

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)
-4.30	-7.50	-5.61

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)
-4.30	-7.50	-2.74

RESULTS

ID:	GE43578	Date:	12/12/17
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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	-5.61	-2.74	30.00	30.00
Mid	5785	-5.61	-2.74	30.00	30.00
High	5825	-5.61	-2.74	30.00	30.00

Duty Cycle CF (dB)	0.11	Included in Calculations of Corr'd PSD
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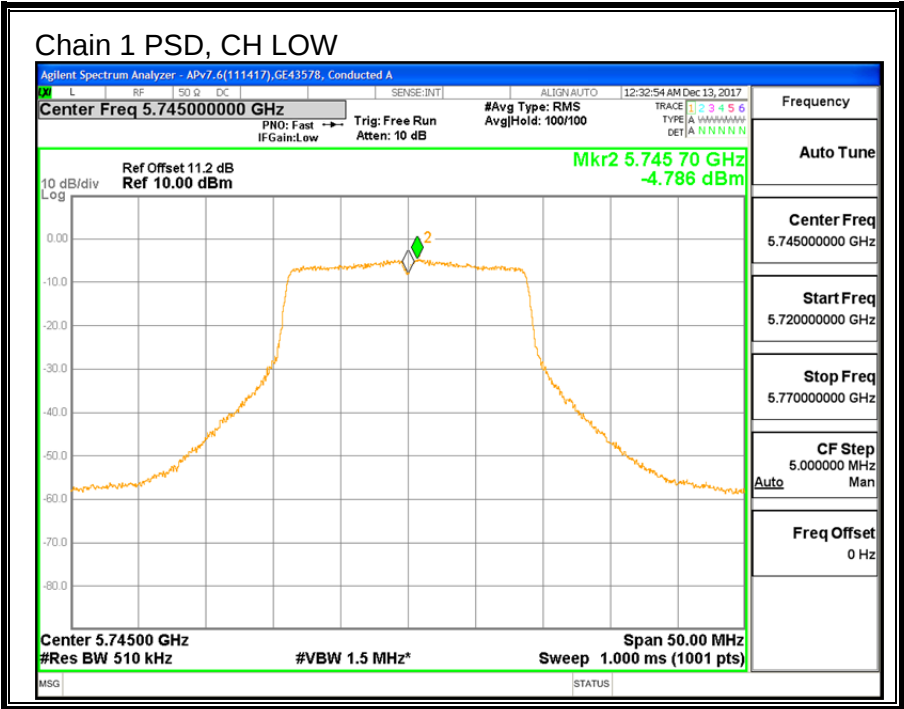
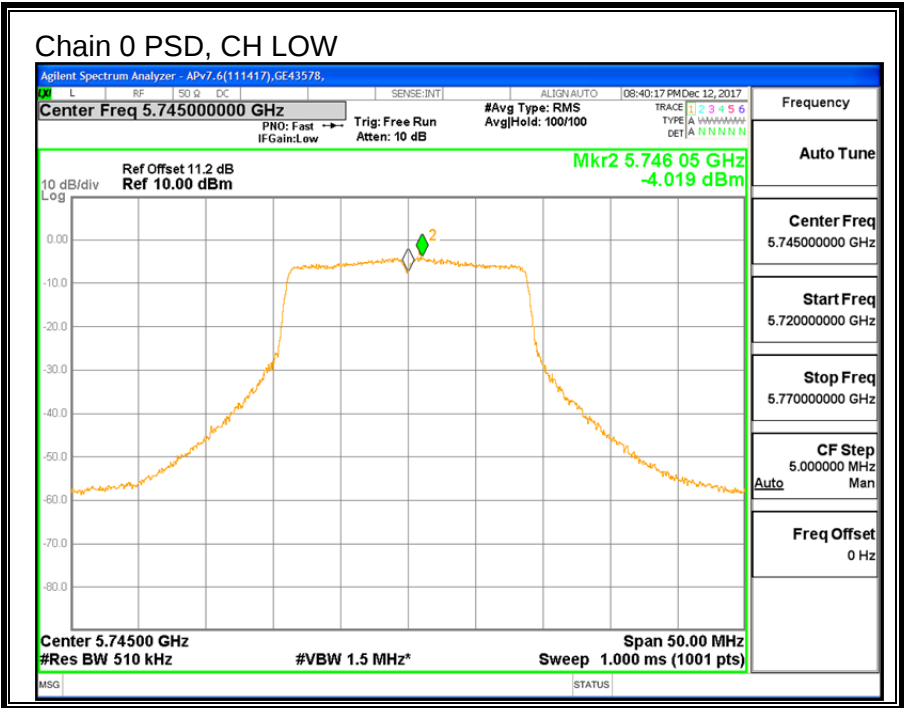
Output Power Results

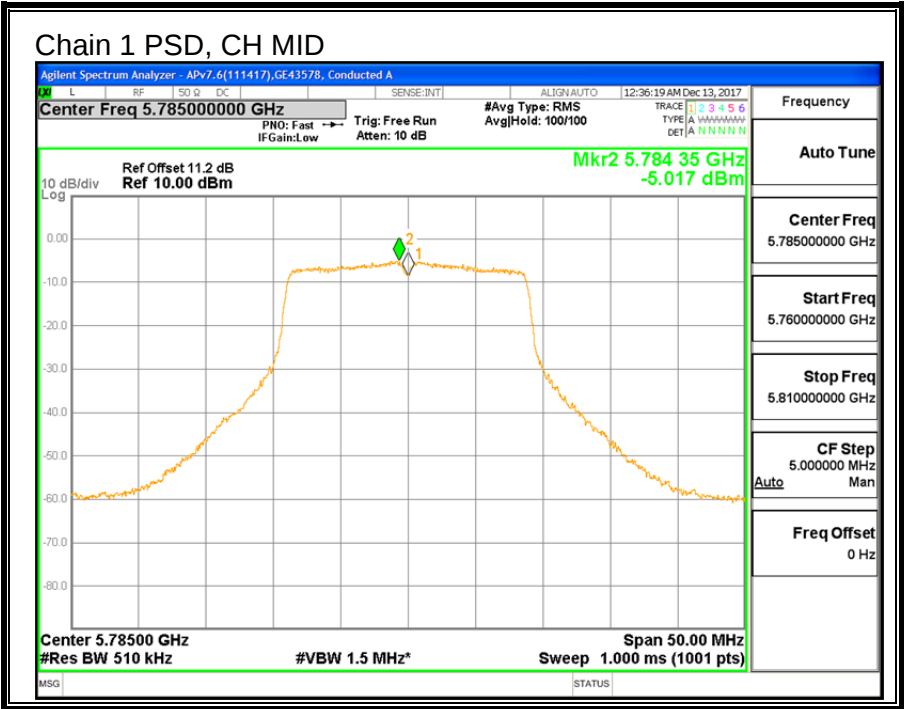
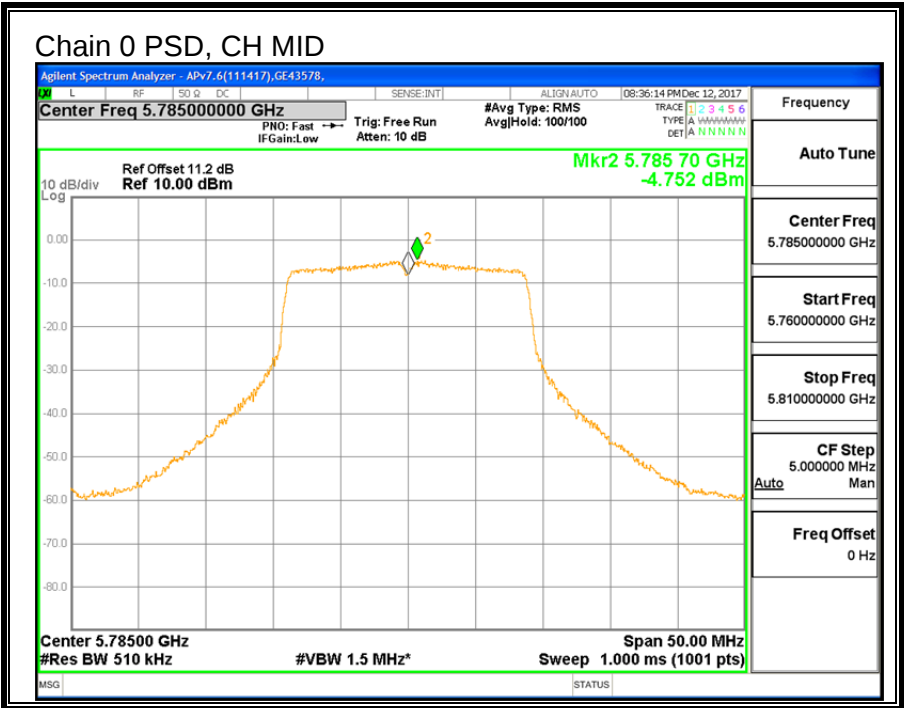
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	8.88	8.32	11.62	30.00	-18.38
Mid	5785	8.87	8.33	11.62	30.00	-18.38
High	5825	9.28	8.39	11.87	30.00	-18.13

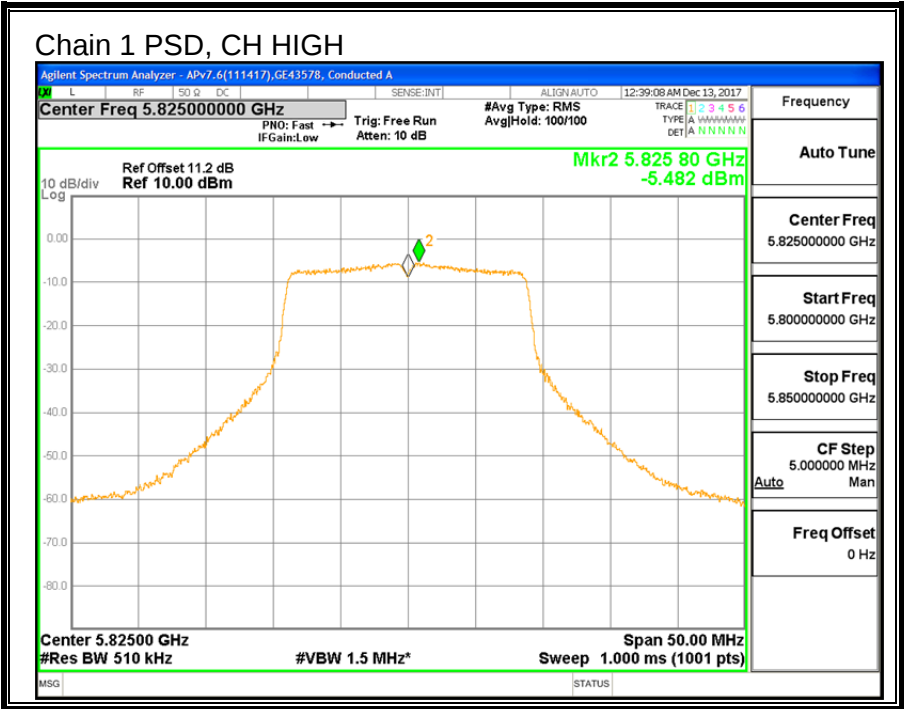
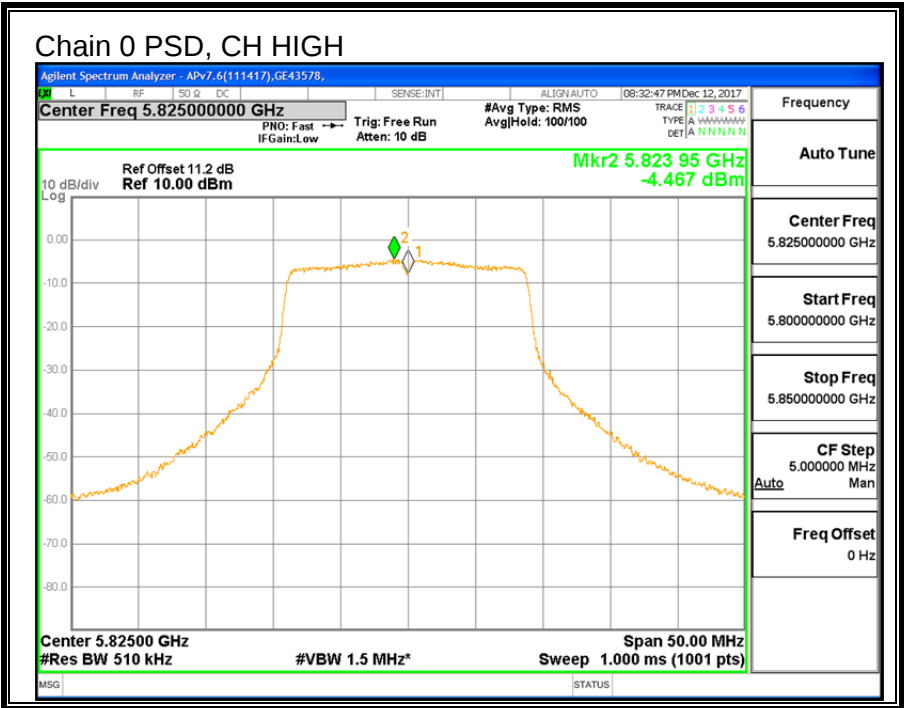
PSD Results

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	-4.019	-4.786	-1.27	30.00	-31.27
Mid	5785	-4.752	-5.017	-1.76	30.00	-31.76
High	5825	-4.467	-5.482	-1.82	30.00	-31.82

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.







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

9.15.1. 6 dB BANDWIDTH

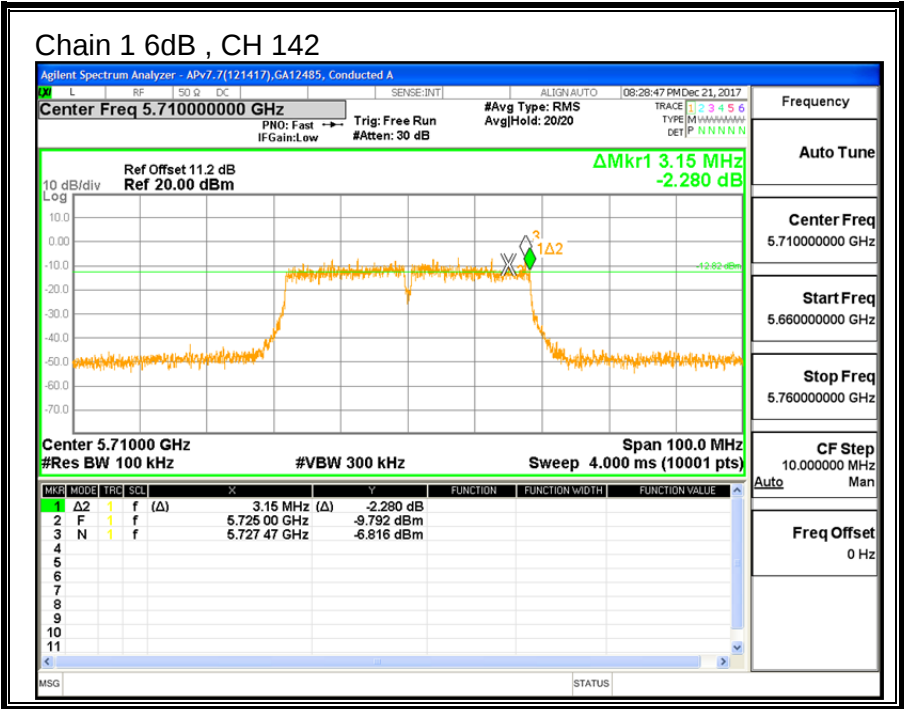
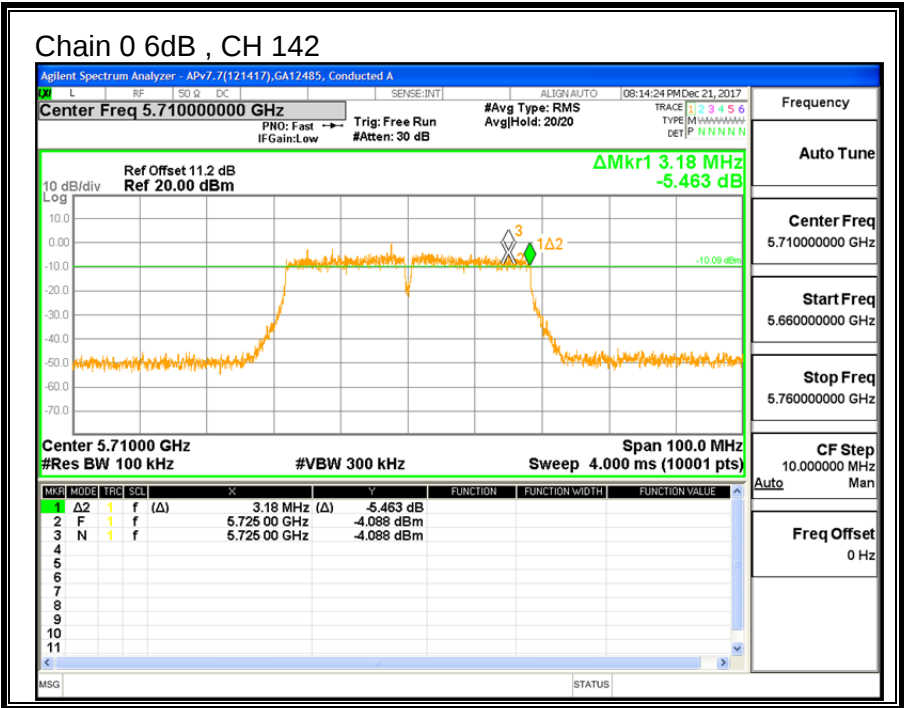
LIMITS

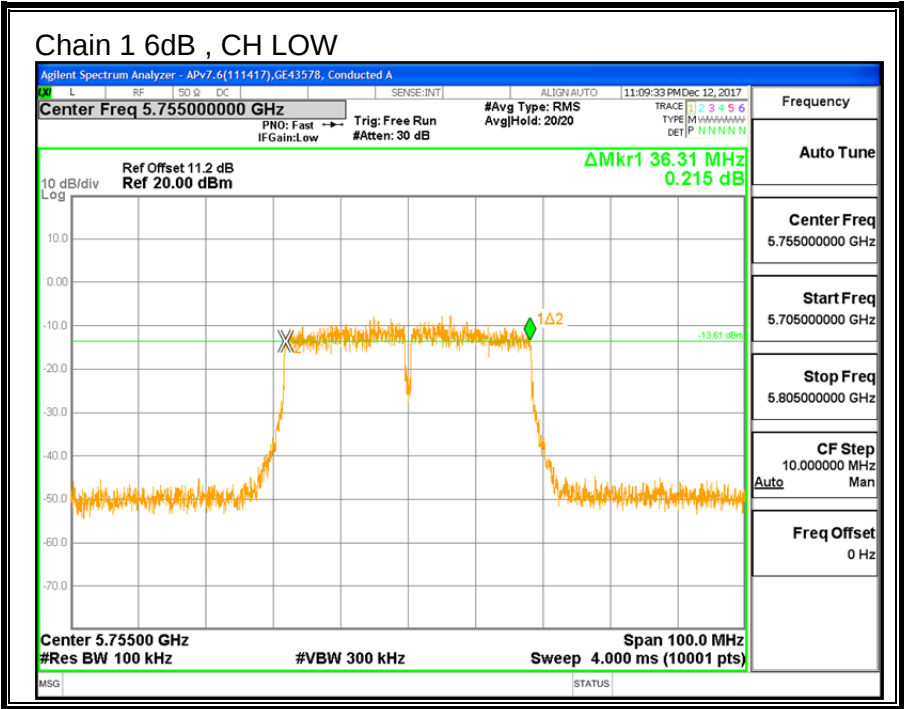
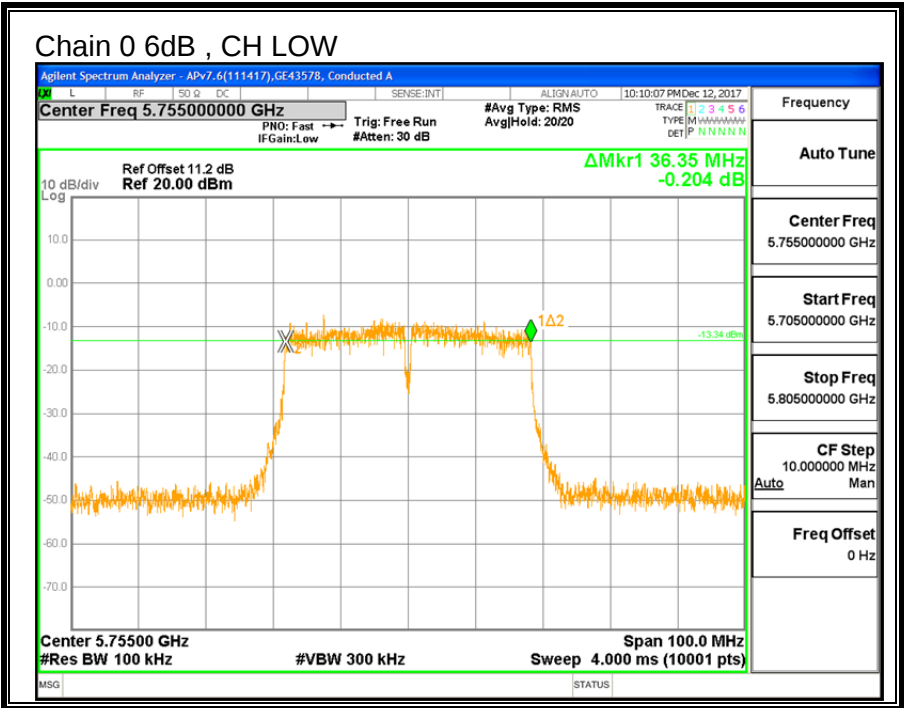
FCC §15.407 (e)

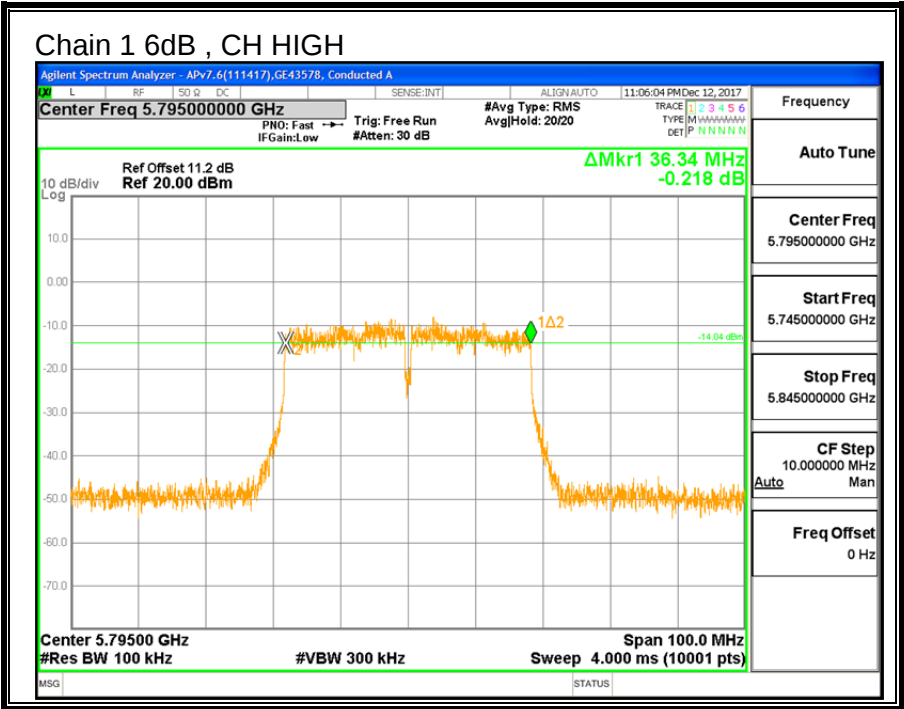
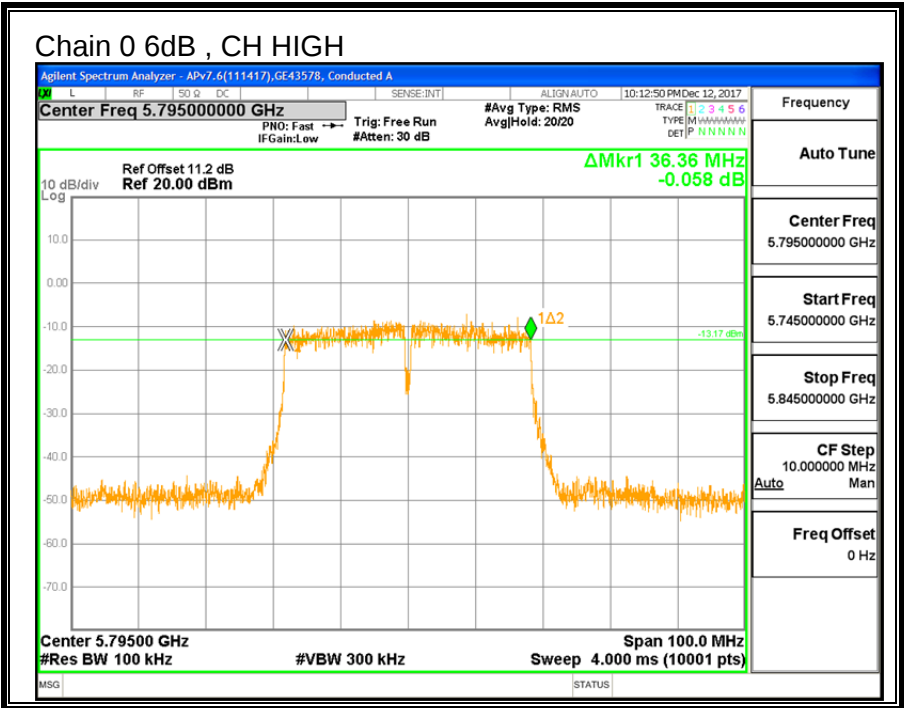
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Frequency	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
142	5710	3.18	3.15	0.5
Low	5755	36.35	36.31	0.5
High	5795	36.36	36.34	0.5







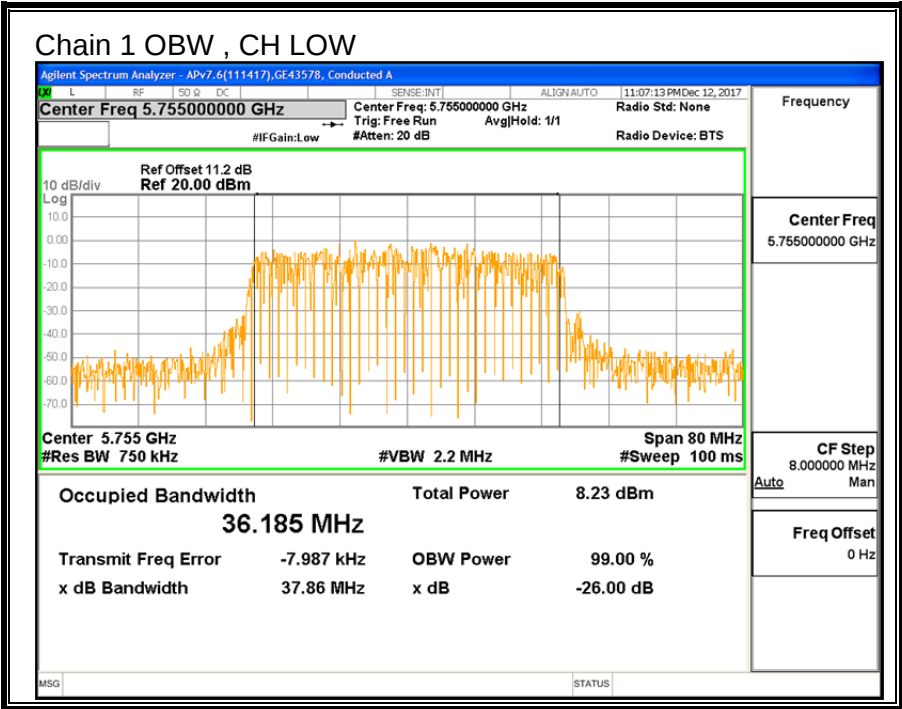
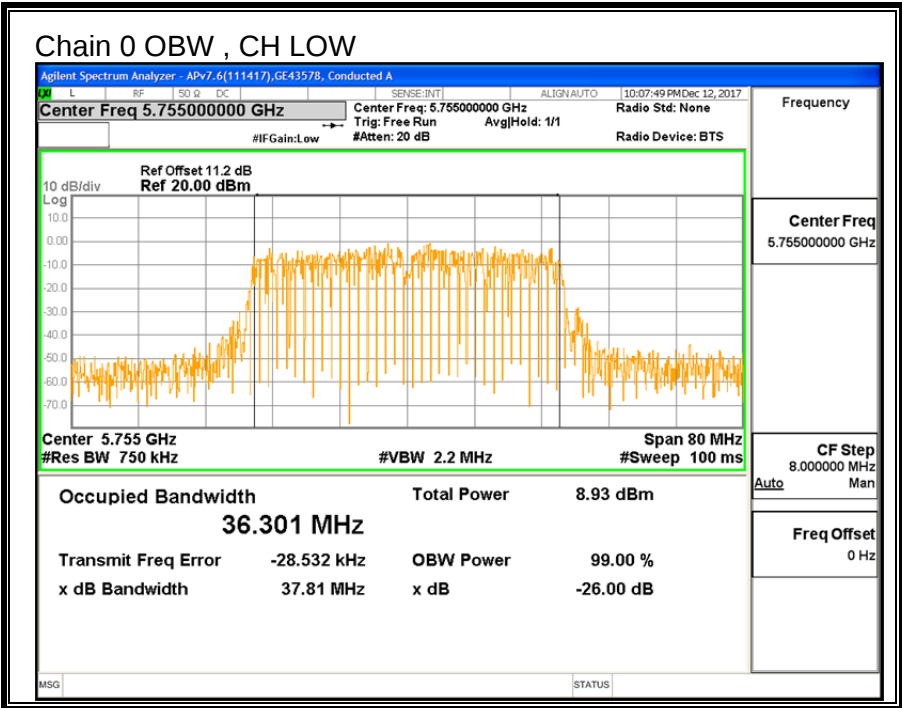
9.15.2. 99% BANDWIDTH

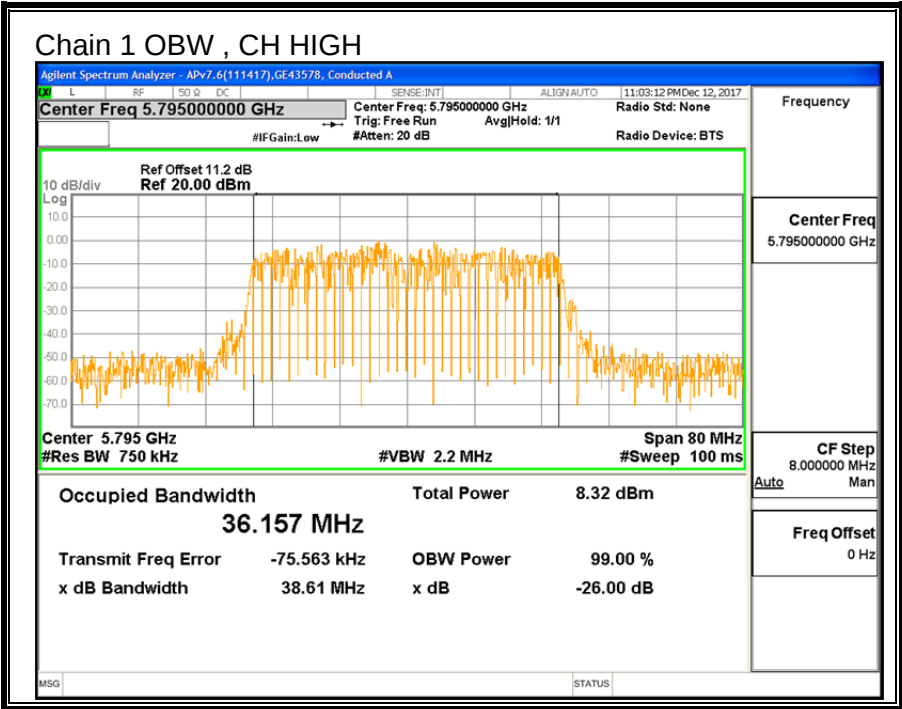
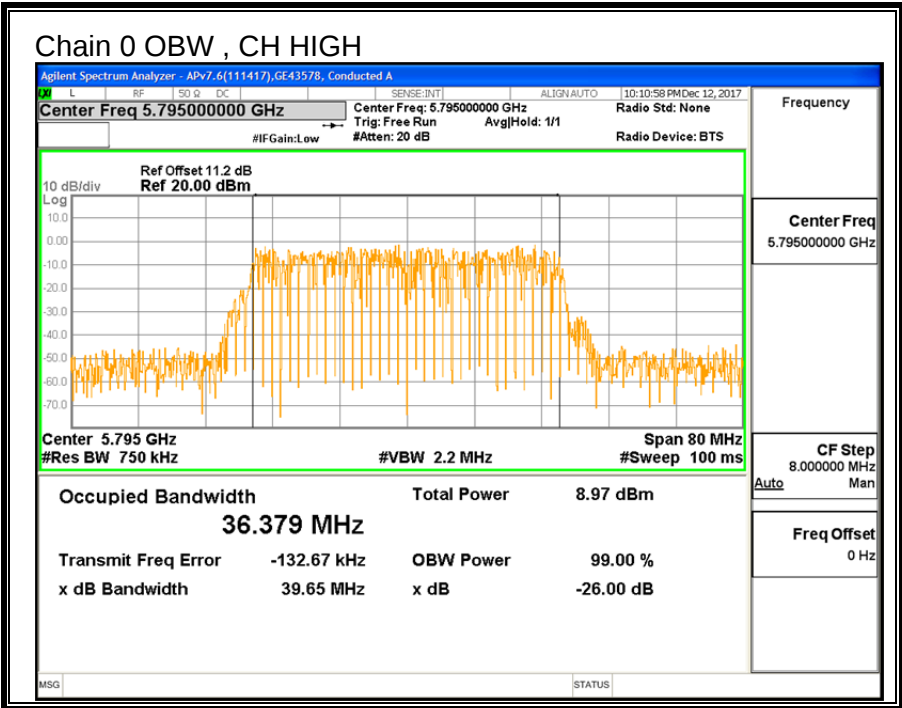
LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5755	36.301	36.185
High	5795	36.379	36.157





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)
-4.30	-7.50	-5.61

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)
-4.30	-7.50	-2.74

RESULTS

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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	-5.61	-2.74	30.00	30.00
High	5795	-5.61	-2.74	30.00	30.00

Duty Cycle CF (dB)	0.39	Included in Calculations of Corr'd PSD
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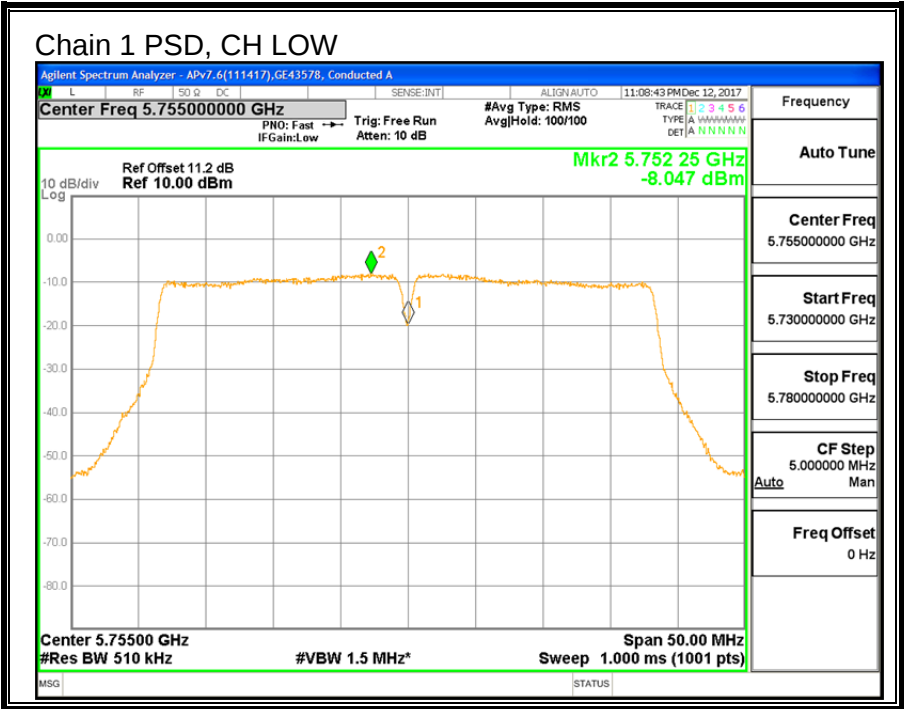
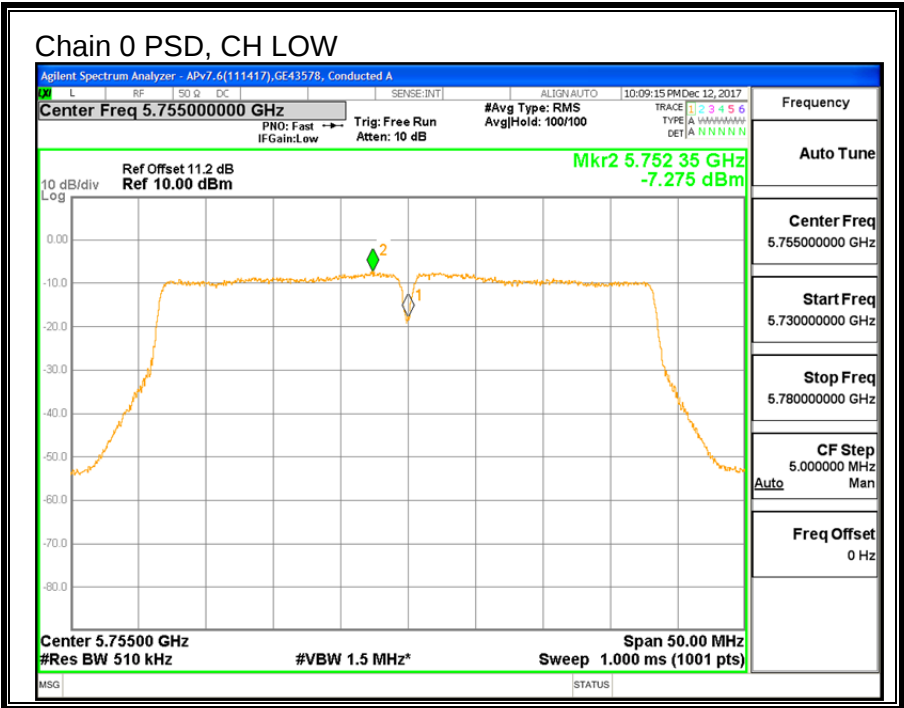
Output Power Results

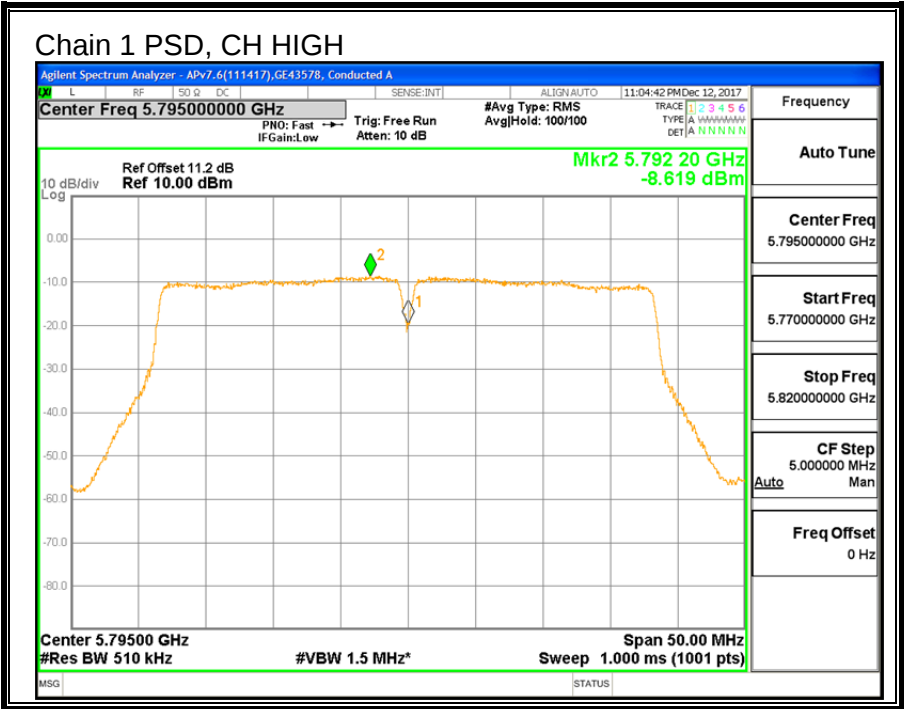
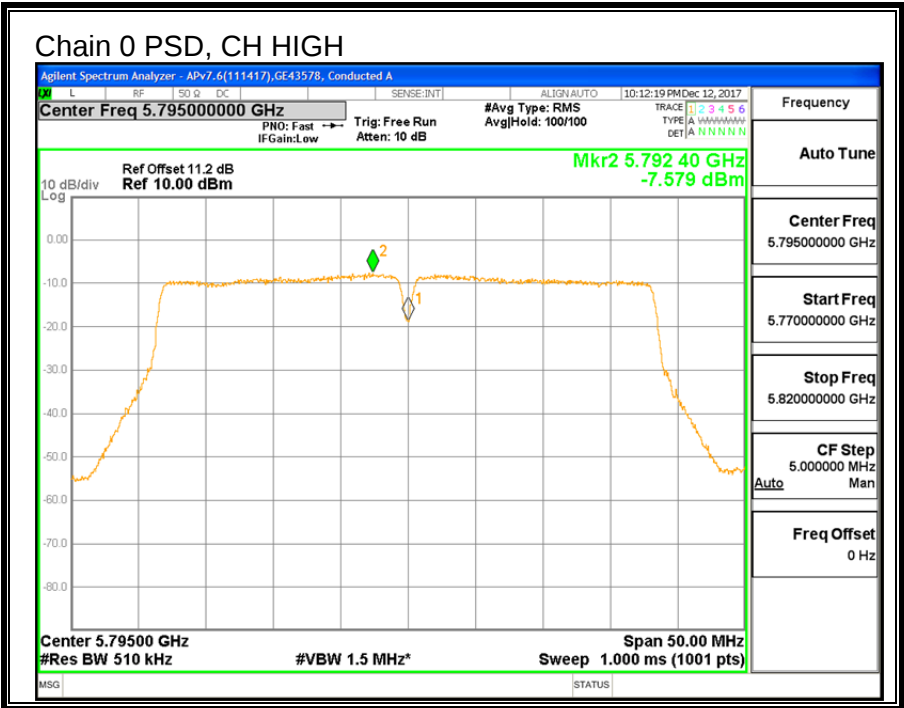
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	8.79	8.23	11.53	30.00	-18.47
High	5795	9.33	8.17	11.80	30.00	-18.20

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	-7.275	-8.047	-4.24	30.00	-34.24
High	5795	-7.579	-8.619	-4.67	30.00	-34.67

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.





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

9.16.1. 6 dB BANDWIDTH

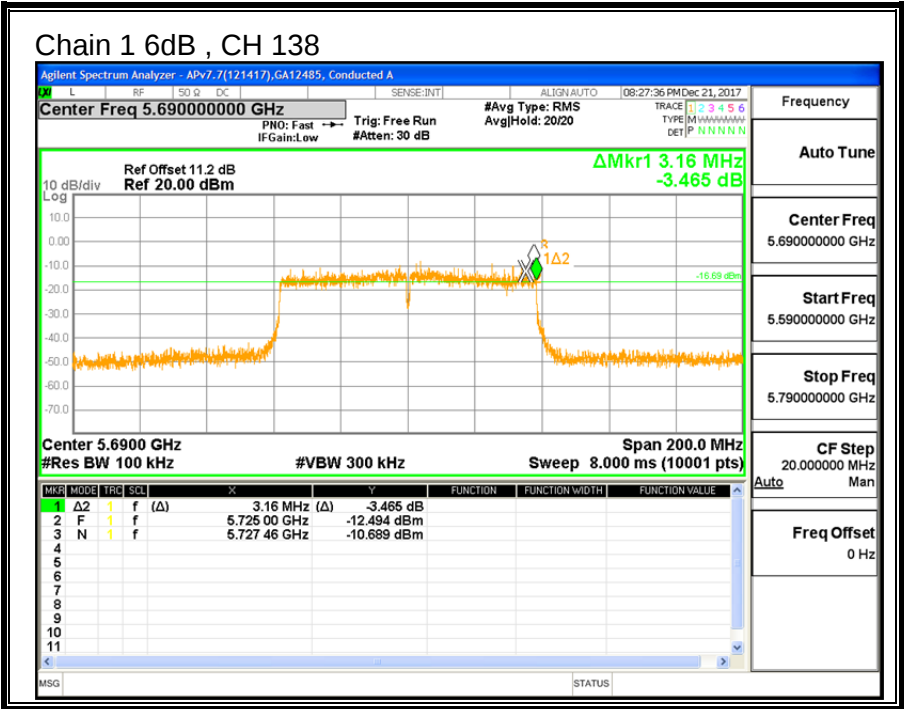
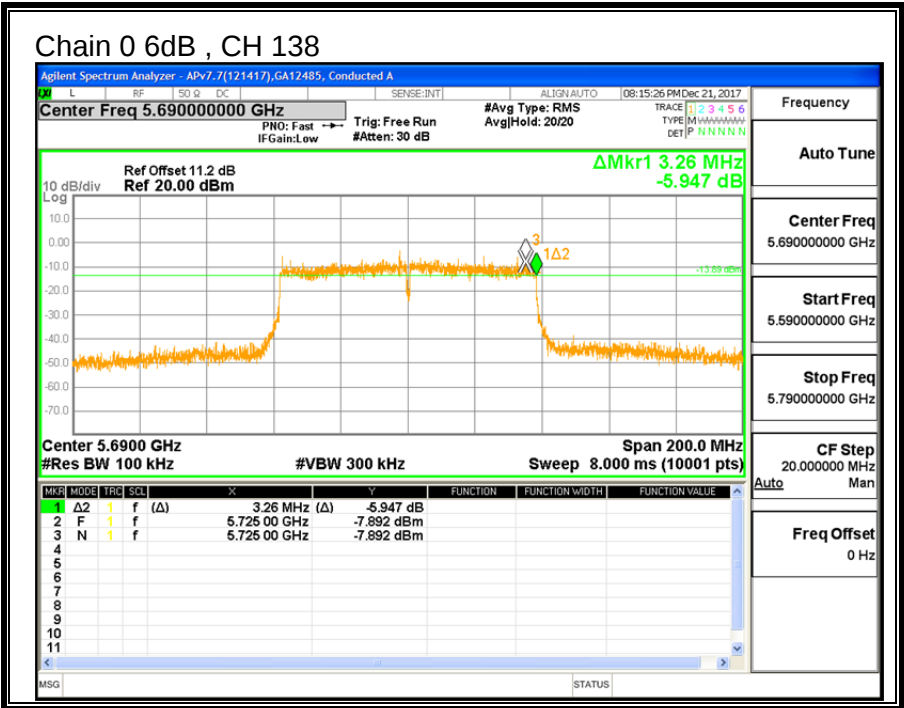
LIMITS

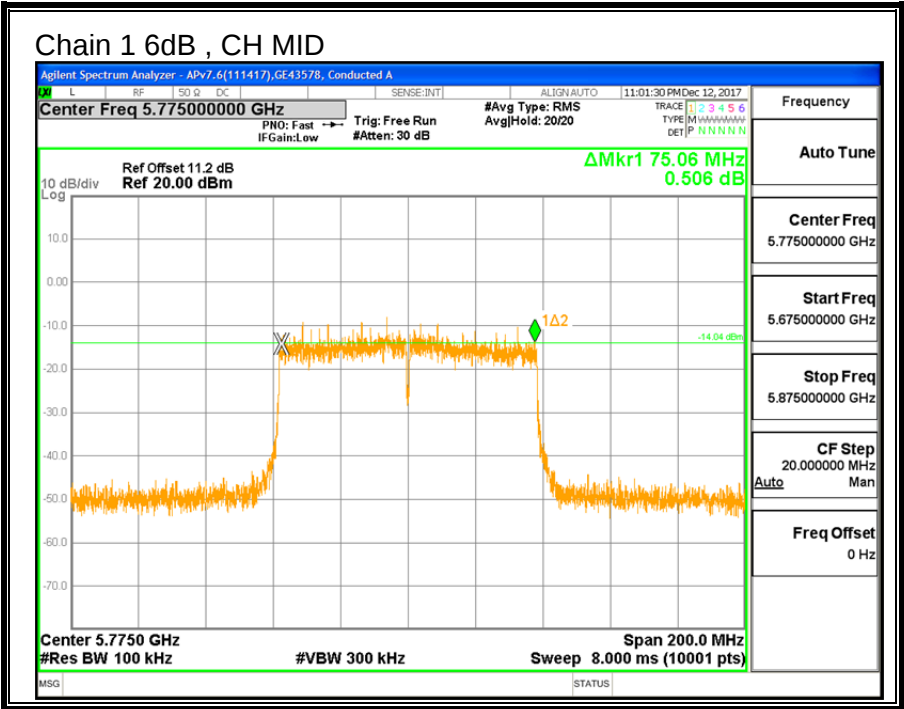
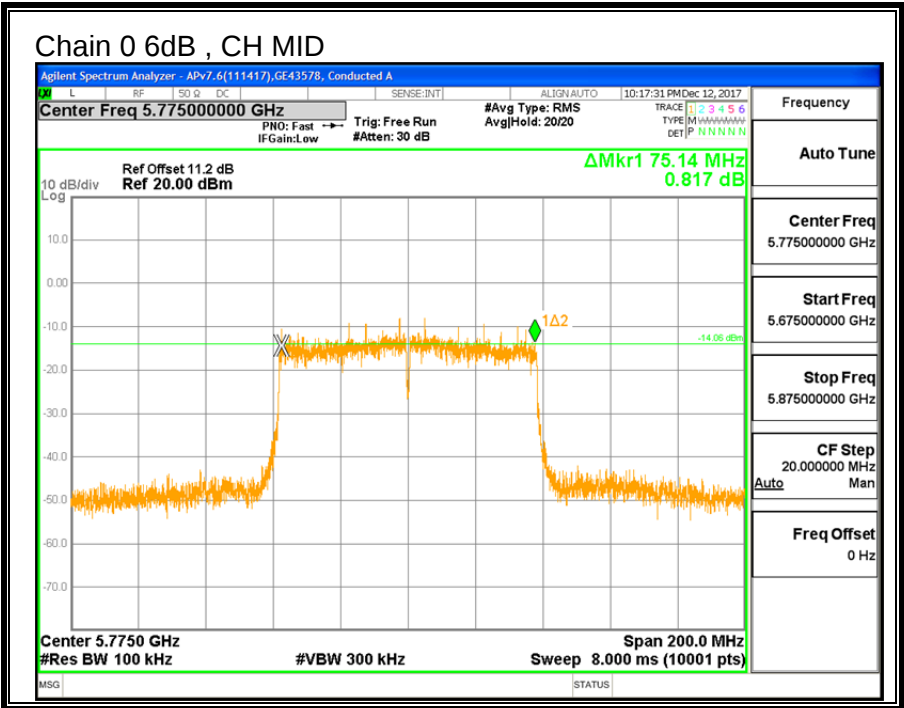
FCC §15.407 (e)

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	3.26	3.16	0.5
Mid	5775	75.14	75.06	0.5





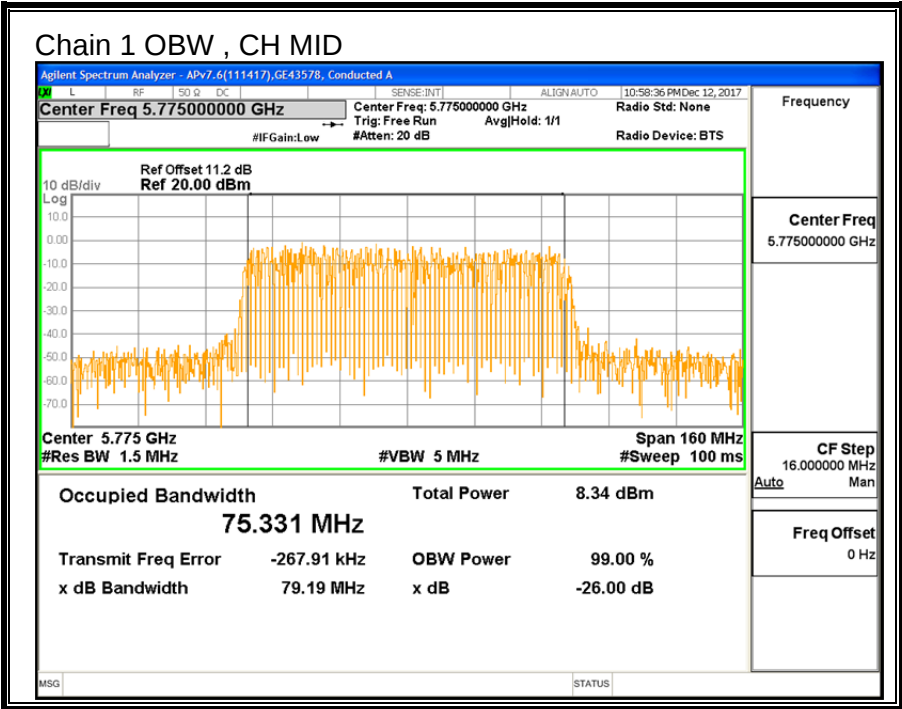
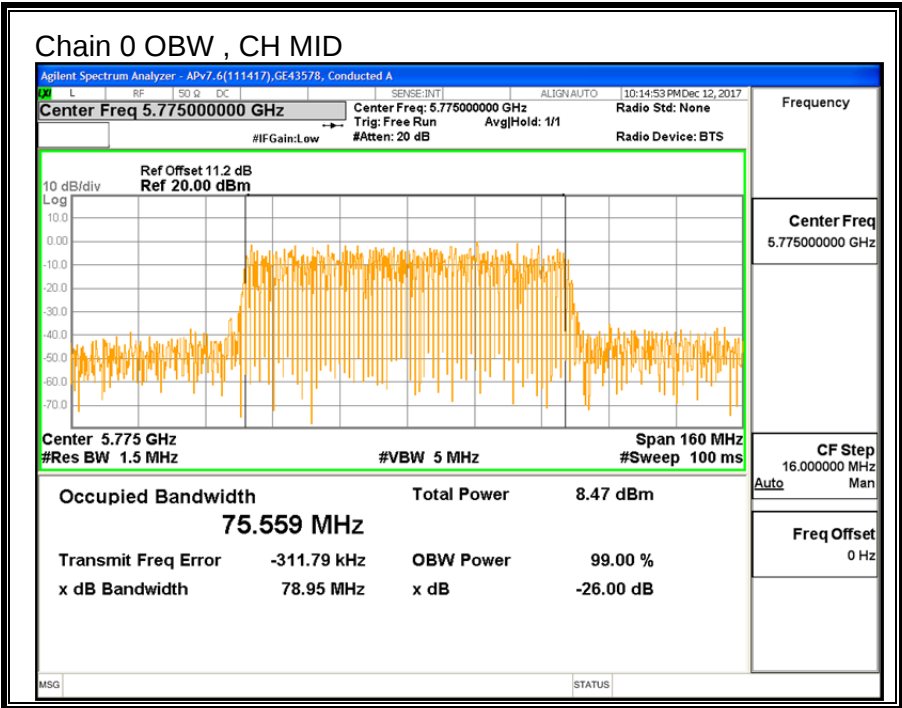
9.16.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Mid	5775	75.559	75.331



9.16.3. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (3)

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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)
-4.30	-7.50	-5.61

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)
-4.30	-7.50	-2.74

RESULTS

ID:	GE43578	Date:	12/12/17
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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	-5.61	-2.74	30.00	30.00

Duty Cycle CF (dB)	0.77	Included in Calculations of Corr'd PSD
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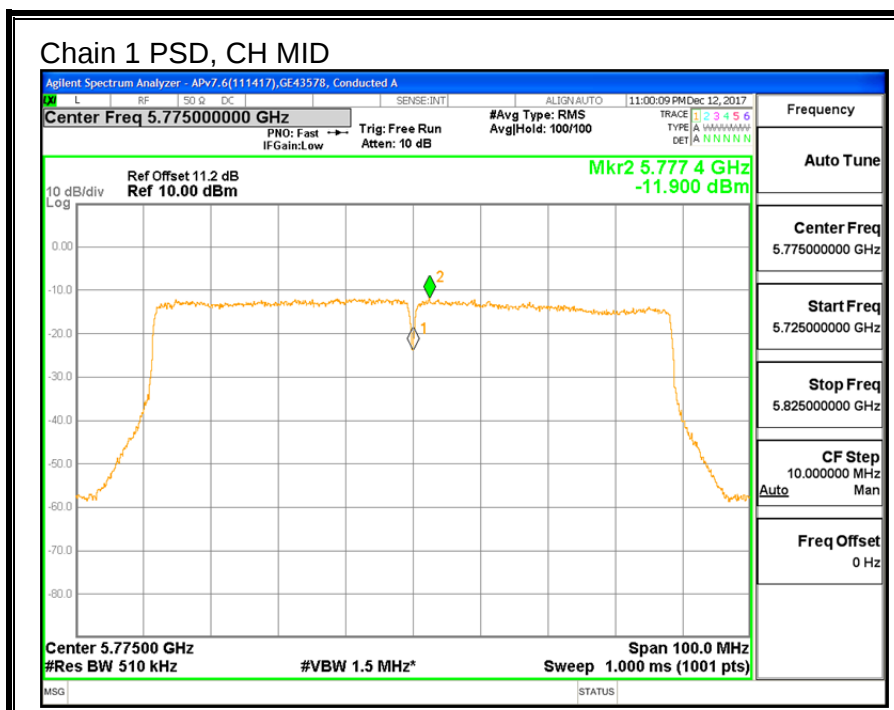
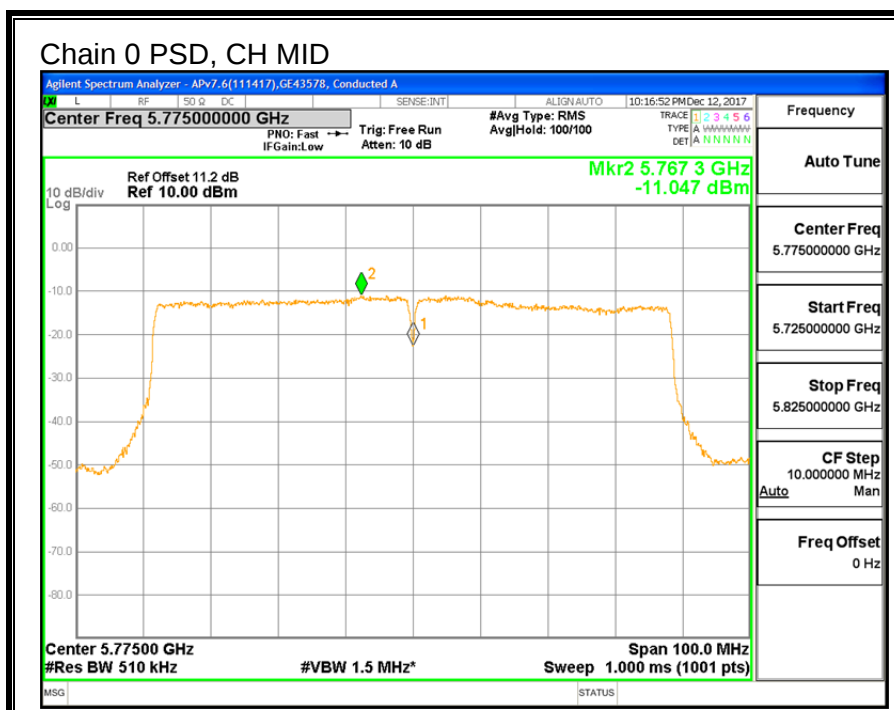
Output Power Results

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	9.03	8.27	11.68	30.00	-18.32

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	-11.047	-11.900	-7.67	30.00	-37.67

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.



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.

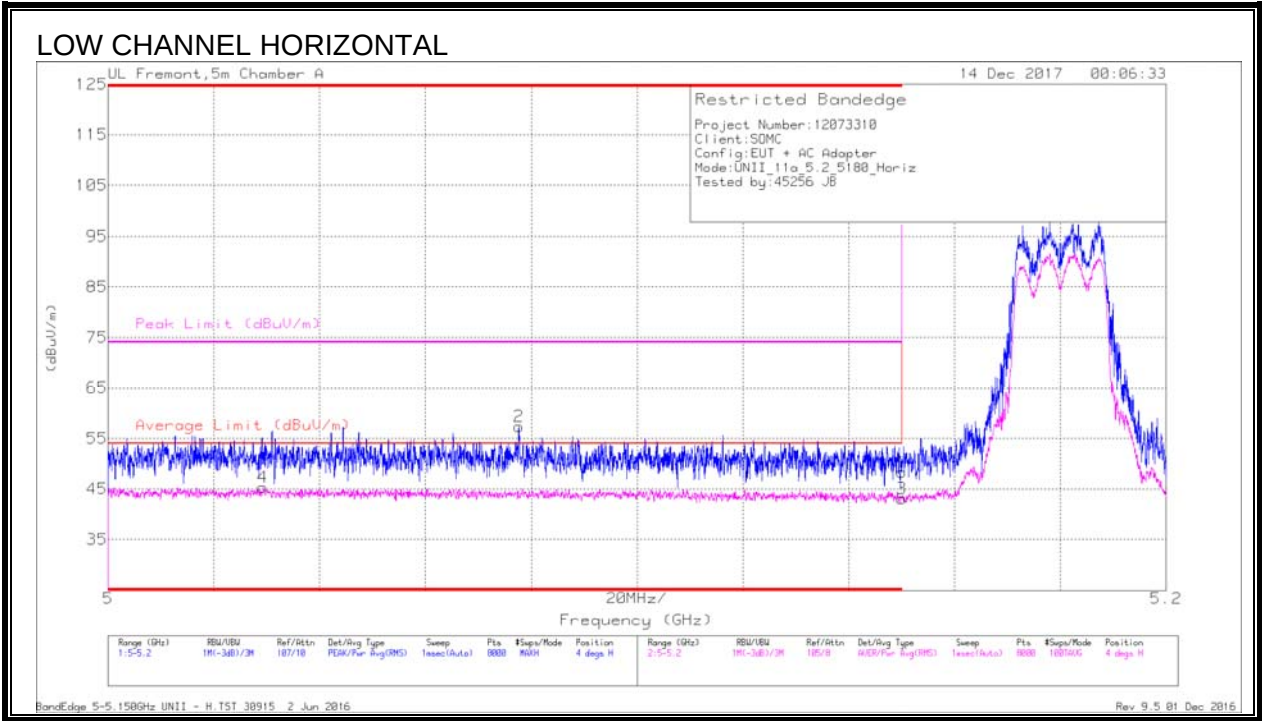
The spectrum from 1 GHz to 18 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. Below 1GHz and above 18GHz emissions, the channel with the highest output power was tested.

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

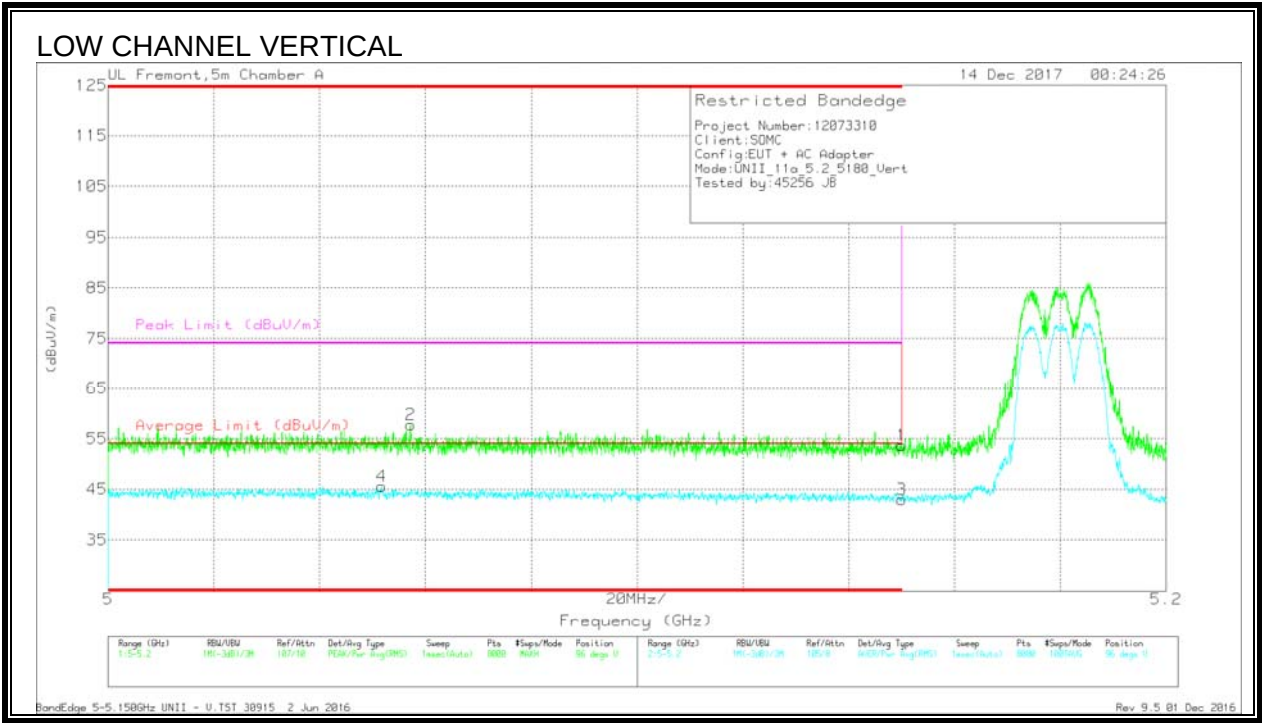
RESTRICTED BANDEDGE (LOW CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filtr/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	32.15	Pk	34.4	-18.2	0	48.35	-	-	74	-25.65	4	303	H
2	* 5.078	40.96	PK	34.4	-18	0	57.36	-	-	74	-16.64	4	303	H
3	* 5.15	26.89	RMS	34.4	-18.2	0	43.09	54	-10.91	-	-	4	303	H
4	* 5.029	28.97	RMS	34.3	-17.9	0	45.37	54	-8.63	-	-	4	303	H

* - indicates frequency in CFR15.205 - Restricted Band
Pk - Peak detector
RMS - RMS detection



Trace Markers

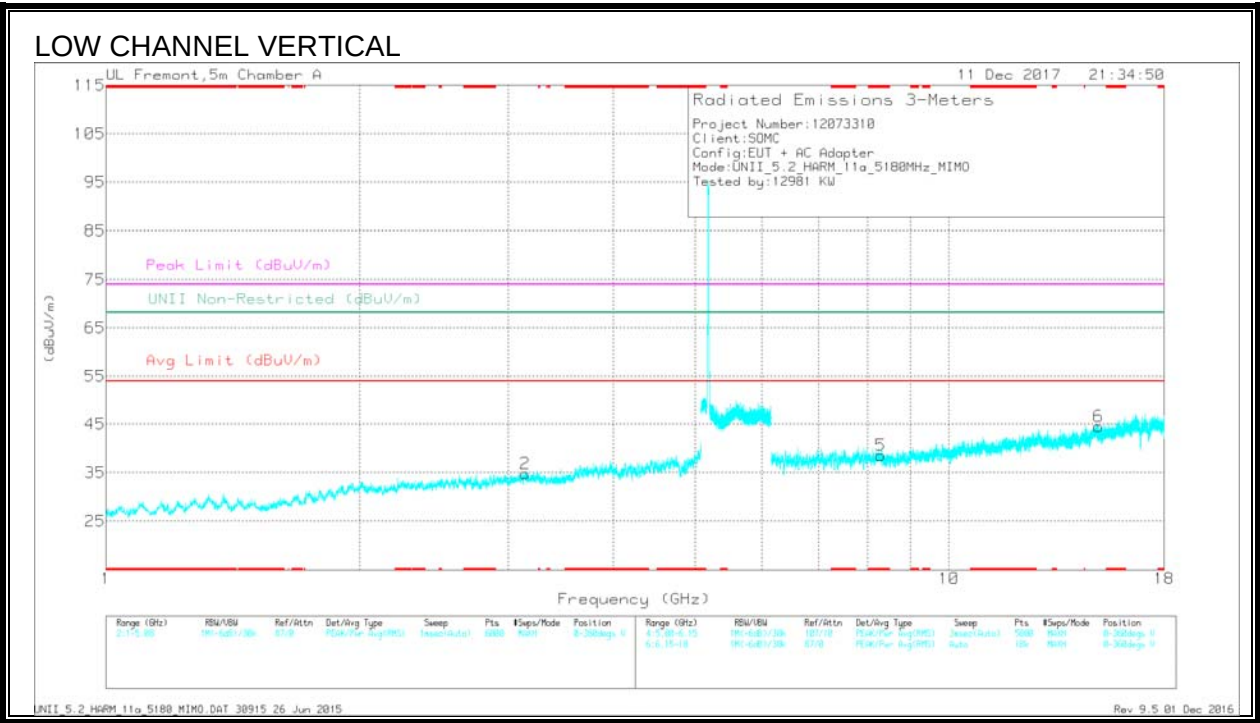
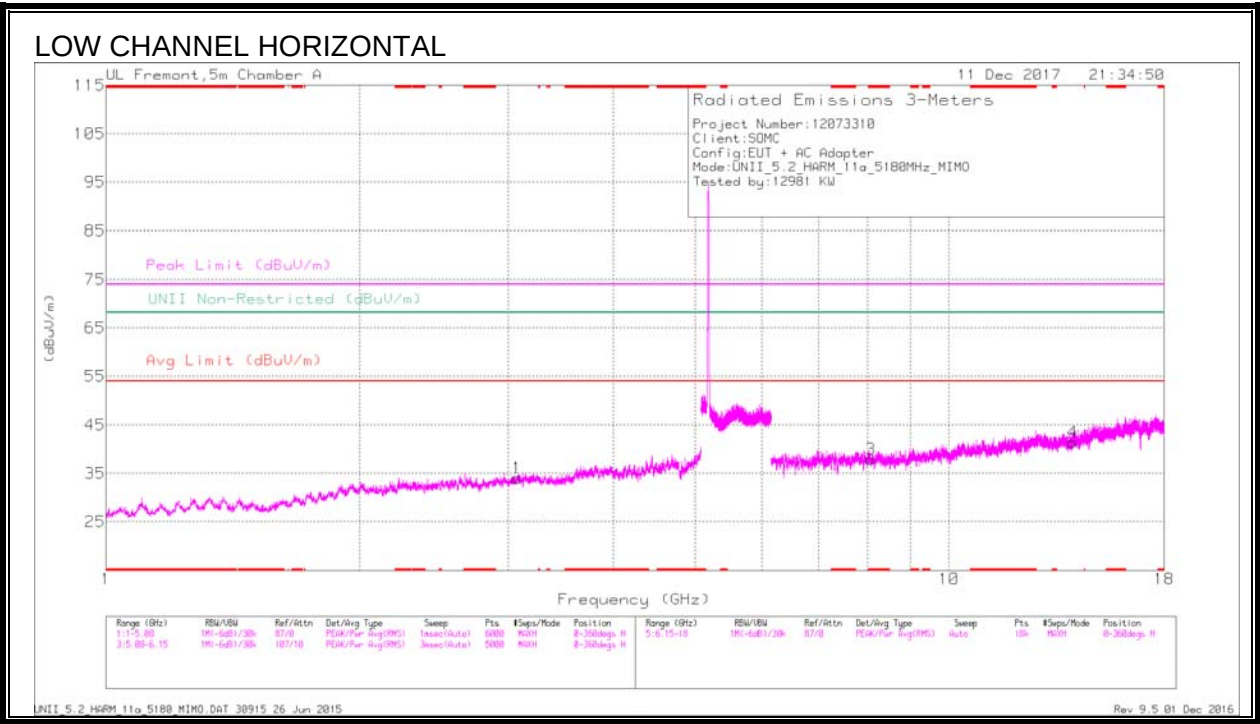
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	37.5	Pk	34.4	-18.2	0	53.7	-	-	74	-20.3	96	231	V
2	* 5.057	41.28	Pk	34.4	-17.9	0	57.78	-	-	74	-16.22	96	231	V
3	* 5.15	26.8	RMS	34.4	-18.2	0	43	54	-11	-	-	96	231	V
4	* 5.052	29.03	RMS	34.4	-17.9	0	45.53	54	-8.47	-	-	96	231	V

* - indicates frequency in CFR47 Pt 15 - Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS



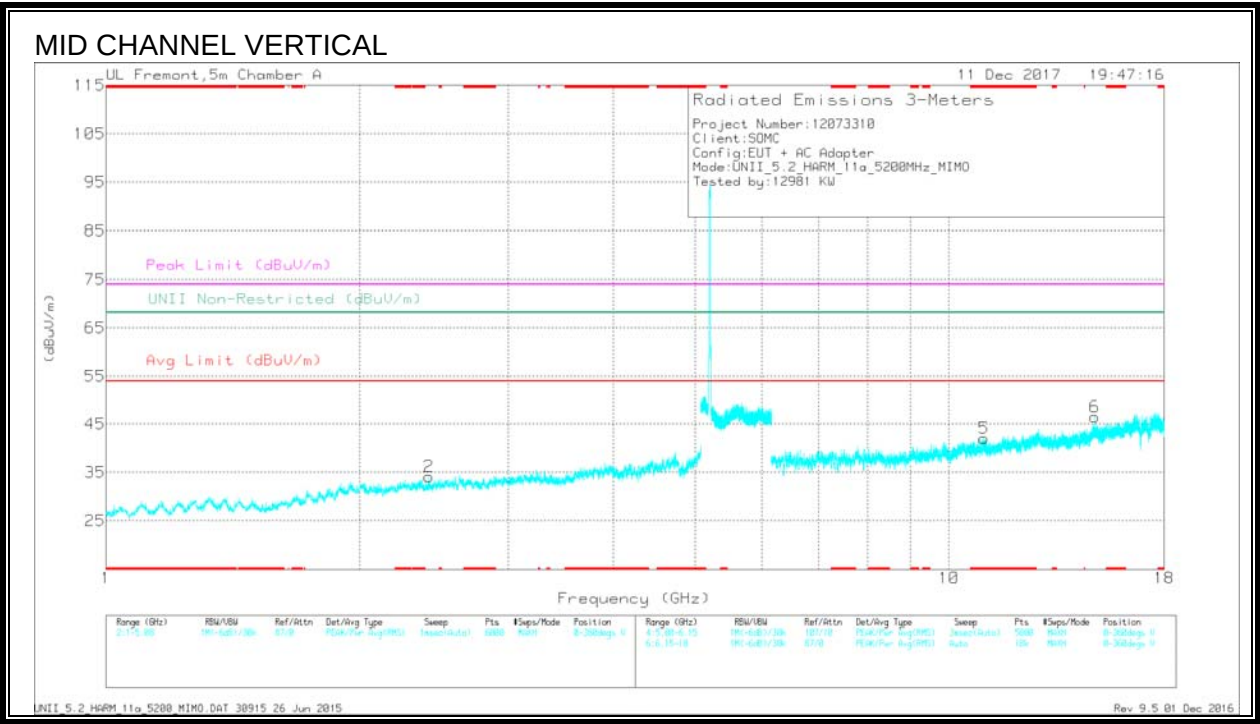
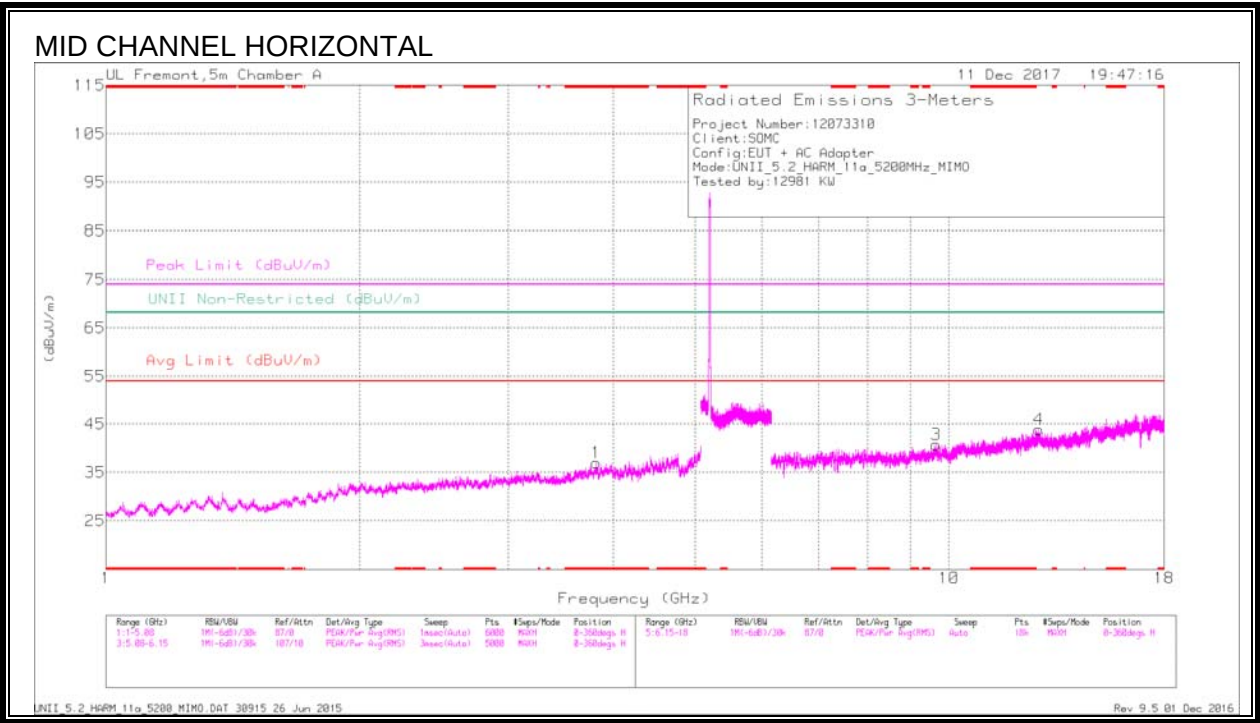
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/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	* 8.073	34.23	PK-U	36	-26	0	44.23	-	-	74	-29.77	-	-	0	177	H
	* 8.073	22.74	ADR	36	-26	0	32.74	54	-21.26	-	-	-	-	0	177	H
5	* 8.299	34.71	PK-U	36.1	-26	0	44.81	-	-	74	-29.19	-	-	0	187	V
	* 8.299	23.61	ADR	36.1	-26	0	33.71	54	-20.29	-	-	-	-	0	187	V
1	3.071	39.17	PK-U	33.1	-31.4	0	40.87	-	-	-	-	68.2	-27.33	0	198	H
2	3.143	39.51	PK-U	33	-31.2	0	41.31	-	-	-	-	68.2	-26.89	0	185	V
4	14.027	31.4	PK-U	39.2	-21.7	0	48.9	-	-	-	-	68.2	-19.3	0	151	H
6	15.041	31.17	PK-U	40.6	-20.8	0	50.97	-	-	-	-	68.2	-17.23	0	104	V

* - indicates frequency in CFR47 Pt 15 - Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



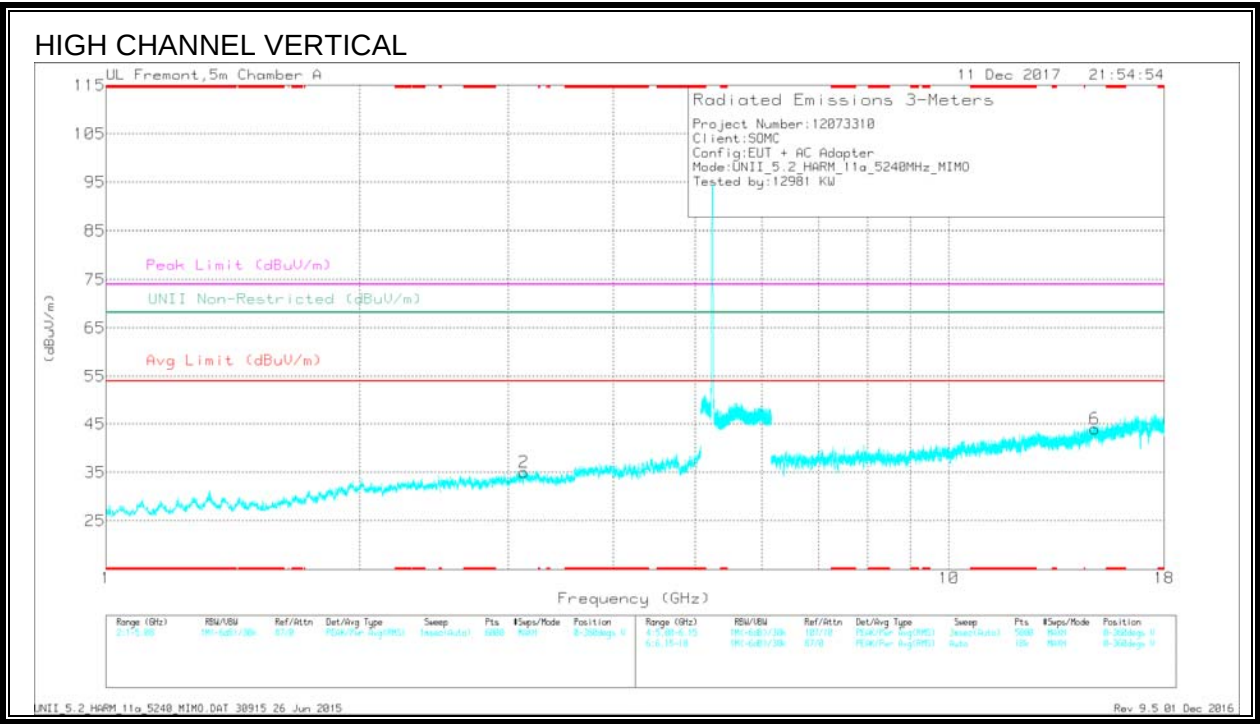
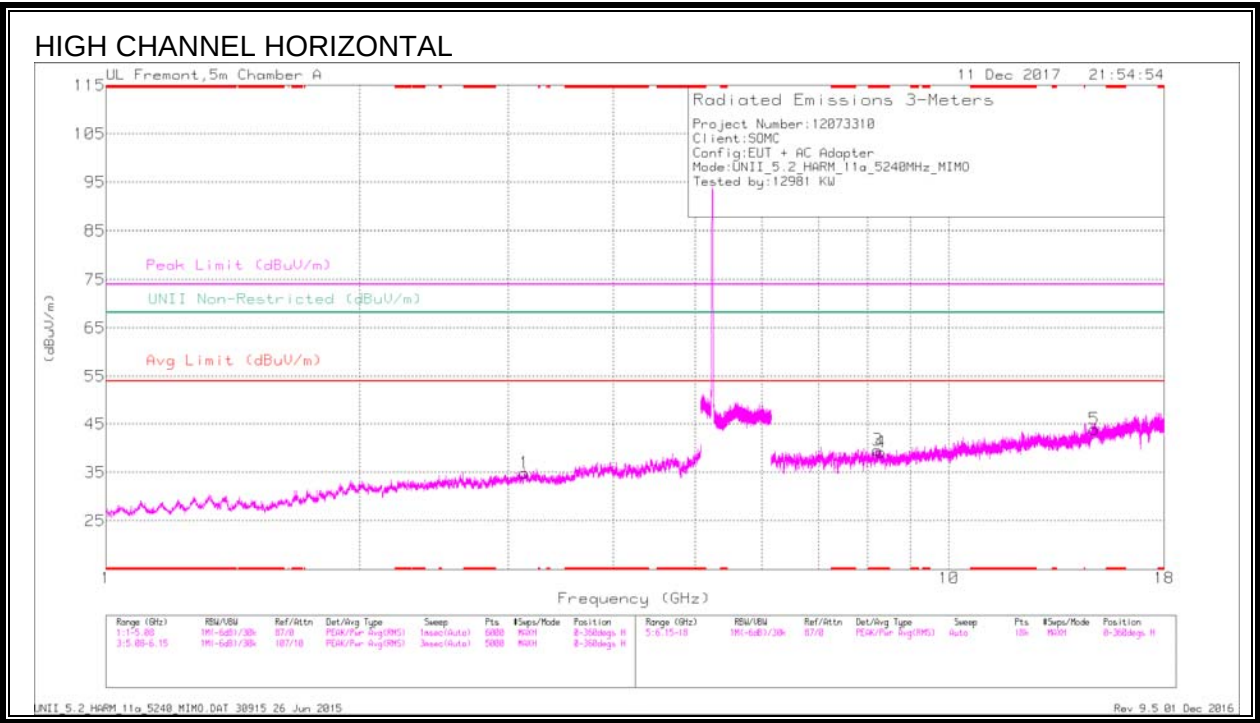
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/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	* 3.816	40.01	PK-U	33.5	-30.6	0	42.91	-	-	74	-31.09	-	-	0	101	H
	* 3.814	28.43	ADR	33.5	-30.6	0	31.33	54	-22.67	-	-	-	-	0	101	H
5	* 11.006	32.48	PK-U	37.7	-21.7	0	48.48	-	-	74	-25.52	-	-	0	113	V
	* 11.002	20.07	ADR	37.7	-21.5	0	36.27	54	-17.73	-	-	-	-	0	113	V
2	2.419	40.05	PK-U	32.1	-32.6	0	39.55	-	-	-	-	68.2	-28.65	0	161	V
3	9.658	34.11	PK-U	36.9	-23.6	0	47.41	-	-	-	-	68.2	-20.79	0	104	H
4	12.785	31.72	PK-U	39.4	-21.6	0	49.52	-	-	-	-	68.2	-18.68	0	198	H
6	14.897	31.77	PK-U	40.6	-21.3	0	51.07	-	-	-	-	68.2	-17.13	0	104	V

* - indicates frequency in CFR47 Pt 15 - Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/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	* 8.233	36.33	PK-U	36.1	-26.3	0	46.13	-	-	74	-27.87	-	-	0	101	H
	* 8.235	24.51	ADR	36.1	-26.4	0	34.21	54	-19.79	-	-	-	-	0	101	H
4	* 8.298	35.56	PK-U	36.1	-26	0	45.66	-	-	74	-28.34	-	-	0	119	H
	* 8.299	23.8	ADR	36.1	-26	0	33.9	54	-20.1	-	-	-	-	0	119	H
2	3.135	39.33	PK-U	33.1	-31	0	41.43	-	-	-	-	68.2	-26.77	0	198	V
1	3.135	40.23	PK-U	33.1	-31	0	42.33	-	-	-	-	68.2	-25.87	0	196	H
5	14.869	31.94	PK-U	40.6	-21.8	0	50.74	-	-	-	-	68.2	-17.46	0	119	H
6	14.893	31.39	PK-U	40.6	-21.3	0	50.69	-	-	-	-	68.2	-17.51	0	139	V

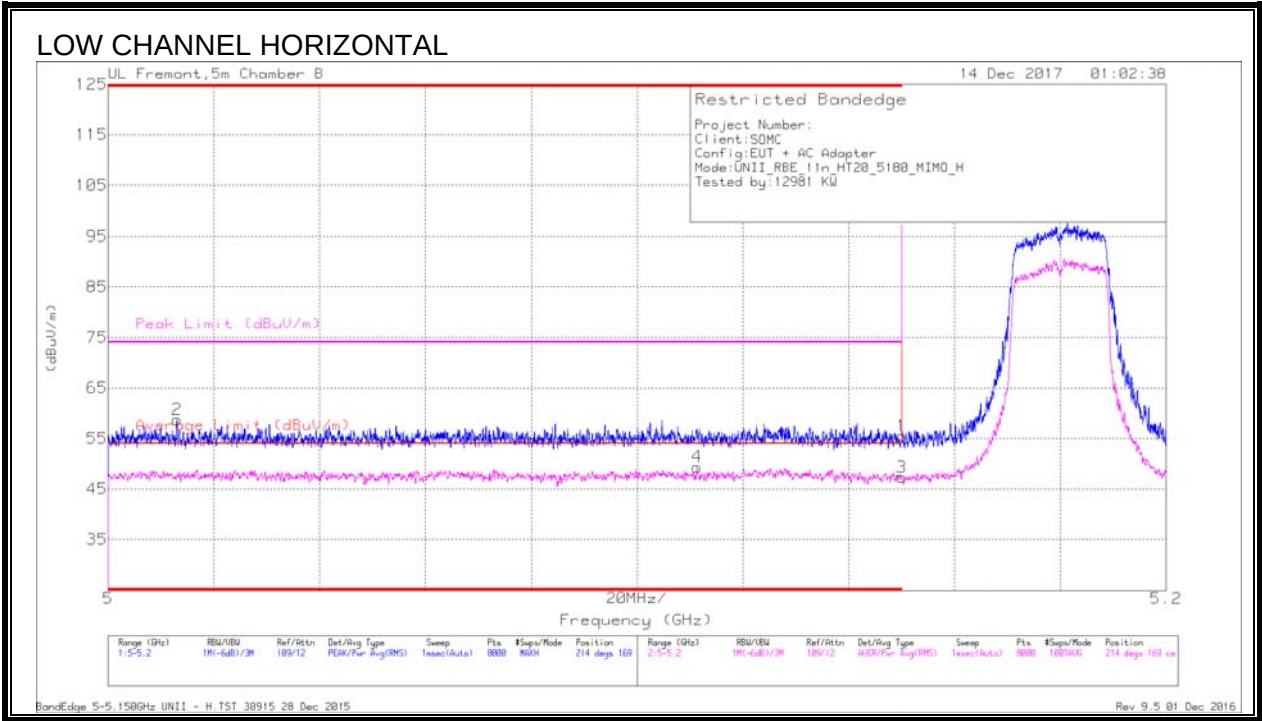
* - indicates frequency in CFR15.205 - Restricted Band

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)



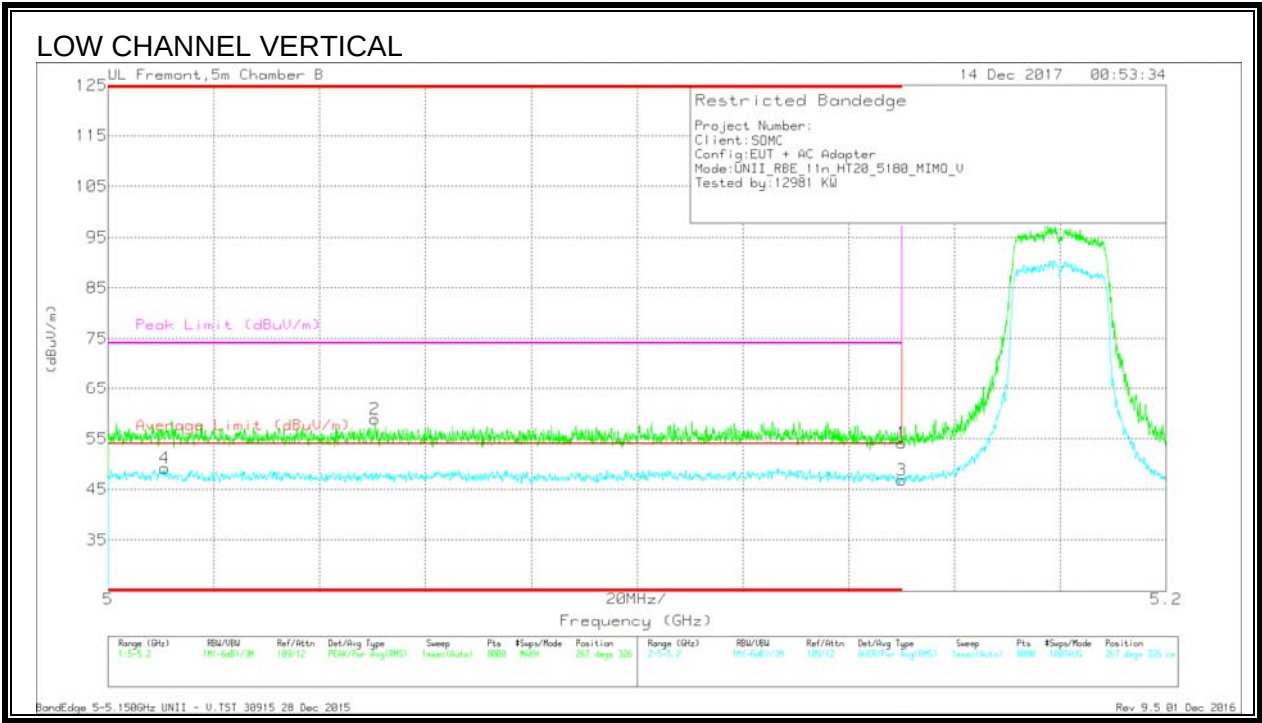
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fitr/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	* 5.013	41.5	Pk	34.4	-17.2	0	58.7	-	-	74	-15.3	214	169	H
4	* 5.111	32.25	RMS	34.4	-17.4	.11	49.36	54	-4.64	-	-	214	169	H
1	* 5.15	38.88	Pk	34.4	-17.8	0	55.48	-	-	74	-18.52	214	169	H
3	* 5.15	30.56	RMS	34.4	-17.8	.11	47.27	54	-6.73	-	-	214	169	H

* - indicates frequency in CFR15.205 - Restricted Band

Pk - Peak detector

RMS - RMS detection



Trace Markers

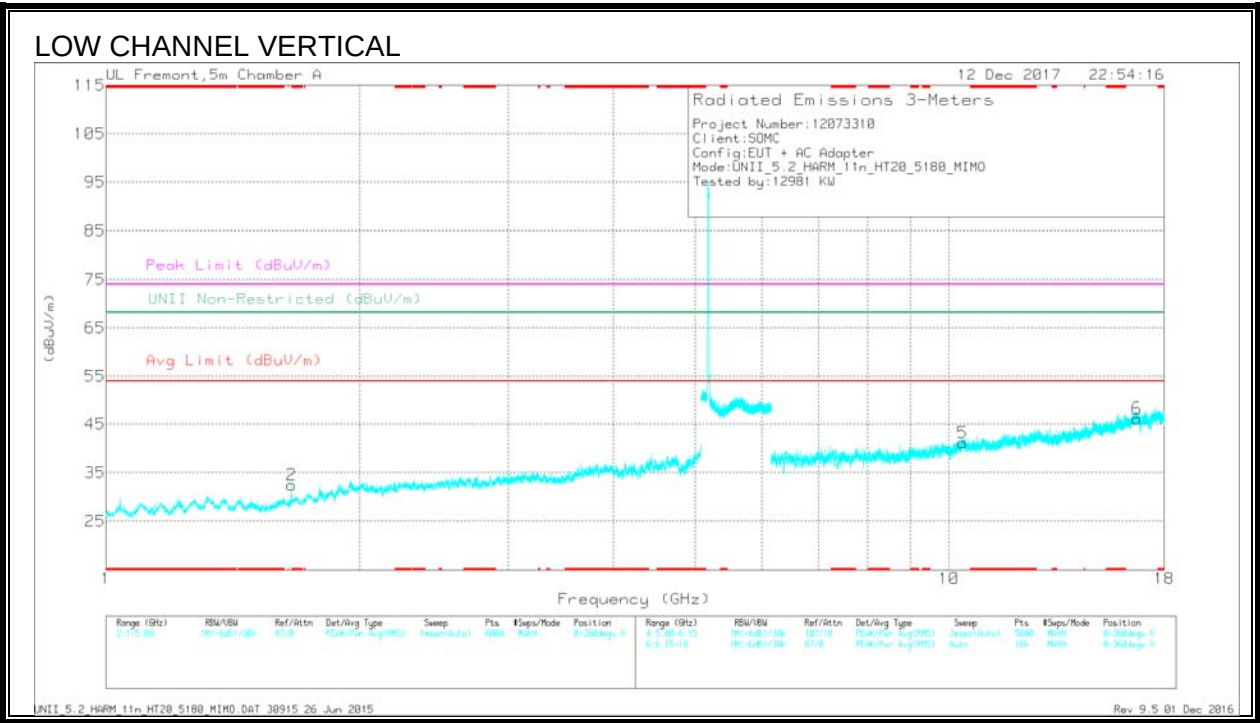
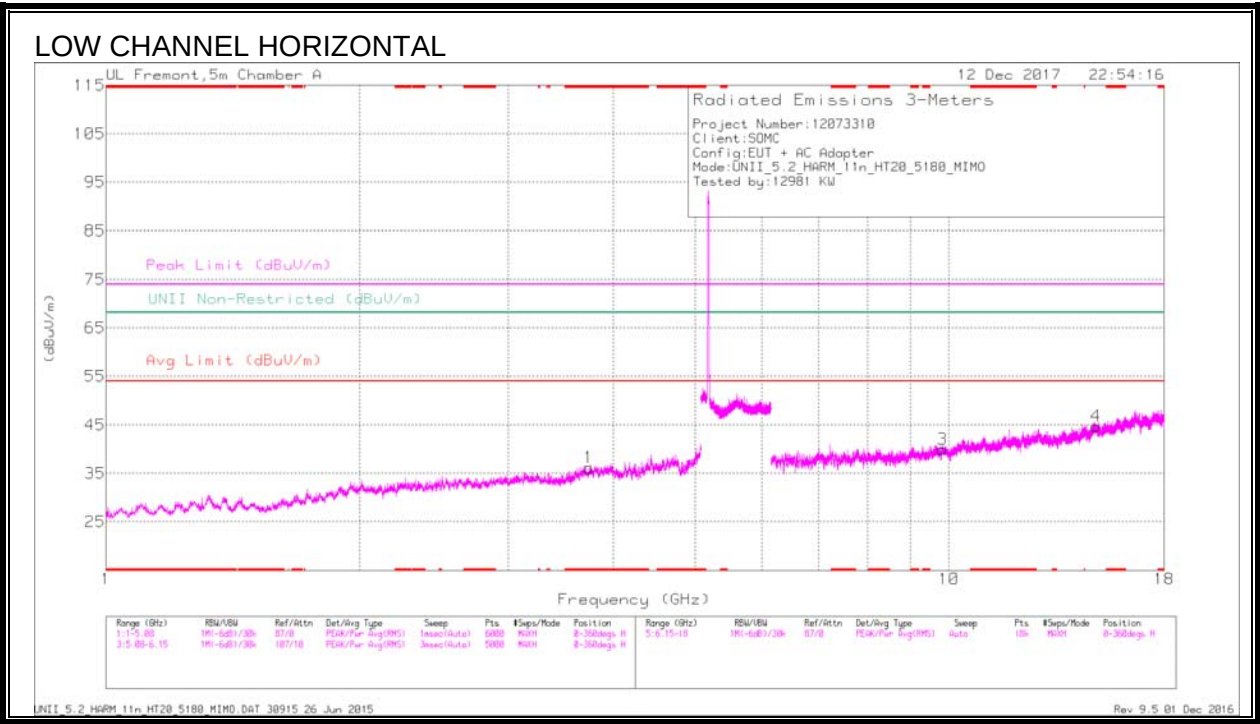
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb1/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	37.53	Pk	34.4	-17.8	0	54.13	-	-	74	-19.87	267	326	V
2	* 5.05	41.98	Pk	34.4	-17.5	0	58.88	-	-	74	-15.12	267	326	V
3	* 5.15	30.13	RMS	34.4	-17.8	.11	46.84	54	-7.16	-	-	267	326	V
4	* 5.011	31.69	RMS	34.4	-17	.11	49.2	54	-4.8	-	-	267	326	V

* - indicates frequency in CFR15.205 - Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS



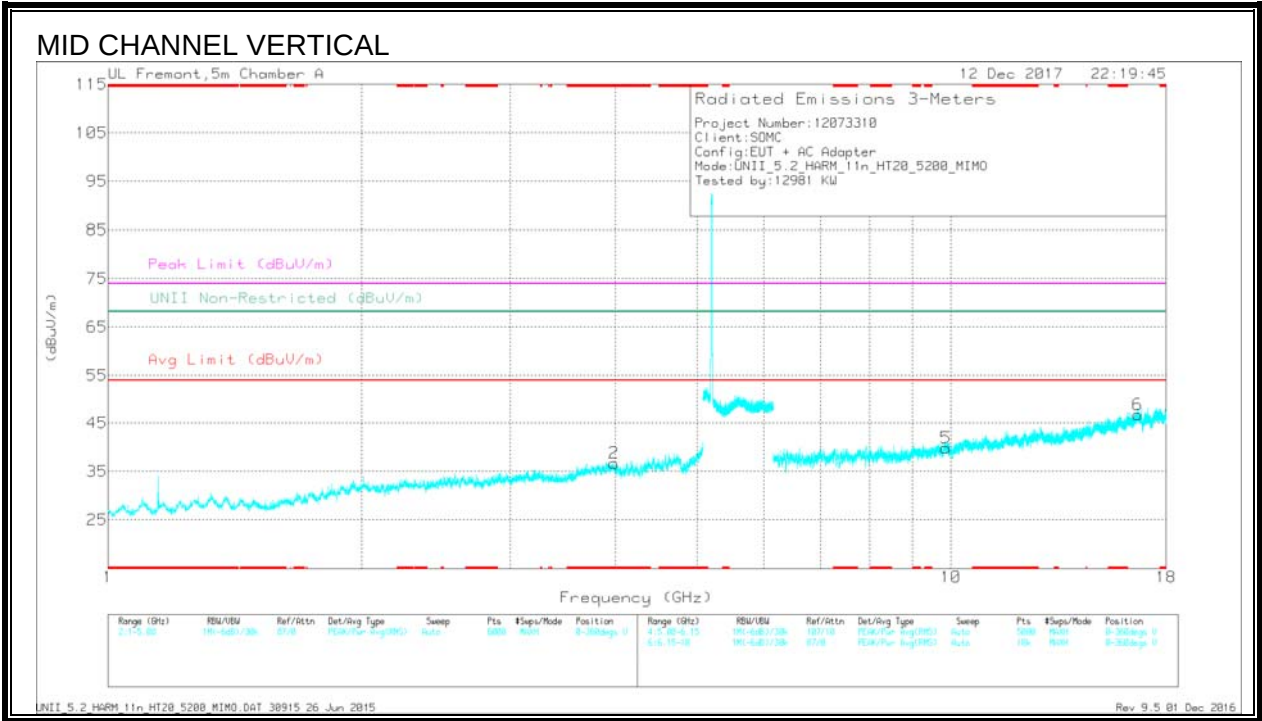
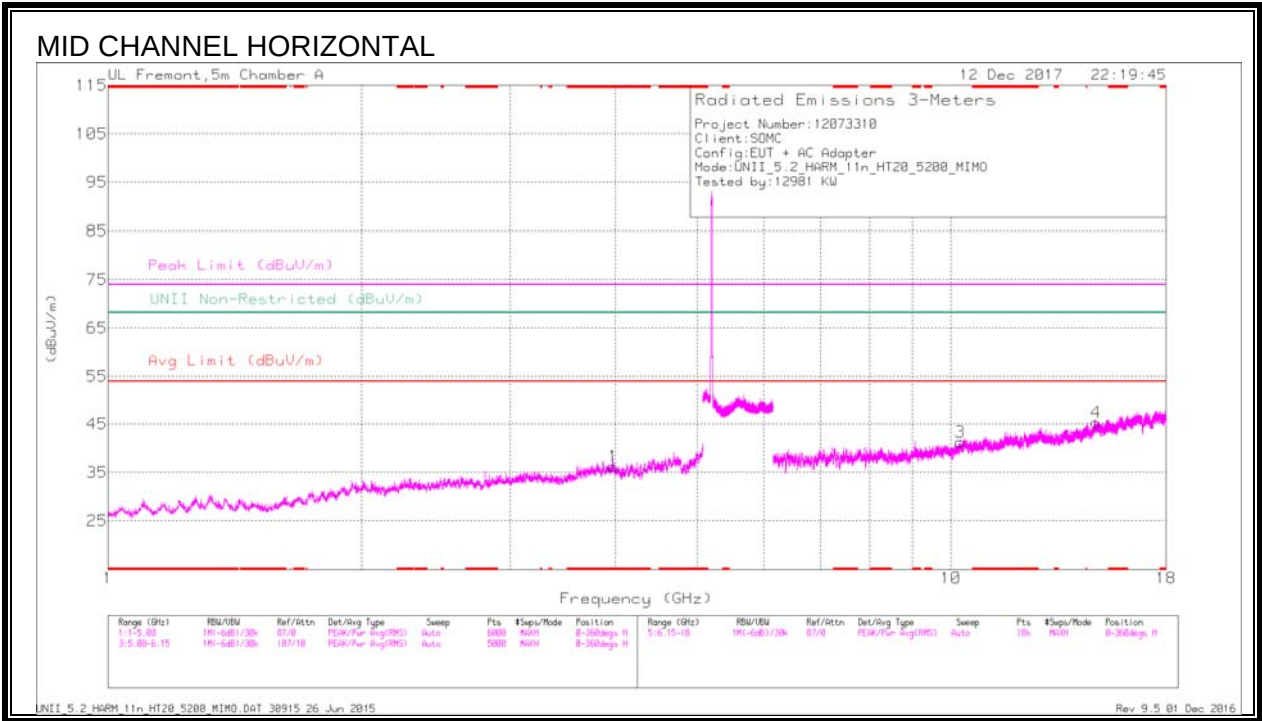
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/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	* 3.742	39.75	PK-U	33.3	-30.7	0	42.35	-	-	74	-31.65	-	-	0	101	H
	* 3.743	28.75	ADR	33.3	-30.7	.11	31.46	54	-22.54	-	-	-	-	0	101	H
2	1.658	39.82	PK-U	28.7	-32.9	0	35.62	-	-	-	-	68.2	-32.58	0	200	V
3	9.829	32.88	PK-U	36.9	-23.2	0	46.58	-	-	-	-	68.2	-21.62	0	200	H
5	10.376	32.98	PK-U	37.5	-22.6	0	47.88	-	-	-	-	68.2	-20.32	0	200	V
4	14.939	31.57	PK-U	40.6	-21.2	0	50.97	-	-	-	-	68.2	-17.23	0	200	H
6	16.714	30.02	PK-U	42.3	-19.6	0	52.72	-	-	-	-	68.2	-15.48	0	104	V

* - indicates frequency in CFR47 Pt 15 - Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



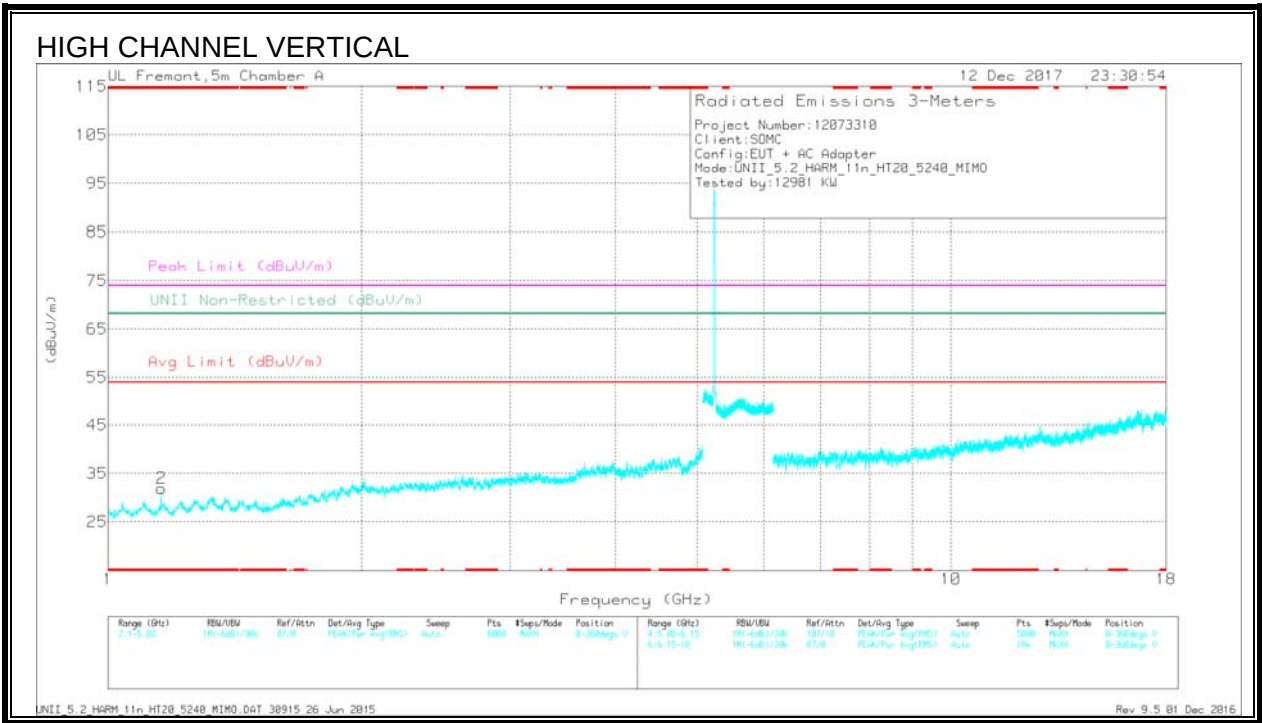
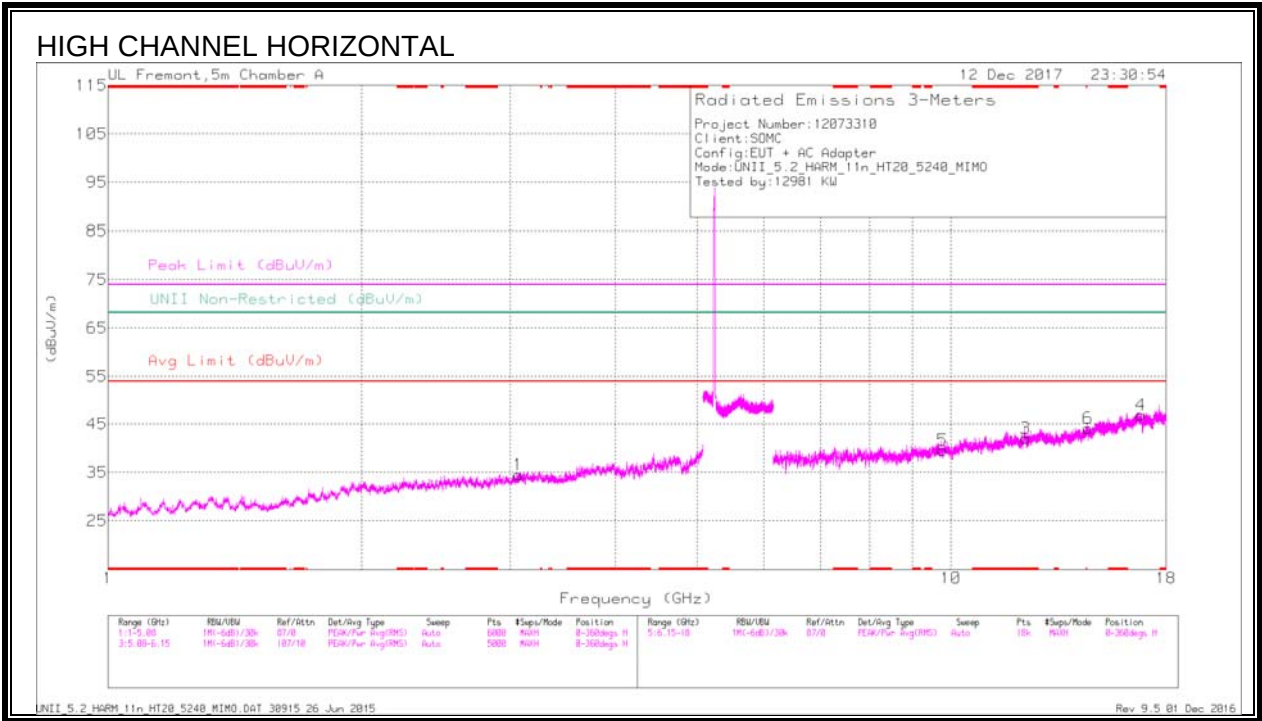
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/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	* 3.973	39.41	PK-U	33.5	-29.3	0	43.61	-	-	74	-30.39	-	-	0	101	H
	* 3.974	28.07	ADR	33.5	-29.3	.11	32.38	54	-21.62	-	-	-	-	0	101	H
2	* 3.983	39.12	PK-U	33.5	-29.2	0	43.42	-	-	74	-30.58	-	-	0	200	V
	* 3.984	27.94	ADR	33.5	-29.2	.11	32.35	54	-21.65	-	-	-	-	0	200	V
5	9.868	32.99	PK-U	37	-23.8	0	46.19	-	-	-	-	68.2	-22.01	0	104	V
3	10.253	33.16	PK-U	37.4	-23.3	0	47.26	-	-	-	-	68.2	-20.94	0	104	H
4	14.865	32.39	PK-U	40.6	-21.7	0	51.29	-	-	-	-	68.2	-16.91	0	104	H
6	16.65	30.27	PK-U	42.2	-19.5	0	52.97	-	-	-	-	68.2	-15.23	0	104	V

* - indicates frequency in CFR47 Pt 15 - Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/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	* 1.157	42.24	PK-U	27.6	-33.9	0	35.94	-	-	74	-38.06	-	-	0	200	V
	* 1.158	30.38	ADR	27.6	-33.9	.11	24.19	54	-29.81	-	-	-	-	0	200	V
3	* 12.258	32.91	PK-U	39.1	-22.3	0	49.71	-	-	74	-24.29	-	-	0	200	H
	* 12.258	21.03	ADR	39.1	-22.3	.11	37.94	54	-16.06	-	-	-	-	0	200	H
1	3.066	39.48	PK-U	33.1	-31.4	0	41.18	-	-	-	-	68.2	-27.02	0	104	H
5	9.768	32.63	PK-U	36.9	-23.9	0	45.63	-	-	-	-	68.2	-22.57	0	104	H
6	14.537	31.54	PK-U	40	-21.4	0	50.14	-	-	-	-	68.2	-18.06	0	104	H
4	16.798	30.09	PK-U	42.3	-19.7	0	52.69	-	-	-	-	68.2	-15.51	0	104	H

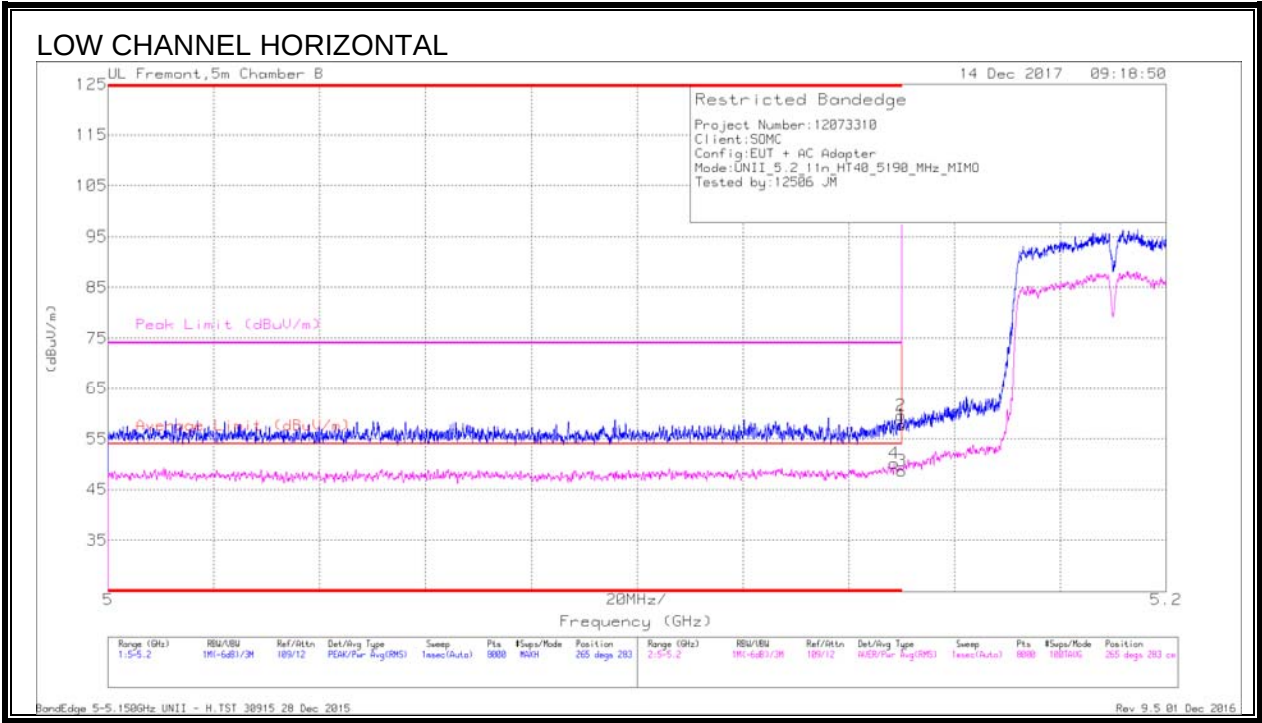
* - indicates frequency in CFR47 Pt 15 - Restricted Band

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)



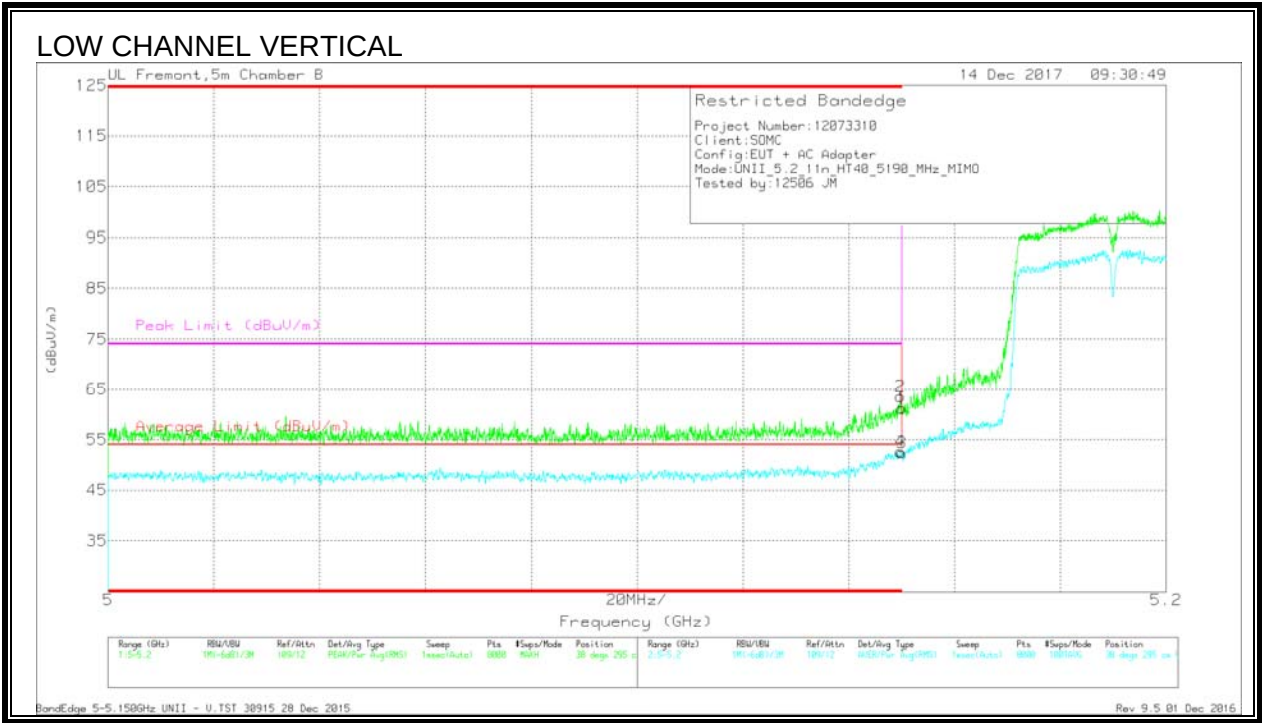
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fitr/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	* 5.149	33.1	RMS	34.4	-17.7	-39	50.19	54	-3.81	-	-	265	283	H
1	* 5.15	41.17	Pk	34.4	-17.8	0	57.77	-	-	74	-16.23	265	283	H
2	* 5.15	43.05	Pk	34.4	-17.8	0	59.65	-	-	74	-14.35	265	283	H
3	* 5.15	31.73	RMS	34.4	-17.8	-39	48.72	54	-5.28	-	-	265	283	H

* - indicates frequency in CFR15.205 - Restricted Band

Pk - Peak detector

RMS - RMS detection



Trace Markers

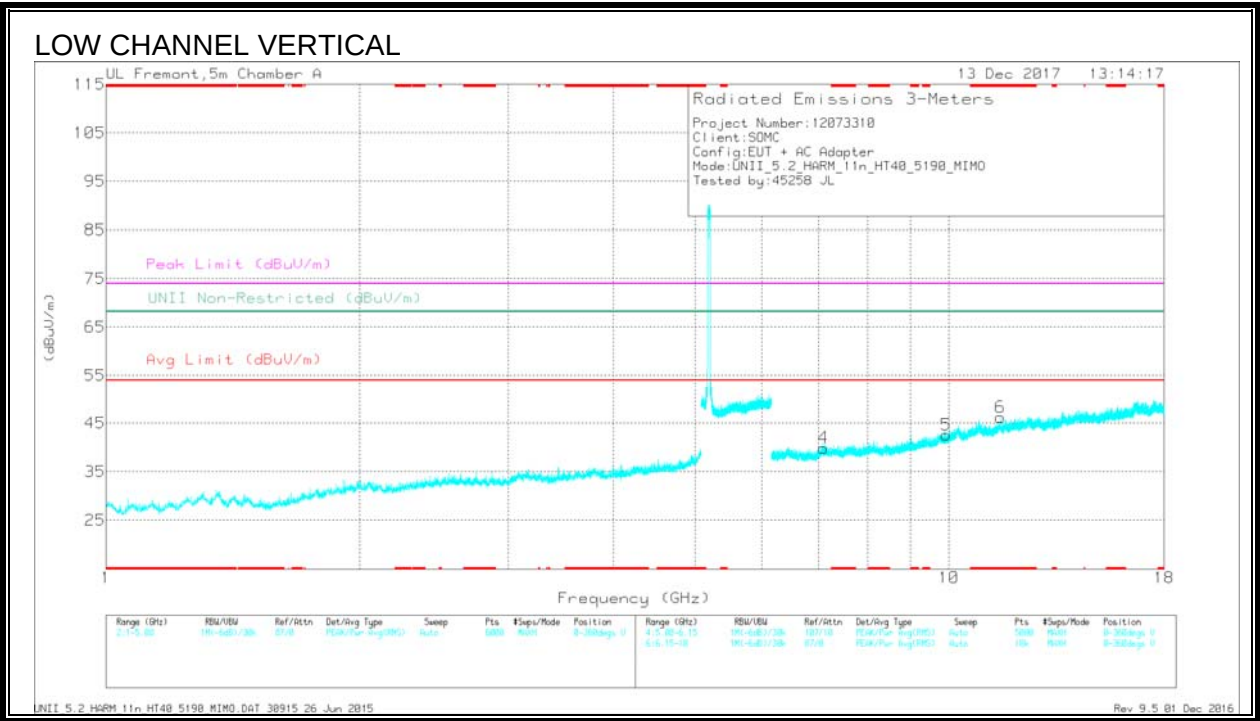
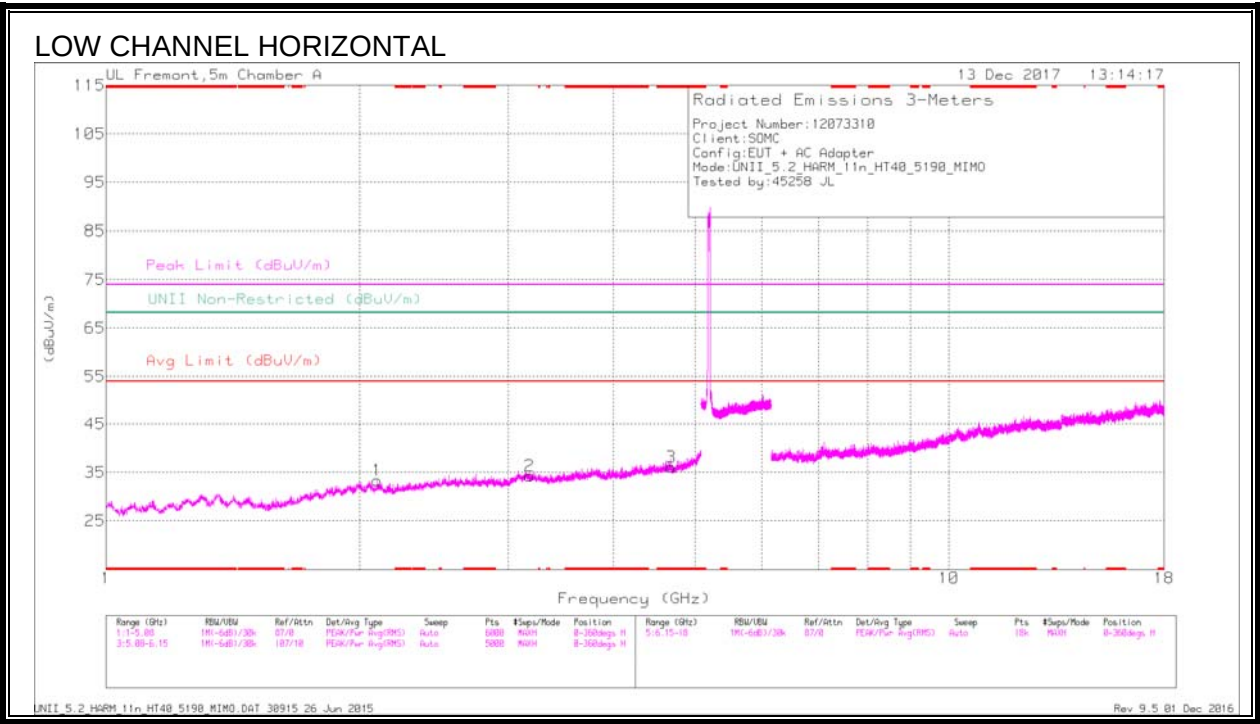
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	44.6	Pk	34.4	-17.8	0	61.2	-	-	74	-12.8	38	295	V
2	* 5.15	46.95	Pk	34.4	-17.8	0	63.55	-	-	74	-10.45	38	295	V
3	* 5.15	35.38	RMS	34.4	-17.8	.39	52.37	54	-1.63	-	-	38	295	V
4	* 5.15	35.65	RMS	34.4	-17.8	.39	52.64	54	-1.36	-	-	38	295	V

* - indicates frequency in CFR15.205 - Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS



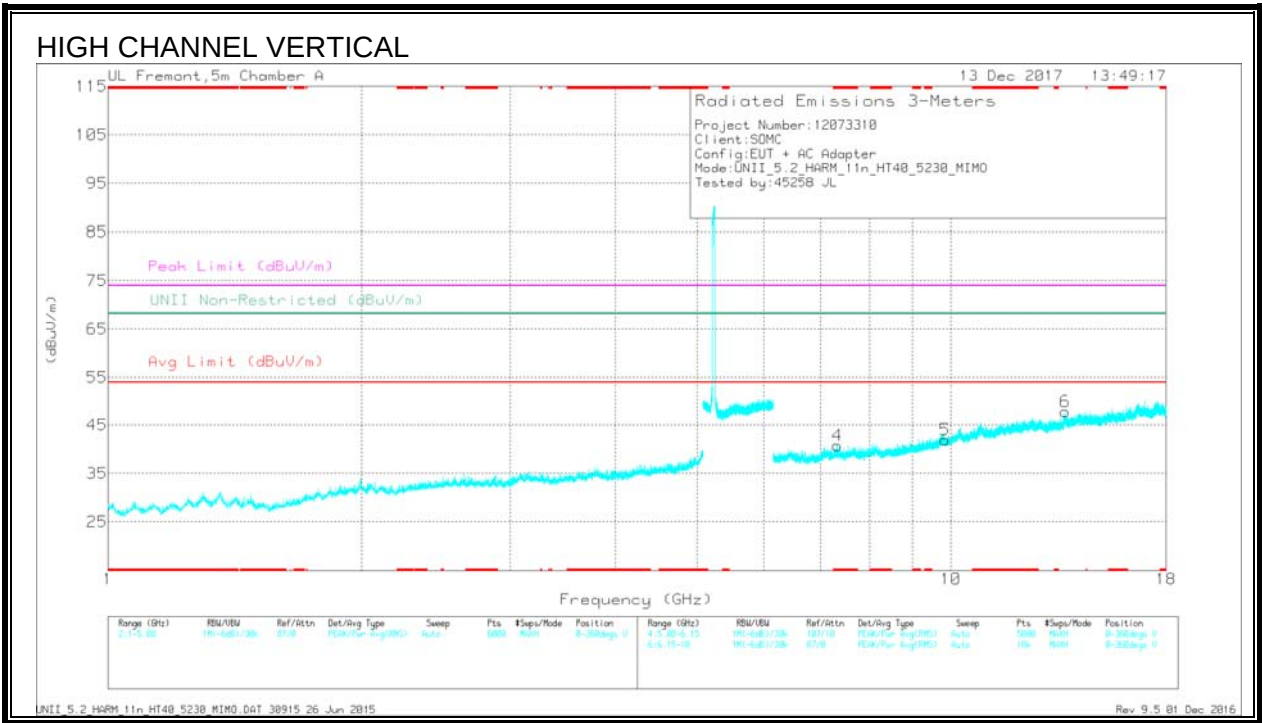
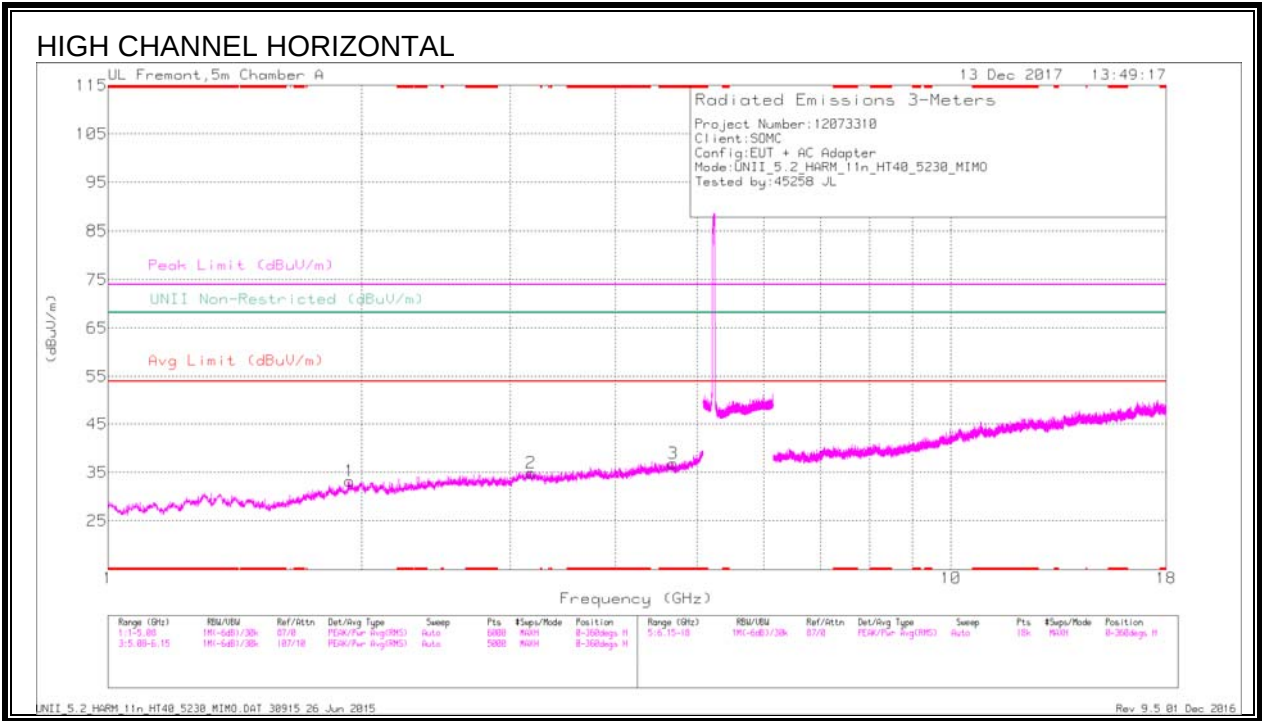
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filtr/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	* 4.678	36.05	PK-U	33.9	-26.8	0	43.15	-	-	74	-30.85	-	-	35	146	H
	* 4.68	24.67	ADR	33.9	-26.9	.39	32.06	54	-21.94	-	-	-	-	35	146	H
6	* 11.504	31.8	PK-U	38.3	-19.1	0	51	-	-	74	-23	-	-	59	181	V
	* 11.504	21.09	ADR	38.3	-19.1	.39	40.68	54	-13.32	-	-	-	-	59	181	V
1	2.098	38.42	PK-U	31.2	-30.2	0	39.42	-	-	-	-	68.2	-28.78	118	225	H
2	3.18	37.54	PK-U	33	-28.9	0	41.64	-	-	-	-	68.2	-26.56	187	256	H
4	7.101	33.35	PK-U	35.7	-22.9	0	46.15	-	-	-	-	68.2	-22.05	165	300	V
5	9.93	32.41	PK-U	37.2	-20.8	0	48.81	-	-	-	-	68.2	-19.39	261	222	V

* - indicates frequency in CFR47 Pt 15 - Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filtr/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	* 4.679	37.39	PK-U	33.9	-26.9	0	44.39	-	-	74	-29.61	-	-	304	141	H
	* 4.679	24.74	ADR	33.9	-26.9	.39	32.13	54	-21.87	-	-	-	-	304	141	H
4	* 7.335	33.14	PK-U	35.7	-22.7	0	46.14	-	-	74	-27.86	-	-	285	169	V
	* 7.335	21.99	ADR	35.7	-22.7	.39	35.38	54	-18.62	-	-	-	-	285	169	V
1	1.936	39.08	PK-U	31.3	-31	0	39.38	-	-	-	-	68.2	-28.82	252	197	H
2	3.177	37.03	PK-U	33	-28.8	0	41.23	-	-	-	-	68.2	-26.97	202	234	H
5	9.841	32.52	PK-U	37.1	-21.1	0	48.52	-	-	-	-	68.2	-19.68	202	234	V
6	13.663	33.4	PK-U	39.3	-19.3	0	53.4	-	-	-	-	68.2	-14.8	104	204	V

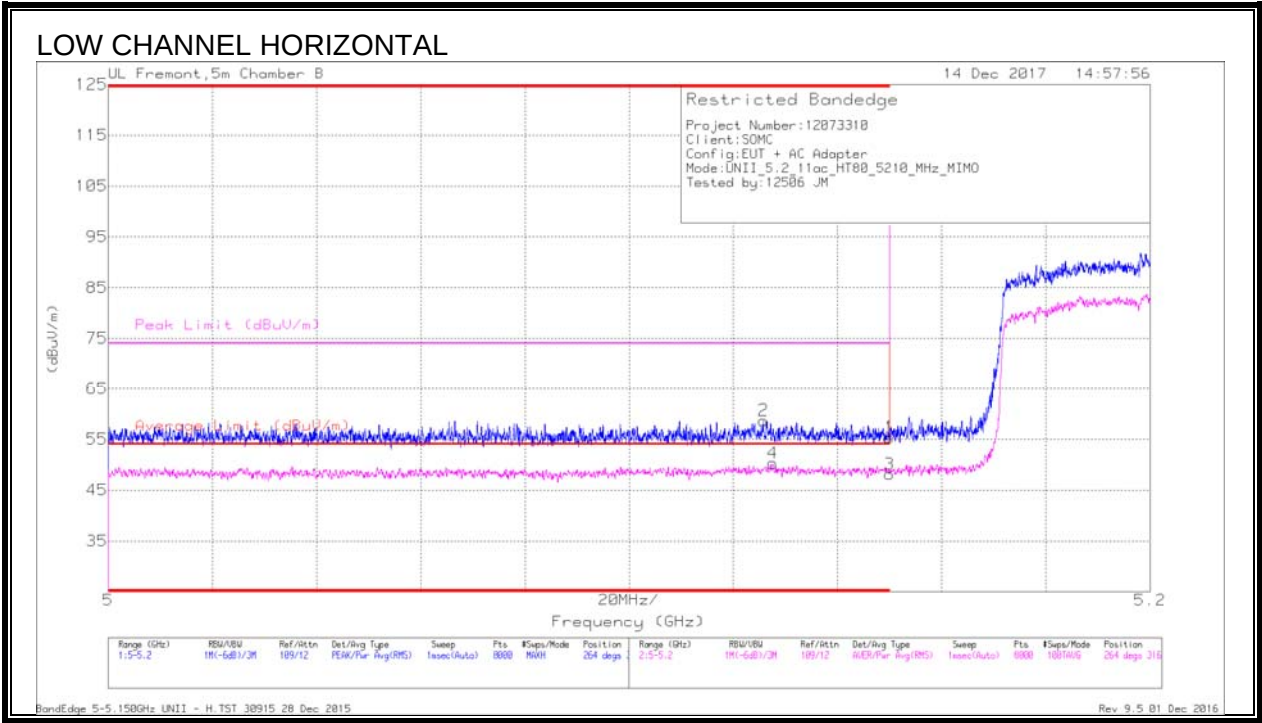
* - indicates frequency in CFR47 Pt 15 - Restricted Band

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)



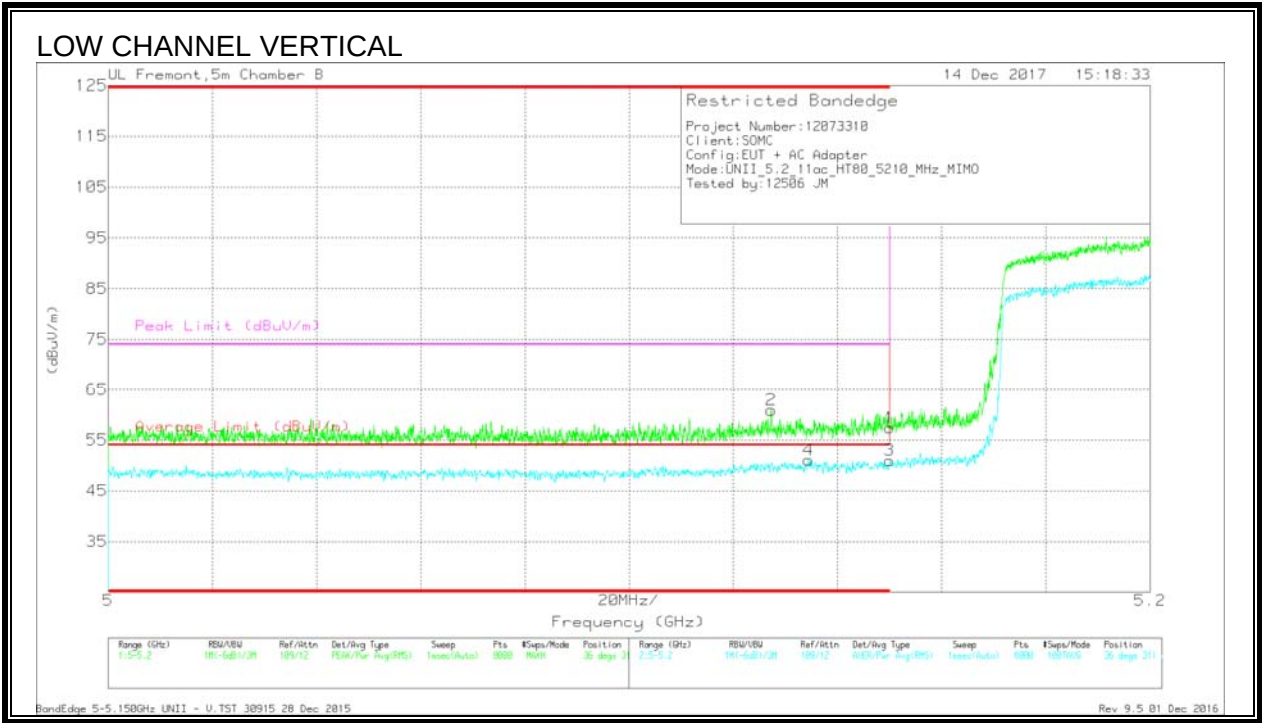
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filt/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	* 5.126	41.06	Pk	34.4	-16.8	0	58.66	-	-	74	-15.34	264	316	H
4	* 5.128	32.1	RMS	34.4	-17	.77	50.27	54	-3.73	-	-	264	316	H
1	* 5.15	38.75	Pk	34.4	-17.8	0	55.35	-	-	74	-18.65	264	316	H
3	* 5.15	30.77	RMS	34.4	-17.8	.77	48.14	54	-5.86	-	-	264	316	H

* - indicates frequency in CFR15.205 - Restricted Band

Pk - Peak detector

RMS - RMS detection



Trace Markers

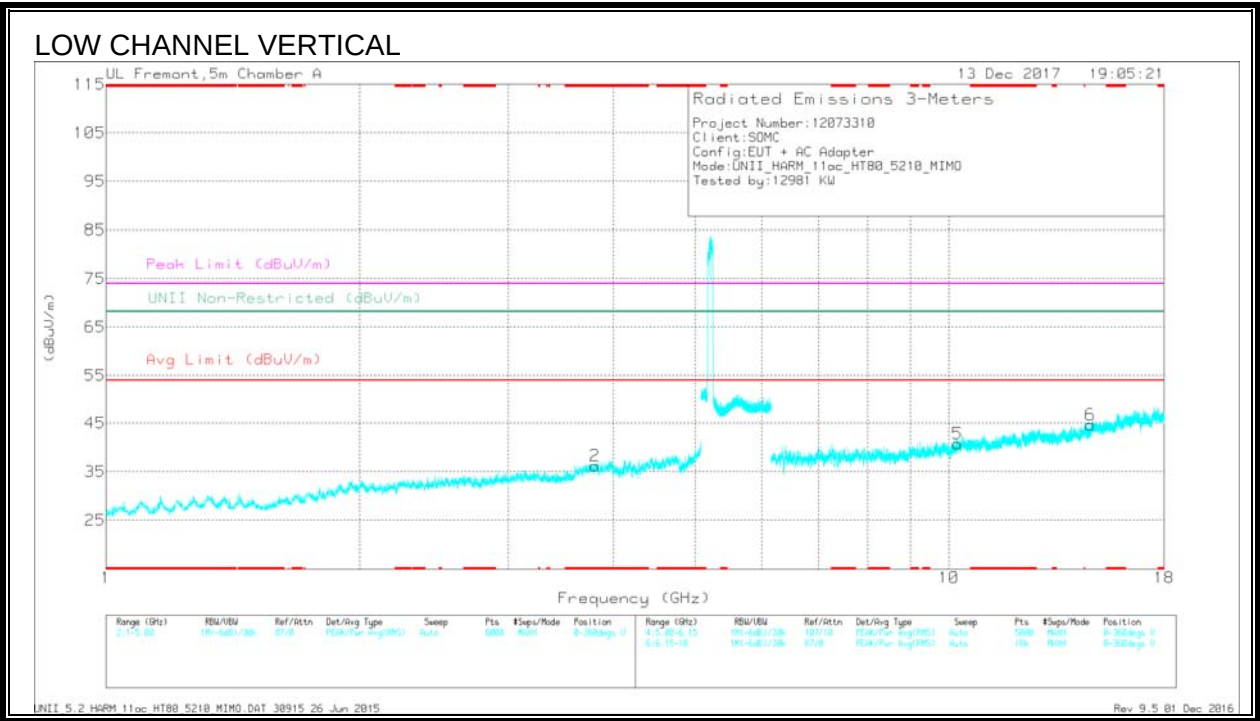
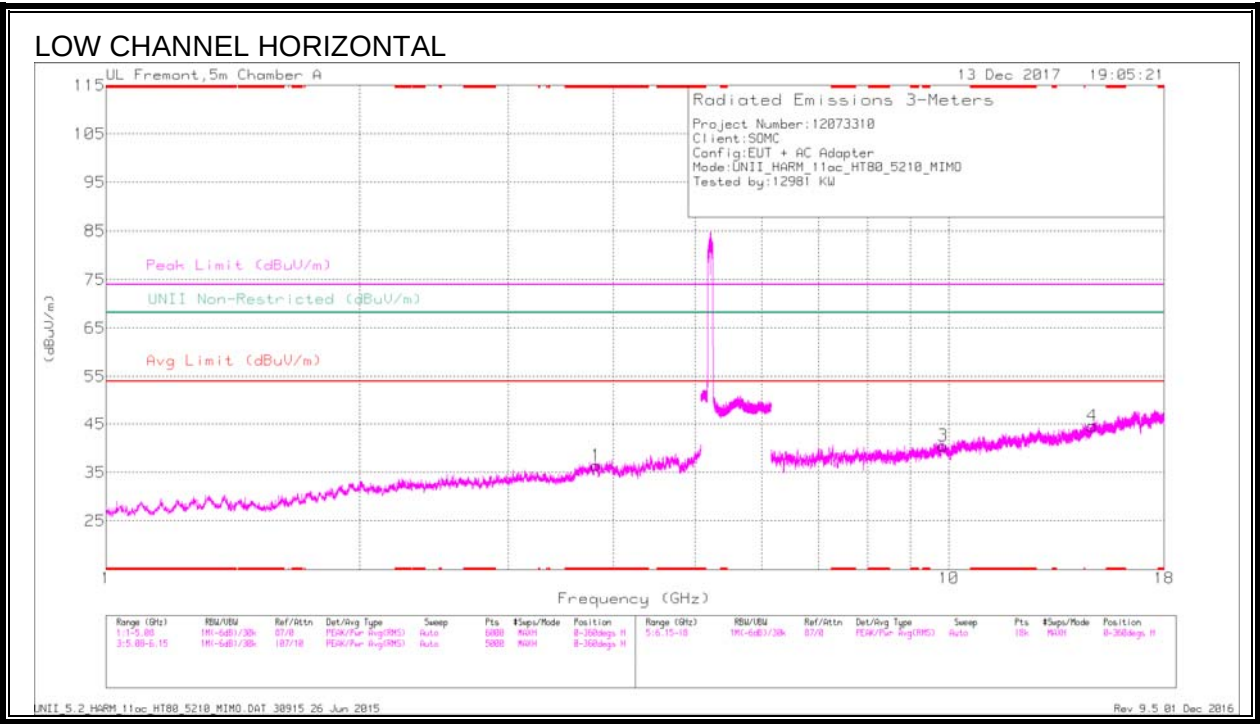
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.127	43.51	PK	34.4	-17	0	60.91	-	-	74	-13.09	36	311	V
4	* 5.134	33.26	RMS	34.4	-17.4	.77	51.03	54	-2.97	-	-	36	311	V
1	* 5.15	40.79	PK	34.4	-17.8	0	57.39	-	-	74	-16.61	36	311	V
3	* 5.15	33.62	RMS	34.4	-17.8	.77	50.99	54	-3.01	-	-	36	311	V

* - indicates frequency in CFR15.205 - Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS



Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/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	* 3.818	40.54	PK-U	33.5	-30.6	0	43.44	-	-	74	-30.56	-	-	360	101	H
	* 3.817	28.95	ADR	33.5	-30.6	.77	32.62	54	-21.38	-	-	-	-	360	101	H
2	* 3.801	40.18	PK-U	33.6	-30.8	0	42.98	-	-	74	-31.02	-	-	360	101	V
	* 3.8	28.95	ADR	33.6	-30.8	.77	32.52	54	-21.48	-	-	-	-	360	101	V
3	9.841	33.16	PK-U	37	-23.3	0	46.86	-	-	-	-	68.2	-21.34	360	183	H
5	10.235	33.51	PK-U	37.4	-23.5	0	47.41	-	-	-	-	68.2	-20.79	360	199	V
6	14.716	31.75	PK-U	40.4	-21.5	0	50.65	-	-	-	-	68.2	-17.55	360	104	V
4	14.791	32.12	PK-U	40.5	-21.5	0	51.12	-	-	-	-	68.2	-17.08	360	196	H

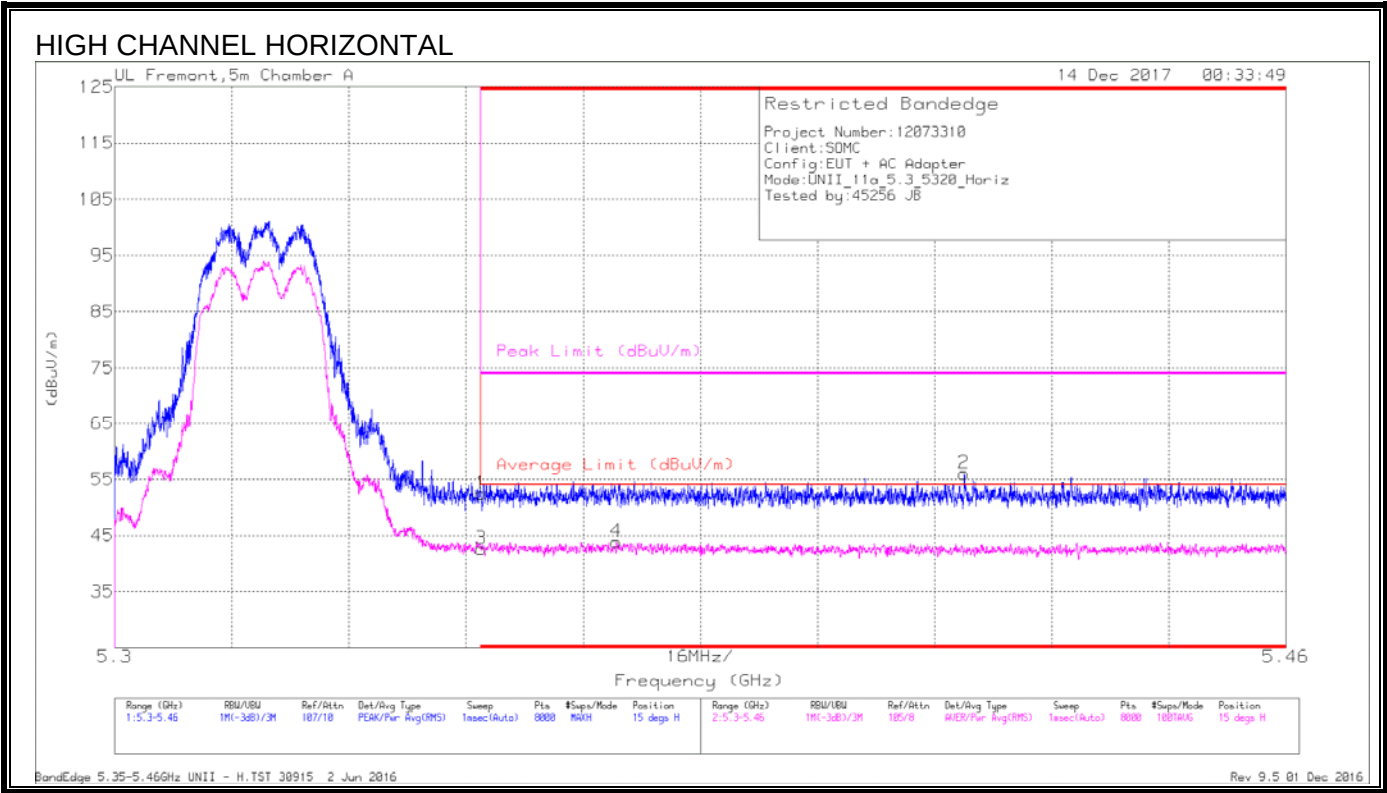
* - indicates frequency in CFR47 Pt 15 - Restricted Band

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)



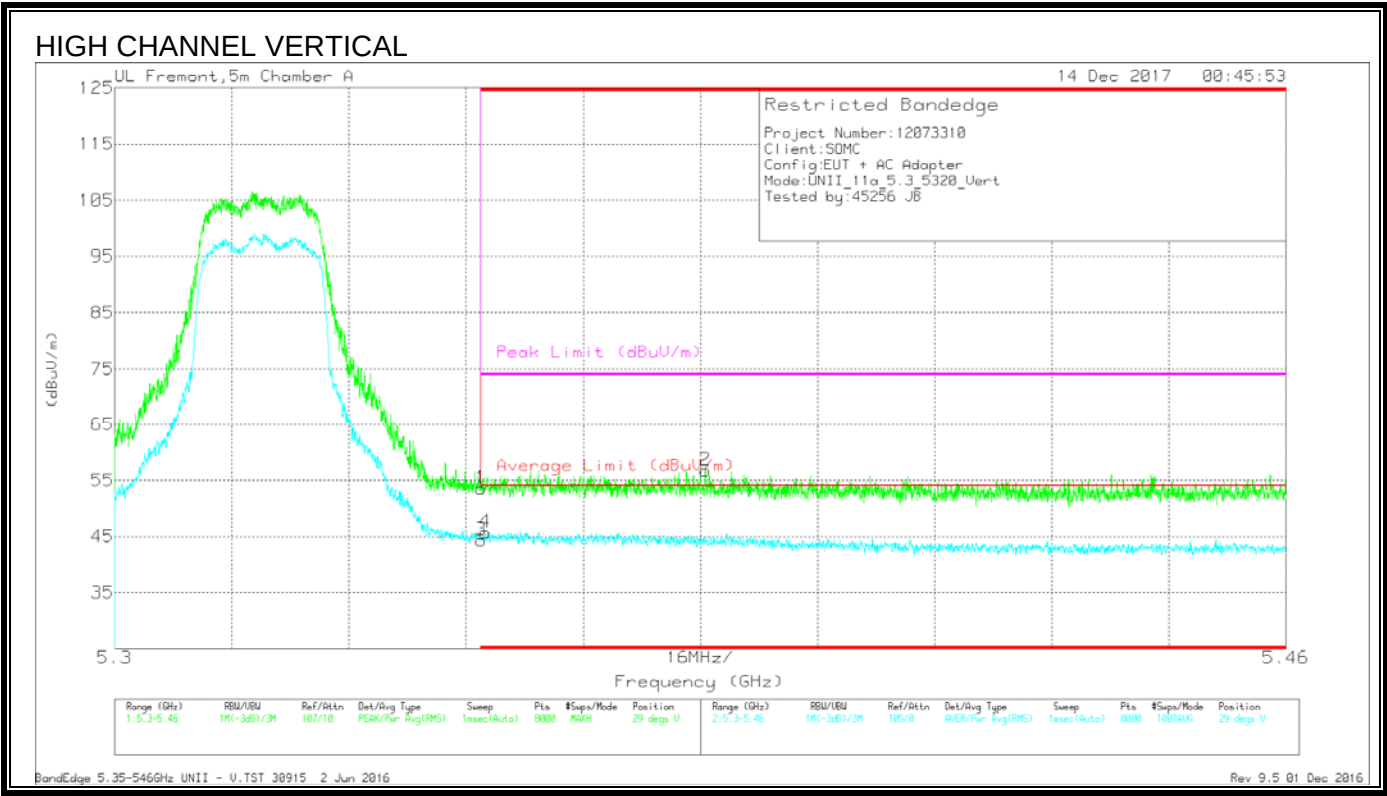
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/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	36.06	Pk	34.6	-18.3	0	52.36	-	-	74	-21.64	15	292	H
2	* 5.416	39.57	Pk	34.7	-18.3	0	55.97	-	-	74	-18.03	15	292	H
3	* 5.35	26.28	RMS	34.6	-18.3	0	42.58	54	-11.42	-	-	15	292	H
4	* 5.369	27.57	RMS	34.6	-18.3	0	43.87	54	-10.13	-	-	15	292	H

* - indicates frequency in CFR15.205 - Restricted Band

Pk - Peak detector

RMS - RMS detection

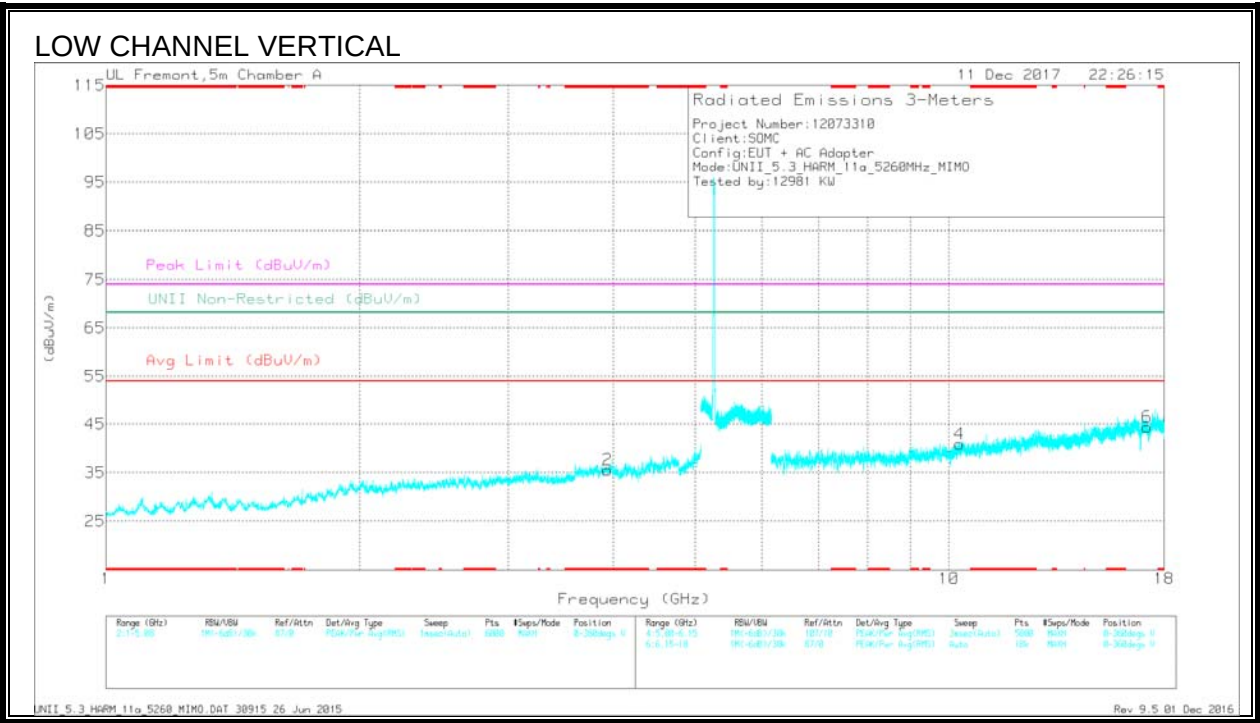
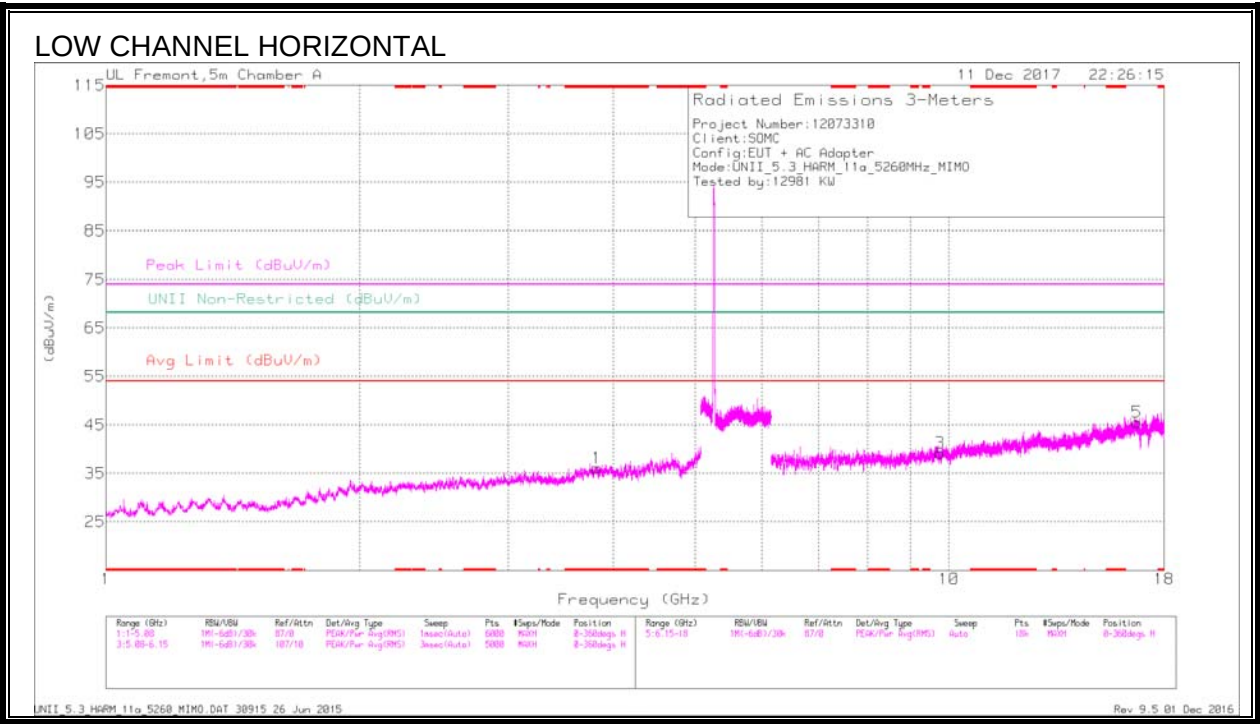


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filtr/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	37.17	Pk	34.6	-18.3	0	53.47	-	-	74	-20.53	29	267	V
2	* 5.381	40.56	Pk	34.6	-18.4	0	56.76	-	-	74	-17.24	29	267	V
3	* 5.35	28.01	RMS	34.6	-18.3	0	44.31	54	-9.69	-	-	29	267	V
4	* 5.351	29.41	RMS	34.6	-18.3	0	45.71	54	-8.29	-	-	29	267	V

* - indicates frequency in CFR15.205 - Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS



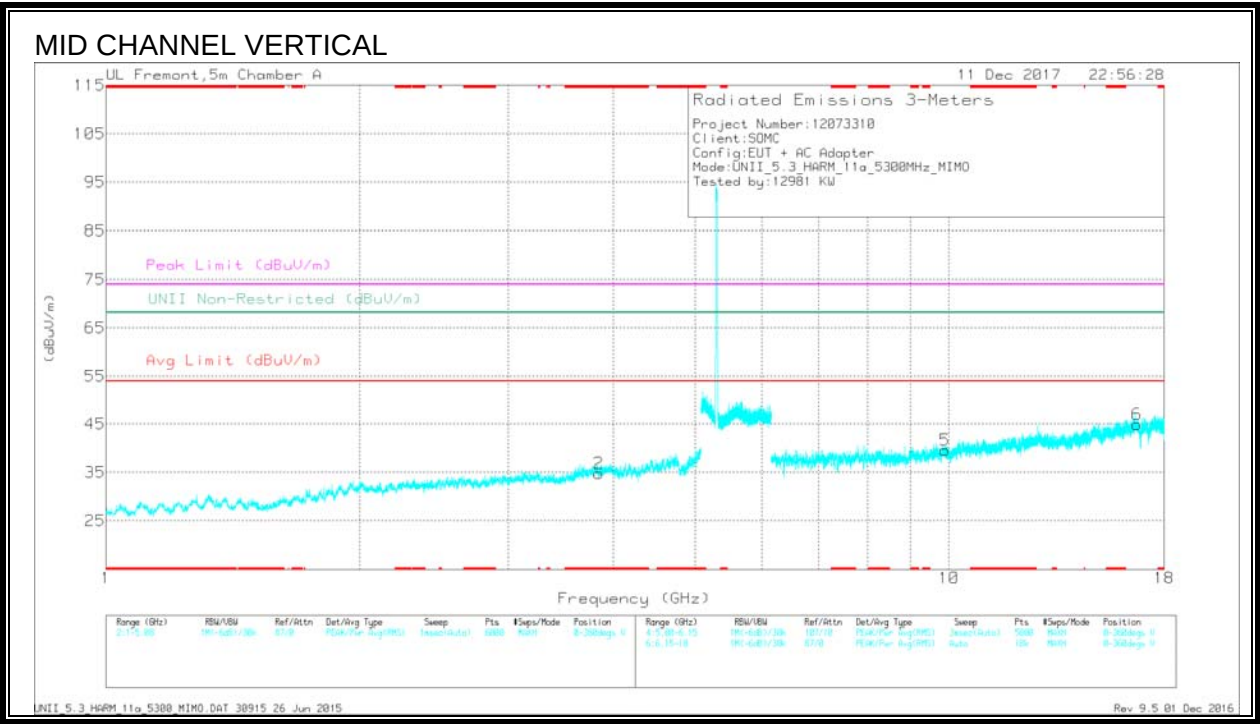
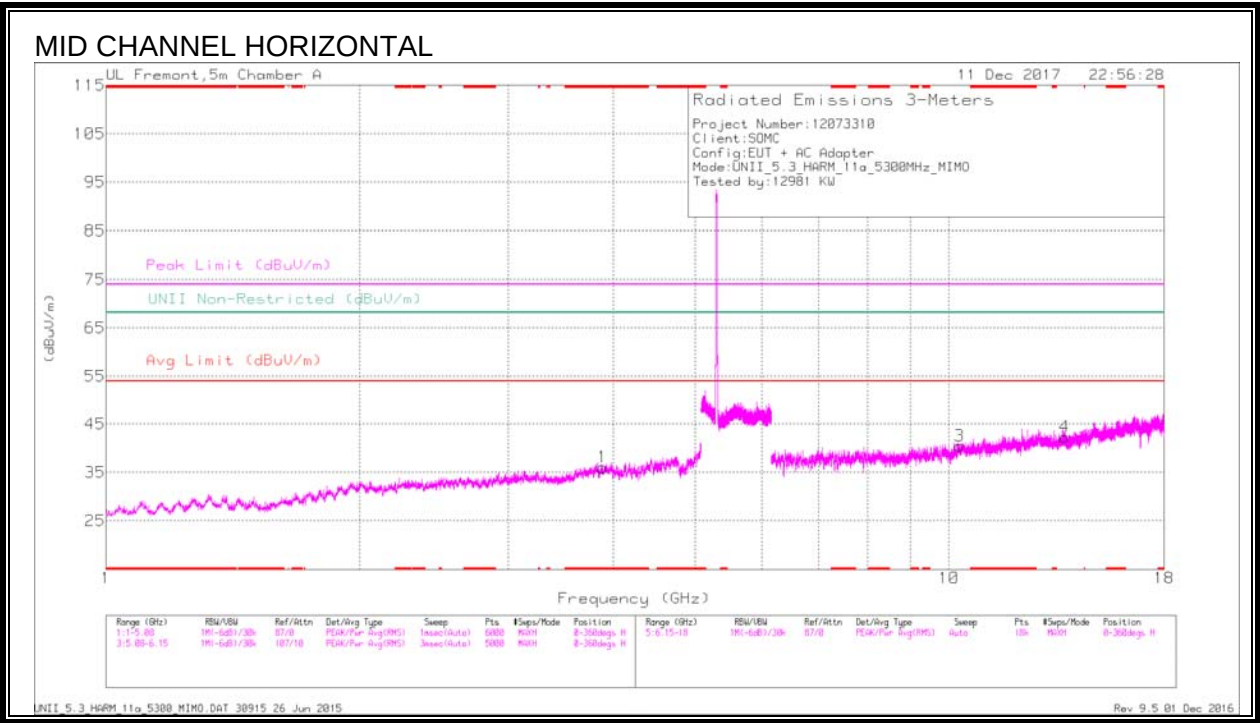
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/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	* 3.82	40.54	PK-U	33.5	-30.8	0	43.24	-	-	74	-30.76	-	-	0	101	H
	* 3.821	28.51	ADR	33.5	-30.8	0	31.21	54	-22.79	-	-	-	-	0	101	H
2	* 3.938	39.54	PK-U	33.5	-29.9	0	43.14	-	-	74	-30.86	-	-	0	101	V
	* 3.938	27.83	ADR	33.5	-29.9	0	31.43	54	-22.57	-	-	-	-	0	101	V
3	9.759	33.68	PK-U	36.9	-24.2	0	46.38	-	-	-	-	68.2	-21.82	0	101	H
4	10.292	33.87	PK-U	37.5	-23.8	0	47.57	-	-	-	-	68.2	-20.63	0	198	V
5	16.712	30.04	PK-U	42.3	-19.5	0	52.84	-	-	-	-	68.2	-15.36	0	198	H
6	17.18	30.81	PK-U	41.7	-19.8	0	52.71	-	-	-	-	68.2	-15.49	0	198	V

* - indicates frequency in CFR15.205 - Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



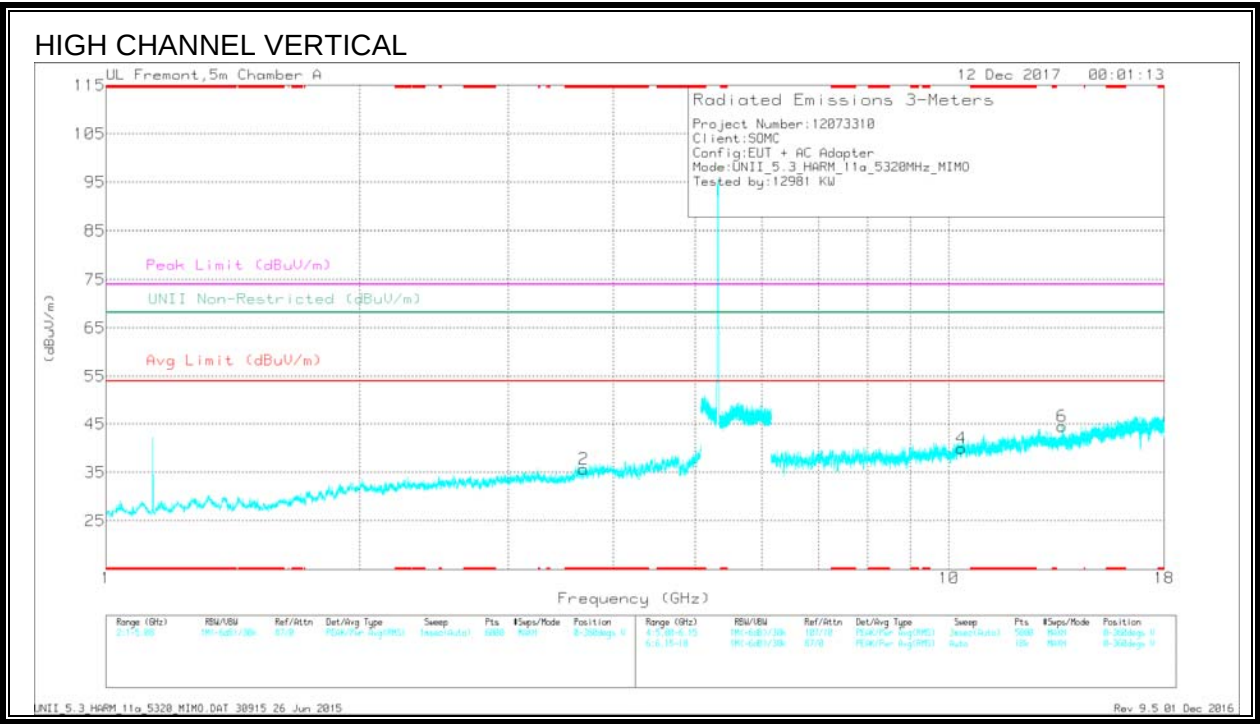
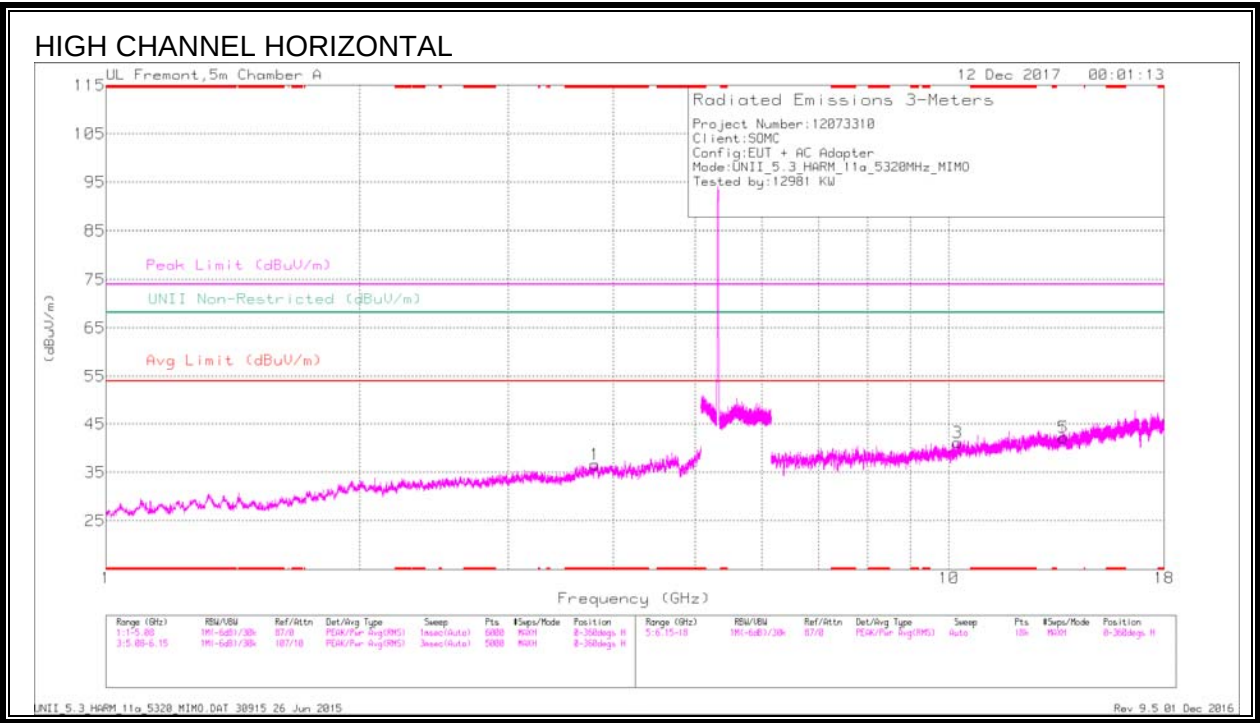
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/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	* 3.882	39.87	PK-U	33.5	-30.6	0	42.77	-	-	74	-31.23	-	-	0	101	H
	* 3.882	28.36	ADR	33.5	-30.6	0	31.26	54	-22.74	-	-	-	-	0	101	H
2	* 3.84	39.59	PK-U	33.5	-31	0	42.09	-	-	74	-31.91	-	-	0	136	V
	* 3.843	27.64	ADR	33.5	-31	0	30.14	54	-23.86	-	-	-	-	0	136	V
5	9.889	32.76	PK-U	37	-23.3	0	46.46	-	-	-	-	68.2	-21.74	0	104	V
3	10.29	32.9	PK-U	37.5	-23.9	0	46.5	-	-	-	-	68.2	-21.7	0	148	H
4	13.716	32.76	PK-U	39.1	-21.8	0	50.06	-	-	-	-	68.2	-18.14	0	128	H
6	16.716	30.09	PK-U	42.3	-19.7	0	52.69	-	-	-	-	68.2	-15.51	0	104	V

* - indicates frequency in CFR47 Pt 15 - Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/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	* 3.805	39.98	PK-U	33.5	-30.8	0	42.68	-	-	74	-31.32	-	-	0	198	H
	* 3.805	28.6	ADR	33.5	-30.8	0	31.3	54	-22.7	-	-	-	-	0	198	H
2	* 3.688	39.74	PK-U	33.2	-30.5	0	42.44	-	-	74	-31.56	-	-	0	104	V
	* 3.687	28.31	ADR	33.2	-30.5	0	31.01	54	-22.99	-	-	-	-	0	104	V
3	10.235	33.43	PK-U	37.4	-23.5	0	47.33	-	-	-	-	68.2	-20.87	0	198	H
4	10.345	31.98	PK-U	37.5	-22.8	0	46.68	-	-	-	-	68.2	-21.52	0	104	V
6	13.621	32.01	PK-U	39.1	-22	0	49.11	-	-	-	-	68.2	-19.09	0	156	V
5	13.663	31.76	PK-U	39.1	-21.8	0	49.06	-	-	-	-	68.2	-19.14	0	198	H

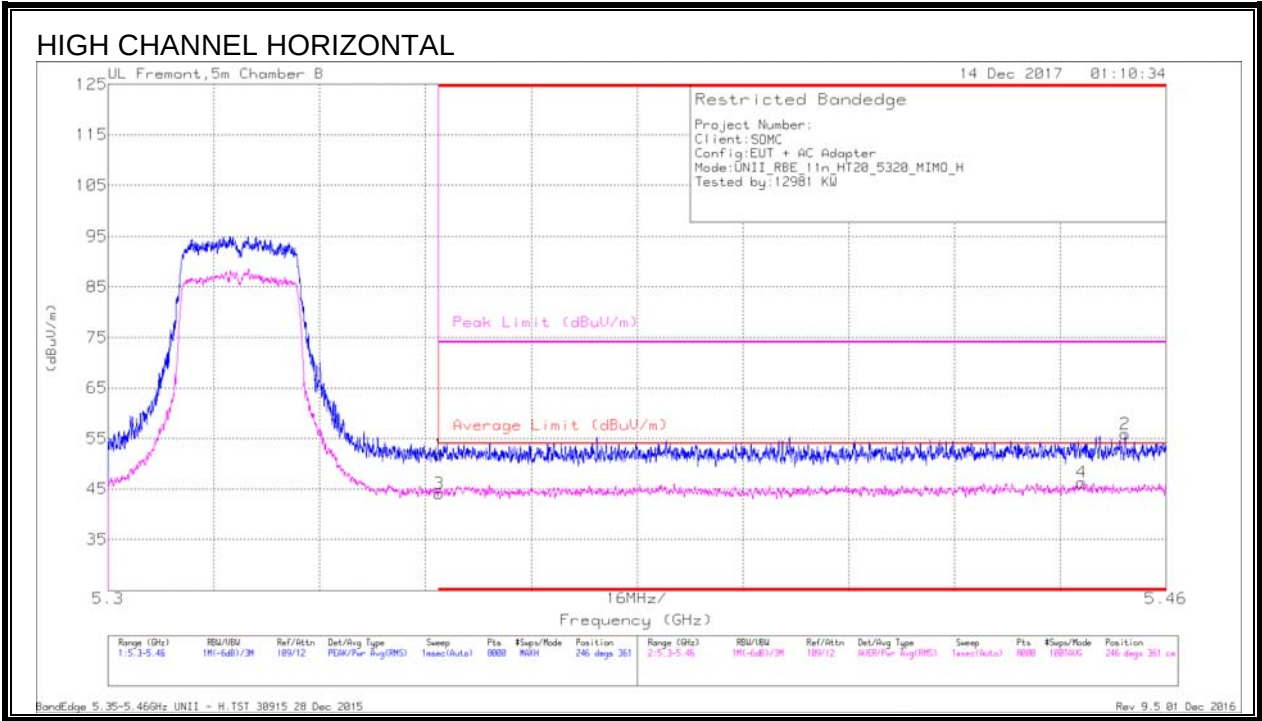
* - indicates frequency in CFR47 Pt 15 - Restricted Band

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)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/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	35.34	Pk	34.9	-18.5	0	51.74	-	-	74	-22.26	246	361	H
3	* 5.35	27.56	RMS	34.9	-18.5	.11	44.07	54	-9.93	-	-	246	361	H
4	* 5.447	29.65	RMS	35.1	-18.6	.11	46.26	54	-7.74	-	-	246	361	H
2	* 5.454	39.53	Pk	35.1	-18.8	0	55.83	-	-	74	-18.17	246	361	H

* - indicates frequency in CFR15.205 - Restricted Band

Pk - Peak detector

RMS - RMS detection