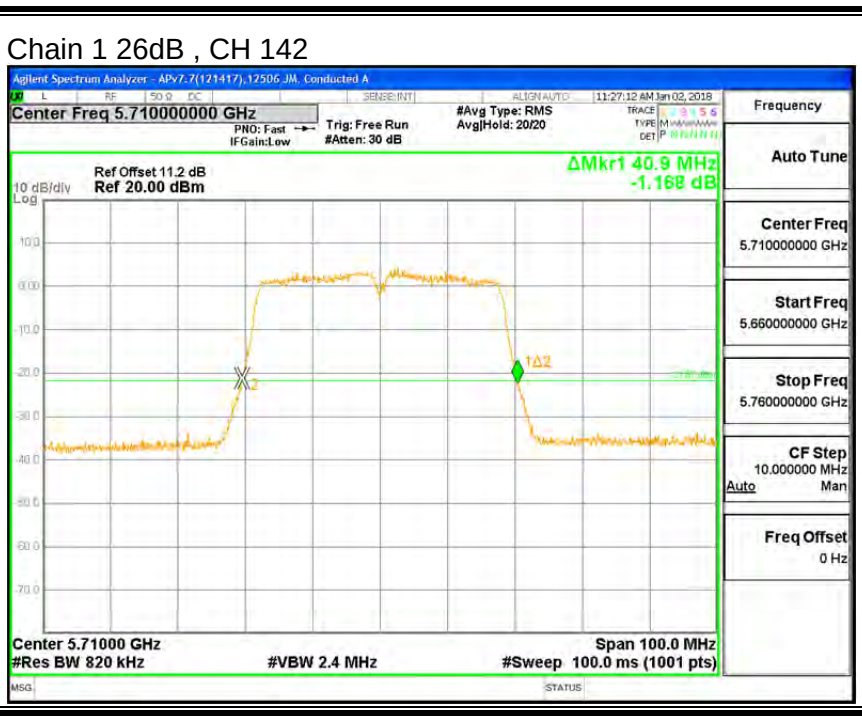
Chain 0 26dB , CH 142

Chain 1 26dB , CH 142



9.11.2. 99% BANDWIDTH

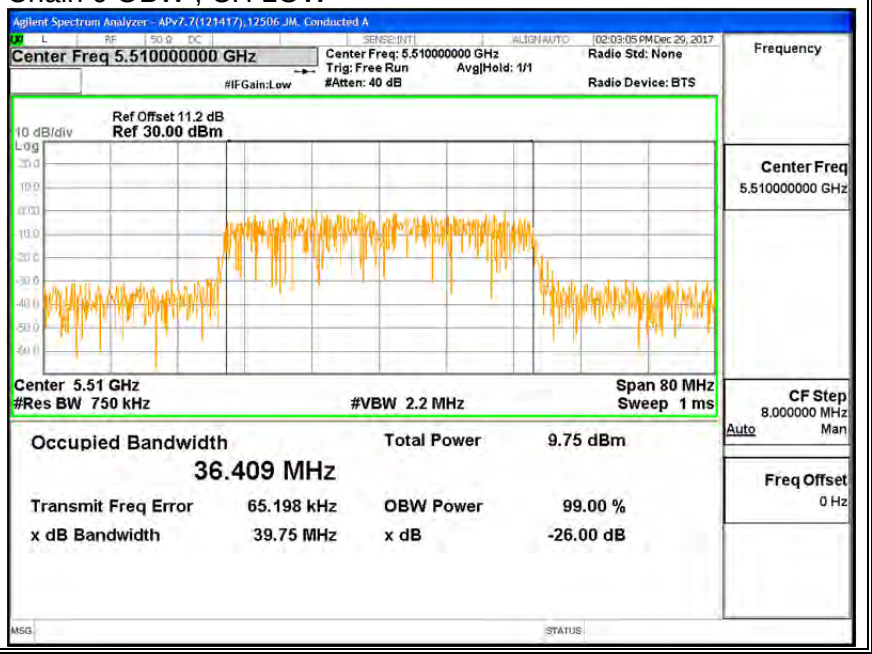
LIMITS

None; for reporting purposes only.

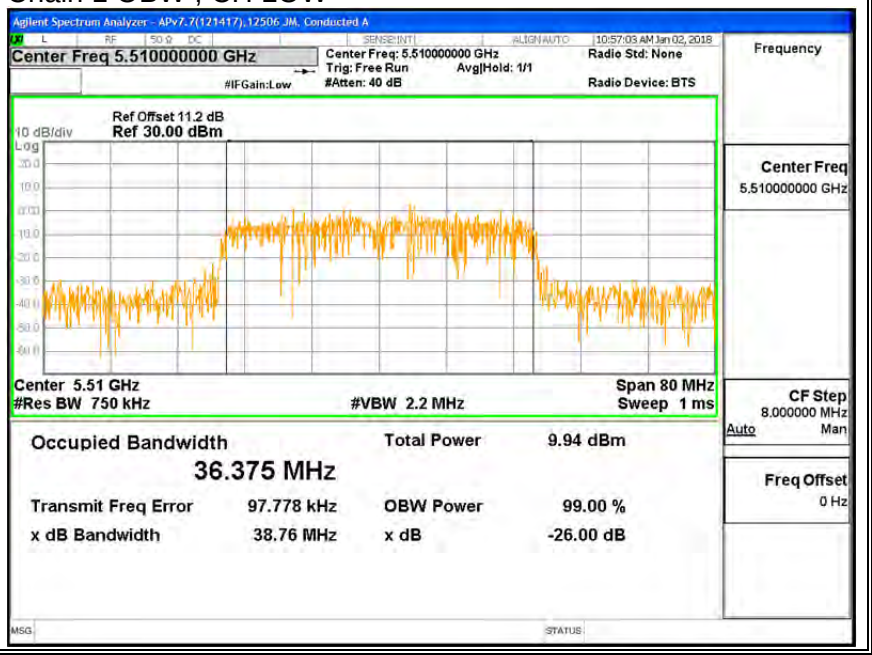
RESULTS

Channel	Frequency	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5510	36.409	36.375
Mid	5550	36.426	36.443
Mid (FCC)	5630	36.338	36.325
High	5670	36.619	36.482
142	5710	36.173	36.283

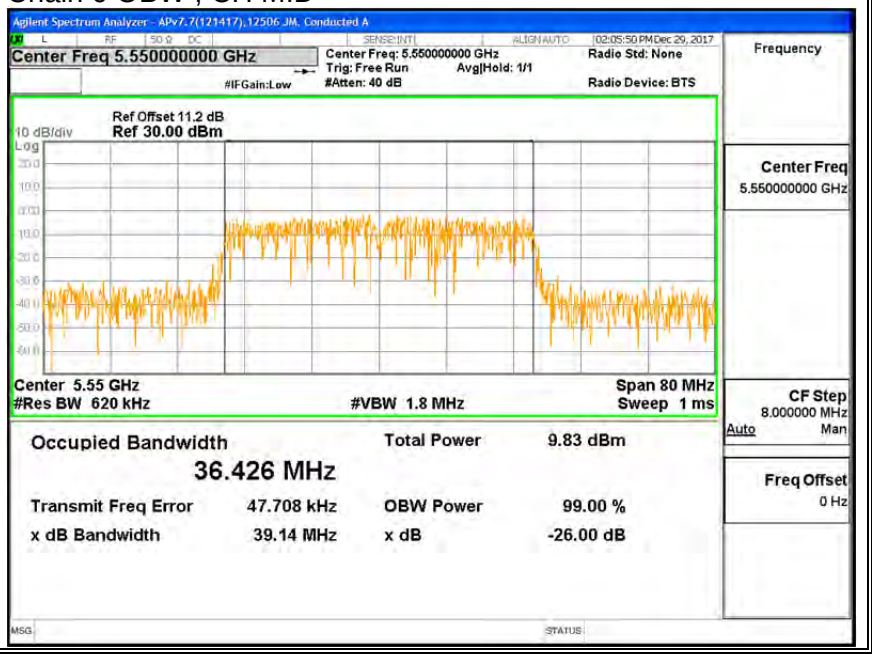
Chain 0 OBW , CH LOW



Chain 1 OBW , CH LOW

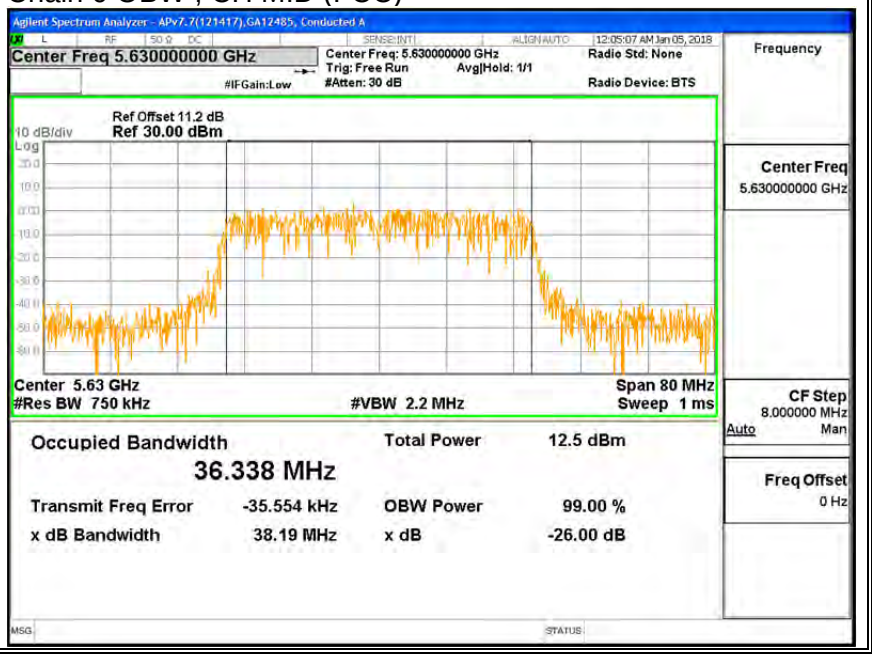


Chain 0 OBW , CH MID



Chain 1 OBW , CH MID

Chain 0 OBW , CH MID (FCC)

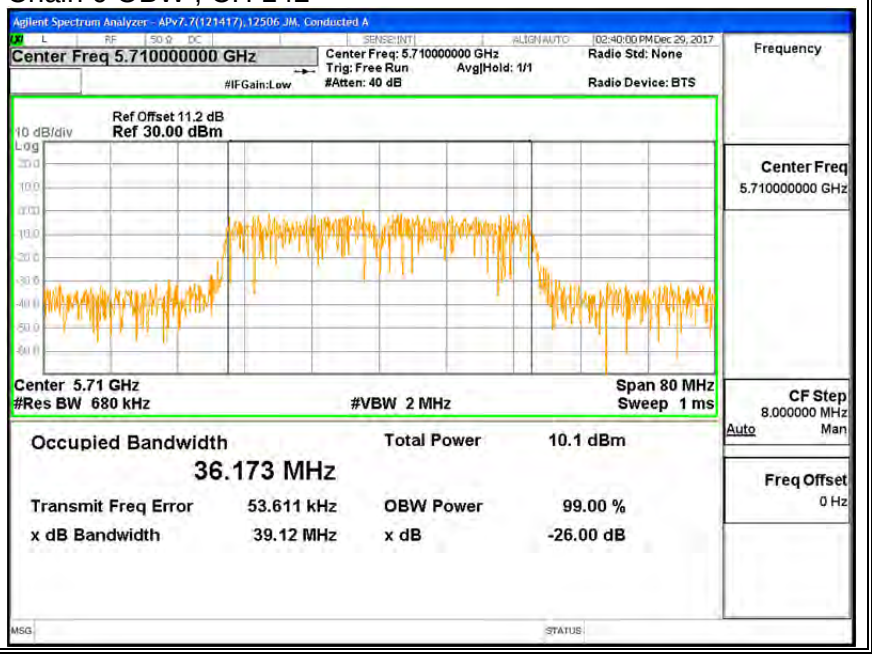


Chain 1 OBW , CH MID (FCC)

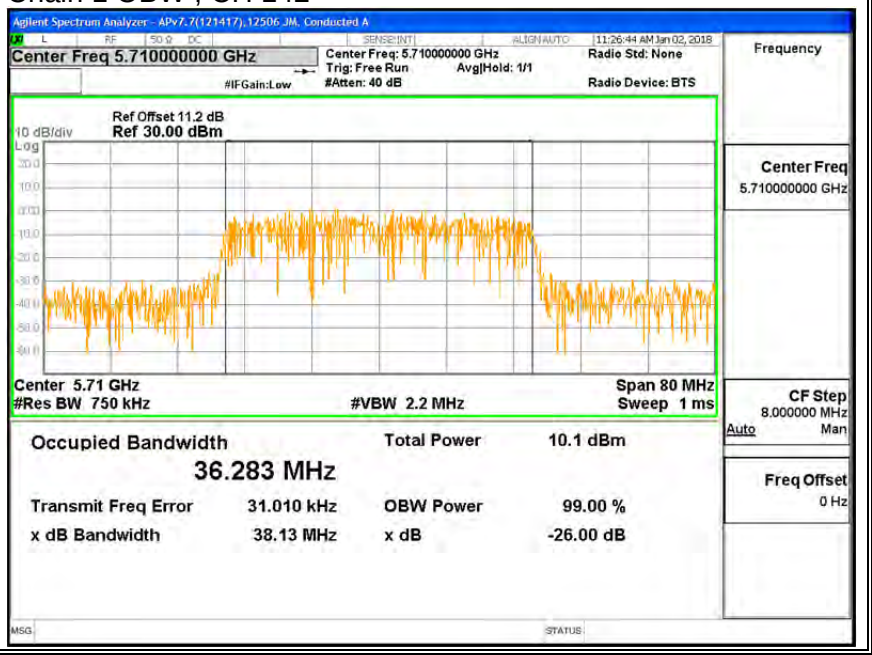
Chain 0 OBW , CH HIGH

Chain 1 OBW , CH HIGH

Chain 0 OBW , CH 142



Chain 1 OBW , CH 142



9.11.3. OUTPUT POWER AND PPSD

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

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

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

5470-5725 MHz

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-0.80	-5.40	-2.52

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

5470-5725 MHz

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-0.80	-5.40	0.21

RESULTS

ID:	12506 JM	Date:	01/08/18

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Low	5510	41.10	36.375	-2.52	0.21
Mid	5550	41.20	35.426	-2.52	0.21
Mid (FCC)	5630	41.20	36.325	-2.52	0.21
High	5670	41.10	36.482	-2.52	0.21
142	5710	35.45	33.087	-2.52	0.21

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5510	24.00	24.00	30.00	24.00	11.00	11.00	11.00
Mid	5550	24.00	24.00	30.00	24.00	11.00	11.00	11.00
Mid (FCC)	5630	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5670	24.00	24.00	30.00	24.00	11.00	11.00	11.00
142	5710	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.48	Included in Calculations of Corr'd PPSD

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	5510	9.26	9.63	12.46	24.00	-11.54
Mid	5550	9.65	9.86	12.77	24.00	-11.23
Mid (FCC)	5630	9.18	9.59	12.40	24.00	-11.60
High	5670	9.69	9.42	12.57	24.00	-11.43
142	5710	9.63	9.49	12.57	24.00	-11.43

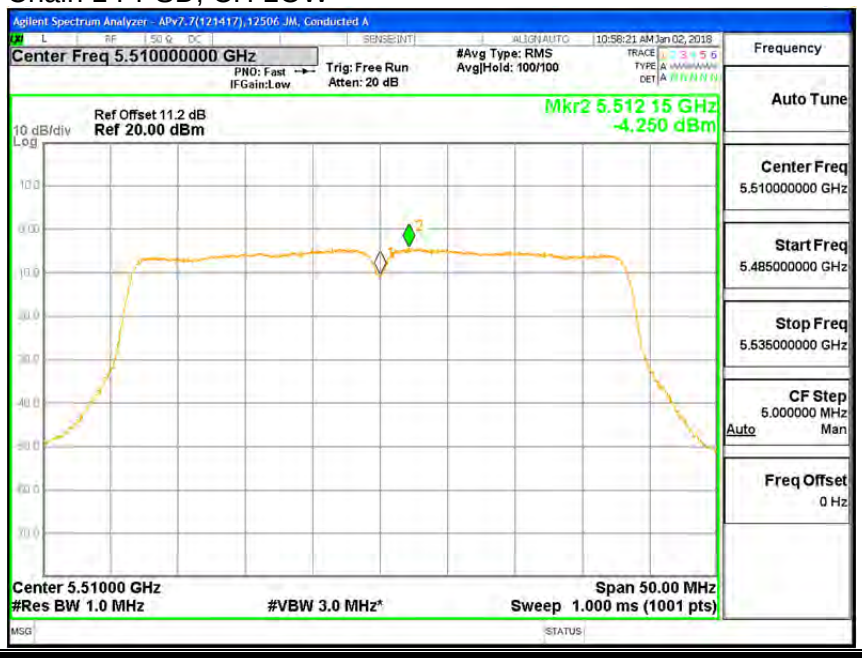
PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5510	-4.606	-4.250	-0.93	11.00	-11.93
Mid	5550	-4.190	-4.233	-0.72	11.00	-11.72
Mid (FCC)	5630	-4.596	-4.054	-0.83	11.00	-11.83
High	5670	-4.107	-4.374	-0.75	11.00	-11.75
142	5710	-3.853	-4.183	-0.52	11.00	-11.52

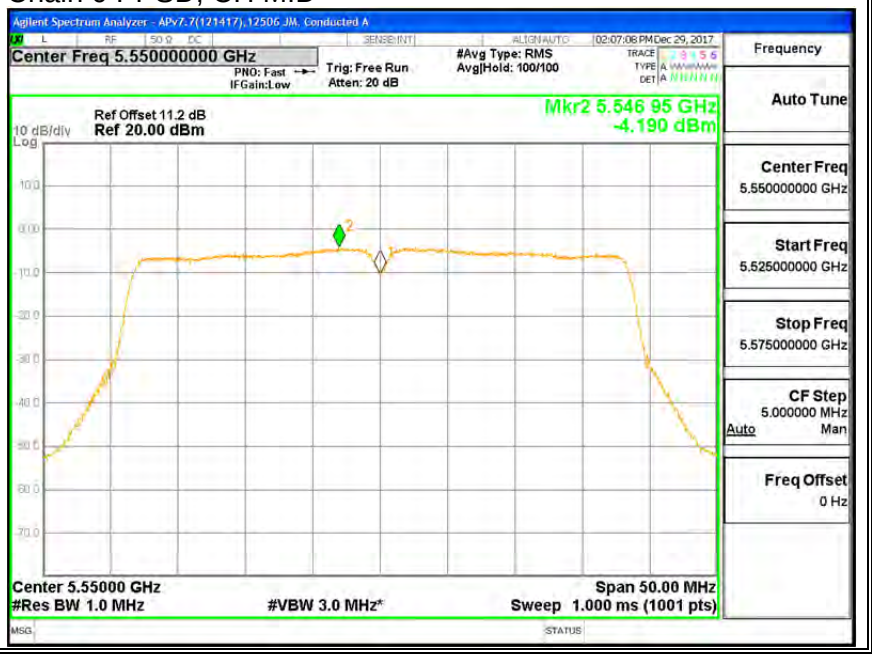
Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

Chain 0 PPSD, CH LOW

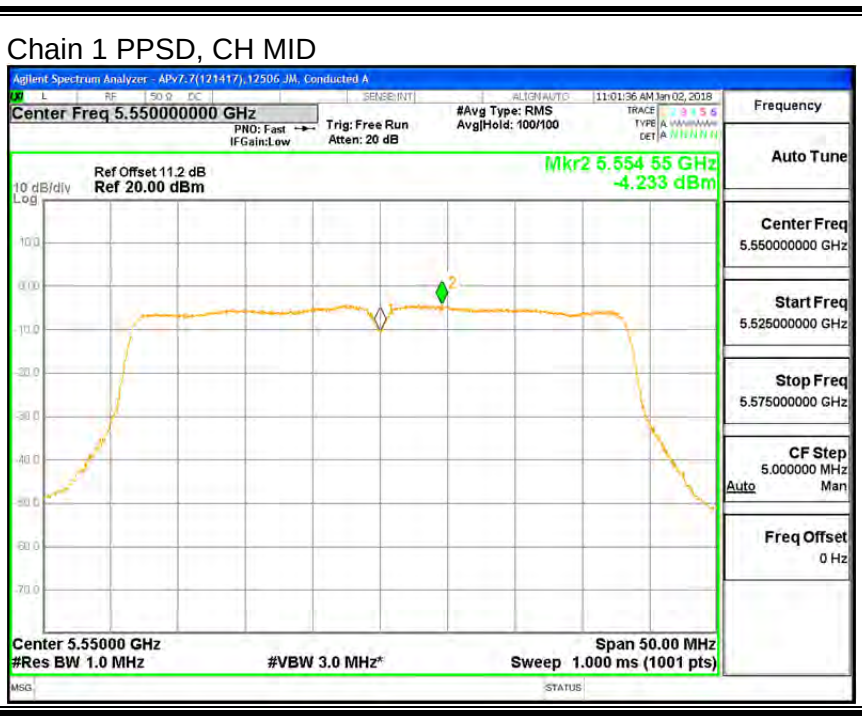
Chain 1 PPSD, CH LOW



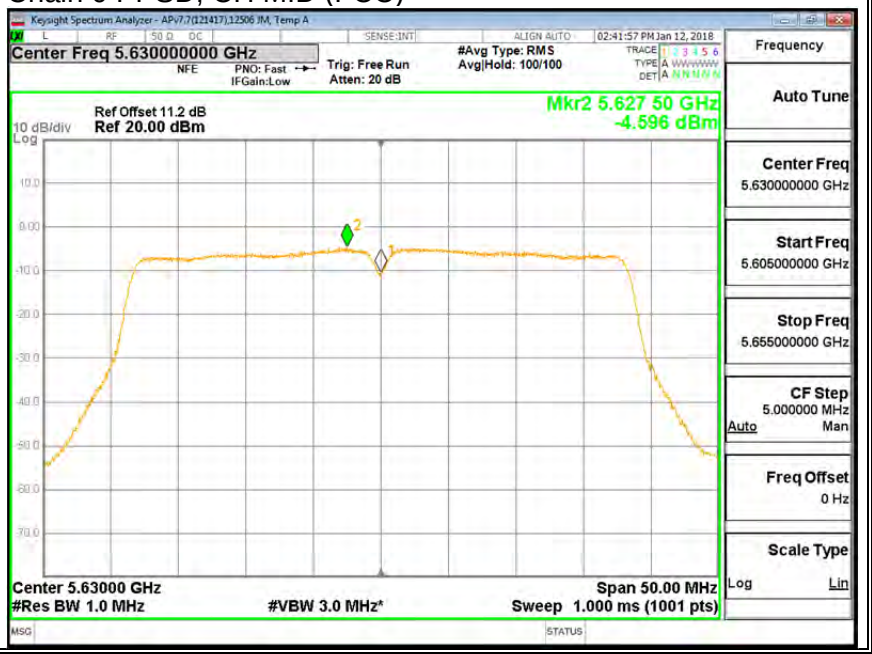
Chain 0 PPSD, CH MID



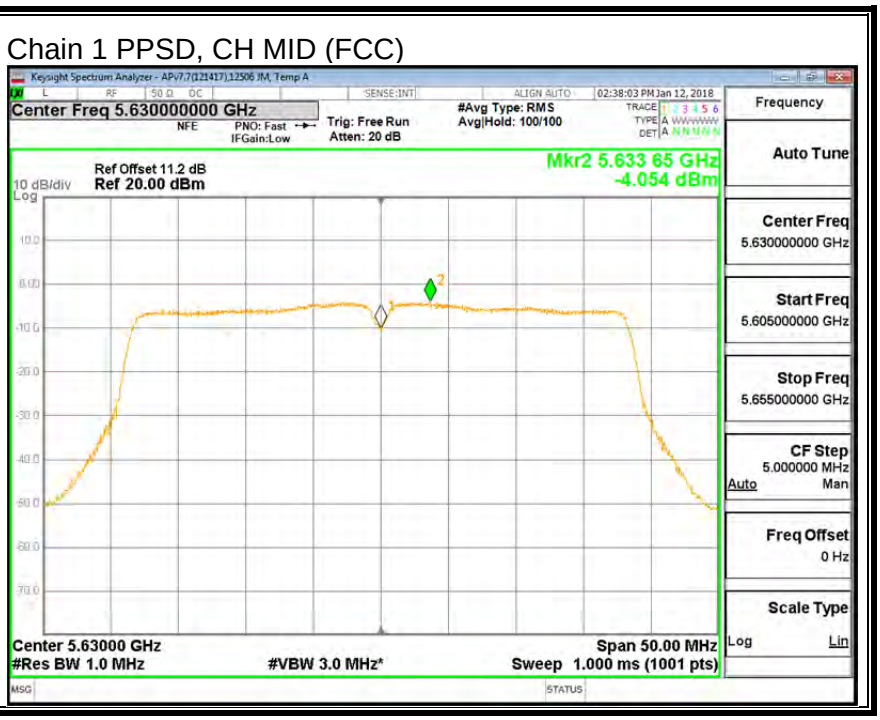
Chain 1 PPSD, CH MID



Chain 0 PPSD, CH MID (FCC)



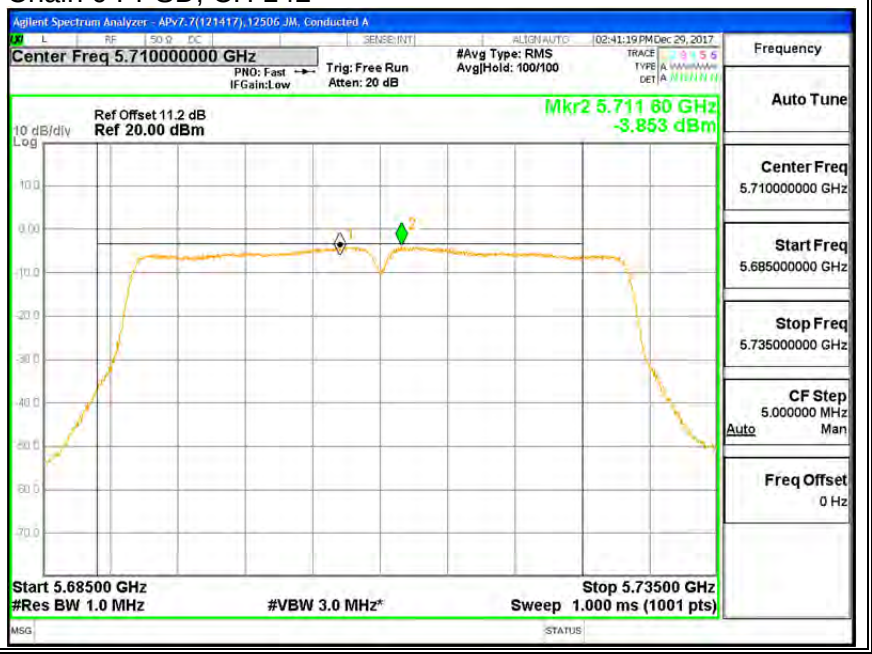
Chain 1 PPSD, CH MID (FCC)



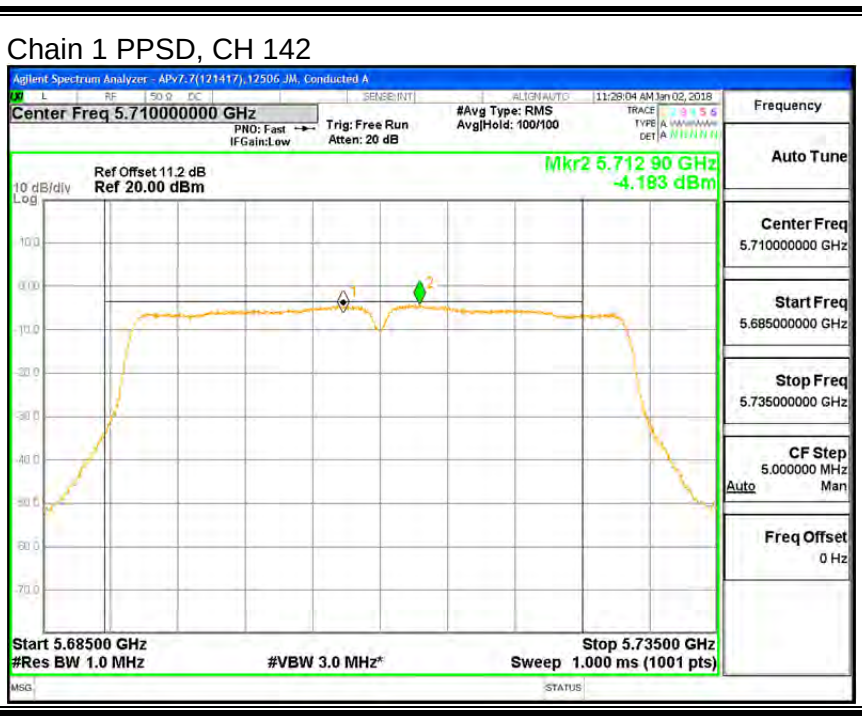
Chain 0 PPSD, CH HIGH

Chain 1 PPSD, CH HIGH

Chain 0 PPSD, CH 142



Chain 1 PPSD, CH 142



9.12. 11ac HT80 2TX CDD MIMO MODE IN THE 5.6GHz BAND

9.12.1. 26 dB BANDWIDTH

LIMITS

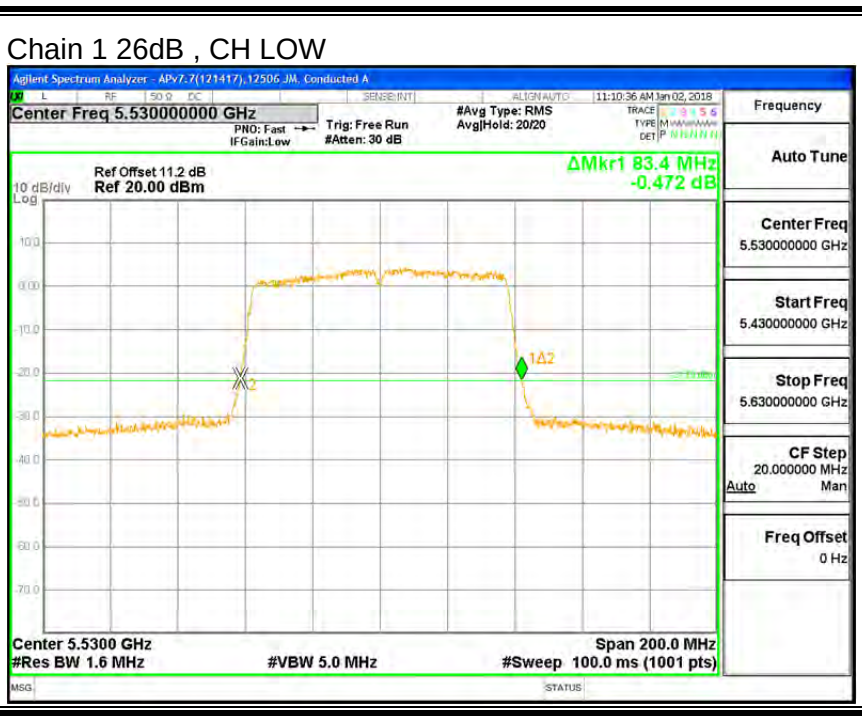
None; for reporting purposes only.

RESULTS

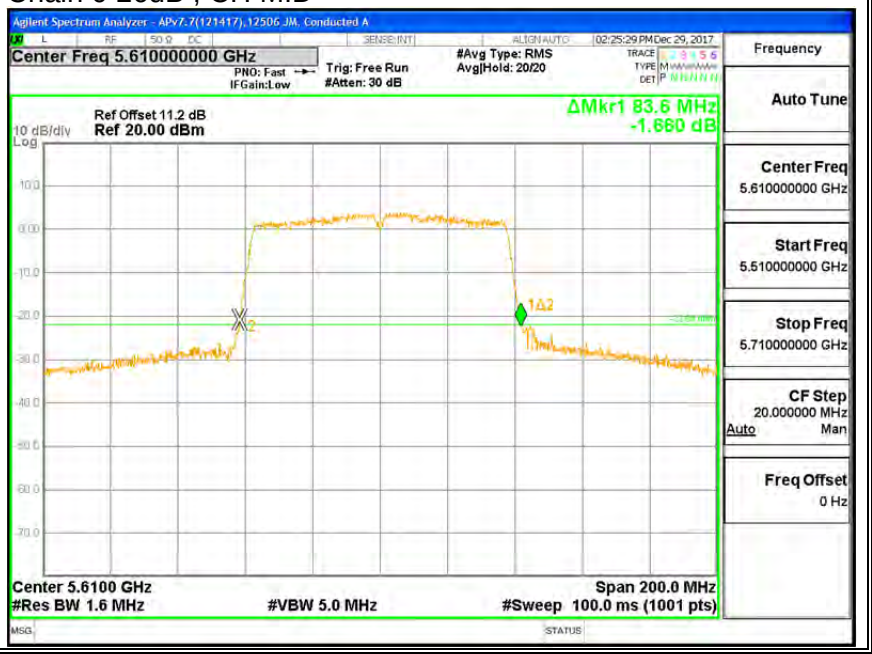
Channel	Frequency	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5530	84.2	83.4
Mid	5610	83.6	83.4
138	5690	83.8	83.6

Chain 0 26dB , CH LOW

Chain 1 26dB , CH LOW

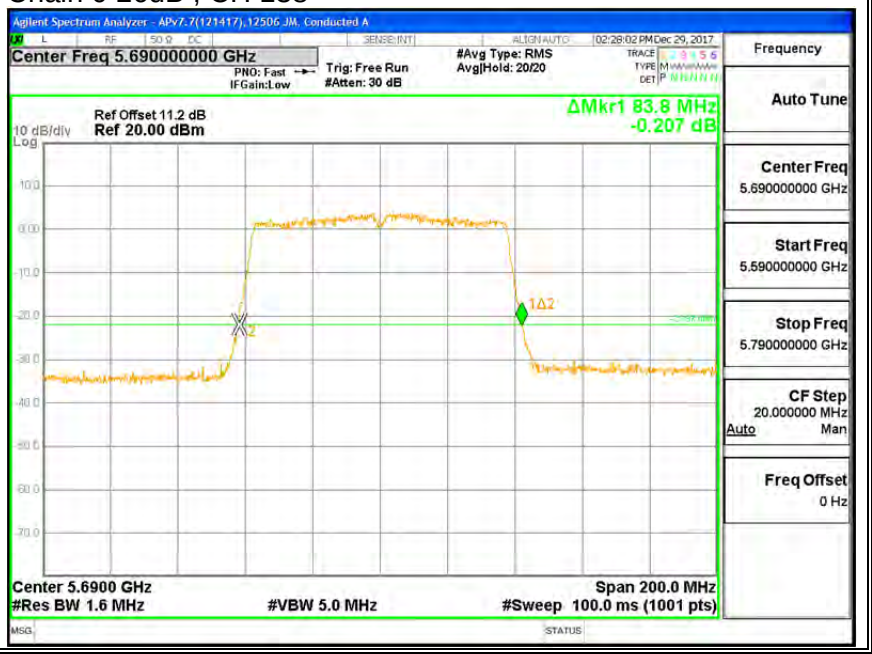


Chain 0 26dB , CH MID

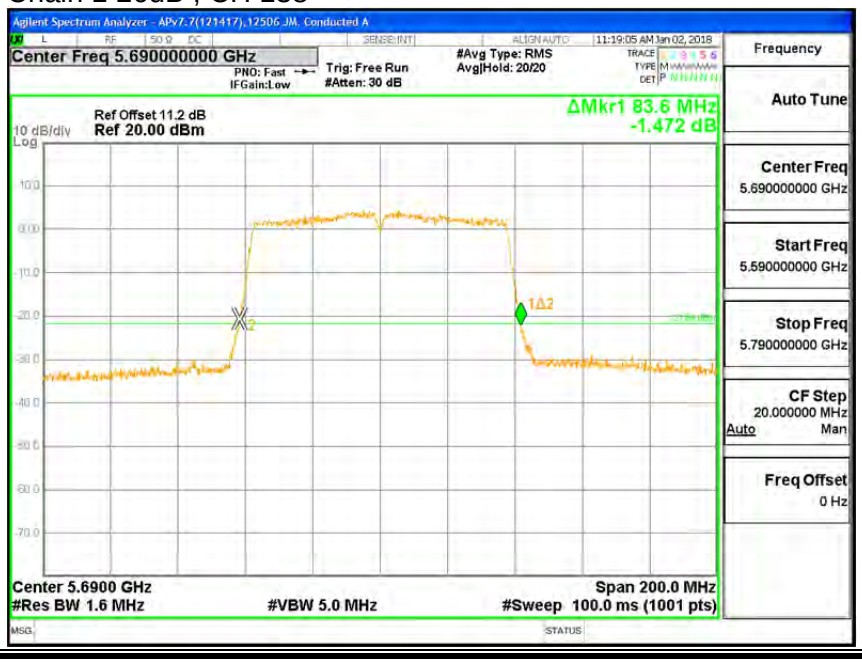


Chain 1 26dB , CH MID

Chain 0 26dB , CH 138



Chain 1 26dB , CH 138



9.12.2. 99% BANDWIDTH

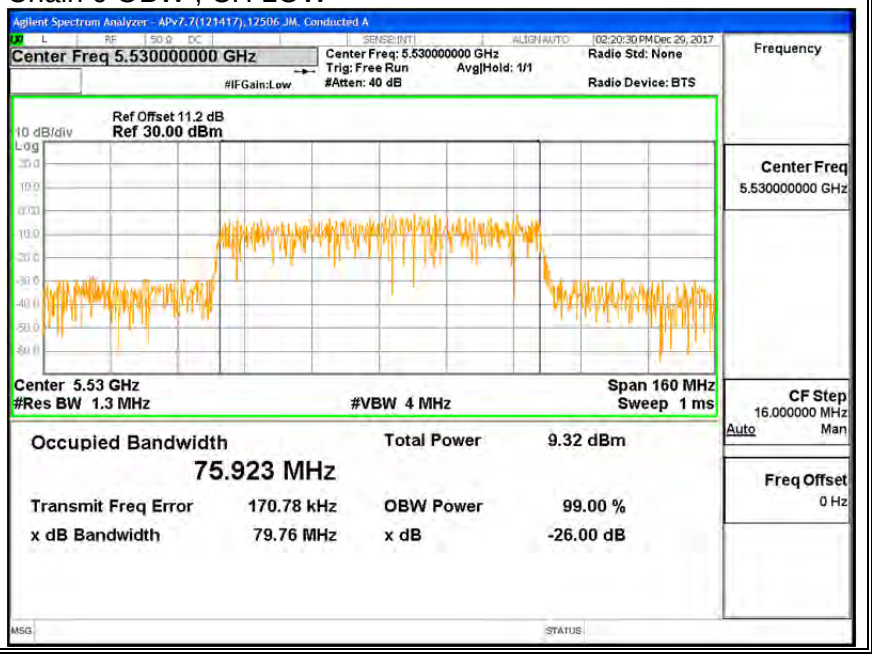
LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5530	75.923	76.420
Mid	5610	76.336	76.020
138	5690	76.280	76.004

Chain 0 OBW , CH LOW

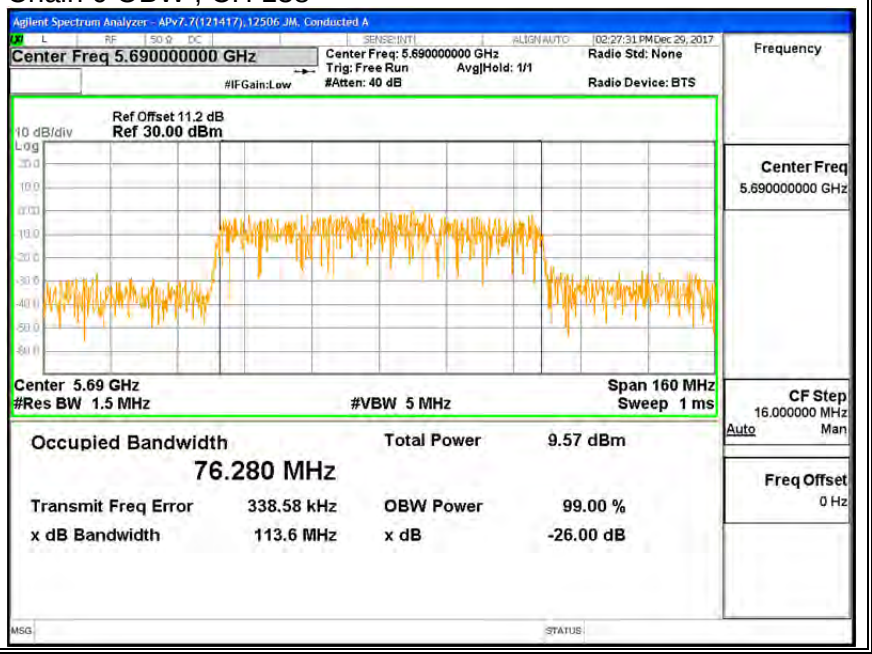


Chain 1 OBW , CH LOW

Chain 0 OBW , CH MID

Chain 1 OBW , CH MID

Chain 0 OBW , CH 138



Chain 1 OBW , CH 138

9.12.3. OUTPUT POWER AND PPSD

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

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

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

5470-5725 MHz

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-0.80	-5.40	-2.52

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

5470-5725 MHz

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-0.80	-5.40	0.21

RESULTS

ID:	12506 JM	Date:	01/08/18

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Low	5530	83.40	75.923	-2.52	0.21
Mid	5610	83.40	76.020	-2.52	0.21
138	5690	76.80	73.002	-2.52	0.21

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5530	24.00	24.00	30.00	24.00	11.00	11.00	11.00
Mid	5610	24.00	24.00	30.00	24.00	11.00	11.00	11.00
138	5690	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.73	Included in Calculations of Corr'd PPSD

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	5530	8.85	9.57	12.24	24.00	-11.76
Mid	5610	9.09	9.29	12.20	24.00	-11.80
138	5690	8.97	9.57	12.29	24.00	-11.71

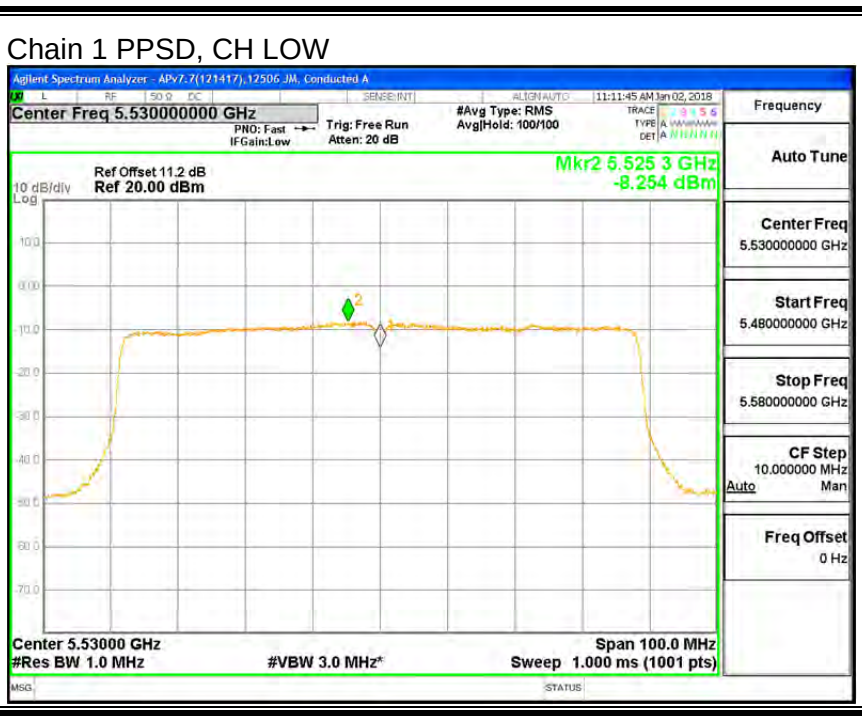
PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5530	-8.378	-8.254	-4.58	11.00	-15.58
Mid	5610	-8.289	-8.202	-4.50	11.00	-15.50
138	5690	-8.018	-7.693	-4.11	11.00	-15.11

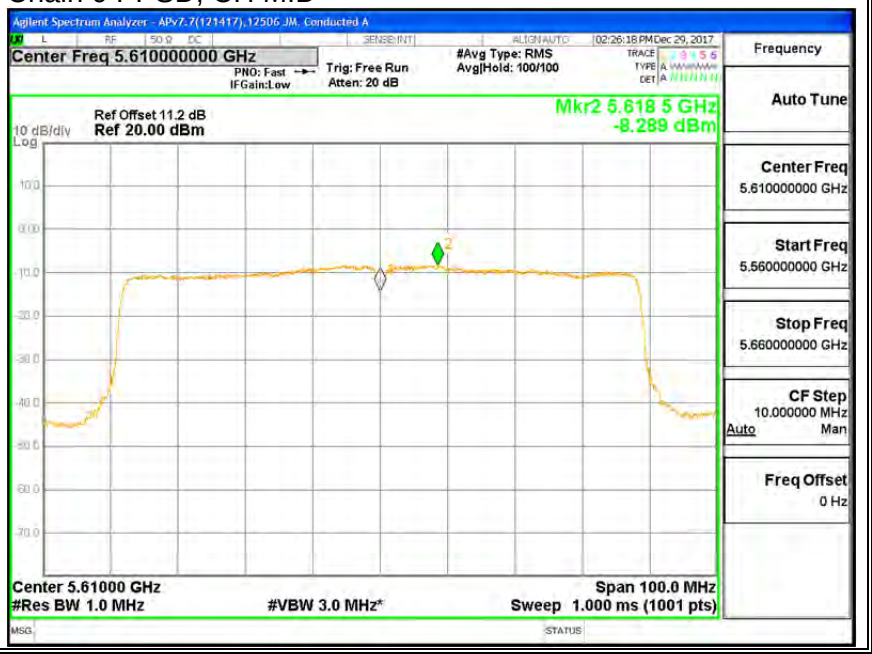
Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

Chain 0 PPSD, CH LOW

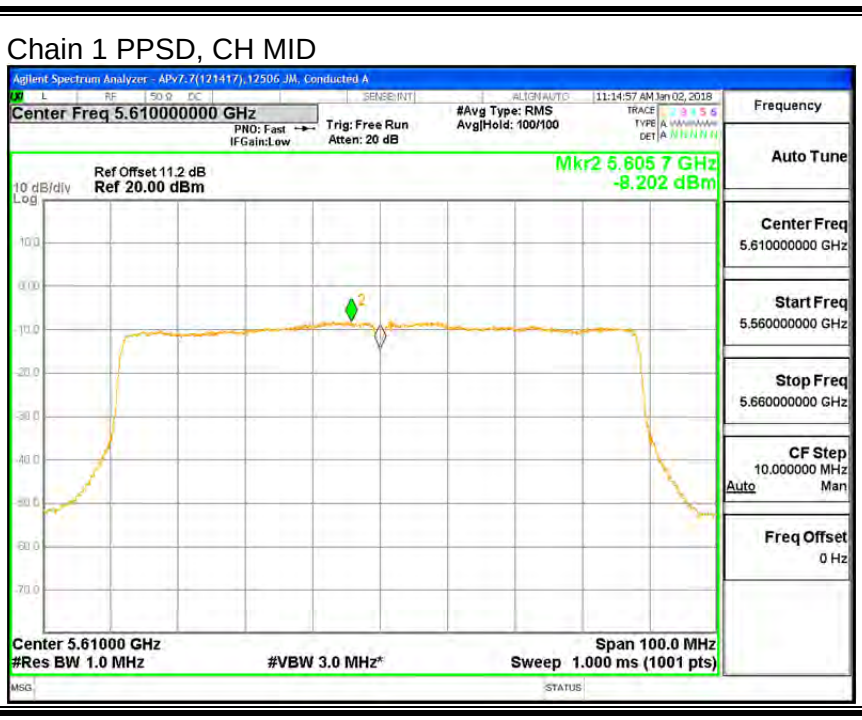
Chain 1 PPSD, CH LOW



Chain 0 PPSD, CH MID

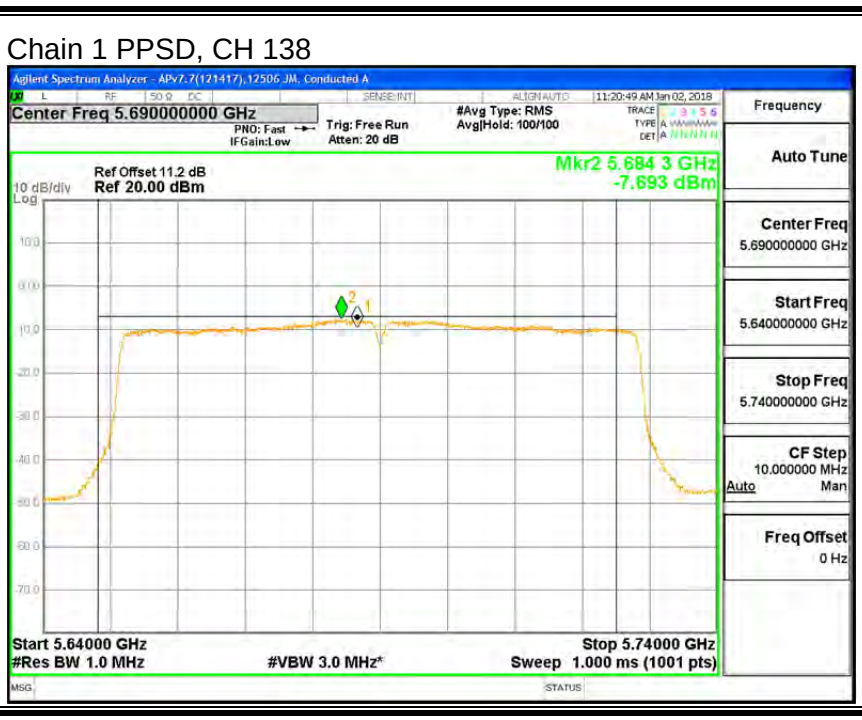


Chain 1 PPSD, CH MID



Chain 0 PPSD, CH 138

Chain 1 PPSD, CH 138



9.13. 11a 2TX CDD MIMO MODE IN THE 5.8GHz BAND

9.13.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

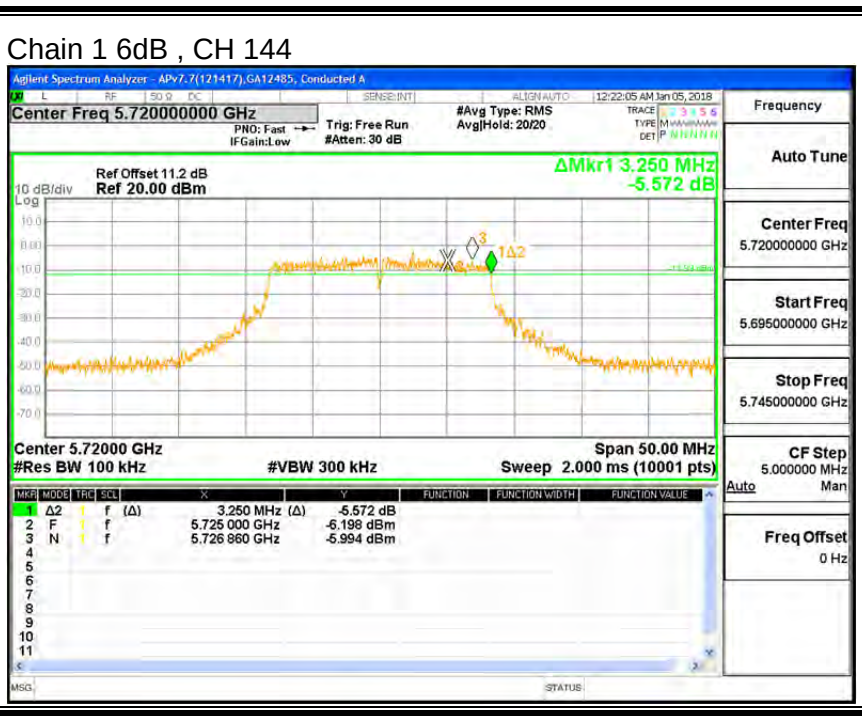
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

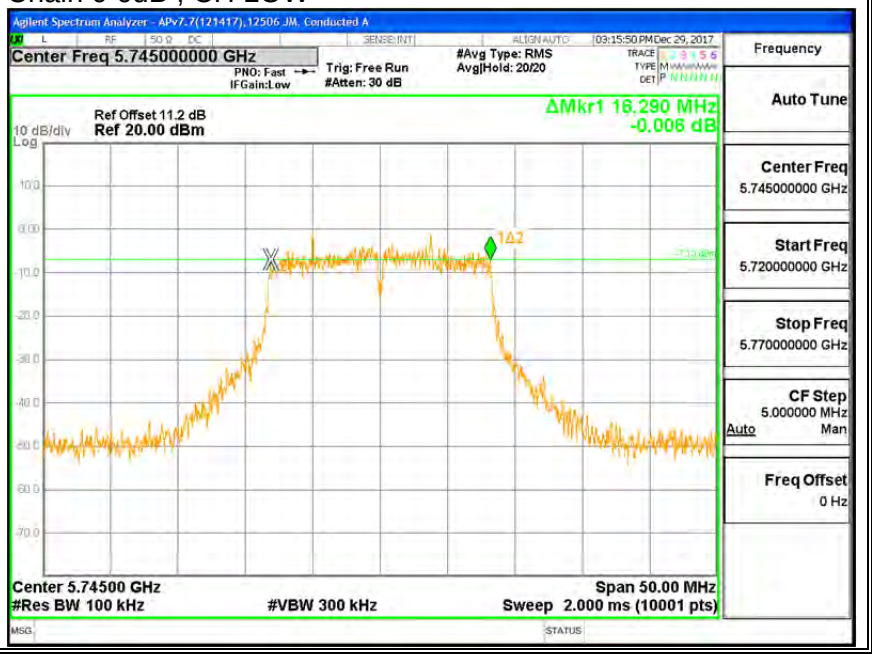
Channel	Frequency	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
144	5720	3.250	3.250	0.5
Low	5745	16.290	16.320	0.5
Mid	5785	16.445	16.380	0.5
High	5825	16.390	16.360	0.5

Chain 0 6dB , CH 144

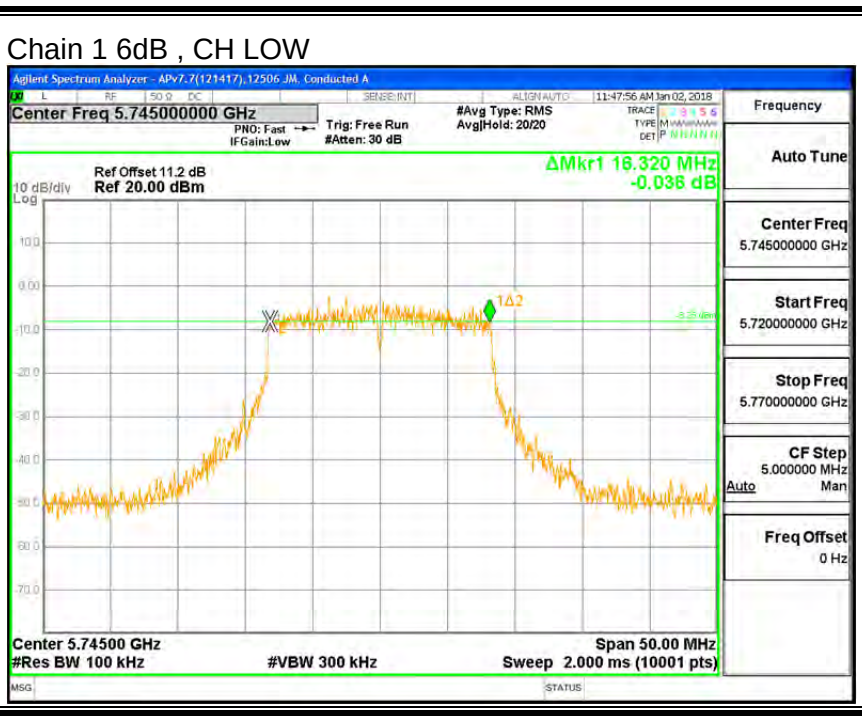
Chain 1 6dB , CH 144



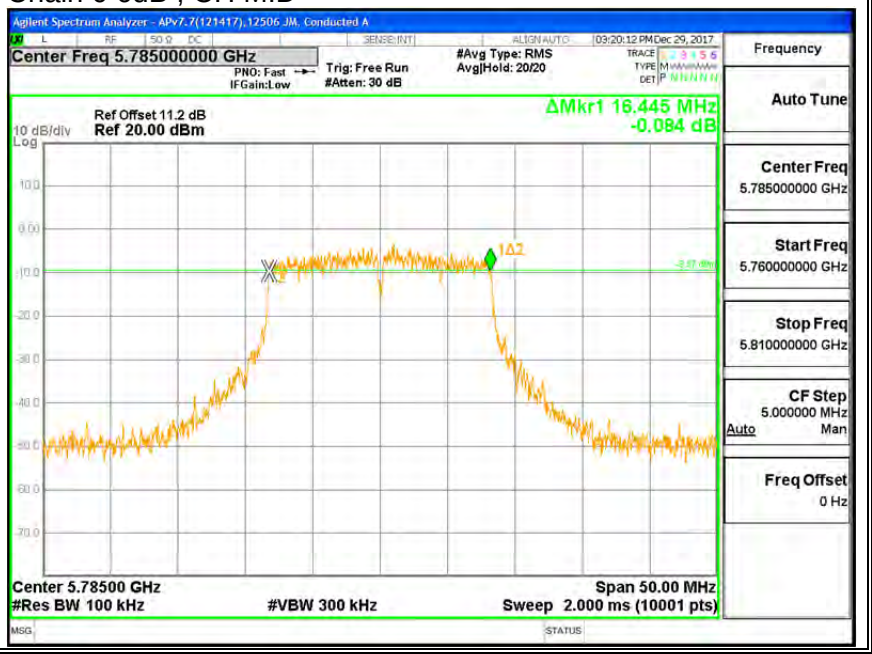
Chain 0 6dB , CH LOW



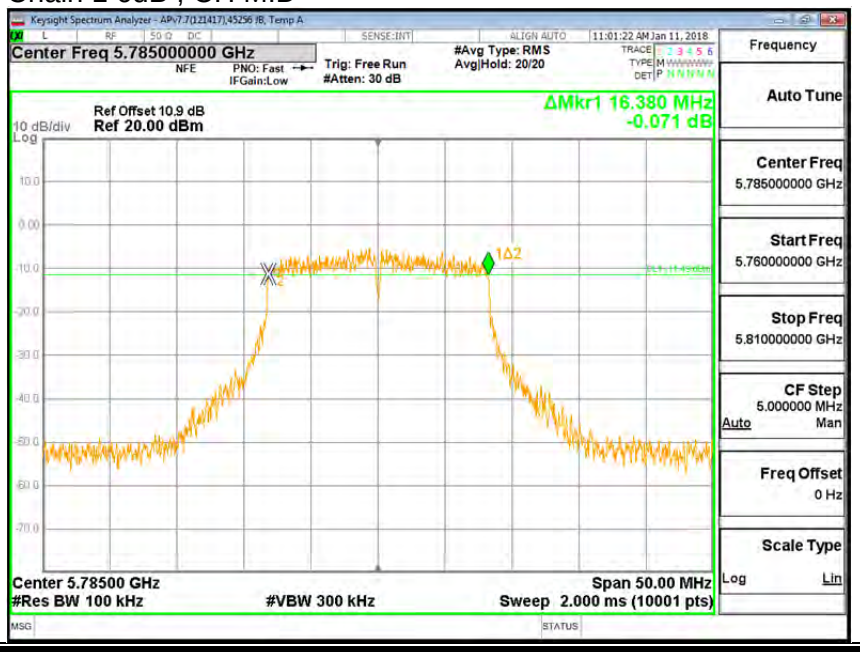
Chain 1 6dB , CH LOW



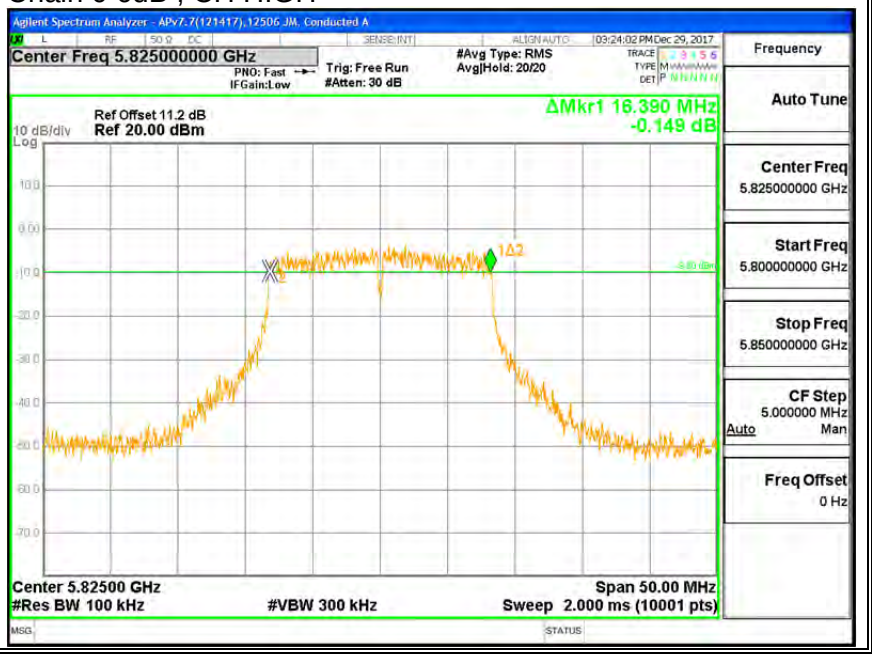
Chain 0 6dB , CH MID



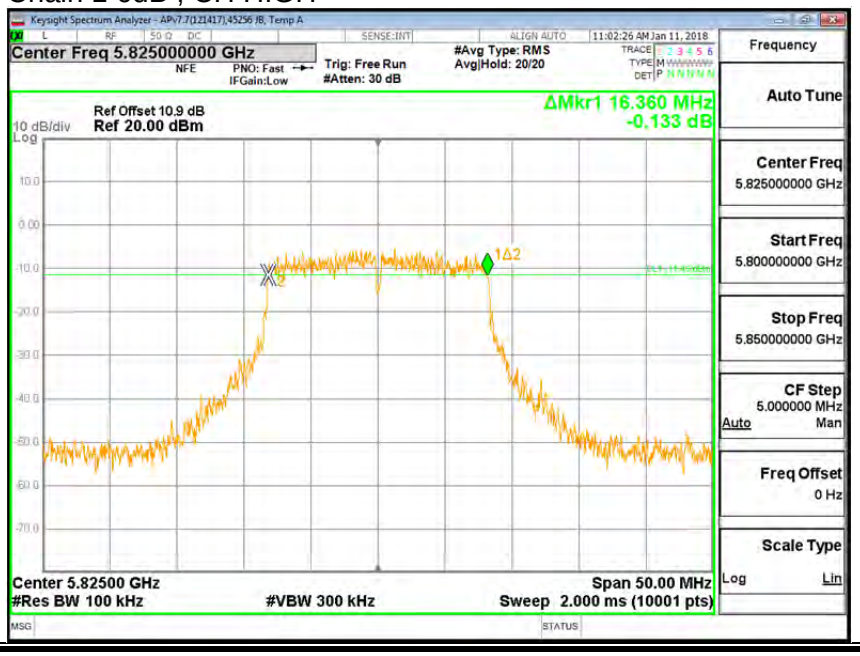
Chain 1 6dB , CH MID



Chain 0 6dB , CH HIGH



Chain 1 6dB , CH HIGH



9.13.2. 99% BANDWIDTH

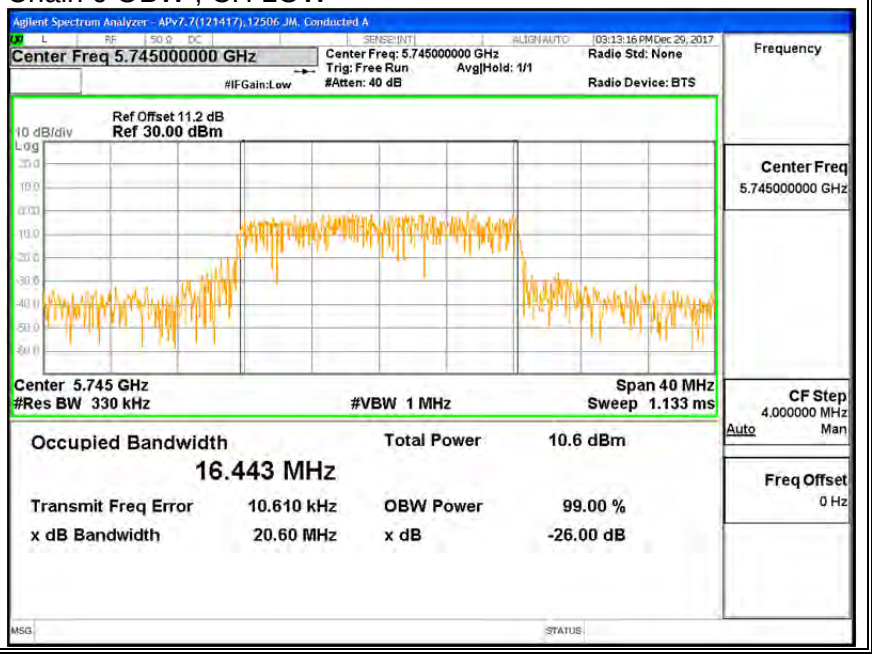
LIMITS

None; for reporting purposes only.

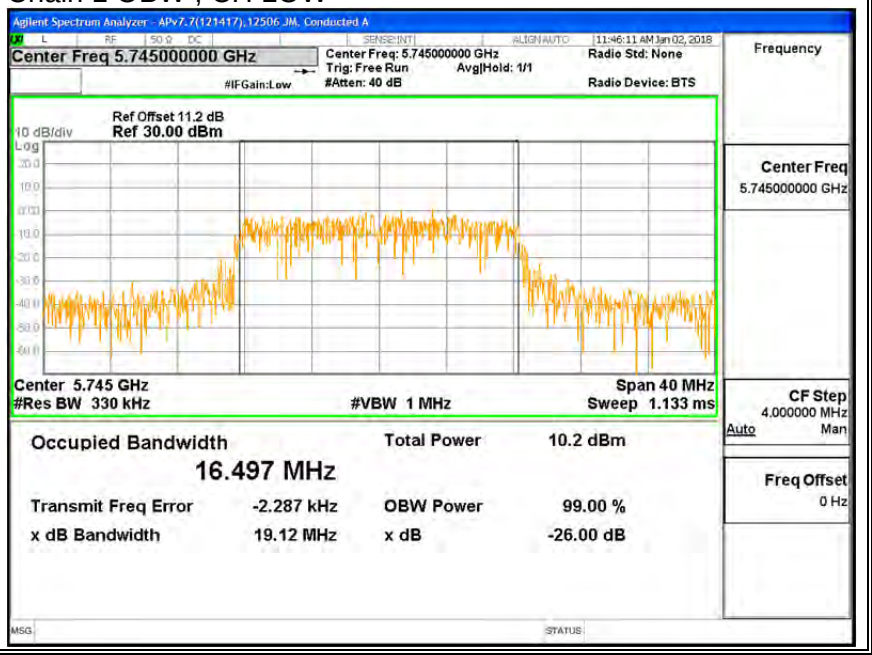
RESULTS

Channel	Frequency	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5745	16.443	16.497
Mid	5785	16.556	16.554
High	5825	16.439	16.510

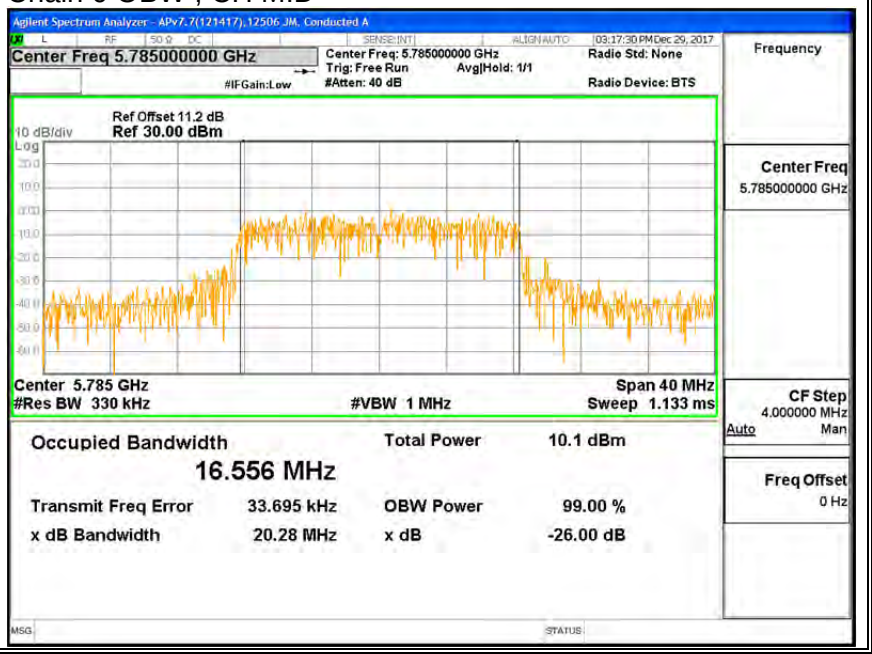
Chain 0 OBW , CH LOW



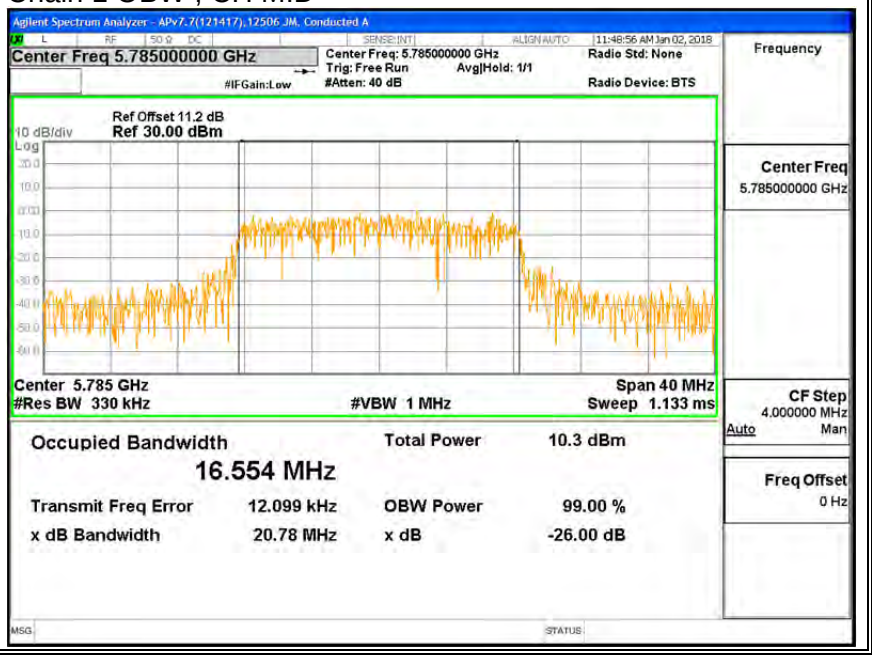
Chain 1 OBW , CH LOW



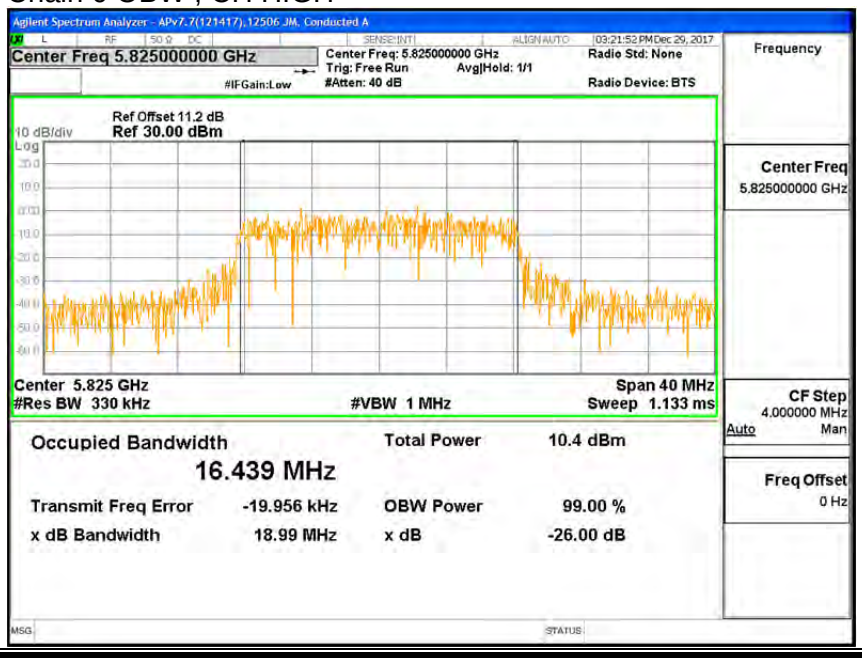
Chain 0 OBW , CH MID



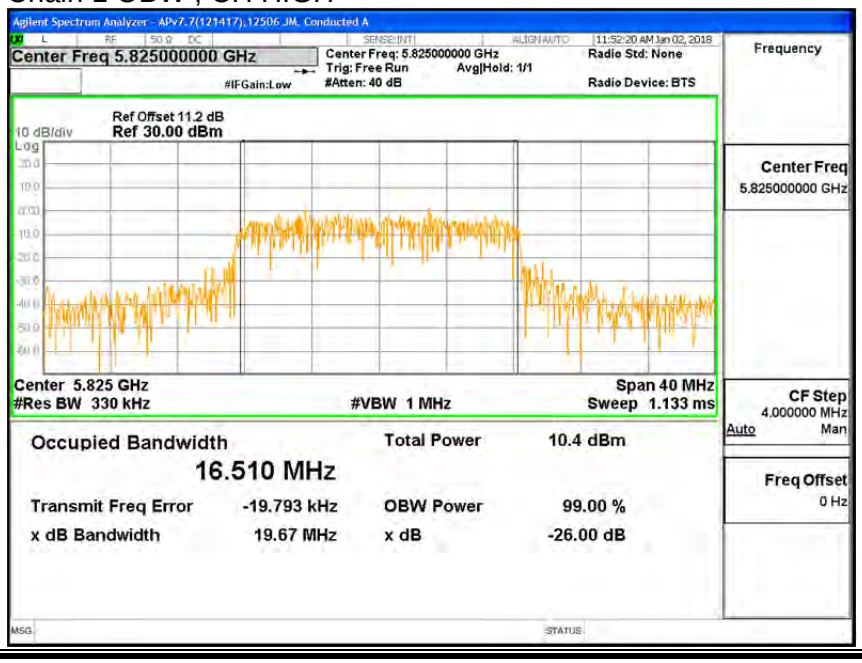
Chain 1 OBW , CH MID



Chain 0 OBW , CH HIGH



Chain 1 OBW , CH HIGH



9.13.3. OUTPUT POWER AND 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.

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

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

5725-5850 MHz

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-1.40	-5.10	-2.87

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

5725-5850 MHz

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-1.40	-5.10	-0.04

RESULTS

ID:	12506 JM	Date:	01/08/18

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	Power Limit (dBm)
Low	5745	-2.87	-0.04	30.00	30.00
Mid	5785	-2.87	-0.04	30.00	30.00
High	5825	-2.87	-0.04	30.00	30.00

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

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	10.39	10.15	13.28	30.00	-16.72
Mid	5785	10.29	10.21	13.26	30.00	-16.74
High	5825	10.44	10.21	13.34	30.00	-16.66

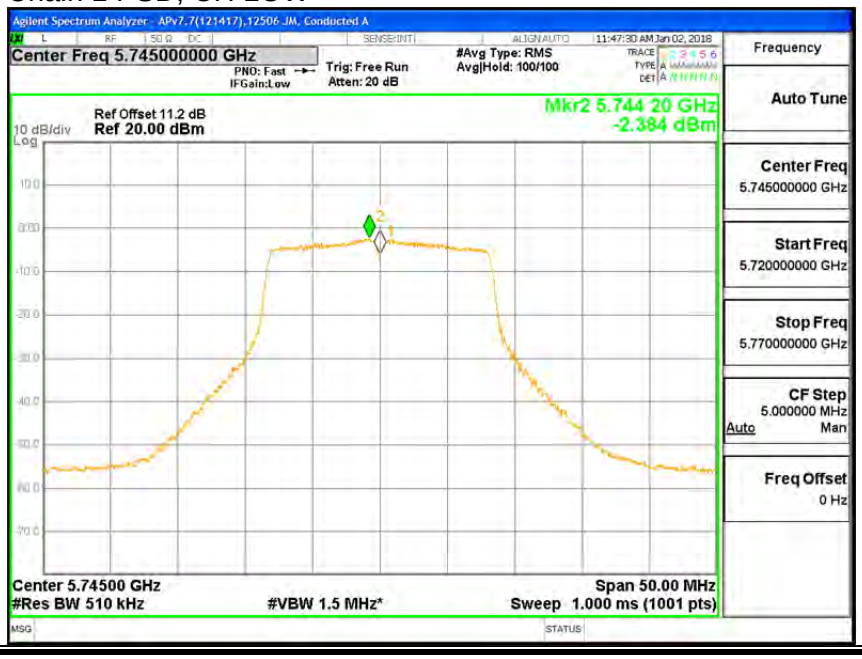
PSD Results

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	-1.855	-2.384	0.90	30.00	-29.10
Mid	5785	-3.236	-2.735	0.03	30.00	-29.97
High	5825	-2.650	-2.929	0.22	30.00	-29.78

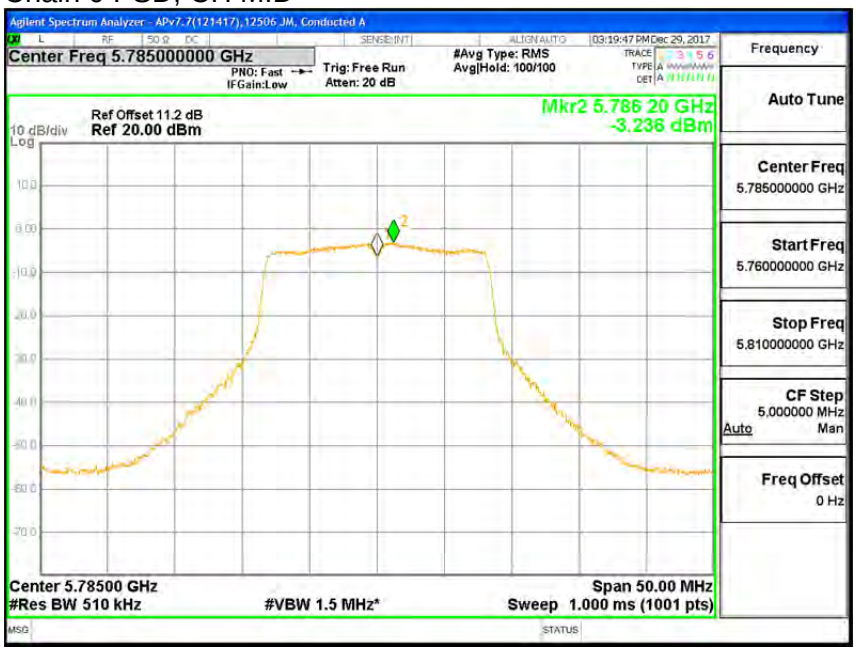
Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

Chain 0 PSD, CH LOW

Chain 1 PSD, CH LOW

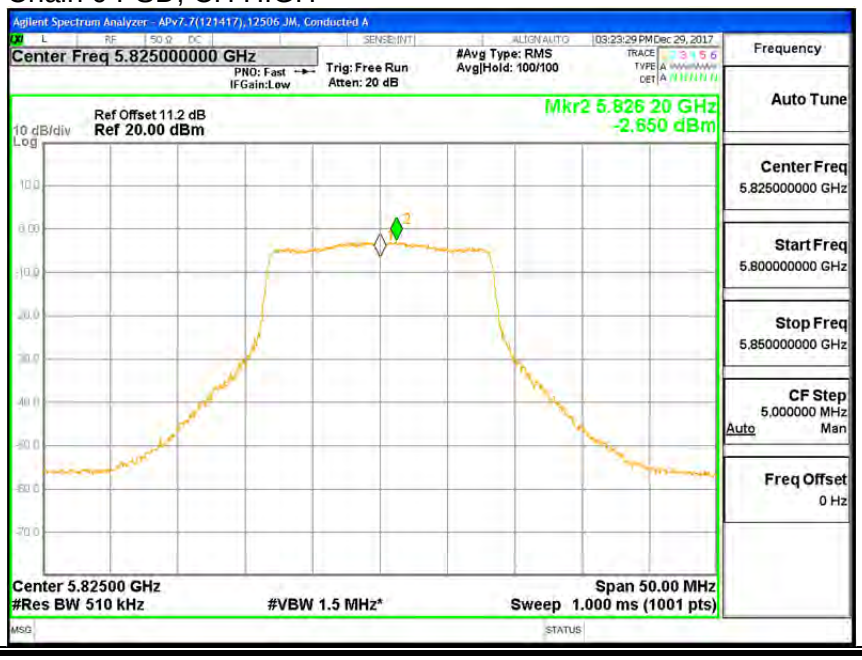


Chain 0 PSD, CH MID

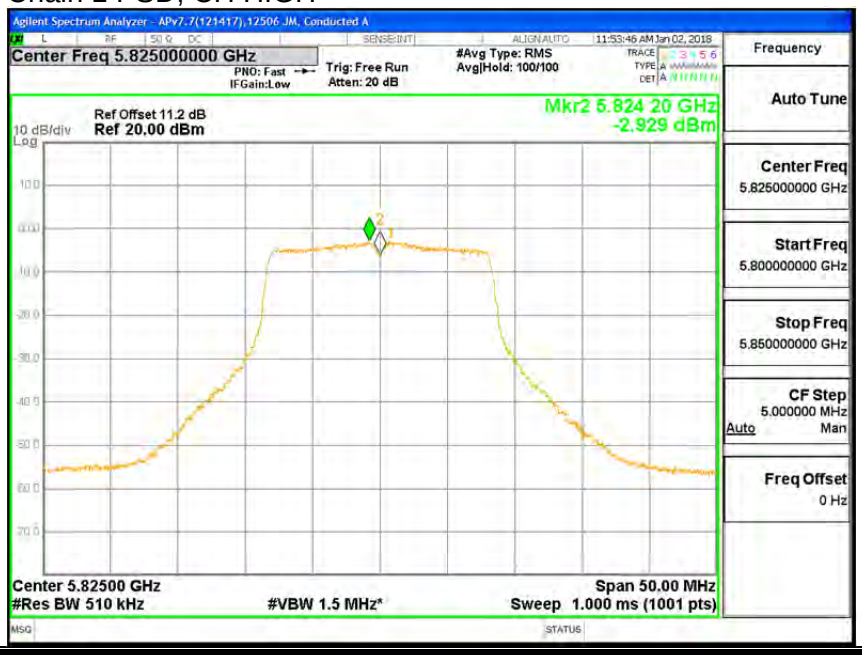


Chain 1 PSD, CH MID

Chain 0 PSD, CH HIGH



Chain 1 PSD, CH HIGH



9.14. 11n HT20 2TX CDD MIMO MODE IN THE 5.8GHz BAND

9.14.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

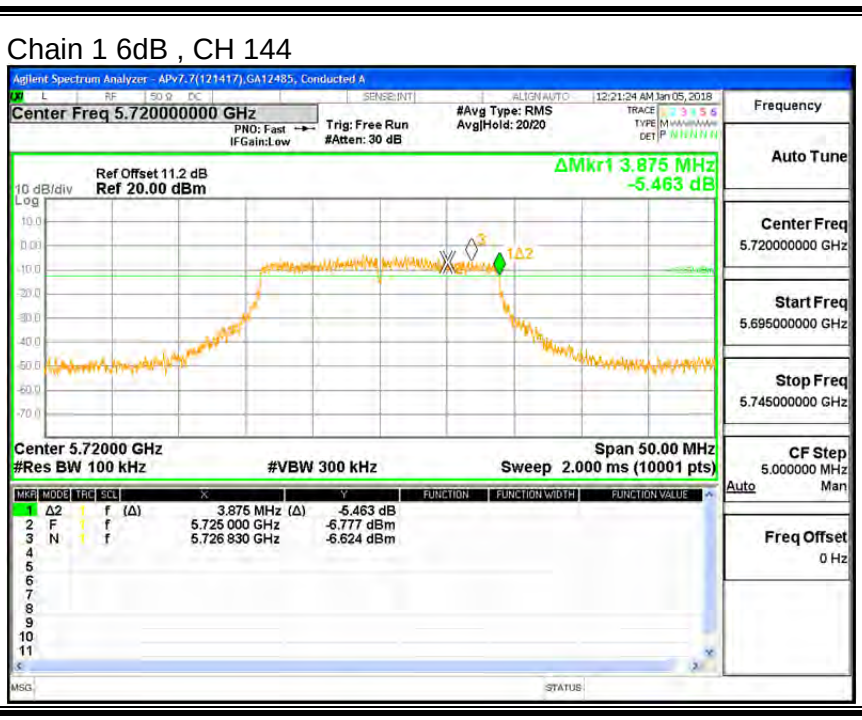
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

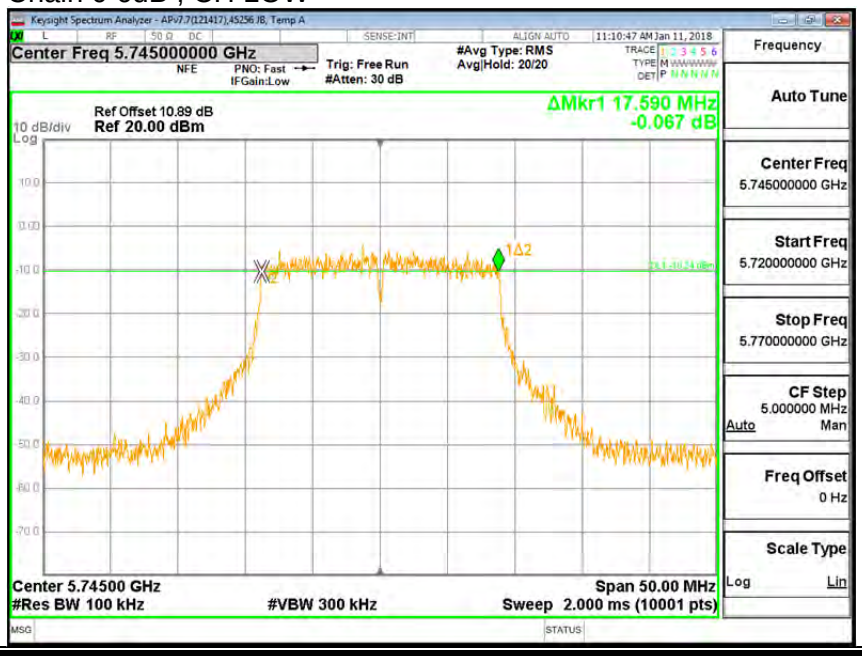
Channel	Frequency	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
144	5720	3.845	3.875	0.5
Low	5745	17.590	17.565	0.5
Mid	5785	17.565	17.615	0.5
High	5825	17.615	17.575	0.5

Chain 0 6dB , CH 144

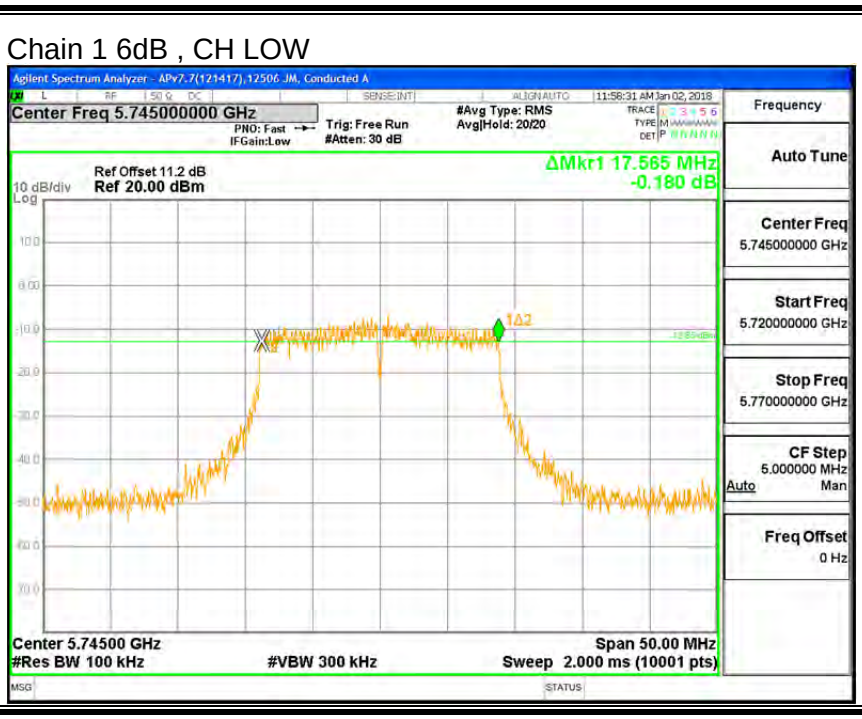
Chain 1 6dB , CH 144



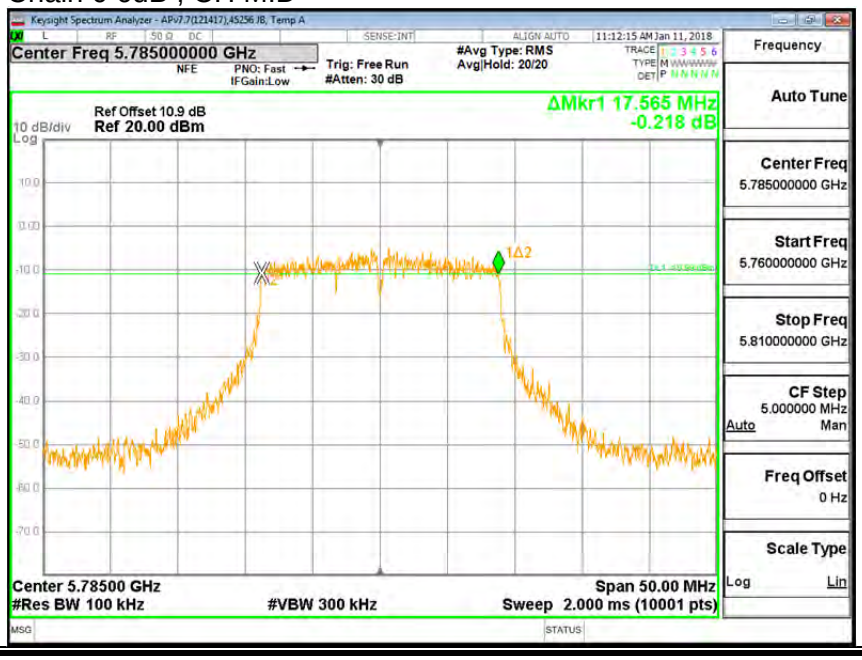
Chain 0 6dB , CH LOW



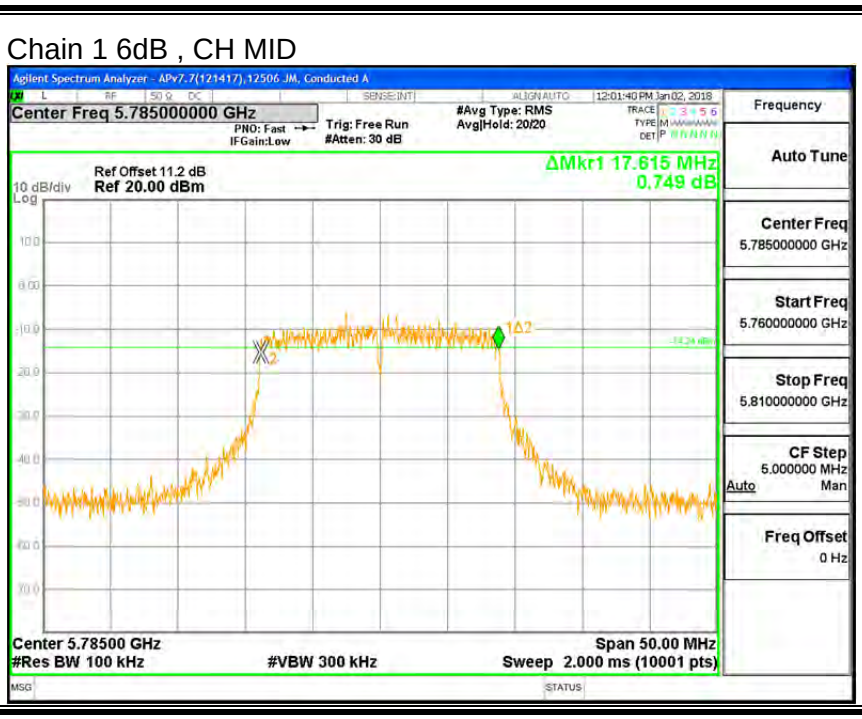
Chain 1 6dB , CH LOW



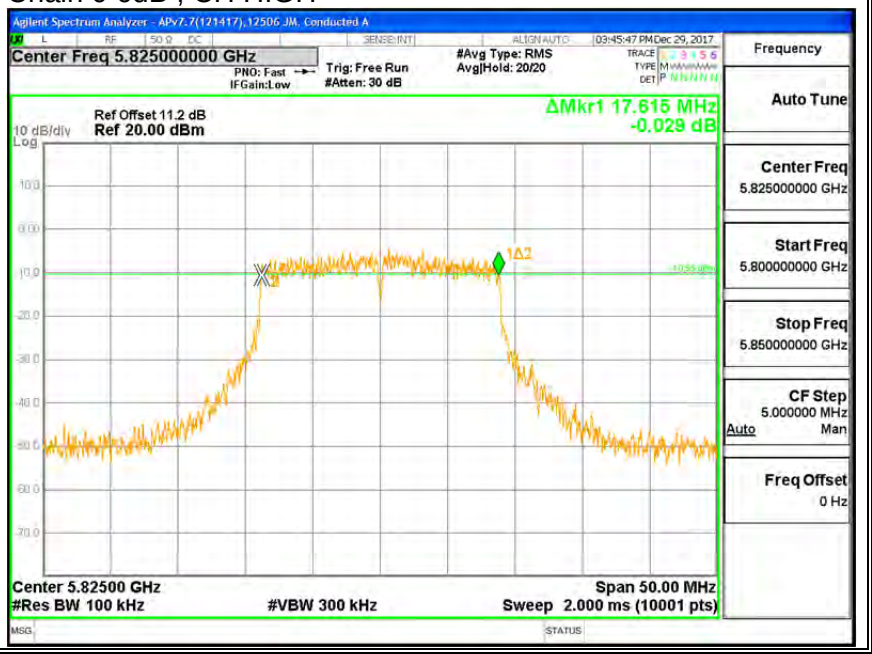
Chain 0 6dB , CH MID



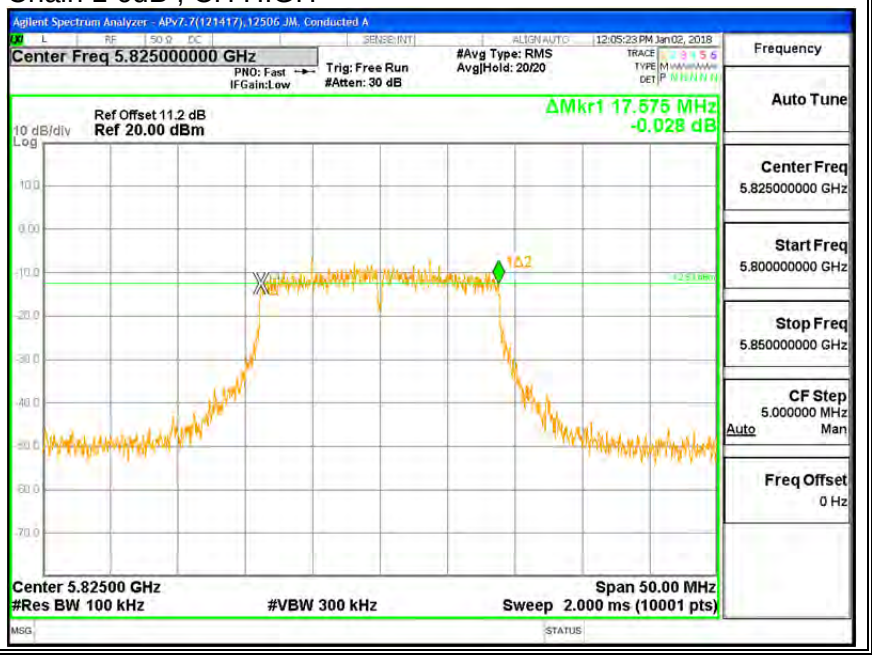
Chain 1 6dB , CH MID



Chain 0 6dB , CH HIGH



Chain 1 6dB , CH HIGH



9.14.2. 99% BANDWIDTH

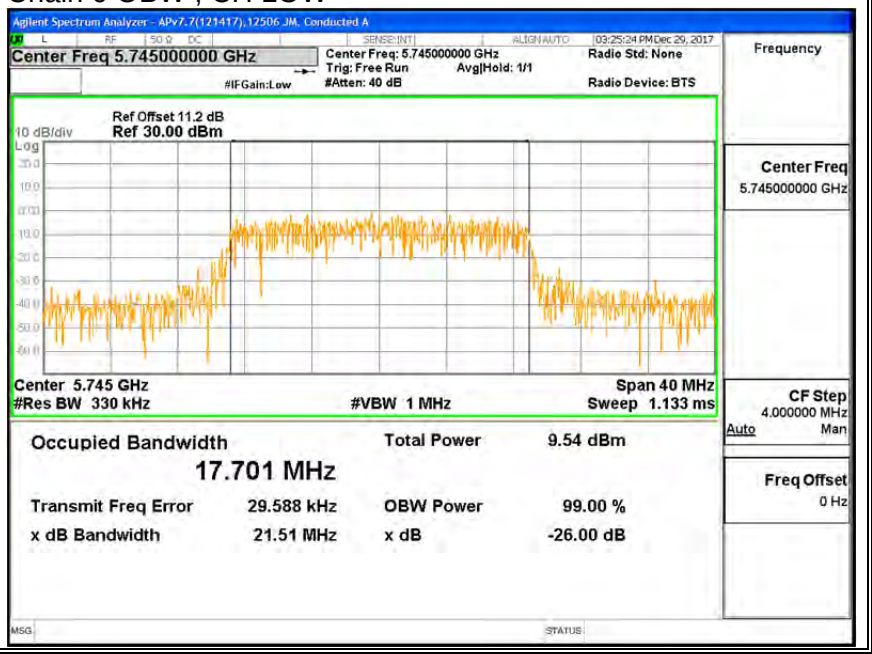
LIMITS

None; for reporting purposes only.

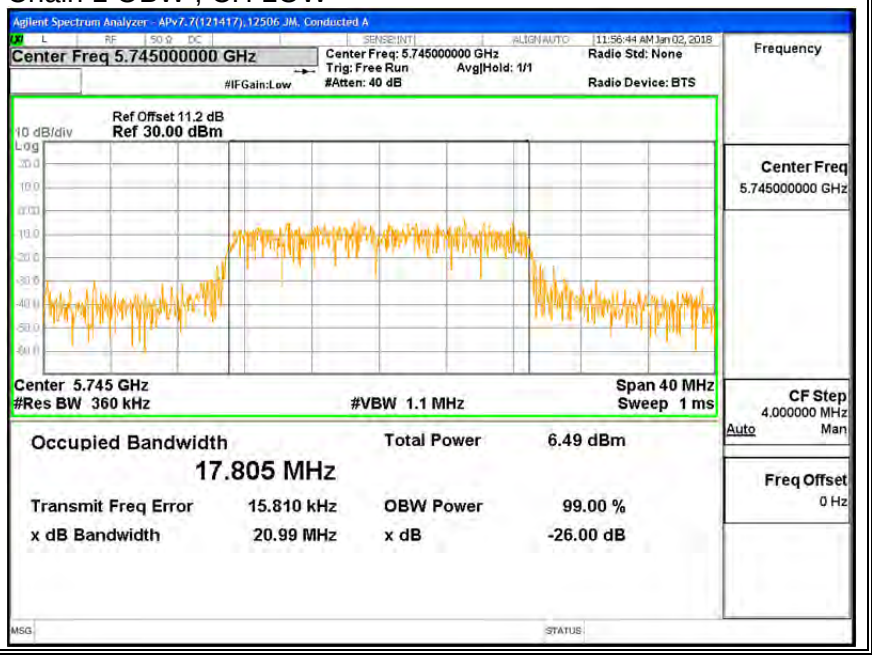
RESULTS

Channel	Frequency	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5745	17.701	17.805
Mid	5785	17.768	17.796
High	5825	17.667	17.743

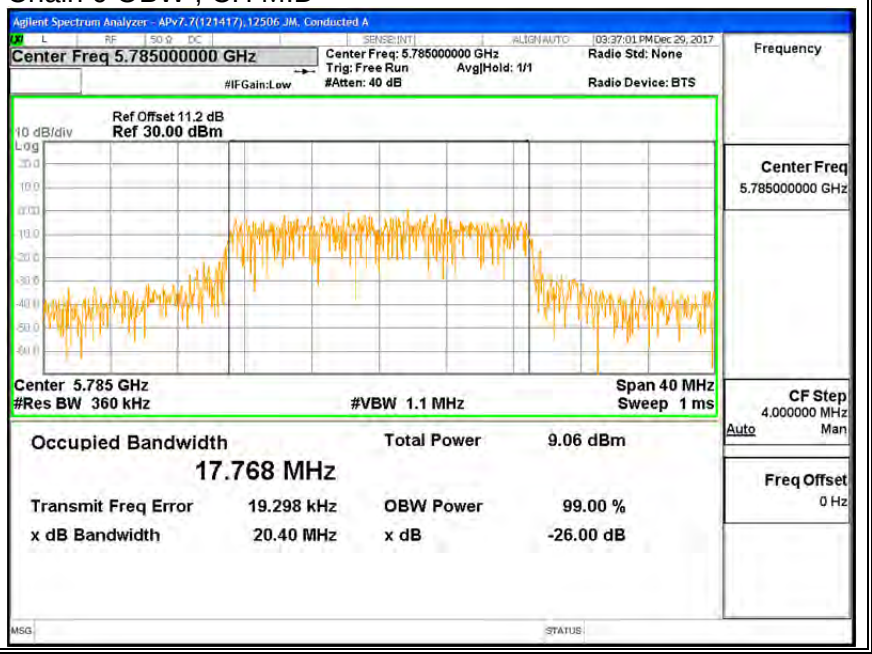
Chain 0 OBW , CH LOW



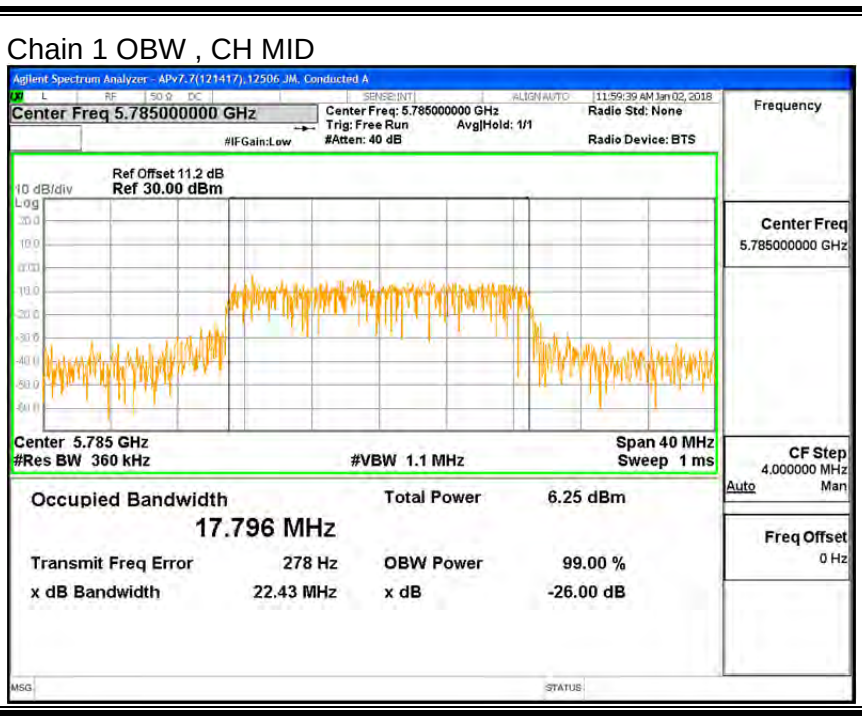
Chain 1 OBW , CH LOW



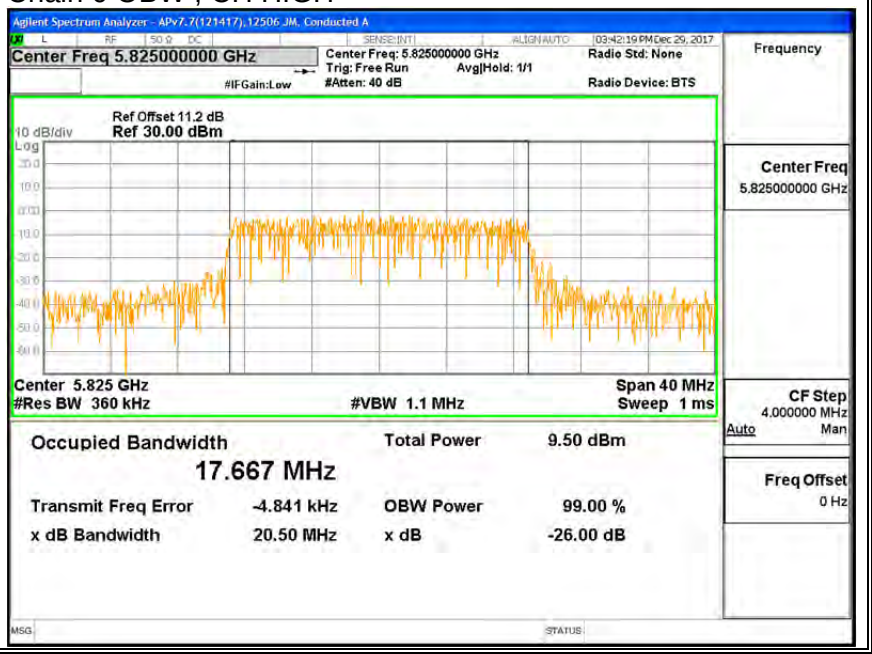
Chain 0 OBW , CH MID



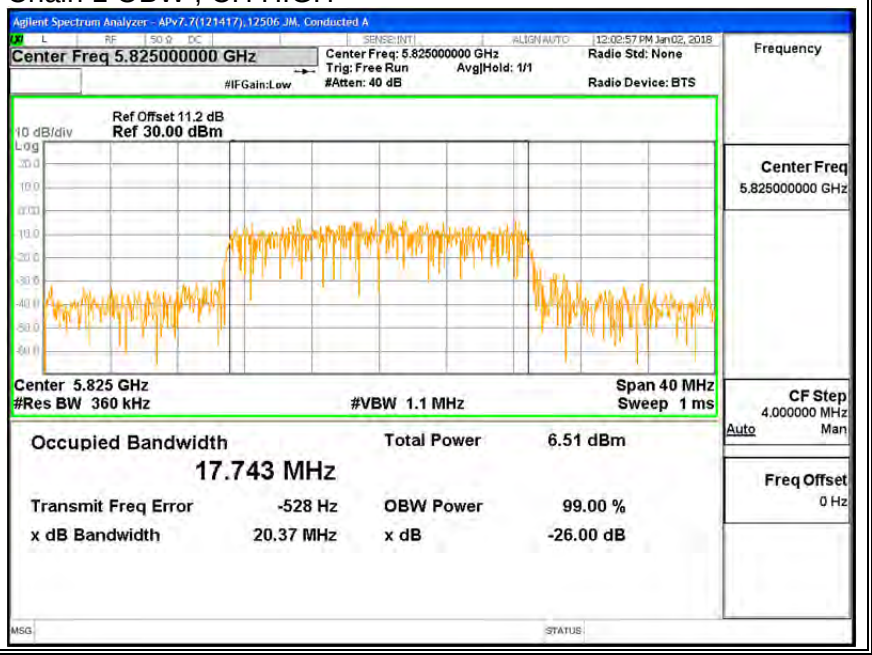
Chain 1 OBW , CH MID



Chain 0 OBW , CH HIGH



Chain 1 OBW , CH HIGH



9.14.3. OUTPUT POWER AND 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.

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

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

5725-5850 MHz

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-1.40	-5.10	-2.87

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

5725-5850 MHz

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-1.40	-5.10	-0.04

RESULTS

ID:	12506 JM	Date:	01/08/18

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	Power Limit (dBm)
Low	5745	-2.87	-0.04	30.00	30.00
Mid	5785	-2.87	-0.04	30.00	30.00
High	5825	-2.87	-0.04	30.00	30.00

Duty Cycle CF (dB)	0.14	Included in Calculations of Corr'd PSD

Output Power Results

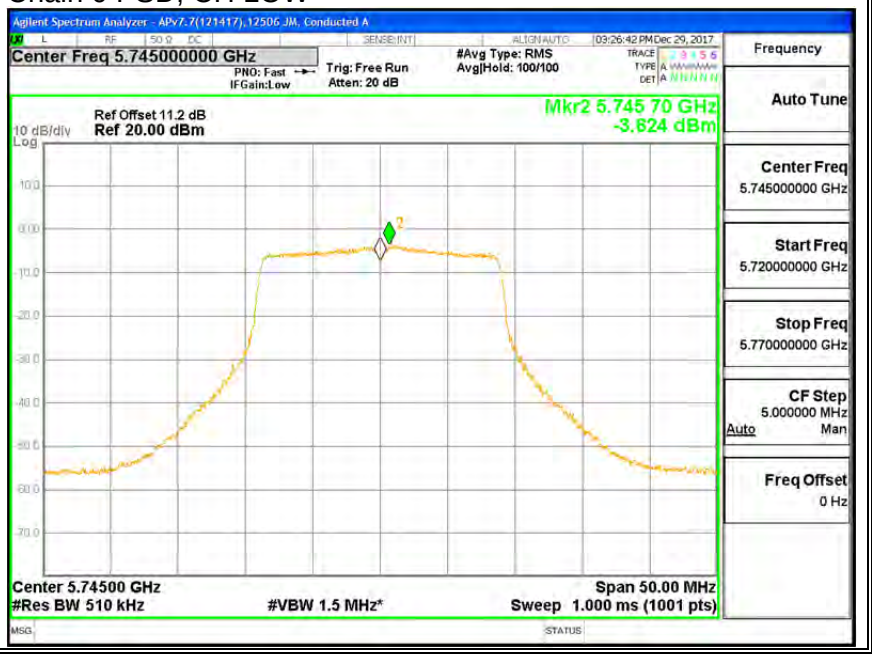
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	9.37	6.38	11.14	30.00	-18.86
Mid	5785	9.23	6.51	11.09	30.00	-18.91
High	5825	9.41	6.47	11.19	30.00	-18.81

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	-3.624	-6.938	-1.82	30.00	-31.82
Mid	5785	-4.575	-7.159	-2.53	30.00	-32.53
High	5825	-3.909	-7.210	-2.10	30.00	-32.10

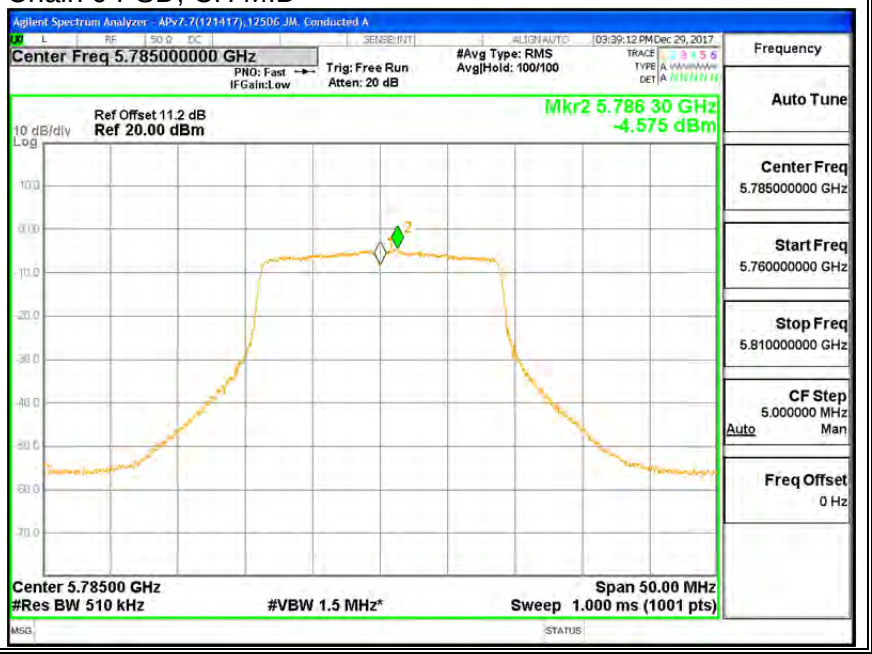
Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

Chain 0 PSD, CH LOW

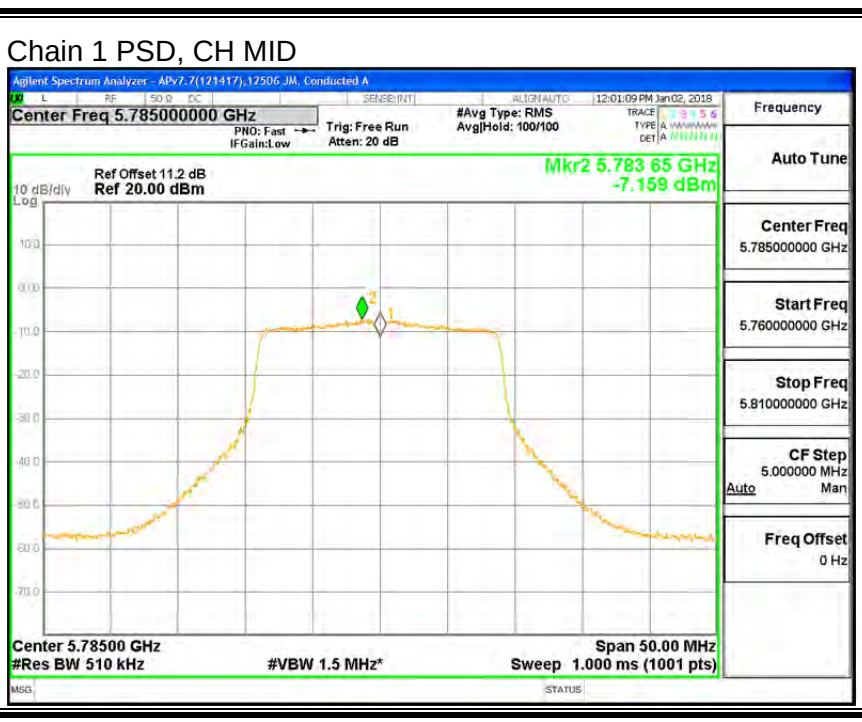


Chain 1 PSD, CH LOW

Chain 0 PSD, CH MID

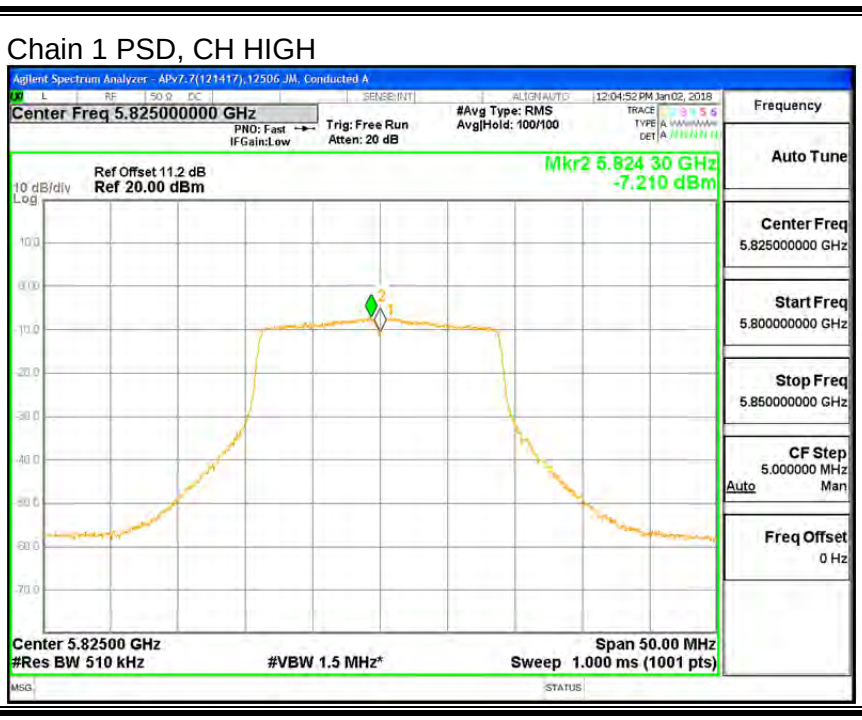


Chain 1 PSD, CH MID



Chain 0 PSD, CH HIGH

Chain 1 PSD, CH HIGH



9.15. 11n HT40 2TX CDD MIMO MODE IN THE 5.8GHz BAND

9.15.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

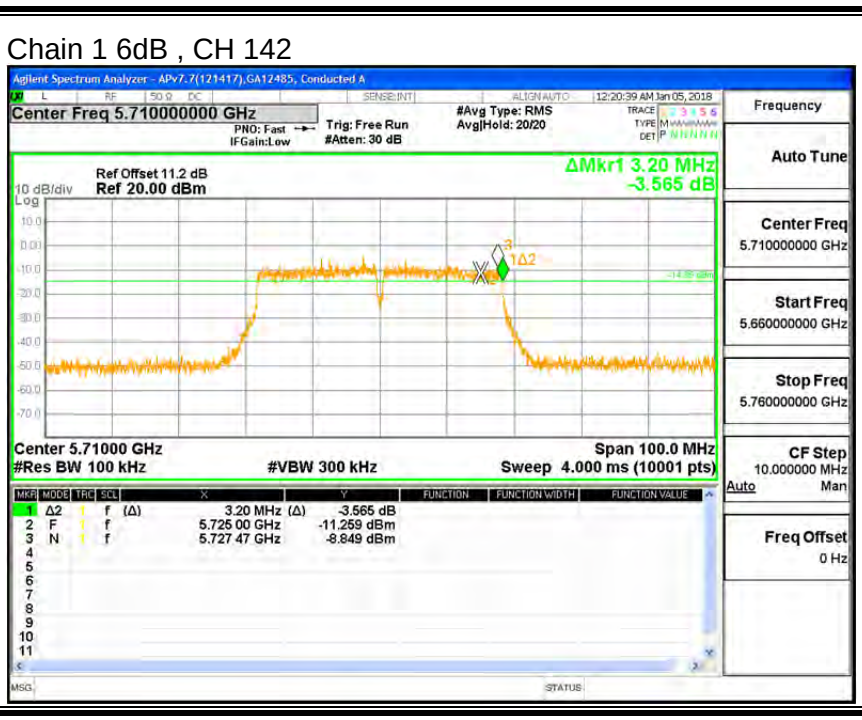
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

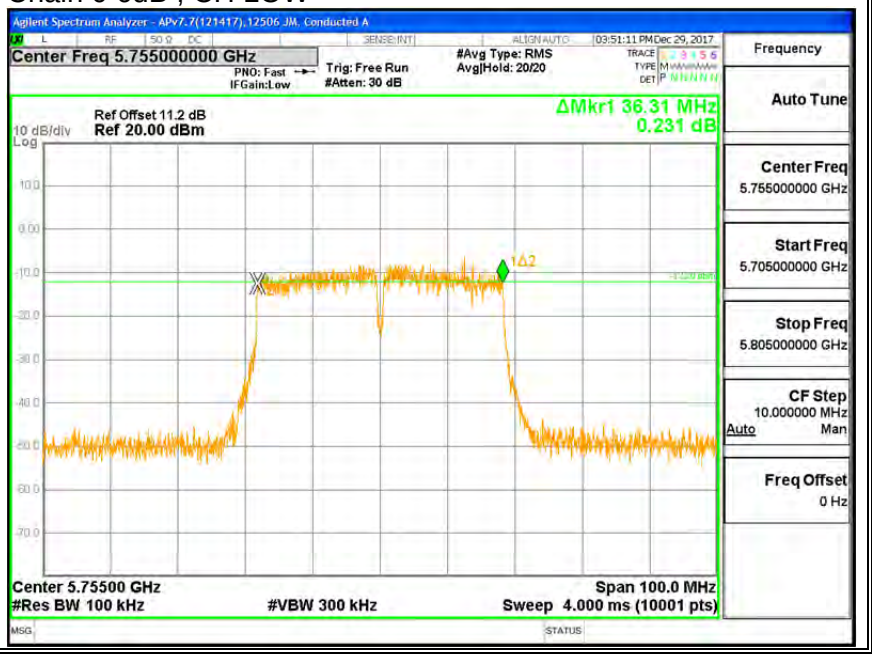
Channel	Frequency	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
142	5710	3.15	3.20	0.5
Low	5755	36.31	36.37	0.5
High	5795	36.35	36.32	0.5

Chain 0 6dB , CH 142

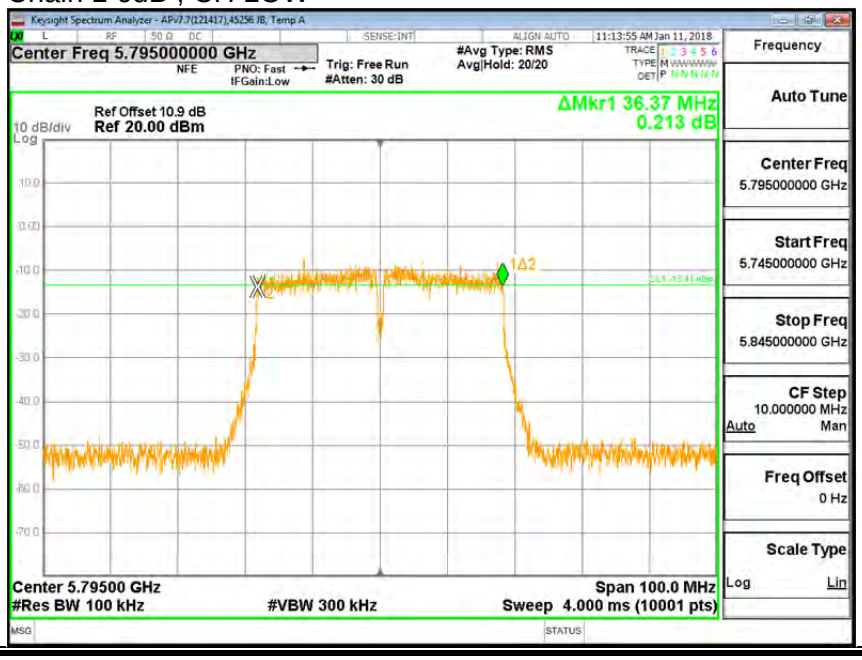
Chain 1 6dB , CH 142



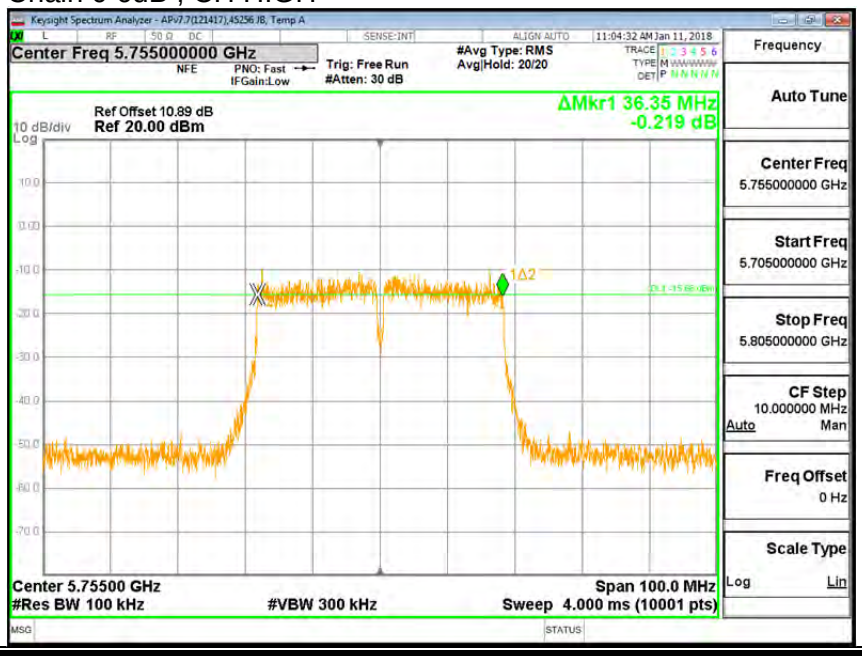
Chain 0 6dB , CH LOW



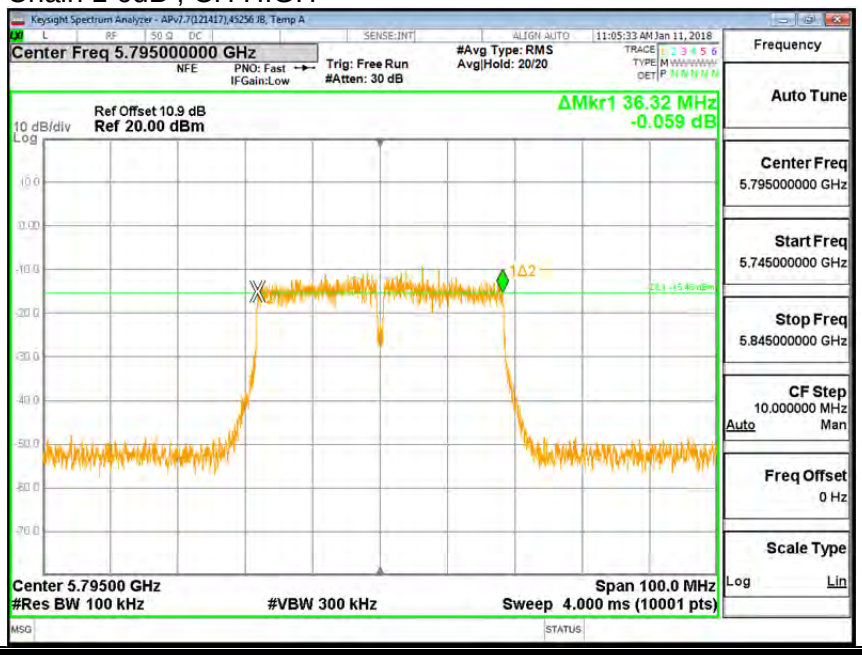
Chain 1 6dB , CH LOW



Chain 0 6dB , CH HIGH



Chain 1 6dB , CH HIGH



9.15.2. 99% BANDWIDTH

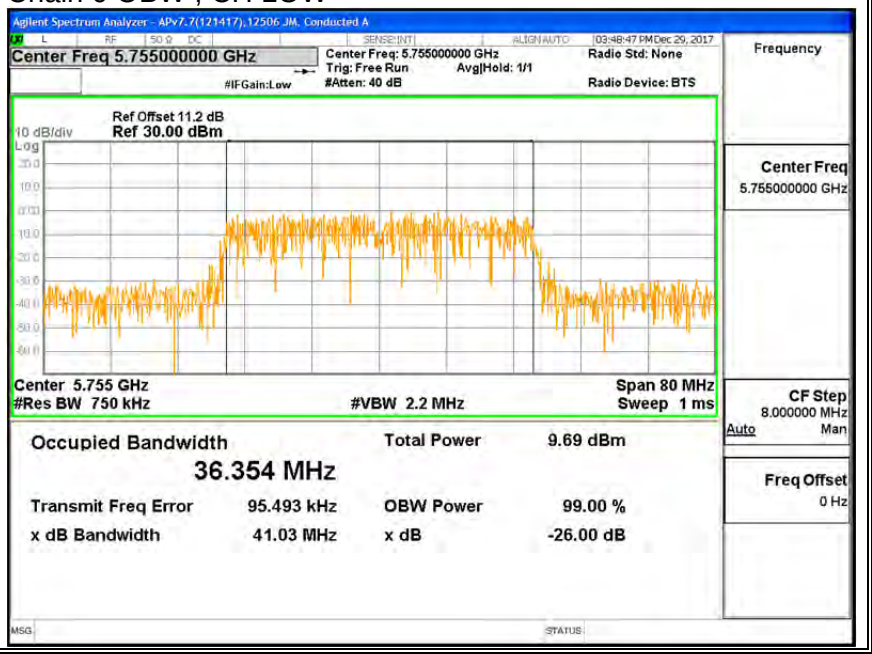
LIMITS

None; for reporting purposes only.

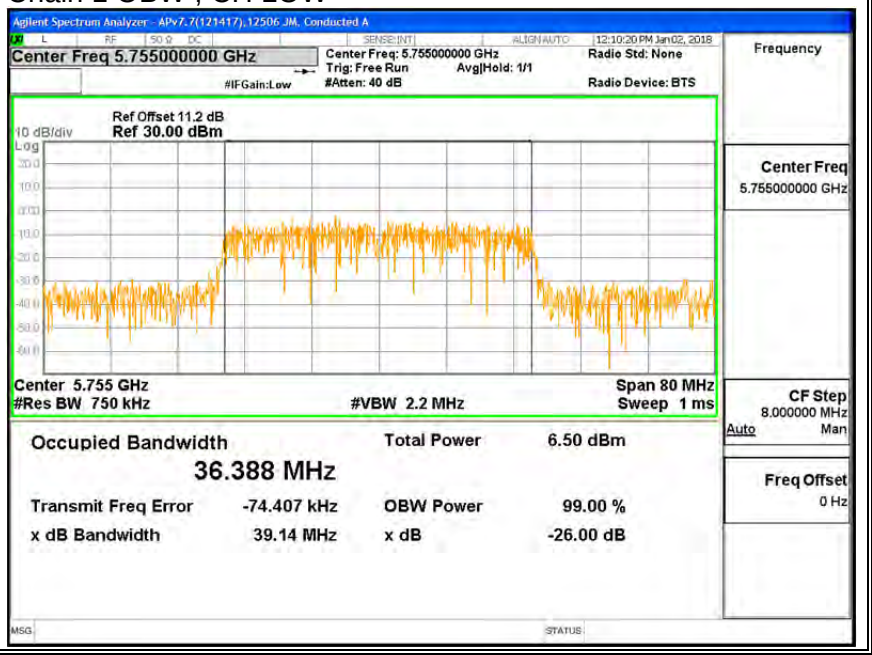
RESULTS

Channel	Frequency	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5755	36.354	36.388
High	5795	36.399	36.571

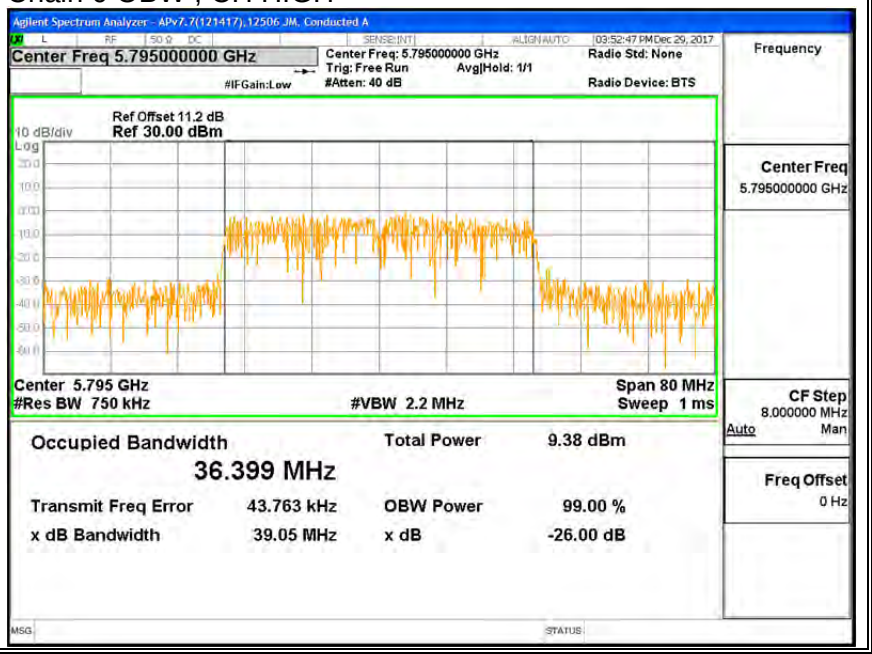
Chain 0 OBW , CH LOW



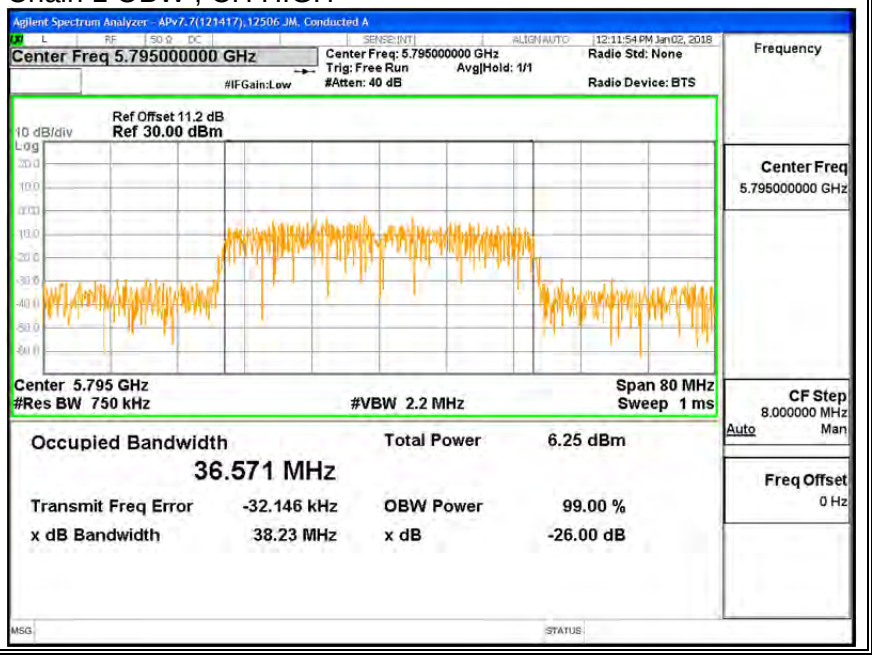
Chain 1 OBW , CH LOW



Chain 0 OBW , CH HIGH



Chain 1 OBW , CH HIGH



9.15.3. OUTPUT POWER AND 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.

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

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

5725-5850 MHz

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-1.40	-5.10	-2.87

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

5725-5850 MHz

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-1.40	-5.10	-0.04

RESULTS

ID:	12506 JM	Date:	01/08/18

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain For Power (dBi)	Directional Gain For PSD (dBi)	Power Limit (dBm)	Power Limit (dBm)
Low	5755	-2.87	-0.04	30.00	30.00
High	5795	-2.87	-0.04	30.00	30.00

Duty Cycle CF (dB)	0.48	Included in Calculations of Corr'd PSD

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	9.31	6.32	11.08	30.00	-18.92
High	5795	9.12	6.35	10.96	30.00	-19.04

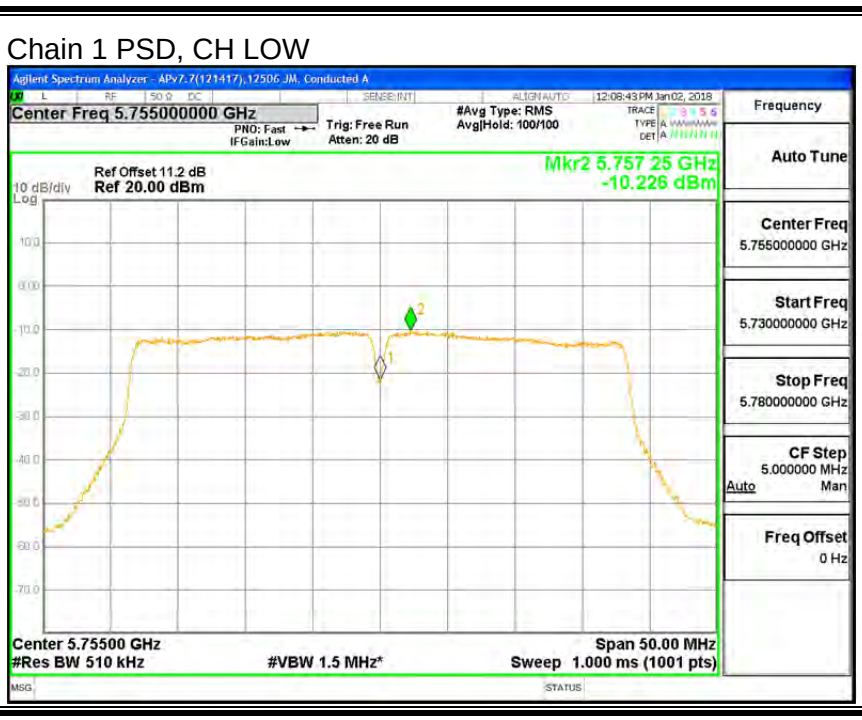
Output Power Results

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	-7.114	-10.226	-4.91	30.00	-34.91
High	5795	-7.912	-10.713	-5.60	30.00	-35.60

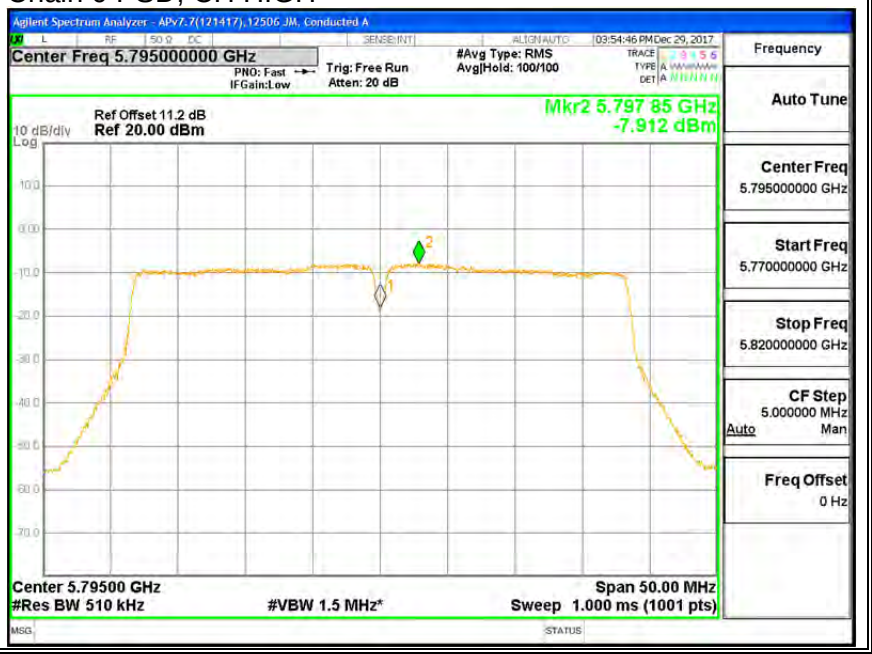
Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

Chain 0 PSD, CH LOW

Chain 1 PSD, CH LOW



Chain 0 PSD, CH HIGH



Chain 1 PSD, CH HIGH

9.16. 11ac HT80 2TX CDD MIMO MODE IN THE 5.8GHz BAND

9.16.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

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

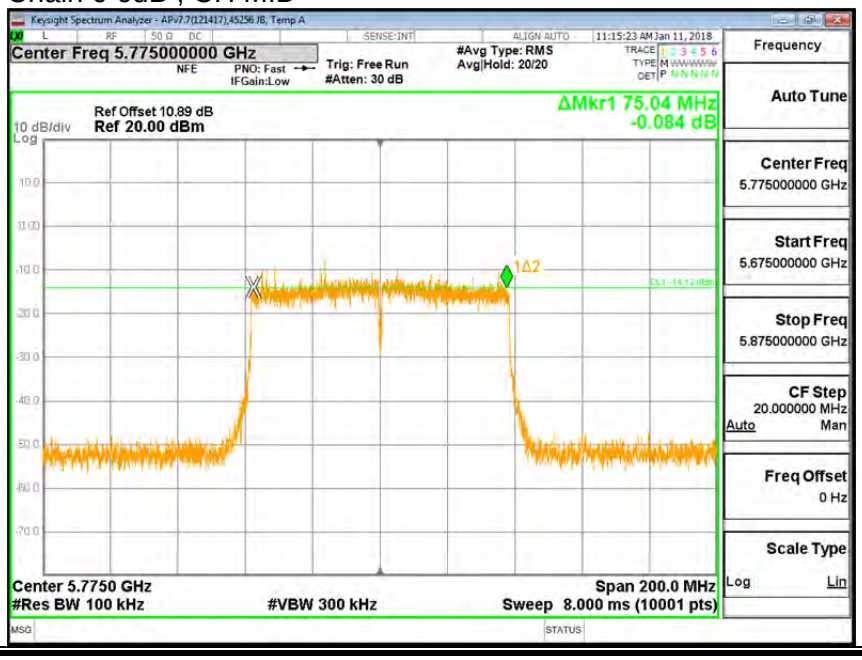
RESULTS

Channel	Frequency	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
138	5690	3.14	3.14	0.5
Mid	5775	75.04	75.66	0.5

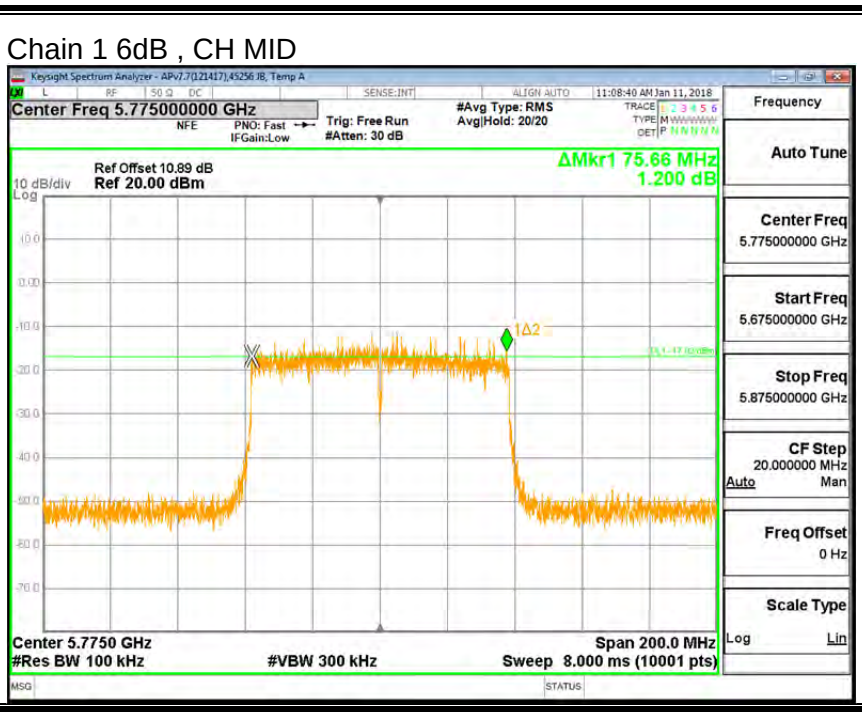
Chain 0 6dB , CH 138

Chain 1 6dB , CH 138

Chain 0 6dB , CH MID



Chain 1 6dB , CH MID



9.16.2. 99% BANDWIDTH

LIMITS

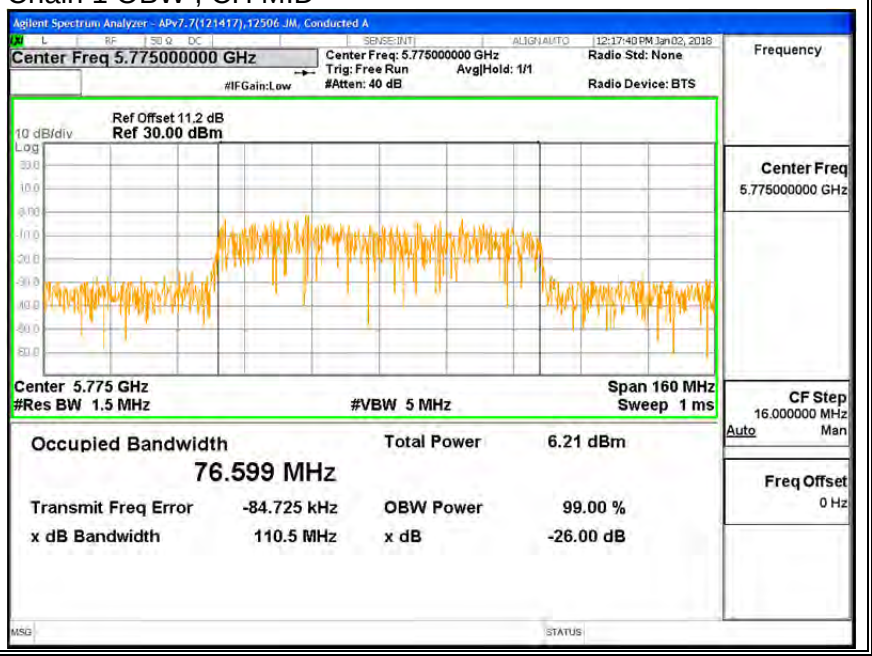
None; for reporting purposes only.

RESULTS

Channel	Frequency	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Mid	5775	76.772	76.599

Chain 0 OBW , CH MID

Chain 1 OBW , CH MID



9.16.3. OUTPUT POWER AND 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.

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

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

5725-5850 MHz

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-1.40	-5.10	-2.87

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

5725-5850 MHz

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-1.40	-5.10	-0.04

RESULTS

ID:	12506 JM	Date:	01/08/18

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Mid	5775	-2.87	-0.04	30.00	30.00

Duty Cycle CF (dB)	0.73	Included in Calculations of Corr'd PSD

Output Power Results

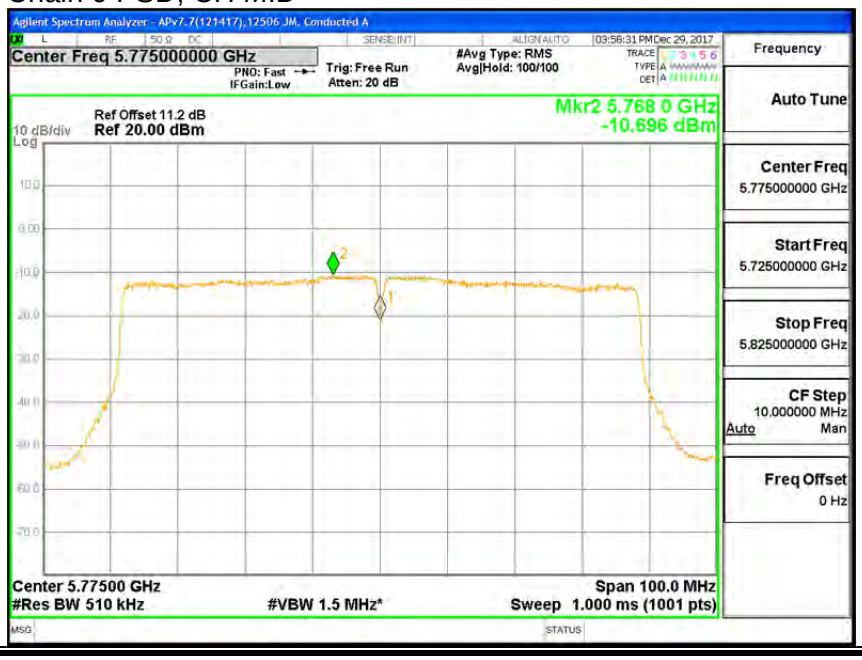
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5775	9.49	6.10	11.13	30.00	-18.87

PSD Results

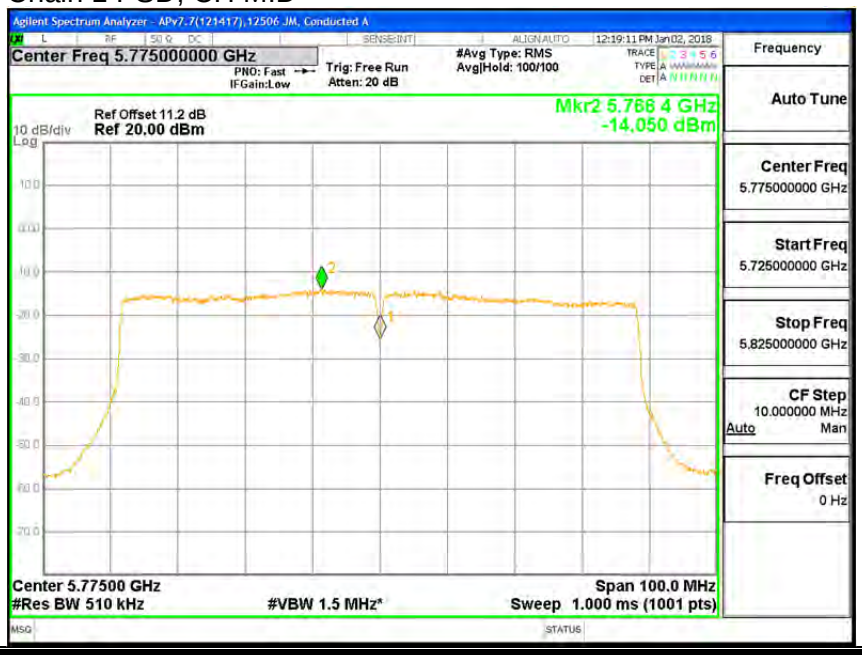
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5775	-10.696	-14.050	-8.32	30.00	-38.32

Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

Chain 0 PSD, CH MID



Chain 1 PSD, CH MID



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
0.009-0.490	2400/F(kHz) @ 300m	-
0.490-1.705	24000/F(kHz) @ 30m	-
1.705-30.0	30 @ 30m	-
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 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak 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 add duty cycle factor for average measurements.

The spectrum from 1 GHz to 18 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. Below 1GHz and above 18GHz emissions, the channel with the highest output power was tested.

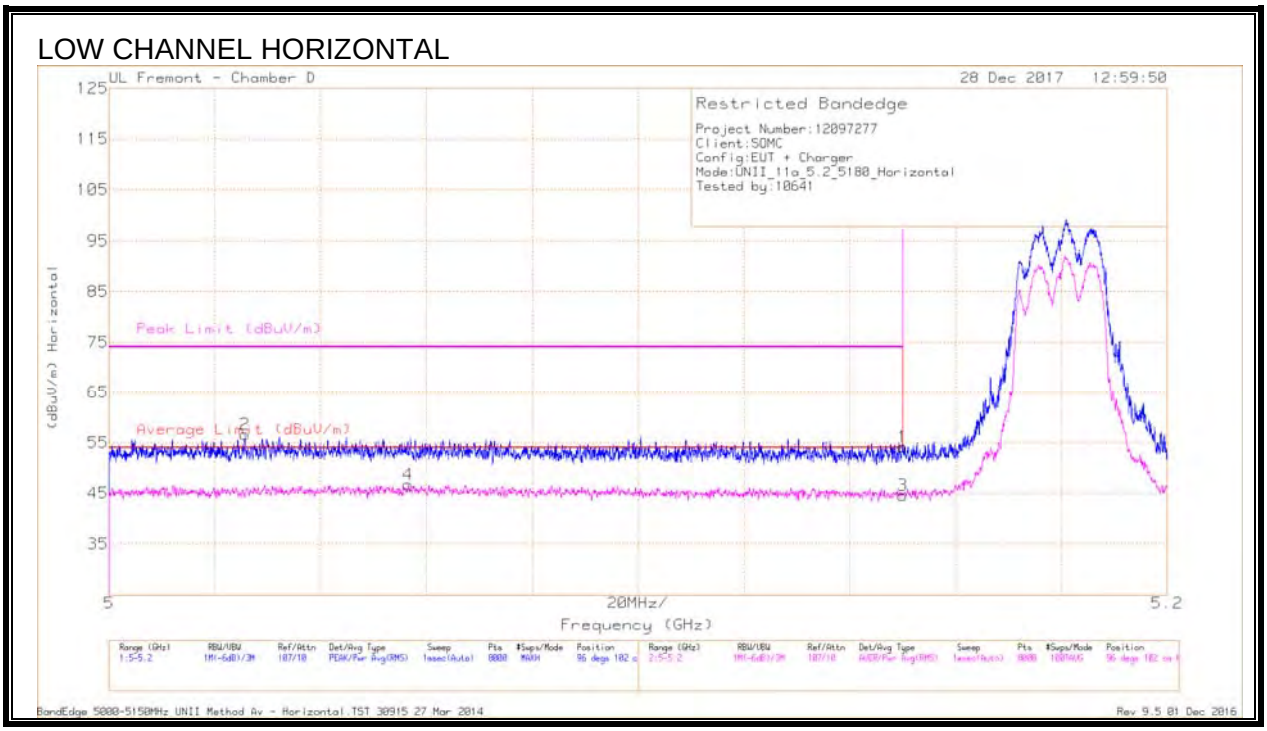
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

10.1.1. 11a 2TX CDD MIMO MODE IN THE 5.2GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL

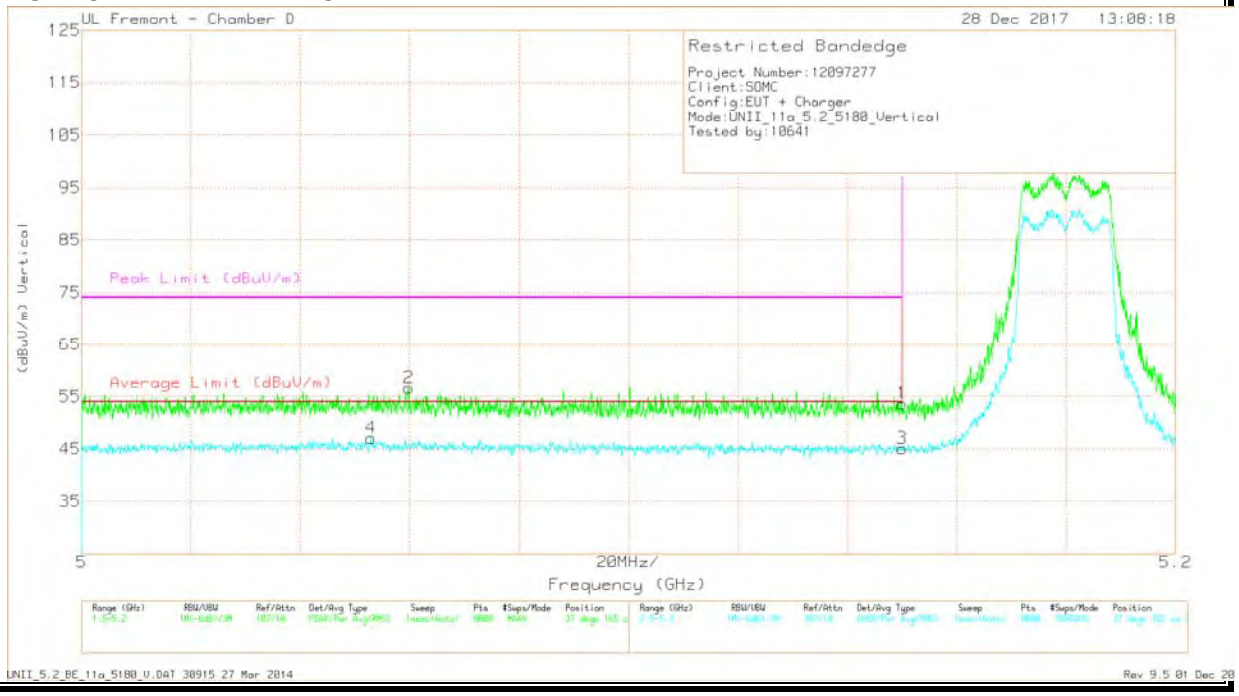


Trace Markers

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
1	* 5.15	38.17	Pk	34.1	-18.1	54.17	-	-	74	-19.83	96	102	H
2	* 5.026	40.37	Pk	34.1	-17.8	56.67	-	-	74	-17.33	96	102	H
3	* 5.15	28.62	RMS	34.1	-18.1	44.62	54	-9.38	-	-	96	102	H
4	* 5.057	30.32	RMS	34.1	-17.7	46.72	54	-7.28	-	-	96	102	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

LOW CHANNEL VERTICAL



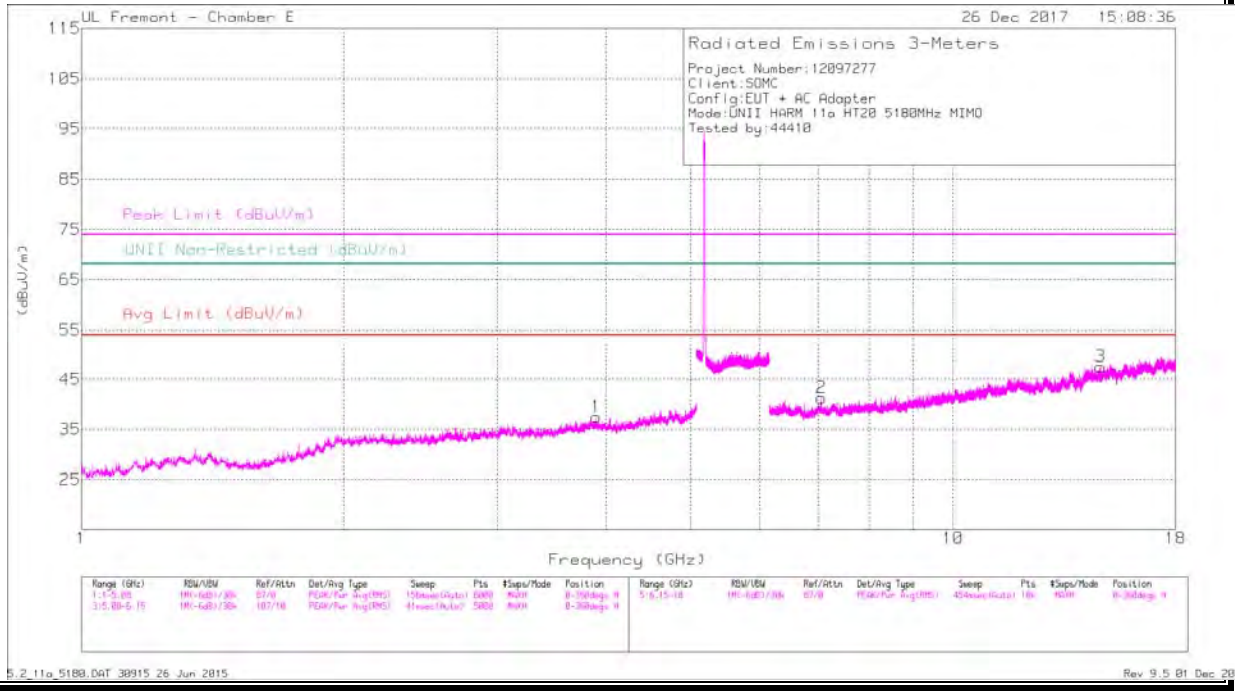
Trace Markers

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
4	* 5.053	30.69	RMS	34.1	-17.7	47.09	54	-6.91	-	-	37	165	V
2	* 5.06	40.38	Pk	34.1	-17.8	56.68	-	-	74	-17.32	37	165	V
1	* 5.15	37.67	Pk	34.1	-18.1	53.67	-	-	74	-20.33	37	165	V
3	* 5.15	29.13	RMS	34.1	-18.1	45.13	54	-8.87	-	-	37	165	V

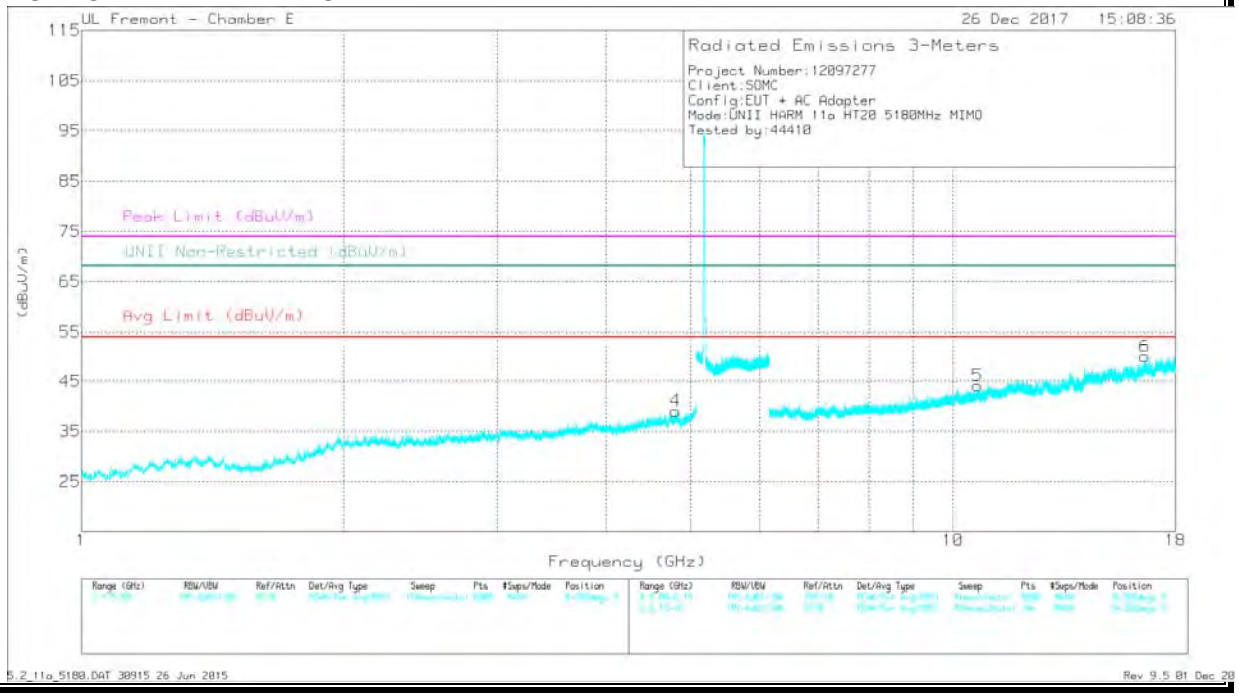
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Radiated Emissions

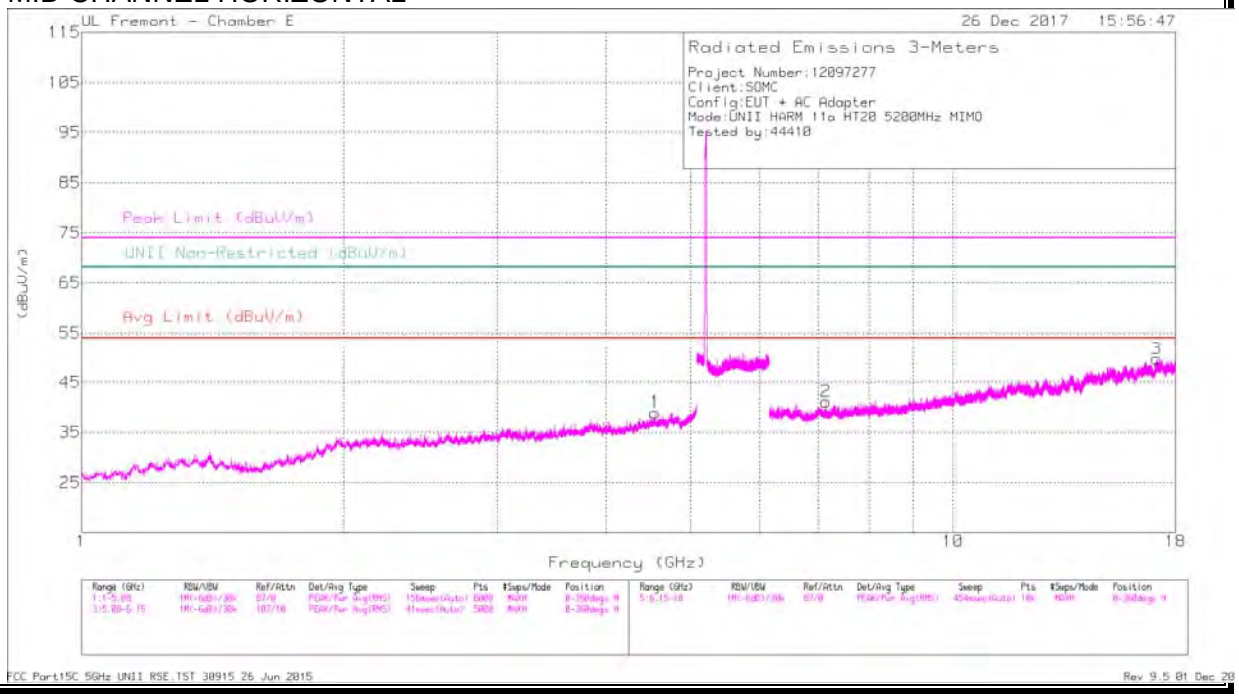
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.897	40.35	PK-U	33.7	-30	0	44.05	-	-	74	-29.95	-	-	225	211	H
	* 3.899	28.29	ADR	33.7	-30.1	0	31.89	54	-22.11	-	-	-	-	225	211	H
4	* 4.8	38.89	PK-U	34.4	-28.8	0	44.49	-	-	74	-29.51	-	-	285	381	V
	* 4.803	27.73	ADR	34.4	-28.7	0	33.43	54	-20.57	-	-	-	-	285	381	V
5	* 10.664	34.38	PK-U	38.1	-22.8	0	49.68	-	-	74	-24.32	-	-	124	138	V
	* 10.665	22.33	ADR	38.1	-22.8	0	37.63	54	-16.37	-	-	-	-	124	138	V
2	7.063	37.4	PK-U	36.1	-27.2	0	46.3	-	-	-	-	68.2	-21.9	331	174	H
3	14.754	34.54	PK-U	40.5	-22.9	0	52.14	-	-	-	-	68.2	-16.06	151	391	H
6	16.595	33.81	PK-U	41.9	-21.1	0	54.61	-	-	-	-	68.2	-13.59	124	101	V

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

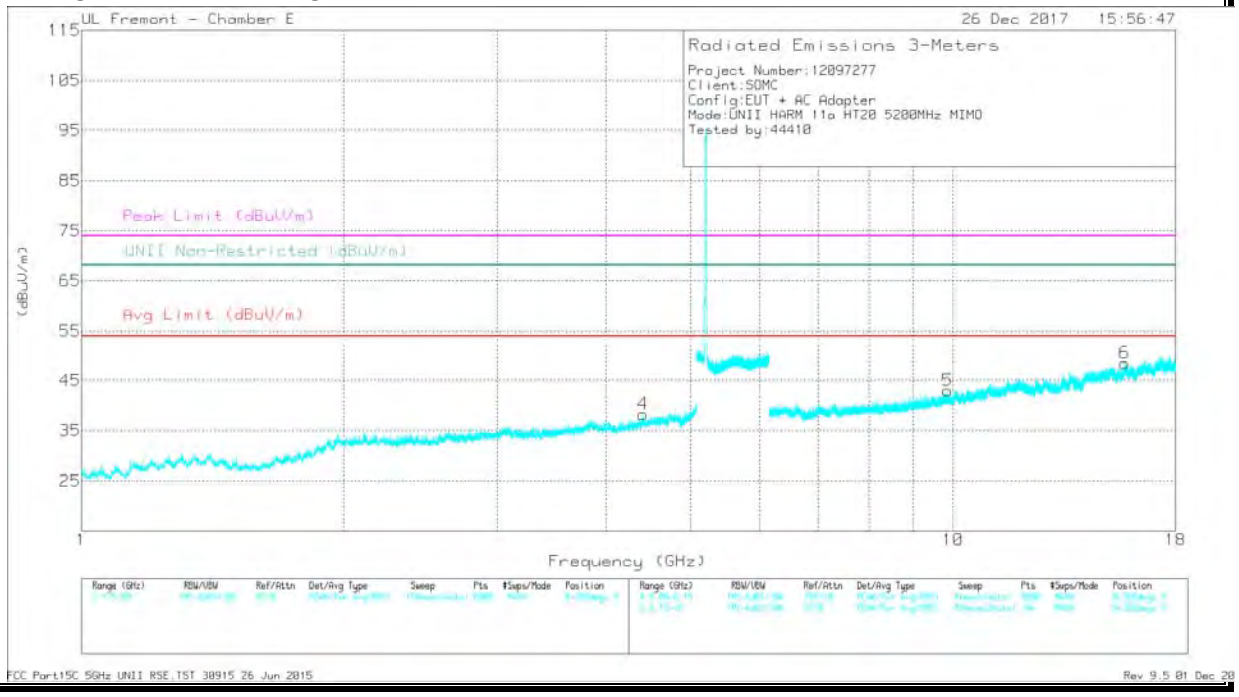
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



Radiated Emissions

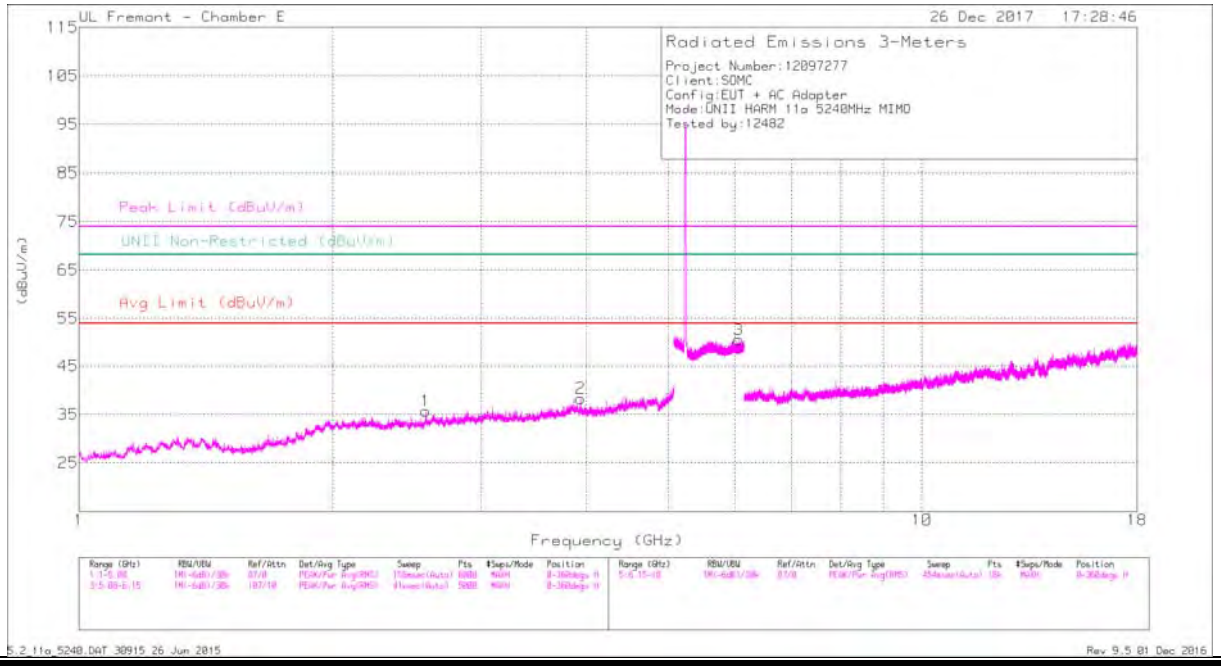
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.553	38.71	PK-U	34.5	-28.9	0	44.31	-	-	74	-29.69	-	-	237	283	H
	* 4.551	27.06	ADR	34.5	-28.8	0	32.76	54	-21.24	-	-	-	-	237	283	H
6	* 15.742	34.09	PK-U	41.7	-22	0	53.79	-	-	74	-20.21	-	-	229	130	V
	* 15.744	22.77	ADR	41.7	-22.1	0	42.37	54	-11.63	-	-	-	-	229	130	V
4	4.403	38.97	PK-U	34.1	-29	0	44.07	-	-	-	-	68.2	-24.13	65	318	V
2	7.149	36.59	PK-U	36.1	-27.3	0	45.39	-	-	-	-	68.2	-22.81	39	170	H
5	9.858	35.07	PK-U	37.6	-24.7	0	47.97	-	-	-	-	68.2	-20.23	345	228	V
3	17.127	34.1	PK-U	41.7	-21	0	54.8	-	-	-	-	68.2	-13.4	243	326	H

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

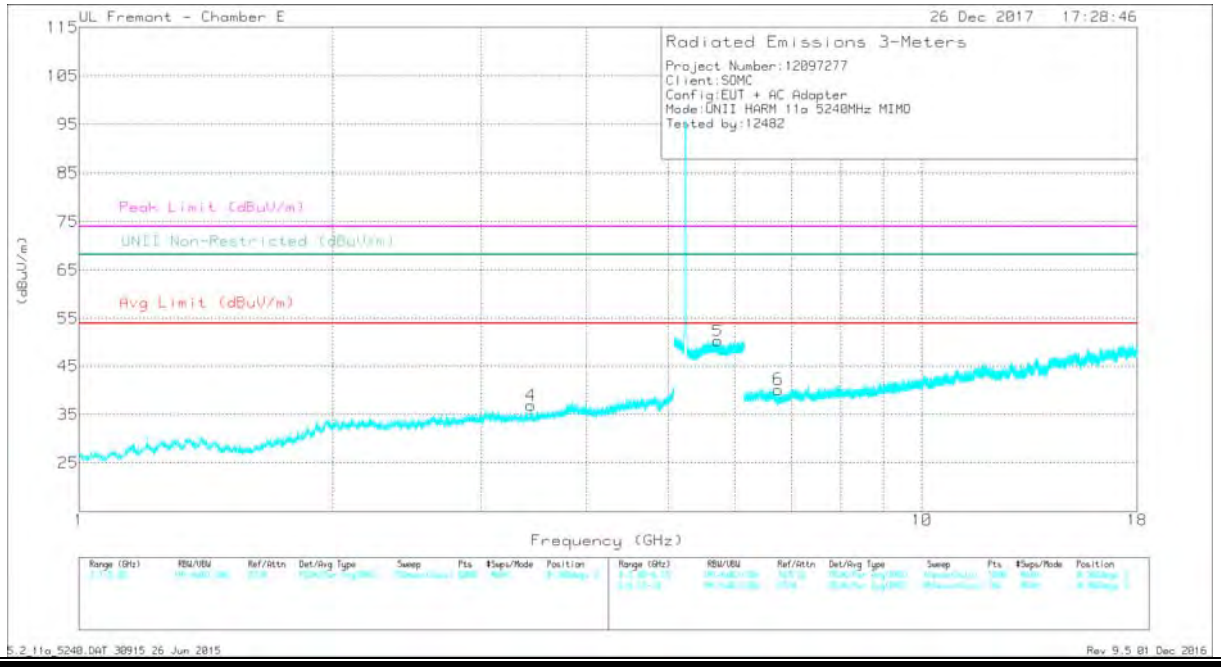
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



Radiated Emissions

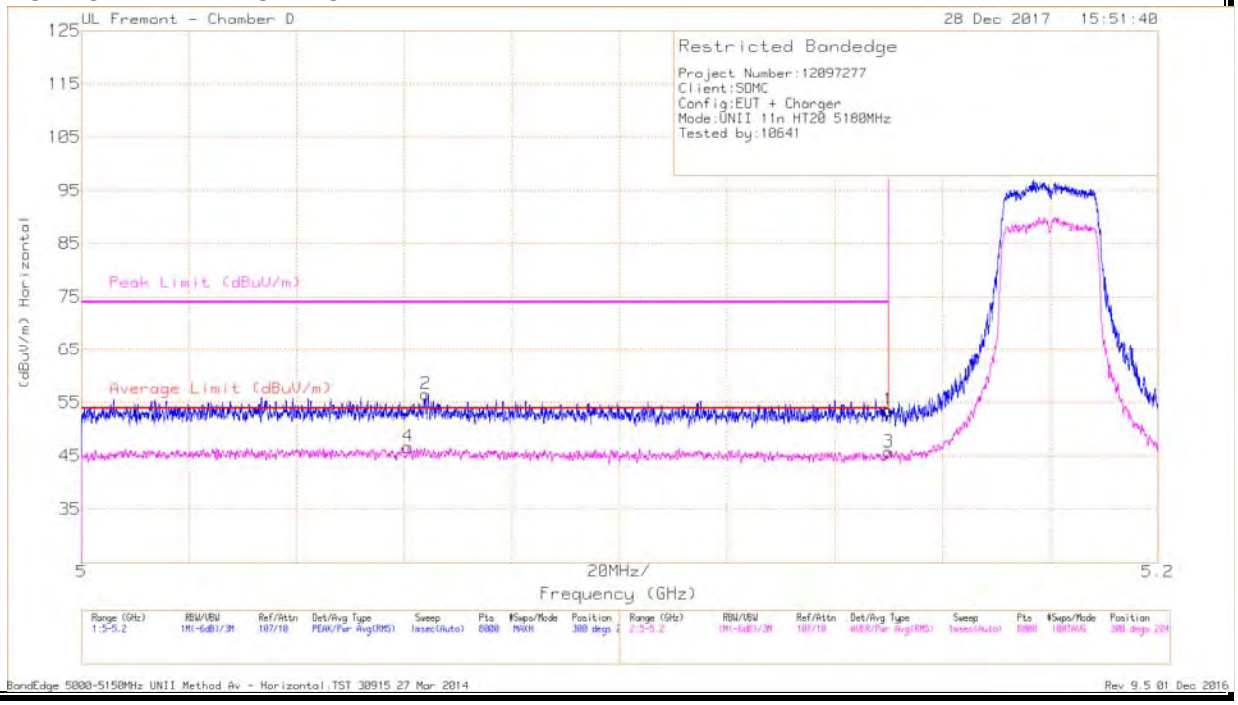
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.936	40.68	PK-U	33.7	-30.7	0	43.68	-	-	74	-30.32	-	-	352	358	H
	* 3.936	28.86	ADR	33.7	-30.7	0	31.86	54	-22.14	-	-	-	-	352	358	H
1	2.579	40.61	PK-U	32.1	-31.6	0	41.11	-	-	-	-	68.2	-27.09	355	355	H
4	3.438	39.32	PK-U	33	-30.6	0	41.72	-	-	-	-	68.2	-26.48	211	154	V
5	5.723	39.84	PK-U	35.1	-19.1	0	55.84	-	-	-	-	68.2	-12.36	85	157	V
3	6.06	39.15	PK-U	35.5	-18.4	0	56.25	-	-	-	-	68.2	-11.95	345	113	H
6	6.752	37.94	PK-U	35.9	-27.8	0	46.04	-	-	-	-	68.2	-22.16	138	178	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

10.1.2. 11n HT20 2TX CDD MIMO MODE IN THE 5.2GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL

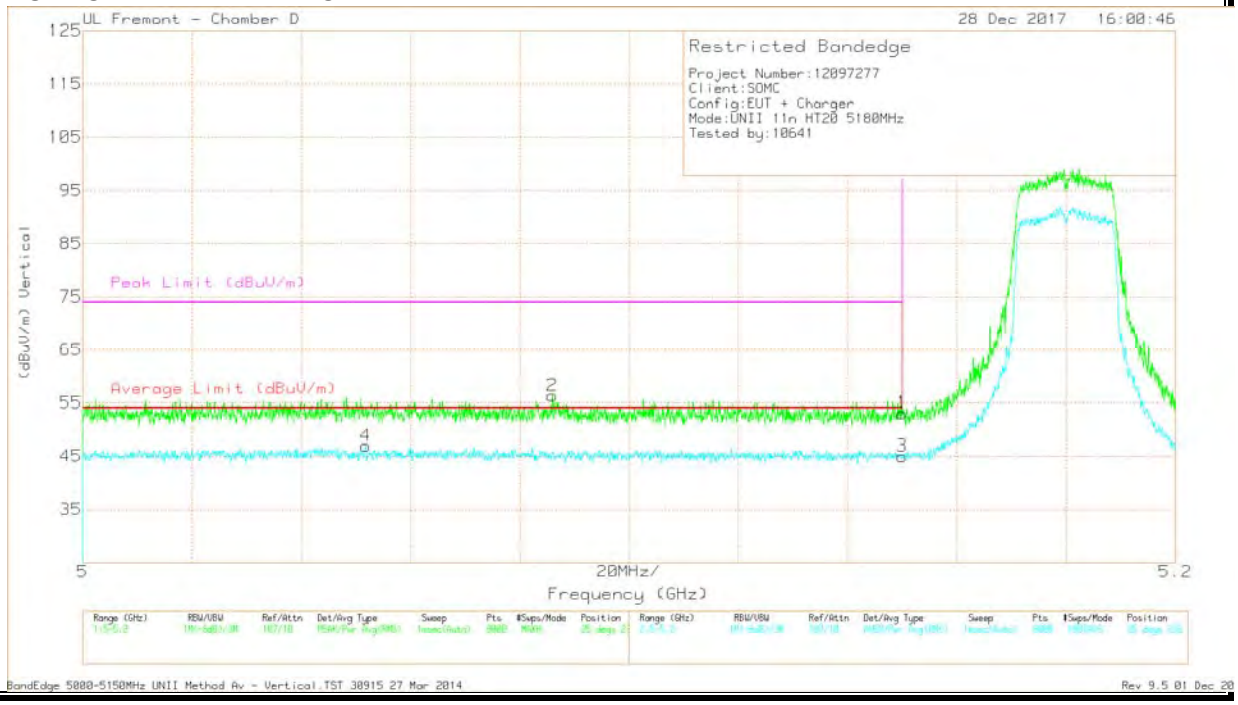


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 5.061	30.23	RMS	34.1	-17.8	.14	46.67	54	-7.33	-	-	300	224	H
2	* 5.064	40.16	Pk	34.1	-17.7	0	56.56	-	-	74	-17.44	300	224	H
1	* 5.15	37.52	Pk	34.1	-18.1	0	53.52	-	-	74	-20.48	300	224	H
3	* 5.15	29.58	RMS	34.1	-18.1	.14	45.72	54	-8.28	-	-	300	224	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

LOW CHANNEL VERTICAL



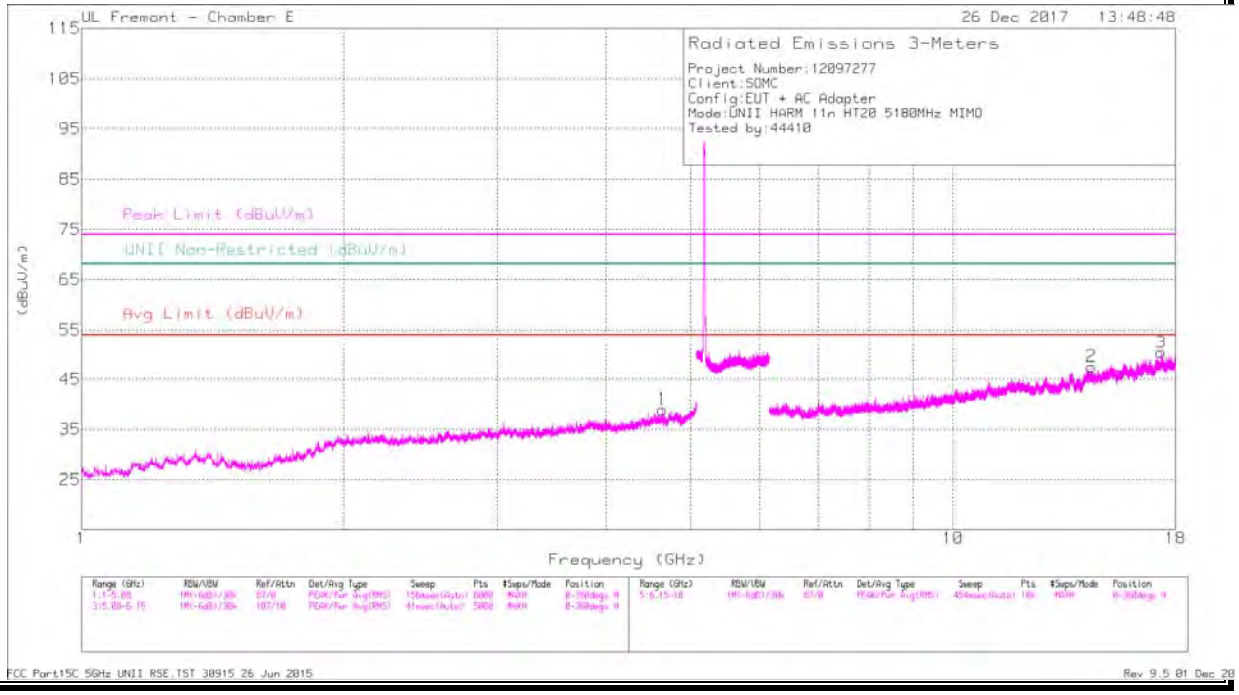
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 5.052	30.36	RMS	34.1	-17.7	.14	46.9	54	-7.1	-	-	25	236	V
2	* 5.086	40.11	Pk	34.1	-17.9	0	56.31	-	-	74	-17.69	25	236	V
1	* 5.15	37.06	Pk	34.1	-18.1	0	53.06	-	-	74	-20.94	25	236	V
3	* 5.15	28.83	RMS	34.1	-18.1	.14	44.97	54	-9.03	-	-	25	236	V

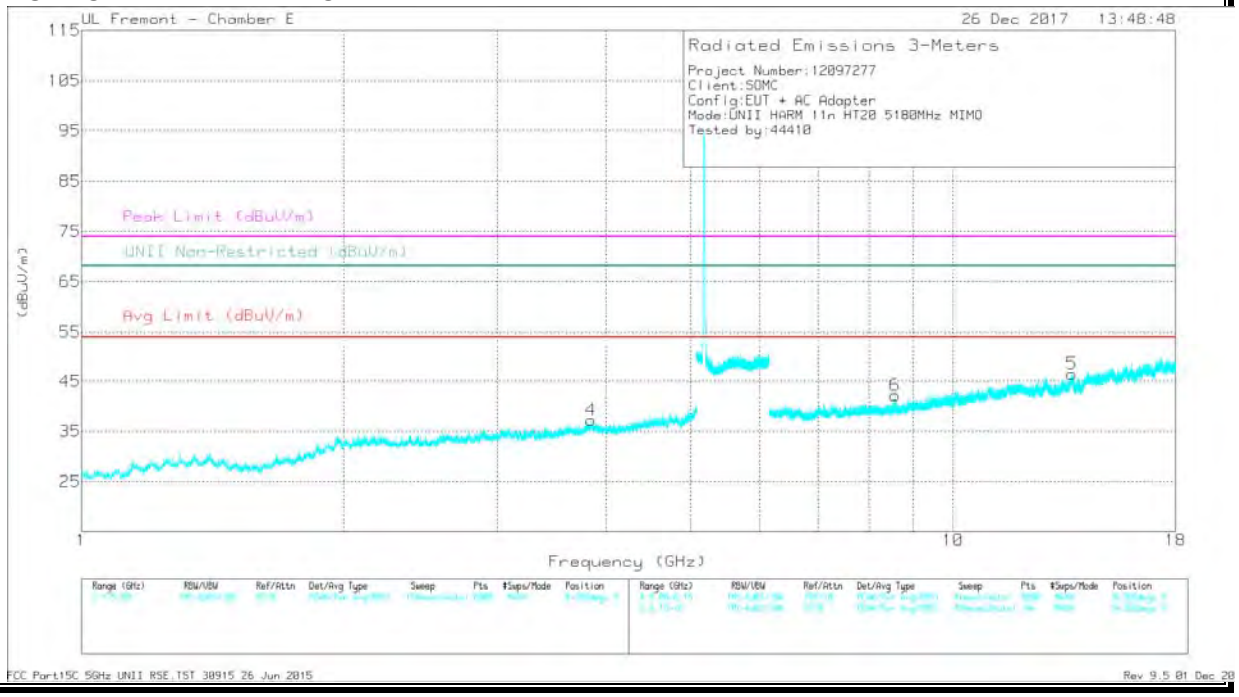
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL

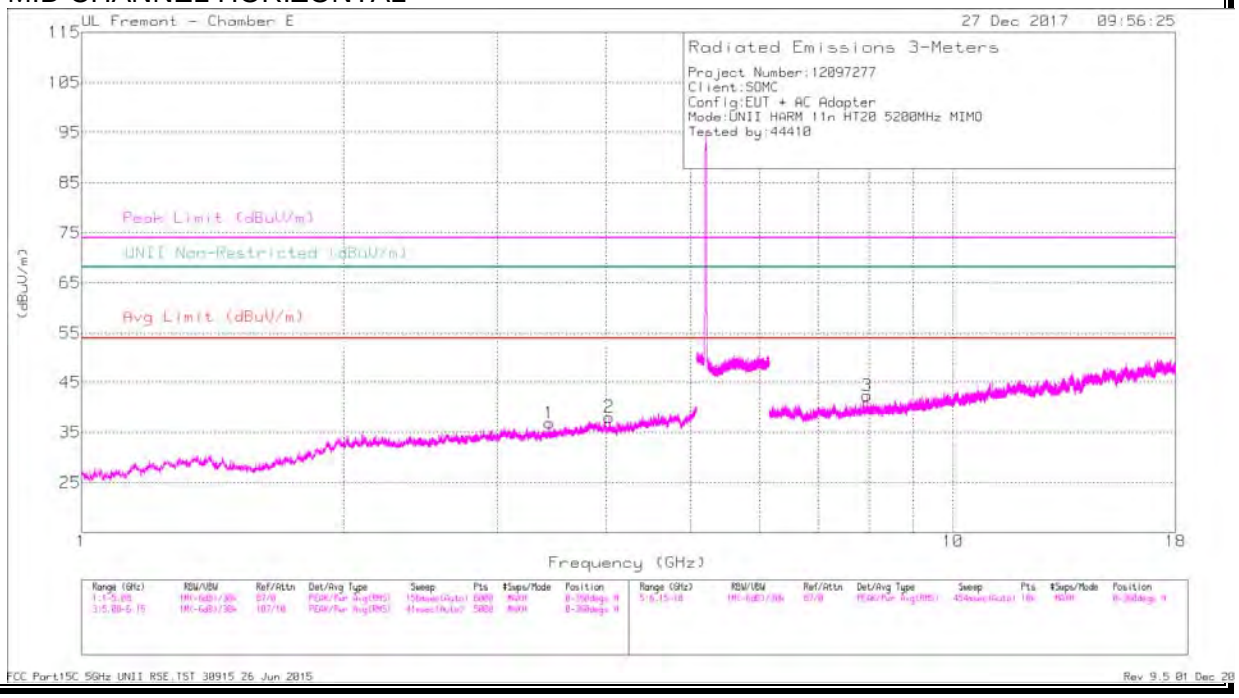


Radiated Emissions

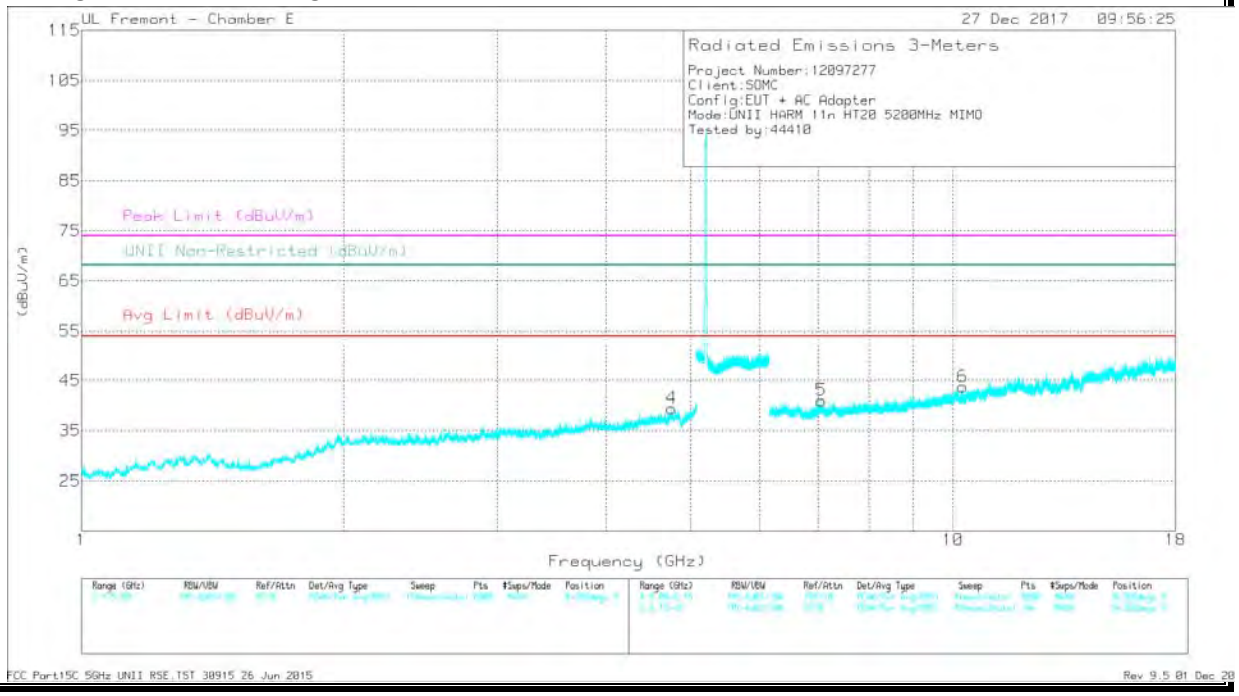
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.638	39.58	PK-U	34.4	-29.4	0	44.58	-	-	74	-29.42	-	-	326	102	H
	* 4.638	27.96	ADR	34.4	-29.4	.14	33.1	54	-20.9	-	-	-	-	326	102	H
4	* 3.844	39.47	PK-U	33.7	-29.4	0	43.77	-	-	74	-30.23	-	-	283	335	V
	* 3.845	27.93	ADR	33.7	-29.4	.14	32.37	54	-21.63	-	-	-	-	283	335	V
6	8.576	35.75	PK-U	36.6	-25.7	0	46.65	-	-	-	-	68.2	-21.55	25	197	V
5	13.694	36.45	PK-U	39.5	-22.7	0	53.25	-	-	-	-	68.2	-14.95	112	365	V
2	14.406	35.65	PK-U	40.9	-23.5	0	53.05	-	-	-	-	68.2	-15.15	122	391	H
3	17.318	35.41	PK-U	41.7	-20.9	0	56.21	-	-	-	-	68.2	-11.99	156	348	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

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



Radiated Emissions

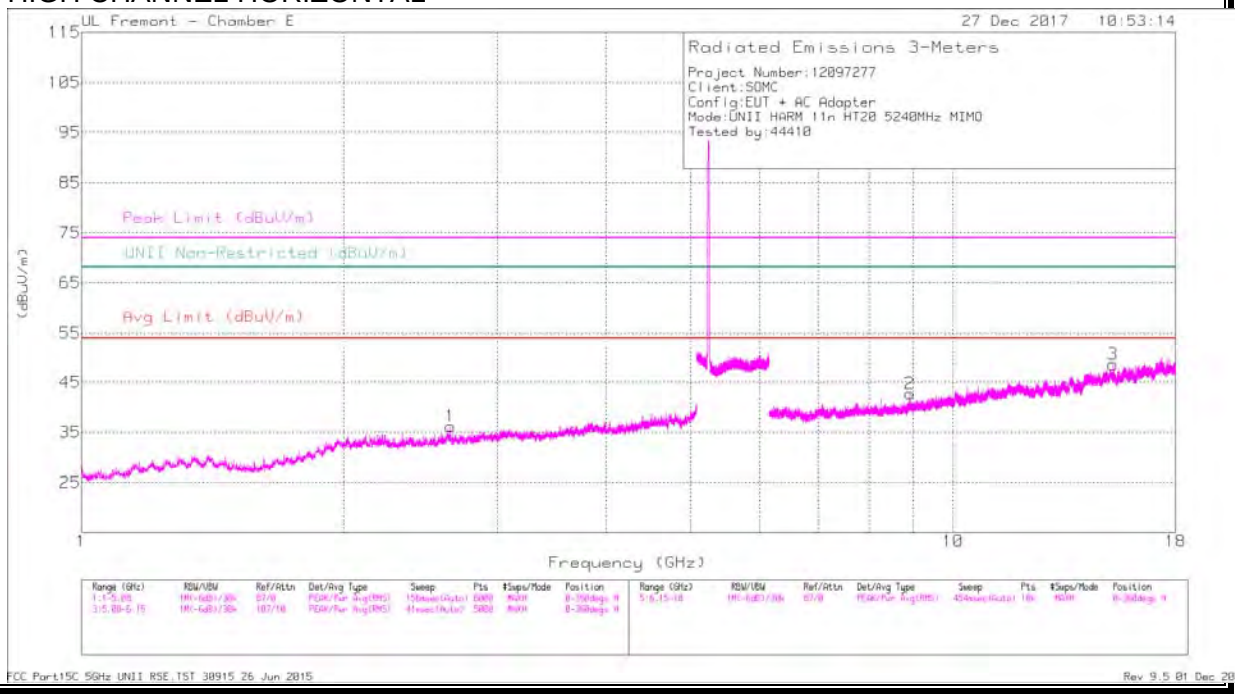
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 4.035	38.63	PK-U	33.6	-29.2	0	43.03	-	-	74	-30.97	-	-	355	249	H
	* 4.034	27.1	ADR	33.6	-29.2	.14	31.64	54	-22.36	-	-	-	-	355	249	H
4	* 4.755	39.01	PK-U	34.4	-28.9	0	44.51	-	-	74	-29.49	-	-	311	376	V
	* 4.758	27.54	ADR	34.4	-29	.14	33.08	54	-20.92	-	-	-	-	311	376	V
1	3.439	39.26	PK-U	33	-30.6	0	41.66	-	-	-	-	68.2	-26.54	78	347	H
5	7.058	38.55	PK-U	36.1	-27.1	0	47.55	-	-	-	-	68.2	-20.65	67	181	V
3	7.967	36.28	PK-U	36.5	-26.6	0	46.18	-	-	-	-	68.2	-22.02	4	373	H
6	10.263	34.38	PK-U	37.6	-24.1	0	47.88	-	-	-	-	68.2	-20.32	201	234	V

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

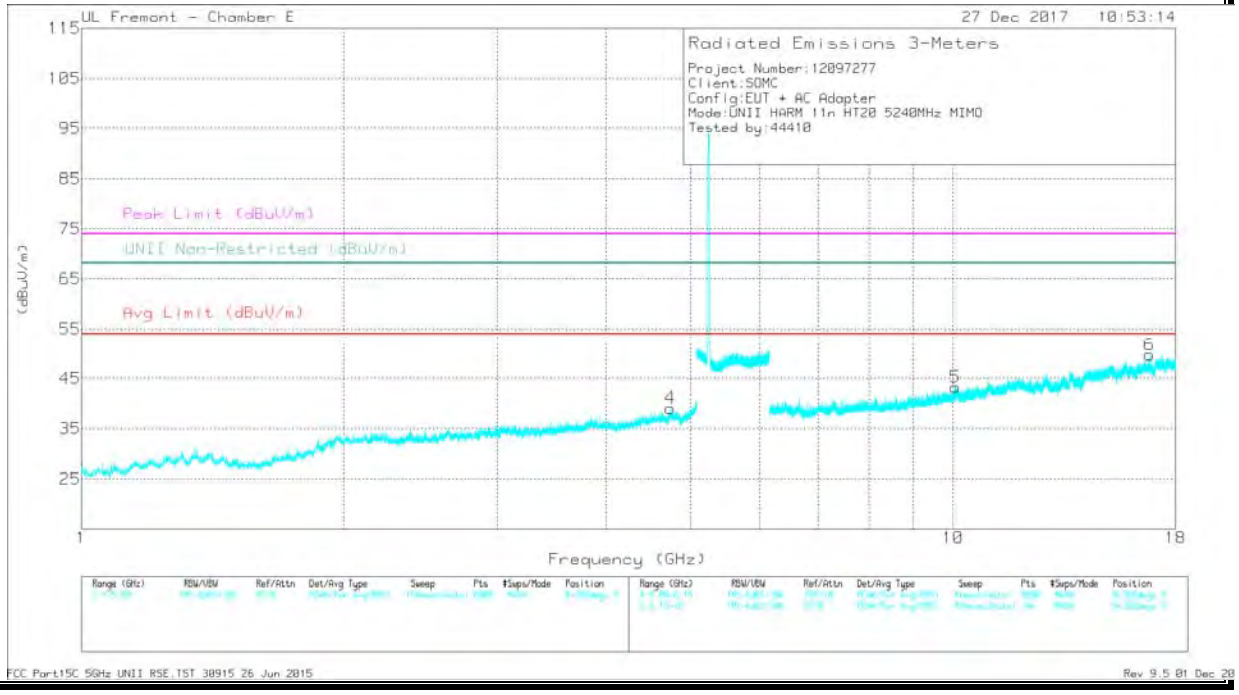
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (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	* 4.74	38.31	PK-U	34.4	-28.5	0	44.21	-	-	74	-29.79	-	-	96	262	V
	* 4.739	27.22	ADR	34.4	-28.5	.14	33.26	54	-20.74	-	-	-	-	96	262	V
1	2.649	39.26	PK-U	32.3	-30.7	0	40.86	-	-	-	-	68.2	-27.34	328	334	H
2	8.918	36.3	PK-U	36.9	-25.5	0	47.7	-	-	-	-	68.2	-20.5	285	146	H
5	10.066	34.01	PK-U	37.6	-22.5	0	49.11	-	-	-	-	68.2	-19.09	47	173	V
3	15.253	34.66	PK-U	41.4	-22.6	0	53.46	-	-	-	-	68.2	-14.74	28	194	H
6	16.799	34.5	PK-U	41.9	-21.8	0	54.6	-	-	-	-	68.2	-13.6	8	305	V

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

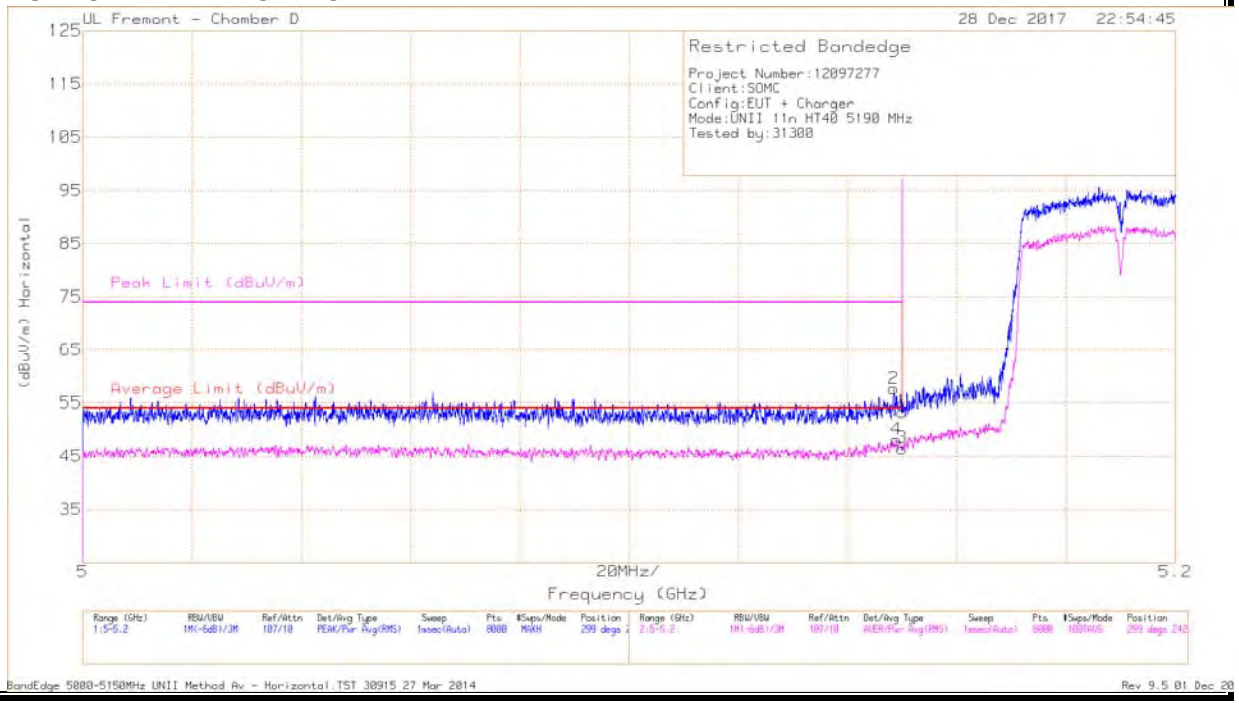
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.1.3. 11n HT40 2TX CDD MIMO MODE IN THE 5.2GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL

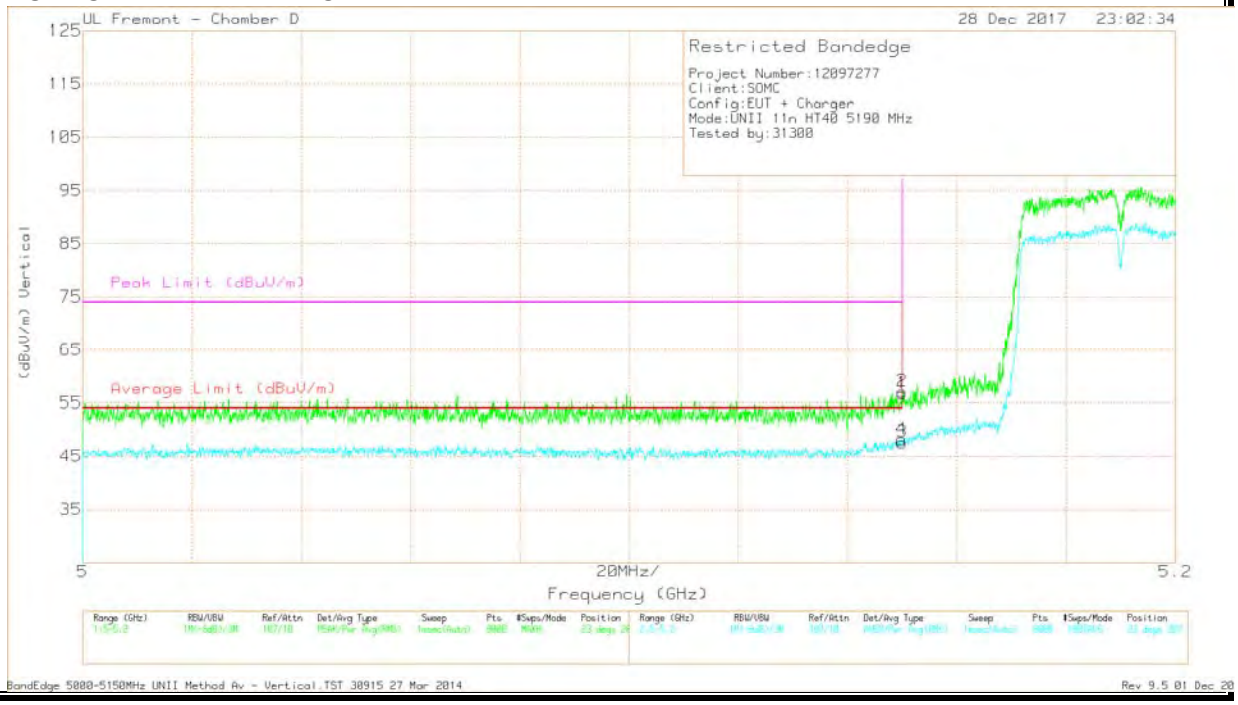


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	37.31	Pk	34.1	-18.1	0	53.31	-	-	74	-20.69	299	242	H
2	* 5.148	41.65	Pk	34.1	-18.1	0	57.65	-	-	74	-16.35	299	242	H
3	* 5.15	30	RMS	34.1	-18.1	.48	46.48	54	-7.52	-	-	299	242	H
4	* 5.149	31.59	RMS	34.1	-18.1	.48	48.07	54	-5.93	-	-	299	242	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

LOW CHANNEL VERTICAL



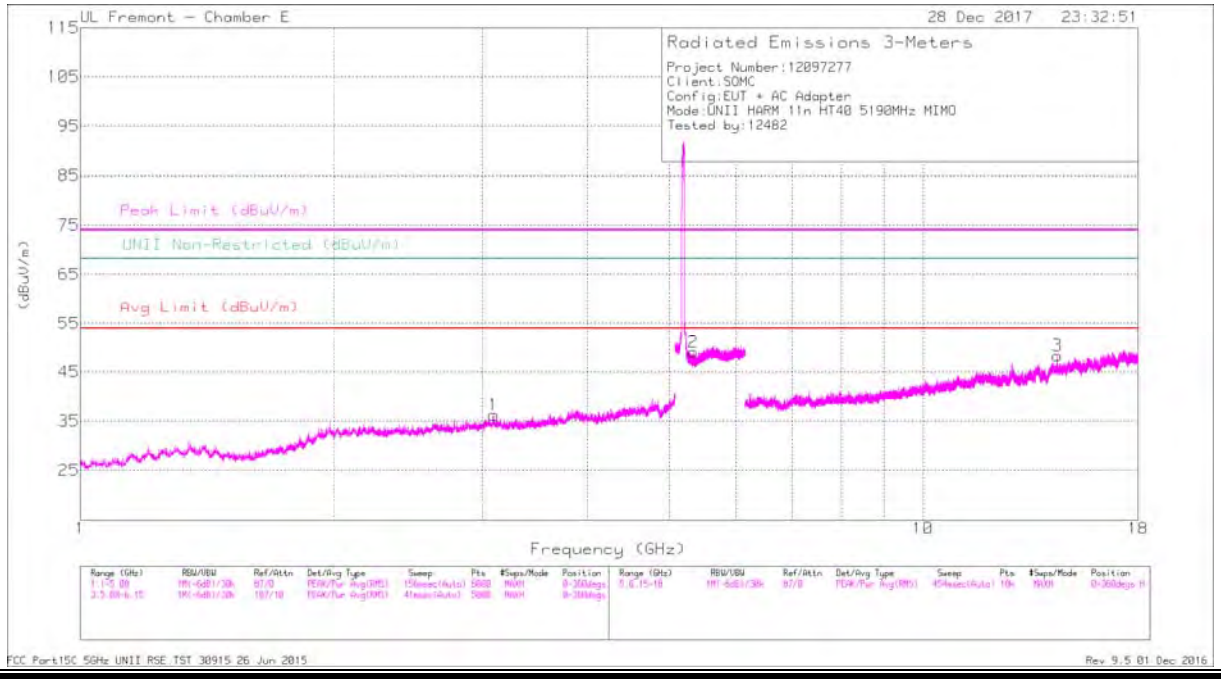
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	40.72	Pk	34.1	-18.1	0	56.72	-	-	74	-17.28	23	207	V
2	* 5.15	41.11	Pk	34.1	-18.1	0	57.11	-	-	74	-16.89	23	207	V
3	* 5.15	31.1	RMS	34.1	-18.1	.48	47.58	54	-6.42	-	-	23	207	V
4	* 5.15	31.6	RMS	34.1	-18.1	.48	48.08	54	-5.92	-	-	23	207	V

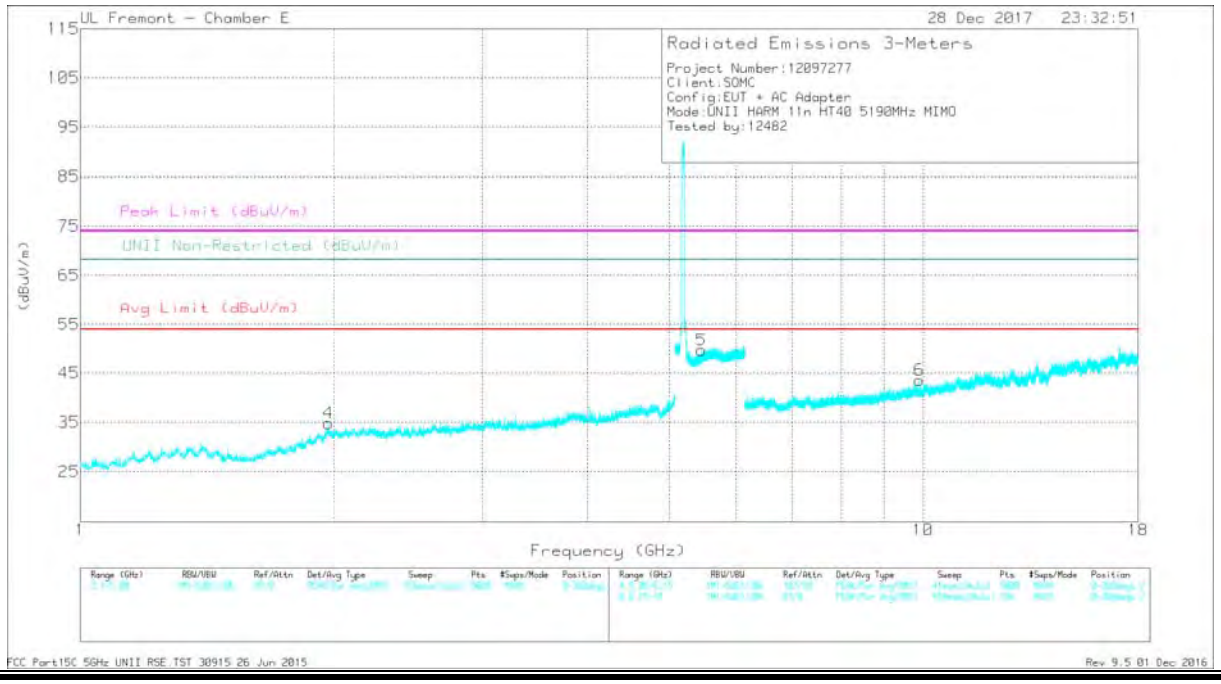
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Radiated Emissions

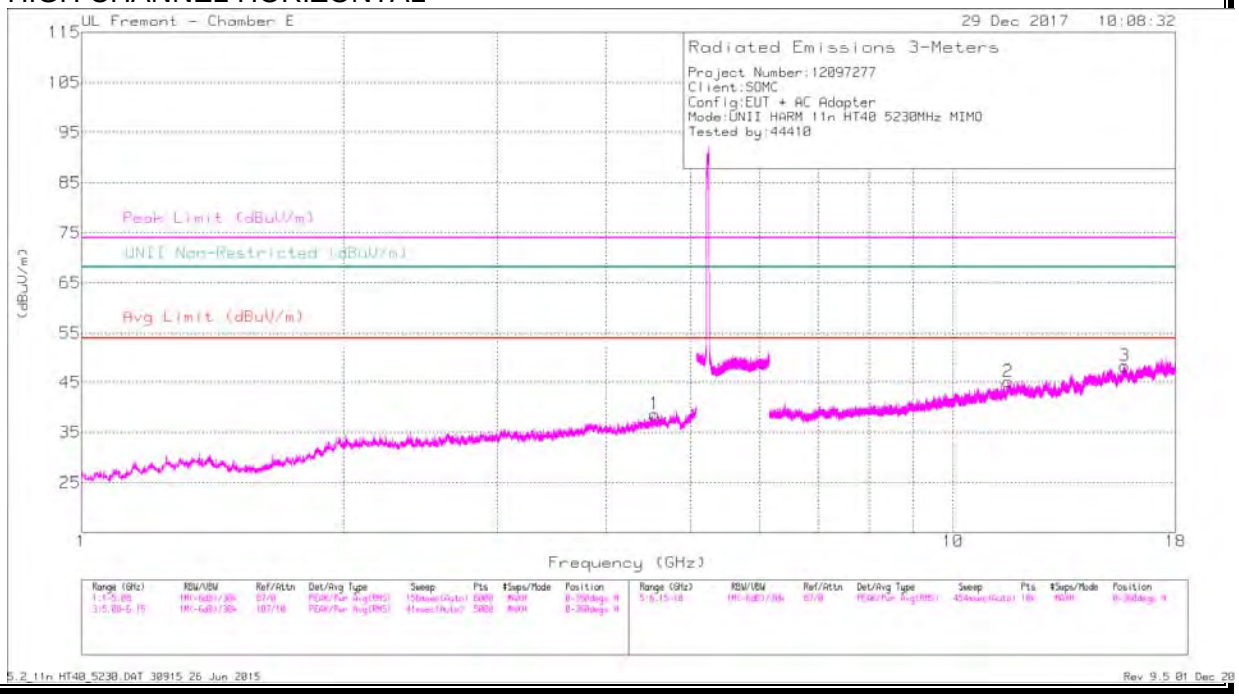
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	1.969	41.59	PK-U	31.7	-32.4	0	40.89	-	-	-	-	68.2	-27.31	72	243	V
1	3.095	39.17	PK-U	33.1	-30.5	0	41.77	-	-	-	-	68.2	-26.43	82	295	H
2	5.337	38.44	PK-U	35	-18.9	0	54.54	-	-	-	-	68.2	-13.66	225	163	H
5	5.464	39.36	PK-U	35.1	-18.9	0	55.56	-	-	-	-	68.2	-12.64	357	316	V
6	9.904	35	PK-U	37.7	-24.5	0	48.2	-	-	-	-	68.2	-20	203	133	V
3	14.449	35.41	PK-U	40.6	-23.6	0	52.41	-	-	-	-	68.2	-15.79	289	330	H

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

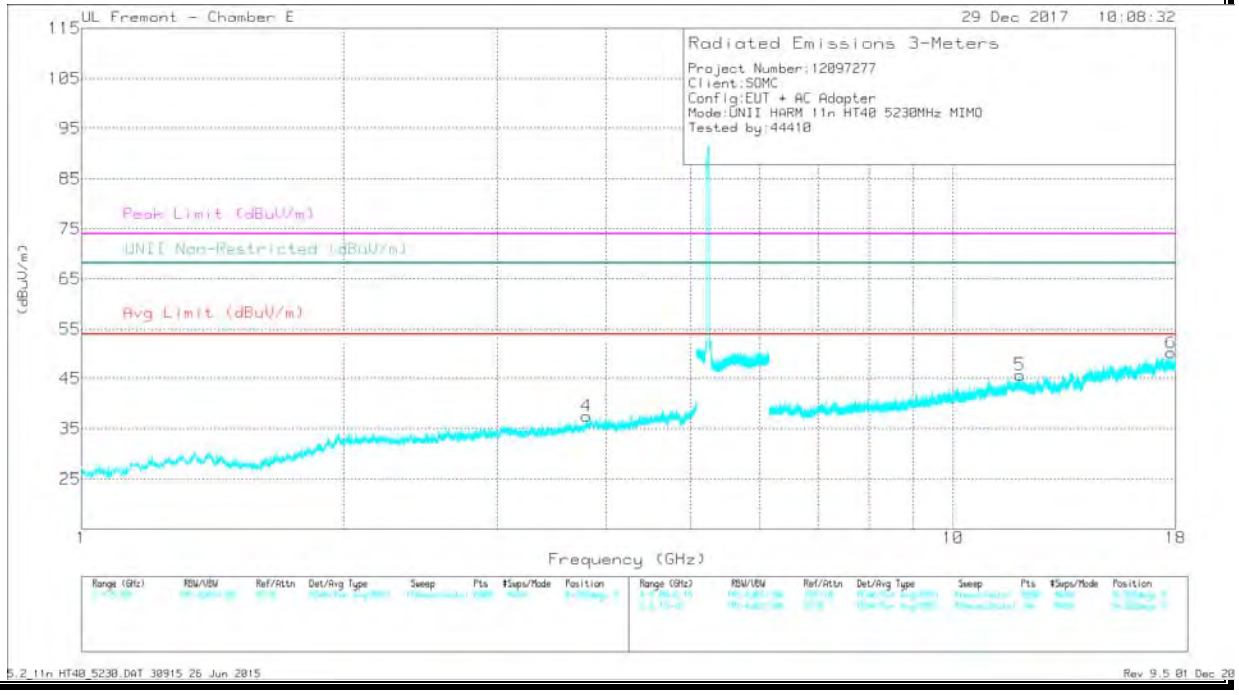
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



Radiated Emissions

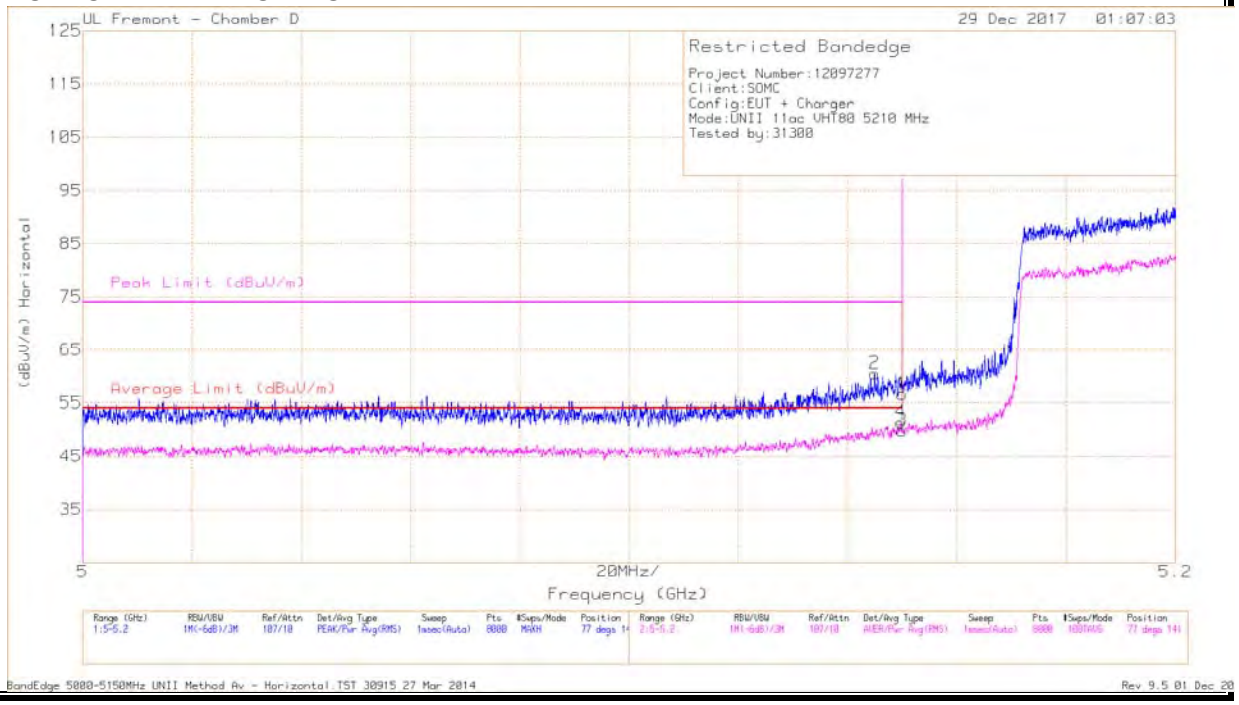
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.548	38.42	PK-U	34.5	-28.8	0	44.12	-	-	74	-29.88	-	-	273	366	H
	* 4.549	27.36	ADR	34.5	-28.8	.48	33.54	54	-20.46	-	-	-	-	273	366	H
4	* 3.795	39.49	PK-U	33.6	-30	0	43.09	-	-	74	-30.91	-	-	171	282	V
	* 3.794	28.03	ADR	33.6	-30	.48	32.11	54	-21.89	-	-	-	-	171	282	V
2	* 11.57	34.29	PK-U	38.7	-22	0	50.99	-	-	74	-23.01	-	-	188	153	H
	* 11.568	22.24	ADR	38.7	-22.1	.48	39.32	54	-14.68	-	-	-	-	188	153	H
3	* 15.724	34.74	PK-U	41.7	-22	0	54.44	-	-	74	-19.56	-	-	13	158	H
	* 15.723	22.94	ADR	41.7	-21.9	.48	43.22	54	-10.78	-	-	-	-	13	158	H
5	* 11.939	34.8	PK-U	39.5	-23.9	0	50.4	-	-	74	-23.6	-	-	103	108	V
	* 11.939	23.46	ADR	39.5	-23.9	.48	39.54	54	-14.46	-	-	-	-	103	108	V
6	* 17.788	33.92	PK-U	41.4	-20.7	0	54.62	-	-	74	-19.38	-	-	356	371	V
	* 17.785	22.54	ADR	41.4	-20.7	.48	43.72	54	-10.28	-	-	-	-	356	371	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

10.1.4. 11ac HT80 2TX CDD MIMO MODE IN THE 5.2GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL

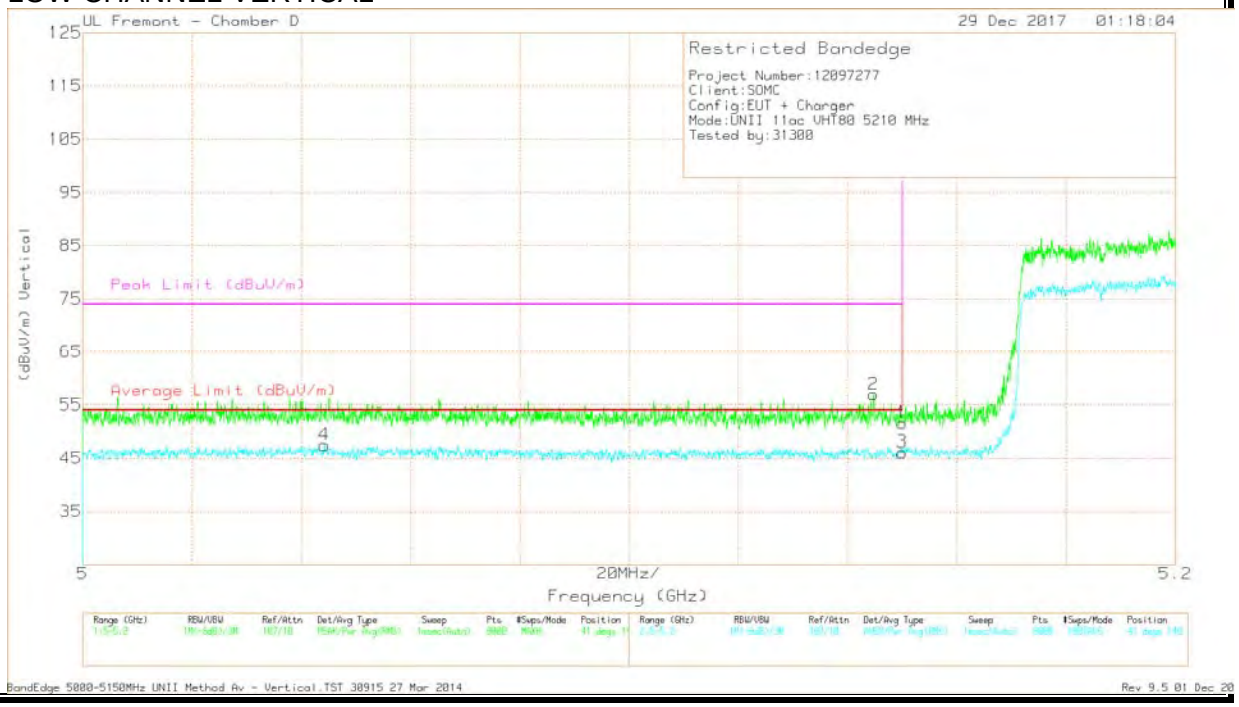


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.145	44.51	Pk	34.1	-18.1	0	60.51	-	-	74	-13.49	77	141	H
1	* 5.15	40.63	Pk	34.1	-18.1	0	56.63	-	-	74	-17.37	77	141	H
3	* 5.15	33.06	RMS	34.1	-18.1	.73	49.79	54	-4.21	-	-	77	141	H
4	* 5.15	34.63	RMS	34.1	-18.1	.73	51.36	54	-2.64	-	-	77	141	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

LOW CHANNEL VERTICAL



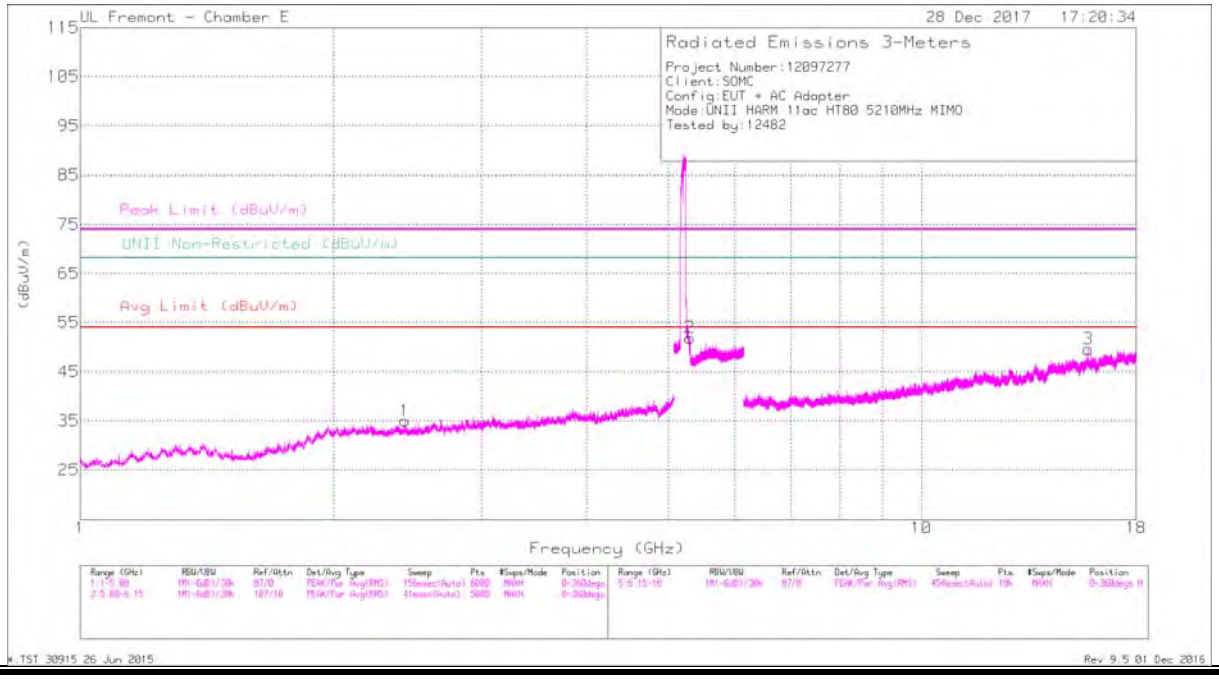
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 5.044	30.3	RMS	34.1	-17.7	.73	47.43	54	-6.57	-	-	41	140	V
2	* 5.145	40.9	Pk	34.1	-18.1	0	56.9	-	-	74	-17.1	41	140	V
1	* 5.15	35.59	Pk	34.1	-18.1	0	51.59	-	-	74	-22.41	41	140	V
3	* 5.15	29.36	RMS	34.1	-18.1	.73	46.09	54	-7.91	-	-	41	140	V

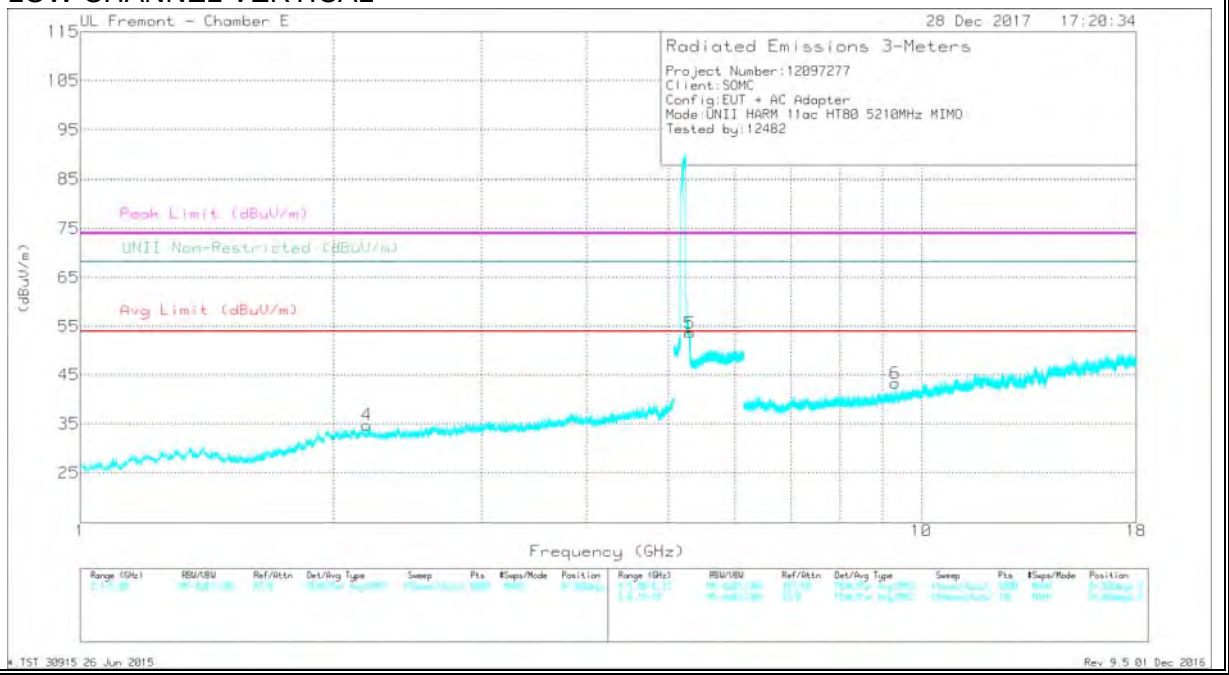
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Radiated Emissions

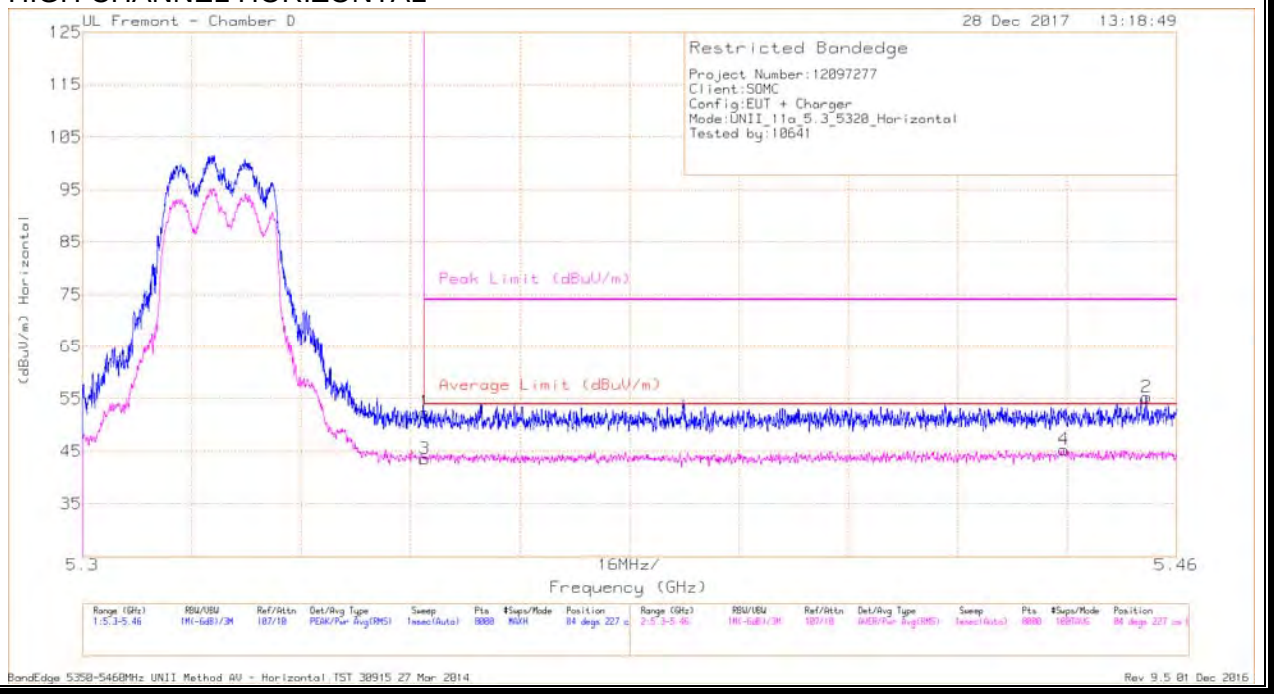
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 15.781	35.01	PK-U	41.7	-22.8	0	53.91	-	-	74	-20.09	-	-	299	311	H
	* 15.78	23.68	ADR	41.7	-22.9	.73	43.21	54	-10.79	-	-	-	-	299	311	H
6	* 9.309	35.4	PK-U	37.2	-25.4	0	47.2	-	-	74	-26.8	-	-	229	364	V
	* 9.309	23.99	ADR	37.2	-25.4	.73	36.52	54	-17.48	-	-	-	-	229	364	V
4	2.193	40.8	PK-U	32.1	-32.3	0	40.6	-	-	-	-	68.2	-27.6	133	129	V
1	2.433	40.49	PK-U	32	-32.1	0	40.39	-	-	-	-	68.2	-27.81	202	259	H
2	5.307	41.91	PK-U	35	-18.9	0	58.01	-	-	-	-	68.2	-10.19	56	215	H
5	5.307	43.92	PK-U	35	-18.9	0	60.02	-	-	-	-	68.2	-8.18	166	101	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

10.1.5. 11a 2TX CDD MIMO MODE IN THE 5.3GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL

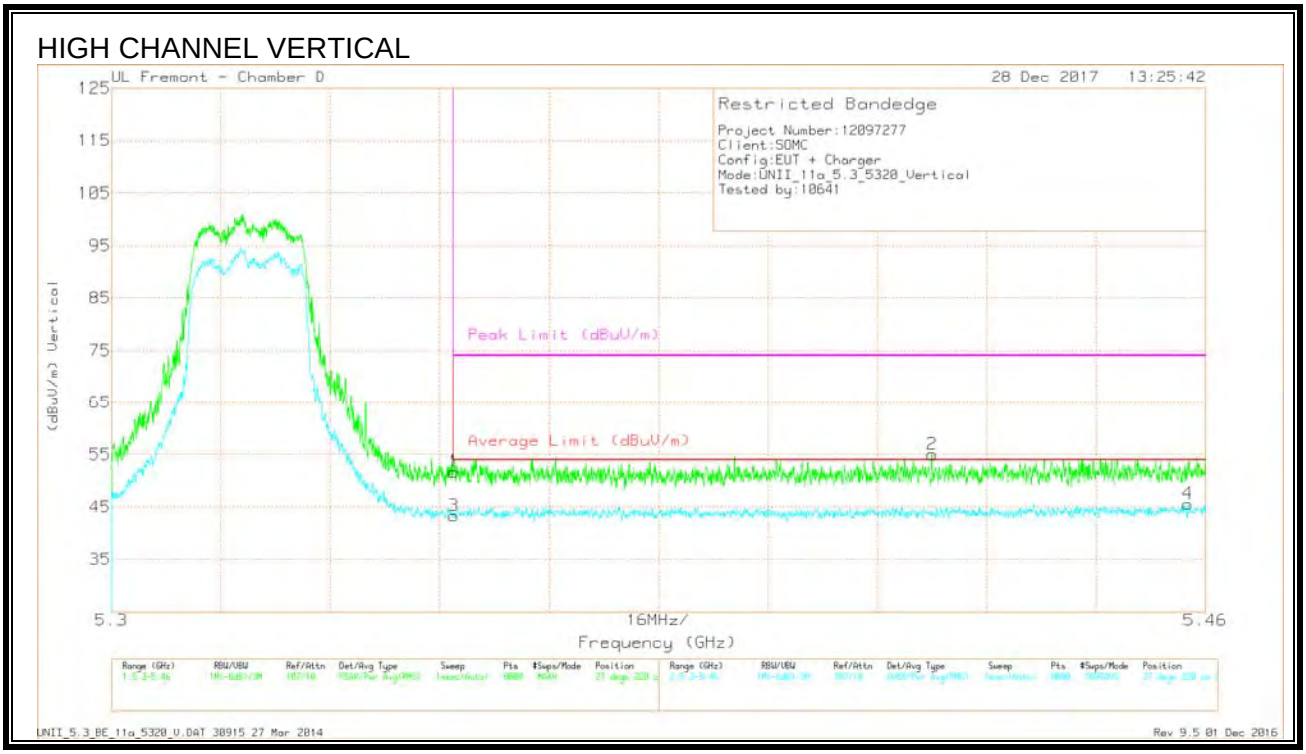


Trace Markers

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
1	* 5.35	36.11	Pk	34.3	-18	52.41	-	-	74	-21.59	84	227	H
3	* 5.35	27.34	RMS	34.3	-18	43.64	54	-10.36	-	-	84	227	H
4	* 5.443	28.69	RMS	34.4	-17.8	45.29	54	-8.71	-	-	84	227	H
2	* 5.456	38.57	Pk	34.4	-17.7	55.27	-	-	74	-18.73	84	227	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HIGH CHANNEL VERTICAL



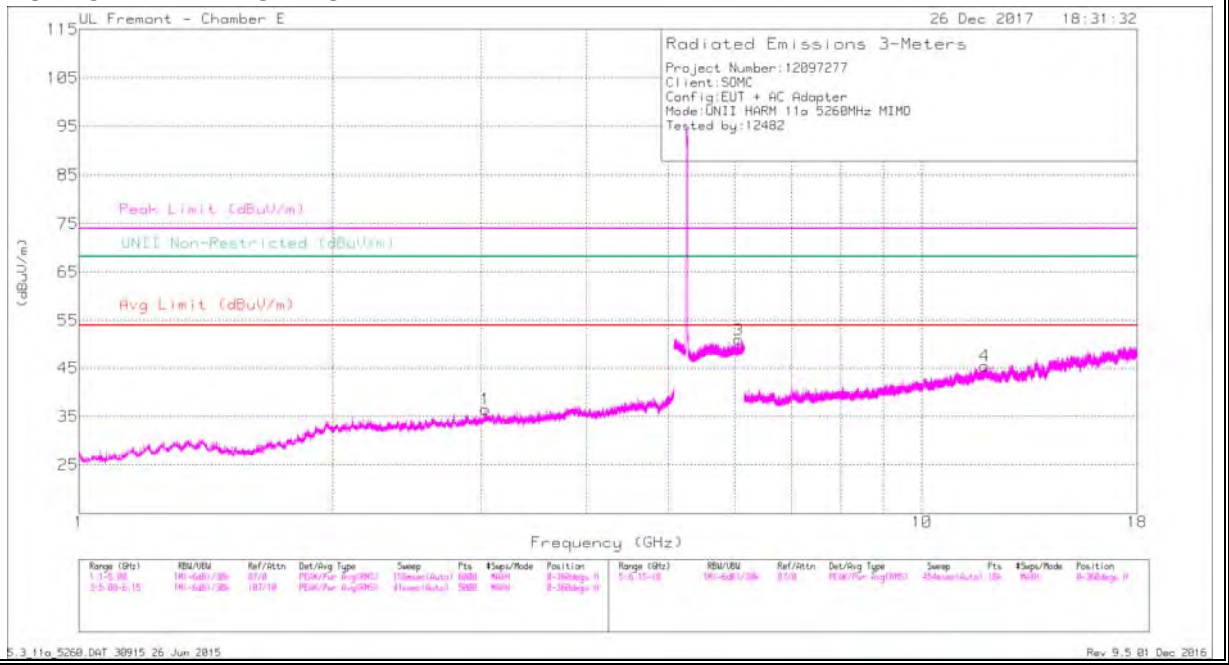
Trace Markers

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
1	* 5.35	35.35	Pk	34.3	-18	51.65	-	-	74	-22.35	27	220	V
3	* 5.35	27.03	RMS	34.3	-18	43.33	54	-10.67	-	-	27	220	V
2	* 5.42	38.56	Pk	34.3	-17.9	54.96	-	-	74	-19.04	27	220	V
4	* 5.457	28.87	RMS	34.4	-17.7	45.57	54	-8.43	-	-	27	220	V

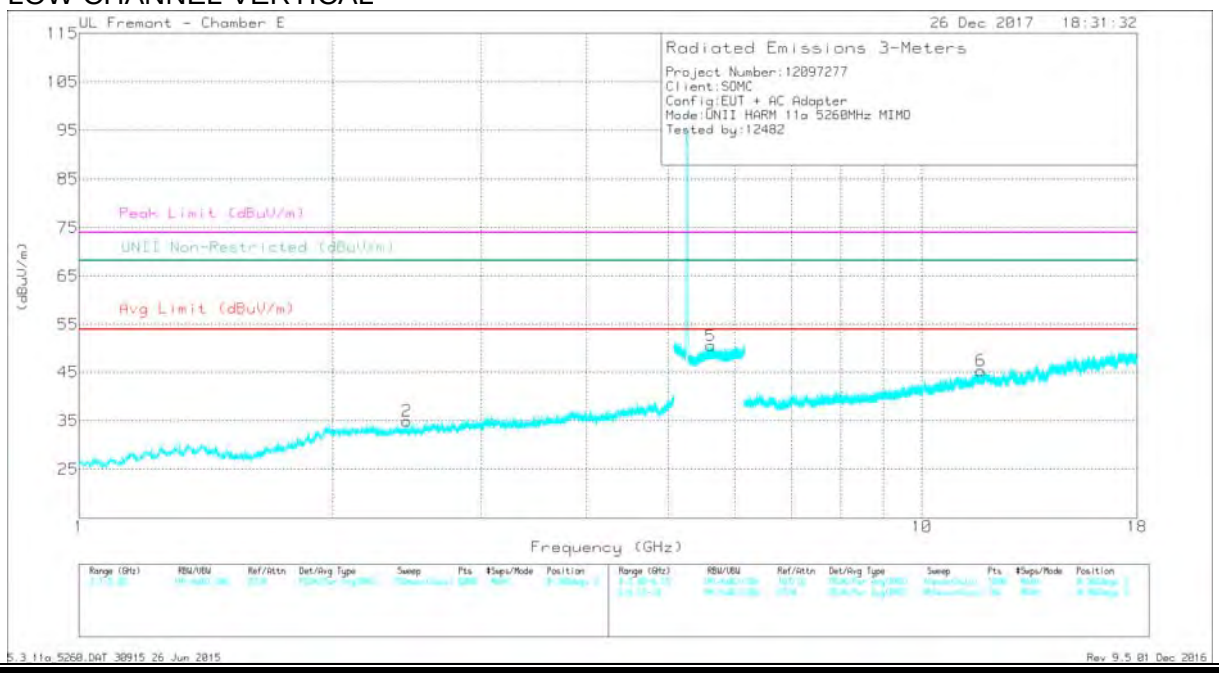
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL

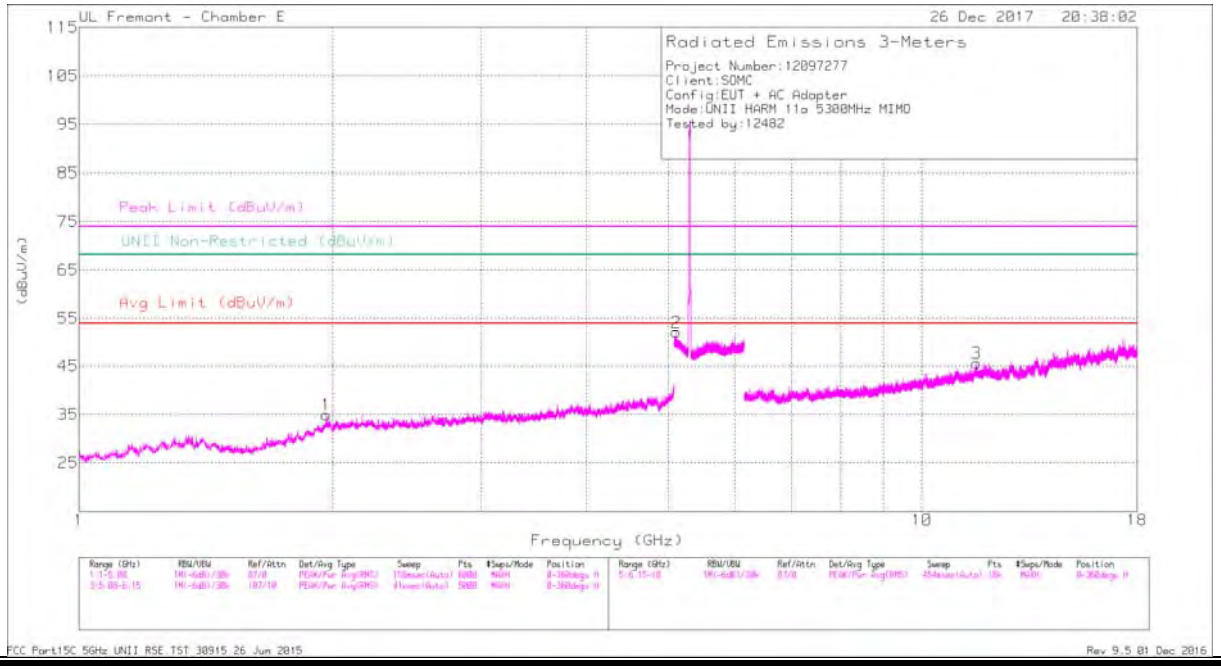


Radiated Emissions

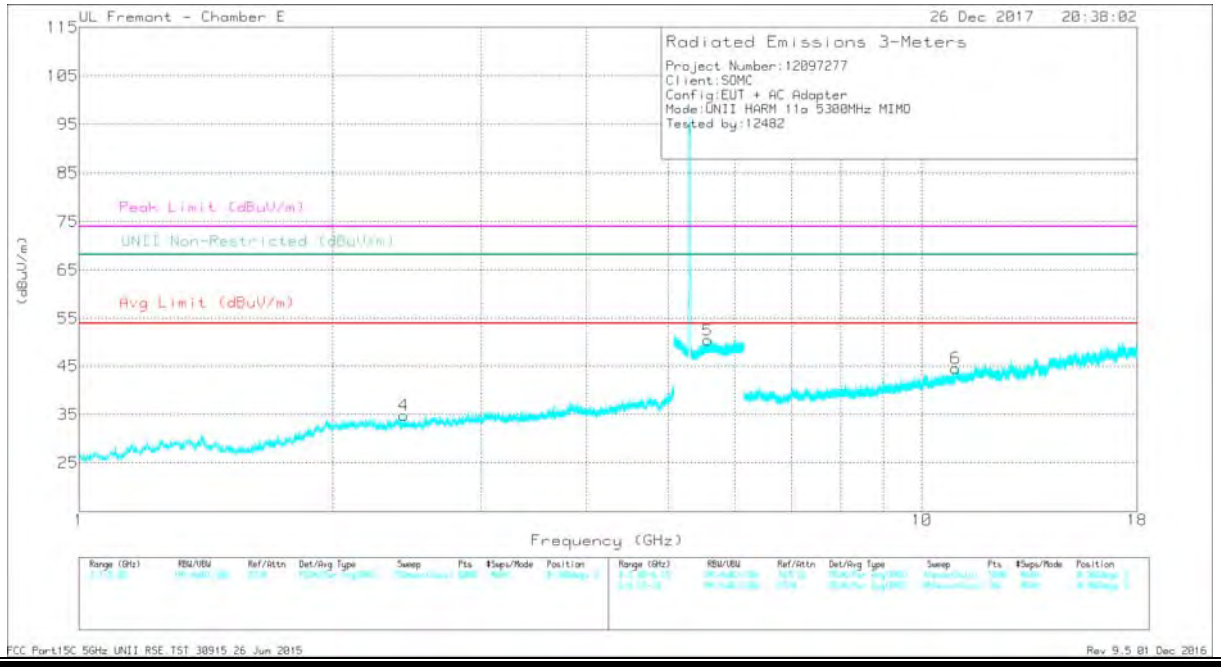
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 11.868	34.55	PK-U	39.4	-22.8	0	51.15	-	-	74	-22.85	-	-	74	231	H
	* 11.865	22.65	ADR	39.4	-22.8	0	39.25	54	-14.75	-	-	-	-	74	231	H
6	* 11.753	34.82	PK-U	39.3	-23.5	0	50.62	-	-	74	-23.38	-	-	74	231	V
	* 11.751	23.81	ADR	39.3	-23.5	0	39.61	54	-14.39	-	-	-	-	74	231	V
2	2.45	40.4	PK-U	32	-32.3	0	40.1	-	-	-	-	68.2	-28.1	114	391	V
1	3.035	39.33	PK-U	33	-30.4	0	41.93	-	-	-	-	68.2	-26.27	187	306	H
5	5.614	40.27	PK-U	35	-19.1	0	56.17	-	-	-	-	68.2	-12.03	127	163	V
3	6.061	40.07	PK-U	35.5	-18.4	0	57.17	-	-	-	-	68.2	-11.03	119	185	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL

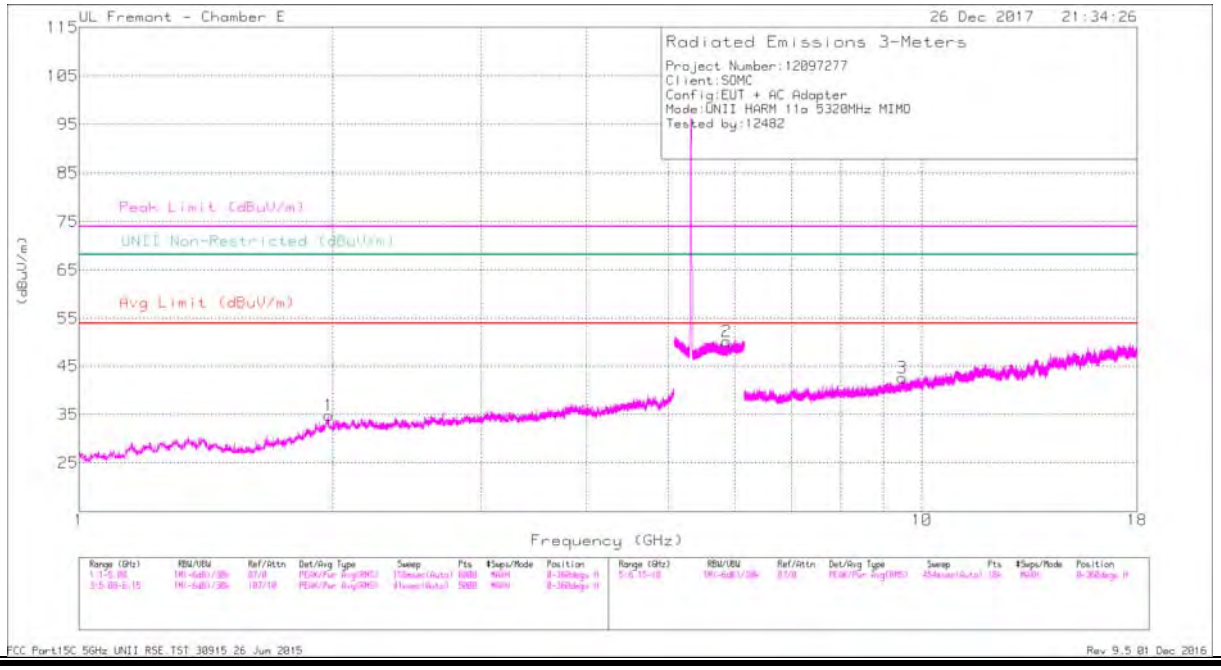


Radiated Emissions

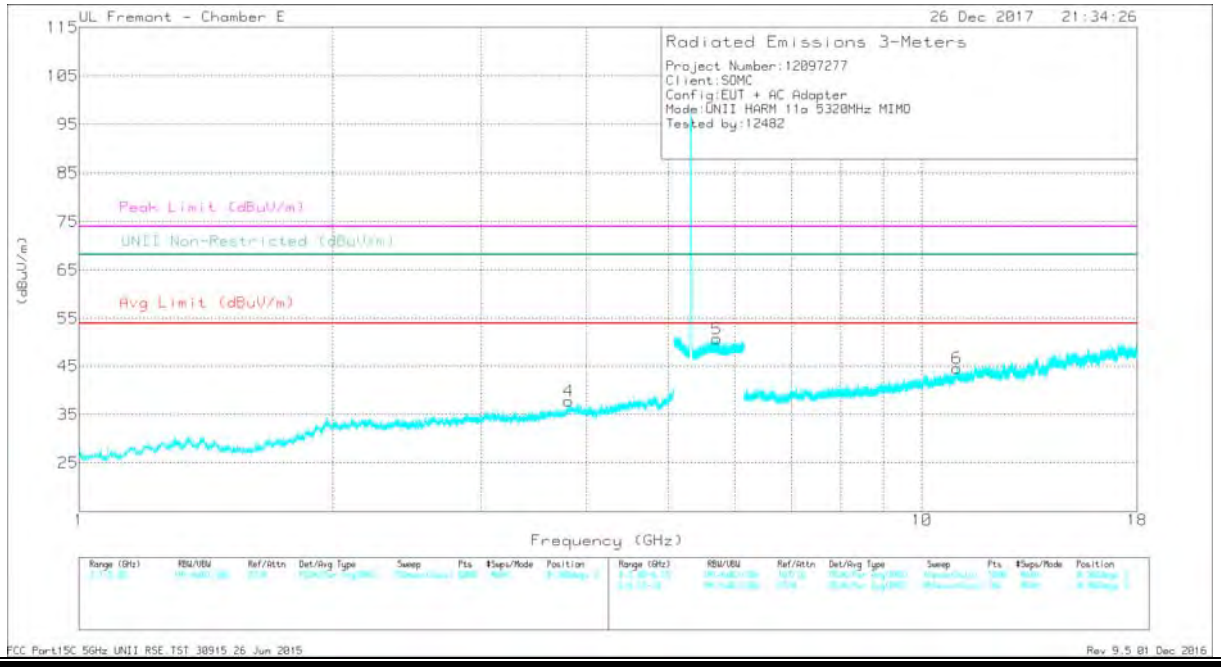
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.11	40.86	PK-U	34.7	-18.3	0	57.26	-	-	74	-16.74	-	-	229	267	H
	* 5.106	28.92	ADR	34.7	-18.3	0	45.32	54	-8.68	-	-	-	-	229	267	H
3	* 11.608	33.85	PK-U	38.8	-22.1	0	50.55	-	-	74	-23.45	-	-	118	283	H
	* 11.61	22.41	ADR	38.8	-22.2	0	39.01	54	-14.99	-	-	-	-	118	283	H
6	* 10.966	34.54	PK-U	38.4	-22.6	0	50.34	-	-	74	-23.66	-	-	318	294	V
	* 10.968	22.47	ADR	38.4	-22.6	0	38.27	54	-15.73	-	-	-	-	318	294	V
1	1.964	41.35	PK-U	31.6	-32.4	0	40.55	-	-	-	-	68.2	-27.65	65	242	H
4	2.429	40.16	PK-U	32	-32	0	40.16	-	-	-	-	68.2	-28.04	133	148	V
5	5.573	40.07	PK-U	35	-19.1	0	55.97	-	-	-	-	68.2	-12.23	285	289	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 HORIZONTAL



HIGH CHANNEL VERTICAL



Radiated Emissions

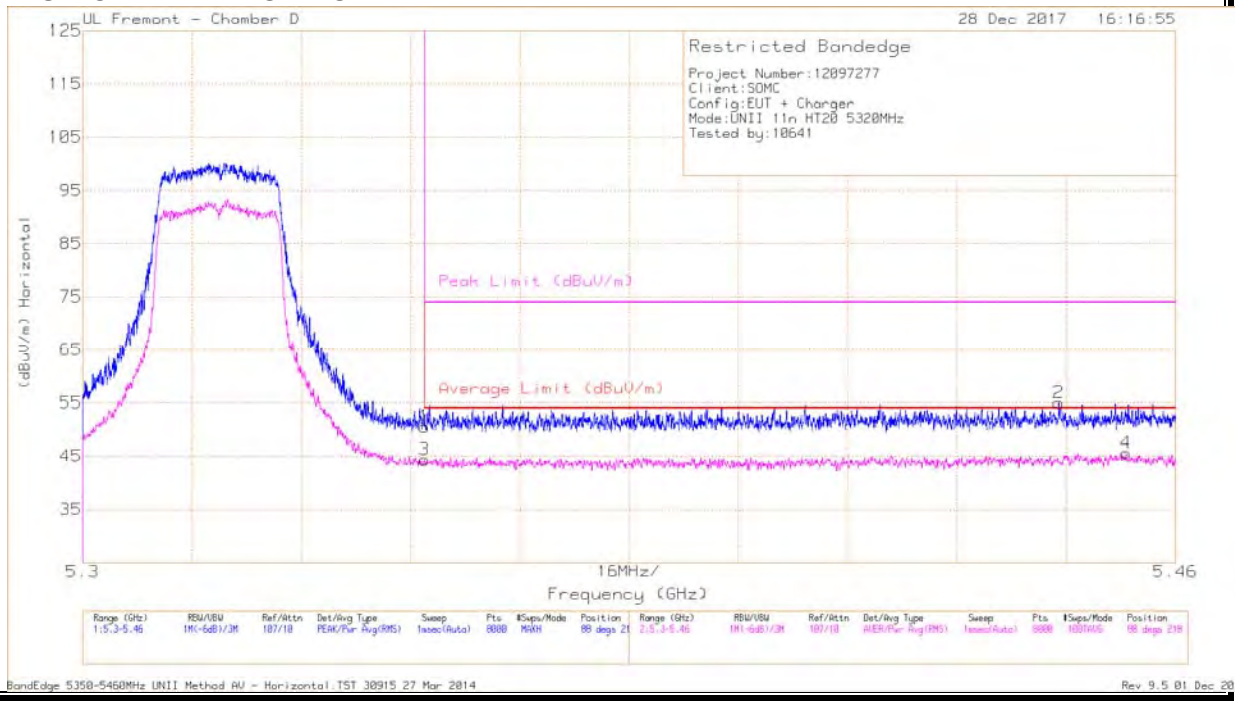
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 3.808	39.77	PK-U	33.7	-29.6	0	43.87	-	-	74	-30.13	-	-	319	243	V
	* 3.808	27.67	ADR	33.7	-29.6	0	31.77	54	-22.23	-	-	-	-	319	243	V
3	* 9.472	35.7	PK-U	37.2	-24.4	0	48.5	-	-	74	-25.5	-	-	133	344	H
	* 9.472	23.59	ADR	37.2	-24.4	0	36.39	54	-17.61	-	-	-	-	133	344	H
6	* 11.01	34.29	PK-U	38.5	-22.4	0	50.39	-	-	74	-23.61	-	-	321	376	V
	* 11.013	22.74	ADR	38.5	-22.6	0	38.64	54	-15.36	-	-	-	-	321	376	V
1	1.976	41.42	PK-U	31.8	-32.5	0	40.72	-	-	-	-	68.2	-27.48	128	288	H
5	5.709	39.88	PK-U	35.1	-19.1	0	55.88	-	-	-	-	68.2	-12.32	197	119	V
2	5.865	39.26	PK-U	35.2	-19	0	55.46	-	-	-	-	68.2	-12.74	162	280	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

10.1.6. 11n HT20 2TX CDD MIMO MODE IN THE 5.3GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL

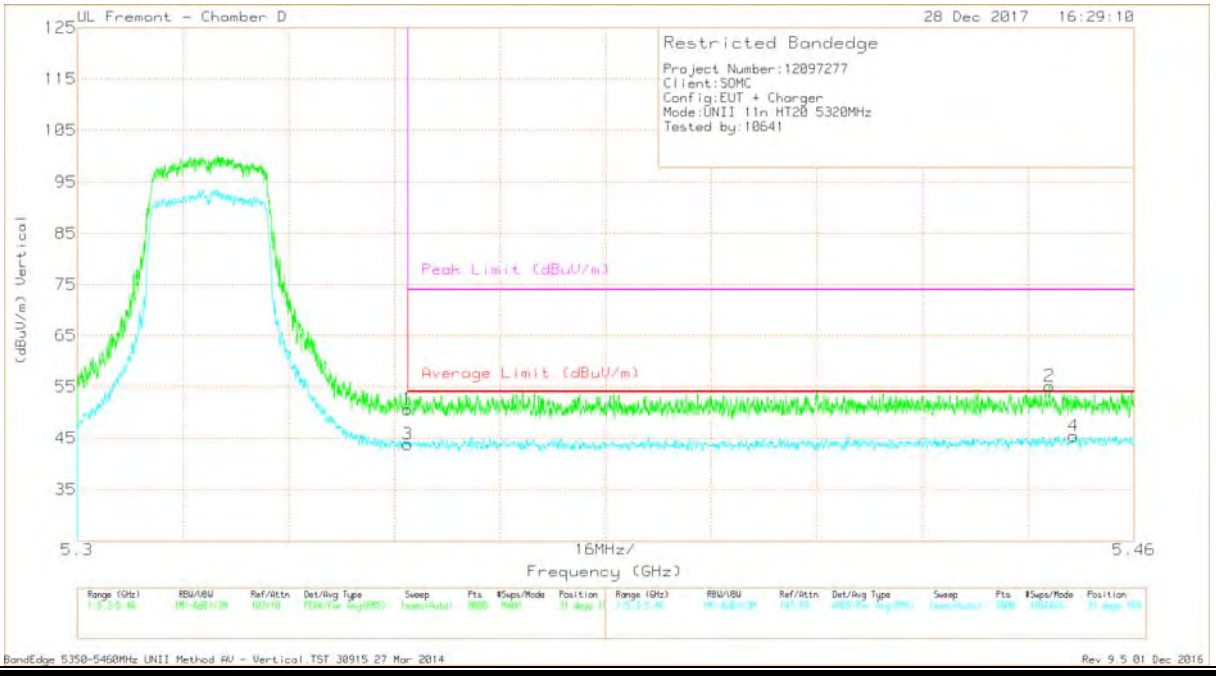


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	34.19	Pk	34.3	-18	0	50.49	-	-	74	-23.51	88	218	H
3	* 5.35	27.89	RMS	34.3	-18	.14	44.33	54	-9.67	-	-	88	218	H
2	* 5.443	38.36	Pk	34.4	-17.8	0	54.96	-	-	74	-19.04	88	218	H
4	* 5.453	28.71	RMS	34.4	-17.7	.14	45.55	54	-8.45	-	-	88	218	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HIGH CHANNEL VERTICAL



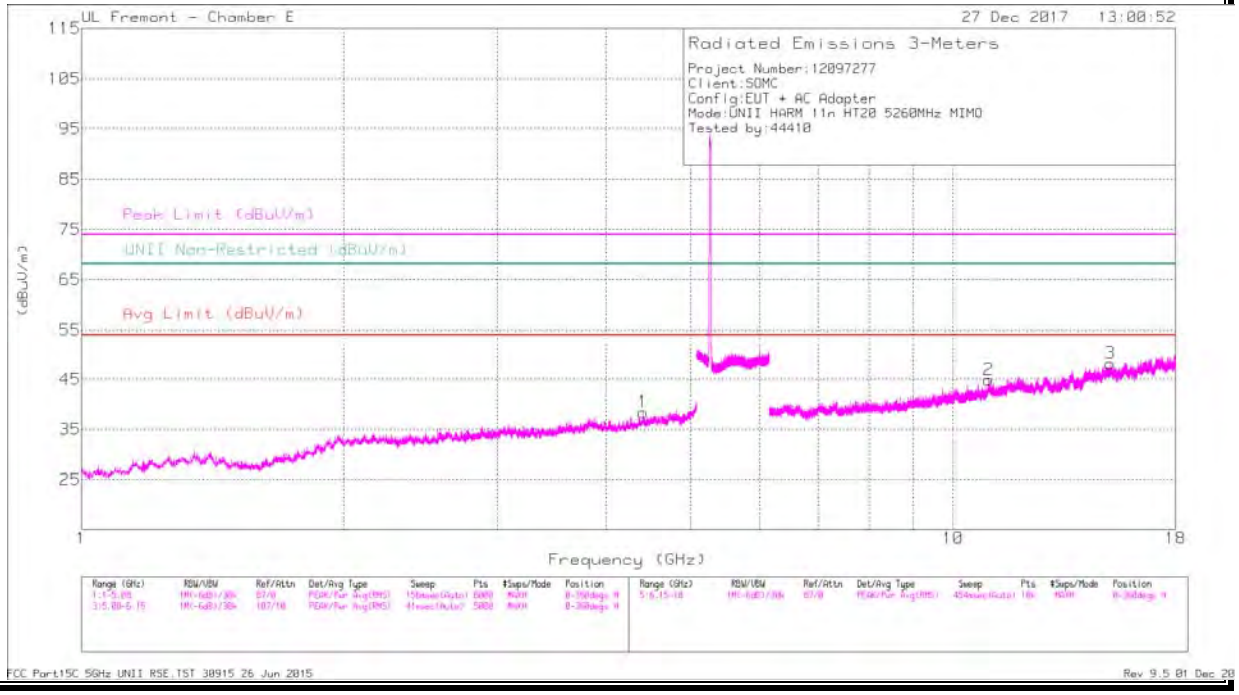
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	34.31	Pk	34.3	-18	0	50.61	-	-	74	-23.39	31	189	V
2	* 5.447	38.53	Pk	34.4	-17.8	0	55.13	-	-	74	-18.87	31	189	V
3	* 5.35	27.37	RMS	34.3	-18	.14	43.81	54	-10.19	-	-	31	189	V
4	* 5.451	28.56	RMS	34.4	-17.7	.14	45.4	54	-8.6	-	-	31	189	V

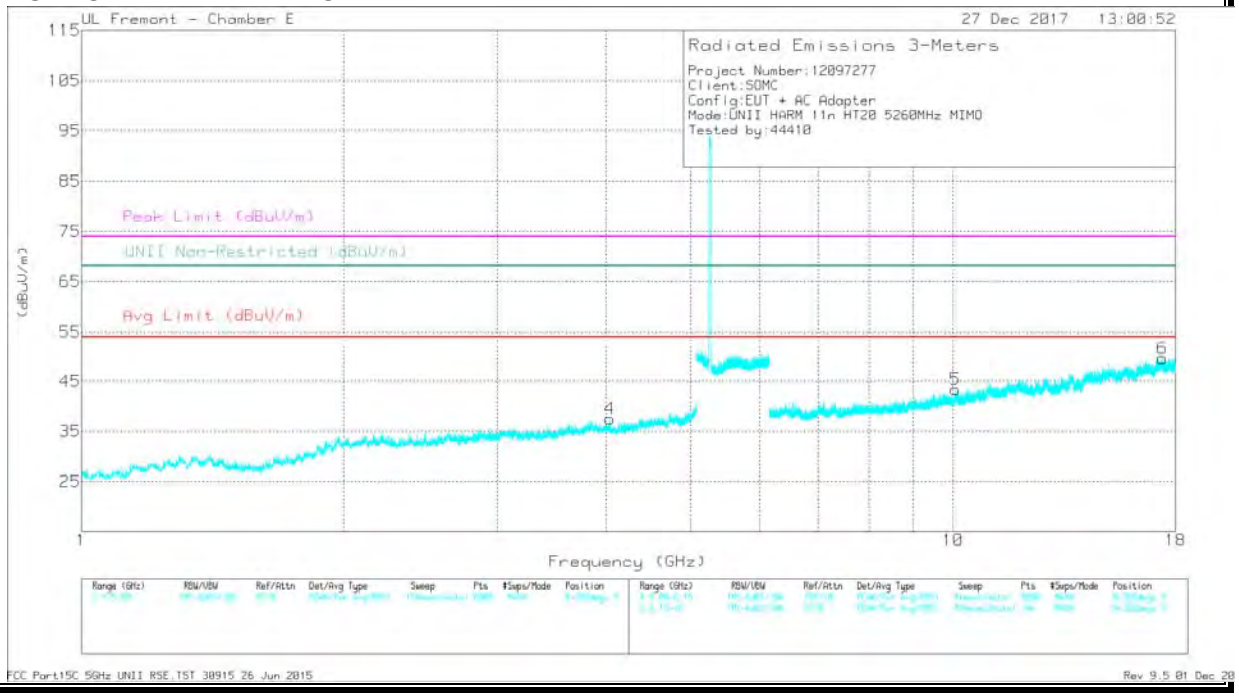
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL

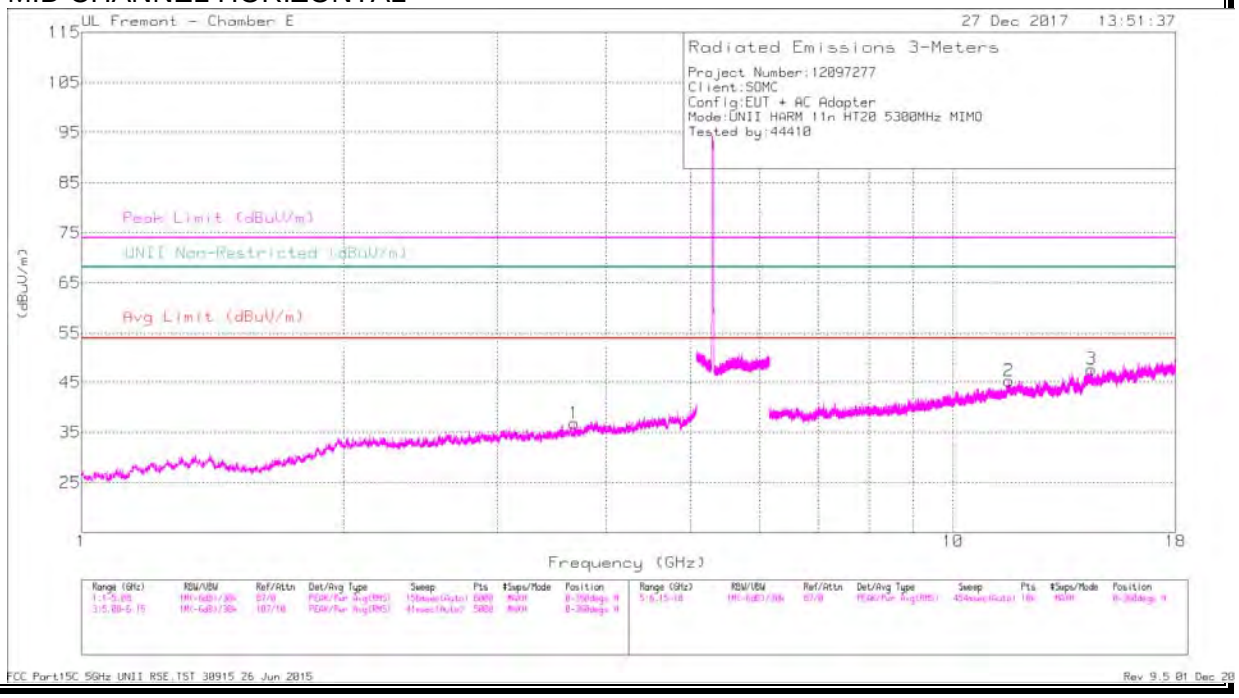


Radiated Emissions

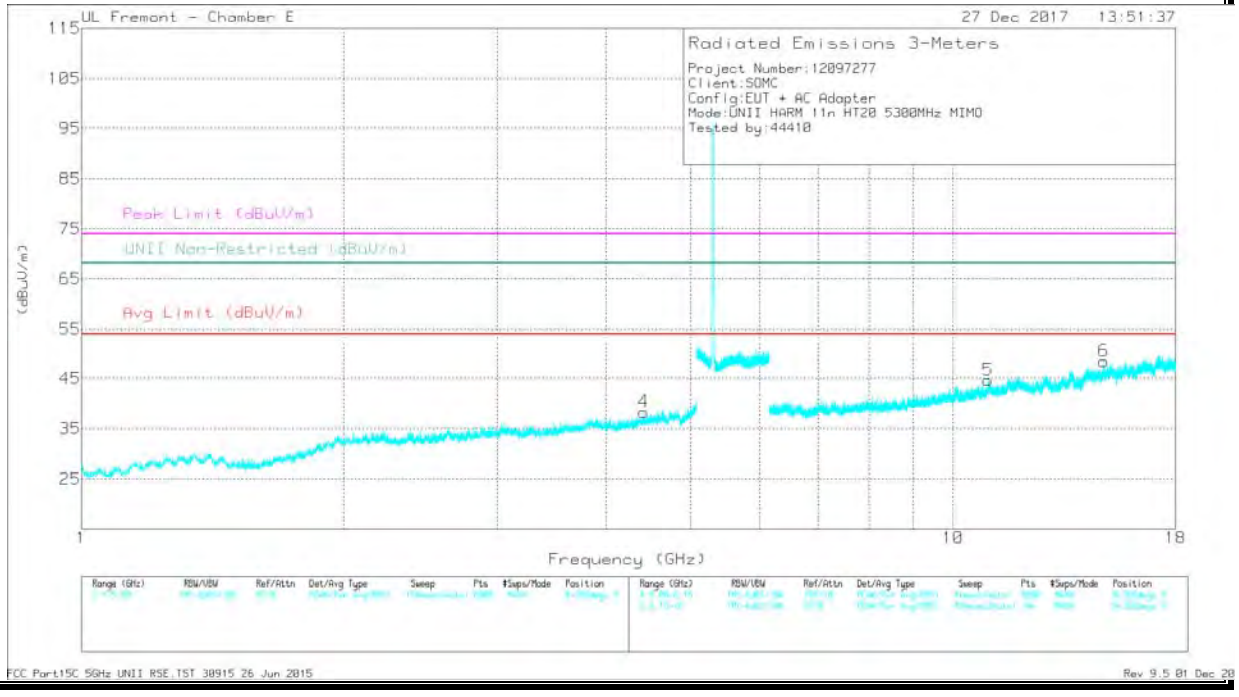
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 4.037	38.47	PK-U	33.6	-29.2	0	42.87	-	-	74	-31.13	-	-	345	278	V
	* 4.041	27.14	ADR	33.6	-29.2	.14	31.68	54	-22.32	-	-	-	-	345	278	V
2	* 10.986	33.45	PK-U	38.4	-22.3	0	49.55	-	-	74	-24.45	-	-	329	280	H
	* 10.987	22.4	ADR	38.4	-22.3	.14	38.64	54	-15.36	-	-	-	-	329	280	H
1	4.41	39.12	PK-U	34.1	-29.1	0	44.12	-	-	-	-	68.2	-24.08	0	109	H
5	10.061	34.57	PK-U	37.6	-22.7	0	49.47	-	-	-	-	68.2	-18.73	282	348	V
3	15.145	34.53	PK-U	41.3	-22.6	0	53.23	-	-	-	-	68.2	-14.97	25	212	H
6	17.382	34.14	PK-U	41.6	-20.5	0	55.24	-	-	-	-	68.2	-12.96	176	233	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 HORIZONTAL



MID CHANNEL VERTICAL

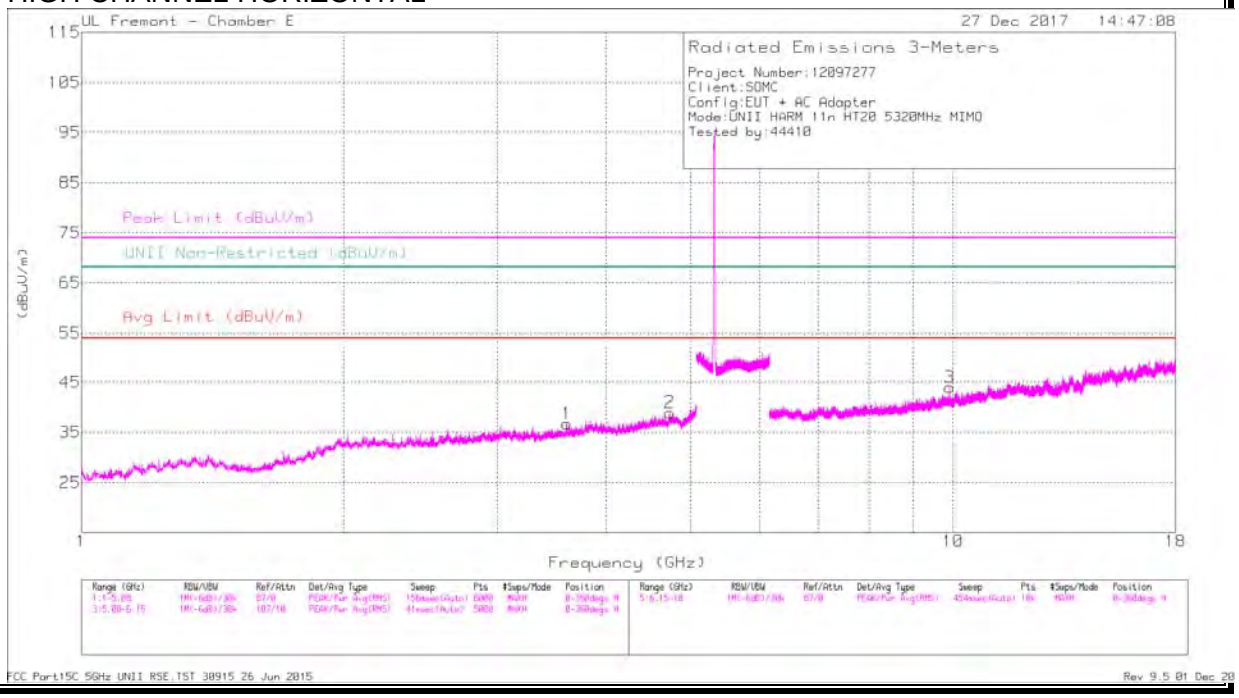


Radiated Emissions

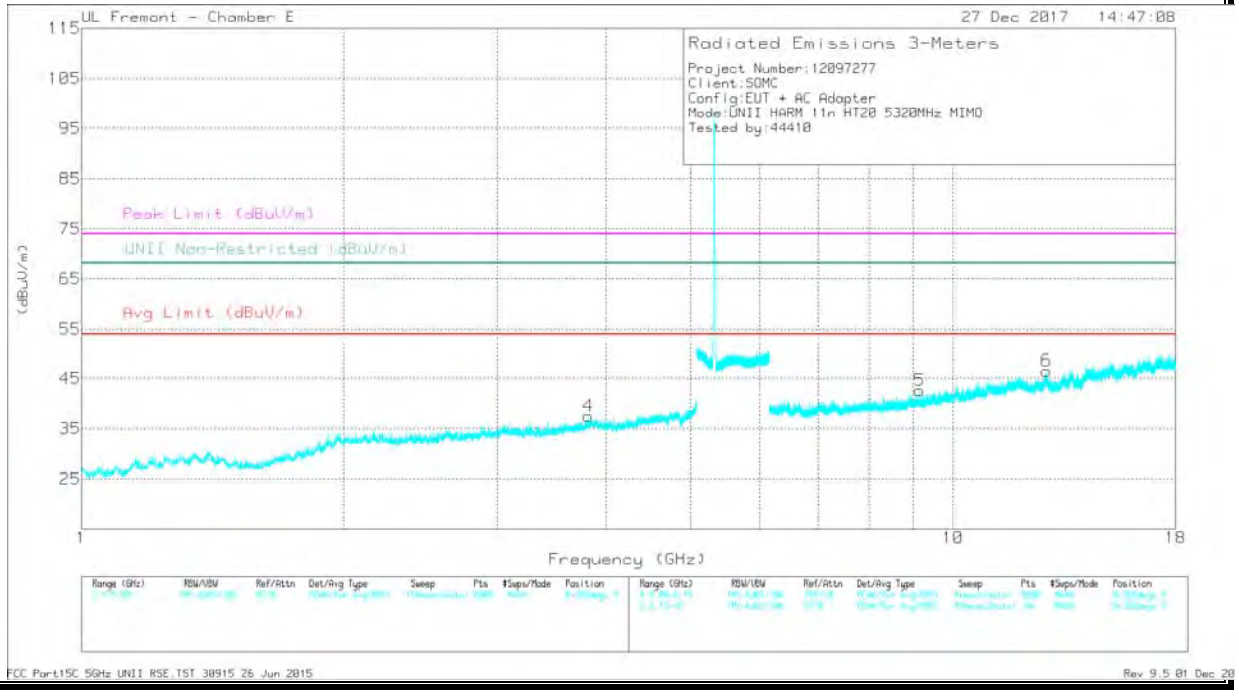
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.676	38.96	PK-U	33.5	-30.2	0	42.26	-	-	74	-31.74	-	-	274	244	H
	* 3.676	27.41	ADR	33.5	-30.2	.14	30.85	54	-23.15	-	-	-	-	274	244	H
2	* 11.589	34.23	PK-U	38.7	-21.9	0	51.03	-	-	74	-22.97	-	-	156	289	H
	* 11.587	22.39	ADR	38.7	-21.9	.14	39.33	54	-14.67	-	-	-	-	156	289	H
5	* 10.967	34.07	PK-U	38.4	-22.6	0	49.87	-	-	74	-24.13	-	-	47	384	V
	* 10.969	22.62	ADR	38.4	-22.5	.14	38.66	54	-15.34	-	-	-	-	47	384	V
4	4.416	38.93	PK-U	34.2	-29.2	0	43.93	-	-	-	-	68.2	-24.27	49	112	V
3	14.403	34.79	PK-U	40.9	-23.5	0	52.19	-	-	-	-	68.2	-16.01	305	274	H
6	14.884	35.04	PK-U	40.6	-22.4	0	53.24	-	-	-	-	68.2	-14.96	348	344	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 HORIZONTAL



HIGH CHANNEL VERTICAL



Radiated Emissions

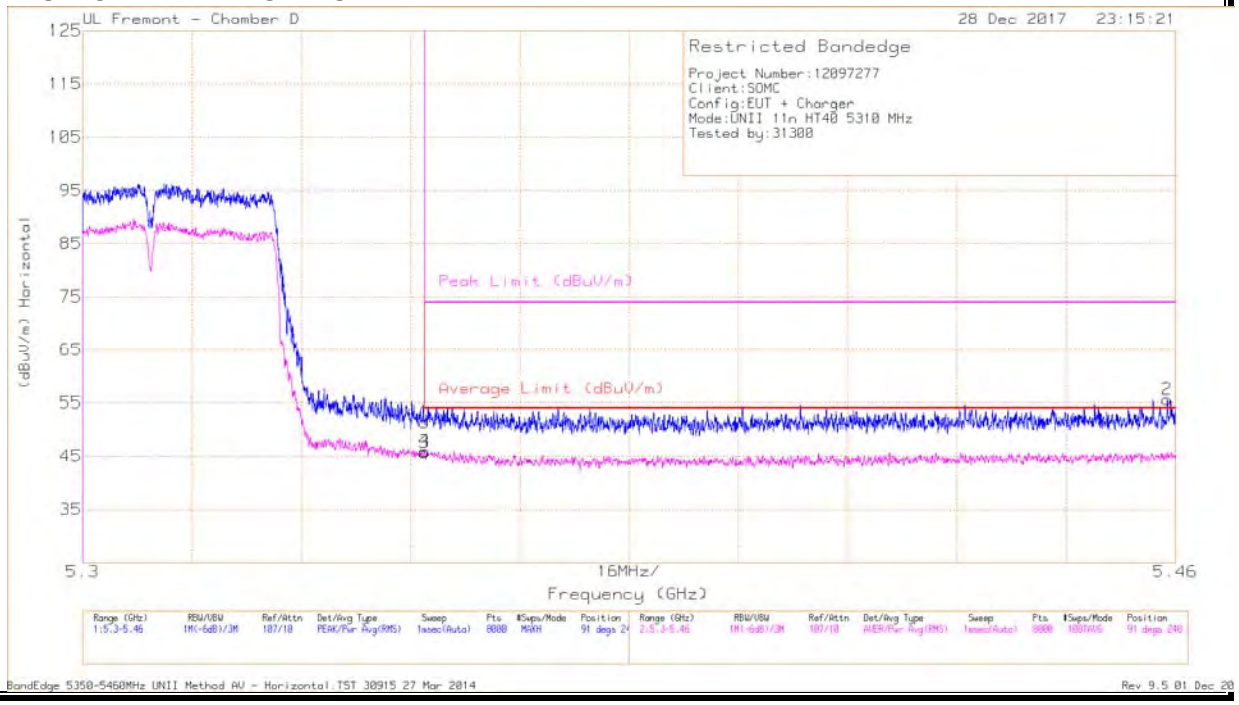
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.603	39.44	PK-U	33.3	-30.3	0	42.44	-	-	74	-31.56	-	-	192	386	H
	* 3.606	27.52	ADR	33.3	-30.3	.14	30.66	54	-23.34	-	-	-	-	192	386	H
2	* 4.733	38.1	PK-U	34.4	-28.5	0	44	-	-	74	-30	-	-	280	234	H
	* 4.734	27.06	ADR	34.4	-28.5	.14	33.1	54	-20.9	-	-	-	-	280	234	H
4	* 3.817	39.1	PK-U	33.7	-29.4	0	43.4	-	-	74	-30.6	-	-	39	218	V
	* 3.819	27.48	ADR	33.7	-29.4	.14	31.92	54	-22.08	-	-	-	-	39	218	V
5	* 9.151	36.13	PK-U	37.1	-25.4	0	47.83	-	-	74	-26.17	-	-	282	389	V
	* 9.151	24.13	ADR	37.1	-25.4	.14	35.97	54	-18.03	-	-	-	-	282	389	V
3	9.904	34.96	PK-U	37.7	-24.5	0	48.16	-	-	-	-	68.2	-20.04	331	333	H
6	12.81	35.11	PK-U	39.9	-23.6	0	51.41	-	-	-	-	68.2	-16.79	348	350	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

10.1.7. 11n HT40 2TX CDD MIMO MODE IN THE 5.3GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL

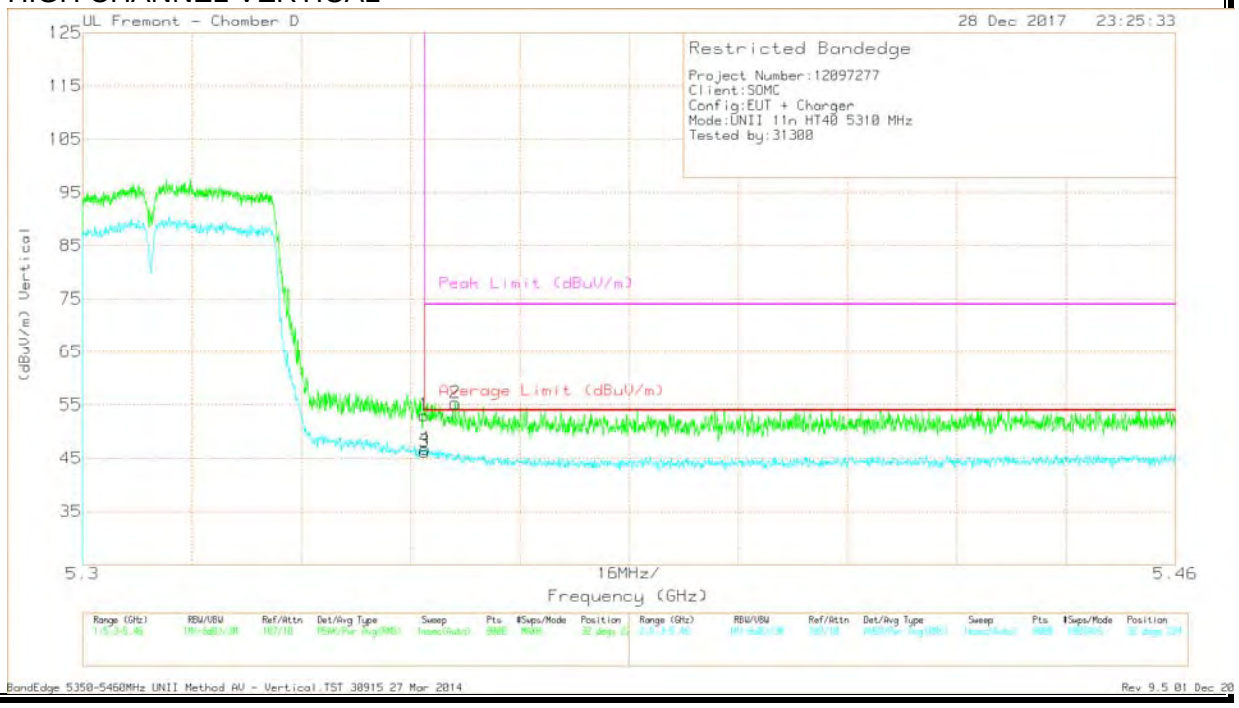


Trace Marker

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	34.99	Pk	34.3	-18	0	51.29	-	-	74	-22.71	91	240	H
3	* 5.35	28.92	RMS	34.3	-18	.48	45.7	54	-8.3	-	-	91	240	H
4	* 5.35	29.16	RMS	34.3	-18	.48	45.94	54	-8.06	-	-	91	240	H
2	* 5.459	38.89	Pk	34.4	-17.7	0	55.59	-	-	74	-18.41	91	240	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HIGH CHANNEL VERTICAL



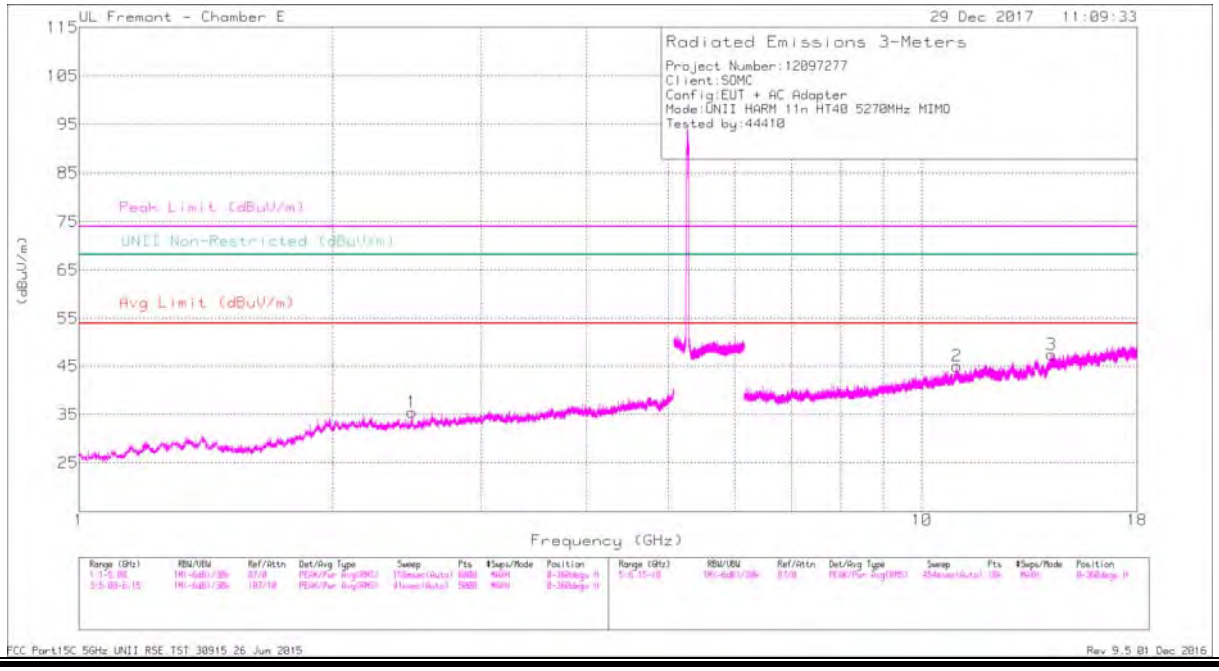
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	36.76	Pk	34.3	-18	0	53.06	-	-	74	-20.94	32	224	V
3	* 5.35	29.42	RMS	34.3	-18	.48	46.2	54	-7.8	-	-	32	224	V
4	* 5.35	29.96	RMS	34.3	-18	.48	46.74	54	-7.26	-	-	32	224	V
2	* 5.355	39.09	Pk	34.3	-18.1	0	55.29	-	-	74	-18.71	32	224	V

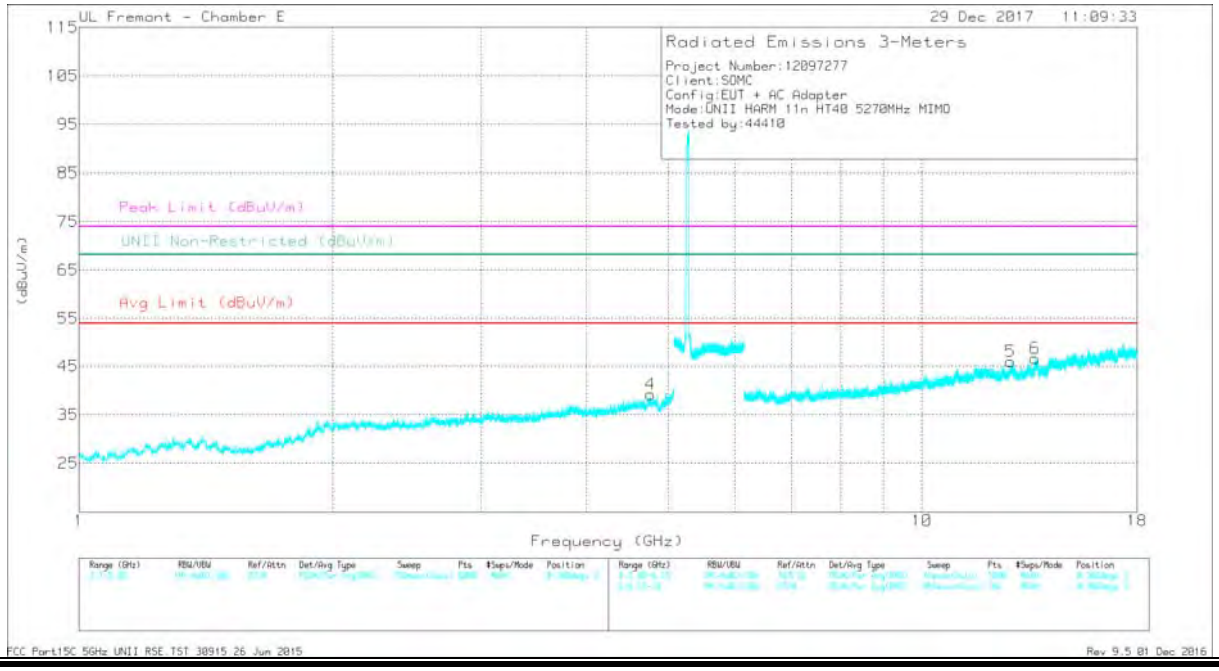
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL

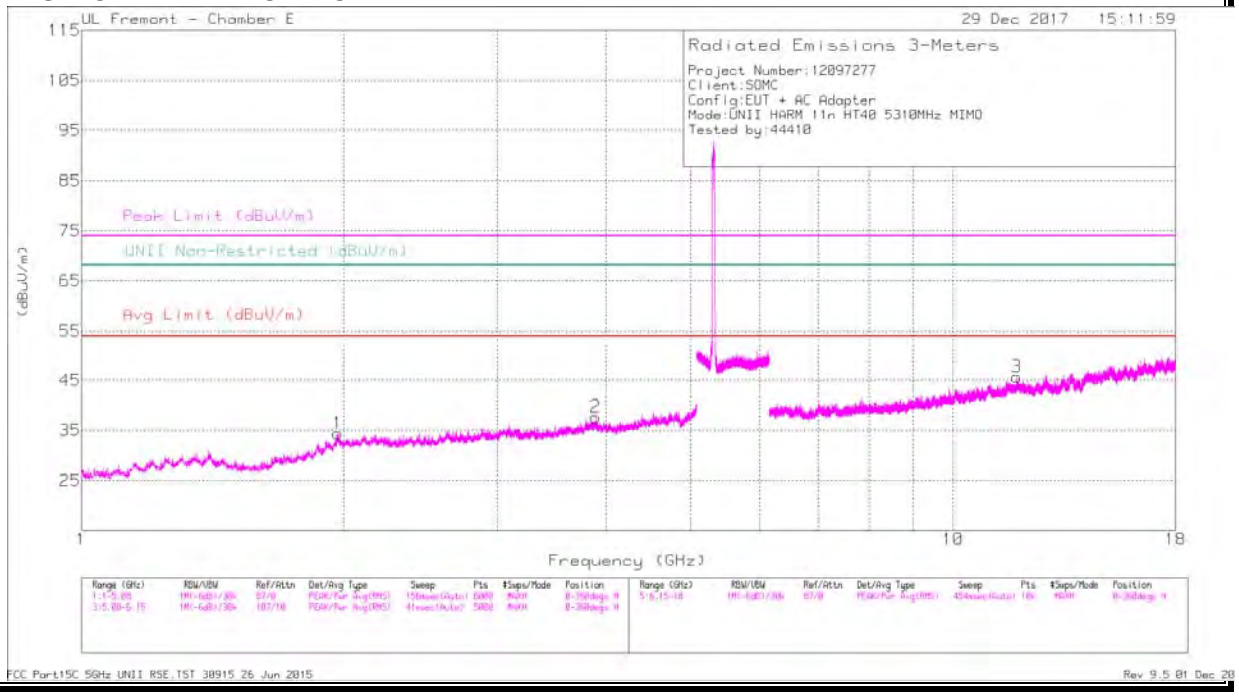


Radiated Emissions

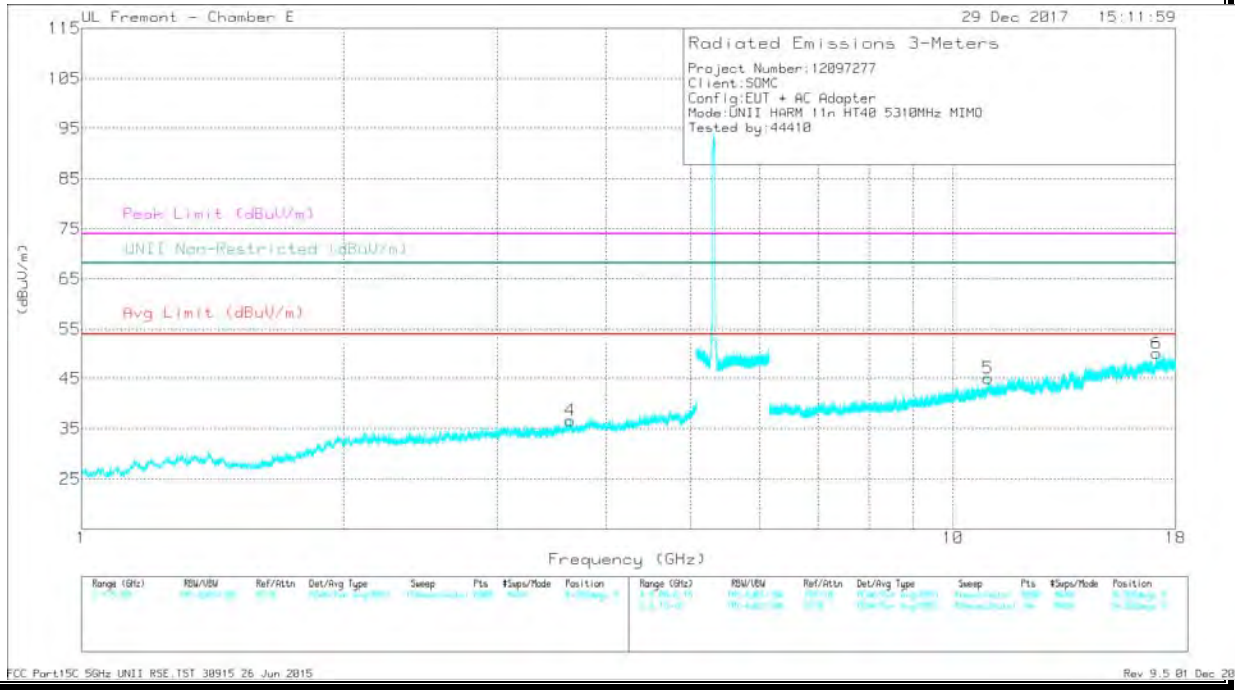
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.487	40.5	PK-U	32.1	-32.3	0	40.3	-	-	74	-33.7	-	-	10	155	H
	* 2.484	28.71	ADR	32.1	-32.2	.48	29.09	54	-24.91	-	-	-	-	10	155	H
4	* 4.763	40.33	PK-U	34.4	-29	0	45.73	-	-	74	-28.27	-	-	184	273	V
	* 4.765	27.75	ADR	34.4	-29.1	.48	33.53	54	-20.47	-	-	-	-	184	273	V
2	* 11.004	33.91	PK-U	38.5	-22.4	0	50.01	-	-	74	-23.99	-	-	13	284	H
	* 11.003	22.24	ADR	38.5	-22.4	.48	38.82	54	-15.18	-	-	-	-	13	284	H
5	12.727	35	PK-U	39.6	-23.5	0	51.1	-	-	-	-	68.2	-17.1	244	353	V
6	13.624	36.12	PK-U	39.6	-23.7	0	52.02	-	-	-	-	68.2	-16.18	101	203	V
3	14.242	35.71	PK-U	40.4	-23.5	0	52.61	-	-	-	-	68.2	-15.59	291	100	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 HORIZONTAL



HIGH CHANNEL VERTICAL



Radiated Emissions

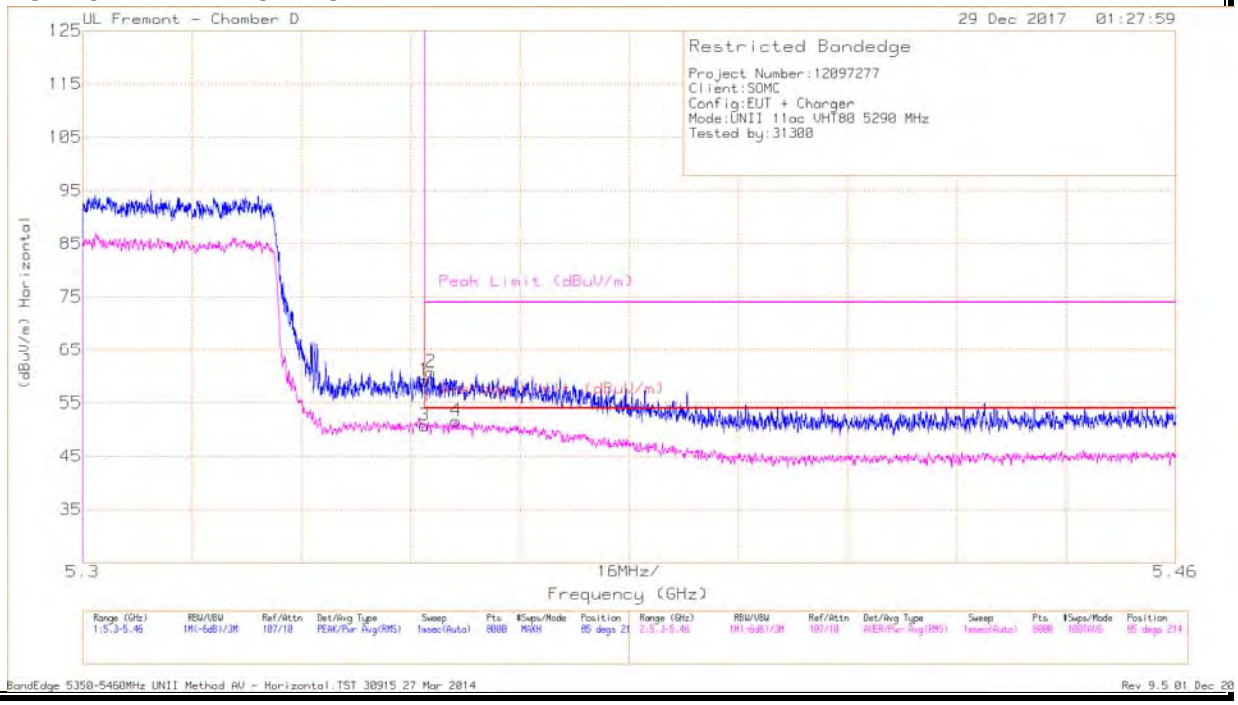
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.893	39.85	PK-U	33.7	-29.9	0	43.65	-	-	74	-30.35	-	-	136	276	H
	* 3.892	28.17	ADR	33.7	-29.9	.48	32.45	54	-21.55	-	-	-	-	136	276	H
4	* 3.639	39.71	PK-U	33.4	-30.3	0	42.81	-	-	74	-31.19	-	-	192	125	V
	* 3.639	27.68	ADR	33.4	-30.3	.48	31.26	54	-22.74	-	-	-	-	192	125	V
3	* 11.836	35.12	PK-U	39.4	-23.6	0	50.92	-	-	74	-23.08	-	-	258	371	H
	* 11.835	23.24	ADR	39.4	-23.6	.48	39.52	54	-14.48	-	-	-	-	258	371	H
5	* 10.973	34.35	PK-U	38.4	-22.4	0	50.35	-	-	74	-23.65	-	-	316	316	V
	* 10.974	22.47	ADR	38.4	-22.4	.48	38.95	54	-15.05	-	-	-	-	316	316	V
1	1.968	41.22	PK-U	31.7	-32.4	0	40.52	-	-	-	-	68.2	-27.68	98	146	H
6	17.115	33.76	PK-U	41.7	-20.9	0	54.56	-	-	-	-	68.2	-13.64	162	101	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

10.1.8. 11ac HT80 2TX CDD MIMO MODE IN THE 5.3GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

LOW CHANNEL HORIZONTAL

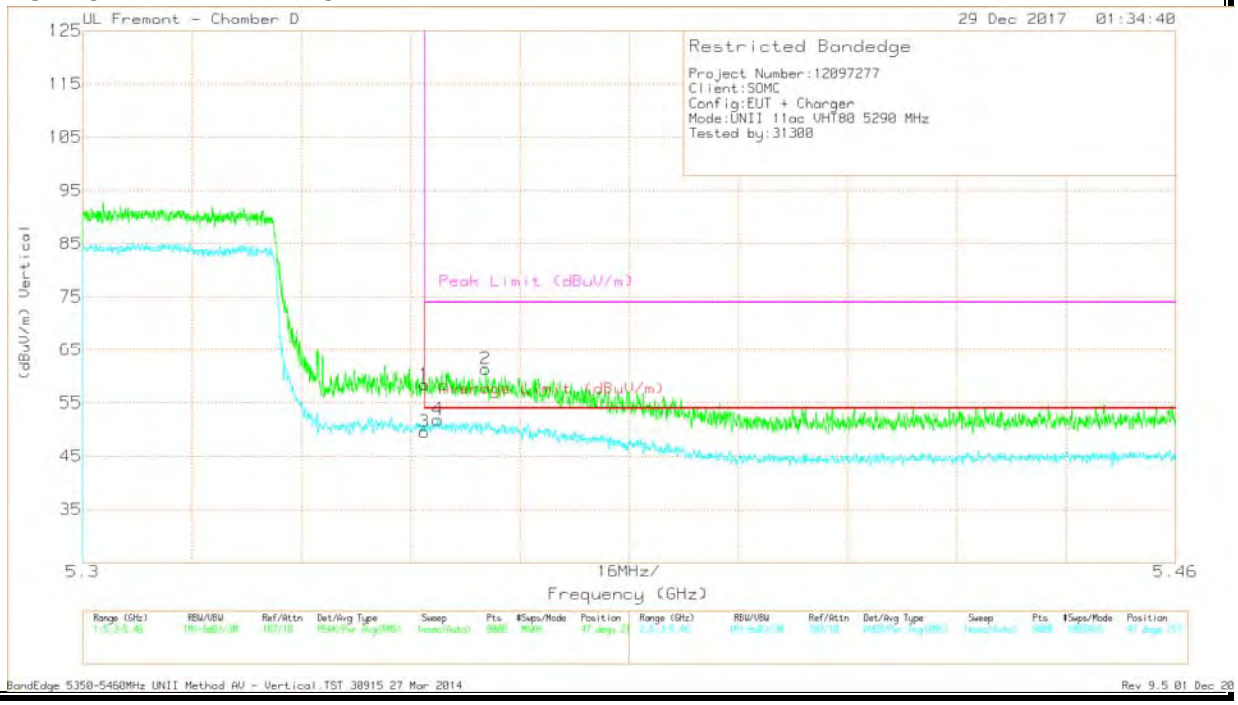


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	42.86	Pk	34.3	-18	0	59.16	-	-	74	-14.84	85	214	H
3	* 5.35	33.73	RMS	34.3	-18	.73	50.76	54	-3.24	-	-	85	214	H
2	* 5.351	44.45	Pk	34.3	-18	0	60.75	-	-	74	-13.25	85	214	H
4	* 5.355	34.67	RMS	34.3	-18.1	.73	51.6	54	-2.4	-	-	85	214	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

LOW CHANNEL VERTICAL



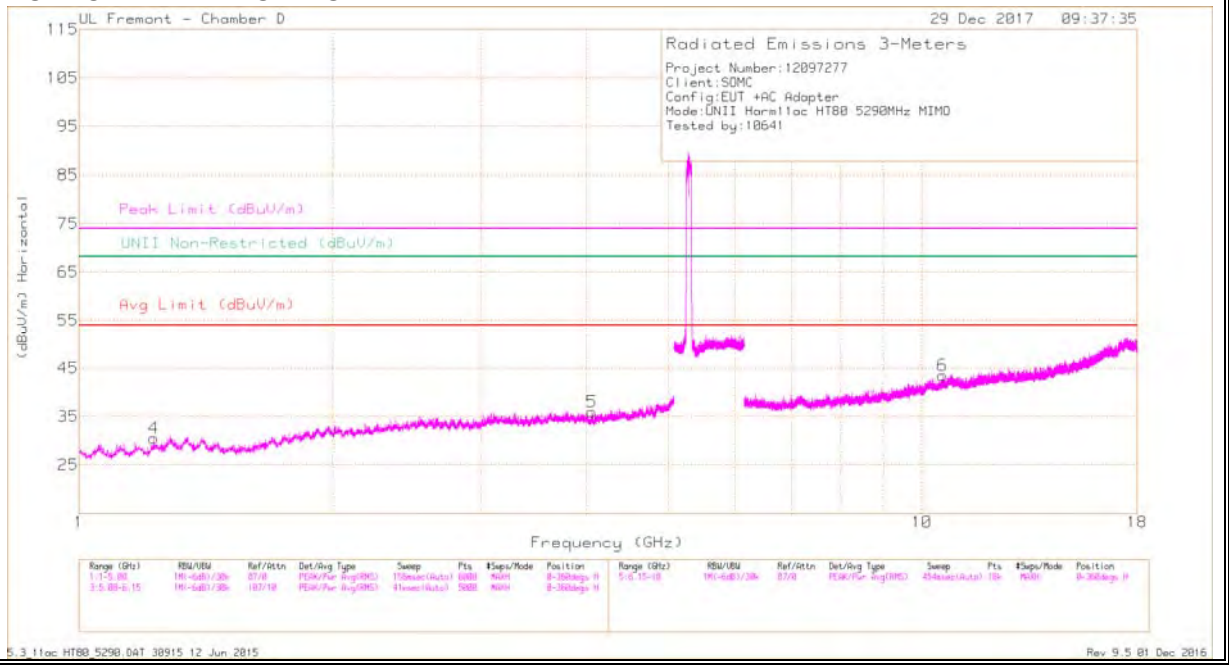
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	42.08	Pk	34.3	-18	0	58.38	-	-	74	-15.62	47	217	V
3	* 5.35	32.51	RMS	34.3	-18	.73	49.54	54	-4.46	-	-	47	217	V
4	* 5.352	34.79	RMS	34.3	-18	.73	51.82	54	-2.18	-	-	47	217	V
2	* 5.359	45.1	Pk	34.3	-18.1	0	61.3	-	-	74	-12.7	47	217	V

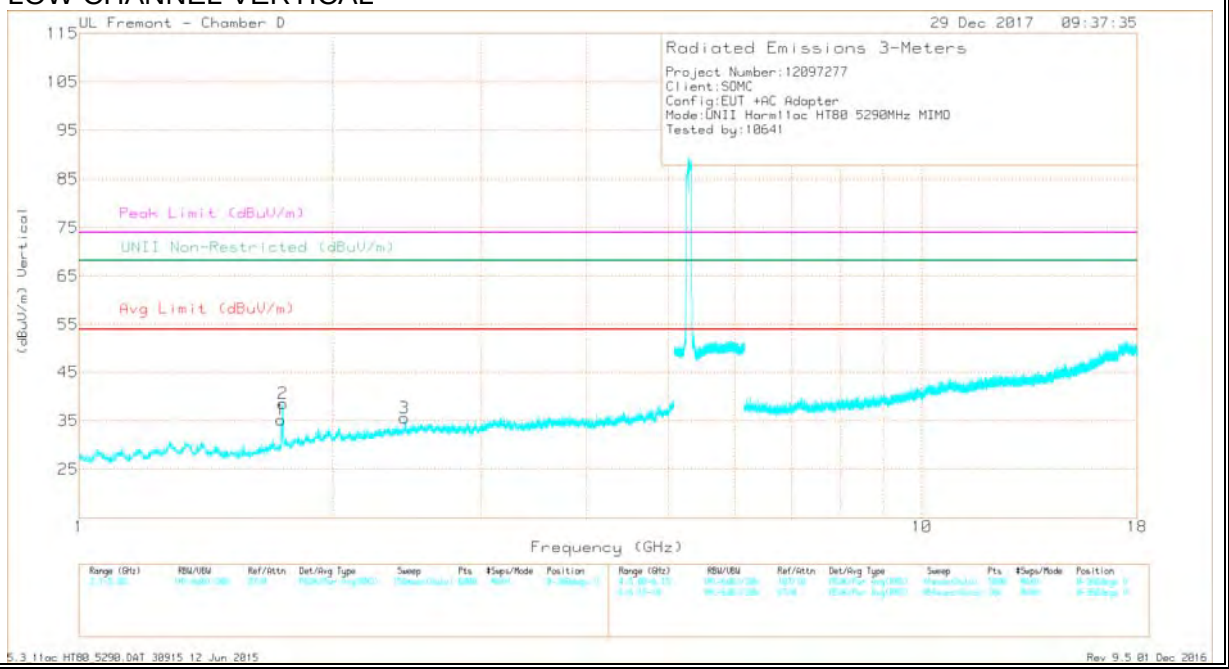
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Radiated Emissions

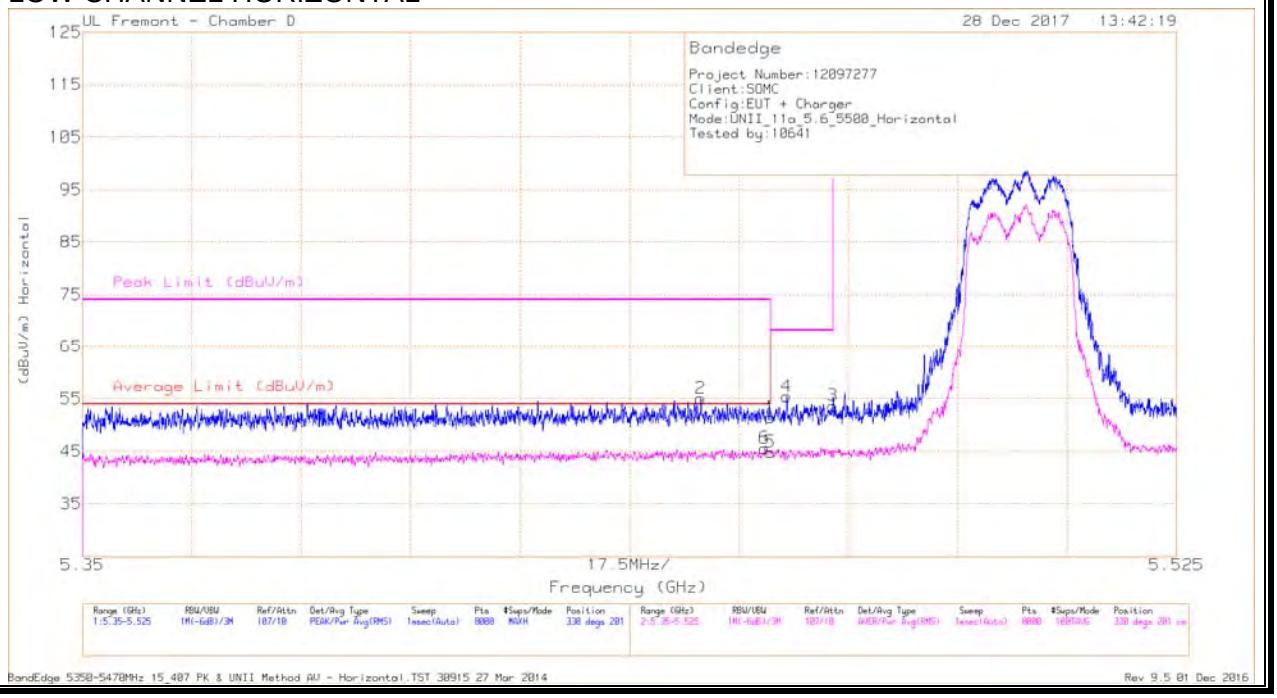
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 1.229	39.47	PK-U	28.9	-32	0	36.37	-	-	74	-37.63	-	-	131	305	H
	* 1.229	27.56	ADR	28.9	-32	.73	25.19	54	-28.81	-	-	-	-	131	305	H
5	* 4.063	36.79	PK-U	33.4	-28.5	0	41.69	-	-	74	-32.31	-	-	207	297	H
	* 4.063	24.69	ADR	33.4	-28.5	.73	30.32	54	-23.68	-	-	-	-	207	297	H
1	1.738	37.75	PK-U	29.7	-30.8	0	36.65	-	-	-	-	68.2	-31.55	102	104	V
2	1.744	38.93	PK-U	29.7	-30.6	0	38.03	-	-	-	-	68.2	-30.17	345	162	V
3	2.434	38.88	PK-U	32.3	-30.4	0	40.78	-	-	-	-	68.2	-27.42	273	276	V
6	10.572	31.29	PK-U	37.7	-20.4	0	48.59	-	-	-	-	68.2	-19.61	245	211	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

10.1.9. 11a 2TX CDD MIMO MODE IN THE 5.6GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL

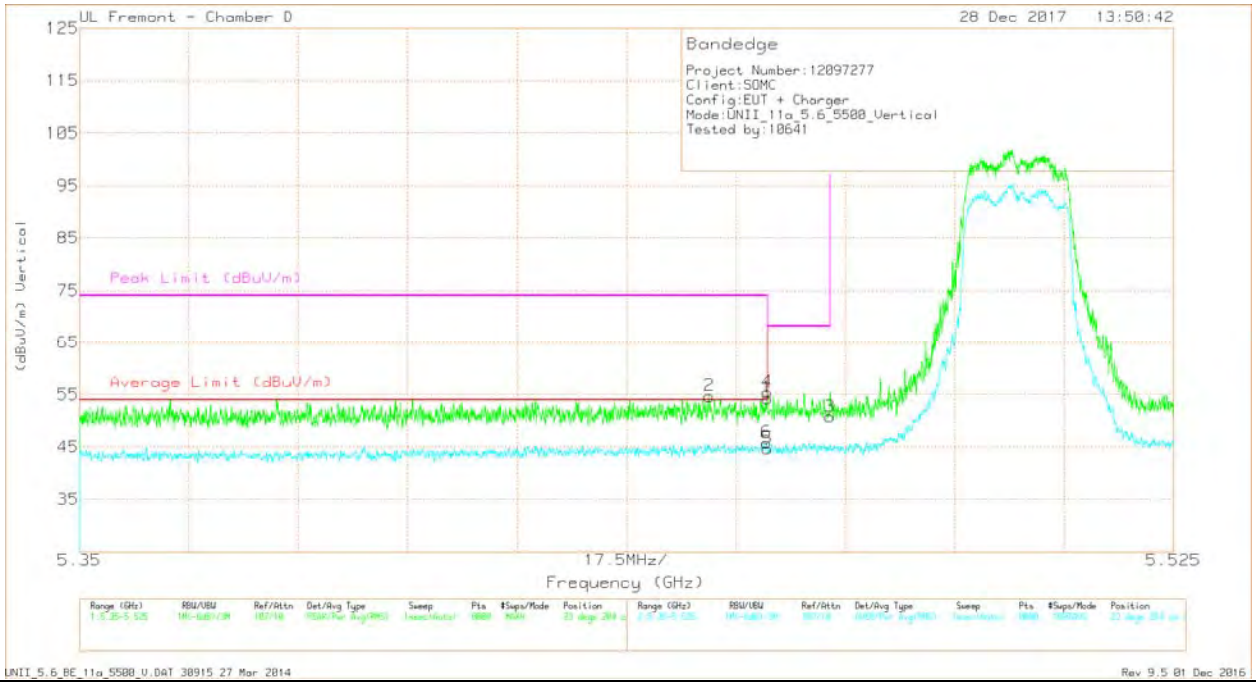


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.449	38.27	Pk	34.4	-17.7	0	54.97	-	-	74	-19.03	330	201	H
6	* 5.459	28.83	RMS	34.4	-17.6	0	45.63	54	-8.37	-	-	330	201	H
1	* 5.46	34.56	Pk	34.4	-17.6	0	51.36	-	-	74	-22.64	330	201	H
5	* 5.46	28.01	RMS	34.4	-17.6	0	44.81	54	-9.19	-	-	330	201	H
4	5.463	38.53	Pk	34.4	-17.6	0	55.33	-	-	68.2	-12.87	330	201	H
3	5.47	36.81	Pk	34.4	-17.6	0	53.61	-	-	68.2	-14.59	330	201	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

LOW CHANNEL VERTICAL



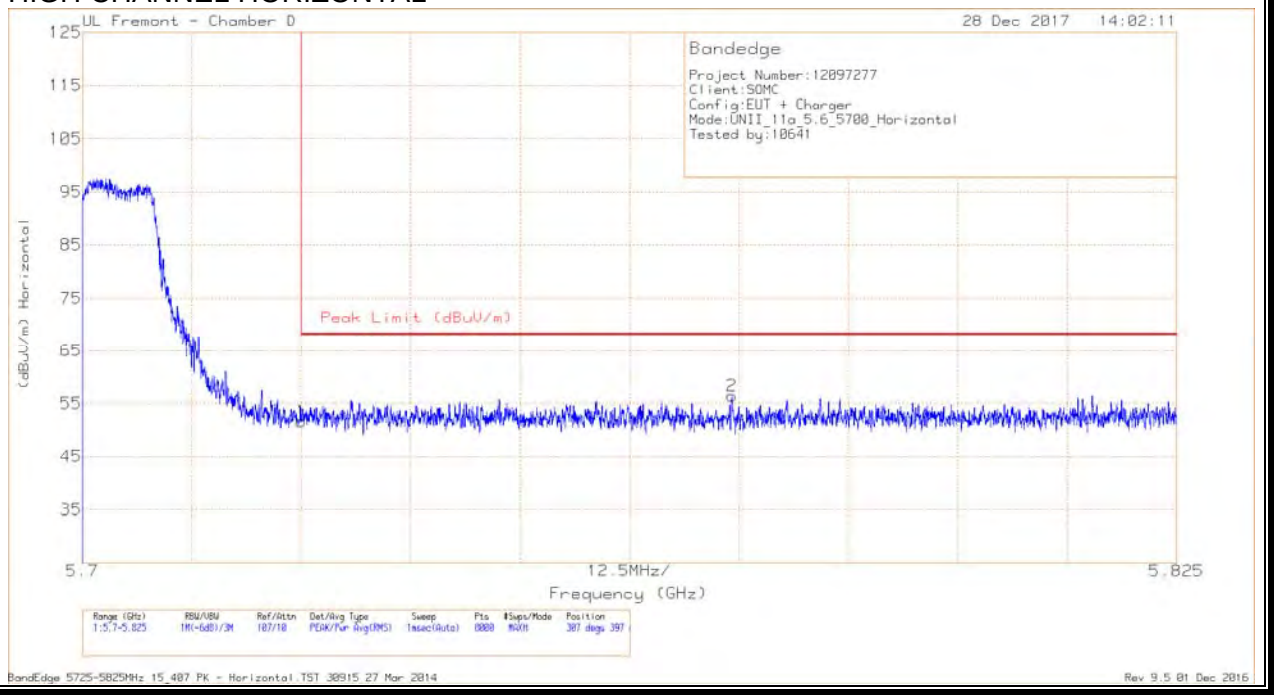
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.451	38	Pk	34.4	-17.7	0	54.7	-	-	74	-19.3	23	284	V
1	* 5.46	37.53	Pk	34.4	-17.6	0	54.33	-	-	74	-19.67	23	284	V
5	* 5.46	27.93	RMS	34.4	-17.6	0	44.73	54	-9.27	-	-	23	284	V
6	* 5.46	29.05	RMS	34.4	-17.6	0	45.85	54	-8.15	-	-	23	284	V
4	5.46	38.64	Pk	34.4	-17.6	0	55.44	-	-	68.2	-12.76	23	284	V
3	5.47	33.98	Pk	34.4	-17.6	0	50.78	-	-	68.2	-17.42	23	284	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	33.98	Pk	34.8	-17.2	0	51.58	68.2	-16.62	307	397	H
2	5.774	39.02	Pk	34.7	-17.3	0	56.42	68.2	-11.78	307	397	H

Pk - Peak detector