UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	4.71	30.00	30.00

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

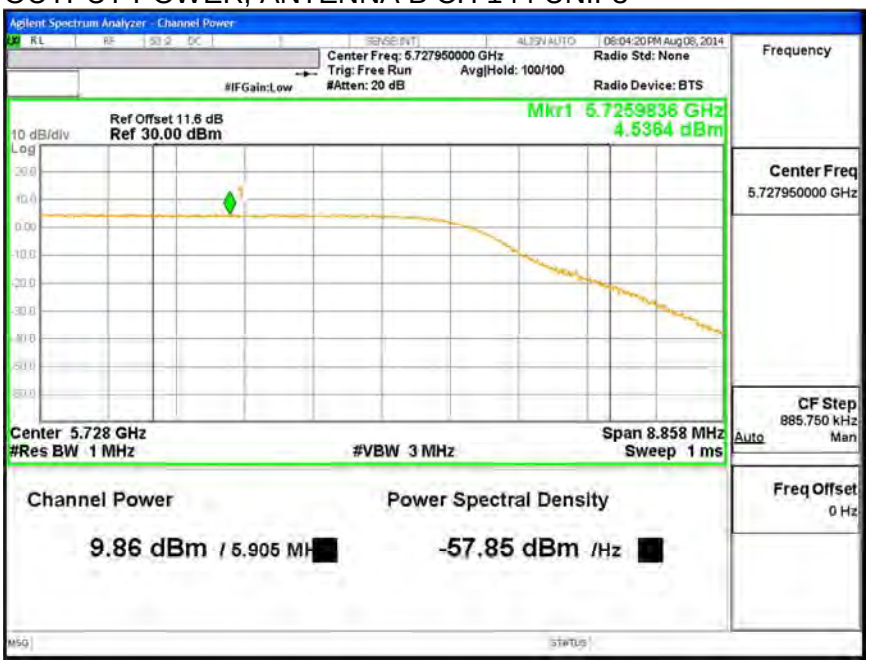
Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Antenna C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	9.86	10.24	13.06	30.00	-16.94

PSD Results

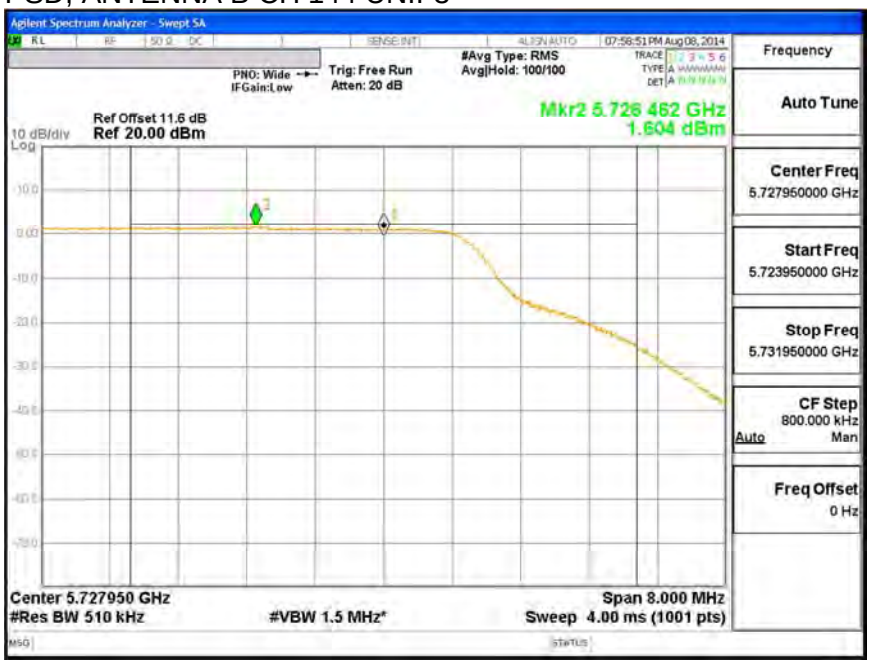
Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	1.60	1.87	4.75	30.00	-25.25

OUTPUT POWER, ANTENNA B CH 144 UNII-3

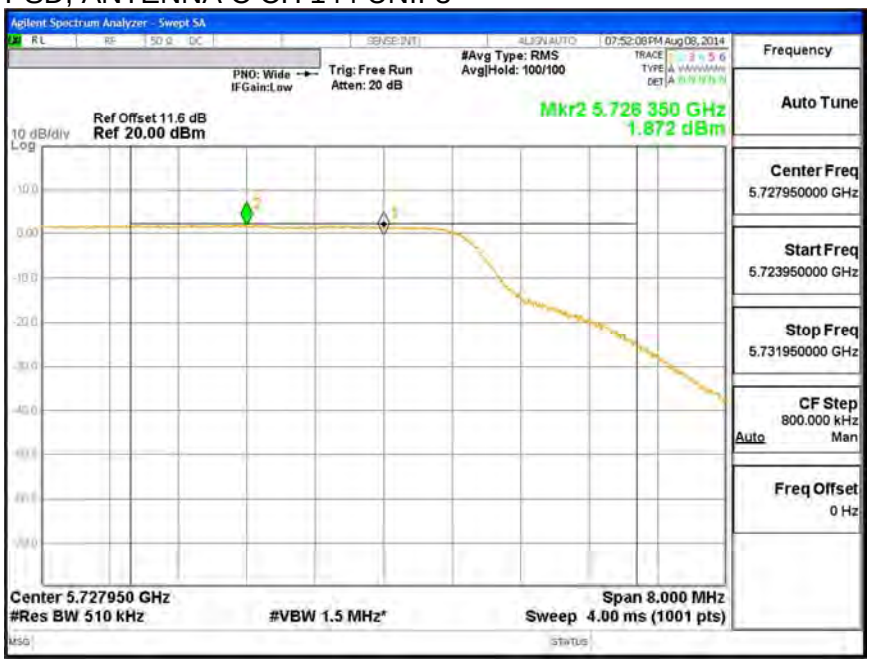


OUTPUT POWER, ANTENNA C CH 144 UNII-3

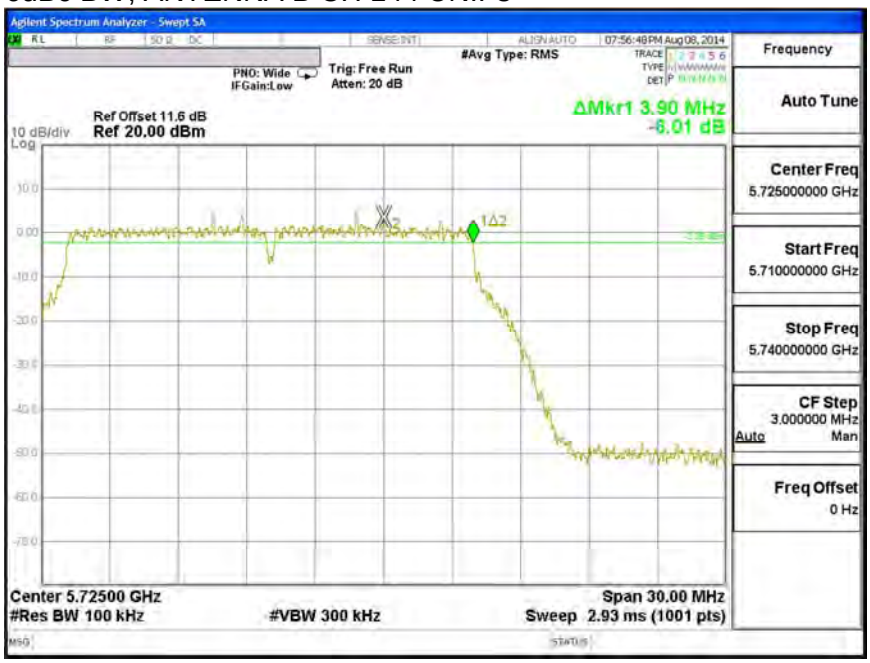
PSD, ANTENNA B CH 144 UNII-3



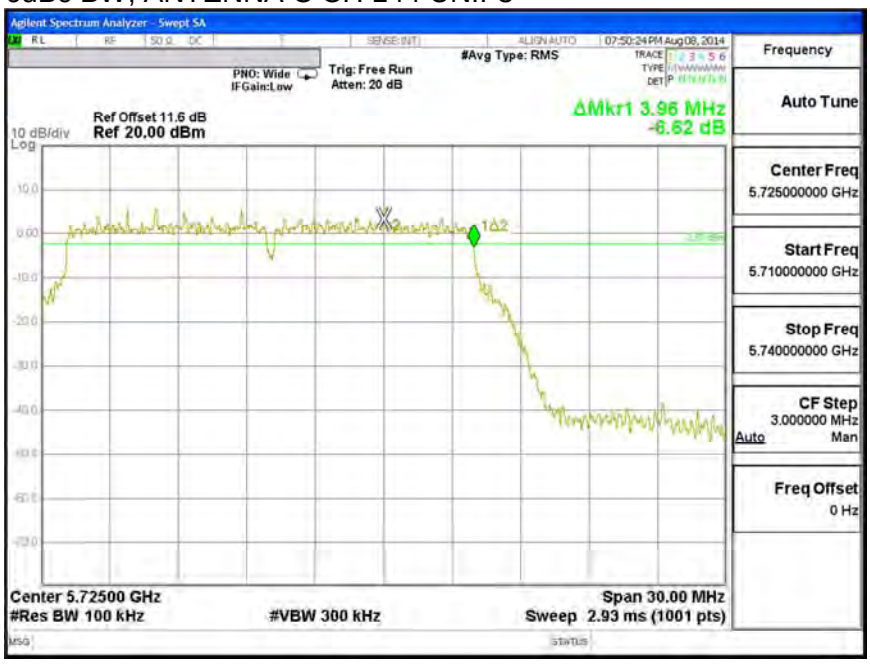
PSD, ANTENNA C CH 144 UNII-3



6dBc BW, ANTENNA B CH 144 UNII-3



6dBc BW, ANTENNA C CH 144 UNII-3



9.21. 802.11n HT20 2Tx STBC/SDM MODE IN THE 5.6 GHz BAND

Refer to Section 9.20, 802.11n HT20 2Tx CDD MODE IN THE 5.6 GHz BAND

9.22. 802.11n HT40 MODE IN THE 5.6 GHz BAND

9.22.1. 26 dB BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5510	40.14
Mid	5550	40.02
High	5670	39.90
High	5710	40.20

26 dB BANDWIDTH

BANDWIDTH LOW CH

BANDWIDTH MID CH

BANDWIDTH HIGH CH

BANDWIDTH STRADDLE CH 142

9.22.2. 99% BANDWIDTH

LIMITS

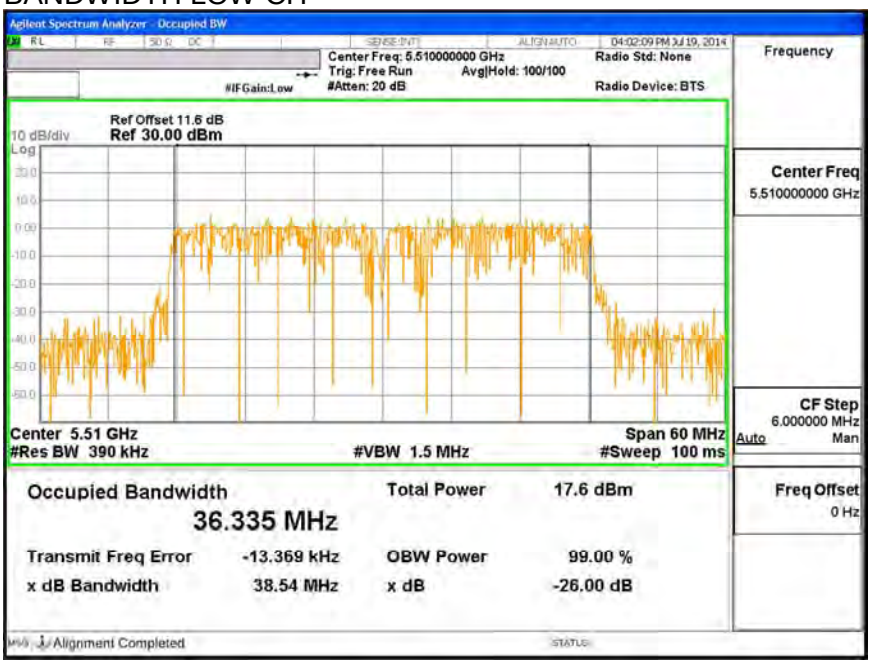
None; for reporting purposes only.

RESULTS

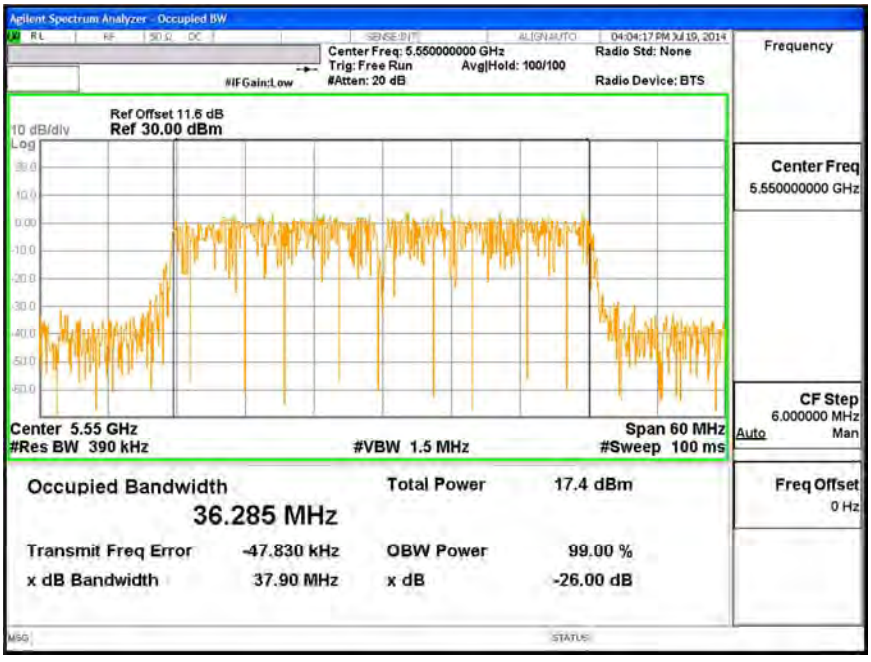
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5510	36.335
Mid	5550	36.285
High	5670	36.136
142	5710	36.236

99% BANDWIDTH

BANDWIDTH LOW CH



BANDWIDTH MID CH



BANDWIDTH HIGH CH

BANDWIDTH STRADDLE CH 142

9.22.1. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Antenna B Power (dBm)	Antenna C Power (dBm)
Low	5510	14.93	14.93
Mid	5550	16.47	17.90
High	5670	13.88	13.92
142	5710	16.41	17.87

9.22.2. 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 peak power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

DIRECTIONAL ANTENNA GAIN

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

ANTENNA B

Antenna Gain (dBi)
0.155

ANTENNA C

Antenna Gain (dBi)
3.004

RESULTS

ANTENNA B

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directiona Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5510	40.14	0.16	24.00	11.00
Mid	5550	40.02	0.16	24.00	11.00
High	5670	39.90	0.16	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	14.93	14.93	24.00	-9.07
Mid	5550	16.47	16.47	24.00	-7.53
High	5670	13.88	13.88	24.00	-10.12

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5510	0.53	0.53	11.00	-10.47
Mid	5550	2.01	2.01	11.00	-8.99
High	5670	-0.78	-0.78	11.00	-11.78

ANTENNA C

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directiona Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5510	40.14	3.00	24.00	11.00
Mid	5550	40.02	3.00	24.00	11.00
High	5670	39.90	3.00	24.00	11.00

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

Output Power Results

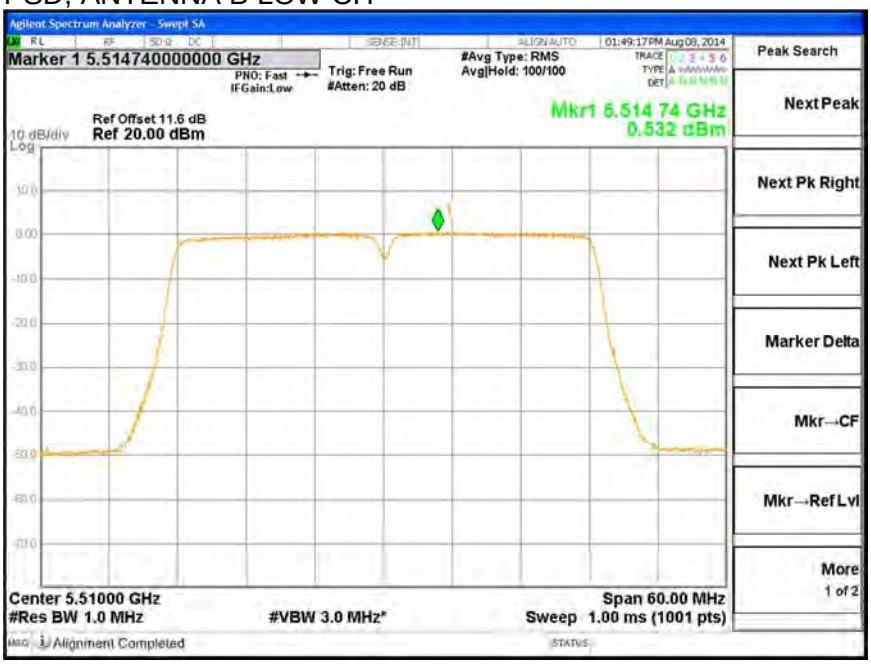
Channel	Frequency (MHz)	Antenna C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	14.93	14.93	24.00	-9.07
Mid	5550	17.90	17.90	24.00	-6.10
High	5670	13.92	13.92	24.00	-10.08

PSD Results

Channel	Frequency (MHz)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5510	0.55	0.55	11.00	-10.45
Mid	5550	3.44	3.44	11.00	-7.57
High	5670	-0.80	-0.80	11.00	-11.80

PSD, ANTENNA B

PSD, ANTENNA B LOW CH

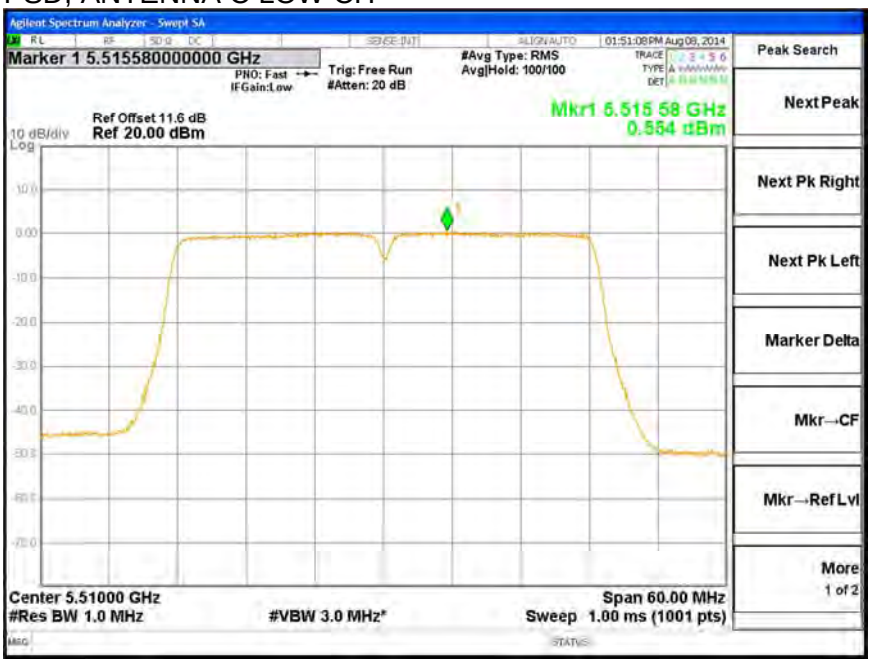


PSD, ANTENNA B MID CH

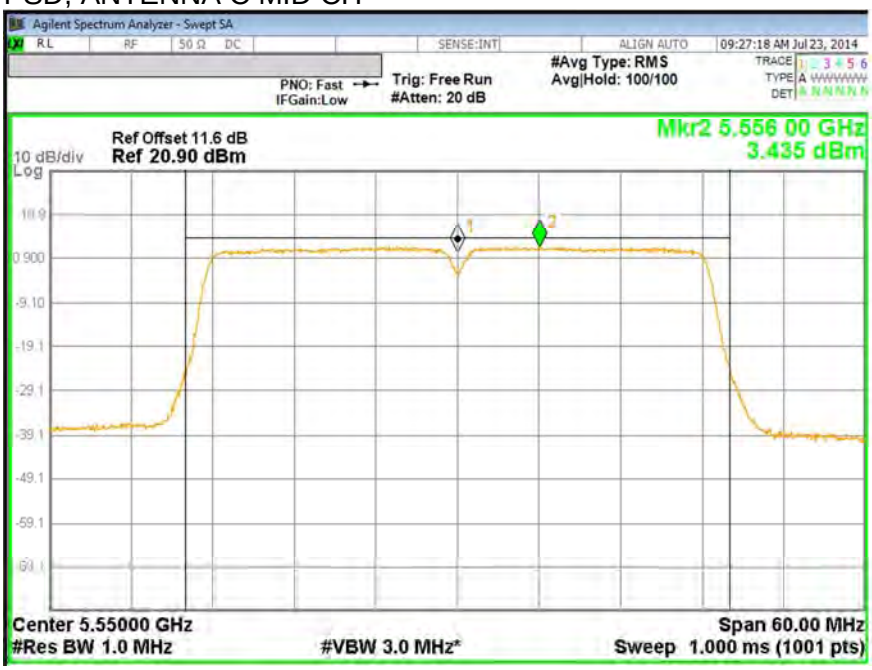
PSD, ANTENNA B HIGH CH

PSD, ANTENNA C

PSD, ANTENNA C LOW CH



PSD, ANTENNA C MID CH



PSD, ANTENNA C HIGH CH

ANTENNA B STRADDLE CHANNEL 142 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)
142	5710	40.02	0.16	0.16	24.00	11.00

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

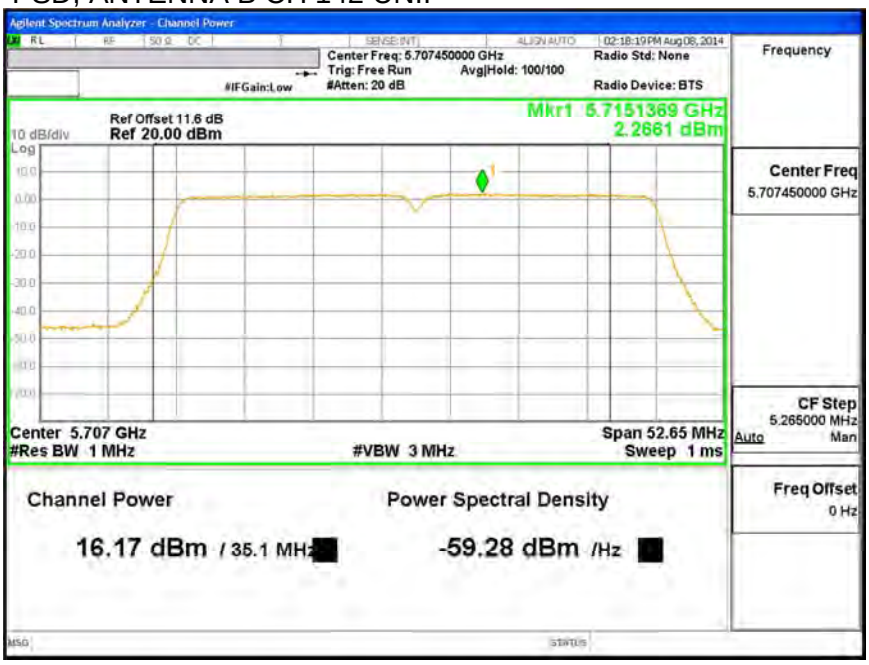
Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
142	5710	16.17	16.17	24.00	-7.83

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
142	5710	2.27	2.27	11.00	-8.73

PSD, ANTENNA B CH 142 UNII



UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
142	5710	3.00	30.00	30.00

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

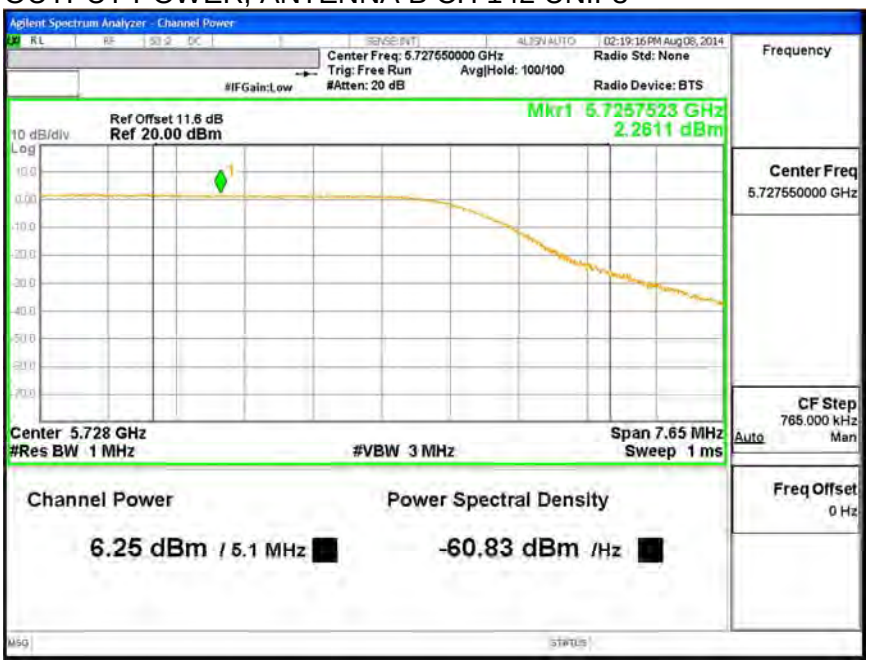
Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
142	5710	6.25	6.25	30.00	-23.75

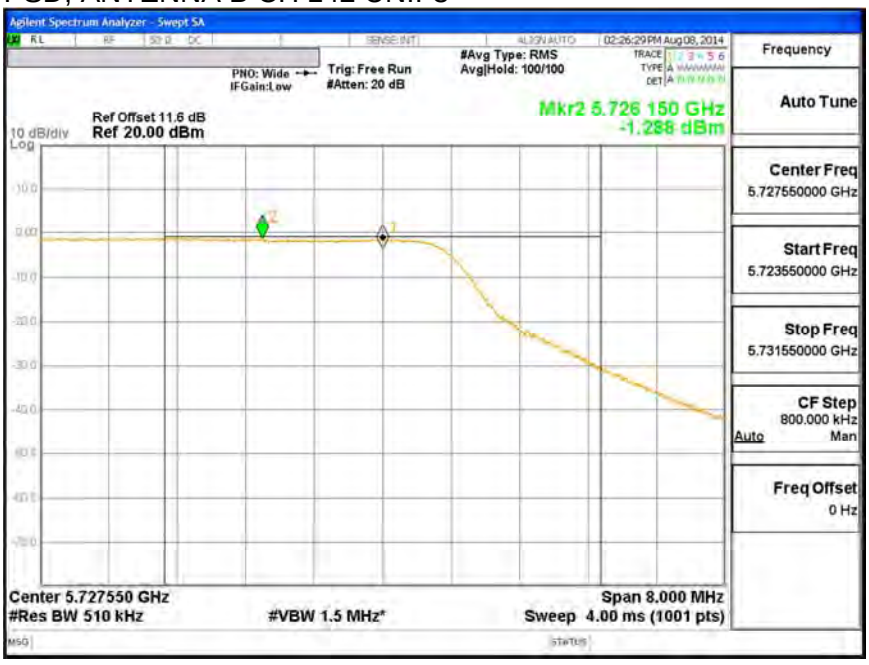
PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
142	5710	-1.29	-1.29	30.00	-31.29

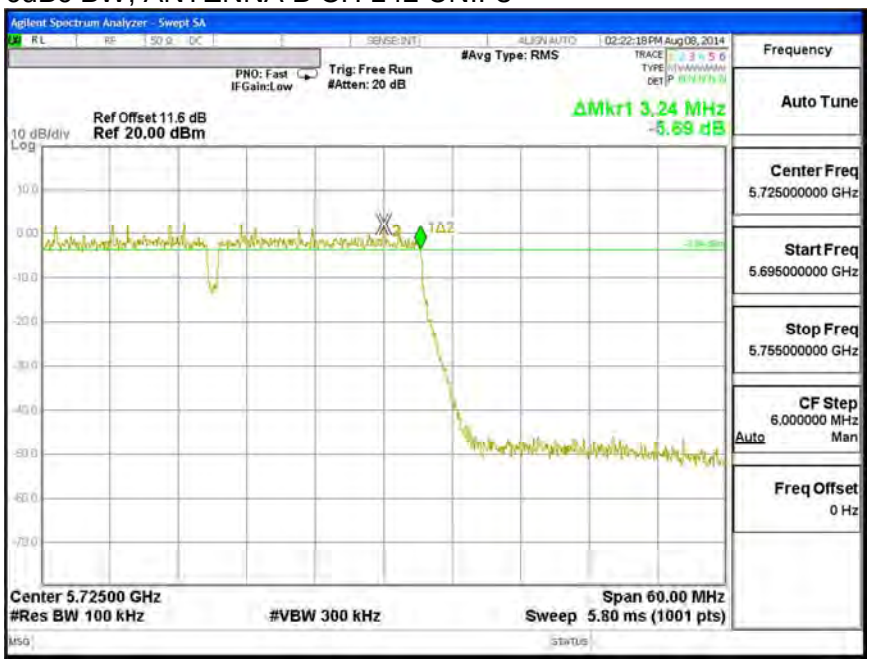
OUTPUT POWER, ANTENNA B CH 142 UNII-3



PSD, ANTENNA B CH 142 UNII-3



6dBc BW, ANTENNA B CH 142 UNII-3



ANTENNA C 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)
142	5710	39.90	3.00	3.00	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
142	5710	17.56	17.56	24.00	-6.44

PSD Results

Channel	Frequency (MHz)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
142	5710	3.64	3.64	11.00	-7.36

PSD, ANTENNA C CH 142 UNII

UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
142	5710	3.00	30.00	30.00

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

Output Power Results

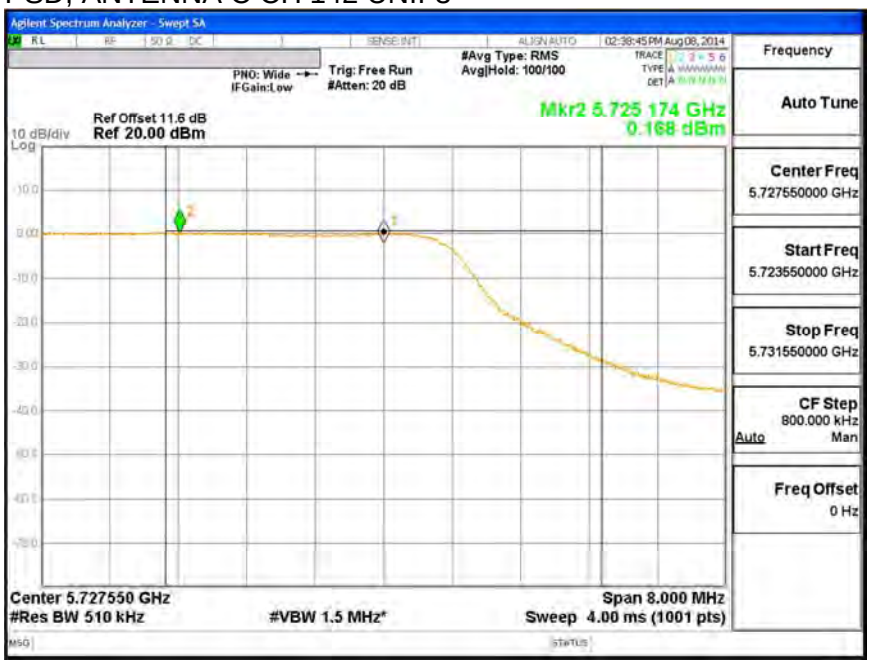
Channel	Frequency (MHz)	Antenna C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
142	5710	7.34	7.34	30.00	-22.66

PSD Results

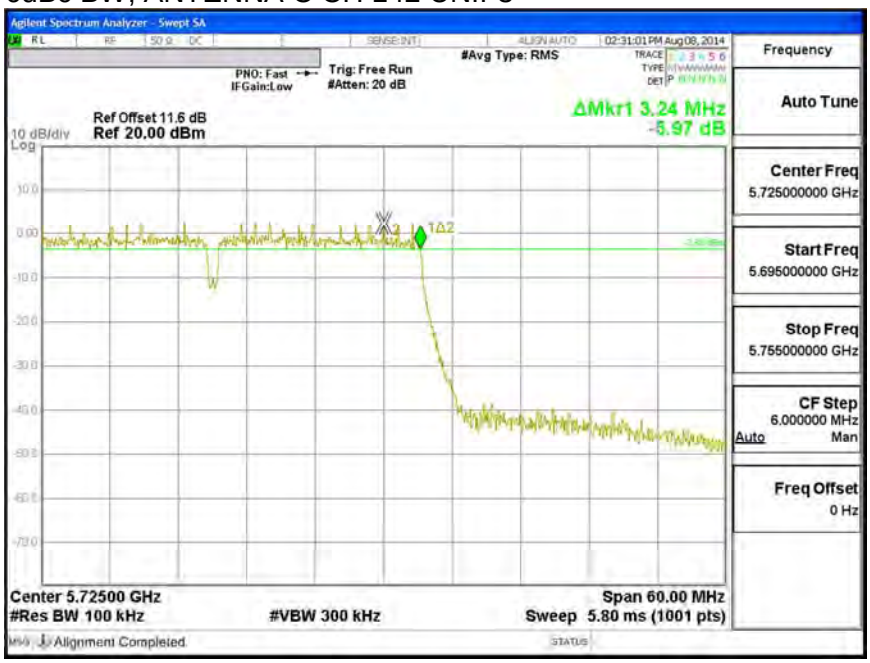
Channel	Frequency (MHz)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
142	5710	0.17	0.17	30.00	-29.83

OUTPUT POWER, ANTENNA C CH 142 UNII-3

PSD, ANTENNA C CH 142 UNII-3



6dBc BW, ANTENNA C CH 142 UNII-3



9.23. 802.11n HT40 2Tx CDD MODE IN THE 5.6 GHz BAND

9.23.1. 26 dB BANDWIDTH

LIMITS

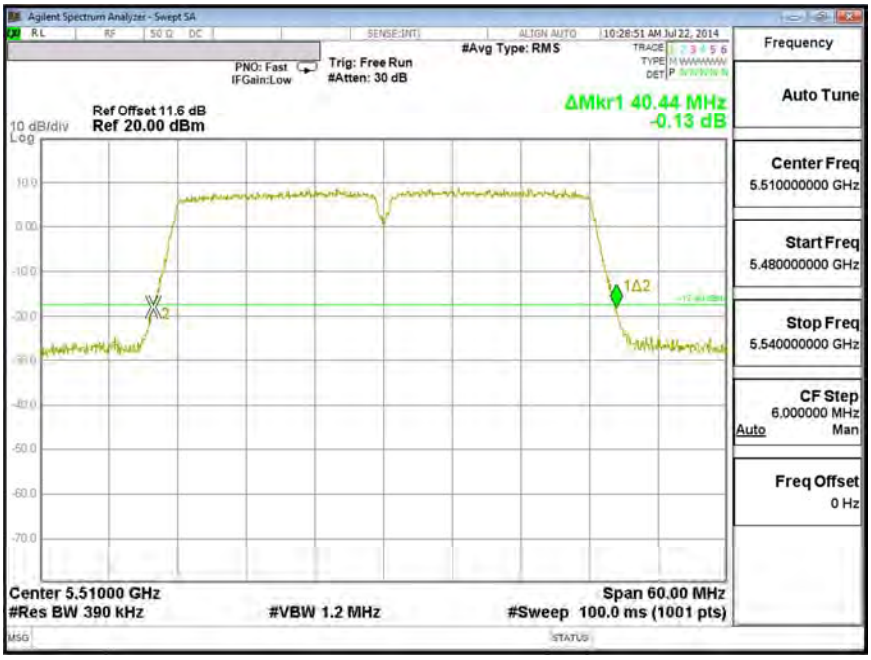
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB BW Antenna B (MHz)	26 dB BW Antenna C (MHz)
Low	5510	40.44	39.72
Mid	5550	40.20	39.96
High	5670	40.20	39.72
High	5710	40.02	39.90

26 dB BANDWIDTH, ANTENNA B

BANDWIDTH ANTENNA B LOW CH



BANDWIDTH ANTENNA B MID CH

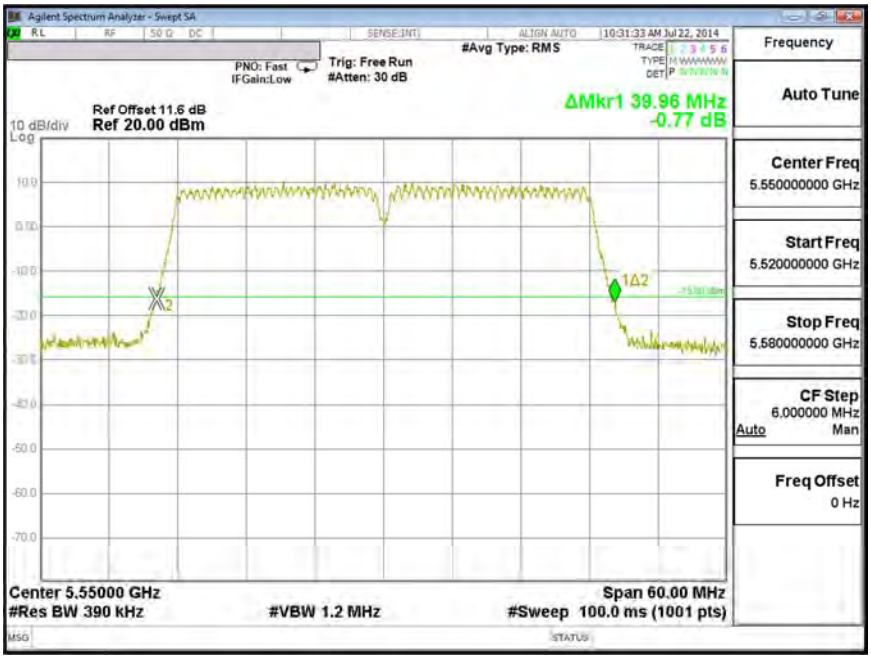
BANDWIDTH ANTENNA B HIGH CH

BANDWIDTH ANTENNA B STRADDLE CH 142

26 dB BANDWIDTH, ANTENNA C

BANDWIDTH ANTENNA C LOW CH

BANDWIDTH ANTENNA C MID CH



BANDWIDTH ANTENNA C HIGH CH

BANDWIDTH ANTENNA C STRADDLE CH 142

9.23.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

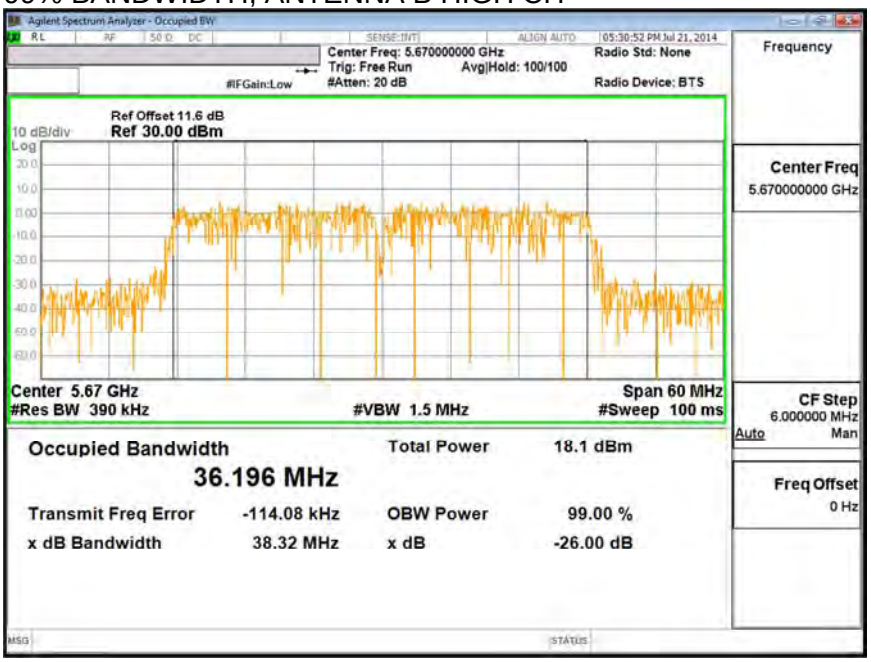
Channel	Frequency (MHz)	99% BW Antenna B (MHz)	99% BW Antenna C (MHz)
Low	5510	36.224	36.118
Mid	5550	36.165	36.235
High	5670	36.196	36.224
High	5710	36.228	35.867

99% BANDWIDTH, ANTENNA B

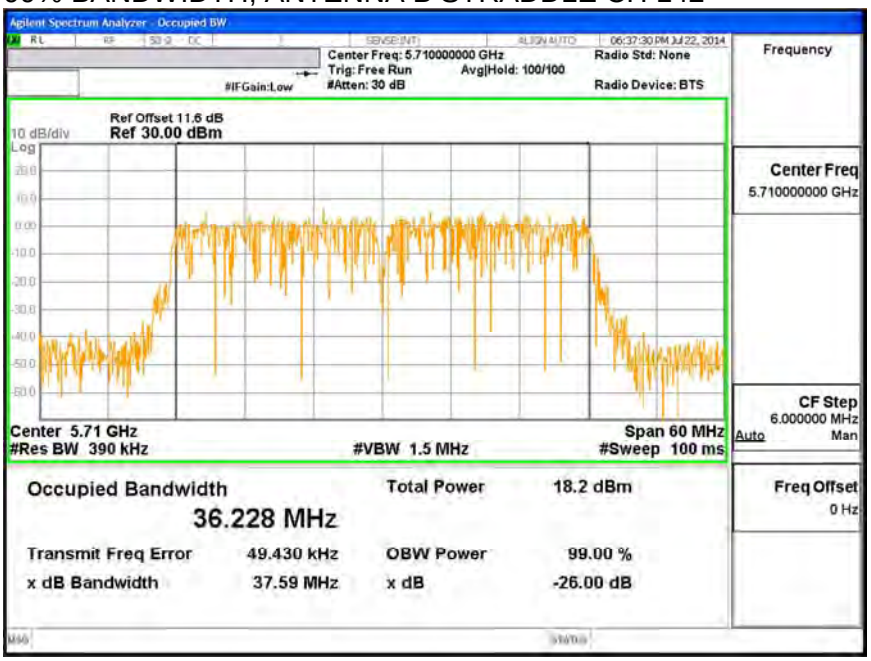
99% BANDWIDTH, ANTENNA B LOW CH

99% BANDWIDTH, ANTENNA B MID CH

99% BANDWIDTH, ANTENNA B HIGH CH



99% BANDWIDTH, ANTENNA B STRADDLE CH 142

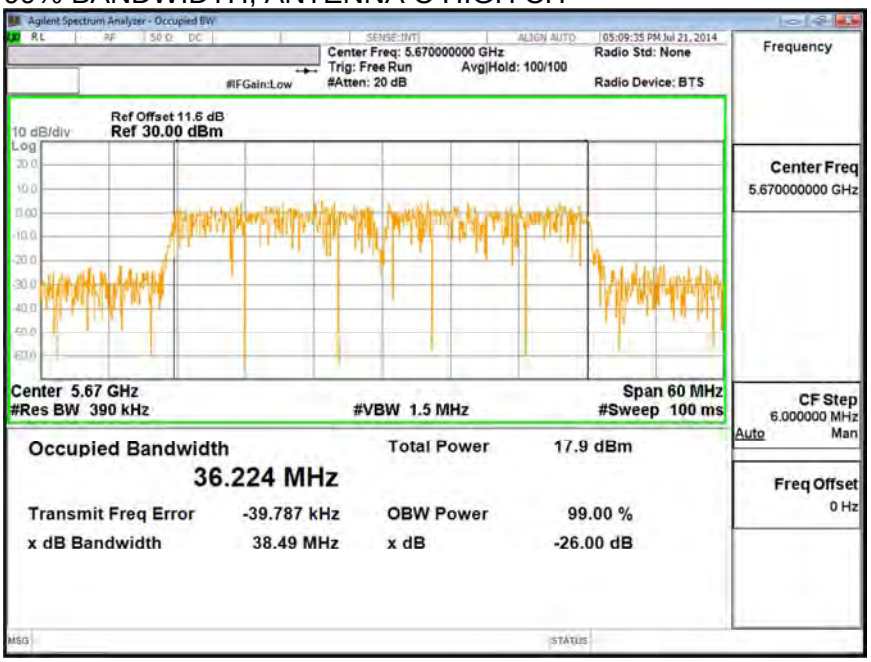


99% BANDWIDTH, ANTENNA C

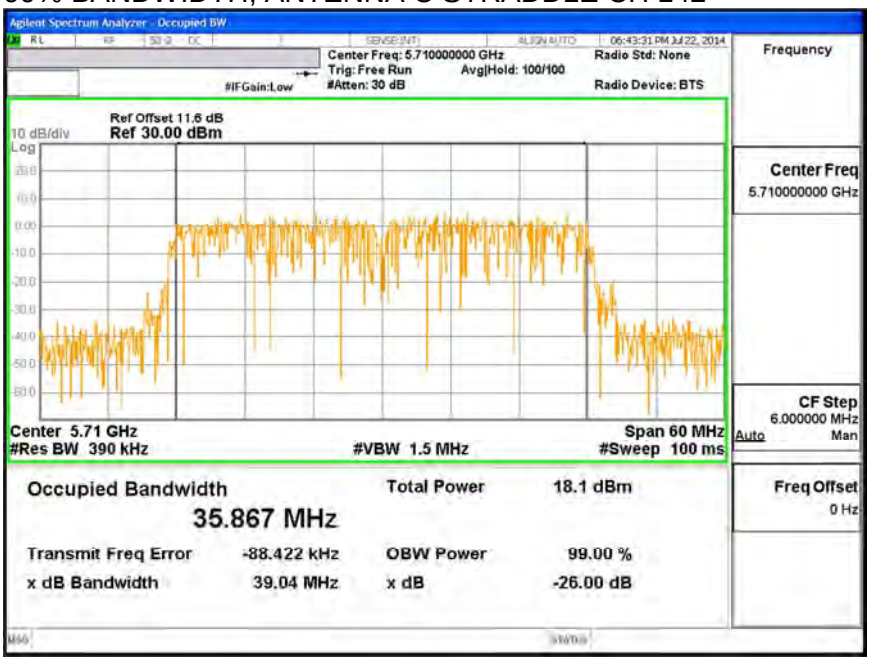
99% BANDWIDTH, ANTENNA C LOW CH

99% BANDWIDTH, ANTENNA C MID CH

99% BANDWIDTH, ANTENNA C HIGH CH



99% BANDWIDTH, ANTENNA C STRADDLE CH 142



9.23.1. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Average Power Results

Channel	Frequency (MHz)	Antenna B Power (dBm)	Antenna C Power (dBm)	Total Power (dBm)
Low	5510	13.43	13.38	16.42
Mid	5550	16.43	17.84	20.20
High	5670	12.97	12.96	15.98
High	5710	16.40	17.82	20.18

9.23.2. 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.

TEST PROCEDURE

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

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 C Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
0.16	3.00	1.81

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

Antenna B Antenna Gain (dBi)	Antenna C Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
0.16	3.00	4.71

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	5510	39.72	1.81	4.71	24.00	11.00
Mid	5550	39.96	1.81	4.71	24.00	11.00
High	5670	39.72	1.81	4.71	24.00	11.00

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

Output Power Results

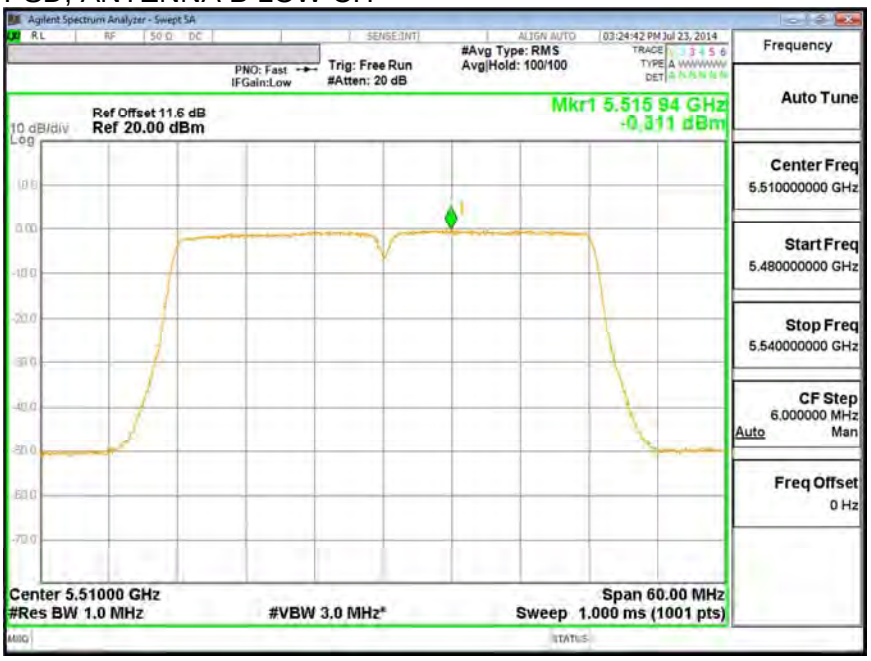
Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Antenna C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	13.43	13.38	16.42	24.00	-7.58
Mid	5550	16.43	17.84	20.20	24.00	-3.80
High	5670	12.97	12.96	15.98	24.00	-8.02

PSD Results

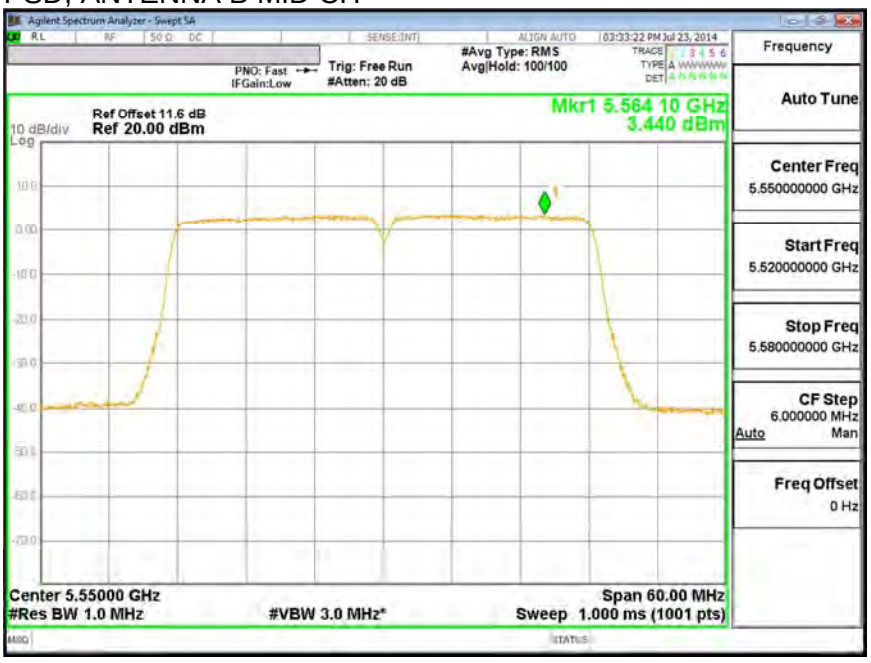
Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5510	-0.31	-0.30	2.71	11.00	-8.29
Mid	5550	3.44	3.77	6.62	11.00	-4.38
High	5670	-1.23	-1.11	1.84	11.00	-9.16

PSD, ANTENNA B

PSD, ANTENNA B LOW CH



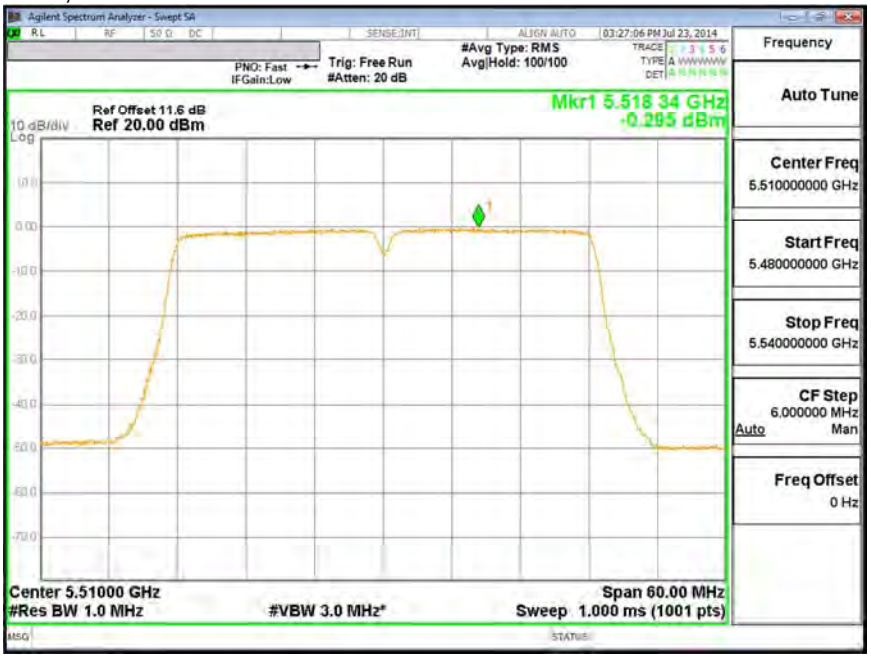
PSD, ANTENNA B MID CH



PSD, ANTENNA B HIGH CH

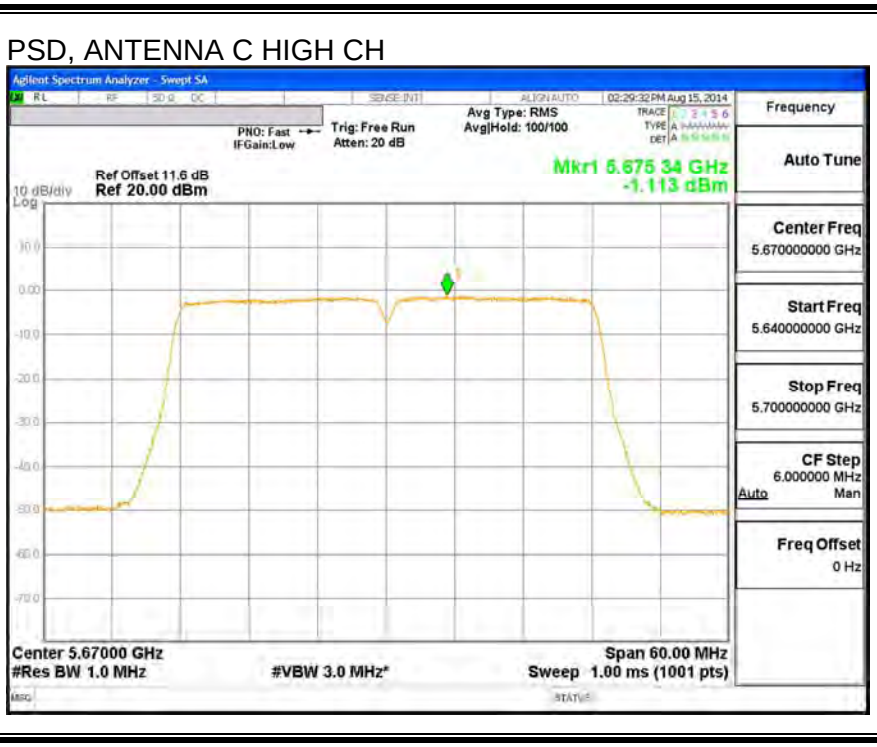
PSD, ANTENNA C

PSD, ANTENNA C LOW CH



PSD, ANTENNA C MID CH

PSD, ANTENNA C HIGH CH



STRADDLE CHANNEL 142 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)
142	5710	39.90	1.81	4.71	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Antenna C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
142	5710	16.65	17.79	20.27	24.00	-3.73

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
142	5710	2.72	3.83	6.32	11.00	-4.68

OUTPUT POWER AND PSD, ANTENNA B CH 142 UNII

OUTPUT POWER AND PSD, ANTENNA C CH 142 UNII

UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
142	5710	4.71	30.00	30.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Antenna C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
142	5710	6.44	7.45	9.98	30.00	-20.02

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
142	5710	2.06	3.43	5.81	30.00	-24.19

OUTPUT POWER, ANTENNA B CH 142 UNII-3

OUTPUT POWER, ANTENNA C CH 142 UNII-3

PSD, ANTENNA B CH 142 UNII-3

PSD, ANTENNA C CH 142 UNII-3

9.24. 802.11n HT40 2Tx STBC/SDM MODE IN THE 5.6 GHz BAND

Refer to Section 9.23, 802.11n HT40 2Tx CDD MODE IN THE 5.6 GHz BAND

9.25. 802.11ac 80MHz 1TX SISO MODE IN THE 5.6 GHz BAND

9.25.1. 26 dB BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5530	81.24
Mid	5610	81.96
High	5690	81.48

26 dB BANDWIDTH

BANDWIDTH LOW CH

BANDWIDTH MID CH

BANDWIDTH HIGH CH

9.25.2. 99% BANDWIDTH

LIMITS

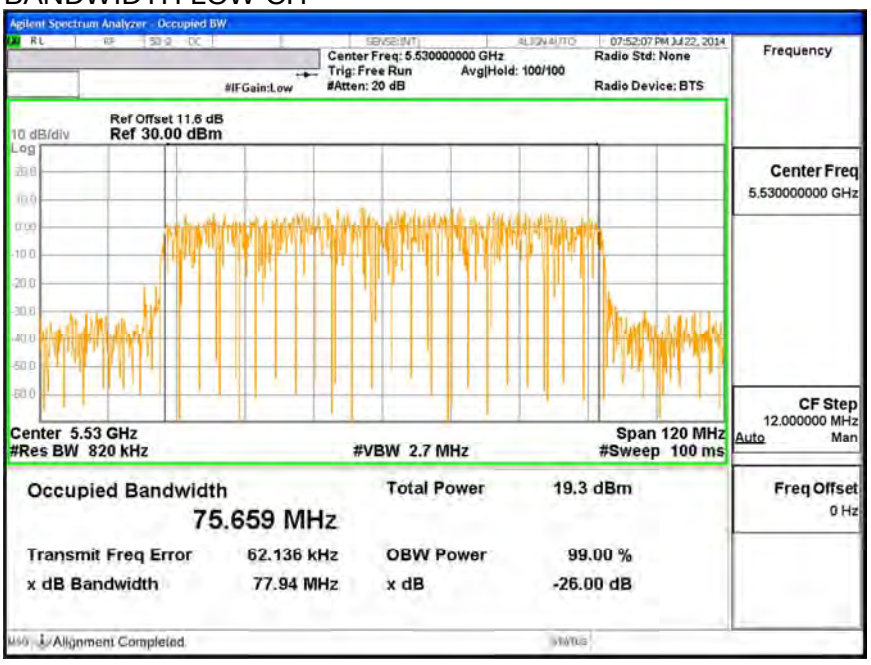
None; for reporting purposes only.

RESULTS

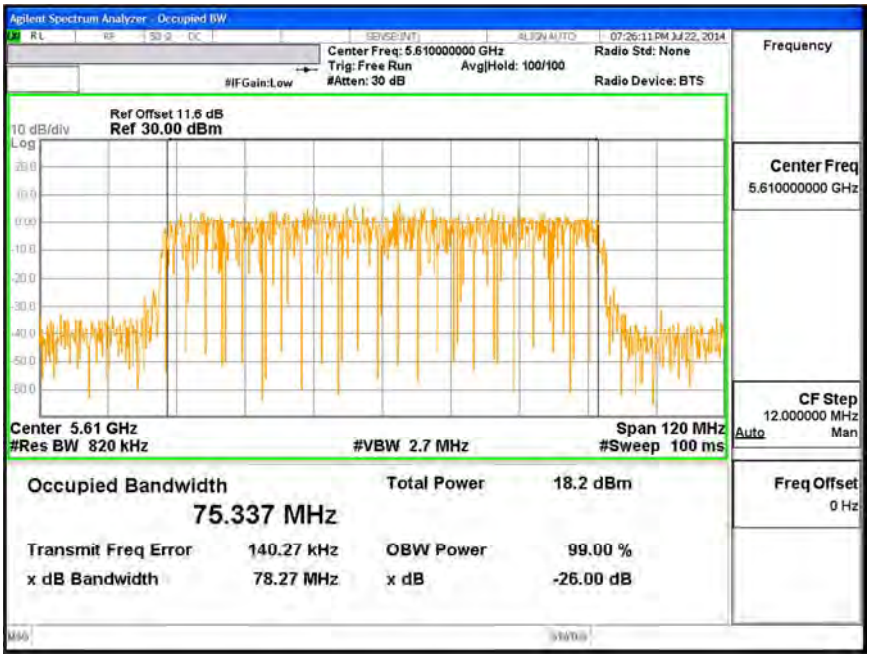
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5530	75.659
Mid	5610	75.337
High	5690	75.241

99% BANDWIDTH

BANDWIDTH LOW CH



BANDWIDTH MID CH



BANDWIDTH HIGH CH

9.25.1. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Antenna B Power (dBm)	Antenna C Power (dBm)
Low	5530	15.87	15.96
Mid	5610	16.48	17.97
High	5690	16.44	17.92

9.25.2. 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.

TEST PROCEDURE

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

DIRECTIONAL ANTENNA GAIN

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

ANTENNA B

Antenna Gain (dBi)
0.155

ANTENNA C

Antenna Gain (dBi)
3.004

RESULTS

ANTENNA B

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5530	81.24	0.16	24.00	11.00
Mid	5610	81.96	0.16	24.00	11.00

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)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5530	15.87	16.08	24.00	-7.92
Mid	5610	16.48	16.69	24.00	-7.31

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5530	-1.09	-0.88	11.00	-11.88
Mid	5610	-1.03	-0.82	11.00	-11.82

ANTENNA C

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5530	81.24	3.00	24.00	11.00
Mid	5610	81.96	3.00	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5530	15.96	16.17	24.00	-7.83
Mid	5610	17.97	18.18	24.00	-5.82

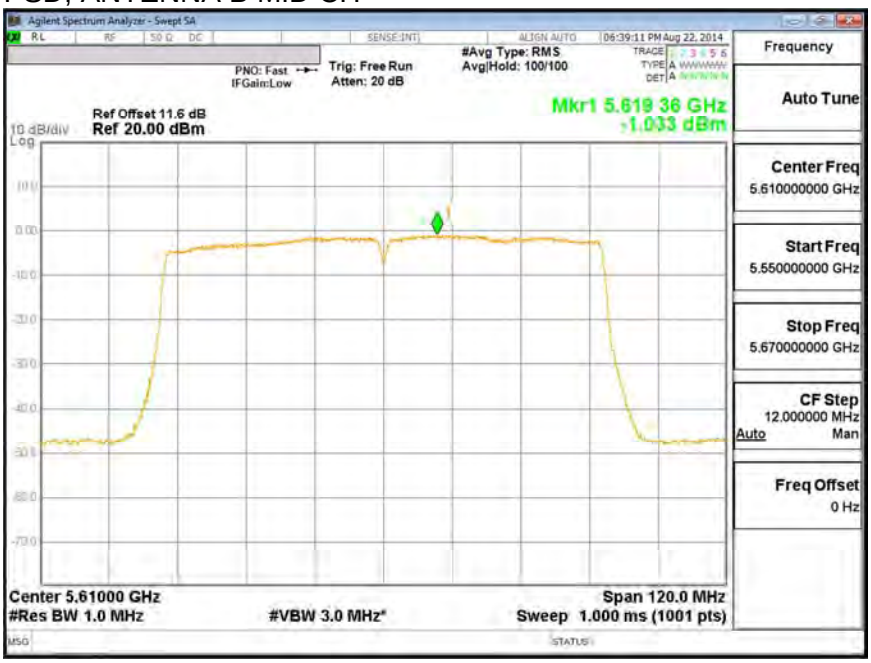
PSD Results

Channel	Frequency (MHz)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5530	-0.74	-0.53	11.00	-11.53
Mid	5610	-0.45	-0.24	11.00	-11.24

PSD, ANTENNA B

PSD, ANTENNA B LOW CH

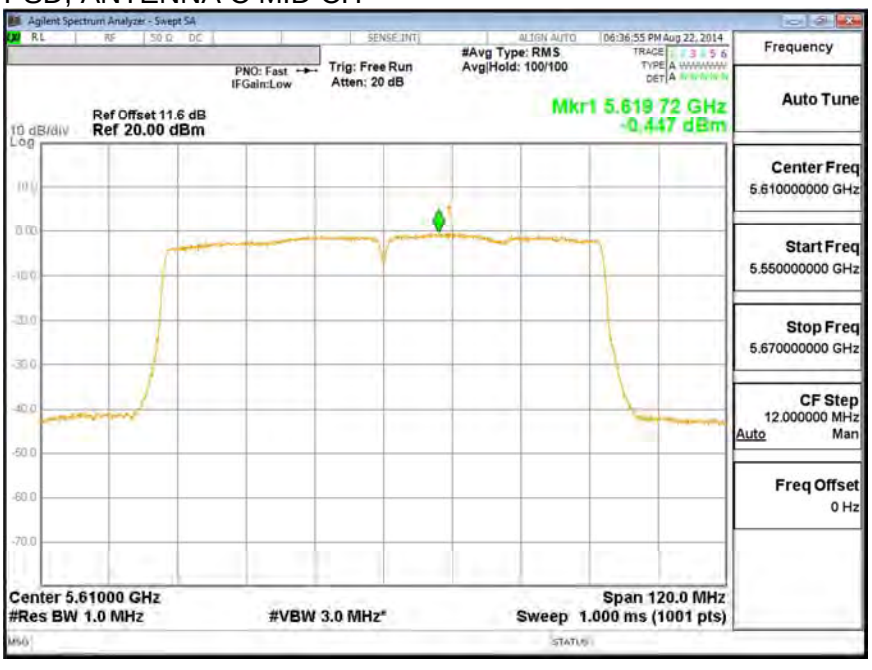
PSD, ANTENNA B MID CH



PSD, ANTENNA C

PSD, ANTENNA C LOW CH

PSD, ANTENNA C MID CH



STRADDLE CHANNEL 138 RESULTS

ANTENNA C 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	81.24	0.16	0.16	24.00	11.00

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

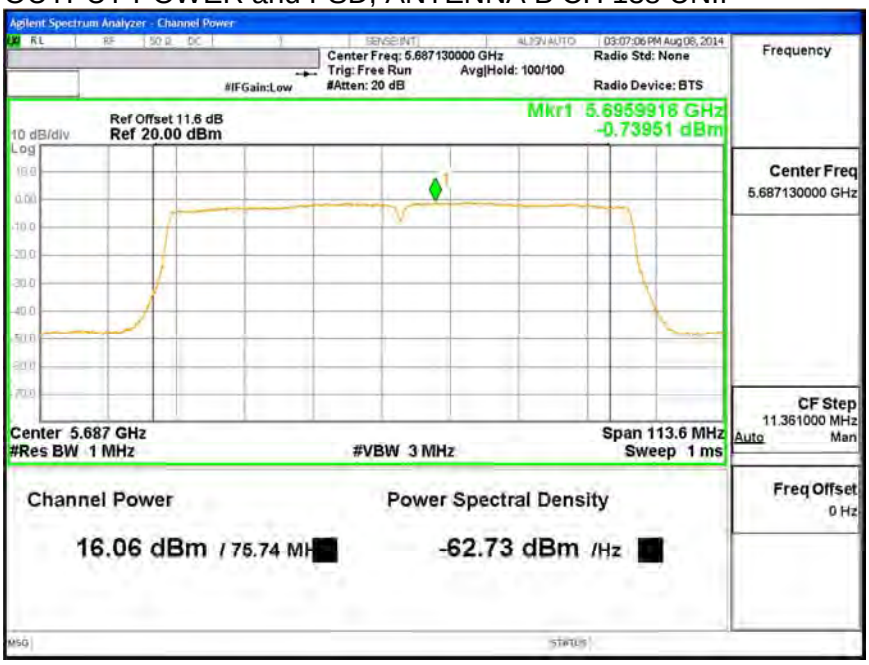
Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	16.06	16.27	24.00	-7.73

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
138	5690	-0.74	-0.53	11.00	-11.53

OUTPUT POWER and PSD, ANTENNA B CH 138 UNII



UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
138	5690	0.16	30.00	30.00

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

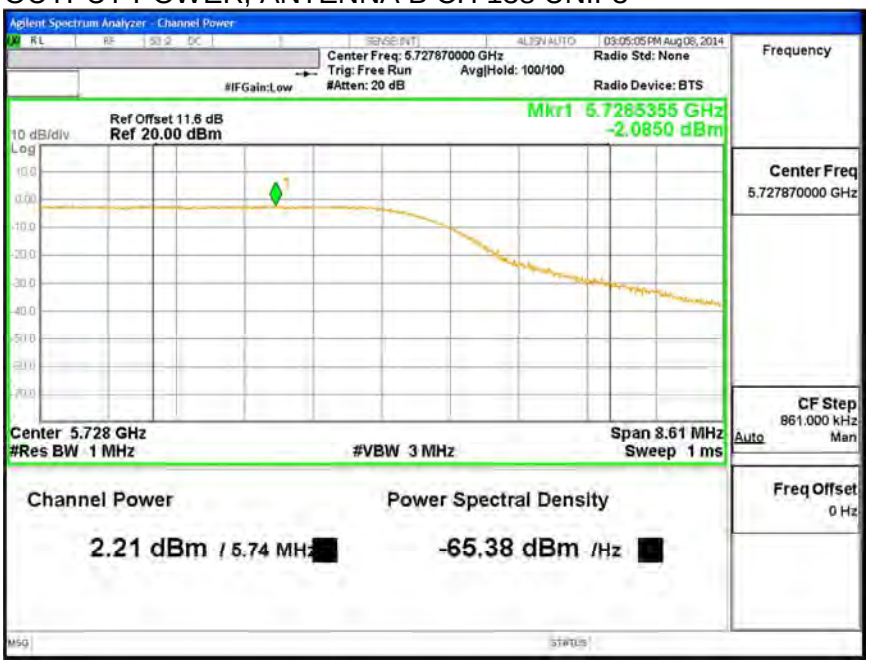
Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	2.21	2.42	30.00	-27.58

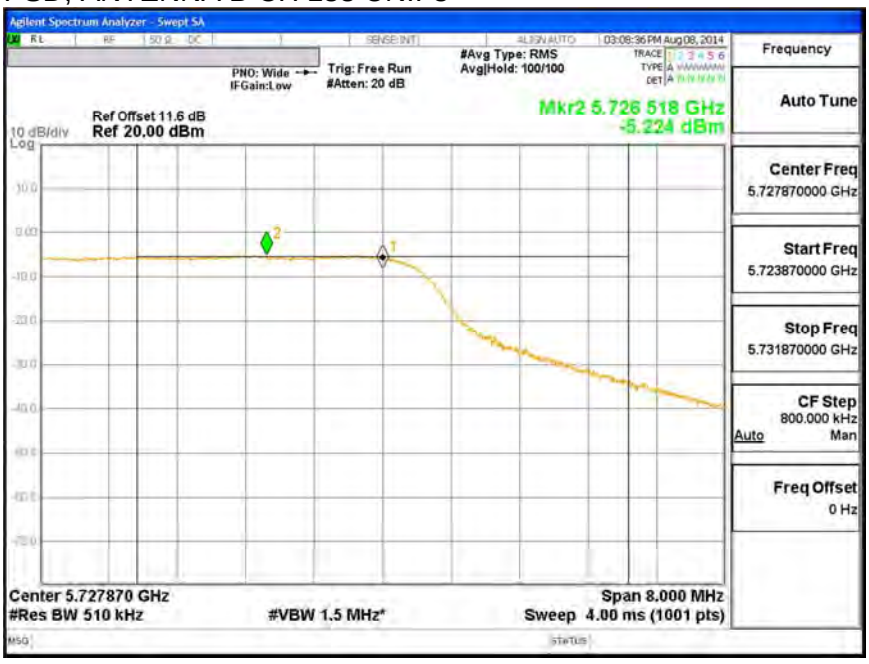
PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
138	5690	-5.22	-5.01	30.00	-35.01

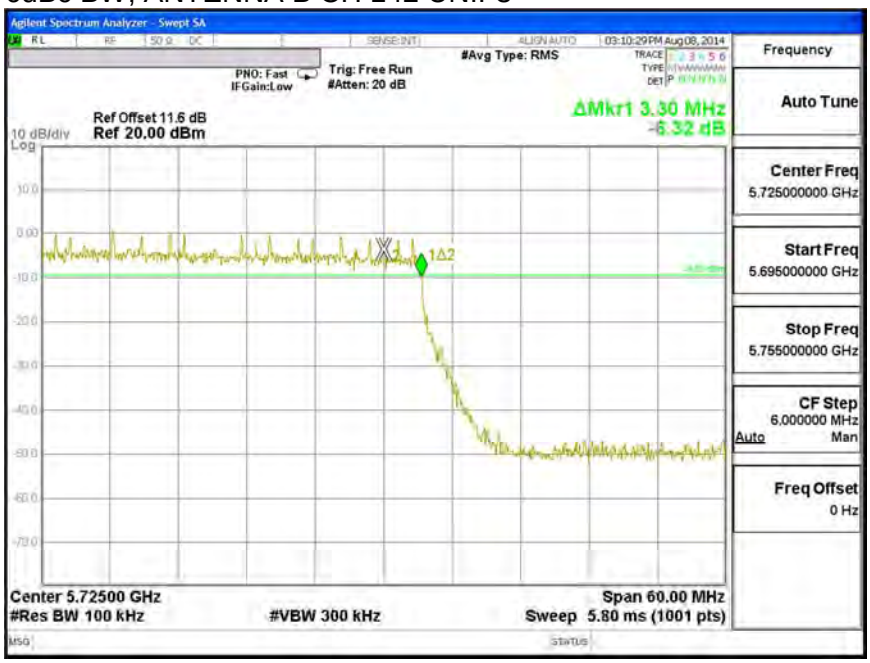
OUTPUT POWER, ANTENNA B CH 138 UNII-3



PSD, ANTENNA B CH 138 UNII-3



6dBc BW, ANTENNA B CH 142 UNII-3



ANTENNA C 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	81.48	3.00	3.00	24.00	11.00

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)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	17.75	17.96	24.00	-6.04

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
138	5690	0.57	0.78	11.00	-10.22

OUTPUT POWER AND PSD, ANTENNA B CH 138 UNII

UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
138	5690	3.00	30.00	30.00

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

Output Power Results

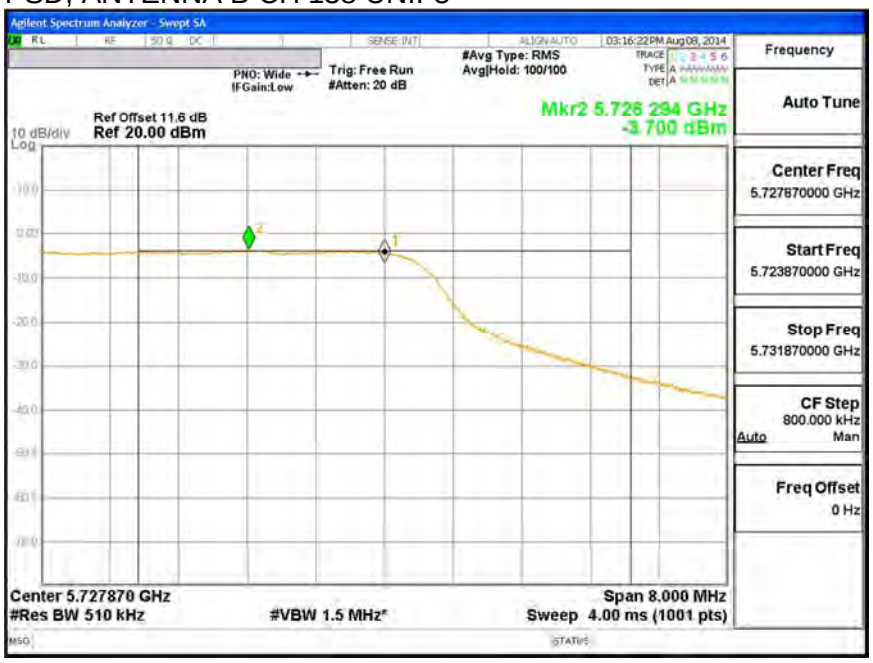
Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	3.57	3.78	30.00	-26.22

PSD Results

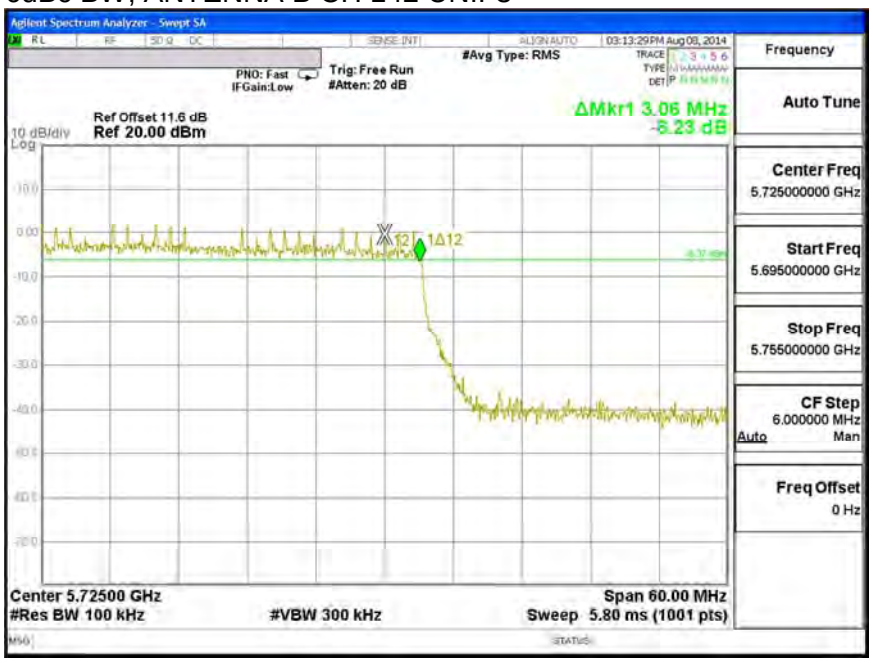
Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
138	5690	-3.70	-3.49	30.00	-33.49

OUTPUT POWER, ANTENNA B CH 138 UNII-3

PSD, ANTENNA B CH 138 UNII-3



6dBc BW, ANTENNA B CH 142 UNII-3



9.26. 802.11ac 80MHz 2TX CDD MODE IN THE 5.6 GHz BAND

9.26.1. 26 dB BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB BW Antenna B (MHz)	26 dB BW Antenna C (MHz)
Low	5530	81.84	81.24
Mid	5610	81.96	81.48
High	5690	81.84	81.24

26 dB BANDWIDTH, ANTENNA B

BANDWIDTH ANTENNA B LOW CH

BANDWIDTH ANTENNA B MID CH

BANDWIDTH ANTENNA B HIGH CH

26 dB BANDWIDTH, ANTENNA C

BANDWIDTH ANTENNA C LOW CH

BANDWIDTH ANTENNA C MID CH

BANDWIDTH ANTENNA C HIGH CH

9.26.2. 99% BANDWIDTH

LIMITS

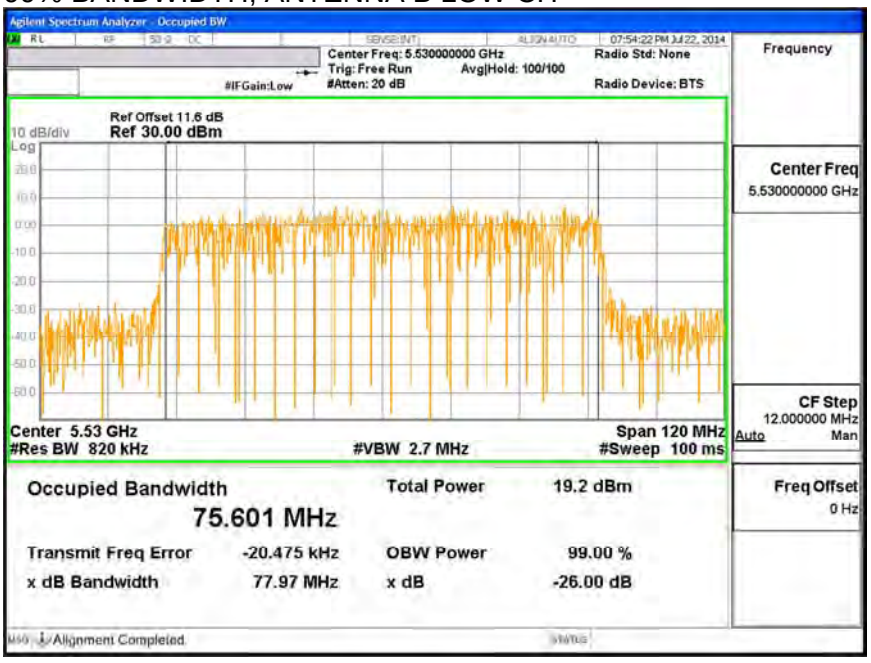
None; for reporting purposes only.

RESULTS

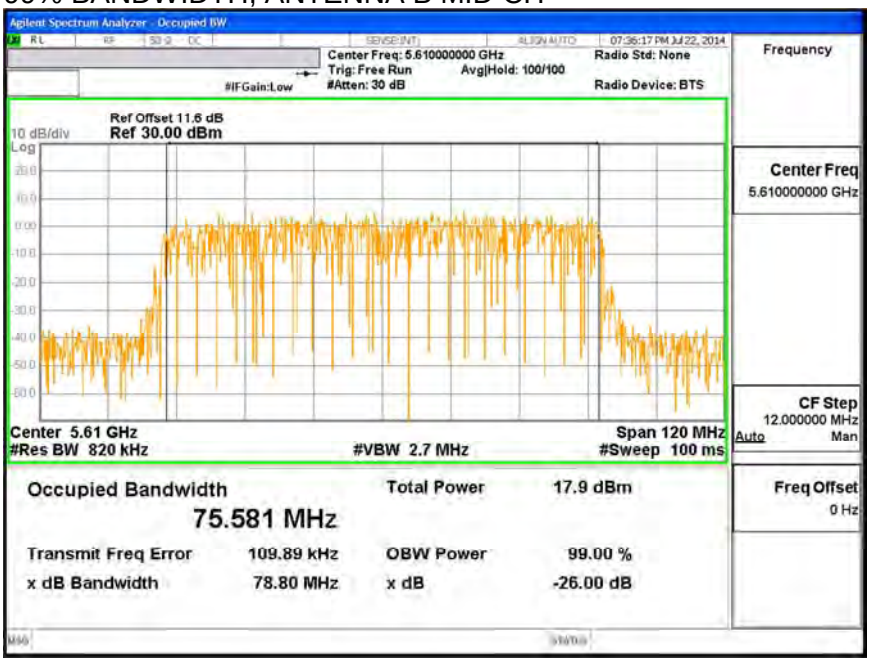
Channel	Frequency (MHz)	99% BW Antenna B (MHz)	99% BW Antenna C (MHz)
Low	5530	75.601	75.357
Mid	5610	75.581	75.535
High	5690	74.953	75.312

99% BANDWIDTH, ANTENNA B

99% BANDWIDTH, ANTENNA B LOW CH



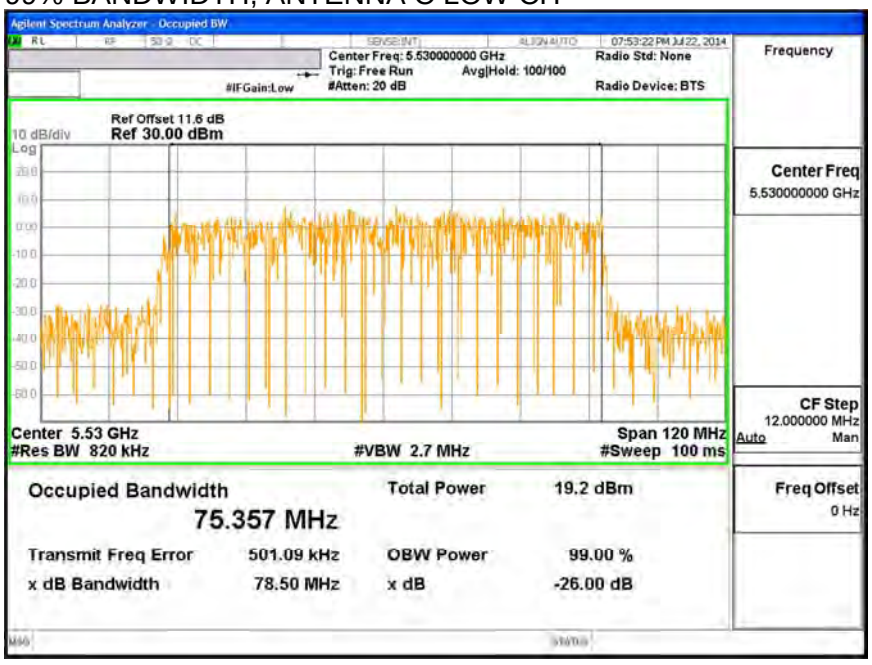
99% BANDWIDTH, ANTENNA B MID CH



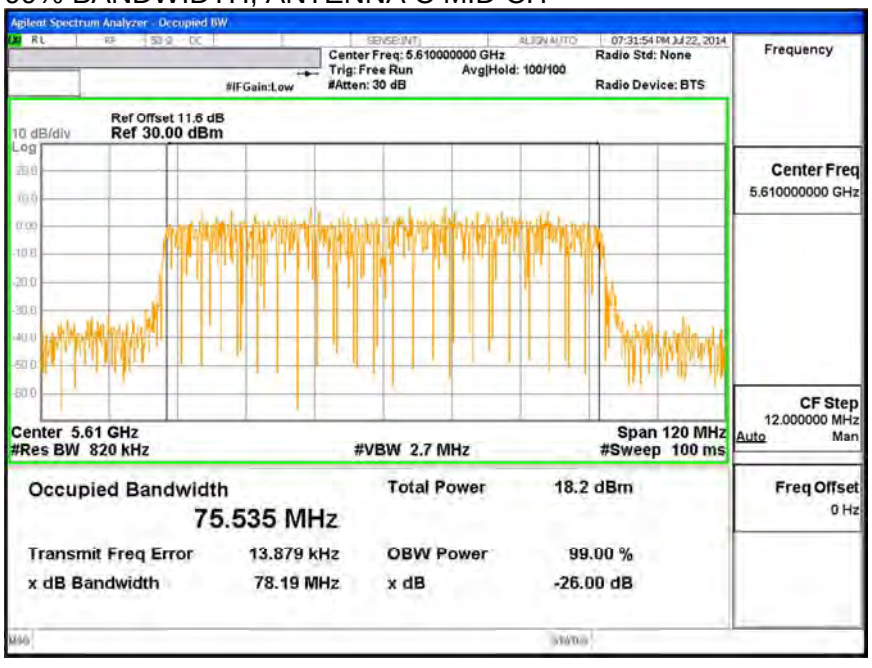
99% BANDWIDTH, ANTENNA B HIGH CH

99% BANDWIDTH, ANTENNA C

99% BANDWIDTH, ANTENNA C LOW CH



99% BANDWIDTH, ANTENNA C MID CH



99% BANDWIDTH, ANTENNA C HIGH CH

9.26.1. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Average Power Results

Channel	Frequency (MHz)	Antenna B Power (dBm)	Antenna C Power (dBm)	Total Power (dBm)
Low	5530	13.90	13.89	16.91
Mid	5610	16.39	17.93	20.24
High	5690	16.49	17.88	20.25

9.26.2. 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.

TEST PROCEDURE

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

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 C Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
0.16	3.00	1.81

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

Antenna B Antenna Gain (dBi)	Antenna C Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
0.16	3.00	4.71

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	81.24	1.81	4.71	24.00	11.00
Mid	5610	81.48	1.81	4.71	24.00	11.00

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 C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5530	13.90	13.89	17.12	24.00	-6.88
Mid	5610	16.39	17.93	20.45	24.00	-3.55

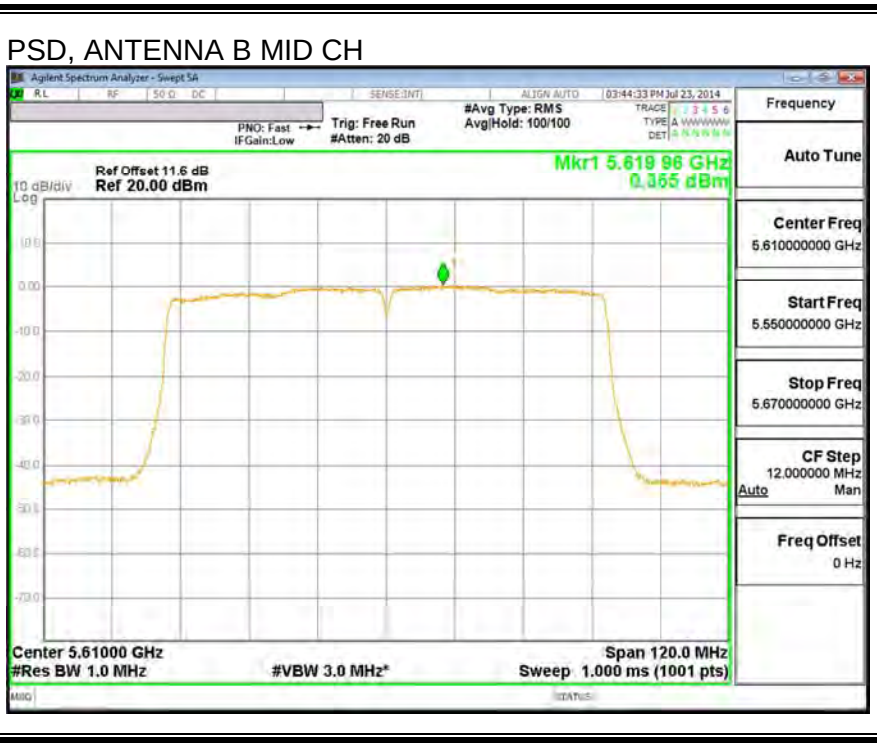
PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5530	-2.59	-2.80	0.53	11.00	-10.47
Mid	5610	0.36	0.10	3.45	11.00	-7.55

PSD, ANTENNA B

PSD, ANTENNA B LOW CH

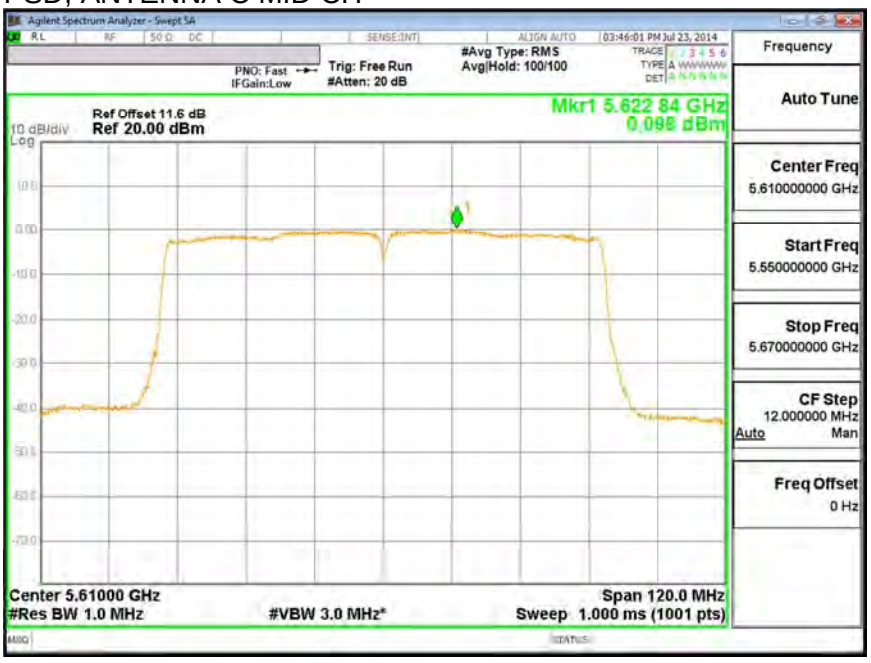
PSD, ANTENNA B MID CH



PSD, ANTENNA C

PSD, ANTENNA C LOW CH

PSD, ANTENNA C MID CH



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	81.24	1.81	4.71	24.00	11.00

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 C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	16.69	17.88	20.55	24.00	-3.45

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
138	5690	-0.32	0.93	3.57	11.00	-7.43

OUTPUT POWER AND PSD, ANTENNA B CH 138 UNII

OUTPUT POWER AND PSD, ANTENNA C CH 138 UNII

UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
138	5690	4.71	30.00	30.00

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 C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	2.64	3.61	6.37	30.00	-23.63

PSD Results

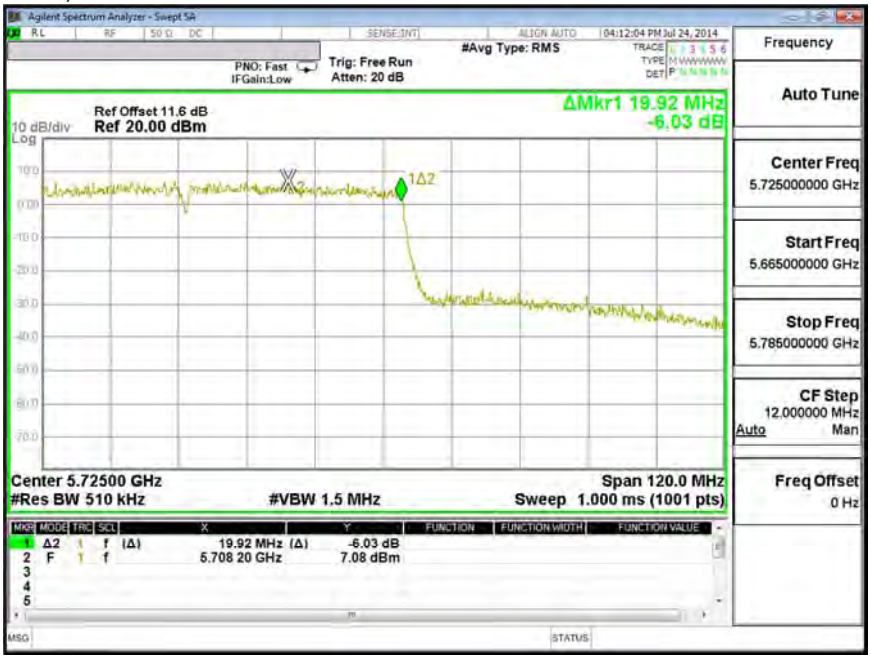
Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
138	5690	-1.58	-0.81	2.04	30.00	-27.96

OUTPUT POWER, ANTENNA B CH 138 UNII-3

OUTPUT POWER, ANTENNA C CH 138 UNII-3

PSD, ANTENNA B CH 138 UNII-3

PSD, ANTENNA C CH 138 UNII-3



9.27. 802.11ac 80MHz 2Tx STBC/SDM MODE IN THE 5.6 GHz BAND

Refer to Section 9.26, 802.11ac 80MHz 2TX CDD MODE IN THE 5.6 GHz BAND.

9.28. 802.11a MODE 1TX SISO IN THE 5.8 GHz BAND

9.28.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

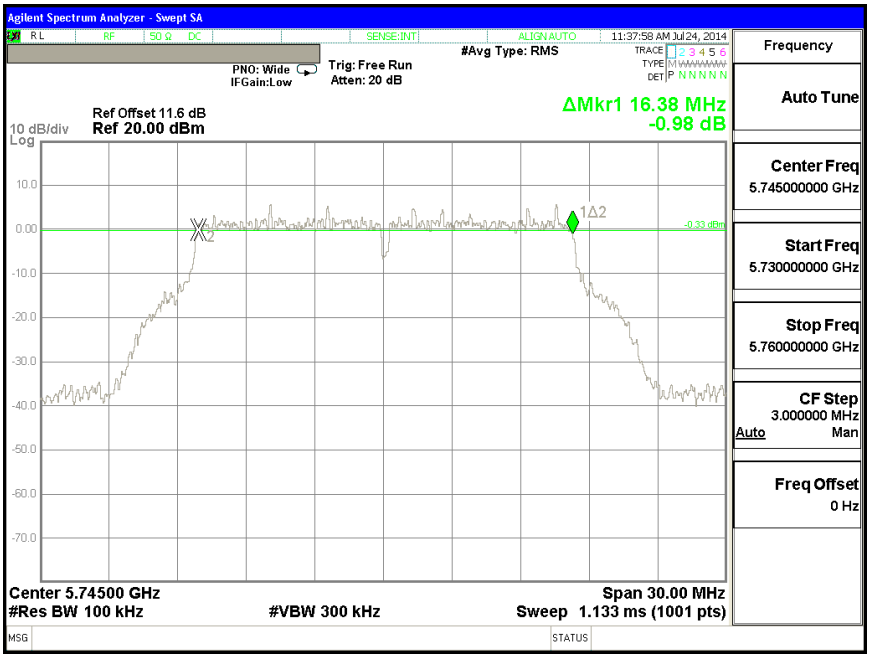
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

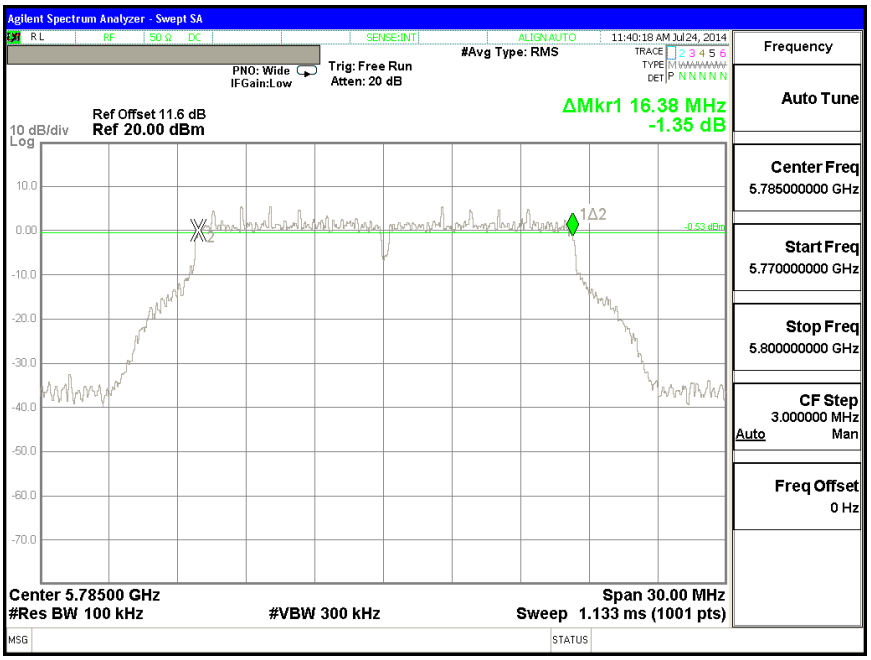
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	16.3800	0.5
Mid	5785	16.3800	0.5
High	5825	16.3800	0.5

6 dB BANDWIDTH

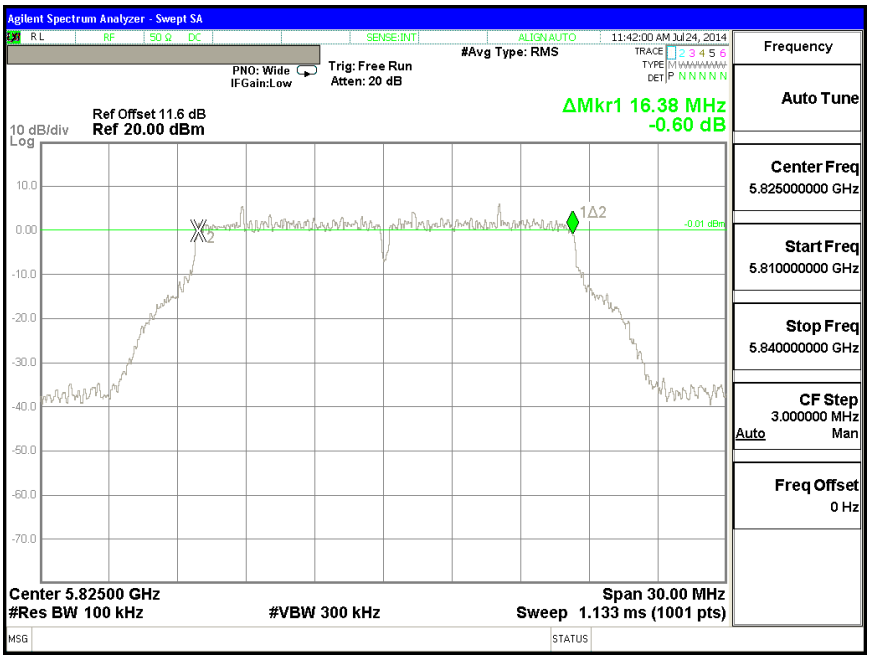
6 dB BANDWIDTH LOW CH



6 dB BANDWIDTH MID CH



6 dB BANDWIDTH HIGH CH



9.28.2. 26 dB BANDWIDTH

LIMITS

None; for reporting purposes only.

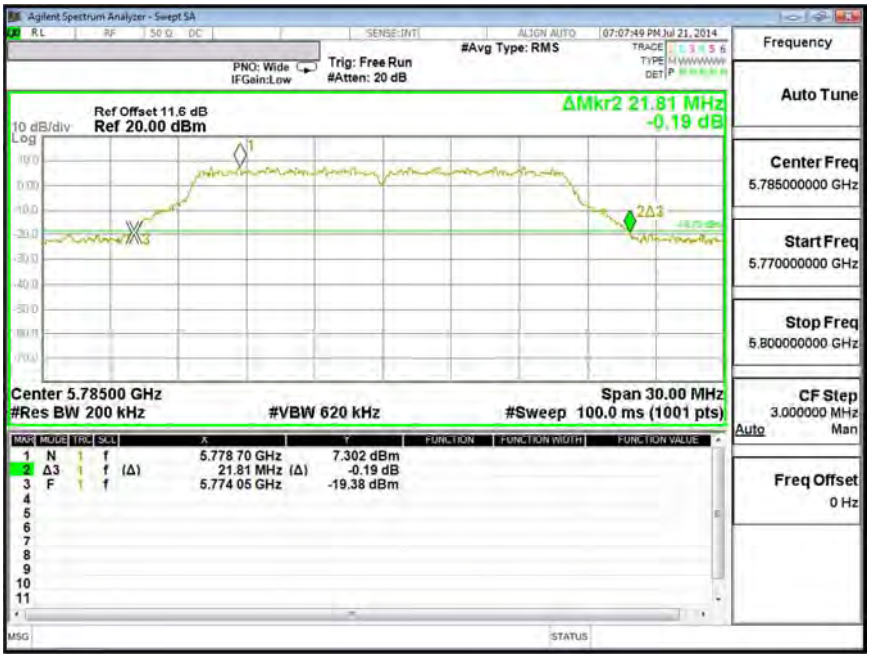
RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	21.78
Mid	5785	21.81
High	5805	21.69

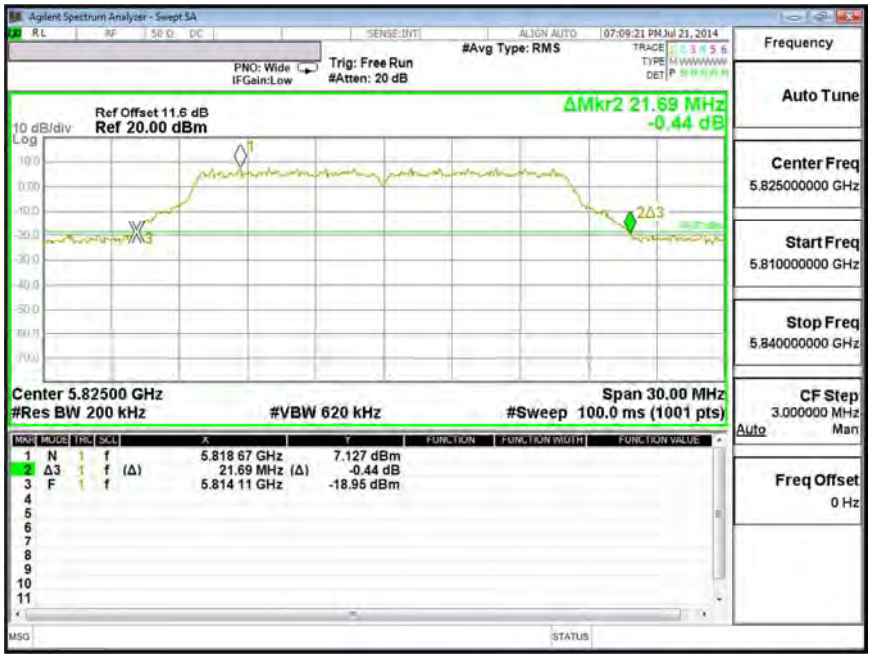
26 dB BANDWIDTH

BANDWIDTH LOW CH

BANDWIDTH MID CH



BANDWIDTH HIGH CH



9.28.3. 99% BANDWIDTH

LIMITS

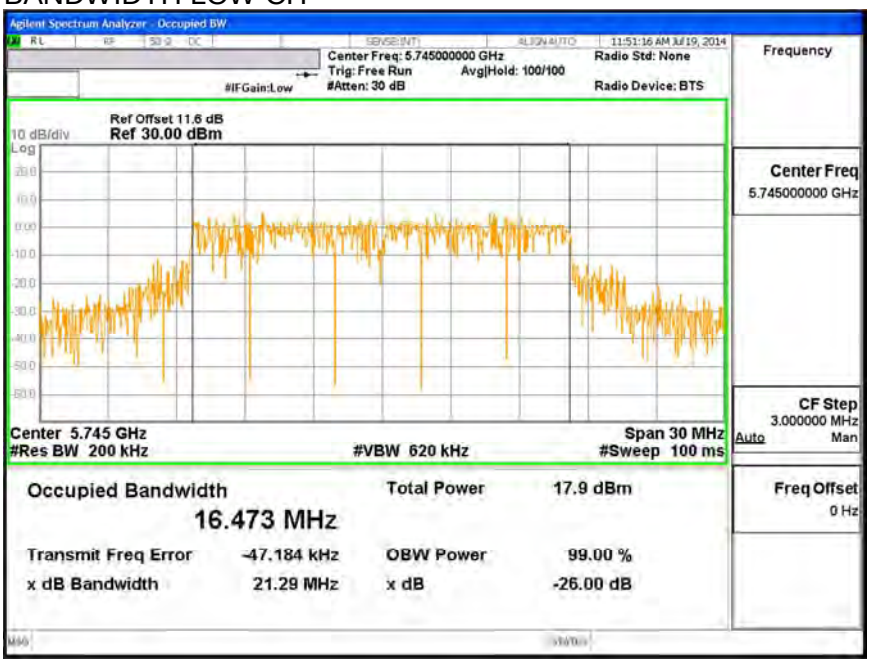
None; for reporting purposes only.

RESULTS

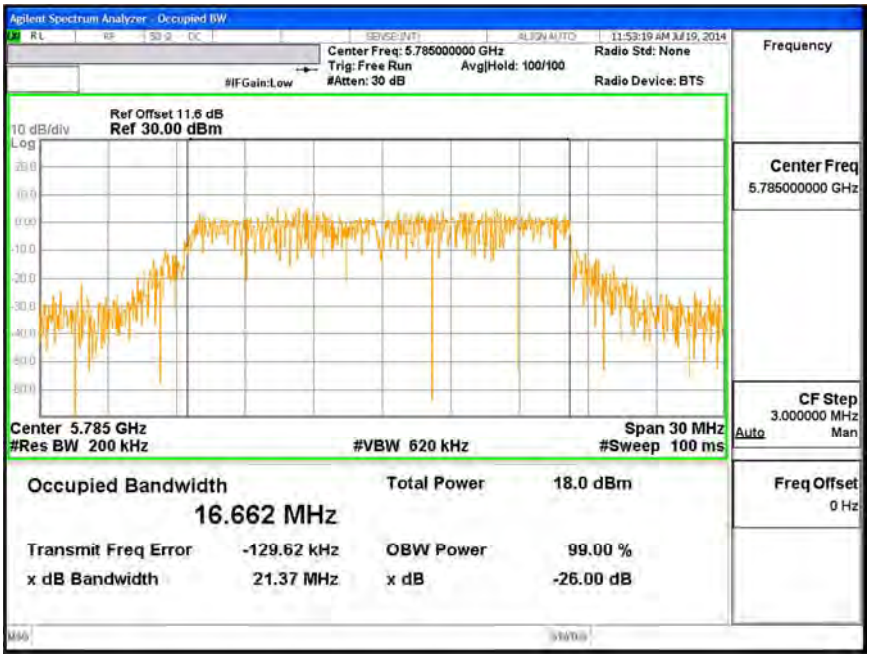
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	16.4730
Mid	5785	16.6620
High	5825	16.4570

99% BANDWIDTH

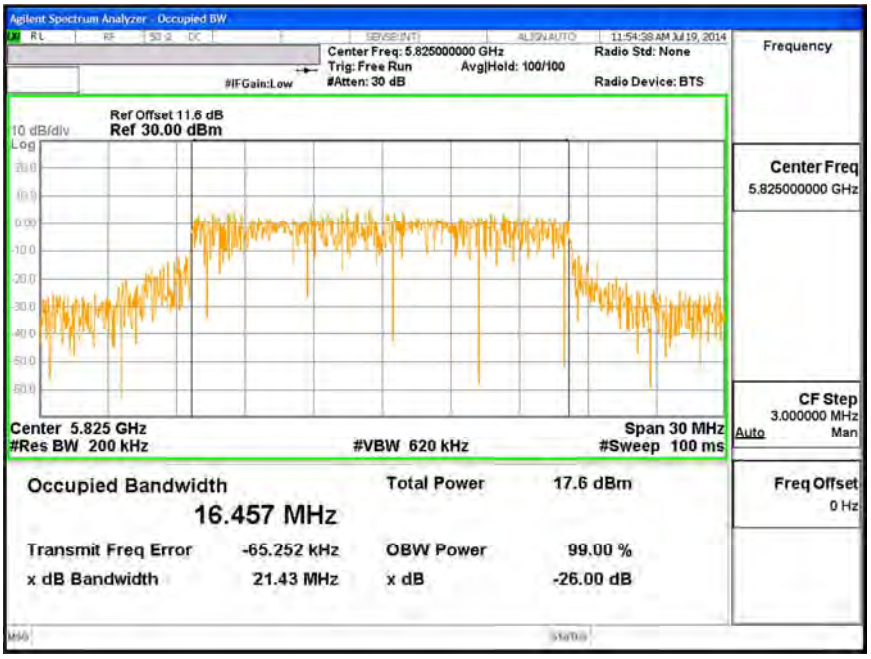
BANDWIDTH LOW CH



BANDWIDTH MID CH



BANDWIDTH HIGH CH



9.28.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Antenna B Power (dBm)	Antenna C Power (dBm)
Low	5745	15.99	15.95
Mid	5785	16.90	17.91
High	5825	16.96	16.89

9.28.5. 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

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

DIRECTIONAL ANTENNA GAIN

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

ANTENNA B

Antenna Gain (dBi)
-0.820

ANTENNA C

Antenna Gain (dBi)
3.130

RESULTS

ANTENNA B

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	-0.82	30.00
Mid	5785	-0.82	30.00
High	5825	-0.82	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	15.99	15.99	30.00	-14.01
Mid	5785	16.90	16.90	30.00	-13.10
High	5825	16.96	16.96	30.00	-13.04

ANTENNA C

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	3.13	30.00
Mid	5785	3.13	30.00
High	5825	3.13	30.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	15.95	15.95	30.00	-14.05
Mid	5785	17.91	17.91	30.00	-12.09
High	5825	16.89	16.89	30.00	-13.11

9.28.6. 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.

ANTENNA B

Antenna Gain (dBi)
-0.820

ANTENNA C

Antenna Gain (dBi)
3.130

RESULTS

ANTENNA B

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5745	-0.82	30.00
Mid	5785	-0.82	30.00
High	5825	-0.82	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	1.03	1.03	30.00	-28.97
Mid	5785	1.96	1.96	30.00	-28.04
High	5825	2.14	2.14	30.00	-27.86

RESULTS

ANTENNA C

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5745	3.13	30.00
Mid	5785	3.13	30.00
High	5825	3.13	30.00

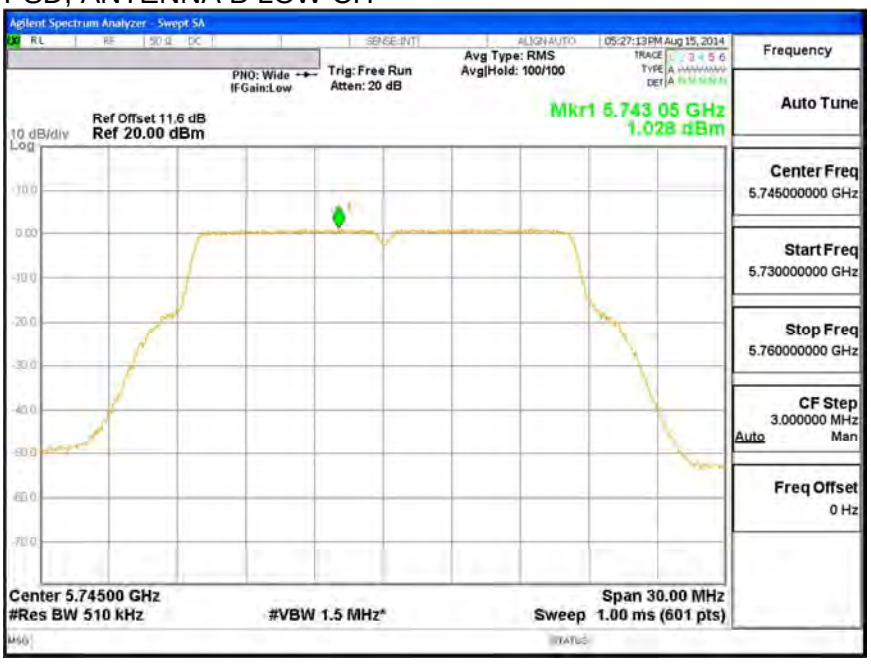
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

Channel	Frequency (MHz)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5745	1.43	1.43	30.00	-28.57
Mid	5785	10.50	10.50	30.00	-19.50
High	5825	2.22	2.22	30.00	-27.78

PSD, ANTENNA B

PSD, ANTENNA B LOW CH

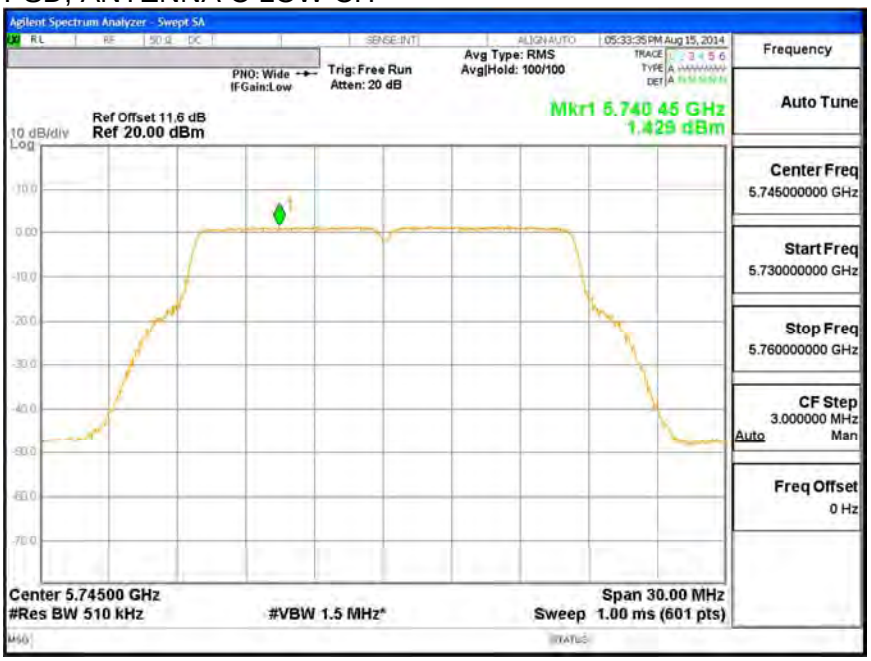


PSD, ANTENNA B MID CH

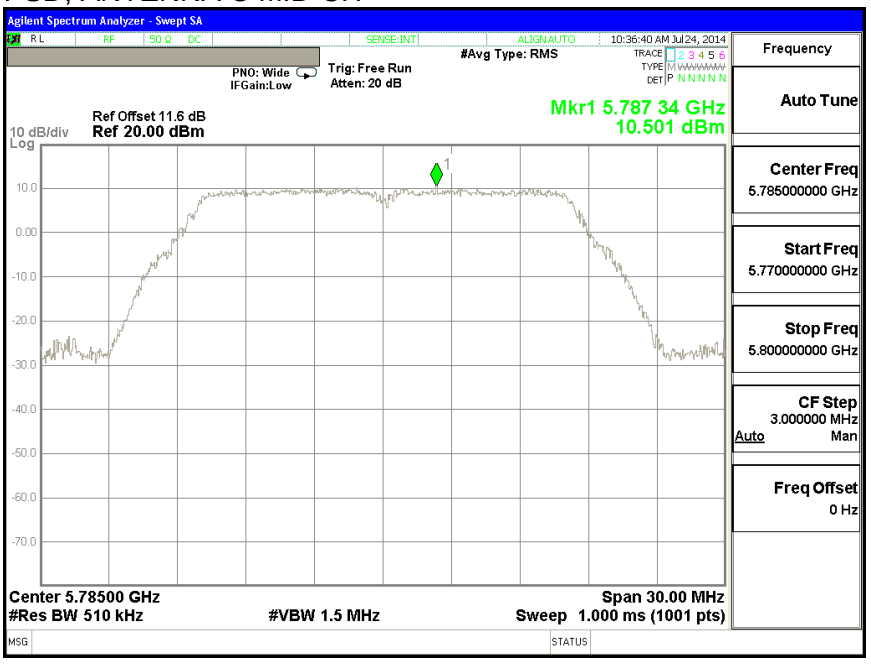
PSD, ANTENNA B HIGH CH

PSD, ANTENNA C

PSD, ANTENNA C LOW CH



PSD, ANTENNA C MID CH



PSD, ANTENNA C HIGH CH

9.29. 802.11n HT20 2TX CDD MODE IN THE 5.8 GHz BAND

9.29.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

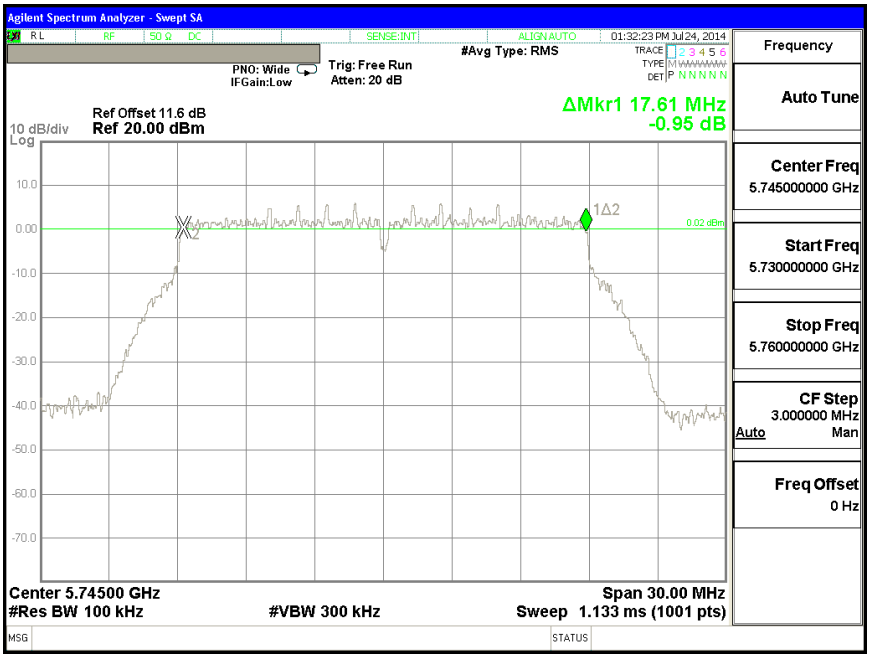
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

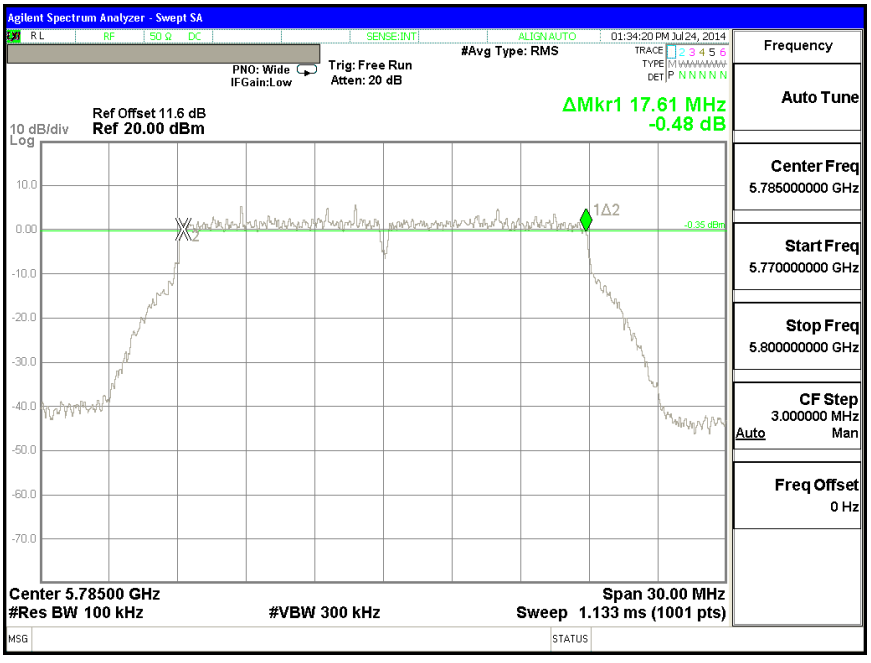
Channel	Frequency (MHz)	6 dB BW Antenna B (MHz)	6 dB BW Antenna C (MHz)	Minimum Limit (MHz)
Low	5745	17.61	17.61	0.5
Mid	5785	17.61	17.61	0.5
High	5825	17.61	17.61	0.5

6 dB BANDWIDTH, ANTENNA B

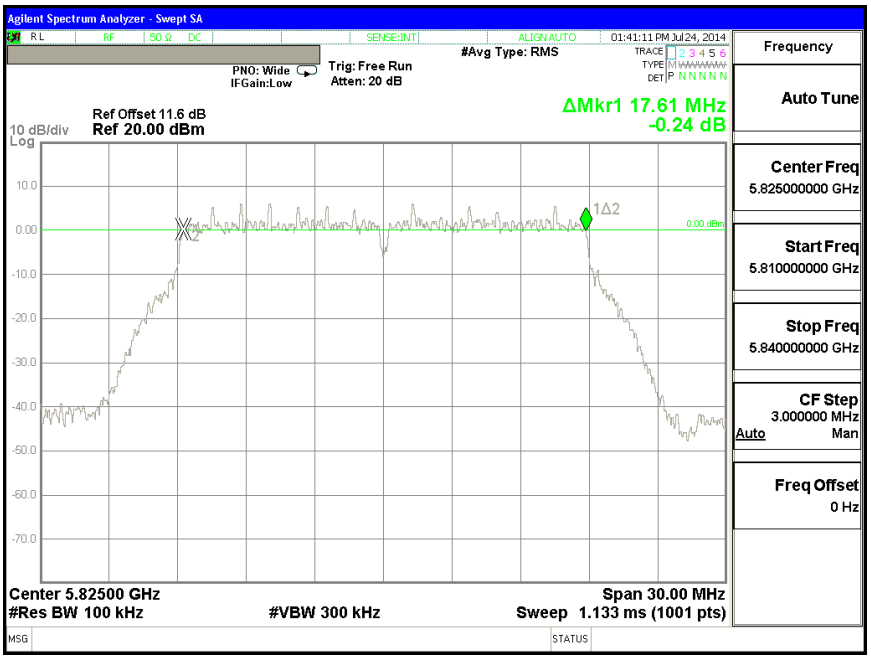
6 dB BANDWIDTH ANTENNA B LOW CH



6 dB BANDWIDTH ANTENNA B MID CH

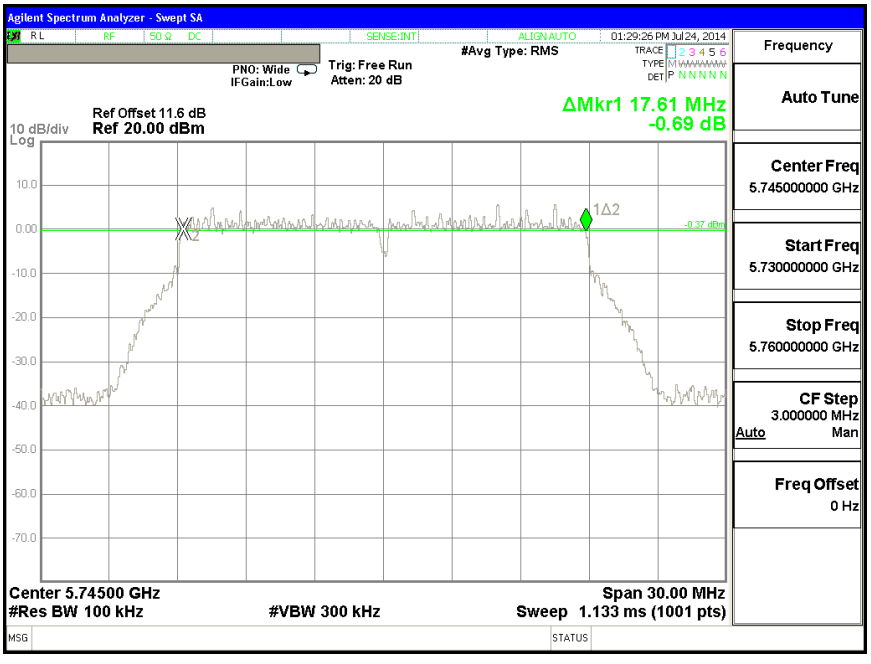


6 dB BANDWIDTH ANTENNA B HIGH CH

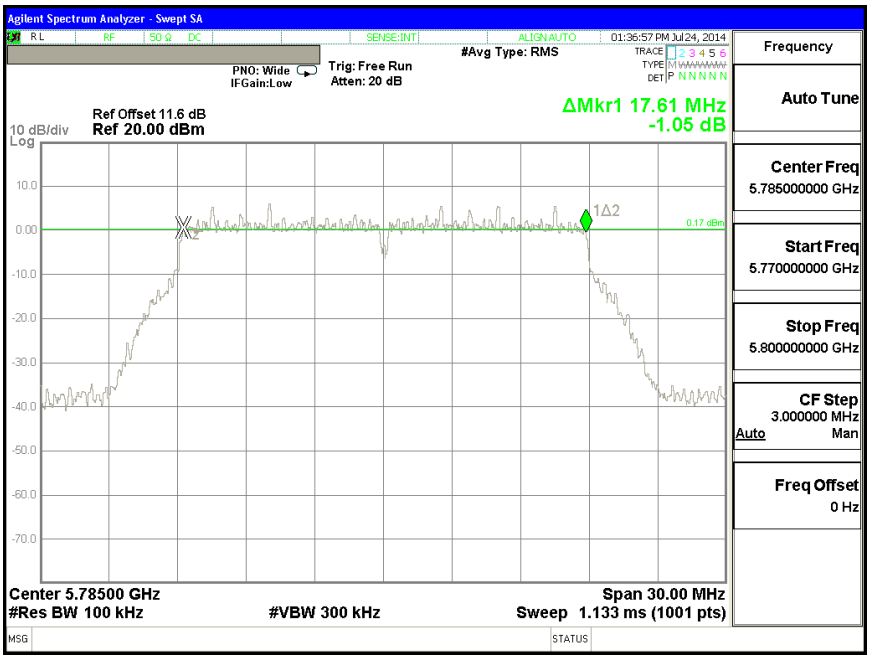


6 dB BANDWIDTH, ANTENNA C

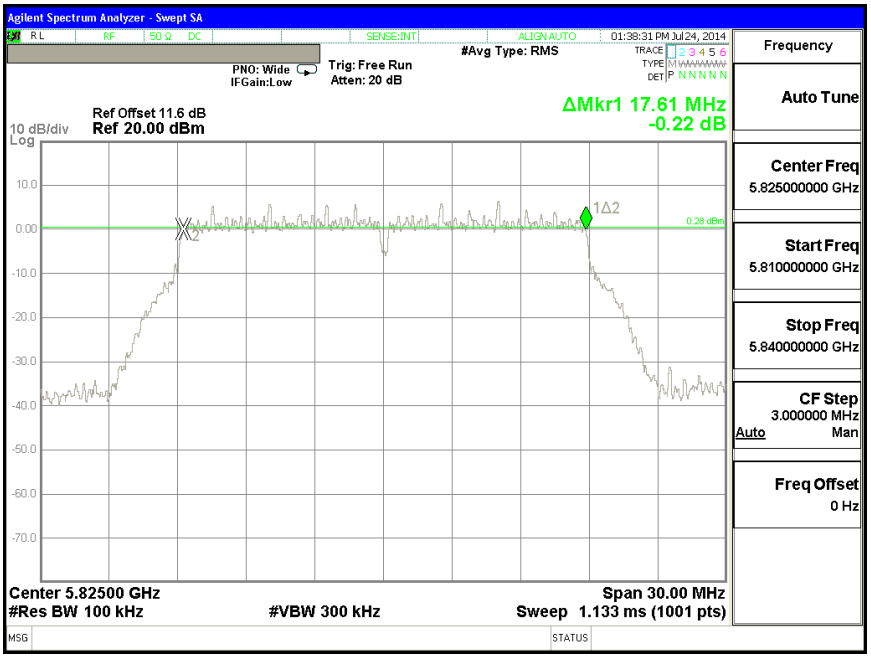
6 dB BANDWIDTH ANTENNA C LOW CH



6 dB BANDWIDTH ANTENNA C MID CH



6 dB BANDWIDTH ANTENNA C HIGH CH



9.29.2. 26 dB BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

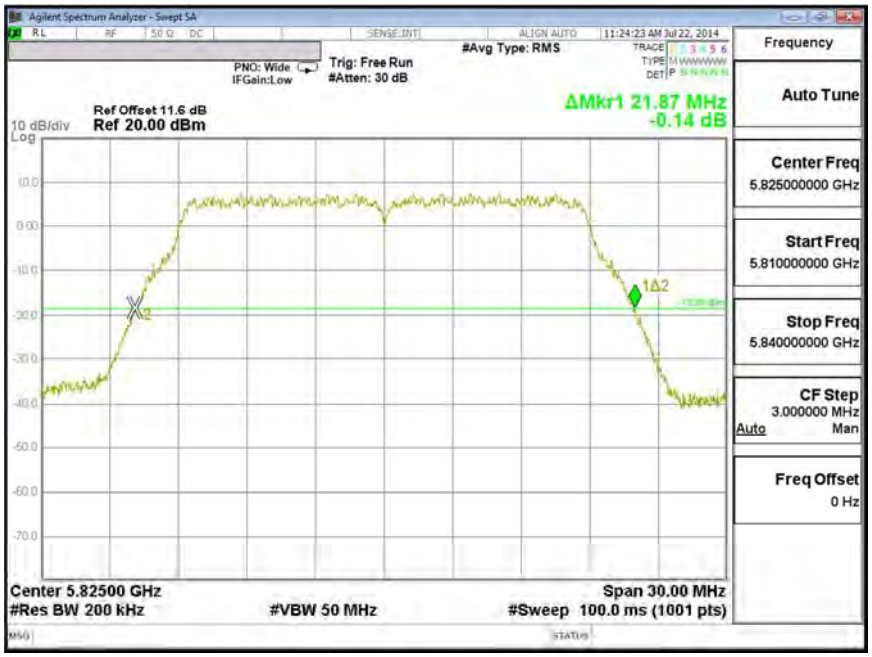
Channel	Frequency (MHz)	26 dB BW Antenna B (MHz)	26 dB BW Antenna C (MHz)
Low	5745	21.93	21.78
Mid	5785	21.87	21.66
High	5825	21.87	21.78

26 dB BANDWIDTH, ANTENNA B

BANDWIDTH ANTENNA B LOW CH

BANDWIDTH ANTENNA B MID CH

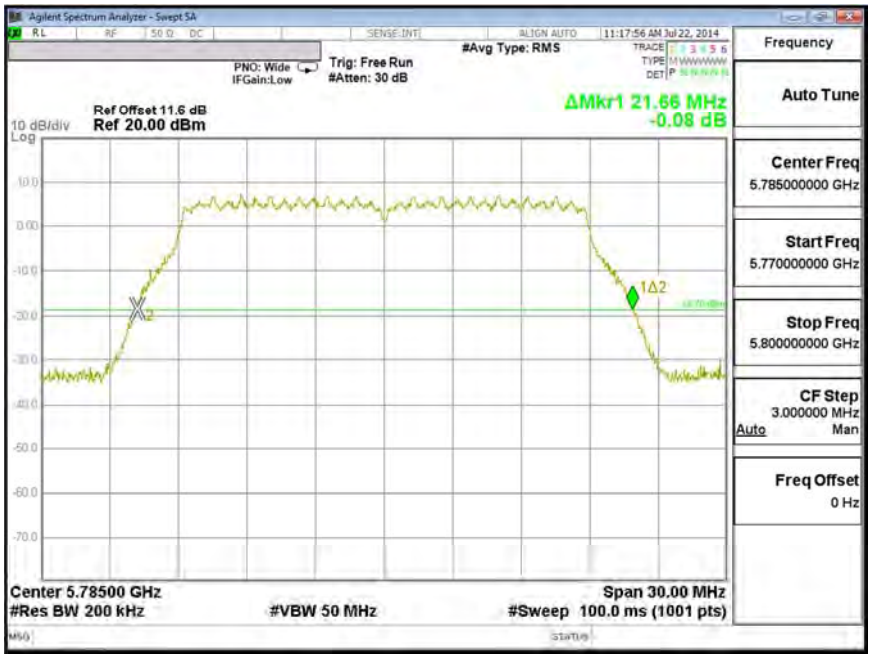
BANDWIDTH ANTENNA B HIGH CH



26 dB BANDWIDTH, ANTENNA C

BANDWIDTH ANTENNA C LOW CH

BANDWIDTH ANTENNA C MID CH



BANDWIDTH ANTENNA C HIGH CH

9.29.3. 99% BANDWIDTH

LIMITS

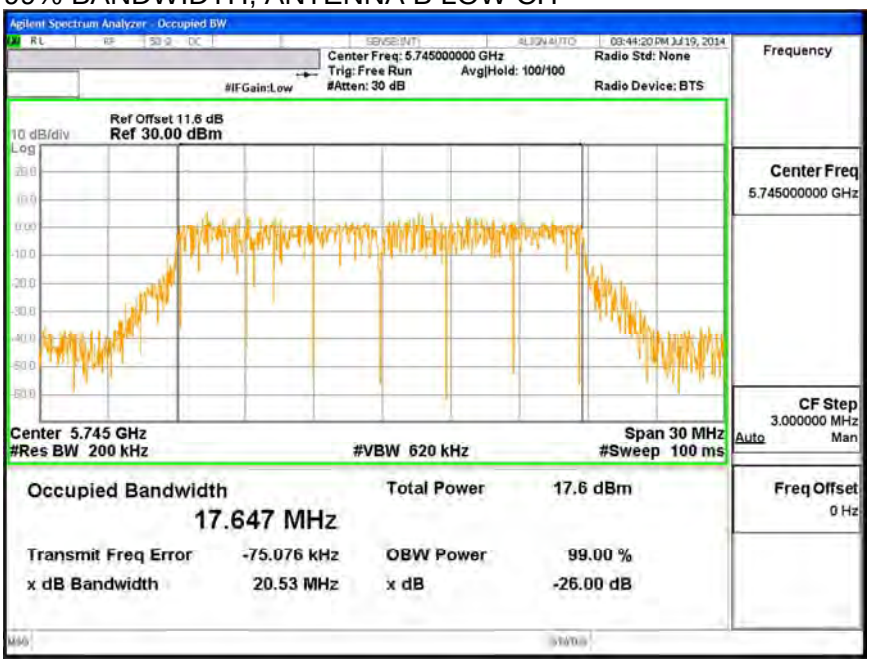
None; for reporting purposes only.

RESULTS

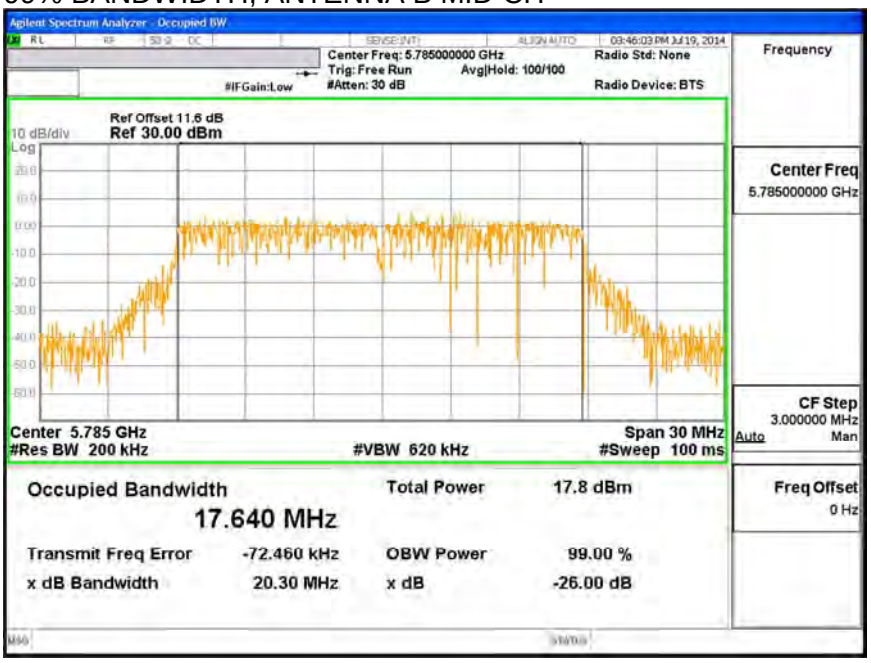
Channel	Frequency (MHz)	99% BW Antenna B (MHz)	99% BW Antenna C (MHz)
Low	5745	17.647	17.875
Mid	5785	17.640	17.799
High	5825	17.615	17.855

99% BANDWIDTH, ANTENNA B

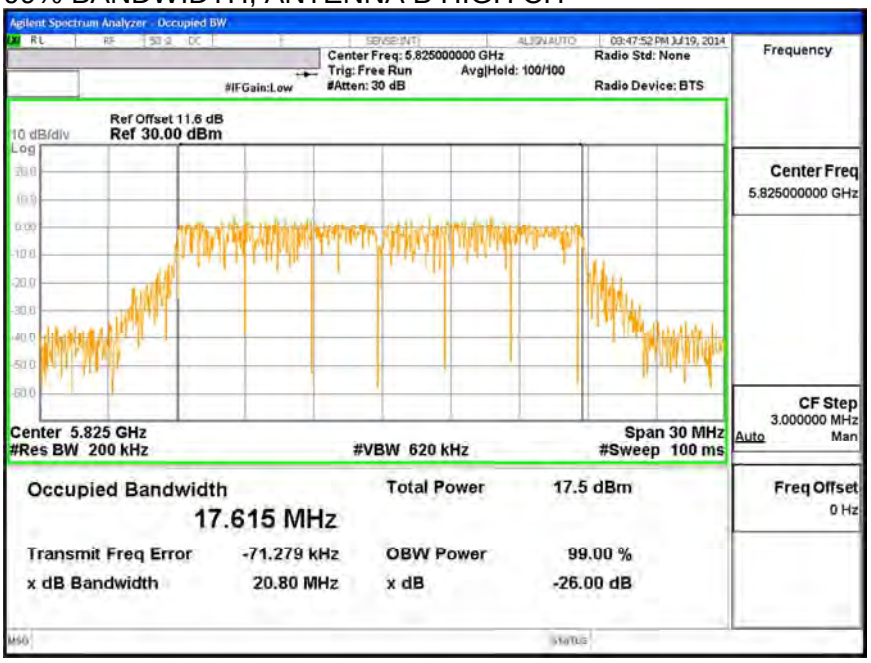
99% BANDWIDTH, ANTENNA B LOW CH



99% BANDWIDTH, ANTENNA B MID CH

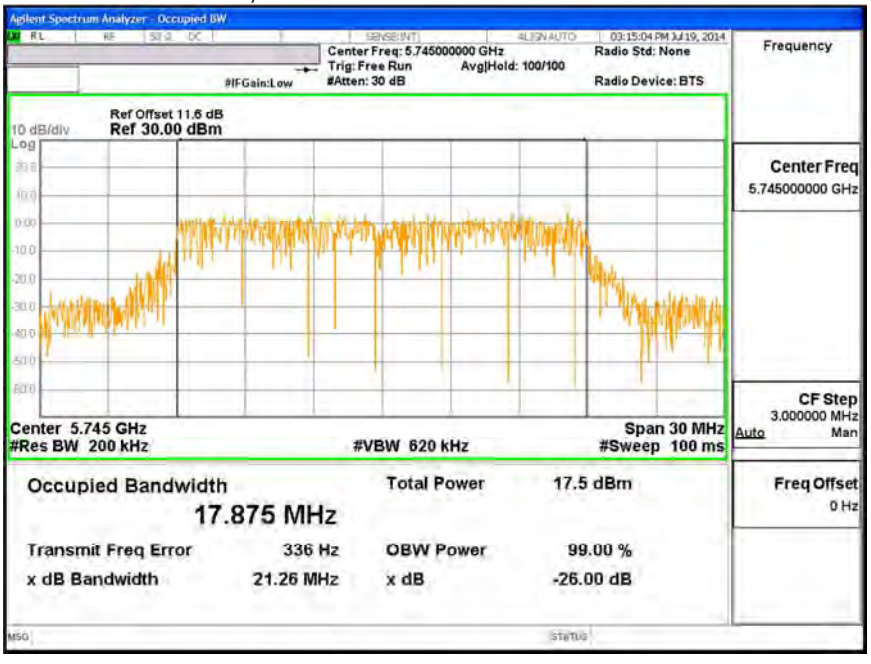


99% BANDWIDTH, ANTENNA B HIGH CH

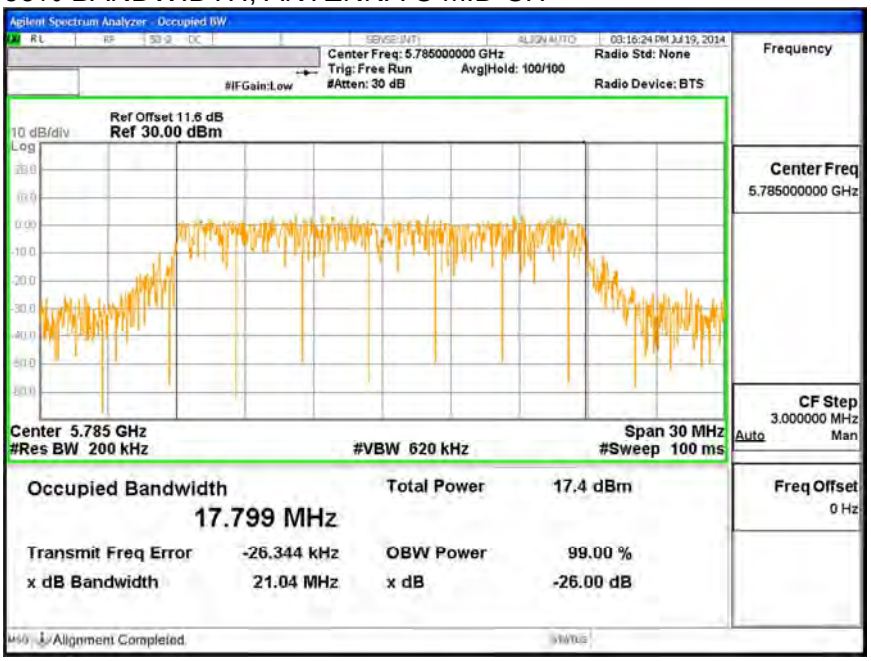


99% BANDWIDTH, ANTENNA C

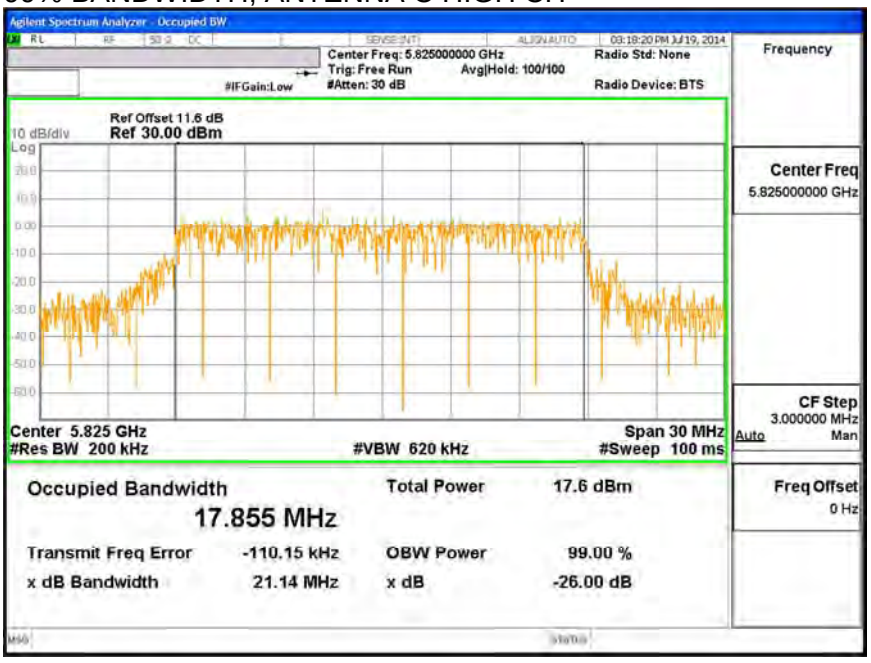
99% BANDWIDTH, ANTENNA C LOW CH



99% BANDWIDTH, ANTENNA C MID CH



99% BANDWIDTH, ANTENNA C HIGH CH



9.29.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Average Power Results

Channel	Frequency (MHz)	Antenna B Power (dBm)	Antenna C Power (dBm)	Total Power (dBm)
Low	5745	14.91	14.93	17.93
Mid	5785	16.94	17.96	20.49
High	5825	15.91	15.93	18.93

9.29.5. 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

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

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 C Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-0.82	3.13	1.59

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	1.59	30.00
Mid	5785	1.59	30.00
High	5825	1.59	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 C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	14.91	14.93	17.93	30.00	-12.07
Mid	5785	16.94	17.96	20.49	30.00	-9.51
High	5825	15.91	15.93	18.93	30.00	-11.07

9.29.6. 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 C Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-0.82	3.13	4.39

RESULTS

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5745	4.39	30.00
Mid	5785	4.39	30.00
High	5825	4.39	30.00

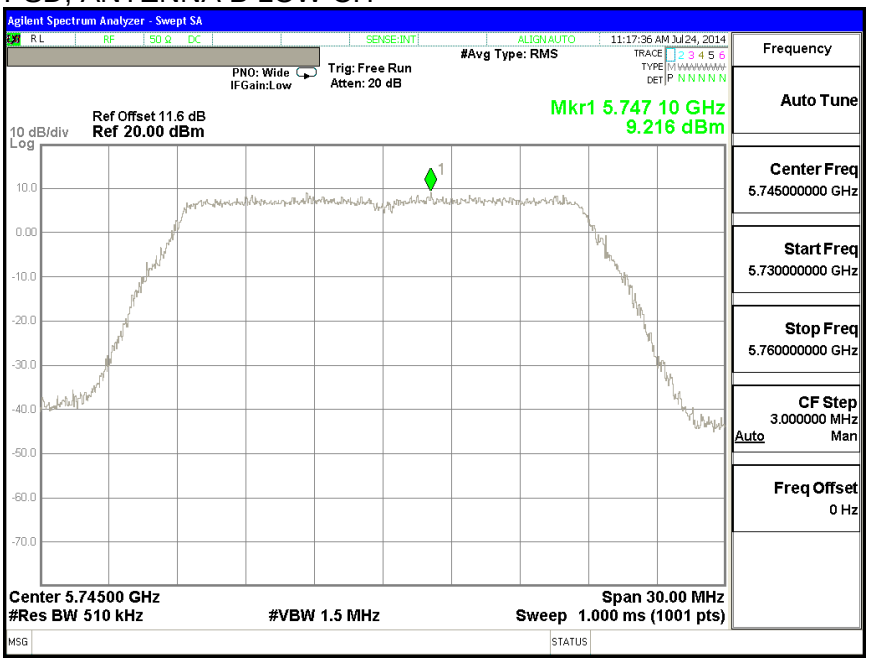
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

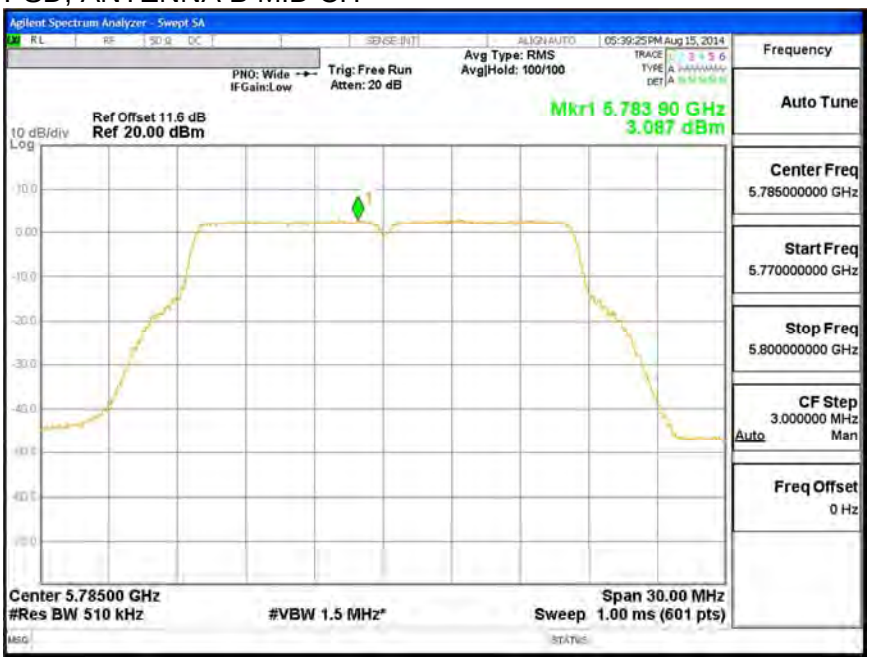
Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5745	9.22	10.97	13.19	30.00	-16.81
Mid	5785	3.09	13.49	13.87	30.00	-16.13
High	5825	9.93	11.79	13.97	30.00	-16.03

PSD, ANTENNA B

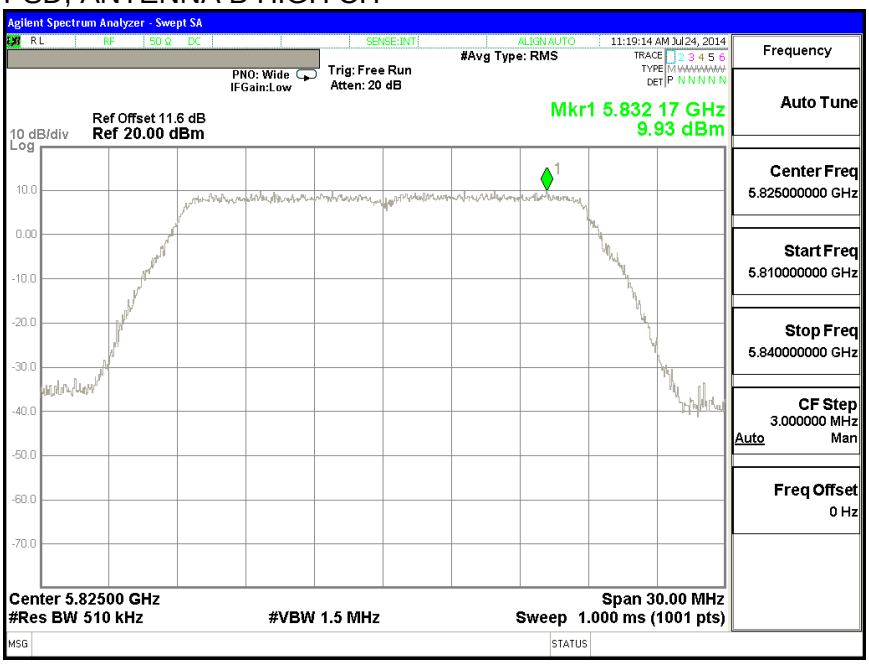
PSD, ANTENNA B LOW CH



PSD, ANTENNA B MID CH

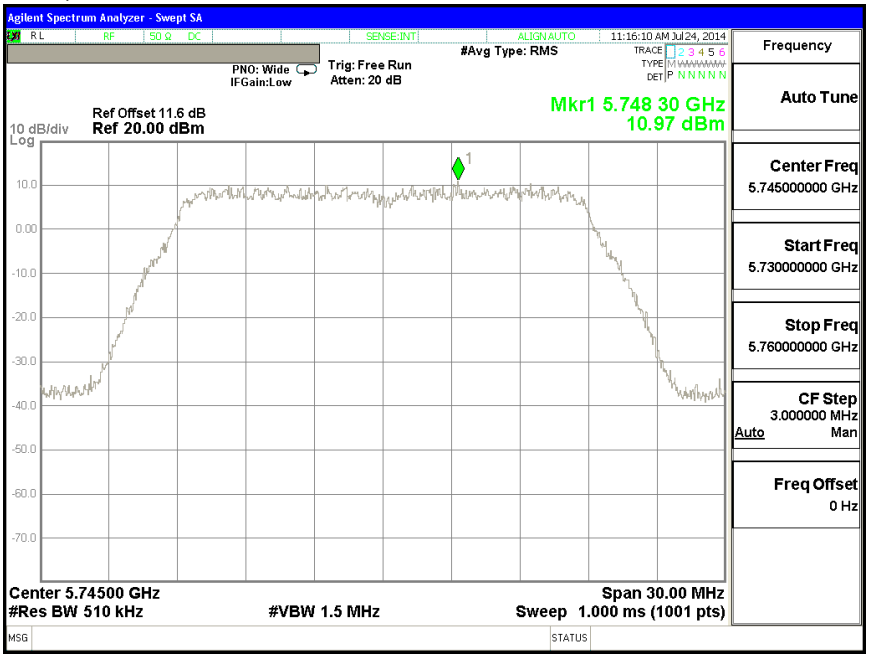


PSD, ANTENNA B HIGH CH

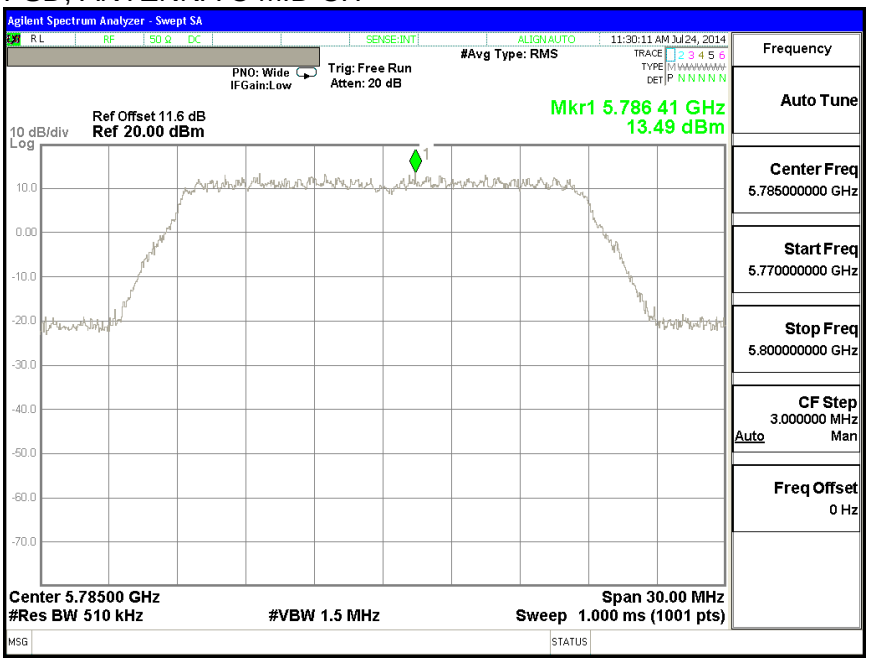


PSD, ANTENNA C

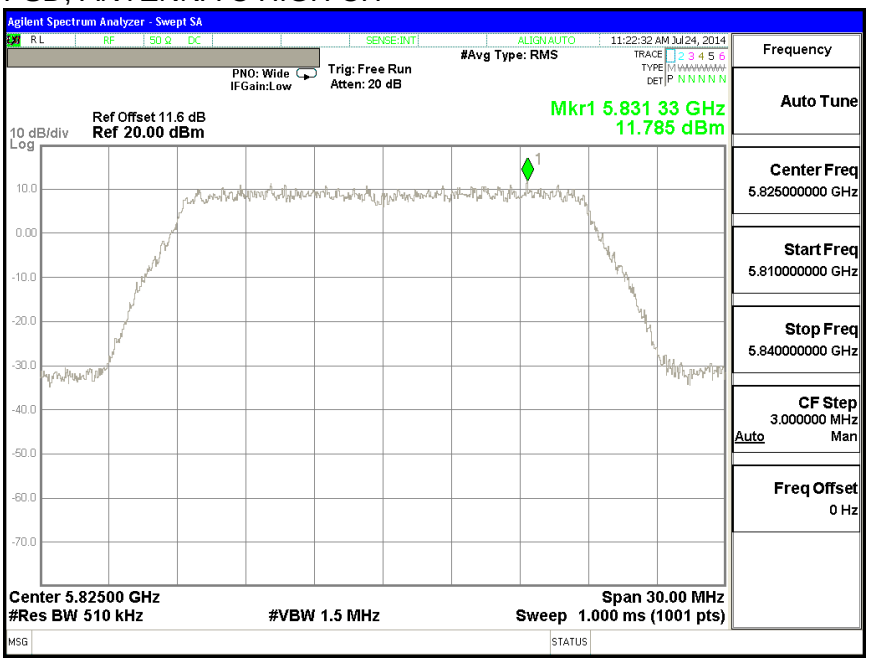
PSD, ANTENNA C LOW CH



PSD, ANTENNA C MID CH



PSD, ANTENNA C HIGH CH



9.30. 802.11n HT20 2Tx STBC/SDM MODE IN THE 5.8 GHz BAND

Refer to Section 9.29, 802.11n HT20 2TX CDD MODE IN THE 5.8 GHz BAND.

9.31. 802.11n HT40 1TX SISO MODE IN THE 5.8 GHz BAND

9.31.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

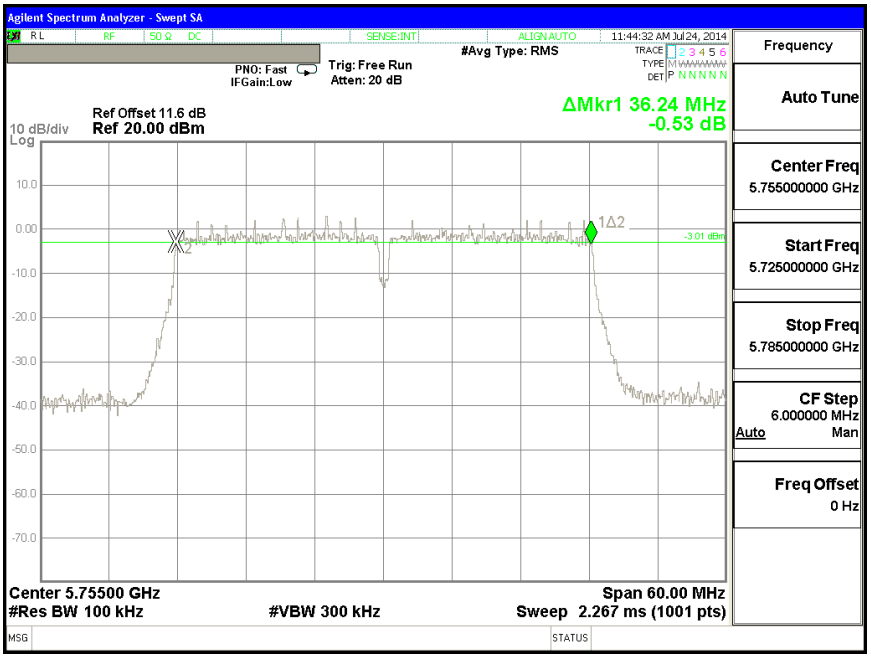
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

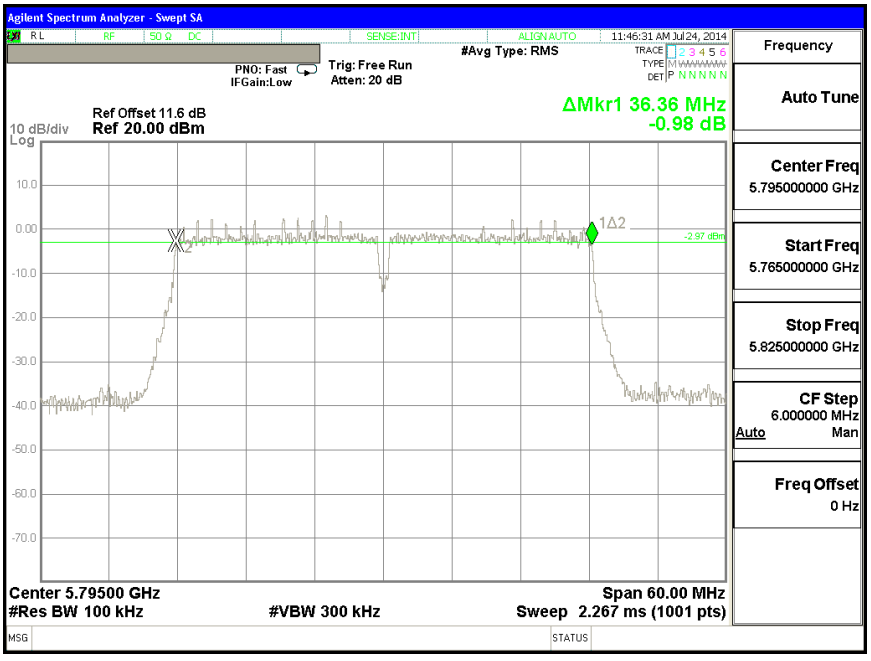
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	36.2400	0.5
High	5795	36.3600	0.5

6 dB BANDWIDTH

6 dB BANDWIDTH LOW CH



6 dB BANDWIDTH HIGH CH



9.31.2. 26 dB BANDWIDTH

LIMITS

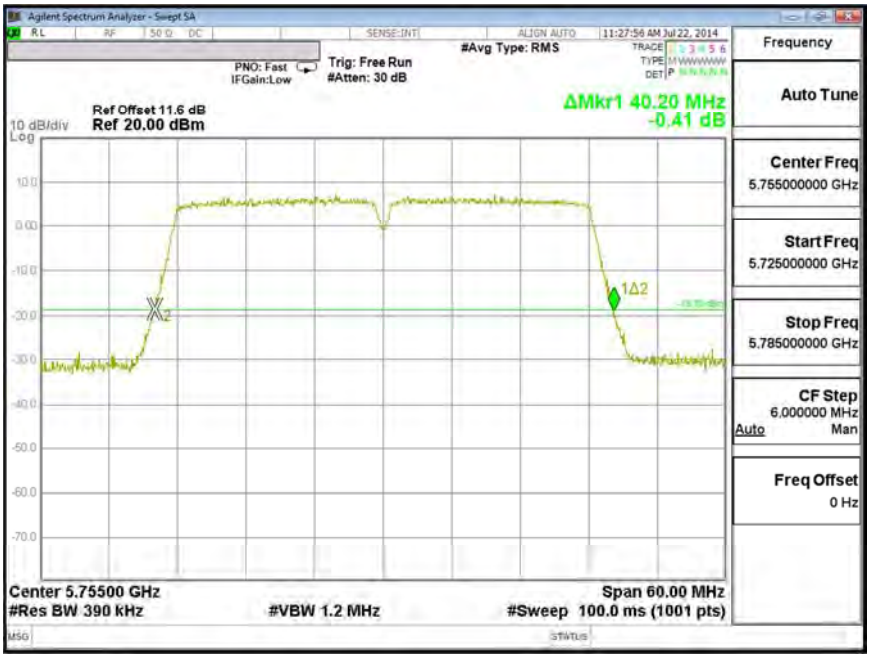
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5755	40.20
High	5795	40.14

26 dB BANDWIDTH

BANDWIDTH LOW CH



BANDWIDTH HIGH CH

9.31.3. 99% BANDWIDTH

LIMITS

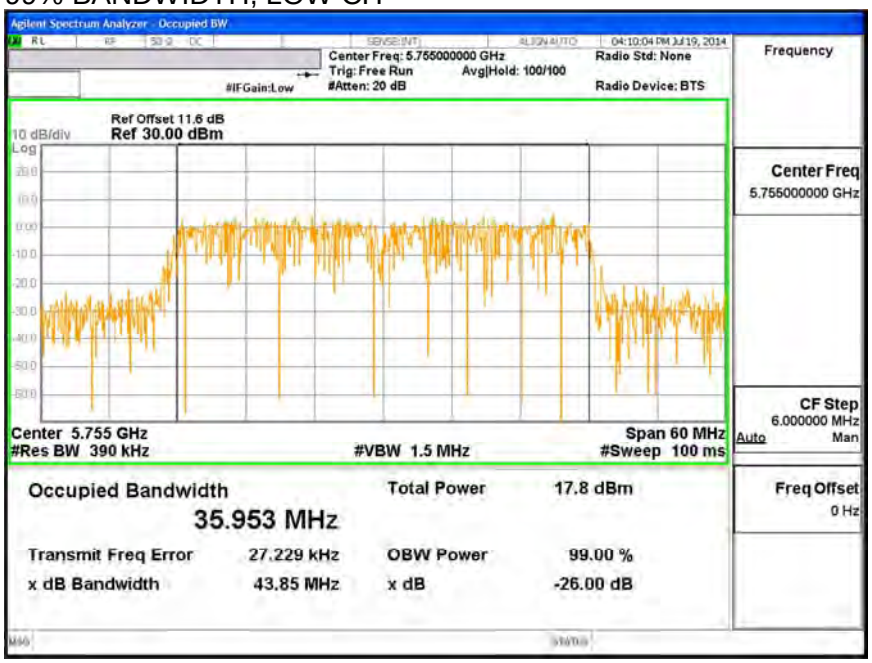
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	35.953
High	5795	36.262

99% BANDWIDTH

99% BANDWIDTH, LOW CH



99% BANDWIDTH, HIGH CH

9.31.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Antenna B Power (dBm)	Antenna C Power (dBm)
Low	5755	14.44	14.40
High	5795	16.98	16.80

9.31.5. 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

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

DIRECTIONAL ANTENNA GAIN

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

ANTENNA B

Antenna Gain (dBi)
-0.820

ANTENNA C

Antenna Gain (dBi)
3.130

RESULTS

ANTENNA B

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	-0.82	30.00
High	5795	-0.82	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	14.44	14.44	30.00	-15.56
High	5795	16.98	16.98	30.00	-13.02

ANTENNA C

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	3.13	30.00
High	5795	3.13	30.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	14.40	14.40	30.00	-15.60
High	5795	16.80	16.80	30.00	-13.20

9.31.6. 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.

ANTENNA B

Antenna Gain (dBi)
-0.820

ANTENNA C

Antenna Gain (dBi)
3.130

RESULTS

ANTENNA B

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5755	-0.82	30.00
High	5795	-0.82	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	-3.26	-3.26	30.00	-33.26
High	5795	-1.05	-1.05	30.00	-31.05

ANTENNA C

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5755	3.13	30.00
High	5795	3.13	30.00

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

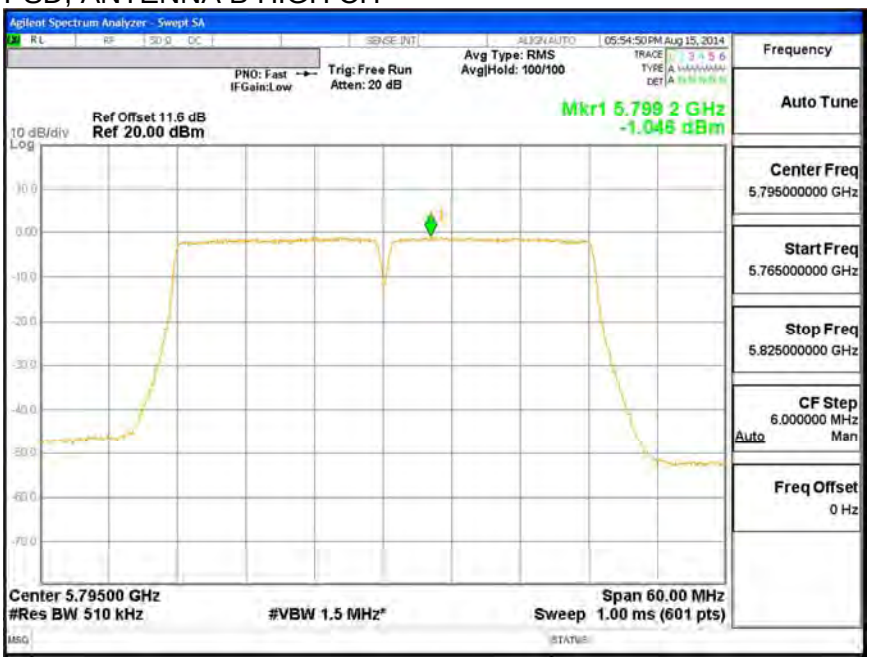
PSD Results

Channel	Frequency (MHz)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5755	-3.53	-3.53	30.00	-33.53
High	5795	-1.12	-1.12	30.00	-31.12

PSD, ANTENNA B

PSD, ANTENNA B LOW CH

PSD, ANTENNA B HIGH CH



PSD, ANTENNA C

PSD, ANTENNA C LOW CH

PSD, ANTENNA C HIGH CH

9.32. 802.11n HT40 2TX CDD MODE IN THE 5.8 GHz BAND

9.32.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

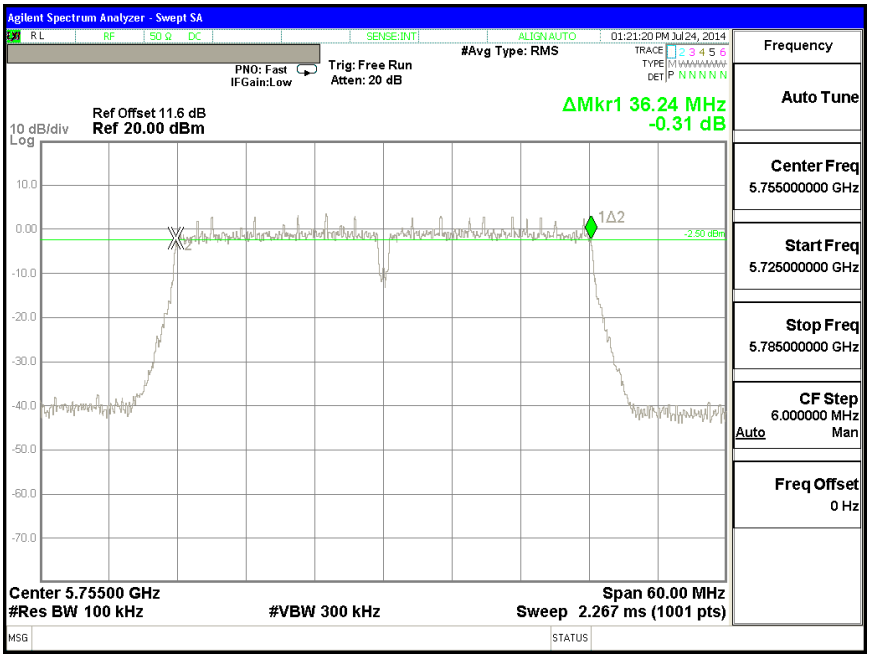
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

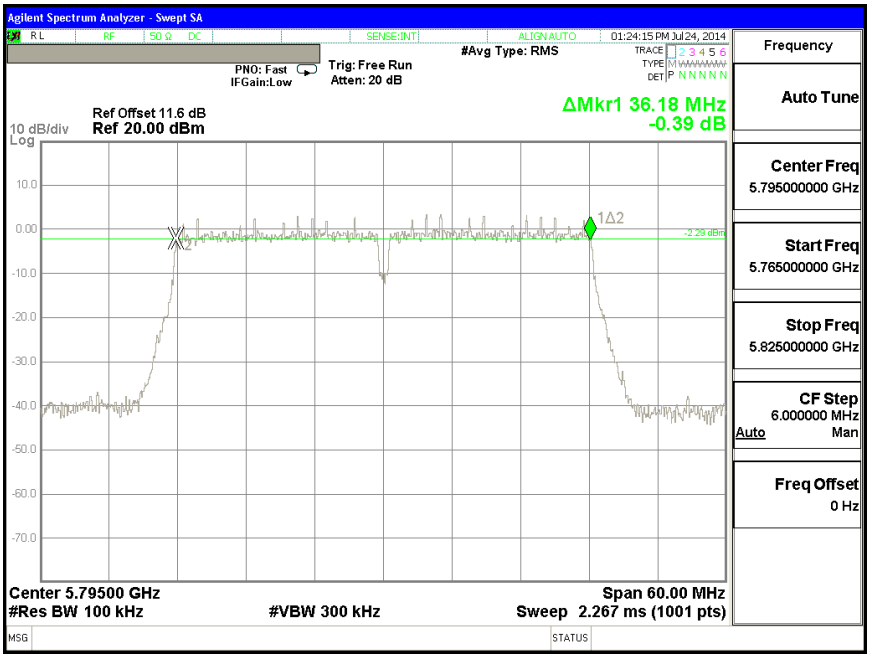
Channel	Frequency (MHz)	6 dB BW Antenna B (MHz)	6 dB BW Antenna C (MHz)	Minimum Limit (MHz)
Low	5755	36.240	36.240	0.5
High	5795	36.180	36.240	0.5

6 dB BANDWIDTH, ANTENNA B

6 dB BANDWIDTH ANTENNA B LOW CH

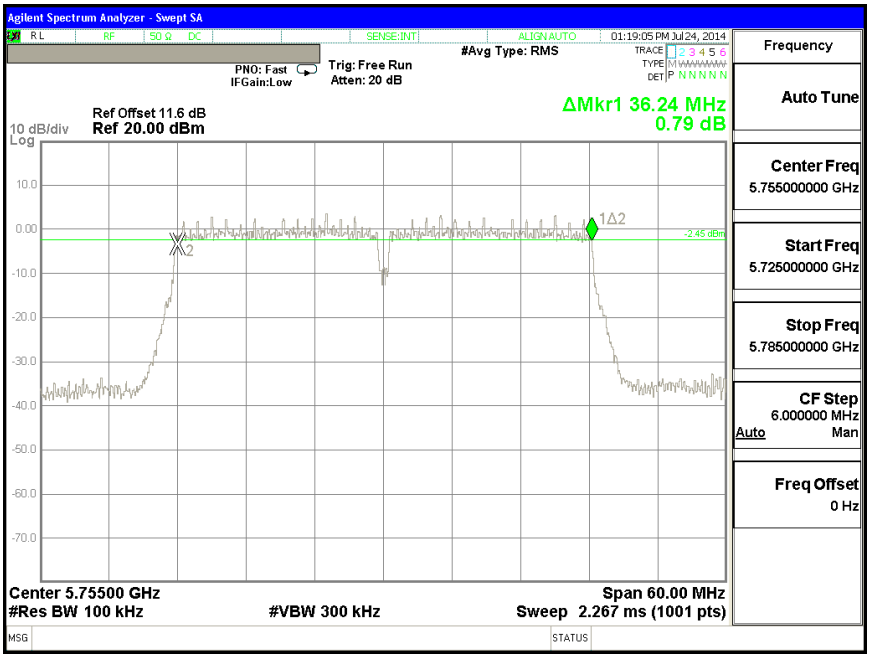


6 dB BANDWIDTH ANTENNA B HIGH CH

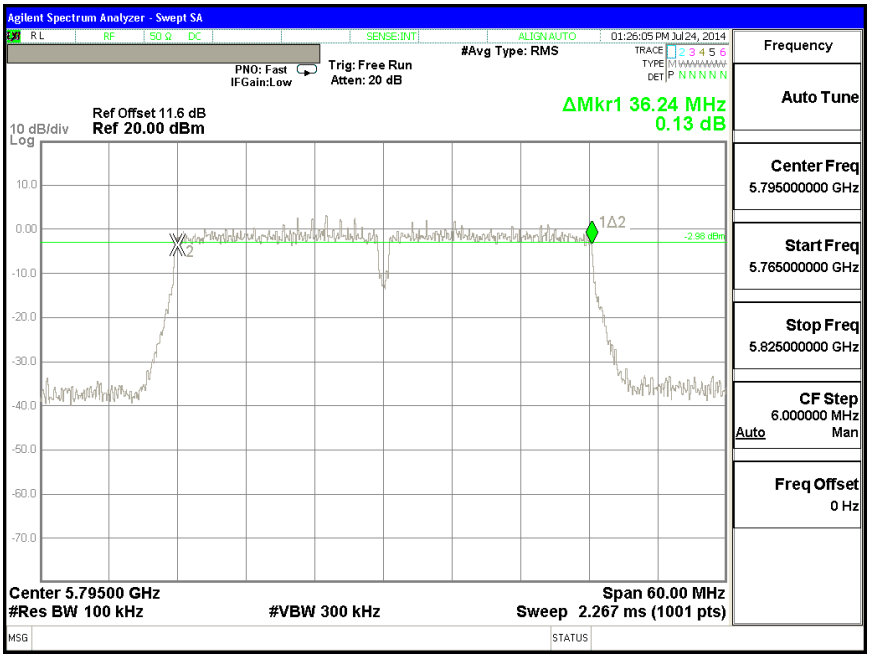


6 dB BANDWIDTH, ANTENNA C

6 dB BANDWIDTH ANTENNA C LOW CH



6 dB BANDWIDTH ANTENNA C HIGH CH



9.32.2. 26 dB BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB BW Antenna B (MHz)	26 dB BW Antenna C (MHz)
Low	5755	40.02	39.84
High	5795	40.08	39.96

26 dB BANDWIDTH, ANTENNA B

26 dB BANDWIDTH, ANTENNA B LOW CH

26 dB BANDWIDTH, ANTENNA B HIGH CH

26 dB BANDWIDTH, ANTENNA C

26 dB BANDWIDTH, ANTENNA C LOW CH

26 dB BANDWIDTH, ANTENNA C HIGH CH

9.32.3. 99% BANDWIDTH

LIMITS

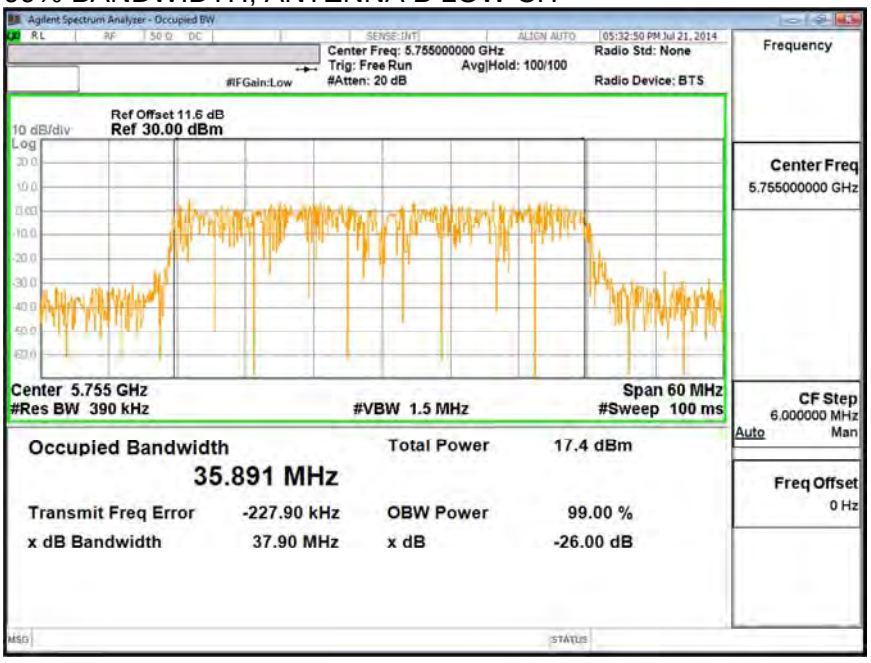
None; for reporting purposes only.

RESULTS

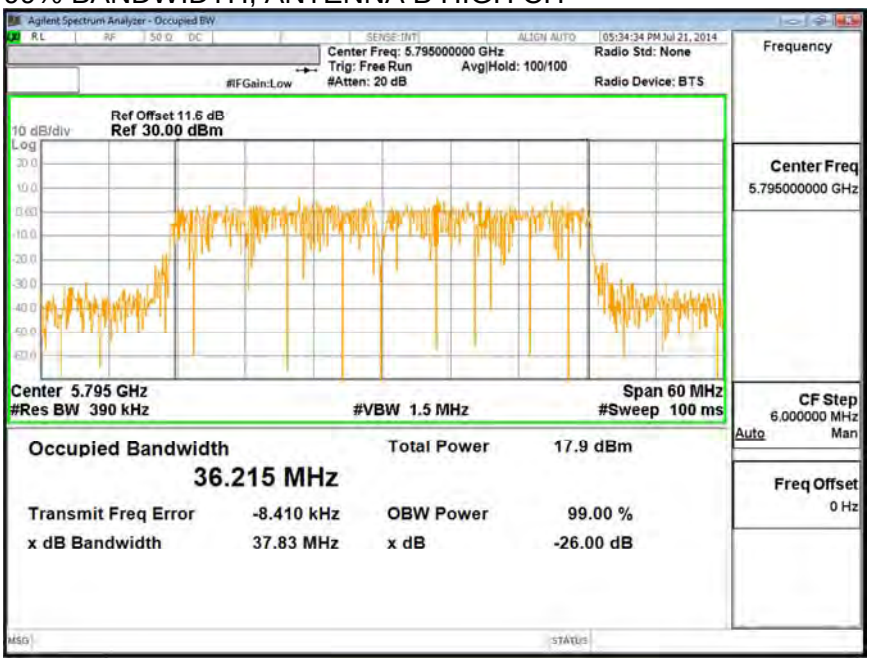
Channel	Frequency (MHz)	99% BW Antenna B (MHz)	99% BW Antenna C (MHz)
Low	5755	35.891	36.364
High	5795	36.215	36.274

99% BANDWIDTH, ANTENNA B

99% BANDWIDTH, ANTENNA B LOW CH

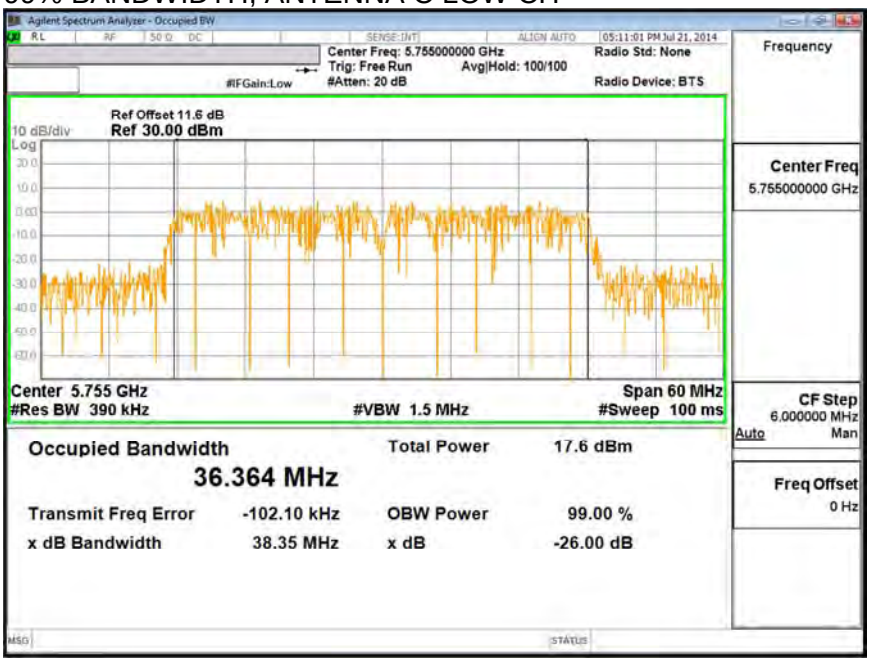


99% BANDWIDTH, ANTENNA B HIGH CH

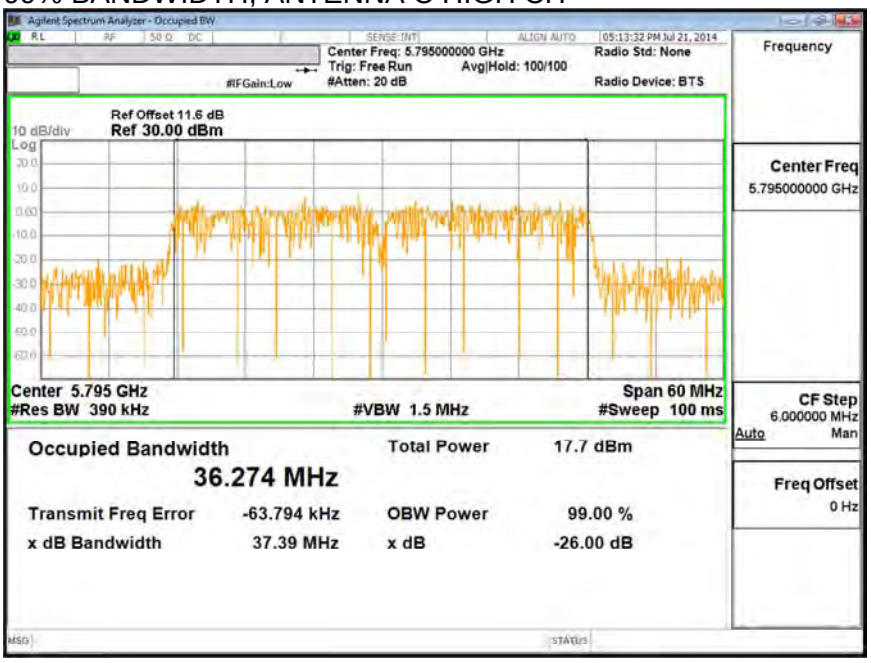


99% BANDWIDTH, ANTENNA C

99% BANDWIDTH, ANTENNA C LOW CH



99% BANDWIDTH, ANTENNA C HIGH CH



9.32.1. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Average Power Results

Channel	Frequency (MHz)	Antenna B Power (dBm)	Antenna C Power (dBm)	Total Power (dBm)
Low	5755	13.85	13.94	16.91
High	5795	15.91	15.93	18.93

9.32.2. 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

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

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 C Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-0.82	3.13	1.59

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	1.59	30.00
High	5795	1.59	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 C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	13.85	13.94	16.91	30.00	-13.09
High	5795	15.91	15.93	18.93	30.00	-11.07

9.32.3. 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 C Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-0.82	3.13	4.39

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5755	4.39	30.00
High	5795	4.39	30.00

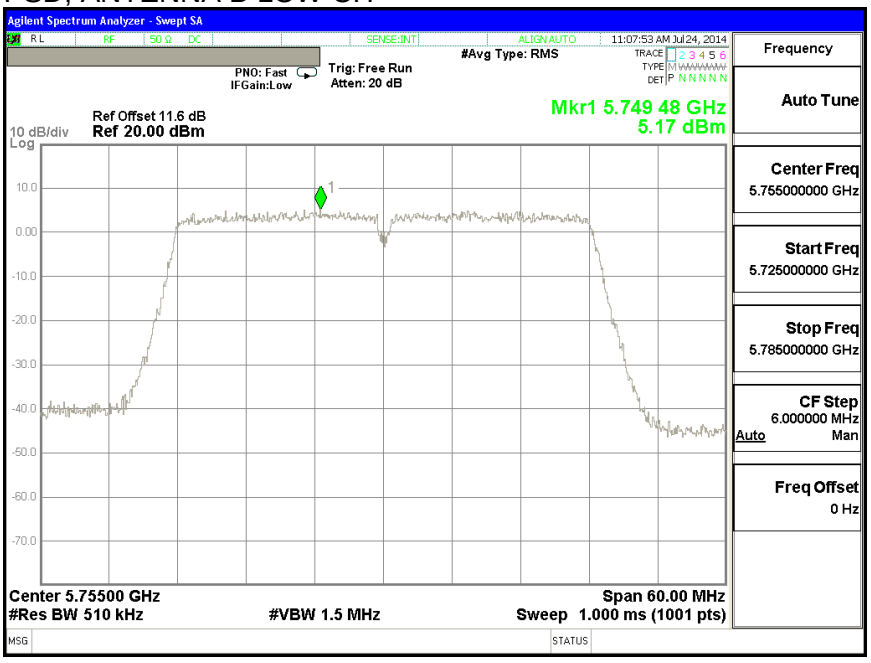
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

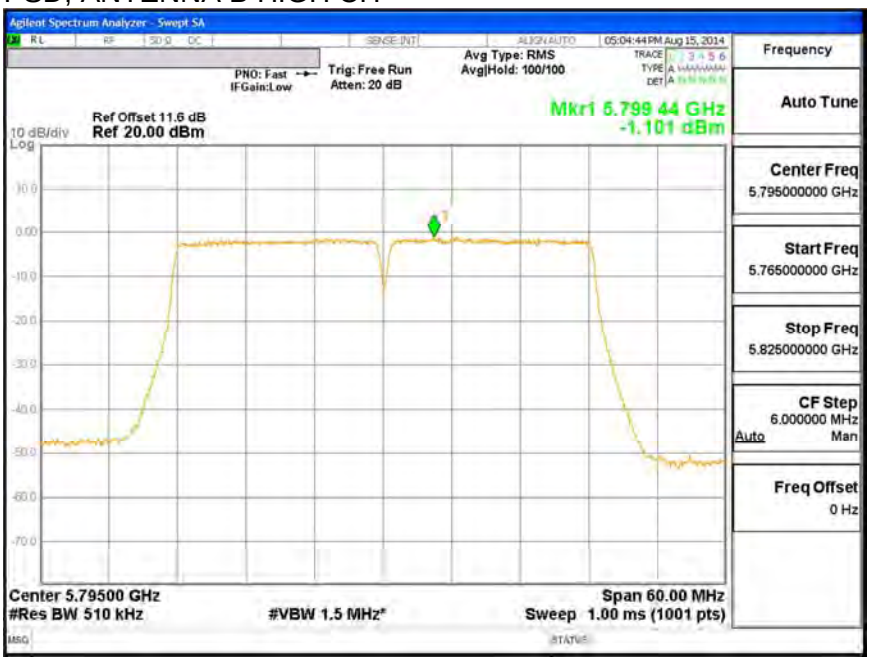
Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5755	5.17	6.48	8.88	30.00	-21.12
High	5795	-1.10	-1.51	1.71	30.00	-28.29

PSD, ANTENNA B

PSD, ANTENNA B LOW CH

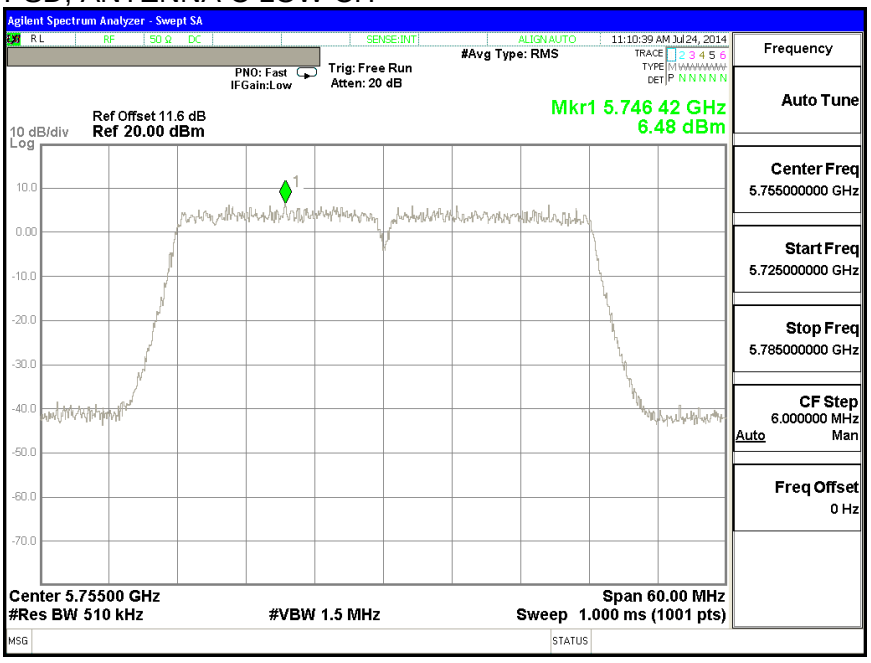


PSD, ANTENNA B HIGH CH

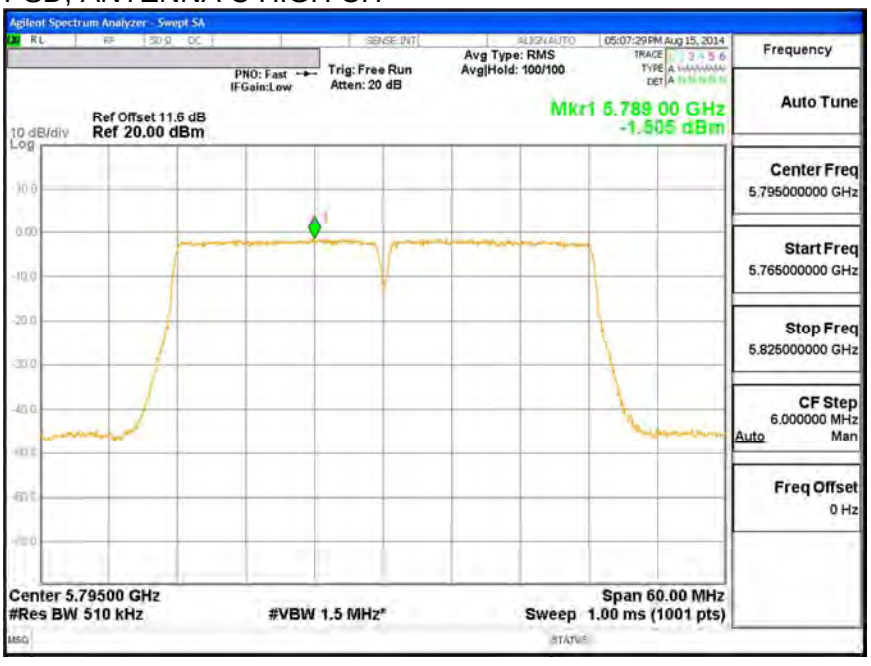


PSD, ANTENNA C

PSD, ANTENNA C LOW CH



PSD, ANTENNA C HIGH CH



9.33. 802.11n HT40 2Tx STBC/SDM MODE IN THE 5.8 GHz BAND

Refer to Section 9.32, 802.11n HT40 2TX CDD MODE IN THE 5.8 GHz BAND.

9.34. 802.11ac 801TX SISO MODE IN THE 5.8 GHz BAND

9.34.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

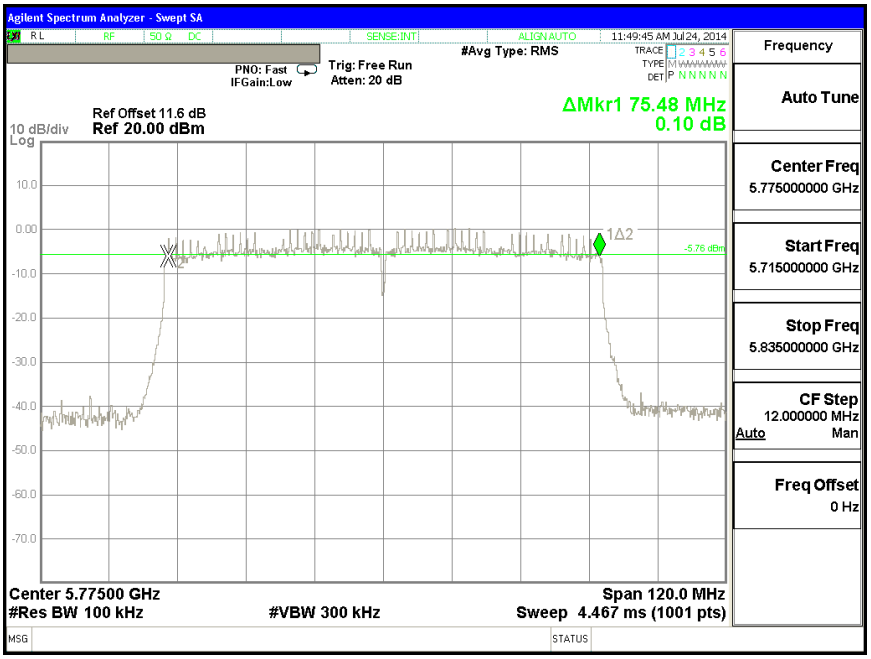
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	75.4800	0.5

6 dB BANDWIDTH

6 dB BANDWIDTH MID CH



9.34.2. 26 dB BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB BW Antenna B (MHz)
Mid	5775	81.96

26 dB BANDWIDTH, ANTENNA B

BANDWIDTH ANTENNA B LOW CH

9.34.3. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Mid	5775	75.674

99% BANDWIDTH

BANDWIDTH MID CH

9.34.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Antenna B Power (dBm)	Antenna C Power (dBm)
Mid	5775	13.42	13.48

9.34.5. 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

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

DIRECTIONAL ANTENNA GAIN

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

ANTENNA B

Antenna Gain (dBi)
-0.820

ANTENNA C

Antenna Gain (dBi)
3.130

RESULTS

ANTENNA B

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Mid	5775	-0.82	30.00

Duty Cycle CF (dB)	0.21	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)
Mid	5775	13.42	13.63	30.00	-16.37

ANTENNA C

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Mid	5775	3.13	30.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5775	13.48	13.69	30.00	-16.31

9.34.6. 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

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

ANTENNA B

Antenna Gain (dBi)
-0.820

ANTENNA C

Antenna Gain (dBi)
3.130

RESULTS

ANTENNA B

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Mid	5755	-0.82	30.00

Duty Cycle CF (dB)	0.21	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)
Mid	5755	-7.29	-7.08	30.00	-37.08

ANTENNA C

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Mid	5755	3.13	30.00

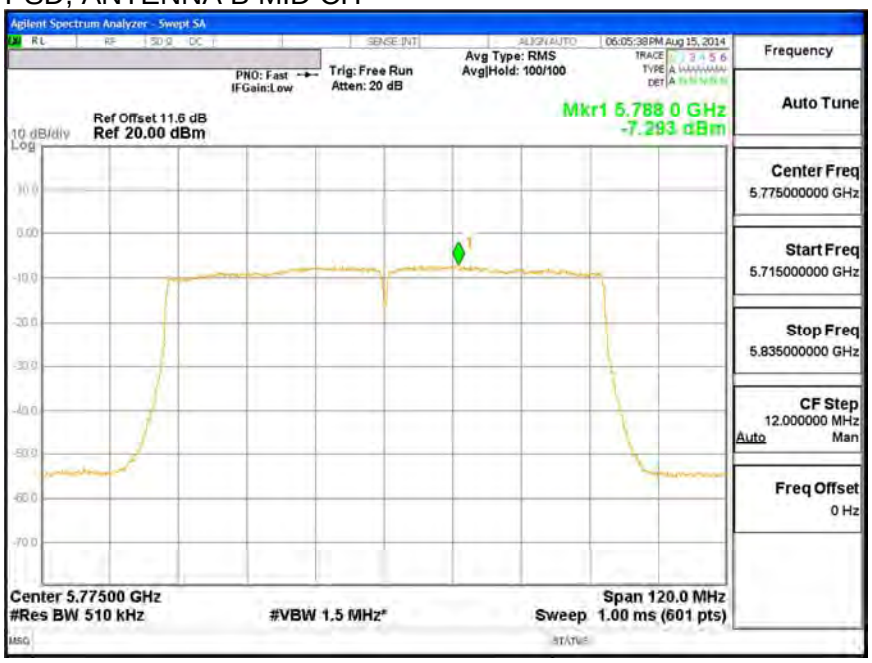
Duty Cycle CF (dB)	0.21	Included in Calculations of Corr'd PSD

PSD Results

Channel	Frequency (MHz)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5755	-7.13	-6.92	30.00	-36.92

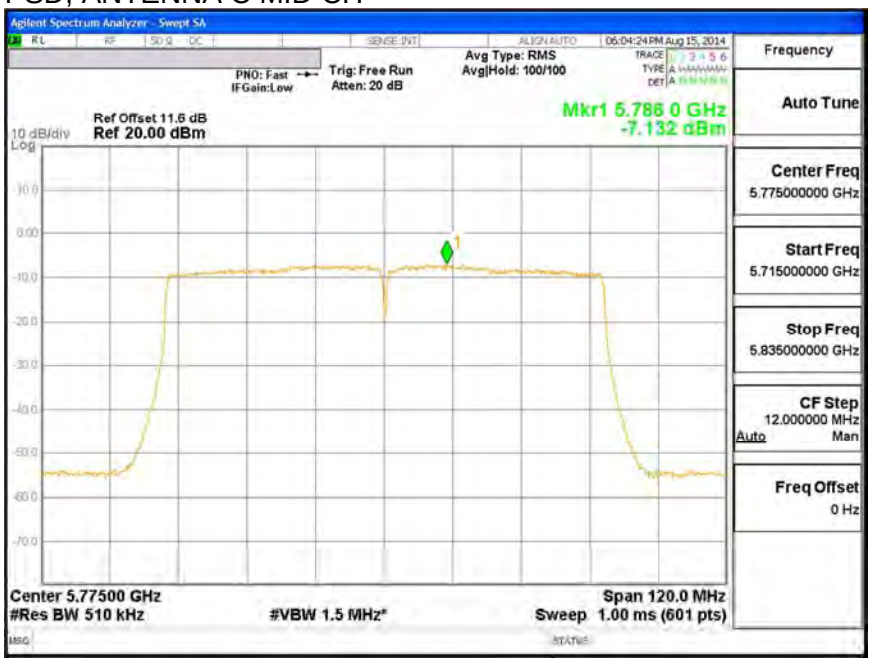
ANTENNA B

PSD, ANTENNA B MID CH



ANTENNA C

PSD, ANTENNA C MID CH



9.35. 802.11ac VHT80 2TX CDD MODE IN THE 5.8 GHz BAND

9.35.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

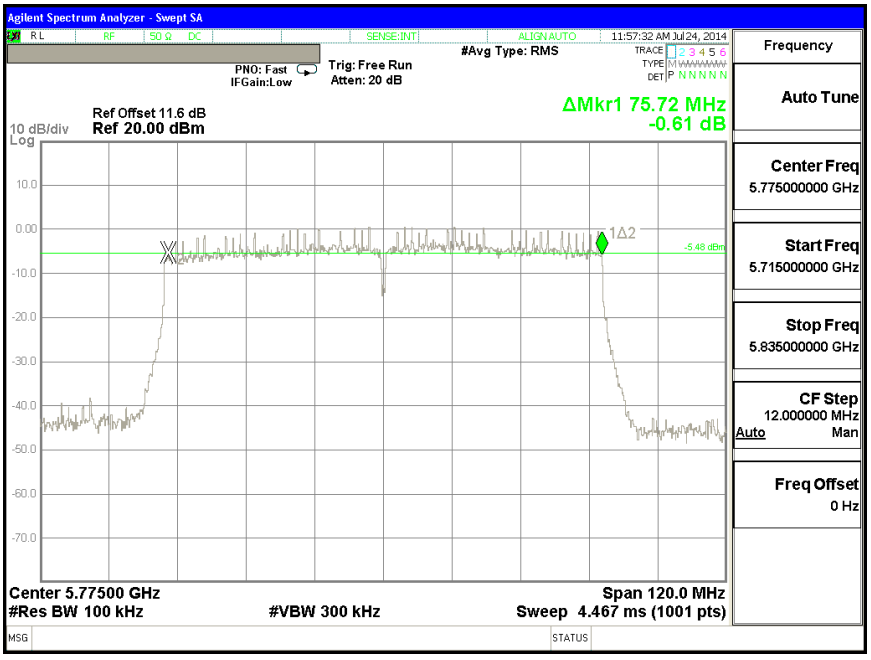
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Frequency (MHz)	6 dB BW Antenna B (MHz)	6 dB BW Antenna C (MHz)	Minimum Limit (MHz)
Mid	5775	75.72	75.84	0.5

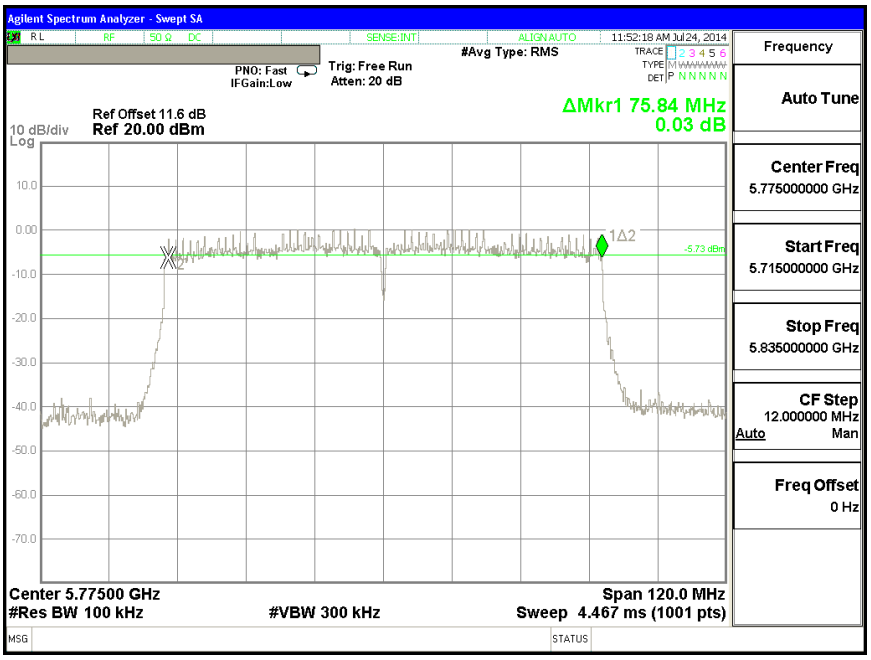
6 dB BANDWIDTH, ANTENNA B

6 dB BANDWIDTH ANTENNA B MID CH



6 dB BANDWIDTH, ANTENNA C

6 dB BANDWIDTH ANTENNA C MID CH



9.35.2. 26 dB BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

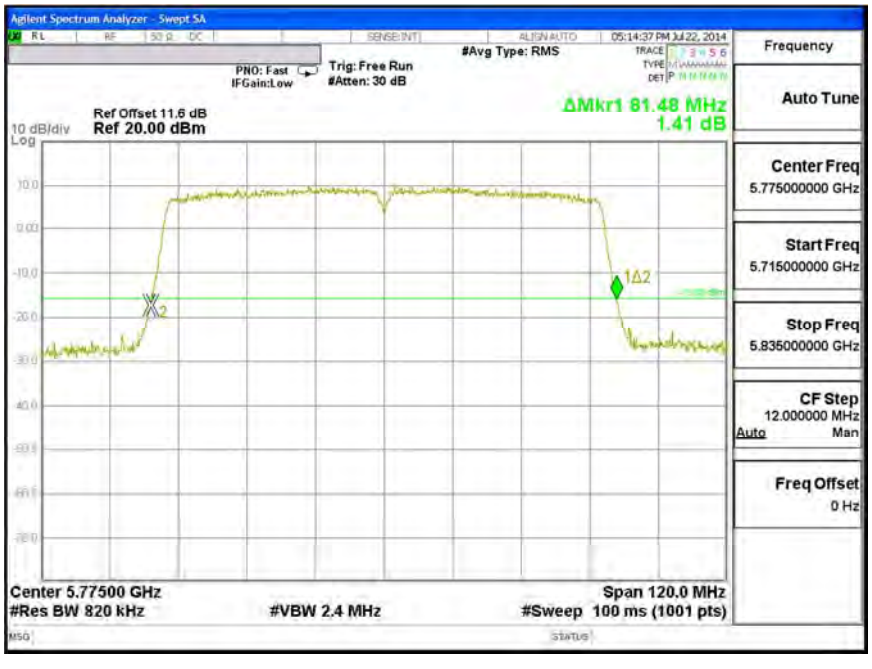
Channel	Frequency (MHz)	26 dB BW Antenna B (MHz)	26 dB BW Antenna C (MHz)
Mid	5775	81.72	81.48

26 dB BANDWIDTH, ANTENNA B

BANDWIDTH ANTENNA B MID CH

26 dB BANDWIDTH, ANTENNA C

BANDWIDTH ANTENNA C MID CH



9.35.3. 99% BANDWIDTH

LIMITS

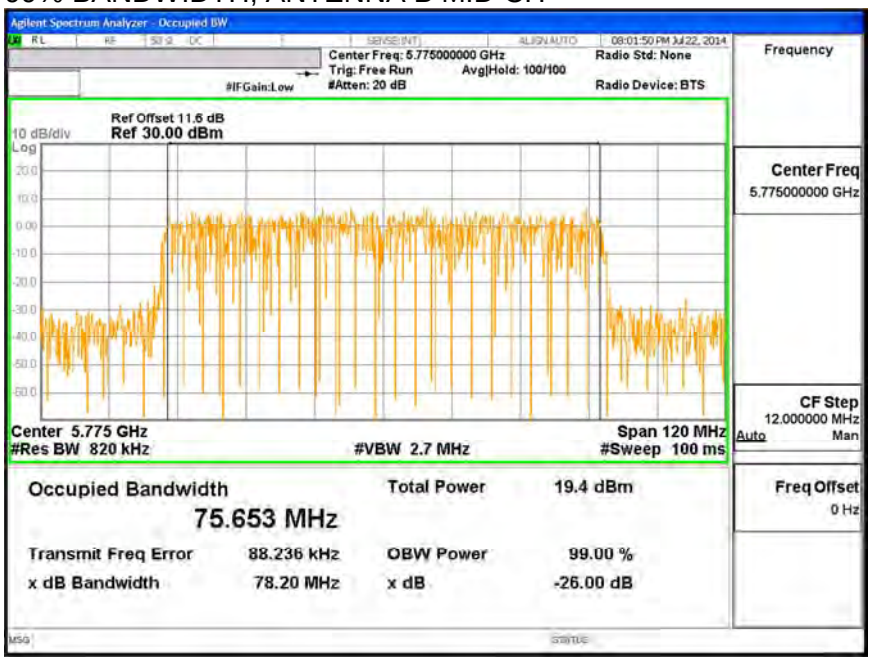
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% BW Antenna B (MHz)	99% BW Antenna C (MHz)
Mid	5775	75.653	76.047

99% BANDWIDTH, ANTENNA B

99% BANDWIDTH, ANTENNA B MID CH



99% BANDWIDTH, ANTENNA C

99% BANDWIDTH, ANTENNA C MID CH

9.35.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Average Power Results

Channel	Frequency (MHz)	Antenna B Power (dBm)	Antenna C Power (dBm)	Total Power (dBm)
Mid	5775	13.00	12.91	15.97

9.35.5. 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

The transmitter output is connected to a power meter. The power meter was setup for a gated power measurement.

The cable assembly insertion loss of 11.6 dB (including 10 dB pad and 1.6 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

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 C Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-0.82	3.13	1.59

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Mid	5775	1.59	30.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna B Meas Power (dBm)	Antenna C Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5775	13.00	12.91	16.18	30.00	-13.82

9.35.6. 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

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

Antenna B Antenna Gain (dBi)	Antenna C Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-0.82	3.13	4.39

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Mid	5755	4.39	30.00

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

PSD Results

Channel	Frequency (MHz)	Antenna B Meas PSD (dBm)	Antenna C Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5755	-6.77	-7.18	-3.75	30.00	-33.75

PSD, ANTENNA B

PSD, ANTENNA B MID CH

PSD, ANTENNA C

PSD, ANTENNA C MID CH

9.36. 802.11ac VHT80 2Tx STBC/SDM MODE IN THE 5.8 GHz BAND

Refer to Section 9.35, 802.11ac VHT80 2TX CDD MODE IN THE 5.8 GHz BAND.

10. RADIATED TEST RESULTS

10.1. 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. The antenna to EUT distance is 3 meters.

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 measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 1 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.

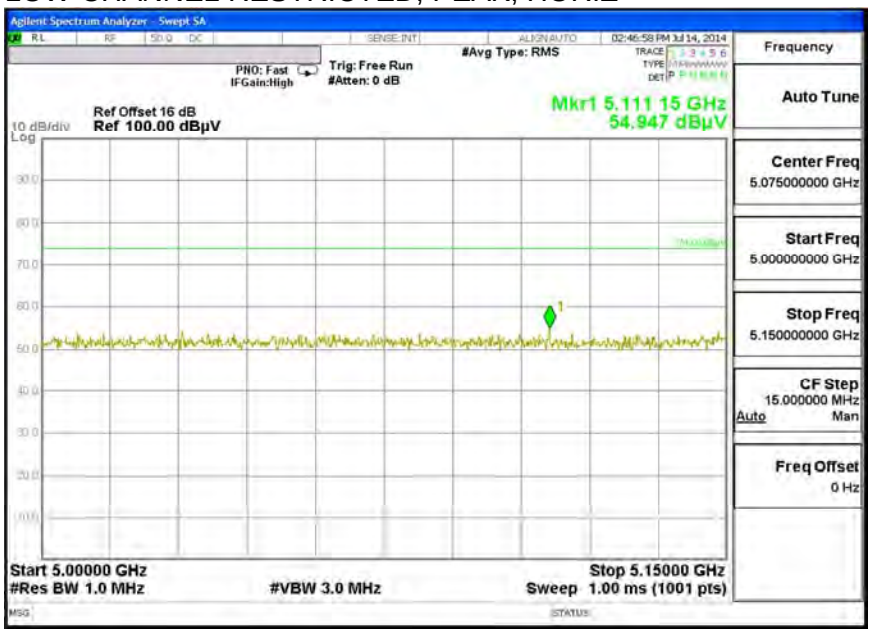
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

1TX mode indicates that only one antenna is transmitting. 2TX mode indicates that two antennas are transmitting simultaneously.

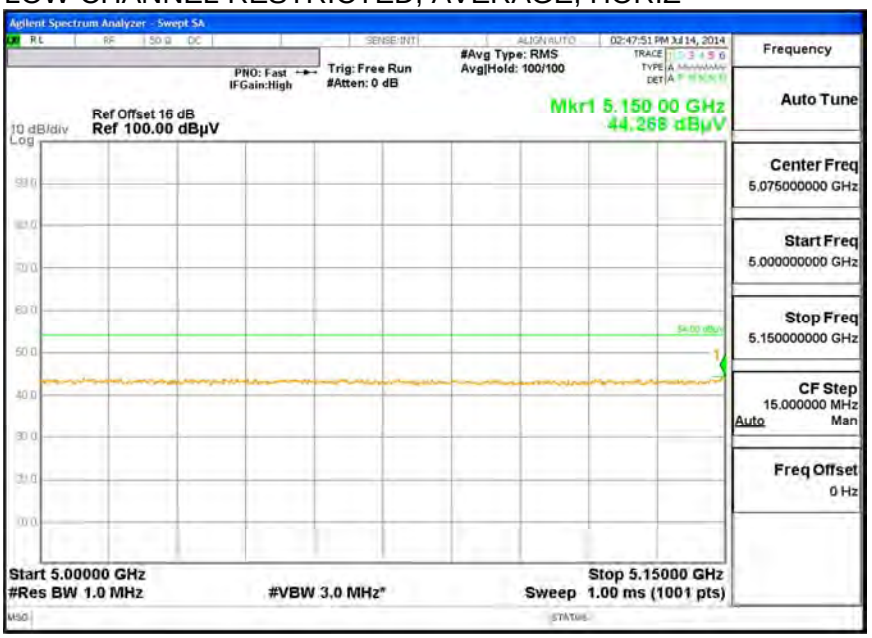
10.2. TX ABOVE 1 GHz 802.11a SISO MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

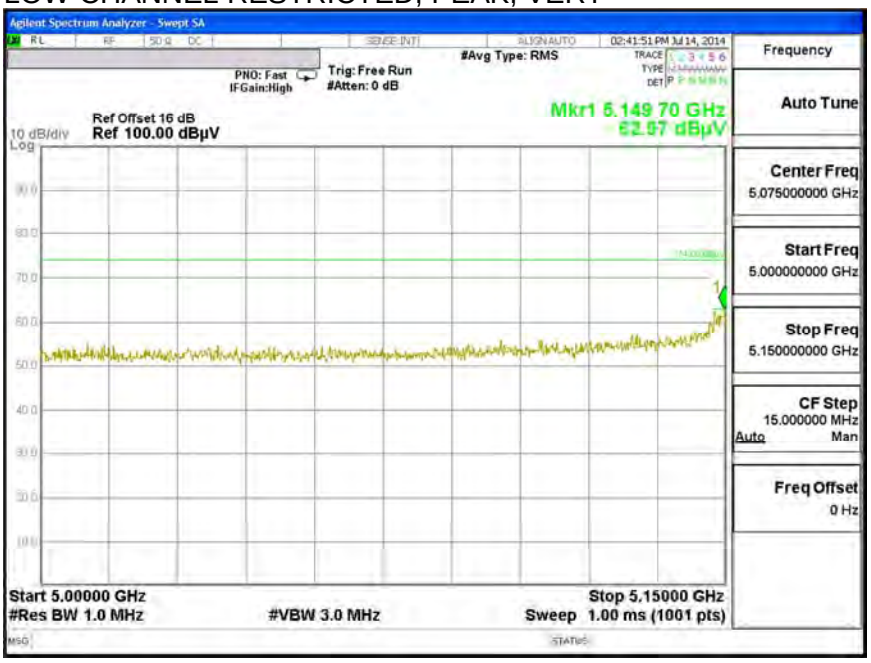
LOW CHANNEL RESTRICTED, PEAK, HORIZ



LOW CHANNEL RESTRICTED, AVERAGE, HORIZ



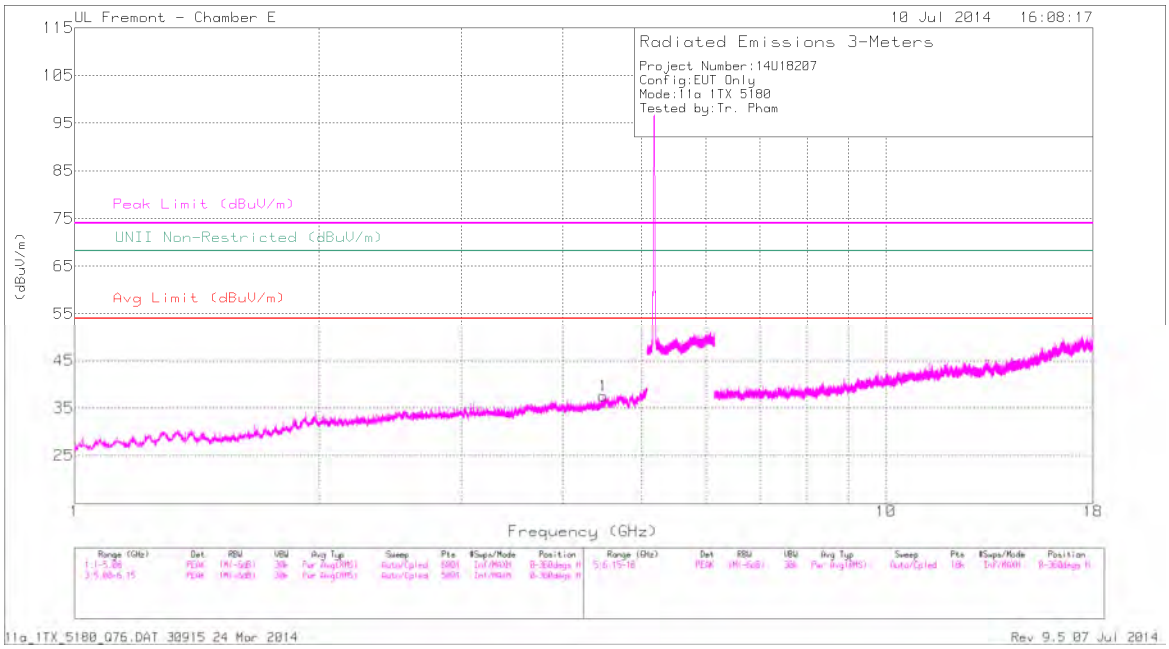
LOW CHANNEL RESTRICTED, PEAK, VERT



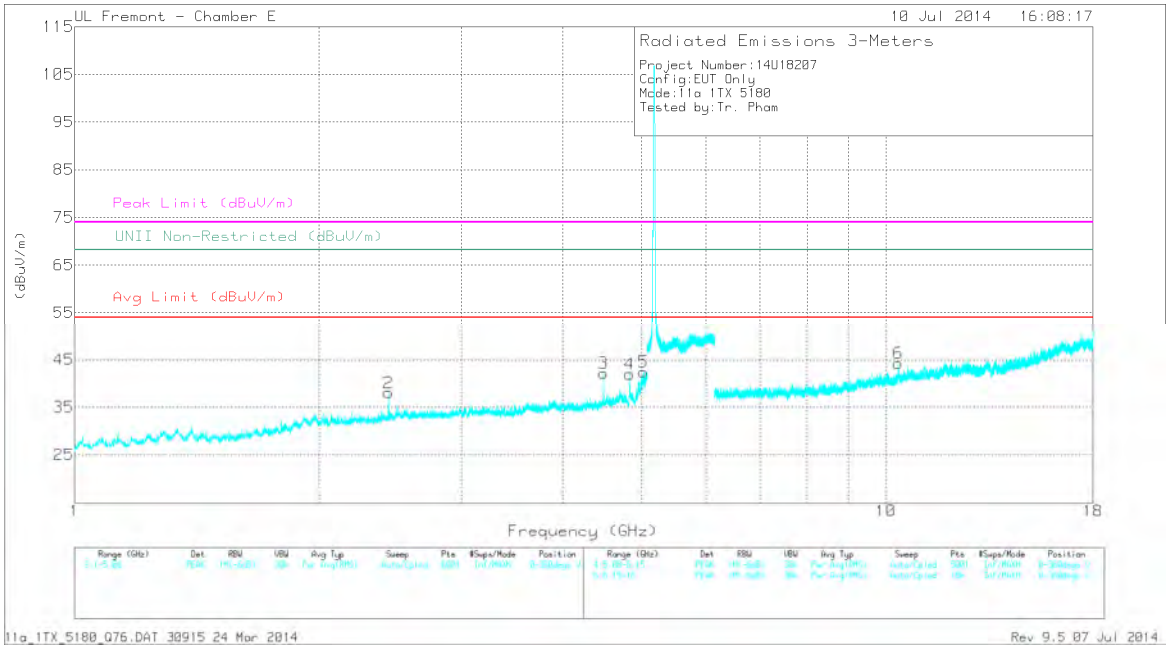
LOW CHANNEL RESTRICTED, AVERAGE, VERT

LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 3.85	47.46	PK1	33.5	-31.1	49.86	-	-	74	-24.14	-	-	335	212	H
* 3.85	41.85	AD1	33.5	-31.1	44.25	54	-9.75	-	-	-	-	335	212	H
* 4.705	45.82	PK1	34.2	-30.1	49.92	-	-	74	-24.08	-	-	330	247	H
* 4.706	38.87	AD1	34.2	-30.1	42.97	54	-11.03	-	-	-	-	330	247	H
* 3.85	44.79	PK1	33.5	-31.1	47.19	-	-	74	-26.81	-	-	294	337	V
* 3.85	38.17	AD1	33.5	-31.1	40.57	54	-13.43	-	-	-	-	294	337	V
* 4.706	49.67	PK1	34.2	-30.1	53.77	-	-	74	-20.23	-	-	329	323	V
* 4.706	45.98	AD1	34.2	-30.1	50.08	54	-3.92	-	-	-	-	329	323	V
* 5.134	45.48	PK1	34.2	-21.6	58.08	-	-	74	-15.92	-	-	351	203	V
* 5.133	36.01	AD1	34.2	-21.6	48.61	54	-5.39	-	-	-	-	351	203	V
1.855	42.69	PK1	30.6	-33.8	39.49	-	-	-	-	68.2	-28.71	77	387	H
6.193	44.99	PK1	35.4	-29.2	51.19	-	-	-	-	68.2	-17.01	360	281	V

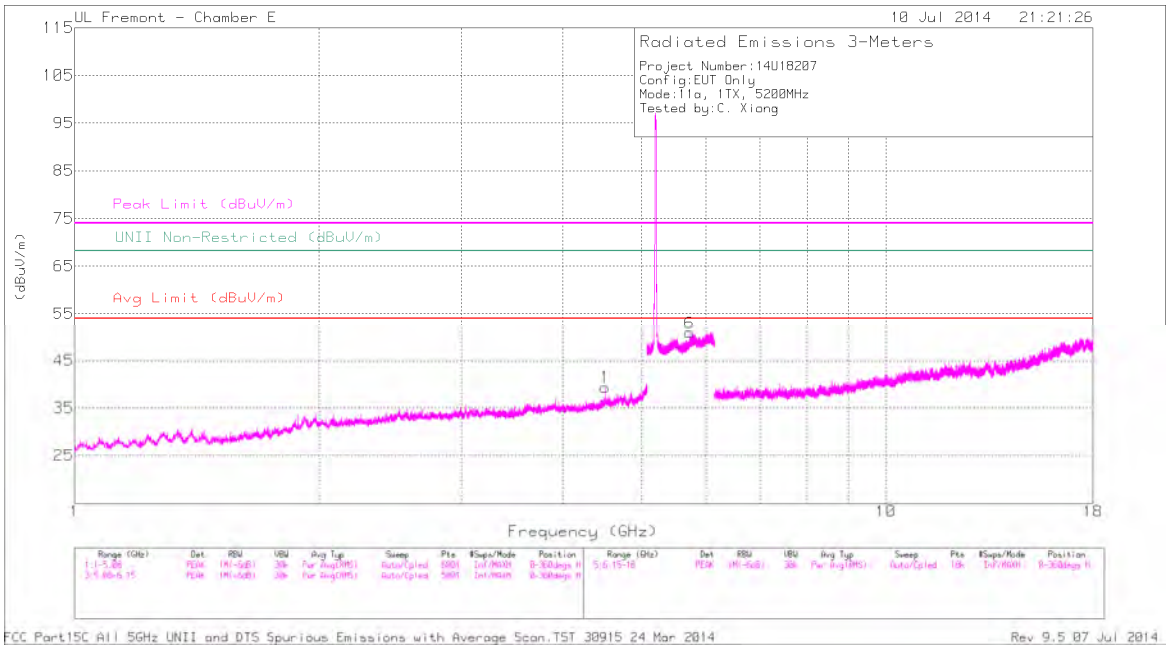
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

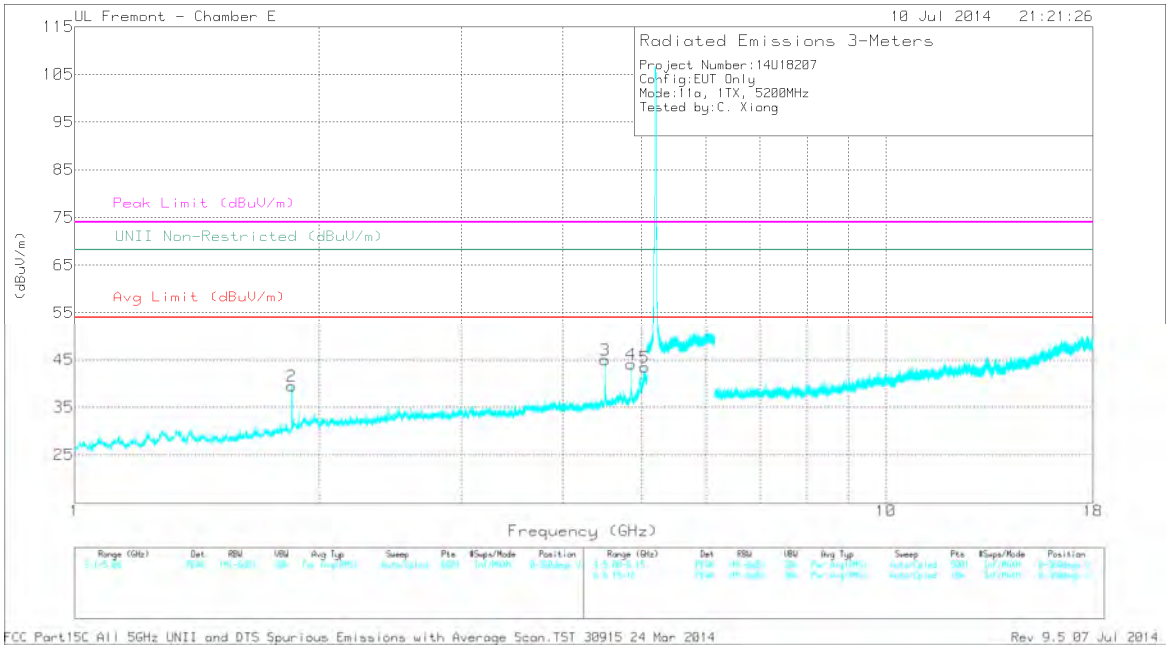
AD1 - KDB789033 Method: AD Primary Power Average

MID CHANNEL HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 4.507	42.19	PK1	33.9	-30	46.09	-	-	74	-27.91	-	-	360	114	H
* 4.507	33.64	AD1	33.9	-30	37.54	54	-16.46	-	-	-	-	360	114	H
* 4.507	46.08	PK1	33.9	-30	49.98	-	-	74	-24.02	-	-	328	227	V
* 4.507	40.53	AD1	33.9	-30	44.43	54	-9.57	-	-	-	-	328	227	V
* 4.853	46.63	PK1	34.1	-30.5	50.23	-	-	74	-23.77	-	-	330	224	V
* 4.853	39.25	AD1	34.1	-30.5	42.85	54	-11.15	-	-	-	-	330	224	V
* 5.045	47.22	PK1	34.1	-28.8	52.52	-	-	74	-21.48	-	-	328	195	V
* 5.043	35.5	AD1	34.1	-28.8	40.8	54	-13.2	-	-	-	-	328	195	V
1.855	42.99	PK1	30.6	-33.8	39.79	-	-	-	-	68.2	-28.41	288	268	V
5.734	43.15	PK1	34.8	-20.8	57.15	-	-	-	-	68.2	-11.05	347	340	H

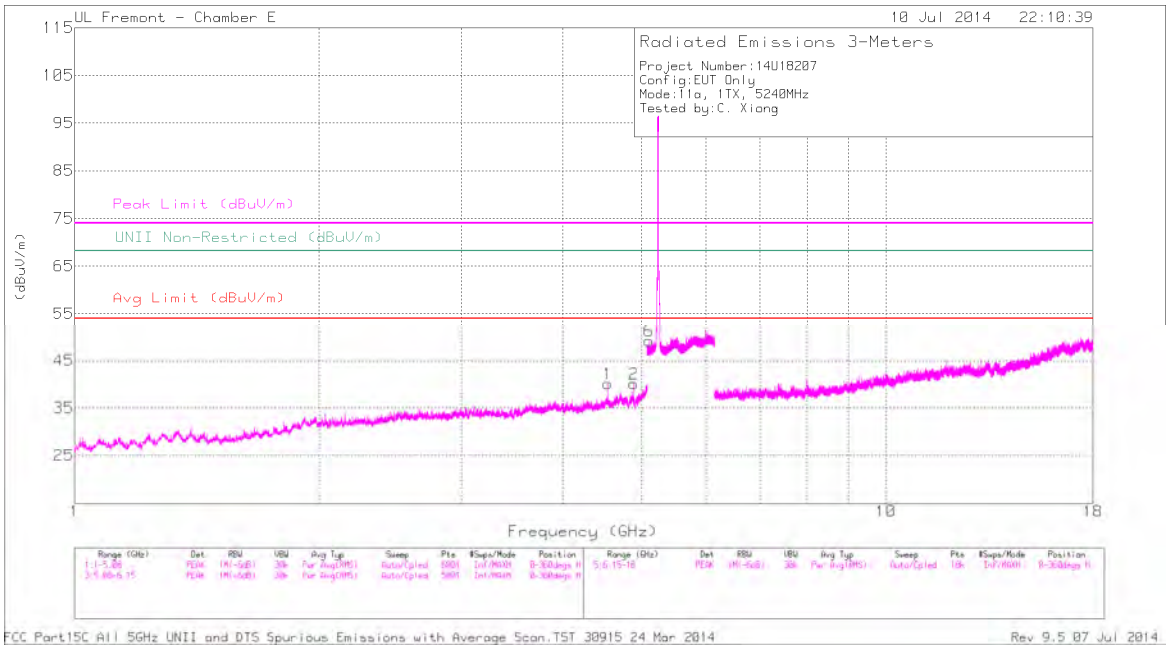
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

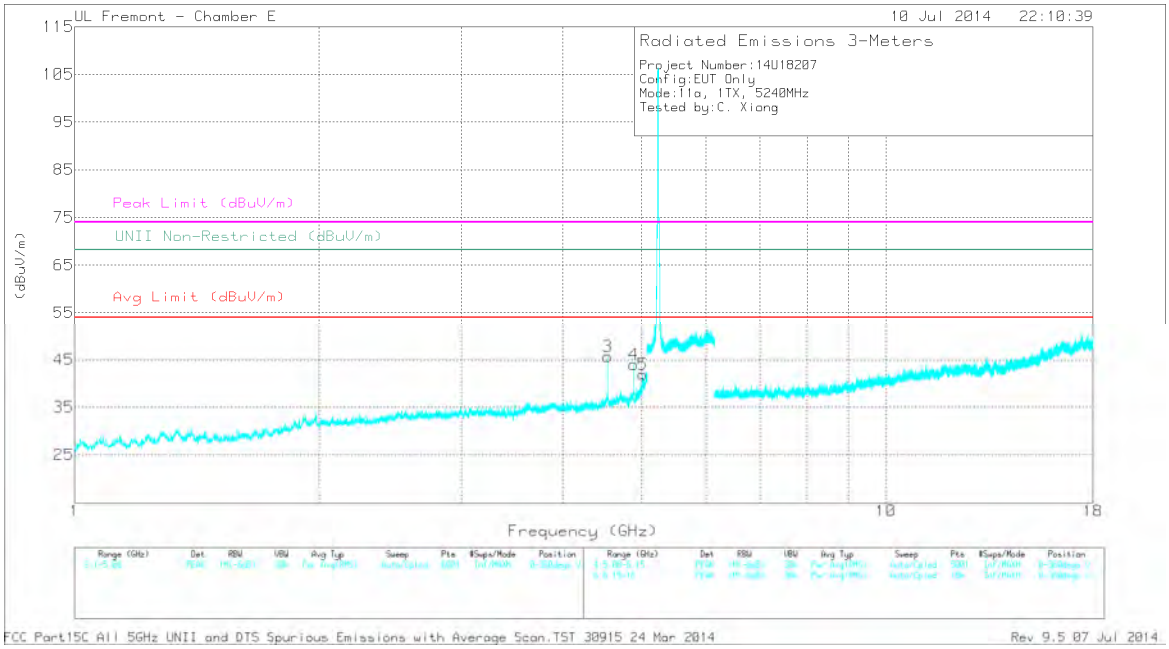
AD1 - KDB789033 Method: AD Primary Power Average

HIGH CHANNEL HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 4.541	43.3	PK1	34	-30.6	46.7	-	-	74	-27.3	-	-	0	110	H
* 4.541	34.29	AD1	34	-30.6	37.69	54	-16.31	-	-	-	-	0	110	H
* 4.891	43.14	PK1	34	-30.1	47.04	-	-	74	-26.96	-	-	1	103	H
* 4.891	33.56	AD1	34	-30.1	37.46	54	-16.54	-	-	-	-	1	103	H
* 4.541	47.45	PK1	34	-30.6	50.85	-	-	74	-23.15	-	-	334	200	V
* 4.541	41.61	AD1	34	-30.6	45.01	54	-8.99	-	-	-	-	334	200	V
* 4.891	46.45	PK1	34	-30.1	50.35	-	-	74	-23.65	-	-	333	175	V
* 4.891	40.04	AD1	34	-30.1	43.94	54	-10.06	-	-	-	-	333	175	V
* 5.023	45.66	PK1	34.1	-28.9	50.86	-	-	74	-23.14	-	-	325	175	V
* 5.022	34.44	AD1	34.1	-28.9	39.64	54	-14.36	-	-	-	-	325	175	V
* 5.106	42.92	PK1	34.2	-21.6	55.52	-	-	74	-18.48	-	-	344	112	H
* 5.105	31.76	AD1	34.2	-21.6	44.36	54	-9.64	-	-	-	-	344	112	H

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

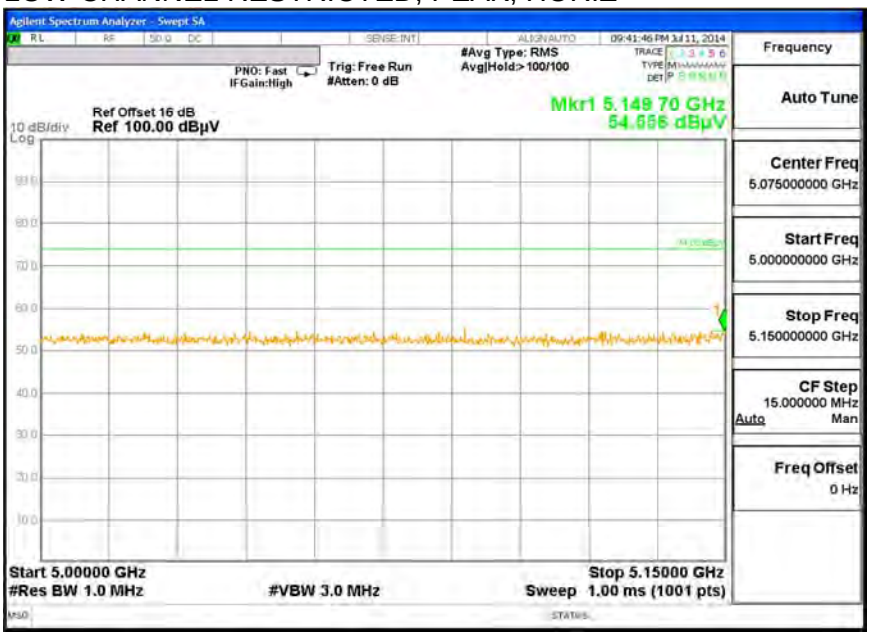
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

10.3. TX ABOVE 1 GHz 802.11n HT20 2Tx CDD MODE IN THE 5.2 GHz BAND

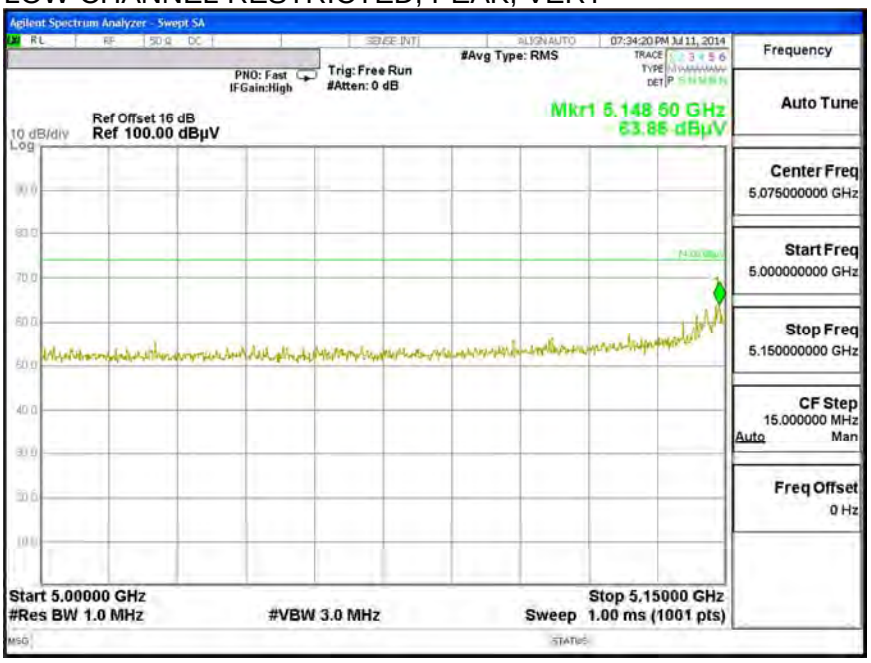
RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK, HORIZ



LOW CHANNEL RESTRICTED, AVERAGE, HORIZ

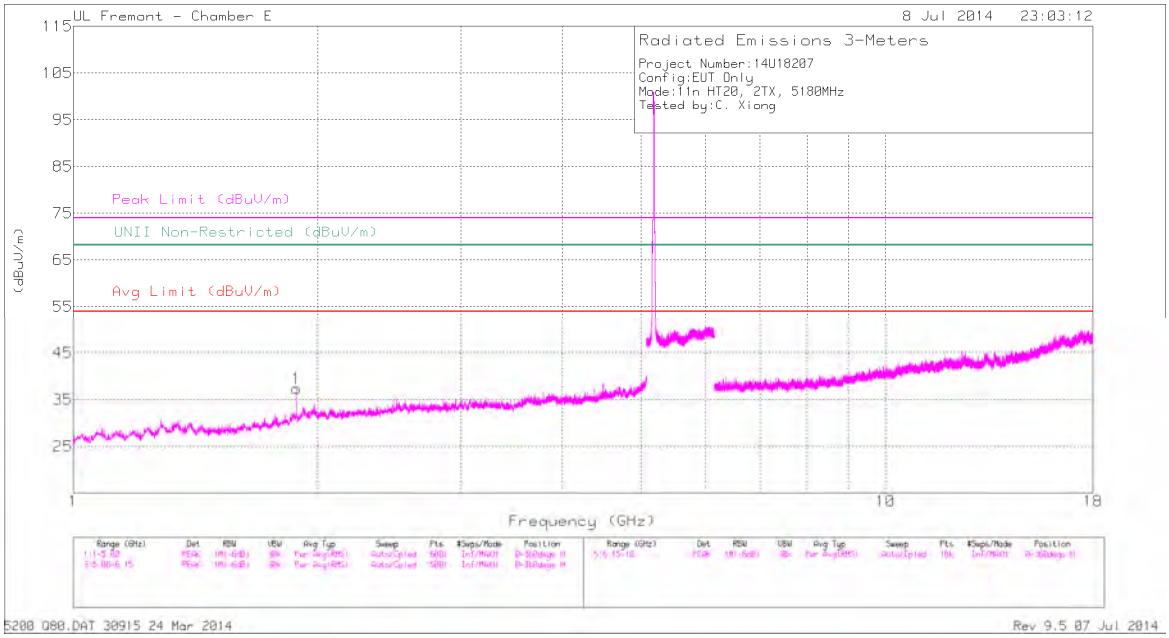
LOW CHANNEL RESTRICTED, PEAK, VERT



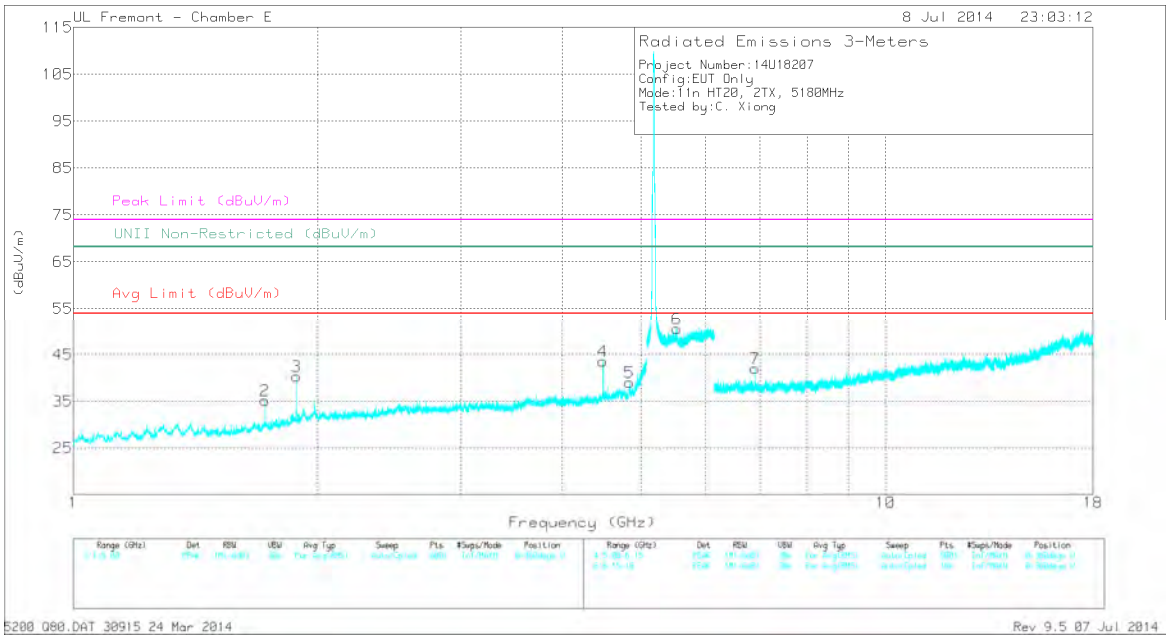
LOW CHANNEL RESTRICTED, AVERAGE, VERT

LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 1.721	44.05	PK1	29.3	-33.7	39.65	-	-	74	-34.35	-	-	251	219	V
* 1.722	31.61	AD1	29.4	-33.7	27.31	54	-26.69	-	-	-	-	251	219	V
* 4.834	43.85	PK1	34.1	-30.3	47.65	-	-	74	-26.35	-	-	320	181	V
* 4.834	33.93	AD1	34.1	-30.3	37.73	54	-16.27	-	-	-	-	320	181	V
1.881	42.65	PK1	30.9	-33.5	40.05	-	-	-	-	68.2	-28.15	291	395	H
1.881	42.11	PK1	30.9	-33.5	39.51	-	-	-	-	68.2	-28.69	136	137	V
4.489	46.04	PK1	33.9	-30.2	49.74	-	-	-	-	68.2	-18.46	334	200	V
5.531	43.92	PK1	34.6	-20.5	58.02	-	-	-	-	68.2	-10.18	317	235	V
6.907	41.86	PK1	35.9	-28.8	48.96	-	-	-	-	68.2	-19.24	134	176	V

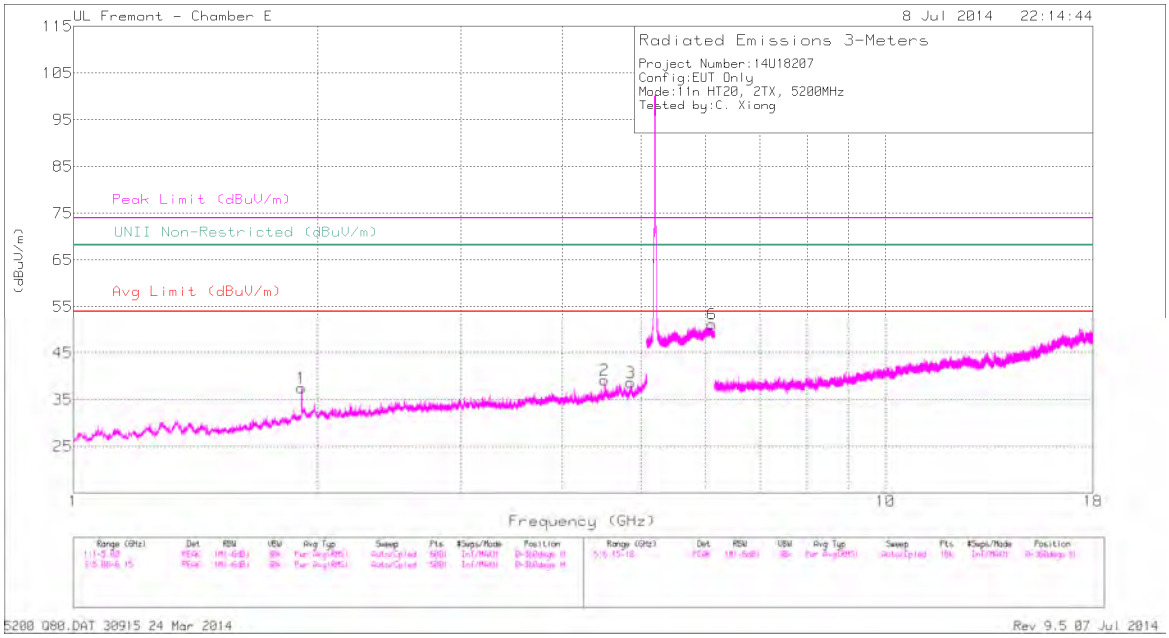
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

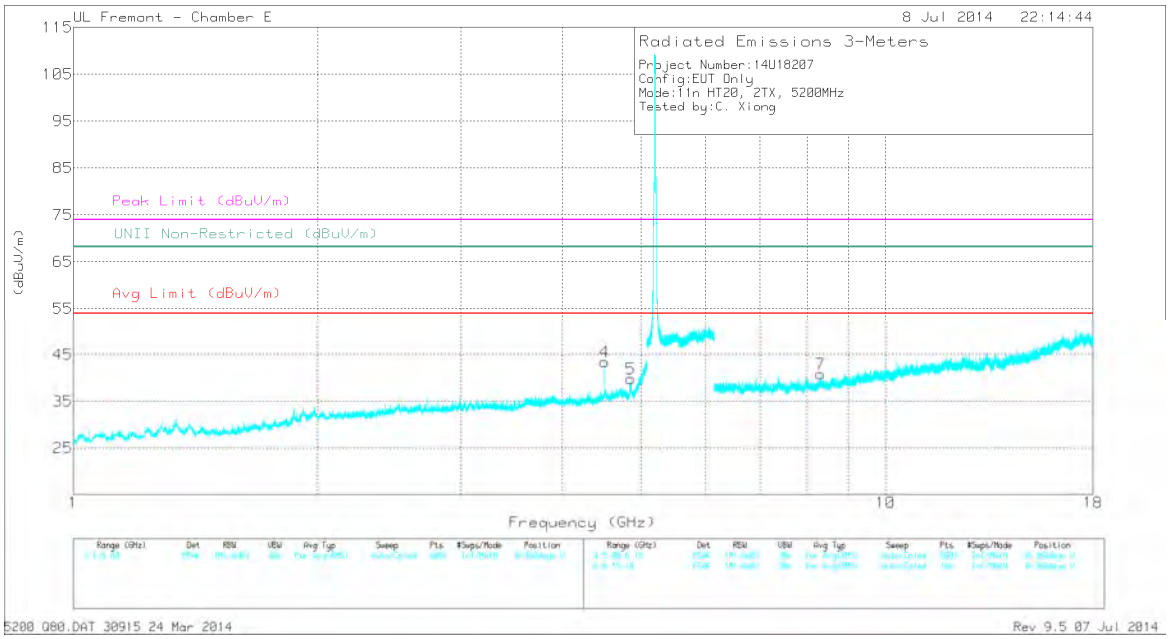
AD1 - KDB789033 Method: AD Primary Power Average

MID CHANNEL HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 4.506	43.02	PK1	33.9	-30	46.92	-	-	74	-27.08	-	-	351	114	H
* 4.507	33.47	AD1	33.9	-30	37.37	54	-16.63	-	-	-	-	351	114	H
* 4.853	42.62	PK1	34.1	-30.5	46.22	-	-	74	-27.78	-	-	344	214	H
* 4.853	31.12	AD1	34.1	-30.5	34.72	54	-19.28	-	-	-	-	344	214	H
* 4.506	45.6	PK1	33.9	-30	49.5	-	-	74	-24.5	-	-	332	199	V
* 4.507	39.5	AD1	33.9	-30	43.4	54	-10.6	-	-	-	-	332	199	V
* 4.853	43.84	PK1	34.1	-30.5	47.44	-	-	74	-26.56	-	-	319	175	V
* 4.853	34.43	AD1	34.1	-30.5	38.03	54	-15.97	-	-	-	-	319	175	V
* 8.312	38.89	PK1	35.9	-27.1	47.69	54	-6.31	74	-26.31	-	-	34	201	V
1.909	42.96	PK1	31.1	-32.9	41.16	-	-	-	-	68.2	-27.04	95	393	H
6.112	42.63	PK1	35.3	-20.3	57.63	-	-	-	-	68.2	-10.57	71	226	H

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

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average