DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.538	38.04	PK-U	34	-28	44.04	-	-	74	-29.96	-	-	76	144	H
	* 4.54	27.98	ADR	34	-28	33.98	54	-20.02	-	-	-	-	76	144	H
2	* 3.7	38.88	PK-U	33.3	-28.8	43.38	-	-	74	-30.62	-	-	148	151	V
	* 3.701	27.89	ADR	33.3	-28.8	32.39	54	-21.61	-	-	-	-	148	151	V
3	* 8.132	36.16	PK-U	35.7	-23.6	48.26	-	-	74	-25.74	-	-	320	264	H
	* 8.131	25.06	ADR	35.7	-23.6	37.16	54	-16.84	-	-	-	-	320	264	H
4	10.529	34.64	PK-U	37.5	-21.8	50.34	-	-	-	-	68.2	-17.86	41	219	H
5	* 7.478	36.87	PK-U	35.6	-25.3	47.17	-	-	74	-26.83	-	-	7	205	V
	* 7.479	26.21	ADR	35.6	-25.2	36.61	54	-17.39	-	-	-	-	7	205	V
6	* 11.799	34.87	PK-U	38.4	-21.4	51.87	-	-	74	-22.13	-	-	39	396	V
	* 11.799	24.15	ADR	38.4	-21.4	41.15	54	-12.85	-	-	-	-	39	396	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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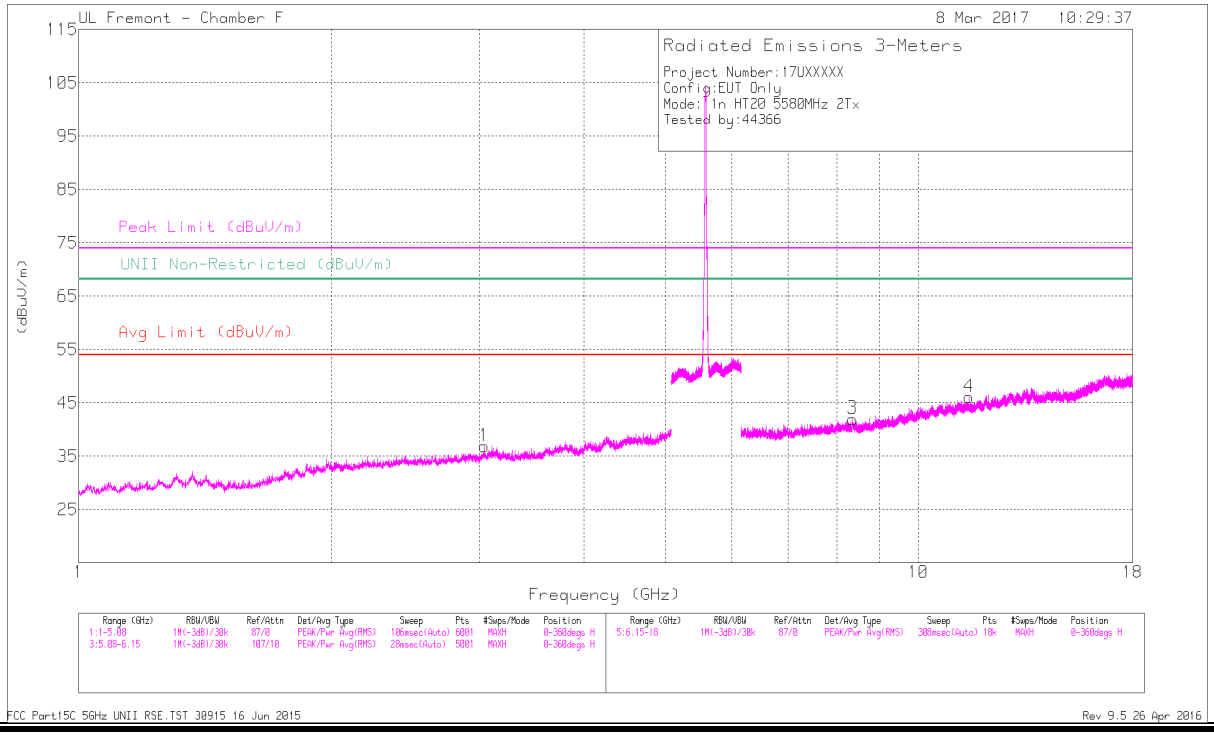
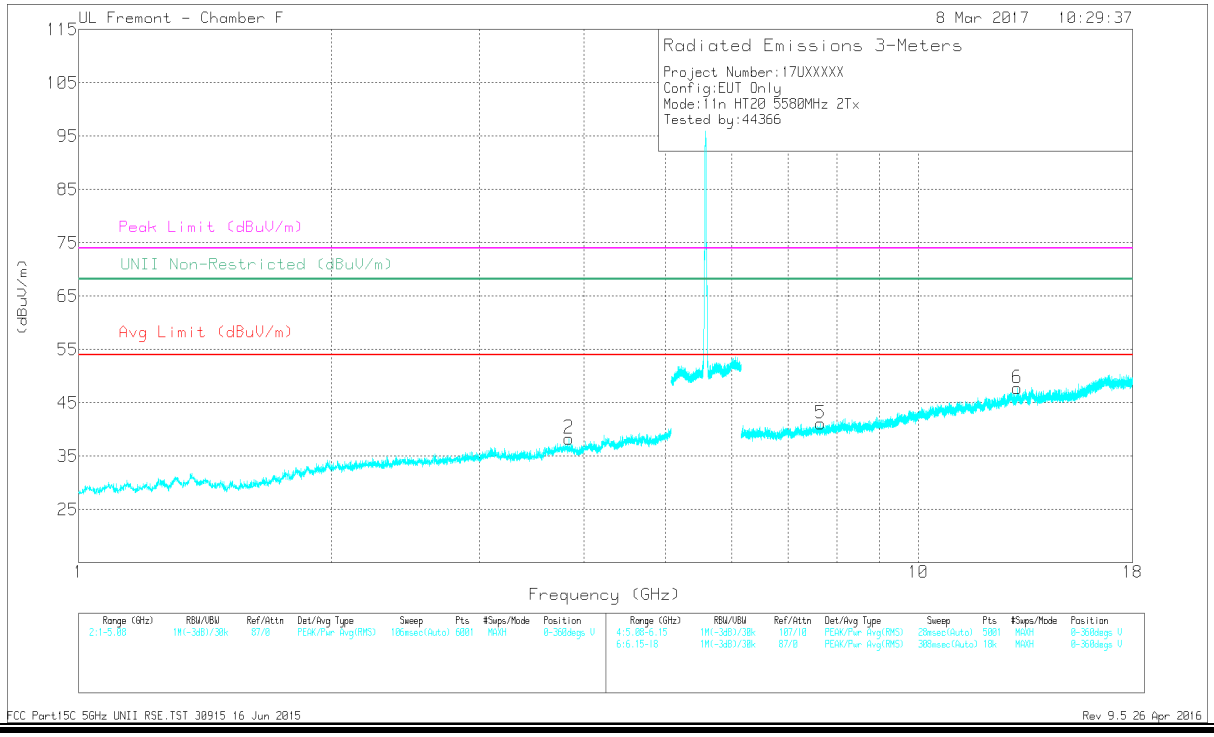
MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.041	40.36	PK-U	33	-30	43.36	-	-	-	-	68.2	-24.84	60	130	H
2	* 3.837	38.38	PK-U	33.4	-28.7	43.08	-	-	74	-30.92	-	-	338	323	V
	* 3.834	28.14	ADR	33.4	-28.7	32.84	54	-21.16	-	-	-	-	338	323	V
3	* 8.351	36.61	PK-U	35.7	-24.2	48.11	-	-	74	-25.89	-	-	13	158	H
	* 8.352	25.82	ADR	35.7	-24.1	37.42	54	-16.58	-	-	-	-	13	158	H
4	* 11.505	35.16	PK-U	38.1	-21.6	51.66	-	-	74	-22.34	-	-	182	366	H
	* 11.505	24.28	ADR	38.1	-21.6	40.78	54	-13.22	-	-	-	-	182	366	H
5	* 7.649	36.2	PK-U	35.7	-24.8	47.1	-	-	74	-26.9	-	-	340	185	V
	* 7.651	25.57	ADR	35.7	-24.7	36.57	54	-17.43	-	-	-	-	340	185	V
6	13.115	35.93	PK-U	39	-21.8	53.13	-	-	-	-	68.2	-15.07	265	385	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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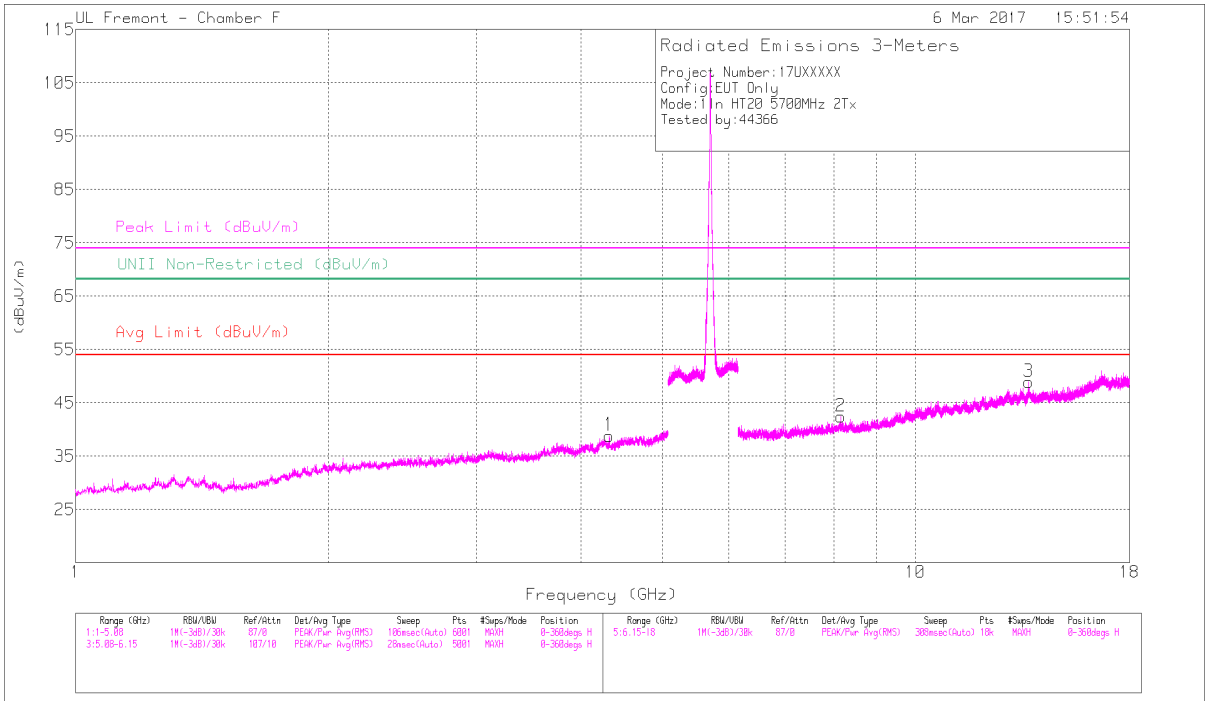
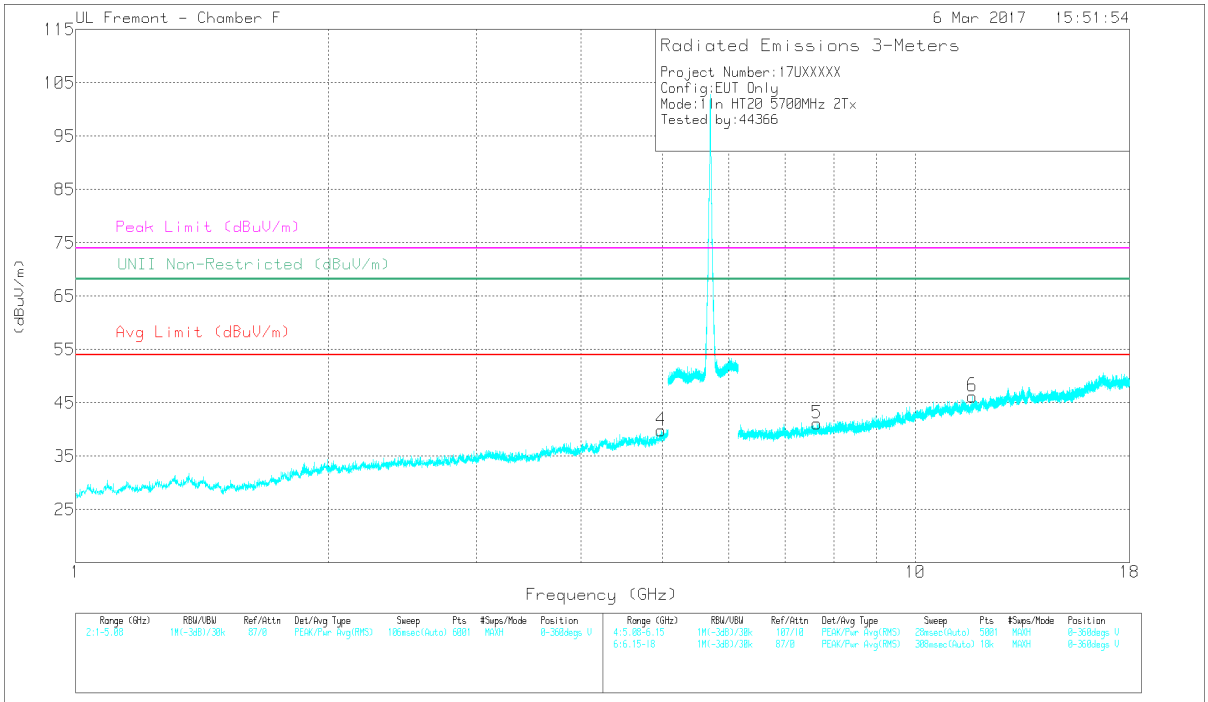
HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.316	38.38	PK-U	33.8	-28	44.18	-	-	74	-29.82	-	-	93	204	H
	* 4.318	27.84	ADR	33.8	-28.1	33.54	54	-20.46	-	-	-	-	93	204	H
4	* 4.981	38.16	PK-U	34.2	-26.8	45.56	-	-	74	-28.44	-	-	27	163	V
	* 4.981	27.38	ADR	34.2	-26.8	34.78	54	-19.22	-	-	-	-	27	163	V
2	* 8.152	35.42	PK-U	35.7	-23.7	47.42	-	-	74	-26.58	-	-	0	301	H
	* 8.154	25.11	ADR	35.7	-23.8	37.01	54	-16.99	-	-	-	-	0	301	H
3	13.658	36.08	PK-U	38.8	-21.6	53.28	-	-	-	-	68.2	-14.92	75	267	H
5	* 7.644	36.9	PK-U	35.7	-24.9	47.7	-	-	74	-26.3	-	-	124	226	V
	* 7.644	26.51	ADR	35.7	-24.9	37.31	54	-16.69	-	-	-	-	124	226	V
6	* 11.69	34.87	PK-U	38.3	-22.3	50.87	-	-	74	-23.13	-	-	109	313	V
	* 11.692	24.47	ADR	38.3	-22.3	40.47	54	-13.53	-	-	-	-	109	313	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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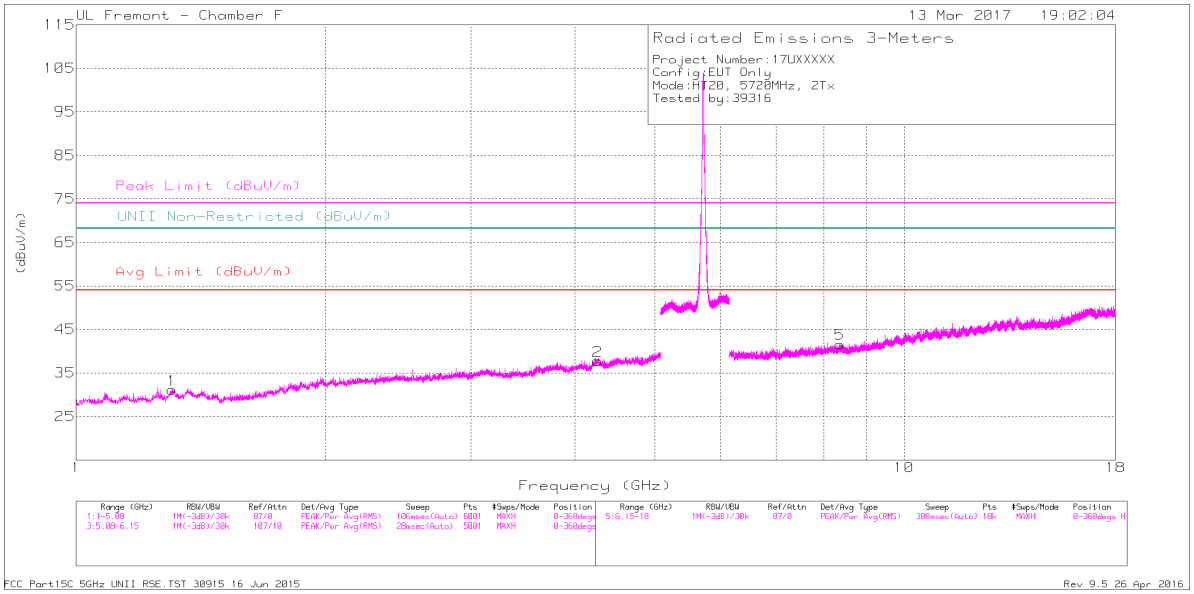
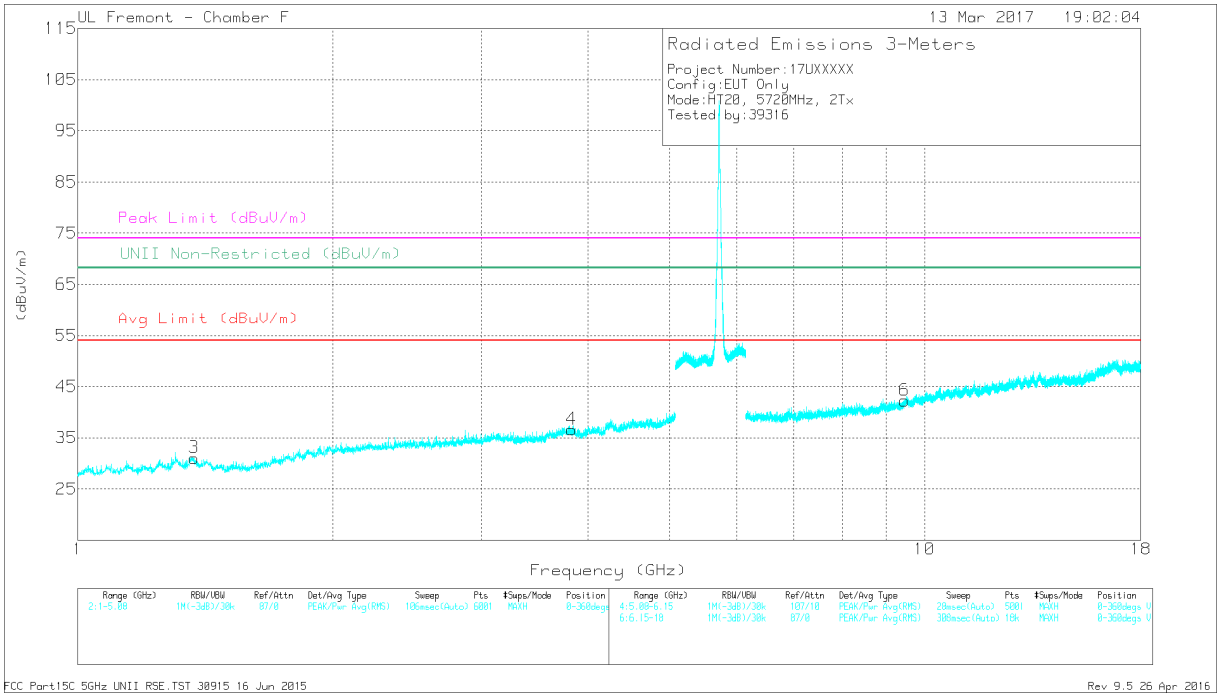
9.1.22. 11n HT20 2TX CDD MIMO STRADDLE CHANNEL 144

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.305	41.33	PK-U	29	-31.5	38.83	-	-	74	-35.17	-	-	98	239	H
	* 1.304	29.84	ADR	29	-31.5	27.34	54	-26.66	-	-	-	-	98	239	H
2	* 4.263	38.81	PK-U	33.7	-26.8	45.71	-	-	74	-28.29	-	-	235	387	H
	* 4.262	27.11	ADR	33.7	-26.7	34.11	54	-19.89	-	-	-	-	235	387	H
3	* 1.373	41.14	PK-U	29.2	-31.4	38.94	-	-	74	-35.06	-	-	288	304	V
	* 1.37	29.33	ADR	29.2	-31.4	27.13	54	-26.87	-	-	-	-	288	304	V
4	* 3.83	38.95	PK-U	33.4	-28.7	43.65	-	-	74	-30.35	-	-	83	129	V
	* 3.832	28.03	ADR	33.4	-28.7	32.73	54	-21.27	-	-	-	-	83	129	V
5	* 8.365	36.18	PK-U	35.7	-23.7	48.18	-	-	74	-25.82	-	-	119	174	H
	* 8.364	26.27	ADR	35.7	-23.7	38.27	54	-15.73	-	-	-	-	119	174	H
6	* 9.464	35.06	PK-U	36.4	-22.3	49.16	-	-	74	-24.84	-	-	237	215	V
	* 9.467	24.81	ADR	36.4	-22.2	39.01	54	-14.99	-	-	-	-	237	215	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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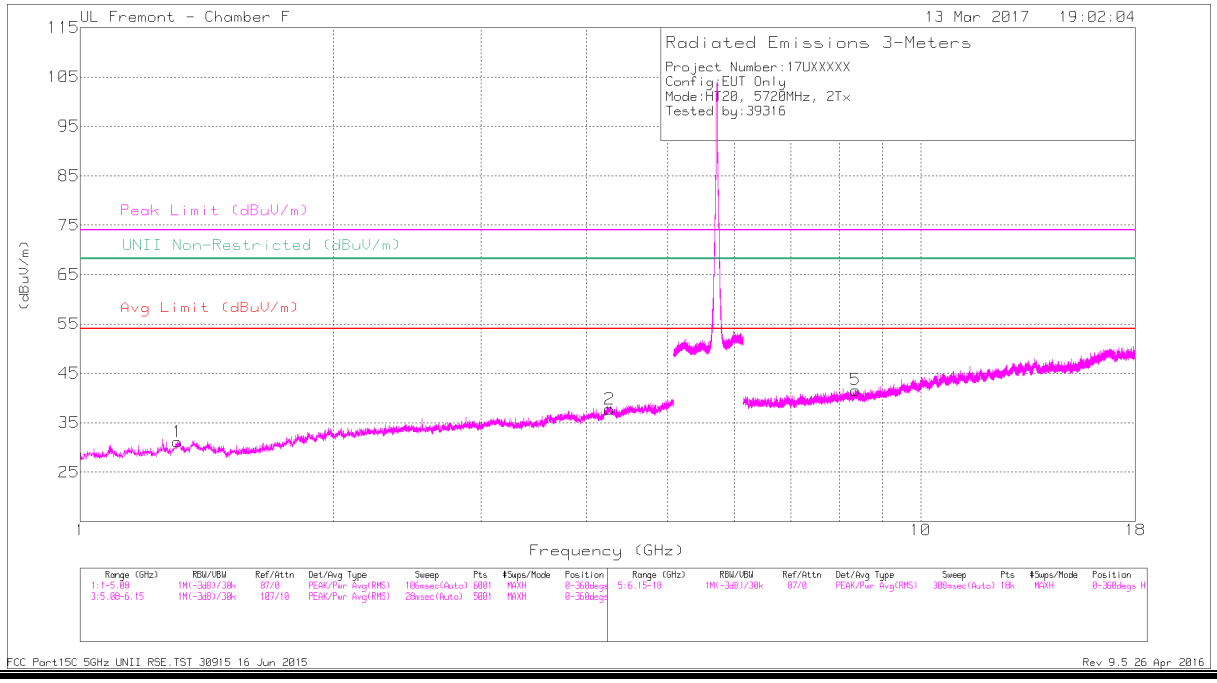
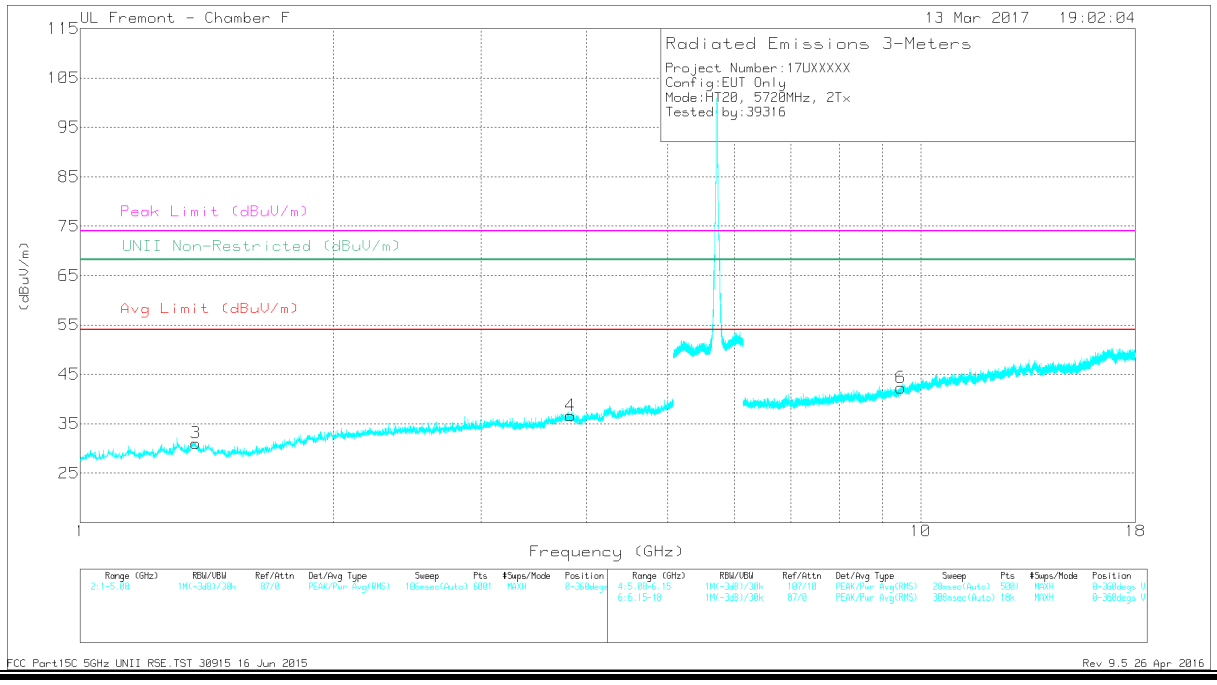
9.1.23. 11ac HT20 2TX CDD MIMO STRADDLE CHANNEL 144

HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL



VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.305	41.33	PK-U	29	-31.5	38.83	-	-	74	-35.17	98	239	H
	* 1.304	29.84	ADR	29	-31.5	27.34	54	-26.66	-	-	98	239	H
2	* 4.263	38.81	PK-U	33.7	-26.8	45.71	-	-	74	-28.29	235	387	H
	* 4.262	27.11	ADR	33.7	-26.7	34.11	54	-19.89	-	-	235	387	H
3	* 1.373	41.14	PK-U	29.2	-31.4	38.94	-	-	74	-35.06	288	304	V
	* 1.37	29.33	ADR	29.2	-31.4	27.13	54	-26.87	-	-	288	304	V
4	* 3.83	38.95	PK-U	33.4	-28.7	43.65	-	-	74	-30.35	83	129	V
	* 3.832	28.03	ADR	33.4	-28.7	32.73	54	-21.27	-	-	83	129	V
5	* 8.365	36.18	PK-U	35.7	-23.7	48.18	-	-	74	-25.82	119	174	H
	* 8.364	26.27	ADR	35.7	-23.7	38.27	54	-15.73	-	-	119	174	H
6	* 9.464	35.06	PK-U	36.4	-22.3	49.16	-	-	74	-24.84	237	215	V
	* 9.467	24.81	ADR	36.4	-22.2	39.01	54	-14.99	-	-	237	215	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

FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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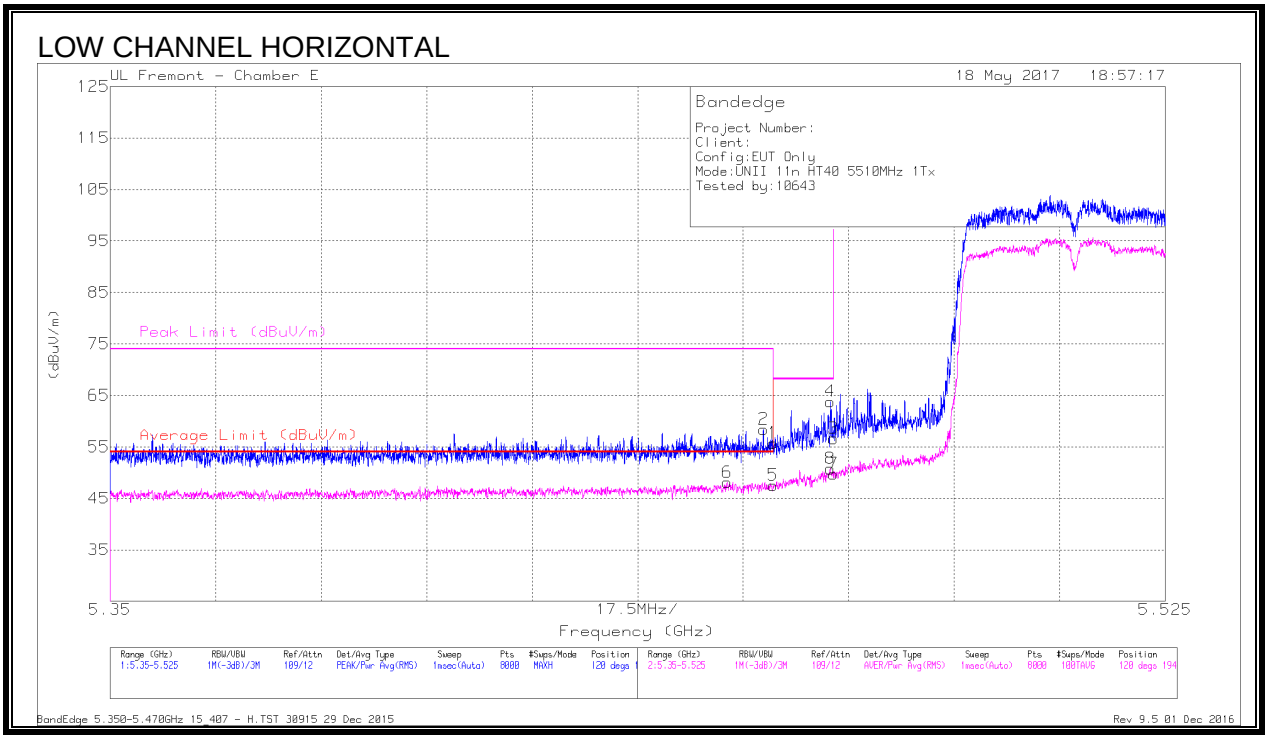
9.1.24. 11n HT40 UAT 2 SISO MODE IN THE 5.6GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC factor	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	39.94	Pk	35.1	-19.3		55.74	-	-	74	-18.26	120	194	H
2	* 5.458	42.63	Pk	35.1	-19.3		58.43	-	-	74	-15.57	120	194	H
3	5.47	40.93	Pk	35.1	-19.4		56.63	-	-	68.2	-11.57	120	194	H
4	5.469	48.12	Pk	35.1	-19.4		63.82	-	-	68.2	-4.38	120	194	H
5	* 5.46	31.76	RMS	35.1	-19.3	0.1	47.66	54	-6.34	-	-	120	194	H
6	* 5.452	32.43	RMS	35.1	-19.4	0.1	48.23	54	-5.77	-	-	120	194	H
7	5.47	34.05	RMS	35.1	-19.4		49.75	-	-	-	-	120	194	H
8	5.469	35.08	RMS	35.1	-19.4		50.78	-	-	-	-	120	194	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection
BandEdge 5.350-5.470GHz 15_407 - H.TST 30915 29 Dec 2015
Rev 9.5 01 Dec 2016

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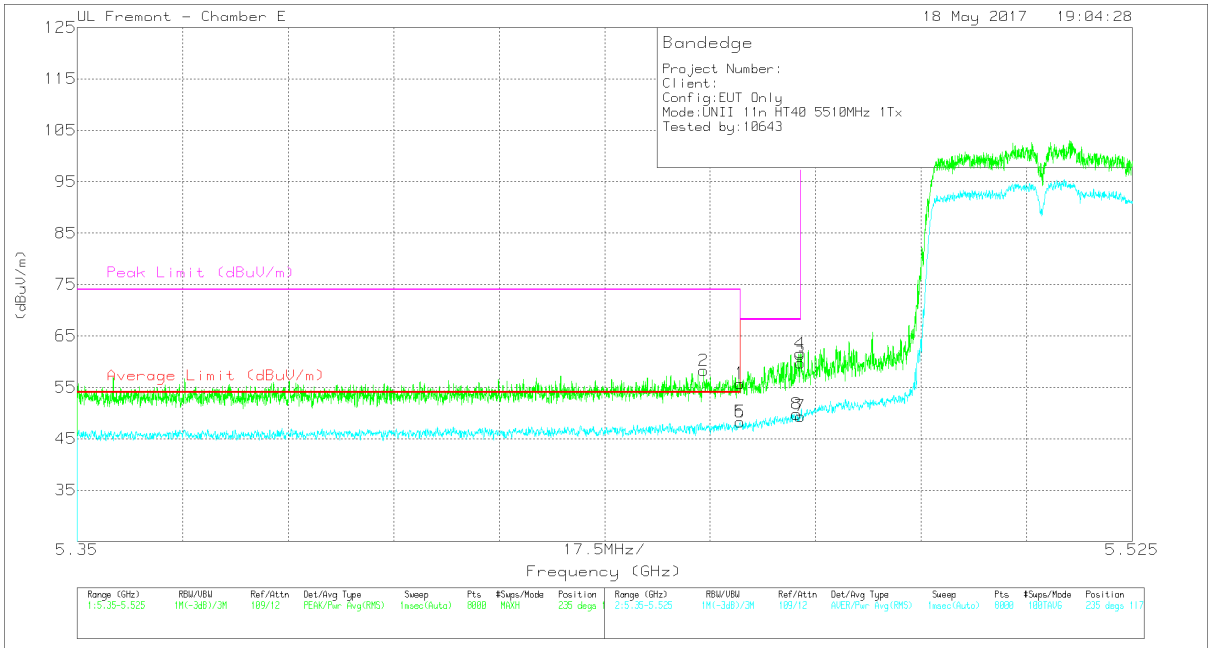
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Factor	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	39.94	Pk	35.1	-19.3		55.74	-	-	74	-18.26	235	117	V
2	* 5.454	42.45	Pk	35.1	-19.3		58.25	-	-	74	-15.75	235	117	V
3	5.47	44.09	Pk	35.1	-19.4		59.79	-	-	68.2	-8.41	235	117	V
4	5.47	45.83	Pk	35.1	-19.4		61.53	-	-	68.2	-6.67	235	117	V
5	* 5.46	32.5	RMS	35.1	-19.3	0.1	48.4	54	-5.6	-	-	235	117	V
6	* 5.46	32.49	RMS	35.1	-19.3	0.1	48.39	54	-5.61	-	-	235	117	V
7	5.47	33.71	RMS	35.1	-19.4		49.41	-	-	-	-	235	117	V
8	5.469	34.09	RMS	35.1	-19.4		49.79	-	-	-	-	235	117	V

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

Pk - Peak detector

RMS - RMS detection

BandEdge 5.350-5.470GHz 15_407 - V.TST 30915 29 Dec 2015
Rev 9.5 01 Dec 2016

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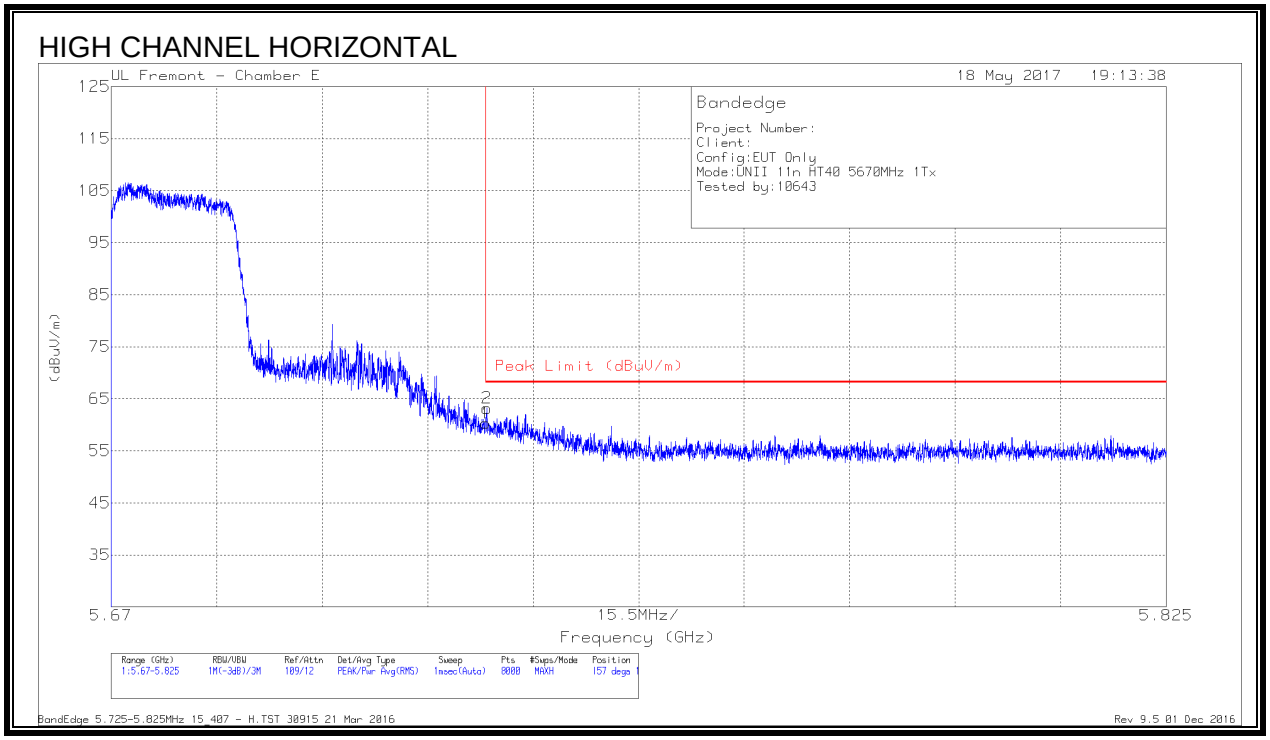
AUTHORIZED BANDEDGE (HIGH CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	44.99	Pk	34.9	-19.6	60.29	68.2	-7.91	157	132	H
2	5.725	47.87	Pk	34.9	-19.6	63.17	68.2	-5.03	157	132	H

Pk - Peak detector
BandEdge 5.725-5.825MHz 15_407 - H.TST 30915 21 Mar 2016
Rev 9.5 01 Dec 2016

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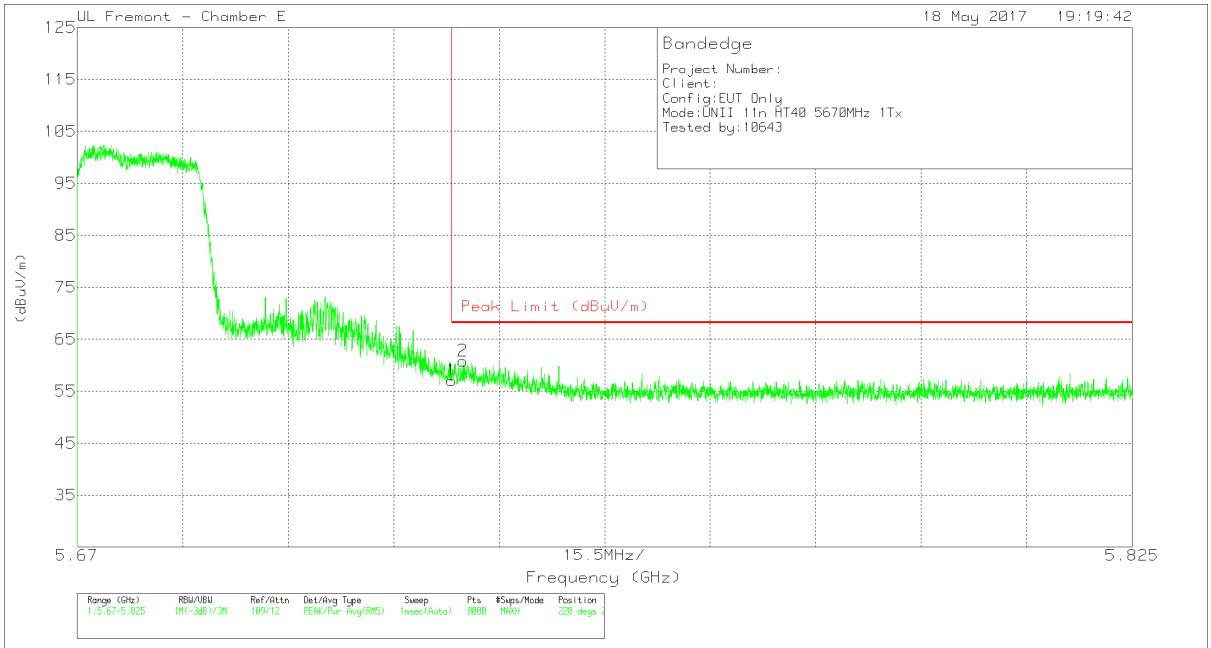
HIGH CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	41.82	Pk	34.9	-19.6	57.12	68.2	-11.08	228	206	V
2	5.727	45.44	Pk	34.9	-19.5	60.84	68.2	-7.36	228	206	V

Pk - Peak detector
BandEdge 5.725-5.825MHz 15_407 - V.TST 30915 21 Mar 2016
Rev 9.5 01 Dec 2016

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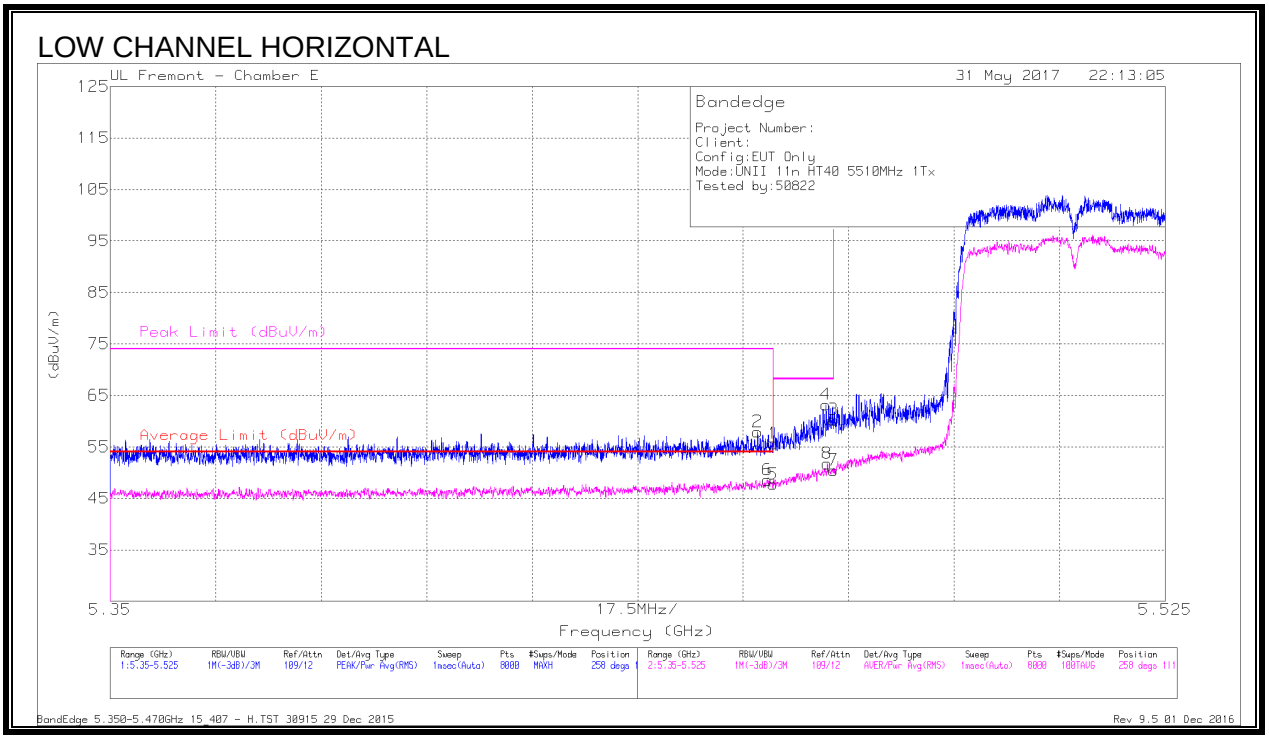
9.1.25. 11n HT40 LAT 3 SISO MODE IN THE 5.6GHz

RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Factor	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	39.86	Pk	35.1	-19.3		55.66	-	-	74	-18.34	258	111	H
2	* 5.457	42.24	Pk	35.1	-19.4		57.94	-	-	74	-16.06	258	111	H
5	* 5.46	31.93	RMS	35.1	-19.3	0.1	47.83	54	-6.17	-	-	258	111	H
6	* 5.459	32.78	RMS	35.1	-19.3	0.1	48.68	54	-5.32	-	-	258	111	H
4	5.469	47.61	Pk	35.1	-19.5		63.21	-	-	68.2	-4.99	258	111	H
8	5.469	36.05	RMS	35.1	-19.4		51.75	-	-	-	-	258	111	H
3	5.47	44.6	Pk	35.1	-19.4		60.3	-	-	68.2	-7.9	258	111	H
7	5.47	34.8	RMS	35.1	-19.4		50.5	-	-	-	-	258	111	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection
BandEdge 5.350-5.470GHz 15_407 - H.TST 30915 29 Dec 2015
Rev 9.5 01 Dec 2016

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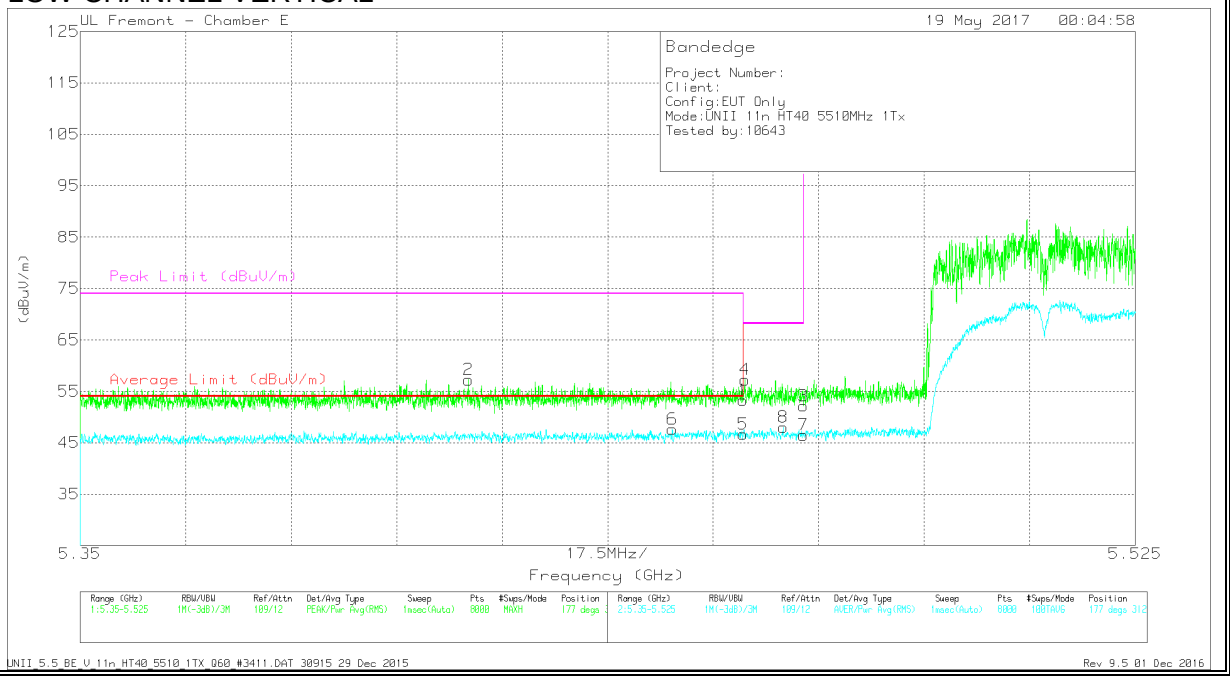
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC factor	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	37.44	Pk	35.1	-19.3		53.24	-	-	74	-20.76	177	312	V
2	* 5.414	41.34	Pk	35.1	-19.2		57.24	-	-	74	-16.76	177	312	V
5	* 5.46	30.87	RMS	35.1	-19.3	0.1	46.77	54	-7.23	-	-	177	312	V
6	* 5.448	31.81	RMS	35.1	-19.3	0.1	47.71	54	-6.29	-	-	177	312	V
4	5.46	41.44	Pk	35.1	-19.3		57.24	-	-	68.2	-10.96	177	312	V
8	5.467	32.32	RMS	35.1	-19.4		48.02	-	-	-	-	177	312	V
3	5.47	36.47	Pk	35.1	-19.4		52.17	-	-	68.2	-16.03	177	312	V
7	5.47	30.8	RMS	35.1	-19.4		46.5	-	-	-	-	177	312	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection
UNII_5.5_BE_V_11n_HT40_5510_1TX_Q60_#3411.DAT 30915 29 Dec 2015
Rev 9.5 01 Dec 2016

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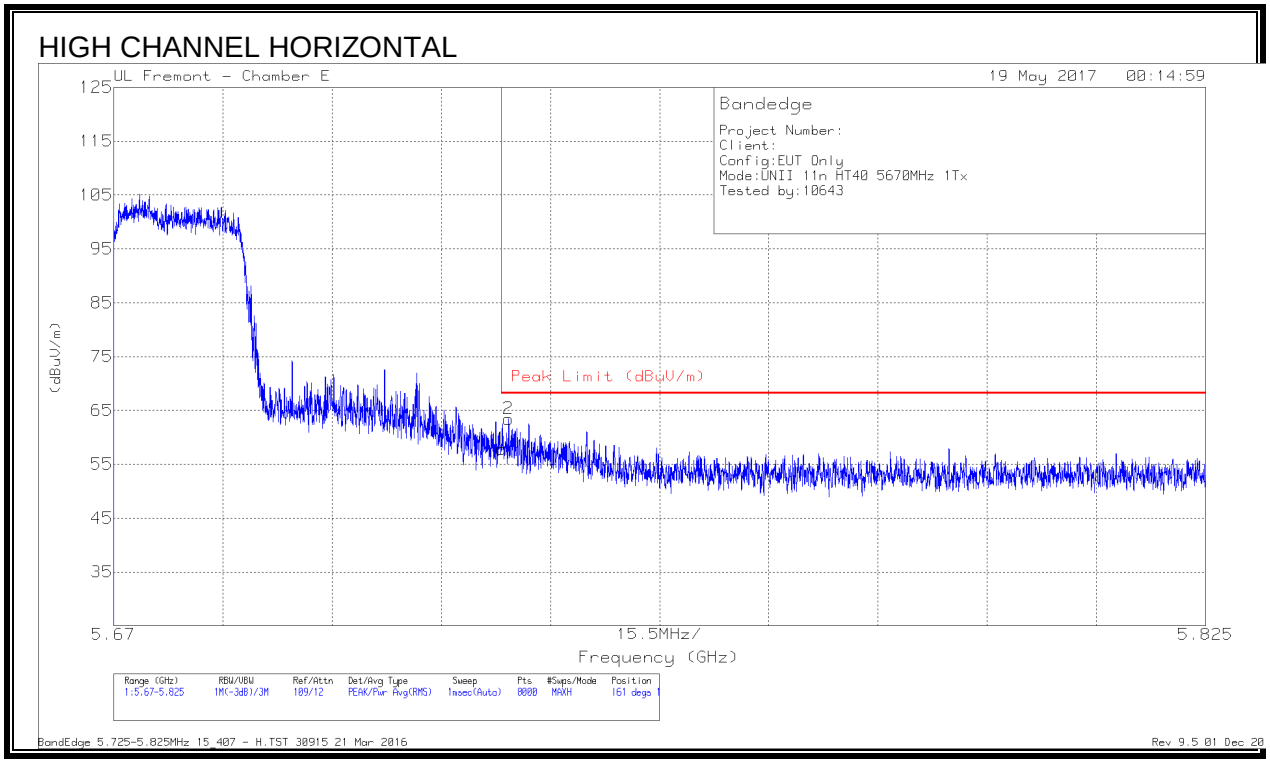
AUTHORIZED BANDEDGE (HIGH CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	42.55	Pk	34.9	-19.6	57.85	68.2	-10.35	161	113	H
2	5.726	48.01	Pk	34.9	-19.5	63.41	68.2	-4.79	161	113	H

Pk - Peak detector
BandEdge 5.725-5.825MHz 15_407 - H.TST 30915 21 Mar 2016
Rev 9.5 01 Dec 2016

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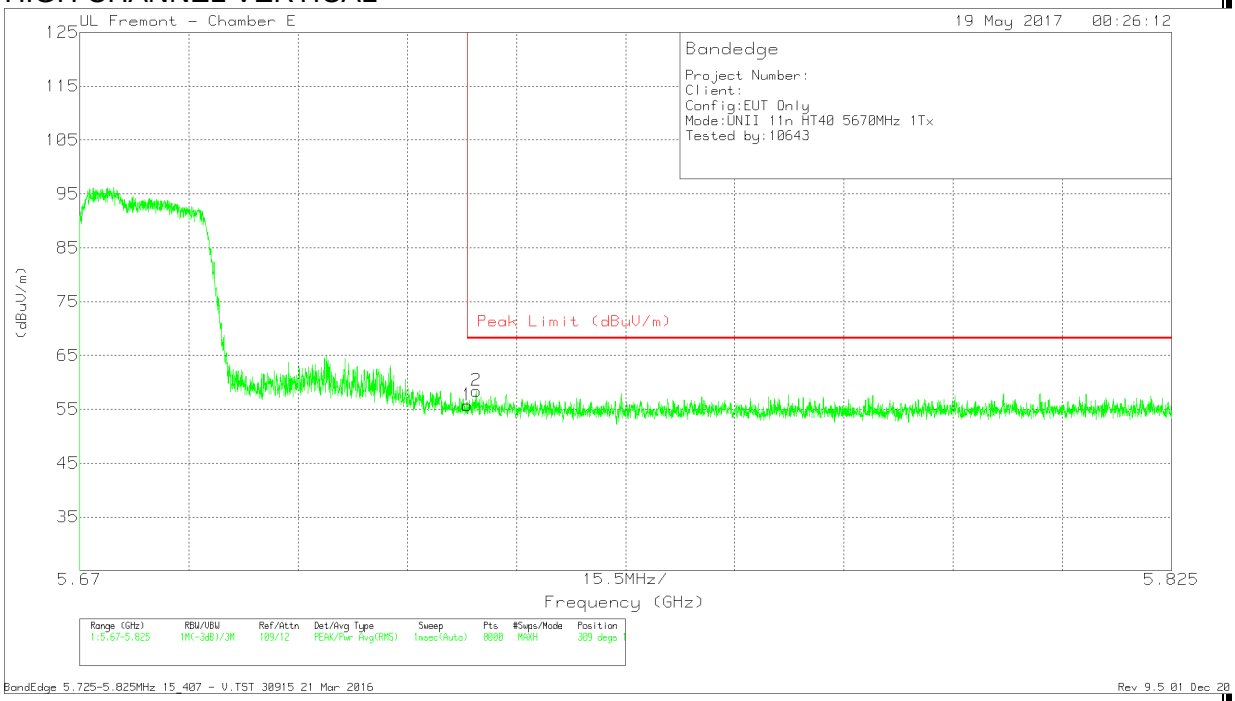
HIGH CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	40.44	Pk	34.9	-19.6	55.74	68.2	-12.46	309	176	V
2	5.726	43.04	Pk	34.9	-19.5	58.44	68.2	-9.76	309	176	V

Pk - Peak detector

BandEdge 5.725-5.825MHz 15_407 - V.TST 30915 21 Mar 2016
Rev 9.5 01 Dec 2016

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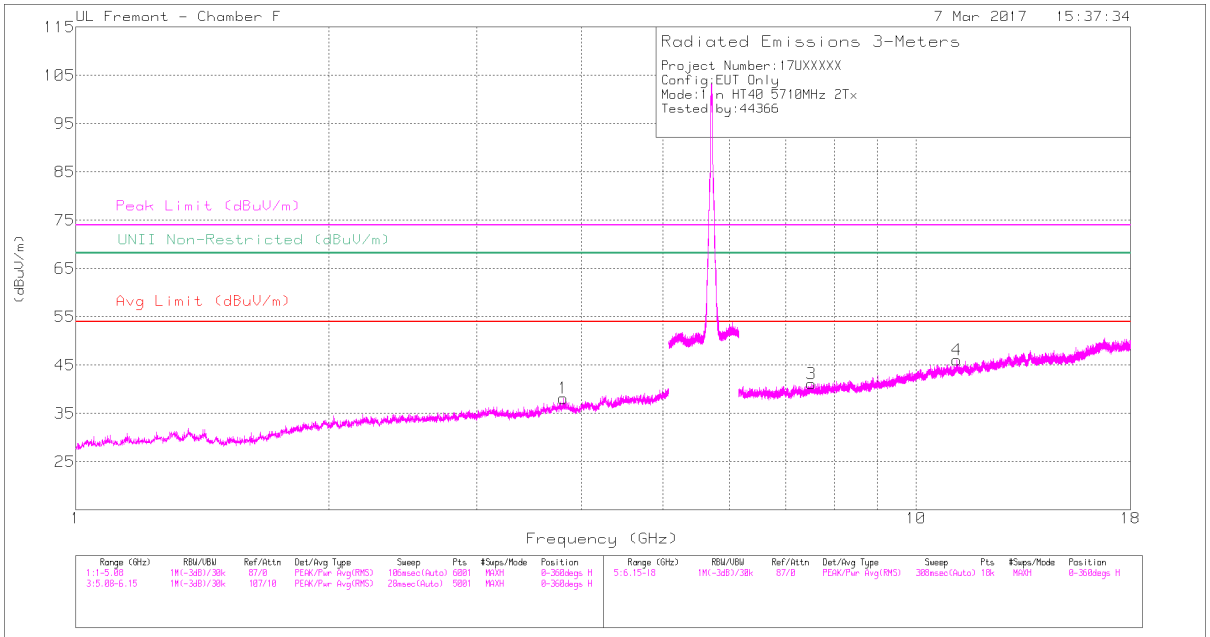
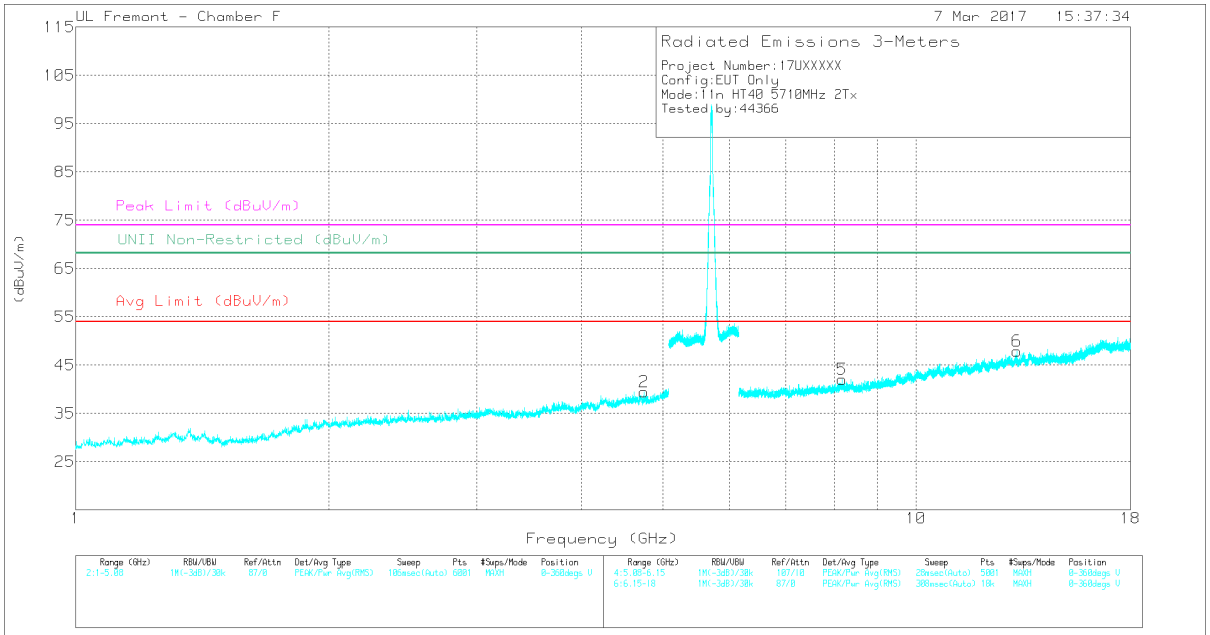
9.1.26. 11ac HT40 LAT 3 SISO STRADDLE CHANNEL 142

HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL



VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	* 3.8	39.14	PK-U	33.4	-29.2	0	43.34	-	-	74	-30.66	-	-	145	128	H
	* 3.803	28.42	ADR	33.4	-29.1	.1	32.82	54	-21.18	-	-	-	-	145	128	H
2	* 4.745	38.2	PK-U	34.1	-27.6	0	44.7	-	-	74	-29.3	-	-	164	292	V
	* 4.745	27.74	ADR	34.1	-27.6	.1	34.34	54	-19.66	-	-	-	-	164	292	V
3	* 7.508	36.08	PK-U	35.6	-24.9	0	46.78	-	-	74	-27.22	-	-	91	157	H
	* 7.509	25.73	ADR	35.6	-24.9	.1	36.53	54	-17.47	-	-	-	-	91	157	H
4	* 11.174	35.14	PK-U	37.9	-21.4	0	51.64	-	-	74	-22.36	-	-	275	123	H
	* 11.177	24.28	ADR	37.9	-21.4	.1	40.88	54	-13.12	-	-	-	-	275	123	H
5	* 8.171	35.48	PK-U	35.8	-23.9	0	47.38	-	-	74	-26.62	-	-	12	216	V
	* 8.172	25.03	ADR	35.8	-23.9	.1	37.03	54	-16.97	-	-	-	-	12	216	V
6	13.198	35.83	PK-U	39	-21.7	0	53.13	-	-	-	-	68.2	-15.07	334	153	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

FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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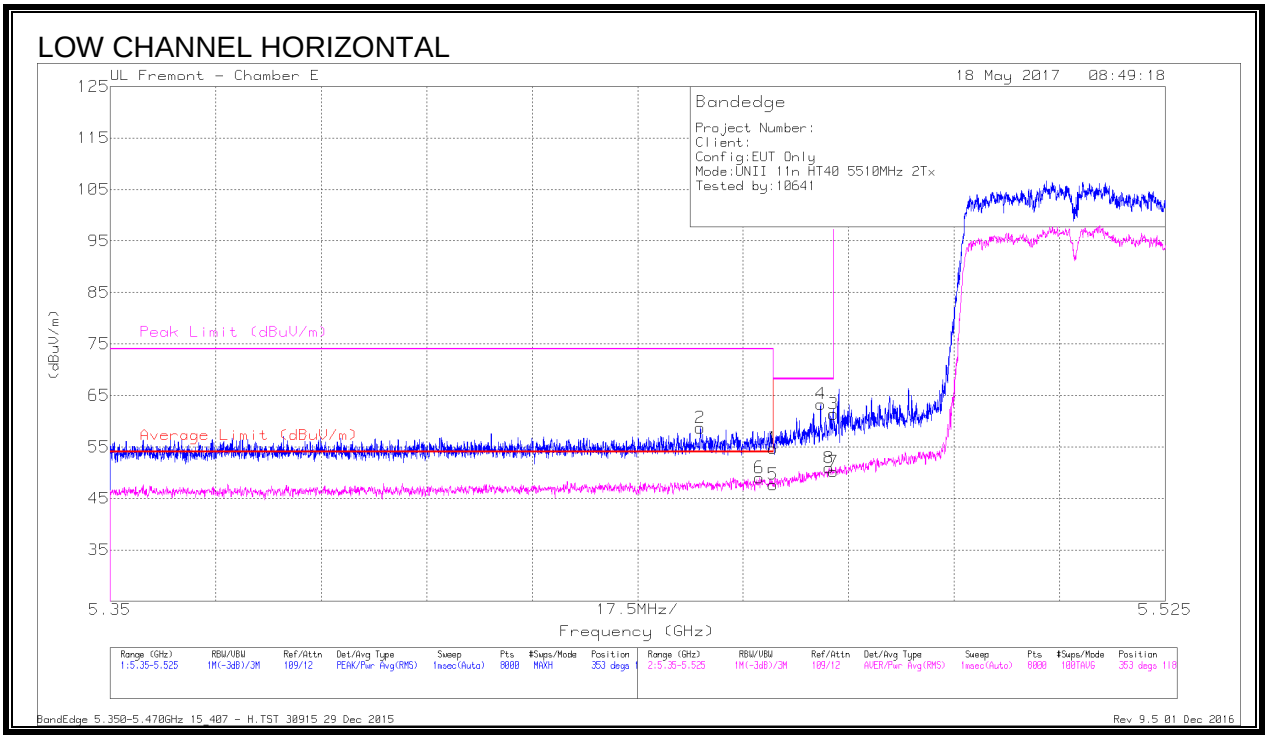
9.1.27. 11n HT40 2TX CDD MIMO MODE IN THE 5.6GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (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	* 5.46	38.96	Pk	35.1	-19.3	0	54.76	-	-	74	-19.24	353	118	H
2	* 5.448	42.91	Pk	35.1	-19.3	0	58.71	-	-	74	-15.29	353	118	H
5	* 5.46	31.8	RMS	35.1	-19.3	.1	47.7	54	-6.3	-	-	353	118	H
6	* 5.458	33.2	RMS	35.1	-19.4	.1	49	54	-5	-	-	353	118	H
4	5.468	47.73	Pk	35.1	-19.5	0	63.33	-	-	68.2	-4.87	353	118	H
8	5.469	35.13	RMS	35.1	-19.4	.1	50.93	-	-	-	-	353	118	H
3	5.47	45.7	Pk	35.1	-19.4	0	61.4	-	-	68.2	-6.8	353	118	H
7	5.47	34.4	RMS	35.1	-19.4	.1	50.2	-	-	-	-	353	118	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection
BandEdge 5.350-5.470GHz 15_407 - H.TST 30915 29 Dec 2015
Rev 9.5 01 Dec 2016

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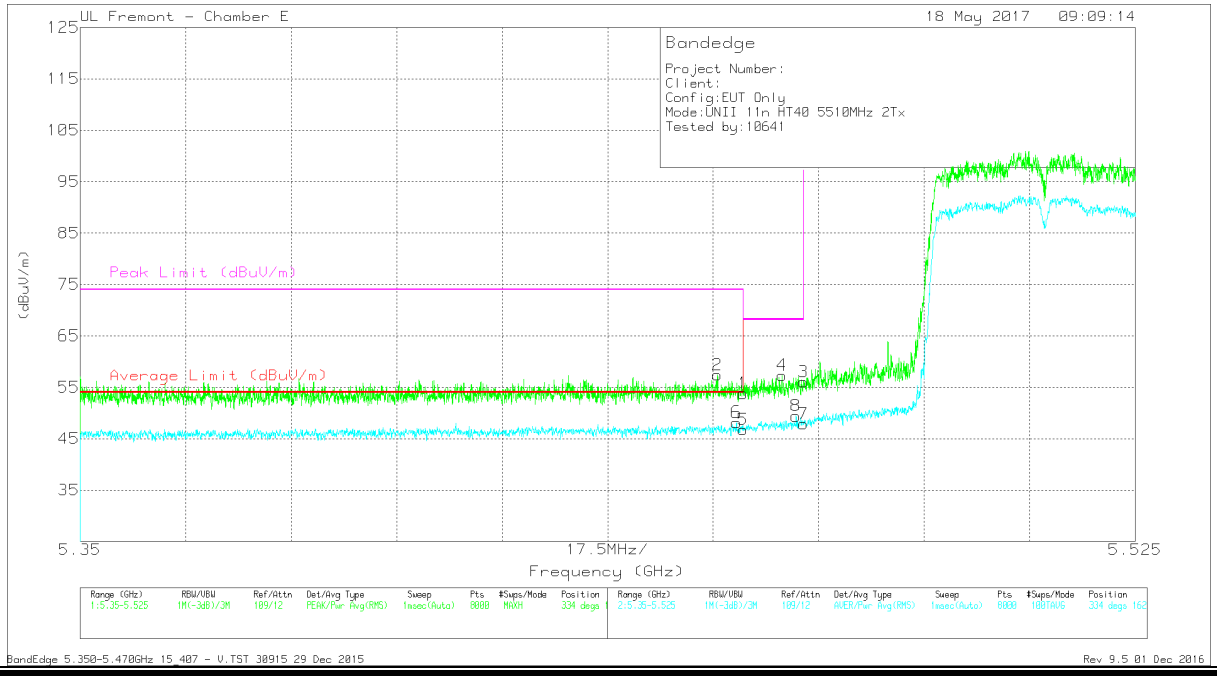
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (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	* 5.46	38.03	Pk	35.1	-19.3	53.83	-	-	74	-20.17	334	162	V
2	* 5.456	41.69	Pk	35.1	-19.4	57.39	-	-	74	-16.61	334	162	V
3	5.47	40.38	Pk	35.1	-19.4	56.08	-	-	68.2	-12.12	334	162	V
4	5.466	41.62	Pk	35.1	-19.4	57.32	-	-	68.2	-10.88	334	162	V
5	* 5.46	30.95	RMS	35.1	-19.3	46.75	54	-7.25	-	-	334	162	V
6	* 5.459	32.35	RMS	35.1	-19.3	48.15	54	-5.85	-	-	334	162	V
7	5.47	32.18	RMS	35.1	-19.4	47.88	-	-	-	-	334	162	V
8	5.469	33.73	RMS	35.1	-19.4	49.43	-	-	-	-	334	162	V

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

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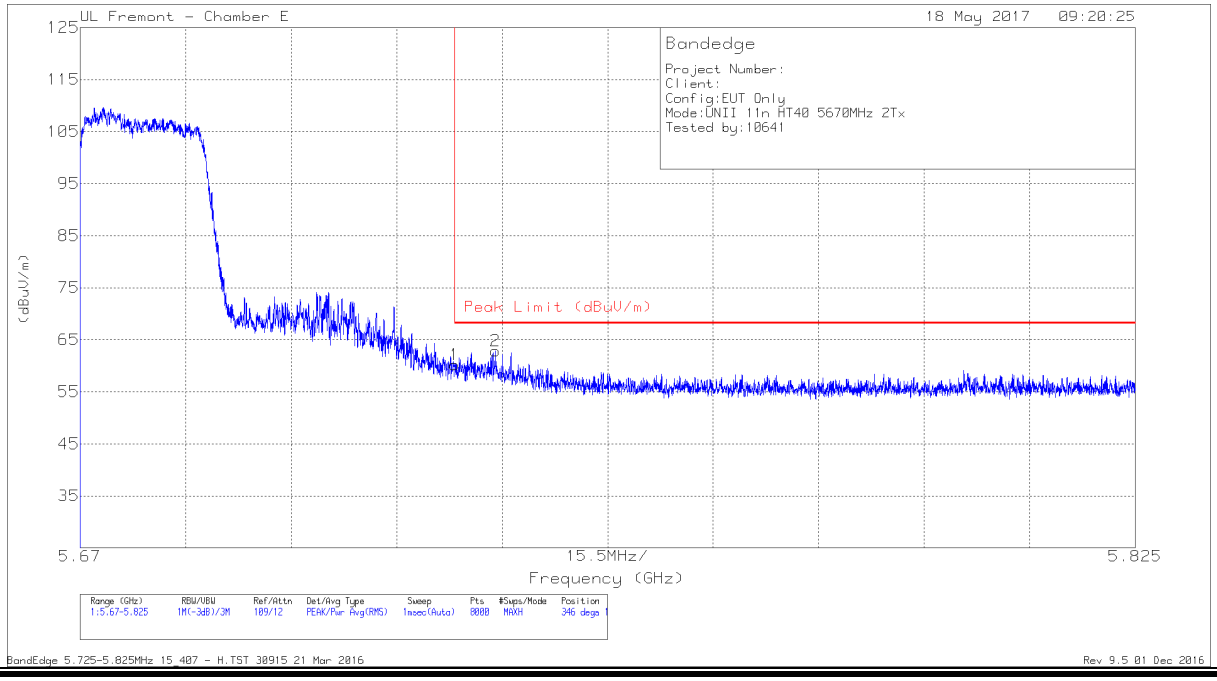
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/ Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	44.91	Pk	34.9	-19.6	60.21	68.2	-7.99	346	112	H
2	5.731	47.35	Pk	34.9	-19.4	62.85	68.2	-5.35	346	112	H

Pk - Peak detector
BandEdge 5.725-5.825MHz 15_407 - H.TST 30915 21 Mar 2016
Rev 9.5 01 Dec 2016

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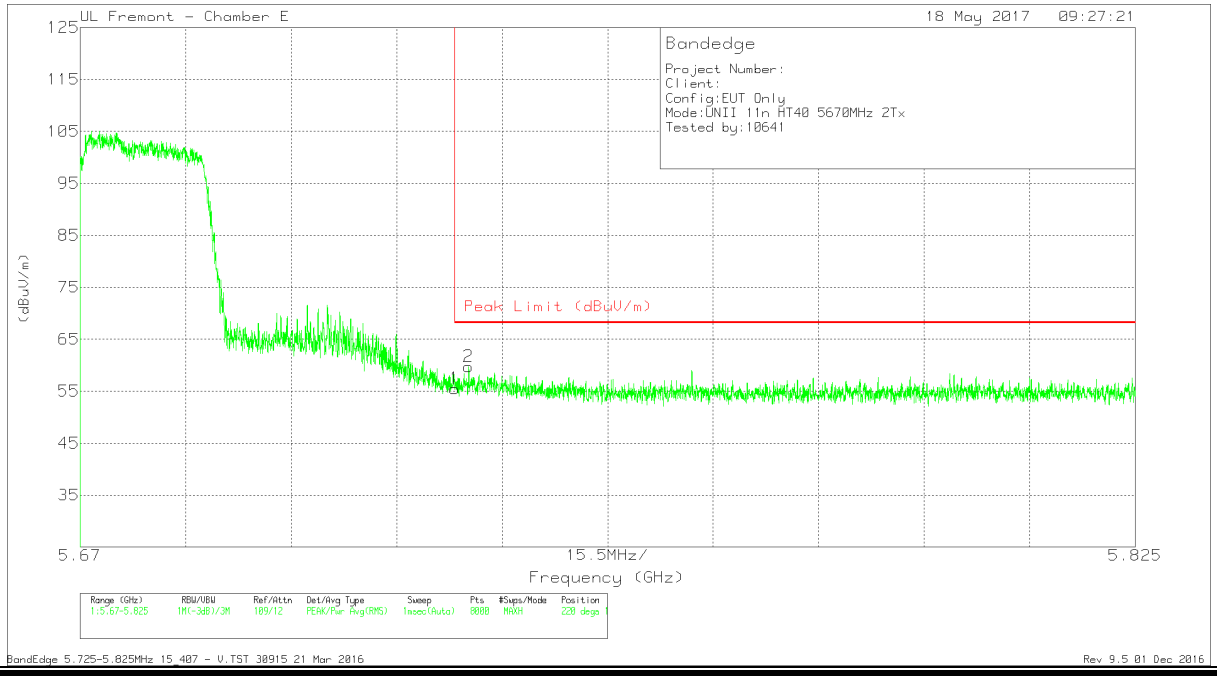
HIGH CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	40.22	Pk	34.9	-19.6	55.52	68.2	-12.68	220	109	V
2	5.727	44.34	Pk	34.9	-19.5	59.74	68.2	-8.46	220	109	V

Pk - Peak detector
BandEdge 5.725-5.825MHz 15_407 - V.TST 30915 21 Mar 2016
Rev 9.5 01 Dec 2016

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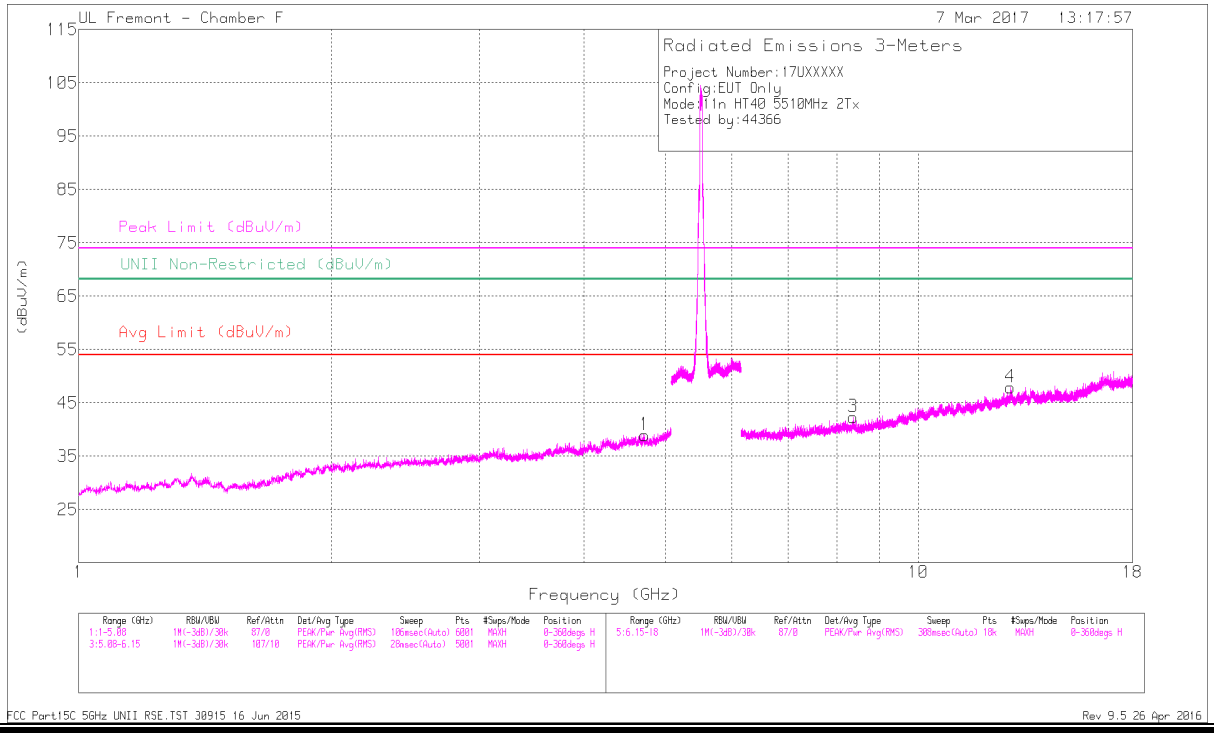
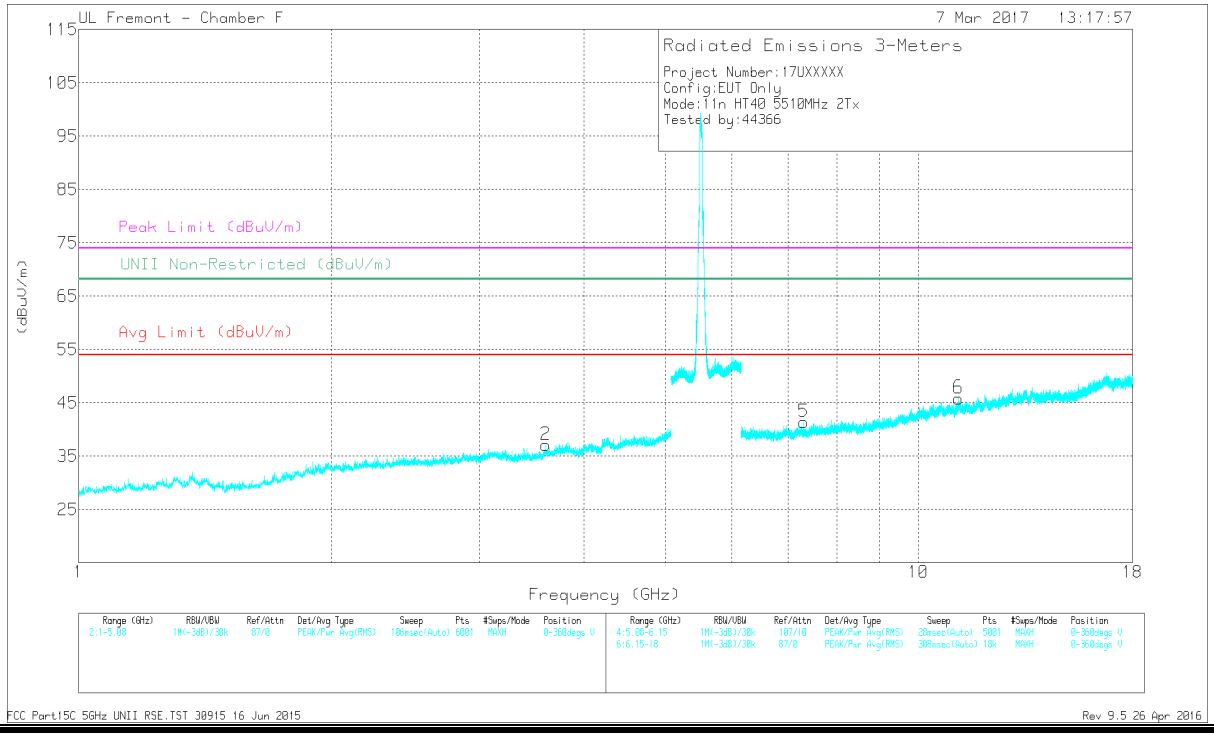
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	* 4.724	39.03	PK-U	34.1	-27.7	0	45.43	-	-	74	-28.57	-	-	33	297	H
	* 4.724	27.45	ADR	34.1	-27.7	.1	33.95	54	-20.05	-	-	-	-	33	297	H
2	* 3.602	39.86	PK-U	33	-29.5	0	43.36	-	-	74	-30.64	-	-	357	141	V
	* 3.602	28.58	ADR	33	-29.5	.1	32.18	54	-21.82	-	-	-	-	357	141	V
3	* 8.362	35.94	PK-U	35.7	-23.7	0	47.94	-	-	74	-26.06	-	-	347	133	H
	* 8.359	25.66	ADR	35.7	-23.8	.1	37.66	54	-16.34	-	-	-	-	347	133	H
4	12.876	36.07	PK-U	39.3	-21.9	0	53.47	-	-	-	-	68.2	-14.73	328	208	H
5	* 7.302	35.85	PK-U	35.5	-25.2	0	46.15	-	-	74	-27.85	-	-	86	355	V
	* 7.302	25.59	ADR	35.5	-25.2	.1	35.99	54	-18.01	-	-	-	-	86	355	V
6	* 11.161	36.08	PK-U	37.9	-21.5	0	52.48	-	-	74	-21.52	-	-	304	216	V
	* 11.161	24.29	ADR	37.9	-21.5	.1	40.79	54	-13.21	-	-	-	-	304	216	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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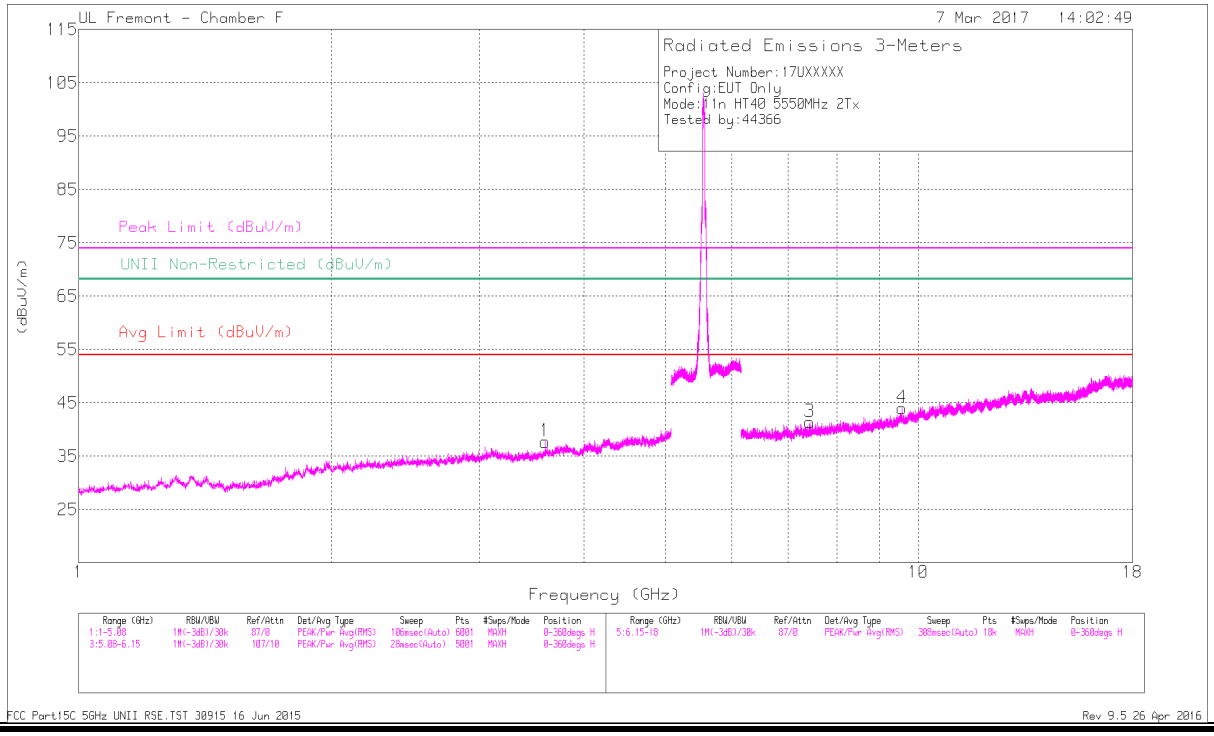
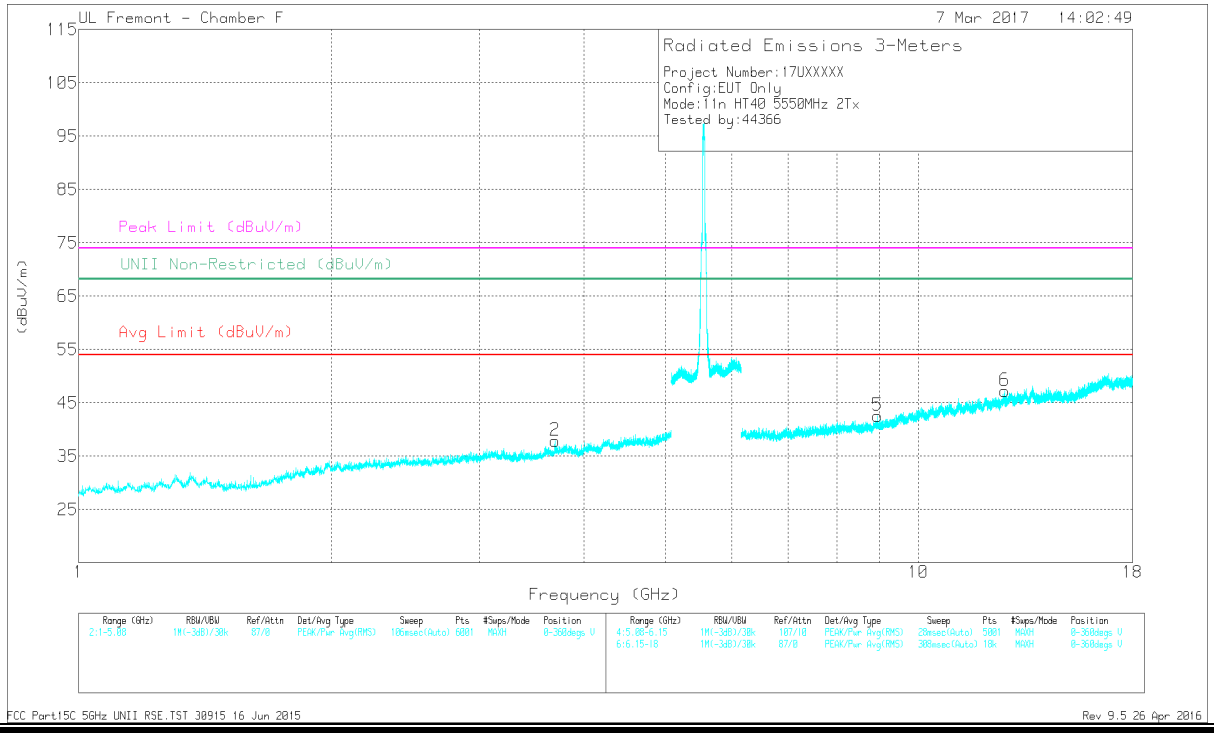
MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	* 3.591	40.57	PK-U	33	-29.5	0	44.07	-	-	74	-29.93	-	-	40	136	H
	* 3.593	28.54	ADR	33	-29.5	.1	32.14	54	-21.86	-	-	-	-	40	136	H
2	* 3.694	39.11	PK-U	33.3	-28.9	0	43.51	-	-	74	-30.49	-	-	155	110	V
	* 3.693	28.15	ADR	33.3	-28.9	.1	32.65	54	-21.35	-	-	-	-	155	110	V
3	* 7.425	37.69	PK-U	35.6	-25.7	0	47.59	-	-	74	-26.41	-	-	252	171	H
	* 7.426	26.28	ADR	35.6	-25.7	.1	36.28	54	-17.72	-	-	-	-	252	171	H
4	9.572	34.46	PK-U	36.5	-21.6	0	49.36	-	-	-	-	68.2	-18.84	217	114	H
5	8.944	34.75	PK-U	35.9	-22.8	0	47.85	-	-	-	-	68.2	-20.35	302	353	V
6	* 12.668	35.69	PK-U	39.2	-22.1	0	52.79	-	-	74	-21.21	-	-	292	228	V
	* 12.669	25.24	ADR	39.2	-22.1	.1	42.44	54	-11.56	-	-	-	-	292	228	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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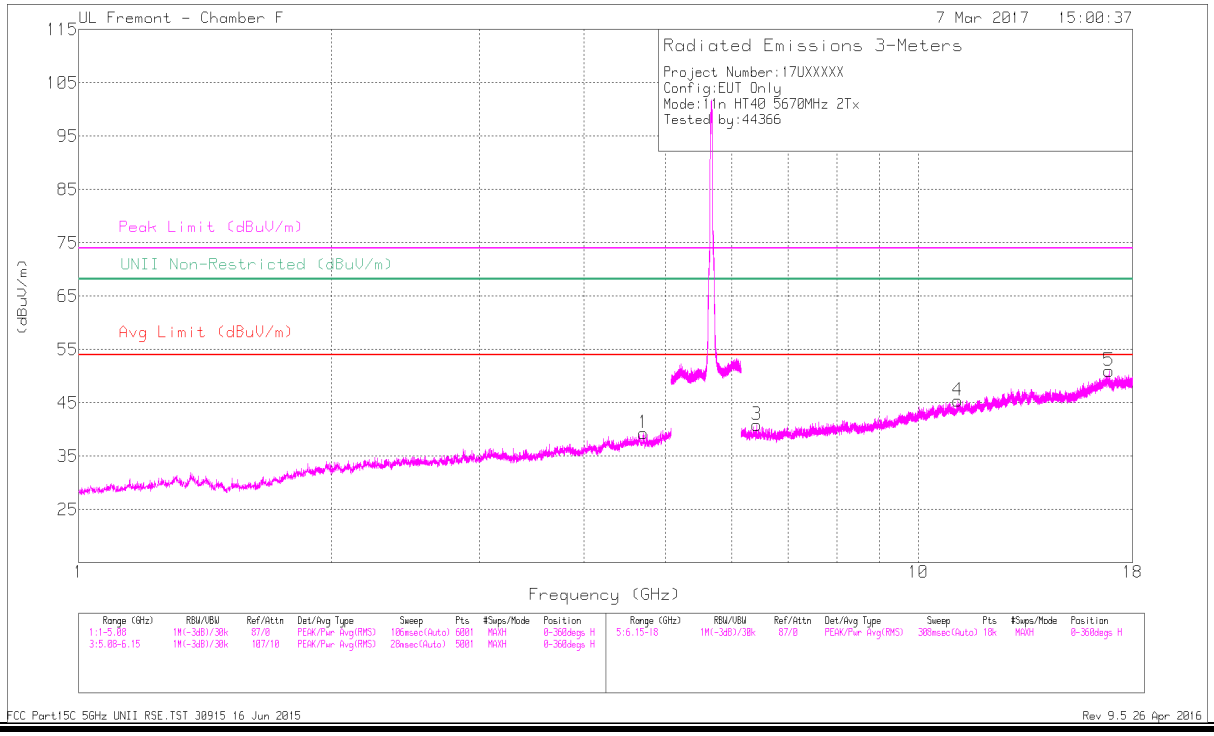
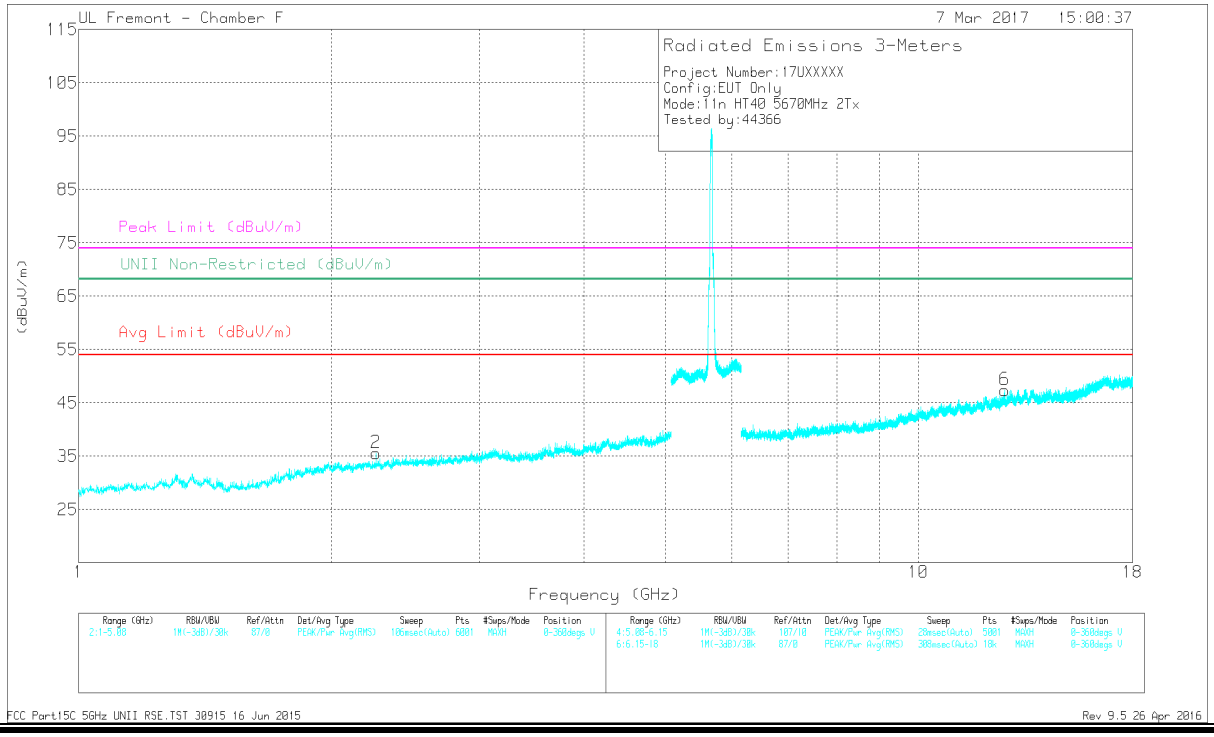
HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	* 4.706	39.07	PK-U	34.2	-27.4	0	45.87	-	-	74	-28.13	-	-	195	297	H
	* 4.709	28.15	ADR	34.2	-27.5	.1	34.95	54	-19.05	-	-	-	-	195	297	H
2	* 2.262	40.13	PK-U	31.8	-30.5	0	41.43	-	-	74	-32.57	-	-	125	126	V
	* 2.258	28.77	ADR	31.8	-30.6	.1	30.07	54	-23.93	-	-	-	-	125	126	V
3	6.421	38.26	PK-U	35.4	-26.7	0	46.96	-	-	-	-	68.2	-21.24	152	131	H
4	* 11.14	35.47	PK-U	37.9	-21.6	0	51.77	-	-	74	-22.23	-	-	328	176	H
	* 11.14	24.36	ADR	37.9	-21.6	.1	40.76	54	-13.24	-	-	-	-	328	176	H
5	16.878	34.92	PK-U	41.8	-20.8	0	55.92	-	-	-	-	68.2	-12.28	58	160	H
6	* 12.677	34.99	PK-U	39.2	-22.2	0	51.99	-	-	74	-22.01	-	-	37	200	V
	* 12.675	24.98	ADR	39.2	-22.2	.1	42.08	54	-11.92	-	-	-	-	37	200	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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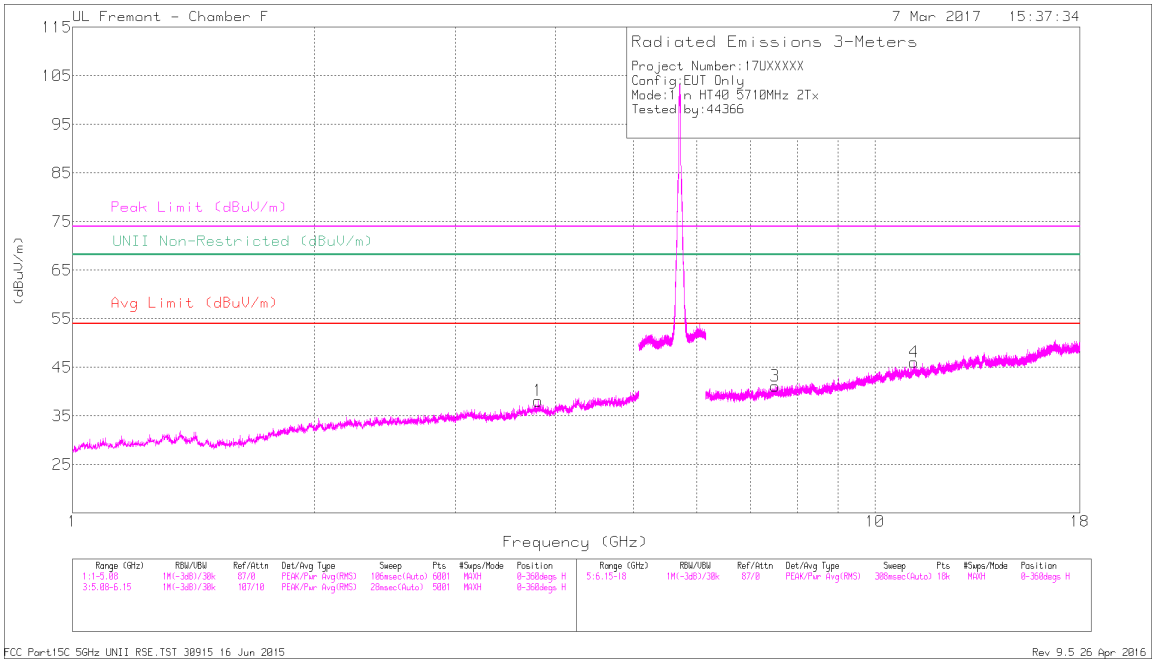
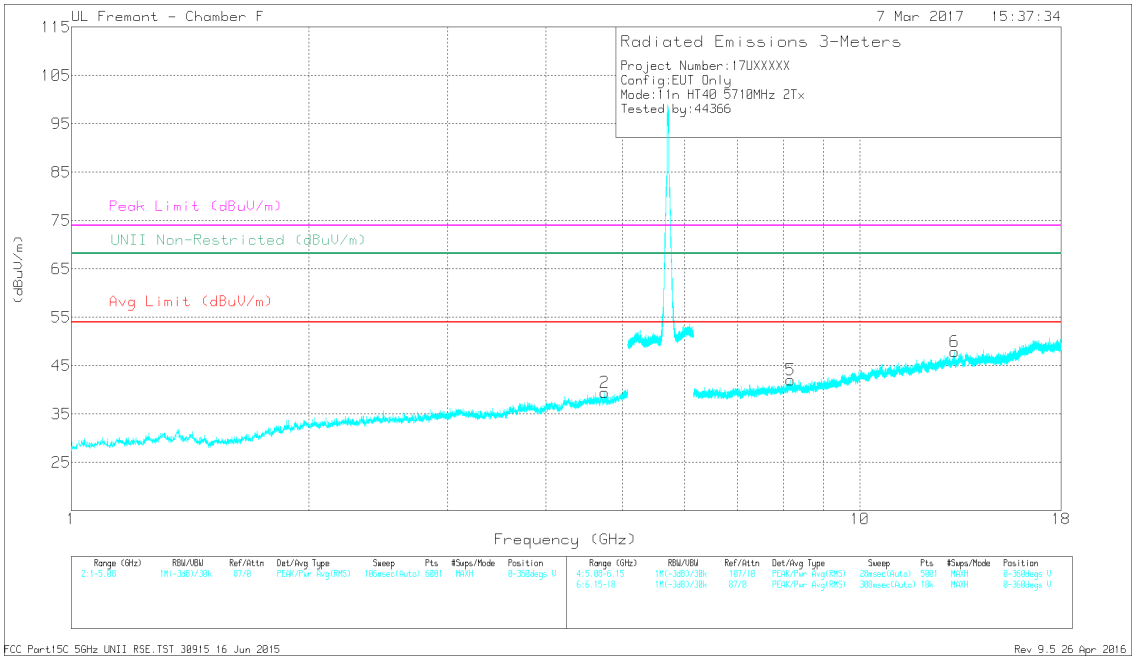
9.1.28. 11ac HT40 2TX CDD MIMO STRADDLE CHANNEL 142

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	* 3.8	39.14	PK-U	33.4	-29.2	0	43.34	-	-	74	-30.66	-	-	145	128	H
	* 3.803	28.42	ADR	33.4	-29.1	.1	32.82	54	-21.18	-	-	-	-	145	128	H
2	* 4.745	38.2	PK-U	34.1	-27.6	0	44.7	-	-	74	-29.3	-	-	164	292	V
	* 4.745	27.74	ADR	34.1	-27.6	.1	34.34	54	-19.66	-	-	-	-	164	292	V
3	* 7.508	36.08	PK-U	35.6	-24.9	0	46.78	-	-	74	-27.22	-	-	91	157	H
	* 7.509	25.73	ADR	35.6	-24.9	.1	36.53	54	-17.47	-	-	-	-	91	157	H
4	* 11.174	35.14	PK-U	37.9	-21.4	0	51.64	-	-	74	-22.36	-	-	275	123	H
	* 11.177	24.28	ADR	37.9	-21.4	.1	40.88	54	-13.12	-	-	-	-	275	123	H
5	* 8.171	35.48	PK-U	35.8	-23.9	0	47.38	-	-	74	-26.62	-	-	12	216	V
	* 8.172	25.03	ADR	35.8	-23.9	.1	37.03	54	-16.97	-	-	-	-	12	216	V
6	13.198	35.83	PK-U	39	-21.7	0	53.13	-	-	-	-	68.2	-15.07	334	153	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
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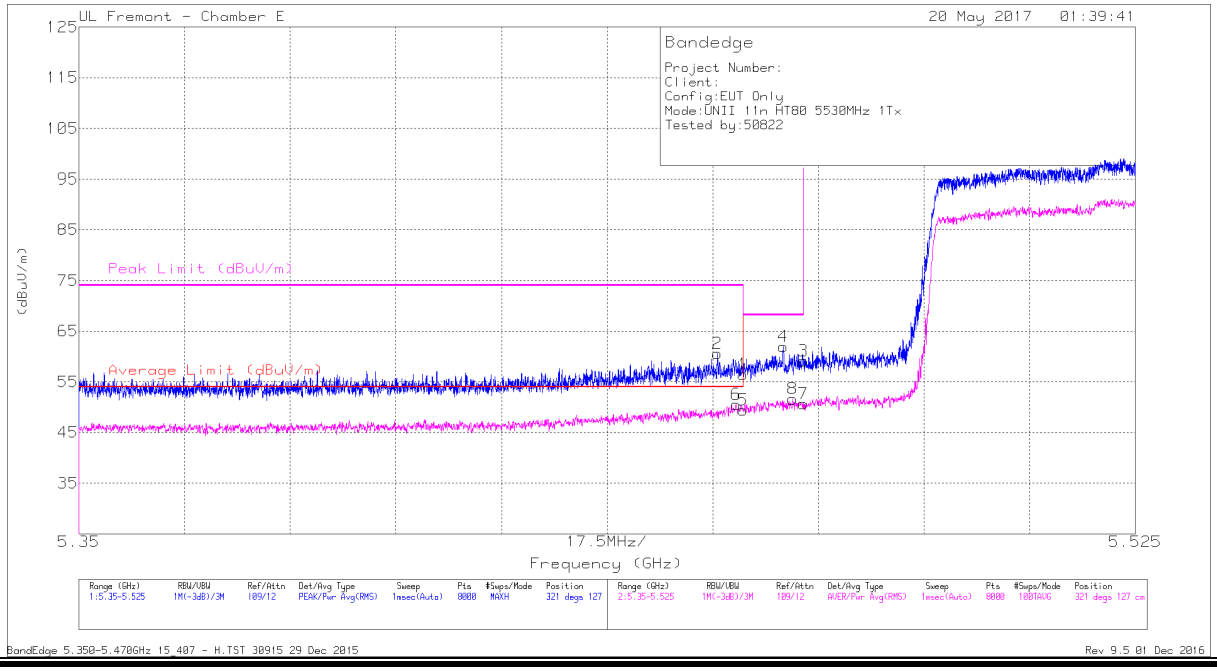
9.1.29. 11ac HT80 UAT 2 SISO MODE IN THE 5.6GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Factor	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	40.7	Pk	35.1	-19.3		56.5	-	-	74	-17.5	321	127	H
2	* 5.456	44.86	Pk	35.1	-19.4		60.56	-	-	74	-13.44	321	127	H
5	* 5.46	33.59	RMS	35.1	-19.3	0.2	49.59	54	-4.41	-	-	321	127	H
6	* 5.459	34.77	RMS	35.1	-19.3	0.2	50.77	54	-3.23	-	-	321	127	H
4	5.467	46.28	Pk	35.1	-19.4		61.98	-	-	68.2	-6.22	321	127	H
8	5.468	36	RMS	35.1	-19.5		51.6	-	-	-	-	321	127	H
3	5.47	43.44	Pk	35.1	-19.4		59.14	-	-	68.2	-9.06	321	127	H
7	5.47	35.01	RMS	35.1	-19.4		50.71	-	-	-	-	321	127	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection
BandEdge 5.350-5.470GHz 15_407 - H.TST 30915 29 Dec 2015
Rev 9.5 01 Dec 2016

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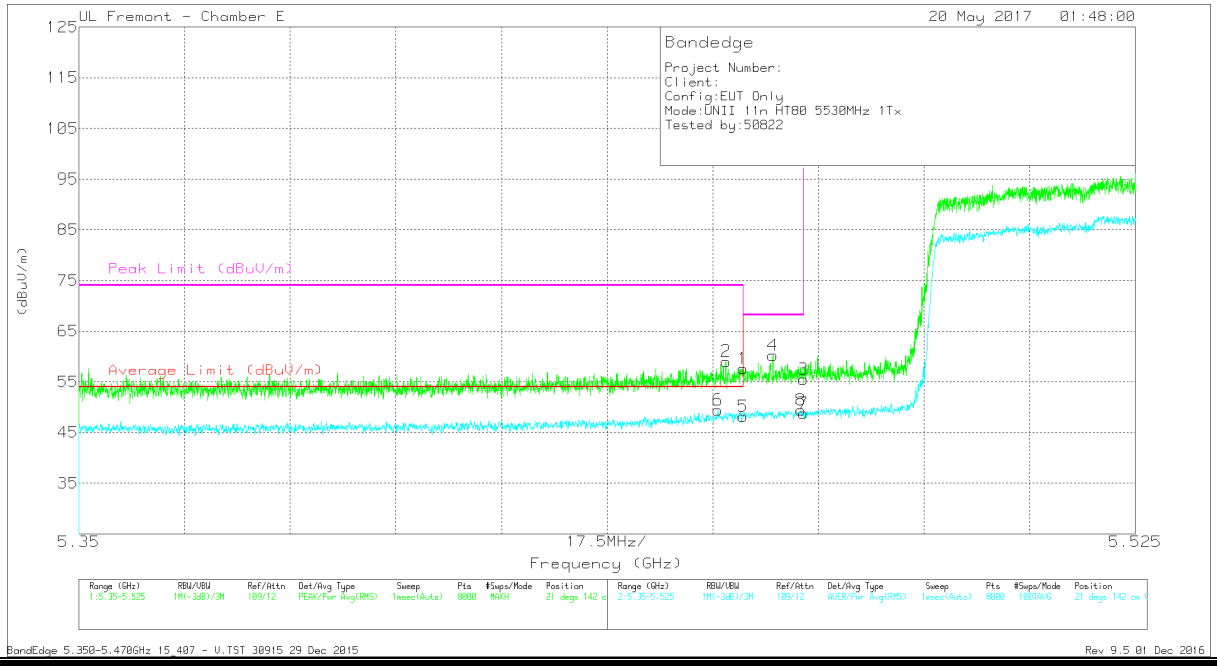
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Factor	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	41.86	Pk	35.1	-19.3		57.66	-	-	74	-16.34	21	142	V
2	* 5.457	43.34	Pk	35.1	-19.4		59.04	-	-	74	-14.96	21	142	V
5	* 5.46	32.34	RMS	35.1	-19.3	0.2	48.34	54	-5.66	-	-	21	142	V
6	* 5.456	33.76	RMS	35.1	-19.4	0.2	49.66	54	-4.34	-	-	21	142	V
4	5.465	44.53	Pk	35.1	-19.4		60.23	-	-	68.2	-7.97	21	142	V
3	5.47	39.8	Pk	35.1	-19.4		55.5	-	-	68.2	-12.7	21	142	V
7	5.47	33.06	RMS	35.1	-19.4		48.76	-	-	-	-	21	142	V
8	5.47	33.7	RMS	35.1	-19.4		49.4	-	-	-	-	21	142	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection
BandEdge 5.350-5.470GHz 15_407 - V.TST 30915 29 Dec 2015
Rev 9.5 01 Dec 2016

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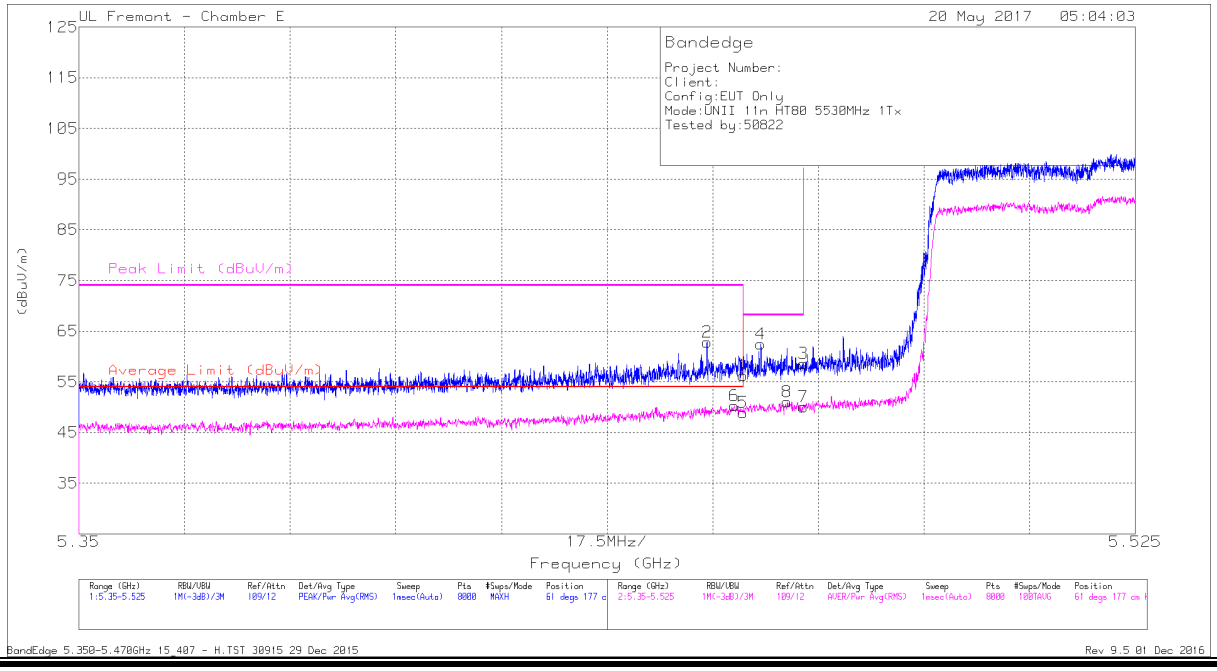
9.1.30. 11ac HT80 LAT 3 SISO MODE IN THE 5.6GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC factor	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	40.43	Pk	35.1	-19.3		56.23	-	-	74	-17.77	61	177	H
2	* 5.454	47.04	Pk	35.1	-19.3		62.84	-	-	74	-11.16	61	177	H
5	* 5.46	33.08	RMS	35.1	-19.3	0.2	49.08	54	-4.92	-	-	61	177	H
6	* 5.459	34.51	RMS	35.1	-19.3	0.2	50.51	54	-3.49	-	-	61	177	H
4	5.463	46.77	Pk	35.1	-19.4		62.47	-	-	68.2	-5.73	61	177	H
8	5.467	35.41	RMS	35.1	-19.5		51.01	-	-	-	-	61	177	H
3	5.47	42.87	Pk	35.1	-19.4		58.57	-	-	68.2	-9.63	61	177	H
7	5.47	34.38	RMS	35.1	-19.4		50.08	-	-	-	-	61	177	H

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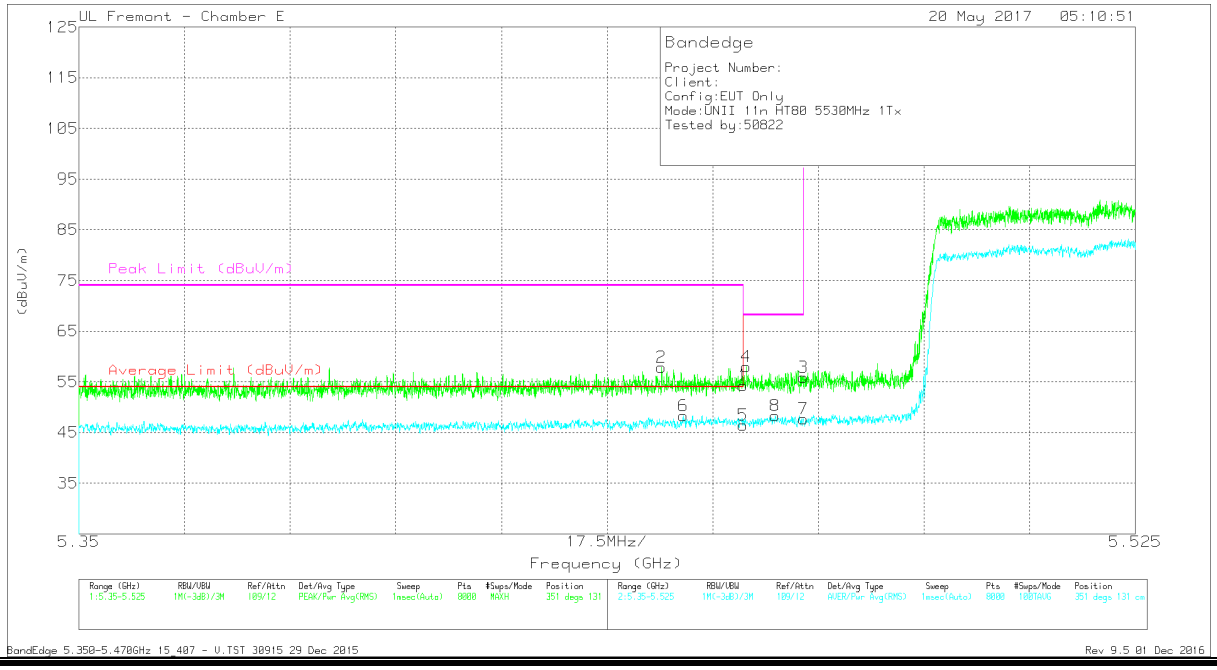
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Factor	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	38.51	Pk	35.1	-19.3		54.31	-	-	74	-19.69	351	131	V
2	* 5.447	42.04	Pk	35.1	-19.3		57.84	-	-	74	-16.16	351	131	V
5	* 5.46	30.65	RMS	35.1	-19.3	0.2	46.65	54	-7.35	-	-	351	131	V
6	* 5.45	32.54	RMS	35.1	-19.3	0.2	48.54	54	-5.46	-	-	351	131	V
4	5.461	42.15	Pk	35.1	-19.3		57.95	-	-	68.2	-10.25	351	131	V
8	5.465	32.65	RMS	35.1	-19.4		48.35	-	-	-	-	351	131	V
3	5.47	40.17	Pk	35.1	-19.4		55.87	-	-	68.2	-12.33	351	131	V
7	5.47	31.93	RMS	35.1	-19.4		47.63	-	-	-	-	351	131	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection
BandEdge 5.350-5.470GHz 15_407 - V.TST 30915 29 Dec 2015
Rev 9.5 01 Dec 2016

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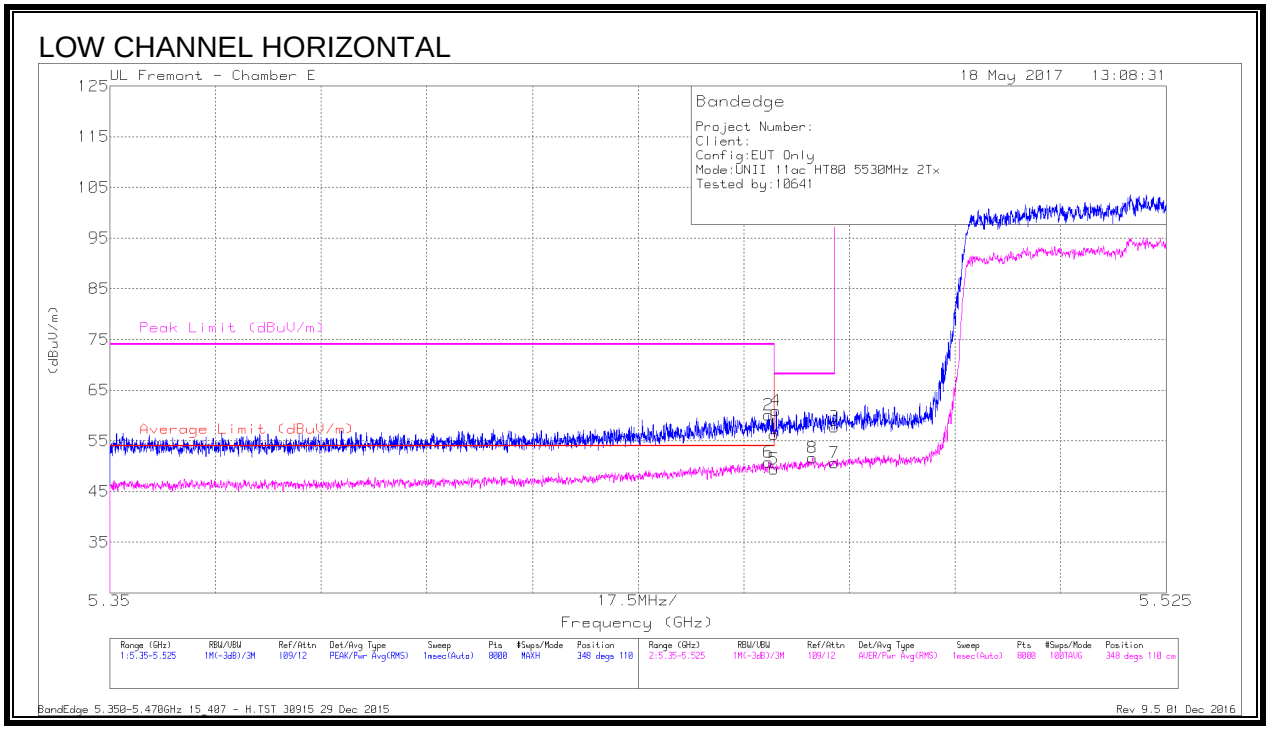
9.1.31. 11ac HT80 2TX CDD MIMO MODE IN THE 5.6GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (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	* 5.46	40.47	Pk	35.1	-19.3	0	56.27	-	-	74	-17.73	348	110	H
2	* 5.459	44.3	Pk	35.1	-19.3	0	60.1	-	-	74	-13.9	348	110	H
3	5.47	42.02	Pk	35.1	-19.4	0	57.72	-	-	68.2	-10.48	348	110	H
4	5.46	45.21	Pk	35.1	-19.3	0	61.01	-	-	68.2	-7.19	348	110	H
5	* 5.46	33.39	RMS	35.1	-19.3	.2	49.39	54	-4.61	-	-	348	110	H
6	* 5.459	34.83	RMS	35.1	-19.3	.2	50.83	54	-3.17	-	-	348	110	H
7	5.47	34.78	RMS	35.1	-19.4	.2	50.68	-	-	-	-	348	110	H
8	5.466	35.81	RMS	35.1	-19.4	.2	51.71	-	-	-	-	348	110	H

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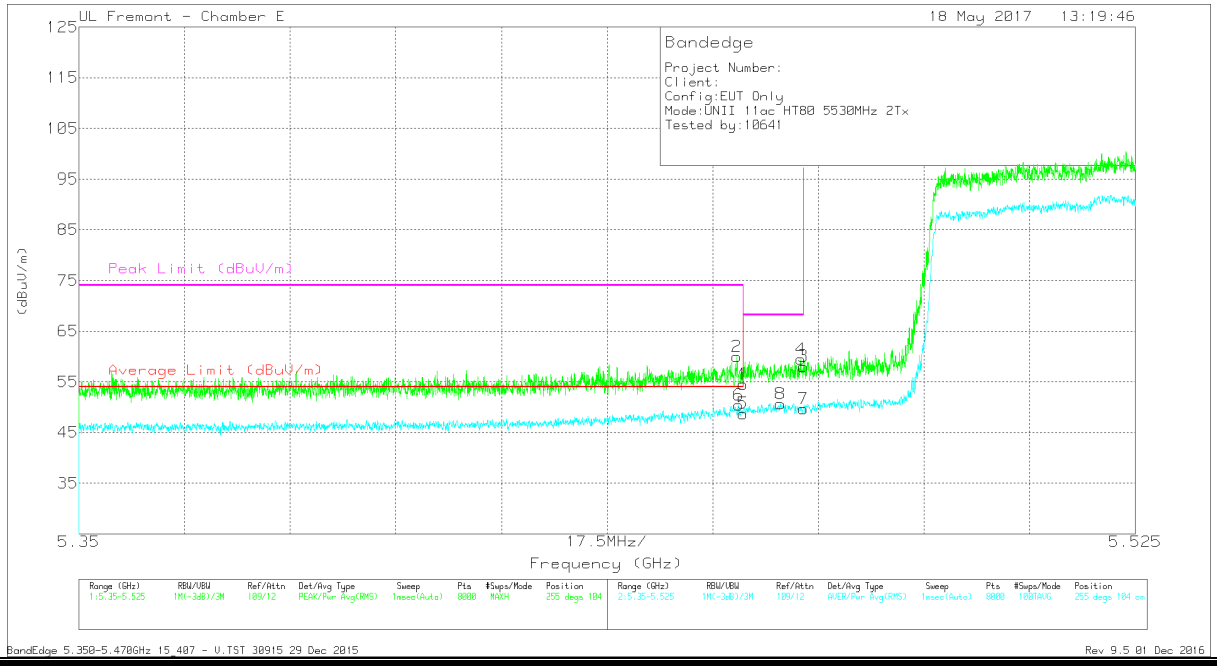
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (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	* 5.46	38.72	Pk	35.1	-19.3	0	54.52	-	-	74	-19.48	255	104	V
2	* 5.459	44.23	Pk	35.1	-19.3	0	60.03	-	-	74	-13.97	255	104	V
5	* 5.46	32.74	RMS	35.1	-19.3	.2	48.74	54	-5.26	-	-	255	104	V
6	* 5.459	34.44	RMS	35.1	-19.3	.2	50.44	54	-3.56	-	-	255	104	V
8	5.466	34.82	RMS	35.1	-19.4	.2	50.72	-	-	-	-	255	104	V
3	5.47	42.35	Pk	35.1	-19.4	0	58.05	-	-	68.2	-10.15	255	104	V
4	5.47	43.74	Pk	35.1	-19.4	0	59.44	-	-	68.2	-8.76	255	104	V
7	5.47	33.82	RMS	35.1	-19.4	.2	49.72	-	-	-	-	255	104	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection
BandEdge 5.350-5.470GHz 15_407 - V.TST 30915 29 Dec 2015
Rev 9.5 01 Dec 2016

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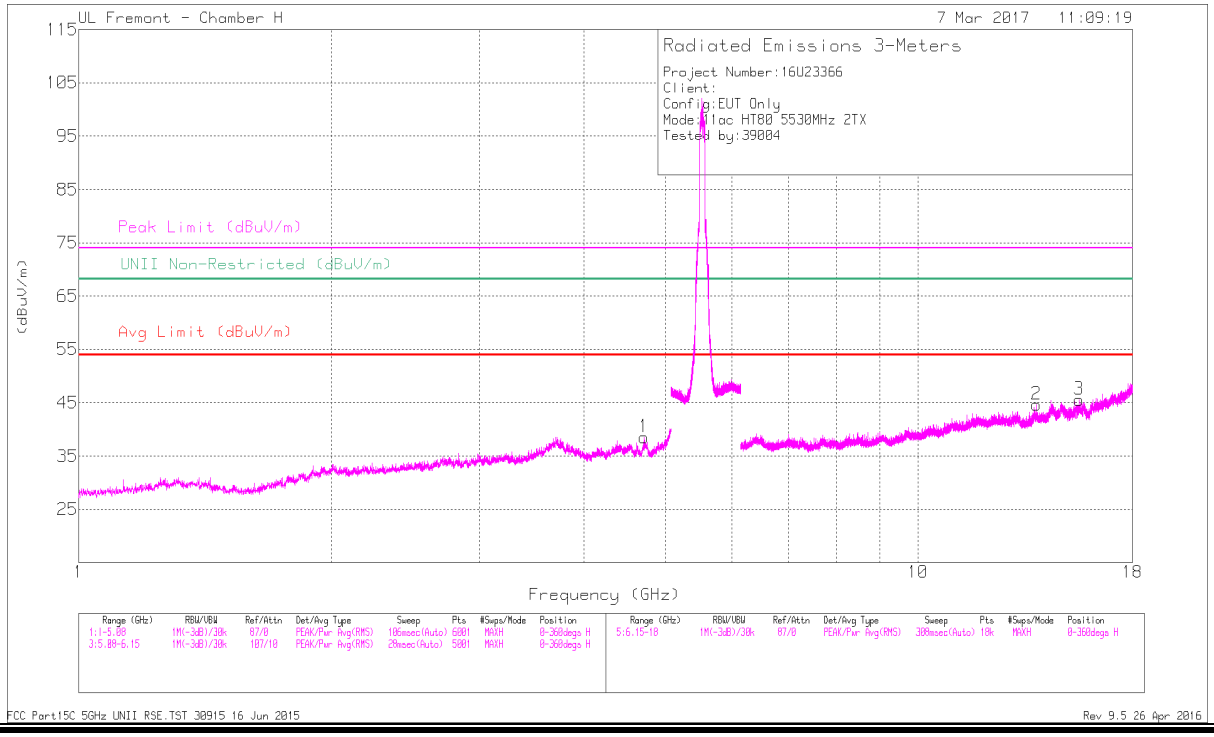
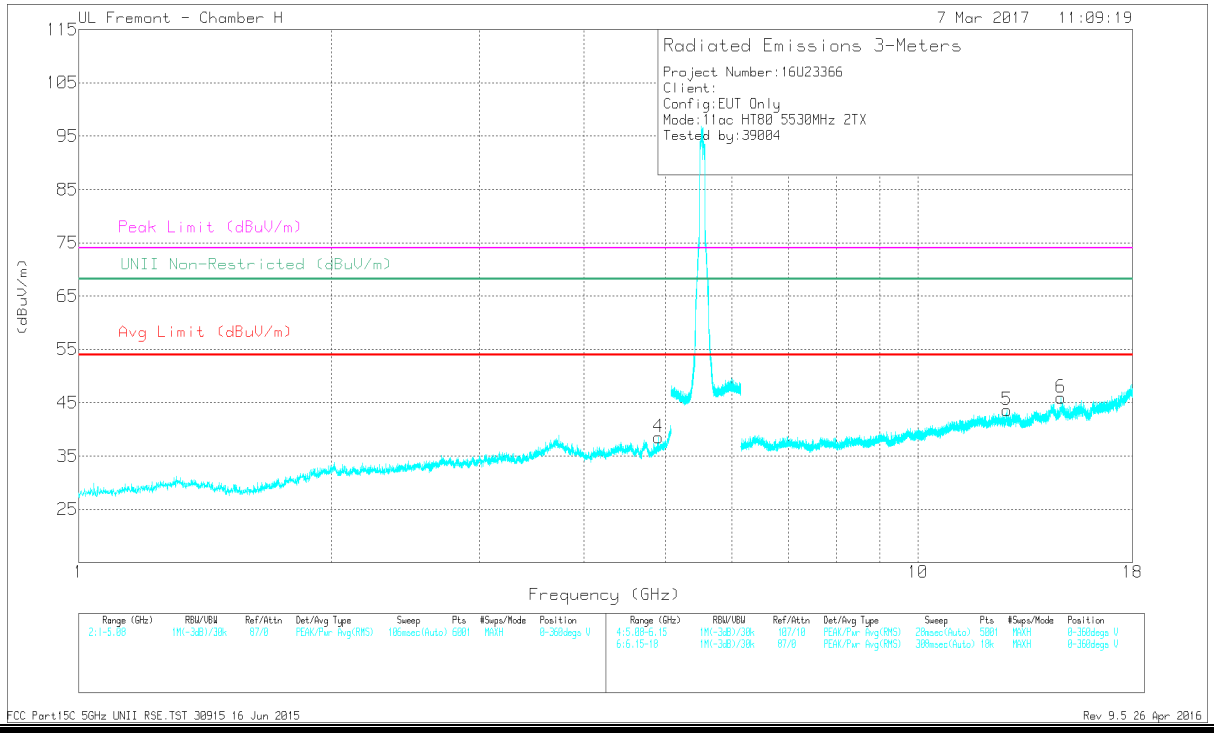
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 4.718	43.57	PK-U	34	-34.3	0	43.27	-	-	74	-30.73	-	-	76	173	H
	* 4.72	33.49	ADR	34	-34.3	.19	33.38	54	-20.62	-	-	-	-	76	173	H
4	* 4.908	43.28	PK-U	34	-33.7	0	43.58	-	-	74	-30.42	-	-	322	323	V
	* 4.906	32.68	ADR	34	-33.7	.19	33.17	54	-20.83	-	-	-	-	322	323	V
3	* 15.551	35.52	PK-U	40.2	-24.8	0	50.92	-	-	74	-23.08	-	-	242	388	H
	* 15.549	25.32	ADR	40.2	-24.8	.19	40.91	54	-13.09	-	-	-	-	242	388	H
5	12.766	36.27	PK-U	39.5	-26.6	0	49.17	-	-	-	-	68.2	-19.03	253	384	V
2	13.824	35.89	PK-U	39.1	-24.5	0	50.49	-	-	-	-	68.2	-17.71	203	318	H
6	14.801	36.51	PK-U	40	-24.3	0	52.21	-	-	-	-	68.2	-15.99	0	107	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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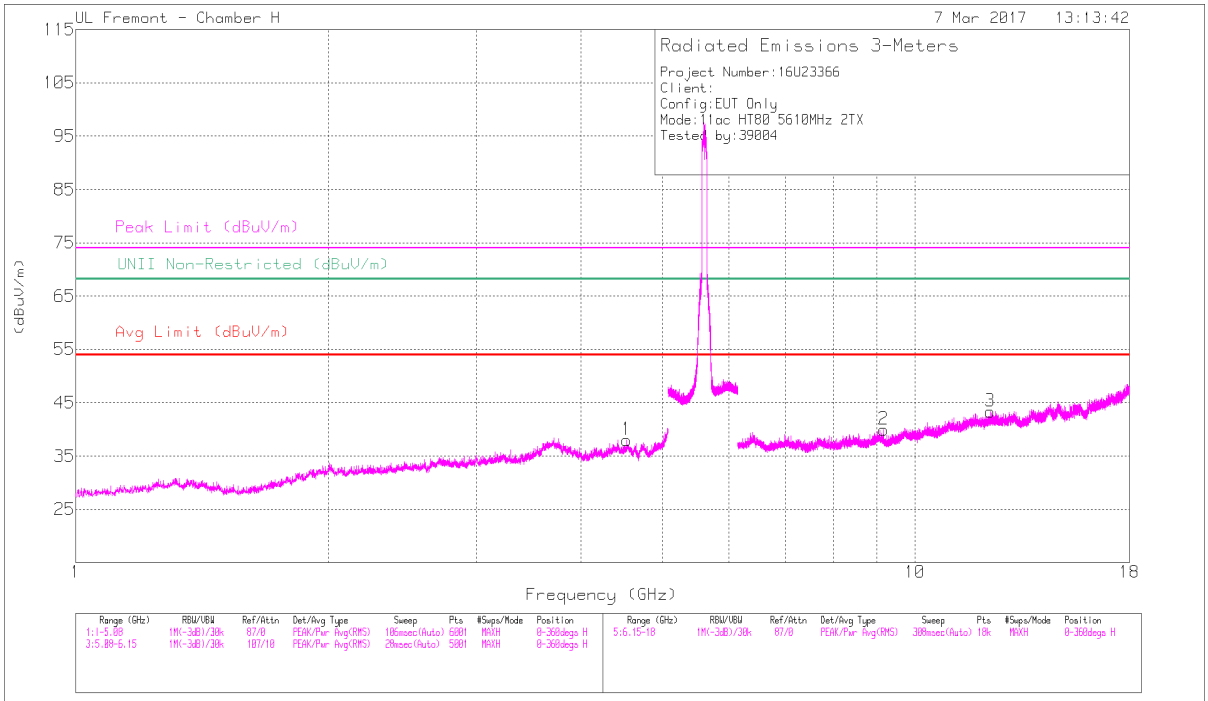
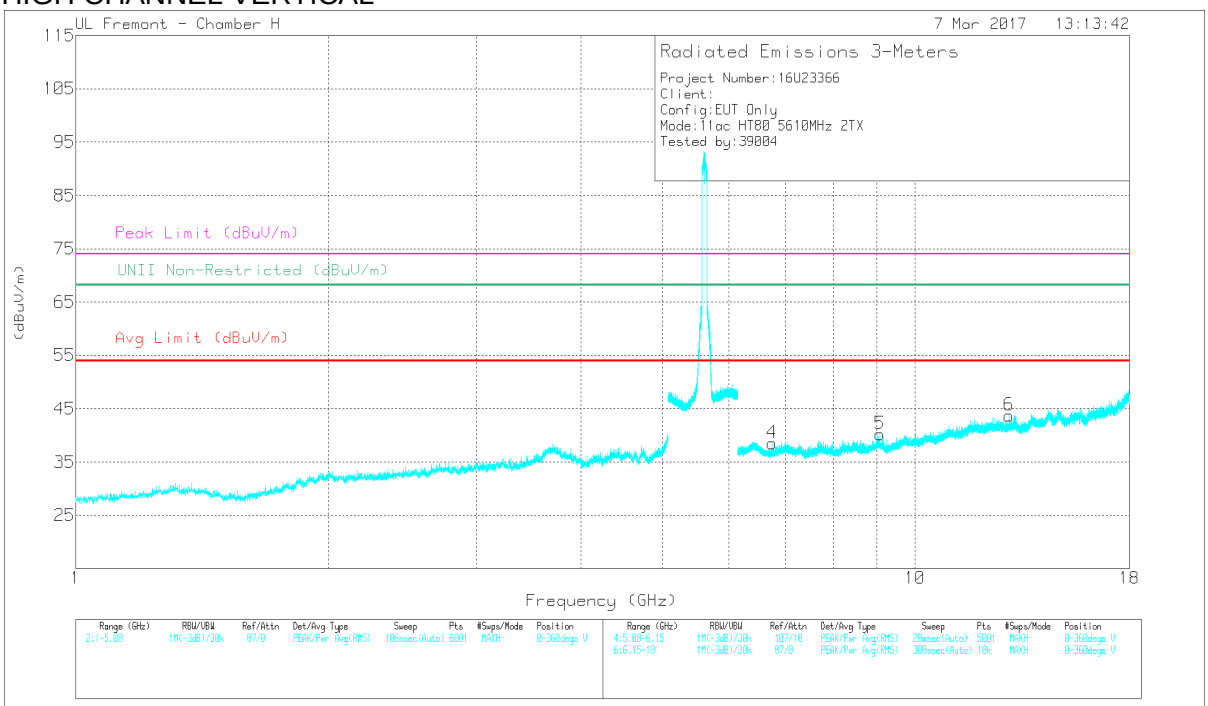
HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 4.536	44.59	PK-U	33.9	-34.9	0	43.59	-	-	74	-30.41	-	-	11	355	H
	* 4.537	33.99	ADR	33.9	-34.9	.19	33.18	54	-20.82	-	-	-	-	11	355	H
2	* 9.169	37.99	PK-U	36.4	-29.2	0	45.19	-	-	74	-28.81	-	-	322	345	H
	* 9.169	27.24	ADR	36.4	-29.2	.19	34.63	54	-19.37	-	-	-	-	322	345	H
3	* 12.287	35.84	PK-U	39.2	-26.7	0	48.34	-	-	74	-25.66	-	-	4	235	H
	* 12.285	25.66	ADR	39.2	-26.7	.19	38.35	54	-15.65	-	-	-	-	4	235	H
5	* 9.074	38.24	PK-U	36.3	-29.3	0	45.24	-	-	74	-28.76	-	-	24	110	V
	* 9.073	27.79	ADR	36.3	-29.3	.19	34.98	54	-19.02	-	-	-	-	24	110	V
4	6.759	39.66	PK-U	35.7	-31.7	0	43.66	-	-	-	-	68.2	-24.54	55	148	V
6	12.947	36.27	PK-U	39.4	-25.7	0	49.97	-	-	-	-	68.2	-18.23	88	136	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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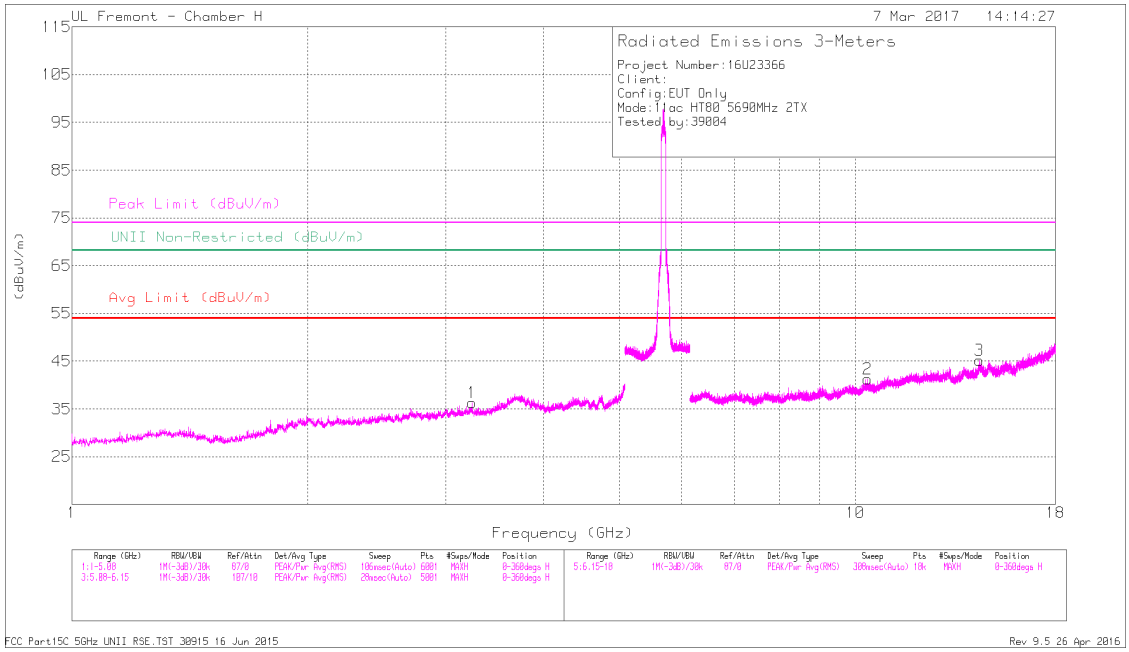
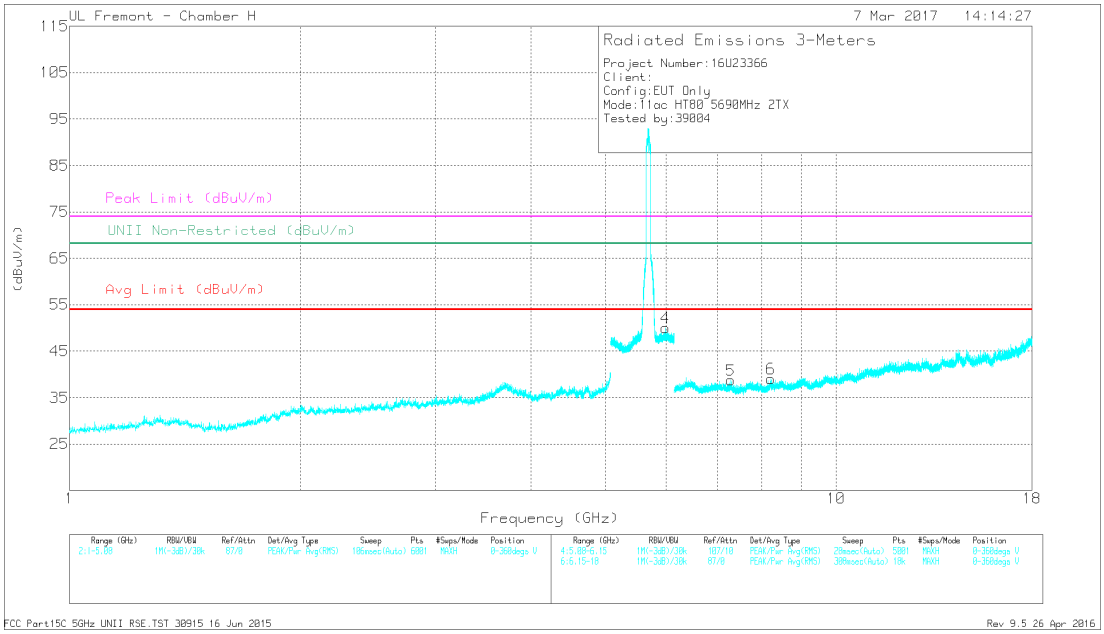
9.1.32. 11ac HT80 2TX CDD MIMO STRADDLE CHANNEL 138

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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
5	* 7.281	39.62	PK-U	35.7	-30.9	0	44.42	-	-	74	-29.58	-	-	198	214	V
	* 7.282	28.68	ADR	35.7	-30.9	.19	33.67	54	-20.33	-	-	-	-	198	214	V
6	* 8.213	38.26	PK-U	35.8	-29.5	0	44.56	-	-	74	-29.44	-	-	87	370	V
	* 8.214	28.03	ADR	35.8	-29.5	.19	34.52	54	-19.48	-	-	-	-	87	370	V
1	3.242	45.88	PK-U	33.3	-36.7	0	42.48	-	-	-	-	68.2	-25.72	245	251	H
4	5.984	42.58	PK-U	35.3	-23.6	0	54.28	-	-	-	-	68.2	-13.92	92	104	V
2	10.371	38.26	PK-U	37.7	-29.2	0	46.76	-	-	-	-	68.2	-21.44	74	175	H
3	14.392	34.97	PK-U	39.8	-23.7	0	51.07	-	-	-	-	68.2	-17.13	103	167	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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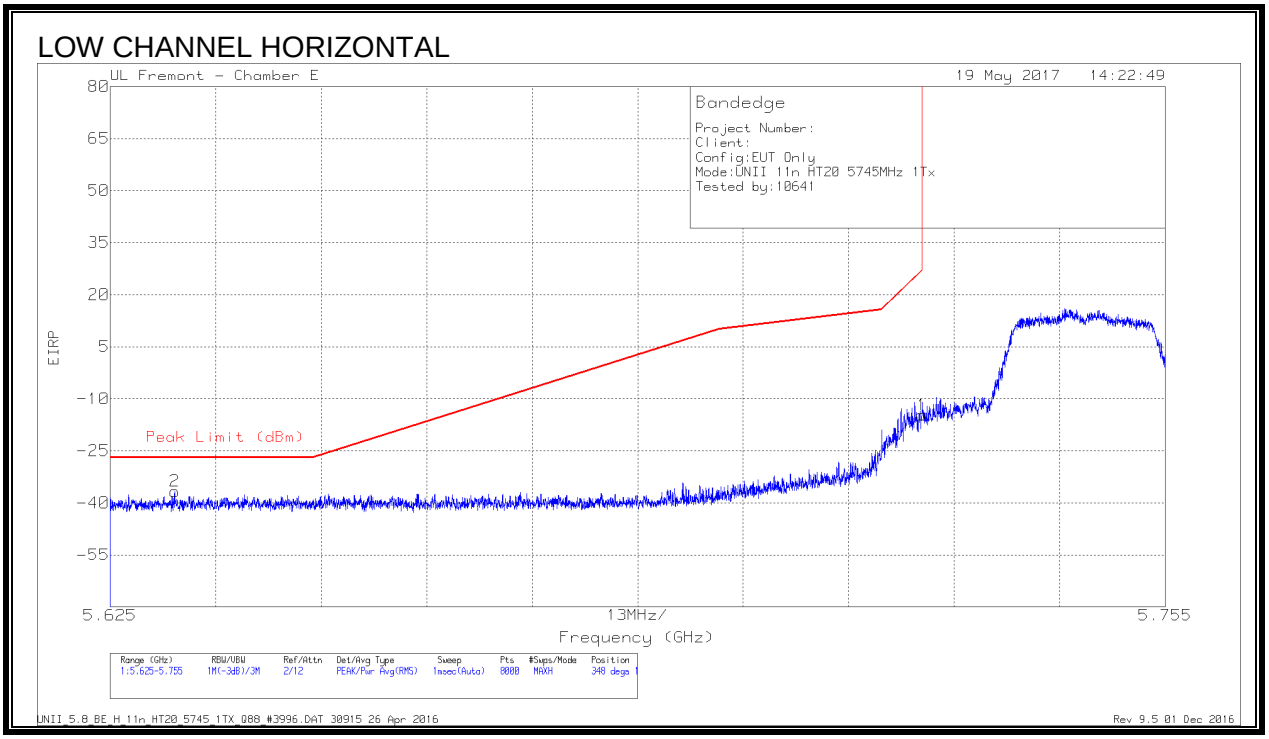
9.1.33. 11n HT20 UAT 2 SISO MODE IN THE 5.8GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.633	-63.88	Pk	34.9	-19.5	11.8	-36.68	-27	-9.68	348	122	H
1	5.725	-41.8	Pk	34.9	-19.6	11.8	-14.7	27	-41.7	348	122	H

Pk - Peak detector
UNII_5.8_BE_H_11n_HT20_5745_1TX_Q88_#3996.DAT 30915 26 Apr 2016
Rev 9.5 01 Dec 2016

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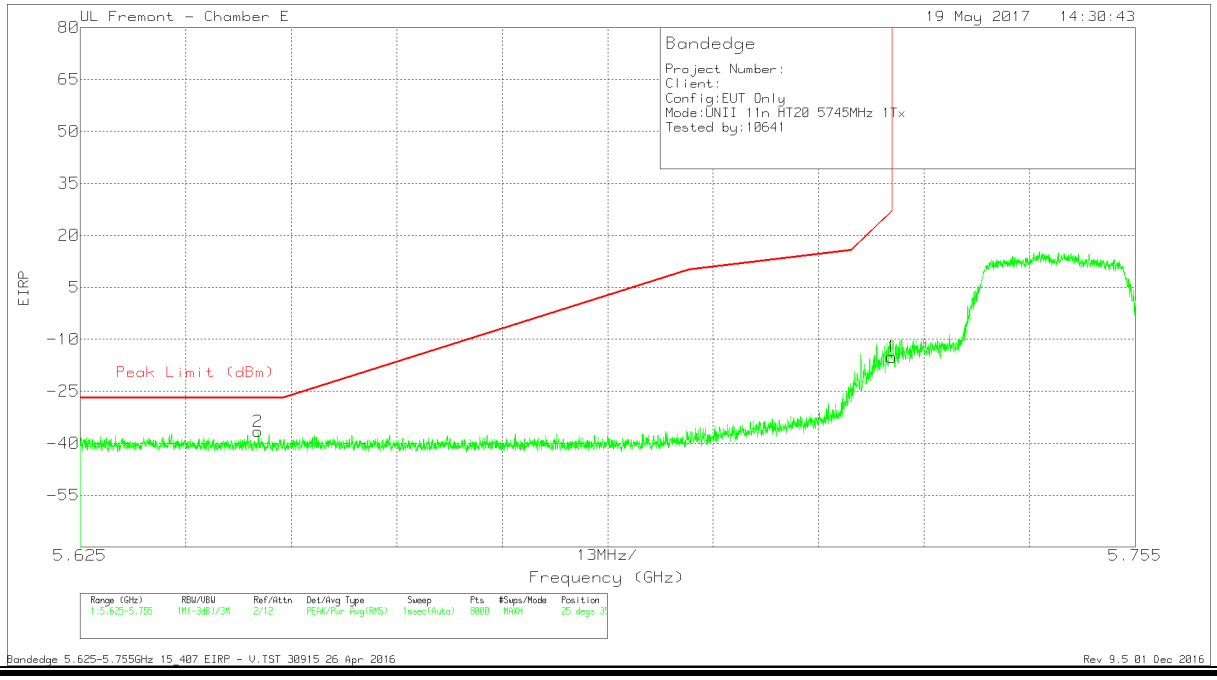
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.647	-63.8	Pk	34.9	-19.5	11.8	-36.6	-27	-9.6	25	350	V
1	5.725	-42.19	Pk	34.9	-19.6	11.8	-15.09	27	-42.09	25	350	V

Pk - Peak detector

Bandedge 5.625-5.755GHz 15_407 EIRP - V.TST 30915 26 Apr 2016
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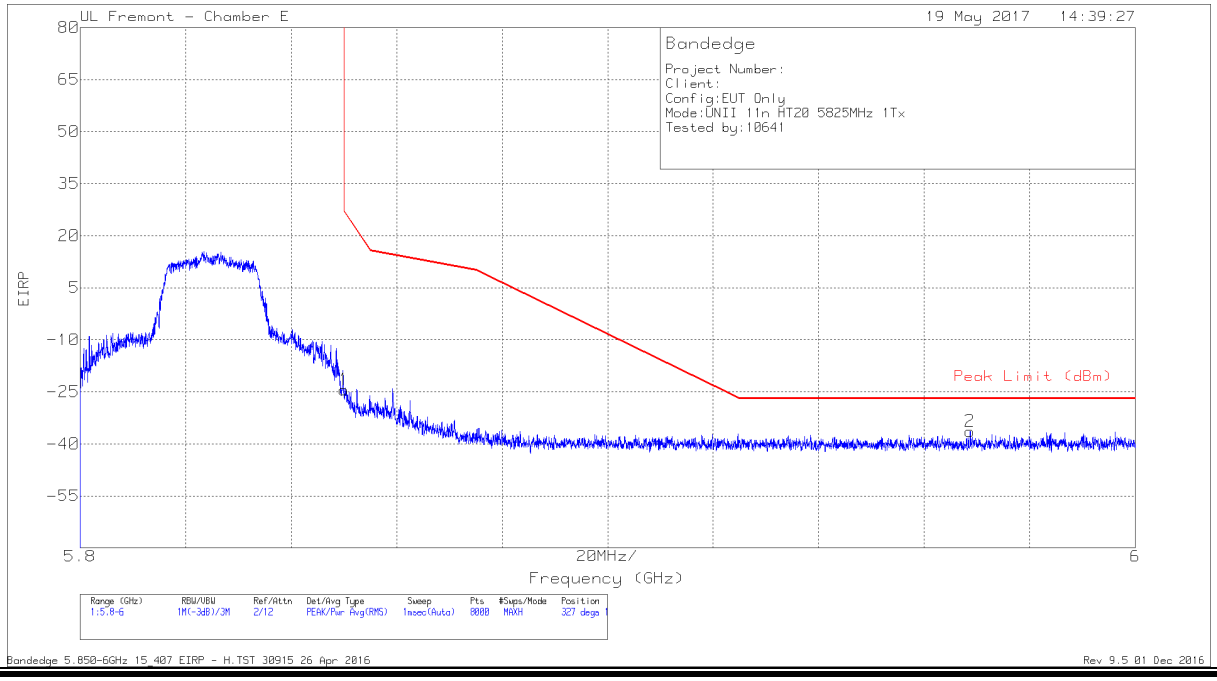
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-52.18	Pk	35.5	-19.5	11.8	-24.38	26.99	-51.37	327	122	H
2	5.969	-64.87	Pk	35.6	-18.9	11.8	-36.37	-27	-9.37	327	122	H

Pk - Peak detector

Bandedge 5.850-6GHz 15_407 EIRP - H.TST 30915 26 Apr 2016
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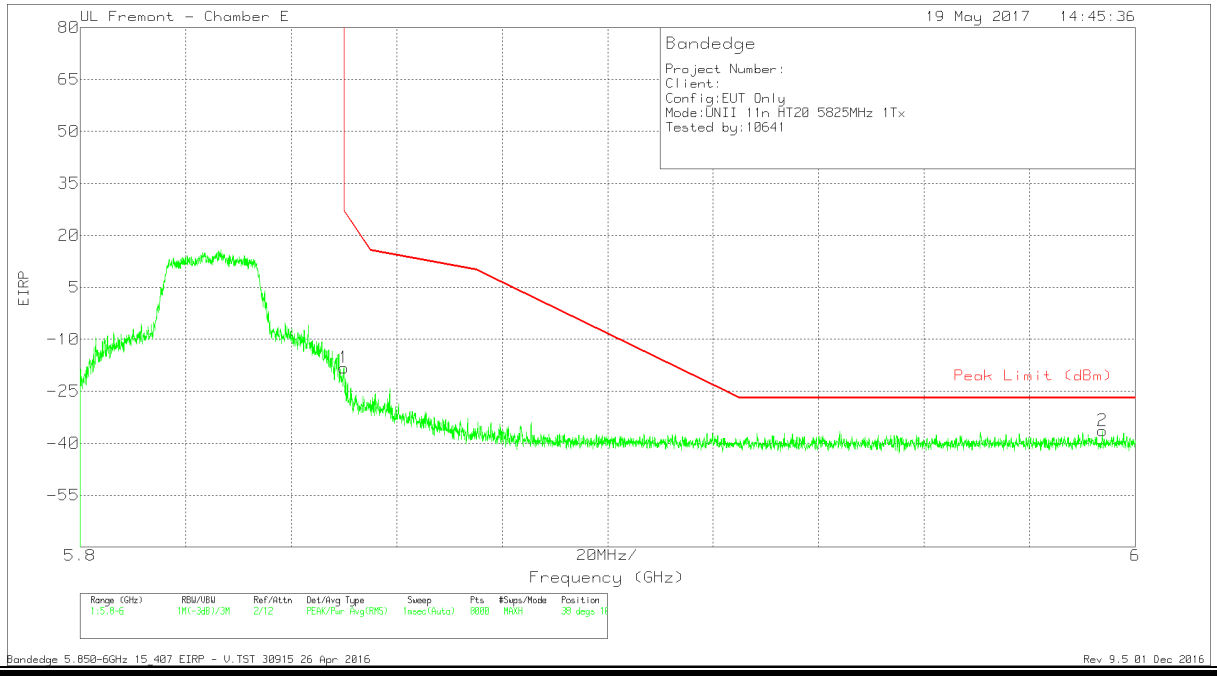
HIGH CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-46.01	Pk	35.5	-19.5	11.8	-18.21	26.99	-45.2	38	109	V
2	5.994	-64.95	Pk	35.6	-18.8	11.8	-36.35	-27	-9.35	38	109	V

Pk - Peak detector

Bandedge 5.850-6GHz 15_407 EIRP - V.TST 30915 26 Apr 2016
Rev 9.5 01 Dec 2016

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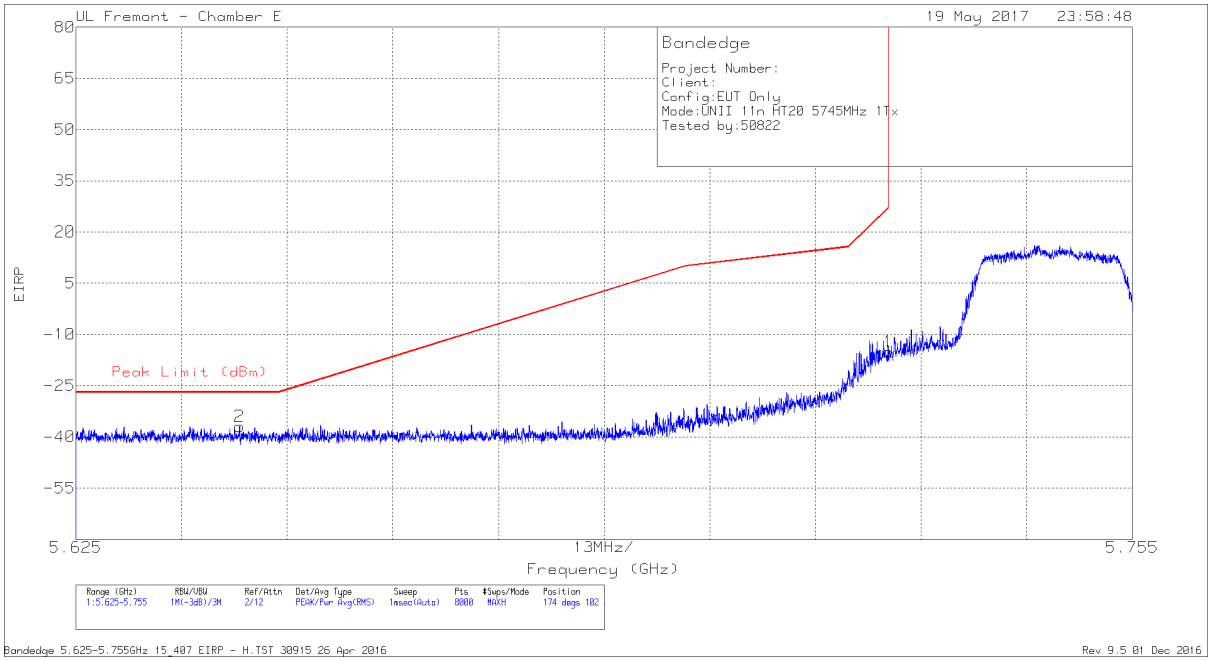
9.1.34. 11n HT20 LAT 3 SISO MODE IN THE 5.8GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.645	-64.07	Pk	34.9	-19.5	11.8	-36.87	-27	-9.87	174	102	H
1	5.725	-42.07	Pk	34.9	-19.6	11.8	-14.97	27	-41.97	174	102	H

Pk - Peak detector
Bandedge 5.625-5.755GHz 15_407 EIRP - H.TST 30915 26 Apr 2016
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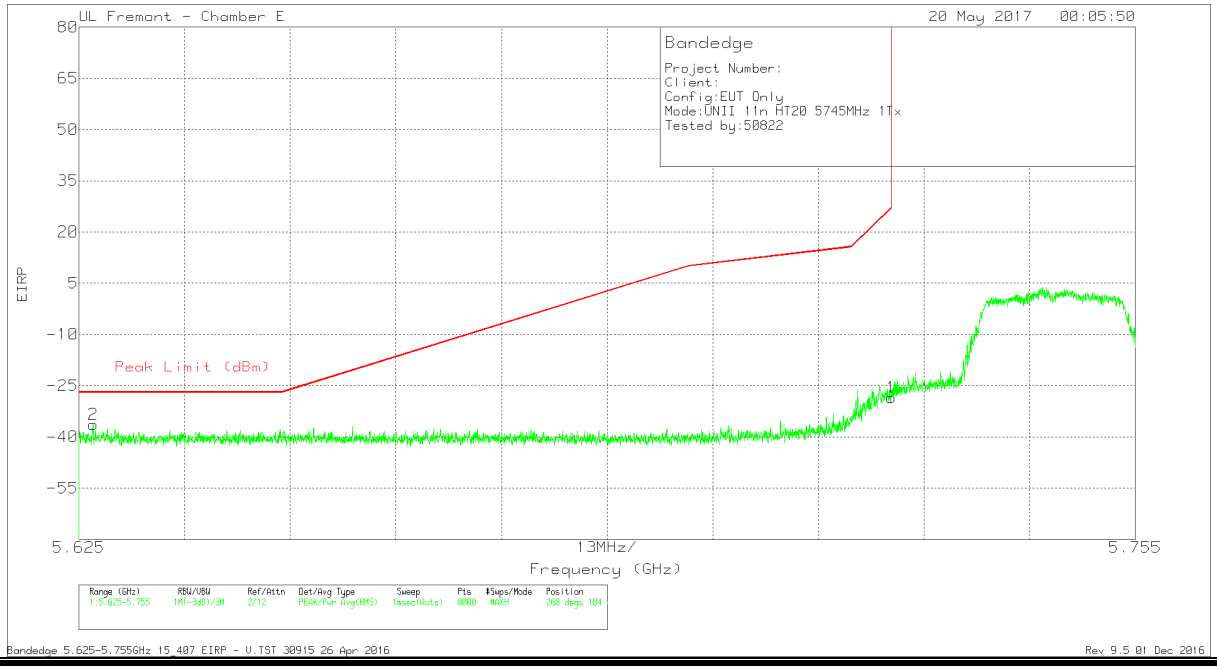
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.627	-63.41	Pk	34.9	-19.6	11.8	-36.31	-27	-9.31	268	104	V
1	5.725	-55.52	Pk	34.9	-19.6	11.8	-28.42	27	-55.42	268	104	V

Pk - Peak detector
Bandedge 5.625-5.755GHz 15_407 EIRP - V.TST 30915 26 Apr 2016
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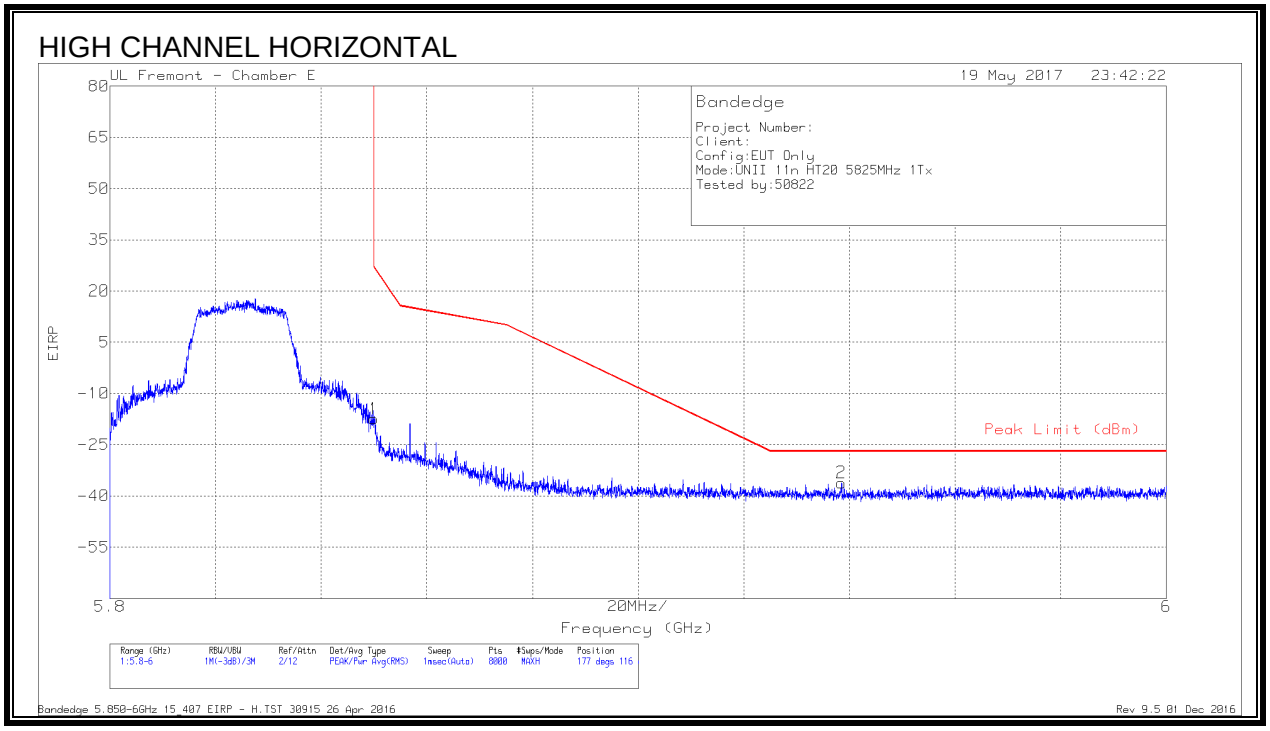
AUTHORIZED BANDEDGE (HIGH CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-45.26	Pk	35.5	-19.5	11.8	-17.46	26.99	-44.45	177	116	H
2	5.939	-64.2	Pk	35.6	-19.3	11.8	-36.1	-27	-9.1	177	116	H

Pk - Peak detector
Bandedge 5.850-6GHz 15_407 EIRP - H.TST 30915 26 Apr 2016
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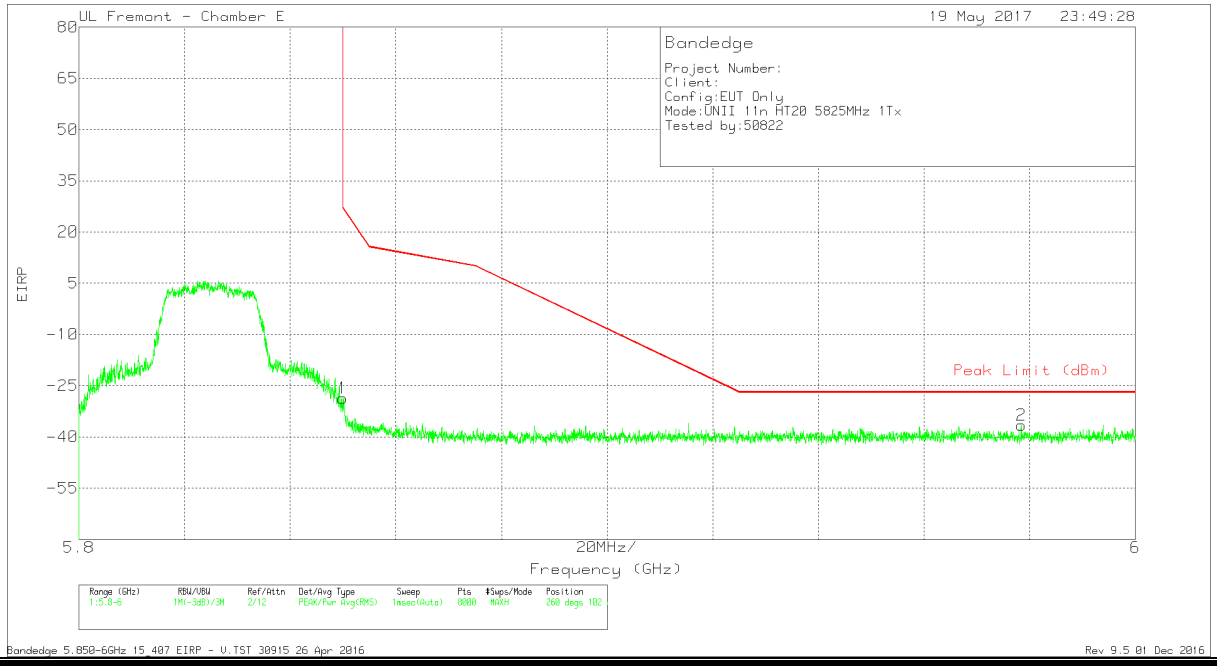
HIGH CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-56.51	Pk	35.5	-19.5	11.8	-28.71	26.99	-55.7	260	102	V
2	5.978	-64.96	Pk	35.6	-19	11.8	-36.56	-27	-9.56	260	102	V

Pk - Peak detector

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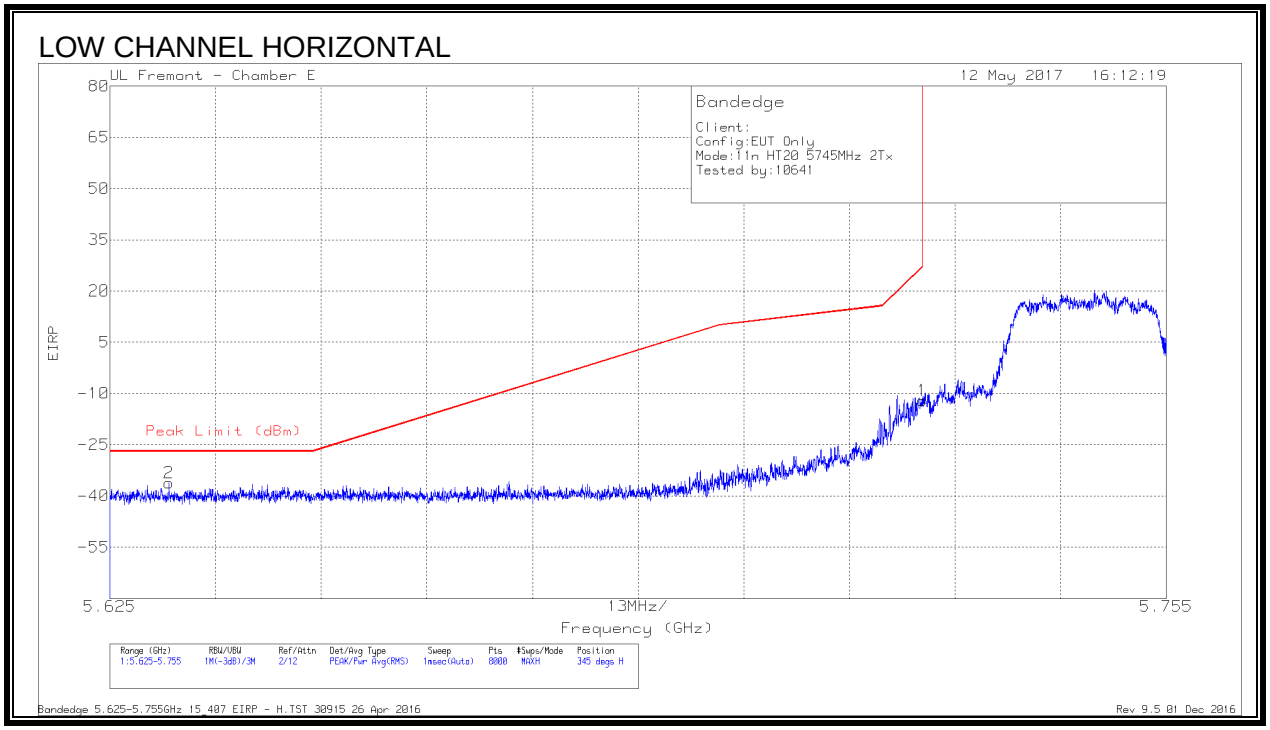
9.1.35. 11n HT20 2TX CDD MIMO MODE IN THE 5.8GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.632	-63.35	Pk	34.9	-19.6	11.8	-36.25	-27	-9.25	345	102	H
1	5.725	-39.23	Pk	34.9	-19.6	11.8	-12.13	27	-39.13	345	102	H

Pk - Peak detector
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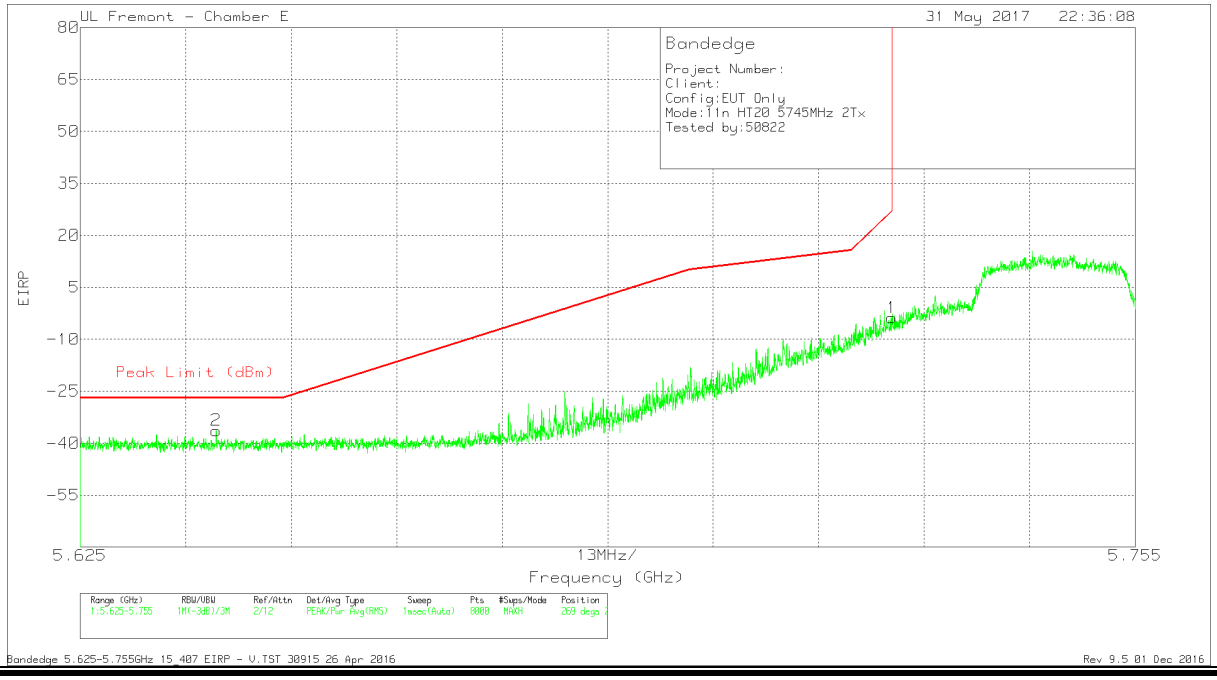
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.642	-63.54	Pk	34.9	-19.5	11.8	-36.34	-27	-9.34	269	243	V
1	5.725	-30.88	Pk	34.9	-19.6	11.8	-3.78	27	-30.78	269	243	V

Pk - Peak detector

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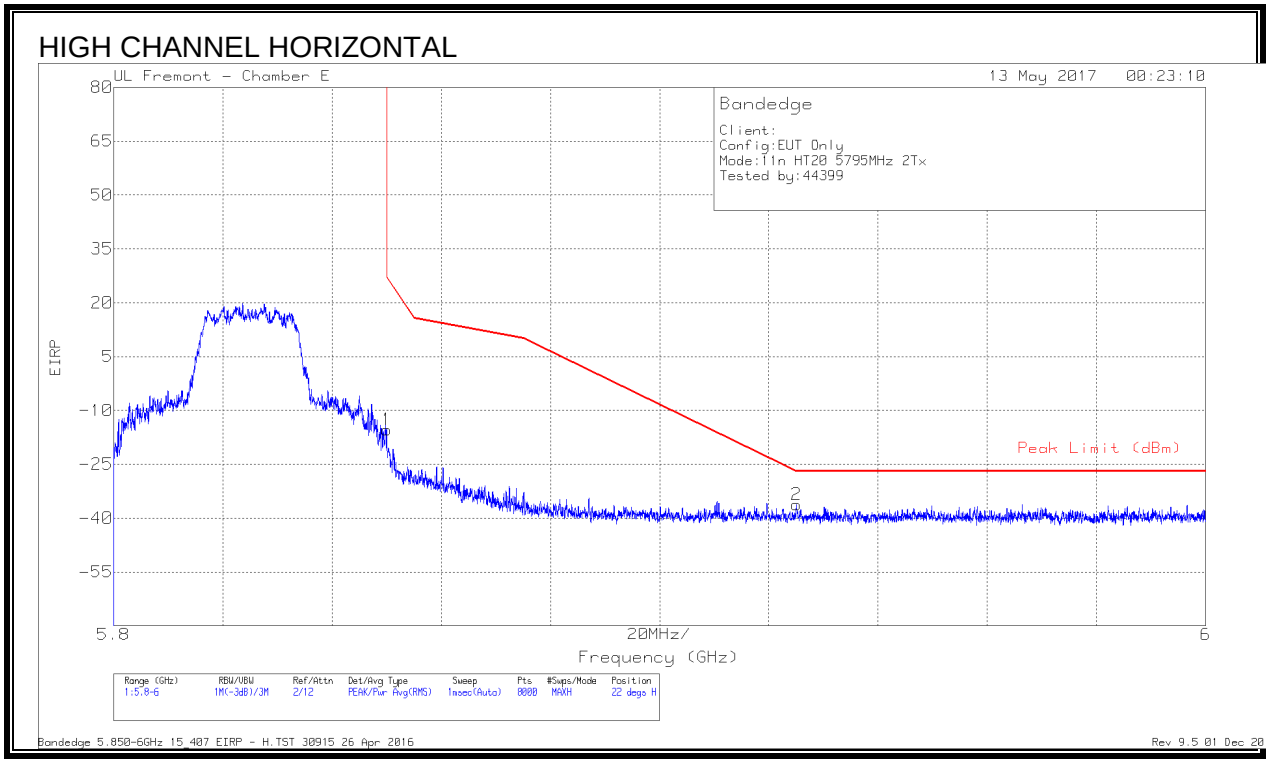
AUTHORIZED BANDEDGE (HIGH CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-43.2	Pk	35.5	-19.5	11.8	-15.4	26.99	-42.39	22	154	H
2	5.925	-64.43	Pk	35.6	-19.2	11.8	-36.23	-27	-9.23	22	154	H

Pk - Peak detector
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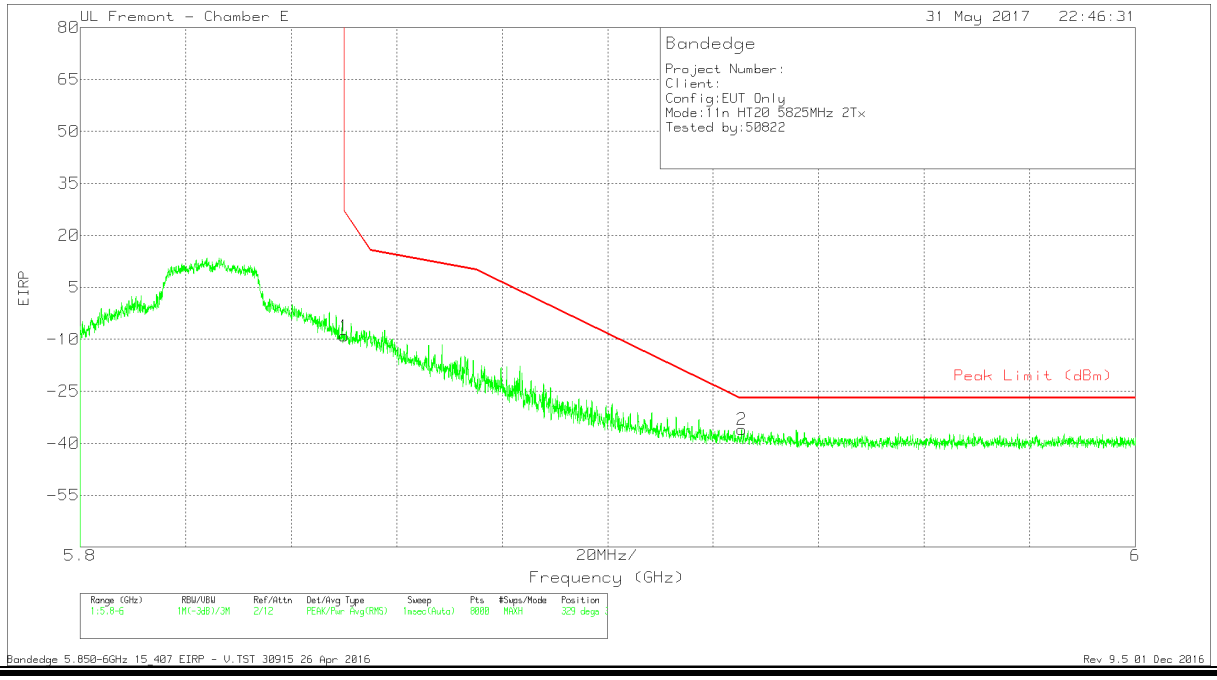
HIGH CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-36.84	Pk	35.5	-19.5	11.8	-9.04	26.99	-36.03	329	355	V
2	5.925	-64.23	Pk	35.6	-19.2	11.8	-36.03	-27	-9.03	329	355	V

Pk - Peak detector

Bandedge 5.850-6GHz 15_407 EIRP - V.TST 30915 26 Apr 2016
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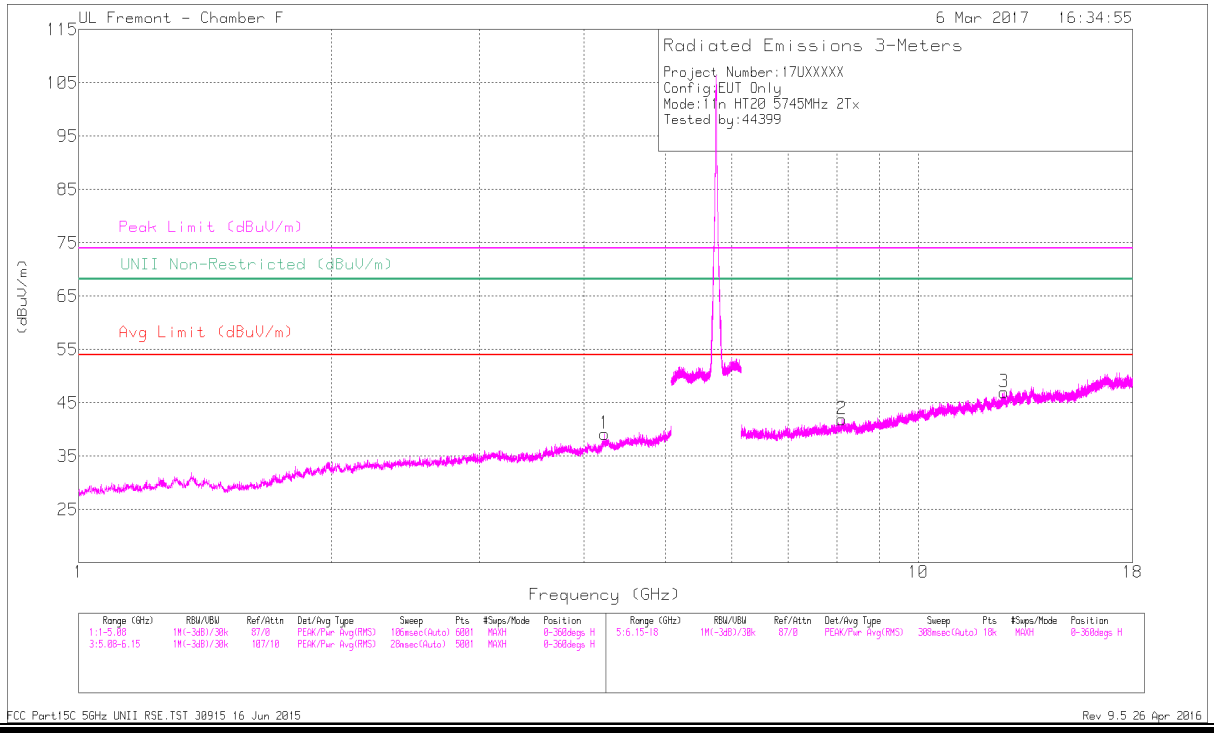
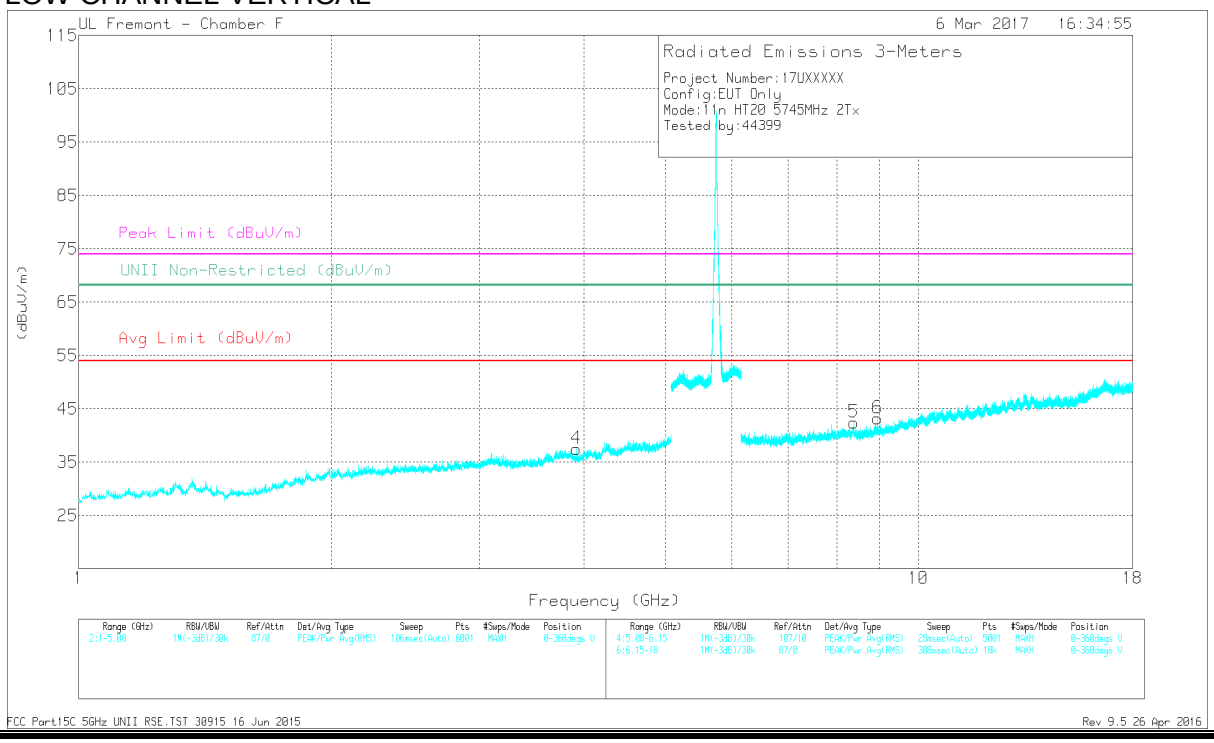
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.232	38.33	PK-U	33.7	-27	45.03	-	-	74	-28.97	-	-	123	177	H
	* 4.23	27.12	ADR	33.7	-27.1	33.72	54	-20.28	-	-	-	-	123	177	H
2	* 8.11	35.85	PK-U	35.7	-24.1	47.45	-	-	74	-26.55	-	-	57	286	H
	* 8.113	25.44	ADR	35.7	-24	37.14	54	-16.86	-	-	-	-	57	286	H
3	* 12.658	35.7	PK-U	39.2	-22	52.9	-	-	74	-21.1	-	-	28	202	H
	* 12.657	25.07	ADR	39.2	-22	42.27	54	-11.73	-	-	-	-	28	202	H
4	* 3.918	38.88	PK-U	33.4	-29.3	42.98	-	-	74	-31.02	-	-	3	345	V
	* 3.917	28.23	ADR	33.4	-29.2	32.43	54	-21.57	-	-	-	-	3	345	V
5	* 8.375	36.3	PK-U	35.7	-23.7	48.3	-	-	74	-25.7	-	-	212	236	V
	* 8.374	25.43	ADR	35.7	-23.7	37.43	54	-16.57	-	-	-	-	212	236	V
6	8.943	35.35	PK-U	35.9	-22.8	48.45	-	-	-	-	68.2	-19.75	201	390	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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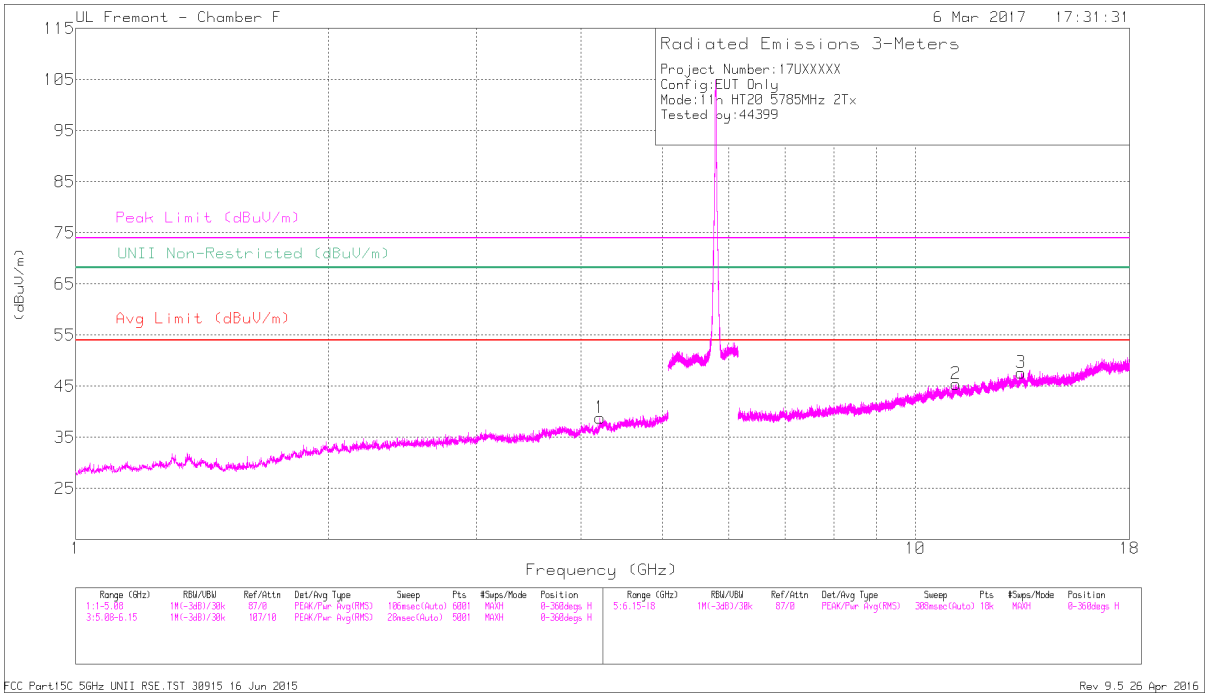
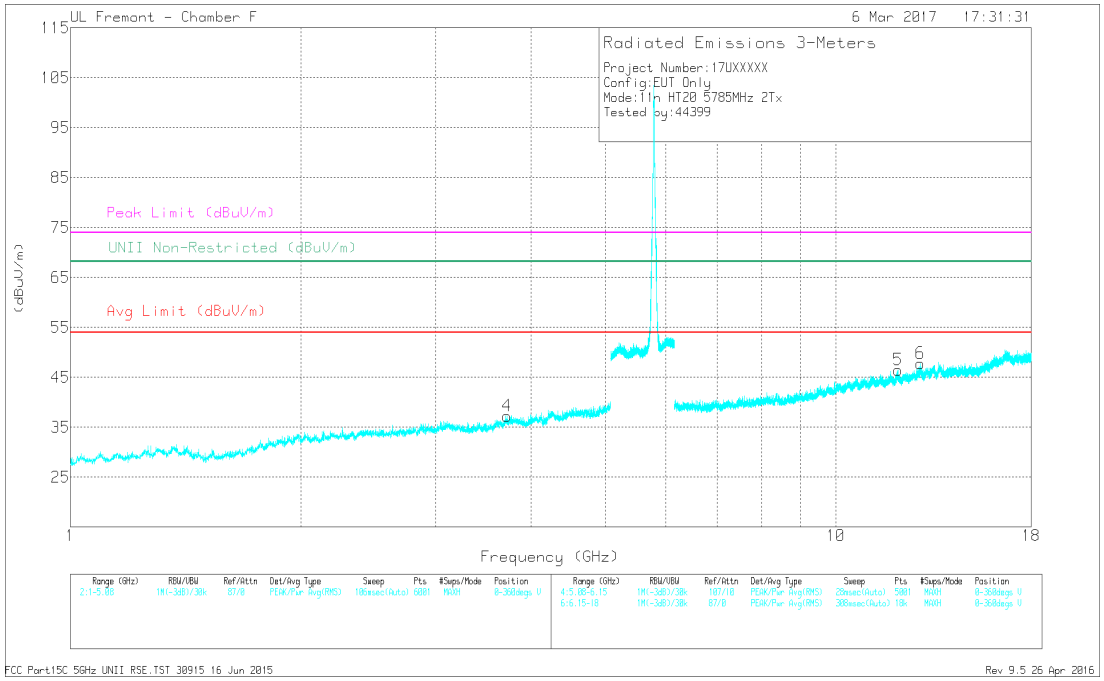
MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.214	38.37	PK-U	33.7	-27.5	44.57	-	-	74	-29.43	-	-	316	400	H
	* 4.211	27.66	ADR	33.7	-27.7	33.66	54	-20.34	-	-	-	-	316	400	H
2	* 11.192	34.56	PK-U	37.9	-21.3	51.16	-	-	74	-22.84	-	-	84	105	H
	* 11.19	24.46	ADR	37.9	-21.3	41.06	54	-12.94	-	-	-	-	84	105	H
3	* 13.38	36.55	PK-U	39.1	-21.6	54.05	-	-	74	-19.95	-	-	170	327	H
	* 13.382	25.6	ADR	39.1	-21.6	43.1	54	-10.9	-	-	-	-	170	327	H
4	* 3.72	38.36	PK-U	33.4	-29	42.76	-	-	74	-31.24	-	-	288	289	V
	* 3.72	27.8	ADR	33.4	-29	32.2	54	-21.8	-	-	-	-	288	289	V
5	* 12.06	34.73	PK-U	38.8	-21.8	51.73	-	-	74	-22.27	-	-	348	285	V
	* 12.06	24.46	ADR	38.8	-21.8	41.46	54	-12.54	-	-	-	-	348	285	V
6	12.891	35.72	PK-U	39.3	-21.6	53.42	-	-	-	-	68.2	-14.78	11	154	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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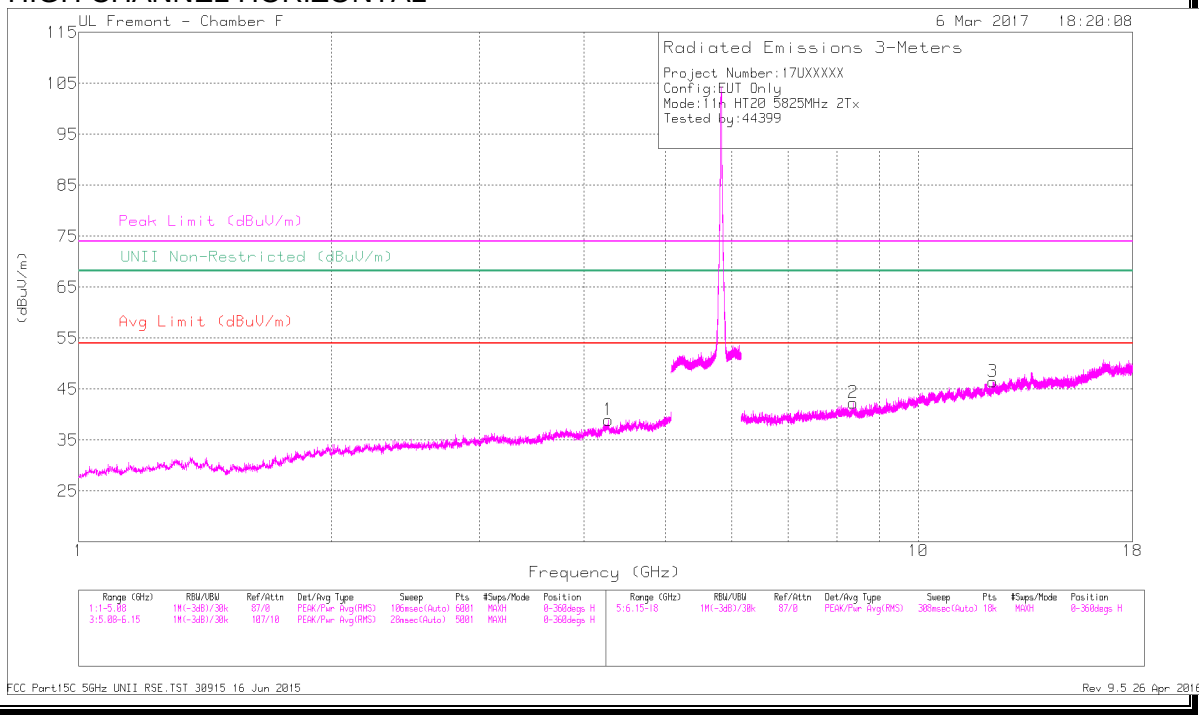
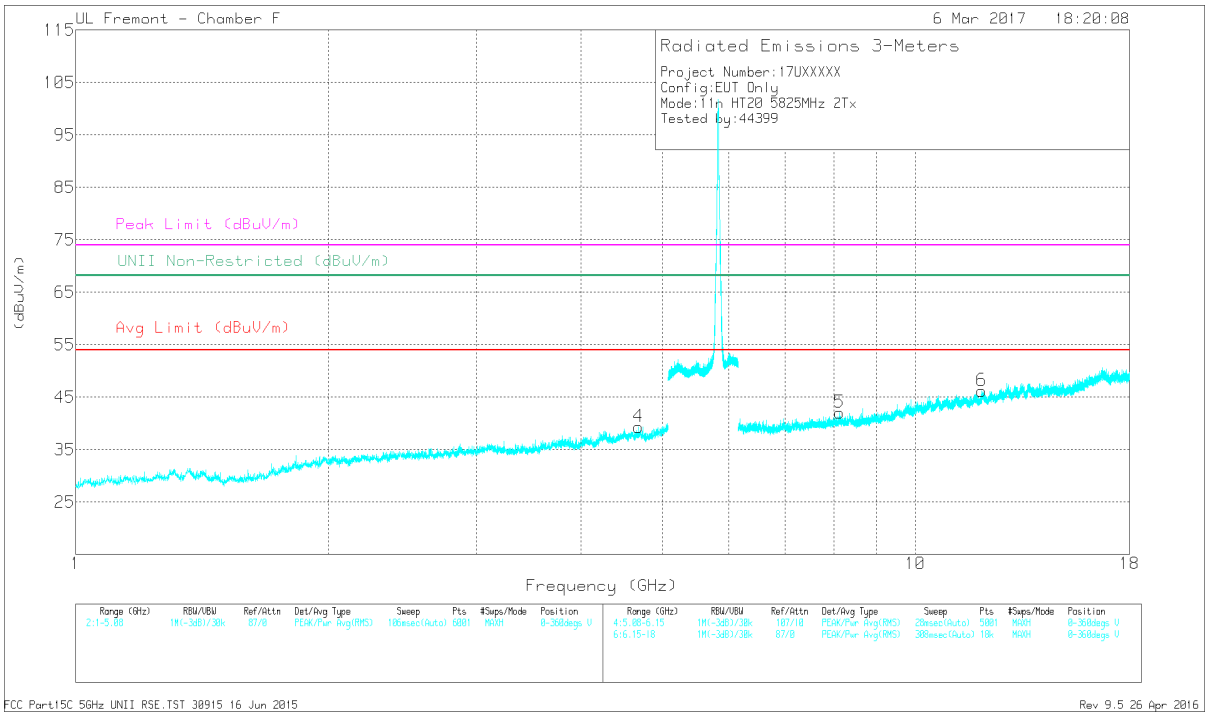
HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.273	37.91	PK-U	33.7	-26.9	44.71	-	-	74	-29.29	-	-	14	332	H
	* 4.272	27.32	ADR	33.7	-26.8	34.22	54	-19.78	-	-	-	-	14	332	H
2	* 8.369	35.71	PK-U	35.7	-23.7	47.71	-	-	74	-26.29	-	-	147	365	H
	* 8.37	25.54	ADR	35.7	-23.7	37.54	54	-16.46	-	-	-	-	147	365	H
3	* 12.268	35.29	PK-U	38.9	-22	52.19	-	-	74	-21.81	-	-	147	167	H
	* 12.27	24.68	ADR	38.9	-22	41.58	54	-12.42	-	-	-	-	147	167	H
4	* 4.684	39.02	PK-U	34.2	-27.2	46.02	-	-	74	-27.98	-	-	33	170	V
	* 4.687	27.56	ADR	34.2	-27.2	34.56	54	-19.44	-	-	-	-	33	170	V
5	* 8.125	36.81	PK-U	35.7	-23.7	48.81	-	-	74	-25.19	-	-	201	118	V
	* 8.125	25.94	ADR	35.7	-23.7	37.94	54	-16.06	-	-	-	-	201	118	V
6	* 12.011	35.18	PK-U	38.7	-21.7	52.18	-	-	74	-21.82	-	-	265	231	V
	* 12.009	25.54	ADR	38.7	-21.7	42.54	54	-11.46	-	-	-	-	265	231	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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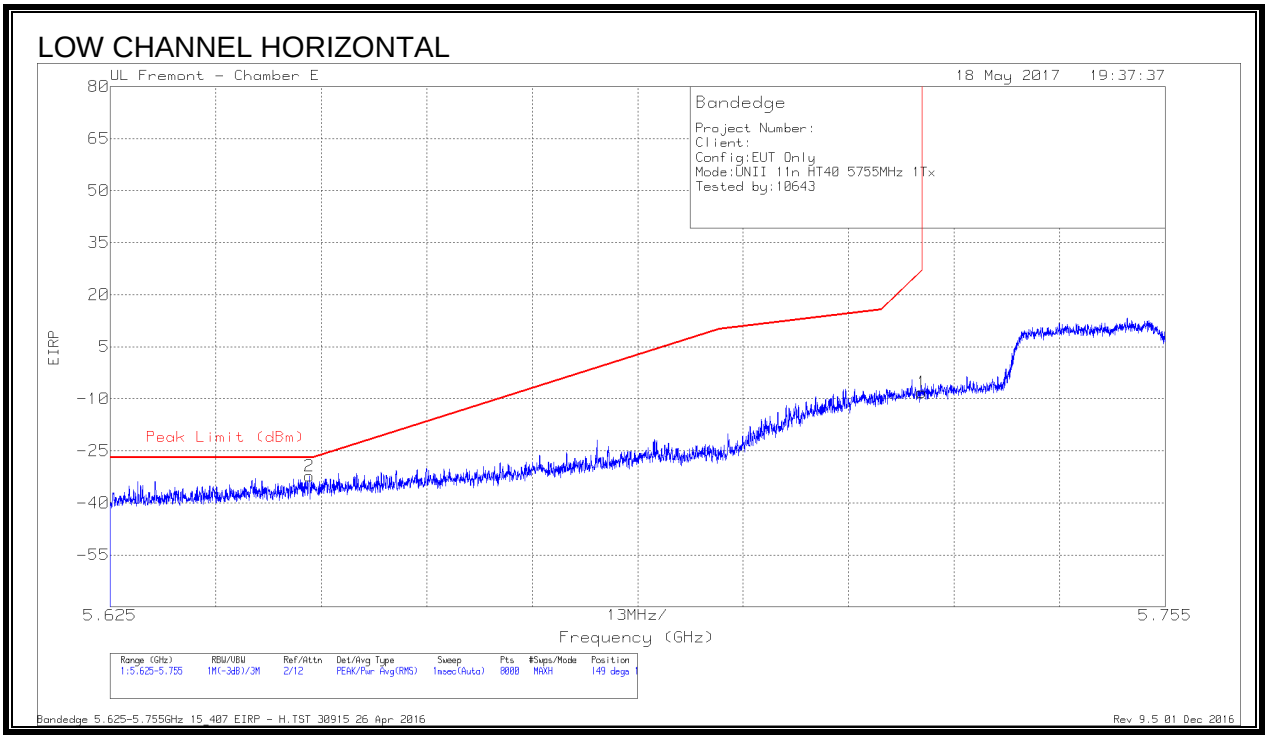
9.1.36. 11n HT40 UAT 2 SISO MODE IN THE 5.8GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-35.29	Pk	34.9	-19.6	11.8	-8.19	27	-35.19	149	181	H
2	5.65	-59.48	Pk	34.9	-19.5	11.8	-32.28	-27	-5.28	149	181	H

Pk - Peak detector
Bandedge 5.625-5.755GHz 15_407 EIRP - H.TST 30915 26 Apr 2016
Rev 9.5 01 Dec 2016

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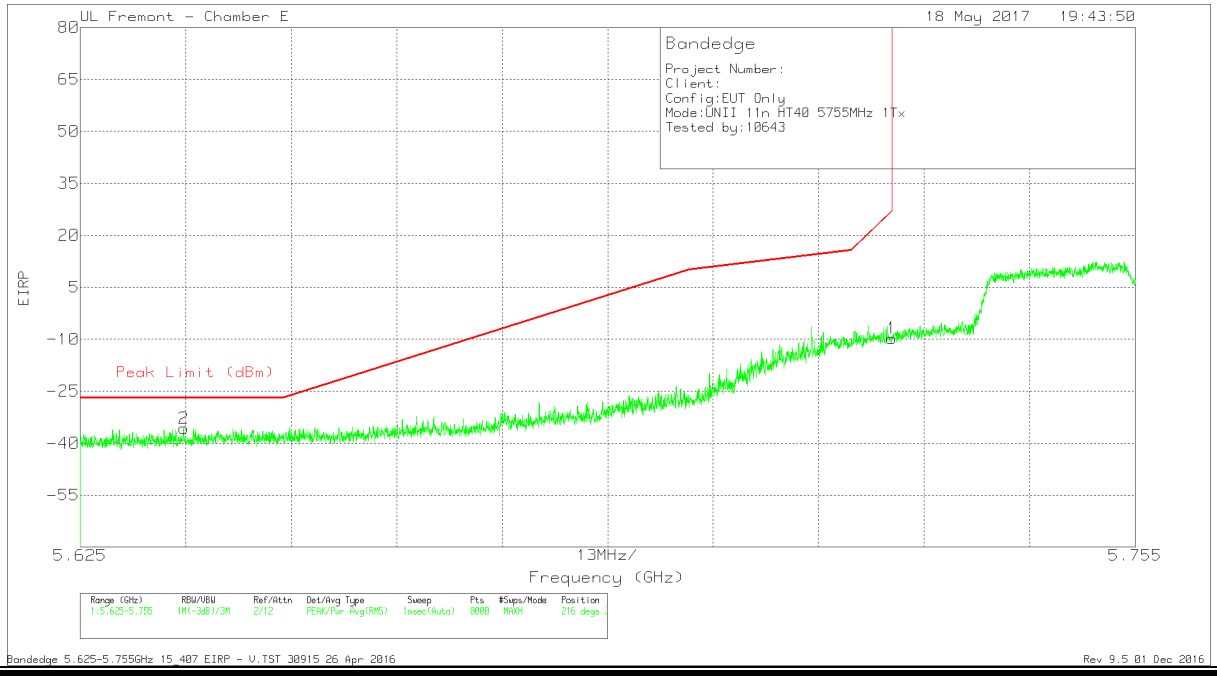
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.638	-62.91	Pk	34.9	-19.5	11.8	-35.71	-27	-8.71	216	323	V
1	5.725	-36.84	Pk	34.9	-19.6	11.8	-9.74	27	-36.74	216	323	V

Pk - Peak detector

Bandedge 5.625-5.755GHz 15_407 EIRP - V.TST 30915 26 Apr 2016
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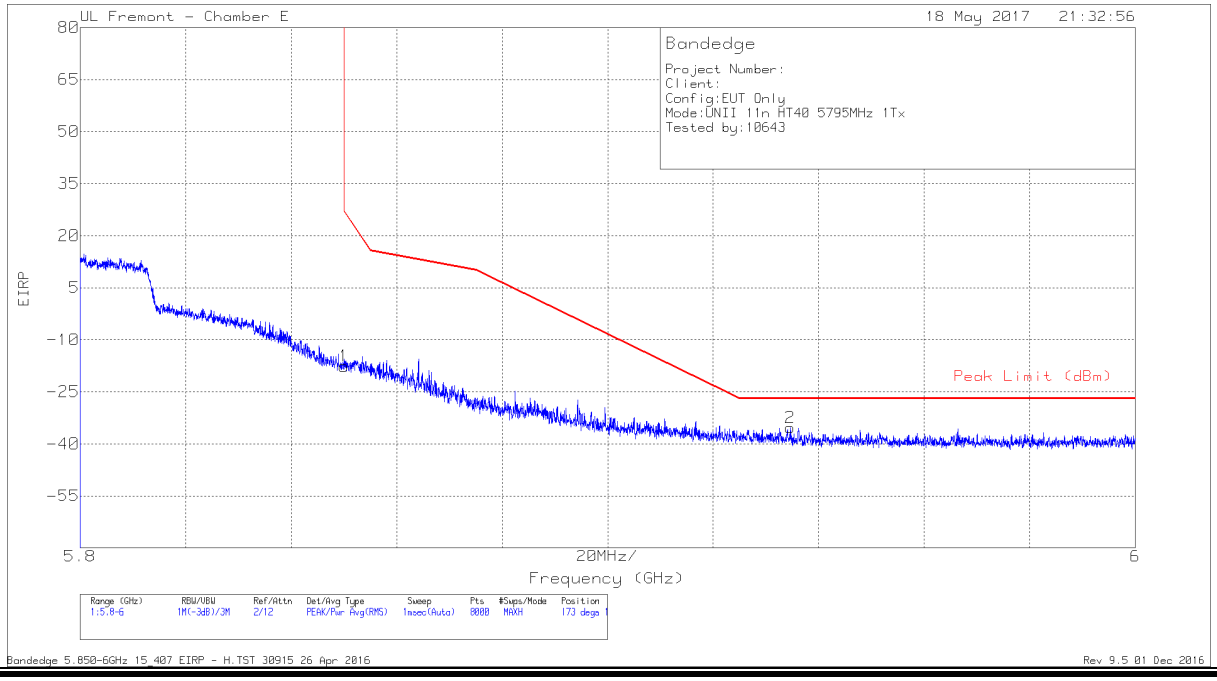
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-45.42	Pk	35.5	-19.5	11.8	-17.62	26.99	-44.61	173	122	H
2	5.935	-63.43	Pk	35.6	-19.3	11.8	-35.33	-27	-8.33	173	122	H

Pk - Peak detector
Bandedge 5.850-6GHz 15_407 EIRP - H.TST 30915 26 Apr 2016
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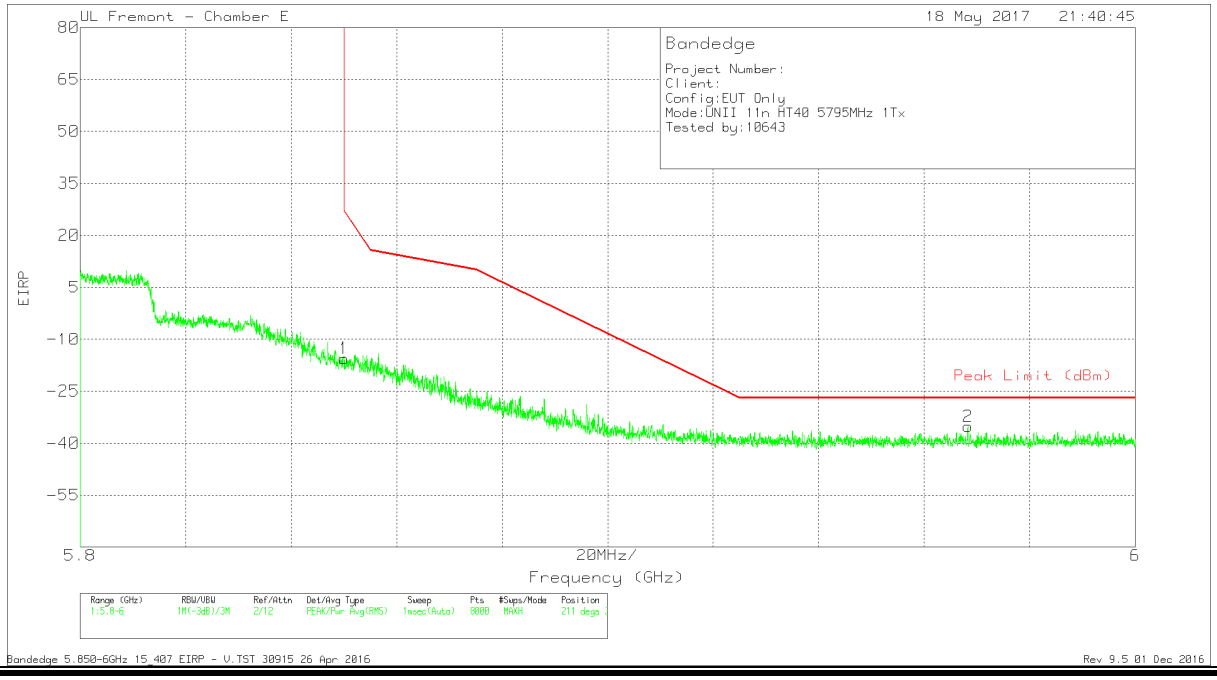
HIGH CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-43.35	Pk	35.5	-19.5	11.8	-15.55	26.99	-42.54	211	346	V
2	5.968	-63.66	Pk	35.6	-18.9	11.8	-35.16	-27	-8.16	211	346	V

Pk - Peak detector

Bandedge 5.850-6GHz 15_407 EIRP - V.TST 30915 26 Apr 2016
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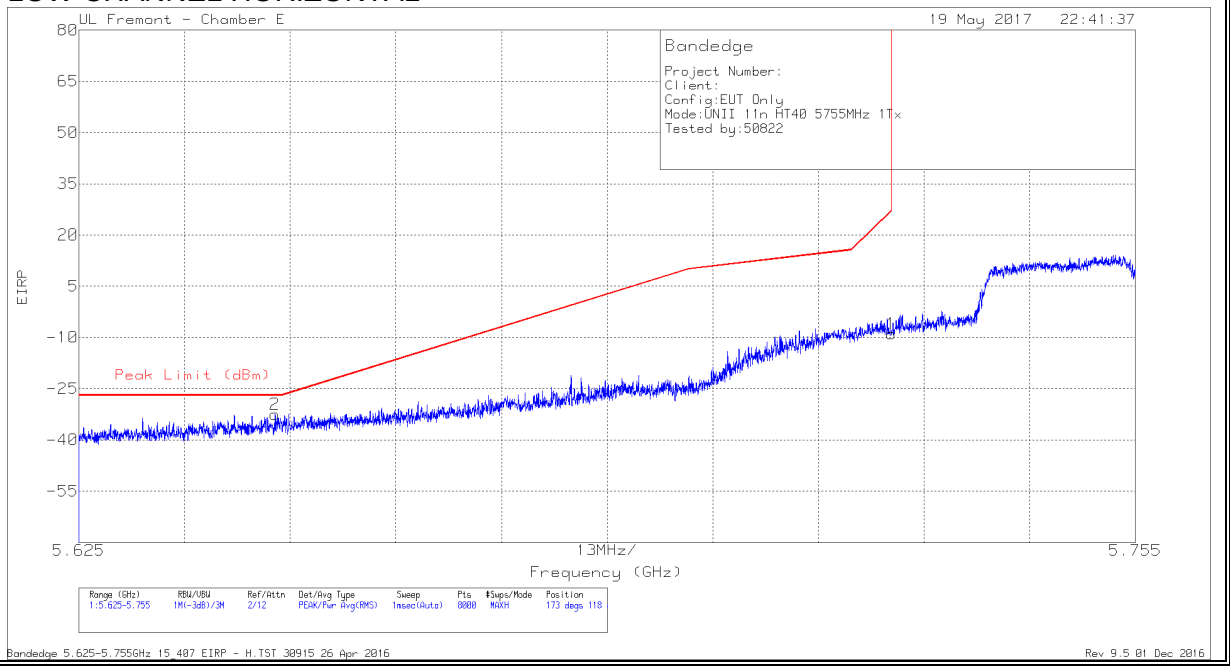
9.1.37. 11n HT40 LAT 3 SISO MODE IN THE 5.8GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.649	-59.79	Pk	34.9	-19.5	11.8	-32.59	-27	-5.59	173	118	H
1	5.725	-36.01	Pk	34.9	-19.6	11.8	-8.91	27	-35.91	173	118	H

Pk - Peak detector
Bandedge 5.625-5.755GHz 15_407 EIRP - H.TST 30915 26 Apr 2016
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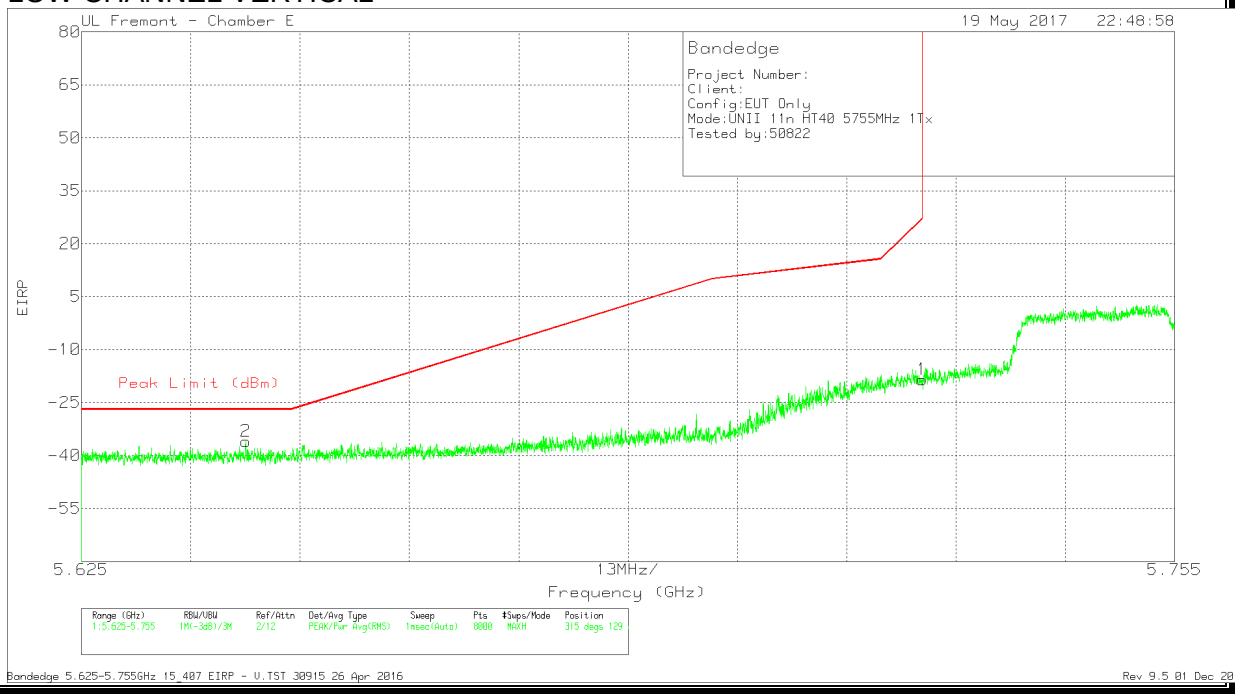
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.645	-63.15	Pk	34.9	-19.5	11.8	-35.95	-27	-8.95	315	129	V
1	5.725	-45.64	Pk	34.9	-19.6	11.8	-18.54	27	-45.54	315	129	V

Pk - Peak detector

Bandedge 5.625-5.755GHz 15_407 EIRP - V.TST 30915 26 Apr 2016
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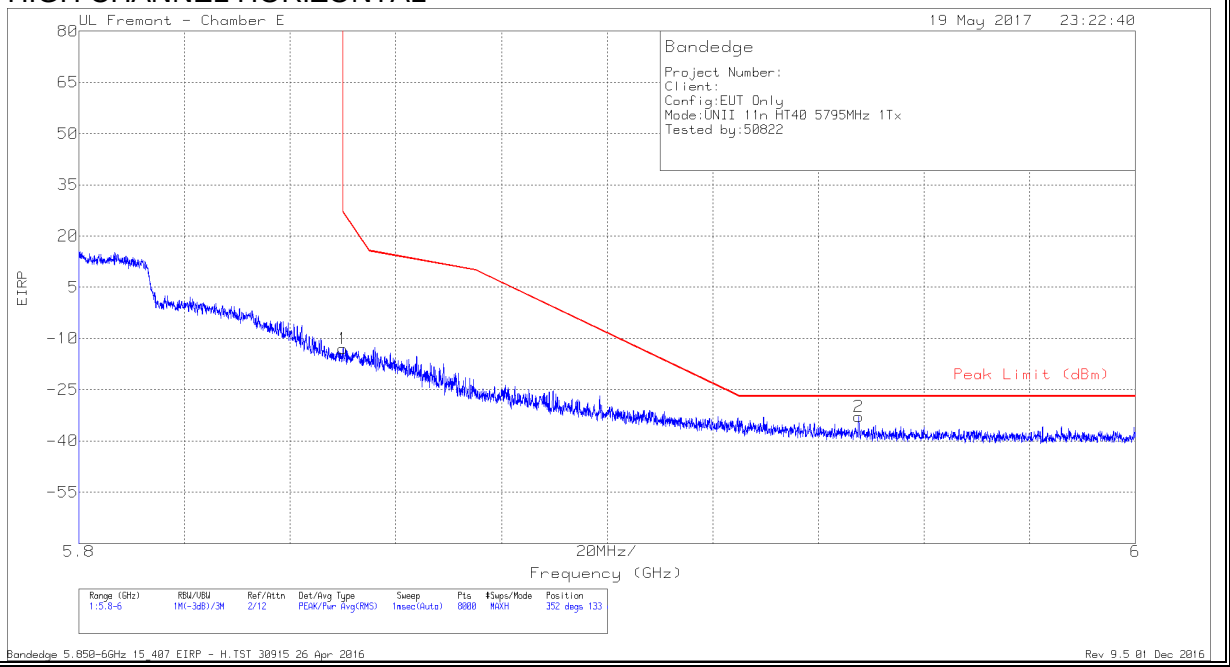
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-40.85	Pk	35.5	-19.5	11.8	-13.05	26.99	-40.04	352	133	H
2	5.948	-61.16	Pk	35.6	-19.1	11.8	-32.86	-27	-5.86	352	133	H

Pk - Peak detector
Bandedge 5.850-6GHz 15_407 EIRP - H.TST 30915 26 Apr 2016
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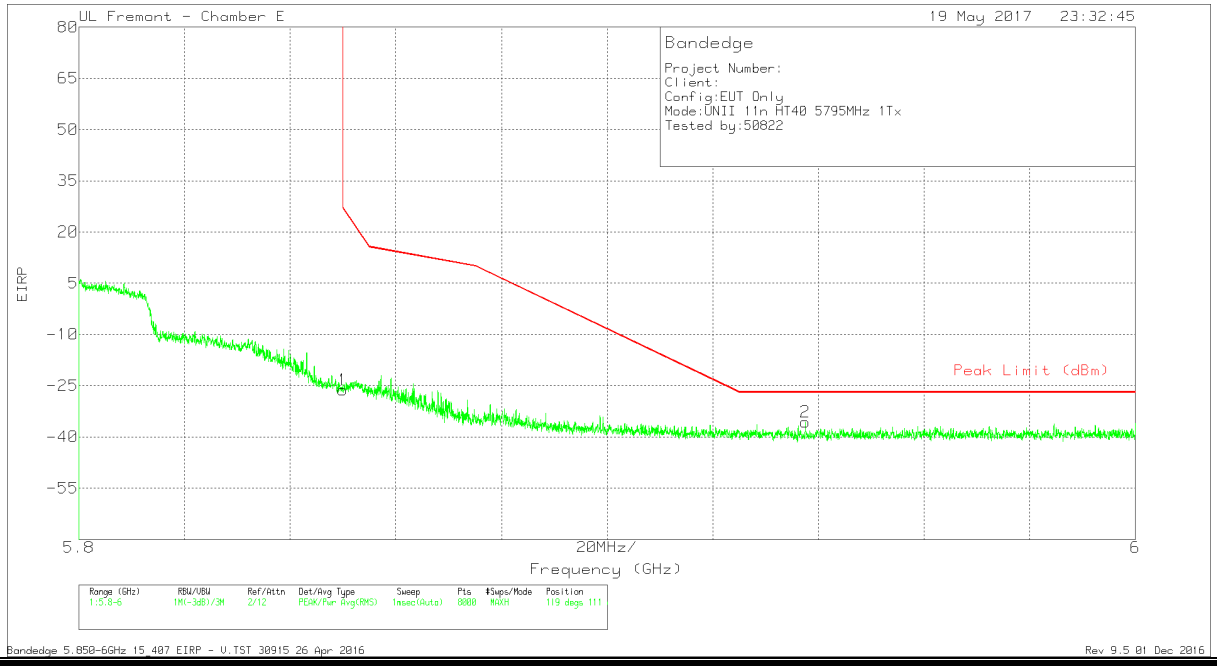
HIGH CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-54.09	Pk	35.5	-19.5	11.8	-26.29	26.99	-53.28	119	111	V
2	5.938	-63.72	Pk	35.6	-19.3	11.8	-35.62	-27	-8.62	119	111	V

Pk - Peak detector

Bandedge 5.850-6GHz 15_407 EIRP - V.TST 30915 26 Apr 2016
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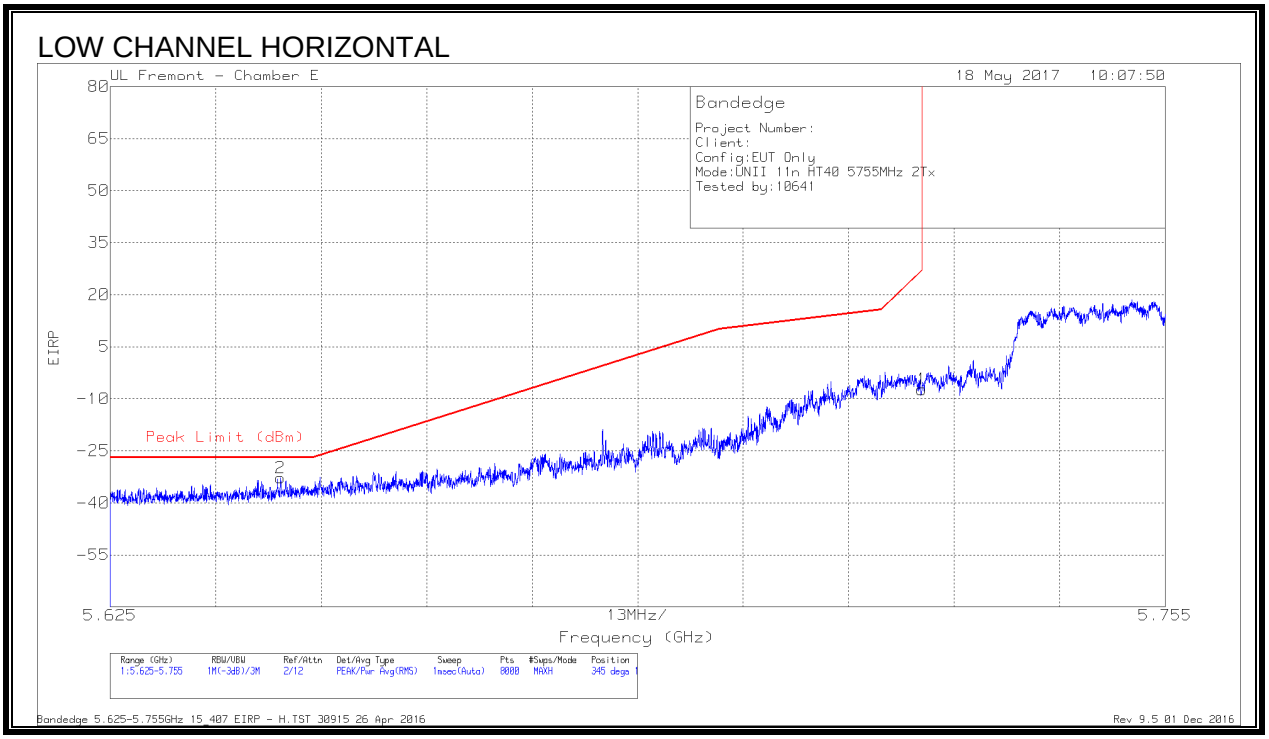
9.1.38. 11n HT40 2TX CDD MIMO MODE IN THE 5.8GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.646	-59.99	Pk	34.9	-19.5	11.8	-32.79	-27	-5.79	345	100	H
1	5.725	-34.39	Pk	34.9	-19.6	11.8	-7.29	27	-34.29	345	100	H

Pk - Peak detector
Bandedge 5.625-5.755GHz 15_407 EIRP - H.TST 30915 26 Apr 2016
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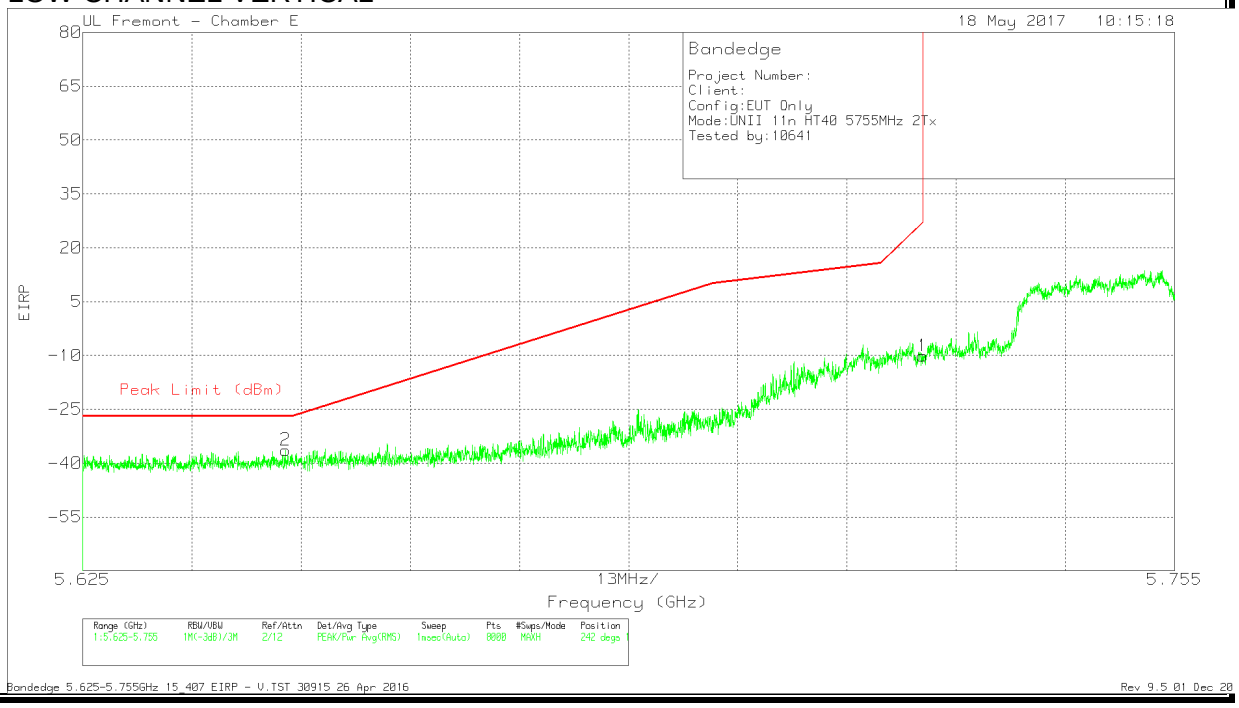
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.649	-63.58	Pk	34.9	-19.5	11.8	-36.38	-27	-9.38	242	101	V
1	5.725	-37.24	Pk	34.9	-19.6	11.8	-10.14	27	-37.14	242	101	V

Pk - Peak detector

Bandedge 5.625-5.755GHz 15_407 EIRP - V.TST 30915 26 Apr 2016
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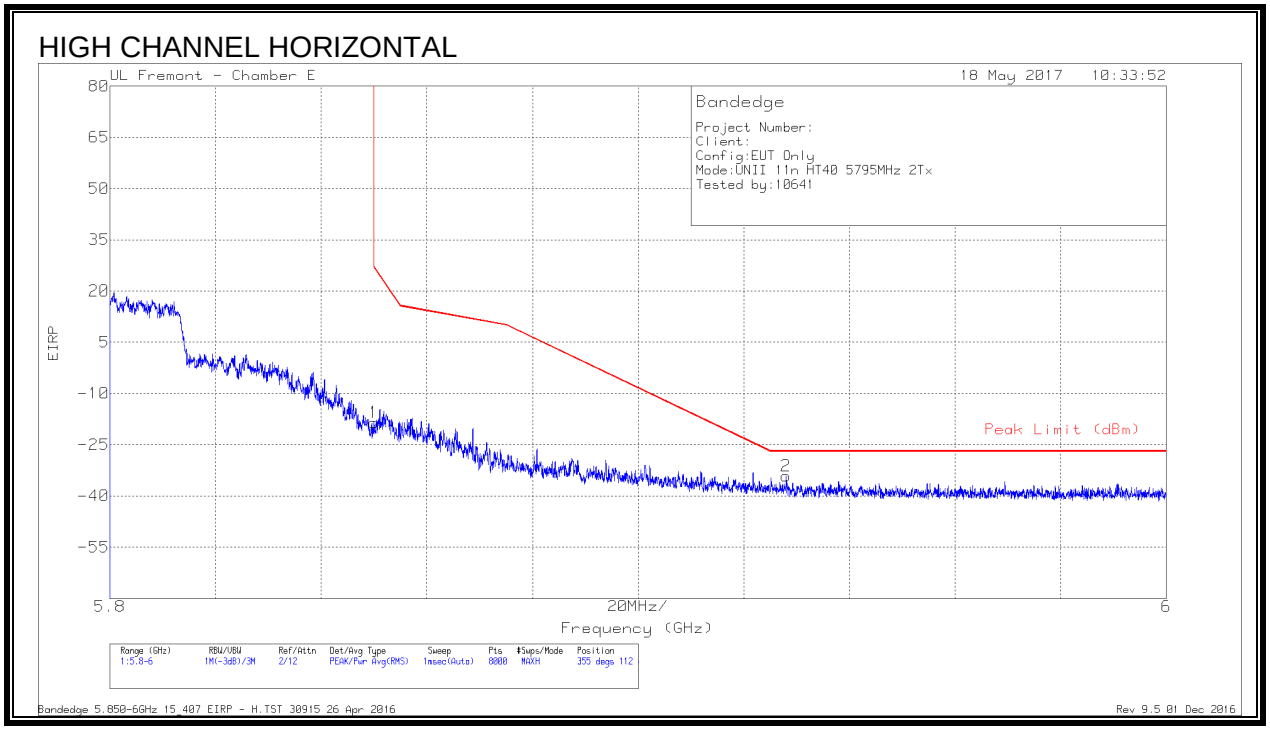
AUTHORIZED BANDEDGE (HIGH CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-46.25	Pk	35.5	-19.5	11.8	-18.45	26.99	-45.44	355	112	H
2	5.928	-62.24	Pk	35.6	-19.3	11.8	-34.14	-27	-7.14	355	112	H

Pk - Peak detector

Bandedge 5.850-6GHz 15_407 EIRP - H.TST 30915 26 Apr 2016
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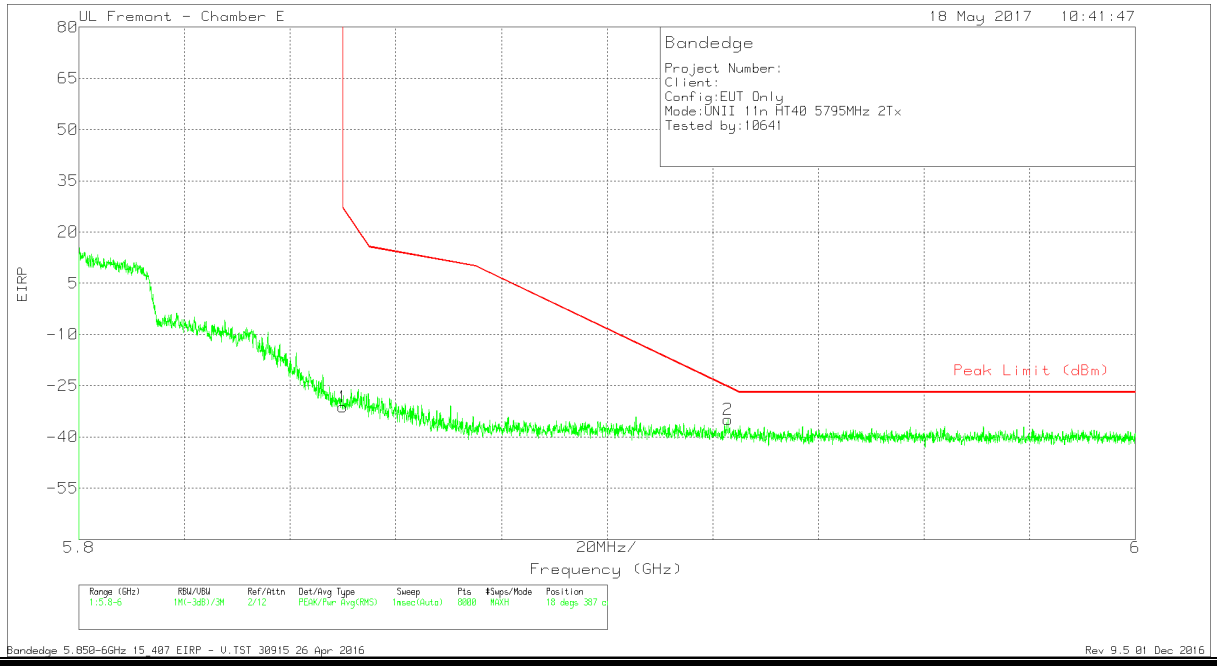
HIGH CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-59.03	Pk	35.5	-19.5	11.8	-31.23	26.99	-58.22	18	387	V
2	5.923	-63.04	Pk	35.6	-19.2	11.8	-34.84	-25.44	-9.4	18	387	V

Pk - Peak detector

Bandedge 5.850-6GHz 15_407 EIRP - V.TST 30915 26 Apr 2016
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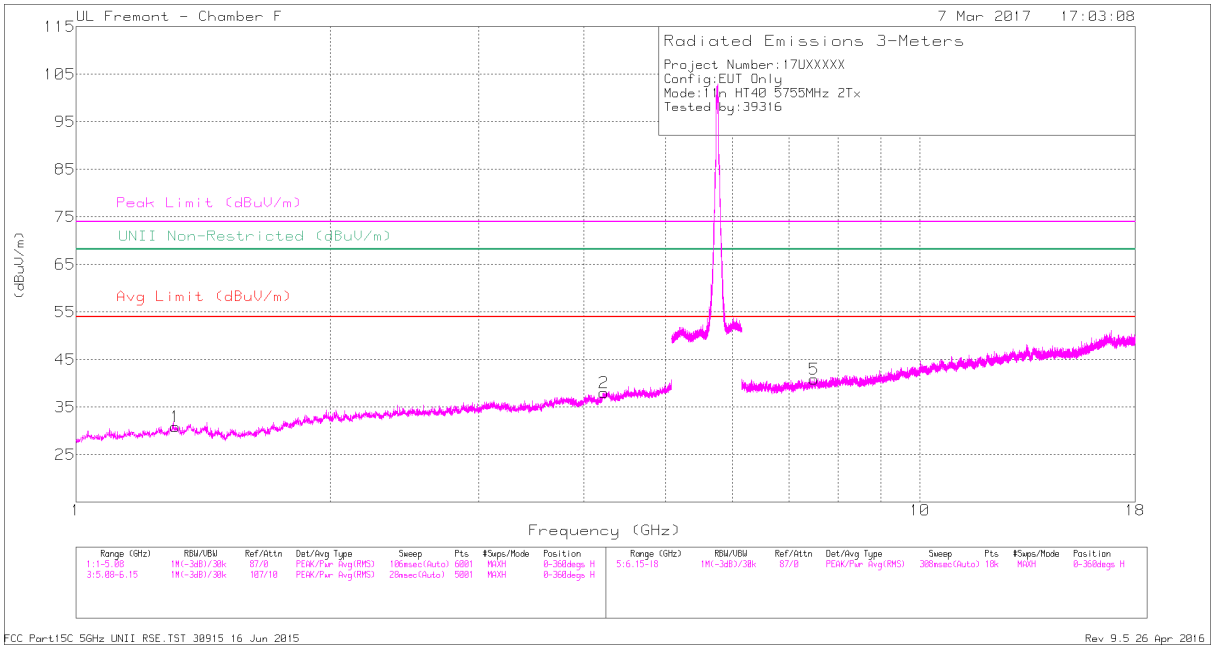
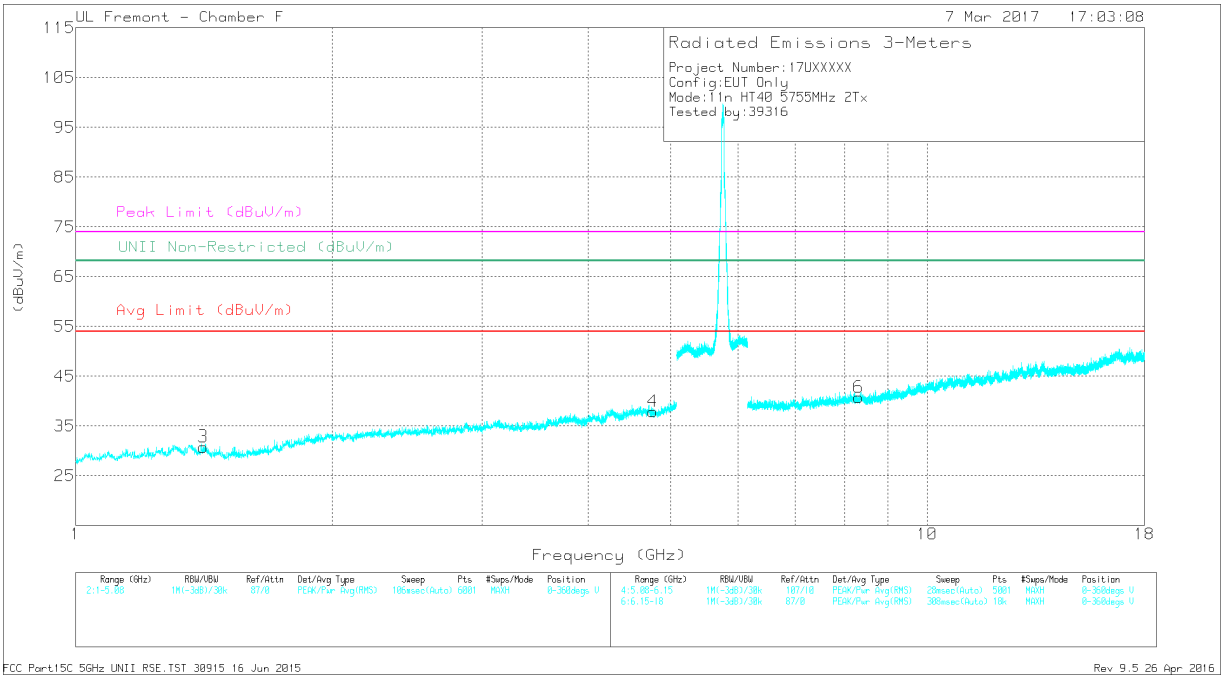
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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)	Azimuth (Degs)	Height (cm)	Polarity
* 1.312	40.44	PK-U	29	-31.4	0	38.04	-	-	74	-35.96	129	232	H
* 1.31	29.45	ADR	29	-31.4	.1	27.15	54	-26.85	-	-	129	232	H
* 4.221	37.96	PK-U	33.7	-27.4	0	44.26	-	-	74	-29.74	224	133	H
* 4.221	27.64	ADR	33.7	-27.4	.1	34.04	54	-19.96	-	-	224	133	H
* 1.411	40.82	PK-U	29.2	-31.8	0	38.22	-	-	74	-35.78	94	164	V
* 1.413	29.49	ADR	29.1	-31.8	.1	26.89	54	-27.11	-	-	94	164	V
* 4.766	37.62	PK-U	34.1	-27.5	0	44.22	-	-	74	-29.78	352	319	V
* 4.766	27.57	ADR	34.1	-27.5	.1	34.27	54	-19.73	-	-	352	319	V
* 7.498	36.64	PK-U	35.6	-24.9	0	47.34	-	-	74	-26.66	285	299	H
* 7.5	26.04	ADR	35.6	-24.9	.1	36.84	54	-17.16	-	-	285	299	H
* 8.308	36.4	PK-U	35.7	-24.5	0	47.6	-	-	74	-26.4	217	179	H
* 8.312	26.44	ADR	35.7	-24.6	.1	37.64	54	-16.36	-	-	217	179	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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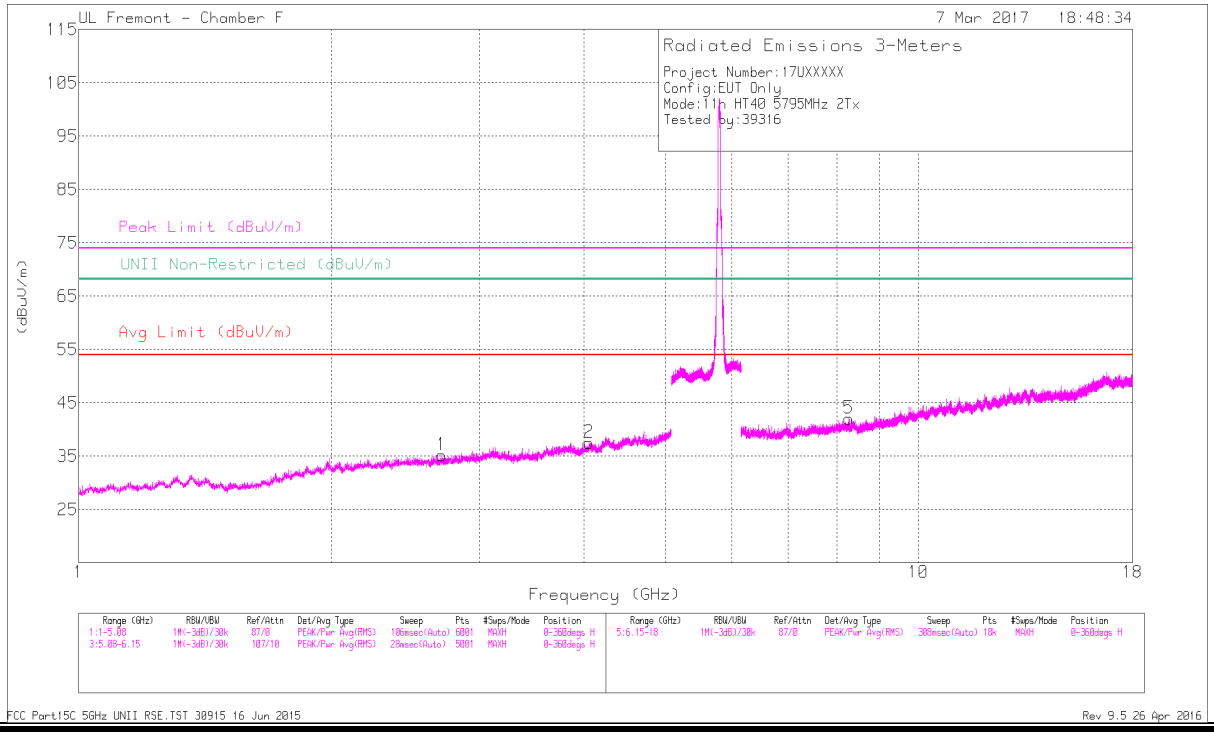
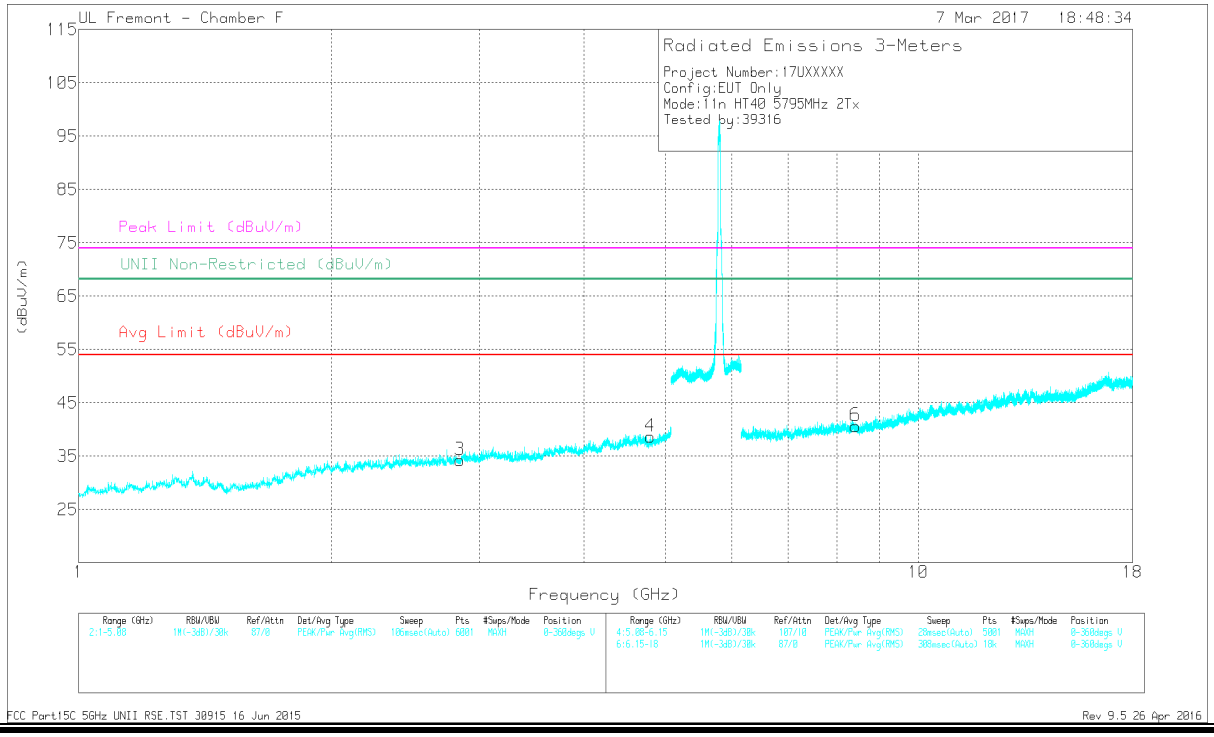
HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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)	Azimuth (Degs)	Height (cm)	Polarity
* 2.708	39.96	PK-U	32.4	-30.5	0	41.86	-	-	74	-32.14	173	197	H
* 2.707	28.73	ADR	32.4	-30.5	.1	30.73	54	-23.27	-	-	173	197	H
* 4.057	39.82	PK-U	33.5	-28.4	0	44.92	-	-	74	-29.08	129	378	H
* 4.057	28.29	ADR	33.5	-28.4	.1	33.49	54	-20.51	-	-	129	378	H
* 2.845	39.48	PK-U	32.6	-29.9	0	42.18	-	-	74	-31.82	301	175	V
* 2.846	27.82	ADR	32.6	-29.9	.1	30.62	54	-23.38	-	-	301	175	V
* 4.8	37.63	PK-U	34	-27.6	0	44.03	-	-	74	-29.97	127	159	V
* 4.8	27.27	ADR	34	-27.6	.1	33.77	54	-20.23	-	-	127	159	V
* 8.261	36.74	PK-U	35.7	-24.2	0	48.24	-	-	74	-25.76	133	180	H
* 8.261	26.32	ADR	35.7	-24.2	.1	37.92	54	-16.08	-	-	133	180	H
* 8.418	35.62	PK-U	35.7	-23.5	0	47.82	-	-	74	-26.18	169	225	V
* 8.417	25.49	ADR	35.7	-23.5	.1	37.79	54	-16.21	-	-	169	225	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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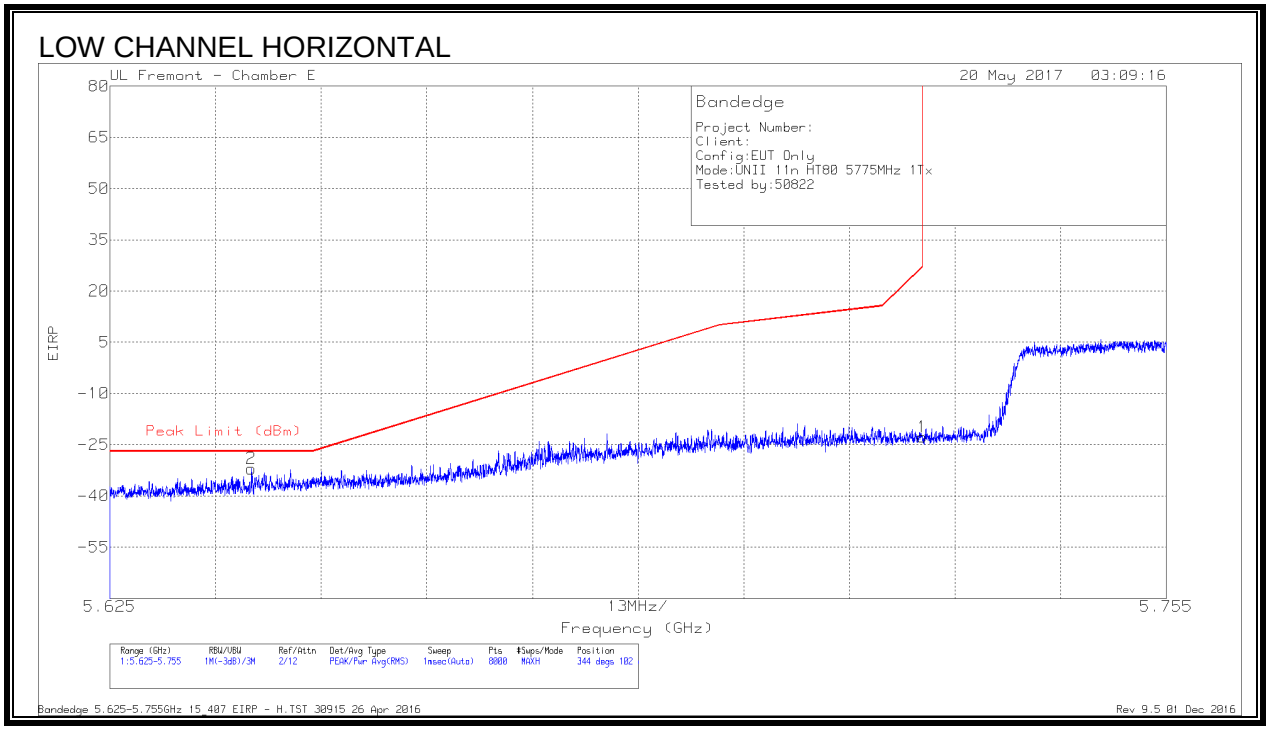
9.1.39. 11ac HT80 UAT 2 SISO MODE IN THE 5.8GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.642	-59.24	Pk	34.9	-19.5	11.8	-32.04	-27	-5.04	344	102	H
1	5.725	-49.81	Pk	34.9	-19.6	11.8	-22.71	27	-49.71	344	102	H

Pk - Peak detector
Bandedge 5.625-5.755GHz 15_407 EIRP - H.TST 30915 26 Apr 2016
Rev 9.5 01 Dec 2016

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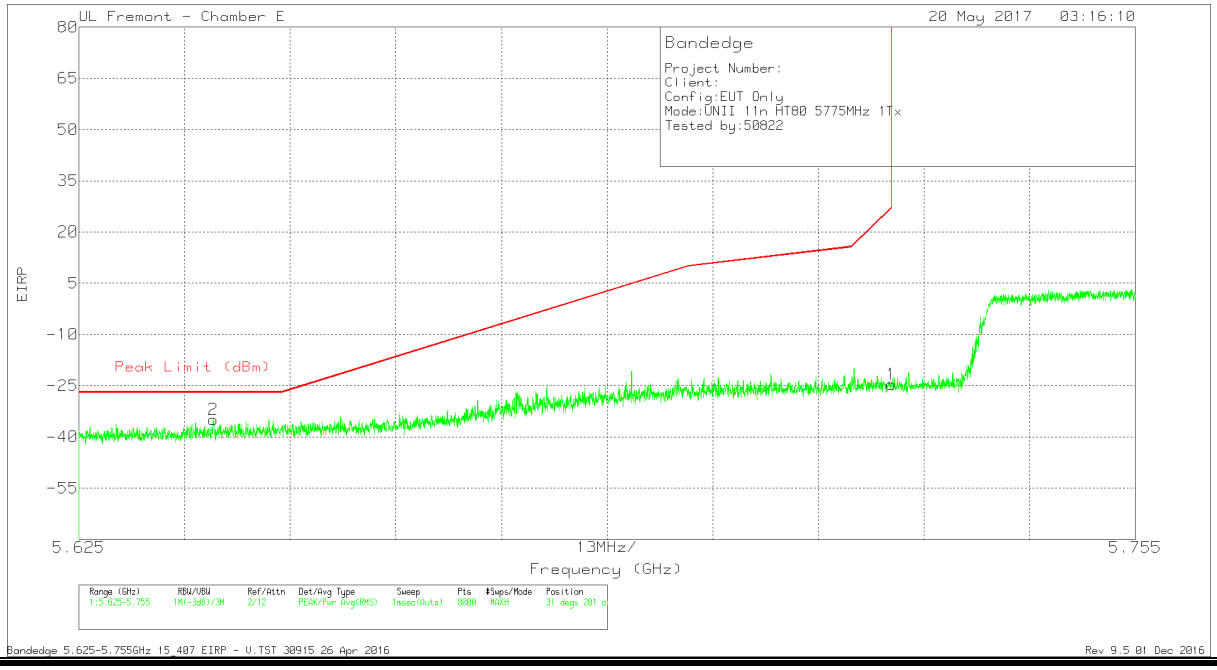
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.642	-62.11	Pk	34.9	-19.5	11.8	-34.91	-27	-7.91	31	201	V
1	5.725	-51.68	Pk	34.9	-19.6	11.8	-24.58	27	-51.58	31	201	V

Pk - Peak detector
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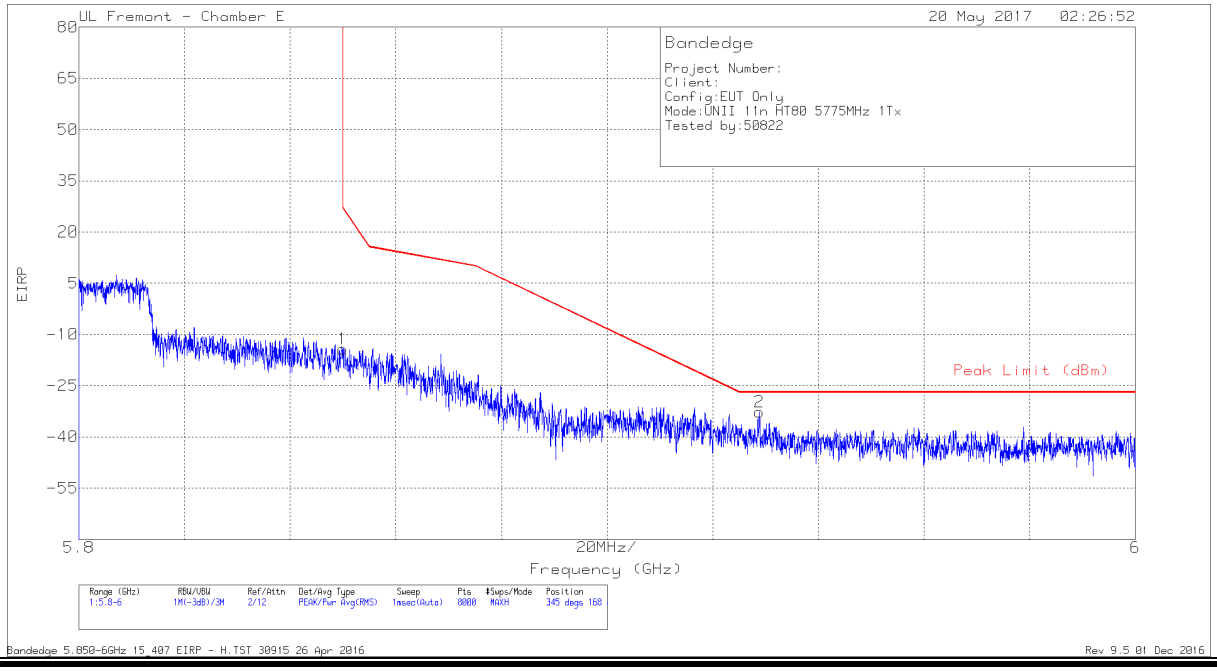
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-42.05	Pk	35.5	-19.5	11.8	-14.25	26.99	-41.24	345	168	H
2	5.929	-60.85	Pk	35.6	-19.3	11.8	-32.75	-27	-5.75	345	168	H

Pk - Peak detector
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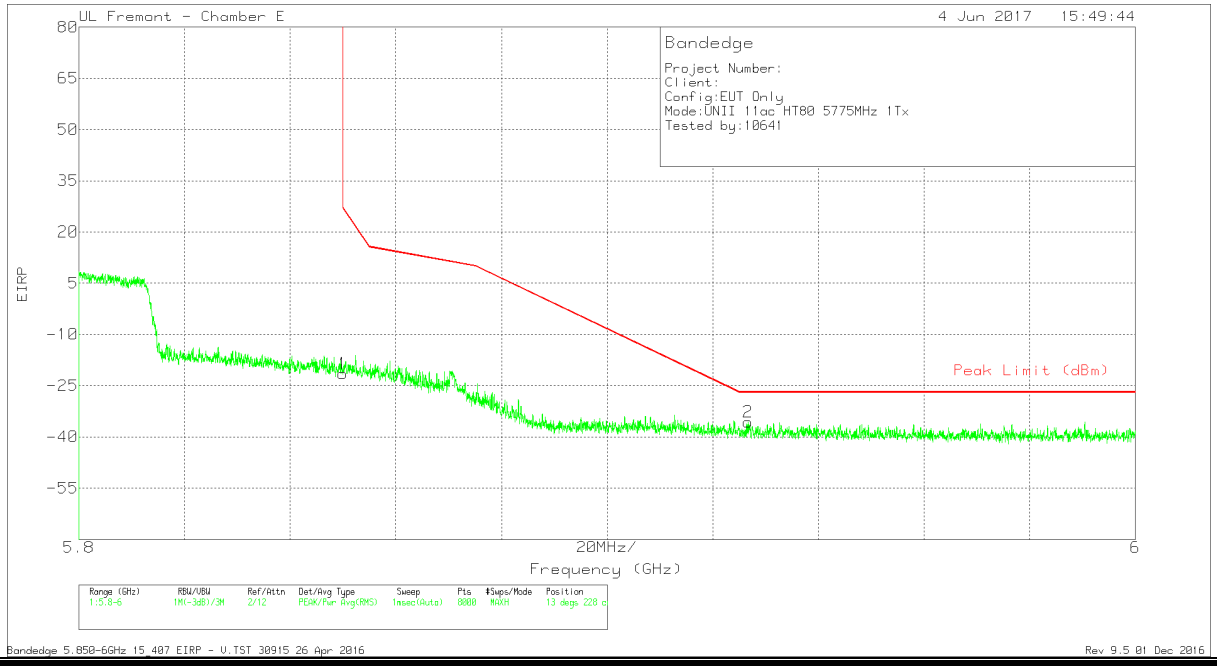
HIGH CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/ Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-49.19	Pk	35.5	-19.5	11.8	0	-21.39	26.99	-48.38	13	228	V
2	5.927	-63.88	Pk	35.6	-19.2	11.8	0	-35.68	-27	-8.68	13	228	V

Pk - Peak detector
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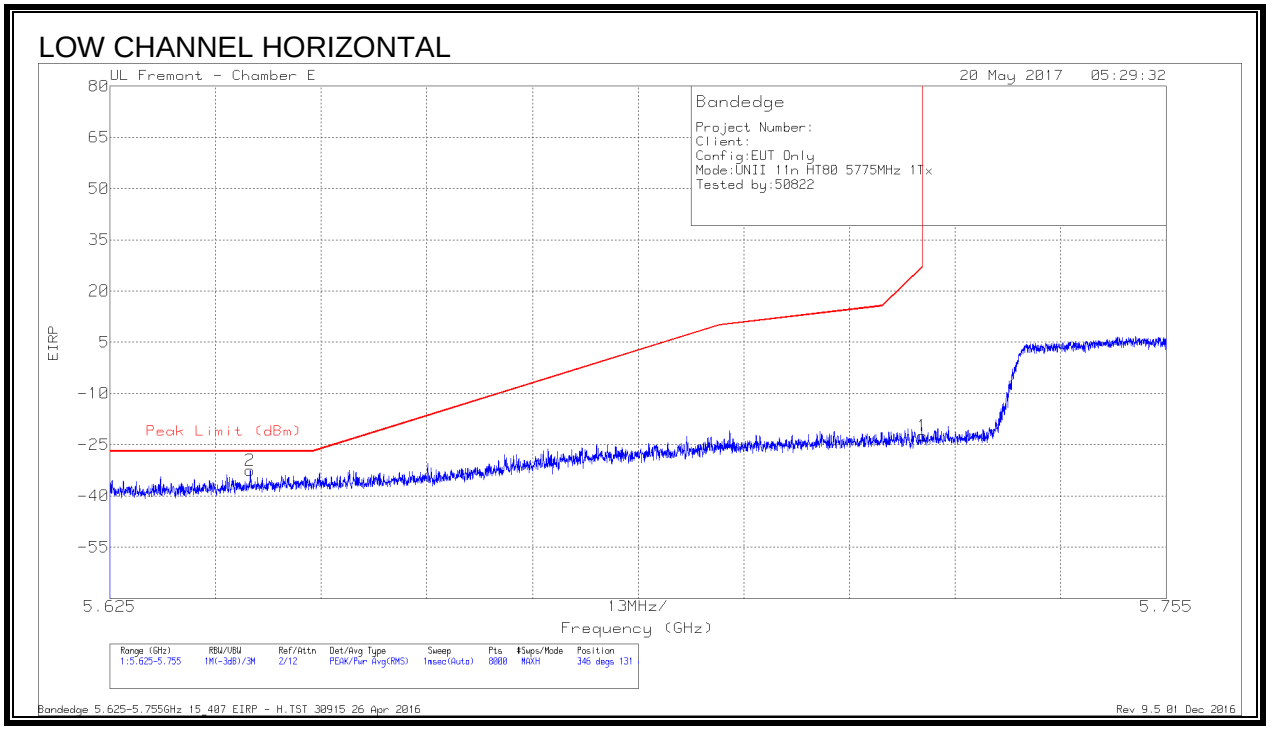
9.1.40. 11ac HT80 LAT 3 SISO MODE IN THE 5.8GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.642	-59.63	Pk	34.9	-19.5	11.8	-32.43	-27	-5.43	346	131	H
1	5.725	-49.55	Pk	34.9	-19.6	11.8	-22.45	27	-49.45	346	131	H

Pk - Peak detector
Bandedge 5.625-5.755GHz 15_407 EIRP - H.TST 30915 26 Apr 2016
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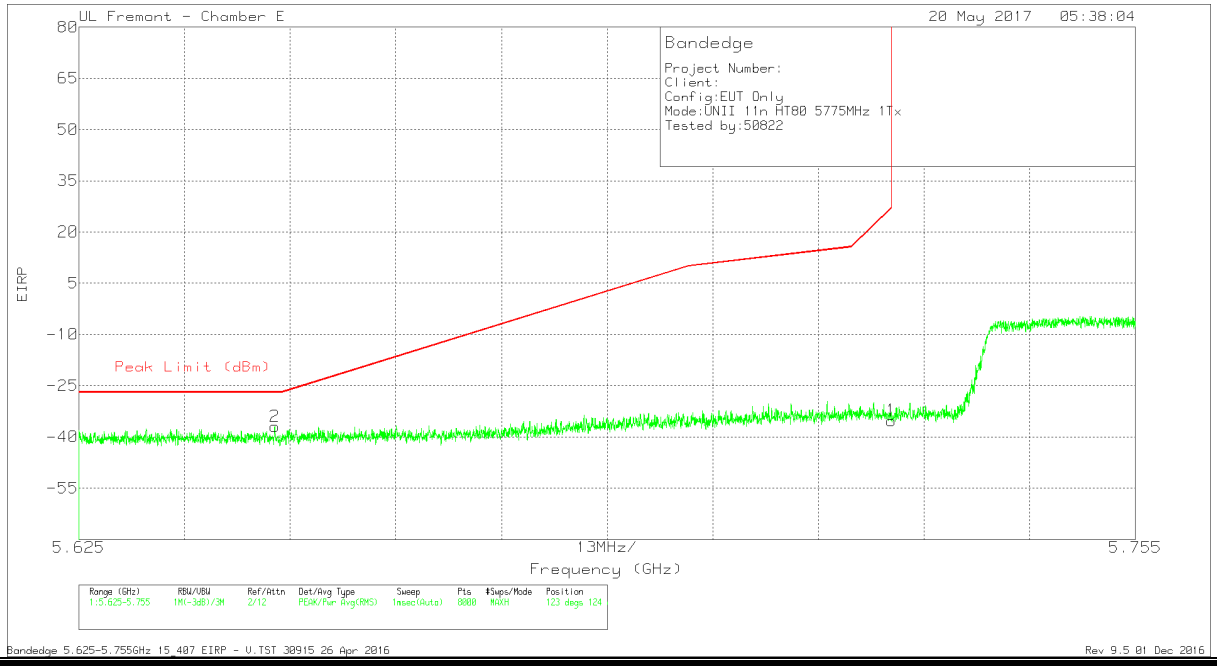
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.649	-64.07	Pk	34.9	-19.5	11.8	-36.87	-27	-9.87	123	124	V
1	5.725	-62.28	Pk	34.9	-19.6	11.8	-35.18	27	-62.18	123	124	V

Pk - Peak detector
Bandedge 5.625-5.755GHz 15_407 EIRP - V.TST 30915 26 Apr 2016
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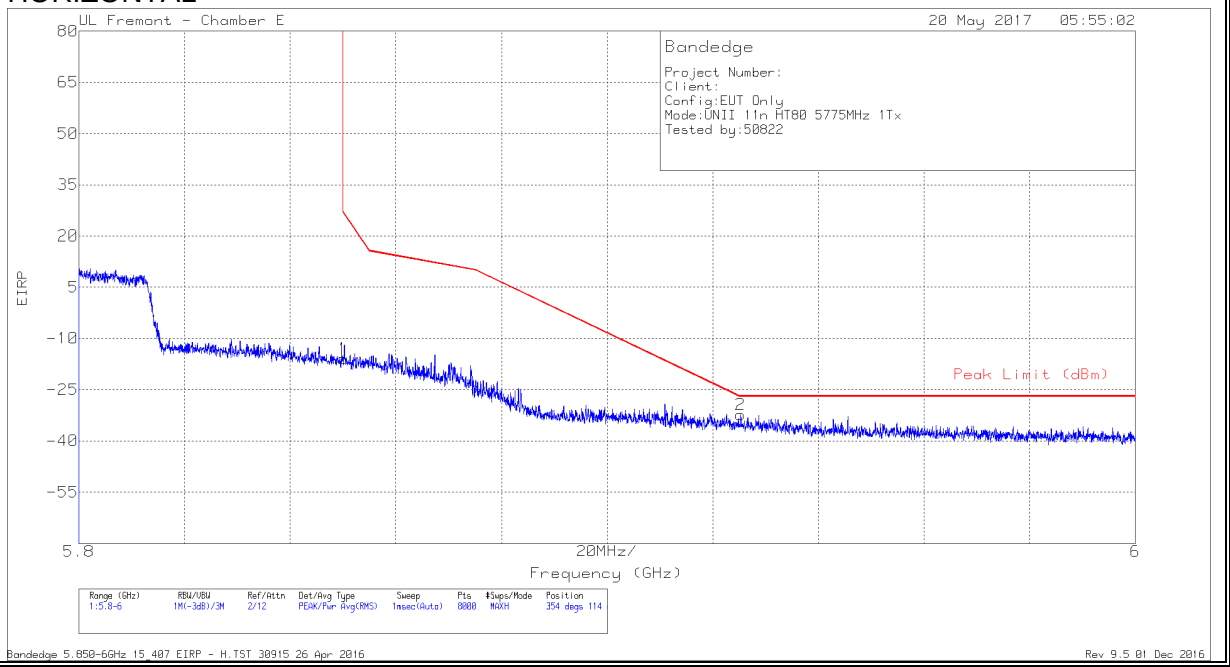
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-43.66	Pk	35.5	-19.5	11.8	-15.86	26.99	-42.85	354	114	H
2	5.925	-60.59	Pk	35.6	-19.2	11.8	-32.39	-27	-5.39	354	114	H

Pk - Peak detector
Bandedge 5.850-6GHz 15_407 EIRP - H.TST 30915 26 Apr 2016
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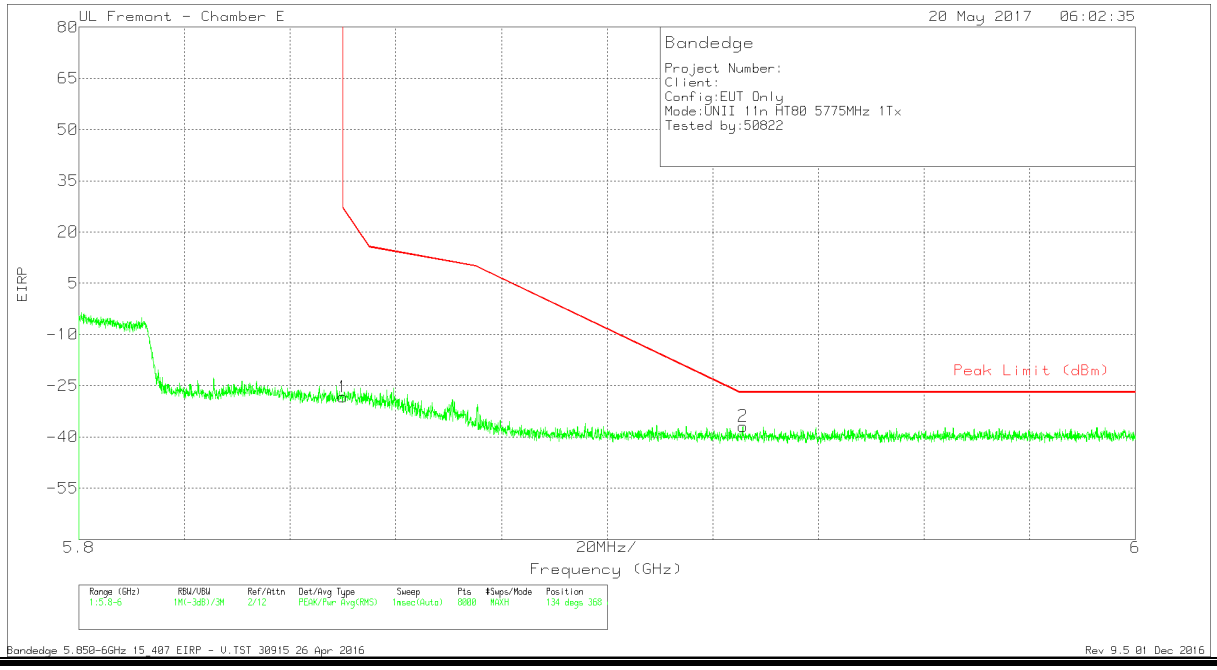
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-56.02	Pk	35.5	-19.5	11.8	-28.22	26.99	-55.21	134	368	V
2	5.926	-65.04	Pk	35.6	-19.2	11.8	-36.84	-27	-9.84	134	368	V

Pk - Peak detector

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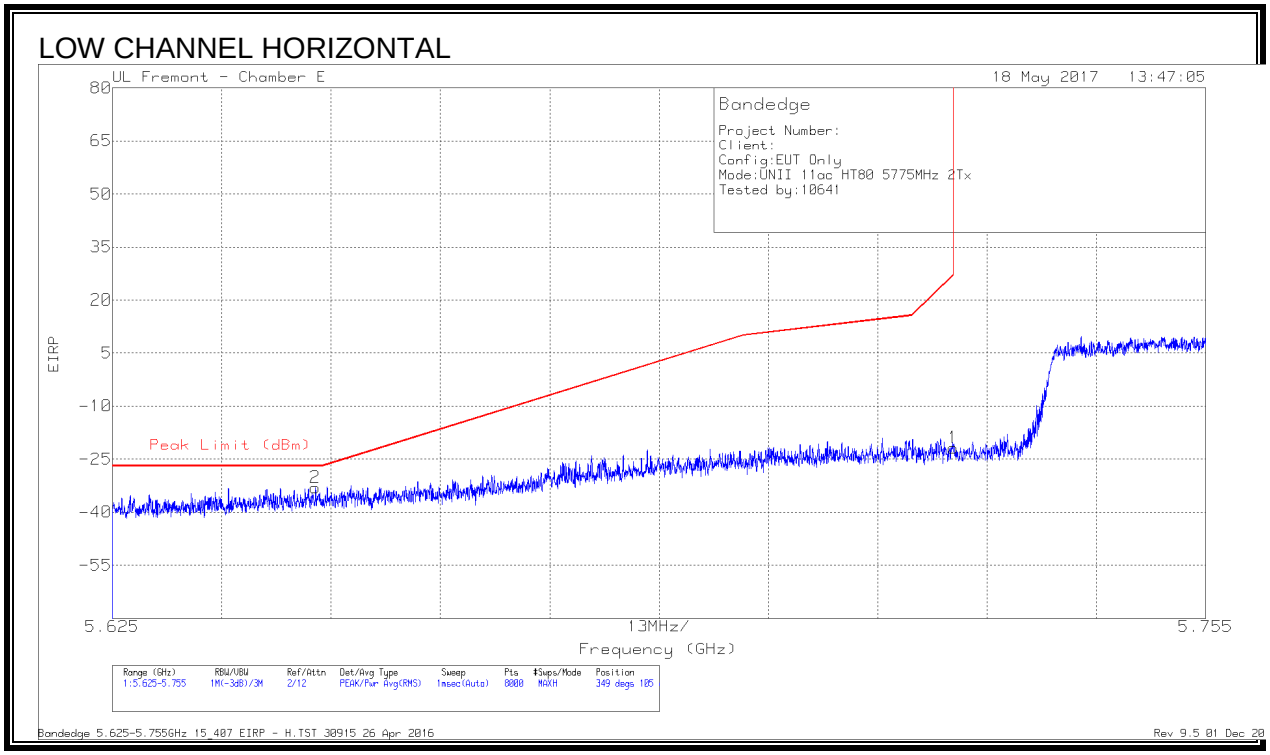
9.1.41. 5.6GHz band HT411ac HT80 2TX CDD MIMO MODE IN THE 5.8GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.649	-60.27	Pk	34.9	-19.5	11.8	-33.07	-27	-6.07	349	105	H
1	5.725	-48.97	Pk	34.9	-19.6	11.8	-21.87	27	-48.87	349	105	H

Pk - Peak detector
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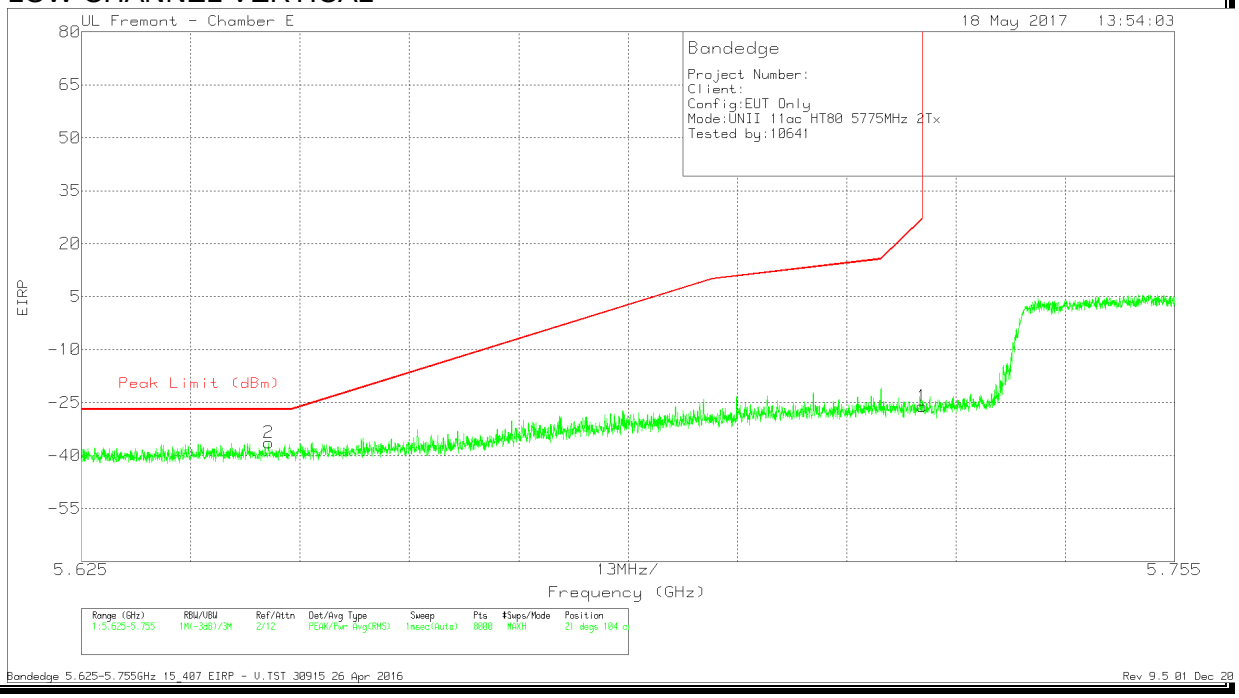
LOW CHANNEL VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.647	-63.64	Pk	34.9	-19.5	11.8	-36.44	-27	-9.44	21	104	V
1	5.725	-53.16	Pk	34.9	-19.6	11.8	-26.06	27	-53.06	21	104	V

Pk - Peak detector
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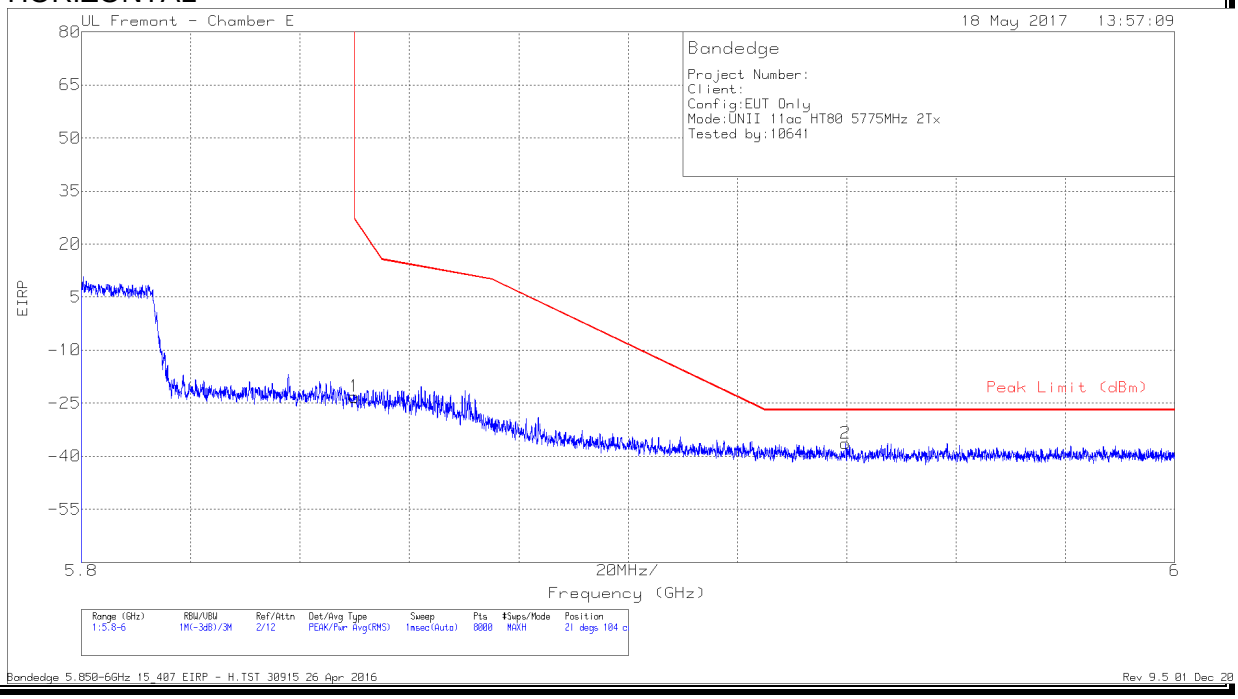
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-51	Pk	35.5	-19.5	11.8	-23.2	26.99	-50.19	21	104	H
2	5.94	-64.41	Pk	35.6	-19.3	11.8	-36.31	-27	-9.31	21	104	H

Pk - Peak detector

Bandedge 5.850-6GHz 15_407 EIRP - H.TST 30915 26 Apr 2016
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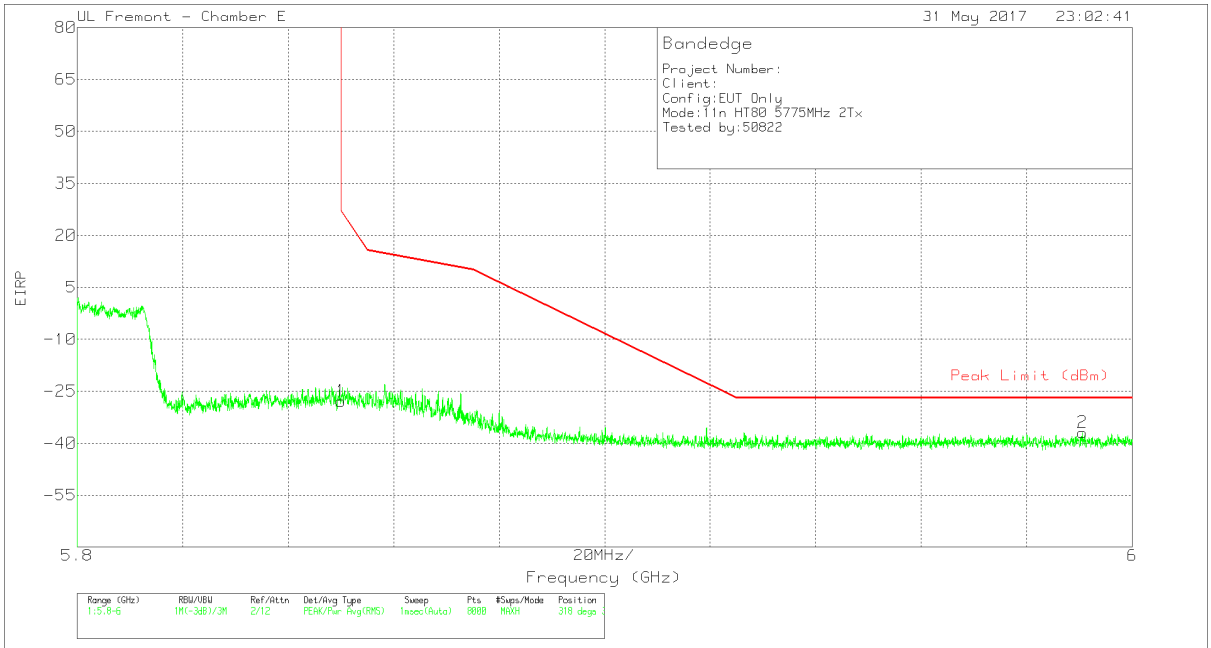
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-55.66	Pk	35.5	-19.5	11.8	-27.86	26.99	-54.85	318	377	V
2	5.991	-65.59	Pk	35.6	-18.7	11.8	-36.89	-27	-9.89	318	377	V

Pk - Peak detector

Bandedge 5.850-6GHz 15_407 EIRP - V.TST 30915 26 Apr 2016
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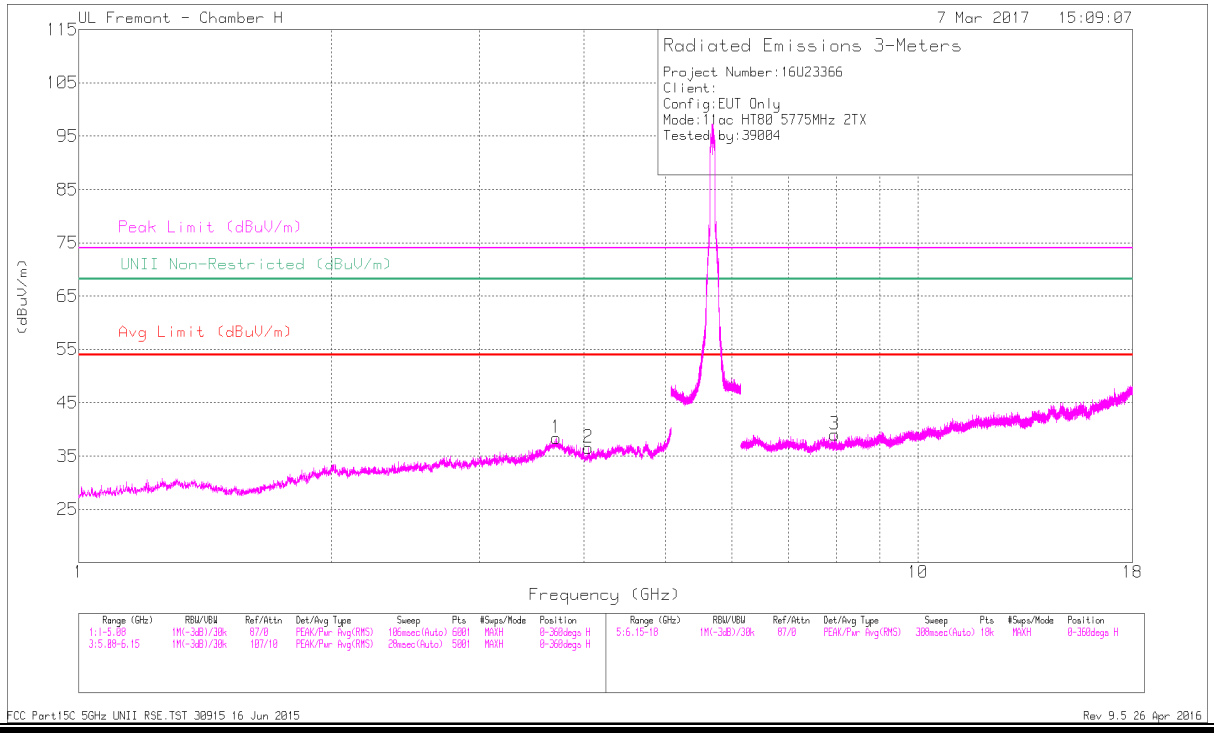
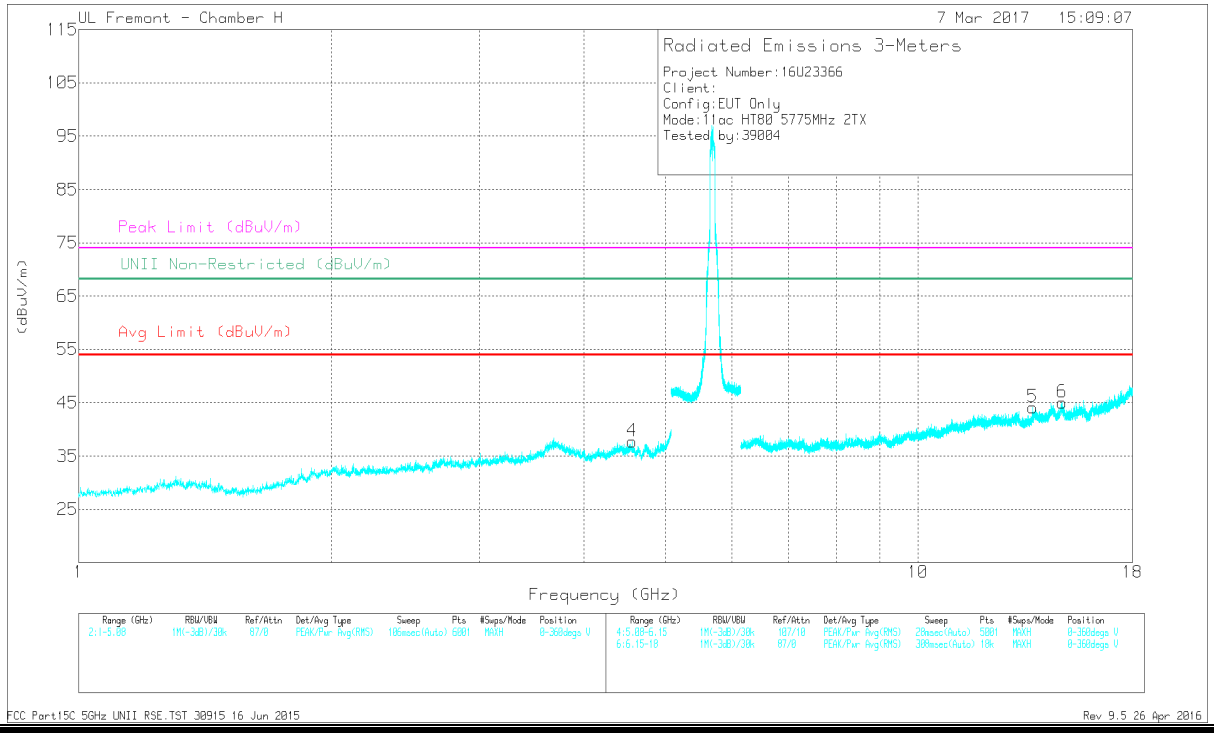
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 3.707	45.55	PK-U	34.9	-36.1	0	44.35	-	-	74	-29.65	-	-	235	251	H
	* 3.709	34.92	ADR	34.8	-36.1	.19	33.81	54	-20.19	-	-	-	-	235	251	H
2	* 4.049	43.34	PK-U	33.5	-35.1	0	41.74	-	-	74	-32.26	-	-	102	127	H
	* 4.045	33.04	ADR	33.5	-35.1	.19	31.63	54	-22.37	-	-	-	-	102	127	H
4	* 4.564	44.3	PK-U	33.9	-35	0	43.2	-	-	74	-30.8	-	-	138	142	V
	* 4.566	33.63	ADR	33.9	-35	.19	32.72	54	-21.28	-	-	-	-	138	142	V
3	7.956	38.56	PK-U	35.8	-30.4	0	43.96	-	-	-	-	68.2	-24.24	203	240	H
5	13.687	35.84	PK-U	39	-25.2	0	49.64	-	-	-	-	68.2	-18.56	253	139	V
6	14.84	35.59	PK-U	40	-24.6	0	50.99	-	-	-	-	68.2	-17.21	341	329	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
FCC Part15C 5GHz UNII RSE.TST 30915 16 Jun 2015
Rev 9.5 26 Apr 2016

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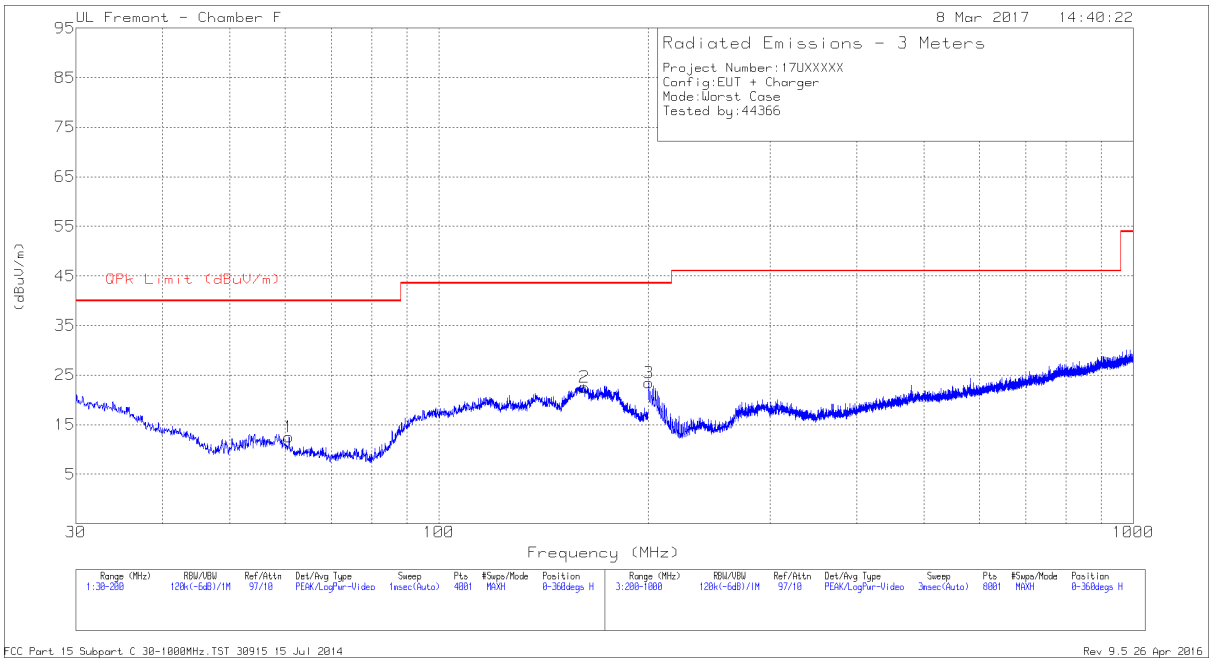
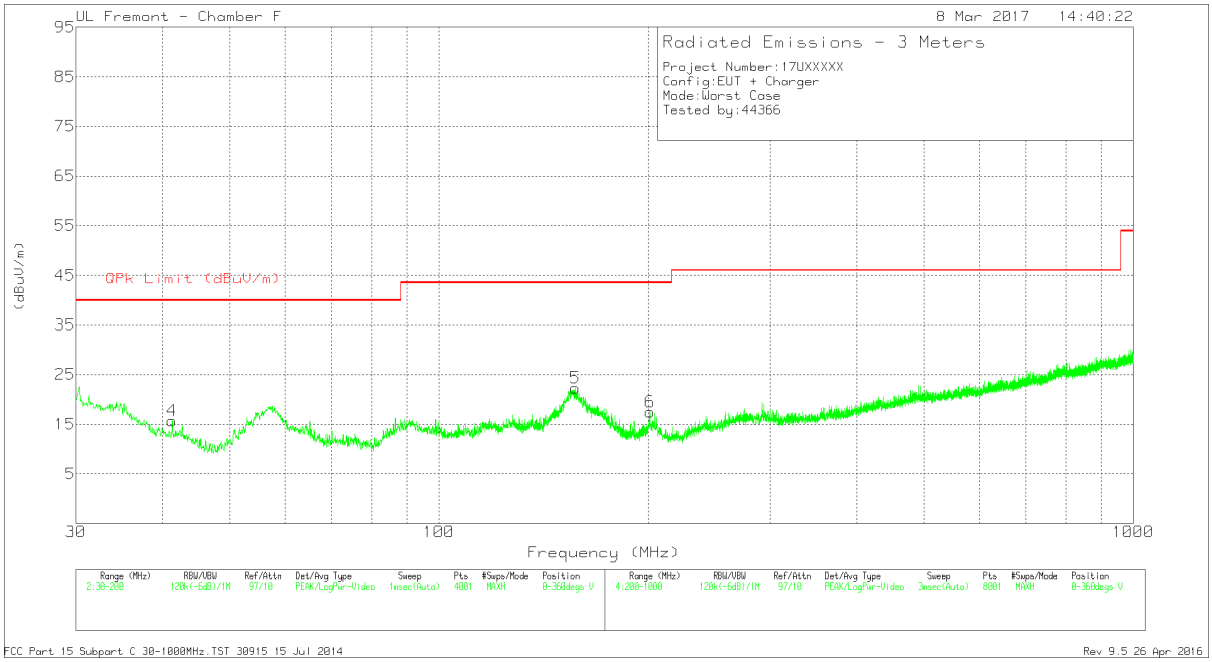
9.2. WORST-CASE BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)

HORIZONTAL PLOT



VERTICAL PLOT



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DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T122 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	60.8125	32.28	Pk	11.7	-31.5	12.48	40	-27.52	0-360	301	H
2	162.005	37.01	Pk	16.3	-30.7	22.61	43.52	-20.91	0-360	201	H
4	41.2625	30.22	Pk	17.2	-31.7	15.72	40	-24.28	0-360	100	V
5	157.2875	36.7	Pk	16.4	-30.8	22.3	43.52	-21.22	0-360	100	V
3	200.5	37.37	Pk	16.6	-30.5	23.47	43.52	-20.05	0-360	100	H
6	201.3	31.51	Pk	16.4	-30.4	17.51	43.52	-26.01	0-360	100	V

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

Pk - Peak detector

FCC Part15C 30-1000MHz.TST 30915 15 Jul 2014
Rev 9.5 01 Dec 2016

UL VERIFICATION SERVICES INC. FORM NO: CCSUP4701J
47173 BENICIA STREET, FREMONT, CA 94538, USA TEL: (510) 771-1000 FAX: (510) 661-0888

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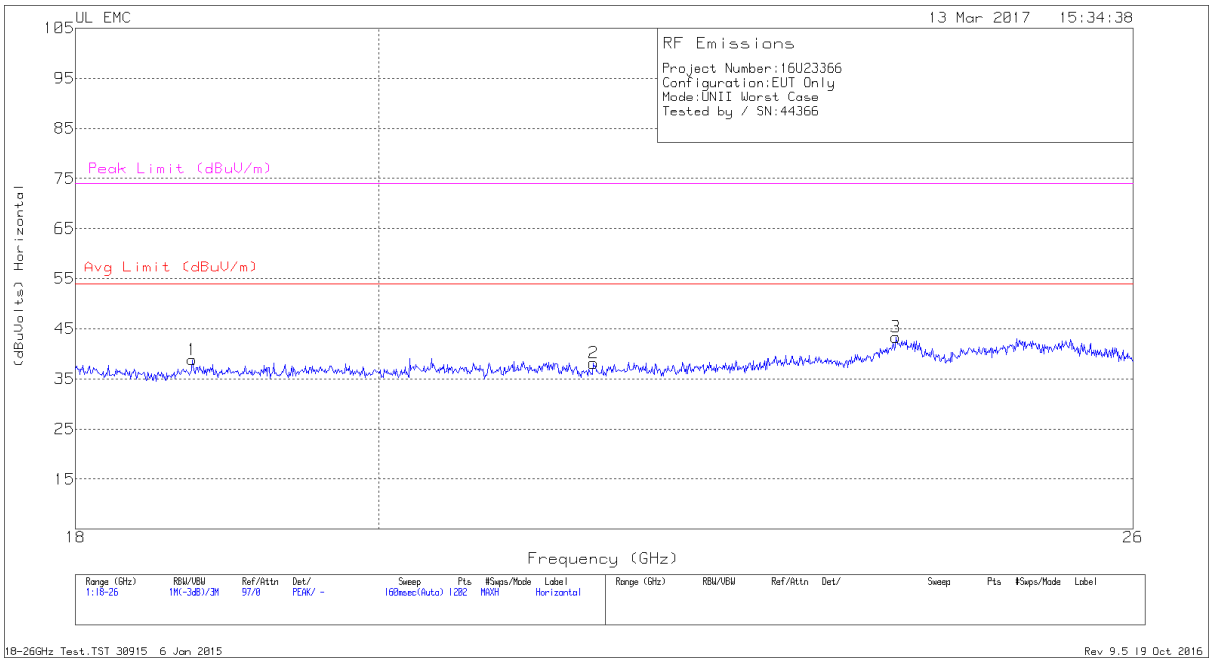
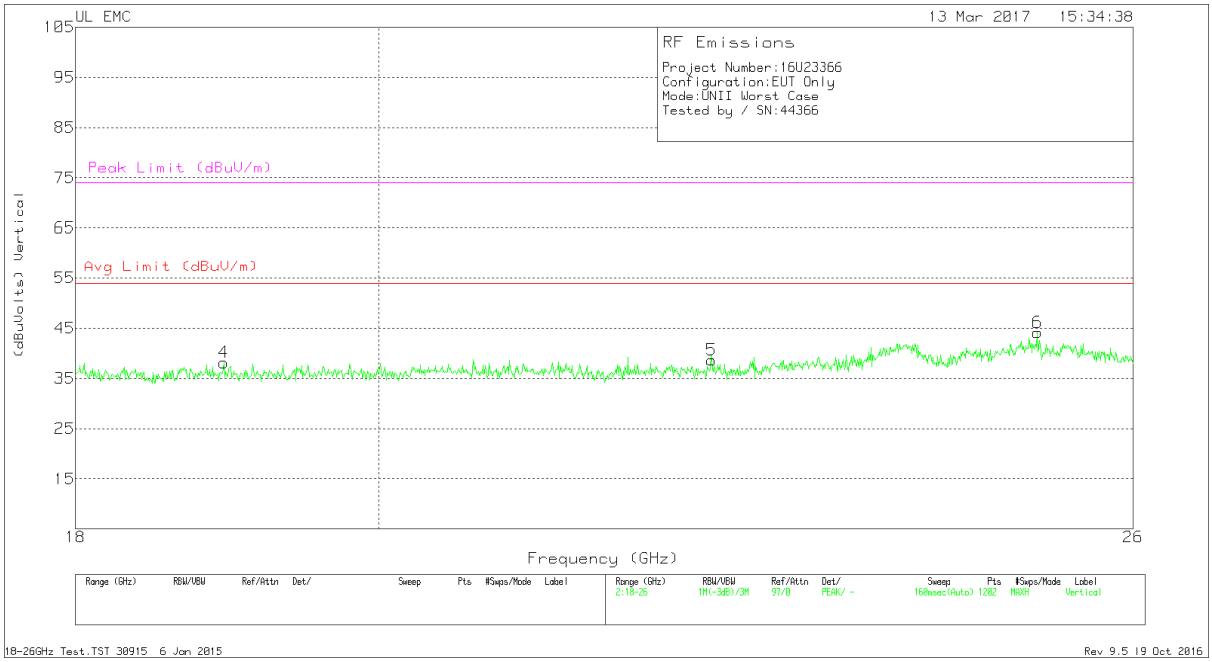
9.3. WORST-CASE 18 to 26 GHz

SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)

HORIZONTAL PLOT



VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T449 (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	18.746	40.53	Pk	32.4	-24.6	-9.5	38.83	54	-15.17	74	-35.17
2	21.55	39.77	Pk	33.2	-25.3	-9.5	38.17	54	-15.83	74	-35.83
3	23.942	43.03	Pk	34	-24.2	-9.5	43.33	54	-10.67	74	-30.67
4	18.953	39.97	Pk	32.6	-24.9	-9.5	38.17	54	-15.83	74	-35.83
5	22.456	39.37	Pk	33.5	-24.7	-9.5	38.67	54	-15.33	74	-35.33
6	25.147	44.27	Pk	34.3	-24.9	-9.5	44.17	54	-9.83	74	-29.83

Pk - Peak detector

18-26GHz Test.TST 30915 6 Jan 2015

Rev 9.5 19 Oct 2016

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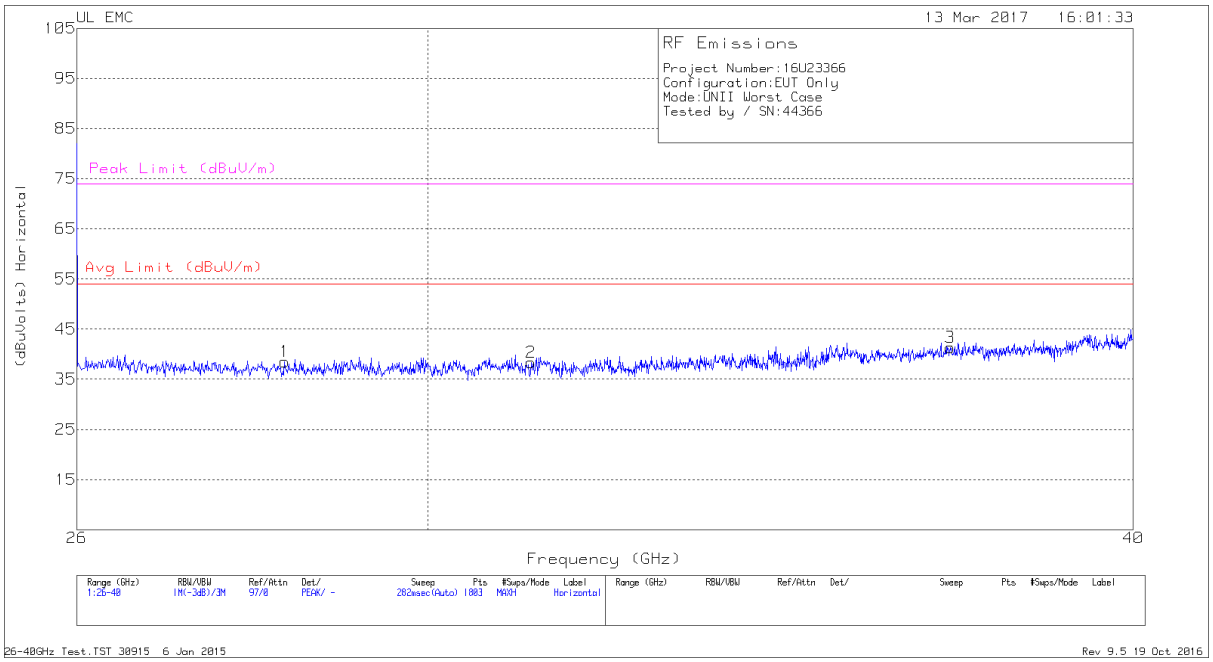
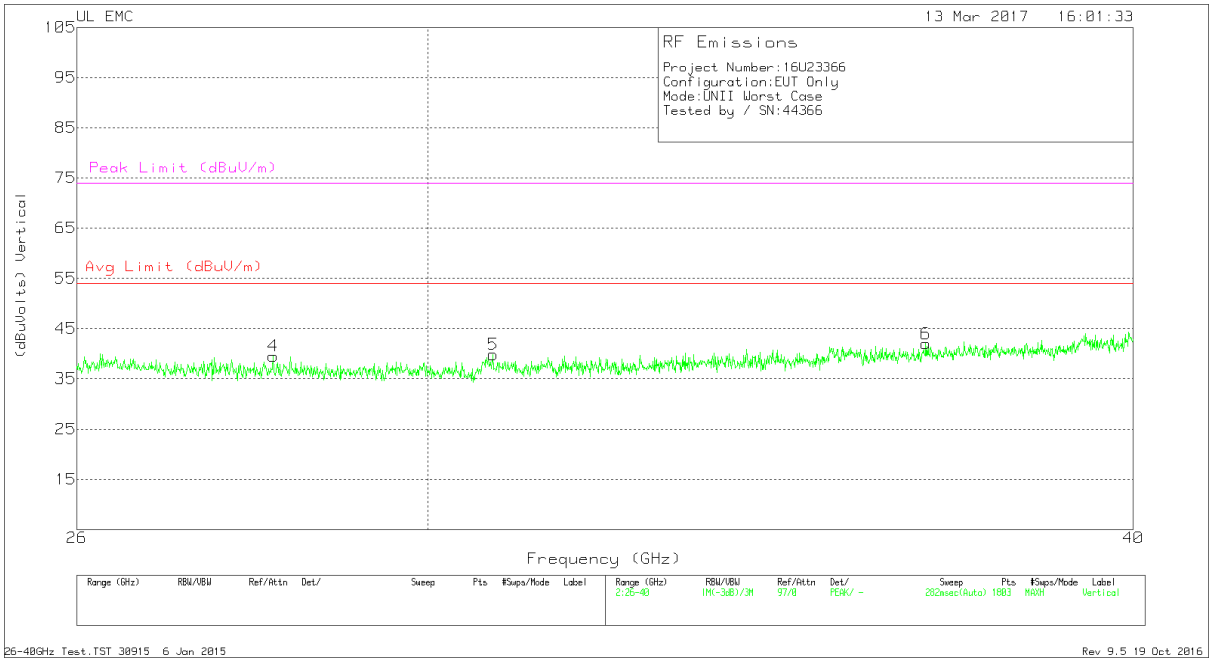
9.4. WORST-CASE 26 to 40 GHz

SPURIOUS EMISSIONS 26 TO 40 GHz (WORST-CASE CONFIGURATION)

HORIZONTAL PLOT



VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T90 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	28.3	44.2	Pk	35.8	-32	-9.5	38.50	54	-15.5	74	-35.5
2	31.291	45.13	Pk	36	-33.3	-9.5	38.33	54	-15.67	74	-35.67
3	37.125	48.13	Pk	37.2	-34.5	-9.5	41.33	54	-12.67	74	-32.67
4	28.168	45.2	Pk	35.9	-32.1	-9.5	39.5	54	-14.5	74	-34.5
5	30.809	46.43	Pk	36	-33.1	-9.5	39.83	54	-14.17	74	-34.17
6	36.752	49.1	Pk	37.1	-34.7	-9.5	42	54	-12	74	-32

Pk - Peak detector

26-40GHz Test.TST 30915 6 Jan 2015
Rev 9.5 19 Oct 2016

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10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

Frequency of Emission (MHz)	Conducted Limit (dBµV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

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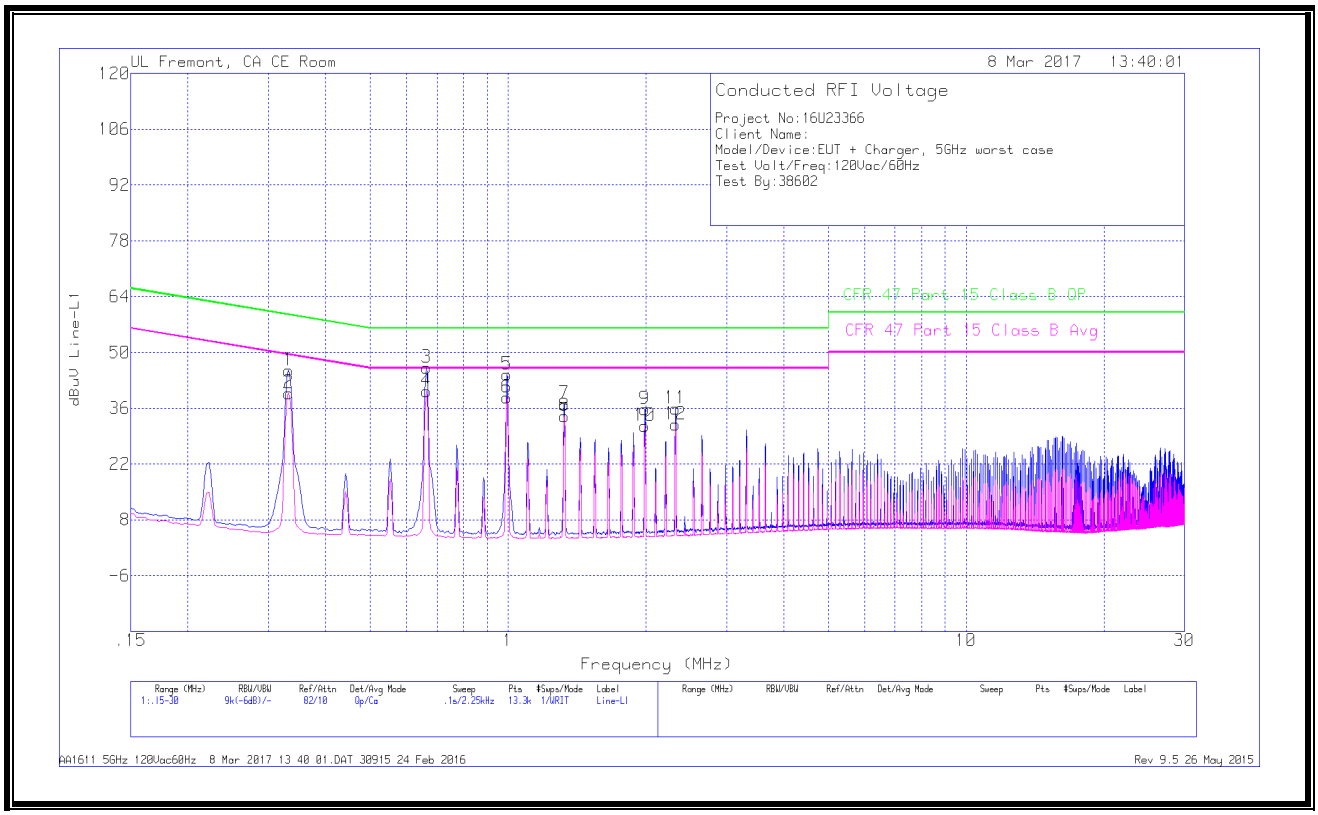
10.1. EUT POWERED BY AC/DC ADAPTER VIA USB CABLE

LINE 1 RESULTS



WORST EMISSIONS

Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables C1&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
1	.33225	35.23	Qp	0	.1	10.1	45.43	59.39	-13.96	-	-
2	.33225	29.63	Ca	0	.1	10.1	39.83	-	-	49.39	-9.56
3	.663	35.96	Qp	0	.1	10.1	46.16	56	-9.84	-	-
4	.663	30.03	Ca	0	.1	10.1	40.23	-	-	46	-5.77
5	.99375	34.23	Qp	0	.1	10.1	44.43	56	-11.57	-	-
6	.99375	28.49	Ca	0	.1	10.1	38.69	-	-	46	-7.31
7	1.32675	26.94	Qp	0	.1	10.1	37.14	56	-18.86	-	-
8	1.32675	23.76	Ca	0	.1	10.1	33.96	-	-	46	-12.04
9	1.98825	25.47	Qp	0	.1	10.1	35.67	56	-20.33	-	-
10	1.98825	21.42	Ca	0	.1	10.1	31.62	-	-	46	-14.38
11	2.32125	25.76	Qp	0	.1	10.1	35.96	56	-20.04	-	-
12	2.32125	21.72	Ca	0	.1	10.1	31.92	-	-	46	-14.08

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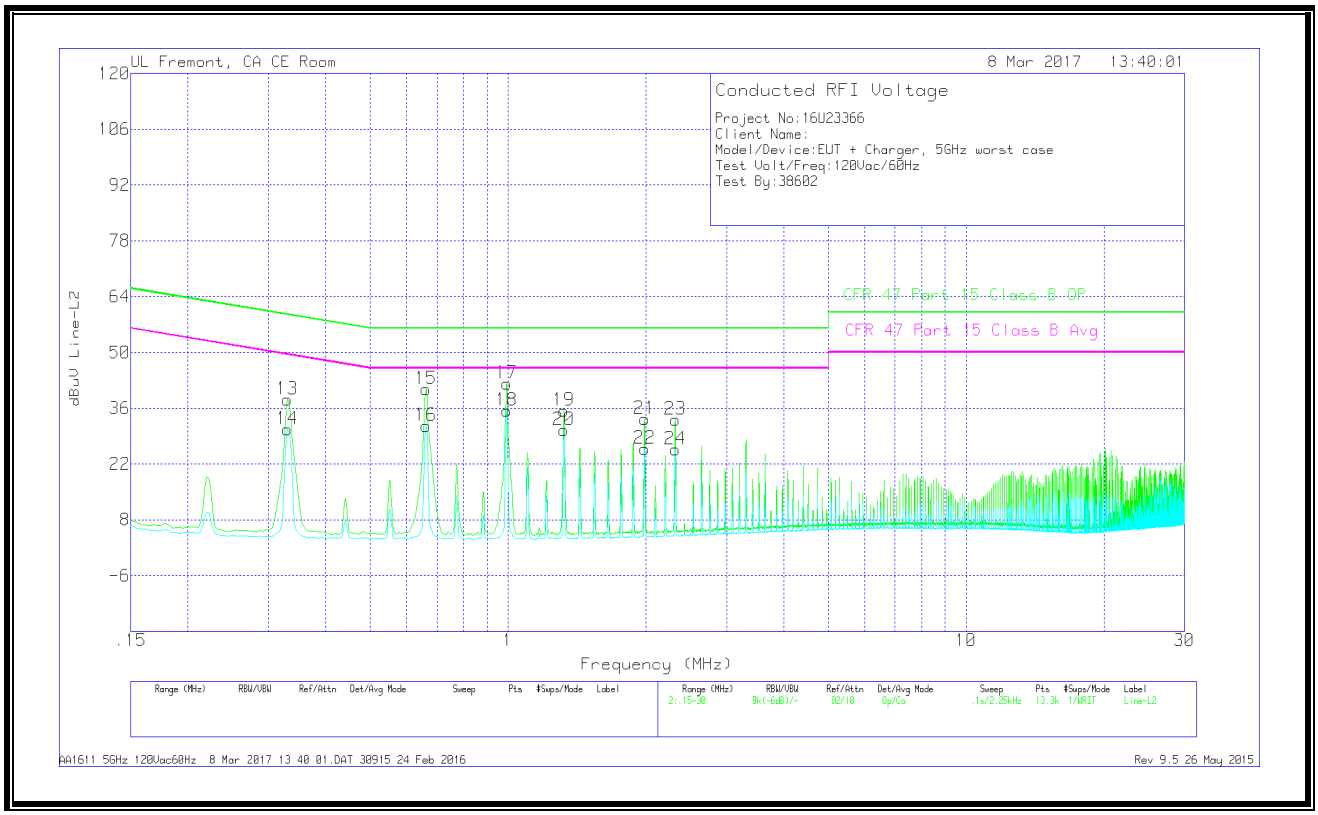
LINE 2 RESULTS



WORST EMISSIONS

Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables C2&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
13	.33	27.97	Qp	0	.1	10.1	38.17	59.45	-21.28	-	-
14	.33	20.47	Ca	0	.1	10.1	30.67	-	-	49.45	-18.78
15	.66075	30.66	Qp	0	.1	10.1	40.86	56	-15.14	-	-
16	.66075	21.32	Ca	0	.1	10.1	31.52	-	-	46	-14.48
17	.99375	31.92	Qp	0	.1	10.1	42.12	56	-13.88	-	-
18	.99375	25.26	Ca	0	.1	10.1	35.46	-	-	46	-10.54
19	1.3245	25.15	Qp	0	.1	10.1	35.35	56	-20.65	-	-
20	1.3245	20.35	Ca	0	.1	10.1	30.55	-	-	46	-15.45
21	1.986	23.05	Qp	0	.1	10.1	33.25	56	-22.75	-	-
22	1.986	15.67	Ca	0	.1	10.1	25.87	-	-	46	-20.13
23	2.31675	22.96	Qp	0	.1	10.1	33.16	56	-22.84	-	-
24	2.31675	15.5	Ca	0	.1	10.1	25.7	-	-	46	-20.3

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