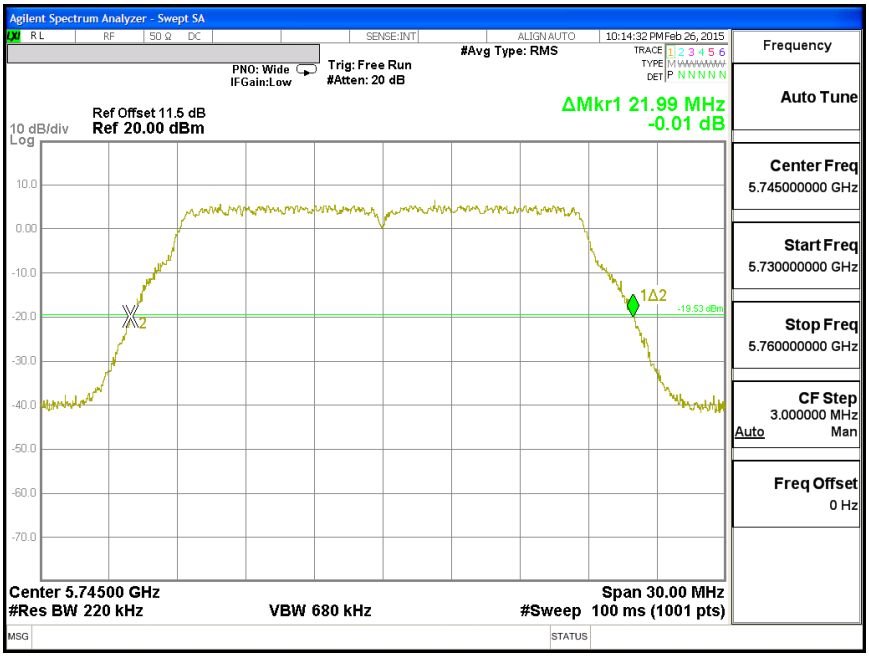
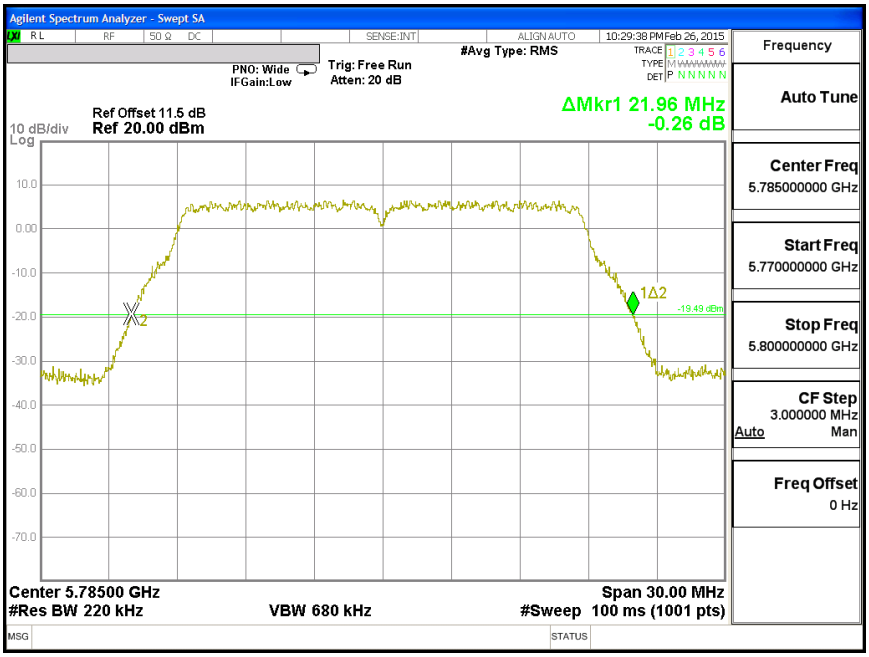
26 dB BANDWIDTH

26 dB BANDWIDTH LOW CH



26 dB BANDWIDTH MID CH



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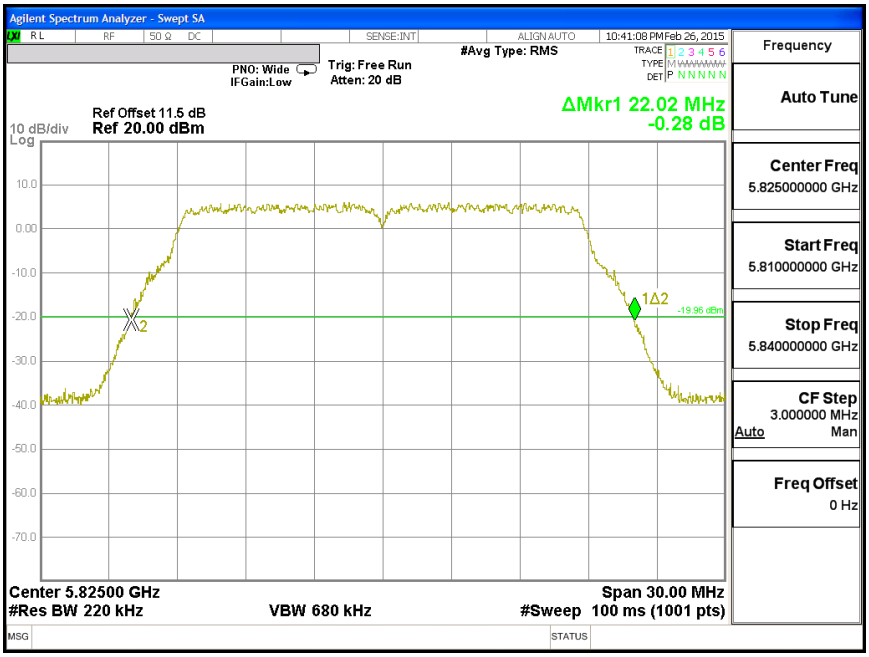
26 dB BANDWIDTH HIGH CH



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8.32.3. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	17.714
Mid	5785	17.782
High	5825	17.761

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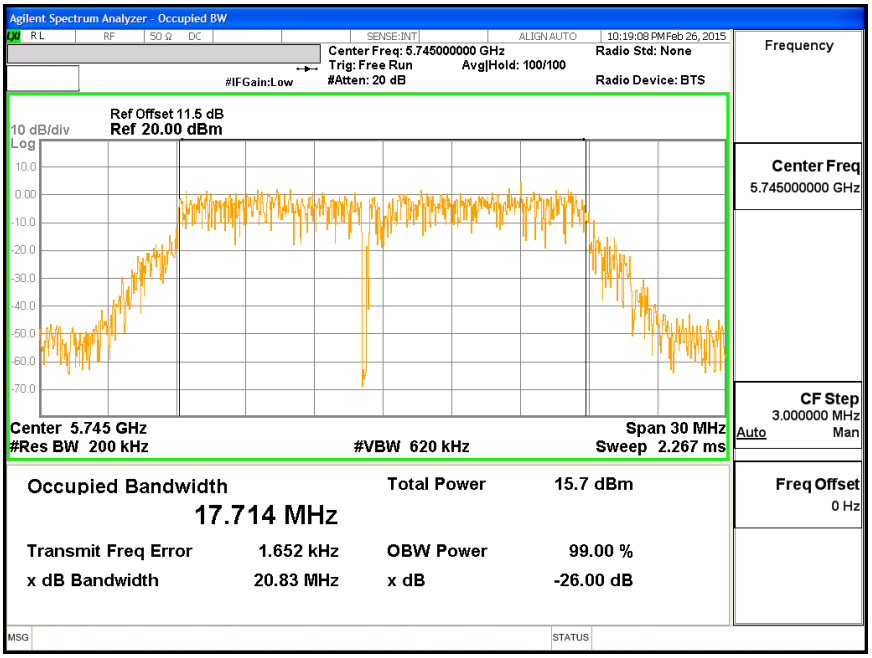
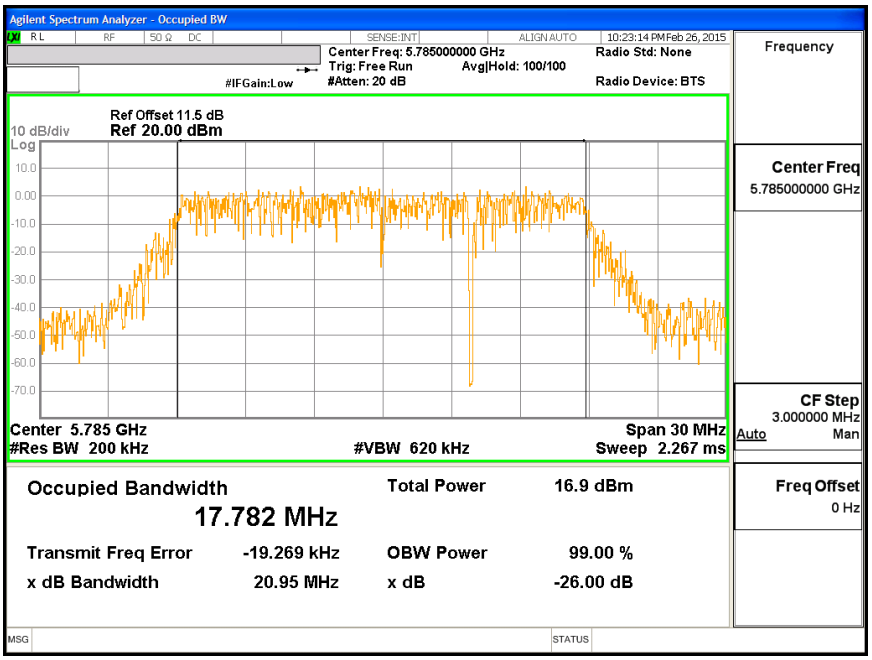
99% BANDWIDTH

BANDWIDTH LOW CH



BANDWIDTH MID CH



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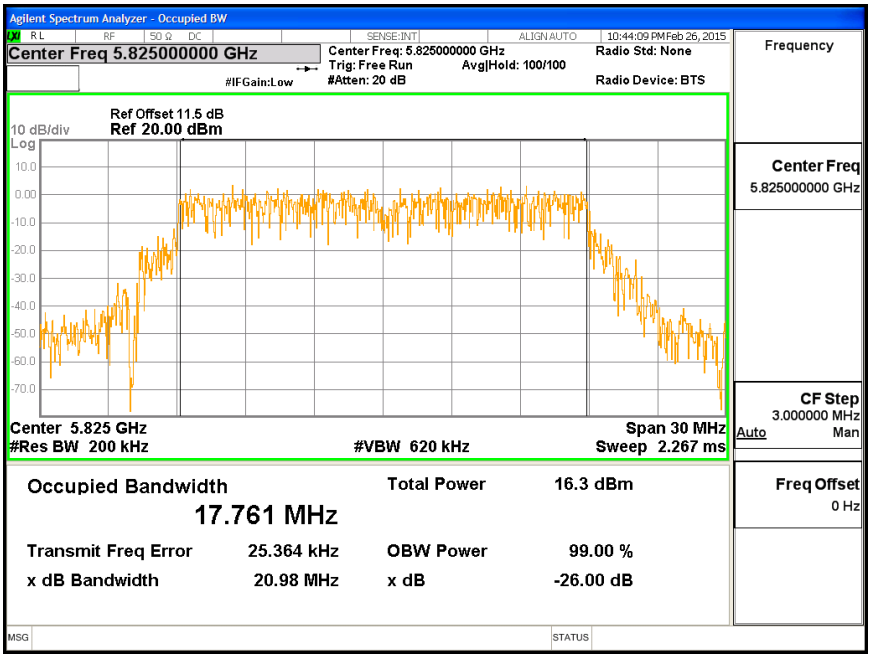
BANDWIDTH HIGH CH



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8.32.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5745	15.03
Mid	5785	16.50
High	5825	15.90

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8.32.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

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RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	4.90	30.00
Mid	5785	4.90	30.00
High	5825	4.90	30.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	15.03	15.03	30.00	-14.97
Mid	5785	16.50	16.50	30.00	-13.50
High	5825	15.90	15.90	30.00	-14.10

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8.32.6. MAXIMUM POWER SPECTRAL DENSITY (PSD)

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

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RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5745	4.90	30.00
Mid	5785	4.90	30.00
High	5825	4.90	30.00

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

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5745	1.28	1.28	30.00	-28.72
Mid	5785	2.59	2.59	30.00	-27.42
High	5825	2.05	2.05	30.00	-27.95

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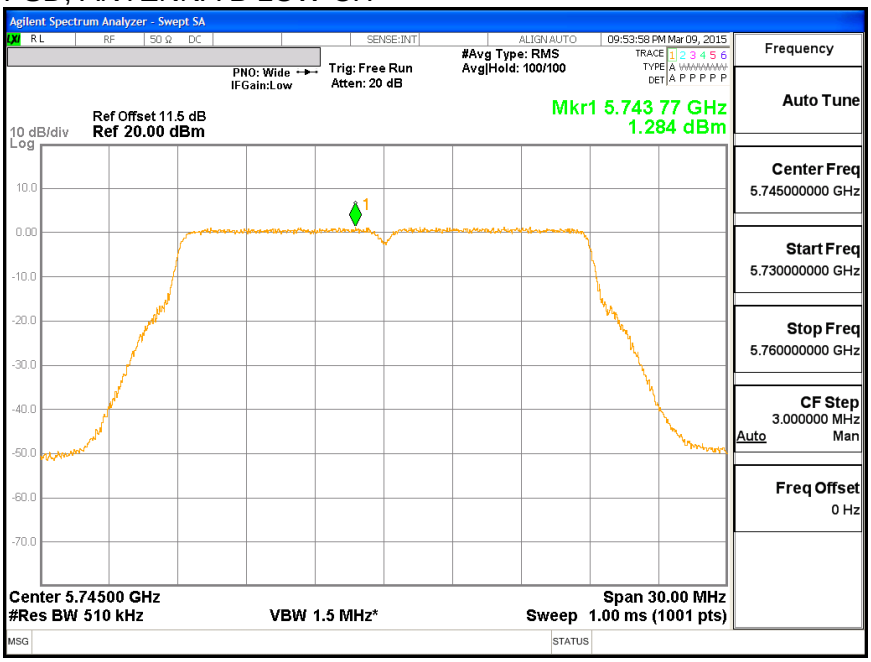
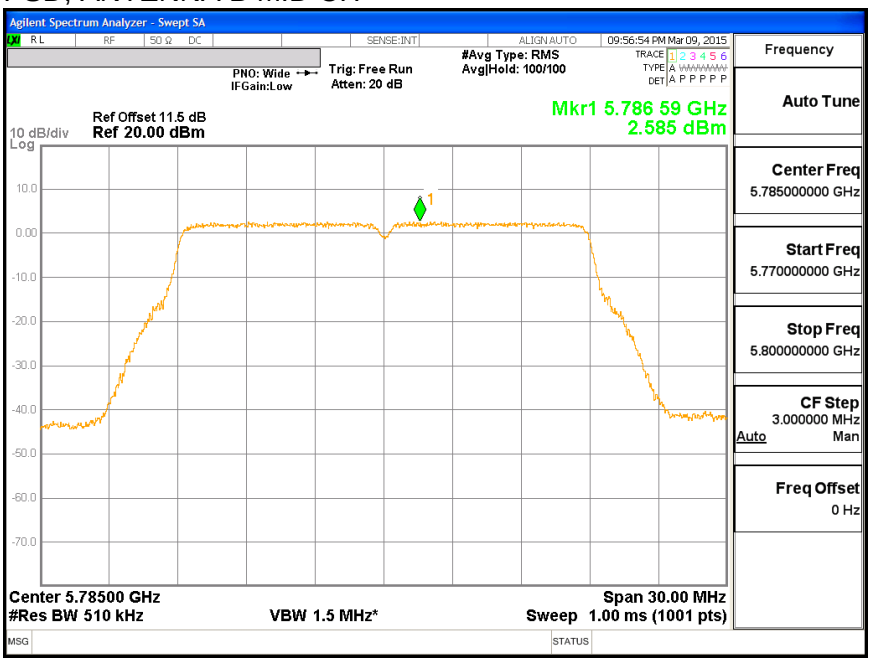
PSD, ANTENNA B

PSD, ANTENNA B LOW CH



PSD, ANTENNA B MID CH



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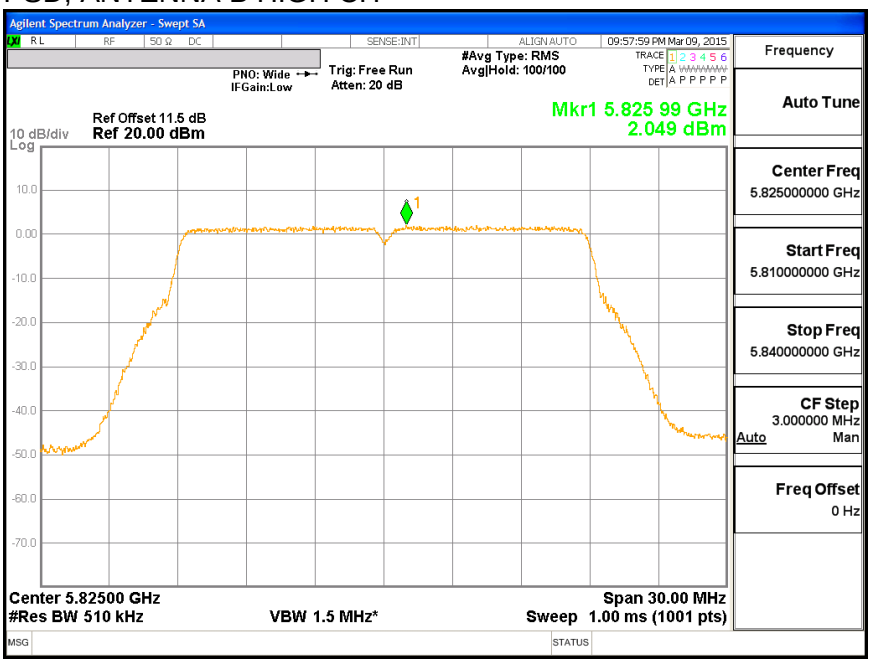
PSD, ANTENNA B HIGH CH



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8.33. 802.11n HT20 SISO MODE IN THE 5.8 GHz BAND ANTENNA A

8.33.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

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

RESULTS

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

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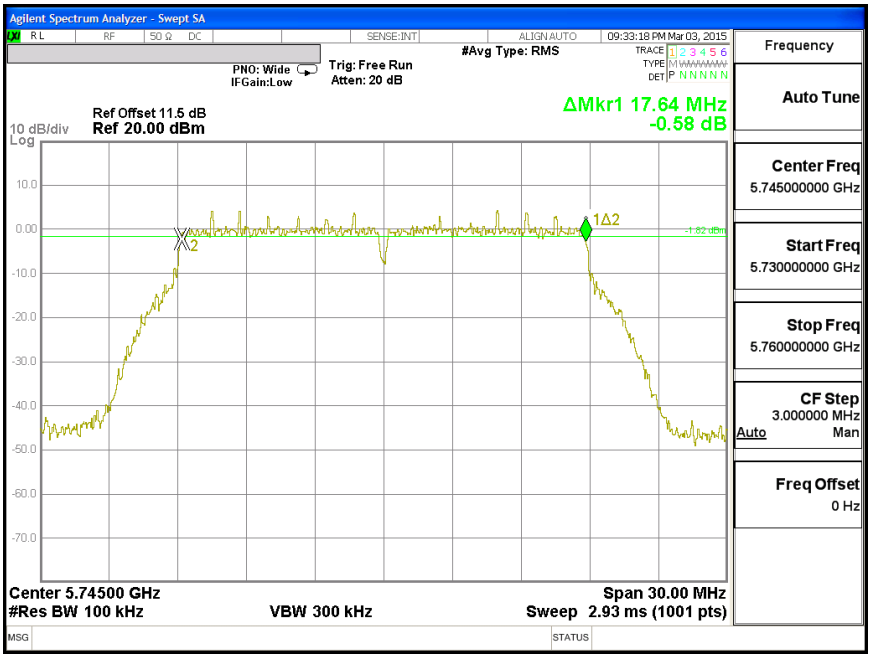
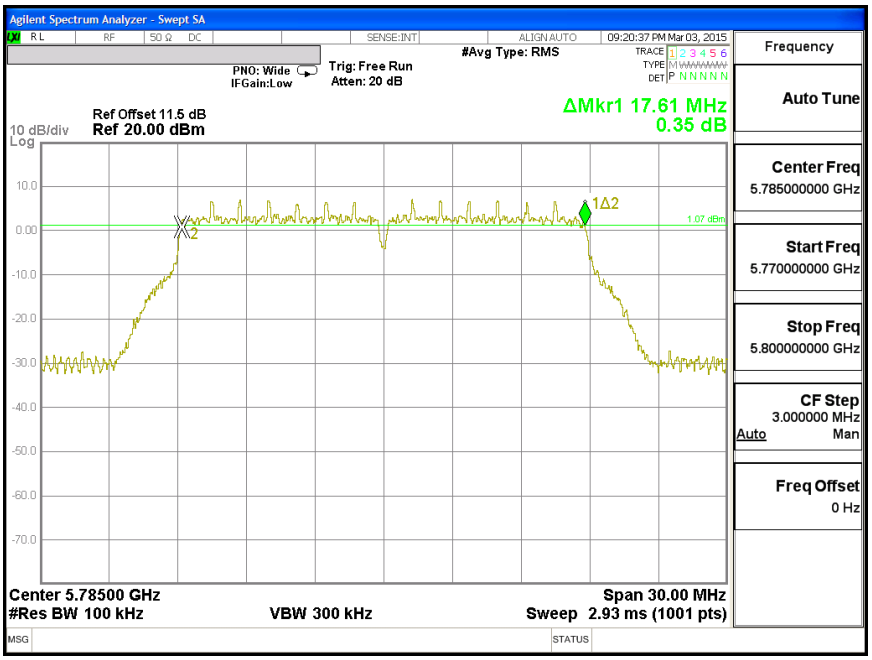
6 dB BANDWIDTH

6 dB BANDWIDTH LOW CH



6 dB BANDWIDTH MID CH



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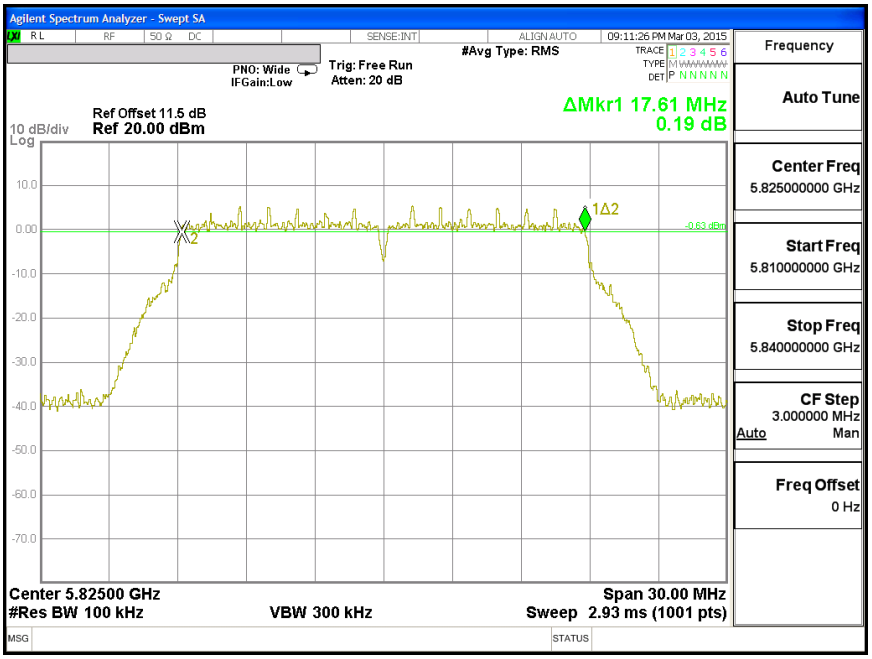
6 dB BANDWIDTH HIGH CH



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8.33.2. 26 dB BANDWIDTH

LIMITS

None, for reporting purposes only

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	22.1700
Mid	5785	21.9600
High	5825	21.9600

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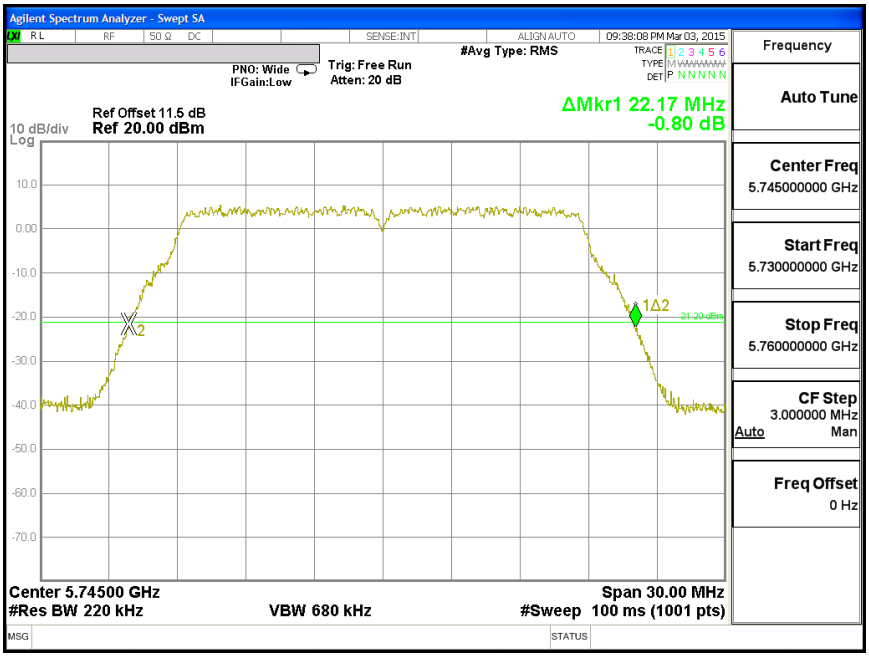
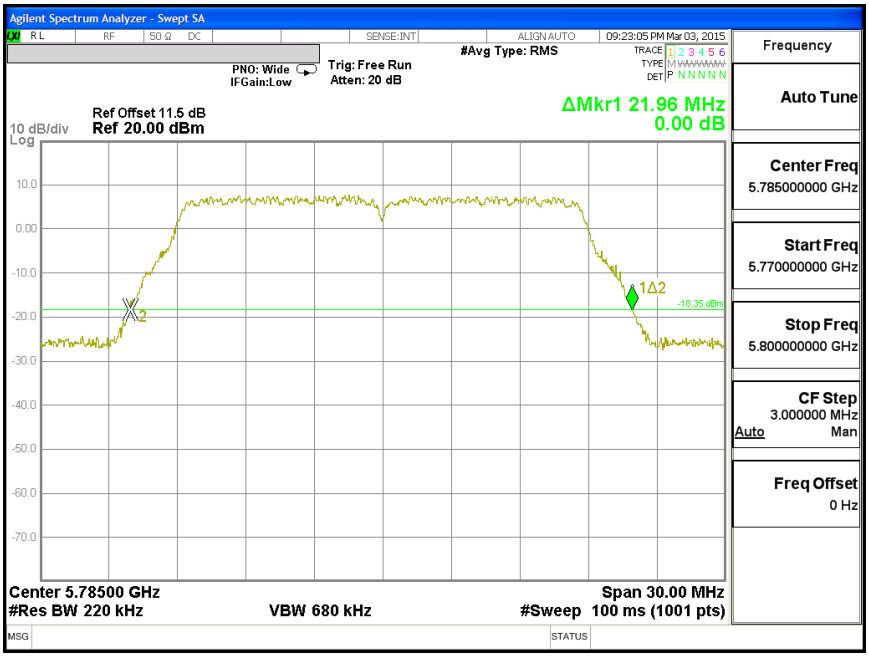
26 dB BANDWIDTH

26 dB BANDWIDTH LOW CH



26 dB BANDWIDTH MID CH



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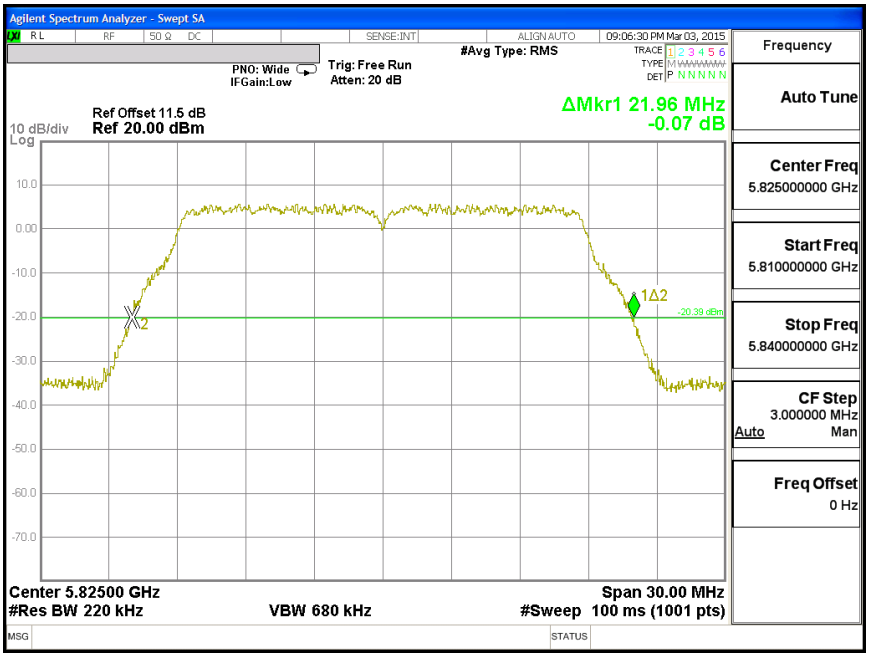
26 dB BANDWIDTH HIGH CH



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8.33.3. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	17.701
Mid	5785	17.678
High	5825	17.718

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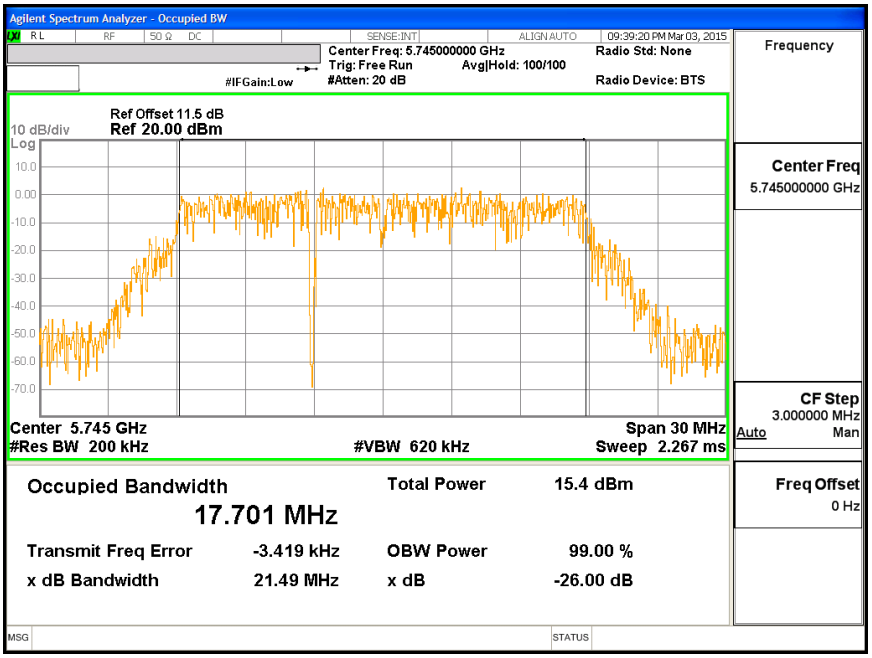
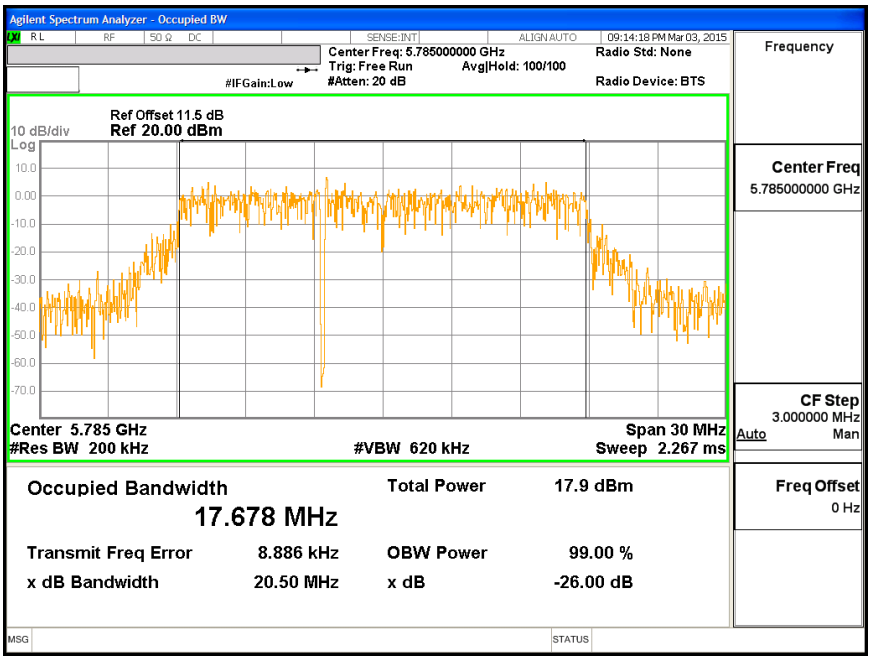
99% BANDWIDTH

BANDWIDTH LOW CH



BANDWIDTH MID CH



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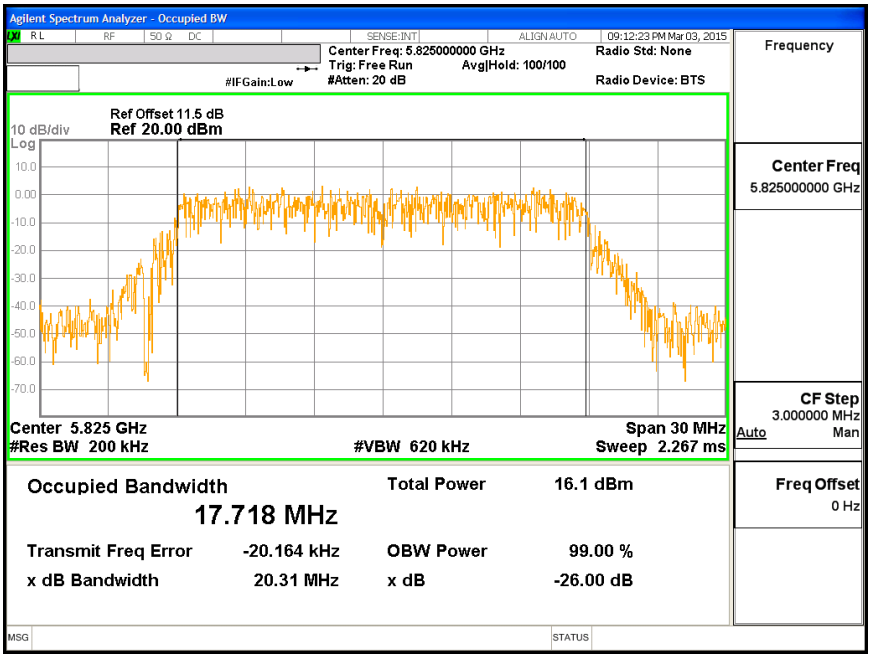
BANDWIDTH HIGH CH



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8.33.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5745	14.99
Mid	5785	17.52
High	5825	16.04

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8.33.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

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RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	3.40	30.00
Mid	5785	3.40	30.00
High	5825	3.40	30.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna A Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	14.99	14.99	30.00	-15.01
Mid	5785	17.52	17.52	30.00	-12.48
High	5825	16.04	16.04	30.00	-13.96

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8.33.6. MAXIMUM POWER SPECTRAL DENSITY (PSD)

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

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RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5745	3.40	30.00
Mid	5785	3.40	30.00
High	5825	3.40	30.00

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

PSD Results

Channel	Frequency (MHz)	Antenna A Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5745	1.17	1.17	30.00	-28.83
Mid	5785	3.59	3.59	30.00	-26.41
High	5825	2.06	2.06	30.00	-27.94

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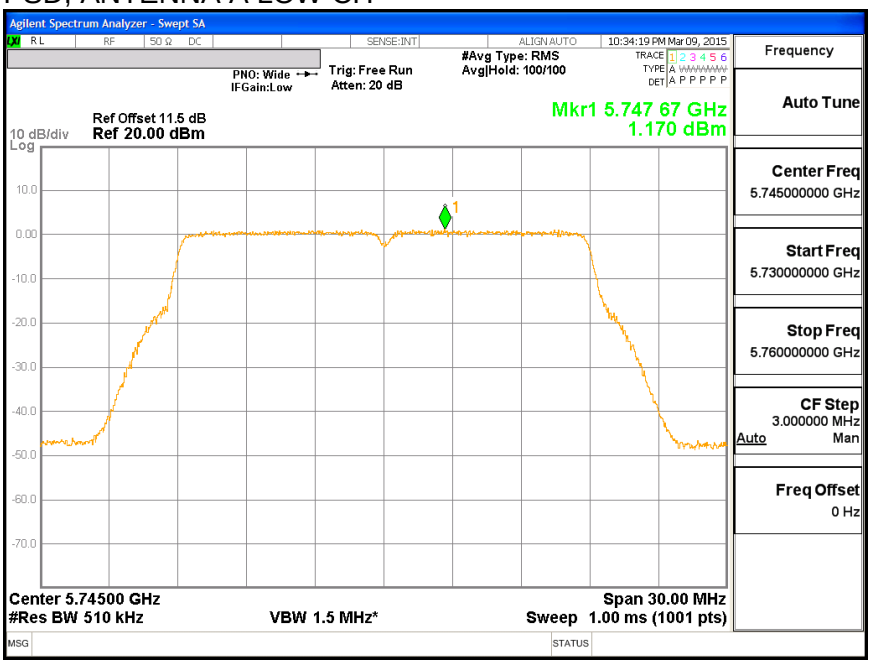
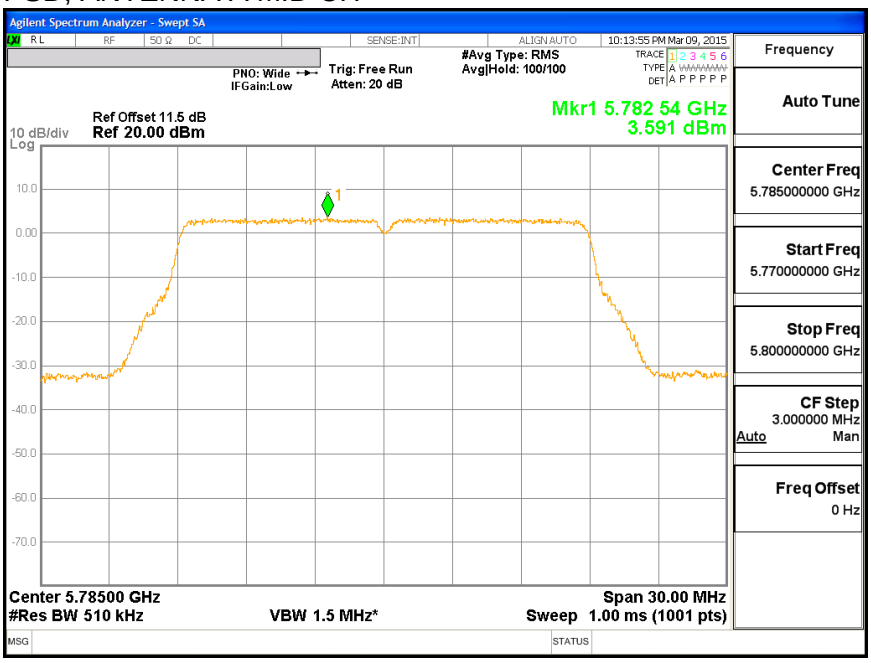
PSD, ANTENNA A

PSD, ANTENNA A LOW CH



PSD, ANTENNA A MID CH



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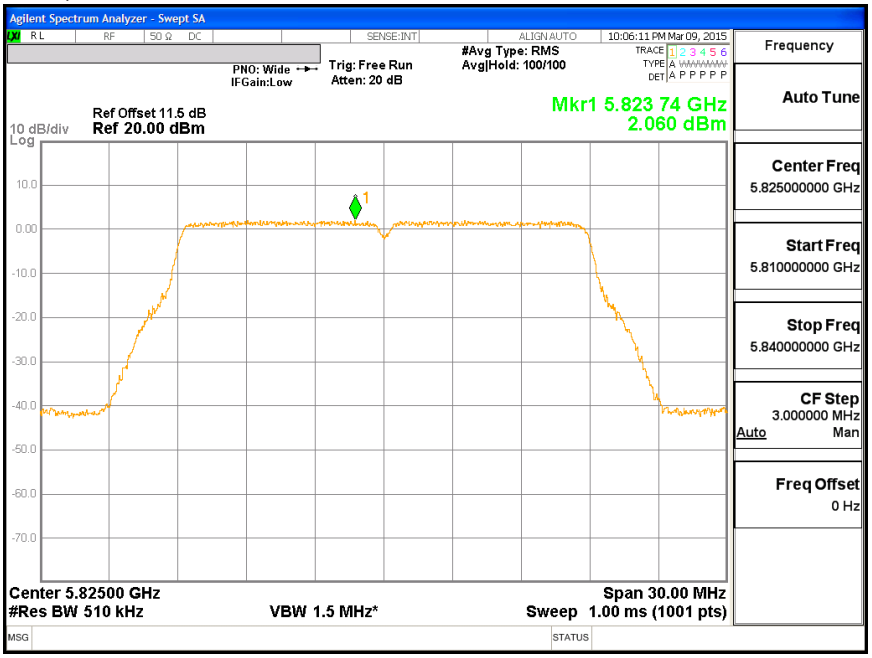
PSD, ANTENNA A HIGH CH



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8.34. 802.11n HT20 2Tx CDD MODE IN THE 5.8 GHz BAND

8.34.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

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

RESULTS

Channel	Frequency (MHz)	6 dB BW Antenna B (MHz)	6 dB BW Antenna A (MHz)	Minimum Limit (MHz)
Low	5745	17.6700	17.6100	0.5
Mid	5785	17.6100	17.6400	0.5
High	5825	17.6100	17.6400	0.5

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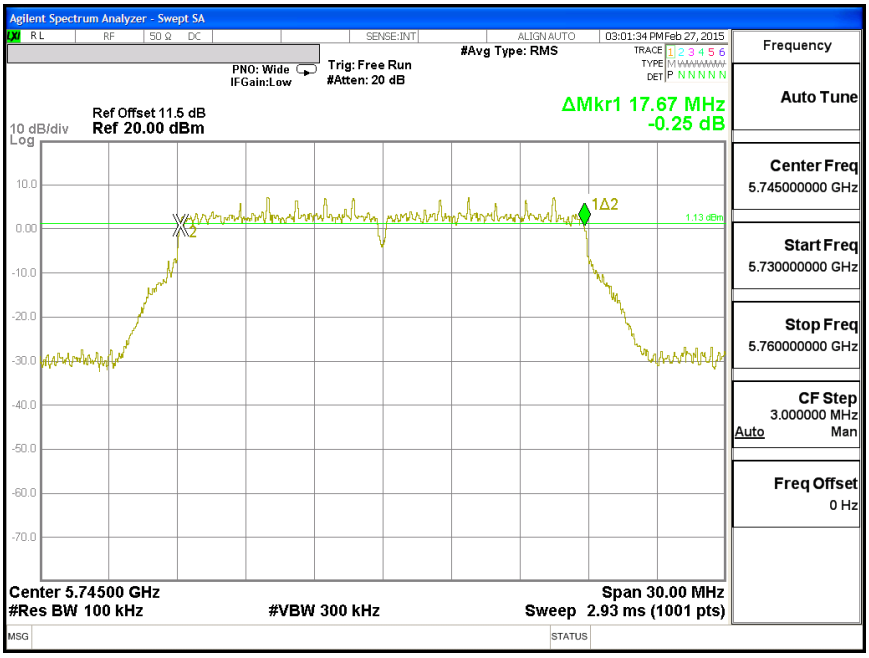
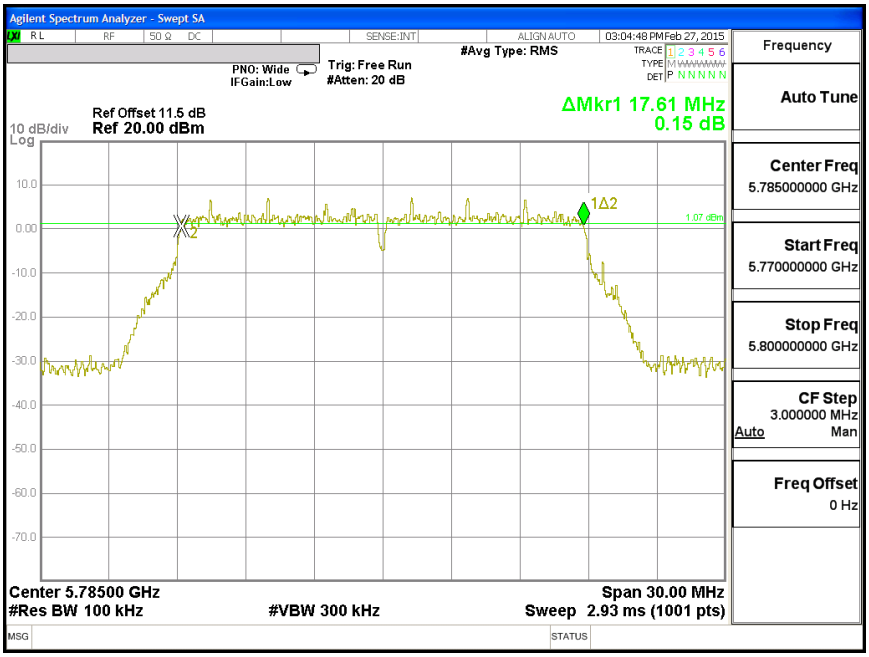
6 dB BANDWIDTH, ANTENNA B

6 dB BANDWIDTH ANTENNA B LOW CH



6 dB BANDWIDTH ANTENNA B MID CH



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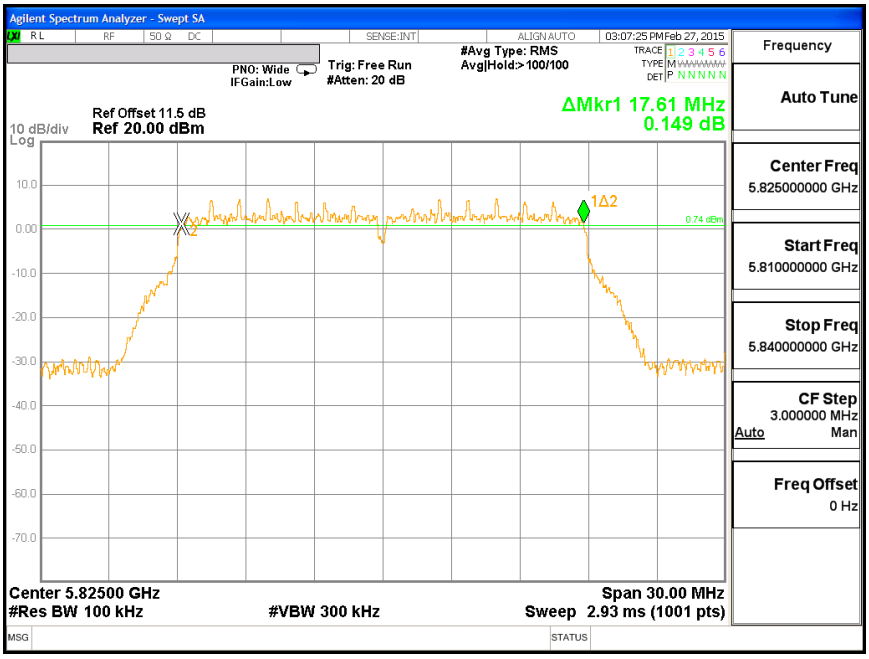
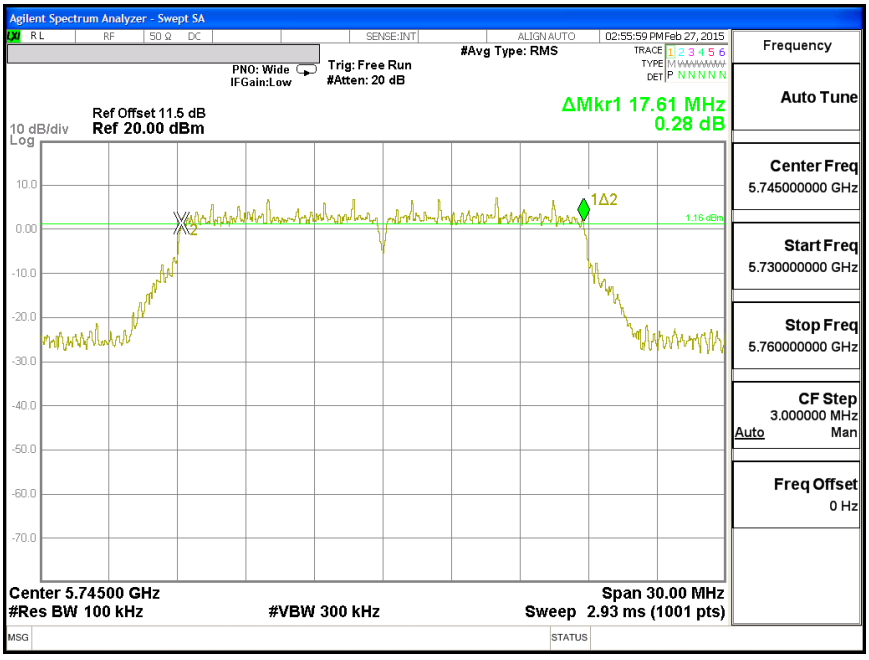
6 dB BANDWIDTH ANTENNA B HIGH CH



6 dB BANDWIDTH, ANTENNA A

6 dB BANDWIDTH ANTENNA A LOW CH



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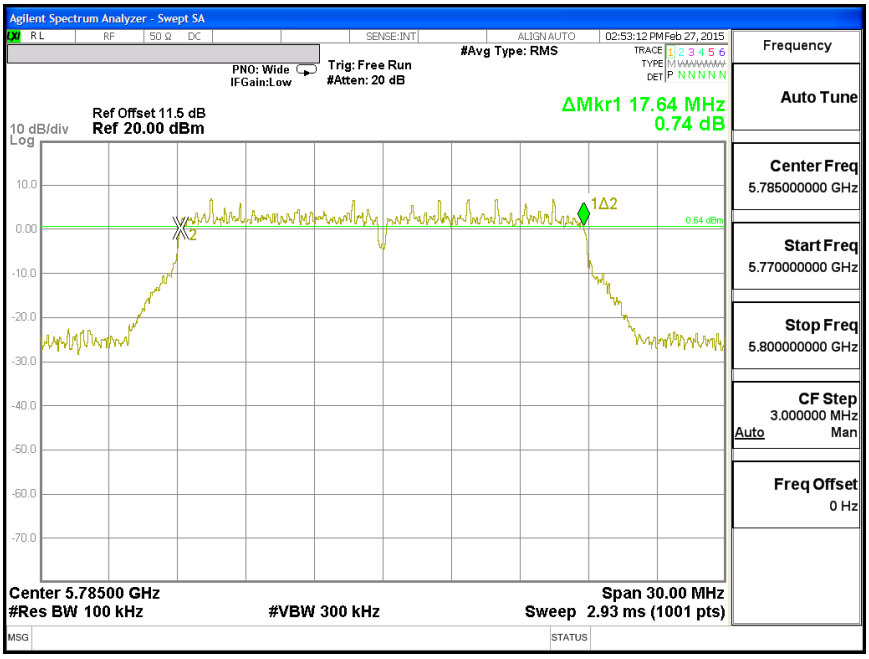
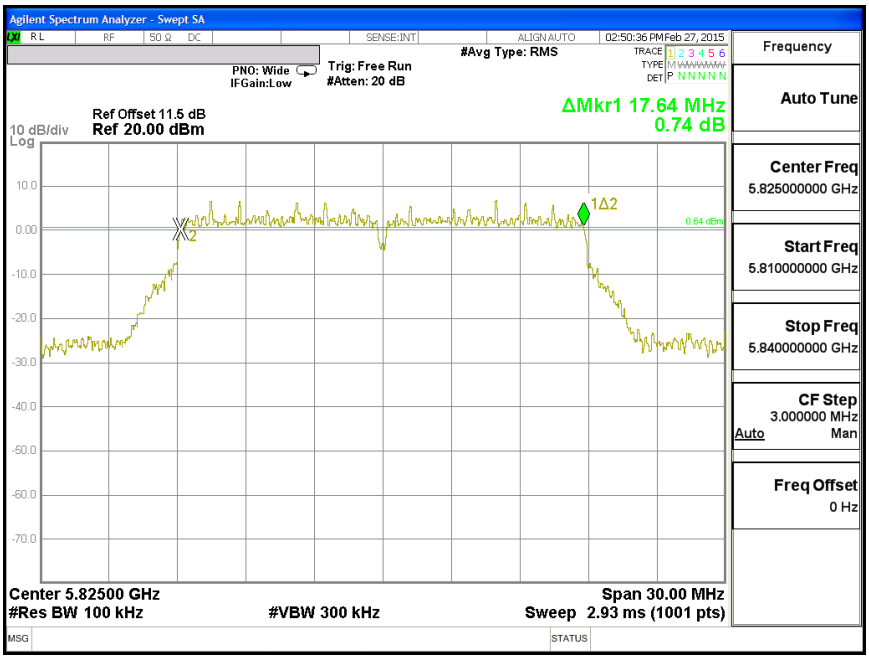
6 dB BANDWIDTH ANTENNA A MID CH



6 dB BANDWIDTH ANTENNA A HIGH CH



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8.34.2. 26 dB BANDWIDTH

LIMITS

None, for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB BW Antenna B (MHz)	26 dB BW Antenna A (MHz)
Low	5745	21.84	21.90
Mid	5785	21.84	21.93
High	5825	21.75	21.87

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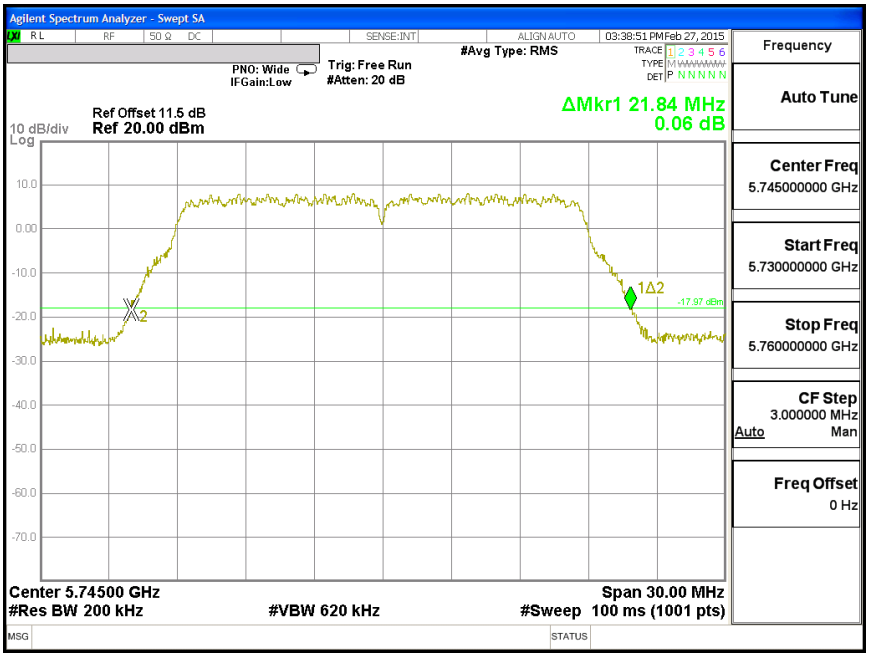
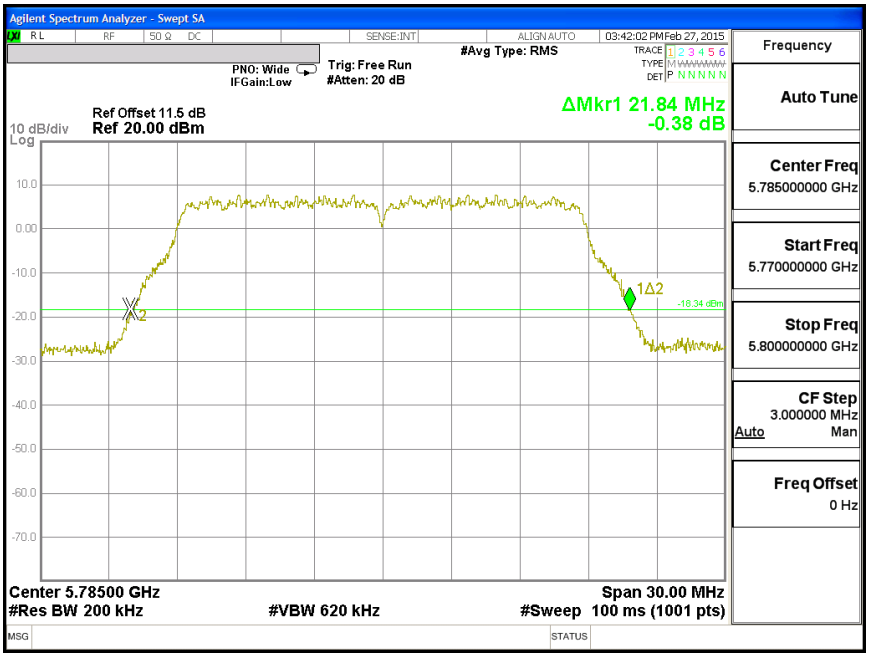
26 dB BANDWIDTH, ANTENNA B

26 dB BANDWIDTH ANTENNA B LOW CH



26 dB BANDWIDTH ANTENNA B MID CH



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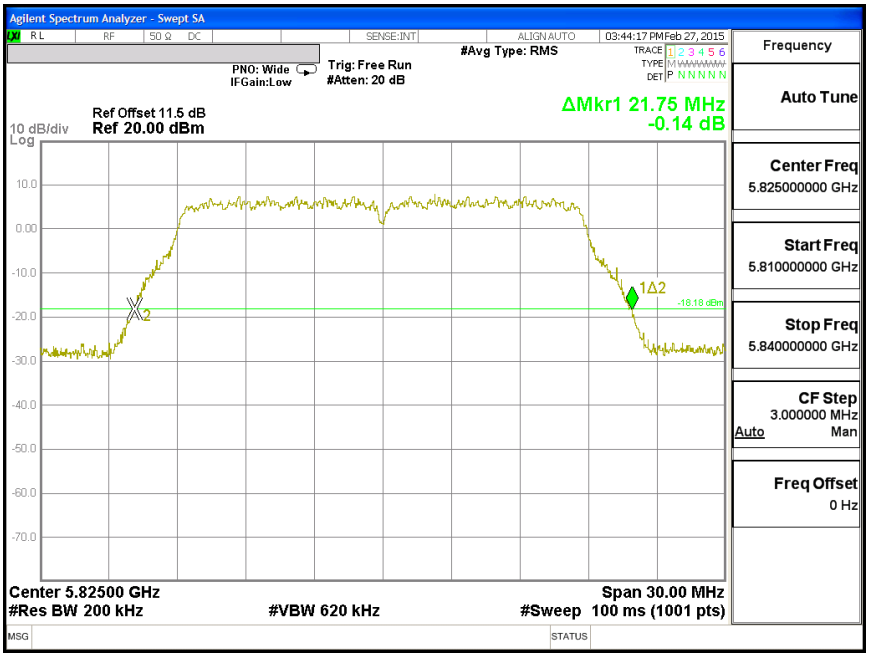
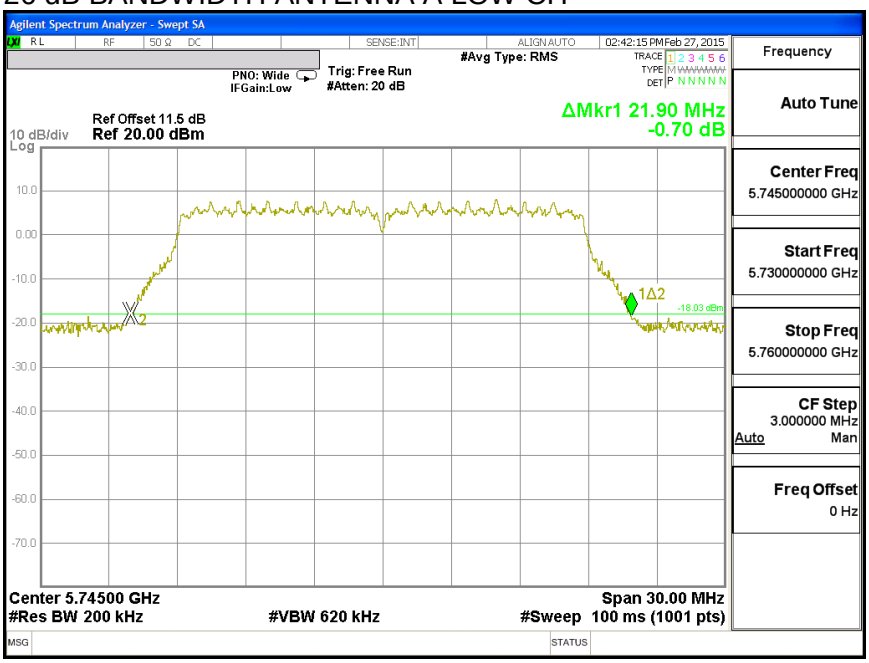
26 dB BANDWIDTH ANTENNA B HIGH CH



26 dB BANDWIDTH, ANTENNA A

26 dB BANDWIDTH ANTENNA A LOW CH



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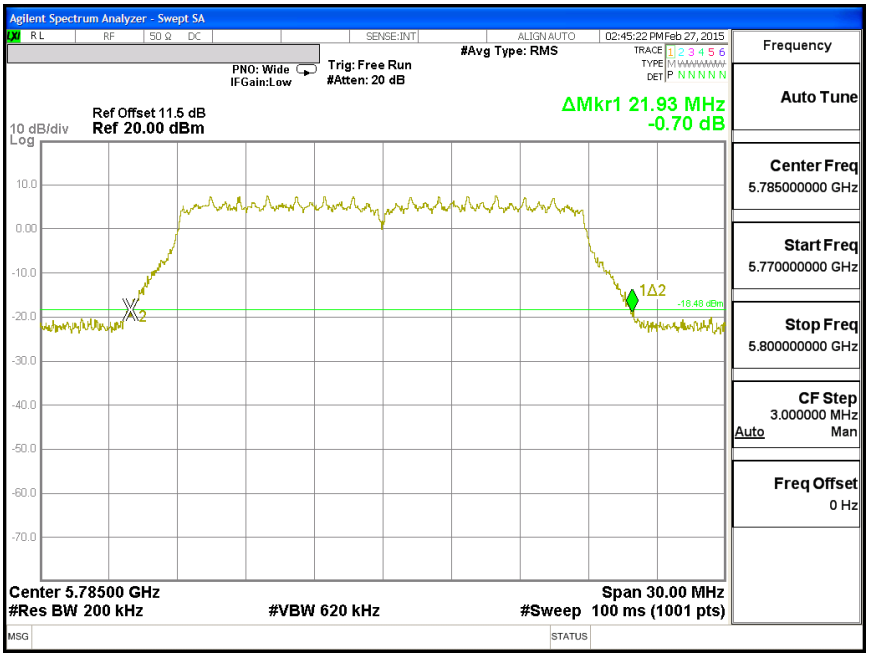
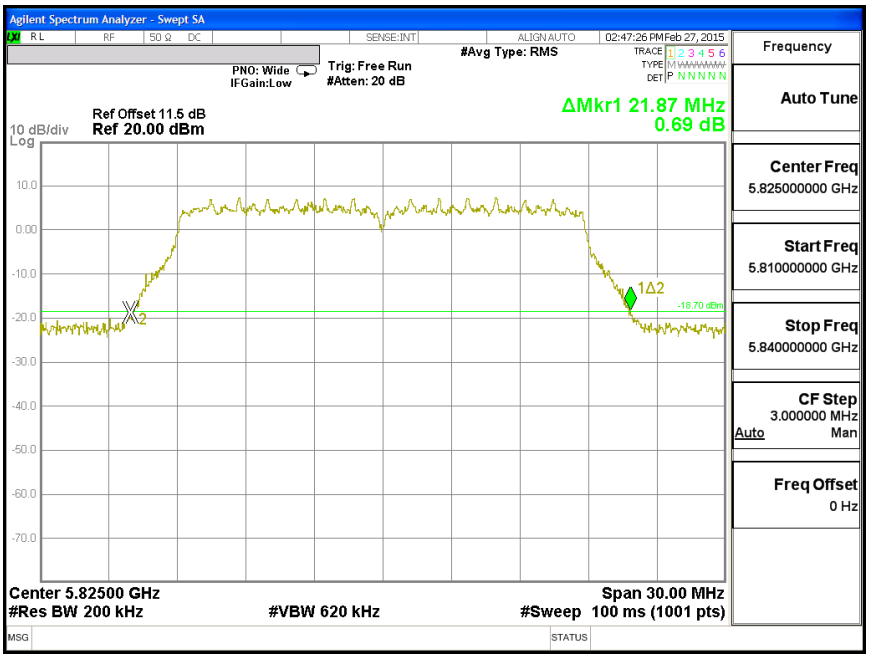
26 dB BANDWIDTH ANTENNA A MID CH



26 dB BANDWIDTH ANTENNA A HIGH CH



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8.34.3. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% BW Antenna B (MHz)	99% BW Antenna A (MHz)
Low	5745	17.7760	17.8310
Mid	5785	17.6380	17.7680
High	5825	17.2610	17.7970

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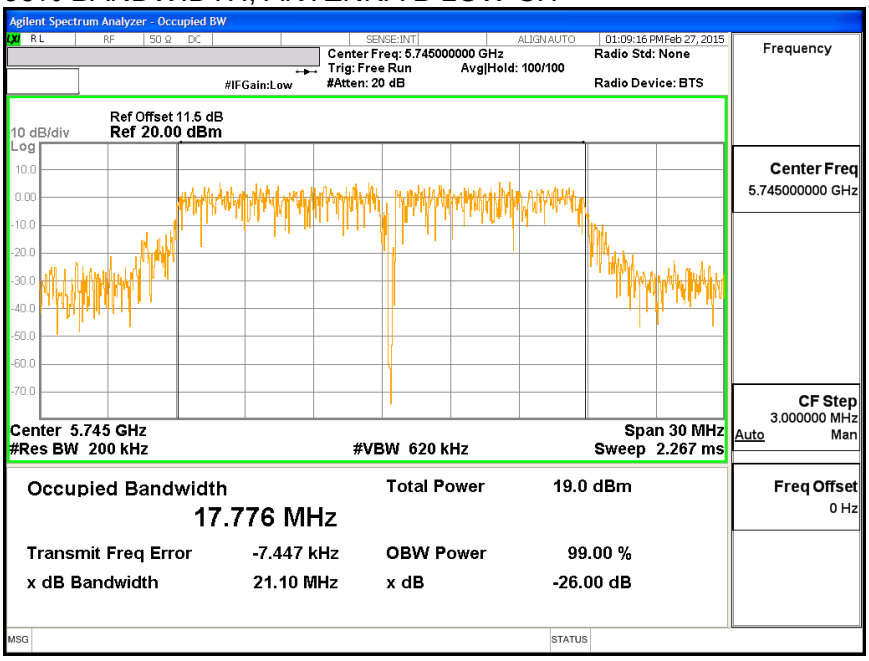
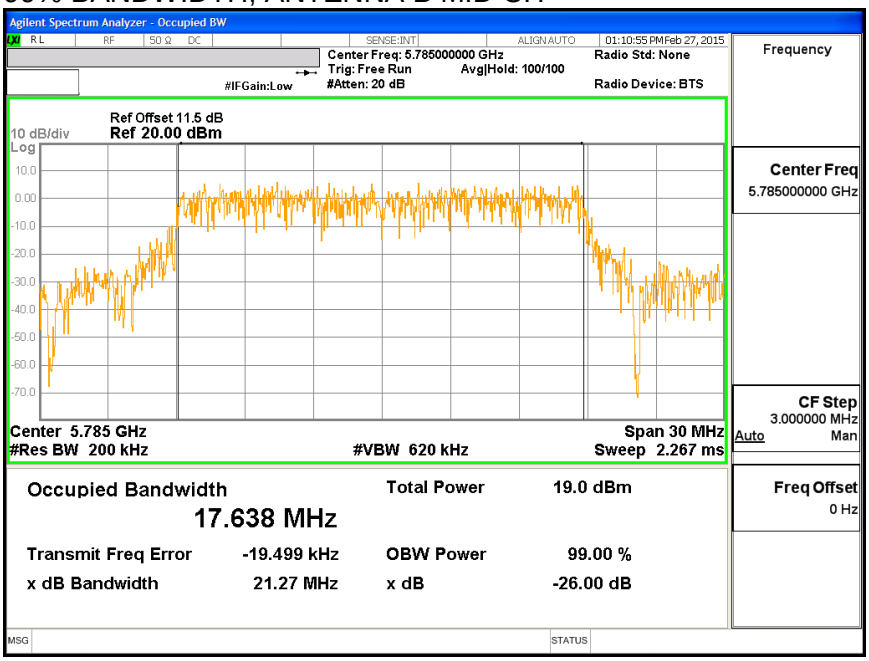
99% BANDWIDTH, ANTENNA B

99% BANDWIDTH, ANTENNA B LOW CH



99% BANDWIDTH, ANTENNA B MID CH



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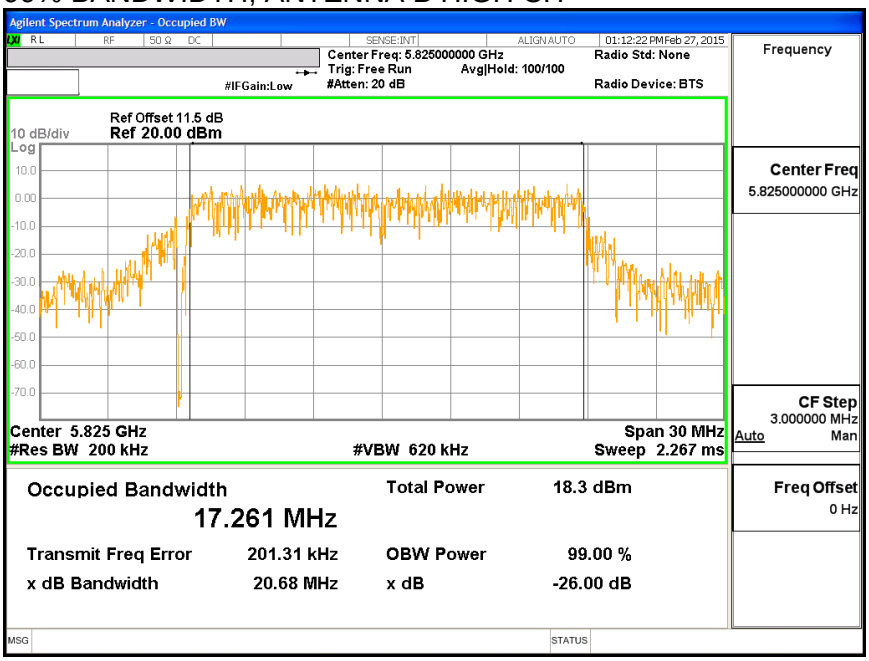
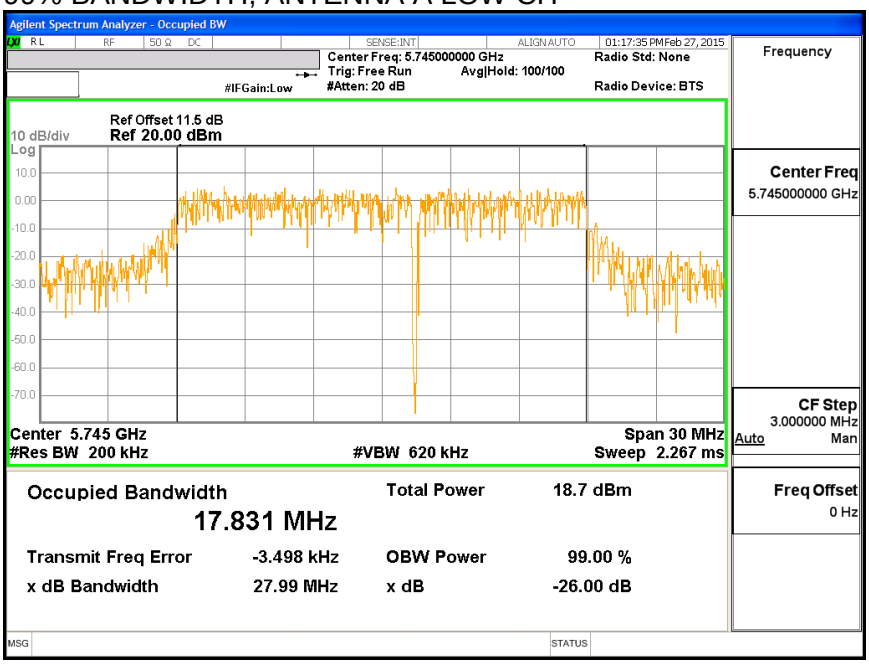
99% BANDWIDTH, ANTENNA B HIGH CH



99% BANDWIDTH, ANTENNA A

99% BANDWIDTH, ANTENNA A LOW CH



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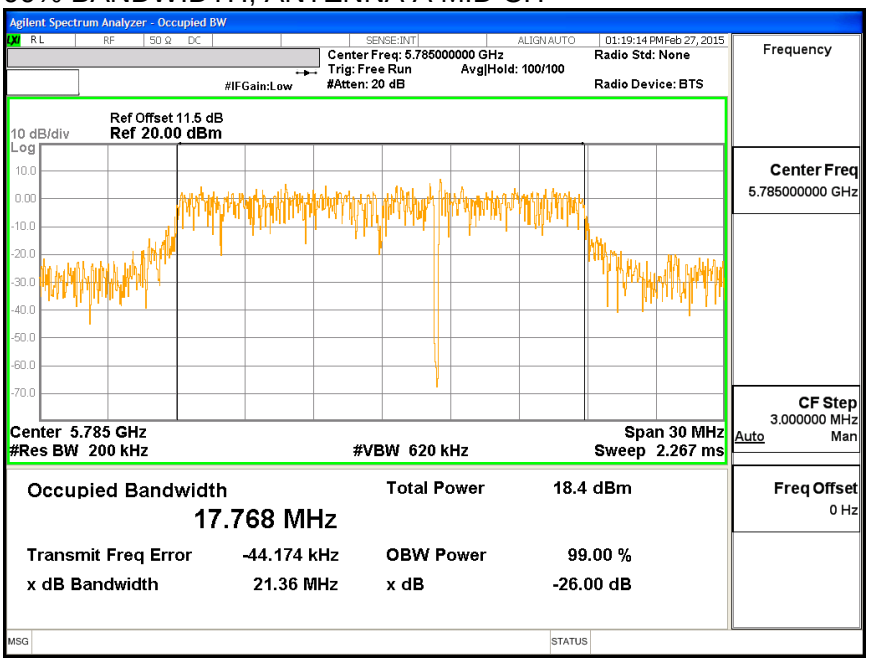
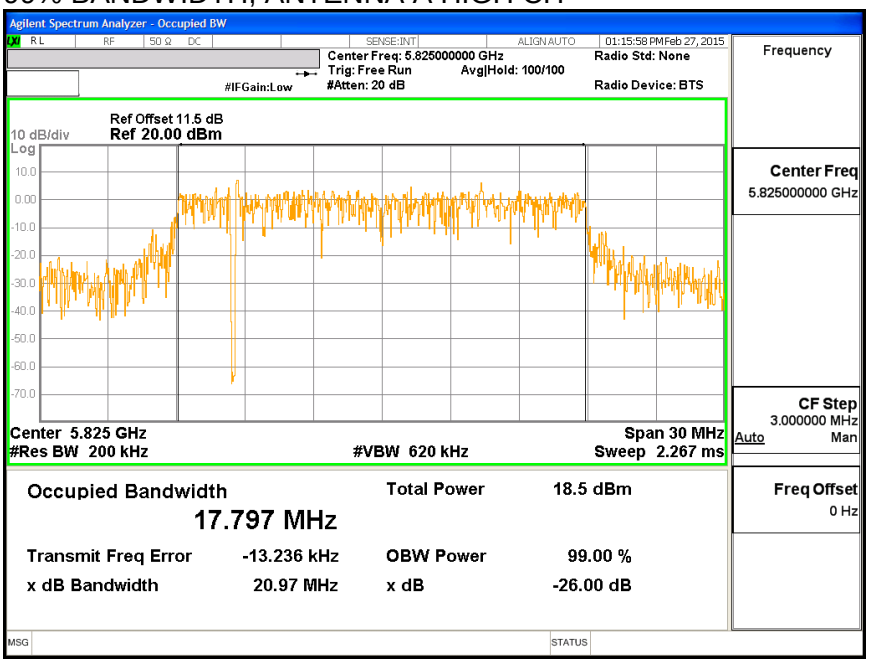
99% BANDWIDTH, ANTENNA A MID CH



99% BANDWIDTH, ANTENNA A HIGH CH



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8.34.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	Antenna B Power (dBm)	Antenna A Power (dBm)	Total Power (dBm)
Low	5745	13.93	13.90	16.93
Mid	5785	16.48	17.43	19.99
High	5825	14.90	15.00	17.96

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8.34.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

Antenna B Antenna Gain (dBi)	Antenna A Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
4.90	3.40	4.21

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RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	4.21	30.00
Mid	5785	4.21	30.00
High	5825	4.21	30.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Antenna A Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	13.93	13.90	16.93	30.00	-13.07
Mid	5785	16.48	17.43	19.99	30.00	-10.01
High	5825	14.90	15.00	17.96	30.00	-12.04

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8.34.6. MAXIMUM POWER SPECTRAL DENSITY (PSD)

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

Antenna B Antenna Gain (dBi)	Antenna A Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
4.90	3.40	7.19

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RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5745	7.19	28.81
Mid	5785	7.19	28.81
High	5825	7.19	28.81

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

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Antenna A Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5745	0.19	0.62	3.42	28.81	-25.39
Mid	5785	2.74	4.30	6.60	28.81	-22.21
High	5825	1.05	1.97	4.55	28.81	-24.26

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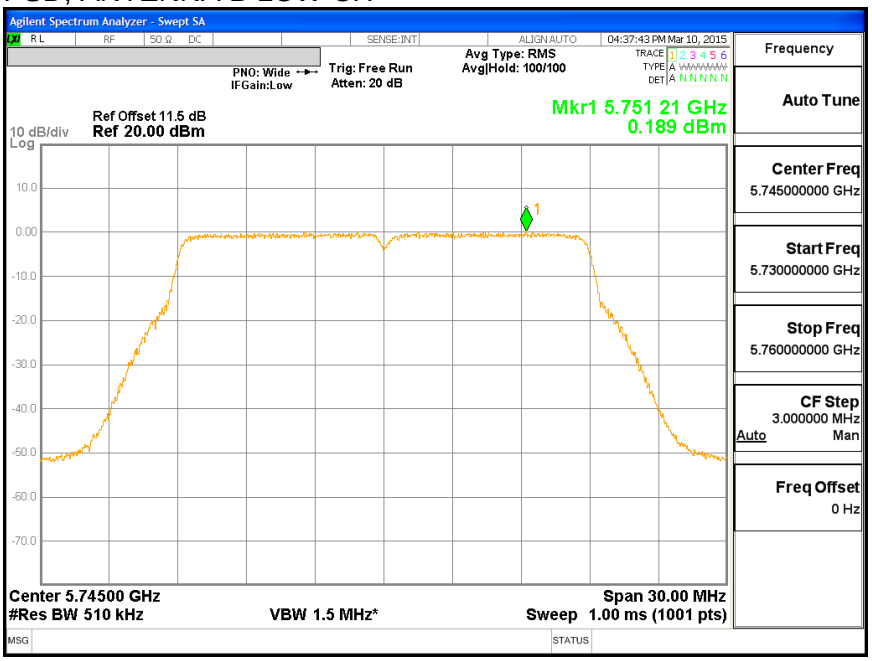
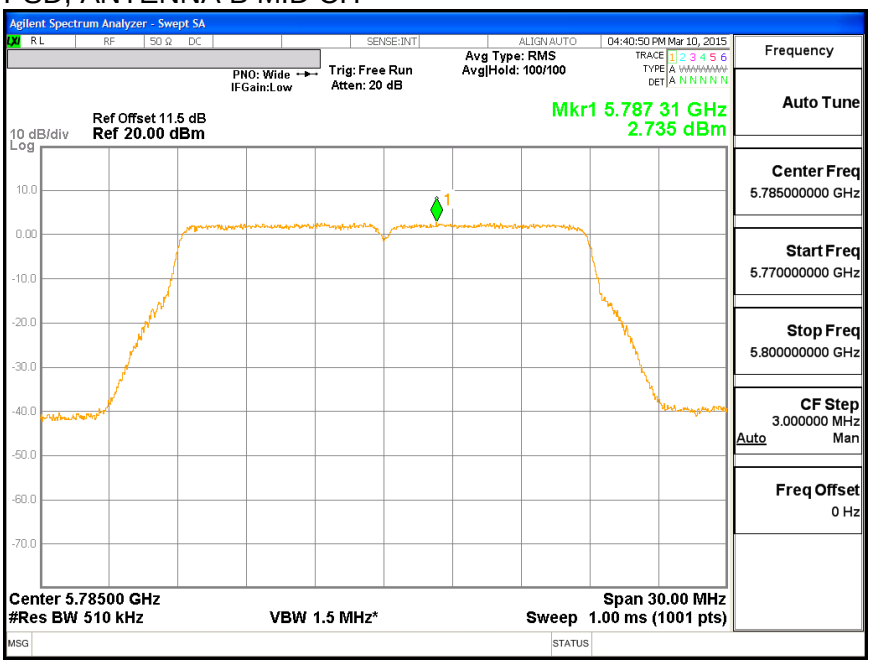
PSD, ANTENNA B

PSD, ANTENNA B LOW CH



PSD, ANTENNA B MID CH



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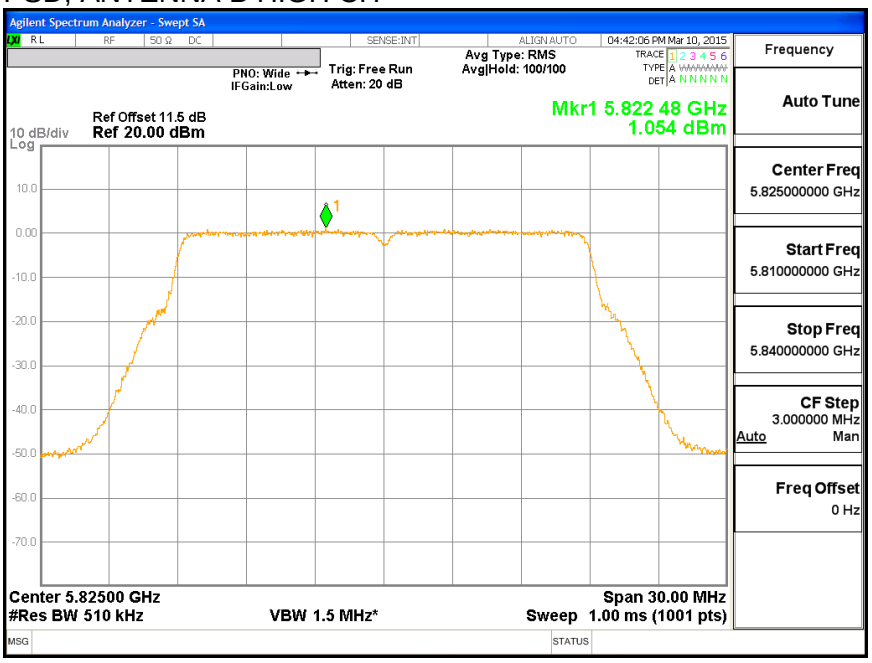
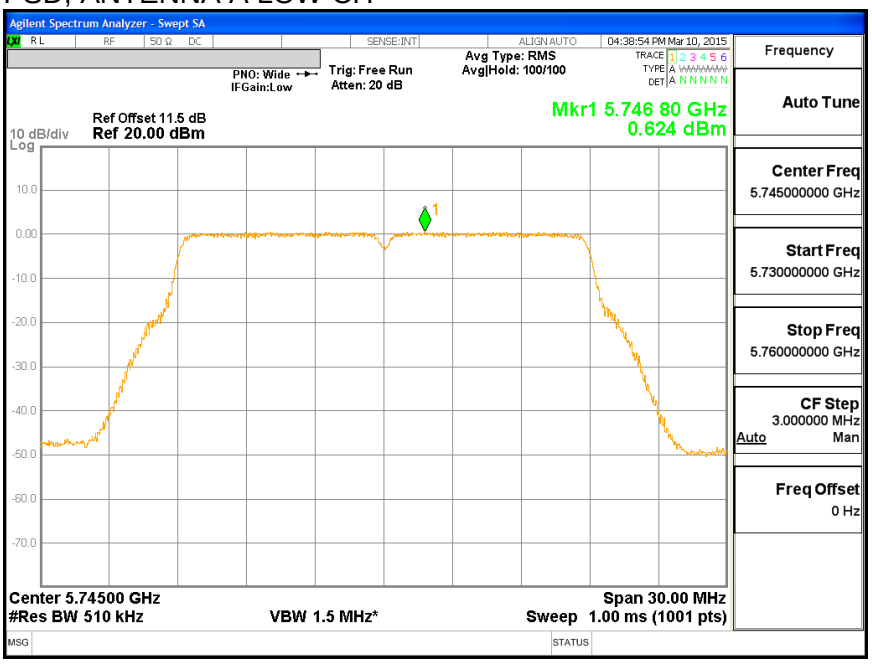
PSD, ANTENNA B HIGH CH



PSD, ANTENNA A

PSD, ANTENNA A LOW CH



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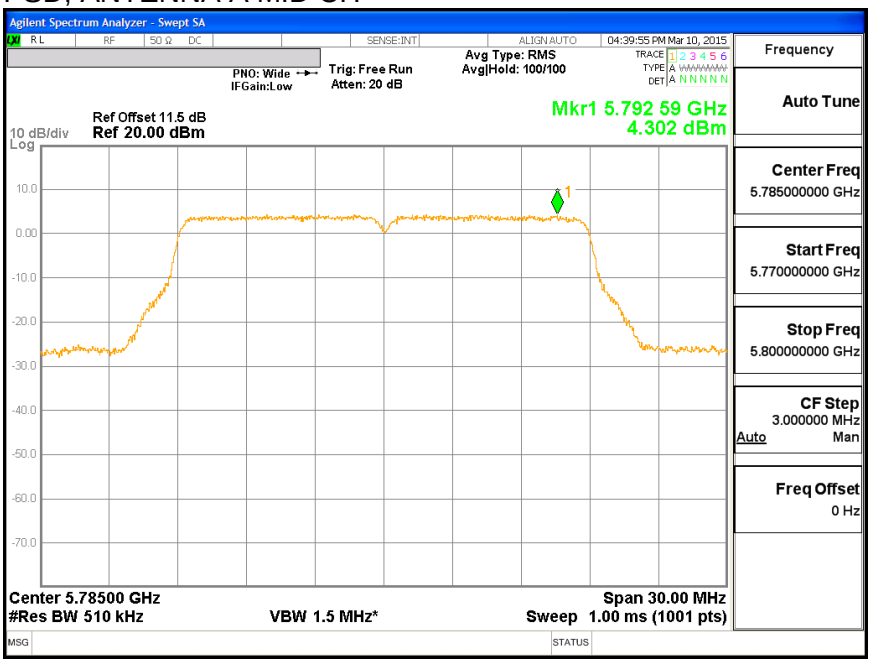
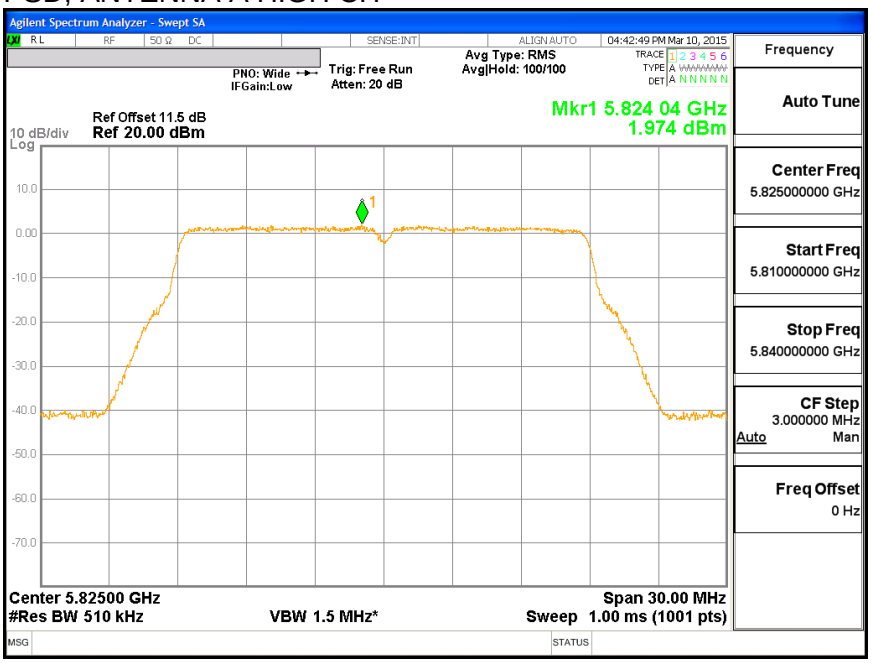
PSD, ANTENNA A MID CH



PSD, ANTENNA A HIGH CH



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8.35. 802.11n HT40 SISO MODE IN THE 5.8 GHz BAND ANTENNA B

8.35.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

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

RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	36.24	0.5
High	5795	36.36	0.5

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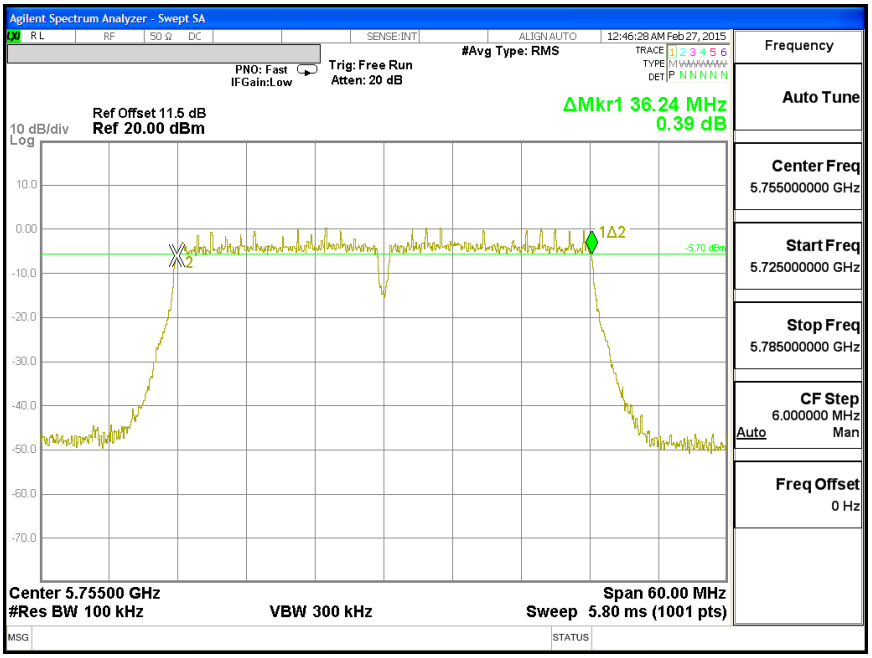
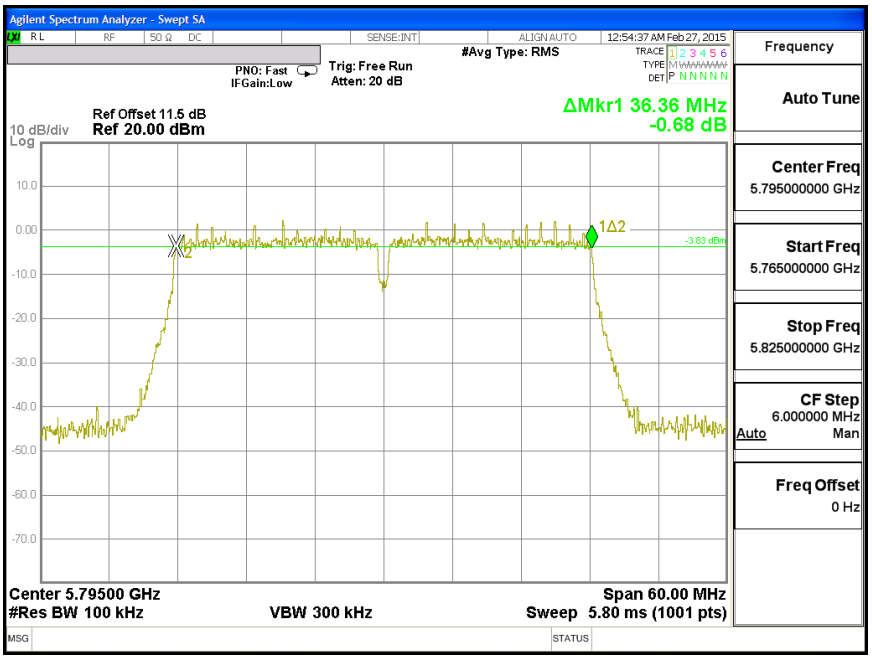
6 dB BANDWIDTH

6 dB BANDWIDTH LOW CH



6 dB BANDWIDTH HIGH CH



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8.35.2. 26 dB BANDWIDTH

LIMITS

None, for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5755	40.44
High	5795	40.20

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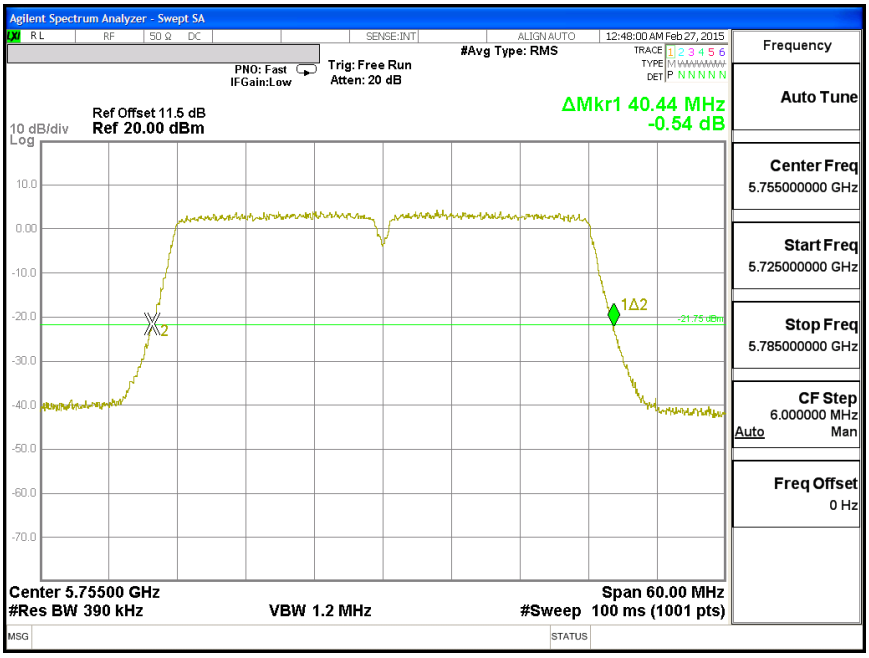
26 dB BANDWIDTH

26 dB BANDWIDTH LOW CH



26 dB BANDWIDTH HIGH CH

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8.35.3. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	36.317
High	5795	36.389

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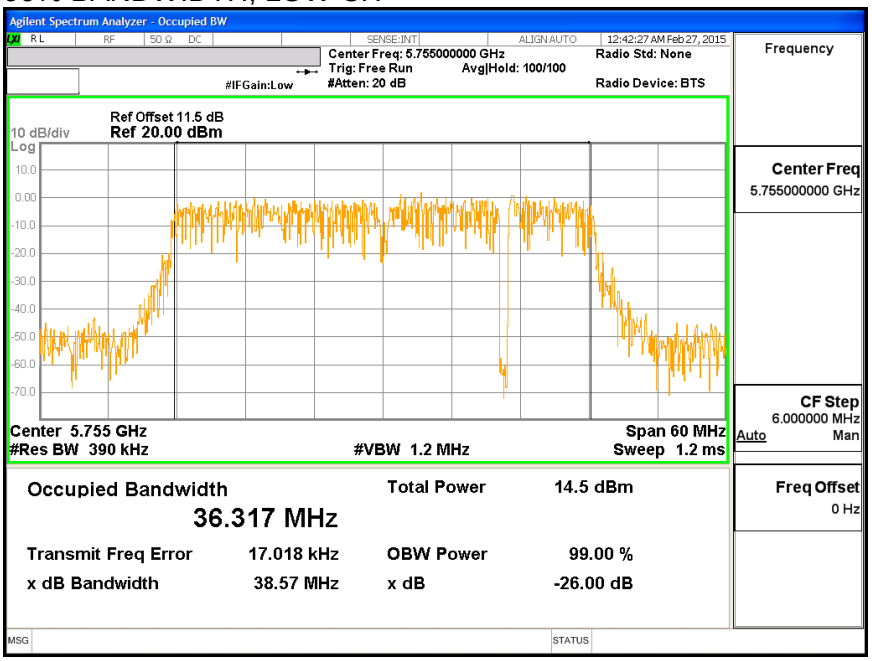
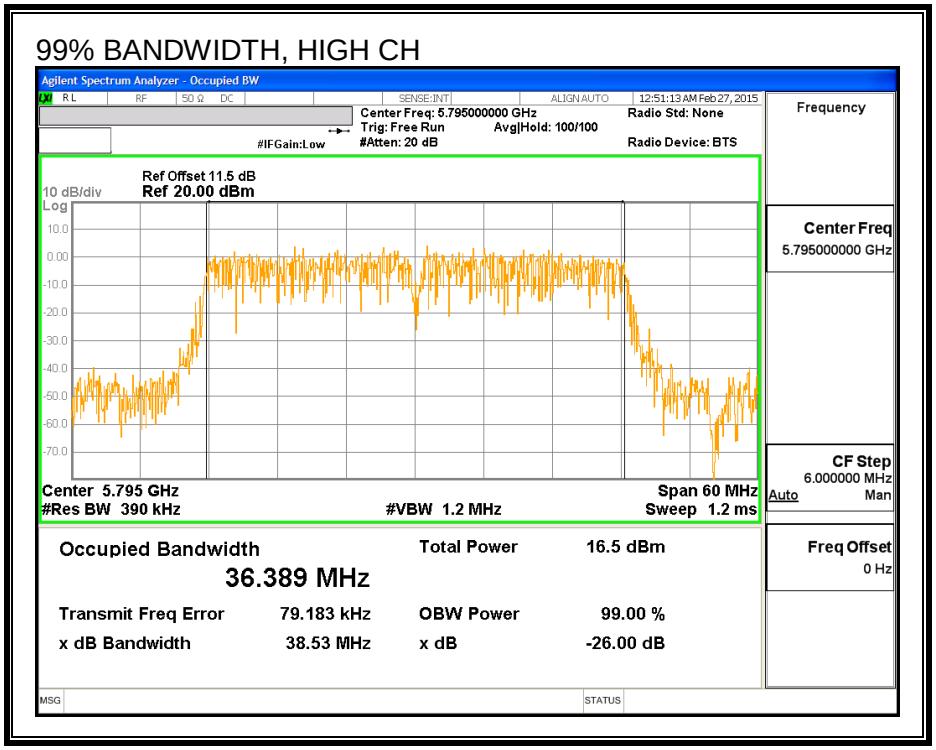
99% BANDWIDTH

99% BANDWIDTH, LOW CH



99% BANDWIDTH, HIGH CH



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8.35.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5755	13.40
High	5795	15.94

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8.35.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

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RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	4.90	30.00
High	5795	4.90	30.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	13.40	13.40	30.00	-16.60
High	5795	15.94	15.94	30.00	-14.06

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8.35.6. MAXIMUM POWER SPECTRAL DENSITY (PSD)

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

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RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5755	4.90	30.00
High	5795	4.90	30.00

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

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5755	-3.45	-3.45	30.00	-33.45
High	5795	-0.70	-0.70	30.00	-30.70

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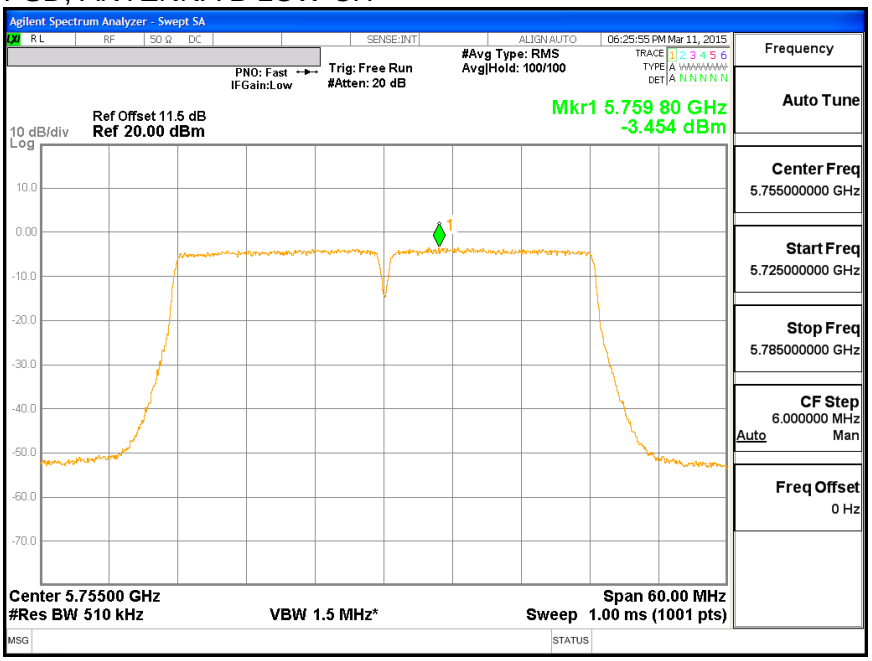
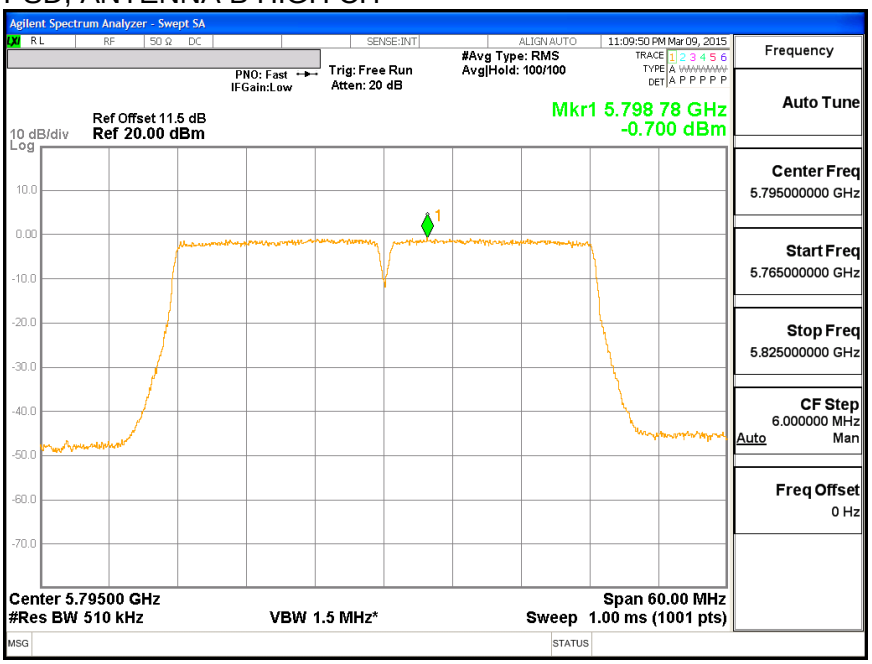
PSD, ANTENNA B

PSD, ANTENNA B LOW CH



PSD, ANTENNA B HIGH CH



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8.36. 802.11n HT40 SISO MODE IN THE 5.8 GHz BAND ANTENNA A

8.36.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

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

RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	36.24	0.5
High	5795	36.24	0.5

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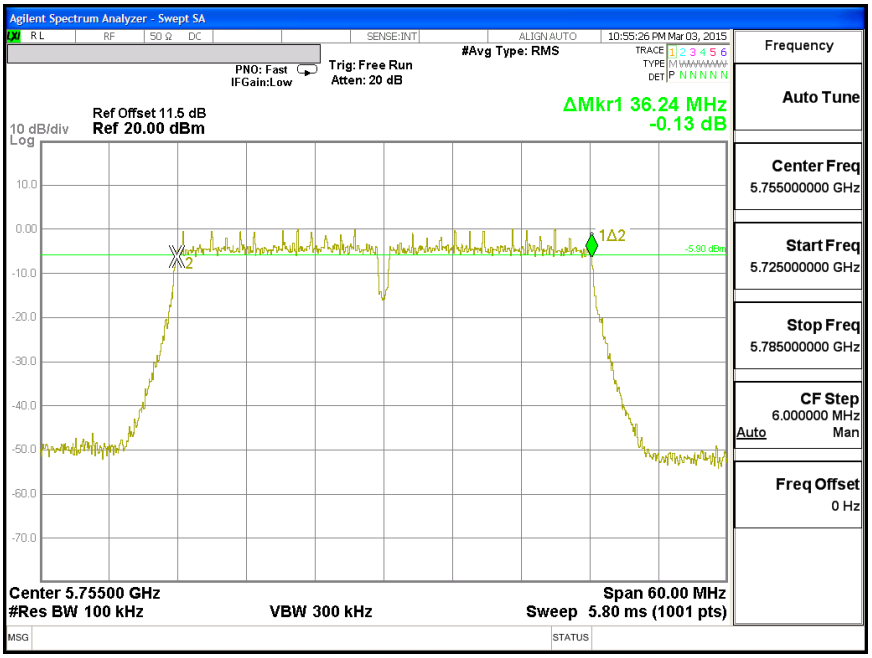
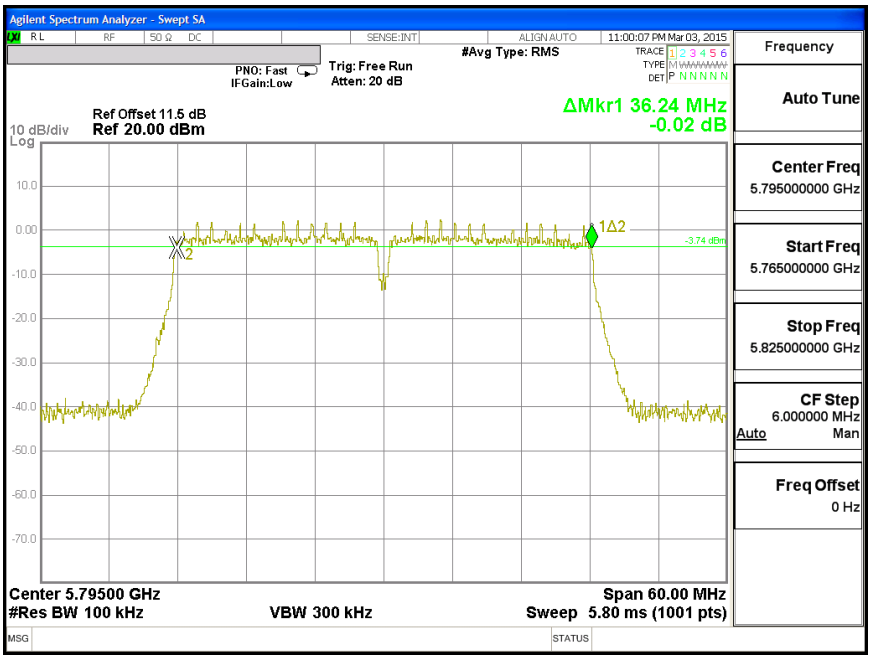
6 dB BANDWIDTH

6 dB BANDWIDTH LOW CH



6 dB BANDWIDTH HIGH CH



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8.36.2. 26 dB BANDWIDTH

LIMITS

None, for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5755	40.20
High	5795	40.38

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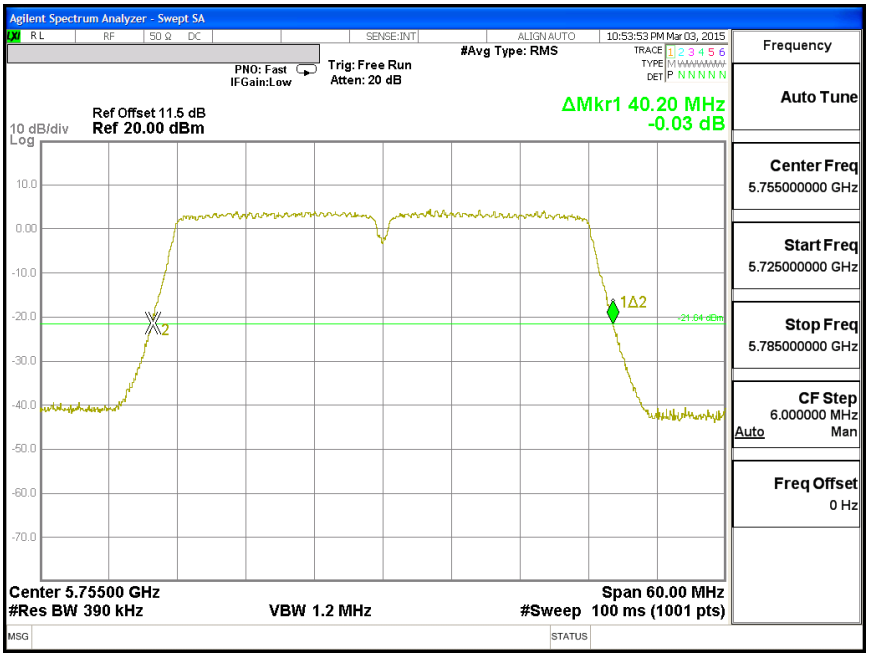
26 dB BANDWIDTH

26 dB BANDWIDTH LOW CH



26 dB BANDWIDTH HIGH CH

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8.36.3. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	36.345
High	5795	36.318

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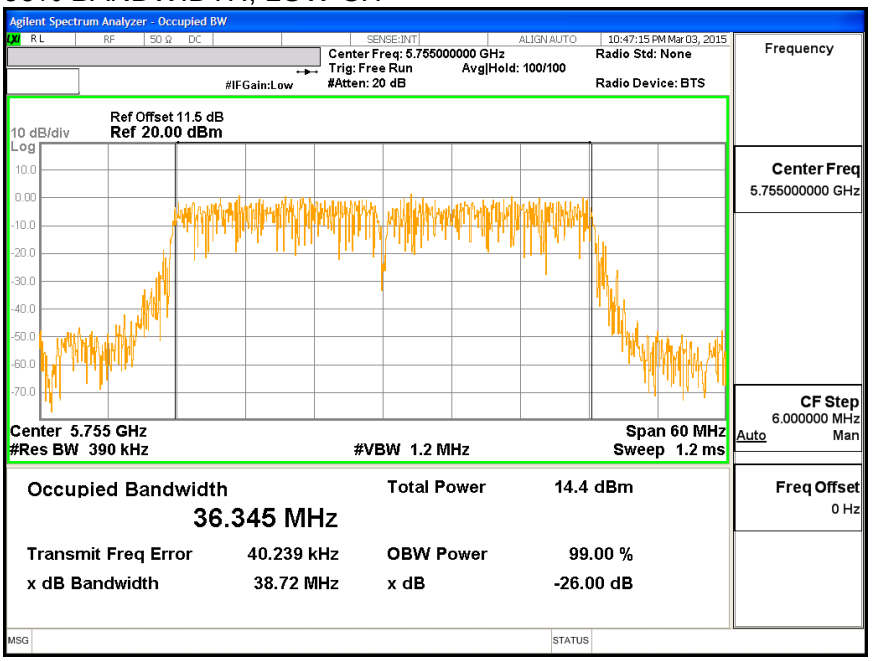
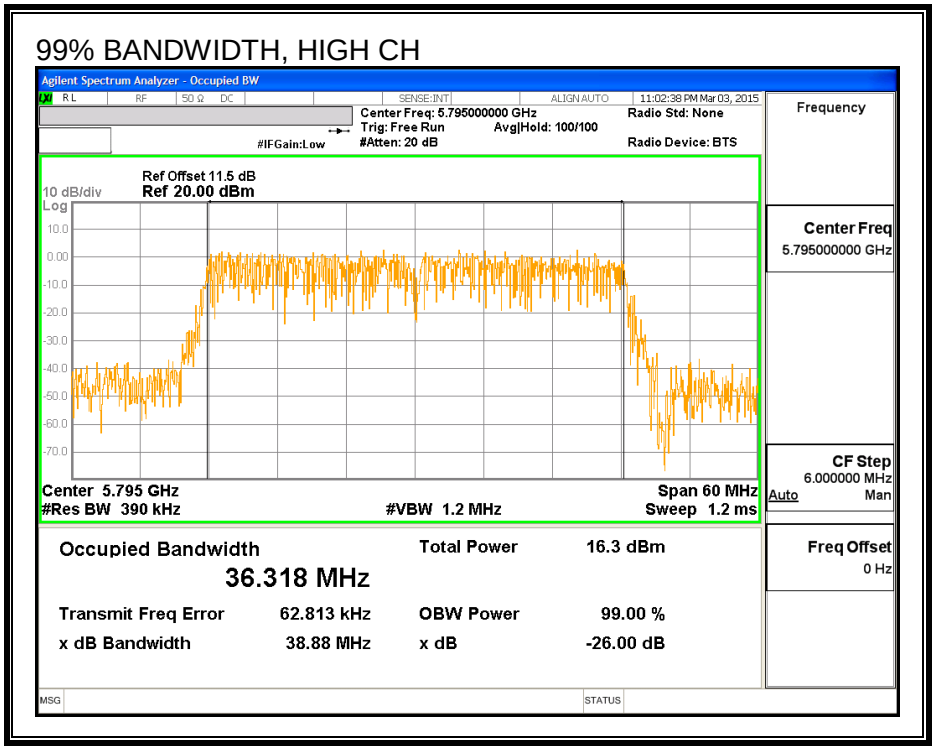
99% BANDWIDTH

99% BANDWIDTH, LOW CH



99% BANDWIDTH, HIGH CH



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8.36.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5755	13.48
High	5795	15.93

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8.36.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

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RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	3.40	30.00
High	5795	3.40	30.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna A Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	13.48	13.48	30.00	-16.52
High	5795	15.93	15.93	30.00	-14.07

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8.36.6. MAXIMUM POWER SPECTRAL DENSITY (PSD)

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

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RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5755	3.40	30.00
High	5795	3.40	30.00

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

PSD Results

Channel	Frequency (MHz)	Antenna A Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5755	3.46	3.46	30.00	-26.54
High	5795	-0.38	-0.38	30.00	-30.38

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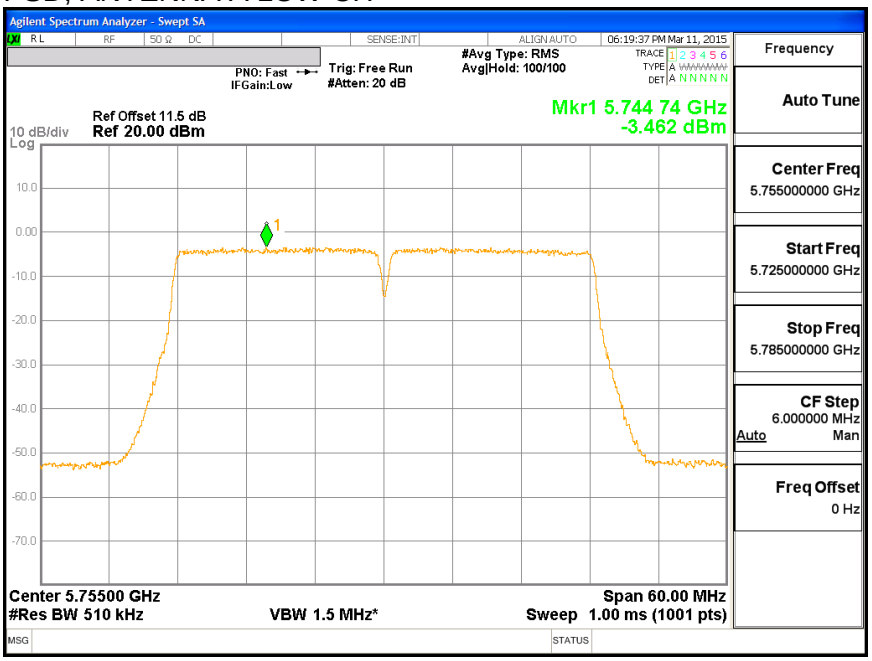
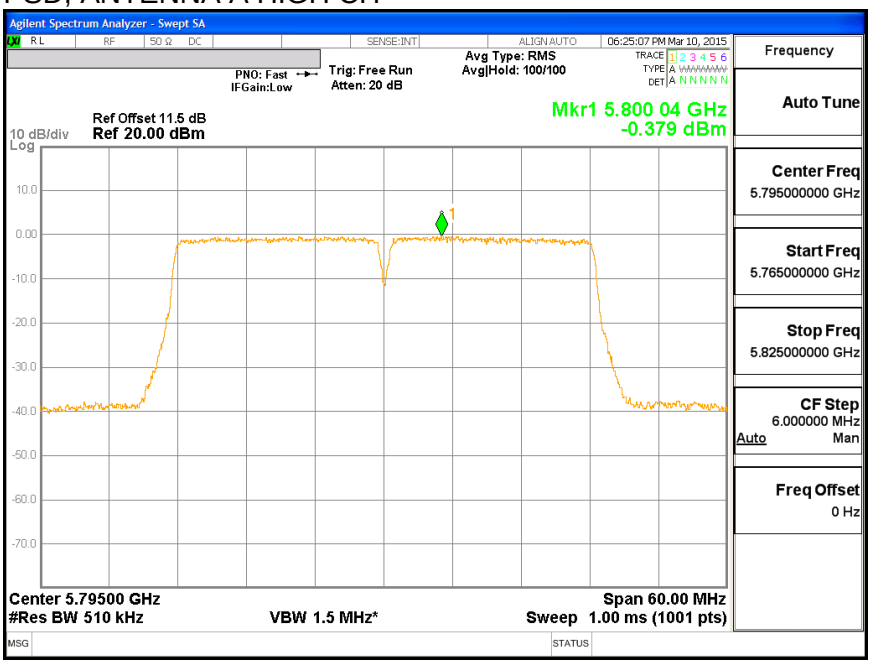
PSD, ANTENNA A

PSD, ANTENNA A LOW CH



PSD, ANTENNA A HIGH CH



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8.37. 802.11n HT40 2Tx CDD MODE IN THE 5.8 GHz BAND

8.37.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

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

RESULTS

Channel	Frequency (MHz)	6 dB BW Antenna B (MHz)	6 dB BW Antenna A (MHz)	Minimum Limit (MHz)
Low	5755	36.2400	36.2400	0.5
High	5795	36.1800	36.1800	0.5

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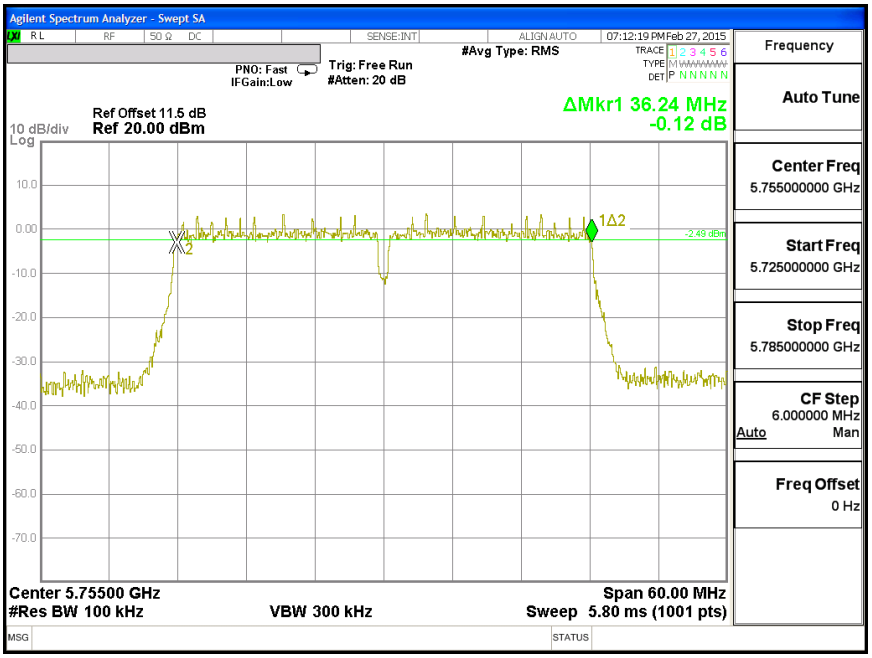
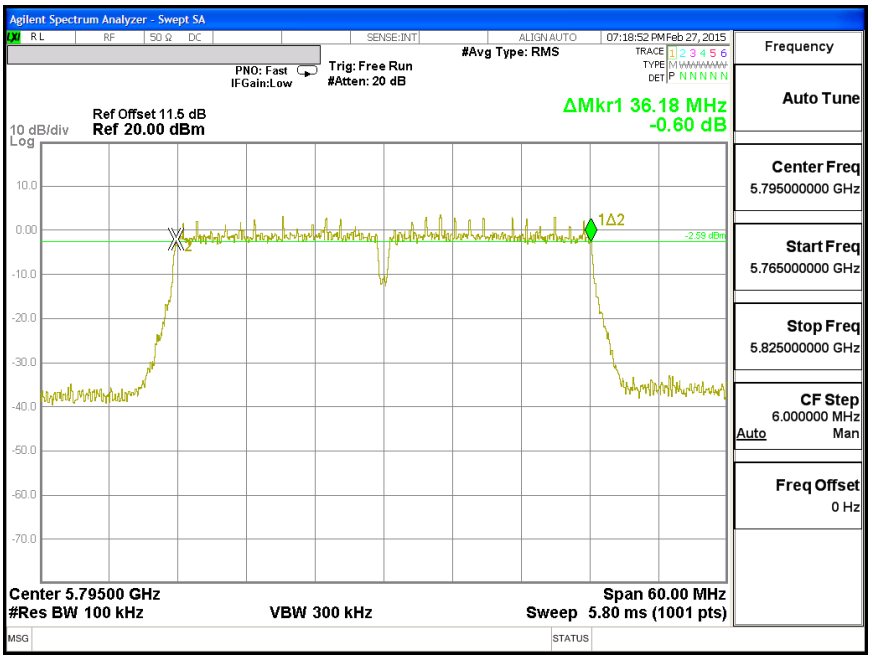
6 dB BANDWIDTH, ANTENNA B

6 dB BANDWIDTH ANTENNA B LOW CH



6 dB BANDWIDTH ANTENNA B HIGH CH



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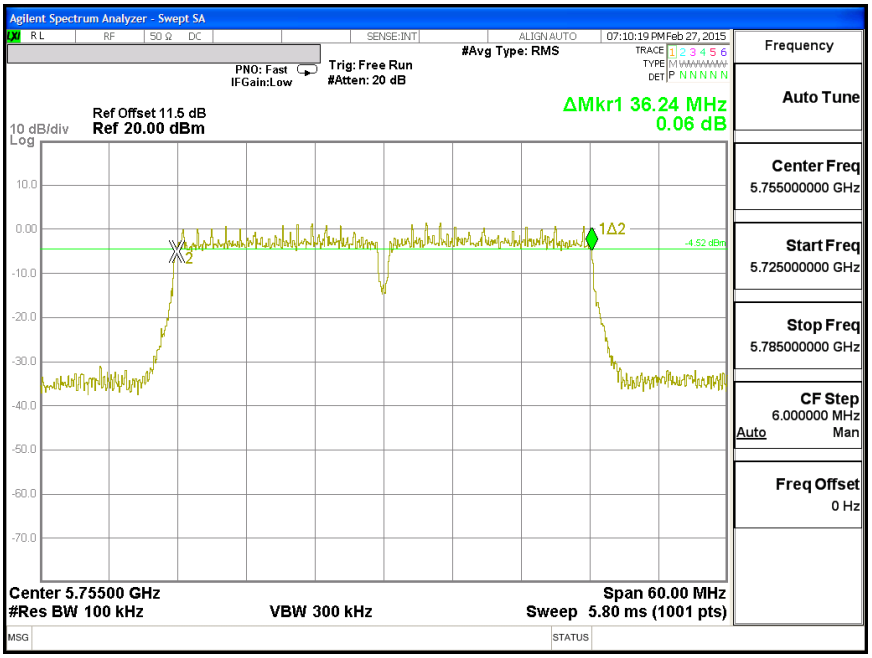
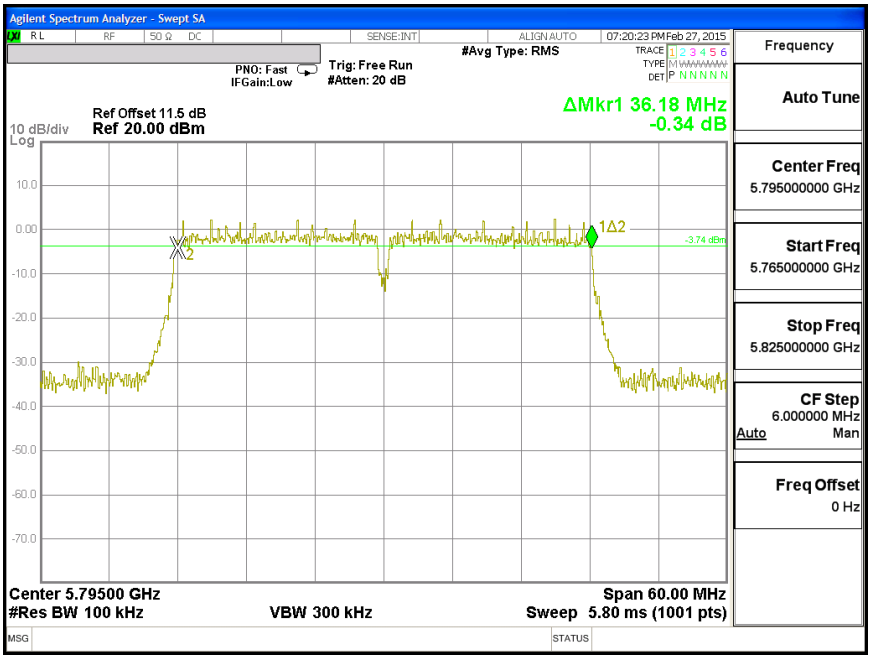
6 dB BANDWIDTH, ANTENNA A

6 dB BANDWIDTH ANTENNA A LOW CH



6 dB BANDWIDTH ANTENNA A HIGH CH



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8.37.2. 26 dB BANDWIDTH

LIMITS

None, for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB BW Antenna B (MHz)	26 dB BW Antenna A (MHz)
Low	5755	40.26	39.96
High	5795	40.32	40.08

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