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

8.34.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

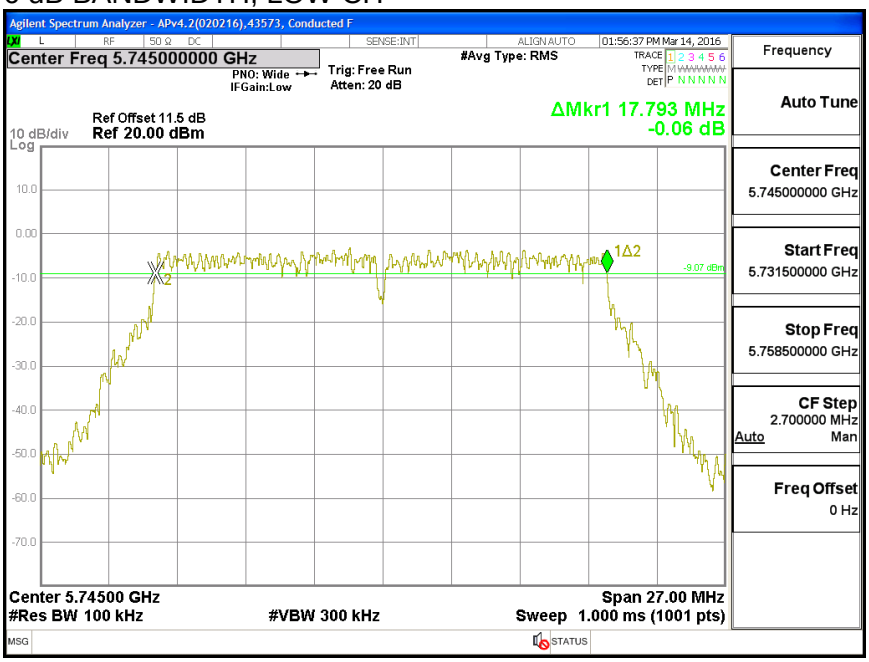
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

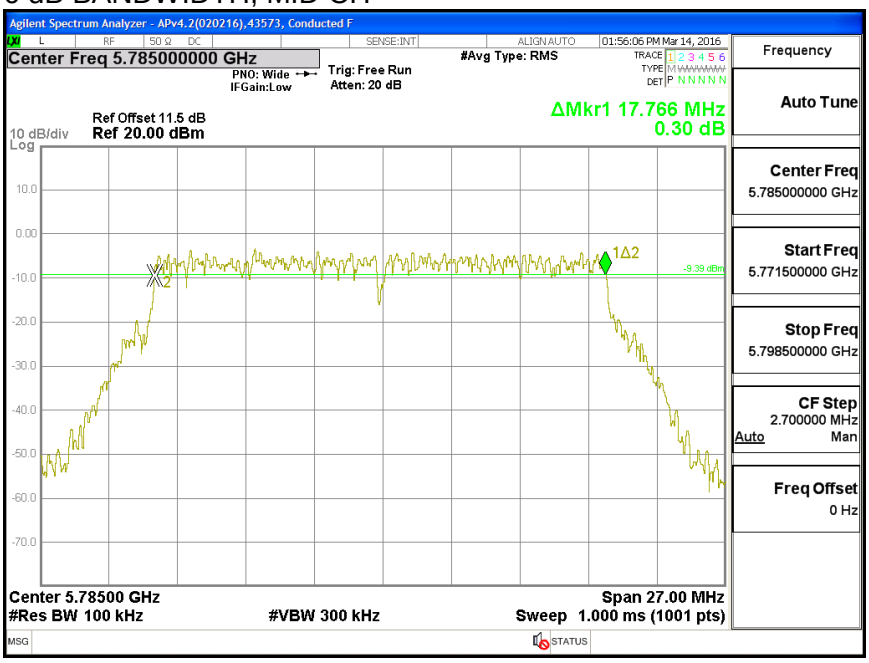
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	17.793	0.5
Mid	5785	17.766	0.5
High	5825	17.577	0.5

6 dB BANDWIDTH

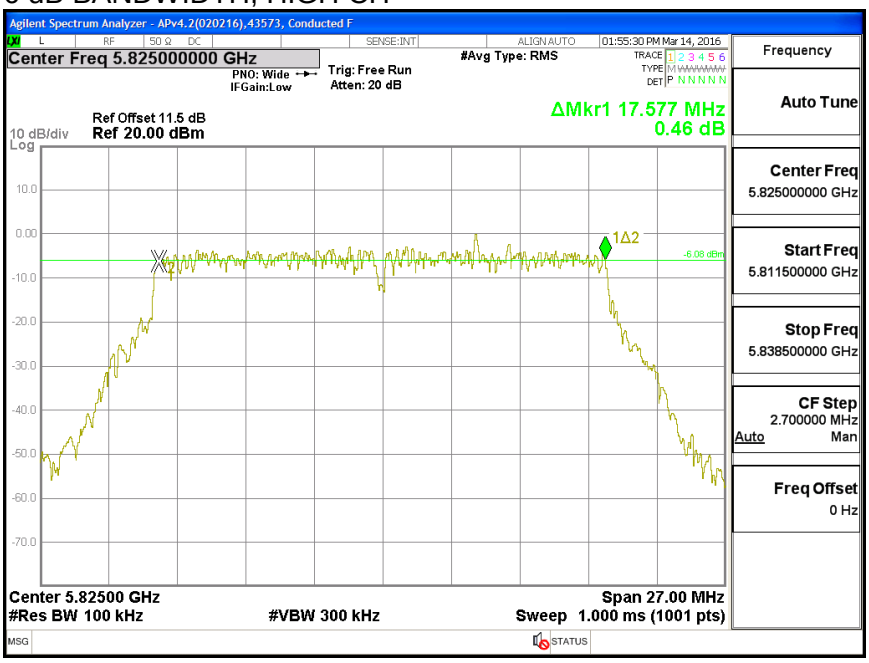
6 dB BANDWIDTH, LOW CH



6 dB BANDWIDTH, MID CH



6 dB BANDWIDTH, HIGH CH



8.34.2. 26 dB BANDWIDTH

LIMITS

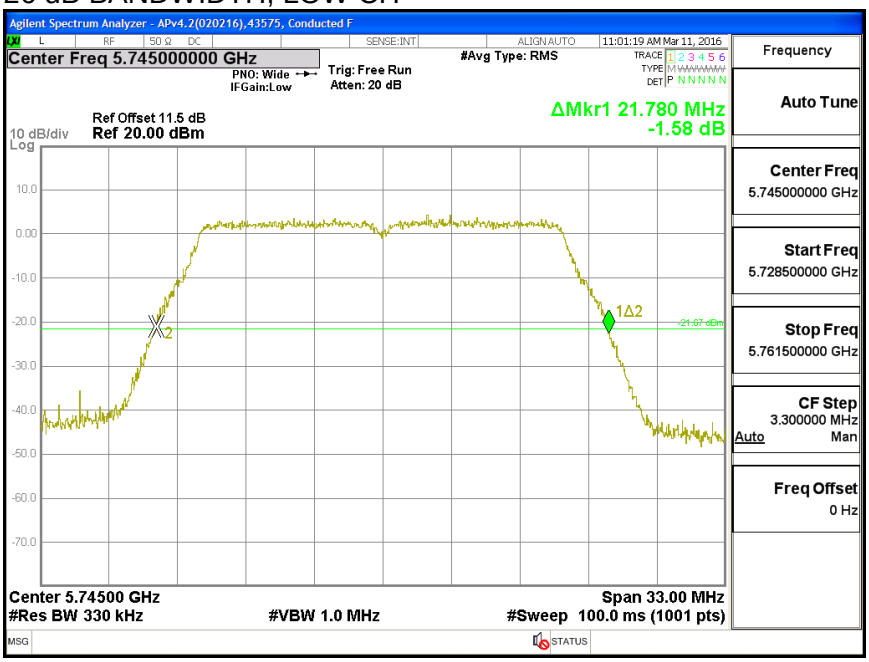
None, for reporting purposes only

RESULTS

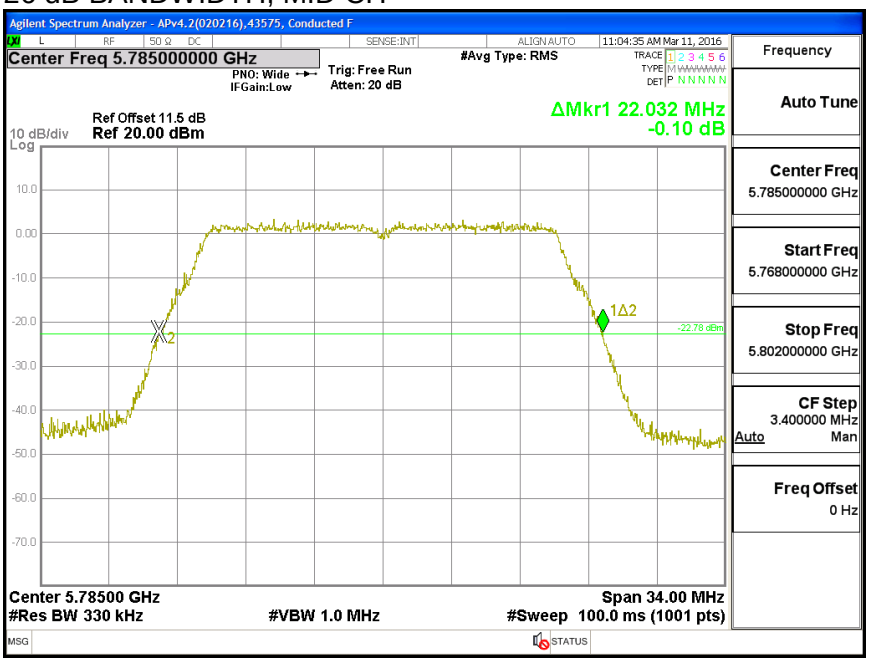
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	21.780
Mid	5785	22.032
High	5825	21.978

26 dB BANDWIDTH

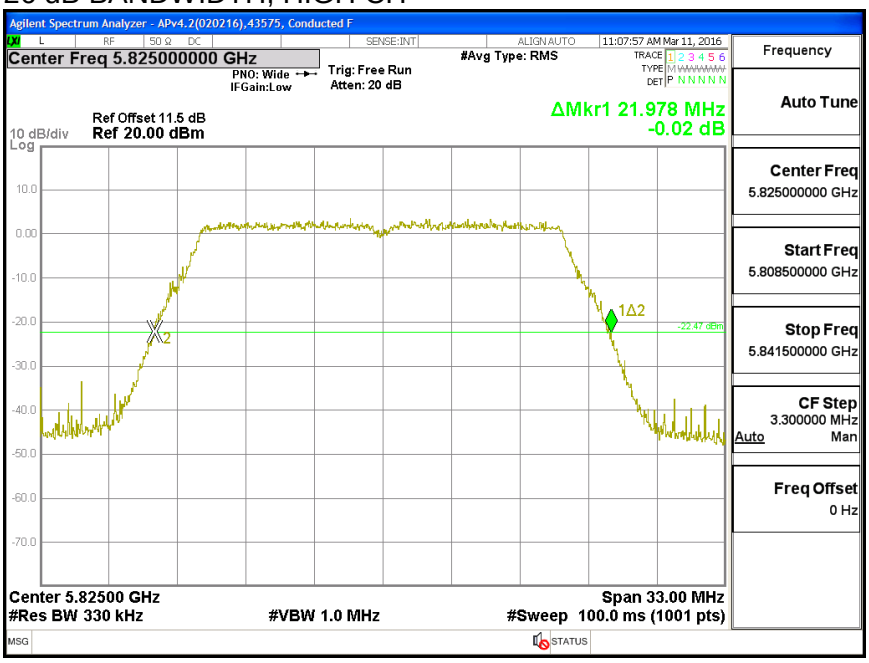
26 dB BANDWIDTH, LOW CH



26 dB BANDWIDTH, MID CH



26 dB BANDWIDTH, HIGH CH



8.34.3. 99% BANDWIDTH

LIMITS

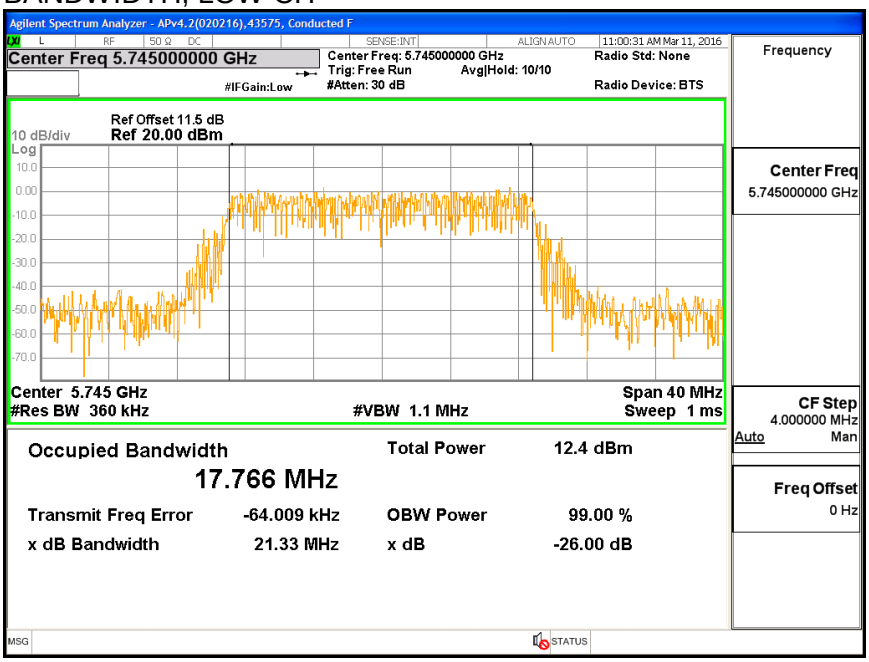
None; for reporting purposes only.

RESULTS

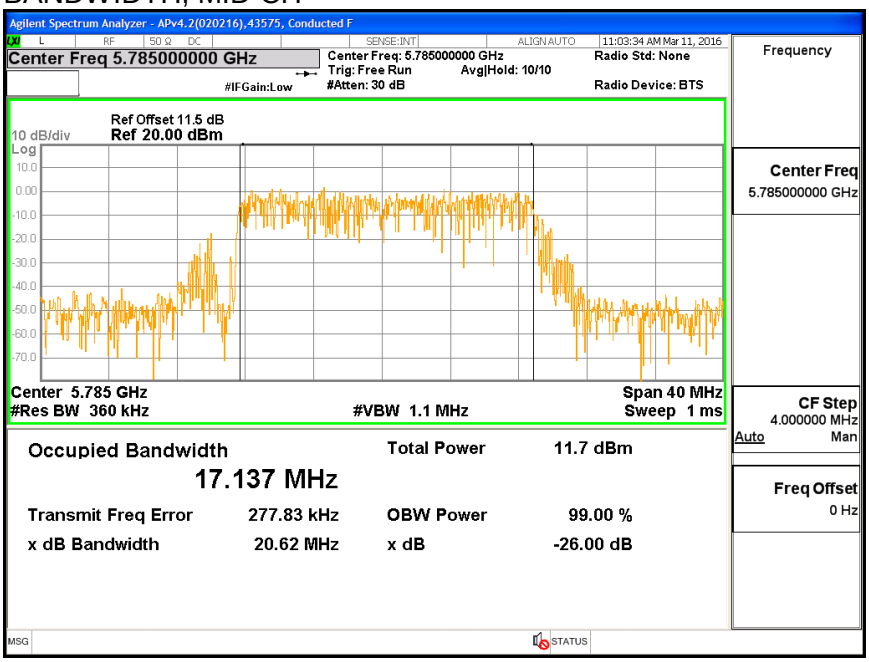
Frequency (MHz)	99% Bandwidth (MHz)
5745	17.766
5785	17.137
5825	18.014

99% BANDWIDTH

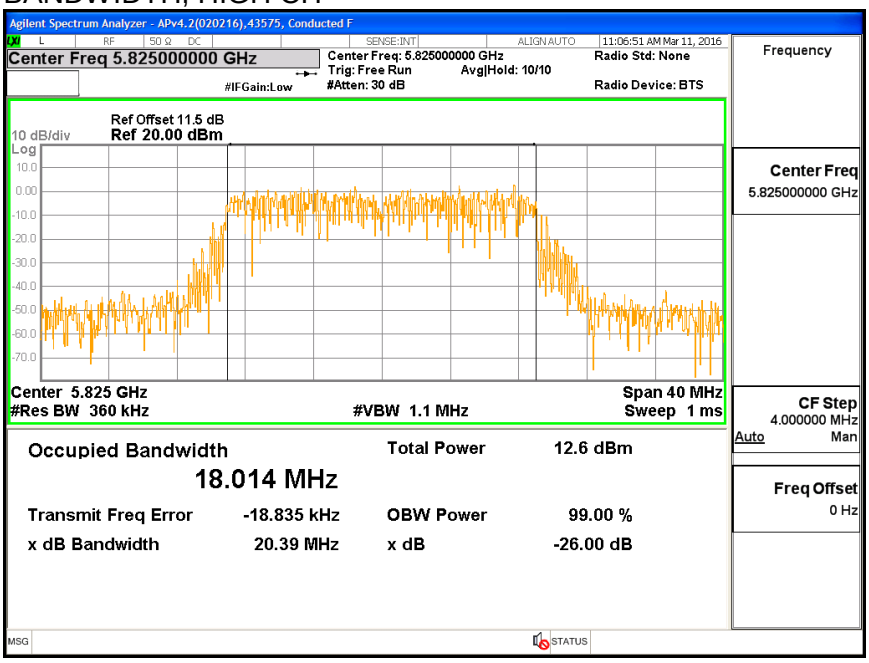
BANDWIDTH, LOW CH



BANDWIDTH, MID CH



BANDWIDTH, HIGH CH



8.34.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	39004	Date:	7/28/16

Channel	Frequency (MHz)	Power (dBm)
Low	5745	16.5
Mid	5785	16.5
High	5825	16.5

8.34.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

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

TEST PROCEDURE

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

ID:	39004	Date:	7/28/16

Antenna Gain and Limit

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

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	16.50	16.50	30.00	-13.50
Mid	5785	16.50	16.50	30.00	-13.50
High	5825	16.50	16.50	30.00	-13.50

8.34.6. PSD

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Antenna Gain and Limits

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

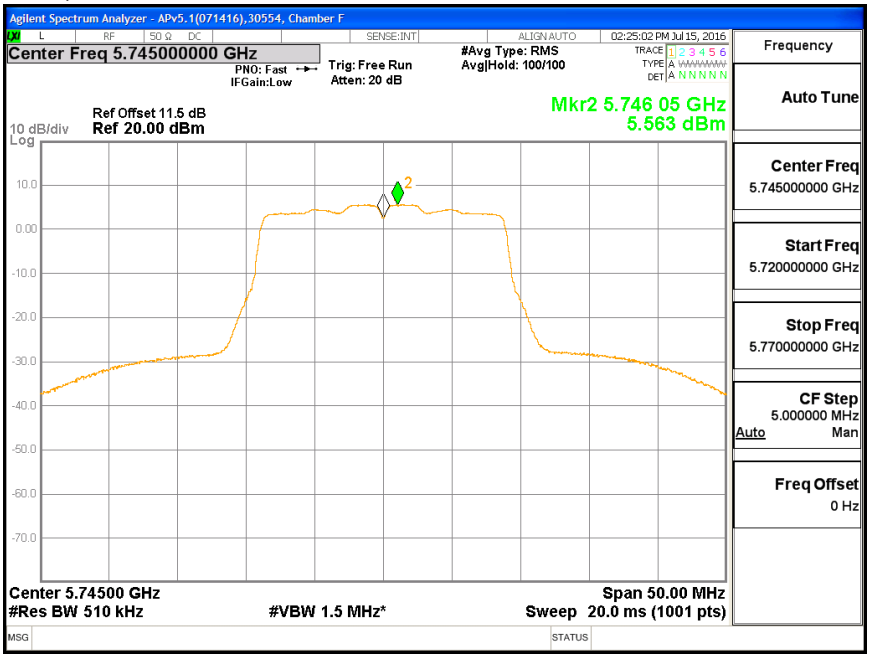
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

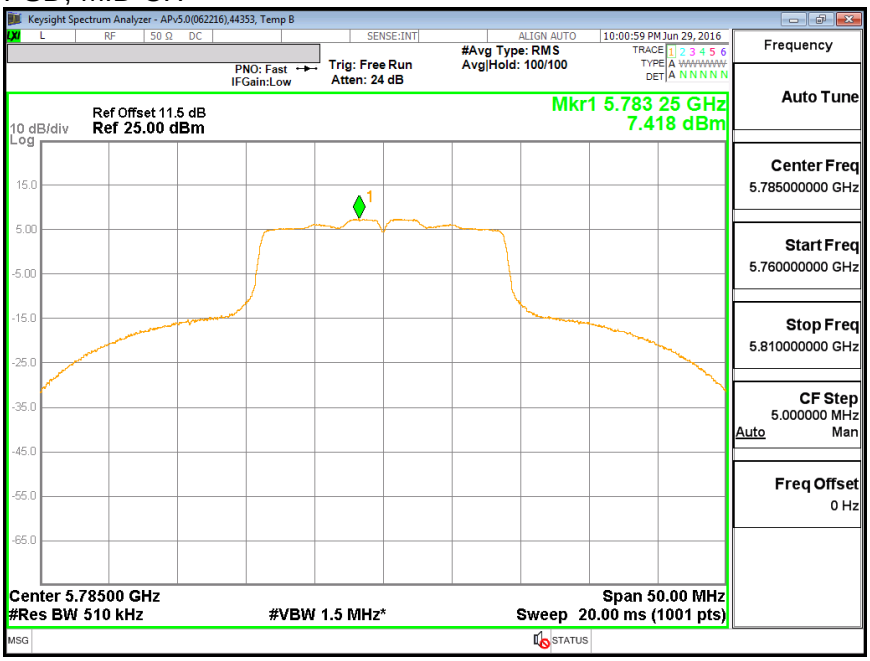
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5745	5.56	5.56	30.00	-24.44
Mid	5785	7.42	7.42	30.00	-22.58
High	5825	5.86	5.86	30.00	-24.14

PSD

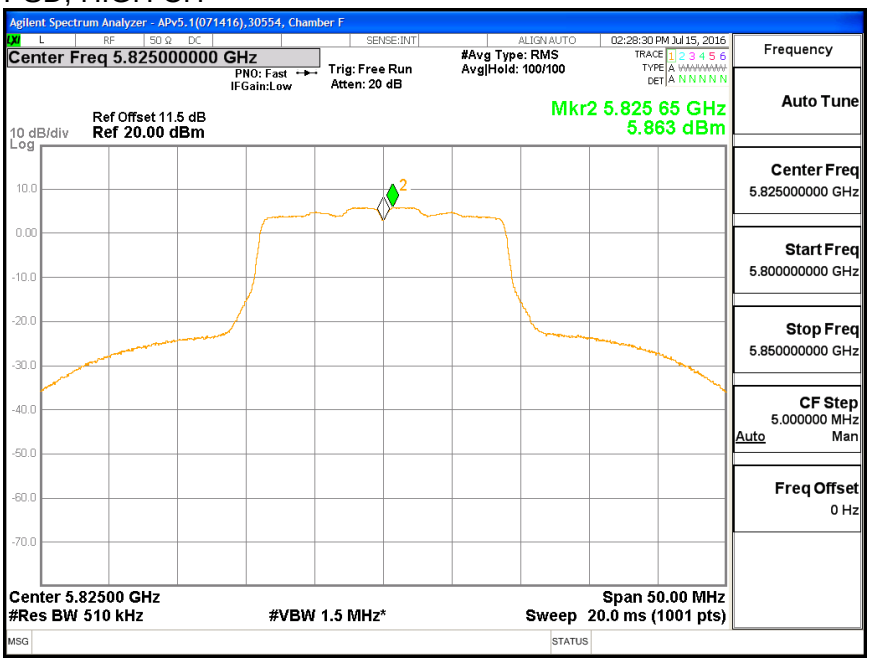
PSD, LOW CH



PSD, MID CH



PSD, HIGH CH



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

8.35.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

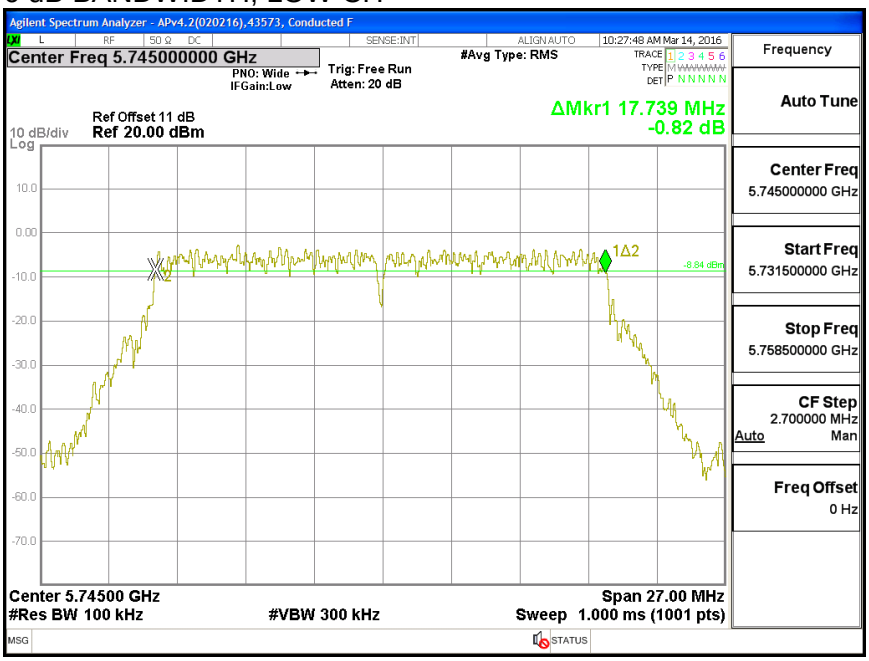
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

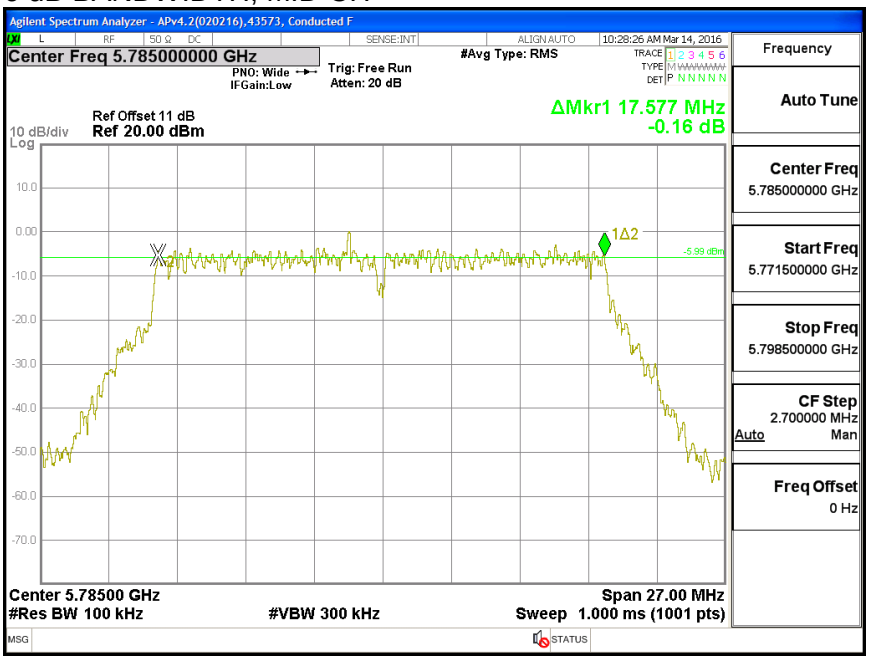
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	17.739	0.5
Mid	5785	17.577	0.5
High	5825	17.766	0.5

6 dB BANDWIDTH

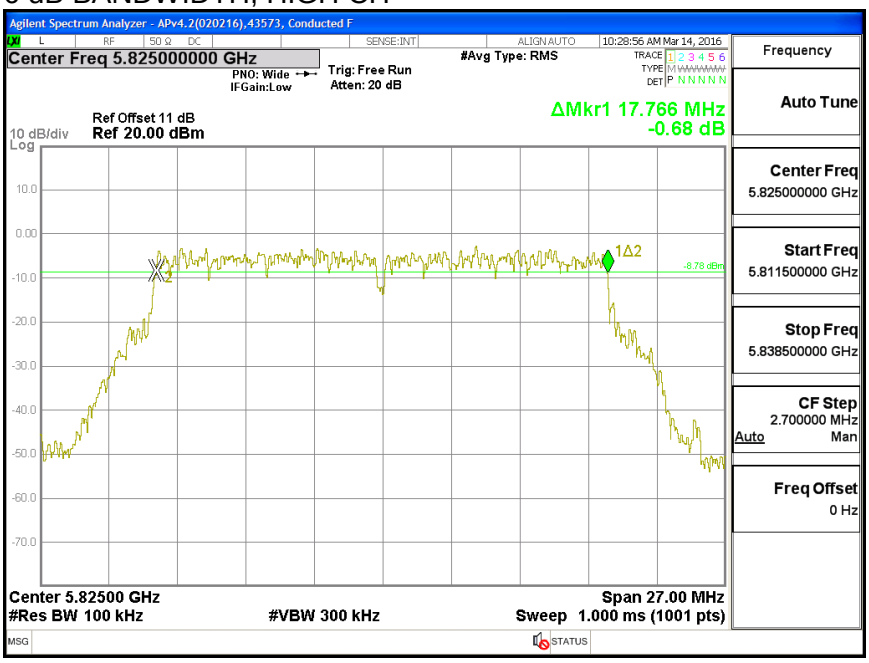
6 dB BANDWIDTH, LOW CH



6 dB BANDWIDTH, MID CH



6 dB BANDWIDTH, HIGH CH



8.35.2. 26 dB BANDWIDTH

LIMITS

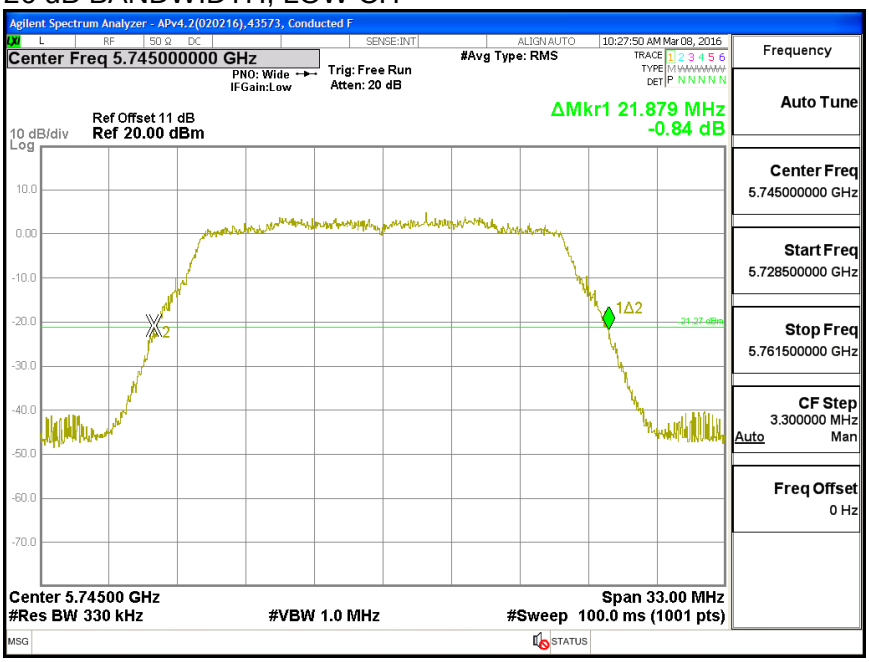
None, for reporting purposes only

RESULTS

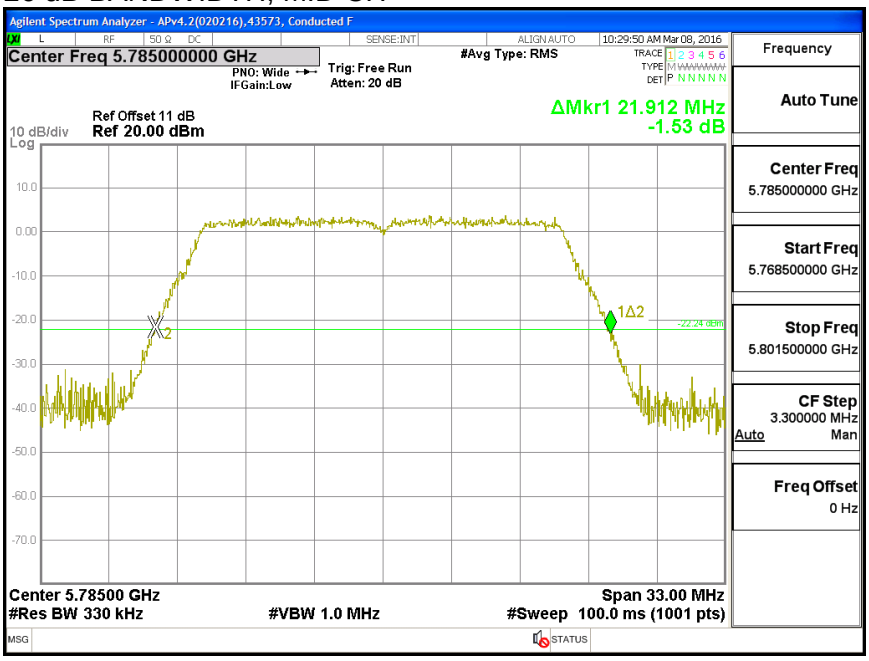
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	21.88
Mid	5785	21.91
High	5825	21.81

26 dB BANDWIDTH

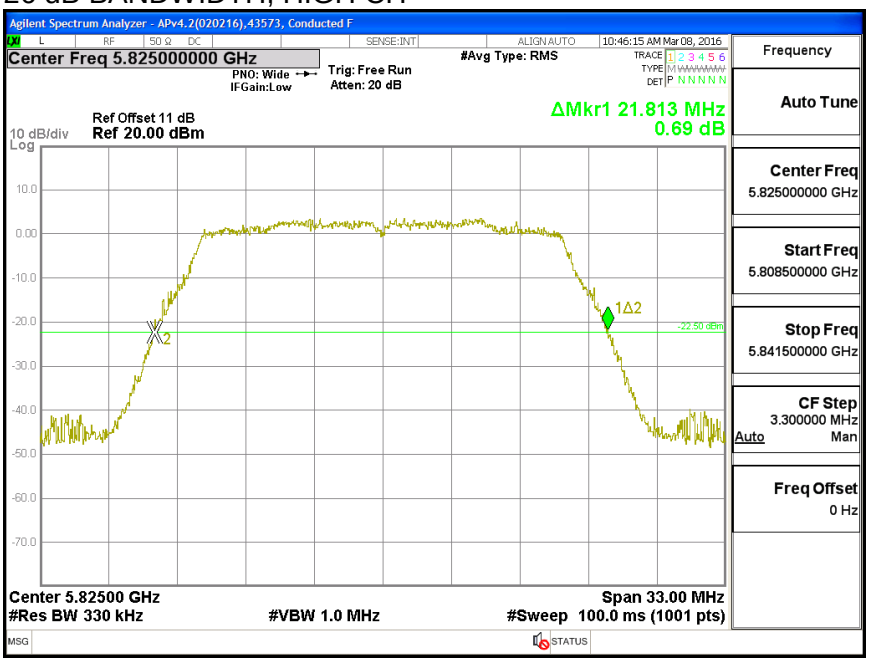
26 dB BANDWIDTH, LOW CH



26 dB BANDWIDTH, MID CH



26 dB BANDWIDTH, HIGH CH



8.35.3. 99% BANDWIDTH

LIMITS

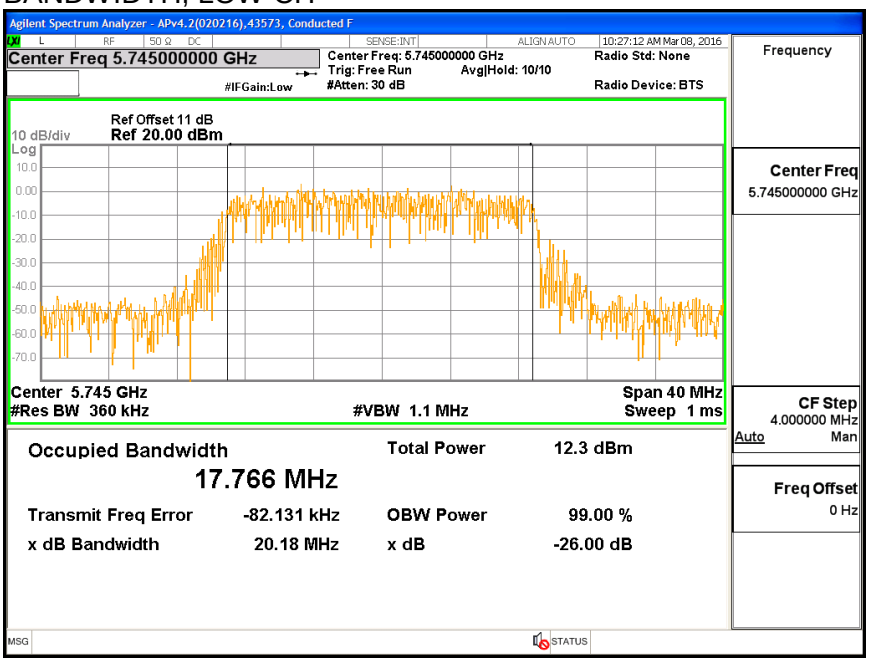
None; for reporting purposes only.

RESULTS

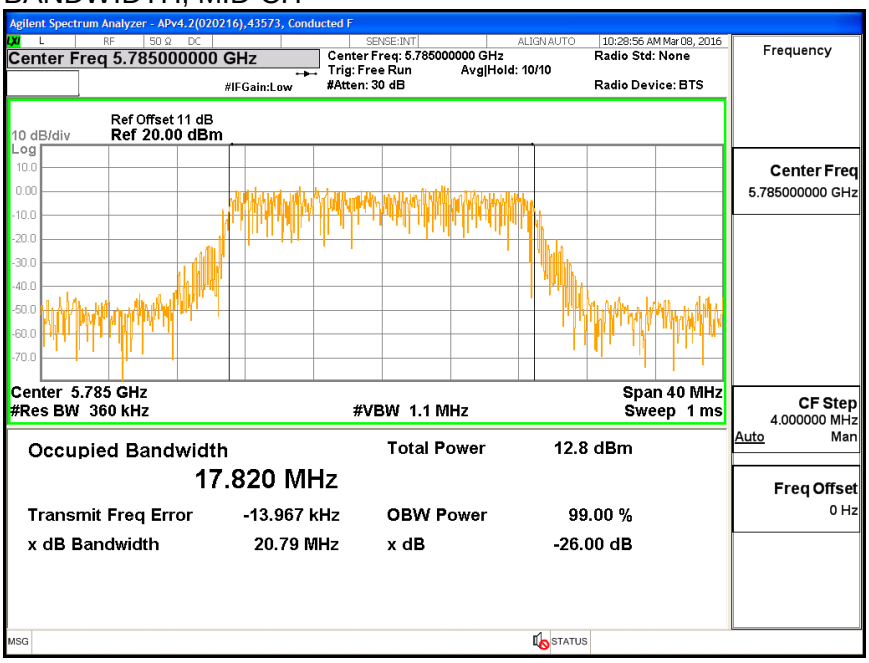
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	17.766
Mid	5785	17.820
High	5825	17.671

99% BANDWIDTH

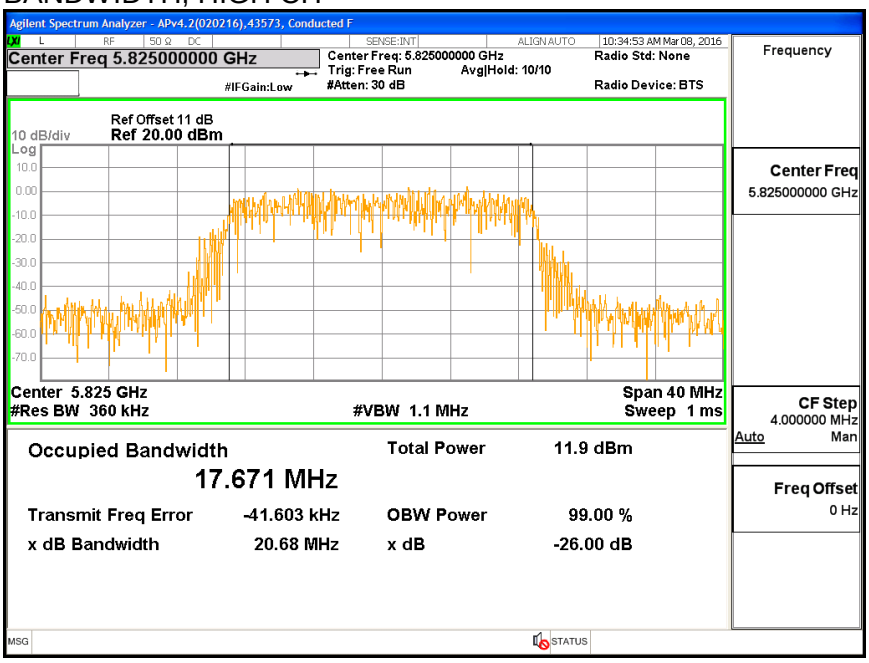
BANDWIDTH, LOW CH



BANDWIDTH, MID CH



BANDWIDTH, HIGH CH



8.35.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	39004	Date:	7/28/16

Channel	Frequency (MHz)	Power (dBm)
Low	5745	19.43
Mid	5785	20.50
High	5825	19.46

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.

TEST PROCEDURE

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

ID:	39004	Date:	7/28/16

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	-1.52	30.00
Mid	5785	-1.52	30.00
High	5825	-1.52	30.00

Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	19.43	19.43	30.00	-10.57
Mid	5785	20.50	20.50	30.00	-9.50
High	5825	19.46	19.46	30.00	-10.54

8.35.6. PSD

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5745	-1.52	30.00
Mid	5785	-1.52	30.00
High	5825	-1.52	30.00

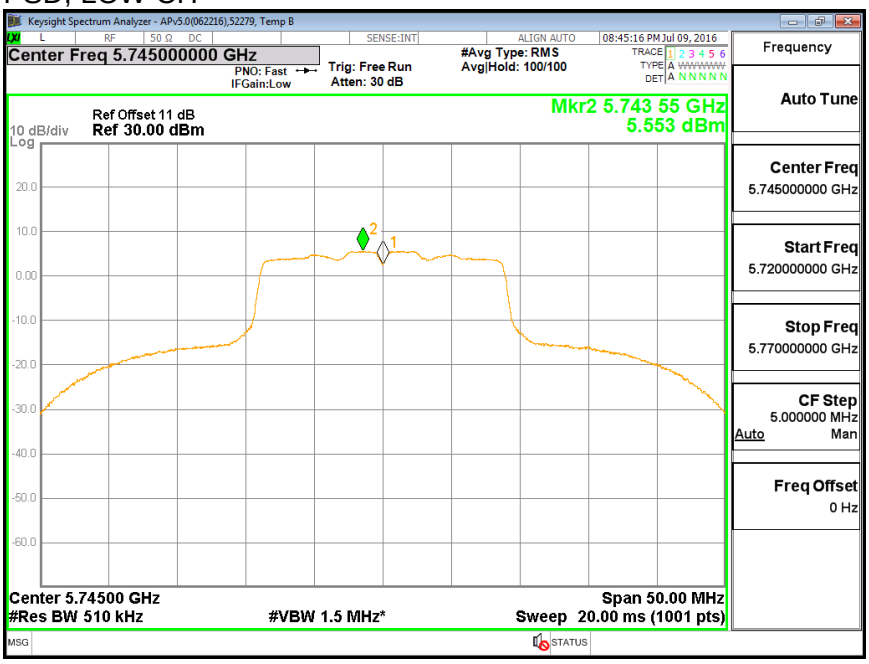
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

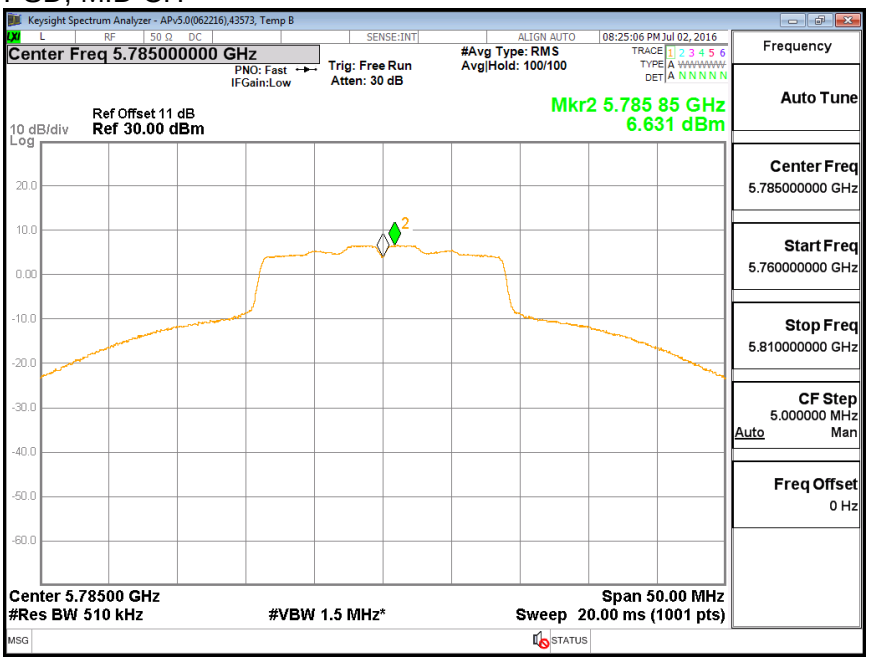
Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5745	5.55	5.55	30.00	-24.45
Mid	5785	6.63	6.63	30.00	-23.37
High	5825	5.57	5.57	30.00	-24.43

PSD

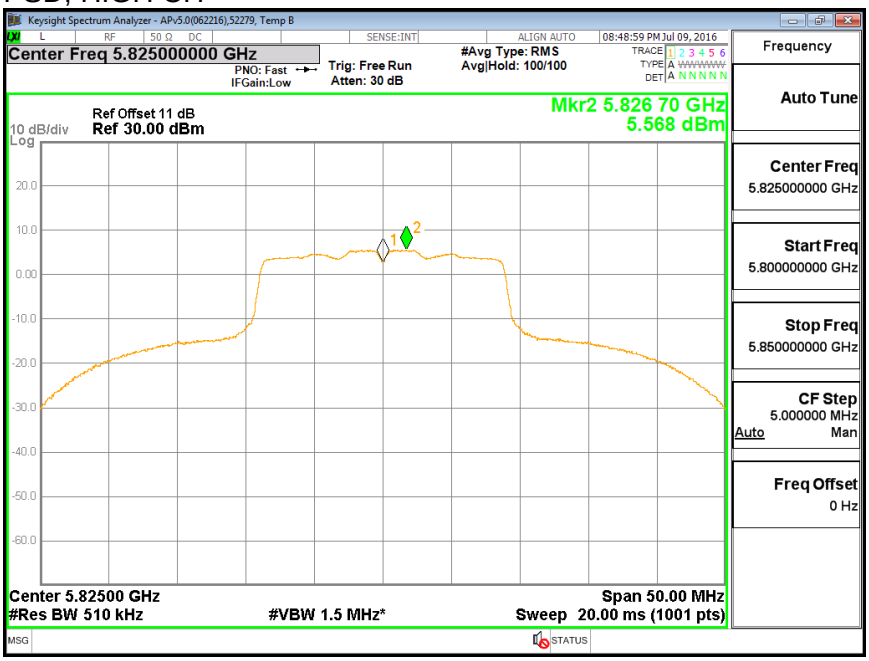
PSD, LOW CH



PSD, MID CH



PSD, HIGH CH



8.36. 802.11n HT20 2Tx CDD MODE IN THE 5.8 GHz BAND

8.36.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

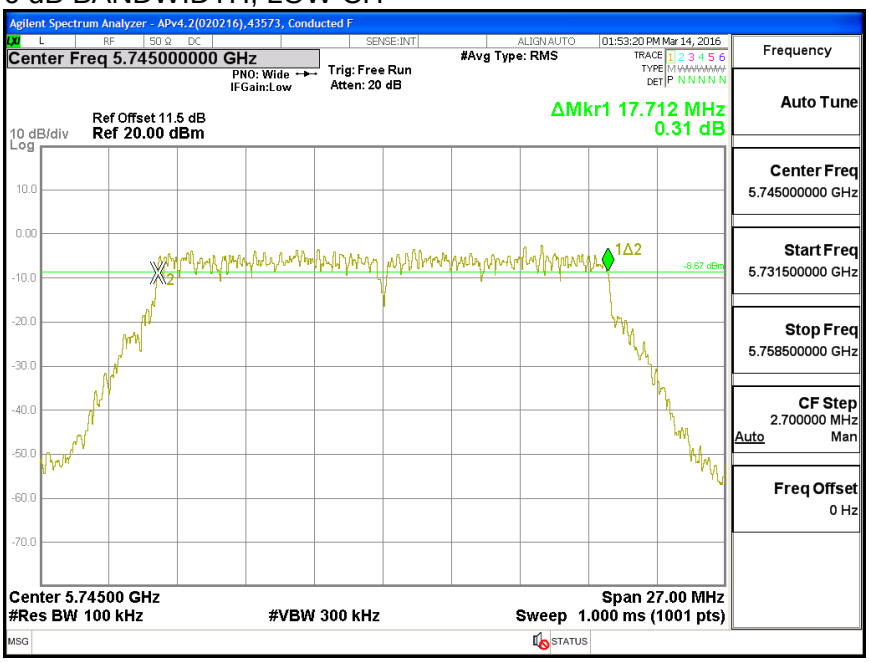
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

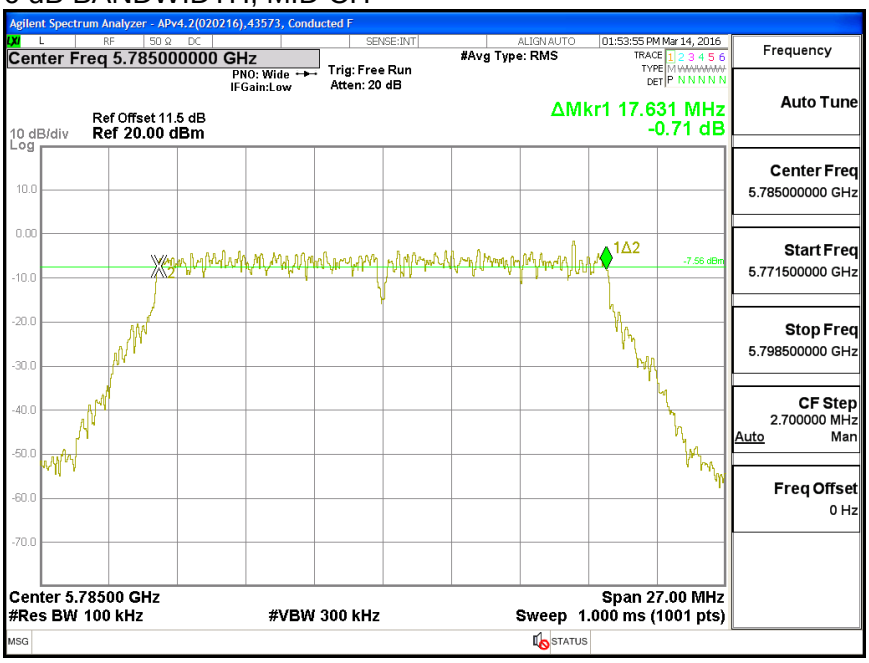
Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	5745	17.712	17.658	0.5
Mid	5785	17.631	17.550	0.5
High	5825	17.577	17.550	0.5

6 dB BANDWIDTH, CHAIN 0

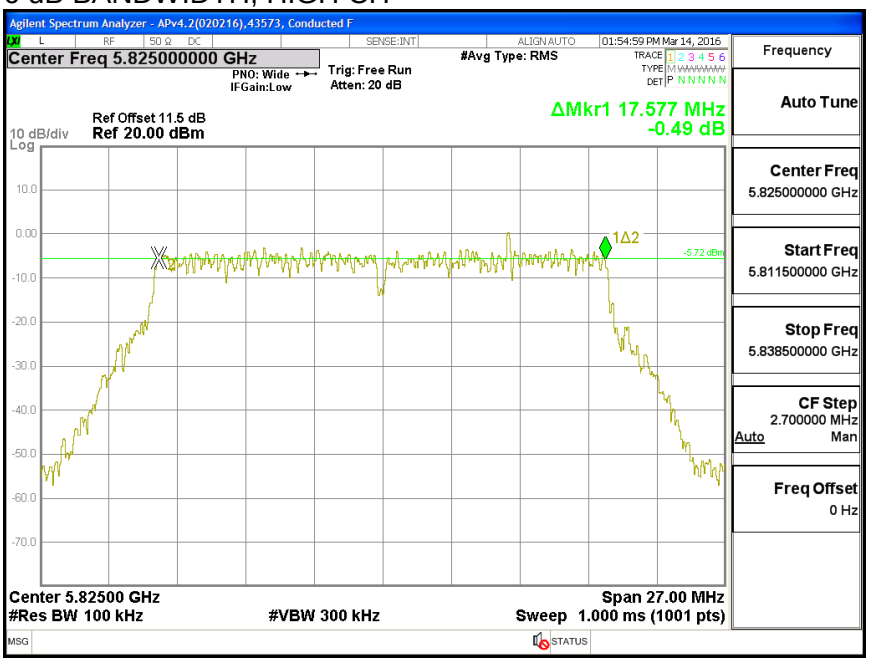
6 dB BANDWIDTH, LOW CH



6 dB BANDWIDTH, MID CH

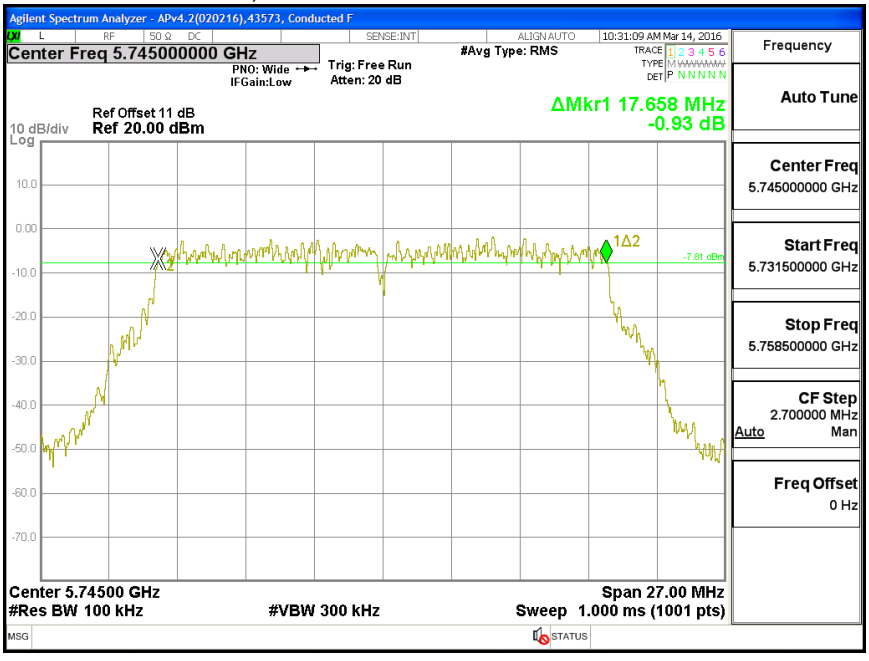


6 dB BANDWIDTH, HIGH CH

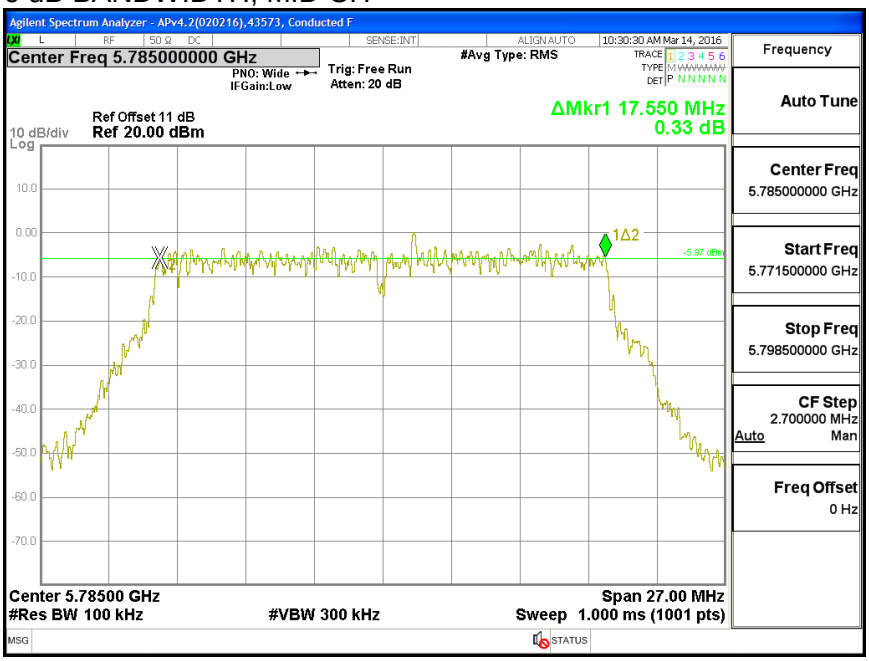


6 dB BANDWIDTH, CHAIN 1

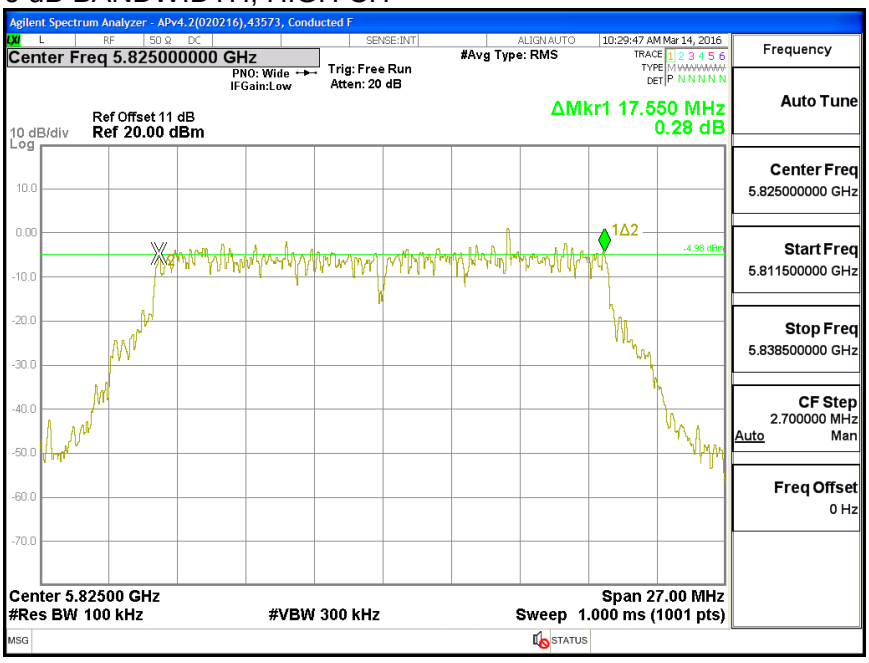
6 dB BANDWIDTH, LOW CH



6 dB BANDWIDTH, MID CH



6 dB BANDWIDTH, HIGH CH



8.36.2. 26 dB BANDWIDTH

LIMITS

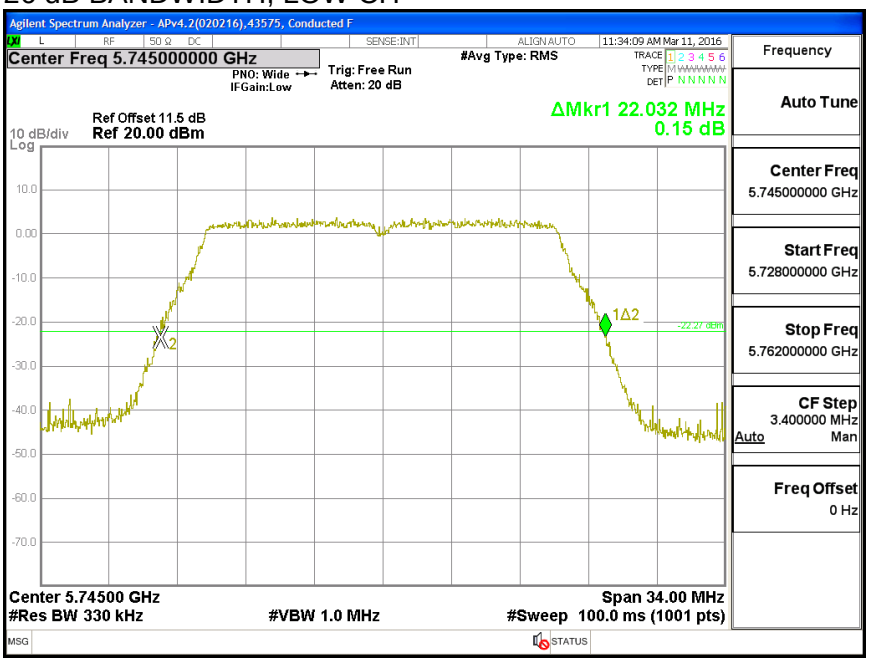
None, for reporting purposes only.

RESULTS

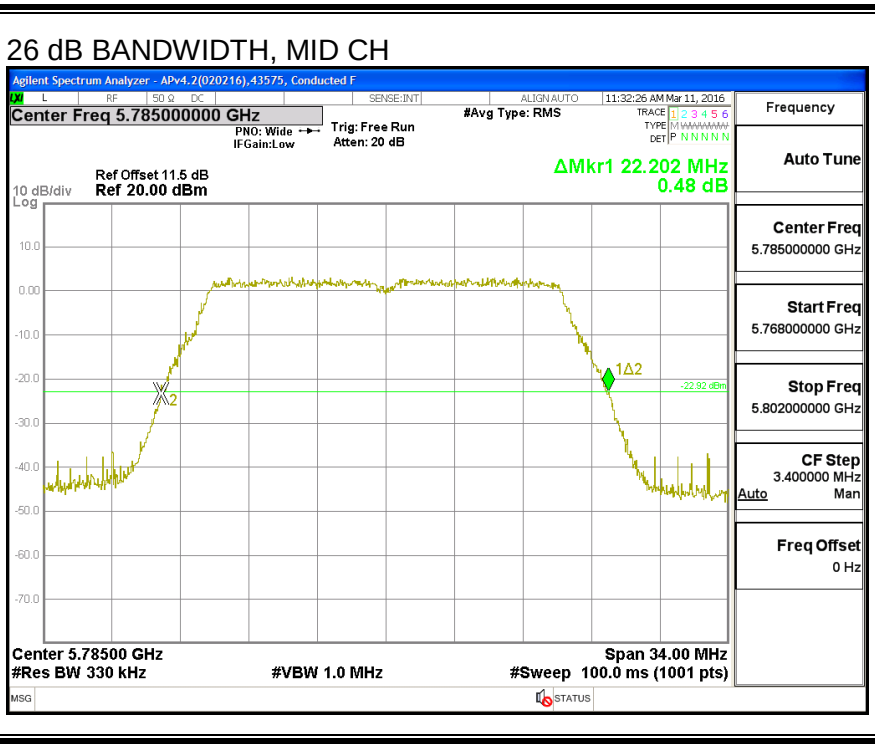
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5745	22.03	21.58
Mid	5785	22.20	21.65
High	5825	21.98	21.55

26 dB BANDWIDTH, CHAIN 0

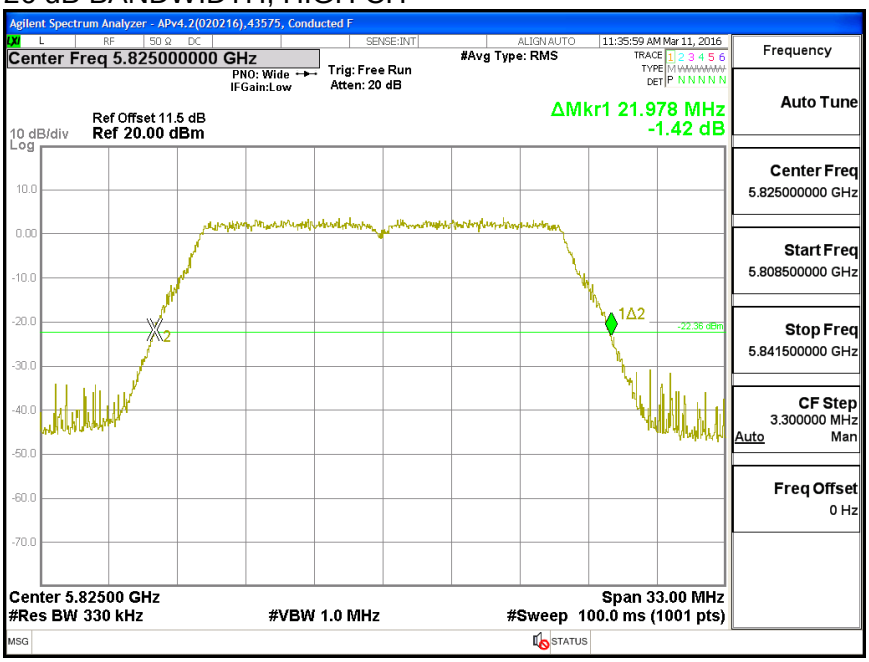
26 dB BANDWIDTH, LOW CH



26 dB BANDWIDTH, MID CH

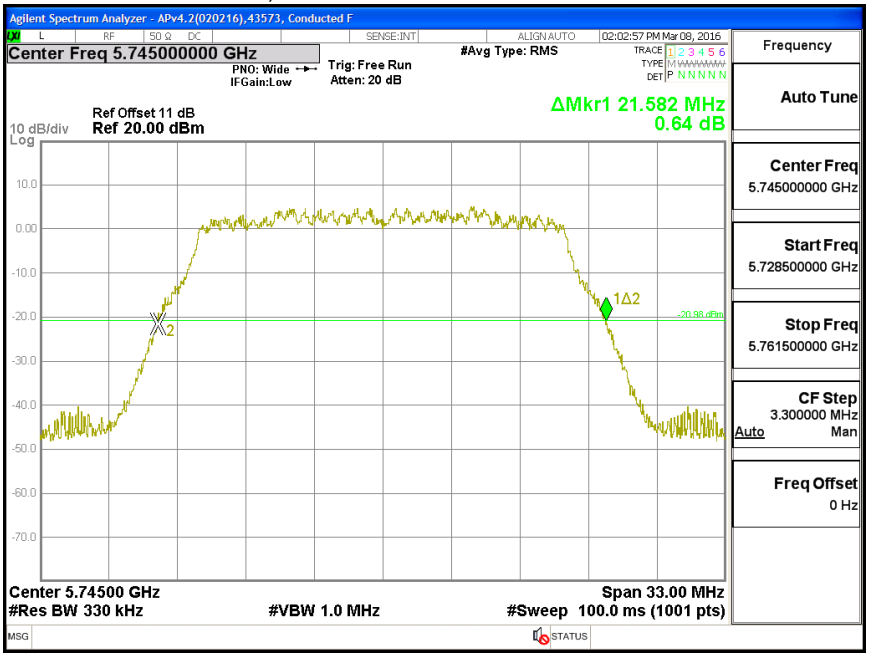


26 dB BANDWIDTH, HIGH CH

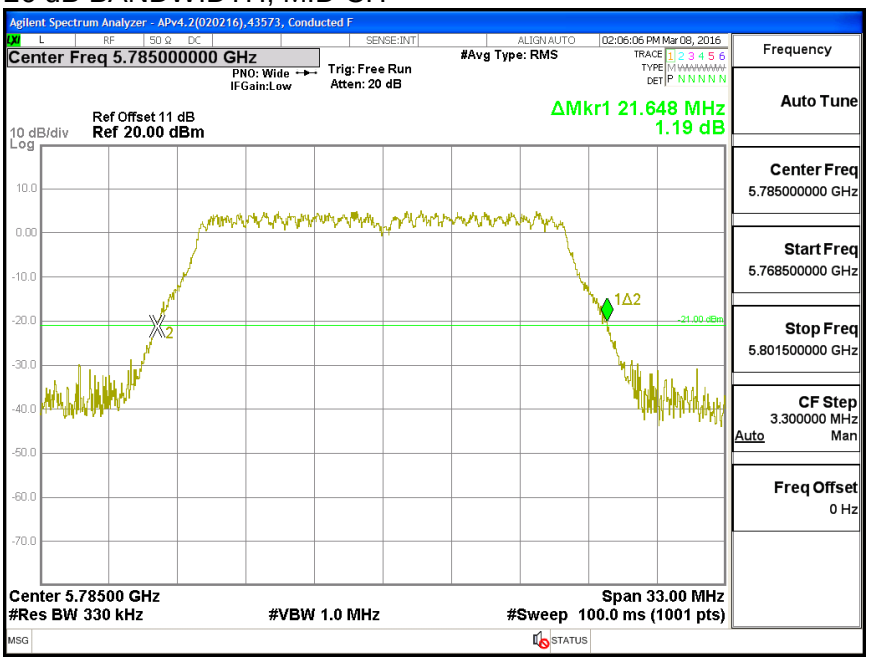


26 dB BANDWIDTH, CHAIN 1

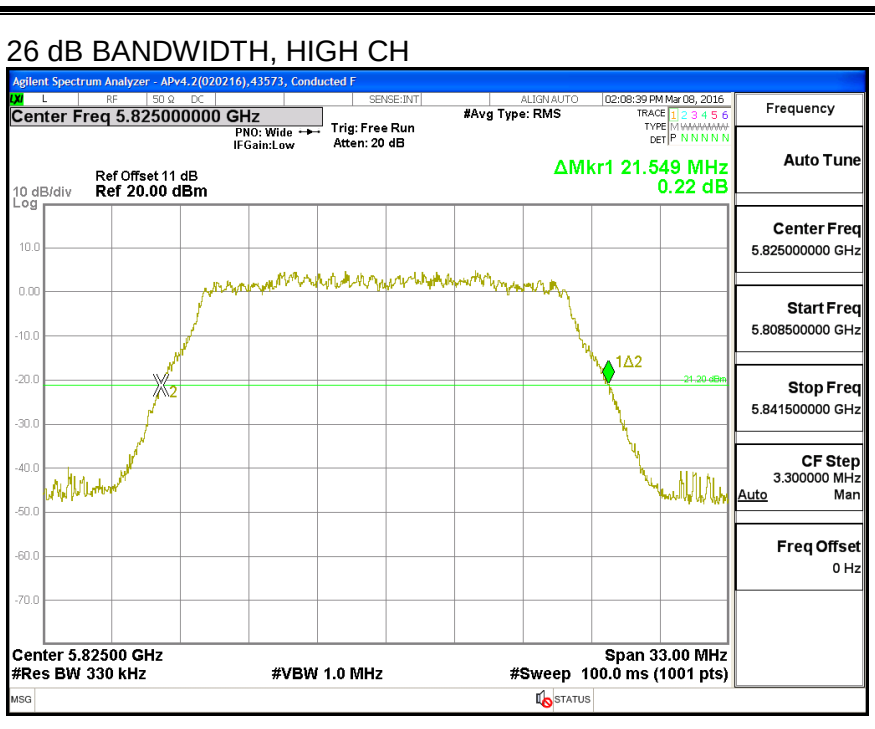
26 dB BANDWIDTH, LOW CH



26 dB BANDWIDTH, MID CH



26 dB BANDWIDTH, HIGH CH



8.36.3. 99% BANDWIDTH

LIMITS

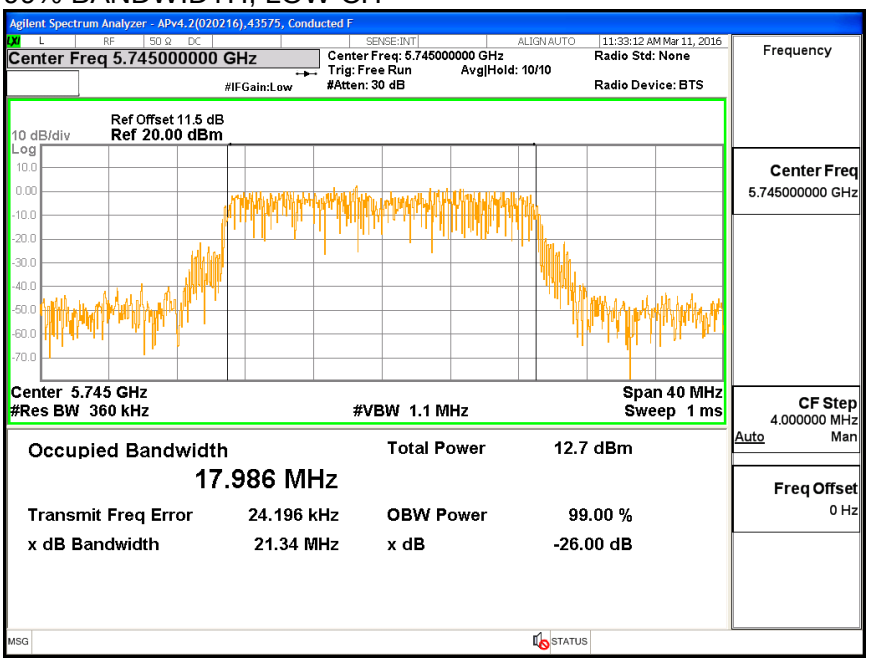
None; for reporting purposes only.

RESULTS

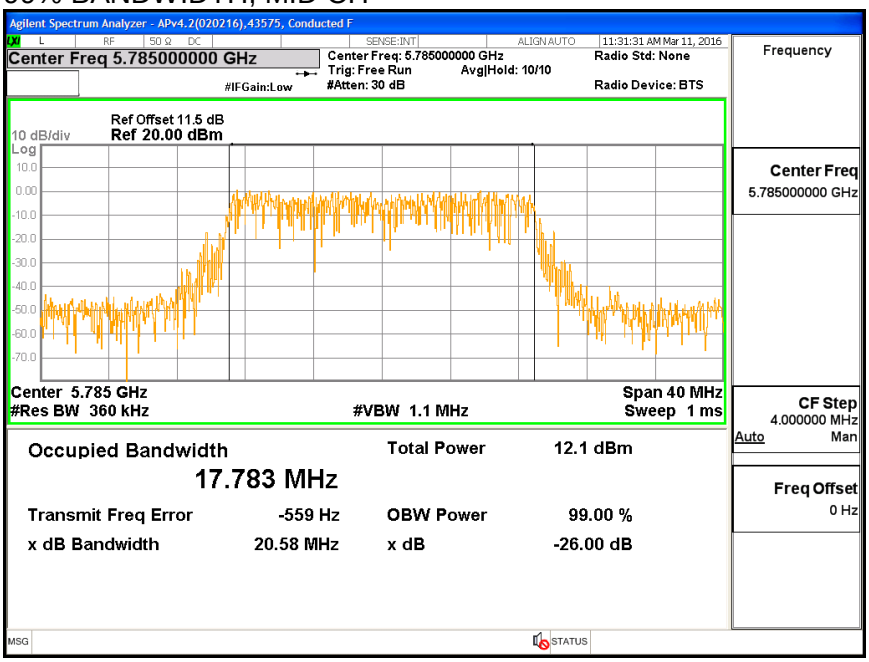
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5745	17.986	17.632
Mid	5785	17.783	17.787
High	5825	17.727	17.610

99% BANDWIDTH, CHAIN 0

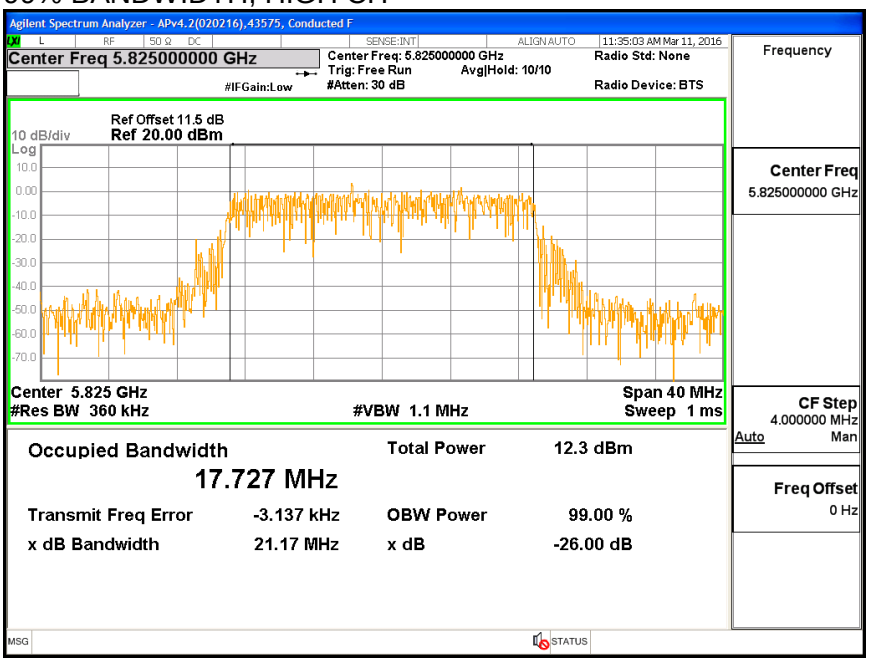
99% BANDWIDTH, LOW CH



99% BANDWIDTH, MID CH

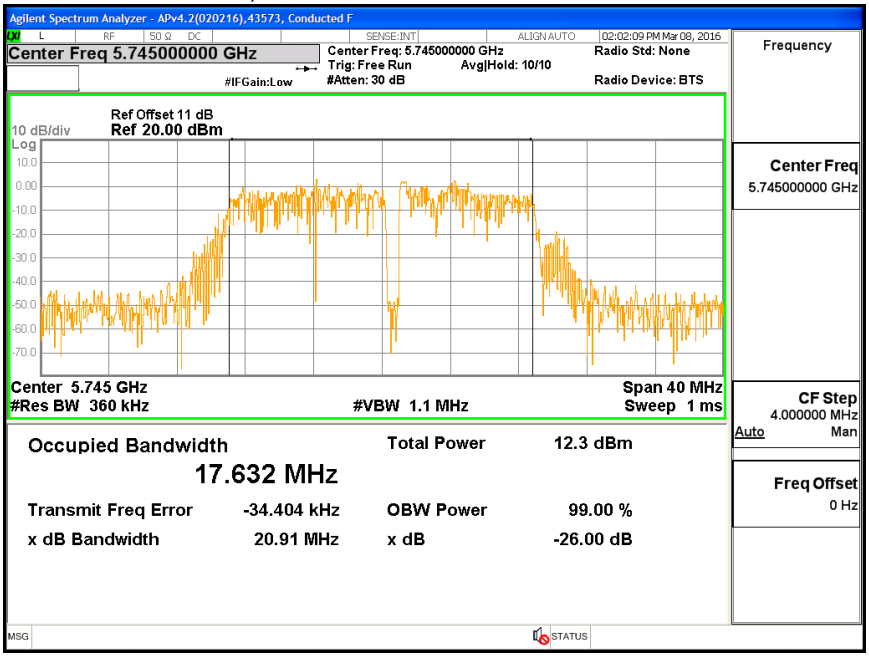


99% BANDWIDTH, HIGH CH

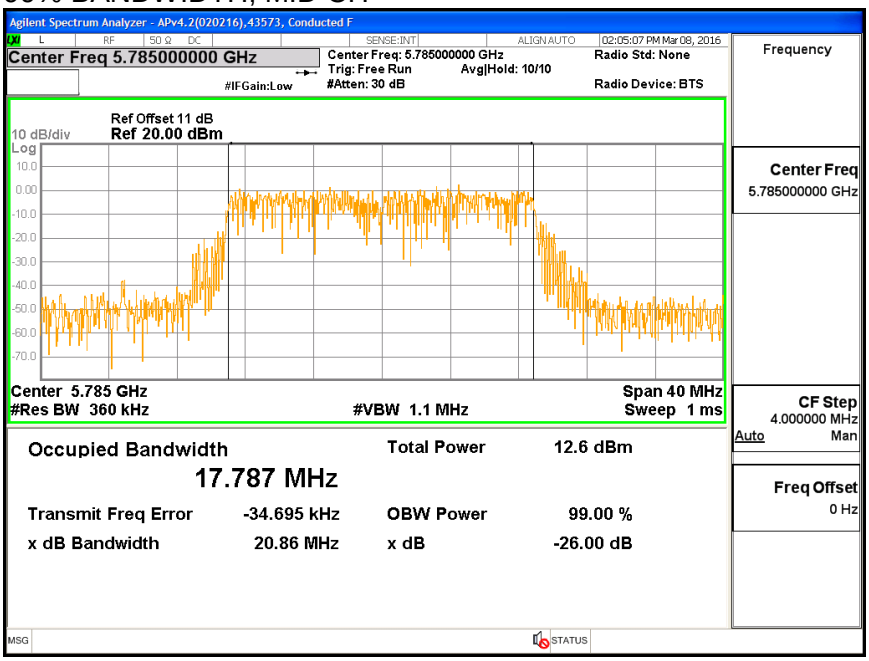


99% BANDWIDTH, CHAIN 1

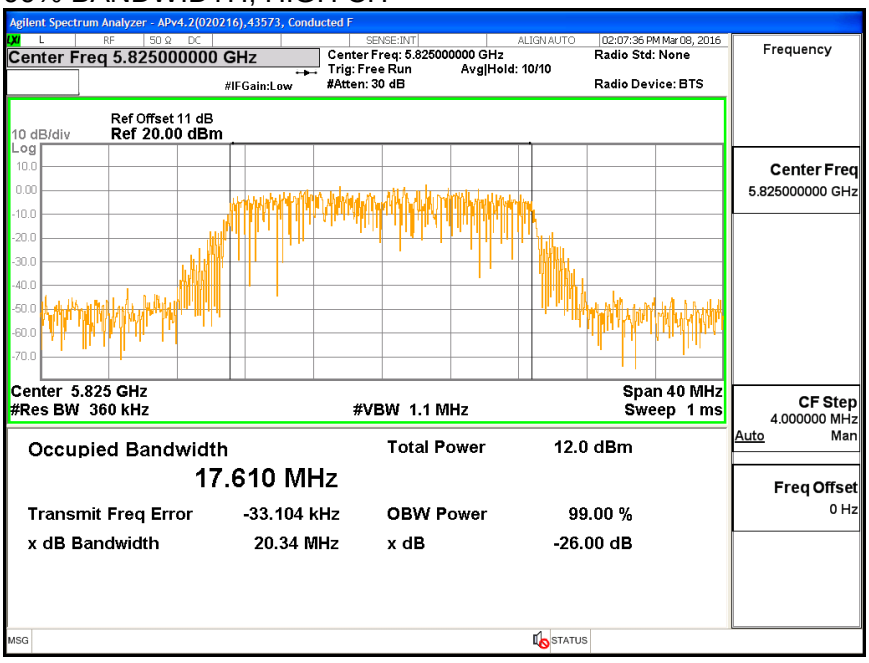
99% BANDWIDTH, LOW CH



99% BANDWIDTH, MID CH



99% BANDWIDTH, HIGH CH



8.36.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	39004	Date:	7/28/16

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5745	16.50	19.48	21.25
Mid	5785	16.50	20.22	21.76
High	5825	16.50	19.42	21.21

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.

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 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
0.22	-1.52	-0.56

RESULTS

ID:	39004	Date:	7/28/16

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	-0.56	30.00
Mid	5785	-0.56	30.00
High	5825	-0.56	30.00

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	16.50	19.48	21.25	30.00	-8.75
Mid	5785	16.50	20.22	21.76	30.00	-8.24
High	5825	16.50	19.42	21.21	30.00	-8.79

8.36.6. PSD

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
0.22	-1.52	2.40

RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5745	2.40	30.00
Mid	5785	2.40	30.00
High	5825	2.40	30.00

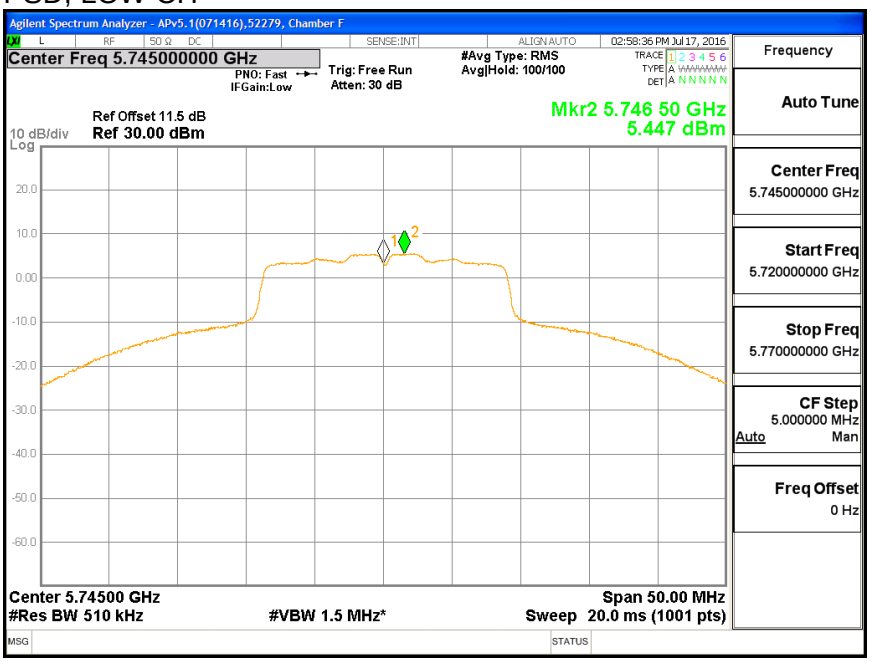
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

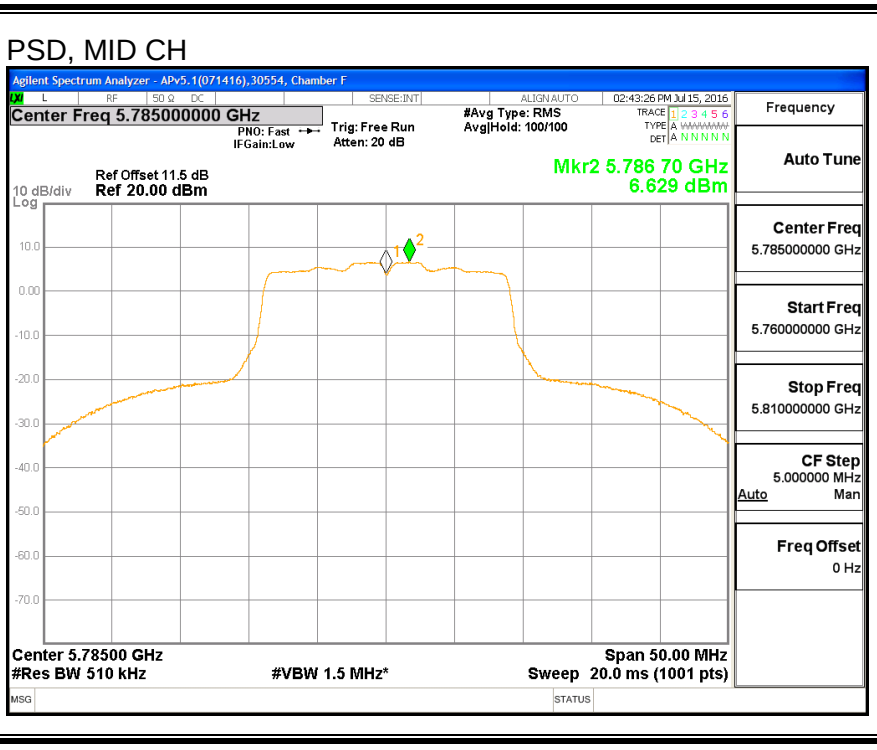
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5745	5.45	5.77	8.62	30.00	-21.38
Mid	5785	6.63	5.36	9.05	30.00	-20.95
High	5825	5.69	5.57	8.64	30.00	-21.36

PSD, CHAIN 0

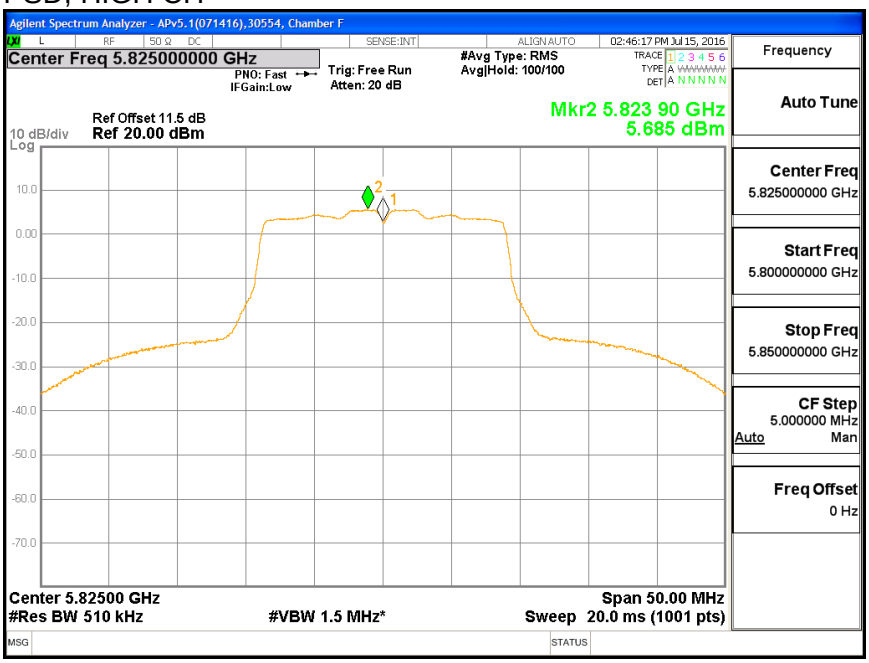
PSD, LOW CH



PSD, MID CH

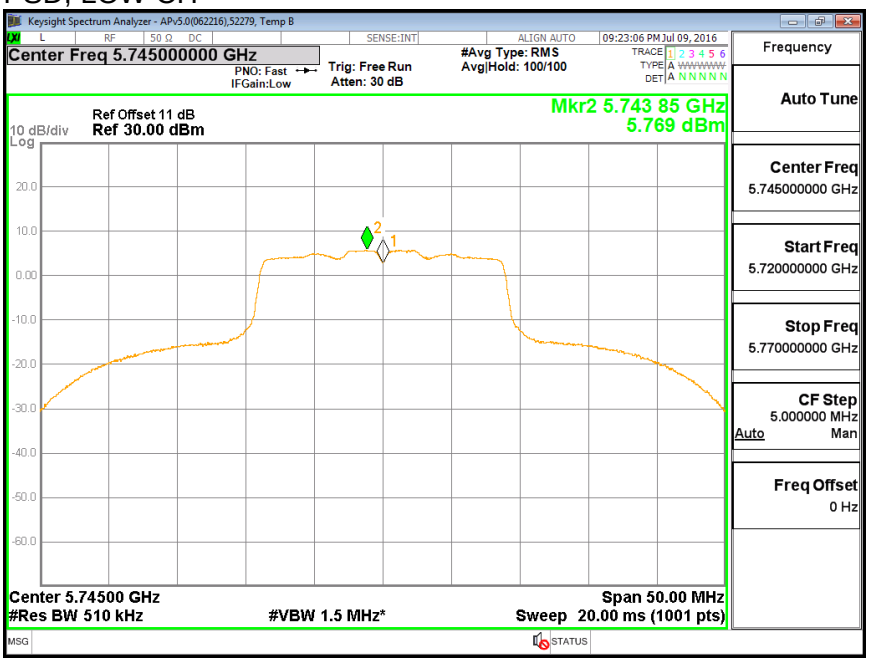


PSD, HIGH CH

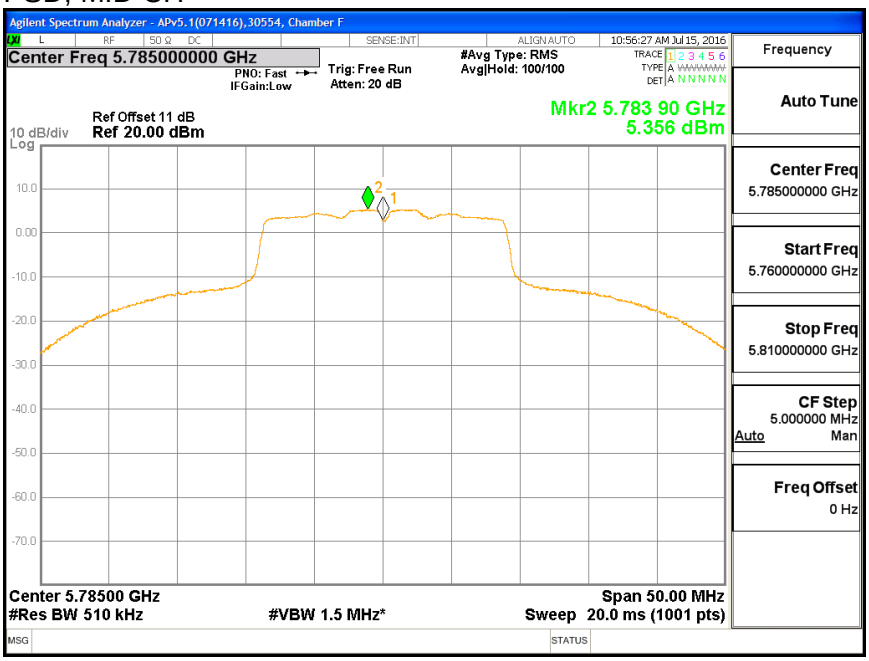


PSD, CHAIN 1

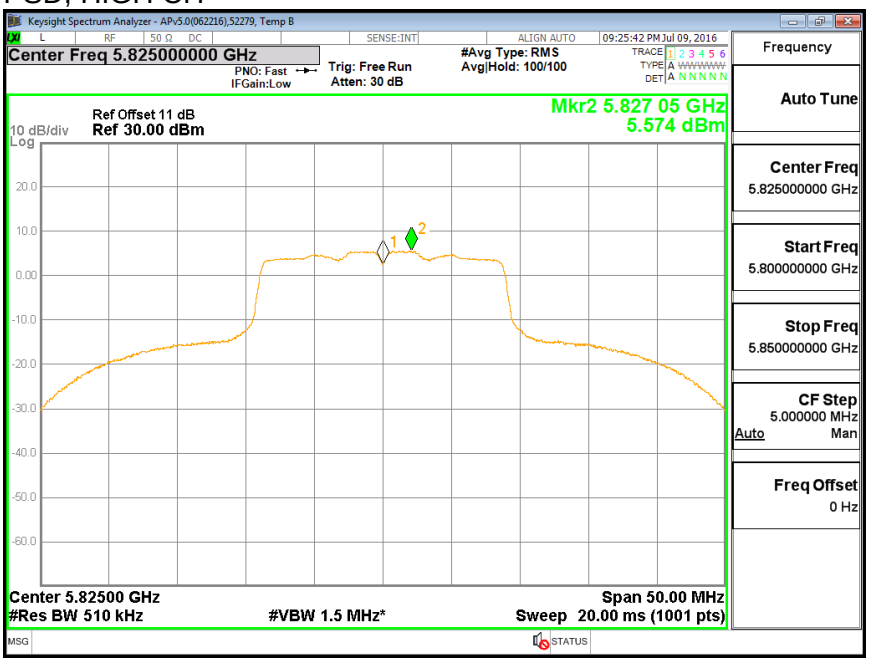
PSD, LOW CH



PSD, MID CH



PSD, HIGH CH



8.37. 802.11n HT40 CHAIN 0 MODE IN THE 5.8 GHz BAND

8.37.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

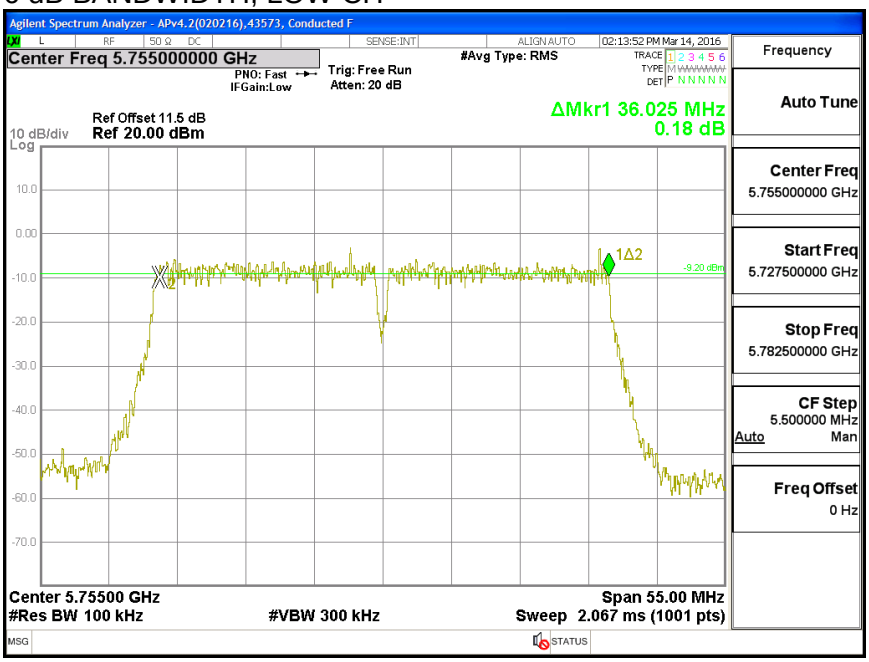
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

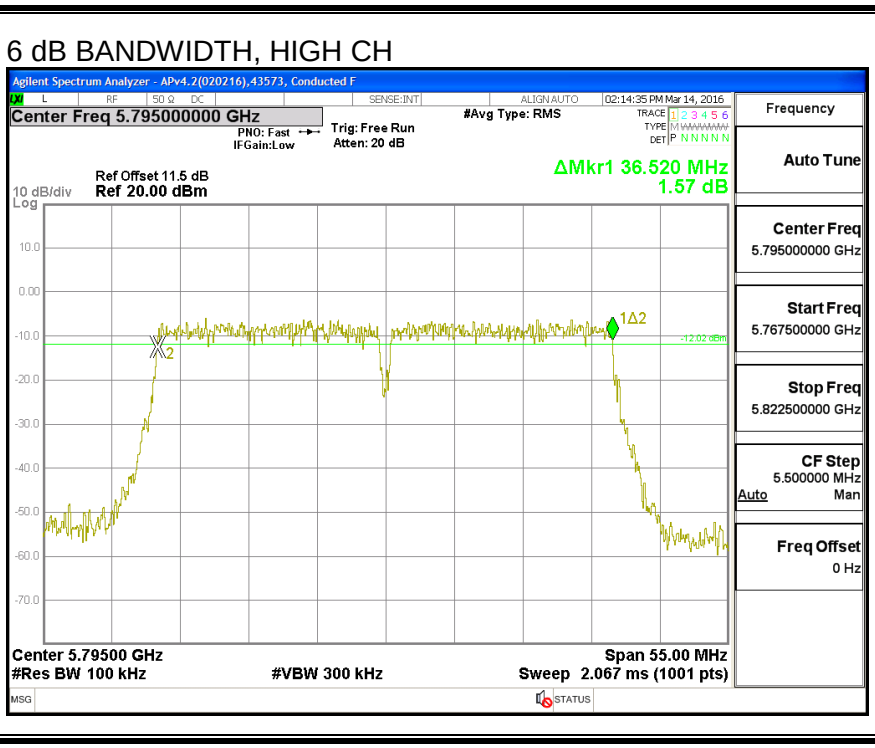
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	36.025	0.5
High	5795	36.520	0.5

6 dB BANDWIDTH

6 dB BANDWIDTH, LOW CH



6 dB BANDWIDTH, HIGH CH



8.37.2. 26 dB BANDWIDTH

LIMITS

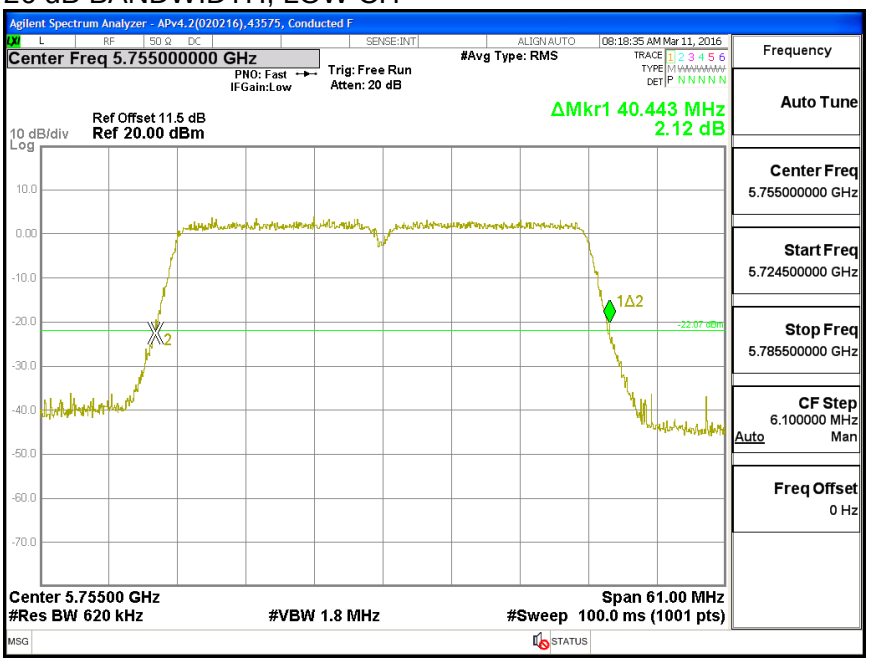
None, for reporting purposes only.

RESULTS

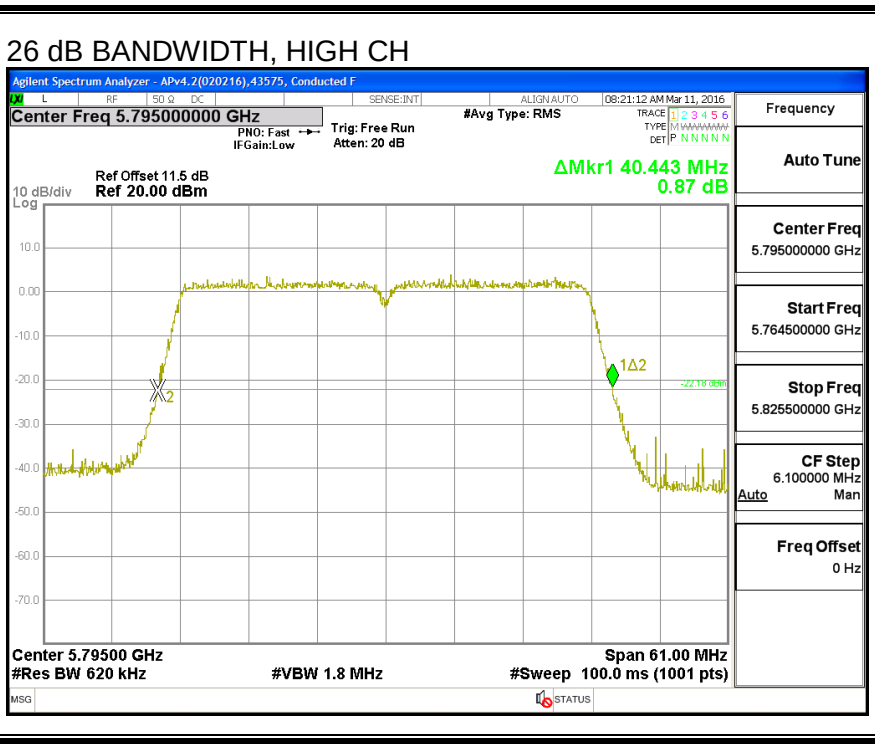
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5755	40.44
High	5795	40.44

26 dB BANDWIDTH

26 dB BANDWIDTH, LOW CH



26 dB BANDWIDTH, HIGH CH



8.37.3. 99% BANDWIDTH

LIMITS

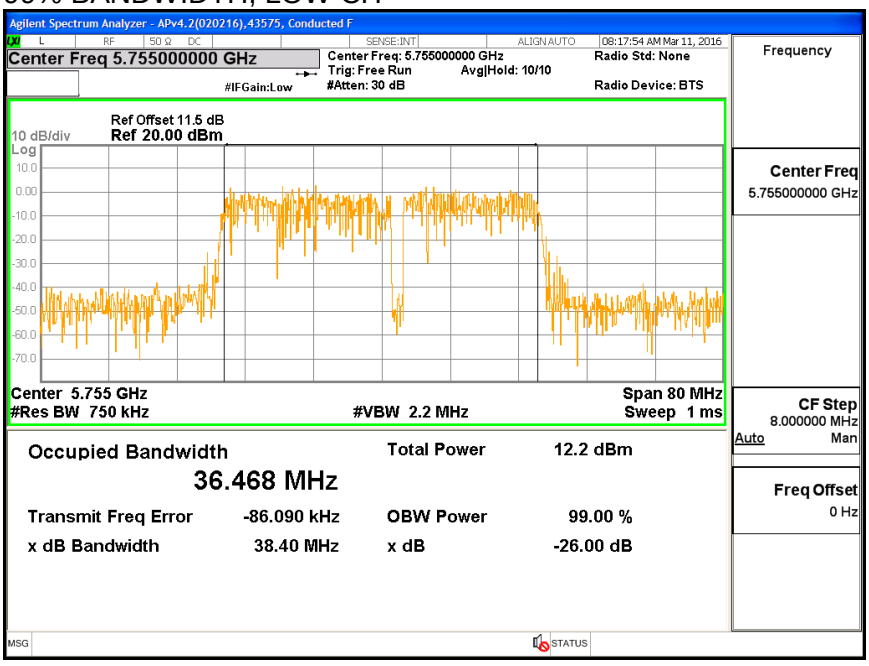
None; for reporting purposes only.

RESULTS

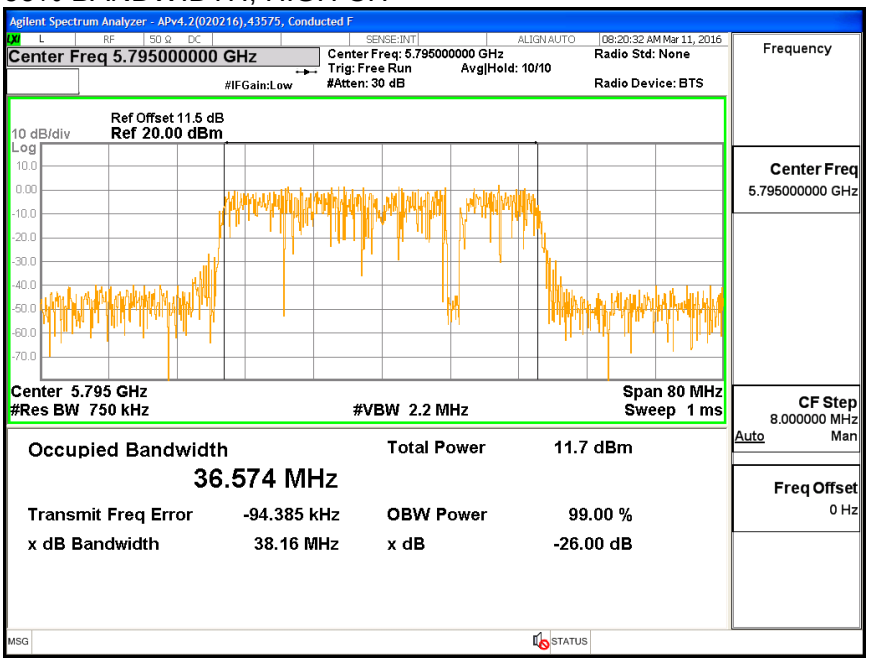
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	36.468
High	5795	36.574

99% BANDWIDTH

99% BANDWIDTH, LOW CH



99% BANDWIDTH, HIGH CH



8.37.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	39004	Date:	7/28/16

Channel	Frequency (MHz)	Power (dBm)
Low	5755	16.5
High	5795	16.44

8.37.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

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

TEST PROCEDURE

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

ID:	39004	Date:	7/28/16

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	0.22	30.00
High	5795	0.22	30.00

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	16.5	16.50	30.00	-13.50
High	5795	16.44	16.44	30.00	-13.56

8.37.6. PSD

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5755	0.22	30.00
High	5795	0.22	30.00

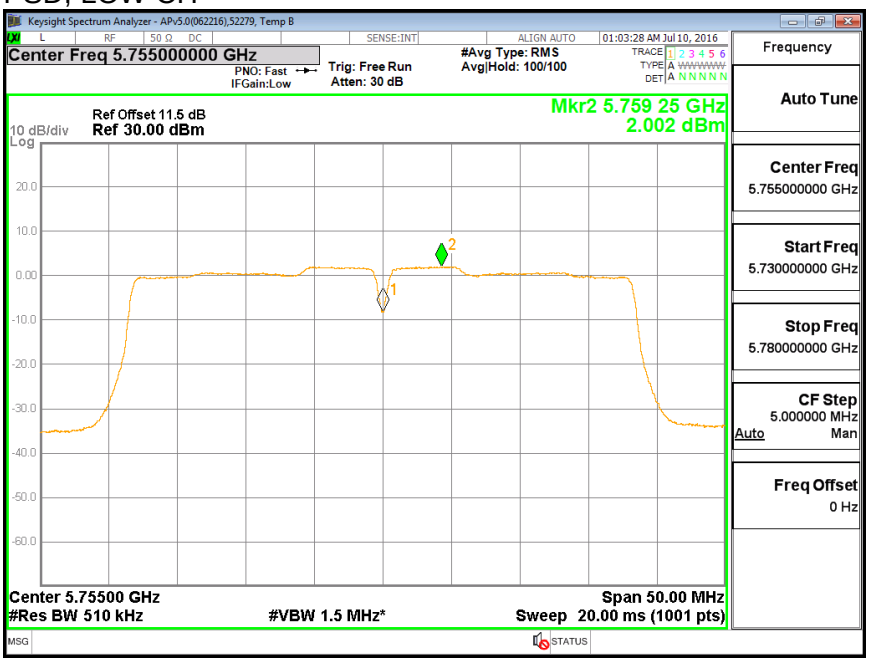
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

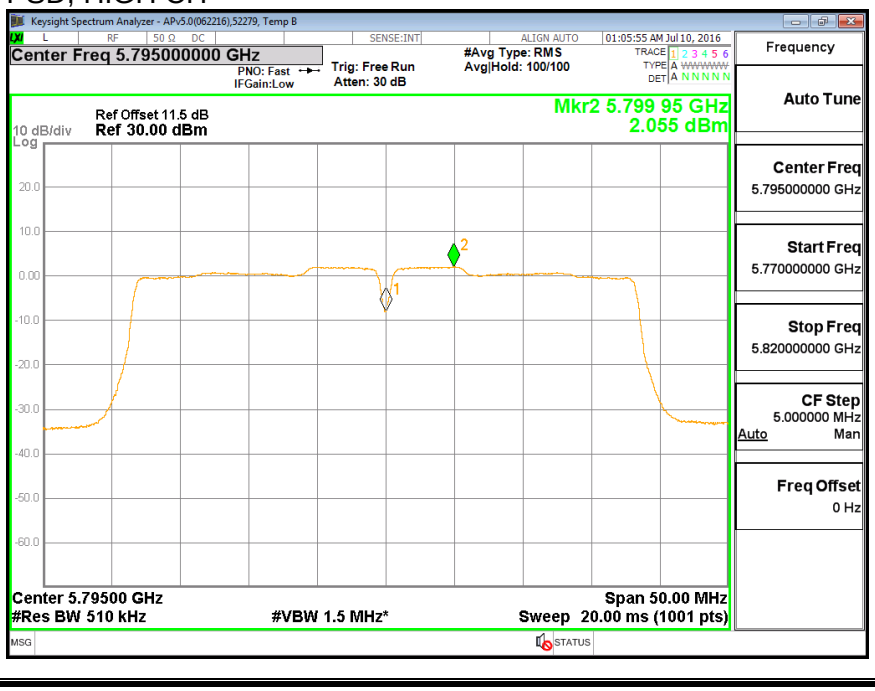
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5755	2.002	2.00	30.00	-28.00
High	5795	2.055	2.06	30.00	-27.95

PSD

PSD, LOW CH



PSD, HIGH CH



8.38. 802.11n HT40 CHAIN 1 MODE IN THE 5.8 GHz BAND

8.38.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

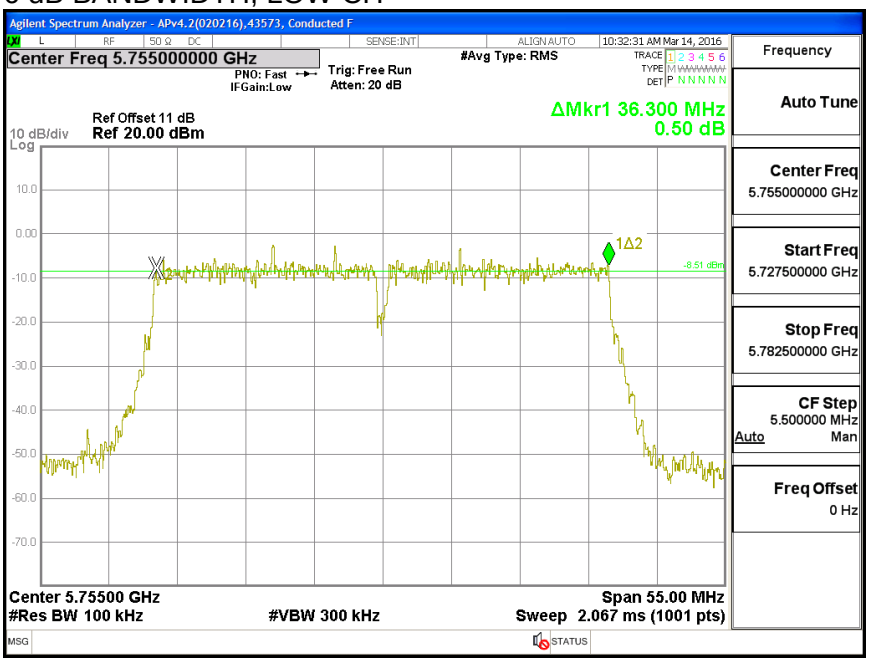
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

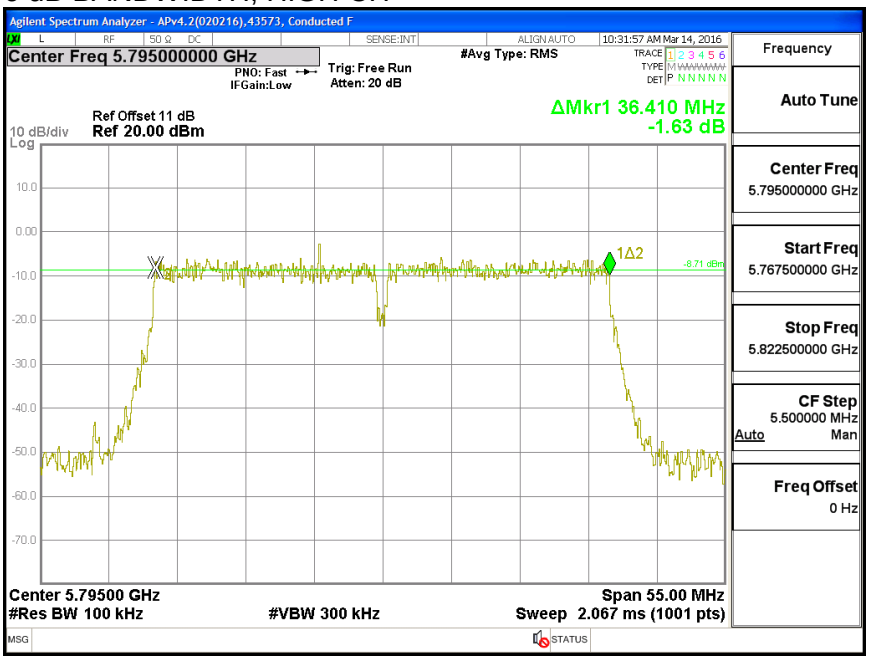
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	36.300	0.5
High	5795	36.410	0.5

6 dB BANDWIDTH

6 dB BANDWIDTH, LOW CH



6 dB BANDWIDTH, HIGH CH



8.38.2. 26 dB BANDWIDTH

LIMITS

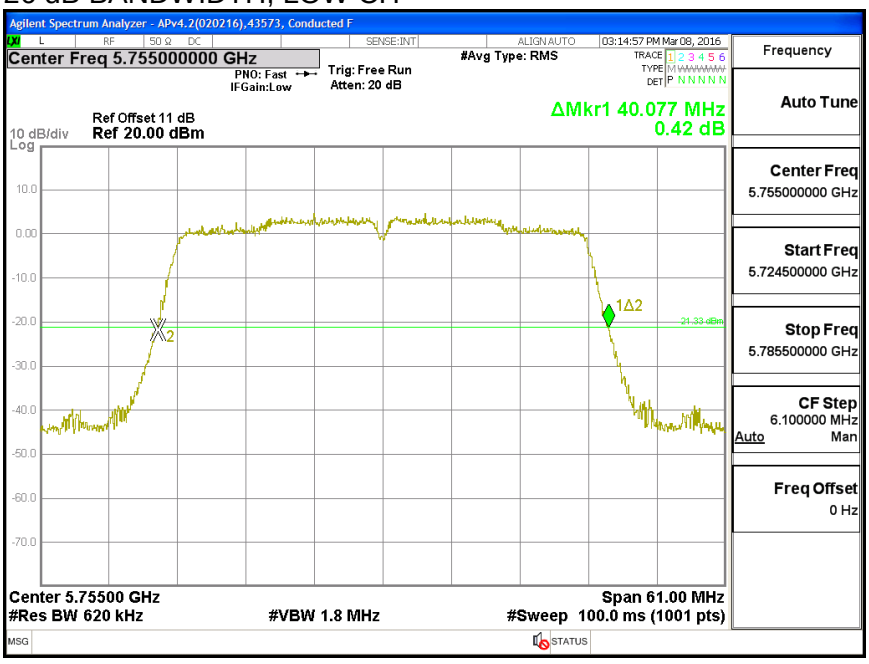
None, for reporting purposes only.

RESULTS

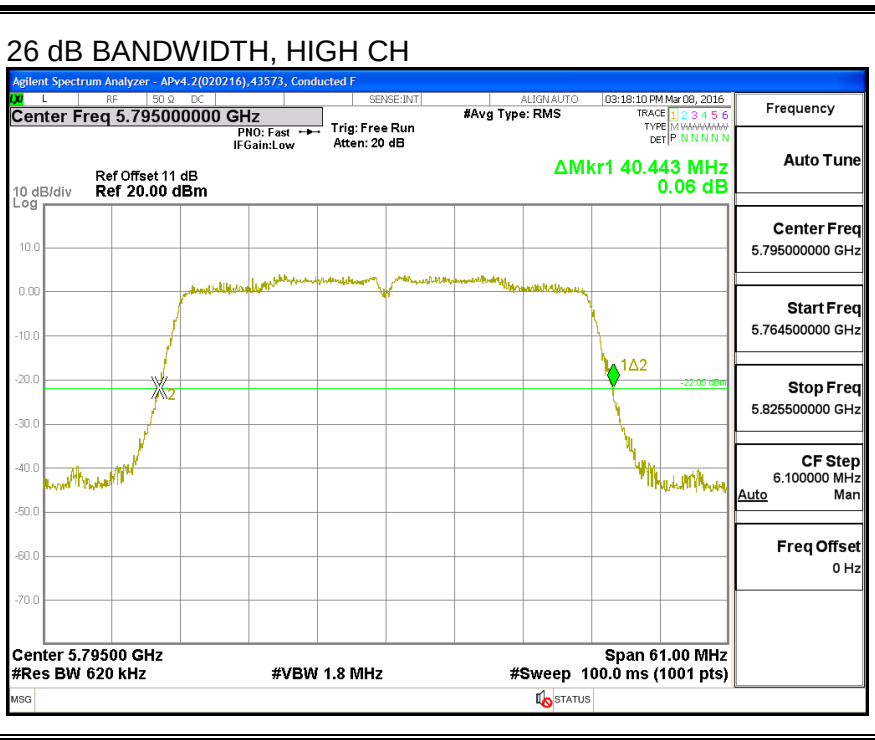
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5755	40.077
High	5795	40.443

26 dB BANDWIDTH

26 dB BANDWIDTH, LOW CH



26 dB BANDWIDTH, HIGH CH



8.38.3. 99% BANDWIDTH

LIMITS

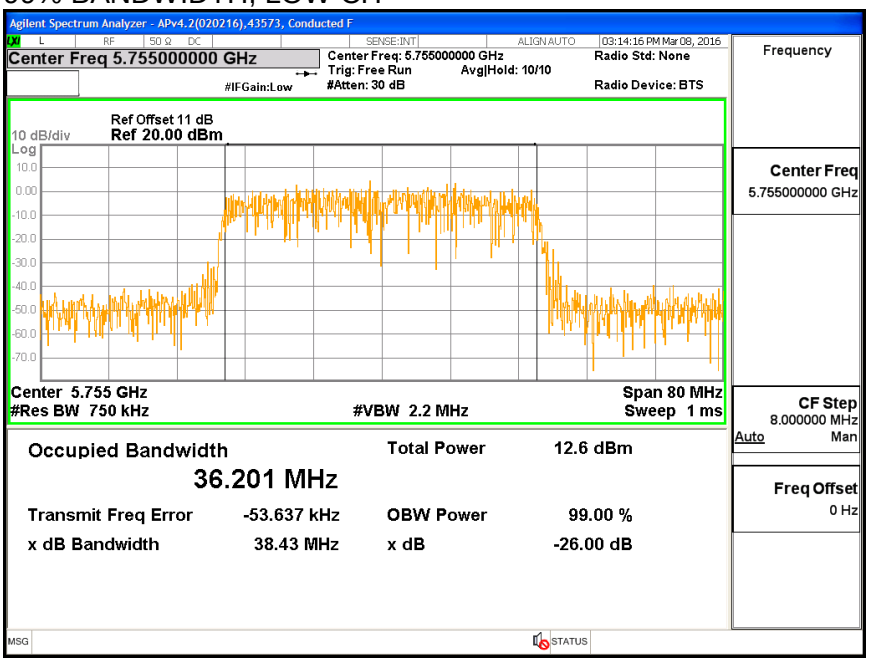
None; for reporting purposes only.

RESULTS

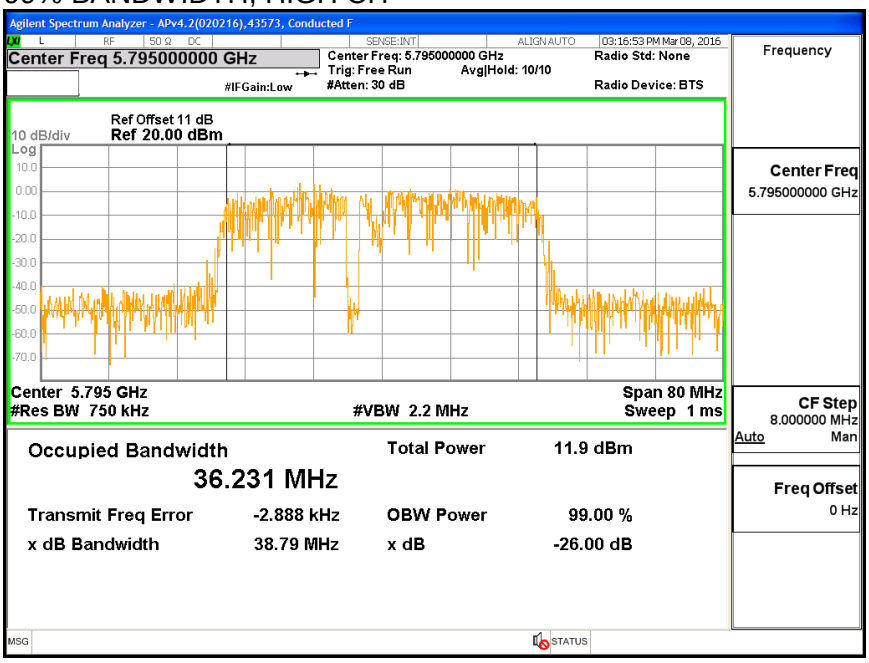
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	36.201
High	5795	36.231

99% BANDWIDTH

99% BANDWIDTH, LOW CH



99% BANDWIDTH, HIGH CH



8.38.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	39004	Date:	7/28/16

Channel	Frequency (MHz)	Power (dBm)
Low	5755	18.75
High	5795	18.88

8.38.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

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

TEST PROCEDURE

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

ID:	39004	Date:	7/28/16

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	-1.52	30.00
High	5795	-1.52	30.00

Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	18.75	18.75	30.00	-11.25
High	5795	18.88	18.88	30.00	-11.12

8.38.6. PSD

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5755	-1.52	30.00
High	5795	-1.52	30.00

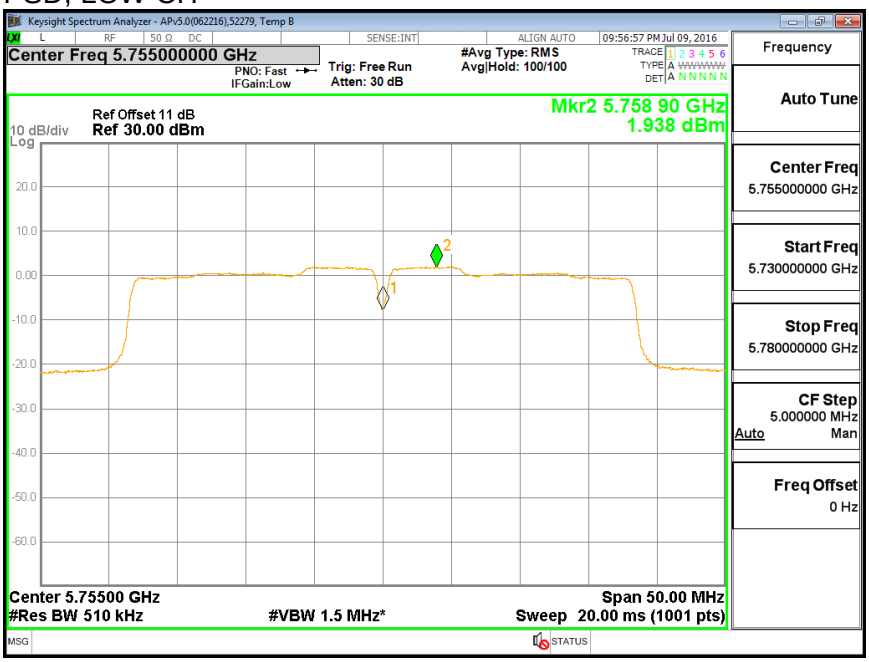
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

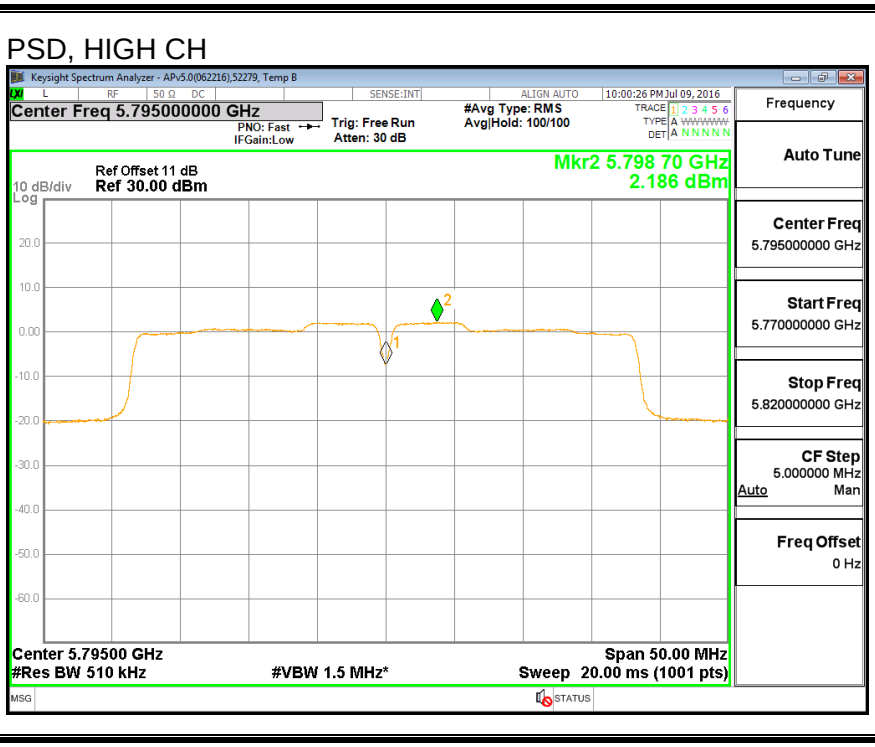
Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5755	1.938	1.94	30.00	-28.06
High	5795	2.186	2.19	30.00	-27.81

PSD

PSD, LOW CH



PSD, HIGH CH



8.39. 802.11n HT40 2Tx CDD MODE IN THE 5.8 GHz BAND

8.39.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

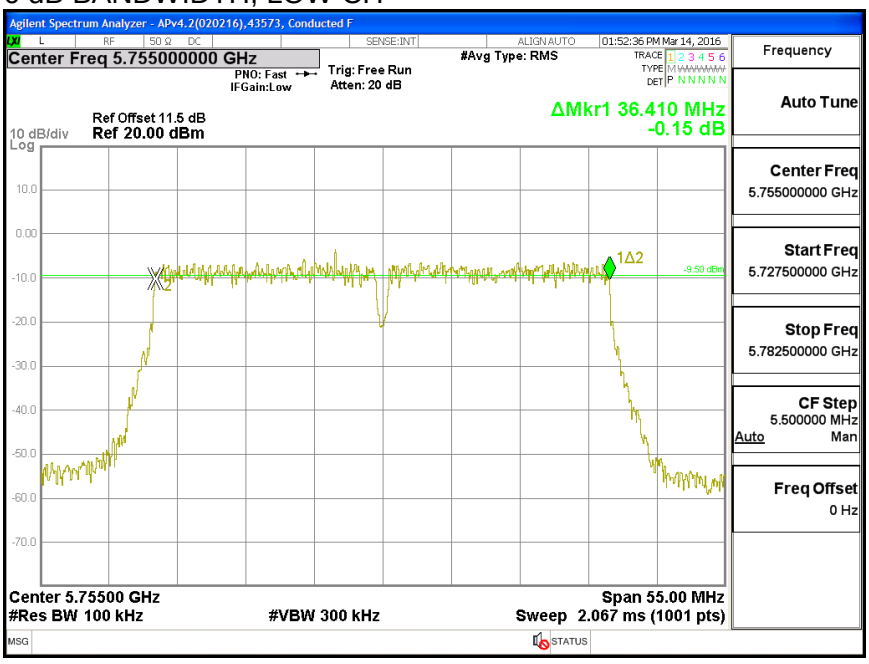
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

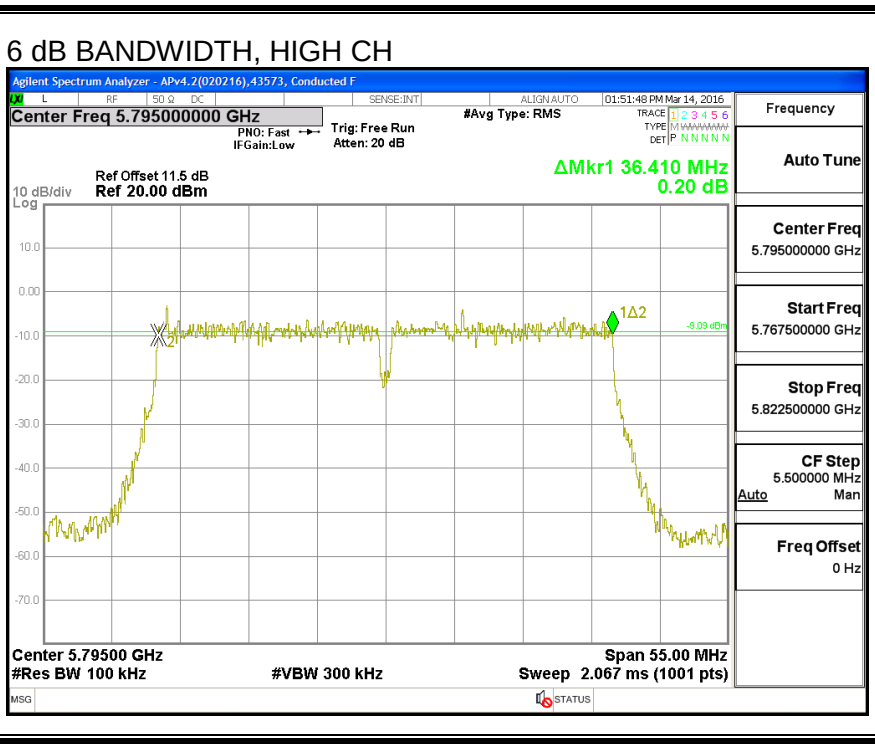
Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	5755	36.410	36.355	0.5
High	5795	36.410	36.135	0.5

6 dB BANDWIDTH, CHAIN 0

6 dB BANDWIDTH, LOW CH

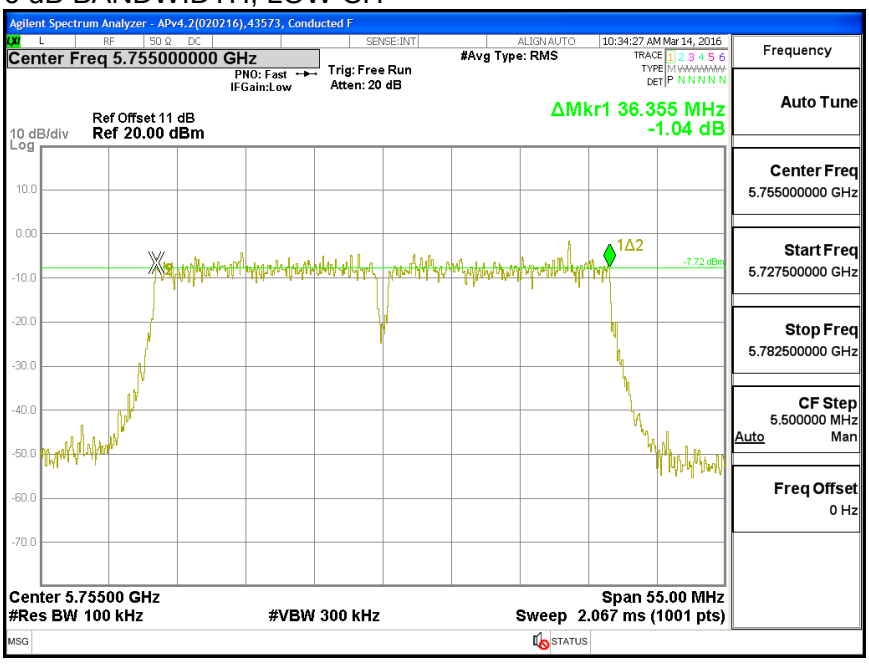


6 dB BANDWIDTH, HIGH CH

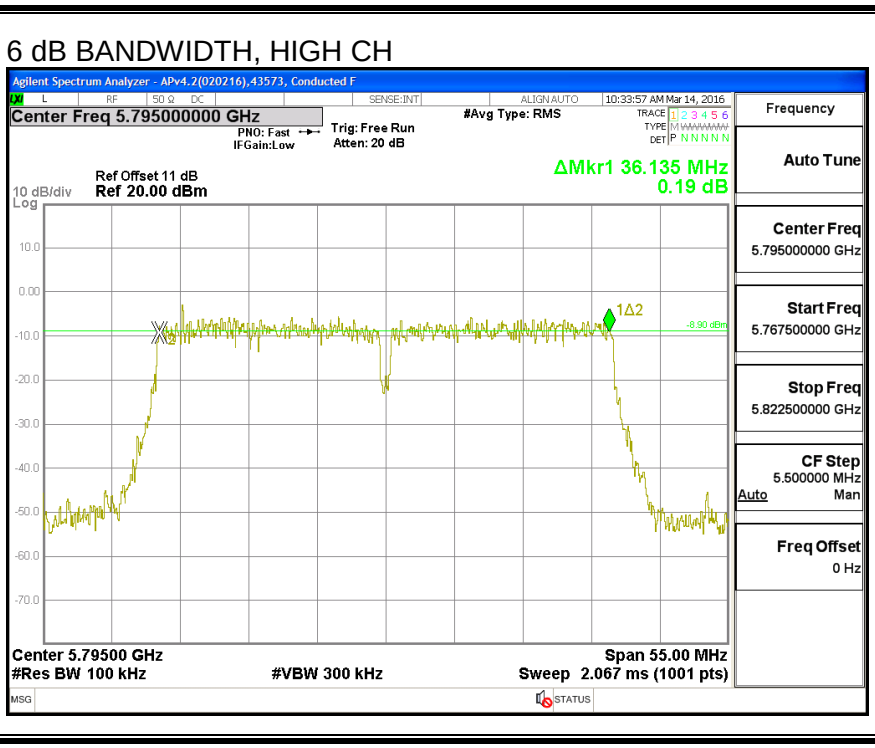


6 dB BANDWIDTH, CHAIN 1

6 dB BANDWIDTH, LOW CH



6 dB BANDWIDTH, HIGH CH



8.39.2. 26 dB BANDWIDTH

LIMITS

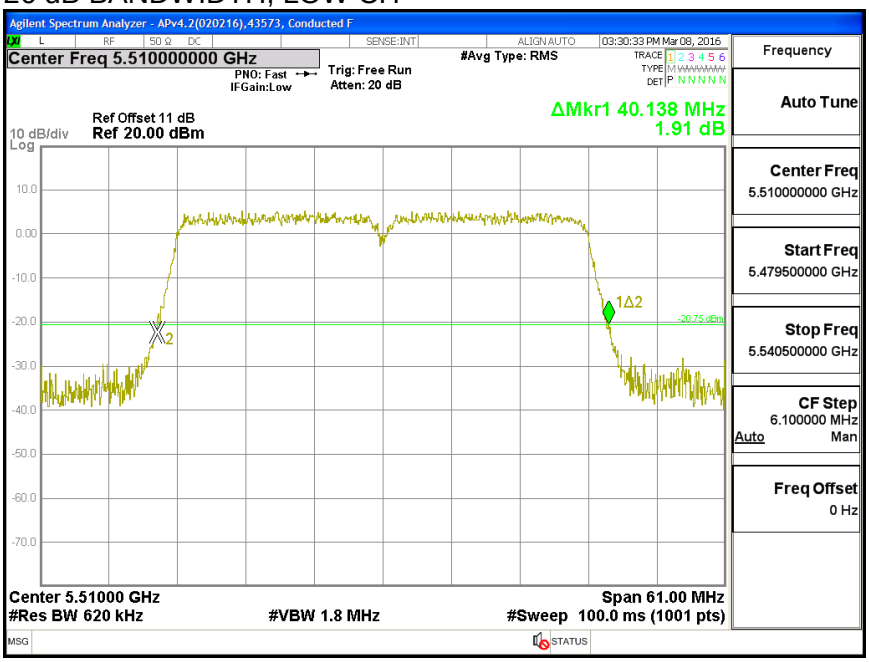
None, for reporting purposes only.

RESULTS

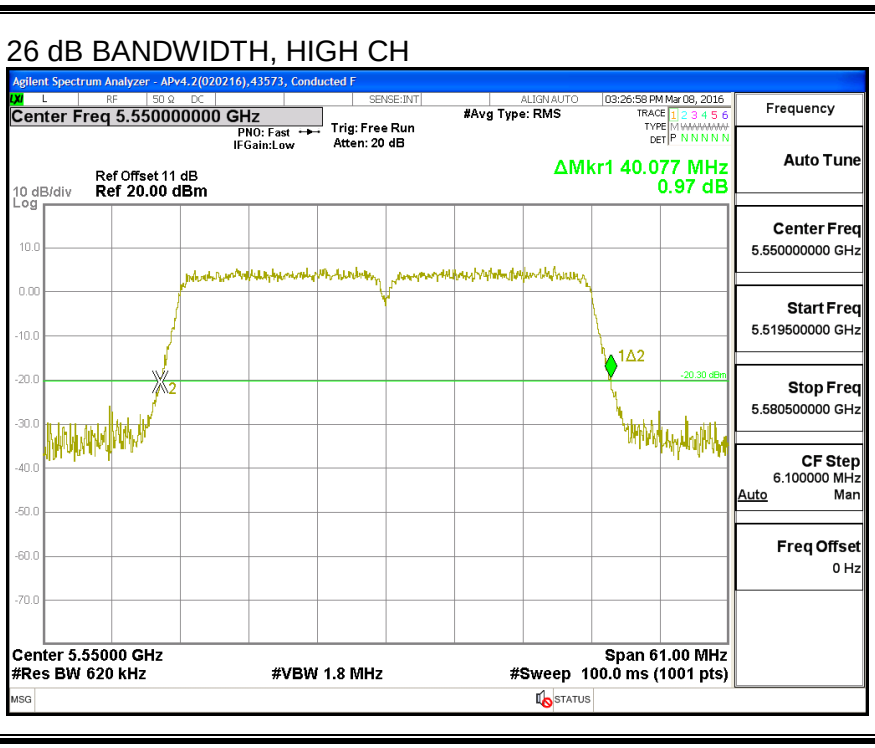
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5755	40.138	40.626
High	5795	40.077	40.443

26 dB BANDWIDTH, CHAIN 0

26 dB BANDWIDTH, LOW CH

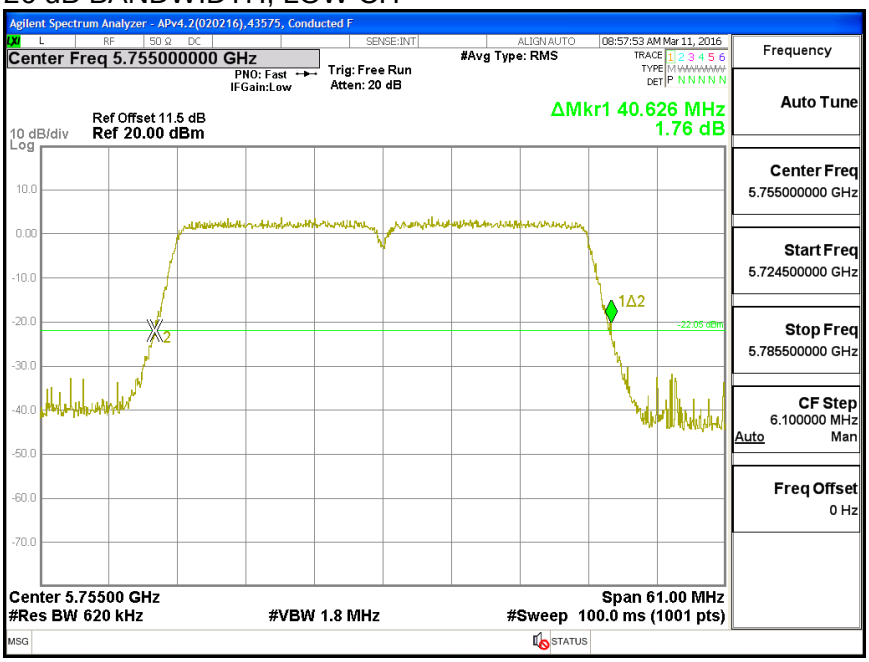


26 dB BANDWIDTH, HIGH CH

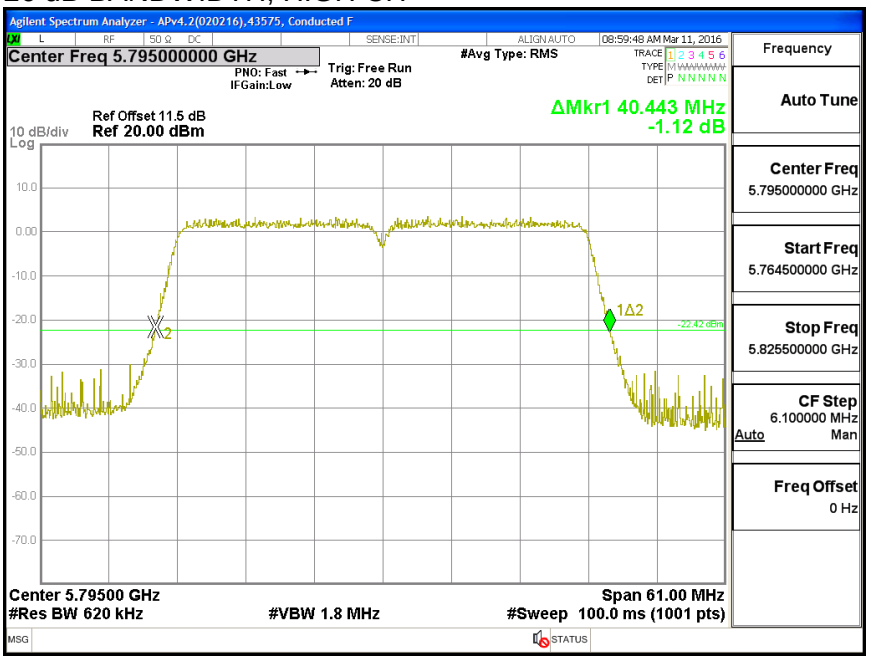


26 dB BANDWIDTH, CHAIN 1

26 dB BANDWIDTH, LOW CH



26 dB BANDWIDTH, HIGH CH



8.39.3. 99% BANDWIDTH

LIMITS

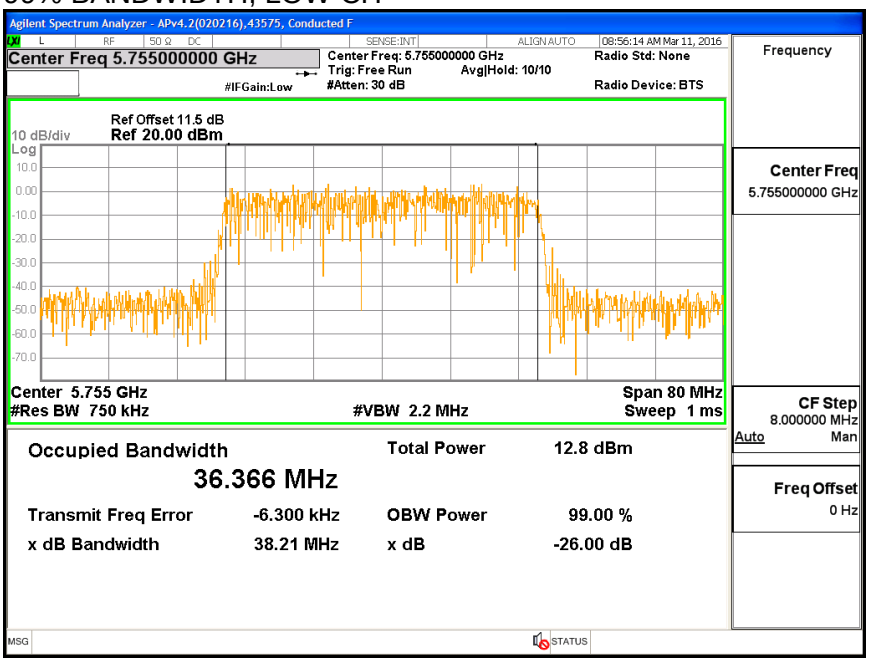
None; for reporting purposes only.

RESULTS

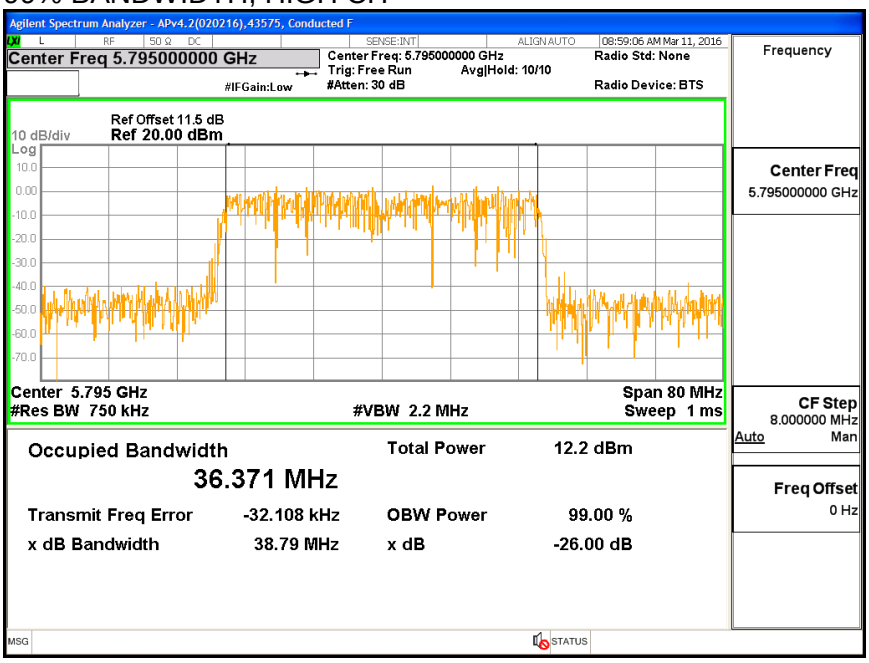
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5755	36.366	36.186
High	5795	36.371	36.120

99% BANDWIDTH, CHAIN 0

99% BANDWIDTH, LOW CH

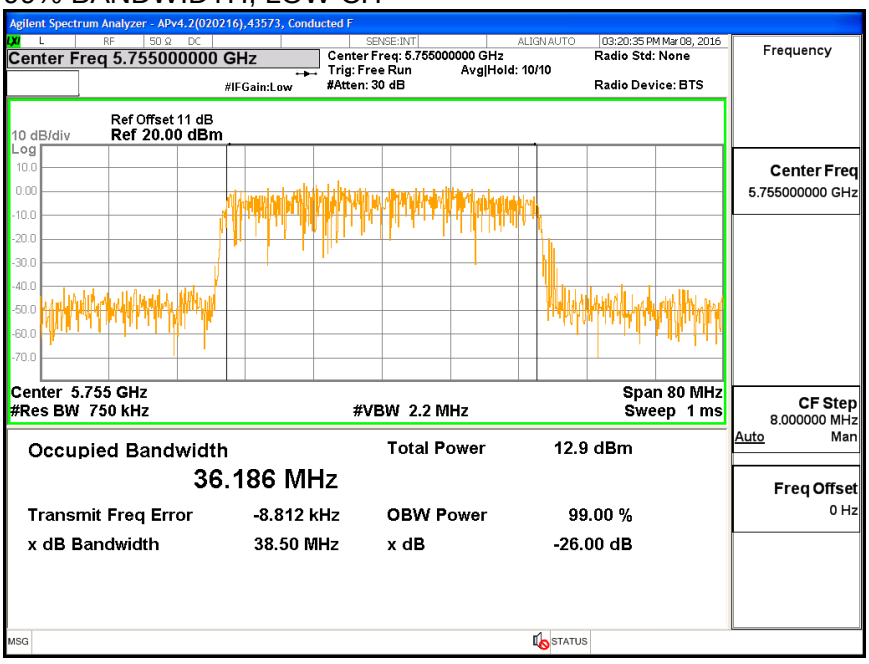


99% BANDWIDTH, HIGH CH

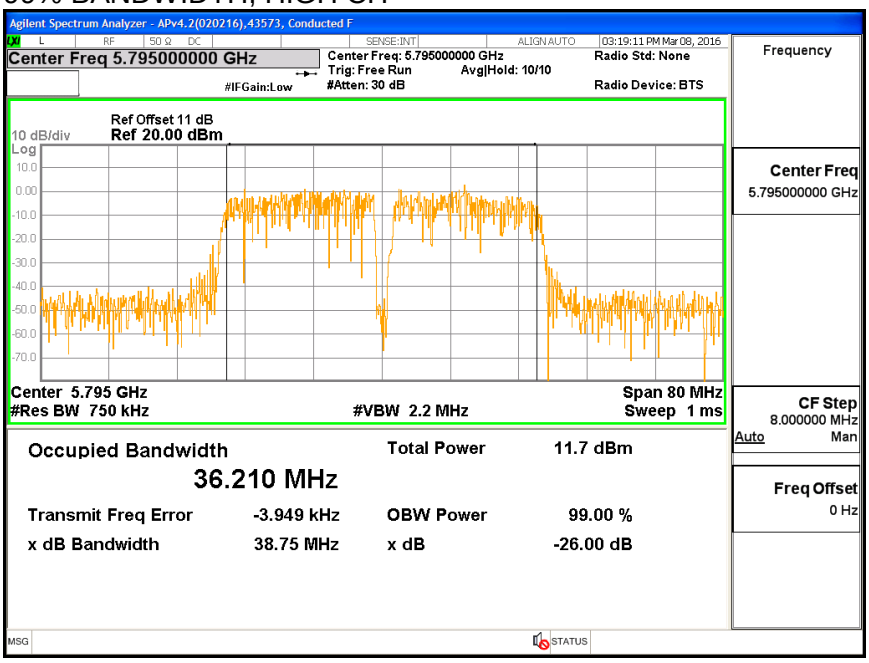


99% BANDWIDTH, CHAIN 1

99% BANDWIDTH, LOW CH



99% BANDWIDTH, HIGH CH



8.39.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	39004	Date:	7/28/16

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5755	16.5	18.54	20.65
High	5795	16.5	18.54	20.65

8.39.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

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

TEST PROCEDURE

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
0.22	-1.52	-0.56

RESULTS

ID:	39004	Date:	7/28/16

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	-0.56	30.00
High	5795	-0.56	30.00

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	16.5	18.54	20.65	30.00	-9.35
High	5795	16.5	18.54	20.65	30.00	-9.35

8.39.6. PSD

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
0.22	-1.52	2.40

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5755	2.40	30.00
High	5795	2.40	30.00

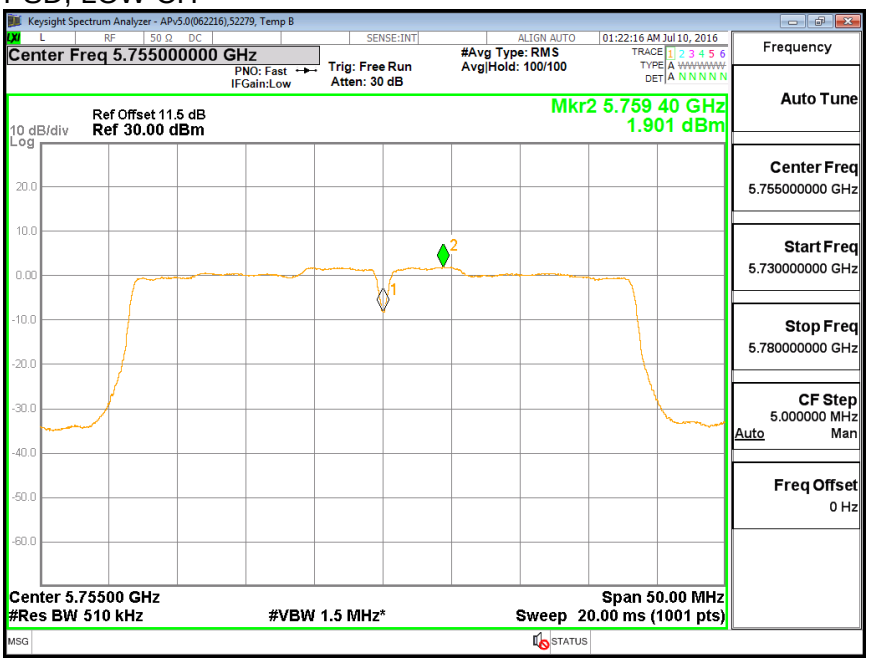
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

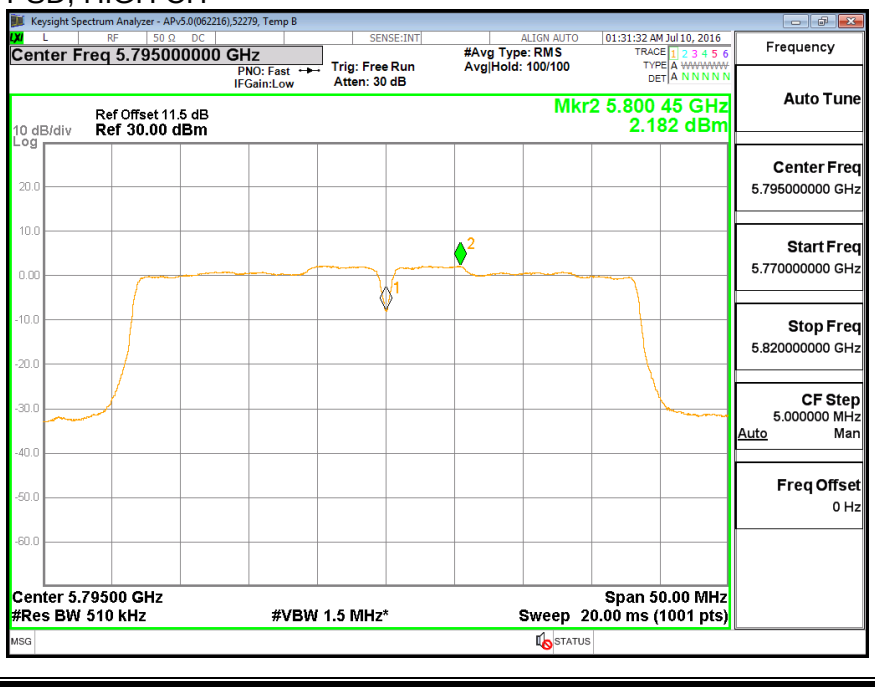
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5755	1.901	1.835	4.88	30.00	-25.12
High	5795	2.182	1.938	5.07	30.00	-24.93

PSD, CHAIN 0

PSD, LOW CH

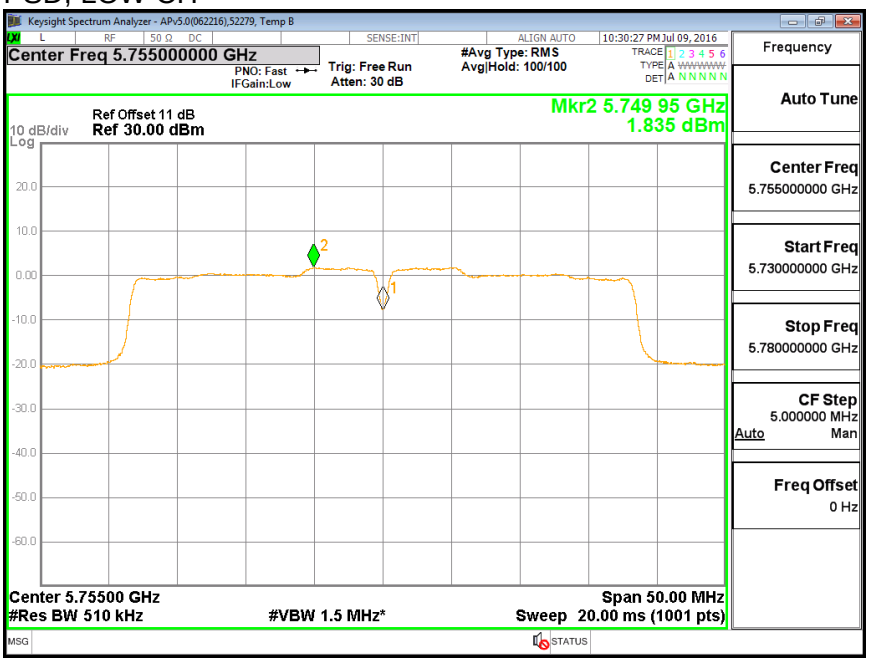


PSD, HIGH CH

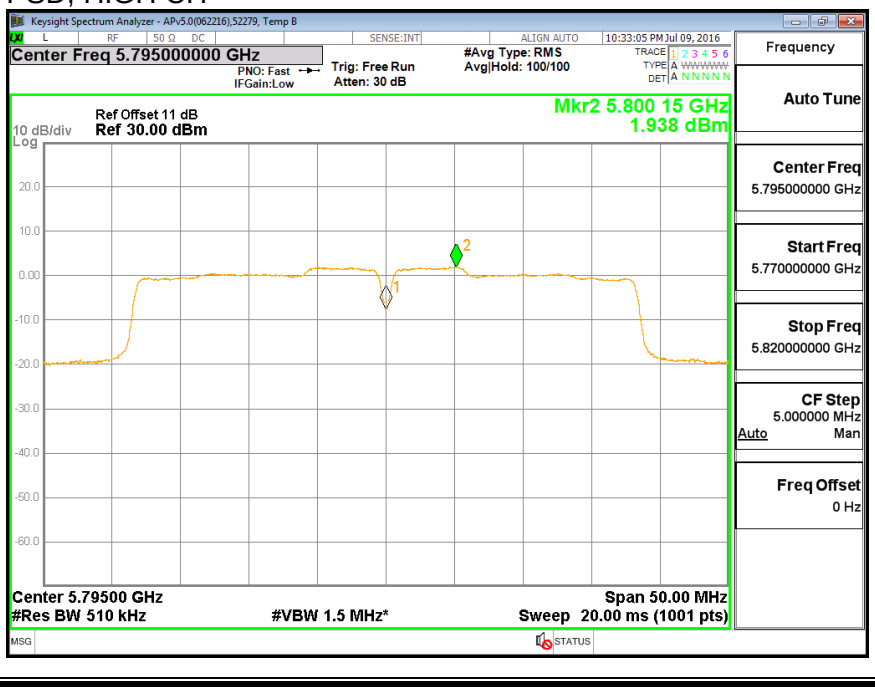


PSD, CHAIN 1

PSD, LOW CH



PSD, HIGH CH



8.40. 802.11ac VHT80 CHAIN 0 MODE IN THE 5.8 GHz BAND

8.40.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

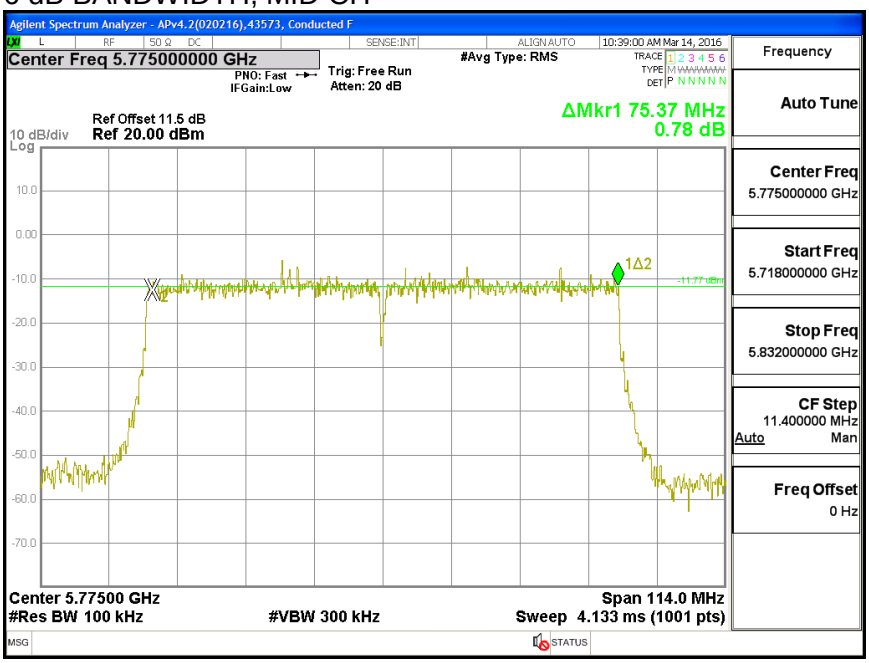
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	75.370	0.5

6 dB BANDWIDTH

6 dB BANDWIDTH, MID CH



8.40.2. 26 dB BANDWIDTH

LIMITS

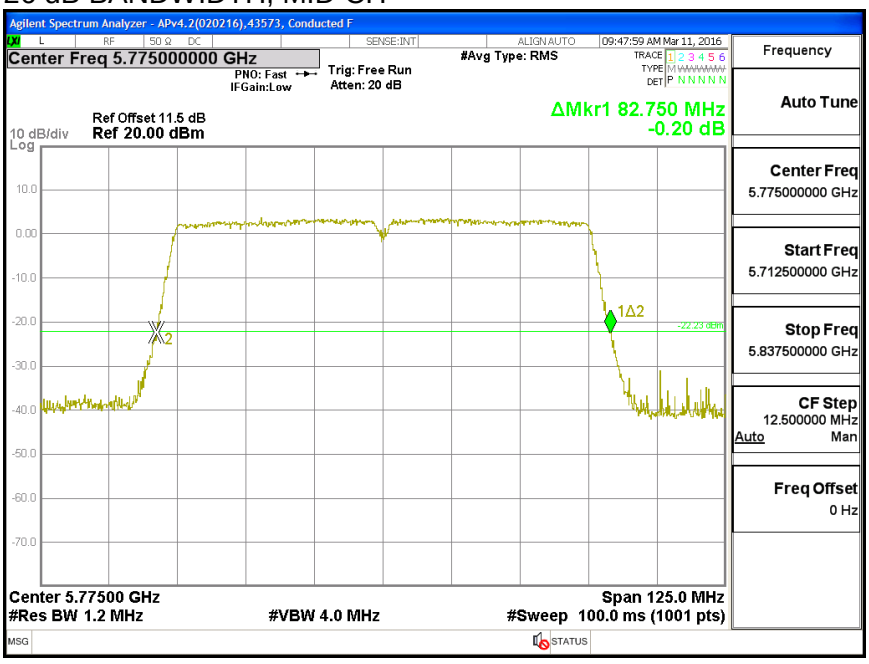
None, for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5775	82.750

26 dB BANDWIDTH

26 dB BANDWIDTH, MID CH



8.40.3. 99% BANDWIDTH

LIMITS

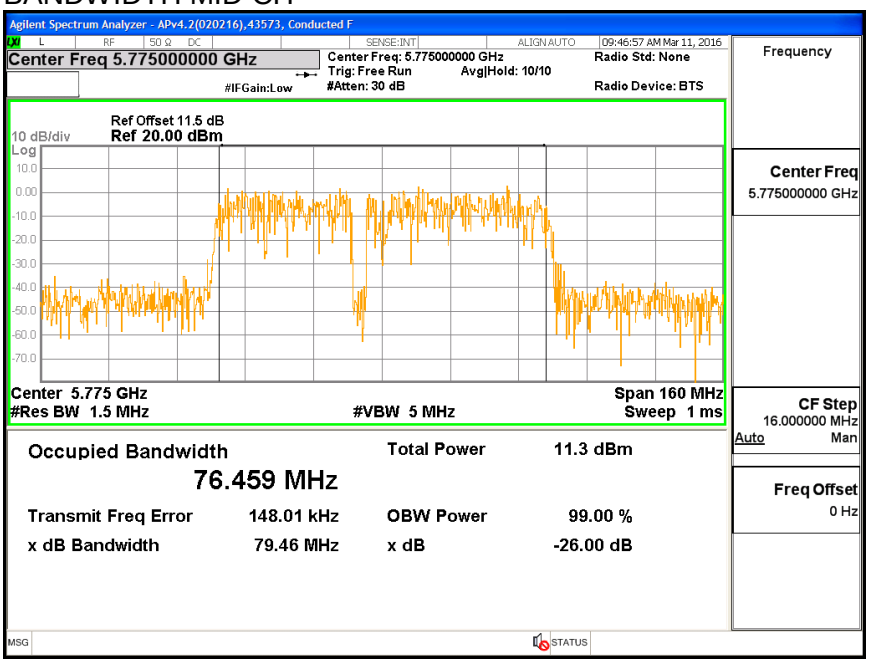
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Mid	5775	76.459

99% BANDWIDTH

BANDWIDTH MID CH



8.40.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	39004	Date:	7/28/16

Channel	Frequency (MHz)	Power (dBm)
Mid	5775	16.50

8.40.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

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

TEST PROCEDURE

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

ID:	39004	Date:	7/28/16

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Mid	5775	0.22	30.00

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5775	16.5	16.50	30.00	-13.50

8.40.6. PSD

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Mid	5775	0.22	30.00

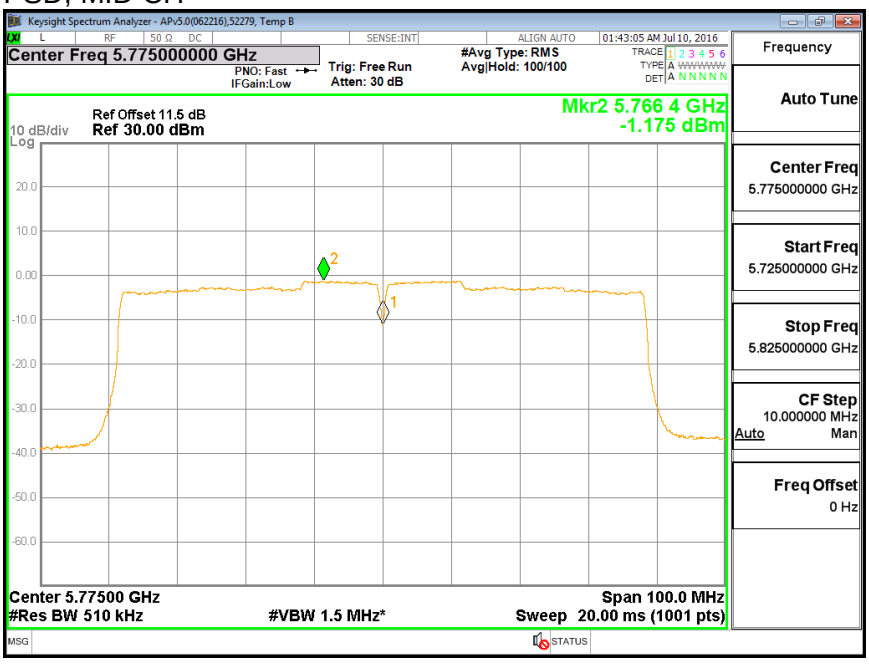
Duty Cycle CF (dB)	0.15	Included in Calculations of Corr'd PSD

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5775	-1.175	-1.03	30.00	-31.03

PSD

PSD, MID CH



8.41. 802.11ac VHT80 CHAIN 1 MODE IN THE 5.8 GHz BAND

8.41.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

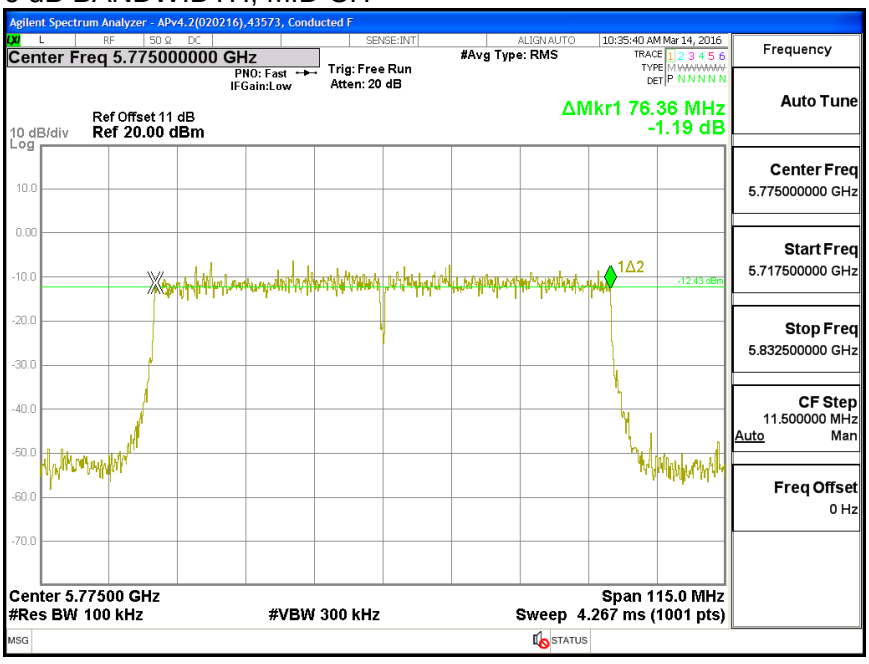
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	76.360	0.5

6 dB BANDWIDTH

6 dB BANDWIDTH, MID CH



8.41.2. 26 dB BANDWIDTH

LIMITS

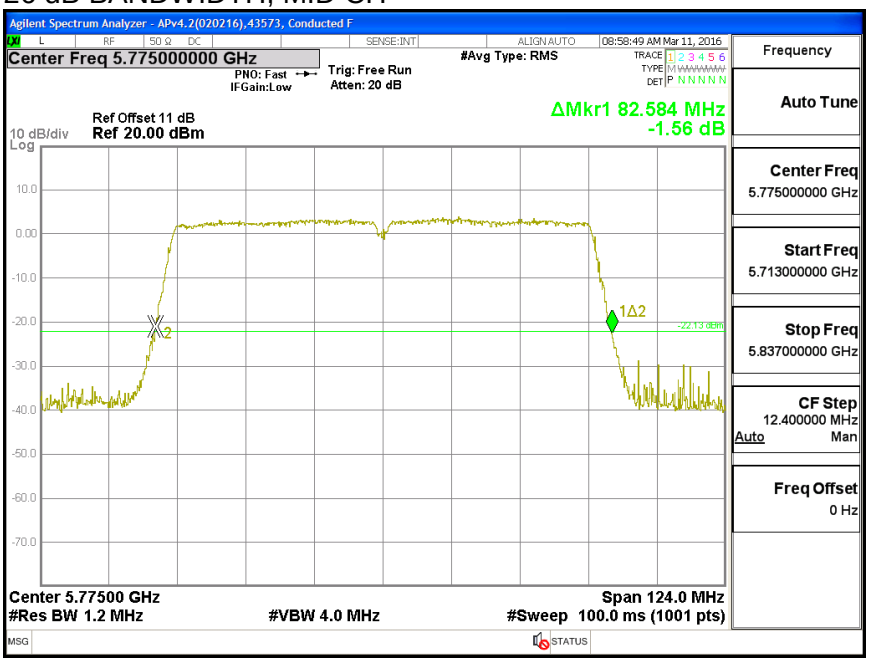
None, for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5775	82.584

26 dB BANDWIDTH

26 dB BANDWIDTH, MID CH



8.41.3. 99% BANDWIDTH

LIMITS

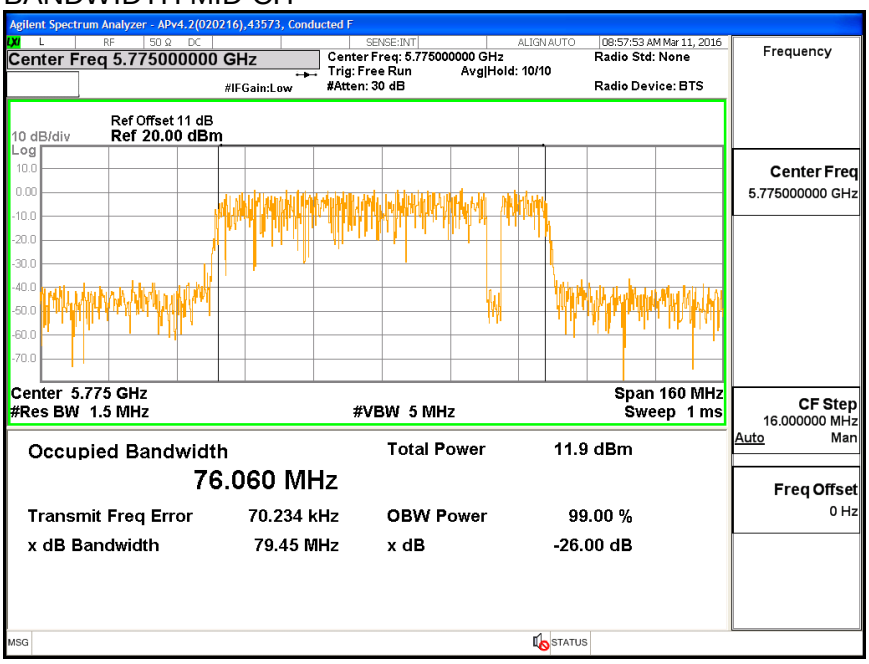
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Mid	5775	76.060

99% BANDWIDTH

BANDWIDTH MID CH



8.41.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	39004	Date:	7/28/16

Channel	Frequency (MHz)	Power (dBm)
Mid	5775	18.72

8.41.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

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

TEST PROCEDURE

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

ID:	39004	Date:	7/28/16

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Mid	5775	-1.52	30.00

Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5775	18.72	18.72	30.00	-11.28

8.41.6. PSD

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Mid	5775	-1.52	30.00

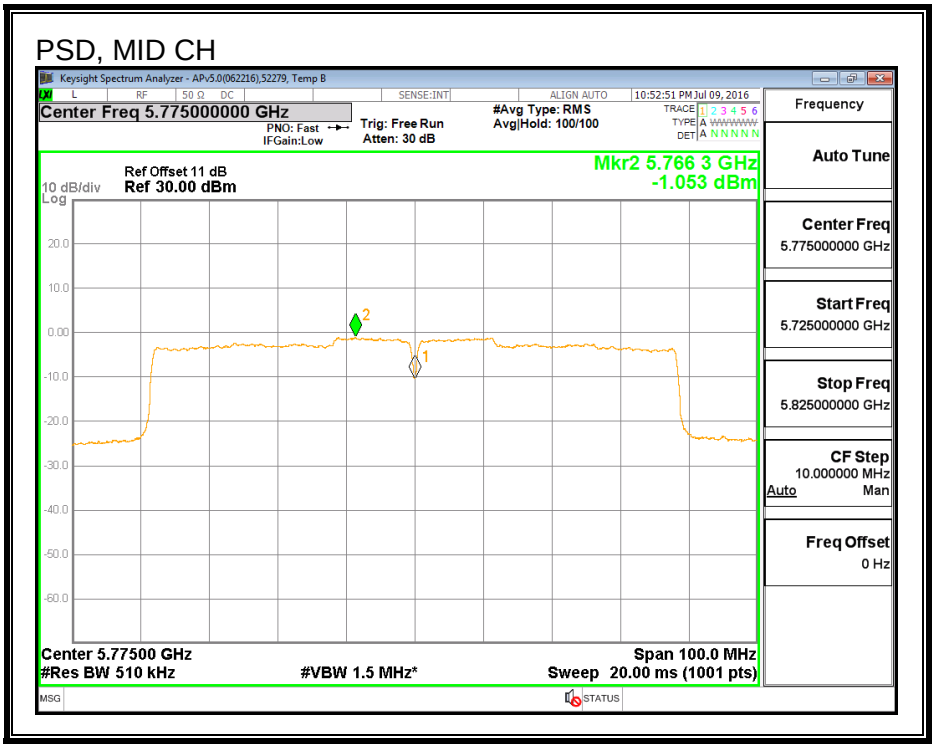
Duty Cycle CF (dB)	0.15	Included in Calculations of Corr'd PSD

PSD Results

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5775	-1.053	-0.90	30.00	-30.90

PSD

PSD, MID CH



8.42. 802.11ac VHT80 2Tx CDD MODE IN THE 5.8 GHz BAND

8.42.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

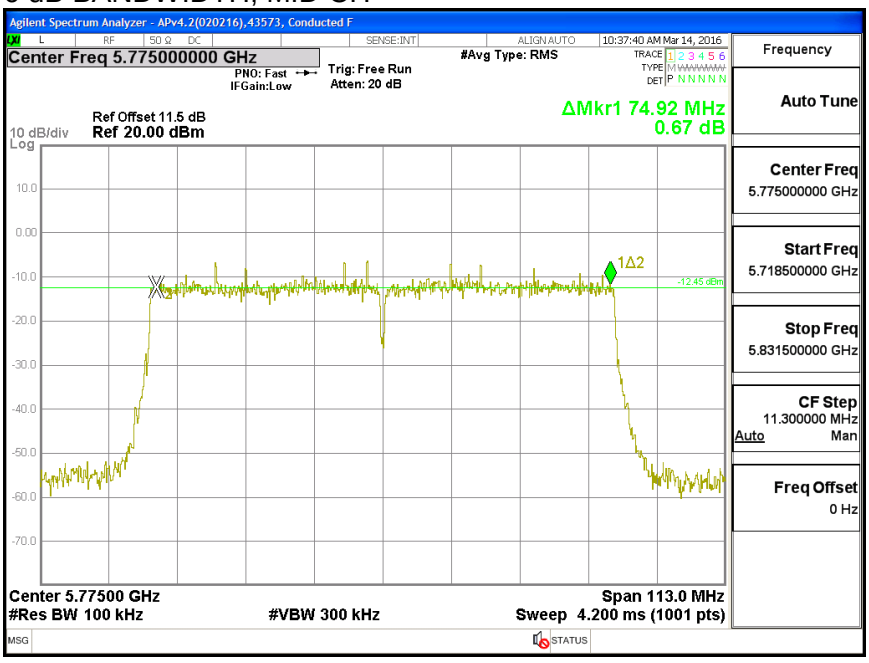
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Mid	5775	74.920	75.810	0.5

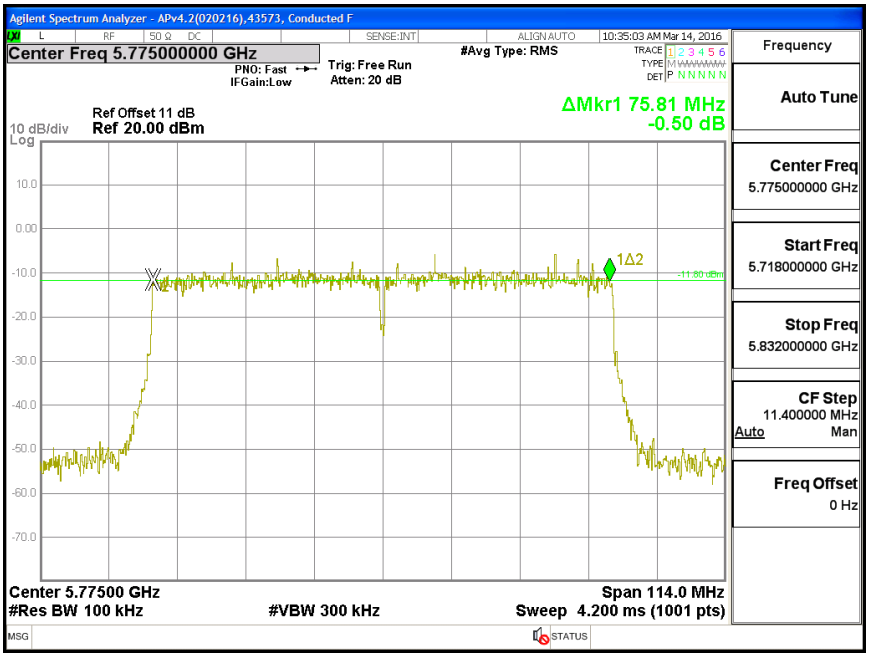
6 dB BANDWIDTH, CHAIN 0

6 dB BANDWIDTH, MID CH



6 DB BANDWIDTH, CHAIN 1

6 dB BANDWIDTH Chain 1 MID CH



8.42.2. 26 dB BANDWIDTH

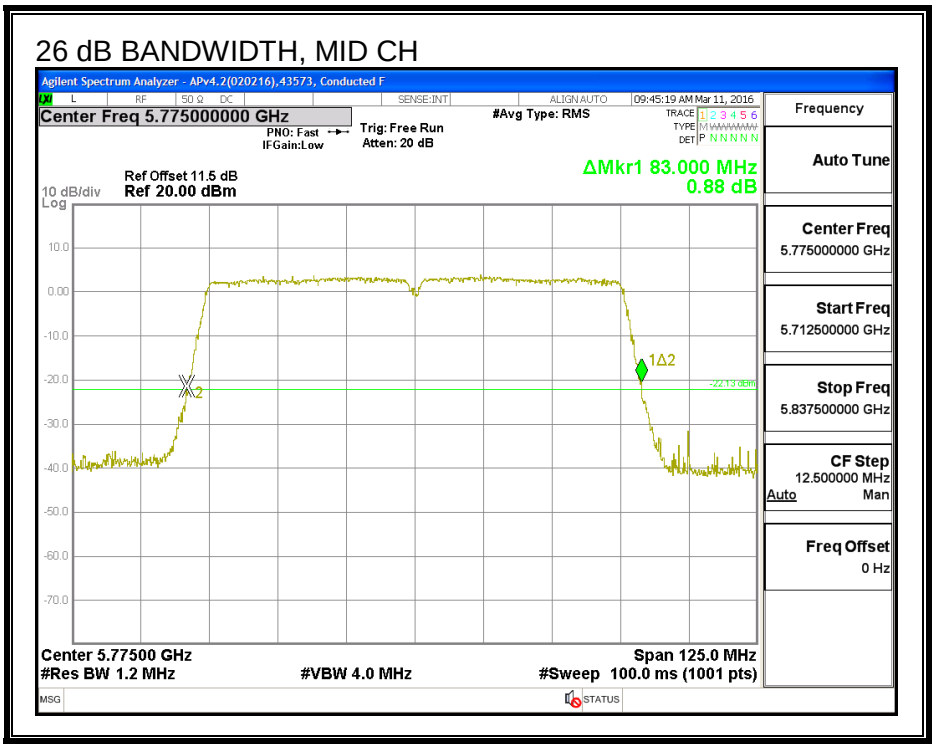
LIMITS

None, for reporting purposes only.

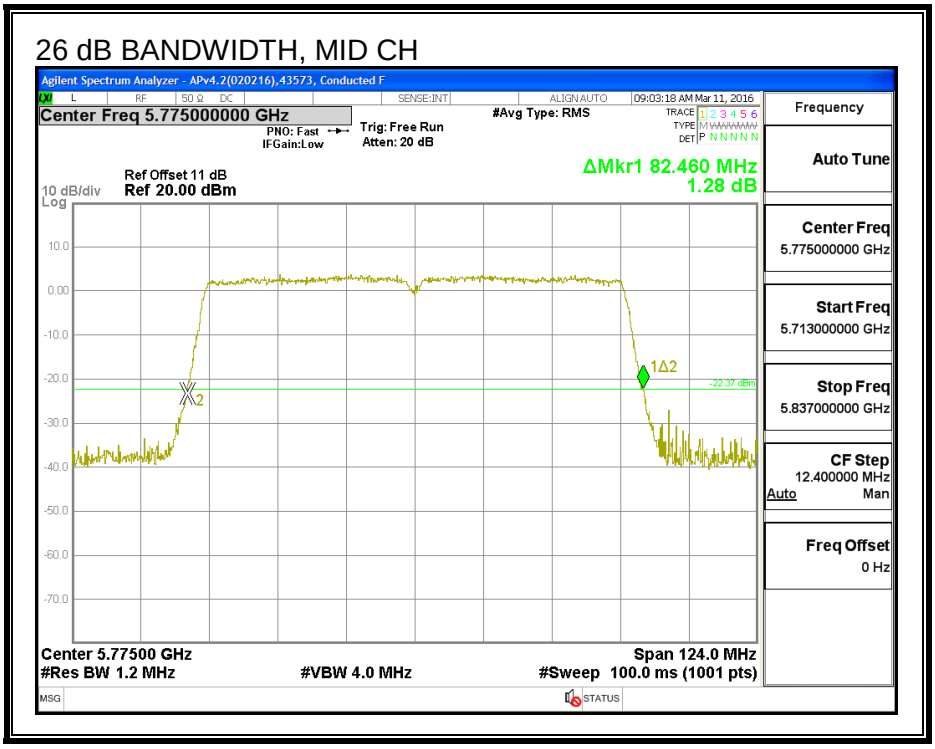
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Mid	5775	83.00	82.46

26 dB BANDWIDTH, CHAIN 0



26 dB BANDWIDTH, CHAIN 1



8.42.3. 99% BANDWIDTH

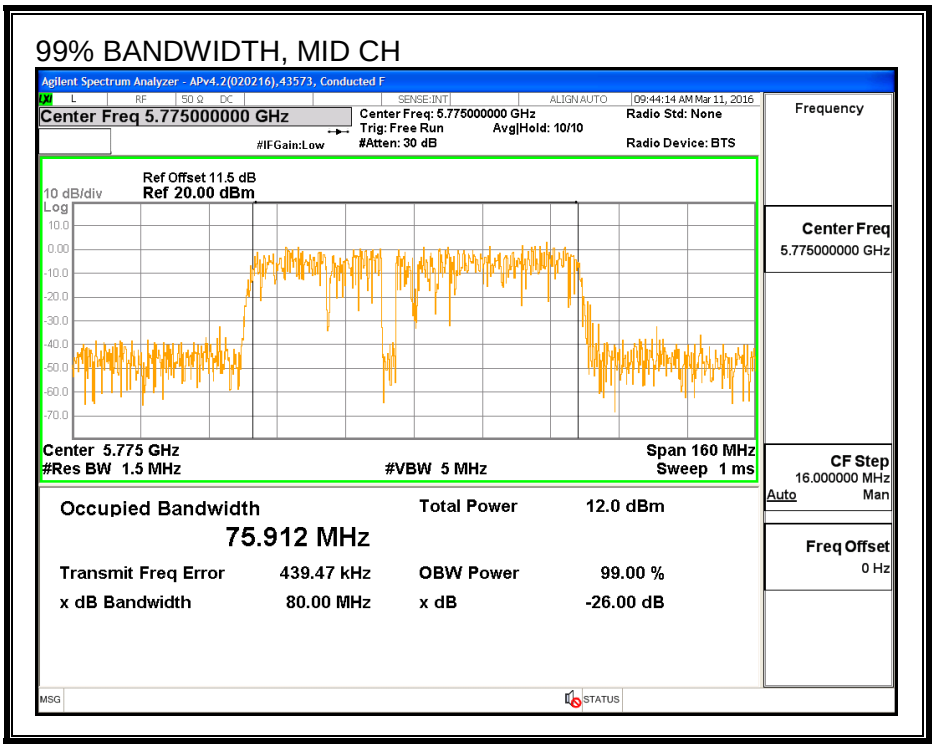
LIMITS

None; for reporting purposes only.

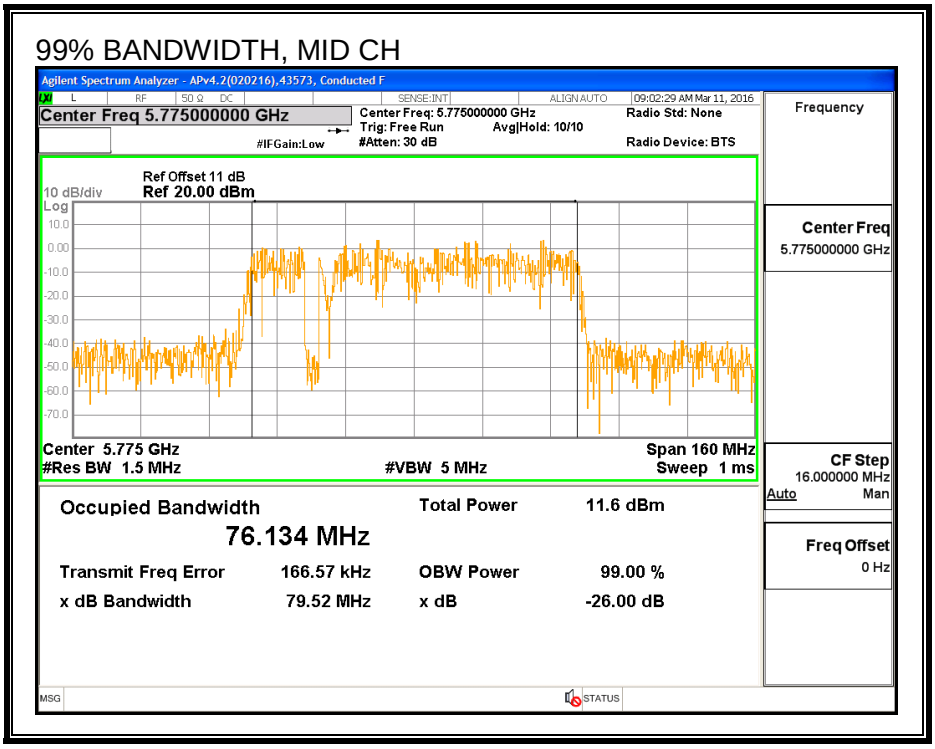
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Mid	5775	75.912	76.134

99% BANDWIDTH, CHAIN 0



99% BANDWIDTH, CHAIN 1



8.42.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	39004	Date:	7/28/16

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Mid	5775	16.5	16.92	19.72

8.42.5. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

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

TEST PROCEDURE

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
0.22	-1.52	-0.56

RESULTS

ID:	39004	Date:	7/28/16

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Mid	5775	-0.56	30.00

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5775	16.5	16.92	19.72	30.00	-10.28

8.42.6. PSD

LIMITS

FCC §15.407 (a) (3)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
0.22	-1.52	2.40

RESULTS

Antenna Gain and Limit

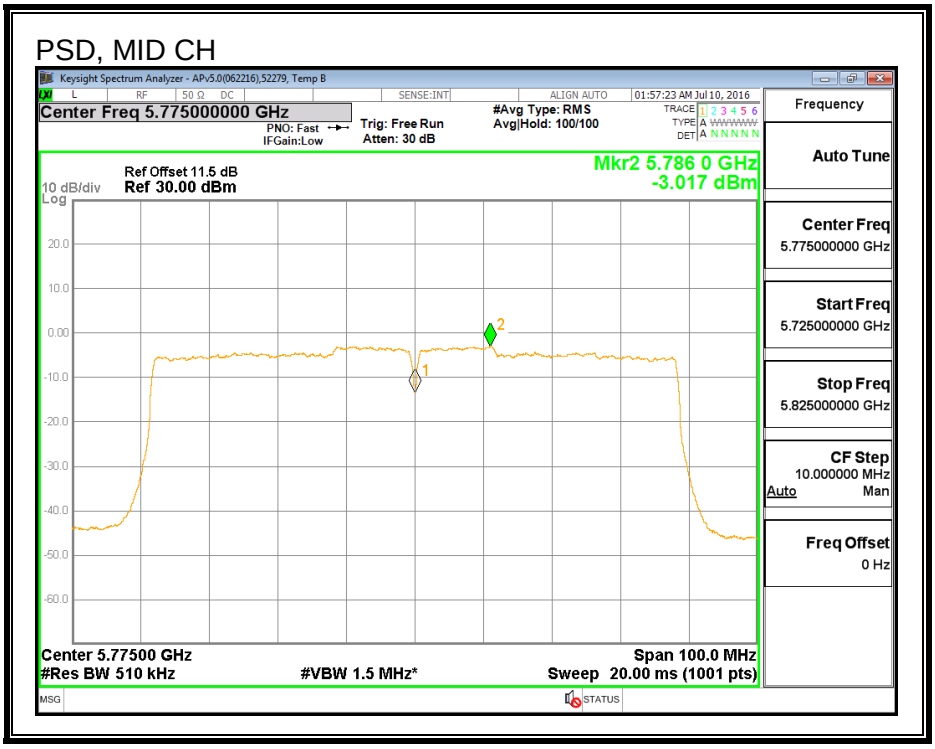
Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Mid	5775	2.40	30.00

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

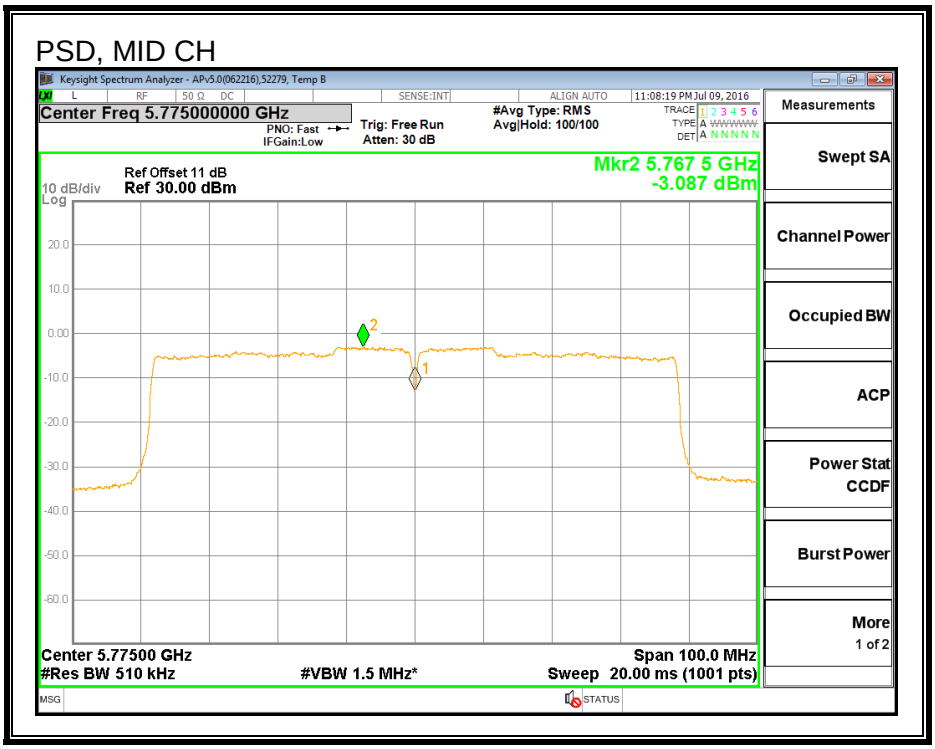
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5775	-3.017	-3.087	0.15	30.00	-29.85

PSD, CHAIN 0



PSD, CHAIN 1



9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For pre-scans above 1GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

For final measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

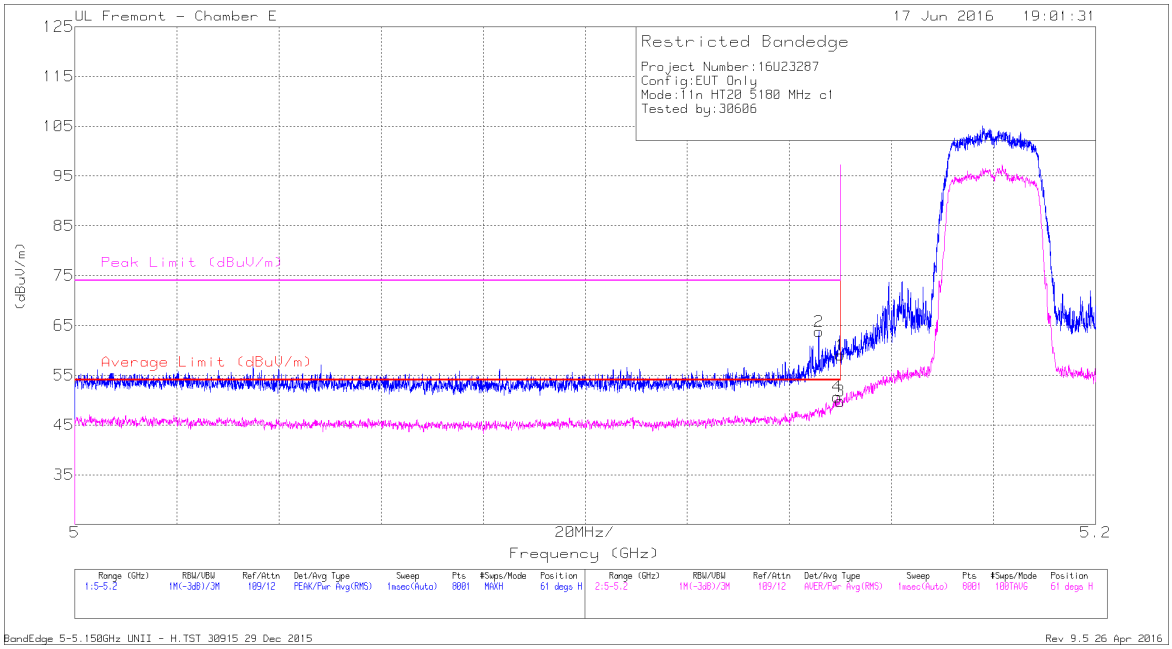
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

Radiated emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

9.2. 802.11n HT20 1Tx MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE, CHAIN 0 (LOW CHANNEL)

LOW CHANNEL HORIZONTAL PLOT



DATA

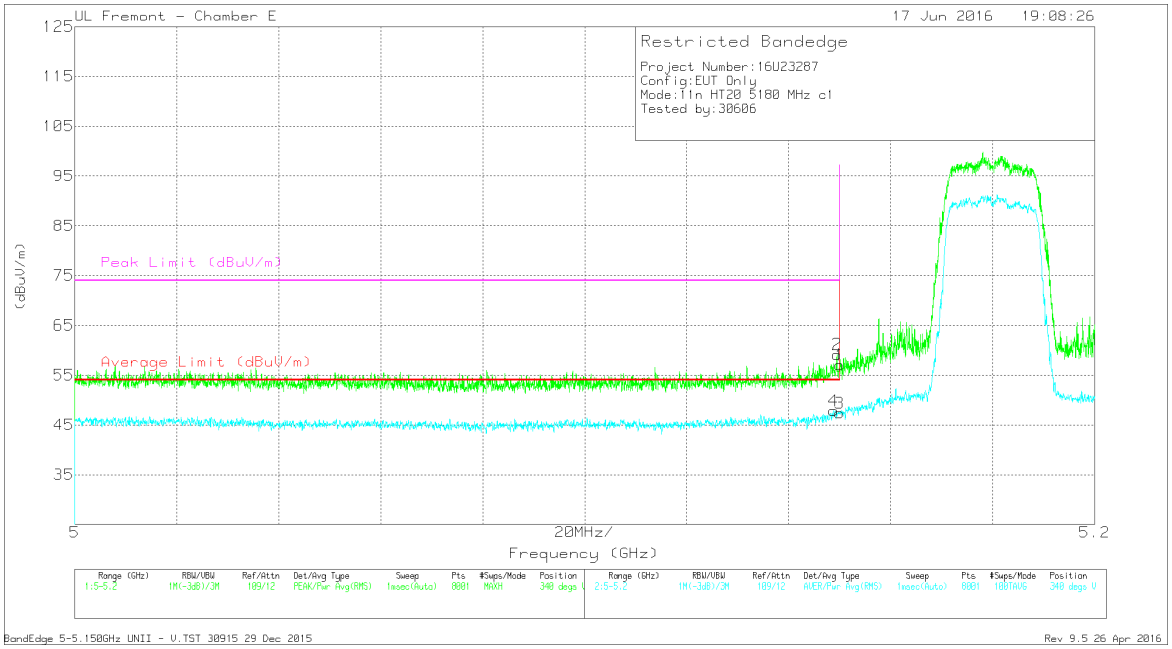
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*5.146	48.55	Pk	34.1	-18.9	63.75	-	-	74	-10.25	61	148	H
4	*5.149	35.44	RMS	34.1	-18.9	50.64	54	-3.36	-	-	61	148	H
1	5.15	43.87	Pk	34.1	-19	58.97	-	-	74	-15.03	61	148	H
3	5.15	34.69	RMS	34.1	-19	49.79	54	-4.21	-	-	61	148	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.149	44.06	Pk	34.1	-19	59.16	-	-	74	-14.84	340	318	V
4	* 5.149	32.68	RMS	34.1	-18.9	47.88	54	-6.12	-	-	340	318	V
1	5.15	41.96	Pk	34.1	-19	57.06	-	-	74	-16.94	340	318	V
3	5.15	32.27	RMS	34.1	-19	47.37	54	-6.63	-	-	340	318	V

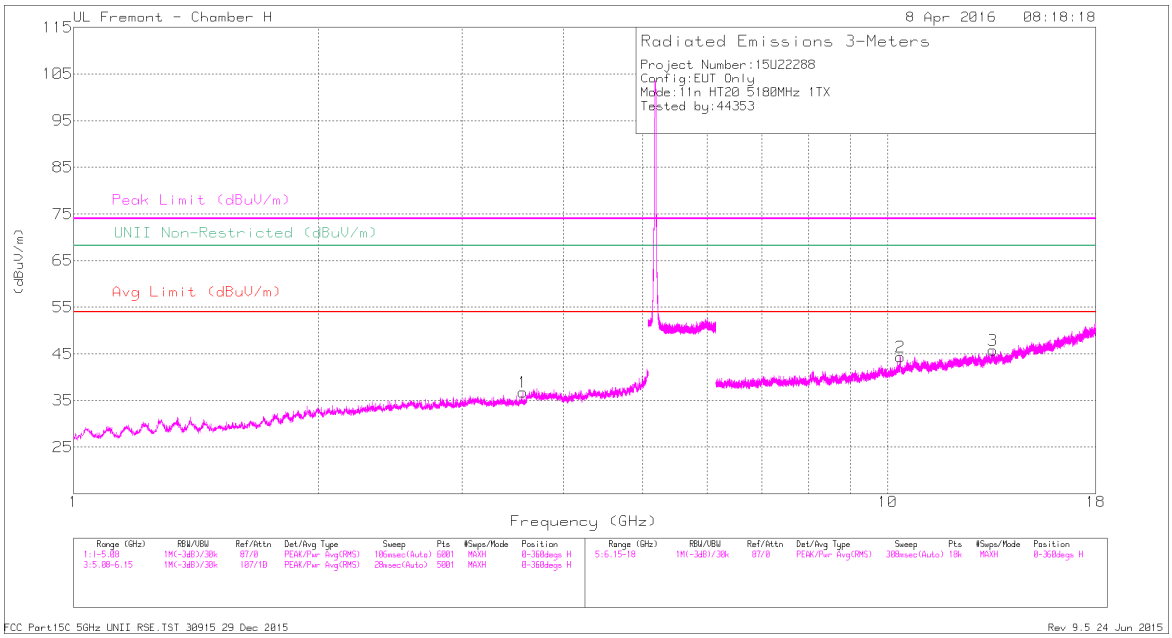
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

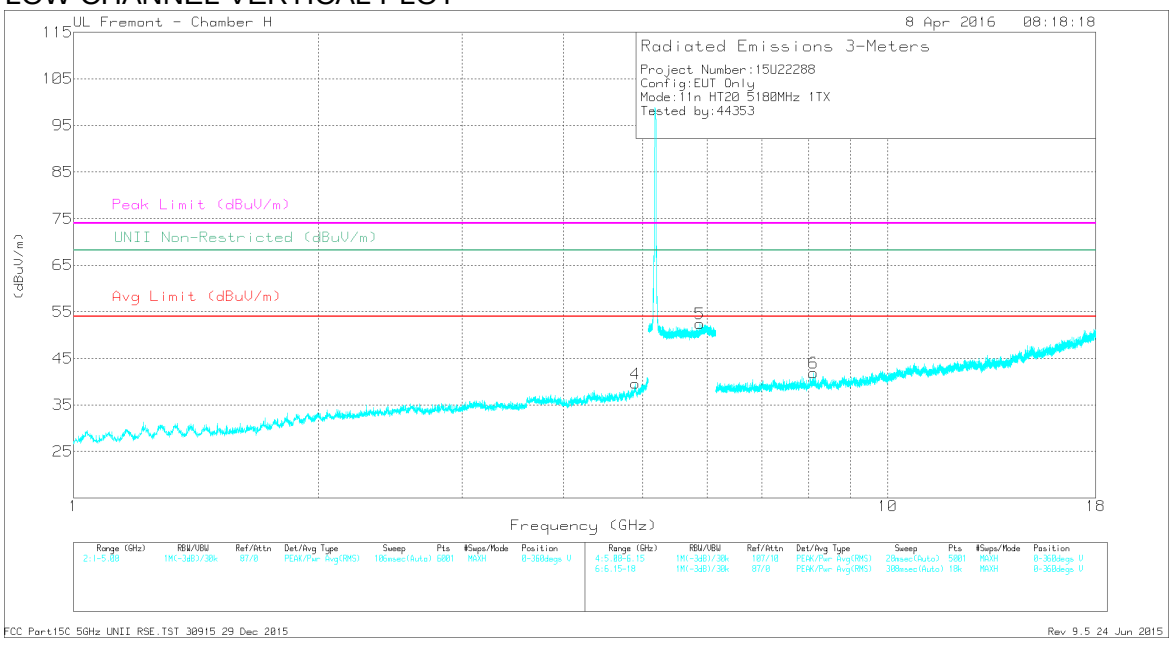
RMS - RMS detection

LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.566	39.09	PK-U	33	-29.3	42.79	-	-	74	-31.21	-	-	231	136	H
	* 3.566	27.39	ADR	33	-29.3	31.09	54	-22.91	-	-	-	-	231	136	H
4	* 4.901	39.12	PK-U	34.2	-27	46.32	-	-	74	-27.68	-	-	112	167	V
	* 4.9	27.67	ADR	34.2	-27	34.87	54	-19.13	-	-	-	-	112	167	V
6	* 8.099	36.06	PK-U	35.9	-23.5	48.46	-	-	74	-25.54	-	-	298	273	V
	* 8.098	24.23	ADR	35.9	-23.5	36.63	54	-17.37	-	-	-	-	298	273	V
5	5.876	40.24	PK-U	35	-16.5	58.74	-	-	-	-	68.2	-9.46	94	115	V
2	10.358	37.71	PK-U	37.2	-21.9	53.01	-	-	-	-	68.2	-15.19	354	283	H
3	13.445	34.41	PK-U	39.5	-21.8	52.11	-	-	-	-	68.2	-16.09	321	201	H

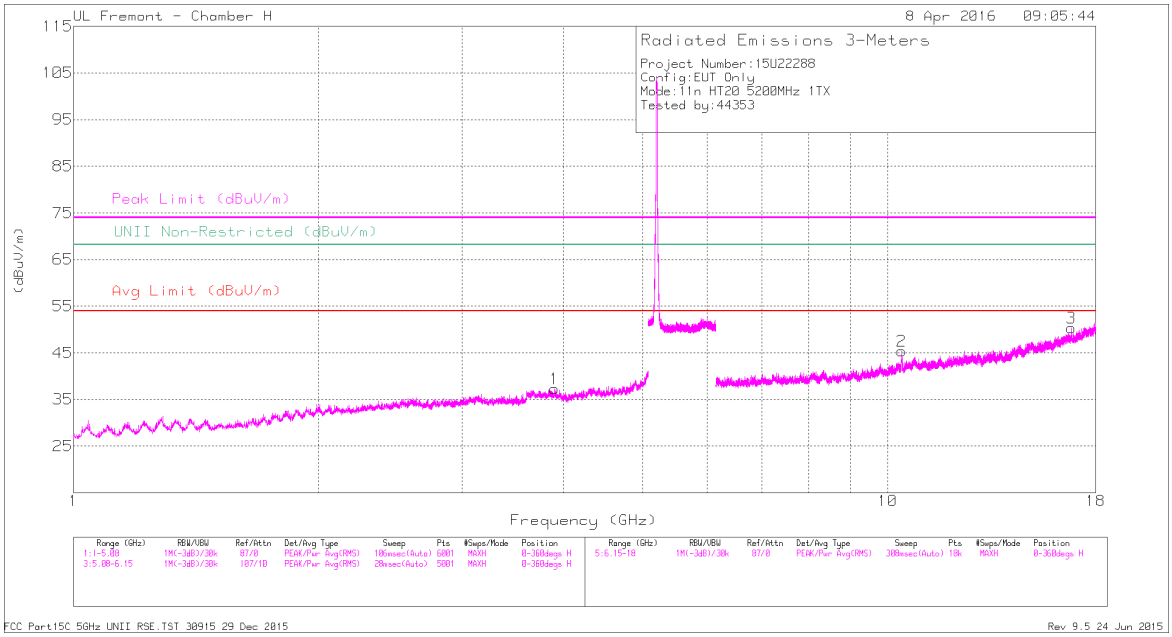
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

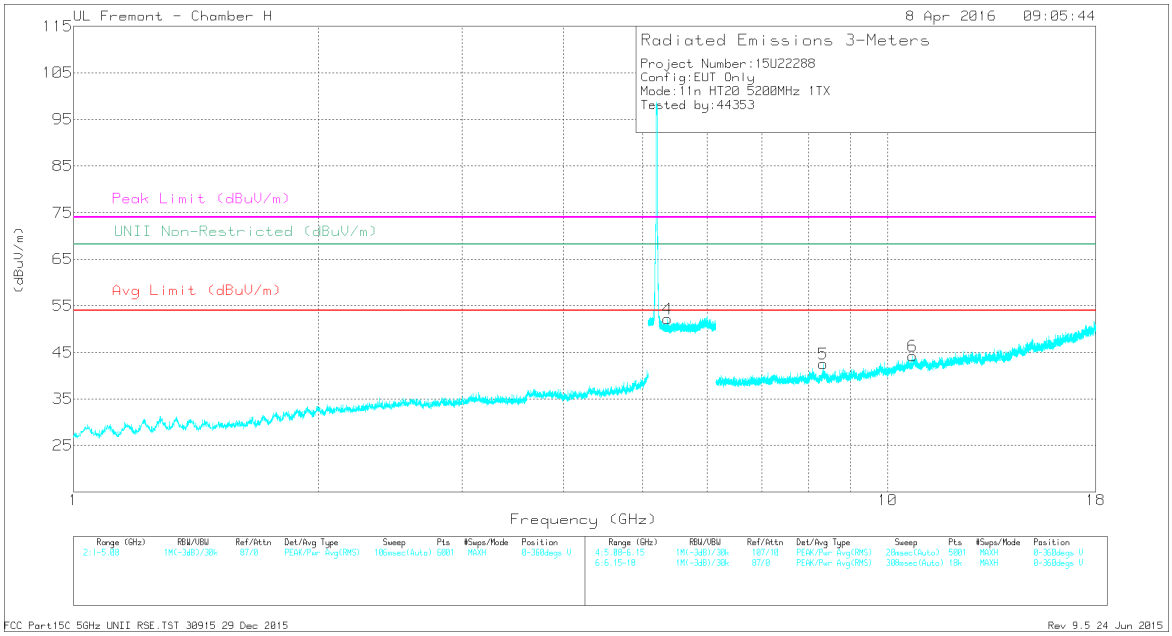
ADR - U-NII AD primary method, RMS average

MID CHANNEL 40 HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.899	39.18	PK-U	33.6	-28.6	44.18	-	-	74	-29.82	-	-	330	212	H
	* 3.899	28.15	ADR	33.6	-28.6	33.15	54	-20.85	-	-	-	-	330	212	H
4	* 5.371	38.76	PK-U	35.2	-16.1	57.86	-	-	74	-16.14	-	-	254	100	V
	* 5.369	27.82	ADR	35.2	-16.1	46.92	54	-7.08	-	-	-	-	254	100	V
5	* 8.314	35.1	PK-U	35.9	-23.1	47.9	-	-	74	-26.1	-	-	79	284	V
	* 8.317	23.32	ADR	35.9	-23	36.22	54	-17.78	-	-	-	-	79	284	V
6	* 10.726	34.71	PK-U	37.9	-22	50.61	-	-	74	-23.39	-	-	126	137	V
	* 10.726	23.2	ADR	37.9	-21.9	39.2	54	-14.8	-	-	-	-	126	137	V
2	10.402	37.74	PK-U	37.3	-22	53.04	-	-	-	-	68.2	-15.16	1	258	H
3	16.809	32.31	PK-U	41.8	-18.3	55.81	-	-	-	-	68.2	-12.39	180	246	H

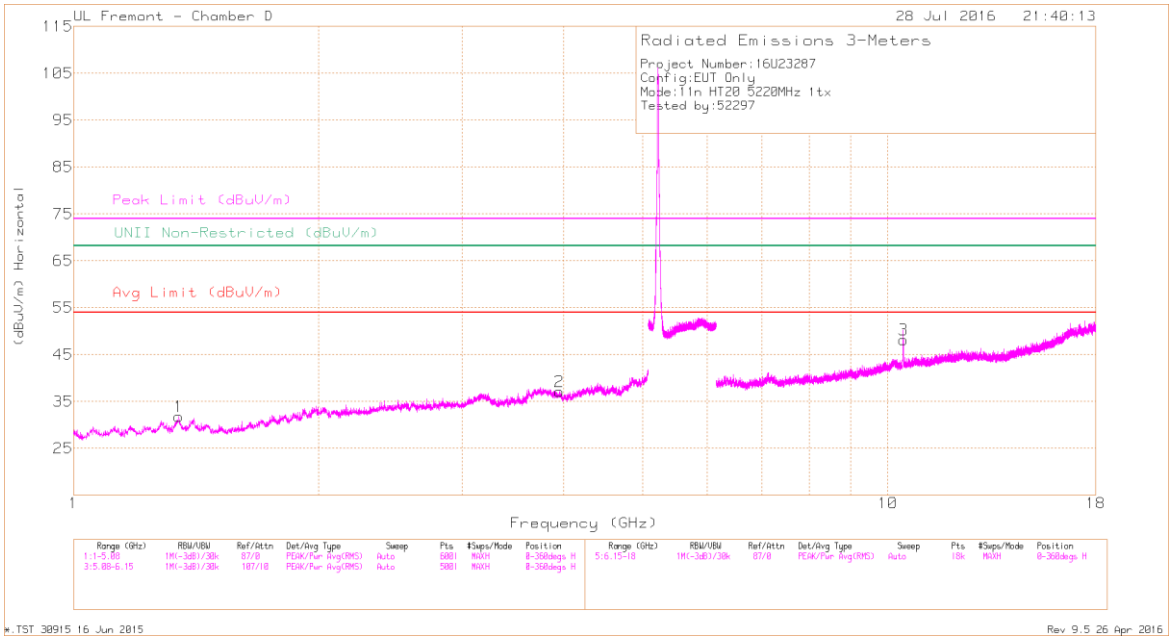
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

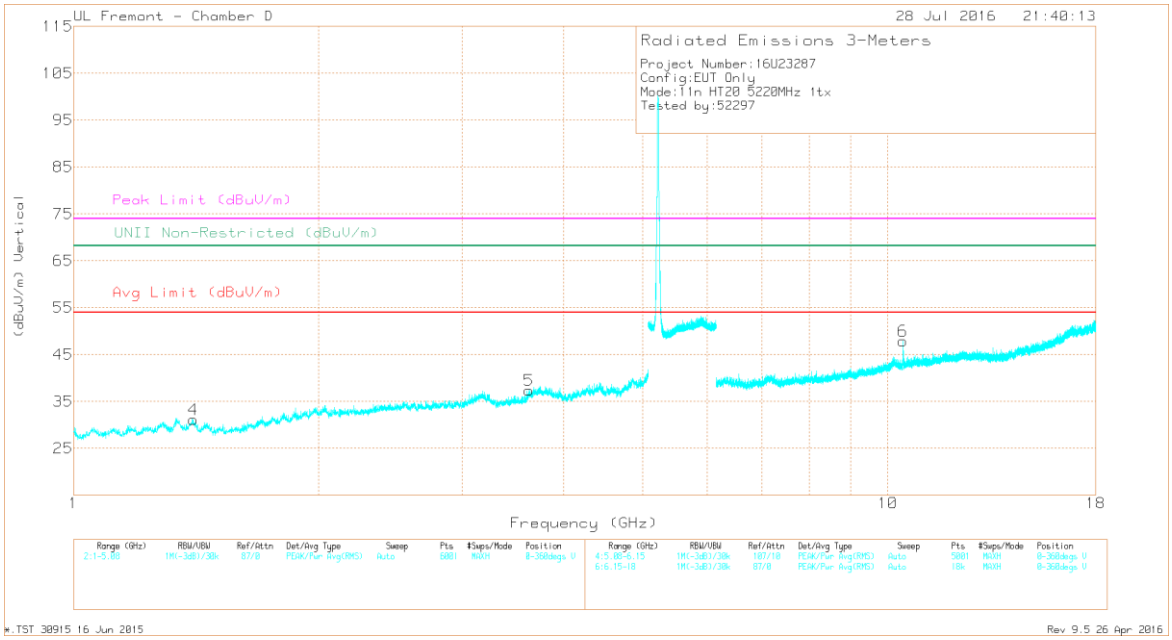
ADR - U-NII AD primary method, RMS average

MID CHANNEL 44 HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



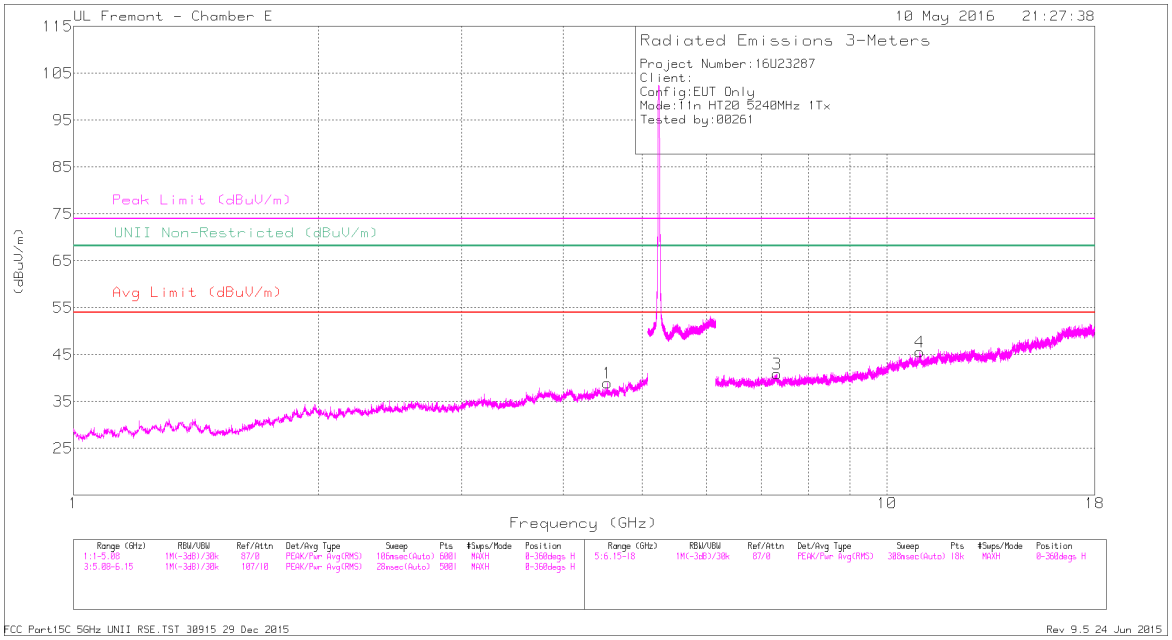
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.347	40.85	PK-U	28.9	-31.3	38.45	-	-	74	-35.55	-	-	83	144	H
	* 1.347	30.1	ADR	28.9	-31.3	27.7	54	-26.3	-	-	-	-	83	144	H
2	* 3.95	37.32	PK-U	33.4	-27.9	42.82	-	-	74	-31.18	-	-	210	108	H
	* 3.952	27.85	ADR	33.4	-27.8	33.45	54	-20.55	-	-	-	-	210	108	H
4	* 1.4	40.69	PK-U	29	-31.2	38.49	-	-	74	-35.51	-	-	193	202	V
	* 1.403	29.95	ADR	28.9	-31.2	27.65	54	-26.35	-	-	-	-	193	202	V
5	* 3.621	37.81	PK-U	33.3	-28.8	42.31	-	-	74	-31.69	-	-	221	187	V
	* 3.622	28.03	ADR	33.3	-28.8	32.53	54	-21.47	-	-	-	-	221	187	V
3	10.438	33.59	PK-U	37.6	-21.4	49.79	-	-	-	-	68.2	-18.41	214	116	V
6	10.445	33.63	PK-U	37.6	-21.5	49.73	-	-	-	-	68.2	-18.47	273	397	H

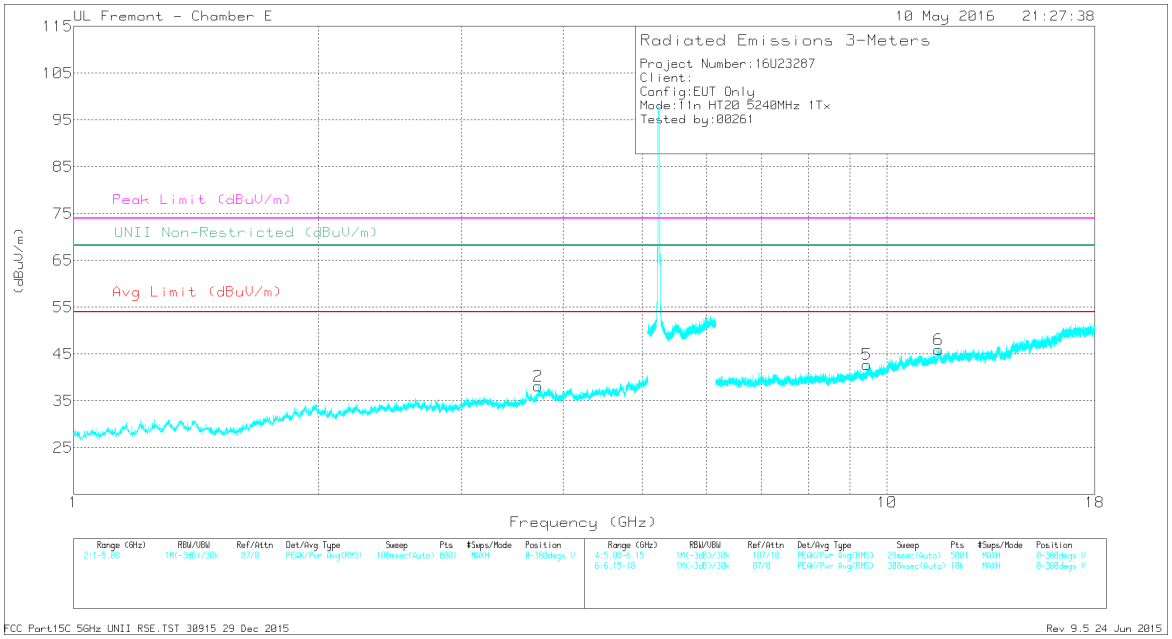
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.531	40.79	PK-U	33.7	-29.6	44.89	-	-	74	-29.11	-	-	123	295	H
	* 4.533	29.43	ADR	33.7	-29.6	33.53	54	-20.47	-	-	-	-	123	295	H
2	* 3.728	42.14	PK-U	33.1	-31.3	43.94	-	-	74	-30.06	-	-	133	124	V
	* 3.73	30.29	ADR	33.1	-31.3	32.09	54	-21.91	-	-	-	-	133	124	V
3	* 7.325	38.08	PK-U	35.6	-26.4	47.28	-	-	74	-26.72	-	-	136	221	H
	* 7.323	26.88	ADR	35.6	-26.3	36.18	54	-17.82	-	-	-	-	136	221	H
4	* 10.963	37	PK-U	38	-23.2	51.8	-	-	74	-22.2	-	-	143	332	H
	* 10.965	24.82	ADR	38	-23.1	39.72	54	-14.28	-	-	-	-	143	332	H
5	* 9.447	37.6	PK-U	36.4	-25.6	48.4	-	-	74	-25.6	-	-	347	329	V
	* 9.445	25.91	ADR	36.4	-25.7	36.61	54	-17.39	-	-	-	-	347	329	V
6	* 11.562	37.05	PK-U	38.4	-22.3	53.15	-	-	74	-20.85	-	-	48	299	V
	* 11.562	25.09	ADR	38.4	-22.3	41.19	54	-12.81	-	-	-	-	48	299	V

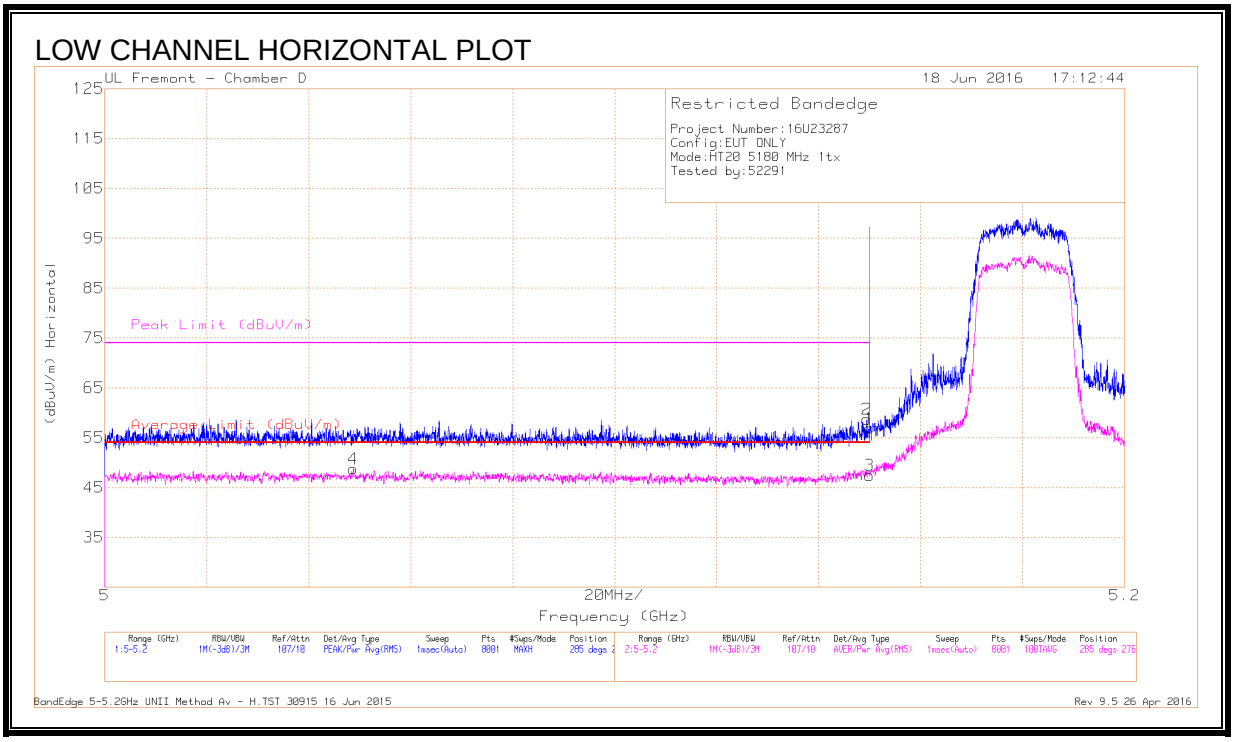
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

RESTRICTED BANDEDGE, CHAIN 1 (LOW CHANNEL)

LOW CHANNEL HORIZONTAL PLOT



DATA

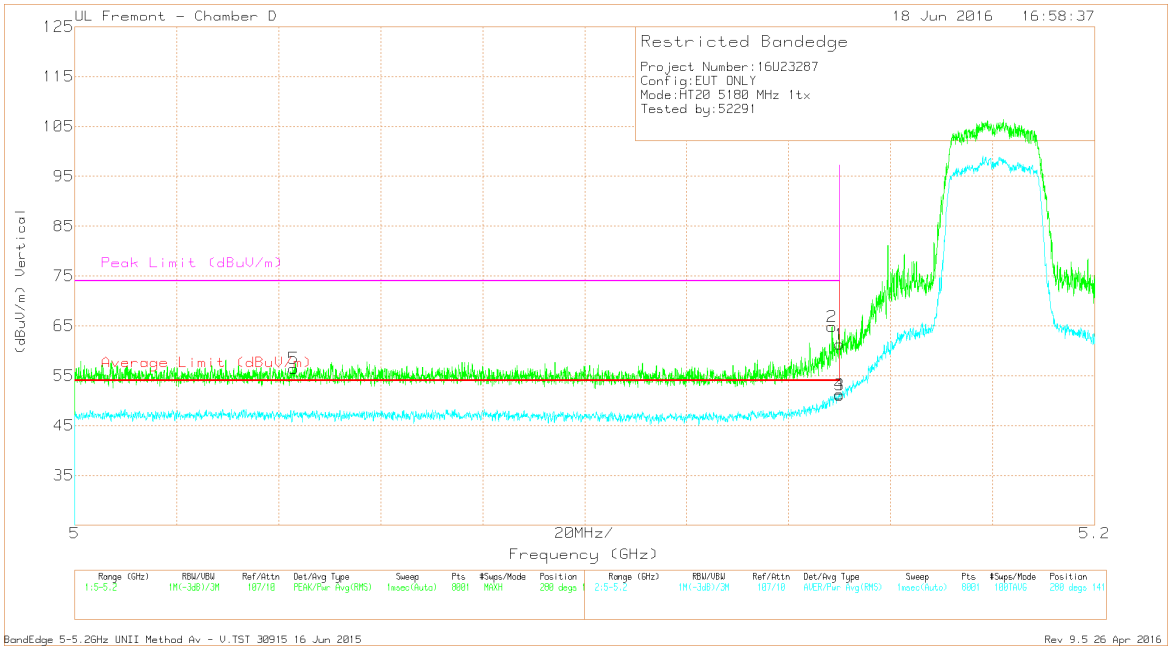
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.149	42.8	Pk	34.1	-18.2	58.7	-	-	74	-15.3	285	276	H
4	* 5.049	32.76	RMS	34	-18	48.76	54	-5.24	-	-	285	276	H
1	5.15	41.02	Pk	34.1	-18.2	56.92	-	-	74	-17.08	285	276	H
3	5.15	31.56	RMS	34.1	-18.2	47.46	54	-6.54	-	-	285	276	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.148	48.95	Pk	34.1	-18.2	64.85	-	-	74	-9.15	280	141	V
5	* 5.043	40.36	Pk	34	-17.9	56.46	-	-	74	-17.54	280	141	V
4	* 5.15	35.4	RMS	34.1	-18.2	51.3	54	-2.7	-	-	280	141	V
1	5.15	45.41	Pk	34.1	-18.2	61.31	-	-	74	-12.69	280	141	V
3	5.15	35.22	RMS	34.1	-18.2	51.12	54	-2.88	-	-	280	141	V

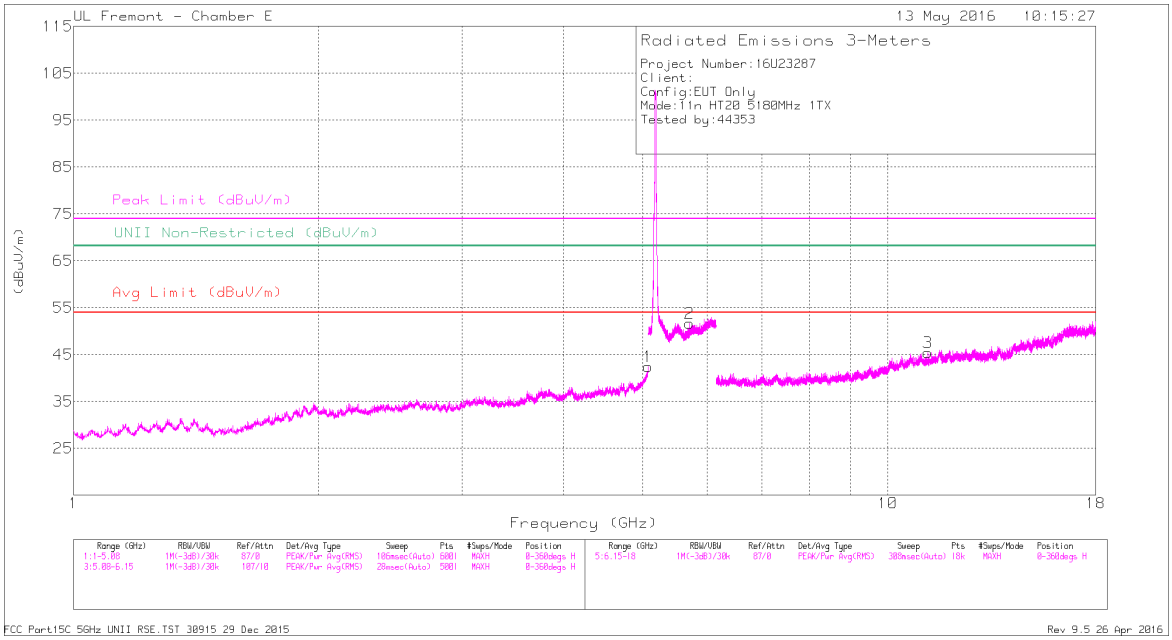
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

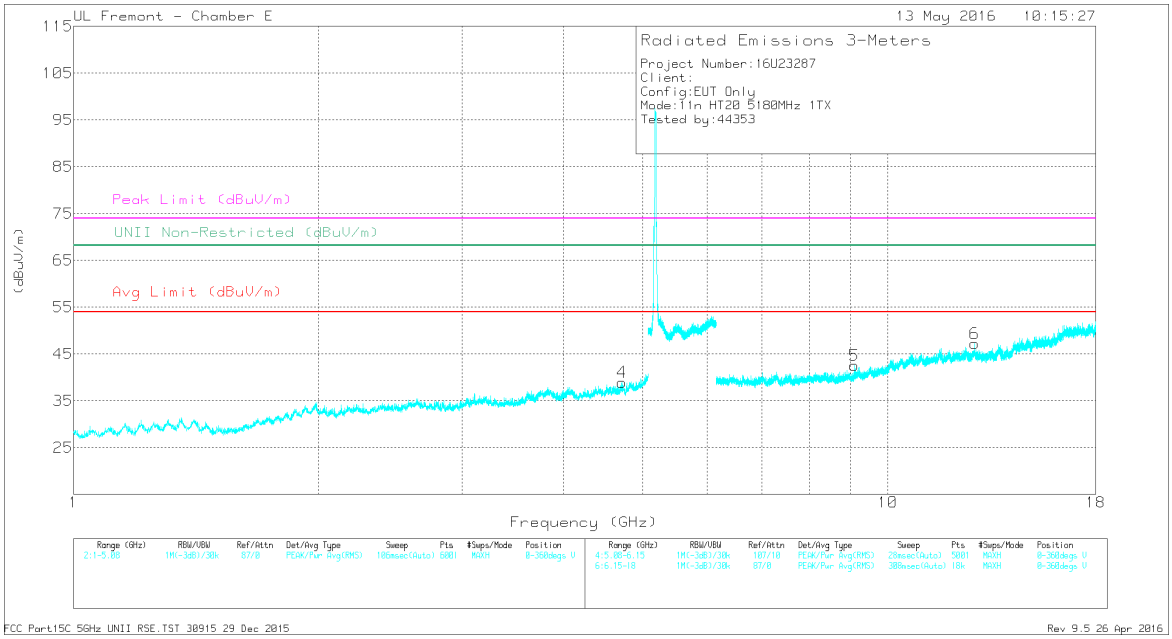
RMS - RMS detection

LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



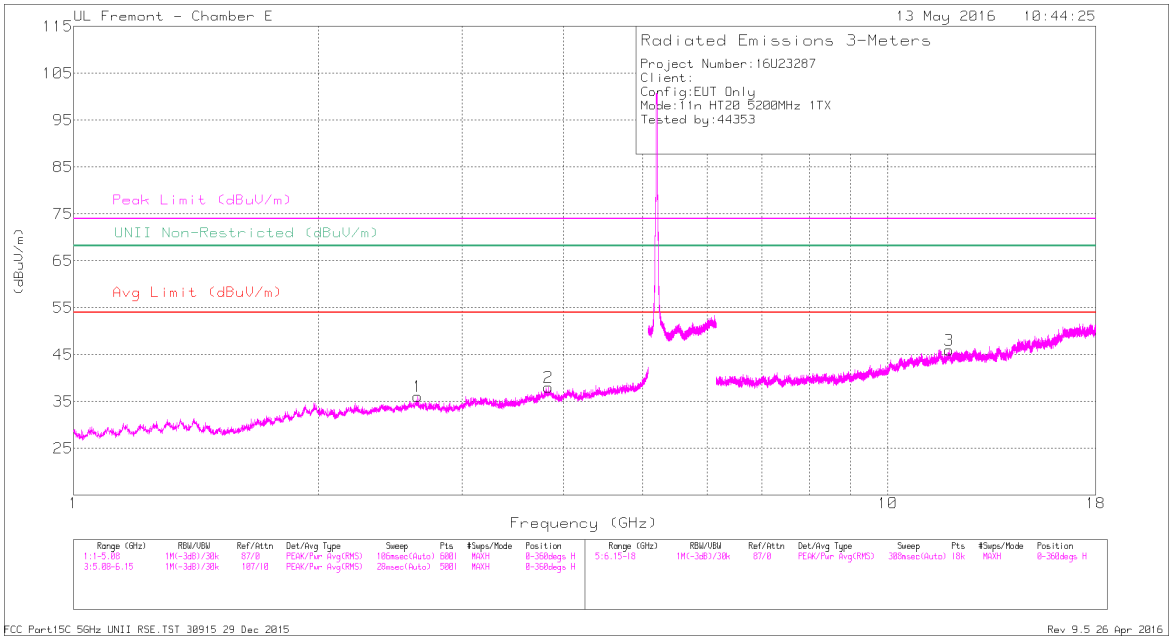
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.078	42.94	PK-U	34	-27	49.94	-	-	74	-24.06	-	-	233	137	H
	* 5.08	32.65	ADR	34	-26.9	39.75	54	-14.25	-	-	-	-	233	137	H
4	* 4.714	40.31	PK-U	34	-29.1	45.21	-	-	74	-28.79	-	-	36	177	V
	* 4.714	30.32	ADR	34	-29.1	35.22	54	-18.78	-	-	-	-	36	177	V
3	* 11.2	37.25	PK-U	38.1	-24.5	50.85	-	-	74	-23.15	-	-	154	287	H
	* 11.197	26.73	ADR	38.1	-24.5	40.33	54	-13.67	-	-	-	-	154	287	H
5	* 9.089	37.95	PK-U	36.1	-25.9	48.15	-	-	74	-25.85	-	-	300	141	V
	* 9.09	27.31	ADR	36.1	-25.9	37.51	54	-16.49	-	-	-	-	300	141	V
2	5.711	42.76	PK-U	34.9	-19.8	57.86	-	-	-	-	68.2	-10.34	250	197	H
6	12.77	37.09	PK-U	39.2	-23.6	52.69	-	-	-	-	68.2	-15.51	311	188	V

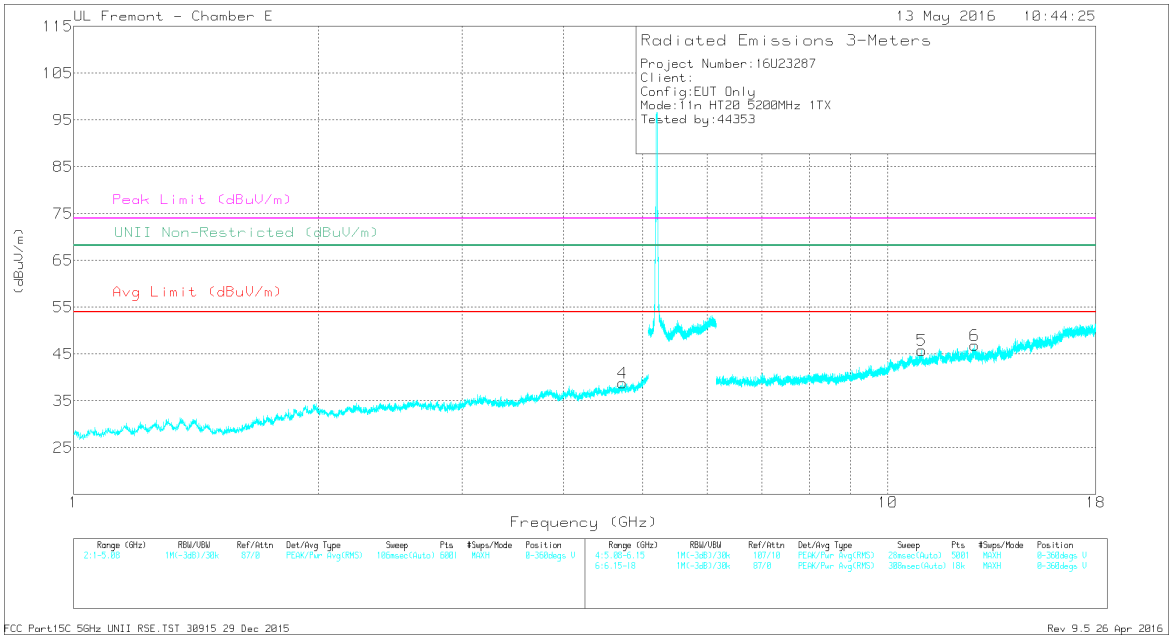
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

MID CHANNEL 40 HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



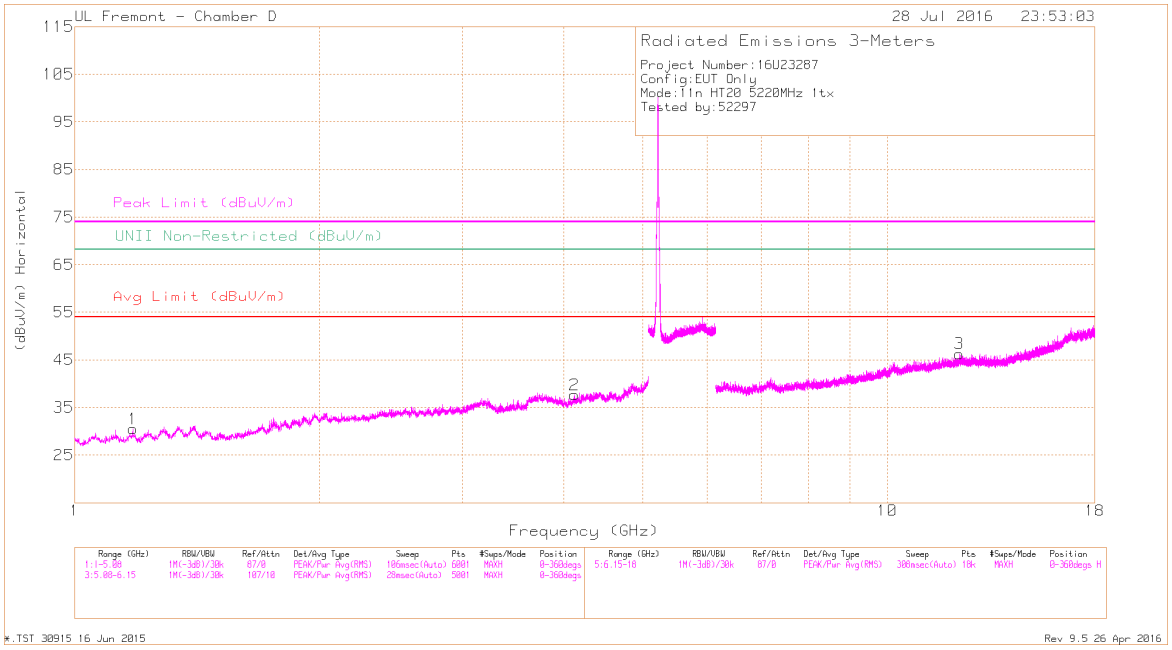
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.833	41	PK-U	33.2	-29.9	44.3	-	-	74	-29.7	-	-	28	189	H
	* 3.833	30.92	ADR	33.2	-29.9	34.22	54	-19.78	-	-	-	-	28	189	H
4	* 4.719	40	PK-U	34	-29	45	-	-	74	-29	-	-	240	118	V
	* 4.72	30.15	ADR	34	-28.9	35.25	54	-18.75	-	-	-	-	240	118	V
3	* 11.888	36.33	PK-U	38.8	-23.1	52.03	-	-	74	-21.97	-	-	102	200	H
	* 11.891	25.92	ADR	38.8	-23.1	41.62	54	-12.38	-	-	-	-	102	200	H
5	* 11.002	35.34	PK-U	38	-22.8	50.54	-	-	74	-23.46	-	-	285	160	V
	* 11.001	25.9	ADR	38	-22.7	41.2	54	-12.8	-	-	-	-	285	160	V
1	2.645	40.9	PK-U	32.6	-31.3	42.2	-	-	-	-	68.2	-26	109	210	H
6	12.787	36.69	PK-U	39.2	-23.7	52.19	-	-	-	-	68.2	-16.01	331	275	V

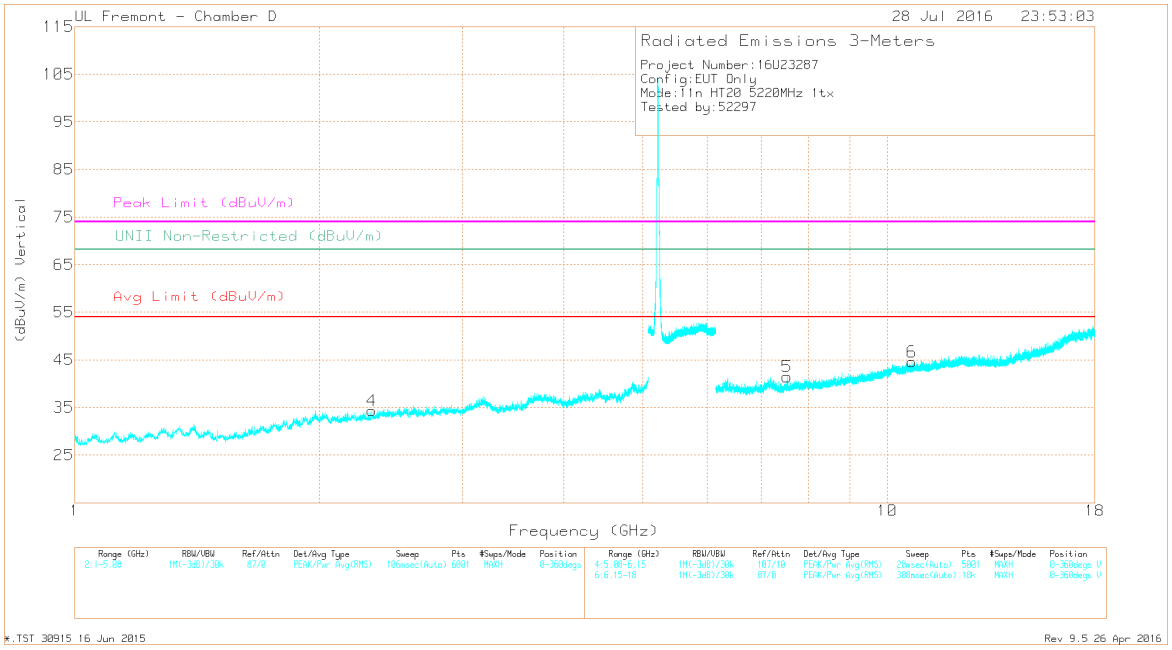
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

MID CHANNEL 44 HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



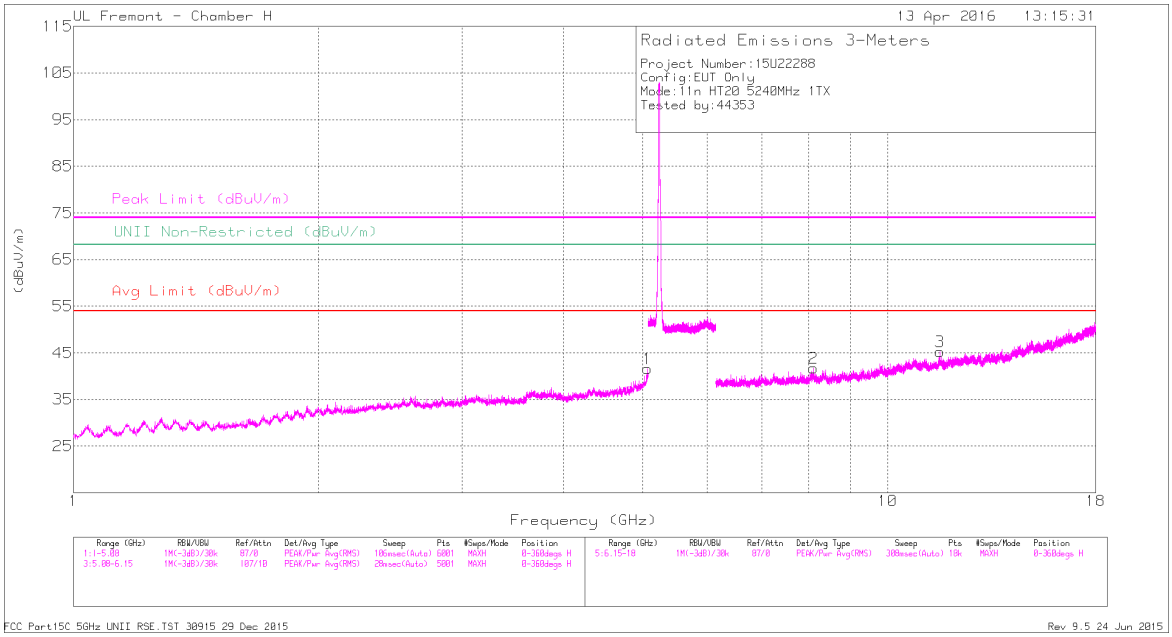
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.18	41.2	PK-U	28	-32.1	37.1	-	-	74	-36.9	-	-	162	151	H
	* 1.18	30.29	ADR	28	-32.1	26.19	54	-27.81	-	-	-	-	162	151	H
2	* 4.12	37.62	PK-U	33.6	-28.3	42.92	-	-	74	-31.08	-	-	184	174	H
	* 4.122	27.74	ADR	33.6	-28.3	33.04	54	-20.96	-	-	-	-	184	174	H
4	* 2.32	39.6	PK-U	31.6	-30.4	40.8	-	-	74	-33.2	-	-	224	285	V
	* 2.319	28.96	ADR	31.5	-30.4	30.06	54	-23.94	-	-	-	-	224	285	V
3	* 12.26	34.11	PK-U	39	-21.1	52.01	-	-	74	-21.99	-	-	56	187	H
	* 12.256	24.03	ADR	39	-21.2	41.83	54	-12.17	-	-	-	-	56	187	H
5	* 7.527	35.48	PK-U	35.7	-24.5	46.68	-	-	74	-27.32	-	-	171	242	V
	* 7.524	25.48	ADR	35.7	-24.5	36.68	54	-17.32	-	-	-	-	171	242	V
6	* 7.525	36.01	PK-U	35.7	-24.5	47.21	-	-	74	-26.79	-	-	280	161	V
	* 7.525	25.25	ADR	35.7	-24.5	36.45	54	-17.55	-	-	-	-	280	161	V

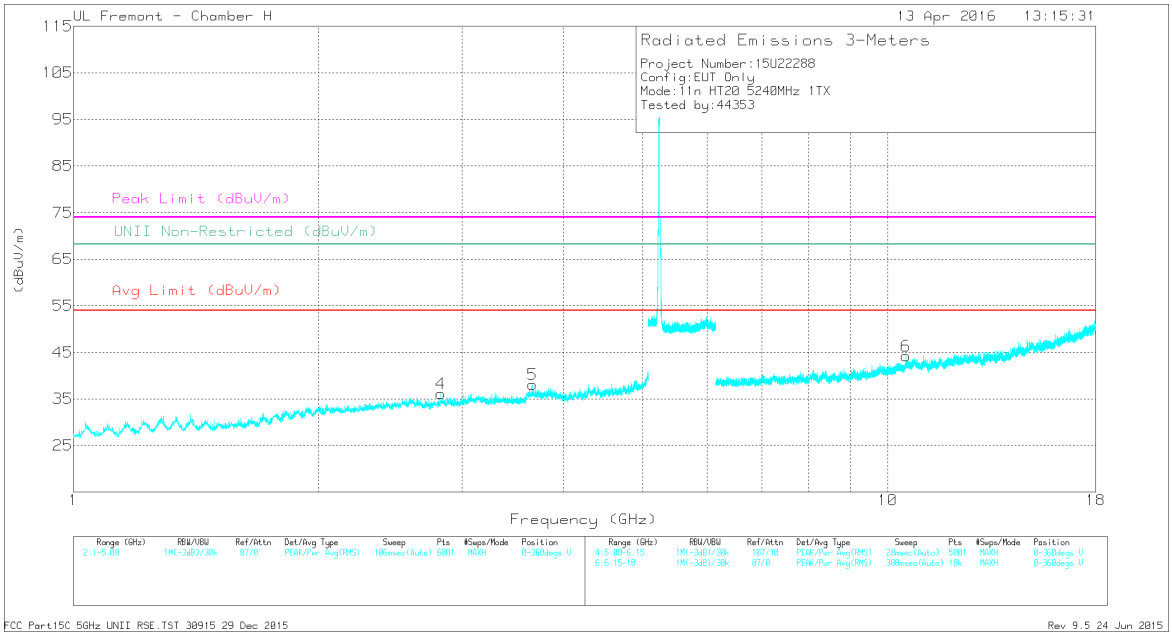
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.068	38.69	PK-U	34.3	-25	47.99	-	-	74	-26.01	-	-	238	156	H
	* 5.067	27.01	ADR	34.3	-25	36.31	54	-17.69	-	-	-	-	238	156	H
4	* 2.827	40.26	PK-U	32.4	-30	42.66	-	-	74	-31.34	-	-	86	197	V
	* 2.826	28.37	ADR	32.4	-30	30.77	54	-23.23	-	-	-	-	86	197	V
5	* 3.667	39.02	PK-U	33.2	-28.1	44.12	-	-	74	-29.88	-	-	114	291	V
	* 3.667	27.56	ADR	33.2	-28.1	32.66	54	-21.34	-	-	-	-	114	291	V
2	* 8.105	35.97	PK-U	35.9	-23.6	48.27	-	-	74	-25.73	-	-	80	202	H
	* 8.104	24.52	ADR	35.9	-23.6	36.82	54	-17.18	-	-	-	-	80	202	H
3	* 11.584	33.8	PK-U	38	-21	50.8	-	-	74	-23.2	-	-	232	110	H
	* 11.581	22.71	ADR	38	-21	39.71	54	-14.29	-	-	-	-	232	110	H
6	10.521	34.38	PK-U	37.5	-21.6	50.28	-	-	-	-	68.2	-17.92	272	183	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average