9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

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

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz measurements and 1.5 m above the ground plane for above 1GHz measurements. The antenna to EUT distance is 3 meters.

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

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

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

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

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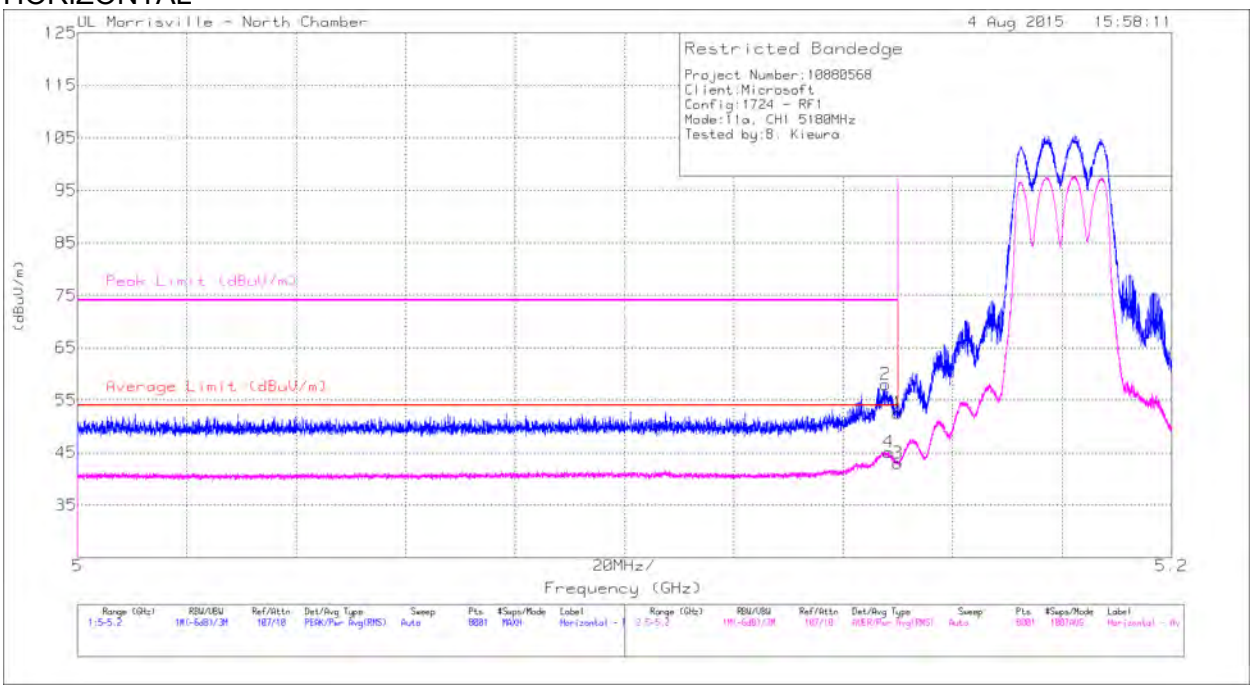
9.2. TRANSMITTER ABOVE 1 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DCCF (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	39.58	Pk	34.3	-21.4	-	52.48	-	-	74	-21.52	259	205	H
2	* 5.148	44.96	Pk	34.3	-21.3	-	57.96	-	-	74	-16.04	259	205	H
3	* 5.15	30.08	RMS	34.3	-21.4	0.12	43.10	54	-10.9	-	-	259	205	H
4	* 5.148	32.07	RMS	34.3	-21.3	0.12	45.19	54	-8.81	-	-	259	205	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
RMS - RMS detection
Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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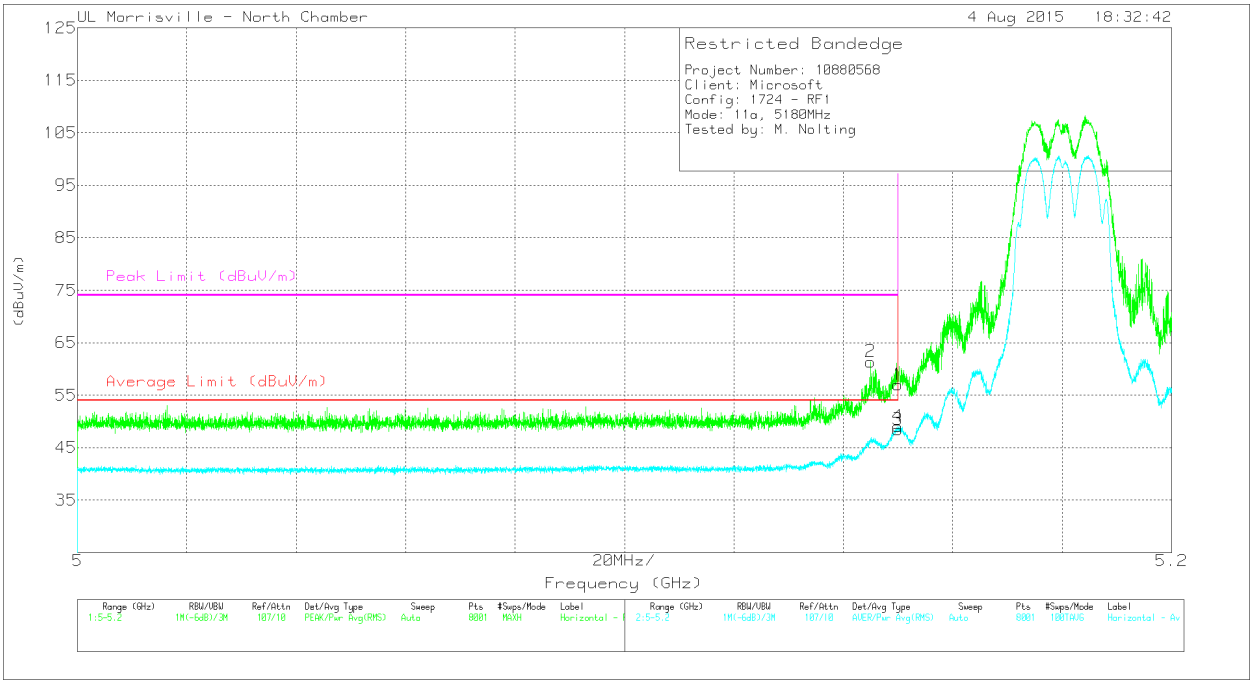
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DCCF (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	44.13	Pk	34.3	-21.4	-	57.03	-	-	74	-16.97	12	282	V
2	* 5.145	48.4	Pk	34.3	-21.3	-	61.4	-	-	74	-12.6	12	282	V
3	* 5.15	35.54	RMS	34.3	-21.4	0.12	48.56	54.0	-5.44	-	-	12	282	V
4	* 5.15	36.2	RMS	34.3	-21.4	0.12	49.22	54.0	-4.78	-	-	12	282	V

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

Pk - Peak detector

RMS - RMS detection

Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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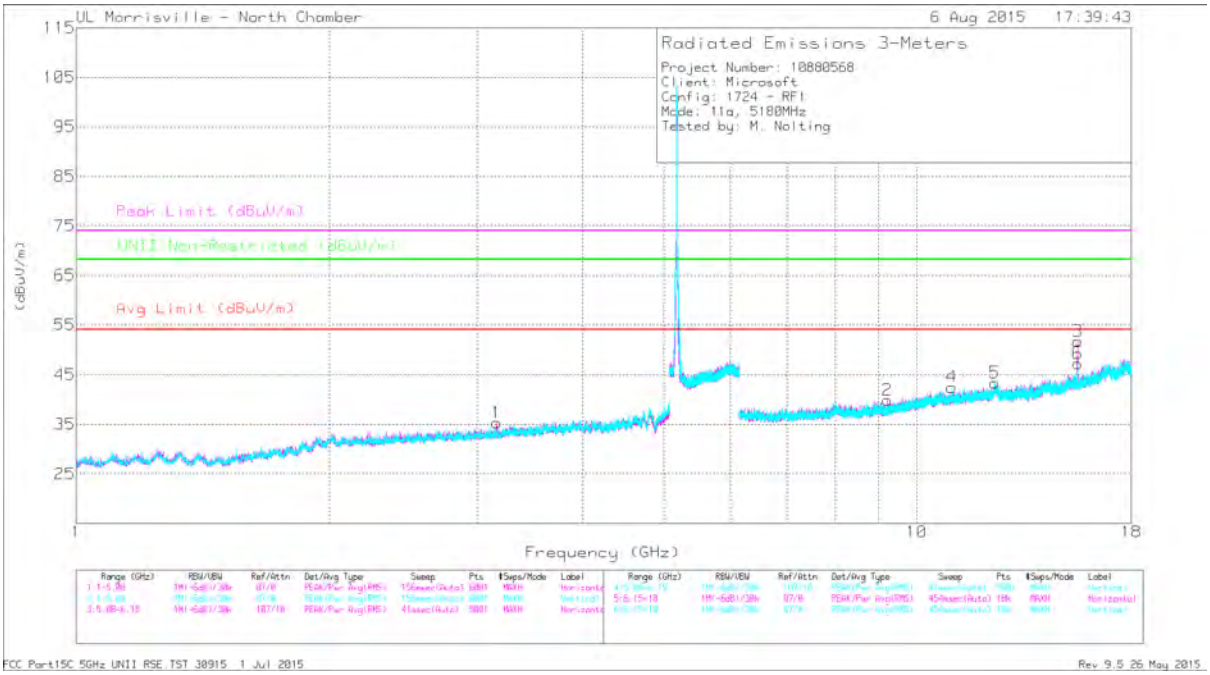
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 15.535	45.8	PK3	40.5	-23.9	-	62.4	-	-	74	-11.6	-	-	351	101	H
	* 15.541	32.15	ADR	40.5	-23.9	0.12	48.87	54	-5.13	-	-	-	-	351	101	H
4	* 11.008	34.3	PK3	38	-23.6	-	48.7	-	-	74	-25.3	-	-	188	314	V
	* 11.007	22.88	ADR	38	-23.6	-	37.28	54	-16.72	-	-	-	-	188	314	V
5	* 12.385	34.44	PK3	39.1	-22.9	-	50.64	-	-	74	-23.36	-	-	42	241	V
	* 12.383	22.95	ADR	39.1	-22.9	-	39.15	54	-14.85	-	-	-	-	42	241	V
6	* 15.536	44.67	PK3	40.5	-23.9	-	61.27	-	-	74	-12.73	-	-	314	236	V
	* 15.541	30.69	ADR	40.5	-23.9	0.12	47.41	54	-6.59	-	-	-	-	314	236	V
1	3.168	43.21	PK3	32.7	-33.1	-	42.81	-	-	-	-	68.2	-25.39	6	155	H
2	9.22	36.44	PK3	36.4	-26.5	-	46.34	-	-	-	-	68.2	-21.86	186	217	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average
Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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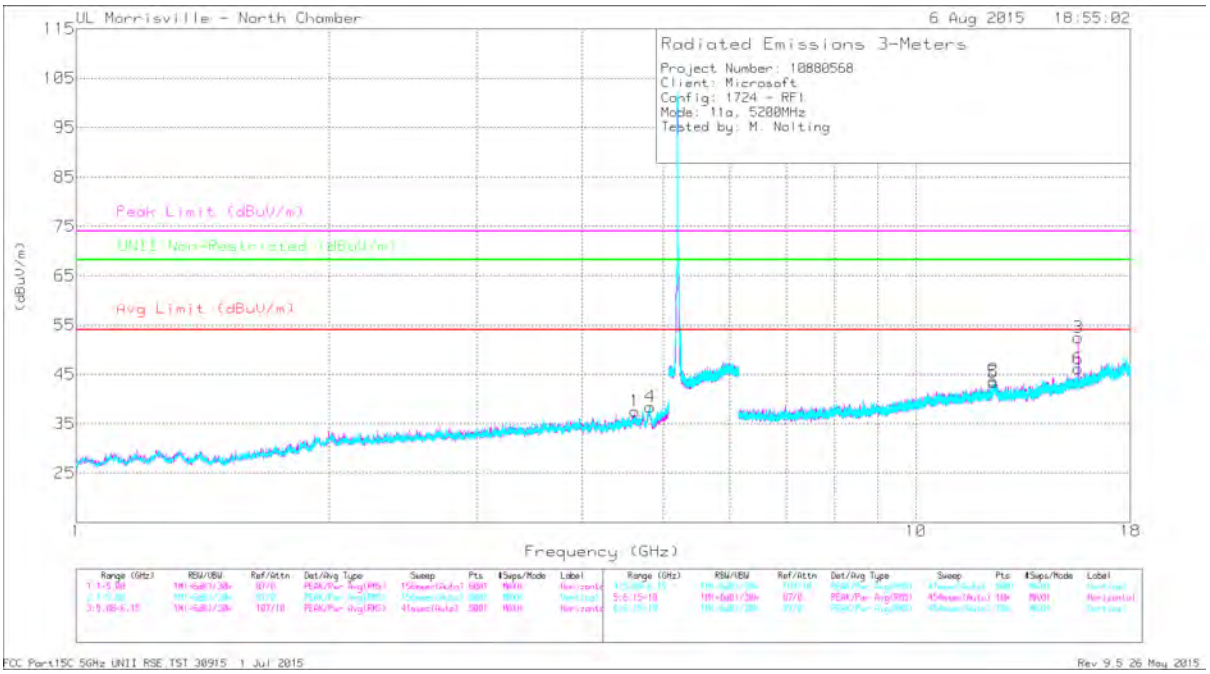
MID CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DCCF (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	* 4.626	41.07	PK3	34	-30.7	-	44.37	-	-	74	-29.63	-	-	199	244	H
	* 4.623	29.59	ADR	34	-30.8	-	32.79	54	-21.21	-	-	-	-	199	244	H
4	* 4.825	41.96	PK3	34.1	-30.2	-	45.86	-	-	74	-28.14	-	-	346	107	V
	* 4.824	30.26	ADR	34.1	-30.2	-	34.16	54	-19.84	-	-	-	-	346	107	V
2	* 15.603	46.91	PK3	40.6	-25	-	62.51	-	-	74	-11.49	-	-	343	102	H
	* 15.603	33	ADR	40.6	-25	0.12	48.72	54	-5.28	-	-	-	-	343	102	H
3	* 12.368	34.28	PK3	39	-23	-	50.28	-	-	74	-23.72	-	-	223	101	H
	* 12.369	22.84	ADR	39	-23	-	38.84	54	-15.16	-	-	-	-	223	101	H
5	* 12.368	35.38	PK3	39	-23	-	51.38	-	-	74	-22.62	-	-	223	103	V
	* 12.374	22.81	ADR	39	-22.9	-	38.91	54	-15.09	-	-	-	-	223	103	V
6	* 15.603	45.86	PK3	40.6	-25	-	61.46	-	-	74	-12.54	-	-	313	237	V
	* 15.603	32.34	ADR	40.6	-25	0.12	48.06	54	-5.94	-	-	-	-	313	237	V

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

Pk - Peak detector

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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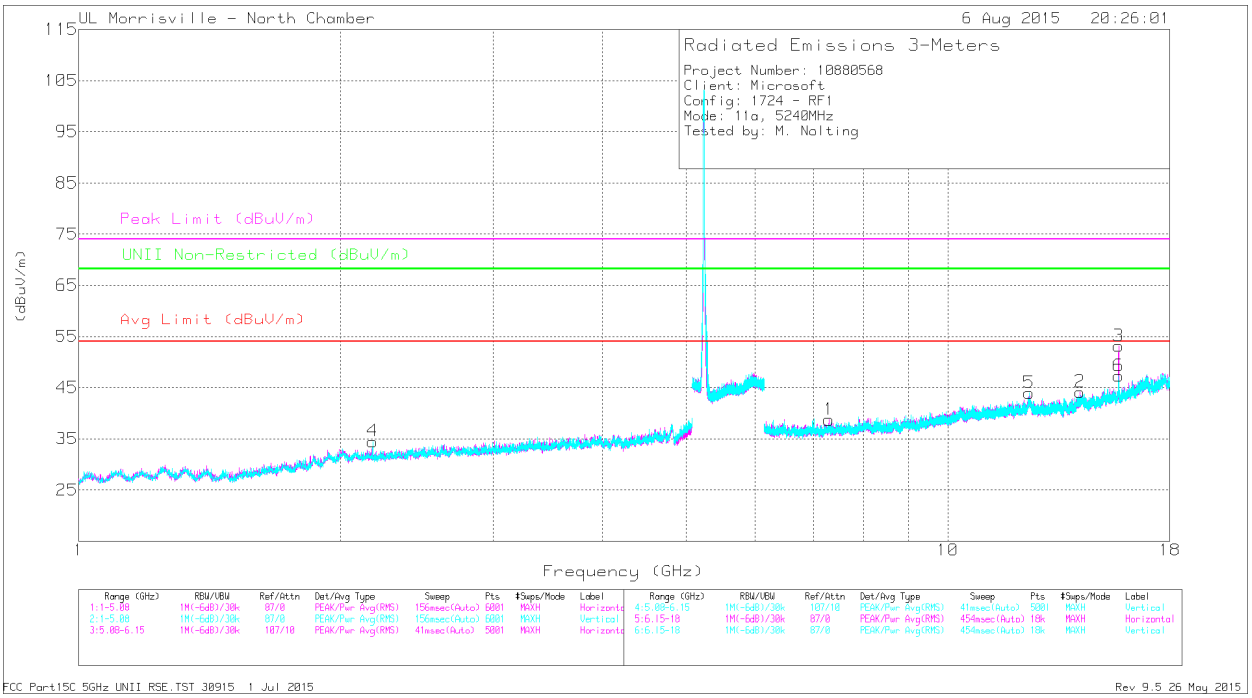
HIGH CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DCCF (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	* 7.291	38.69	PK3	35.7	-28.2	-	46.19	-	-	74	-27.81	-	-	271	299	H
	* 7.295	26.79	ADR	35.7	-28.2	-	34.29	54	-19.71	-	-	-	-	271	299	H
3	* 15.716	47.17	PK3	40.7	-24.2	-	63.67	-	-	74	-10.33	-	-	345	103	H
	* 15.721	33.06	ADR	40.8	-24.1	0.12	49.88	54	-4.12	-	-	-	-	345	103	H
5	* 12.399	34.95	PK3	39.1	-22.9	-	51.15	-	-	74	-22.85	-	-	82	231	V
	* 12.401	23.13	ADR	39.1	-22.9	-	39.33	54	-14.67	-	-	-	-	82	231	V
6	* 15.716	46.17	PK3	40.7	-24.2	-	62.67	-	-	74	-11.33	-	-	313	235	V
	* 15.721	32	ADR	40.8	-24.1	0.12	48.82	54	-5.18	-	-	-	-	313	235	V
4	2.183	44.28	PK3	31.6	-34.4	-	41.48	-	-	-	-	68.2	-26.72	346	118	V
2	14.181	36	PK3	39.3	-24.9	-	50.4	-	-	-	-	68.2	-17.8	25	199	H

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

Pk - Peak detector

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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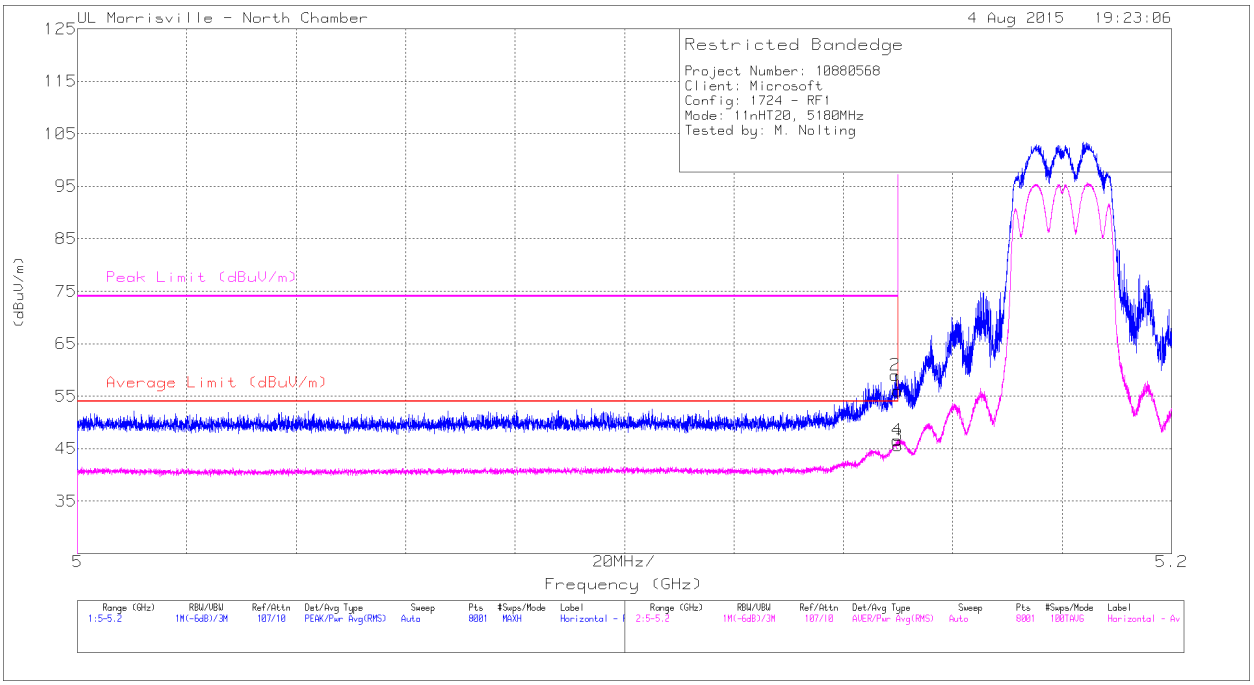
9.2.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	43.13	Pk	34.3	-21.4	56.03	-	-	74	-17.97	260	177	H
2	* 5.149	46.1	Pk	34.3	-21.4	59	-	-	74	-15	260	177	H
3	* 5.15	32.62	RMS	34.3	-21.4	45.52	54	-8.48	-	-	260	177	H
4	* 5.15	33.7	RMS	34.3	-21.4	46.6	54	-7.4	-	-	260	177	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
RMS - RMS detection

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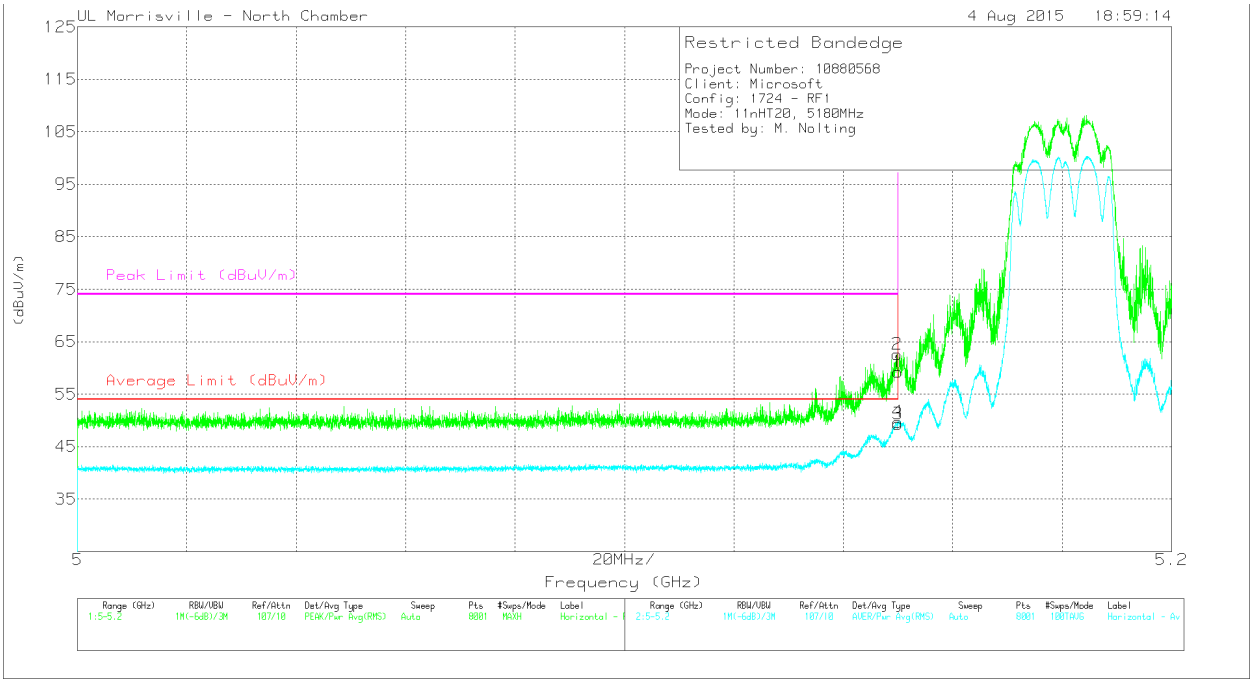
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	46.33	Pk	34.3	-21.4	59.23	-	-	74	-14.77	12	281	V
2	* 5.15	49.67	Pk	34.3	-21.4	62.57	-	-	74	-11.43	12	281	V
3	* 5.15	36.43	RMS	34.3	-21.4	49.33	54	-4.67	-	-	12	281	V
4	* 5.15	36.74	RMS	34.3	-21.4	49.64	54	-4.36	-	-	12	281	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
RMS - RMS detection

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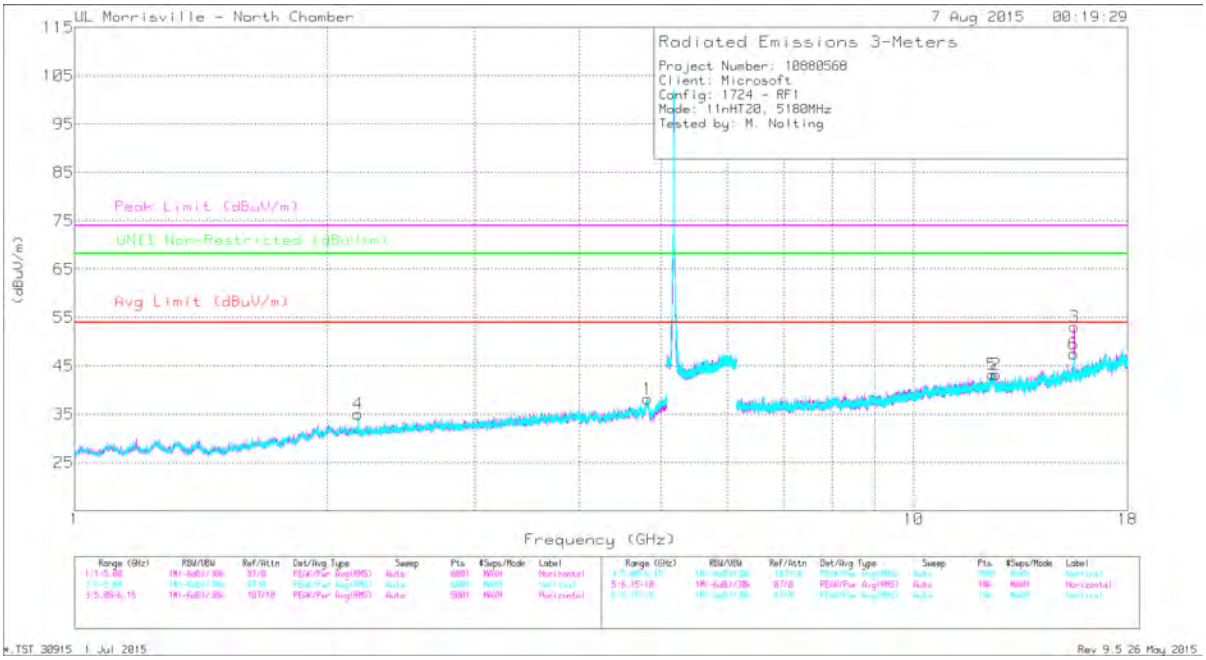
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 4.817	41.74	PK3	34.1	-30.2	45.64	-	-	74	-28.36	-	-	86	132	H
	* 4.814	29.78	ADR	34.1	-30.2	33.68	54	-20.32	-	-	-	-	86	132	H
2	* 12.544	34.95	PK3	39.1	-24.8	49.25	-	-	74	-24.75	-	-	95	231	H
	* 12.554	23.2	ADR	39.1	-24.9	37.4	54	-16.6	-	-	-	-	95	231	H
3	* 15.529	46.72	PK3	40.4	-23.8	63.32	-	-	74	-10.68	-	-	353	101	H
	* 15.543	32.73	ADR	40.5	-24	49.23	54	-4.77	-	-	-	-	353	101	H
5	* 12.419	35.25	PK3	39.1	-23	51.35	-	-	74	-22.65	-	-	87	146	V
	* 12.413	22.92	ADR	39.1	-23.1	38.92	54	-15.08	-	-	-	-	87	146	V
6	* 15.529	44.28	PK3	40.4	-23.8	60.88	-	-	74	-13.12	-	-	312	236	V
	* 15.543	30.25	ADR	40.5	-24	46.75	54	-7.25	-	-	-	-	312	236	V
4	2.179	44.92	PK3	31.6	-34.4	42.12	-	-	-	-	68.2	-26.08	339	138	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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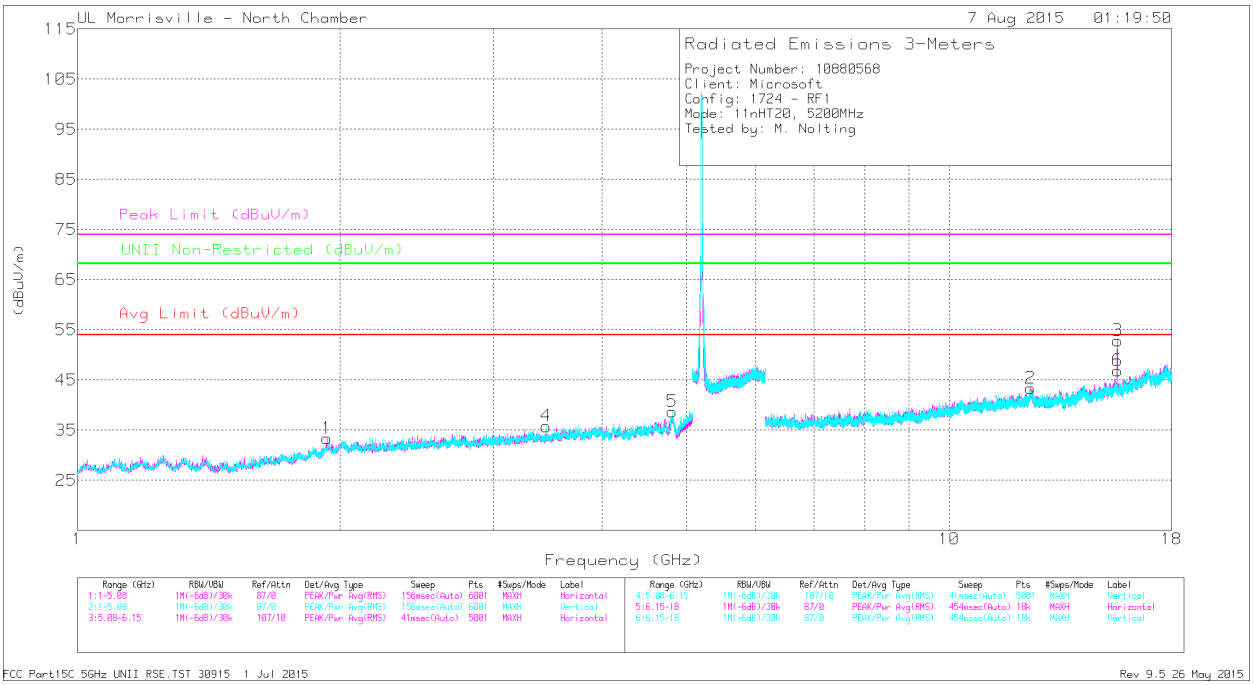
MID CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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
5	* 4.812	42.44	PK3	34.1	-30.2	46.34	-	-	74	-27.66	-	-	360	121	V
	* 4.809	30.57	ADR	34.1	-30.2	34.47	54	-19.53	-	-	-	-	360	121	V
2	* 12.4	34.5	PK3	39.1	-22.9	50.7	-	-	74	-23.3	-	-	321	262	H
	* 12.399	22.92	ADR	39.1	-22.9	39.12	54	-14.88	-	-	-	-	321	262	H
3	* 15.603	47.81	PK3	40.6	-25	63.41	-	-	74	-10.59	-	-	352	101	H
	* 15.603	34	ADR	40.6	-25	49.6	54	-4.4	-	-	-	-	352	101	H
6	* 15.598	43.03	PK3	40.6	-25	58.63	-	-	74	-15.37	-	-	307	233	V
	* 15.603	29.24	ADR	40.6	-25	44.84	54	-9.16	-	-	-	-	307	233	V
1	1.93	44.22	PK3	31.1	-34.6	40.72	-	-	-	-	68.2	-27.48	269	154	H
4	3.447	43.69	PK3	33.1	-32.7	44.09	-	-	-	-	68.2	-24.11	350	237	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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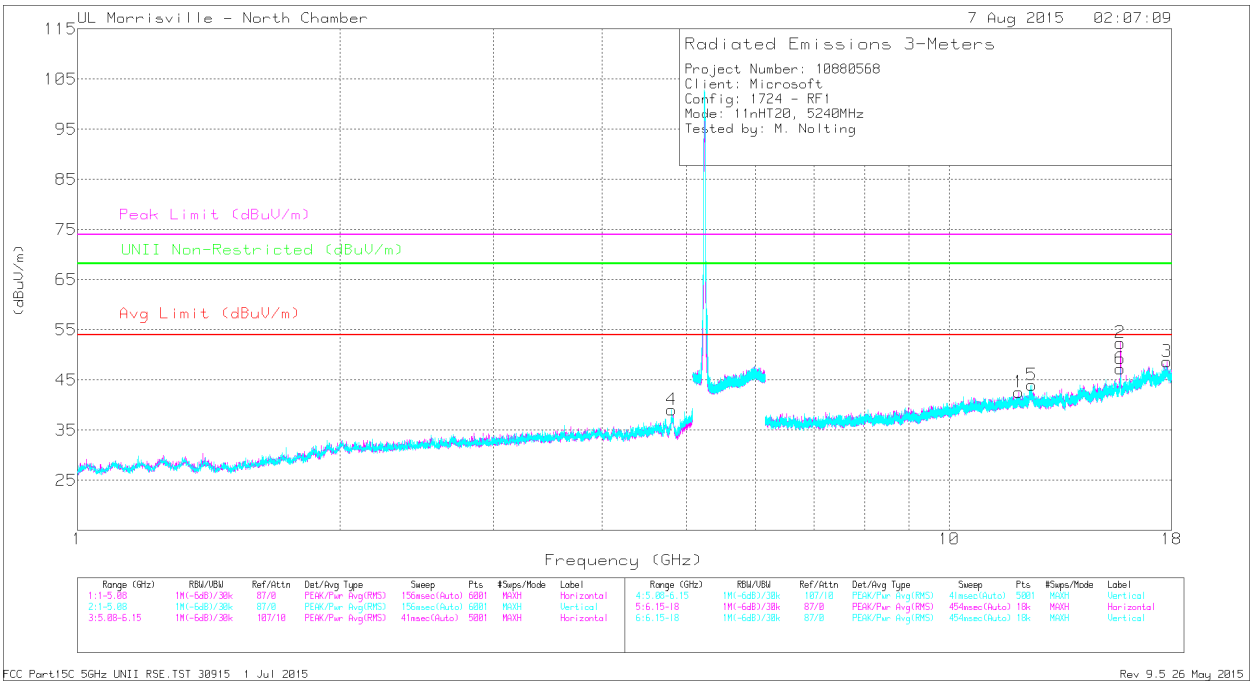
HIGH CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 4.809	41.22	PK3	34.1	-30.2	45.12	-	-	74	-28.88	-	-	354	287	V
	* 4.811	30.06	ADR	34.1	-30.2	33.96	54	-20.04	-	-	-	-	354	287	V
1	* 12.021	35.03	PK3	38.9	-24.5	49.43	-	-	74	-24.57	-	-	17	131	H
	* 12.007	23.45	ADR	38.9	-24.6	37.75	54	-16.25	-	-	-	-	17	131	H
2	* 15.731	46.21	PK3	40.8	-24	63.01	-	-	74	-10.99	-	-	345	103	H
	* 15.721	32.58	ADR	40.8	-24.1	49.28	54	-4.72	-	-	-	-	345	103	H
3	* 17.786	33.27	PK3	41.9	-19.9	55.27	-	-	74	-18.73	-	-	118	330	H
	* 17.78	21.73	ADR	41.9	-19.9	43.73	54	-10.27	-	-	-	-	118	330	H
5	* 12.434	35.08	PK3	39.1	-23.1	51.08	-	-	74	-22.92	-	-	327	126	V
	* 12.423	23.01	ADR	39.1	-23	39.11	54	-14.89	-	-	-	-	327	126	V
6	* 15.73	44.48	PK3	40.8	-24	61.28	-	-	74	-12.72	-	-	309	237	V
	* 15.72	30.07	ADR	40.8	-24.1	46.77	54	-7.23	-	-	-	-	309	237	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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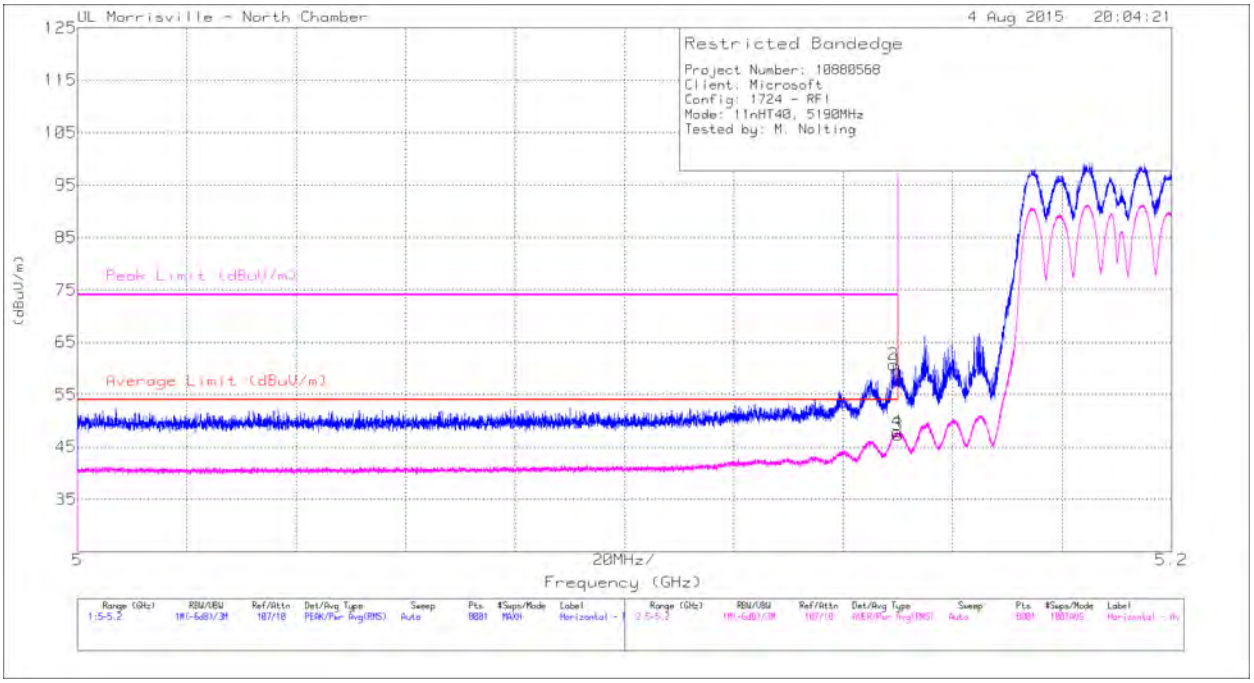
9.2.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*5.15	46.75	Pk	34.3	-21.4	59.65	-	-	74	-14.35	263	205	H
2	*5.149	47.72	Pk	34.3	-21.3	60.72	-	-	74	-13.28	263	205	H
3	*5.15	34.38	RMS	34.3	-21.4	47.28	54	-6.72	-	-	263	205	H
4	*5.15	35.06	RMS	34.3	-21.4	47.96	54	-6.04	-	-	263	205	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
RMS - RMS detection

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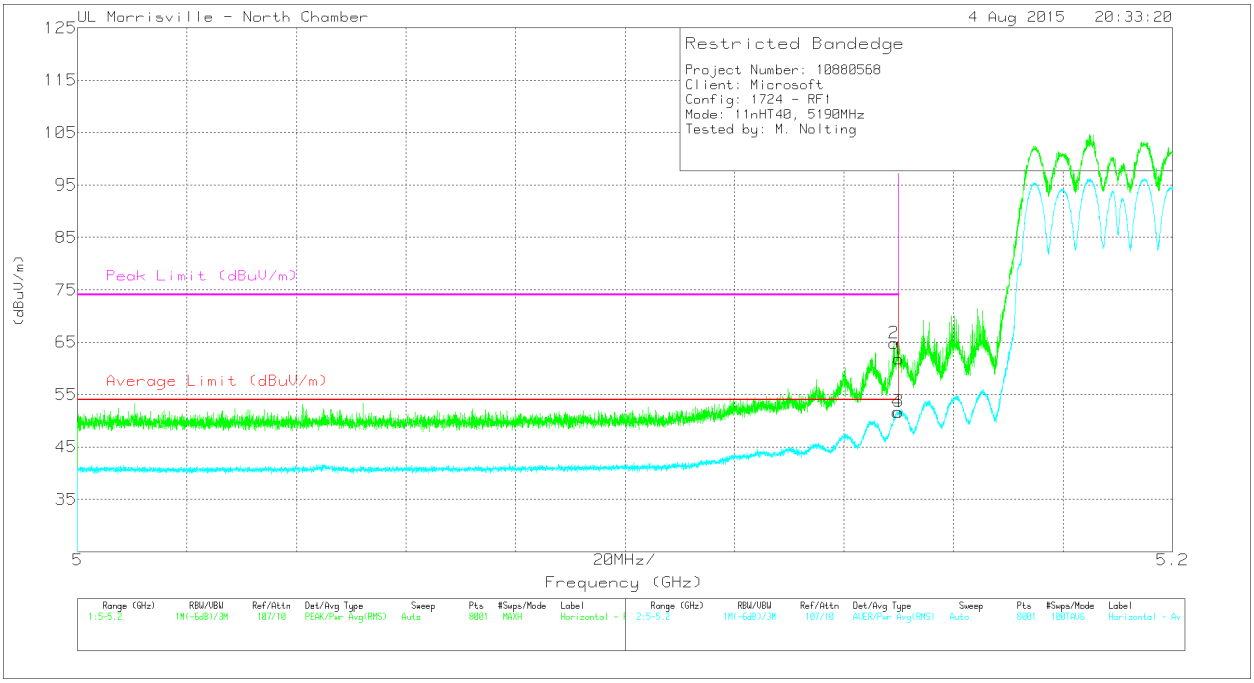
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*5.15	48.96	Pk	34.3	-21.4	61.86	-	-	74	-12.14	8	281	V
2	*5.149	51.84	Pk	34.3	-21.3	64.84	-	-	74	-9.16	8	281	V
3	*5.15	38.82	RMS	34.3	-21.4	51.72	54	-2.28	-	-	8	281	V
4	*5.15	38.79	RMS	34.3	-21.4	51.69	54	-2.31	-	-	8	281	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
RMS - RMS detection

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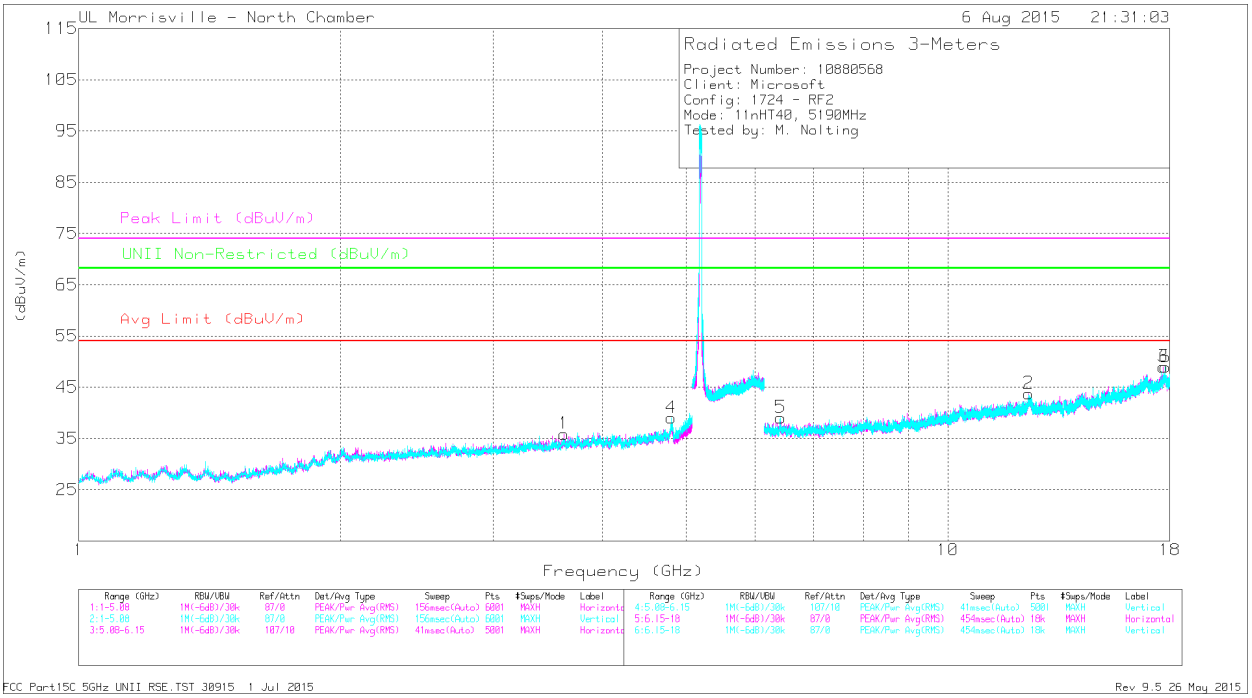
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 3.624	40.85	PK3	33.2	-31.5	42.55	-	-	74	-31.45	-	-	344	383	H
	* 3.617	29.44	ADR	33.2	-31.5	31.14	54	-22.86	-	-	-	-	344	383	H
4	* 4.809	42.39	PK3	34.1	-30.2	46.29	-	-	74	-27.71	-	-	50	181	V
	* 4.806	30.98	ADR	34.1	-30.3	34.78	54	-19.22	-	-	-	-	50	181	V
2	* 12.393	34.86	PK3	39.1	-22.9	51.06	-	-	74	-22.94	-	-	247	258	H
	* 12.393	22.98	ADR	39.1	-22.9	39.18	54	-14.82	-	-	-	-	247	258	H
6	* 17.785	33.26	PK3	41.9	-19.9	55.26	-	-	74	-18.74	-	-	146	151	V
	* 17.769	22.05	ADR	41.9	-20.1	43.85	54	-10.15	-	-	-	-	146	151	V
5	6.427	39.58	PK3	35.5	-29.3	45.78	-	-	-	-	68.2	-22.42	4	201	V
3	17.686	35.55	PK3	41.9	-20.8	56.65	-	-	-	-	68.2	-11.55	152	293	H

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

Pk - Peak detector

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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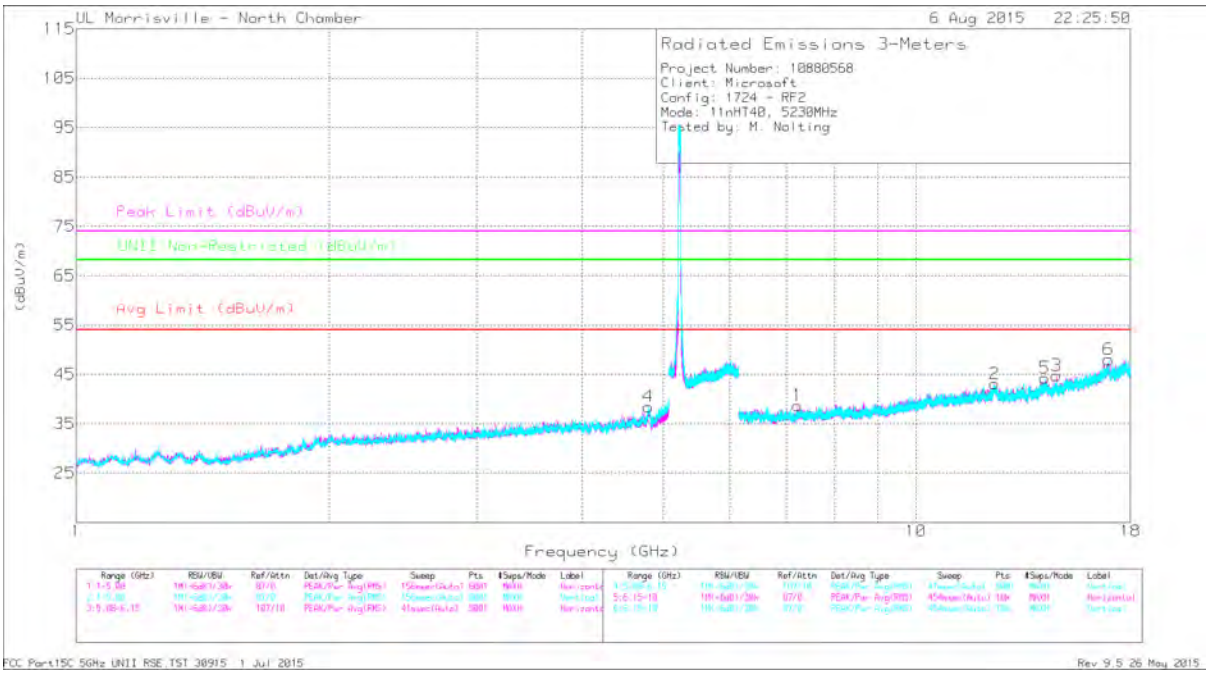
HIGH CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 4.81	42.06	PK3	34.1	-30.2	45.96	-	-	74	-28.04	-	-	17	108	V
	* 4.807	30.84	ADR	34.1	-30.3	34.64	54	-19.36	-	-	-	-	17	108	V
2	* 12.408	34.45	PK3	39.1	-23	50.55	-	-	74	-23.45	-	-	254	343	H
	* 12.408	23.07	ADR	39.1	-23	39.17	54	-14.83	-	-	-	-	254	343	H
1	7.228	37.69	PK3	35.7	-28.1	45.29	-	-	-	-	68.2	-22.91	110	179	H
5	14.241	36.38	PK3	39.4	-24.4	51.38	-	-	-	-	68.2	-16.82	97	300	V
3	14.707	36.83	PK3	39.8	-24.8	51.83	-	-	-	-	68.2	-16.37	137	212	H
6	16.96	35.05	PK3	42.2	-22.2	55.05	-	-	-	-	68.2	-13.15	0	177	V

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

Pk - Peak detector

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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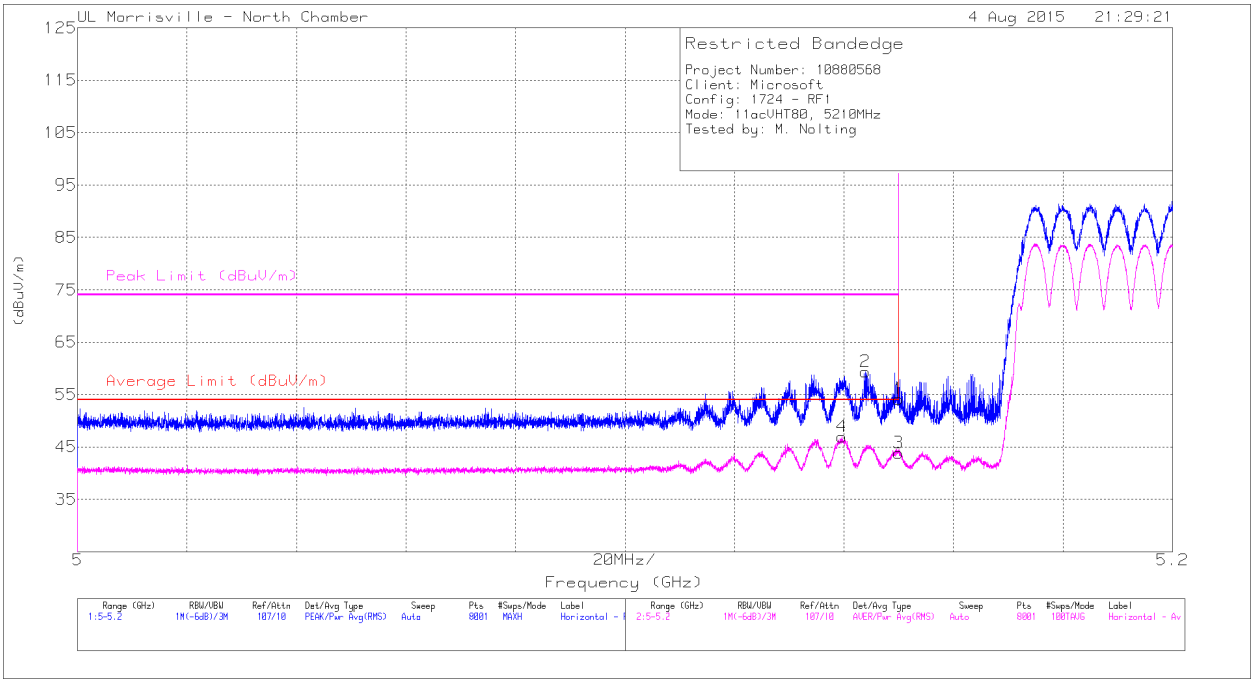
9.2.4. TX ABOVE 1 GHz 802.11ac VHT80 MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	41.28	Pk	34.3	-21.4	54.18	-	-	74	-19.82	261	185	H
2	* 5.144	46.36	Pk	34.3	-21.3	59.36	-	-	74	-14.64	261	185	H
3	* 5.15	30.92	RMS	34.3	-21.4	43.82	54	-10.18	-	-	261	185	H
4	* 5.14	33.93	RMS	34.3	-21.3	46.93	54	-7.07	-	-	261	185	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
RMS - RMS detection

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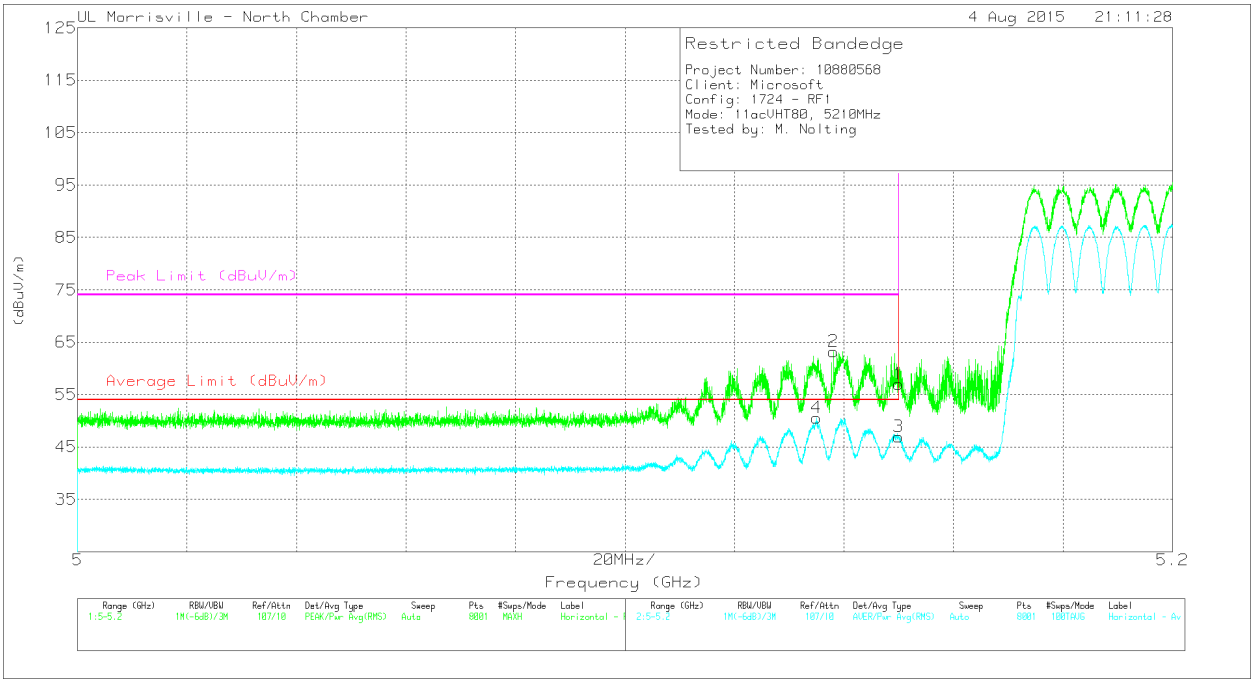
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	44.07	Pk	34.3	-21.4	56.97	-	-	74	-17.03	14	284	V
2	* 5.138	50.22	Pk	34.3	-21.3	63.22	-	-	74	-10.78	14	284	V
3	* 5.15	34.06	RMS	34.3	-21.4	46.96	54	-7.04	-	-	14	284	V
4	* 5.135	37.66	RMS	34.3	-21.4	50.56	54	-3.44	-	-	14	284	V

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

Pk - Peak detector

RMS - RMS detection

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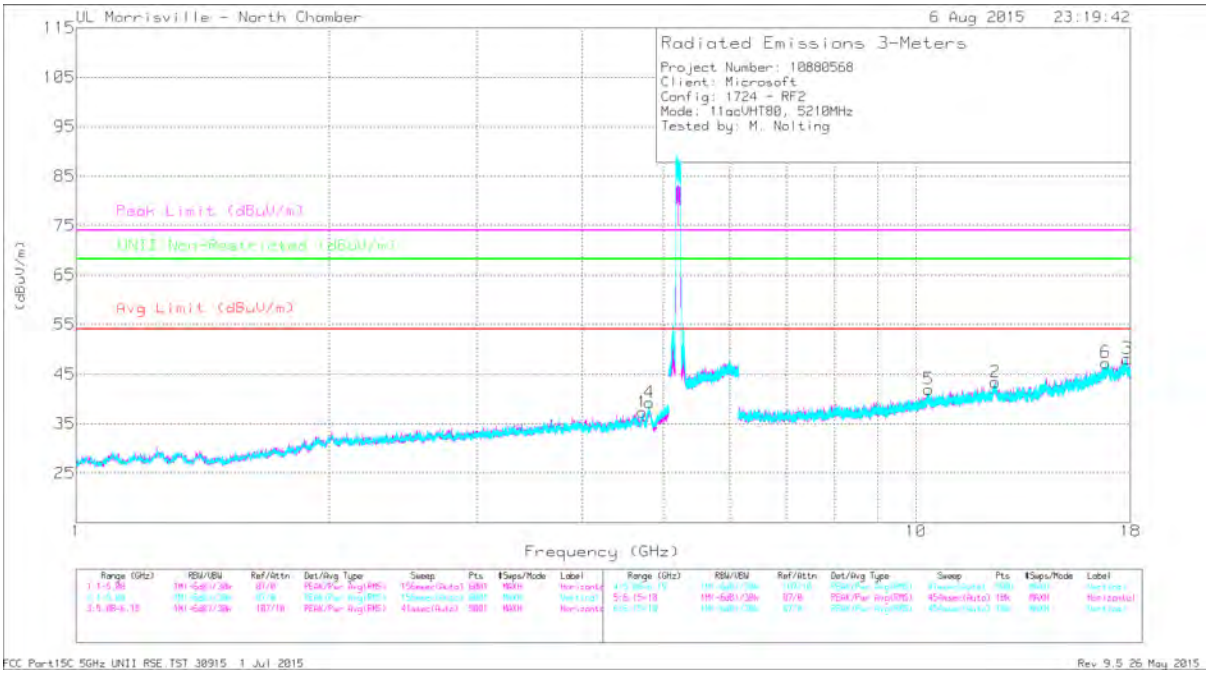
HARMONICS AND SPURIOUS EMISSIONS

MIDDLE CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 4.72	41.65	PK3	34.1	-30.7	45.05	-	-	74	-28.95	-	-	24	228	H
	* 4.728	29.79	ADR	34.1	-30.8	33.09	54	-20.91	-	-	-	-	24	228	H
4	* 4.814	42.01	PK3	34.1	-30.2	45.91	-	-	74	-28.09	-	-	7	171	V
	* 4.81	30.56	ADR	34.1	-30.2	34.46	54	-19.54	-	-	-	-	7	171	V
2	* 12.445	35.19	PK3	39.1	-23.1	51.19	-	-	74	-22.81	-	-	346	241	H
	* 12.44	22.82	ADR	39.1	-23.1	38.82	54	-15.18	-	-	-	-	346	241	H
3	* 17.85	35.16	PK3	41.9	-21.4	55.66	-	-	74	-18.34	-	-	11	243	H
	* 17.852	22.6	ADR	41.9	-21.5	43	54	-11	-	-	-	-	11	243	H
5	10.356	35.03	PK3	37.6	-23.8	48.83	-	-	-	-	68.2	-19.37	67	351	V
6	16.832	34.21	PK3	42.3	-22.1	54.41	-	-	-	-	68.2	-13.79	264	400	V

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

Pk - Peak detector

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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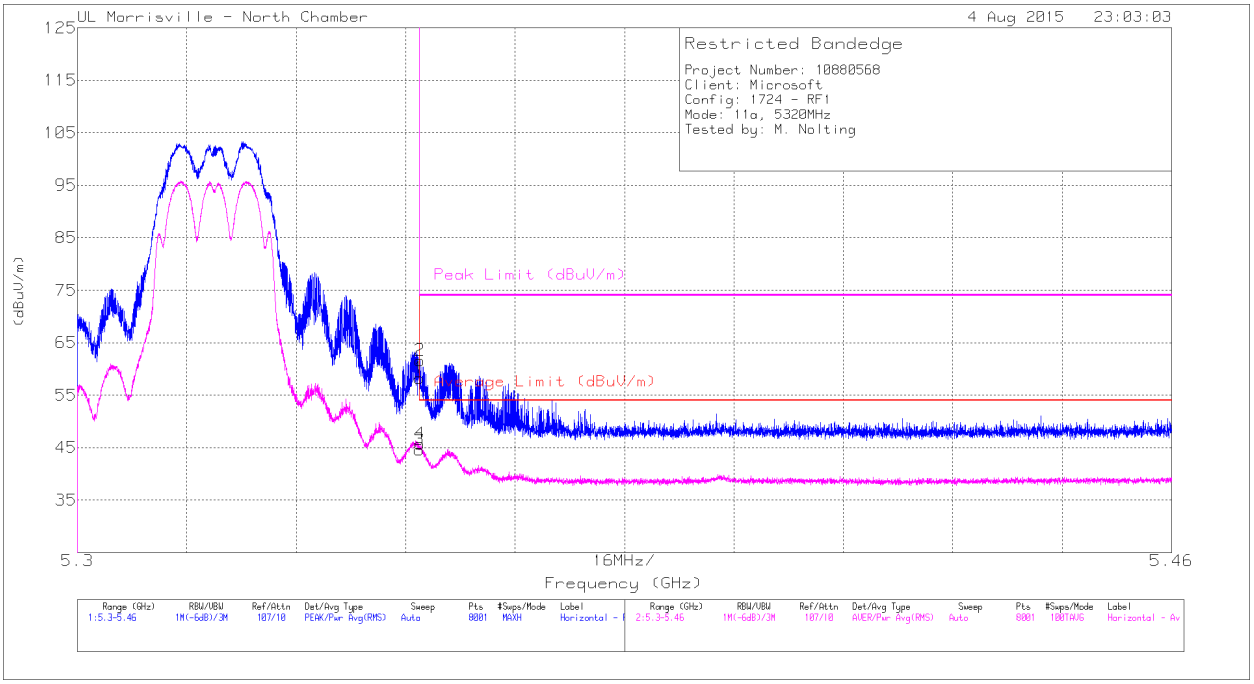
9.2.5. TX ABOVE 1 GHz 802.11a MODE IN THE 5.3 GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DCCF (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	45.31	Pk	34.5	-21.6	-	58.21	-	-	74	-15.79	260	184	H
2	* 5.35	48.67	Pk	34.5	-21.6	-	61.57	-	-	74	-12.43	260	184	H
3	* 5.35	31.67	RMS	34.5	-21.6	0.12	44.69	54	-9.31	-	-	260	184	H
4	* 5.35	32.81	RMS	34.5	-21.6	0.12	45.83	54	-8.17	-	-	260	184	H

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

Pk - Peak detector

RMS - RMS detection

Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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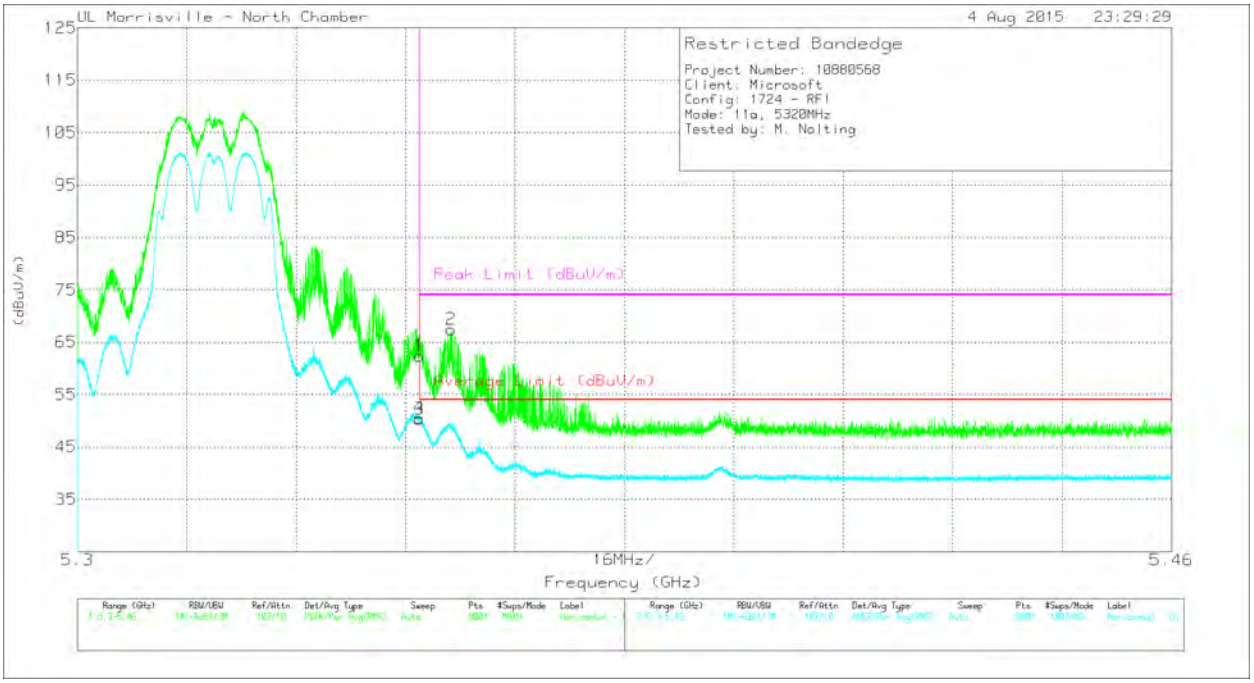
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DCCF (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	49.43	Pk	34.5	-21.6	-	62.33	-	-	74	-11.67	347	281	V
2	* 5.355	54.57	Pk	34.5	-21.6	-	67.47	-	-	74	-6.53	347	281	V
3	* 5.35	37.38	RMS	34.5	-21.6	0.12	50.40	54	-3.60	-	-	347	281	V
4	* 5.35	37.63	RMS	34.5	-21.6	0.12	50.65	54	-3.35	-	-	347	281	V

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

Pk - Peak detector

RMS - RMS detection

Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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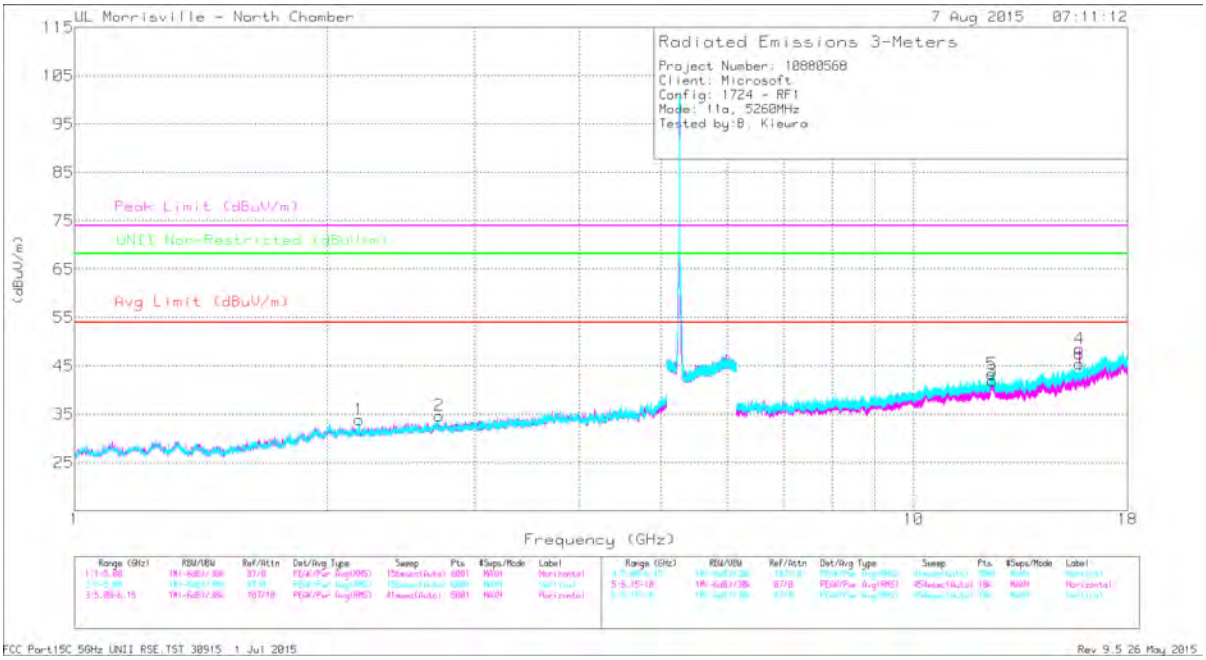
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DCCF (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	* 12.401	34.92	PK3	39.1	-22.9	-	51.12	-	-	74	-22.88	-	-	197	306	H
	* 12.407	23.02	ADR	39.1	-23	-	39.12	54	-14.88	-	-	-	-	197	306	H
4	* 15.768	42.85	PK3	40.8	-23.8	-	59.85	-	-	74	-14.15	-	-	357	203	H
	* 15.778	29.04	ADR	40.8	-23.6	0.12	46.36	54	-7.64	-	-	-	-	357	203	H
1	2.185	44.79	PK3	31.6	-34.4	-	41.99	-	-	-	-	68.2	-26.21	351	225	V
2	* 2.723	42.76	PK3	32.4	-33.1	-	42.06	-	-	74	-31.94	-	-	324	393	V
	* 2.72	30.31	ADR	32.4	-33.1	-	29.61	54	-24.39	-	-	-	-	324	393	V
5	* 12.406	35.17	PK3	39.1	-23	-	51.27	-	-	74	-22.73	-	-	316	257	V
	* 12.4	22.99	ADR	39.1	-22.9	-	39.19	54	-14.81	-	-	-	-	316	257	V
6	* 15.776	43.06	PK3	40.8	-23.7	-	60.16	-	-	74	-13.84	-	-	328	266	V
	* 15.781	28.34	ADR	40.8	-23.6	0.12	45.66	54	-8.34	-	-	-	-	328	266	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average
Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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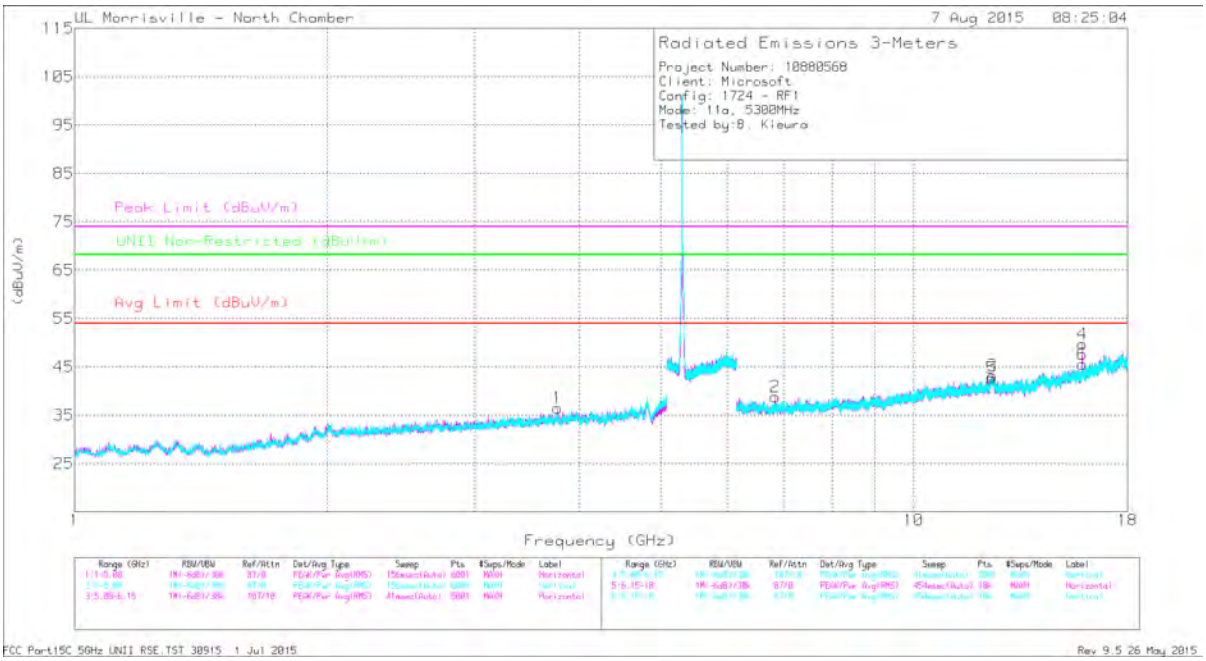
MID CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DCCF (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	* 3.766	41.59	PK3	33.4	-32.3	-	42.69	-	-	74	-31.31	-	-	309	319	H
	* 3.763	30.25	ADR	33.4	-32.3	-	31.35	54	-22.65	-	-	-	-	309	319	H
2	6.861	39.9	PK3	35.6	-29.3	-	46.2	-	-	-	-	68.2	-22	8	281	H
3	* 12.42	34.83	PK3	39.1	-23	-	50.93	-	-	74	-23.07	-	-	300	308	H
	* 12.418	22.96	ADR	39.1	-23	-	39.06	54	-14.94	-	-	-	-	300	308	H
4	* 15.903	41.65	PK3	41	-24.6	-	58.05	-	-	74	-15.95	-	-	337	158	H
	* 15.903	28.79	ADR	41	-24.6	0.12	45.31	54	-8.69	-	-	-	-	337	158	H
5	* 12.404	34.56	PK3	39.1	-23	-	50.66	-	-	74	-23.34	-	-	295	173	V
	* 12.406	23.16	ADR	39.1	-23	-	39.26	54	-14.74	-	-	-	-	295	173	V
6	* 15.897	41.86	PK3	41	-24.5	-	58.36	-	-	74	-15.64	-	-	346	256	V
	* 15.901	28.46	ADR	41	-24.5	0.12	45.08	54	-8.92	-	-	-	-	346	256	V

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

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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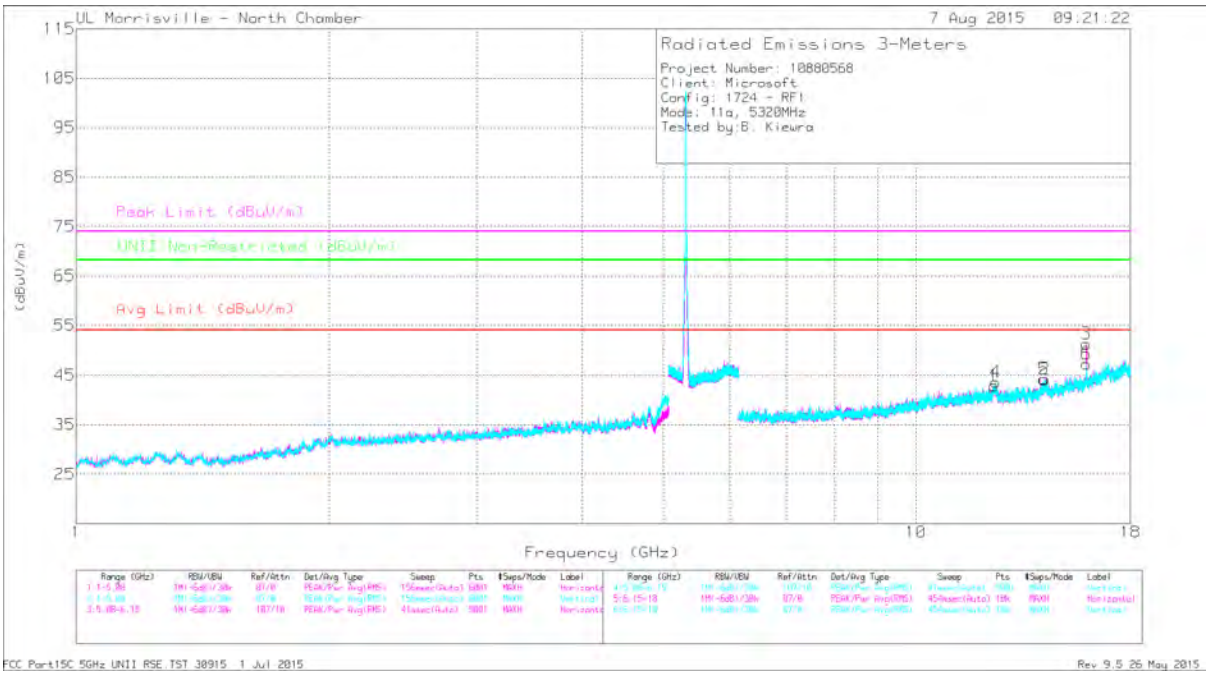
HIGH CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DCCF (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	* 12.38	34.53	PK3	39.1	-22.9	-	50.73	-	-	74	-23.27	-	-	44	133	H
	* 12.383	22.87	ADR	39.1	-22.9	-	39.07	54	-14.93	-	-	-	-	44	133	H
2	14.229	36.32	PK3	39.4	-24.6	-	51.12	-	-	-	-	68.2	-17.08	247	349	H
3	* 15.957	43.81	PK3	41.1	-24.6	-	60.31	-	-	74	-13.69	-	-	11	213	H
	* 15.962	30.52	ADR	41.1	-24.6	0.12	47.14	54	-6.86	-	-	-	-	11	213	H
4	* 12.448	34.68	PK3	39.1	-23	-	50.78	-	-	74	-23.22	-	-	337	189	V
	* 12.446	22.72	ADR	39.1	-23.1	-	38.72	54	-15.28	-	-	-	-	337	189	V
6	* 15.956	43.54	PK3	41.1	-24.6	-	60.04	-	-	74	-13.96	-	-	0	219	V
	* 15.959	29.12	ADR	41.1	-24.6	0.12	45.74	54	-8.26	-	-	-	-	0	219	V
5	14.21	36.07	PK3	39.4	-24.7	-	50.77	-	-	-	-	68.2	-17.43	237	160	V

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

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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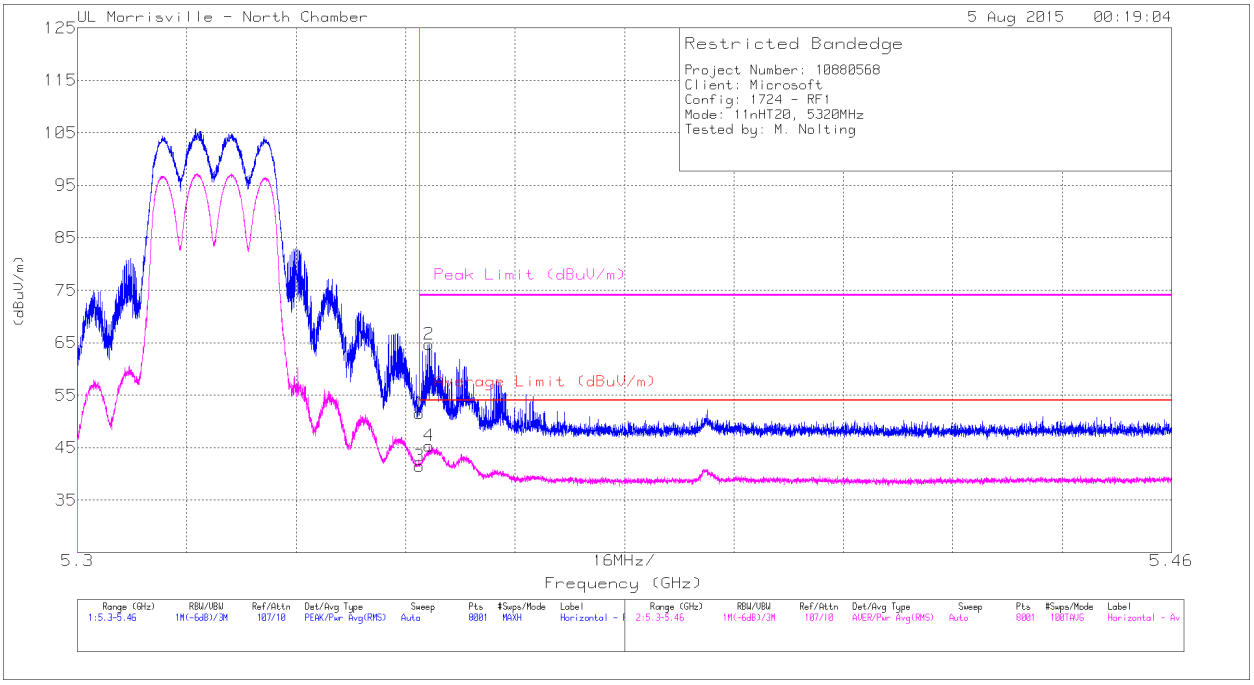
9.2.6. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.3 GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	38.66	Pk	34.5	-21.6	51.56	-	-	74	-22.44	260	185	H
2	* 5.351	51.84	Pk	34.5	-21.6	64.74	-	-	74	-9.26	260	185	H
3	* 5.35	28.6	RMS	34.5	-21.6	41.5	54	-12.5	-	-	260	185	H
4	* 5.351	32.37	RMS	34.5	-21.6	45.27	54	-8.73	-	-	260	185	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
RMS - RMS detection

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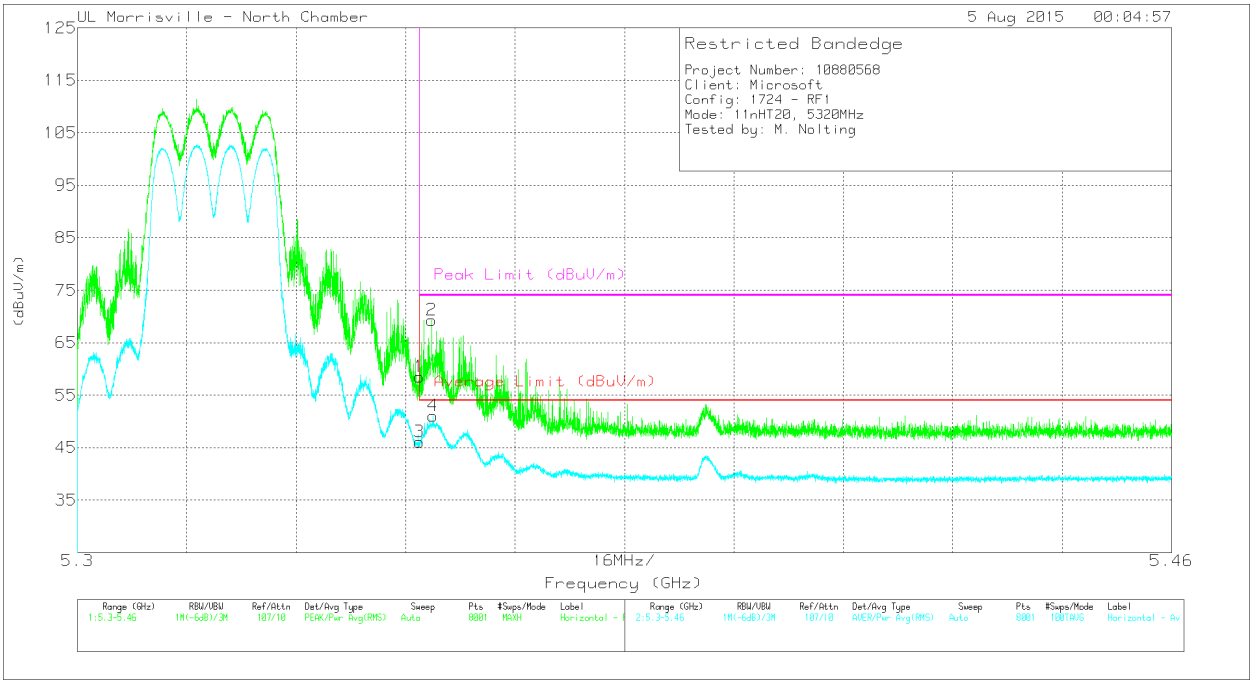
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	45.63	Pk	34.5	-21.6	58.53	-	-	74	-15.47	350	280	V
2	* 5.352	56.35	Pk	34.5	-21.6	69.25	-	-	74	-4.75	350	280	V
3	* 5.35	33.13	RMS	34.5	-21.6	46.03	54	-7.97	-	-	350	280	V
4	* 5.352	38.12	RMS	34.5	-21.6	51.02	54	-2.98	-	-	350	280	V

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

Pk - Peak detector

RMS - RMS detection

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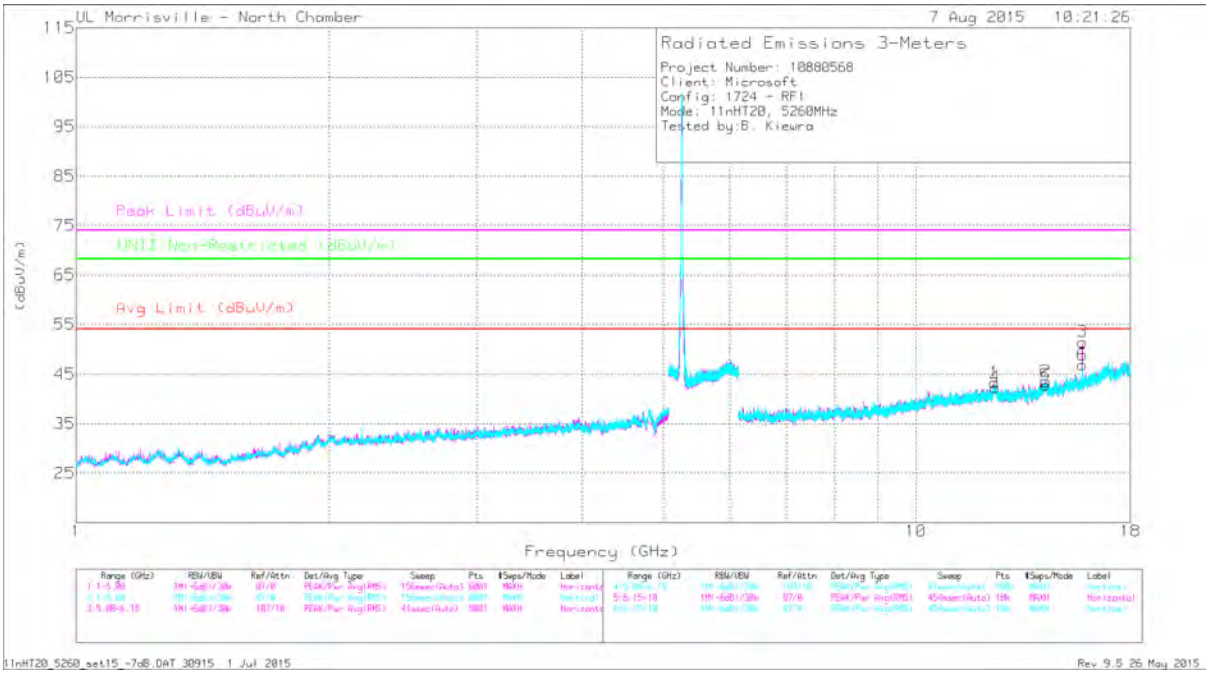
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 12.41	34.42	PK3	39.1	-23.1	50.42	-	-	74	-23.58	-	-	272	113	H
	* 12.409	23.08	ADR	39.1	-23	39.18	54	-14.82	-	-	-	-	272	113	H
2	14.283	35.75	PK3	39.4	-24	51.15	-	-	-	-	68.2	-17.05	219	121	H
3	* 15.79	44.52	PK3	40.9	-23.6	61.82	-	-	74	-12.18	-	-	337	175	H
	* 15.781	29.97	ADR	40.8	-23.6	47.17	54	-6.83	-	-	-	-	337	175	H
4	* 12.445	34.71	PK3	39.1	-23.1	50.71	-	-	74	-23.29	-	-	272	315	V
	* 12.413	22.92	ADR	39.1	-23.1	38.92	54	-15.08	-	-	-	-	272	315	V
5	14.249	35.62	PK3	39.4	-24.2	50.82	-	-	-	-	68.2	-17.38	87	193	V
6	* 15.769	43.15	PK3	40.8	-23.9	60.05	-	-	74	-13.95	-	-	340	254	V
	* 15.781	29.2	ADR	40.8	-23.6	46.4	54	-7.6	-	-	-	-	340	254	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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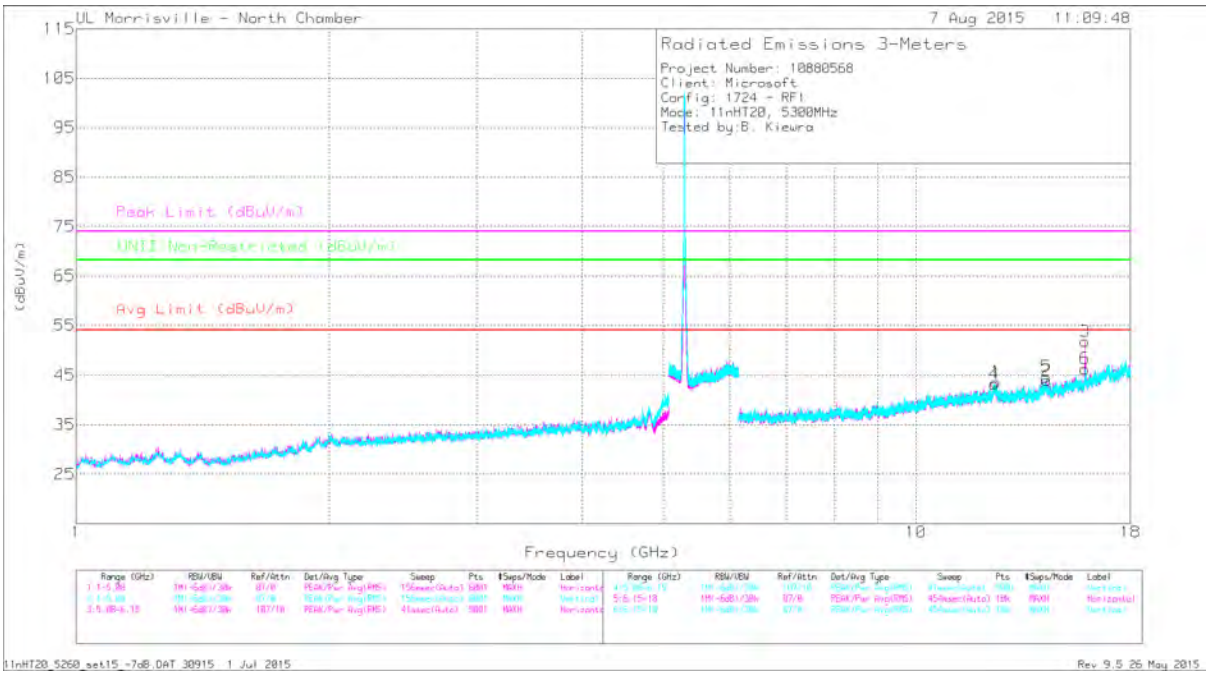
MID CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 12.465	34.19	PK3	39.1	-23.2	50.09	-	-	74	-23.91	-	-	333	361	H
	* 12.425	22.82	ADR	39.1	-23	38.92	54	-15.08	-	-	-	-	333	361	H
3	* 15.889	46.73	PK3	41	-24.4	63.33	-	-	74	-10.67	-	-	339	149	H
	* 15.899	31.74	ADR	41	-24.5	48.24	54	-5.76	-	-	-	-	339	149	H
4	* 12.419	34.2	PK3	39.1	-23	50.3	-	-	74	-23.7	-	-	0	360	V
	* 12.386	22.77	ADR	39.1	-22.9	38.97	54	-15.03	-	-	-	-	0	360	V
6	* 15.889	44.49	PK3	41	-24.4	61.09	-	-	74	-12.91	-	-	13	237	V
	* 15.903	29.92	ADR	41	-24.5	46.42	54	-7.58	-	-	-	-	13	237	V
5	14.283	36.49	PK3	39.4	-24	51.89	-	-	-	-	68.2	-16.31	306	281	V
2	14.324	35.22	PK3	39.5	-23.9	50.82	-	-	-	-	68.2	-17.38	299	297	H

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

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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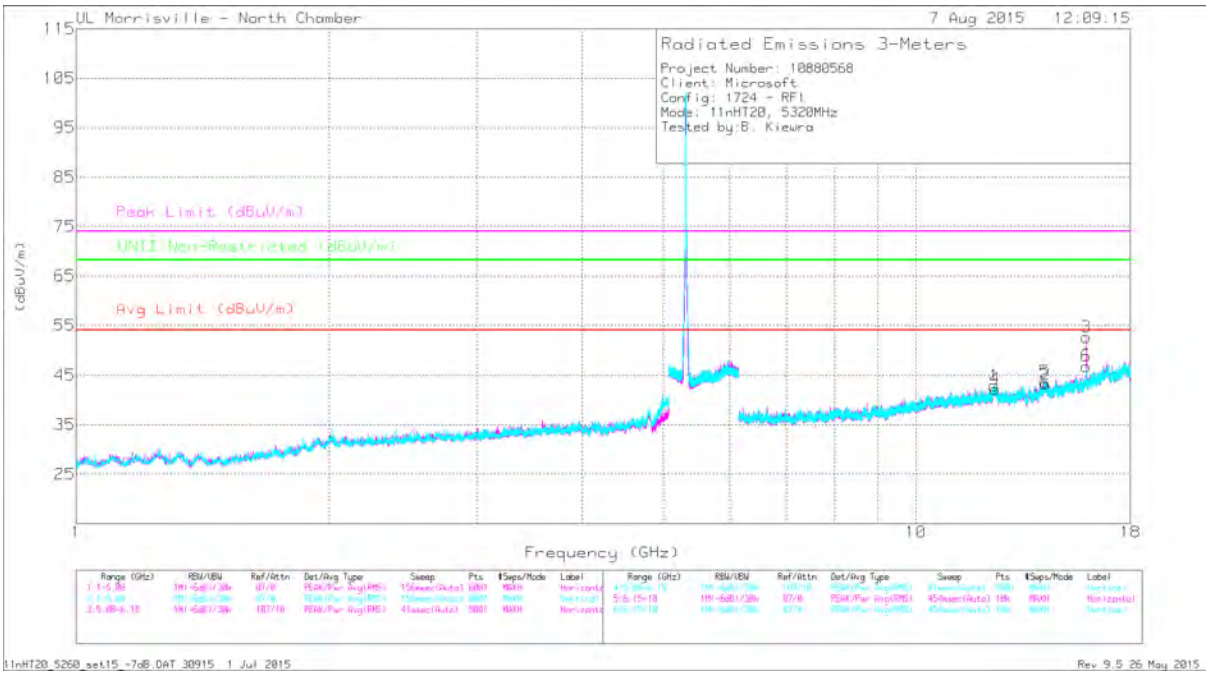
HIGH CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 12.409	35.16	PK3	39.1	-23	51.26	-	-	74	-22.74	-	-	166	231	H
	* 12.41	23.08	ADR	39.1	-23.1	39.08	54	-14.92	-	-	-	-	166	231	H
3	* 15.95	46.1	PK3	41.1	-24.6	62.6	-	-	74	-11.4	-	-	350	195	H
	* 15.959	32.47	ADR	41.1	-24.6	48.97	54	-5.03	-	-	-	-	350	195	H
4	* 12.416	34.83	PK3	39.1	-23.1	50.83	-	-	74	-23.17	-	-	307	375	V
	* 12.413	22.91	ADR	39.1	-23.1	38.91	54	-15.09	-	-	-	-	307	375	V
6	* 15.955	43.08	PK3	41.1	-24.6	59.58	-	-	74	-14.42	-	-	345	265	V
	* 15.961	29.35	ADR	41.1	-24.6	45.85	54	-8.15	-	-	-	-	345	265	V
5	14.257	36.57	PK3	39.4	-24	51.97	-	-	-	-	68.2	-16.23	319	260	V
2	14.259	36.01	PK3	39.4	-24	51.41	-	-	-	-	68.2	-16.79	84	120	H

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

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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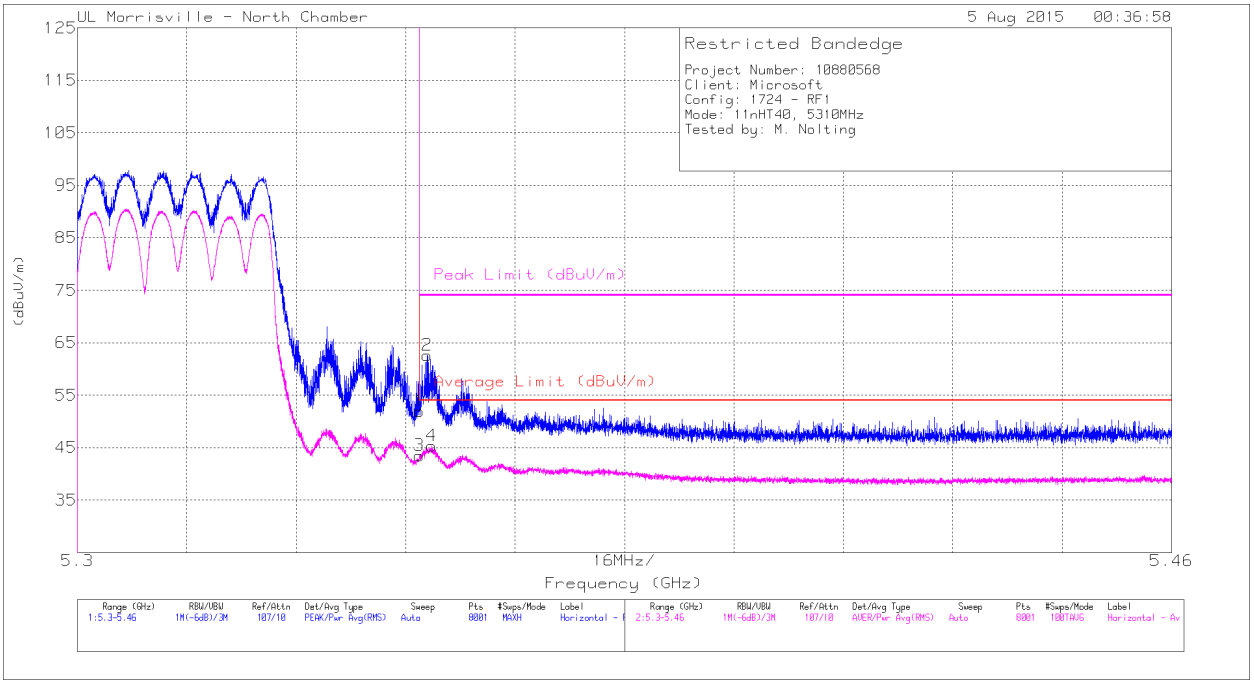
9.2.7. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.3 GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	38.96	Pk	34.5	-21.6	51.86	-	-	74	-22.14	259	193	H
2	* 5.351	49.7	Pk	34.5	-21.6	62.6	-	-	74	-11.4	259	193	H
3	* 5.35	30.55	RMS	34.5	-21.6	43.45	54	-10.55	-	-	259	193	H
4	* 5.352	32.41	RMS	34.5	-21.6	45.31	54	-8.69	-	-	259	193	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
RMS - RMS detection

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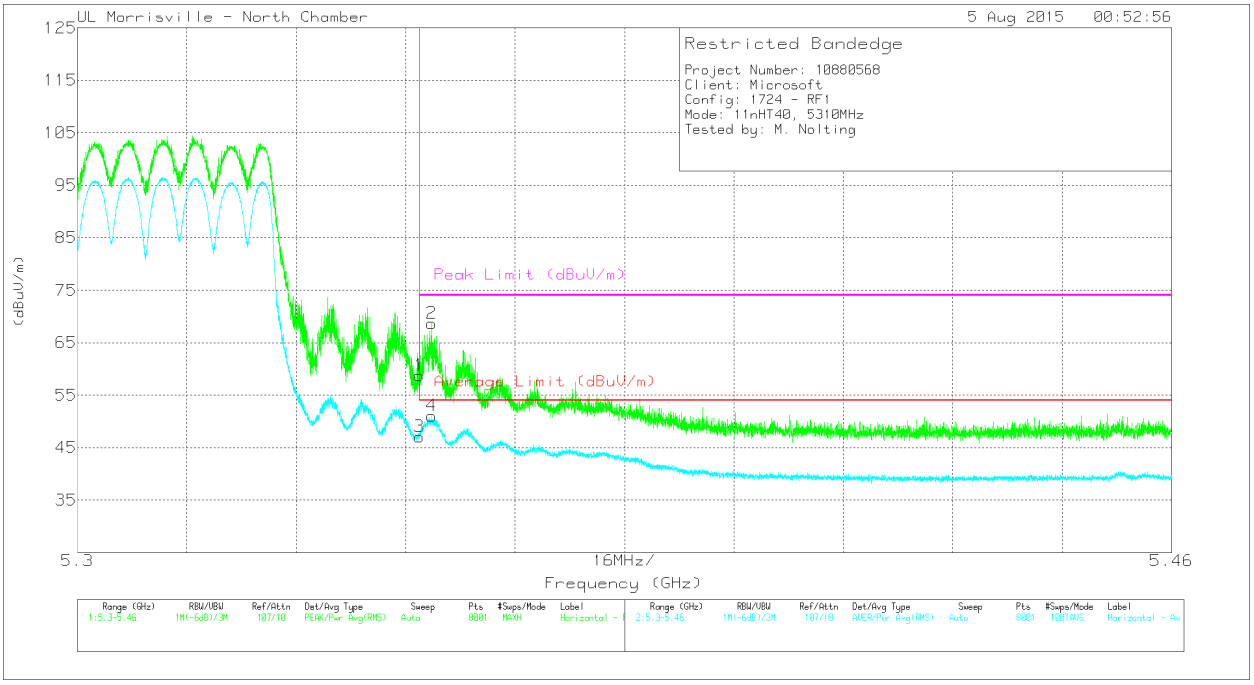
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	45.86	Pk	34.5	-21.6	58.76	-	-	74	-15.24	352	280	V
2	* 5.352	55.78	Pk	34.5	-21.6	68.68	-	-	74	-5.32	352	280	V
3	* 5.35	34.21	RMS	34.5	-21.6	47.11	54	-6.89	-	-	352	280	V
4	* 5.352	38.1	RMS	34.5	-21.6	51	54	-3	-	-	352	280	V

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

Pk - Peak detector

RMS - RMS detection

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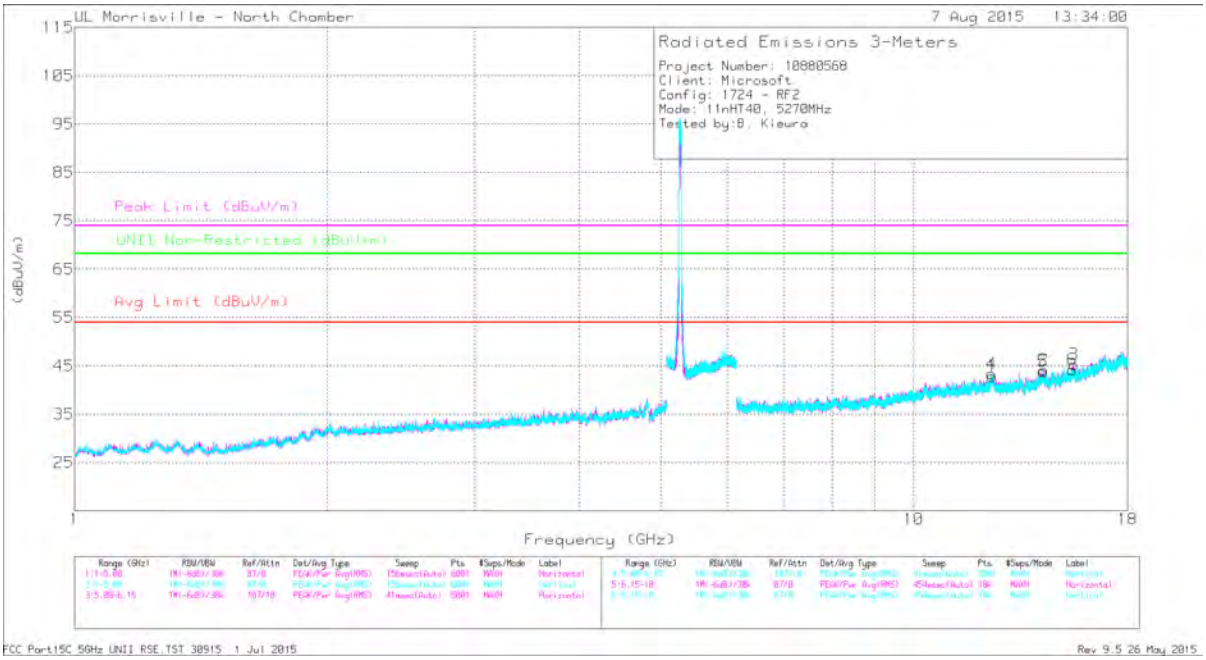
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 12.392	34.39	PK3	39.1	-22.9	50.59	-	-	74	-23.41	-	-	14	209	H
	* 12.408	23.06	ADR	39.1	-23	39.16	54	-14.84	-	-	-	-	14	209	H
2	14.29	35.87	PK3	39.4	-23.7	51.57	-	-	-	-	68.2	-16.63	243	208	H
3	* 15.52	35.66	PK3	40.4	-23.7	52.36	-	-	74	-21.64	-	-	76	113	H
	* 15.535	23.65	ADR	40.5	-23.9	40.25	54	-13.75	-	-	-	-	76	113	H
4	* 12.387	34.44	PK3	39.1	-22.9	50.64	-	-	74	-23.36	-	-	44	222	V
	* 12.414	22.98	ADR	39.1	-23.1	38.98	54	-15.02	-	-	-	-	44	222	V
5	14.268	35.28	PK3	39.4	-24	50.68	-	-	-	-	68.2	-17.52	349	297	V
6	* 15.469	34.53	PK3	40.4	-23.2	51.73	-	-	74	-22.27	-	-	242	344	V
	* 15.493	22.91	ADR	40.4	-23.3	40.01	54	-13.99	-	-	-	-	242	344	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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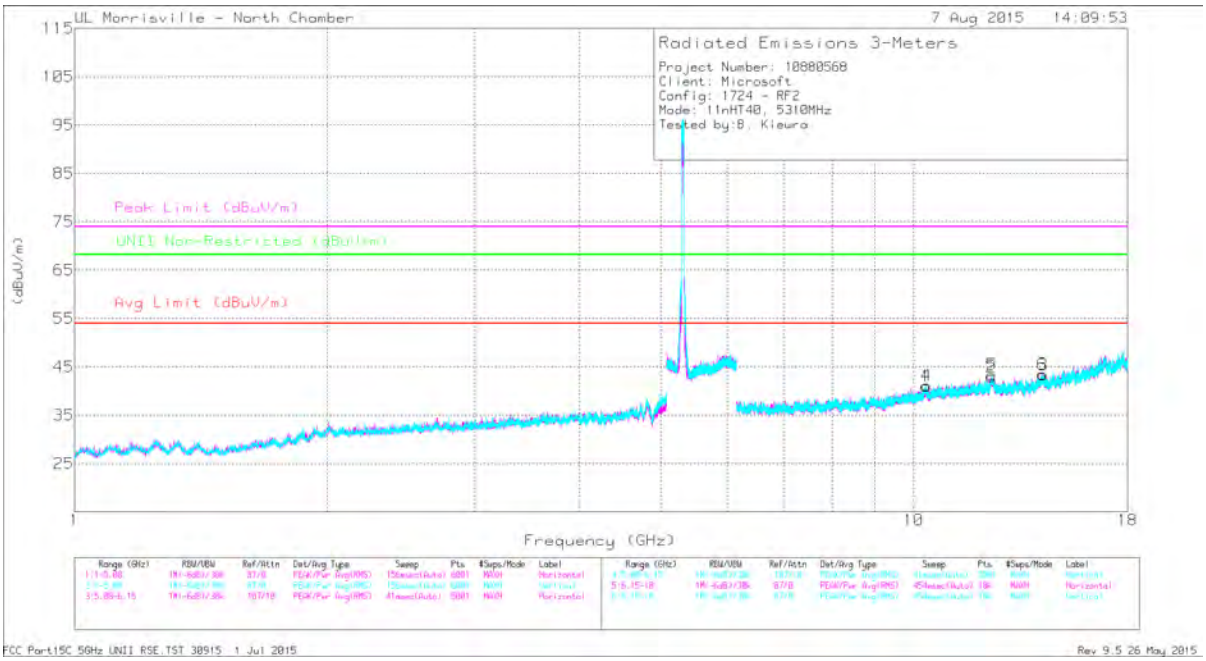
HIGH CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	10.355	34.91	PK3	37.6	-23.8	48.71	-	-	-	-	68.2	-19.49	13	232	H
2	* 12.382	34.84	PK3	39.1	-22.9	51.04	-	-	74	-22.96	-	-	307	136	H
	* 12.403	22.92	ADR	39.1	-22.9	39.12	54	-14.88	-	-	-	-	307	136	H
3	14.283	35.07	PK3	39.4	-24	50.47	-	-	-	-	68.2	-17.73	306	163	H
4	10.367	35.07	PK3	37.6	-24	48.67	-	-	-	-	68.2	-19.53	348	135	V
5	* 12.417	34.52	PK3	39.1	-23.1	50.52	-	-	74	-23.48	-	-	112	111	V
	* 12.409	23.02	ADR	39.1	-23	39.12	54	-14.88	-	-	-	-	112	111	V
6	14.251	36.79	PK3	39.4	-24.1	52.09	-	-	-	-	68.2	-16.11	117	125	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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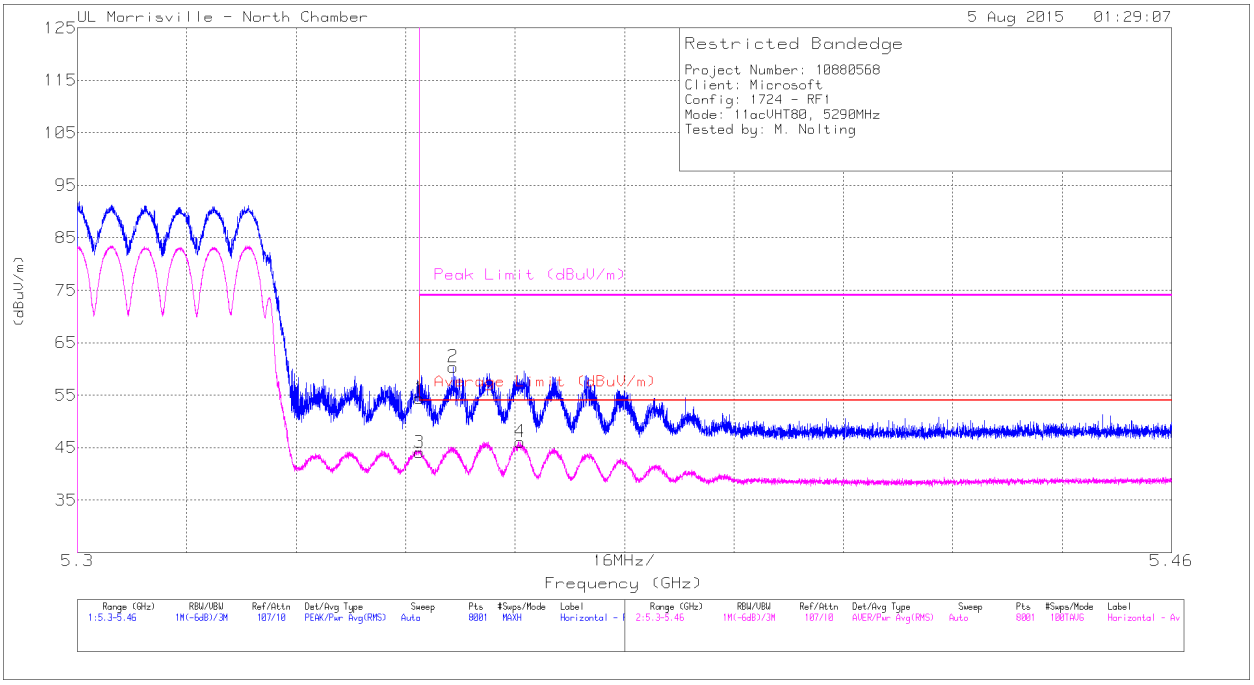
9.2.8. TX ABOVE 1 GHz 802.11ac VHT80 MODE IN THE 5.3 GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	41.5	Pk	34.5	-21.6	54.4	-	-	74	-19.6	263	184	H
2	* 5.355	47.51	Pk	34.5	-21.6	60.41	-	-	74	-13.59	263	184	H
3	* 5.35	31.19	RMS	34.5	-21.6	44.09	54	-9.91	-	-	263	184	H
4	* 5.365	33.23	RMS	34.5	-21.6	46.13	54	-7.87	-	-	263	184	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
RMS - RMS detection

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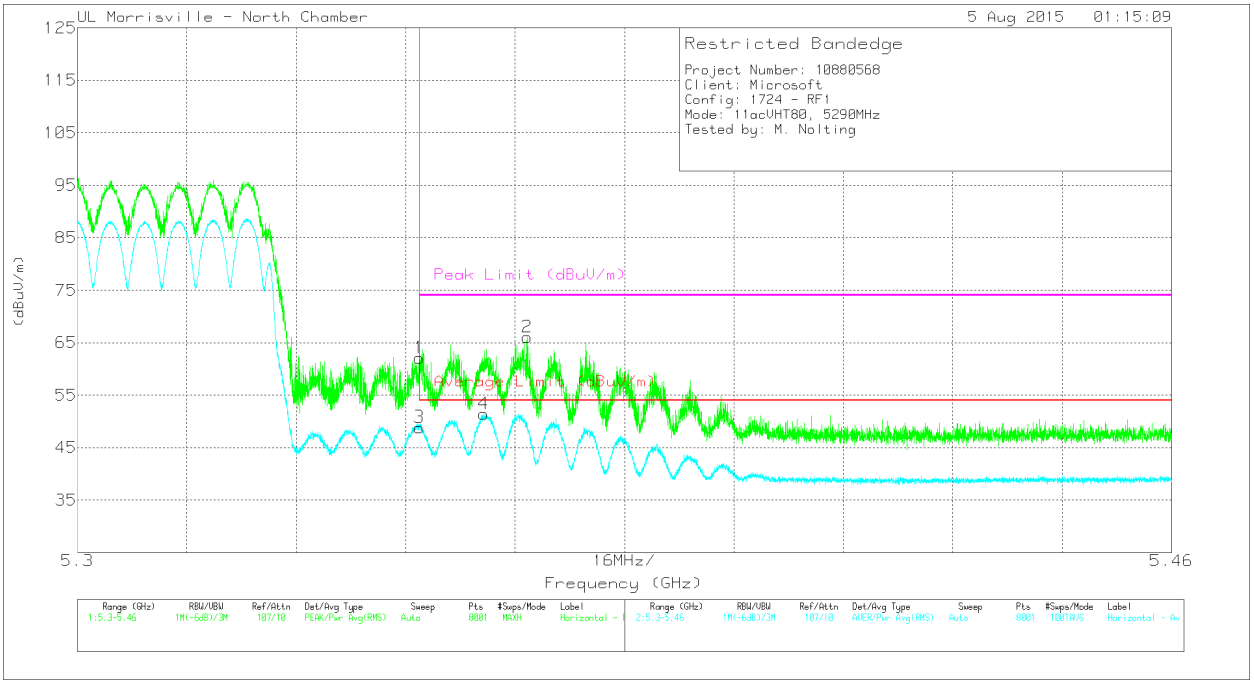
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	49.24	Pk	34.5	-21.6	62.14	-	-	74	-11.86	343	281	V
2	* 5.366	53.12	Pk	34.5	-21.6	66.02	-	-	74	-7.98	343	281	V
3	* 5.35	35.96	RMS	34.5	-21.6	48.86	54	-5.14	-	-	343	281	V
4	* 5.359	38.51	RMS	34.5	-21.6	51.41	54	-2.59	-	-	343	281	V

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

Pk - Peak detector

RMS - RMS detection

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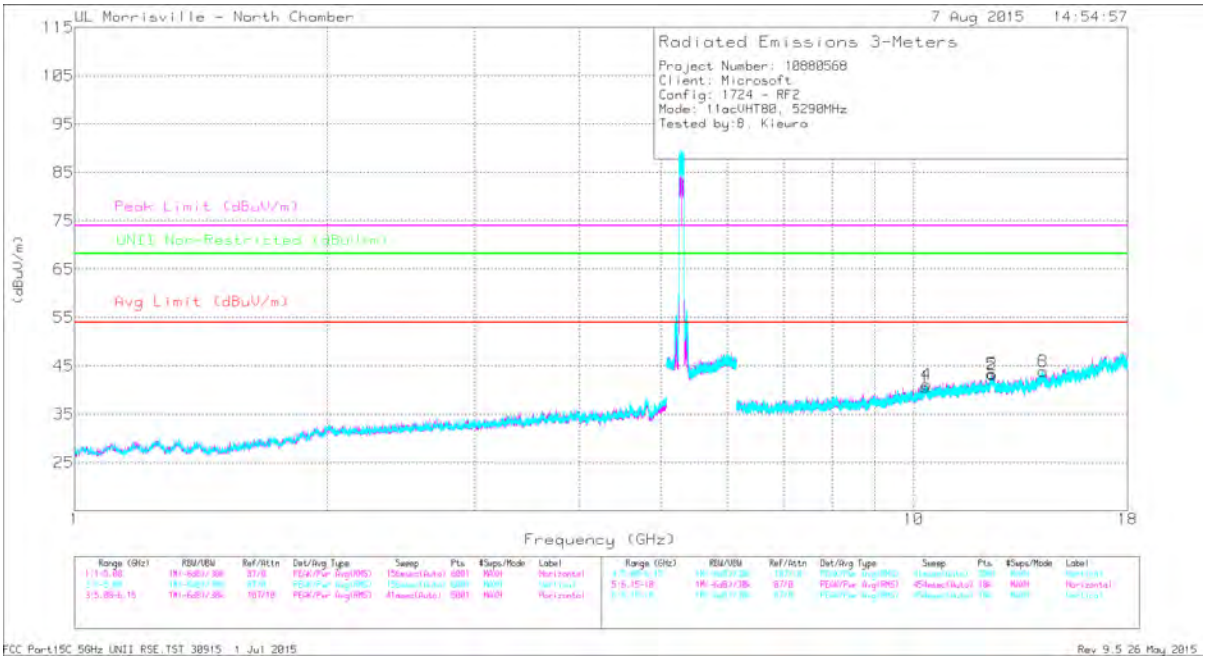
HARMONICS AND SPURIOUS EMISSIONS



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	10.324	34.87	PK3	37.6	-23.7	48.77	-	-	-	-	68.2	-19.43	0	334	H
2	* 12.422	35.18	PK3	39.1	-23	51.28	-	-	74	-22.72	-	-	36	205	H
	* 12.408	22.94	ADR	39.1	-23	39.04	54	-14.96	-	-	-	-	36	205	H
3	14.262	36.22	PK3	39.4	-24	51.62	-	-	-	-	68.2	-16.58	55	143	H
4	10.346	35.05	PK3	37.6	-23.9	48.75	-	-	-	-	68.2	-19.45	325	140	V
5	* 12.374	35.11	PK3	39	-22.9	51.21	-	-	74	-22.79	-	-	120	195	V
	* 12.408	22.88	ADR	39.1	-23	38.98	54	-15.02	-	-	-	-	120	195	V
6	14.241	35.59	PK3	39.4	-24.4	50.59	-	-	-	-	68.2	-17.61	176	291	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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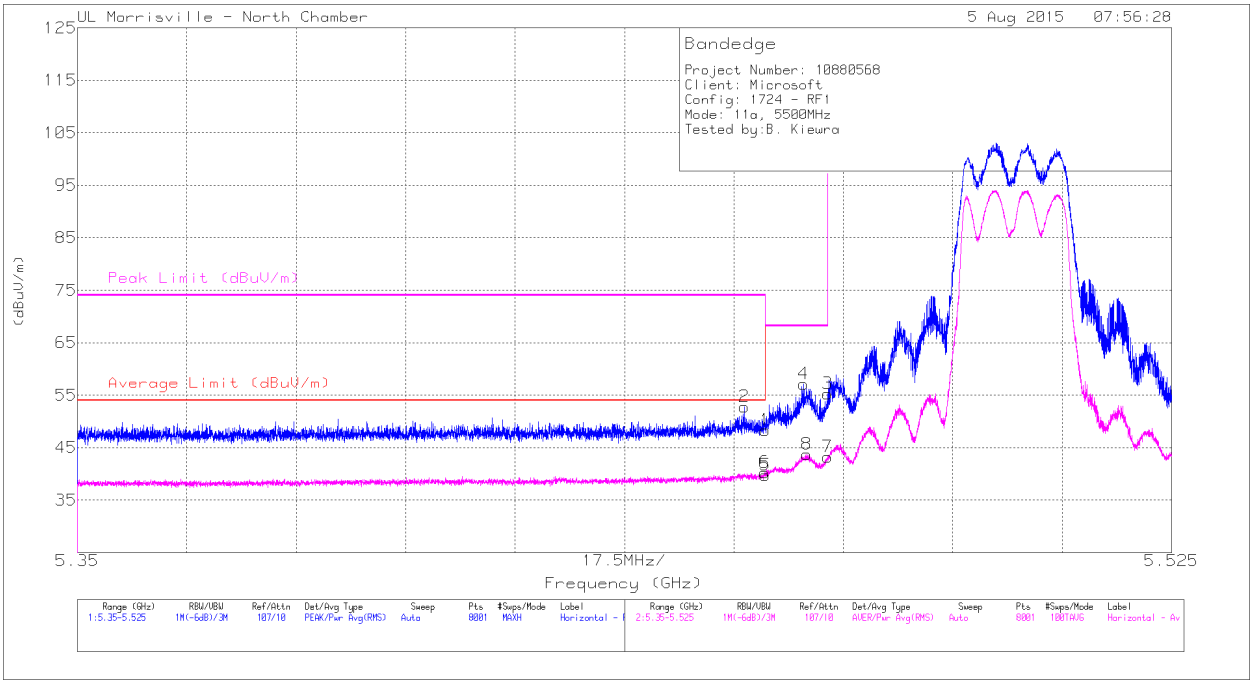
9.2.9. TX ABOVE 1 GHz 802.11a MODE IN THE 5.6 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DCCF (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	35.54	Pk	34.5	-21.7	-	48.34	-	-	74	-25.66	253	270	H
2	* 5.457	40	Pk	34.5	-21.7	-	52.8	-	-	74	-21.2	253	270	H
3	5.47	42.45	Pk	34.5	-21.7	-	55.25	-	-	68.2	-12.95	253	270	H
4	5.466	44.3	Pk	34.5	-21.7	-	57.1	-	-	68.2	-11.1	253	270	H
5	* 5.46	26.97	RMS	34.5	-21.7	0.12	39.89	54	-14.11	-	-	253	270	H
6	* 5.46	27.48	RMS	34.5	-21.7	0.12	40.40	54	-13.60	-	-	253	270	H
7	5.47	30.38	RMS	34.5	-21.7	0.12	43.30	-	-	-	-	253	270	H
8	5.467	30.86	RMS	34.5	-21.7	0.12	43.78	-	-	-	-	253	270	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
RMS - RMS detection
Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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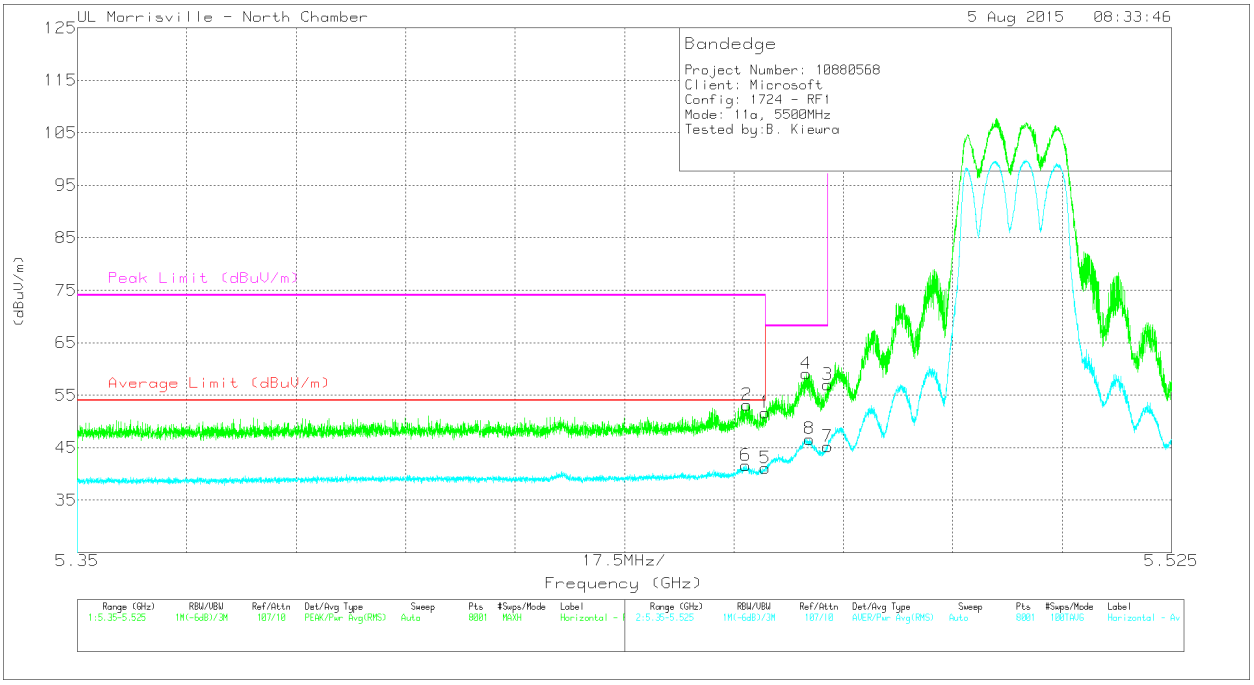
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DCCF (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	38.83	Pk	34.5	-21.7	-	51.63	-	-	74	-22.37	30	314	V
2	* 5.457	40.39	Pk	34.5	-21.7	-	53.19	-	-	74	-20.81	30	314	V
3	5.47	44.23	Pk	34.5	-21.7	-	57.03	-	-	68.2	-11.17	30	314	V
4	5.467	46.25	Pk	34.5	-21.7	-	59.05	-	-	68.2	-9.15	30	314	V
5	* 5.46	28.29	RMS	34.5	-21.7	0.12	41.21	54	-12.79	-	-	30	314	V
6	* 5.457	28.79	RMS	34.5	-21.7	0.12	41.71	54	-12.29	-	-	30	314	V
7	5.47	32.43	RMS	34.5	-21.7	0.12	45.35	-	-	-	-	30	314	V
8	5.467	33.83	RMS	34.5	-21.7	0.12	46.75	-	-	-	-	30	314	V

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

Pk - Peak detector

RMS - RMS detection

Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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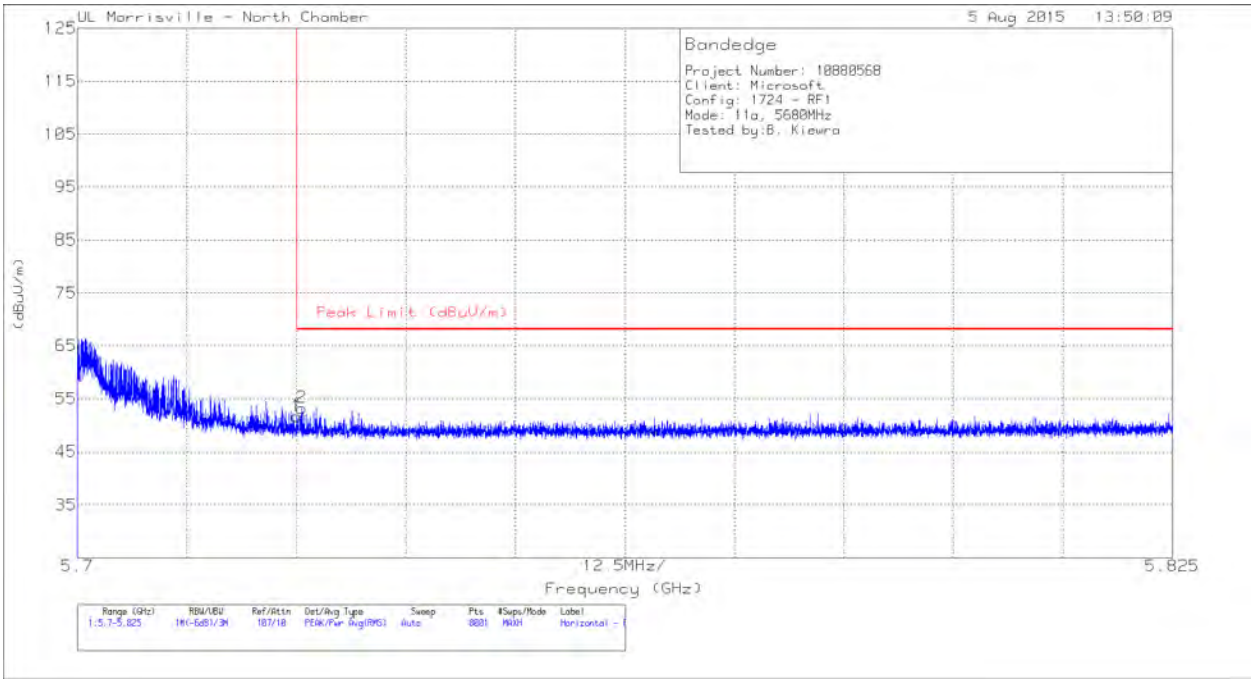
AUTHORIZED BANDEDGE (HIGH CHANNEL 136)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	38.5	Pk	34.7	-21.5	51.7	68.2	-16.5	166	198	H
2	5.726	40.13	Pk	34.7	-21.5	53.33	68.2	-14.87	166	198	H

Pk - Peak detector

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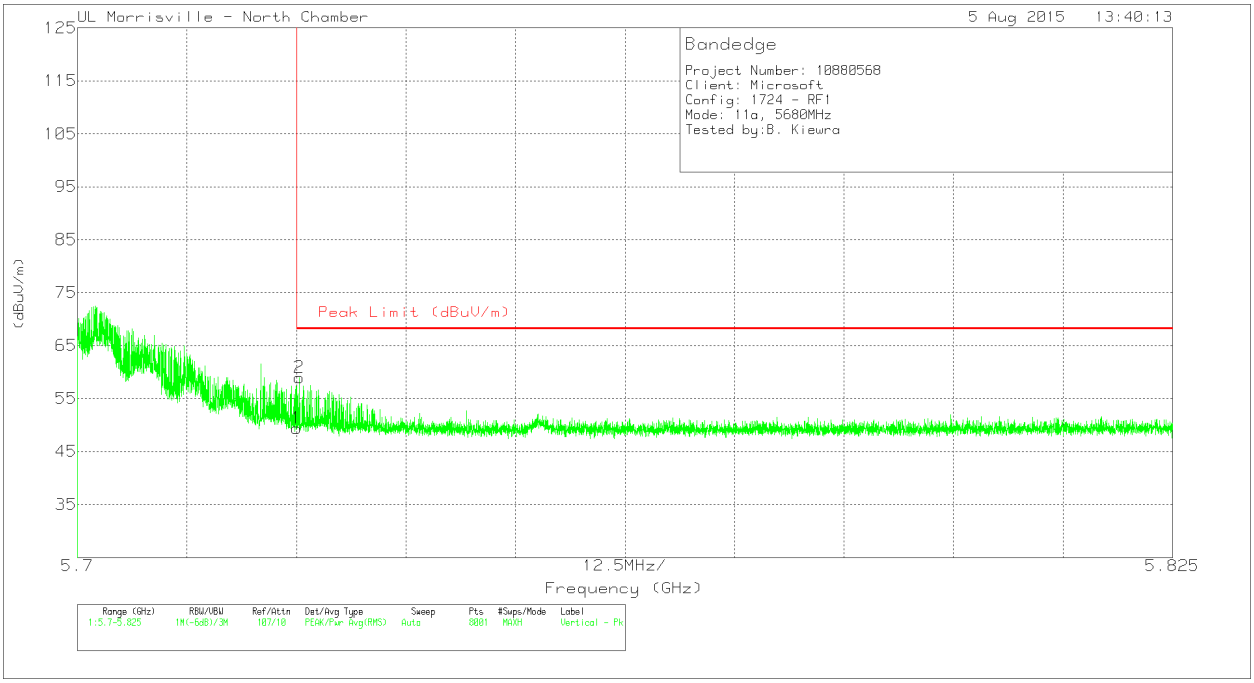
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	36.21	Pk	34.7	-21.5	49.41	68.2	-18.79	18	257	V
2	5.725	45.71	Pk	34.7	-21.5	58.91	68.2	-9.29	18	257	V

Pk - Peak detector

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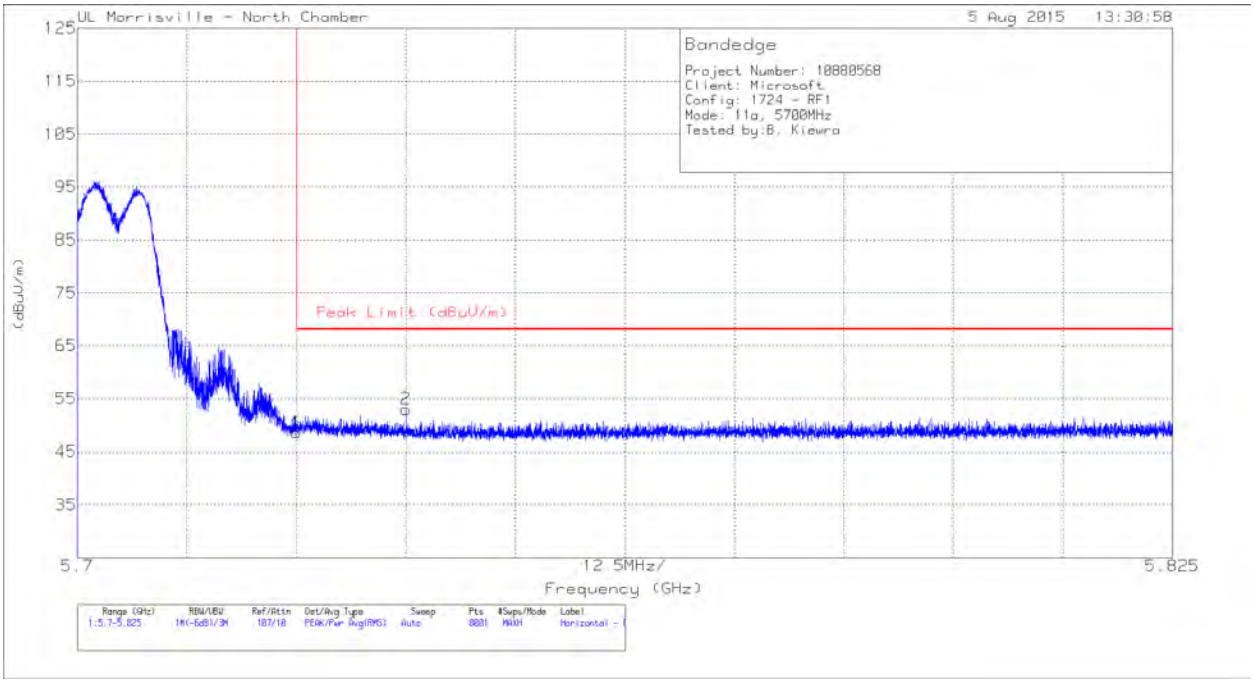
AUTHORIZED BANDEDGE (HIGH CHANNEL 140)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	35.45	Pk	34.7	-21.5	48.65	68.2	-19.55	266	239	H
2	5.738	39.93	Pk	34.7	-21.6	53.03	68.2	-15.17	266	239	H

Pk - Peak detector

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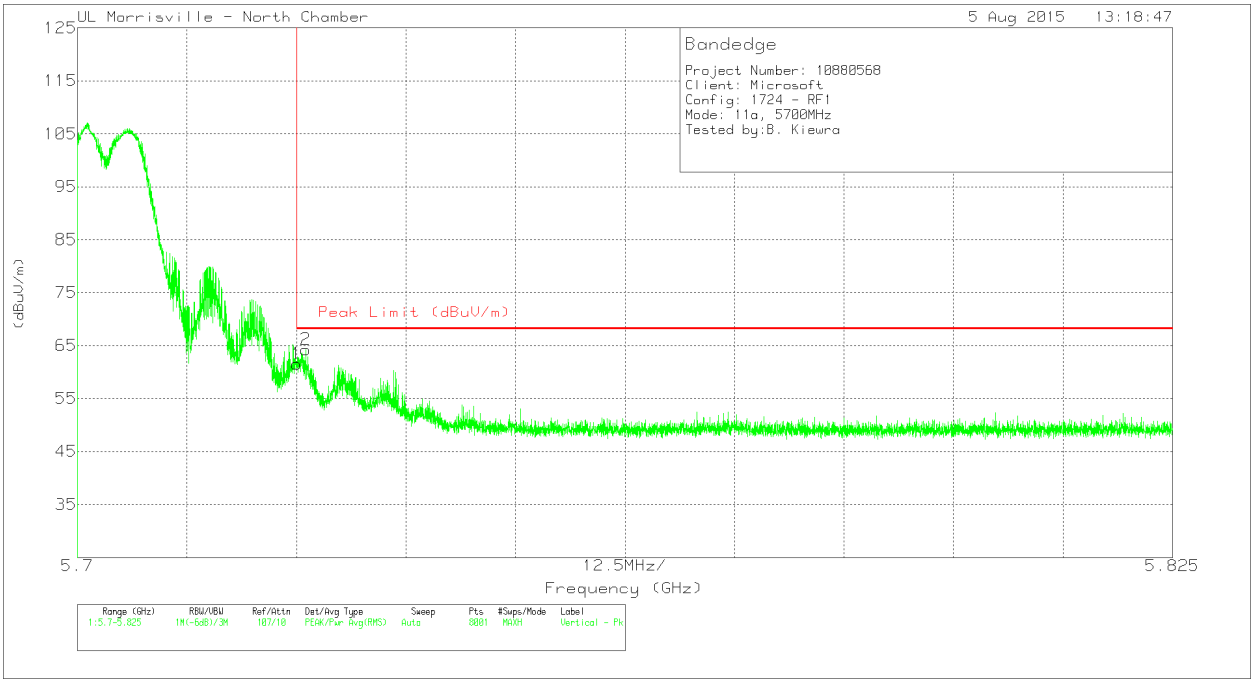
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	48.34	Pk	34.7	-21.5	61.54	68.2	-6.66	7	247	V
2	5.726	50.99	Pk	34.7	-21.5	64.19	68.2	-4.01	7	247	V

Pk - Peak detector

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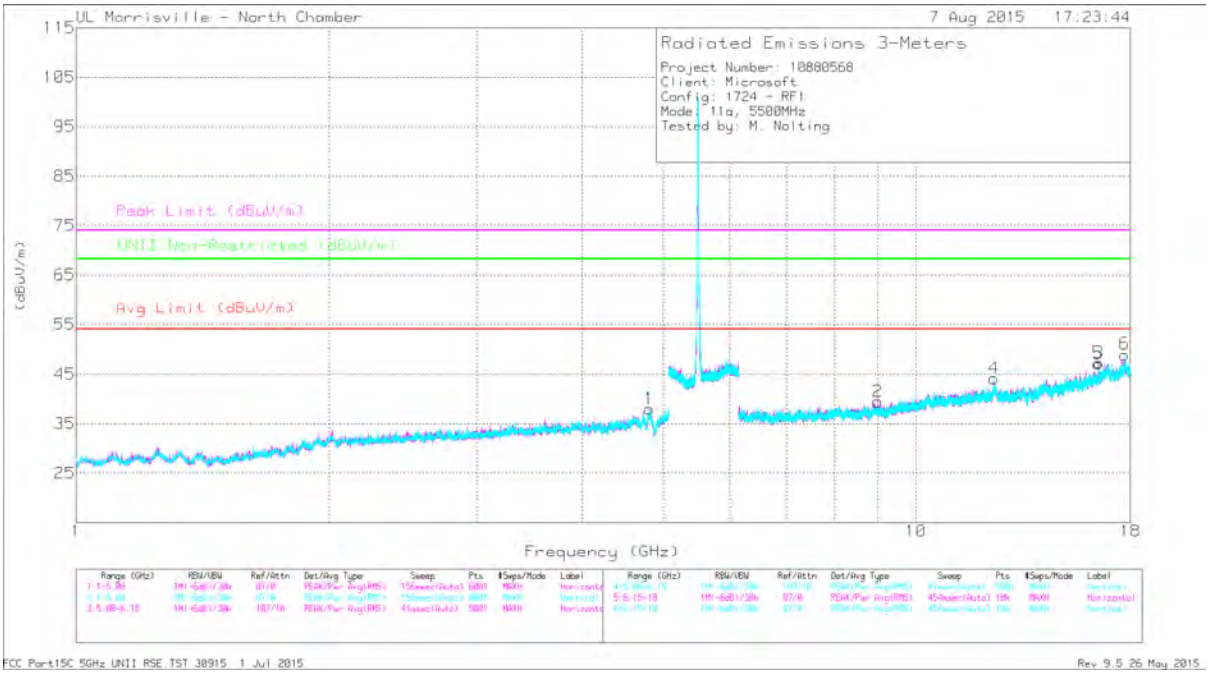
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DCCF (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	* 4.807	41.5	PK3	34.1	-30.3	-	45.3	-	-	74	-28.7	-	-	128	234	H
	* 4.813	29.82	ADR	34.1	-30.2	-	33.72	54	-20.28	-	-	-	-	128	234	H
2	* 9.015	36.98	PK3	36.4	-26.8	-	46.58	-	-	74	-27.42	-	-	137	216	H
	* 9.018	25.27	ADR	36.4	-26.9	-	34.77	54	-19.23	-	-	-	-	137	216	H
4	* 12.379	34.76	PK3	39.1	-22.9	-	50.96	-	-	74	-23.04	-	-	251	188	V
	* 12.377	23.06	ADR	39.1	-22.9	-	39.26	54	-14.74	-	-	-	-	251	188	V
6	* 17.717	33.57	PK3	41.9	-20.8	-	54.67	-	-	74	-19.33	-	-	55	149	V
	* 17.71	22.4	ADR	41.9	-20.8	-	43.5	54	-10.5	-	-	-	-	55	149	V
5	16.493	40.35	PK3	41.8	-24.1	-	58.05	-	-	-	-	68.2	-10.15	24	192	H
3	16.497	39.6	PK3	41.8	-24.1	-	57.3	-	-	-	-	68.2	-10.9	21	203	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average
Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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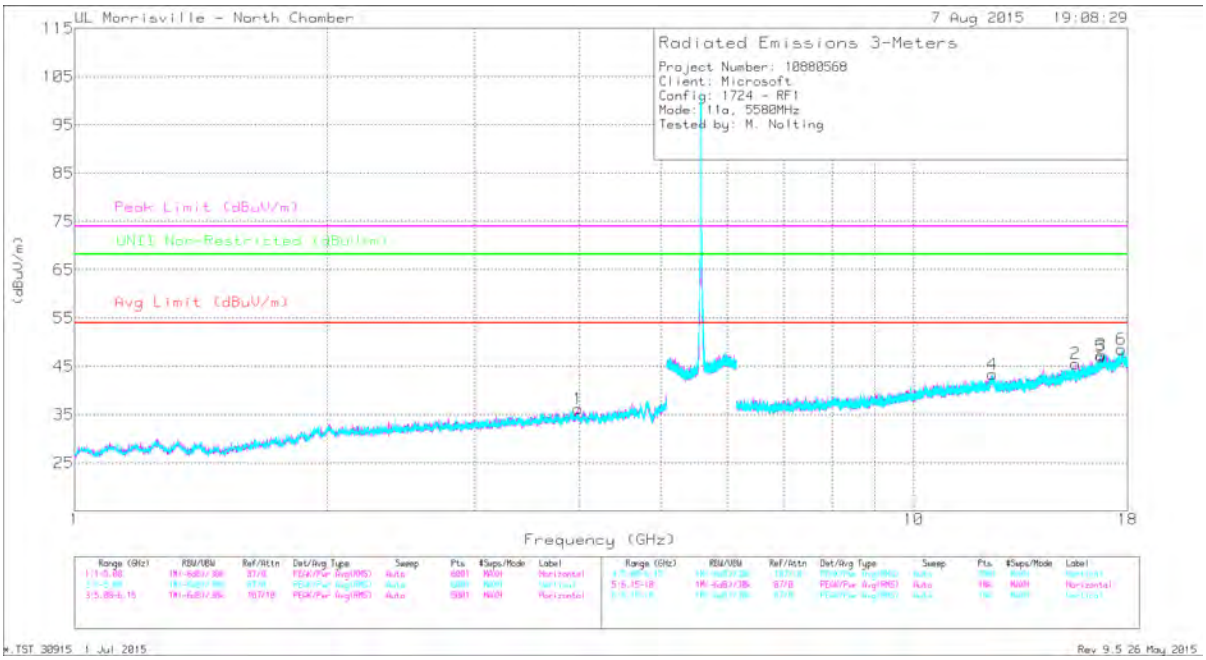
MID CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DCCF (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	* 3.978	41.46	PK3	33.8	-31.8	-	43.46	-	-	74	-30.54	-	-	72	170	H
	* 3.977	29.9	ADR	33.8	-31.8	-	31.9	54	-22.1	-	-	-	-	72	170	H
2	* 15.598	36.42	PK3	40.6	-25	-	52.02	-	-	74	-21.98	-	-	66	283	H
	* 15.608	24.37	ADR	40.6	-25.1	-	39.87	54	-14.13	-	-	-	-	66	283	H
4	* 12.421	34.72	PK3	39.1	-23	-	50.82	-	-	74	-23.18	-	-	208	241	V
	* 12.405	23.19	ADR	39.1	-23	-	39.29	54	-14.71	-	-	-	-	208	241	V
5	16.737	37.41	PK3	42.3	-22.4	-	57.31	-	-	-	-	68.2	-10.89	6	273	V
3	16.736	39.09	PK3	42.3	-22.4	-	58.99	-	-	-	-	68.2	-9.21	40	186	H
6	17.674	34.93	PK3	41.9	-21	-	55.83	-	-	-	-	68.2	-12.37	285	298	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average
Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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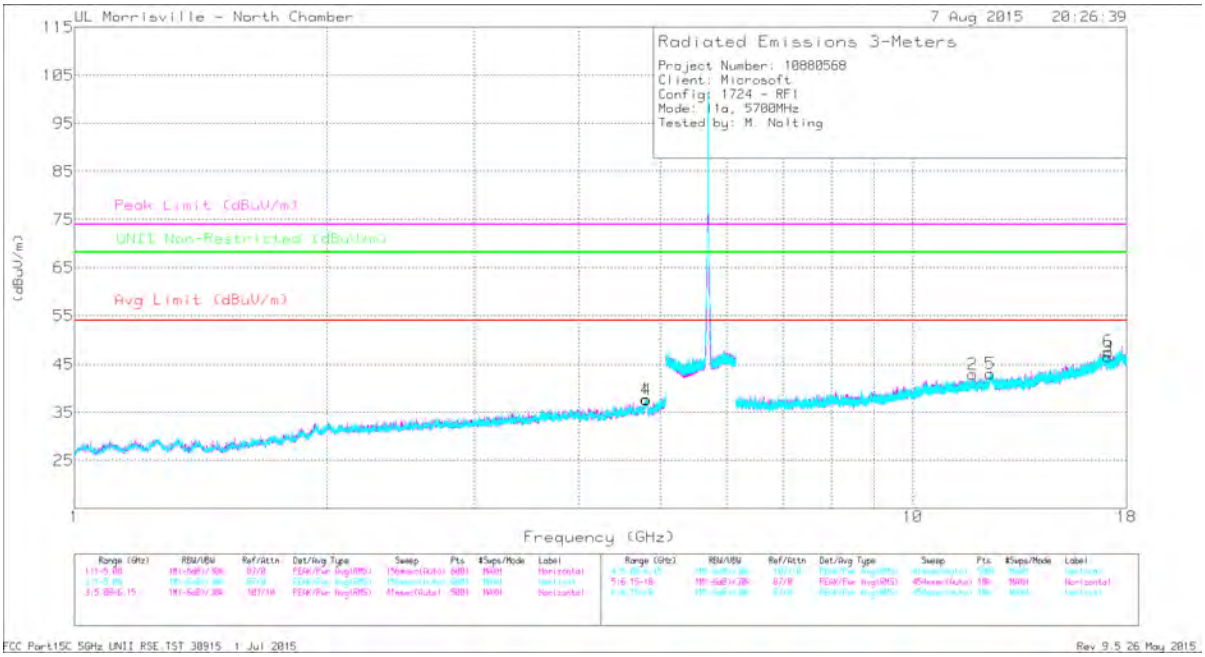
HIGH CHANNEL

Note – High channel (CH140) was set to same power setting as the Mid channel to achieve worst-case results.



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DCCF (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	* 4.813	41.68	PK3	34.1	-30.2	-	45.58	-	-	74	-28.42	-	-	9	332	H
	* 4.808	30.42	ADR	34.1	-30.3	-	34.22	54	-19.78	-	-	-	-	9	332	H
4	* 4.812	42.11	PK3	34.1	-30.2	-	46.01	-	-	74	-27.99	-	-	0	136	V
	* 4.808	30.29	ADR	34.1	-30.2	-	34.19	54	-19.81	-	-	-	-	0	136	V
2	* 11.781	34.5	PK3	38.6	-24	-	49.1	-	-	74	-24.9	-	-	87	167	H
	* 11.794	23.1	ADR	38.7	-23.9	-	37.9	54	-16.1	-	-	-	-	87	167	H
5	* 12.382	34.66	PK3	39.1	-22.9	-	50.86	-	-	74	-23.14	-	-	269	192	V
	* 12.377	22.91	ADR	39.1	-22.9	-	39.11	54	-14.89	-	-	-	-	269	192	V
3	17.096	35.06	PK3	42	-23.1	-	53.96	-	-	-	-	68.2	-14.24	197	217	H
6	17.106	35.97	PK3	42	-23	-	54.97	-	-	-	-	68.2	-13.23	22	200	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average
Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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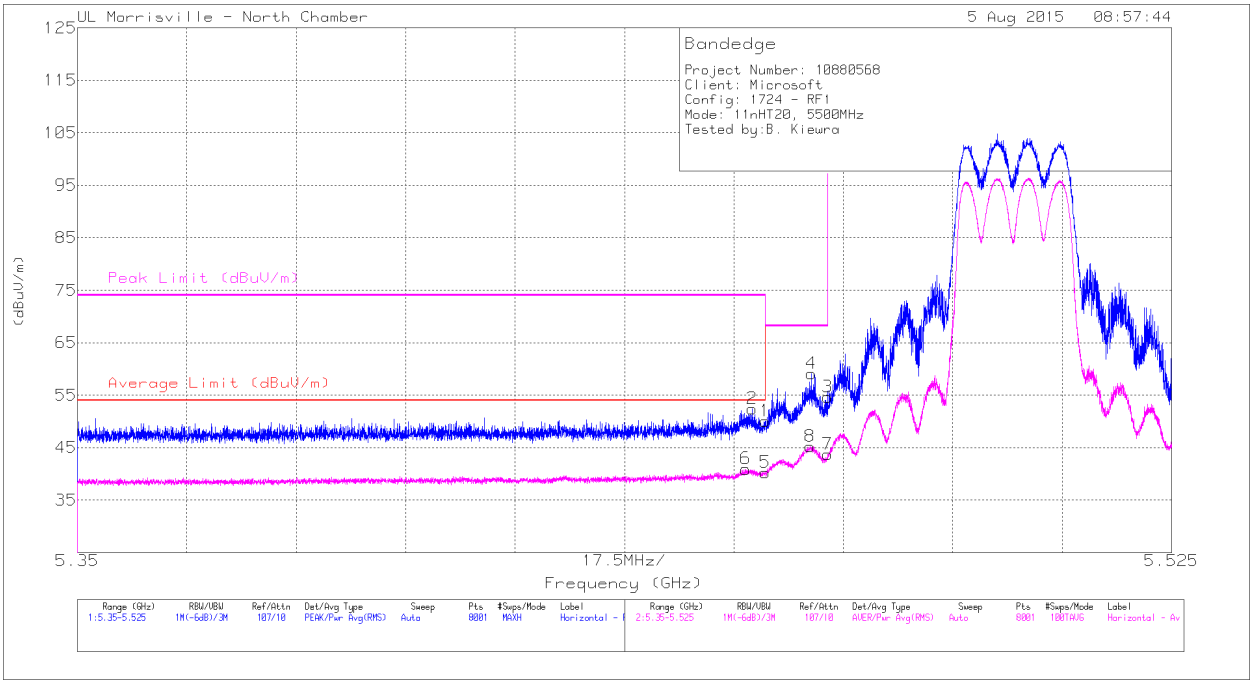
9.2.10. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.6 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	37.22	Pk	34.5	-21.7	50.02	-	-	74	-23.98	258	250	H
2	* 5.458	39.61	Pk	34.5	-21.7	52.41	-	-	74	-21.59	258	250	H
3	5.47	41.89	Pk	34.5	-21.7	54.69	-	-	68.2	-13.51	258	250	H
4	5.467	46.33	Pk	34.5	-21.7	59.13	-	-	68.2	-9.07	258	250	H
5	* 5.46	27.44	RMS	34.5	-21.7	40.24	54	-13.76	-	-	258	250	H
6	* 5.457	28.12	RMS	34.5	-21.7	40.92	54	-13.08	-	-	258	250	H
7	5.47	30.86	RMS	34.5	-21.7	43.66	-	-	-	-	258	250	H
8	5.467	32.41	RMS	34.5	-21.7	45.21	-	-	-	-	258	250	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
RMS - RMS detection

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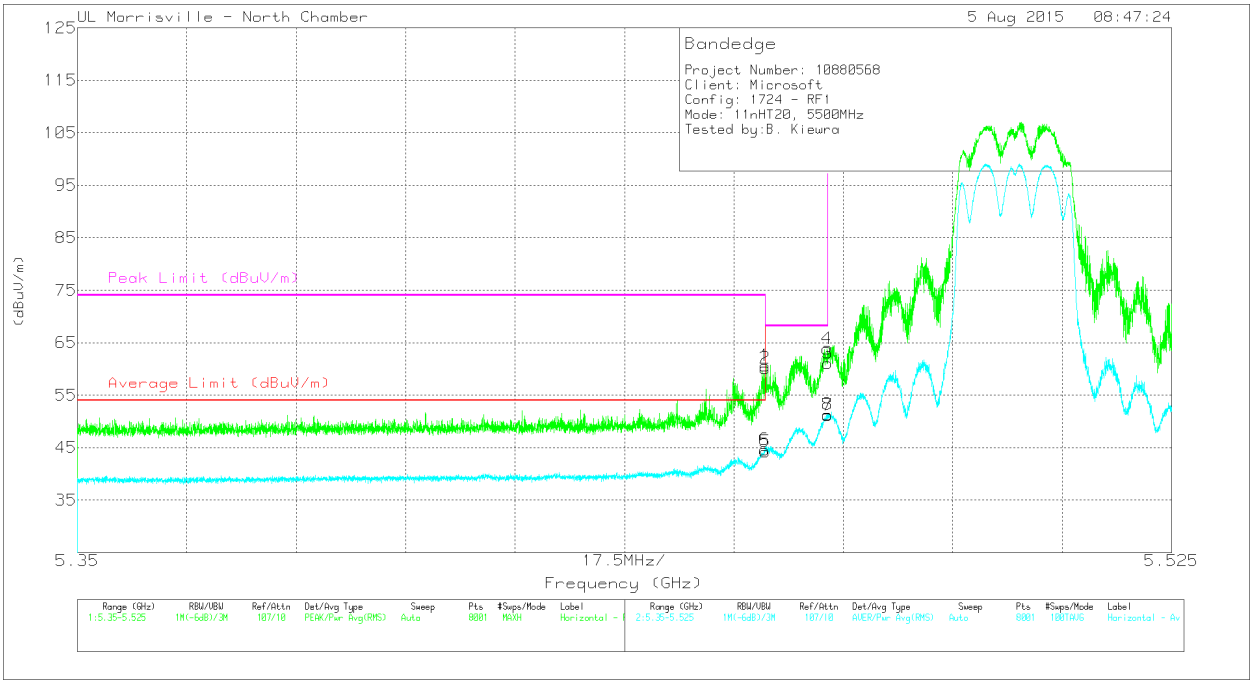
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	47.79	Pk	34.5	-21.7	60.59	-	-	74	-13.41	352	269	V
2	* 5.46	47.26	Pk	34.5	-21.7	60.06	-	-	74	-13.94	352	269	V
3	5.47	48.34	Pk	34.5	-21.7	61.14	-	-	68.2	-7.06	352	269	V
4	5.47	50.97	Pk	34.5	-21.7	63.77	-	-	68.2	-4.43	352	269	V
5	* 5.46	31.44	RMS	34.5	-21.7	44.24	54	-9.76	-	-	352	269	V
6	* 5.46	31.81	RMS	34.5	-21.7	44.61	54	-9.39	-	-	352	269	V
7	5.47	38.35	RMS	34.5	-21.7	51.15	-	-	-	-	352	269	V
8	5.47	38.54	RMS	34.5	-21.7	51.34	-	-	-	-	352	269	V

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

Pk - Peak detector

RMS - RMS detection

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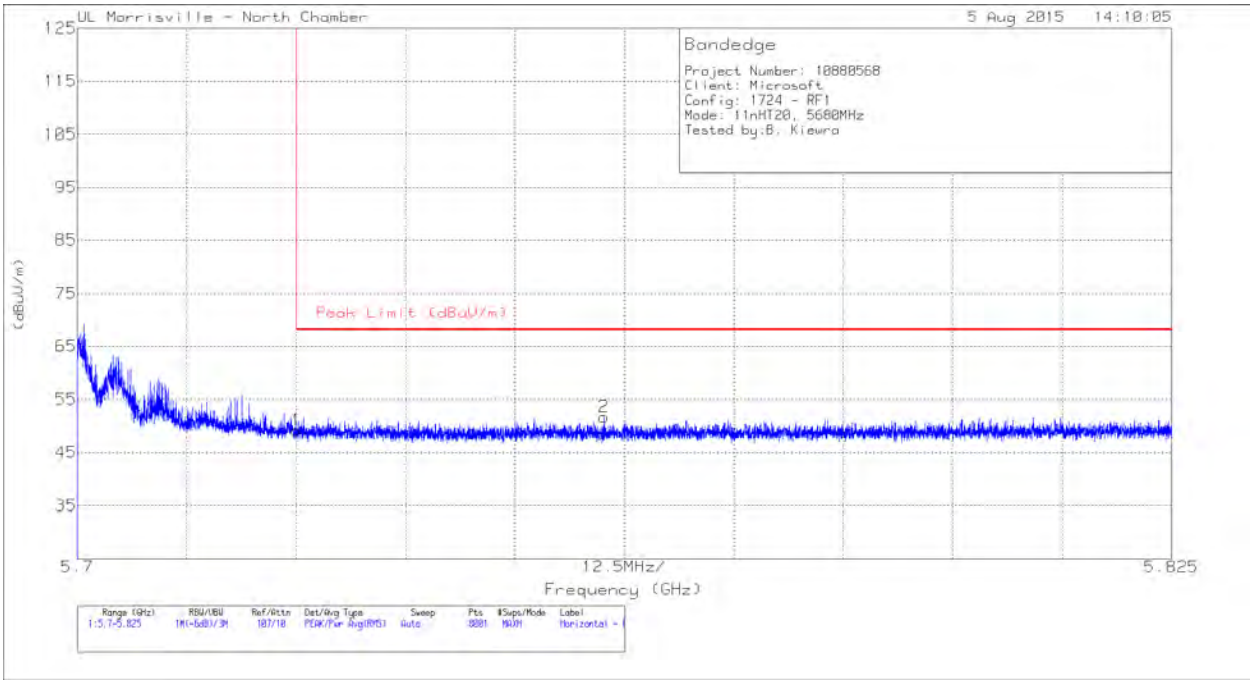
AUTHORIZED BANDEDGE (HIGH CHANNEL 136)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	35.92	Pk	34.7	-21.5	49.12	68.2	-19.08	42	195	H
2	5.76	38.56	Pk	34.7	-21.5	51.76	68.2	-16.44	42	195	H

Pk - Peak detector

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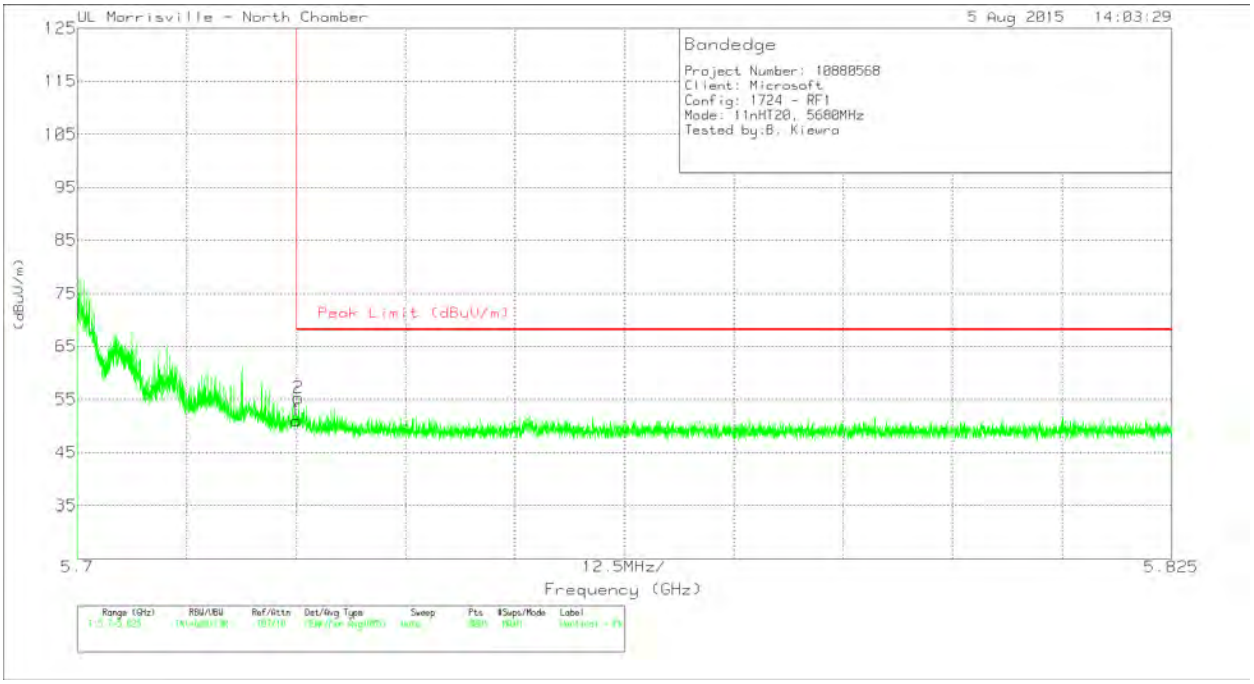
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	37.82	Pk	34.7	-21.5	51.02	68.2	-17.18	19	260	V
2	5.725	42.12	Pk	34.7	-21.5	55.32	68.2	-12.88	19	260	V

Pk - Peak detector

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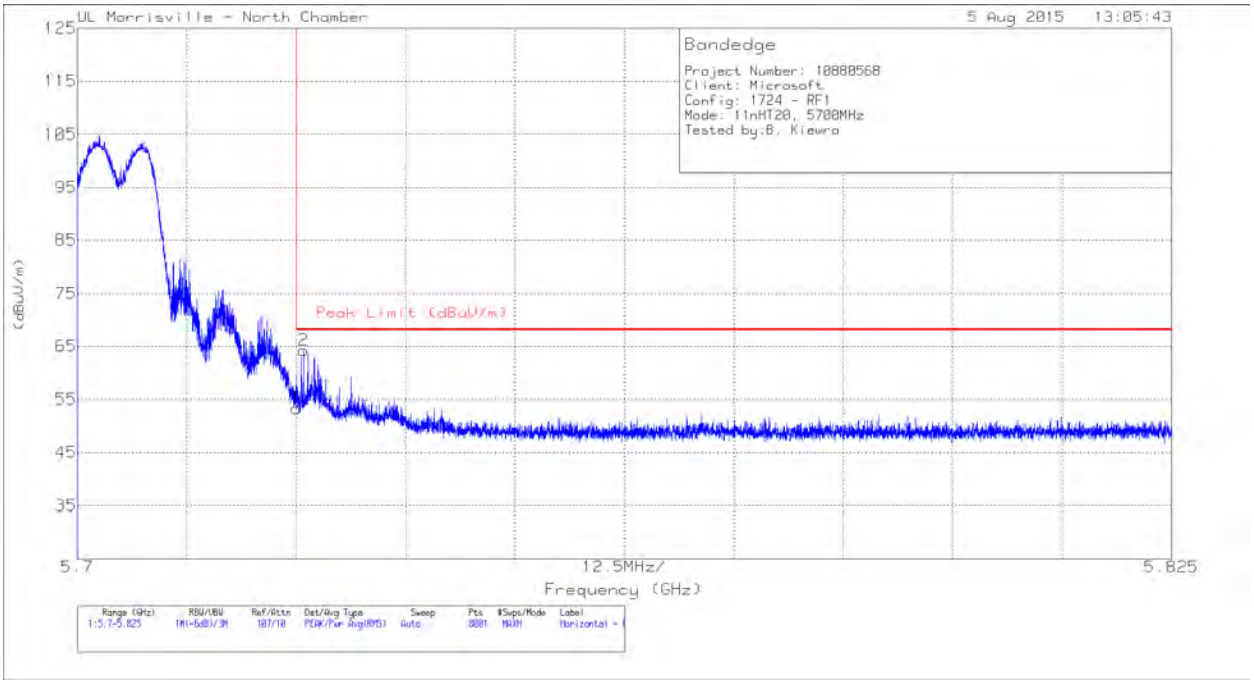
AUTHORIZED BANDEDGE (HIGH CHANNEL 140)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	40.13	Pk	34.7	-21.5	53.33	68.2	-14.87	265	355	H
2	5.726	51.01	Pk	34.7	-21.5	64.21	68.2	-3.99	265	355	H

Pk - Peak detector

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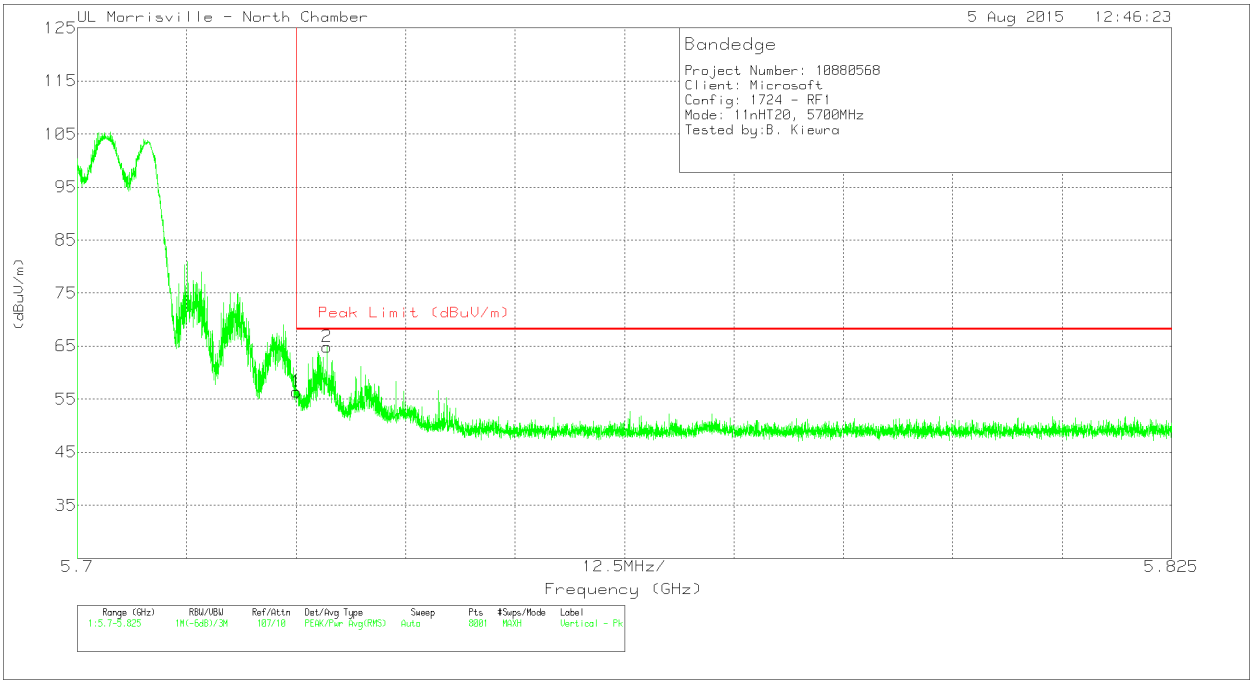
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	43.19	Pk	34.7	-21.5	56.39	68.2	-11.81	336	335	V
2	5.729	51.63	Pk	34.7	-21.5	64.83	68.2	-3.37	336	335	V

Pk - Peak detector

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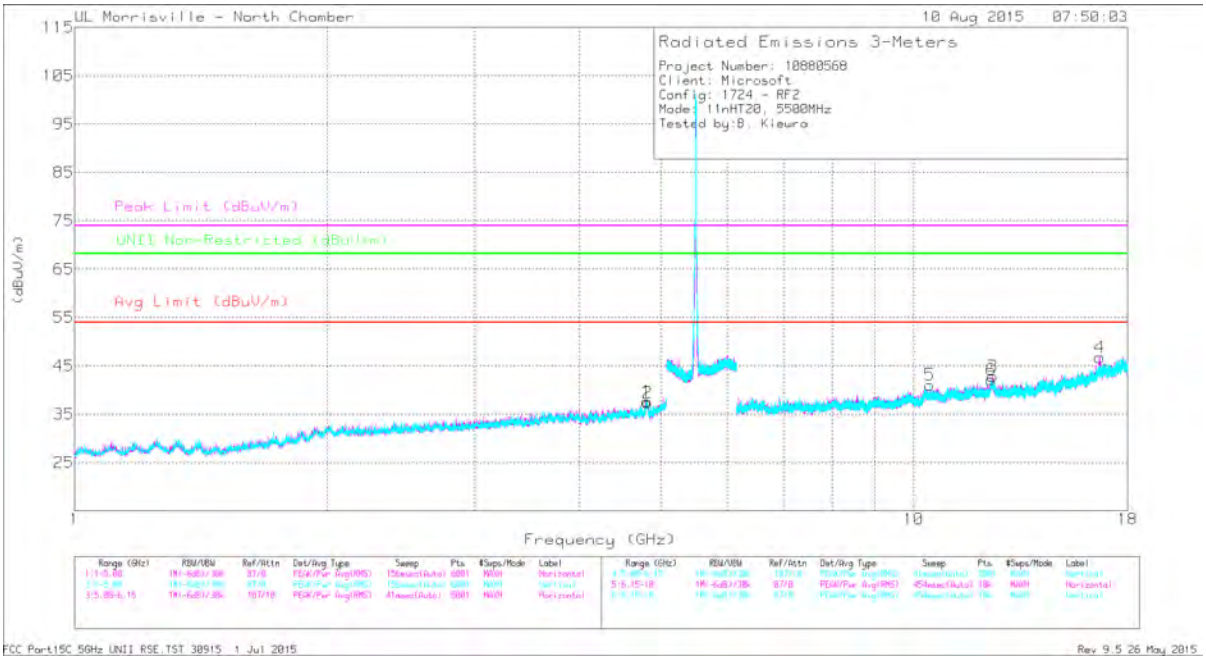
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 4.814	41.18	PK3	34.1	-30.2	45.08	-	-	74	-28.92	-	-	114	372	H
	* 4.809	29.42	ADR	34.1	-30.2	33.32	54	-20.68	-	-	-	-	114	372	H
3	* 12.417	34.45	PK3	39.1	-23.1	50.45	-	-	74	-23.55	-	-	174	172	H
	* 12.407	23.04	ADR	39.1	-23	39.14	54	-14.86	-	-	-	-	174	172	H
4	16.655	34.59	PK3	42.1	-22.3	54.39	-	-	-	-	68.2	-13.81	223	144	H
2	* 4.803	41.45	PK3	34.1	-30.3	45.25	-	-	74	-28.75	-	-	304	336	V
	* 4.813	29.8	ADR	34.1	-30.2	33.7	54	-20.3	-	-	-	-	304	336	V
5	10.456	35.78	PK3	37.7	-25.1	48.38	-	-	-	-	68.2	-19.82	216	397	V
6	* 12.38	34.65	PK3	39.1	-22.9	50.85	-	-	74	-23.15	-	-	57	310	V
	* 12.354	23.07	ADR	39	-23.6	38.47	54	-15.53	-	-	-	-	57	310	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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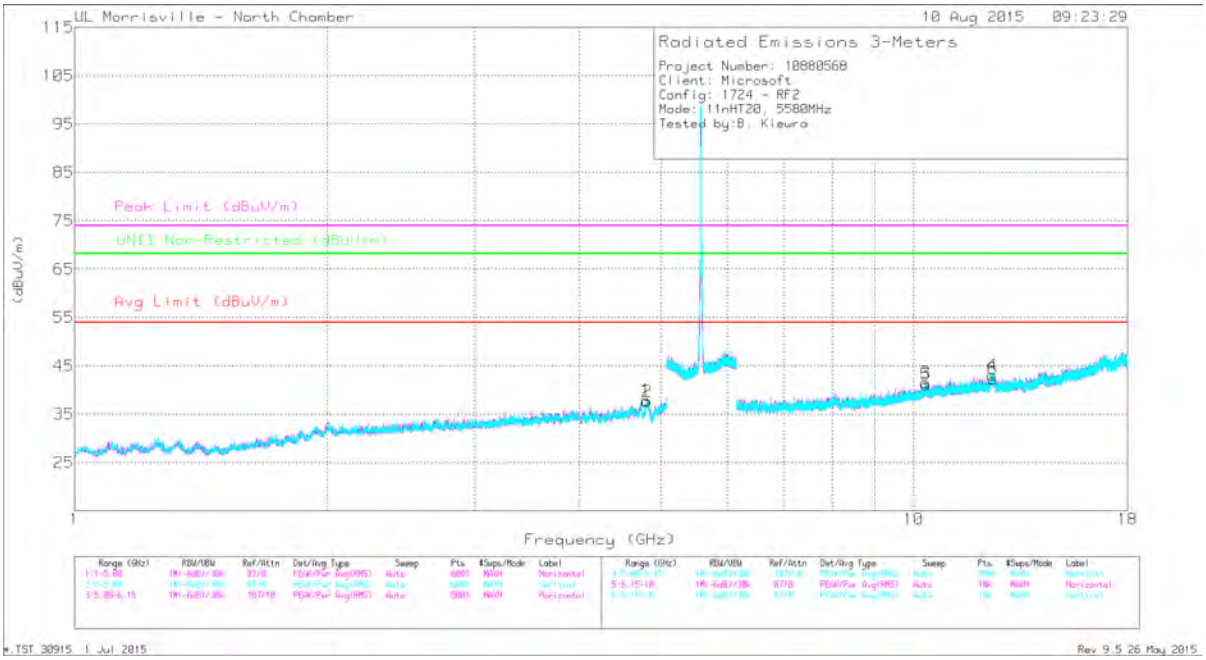
MID CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 4.829	41.38	PK3	34.1	-30.3	45.18	-	-	74	-28.82	-	-	305	114	H
	* 4.812	29.69	ADR	34.1	-30.2	33.59	54	-20.41	-	-	-	-	305	114	H
2	* 4.81	42.28	PK3	34.1	-30.2	46.18	-	-	74	-27.82	-	-	102	377	V
	* 4.811	30.16	ADR	34.1	-30.2	34.06	54	-19.94	-	-	-	-	102	377	V
3	10.356	34.88	PK3	37.6	-23.8	48.68	-	-	-	-	68.2	-19.52	166	274	H
4	* 12.419	35.38	PK3	39.1	-23	51.48	-	-	74	-22.52	-	-	354	121	H
	* 12.408	23.01	ADR	39.1	-23	39.11	54	-14.89	-	-	-	-	354	121	H
5	10.343	34.63	PK3	37.6	-23.9	48.33	-	-	-	-	68.2	-19.87	327	160	V
6	* 12.434	34.73	PK3	39.1	-23.1	50.73	-	-	74	-23.27	-	-	270	245	V
	* 12.433	23.01	ADR	39.1	-23.1	39.01	54	-14.99	-	-	-	-	270	245	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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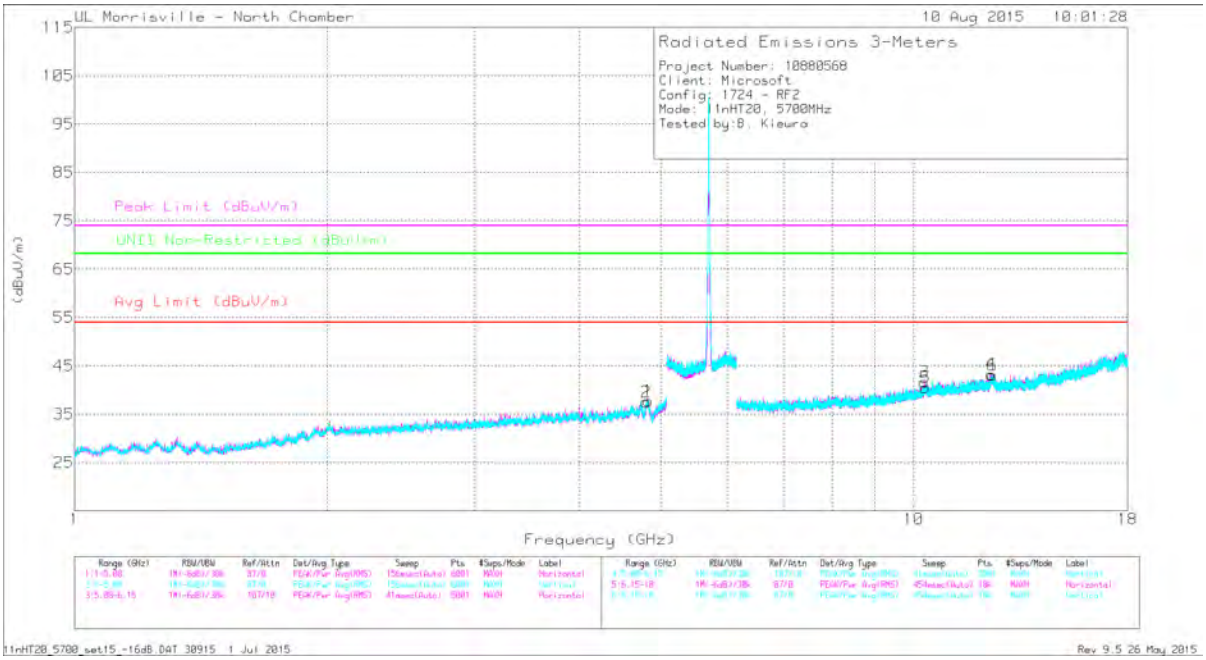
HIGH CHANNEL

Note – High channel (CH140) was set to same power setting as the Mid channel to achieve worst-case results.



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 4.811	41.78	PK3	34.1	-30.2	45.68	-	-	74	-28.32	-	-	121	212	H
	* 4.823	29.72	ADR	34.1	-30.2	33.62	54	-20.38	-	-	-	-	121	212	H
2	* 4.817	41.4	PK3	34.1	-30.2	45.3	-	-	74	-28.7	-	-	4	169	V
	* 4.808	29.75	ADR	34.1	-30.2	33.65	54	-20.35	-	-	-	-	4	169	V
3	10.306	34.74	PK3	37.5	-24.2	48.04	-	-	-	-	68.2	-20.16	161	259	H
4	* 12.401	34.49	PK3	39.1	-22.9	50.69	-	-	74	-23.31	-	-	0	144	H
	* 12.353	22.83	ADR	39	-23.6	38.23	54	-15.77	-	-	-	-	0	144	H
5	10.316	34.76	PK3	37.6	-23.8	48.56	-	-	-	-	68.2	-19.64	357	129	V
6	* 12.413	34.66	PK3	39.1	-23.1	50.66	-	-	74	-23.34	-	-	30	288	V
	* 12.416	22.96	ADR	39.1	-23.1	38.96	54	-15.04	-	-	-	-	30	288	V

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

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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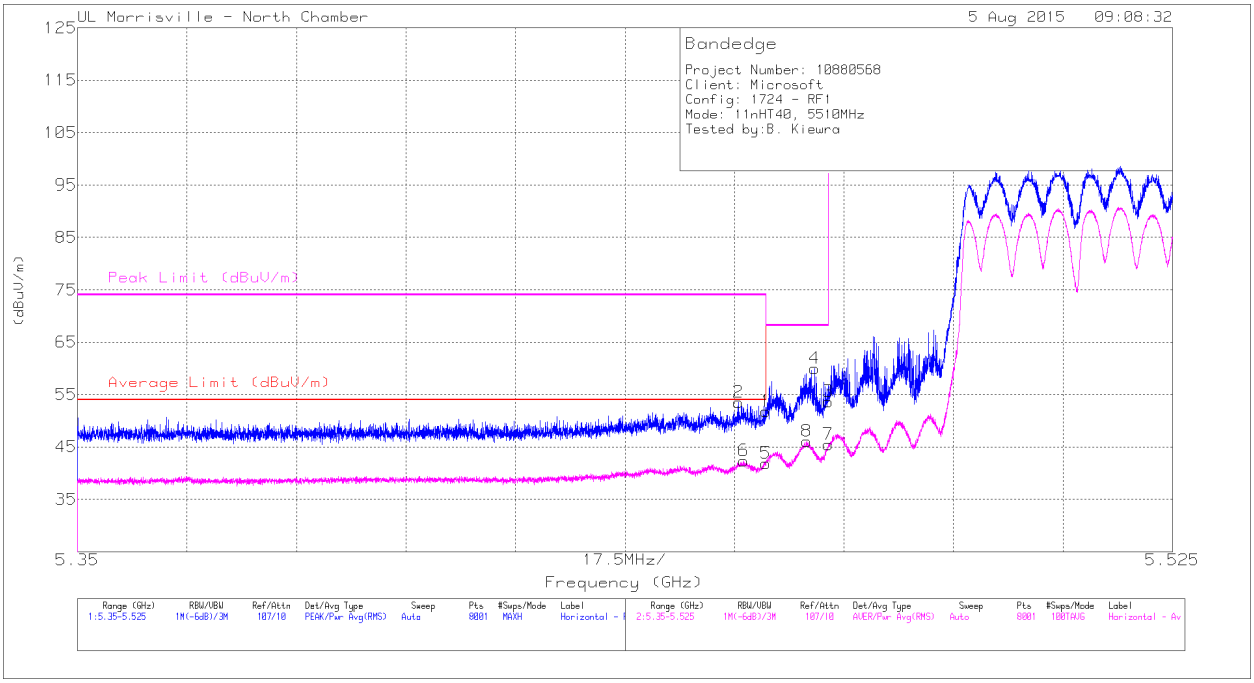
9.2.11. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.6 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	39.02	Pk	34.5	-21.7	51.82	-	-	74	-22.18	253	263	H
2	* 5.456	40.69	Pk	34.5	-21.7	53.49	-	-	74	-20.51	253	263	H
3	5.47	40.79	Pk	34.5	-21.7	53.59	-	-	68.2	-14.61	253	263	H
4	5.468	47.23	Pk	34.5	-21.7	60.03	-	-	68.2	-8.17	253	263	H
5	* 5.46	29.05	RMS	34.5	-21.7	41.85	54	-12.15	-	-	253	263	H
6	* 5.456	29.57	RMS	34.5	-21.7	42.37	54	-11.63	-	-	253	263	H
7	5.47	32.64	RMS	34.5	-21.7	45.44	-	-	-	-	253	263	H
8	5.467	33.27	RMS	34.5	-21.7	46.07	-	-	-	-	253	263	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
RMS - RMS detection

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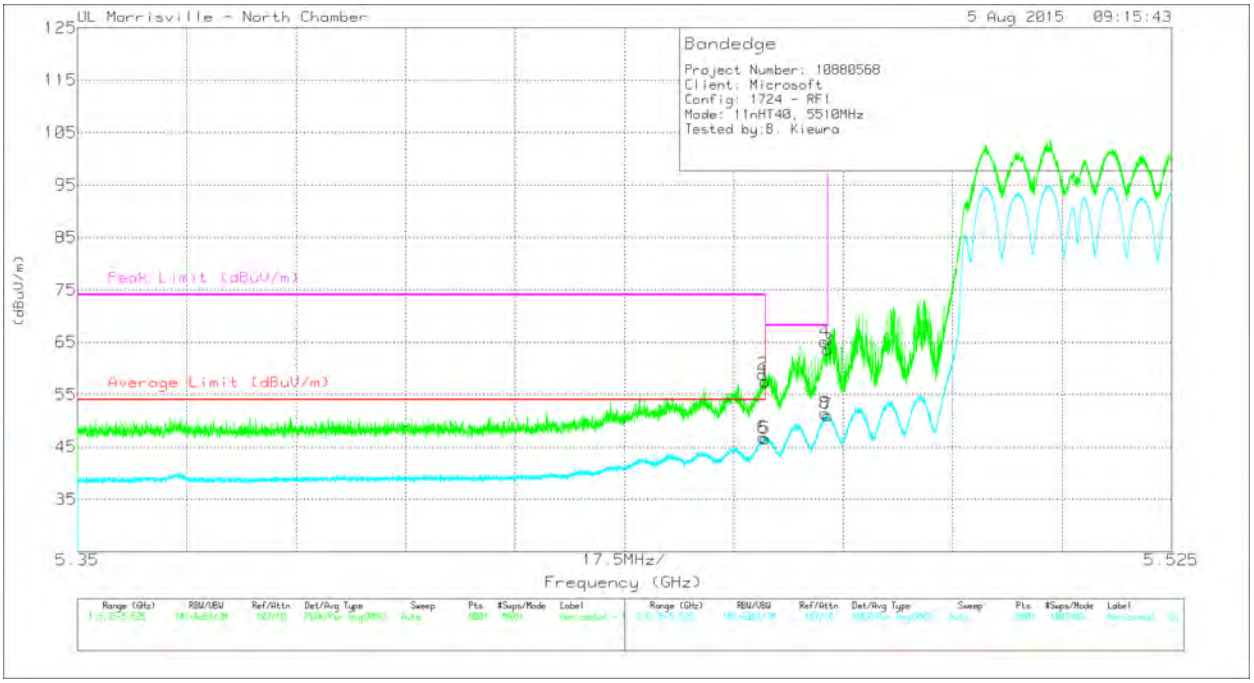
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	44.74	Pk	34.5	-21.7	57.54	-	-	74	-16.46	32	260	V
2	* 5.46	46.05	Pk	34.5	-21.7	58.85	-	-	74	-15.15	32	260	V
3	5.47	50.73	Pk	34.5	-21.7	63.53	-	-	68.2	-4.67	32	260	V
4	5.47	52.28	Pk	34.5	-21.7	65.08	-	-	68.2	-3.12	32	260	V
5	* 5.46	33.81	RMS	34.5	-21.7	46.61	54	-7.39	-	-	32	260	V
6	* 5.46	34.06	RMS	34.5	-21.7	46.86	54	-7.14	-	-	32	260	V
7	5.47	38.3	RMS	34.5	-21.7	51.1	-	-	-	-	32	260	V
8	5.47	38.61	RMS	34.5	-21.7	51.41	-	-	-	-	32	260	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
RMS - RMS detection

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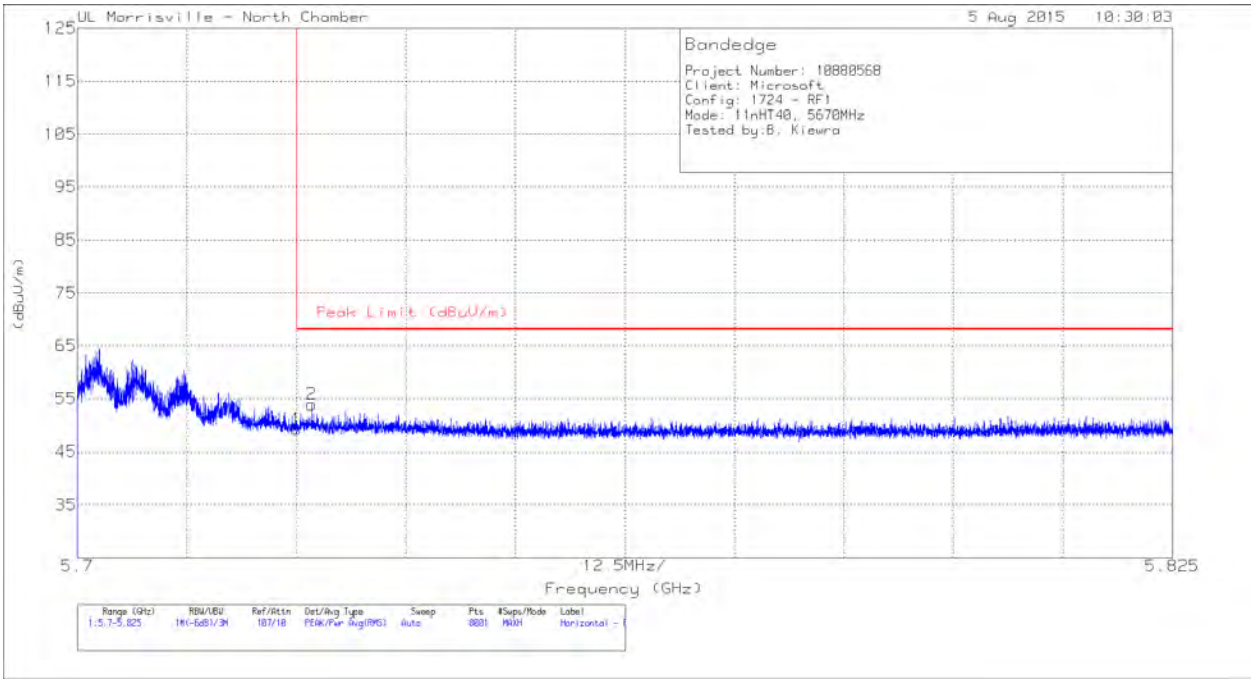
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	36.06	Pk	34.7	-21.5	49.26	68.2	-18.94	256	245	H
2	5.727	40.75	Pk	34.7	-21.5	53.95	68.2	-14.25	256	245	H

Pk - Peak detector

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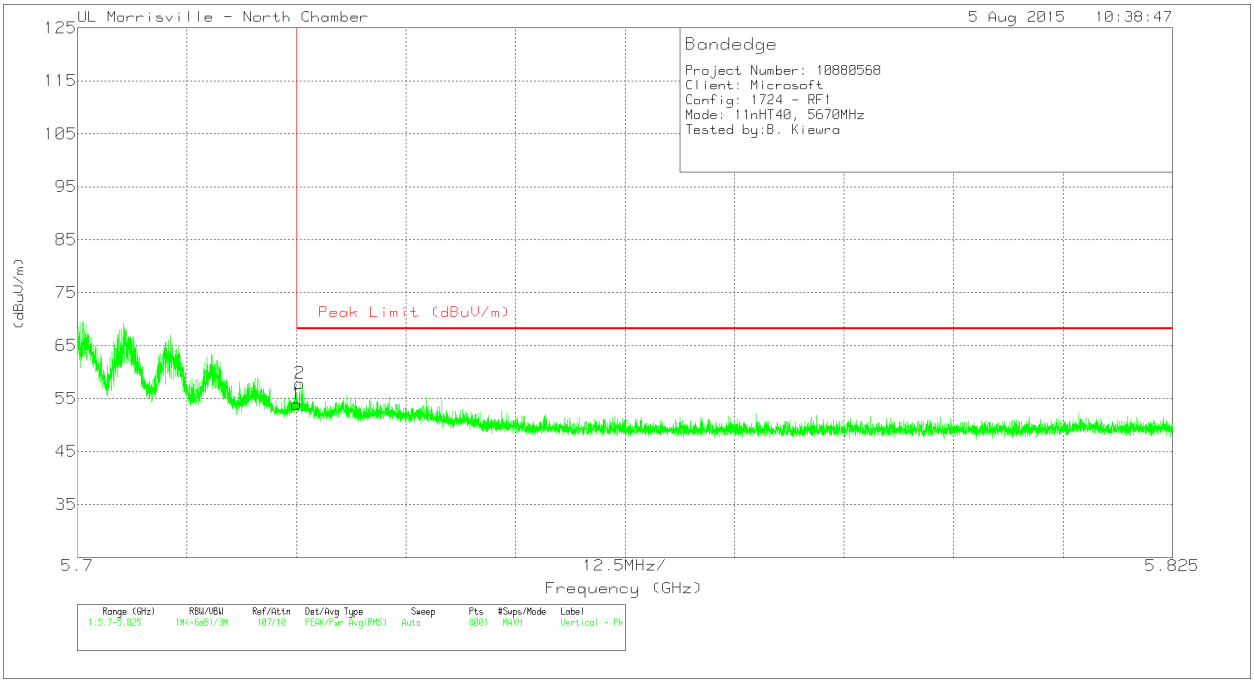
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	40.76	Pk	34.7	-21.5	53.96	68.2	-14.24	5	236	V
2	5.725	44.64	Pk	34.7	-21.5	57.84	68.2	-10.36	5	236	V

Pk - Peak detector

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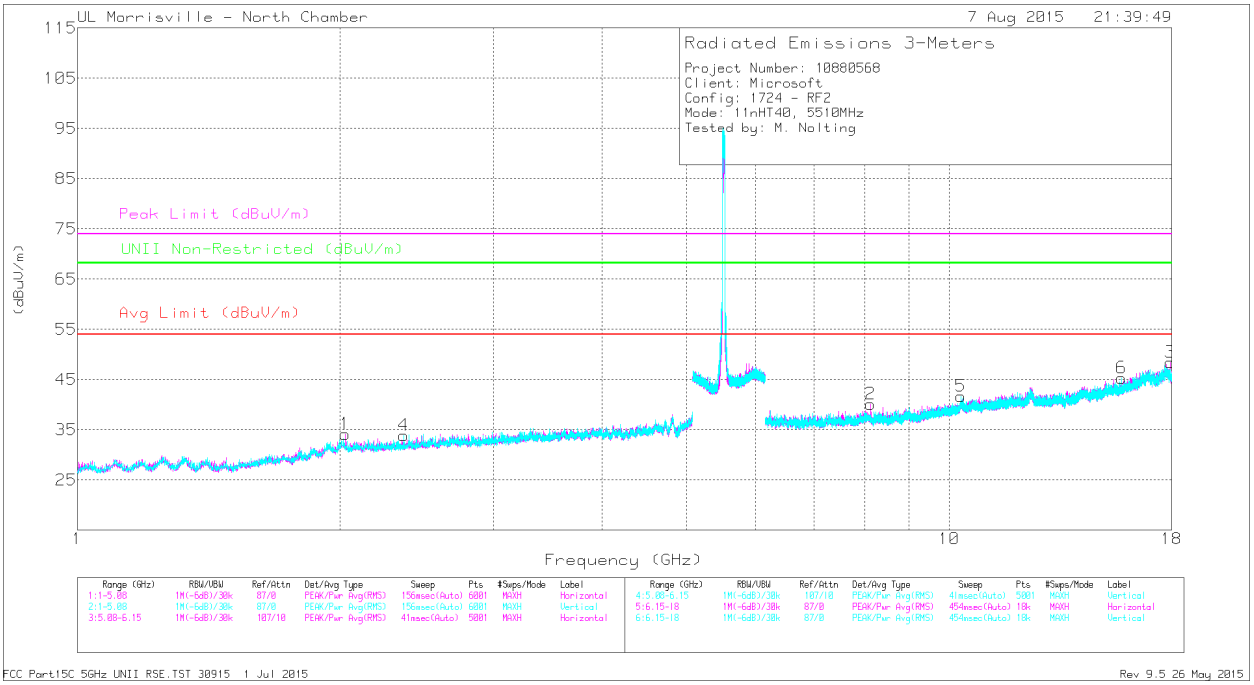
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.36	43.34	PK3	31.8	-33.8	41.34	-	-	74	-32.66	-	-	153	166	V
	* 2.36	30.95	ADR	31.8	-33.8	28.95	54	-25.05	-	-	-	-	153	166	V
2	* 8.114	37.61	PK3	35.9	-27	46.51	-	-	74	-27.49	-	-	347	268	H
	* 8.129	25.97	ADR	35.9	-27.4	34.47	54	-19.53	-	-	-	-	347	268	H
3	* 17.921	34.7	PK3	42	-21.8	54.9	-	-	74	-19.1	-	-	66	145	H
	* 17.918	23.12	ADR	42	-21.9	43.22	54	-10.78	-	-	-	-	66	145	H
6	* 15.769	34.96	PK3	40.8	-23.8	51.96	-	-	74	-22.04	-	-	252	202	V
	* 15.76	23.17	ADR	40.8	-23.7	40.27	54	-13.73	-	-	-	-	252	202	V
1	2.022	44.21	PK3	31.7	-34.3	41.61	-	-	-	-	68.2	-26.59	246	223	H
5	10.313	35.22	PK3	37.6	-23.9	48.92	-	-	-	-	68.2	-19.28	58	113	V

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

Pk - Peak detector

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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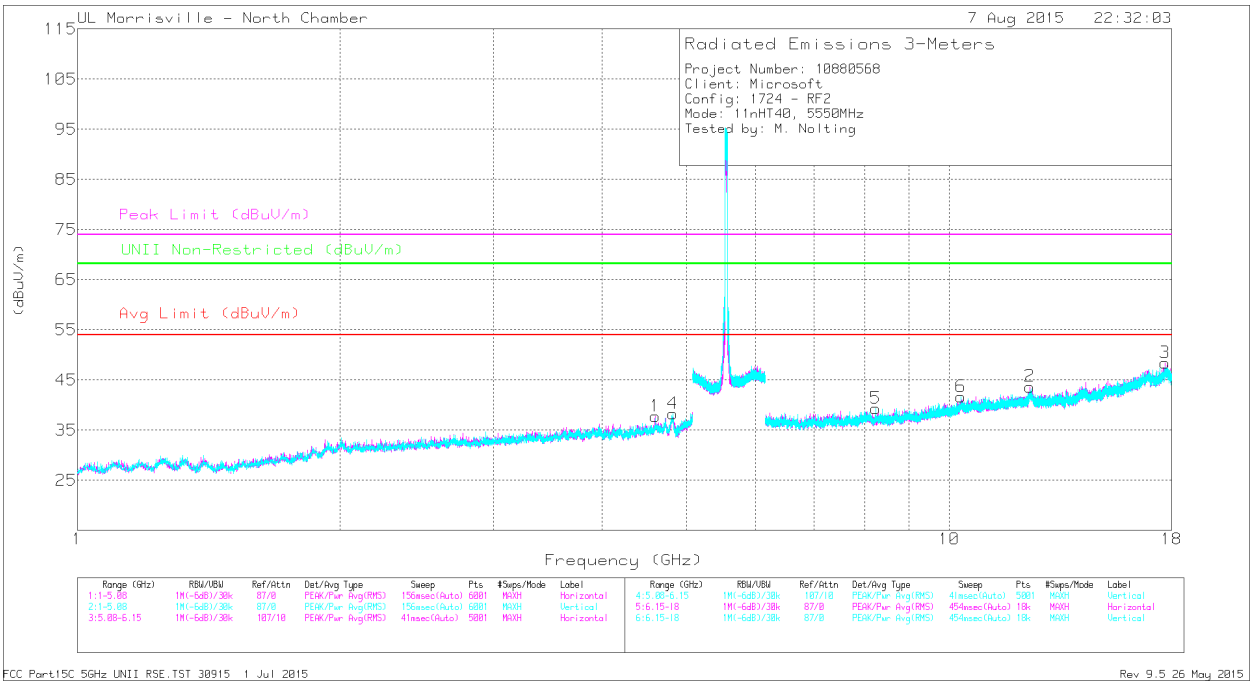
MID CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 4.603	41.76	PK3	34	-31.3	44.46	-	-	74	-29.54	-	-	83	215	H
	* 4.603	30.07	ADR	34	-31.3	32.77	54	-21.23	-	-	-	-	83	215	H
4	* 4.813	41.48	PK3	34.1	-30.2	45.38	-	-	74	-28.62	-	-	301	245	V
	* 4.81	30.01	ADR	34.1	-30.2	33.91	54	-20.09	-	-	-	-	301	245	V
2	* 12.391	34.98	PK3	39.1	-22.9	51.18	-	-	74	-22.82	-	-	330	231	H
	* 12.382	22.99	ADR	39.1	-22.9	39.19	54	-14.81	-	-	-	-	330	231	H
5	* 8.24	37.56	PK3	35.9	-27.3	46.16	-	-	74	-27.84	-	-	69	134	V
	* 8.24	25.64	ADR	35.9	-27.3	34.24	54	-19.76	-	-	-	-	69	134	V
6	10.314	34.89	PK3	37.6	-23.9	48.59	-	-	-	-	68.2	-19.61	322	228	V
3	17.691	34.04	PK3	41.9	-20.7	55.24	-	-	-	-	68.2	-12.96	215	307	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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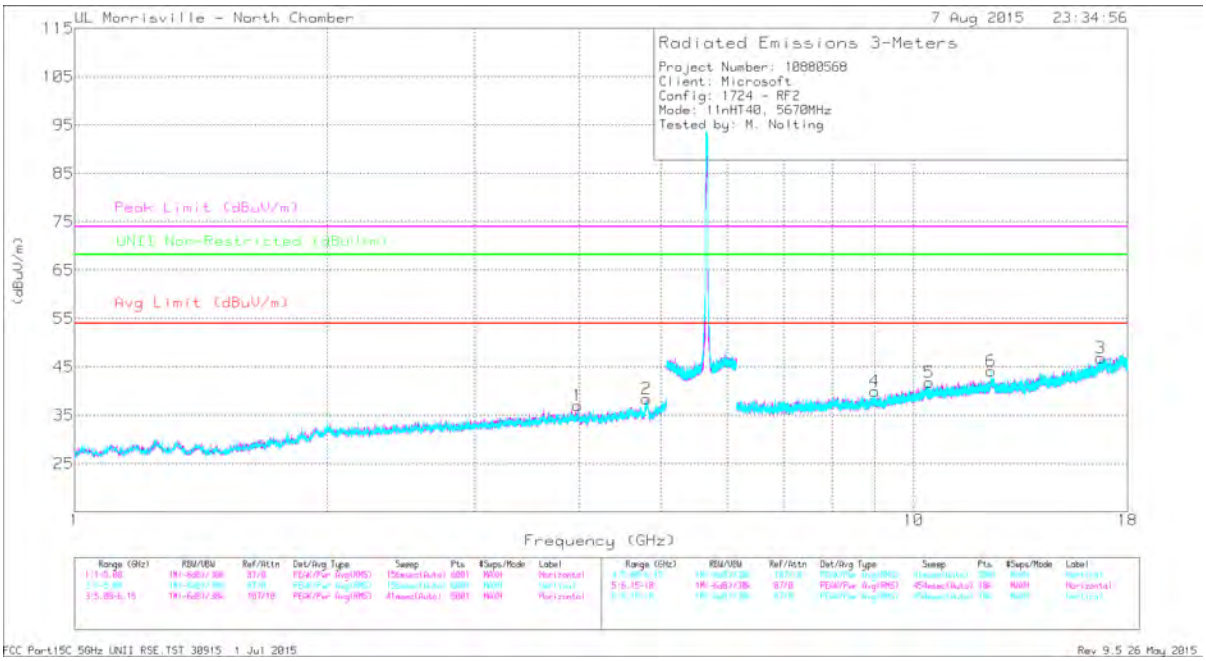
HIGH CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 3.978	41.53	PK3	33.8	-31.8	43.53	-	-	74	-30.47	-	-	337	183	H
	* 3.973	29.74	ADR	33.8	-31.7	31.84	54	-22.16	-	-	-	-	337	183	H
2	* 4.808	41.19	PK3	34.1	-30.3	44.99	-	-	74	-29.01	-	-	24	118	H
	* 4.813	29.65	ADR	34.1	-30.2	33.55	54	-20.45	-	-	-	-	24	118	H
6	* 12.387	34.24	PK3	39.1	-22.9	50.44	-	-	74	-23.56	-	-	119	275	V
	* 12.384	23.01	ADR	39.1	-22.9	39.21	54	-14.79	-	-	-	-	119	275	V
4	8.995	37.19	PK3	36.4	-26.6	46.99	-	-	-	-	68.2	-21.21	209	199	V
5	10.441	35.05	PK3	37.7	-25	47.75	-	-	-	-	68.2	-20.45	5	266	V
3	16.718	35.08	PK3	42.2	-22.4	54.88	-	-	-	-	68.2	-13.32	128	170	H

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

Pk - Peak detector

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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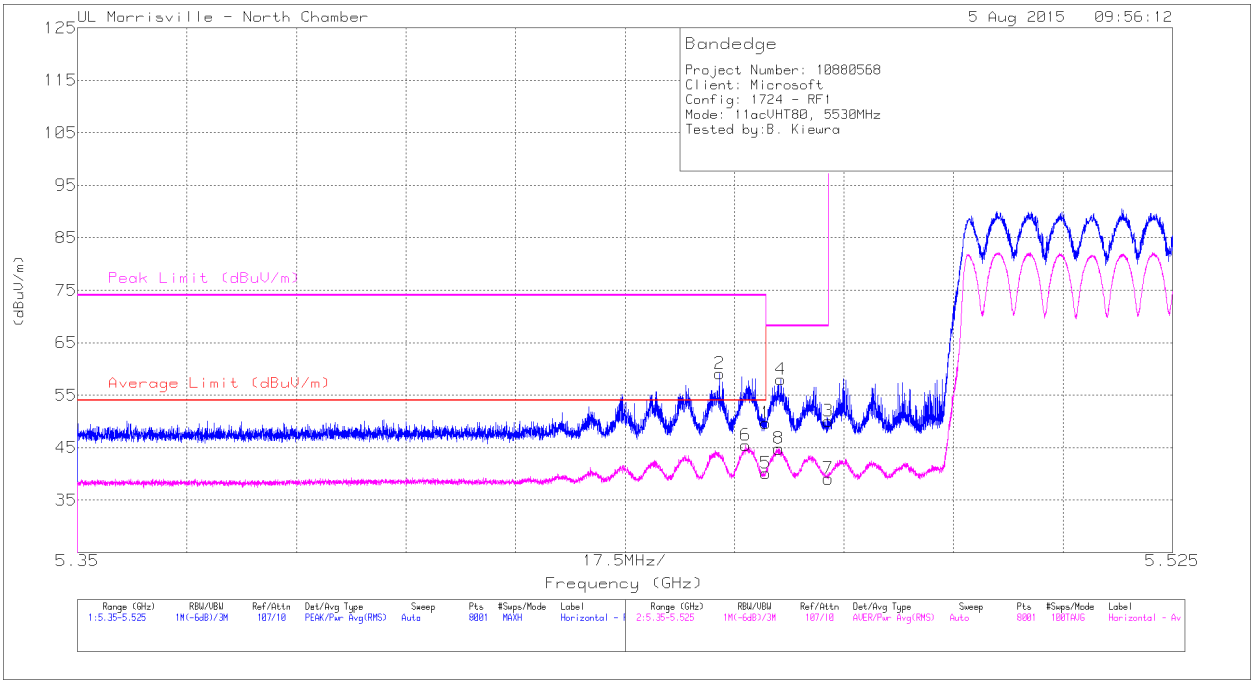
9.2.12. TX ABOVE 1 GHz 802.11ac VHT80 MODE IN THE 5.6 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	36.86	Pk	34.5	-21.7	49.66	-	-	74	-24.34	254	251	H
2	* 5.453	46.34	Pk	34.5	-21.7	59.14	-	-	74	-14.86	254	251	H
3	5.47	37.27	Pk	34.5	-21.7	50.07	-	-	68.2	-18.13	254	251	H
4	5.462	45.16	Pk	34.5	-21.7	57.96	-	-	68.2	-10.24	254	251	H
5	* 5.46	27.34	RMS	34.5	-21.7	40.14	54	-13.86	-	-	254	251	H
6	* 5.457	32.66	RMS	34.5	-21.7	45.46	54	-8.54	-	-	254	251	H
7	5.47	26.26	RMS	34.5	-21.7	39.06	-	-	-	-	254	251	H
8	5.462	31.97	RMS	34.5	-21.7	44.77	-	-	-	-	254	251	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
RMS - RMS detection

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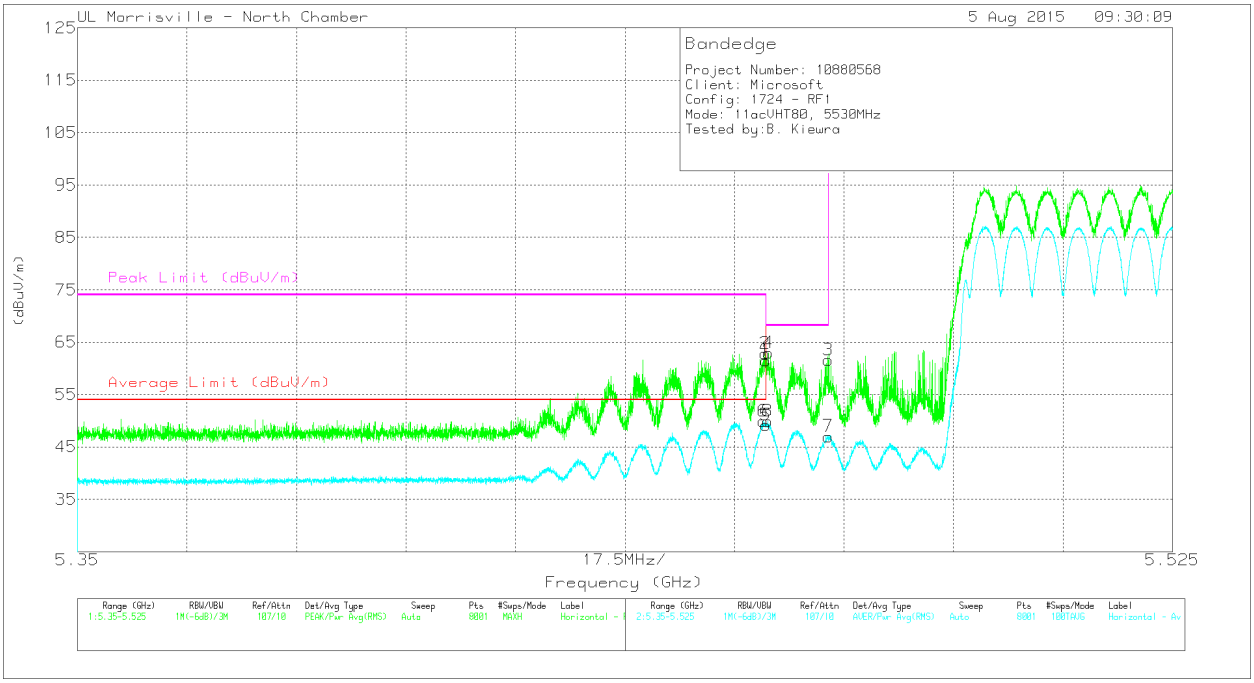
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	48.69	Pk	34.5	-21.7	61.49	-	-	74	-12.51	0	277	V
2	* 5.46	50.07	Pk	34.5	-21.7	62.87	-	-	74	-11.13	0	277	V
3	5.47	48.84	Pk	34.5	-21.7	61.64	-	-	68.2	-6.56	0	277	V
4	5.46	50.14	Pk	34.5	-21.7	62.94	-	-	68.2	-5.26	0	277	V
5	* 5.46	36.42	RMS	34.5	-21.7	49.22	54	-4.78	-	-	0	277	V
6	* 5.46	37.13	RMS	34.5	-21.7	49.93	54	-4.07	-	-	0	277	V
7	5.47	34.2	RMS	34.5	-21.7	47	-	-	-	-	0	277	V
8	5.46	37.1	RMS	34.5	-21.7	49.9	-	-	-	-	0	277	V

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

Pk - Peak detector

RMS - RMS detection

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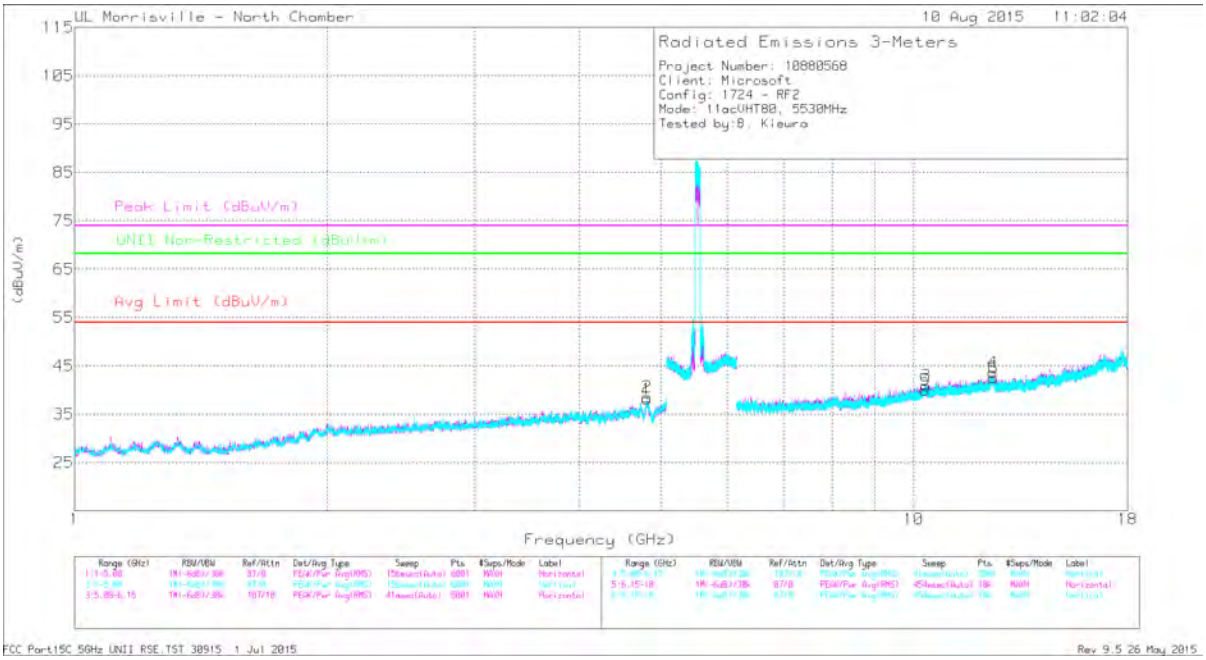
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 4.806	41.33	PK3	34.1	-30.3	45.13	-	-	74	-28.87	-	-	252	345	H
	* 4.807	30.11	ADR	34.1	-30.3	33.91	54	-20.09	-	-	-	-	252	345	H
2	* 4.811	41.73	PK3	34.1	-30.2	45.63	-	-	74	-28.37	-	-	201	322	V
	* 4.809	30.06	ADR	34.1	-30.2	33.96	54	-20.04	-	-	-	-	201	322	V
4	* 12.461	34.37	PK3	39.1	-23.2	50.27	-	-	74	-23.73	-	-	201	104	H
	* 12.426	22.75	ADR	39.1	-23	38.85	54	-15.15	-	-	-	-	201	104	H
6	* 12.469	34.42	PK3	39.1	-23.3	50.22	-	-	74	-23.78	-	-	11	294	V
	* 12.489	22.72	ADR	39.1	-23.7	38.12	54	-15.88	-	-	-	-	11	294	V
5	10.327	34.93	PK3	37.6	-23.7	48.83	-	-	-	-	68.2	-19.37	325	192	V
3	10.332	34.91	PK3	37.6	-23.8	48.71	-	-	-	-	68.2	-19.49	212	265	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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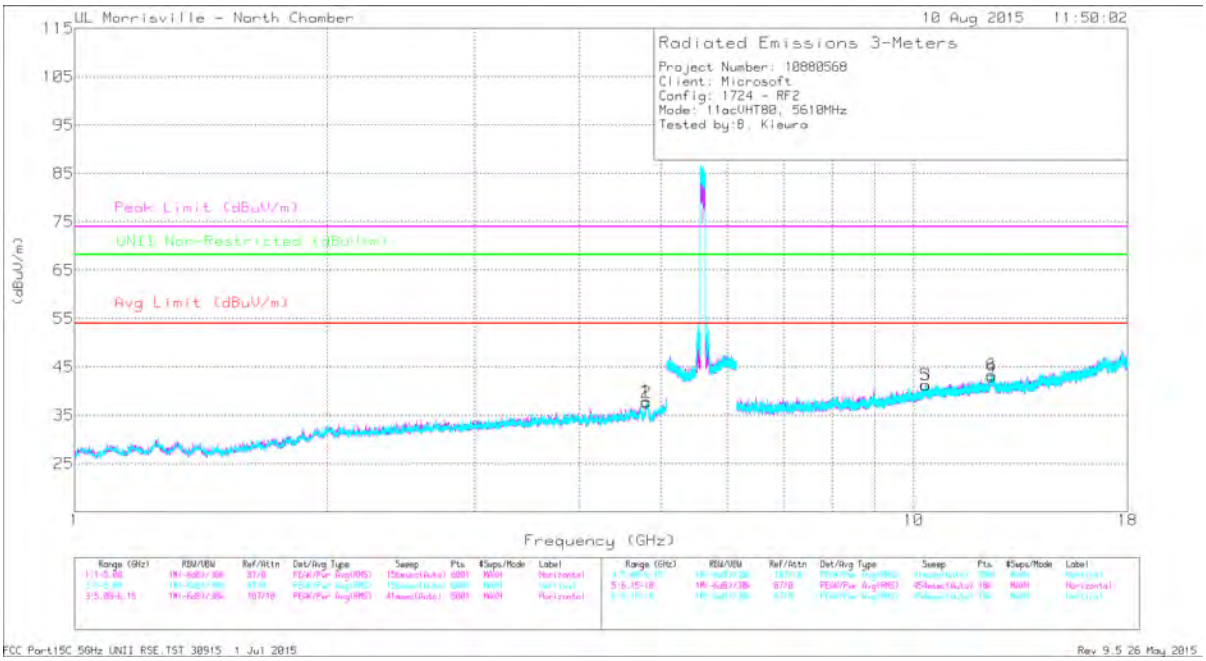
MID CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 4.828	41.23	PK3	34.1	-30.3	45.03	-	-	74	-28.97	-	-	244	390	H
	* 4.813	29.87	ADR	34.1	-30.2	33.77	54	-20.23	-	-	-	-	244	390	H
3	10.365	34.75	PK3	37.6	-24	48.35	-	-	-	-	68.2	-19.85	91	136	H
4	* 12.403	34.66	PK3	39.1	-22.9	50.86	-	-	74	-23.14	-	-	123	302	H
	* 12.407	22.88	ADR	39.1	-23	38.98	54	-15.02	-	-	-	-	123	302	H
2	* 4.804	41.86	PK3	34.1	-30.3	45.66	-	-	74	-28.34	-	-	79	163	V
	* 4.808	30.38	ADR	34.1	-30.3	34.18	54	-19.82	-	-	-	-	79	163	V
5	10.354	34.57	PK3	37.6	-23.8	48.37	-	-	-	-	68.2	-19.83	47	229	V
6	* 12.377	34.12	PK3	39.1	-22.9	50.32	-	-	74	-23.68	-	-	0	130	V
	* 12.407	22.93	ADR	39.1	-23	39.03	54	-14.97	-	-	-	-	0	130	V

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

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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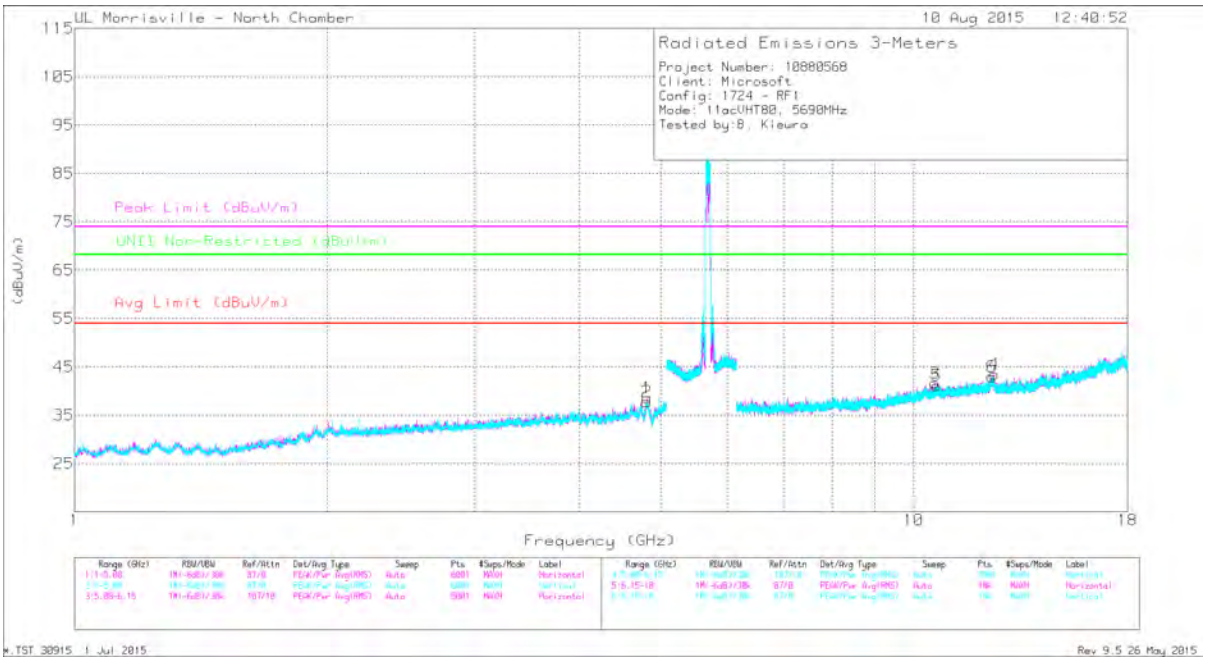
HIGH CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 4.813	41.29	PK3	34.1	-30.2	45.19	-	-	74	-28.81	-	-	292	338	H
	* 4.808	30.11	ADR	34.1	-30.3	33.91	54	-20.09	-	-	-	-	292	338	H
2	* 4.802	42.08	PK3	34.1	-30.3	45.88	-	-	74	-28.12	-	-	20	190	V
	* 4.807	30.13	ADR	34.1	-30.3	33.93	54	-20.07	-	-	-	-	20	190	V
3	* 10.609	34.11	PK3	37.7	-24	47.81	-	-	74	-26.19	-	-	360	168	H
	* 10.604	22.97	ADR	37.7	-24.1	36.57	54	-17.43	-	-	-	-	360	168	H
4	* 12.472	34.07	PK3	39.1	-23.3	49.87	-	-	74	-24.13	-	-	151	299	H
	* 12.497	22.88	ADR	39.1	-23.9	38.08	54	-15.92	-	-	-	-	151	299	H
5	* 10.66	34.62	PK3	37.8	-23.7	48.72	-	-	74	-25.28	-	-	96	213	V
	* 10.685	22.83	ADR	37.8	-23.9	36.73	54	-17.27	-	-	-	-	96	213	V
6	* 12.415	34.8	PK3	39.1	-23.1	50.8	-	-	74	-23.2	-	-	186	101	V
	* 12.418	22.87	ADR	39.1	-23	38.97	54	-15.03	-	-	-	-	186	101	V

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

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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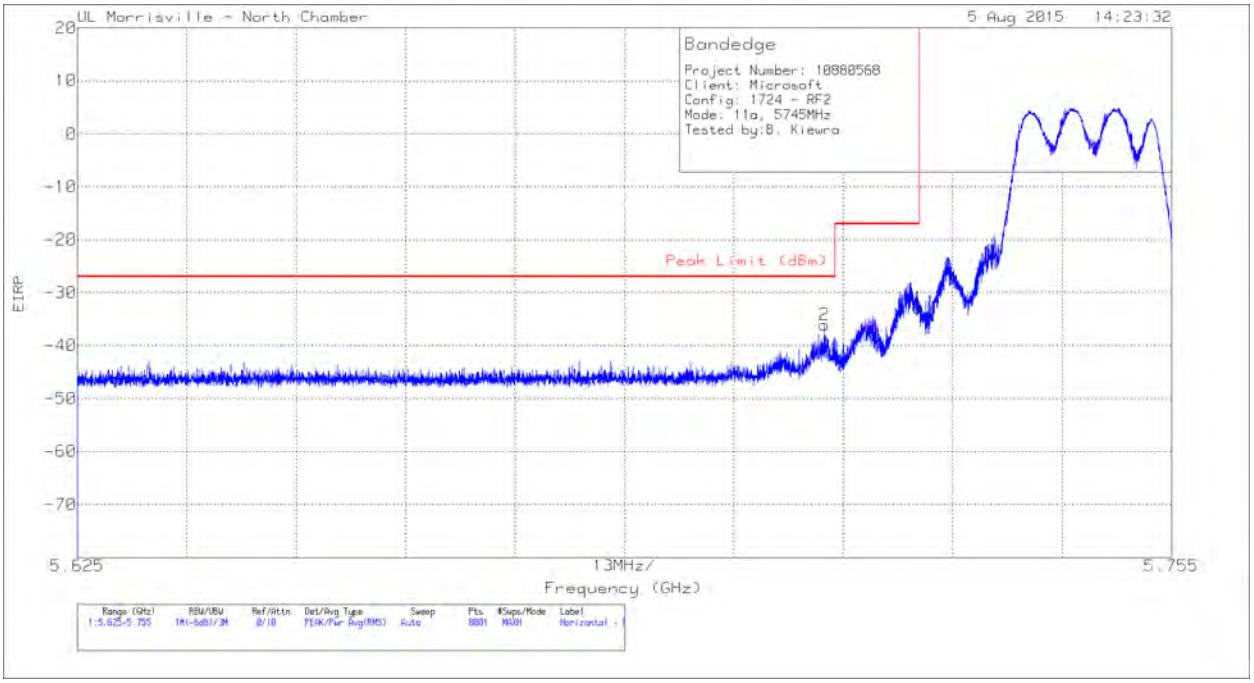
9.2.13. TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-57.93	Pk	34.7	-21.5	11.8	-32.93	-17	-15.93	248	202	H
2	5.714	-61.04	Pk	34.7	-21.6	11.8	-36.14	-27	-9.14	248	202	H

Pk - Peak detector

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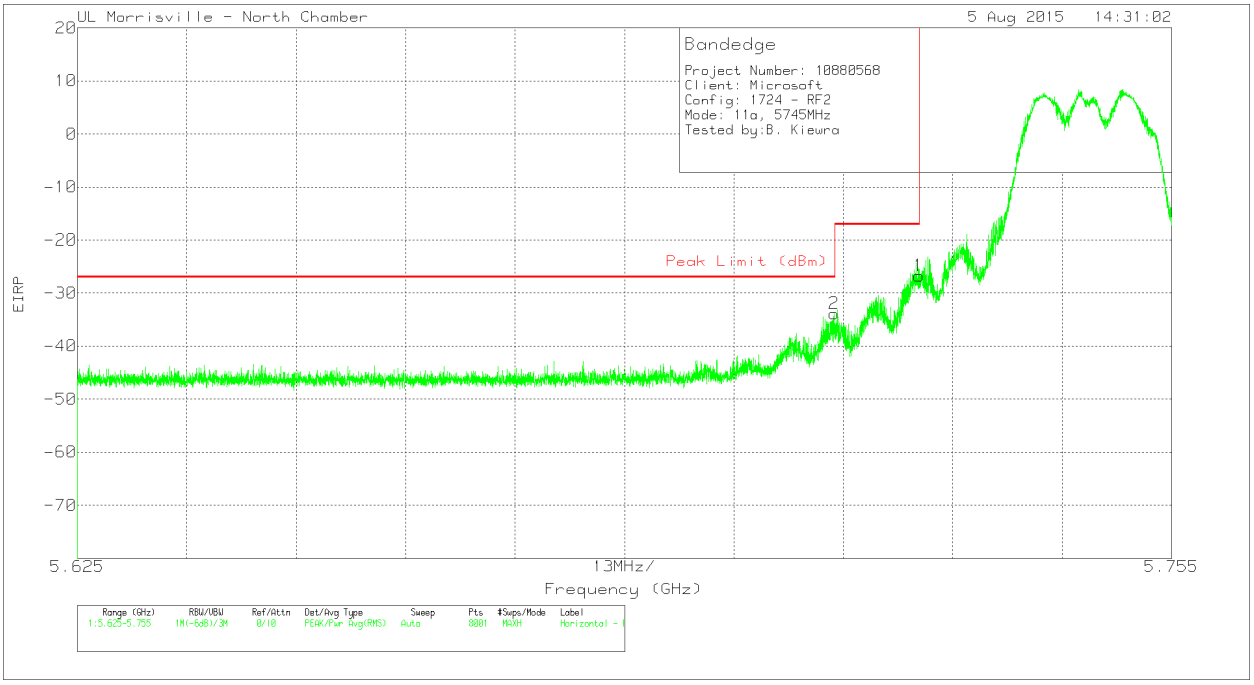
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-51.74	Pk	34.7	-21.5	11.8	-26.74	-17	-9.74	308	304	V
2	5.715	-58.92	Pk	34.7	-21.5	11.8	-33.92	-27	-6.92	308	304	V

Pk - Peak detector

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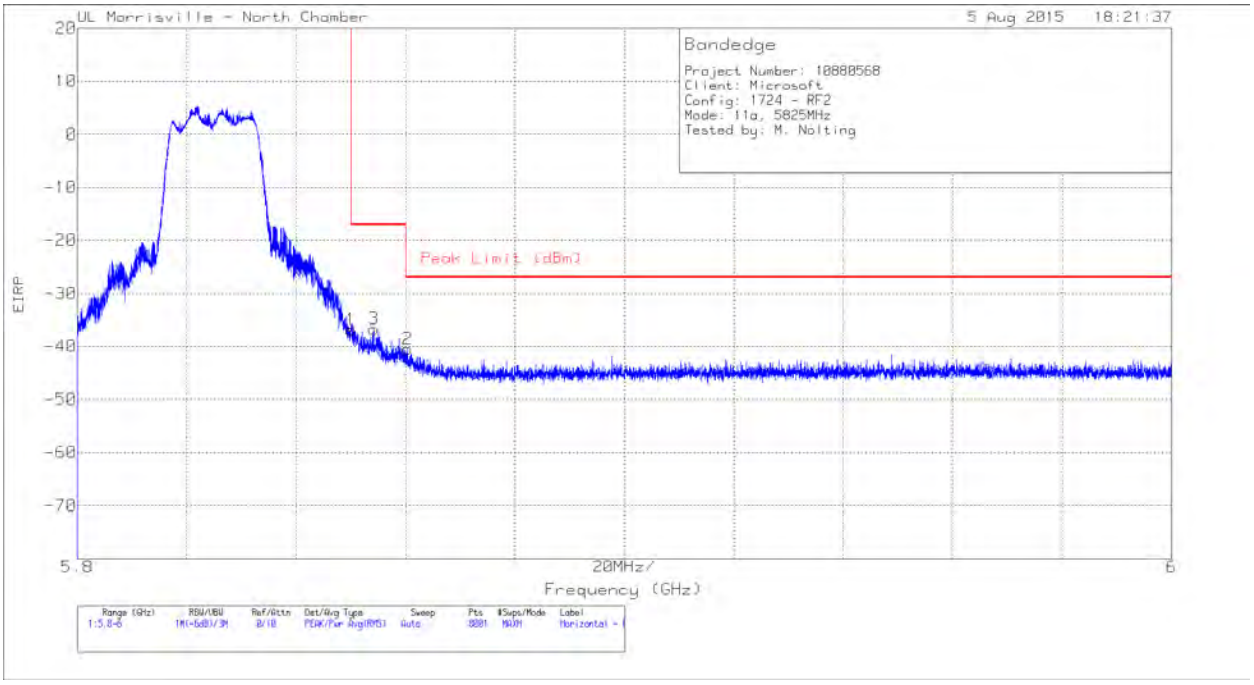
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-62.55	Pk	34.9	-21	11.8	-36.85	-17	-19.85	14	170	H
2	5.86	-66.2	Pk	34.9	-21	11.8	-40.5	-27	-13.5	14	170	H
3	5.854	-62.55	Pk	34.9	-20.9	11.8	-36.75	-17	-19.75	14	170	H

Pk - Peak detector

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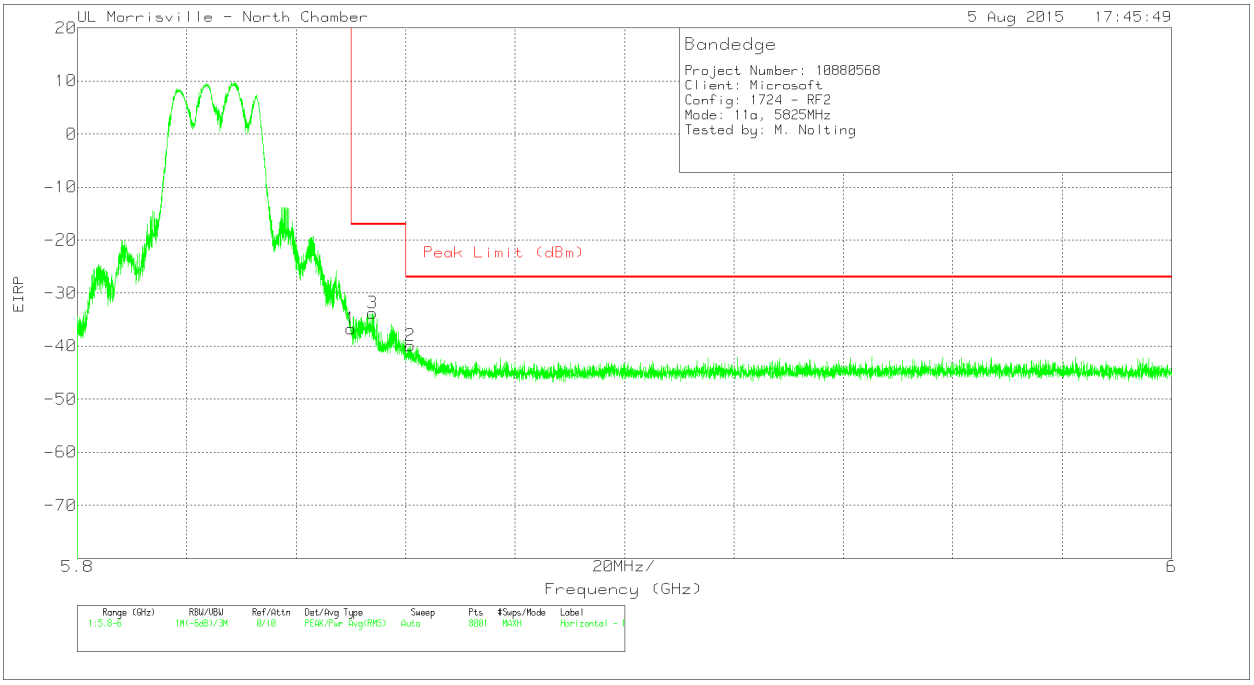
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-62.35	Pk	34.9	-21	11.8	-36.65	-17	-19.65	337	315	V
2	5.861	-65.55	Pk	34.9	-21	11.8	-39.85	-27	-12.85	337	315	V
3	5.854	-59.49	Pk	34.9	-21	11.8	-33.79	-17	-16.79	337	315	V

Pk - Peak detector

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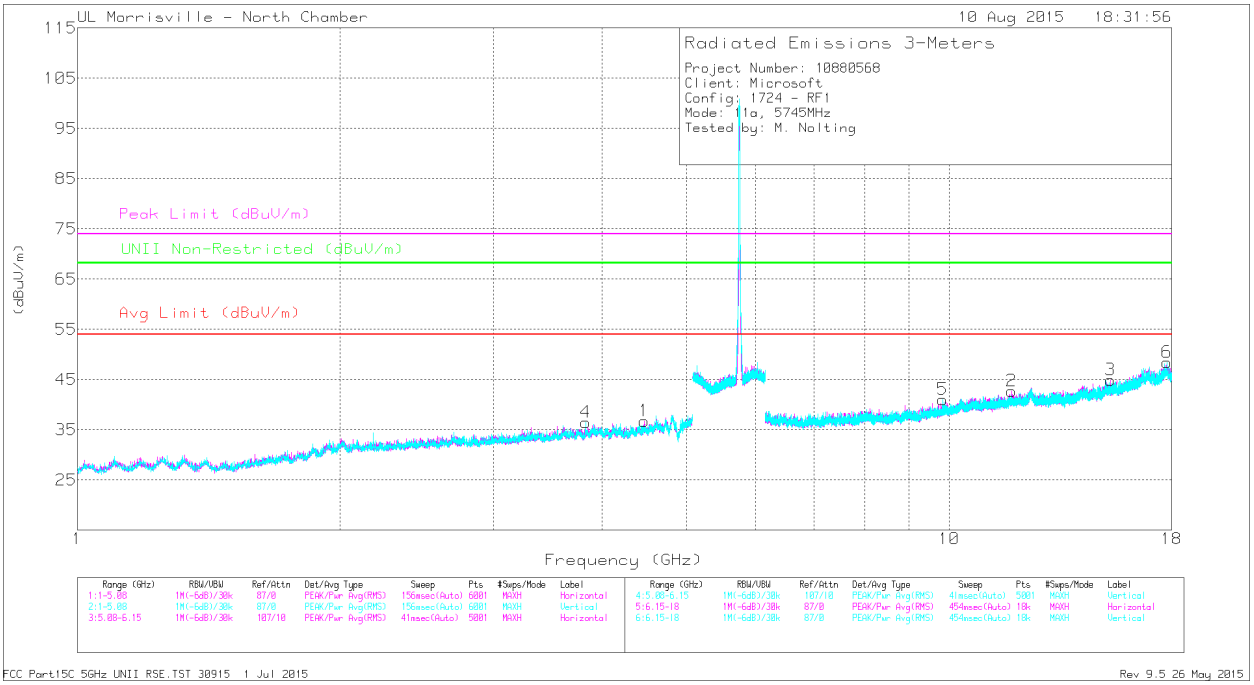
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 3.83	43.44	PK3	33.5	-31.9	-	45.04	-	-	74	-28.96	-	-	13	349	V
	* 3.83	30.77	ADR	33.5	-31.9	-	32.37	54	-21.63	-	-	-	-	13	349	V
2	* 11.798	35.6	PK3	38.7	-23.9	-	50.4	-	-	74	-23.6	-	-	201	181	H
	* 11.795	23.12	ADR	38.7	-23.9	-	37.92	54	-16.08	-	-	-	-	201	181	H
6	* 17.789	33.42	PK3	41.9	-19.9	-	55.42	-	-	74	-18.58	-	-	54	131	V
	* 17.783	21.76	ADR	41.9	-19.9	-	43.76	54	-10.24	-	-	-	-	54	131	V
1	4.473	40.84	PK3	33.9	-30.8	-	43.94	-	-	-	-	68.2	-24.26	251	127	H
5	9.839	36.02	PK3	37.1	-25.9	-	47.22	-	-	-	-	68.2	-20.98	282	238	V
3	15.314	36.54	PK3	40.2	-24.6	-	52.14	-	-	-	-	68.2	-16.06	116	161	H

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

Pk - Peak detector

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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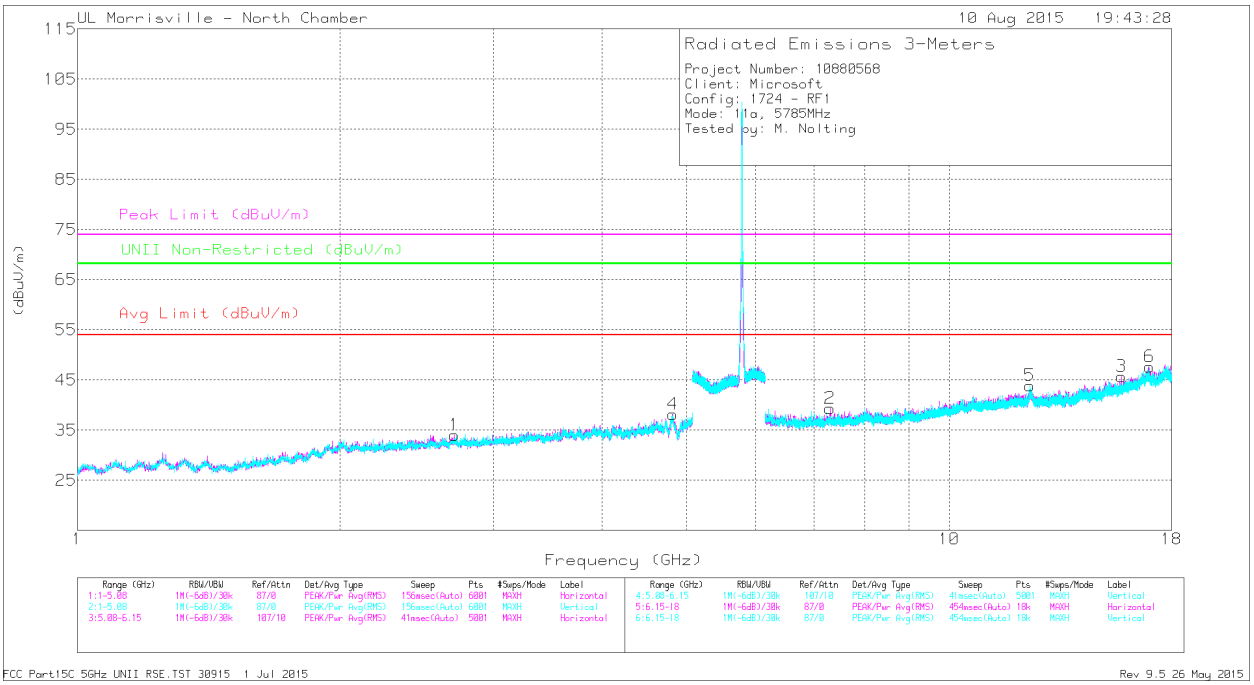
MID CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.703	43.18	PK3	32.3	-33.1	-	42.38	-	-	74	-31.62	-	-	29	122	H
	* 2.706	30.74	ADR	32.3	-33.1	-	29.94	54	-24.06	-	-	-	-	29	122	H
4	* 4.808	41.38	PK3	34.1	-30.3	-	45.18	-	-	74	-28.82	-	-	117	229	V
	* 4.814	29.79	ADR	34.1	-30.2	-	33.69	54	-20.31	-	-	-	-	117	229	V
2	* 7.298	37.88	PK3	35.7	-28.2	-	45.38	-	-	74	-28.62	-	-	294	308	H
	* 7.293	26.54	ADR	35.7	-28.2	-	34.04	54	-19.96	-	-	-	-	294	308	H
3	* 15.751	34.7	PK3	40.8	-23.8	-	51.7	-	-	74	-22.3	-	-	322	121	H
	* 15.757	23.23	ADR	40.8	-23.7	-	40.33	54	-13.67	-	-	-	-	322	121	H
5	* 12.387	34.64	PK3	39.1	-22.9	-	50.84	-	-	74	-23.16	-	-	292	169	V
	* 12.382	22.94	ADR	39.1	-22.9	-	39.14	54	-14.86	-	-	-	-	292	169	V
6	16.985	34.69	PK3	42.2	-22.4	-	54.49	-	-	-	-	68.2	-13.71	135	211	V

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

Pk - Peak detector

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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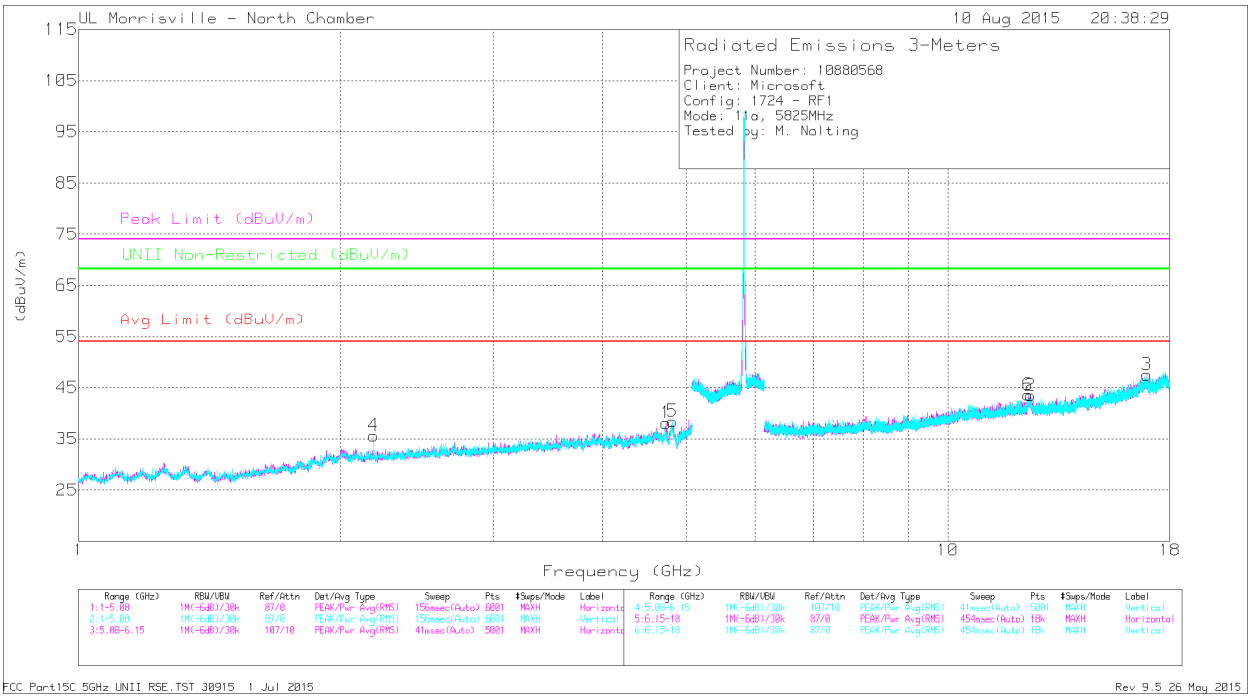
HIGH CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DCCF (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	* 4.731	41.75	PK3	34.1	-30.8	-	45.05	-	-	74	-28.95	-	-	12	265	H
	* 4.73	29.87	ADR	34.1	-30.8	-	33.17	54	-20.83	-	-	-	-	12	265	H
5	* 4.816	41.72	PK3	34.1	-30.2	-	45.62	-	-	74	-28.38	-	-	146	112	V
	* 4.814	29.49	ADR	34.1	-30.2	-	33.39	54	-20.61	-	-	-	-	146	112	V
2	* 12.453	34.19	PK3	39.1	-23	-	50.29	-	-	74	-23.71	-	-	339	223	H
	* 12.451	22.65	ADR	39.1	-23	-	38.75	54	-15.25	-	-	-	-	339	223	H
6	* 12.379	35.06	PK3	39.1	-22.9	-	51.26	-	-	74	-22.74	-	-	320	282	V
	* 12.361	22.94	ADR	39	-23.3	-	38.64	54	-15.36	-	-	-	-	320	282	V
4	2.185	45.32	PK3	31.6	-34.4	-	42.52	-	-	-	-	68.2	-25.68	336	119	V
3	16.962	34.52	PK3	42.2	-22.2	-	54.52	-	-	-	-	68.2	-13.68	333	179	H

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

Pk - Peak detector

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

Duty Cycle Correction (DCCF) = 10log(1/x) = 10log(1/0.9722) = 0.12 dB

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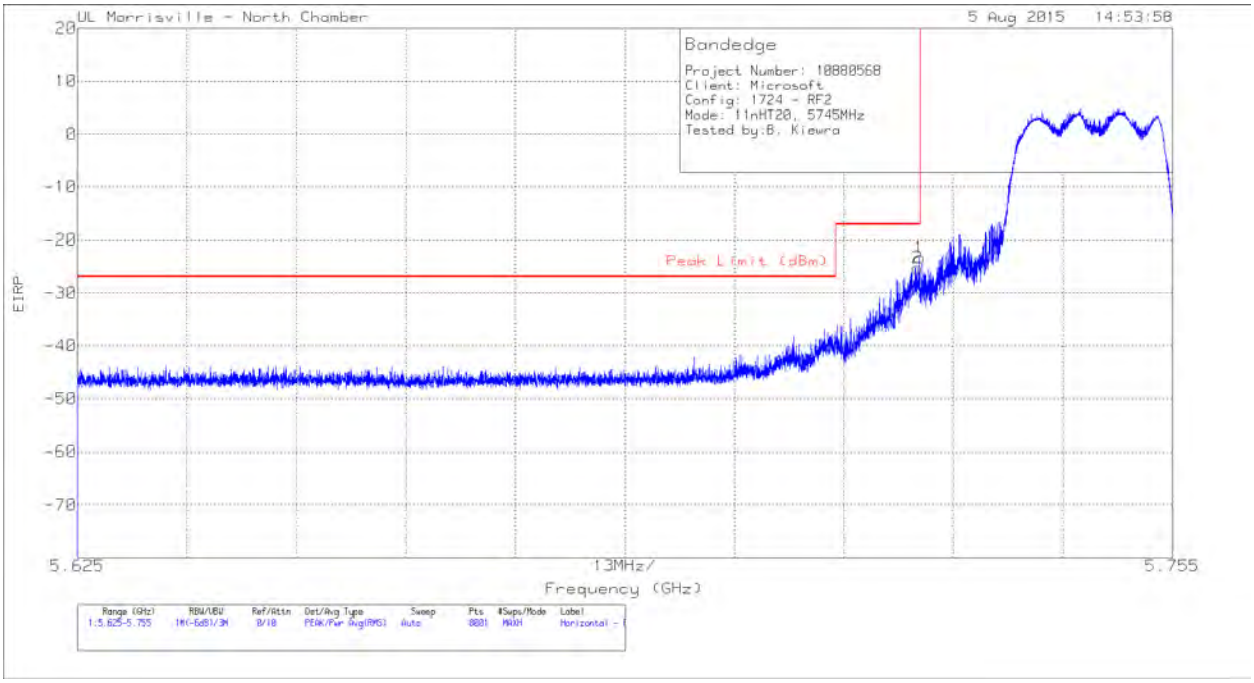
9.2.14. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-48.31	Pk	34.7	-21.5	11.8	-23.31	-17	-6.31	106	198	H
2	5.725	-50.24	Pk	34.7	-21.5	11.8	-25.24	-17	-8.24	106	198	H

Pk - Peak detector

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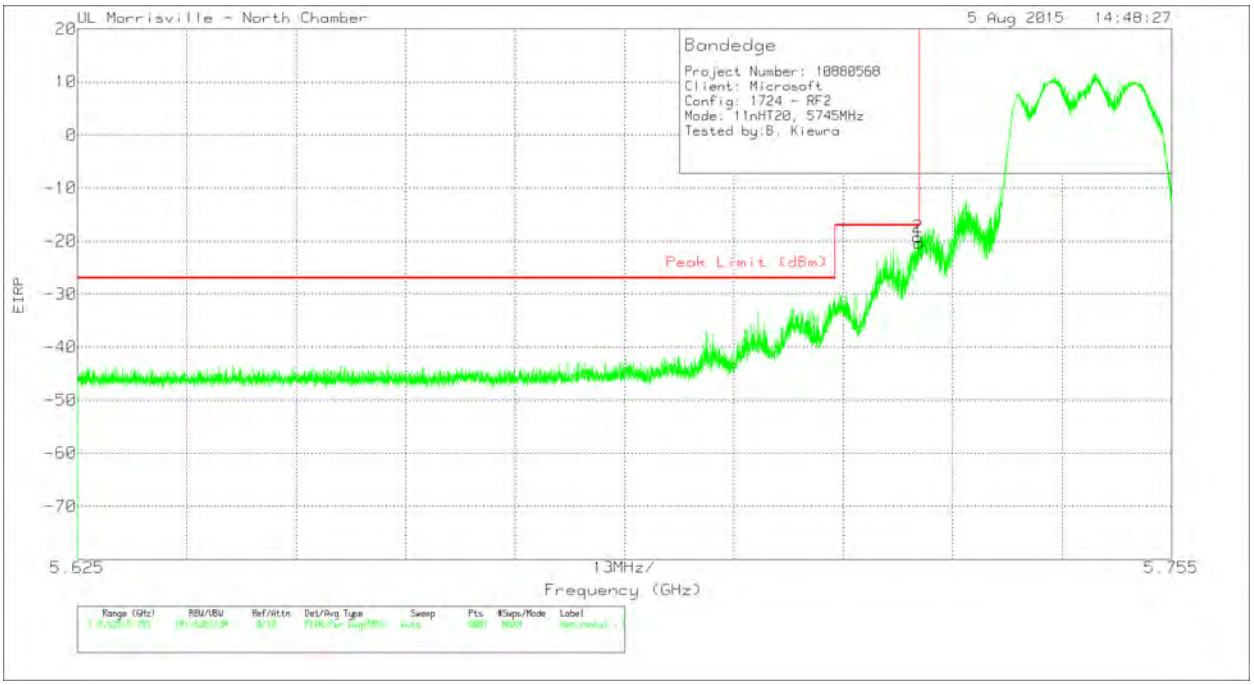
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-45.32	Pk	34.7	-21.5	11.8	-20.32	-17	-3.32	16	264	V
2	5.725	-44.27	Pk	34.7	-21.5	11.8	-19.27	-17	-2.27	16	264	V

Pk - Peak detector

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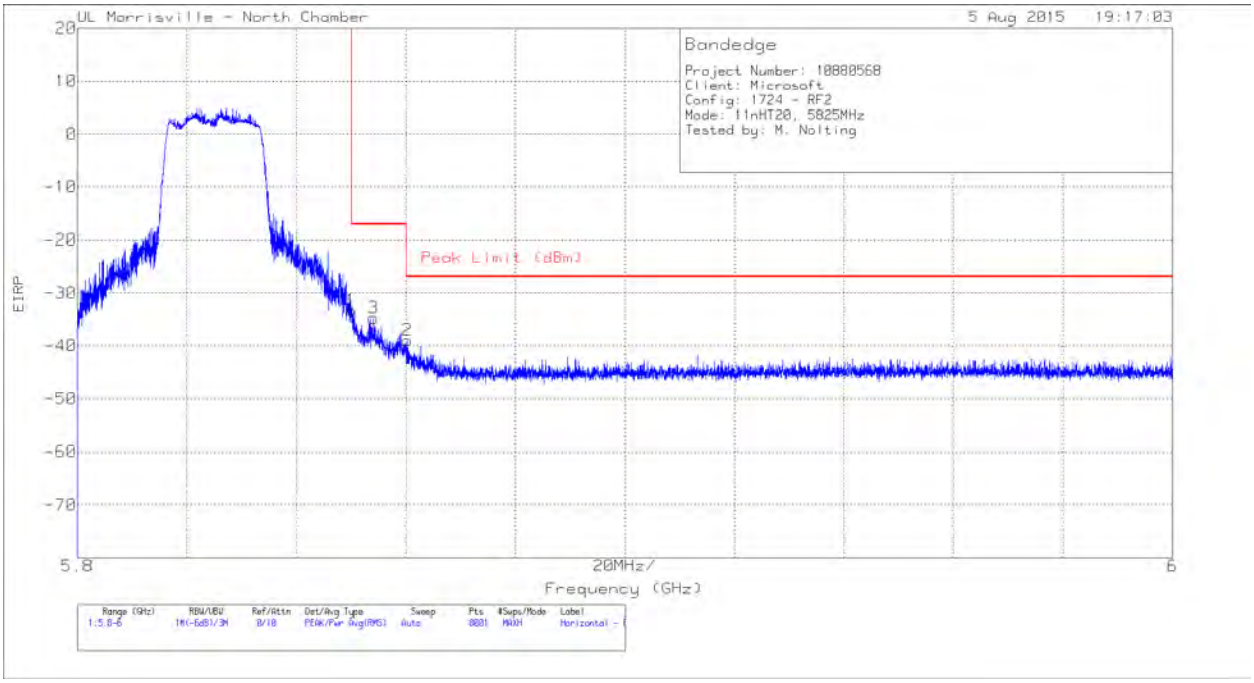
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-58.95	Pk	34.9	-21	11.8	-33.25	-17	-16.25	16	172	H
2	5.86	-64.68	Pk	34.9	-20.9	11.8	-38.88	-27	-11.88	16	172	H
3	5.854	-60.59	Pk	34.9	-20.9	11.8	-34.79	-17	-17.79	16	172	H

Pk - Peak detector

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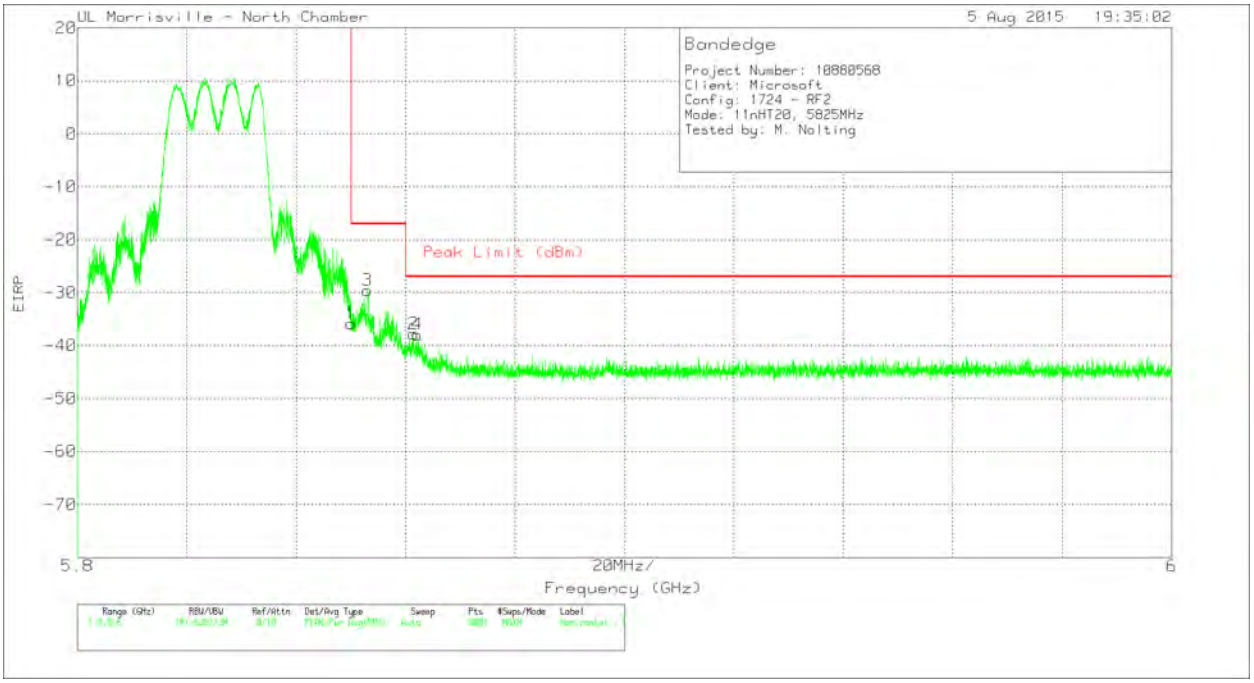
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-61.57	Pk	34.9	-21	11.8	-35.87	-17	-18.87	12	321	V
2	5.861	-63.47	Pk	34.9	-21	11.8	-37.77	-27	-10.77	12	321	V
3	5.853	-55.23	Pk	34.9	-21	11.8	-29.53	-17	-12.53	12	321	V
4	5.862	-63.59	Pk	34.9	-21	11.8	-37.89	-27	-10.89	12	321	V

Pk - Peak detector

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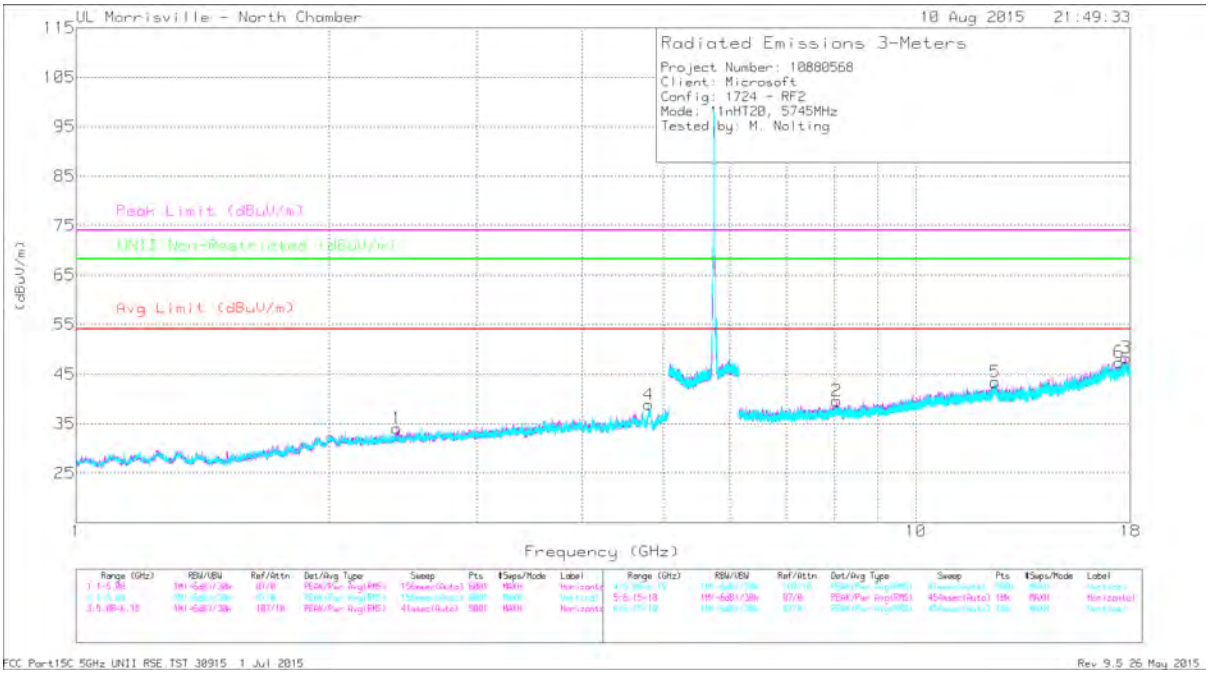
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 4.811	41.34	PK3	34.1	-30.2	45.24	-	-	74	-28.76	-	-	102	198	V
	* 4.804	29.62	ADR	34.1	-30.3	33.42	54	-20.58	-	-	-	-	102	198	V
2	* 8.044	36.64	PK3	35.9	-26.4	46.14	-	-	74	-27.86	-	-	297	333	H
	* 8.056	25.24	ADR	35.9	-26.8	34.34	54	-19.66	-	-	-	-	297	333	H
3	* 17.786	32.97	PK3	41.9	-19.9	54.97	-	-	74	-19.03	-	-	65	146	H
	* 17.785	21.49	ADR	41.9	-19.9	43.49	54	-10.51	-	-	-	-	65	146	H
5	* 12.433	34.58	PK3	39.1	-23.1	50.58	-	-	74	-23.42	-	-	216	178	V
	* 12.419	22.8	ADR	39.1	-23	38.9	54	-15.1	-	-	-	-	216	178	V
1	2.408	43.15	PK3	31.9	-33.6	41.45	-	-	-	-	68.2	-26.75	259	172	H
6	17.445	34.5	PK3	41.8	-21.8	54.5	-	-	-	-	68.2	-13.7	170	324	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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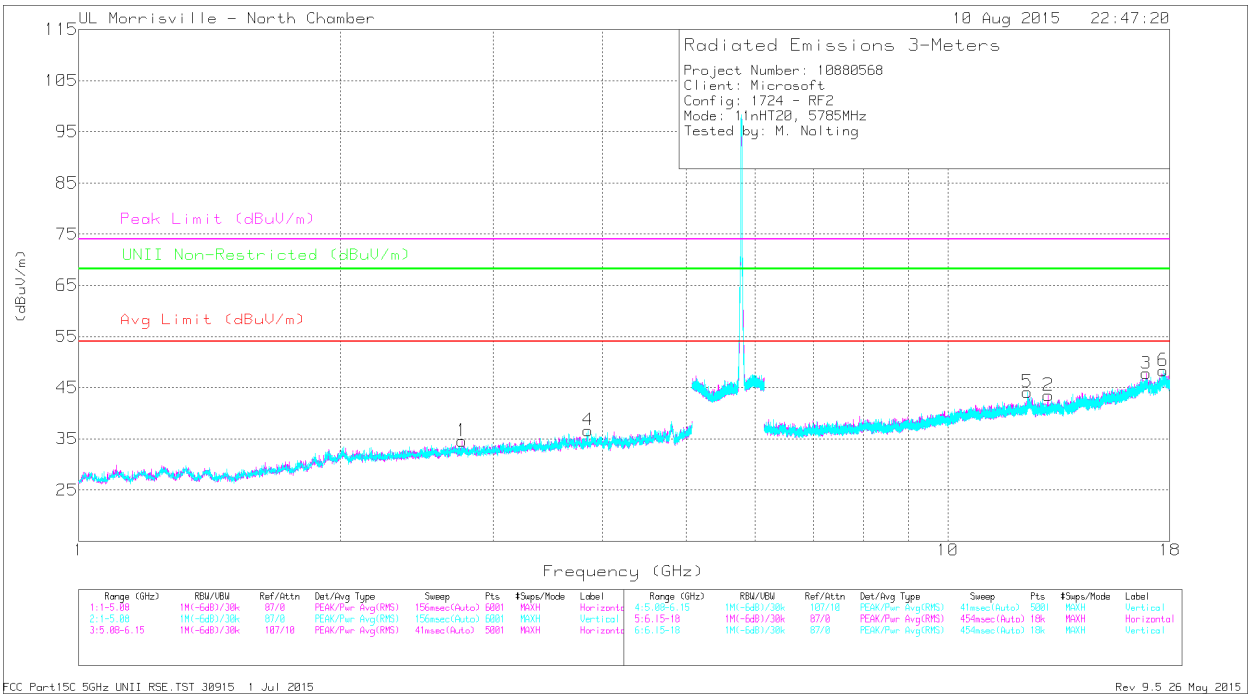
MID CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 2.755	43.16	PK3	32.4	-33.2	42.36	-	-	74	-31.64	-	-	138	366	H
	* 2.766	30.55	ADR	32.4	-33.2	29.75	54	-24.25	-	-	-	-	138	366	H
4	* 3.857	43.82	PK3	33.6	-32	45.42	-	-	74	-28.58	-	-	28	362	V
	* 3.857	31.45	ADR	33.6	-32	33.05	54	-20.95	-	-	-	-	28	362	V
5	* 12.344	34.69	PK3	39	-23.9	49.79	-	-	74	-24.21	-	-	329	125	V
	* 12.328	23.18	ADR	39	-24.4	37.78	54	-16.22	-	-	-	-	329	125	V
2	13.044	35.39	PK3	39.3	-25.4	49.29	-	-	-	-	68.2	-18.91	6	267	H
3	16.901	35.68	PK3	42.2	-22.8	55.08	-	-	-	-	68.2	-13.12	279	125	H
6	17.675	22.81	ADR	41.9	-21	43.71	-	-	-	-	-	-	200	240	V

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

Pk - Peak detector

PK3 - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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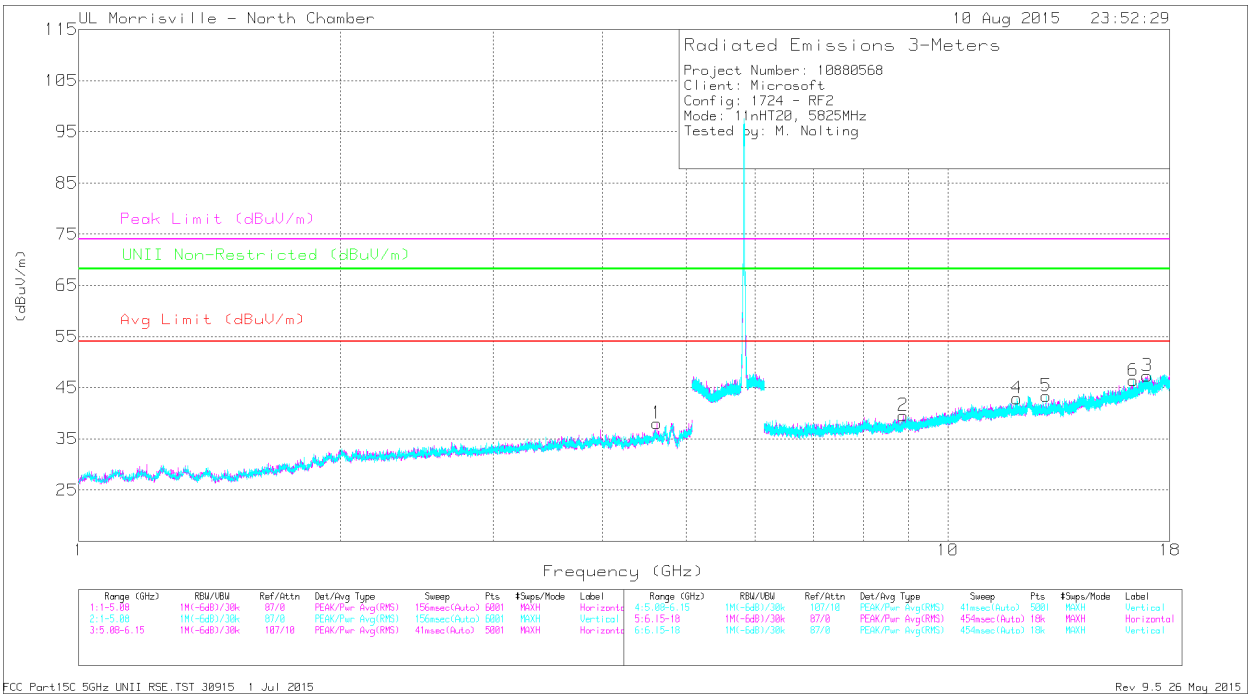
HIGH CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 4.626	41.78	PK3	34	-30.8	44.98	-	-	74	-29.02	-	-	115	134	H
	* 4.619	29.6	ADR	34	-30.9	32.7	54	-21.3	-	-	-	-	115	134	H
4	* 12.005	35.58	PK3	38.9	-24.6	49.88	-	-	74	-24.12	-	-	178	236	V
	* 12.016	23.34	ADR	38.9	-24.5	37.74	54	-16.26	-	-	-	-	178	236	V
2	8.893	37.15	PK3	36.3	-26.6	46.85	-	-	-	-	68.2	-21.35	242	345	H
5	12.975	35.25	PK3	39.3	-25.2	49.35	-	-	-	-	68.2	-18.85	301	179	V
6	16.335	35.67	PK3	41.5	-23.6	53.57	-	-	-	-	68.2	-14.63	83	218	V
3	16.97	34.63	PK3	42.2	-22.3	54.53	-	-	-	-	68.2	-13.67	153	128	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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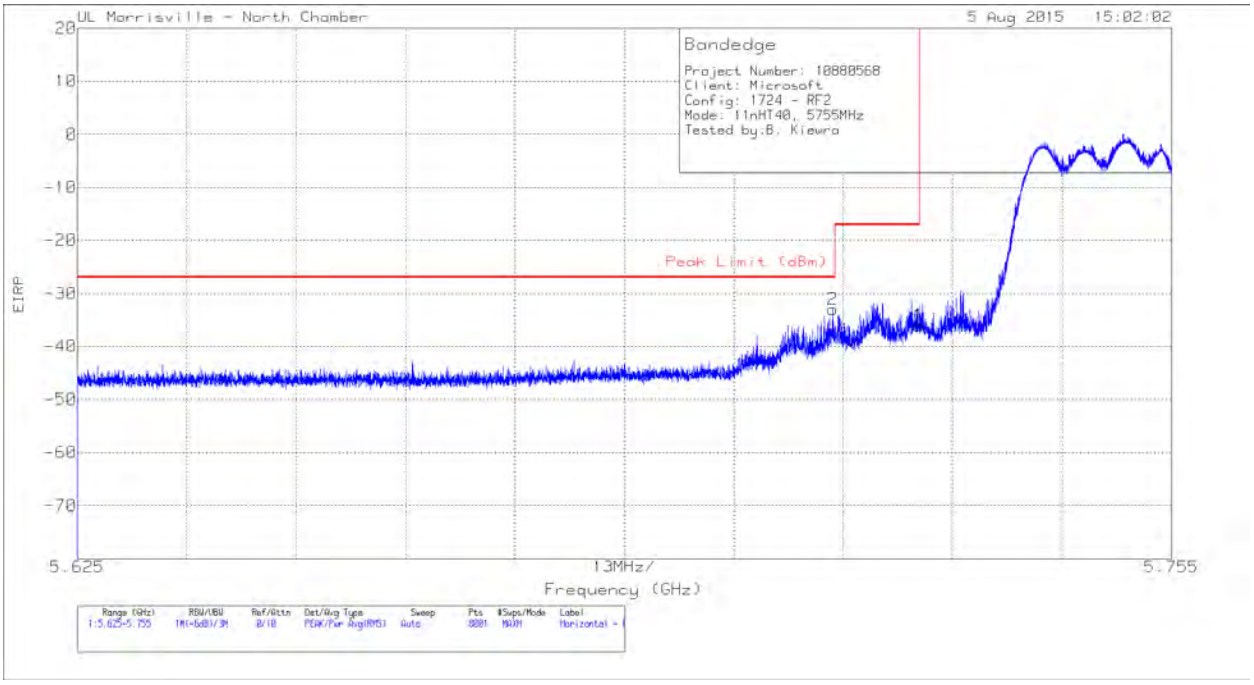
9.2.15. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-61.11	Pk	34.7	-21.5	11.8	-36.11	-17	-19.11	98	191	H
2	5.715	-58.05	Pk	34.7	-21.5	11.8	-33.05	-27	-6.05	98	191	H

Pk - Peak detector

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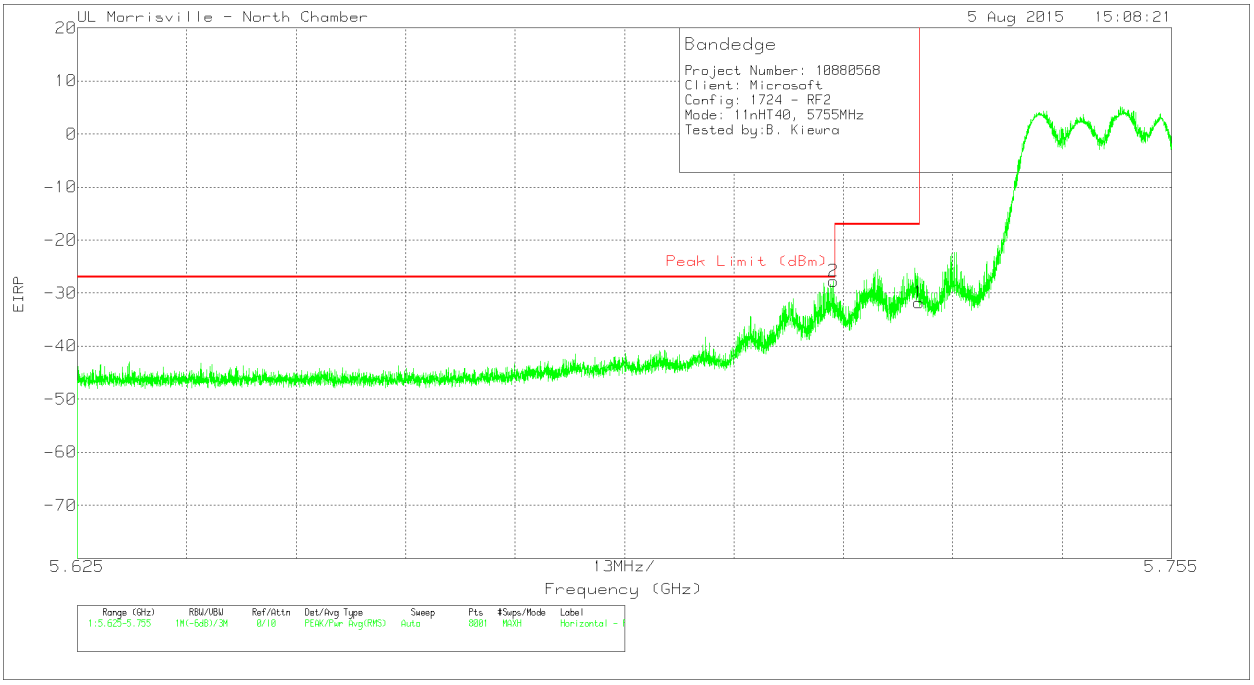
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-56.75	Pk	34.7	-21.5	11.8	-31.75	-17	-14.75	335	315	V
2	5.715	-52.76	Pk	34.7	-21.5	11.8	-27.76	-27	-.76	335	315	V

Pk - Peak detector

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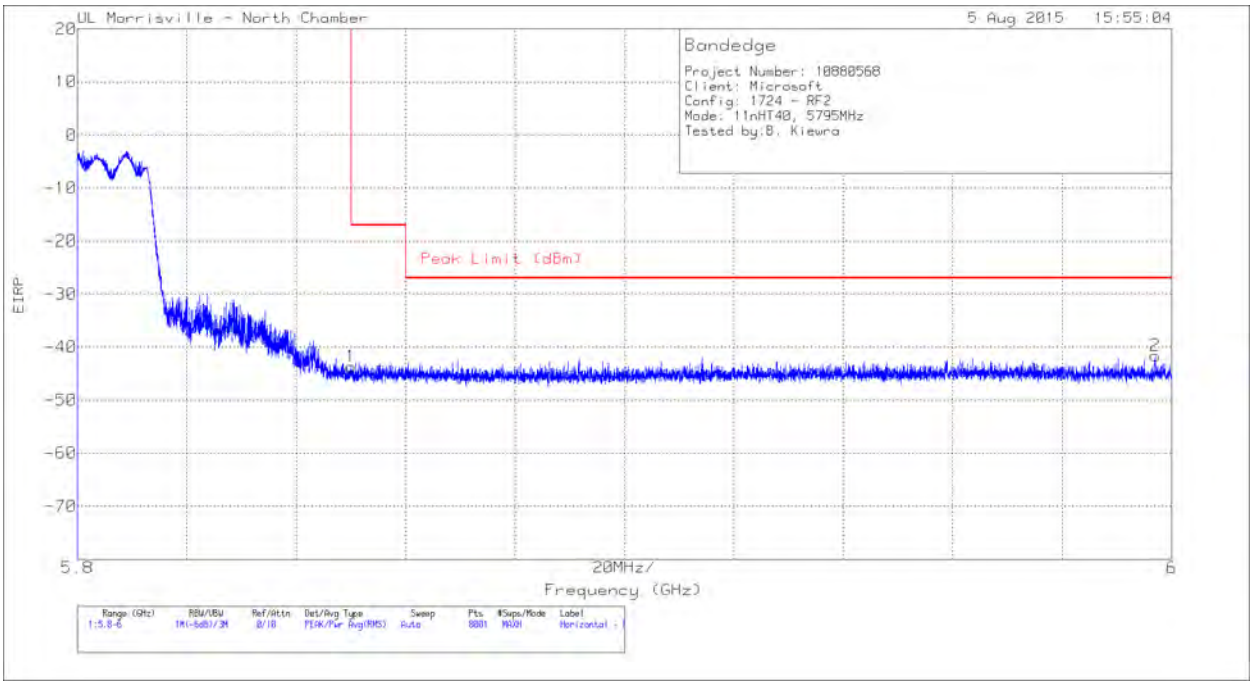
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-69.4	Pk	34.9	-21	11.8	-43.7	-17	-26.7	146	198	H
2	5.997	-68.12	Pk	35.1	-20.4	11.8	-41.62	-27	-14.62	146	198	H

Pk - Peak detector

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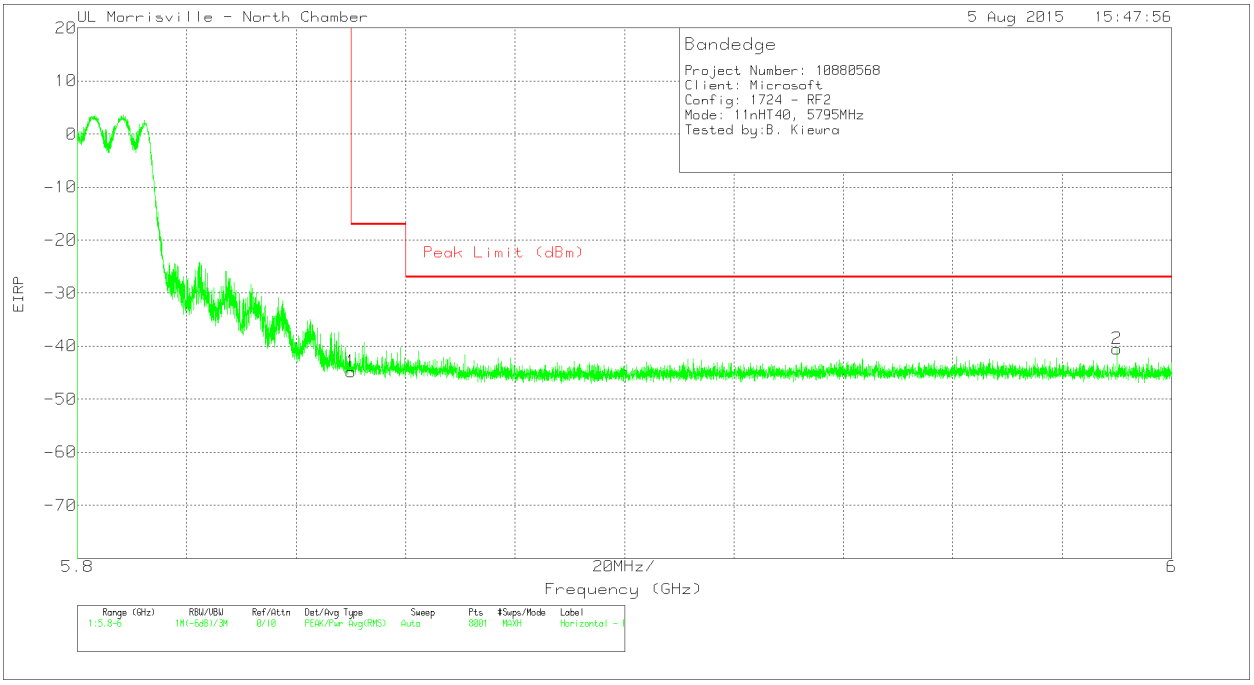
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-70.5	Pk	34.9	-21	11.8	-44.8	-17	-27.8	355	336	V
2	5.99	-67.03	Pk	35.1	-20.4	11.8	-40.53	-27	-13.53	355	336	V

Pk - Peak detector

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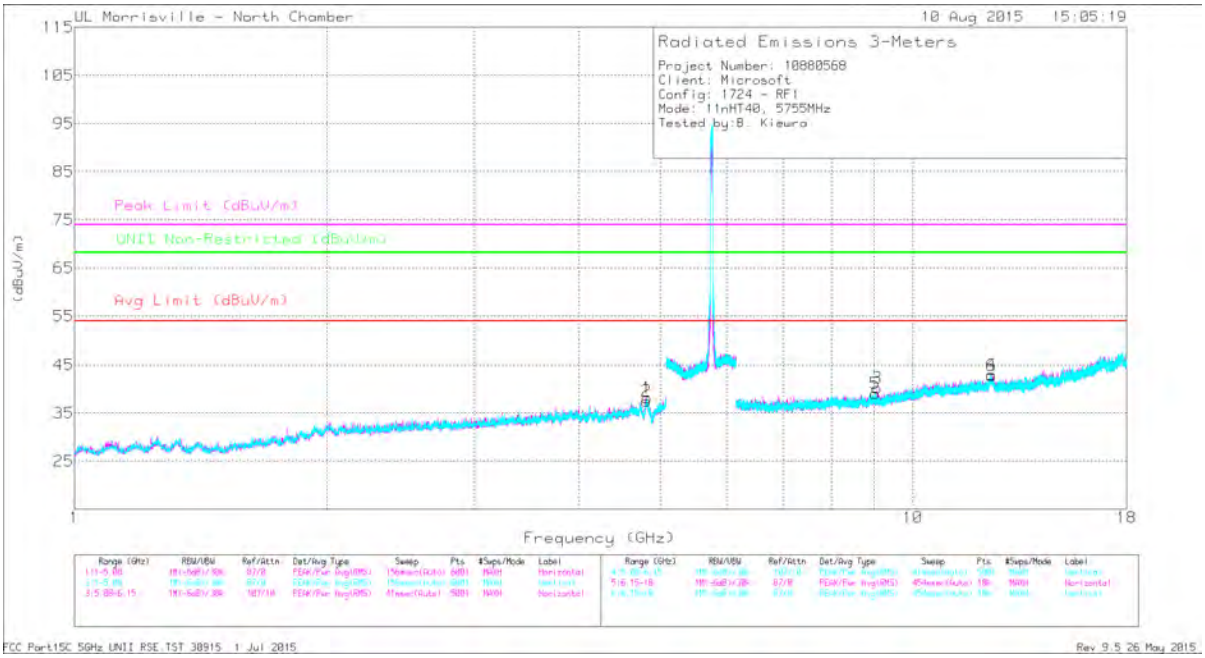
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 4.809	41.42	PK3	34.1	-30.2	45.32	-	-	74	-28.68	-	-	178	297	H
	* 4.809	29.73	ADR	34.1	-30.2	33.63	54	-20.37	-	-	-	-	178	297	H
2	* 4.818	41.35	PK3	34.1	-30.2	45.25	-	-	74	-28.75	-	-	253	253	V
	* 4.808	29.7	ADR	34.1	-30.3	33.5	54	-20.5	-	-	-	-	253	253	V
3	* 9.043	37.21	PK3	36.4	-26.9	46.71	-	-	74	-27.29	-	-	149	349	H
	* 9.041	25.07	ADR	36.4	-26.9	34.57	54	-19.43	-	-	-	-	149	349	H
4	* 12.425	34.41	PK3	39.1	-23	50.51	-	-	74	-23.49	-	-	109	204	H
	* 12.425	22.73	ADR	39.1	-23	38.83	54	-15.17	-	-	-	-	109	204	H
5	* 9.033	36.72	PK3	36.4	-27	46.12	-	-	74	-27.88	-	-	230	270	V
	* 9.048	25.08	ADR	36.4	-27	34.48	54	-19.52	-	-	-	-	230	270	V
6	* 12.443	34.6	PK3	39.1	-23.1	50.6	-	-	74	-23.4	-	-	343	210	V
	* 12.419	22.71	ADR	39.1	-23	38.81	54	-15.19	-	-	-	-	343	210	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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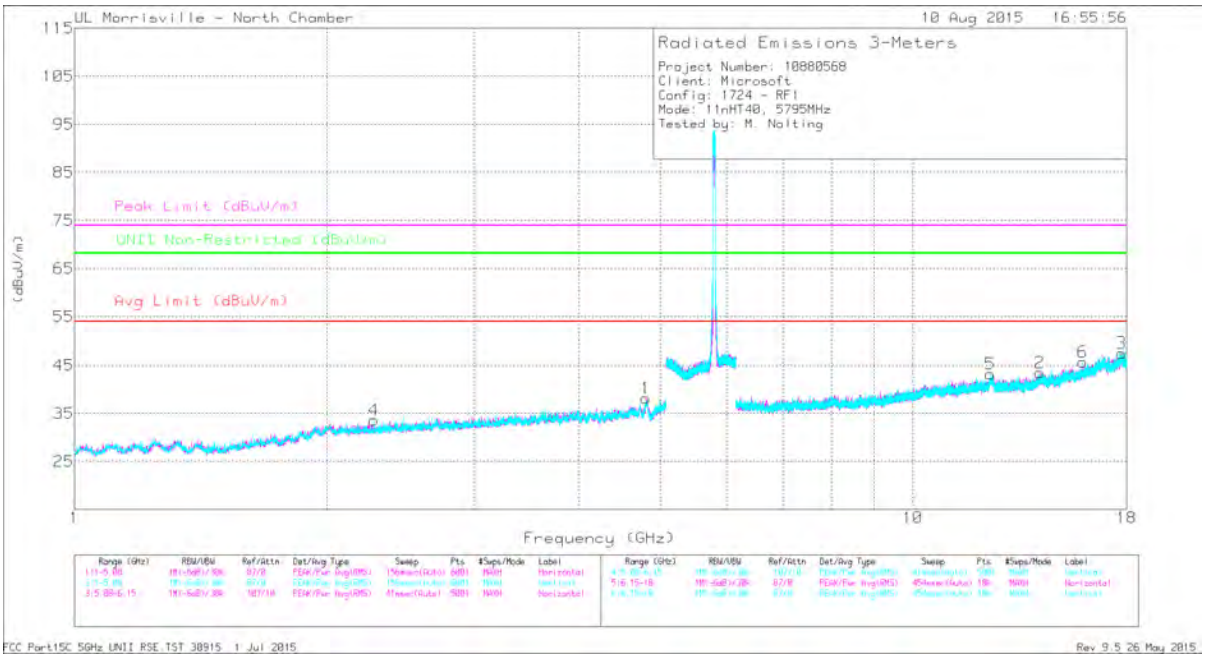
HIGH CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 4.809	41.9	PK3	34.1	-30.2	45.8	-	-	74	-28.2	-	-	4	122	H
	* 4.804	29.9	ADR	34.1	-30.3	33.7	54	-20.3	-	-	-	-	4	122	H
4	* 2.274	43.43	PK3	31.6	-34.2	40.83	-	-	74	-33.17	-	-	107	268	V
	* 2.282	31.22	ADR	31.7	-34.2	28.72	54	-25.28	-	-	-	-	107	268	V
3	* 17.746	34.49	PK3	41.9	-20.7	55.69	-	-	74	-18.31	-	-	275	201	H
	* 17.761	22.39	ADR	41.9	-20.3	43.99	54	-10.01	-	-	-	-	275	201	H
5	* 12.391	35.09	PK3	39.1	-22.9	51.29	-	-	74	-22.71	-	-	248	141	V
	* 12.376	22.93	ADR	39.1	-22.9	39.13	54	-14.87	-	-	-	-	248	141	V
6	* 15.954	36.63	PK3	41.1	-24.6	53.13	-	-	74	-20.87	-	-	69	175	V
	* 15.941	24.49	ADR	41.1	-24.7	40.89	54	-13.11	-	-	-	-	69	175	V
2	14.176	36.69	PK3	39.3	-24.8	51.19	-	-	-	-	68.2	-17.01	239	139	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
Pk - Peak detector
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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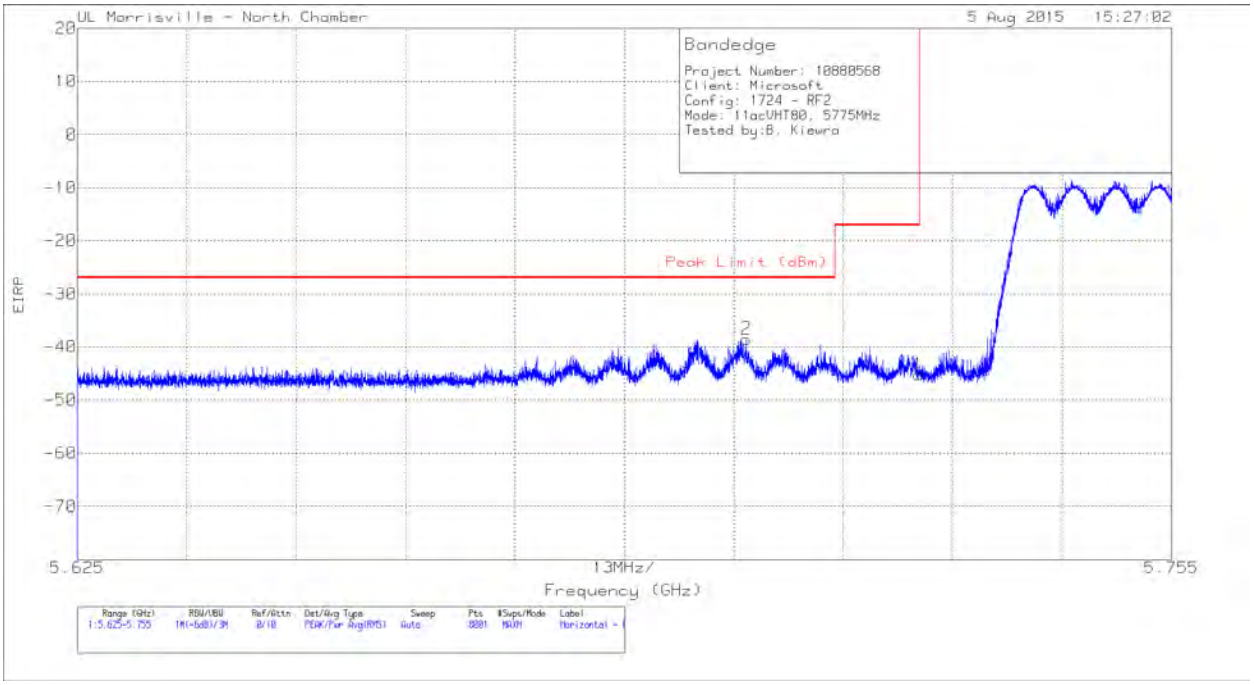
9.2.16. TX ABOVE 1 GHz 802.11ac VHT80 MODE IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-70.17	Pk	34.7	-21.5	11.8	-45.17	-17	-28.17	39	173	H
2	5.704	-63.39	Pk	34.7	-21.6	11.8	-38.49	-27	-11.49	39	173	H

Pk - Peak detector

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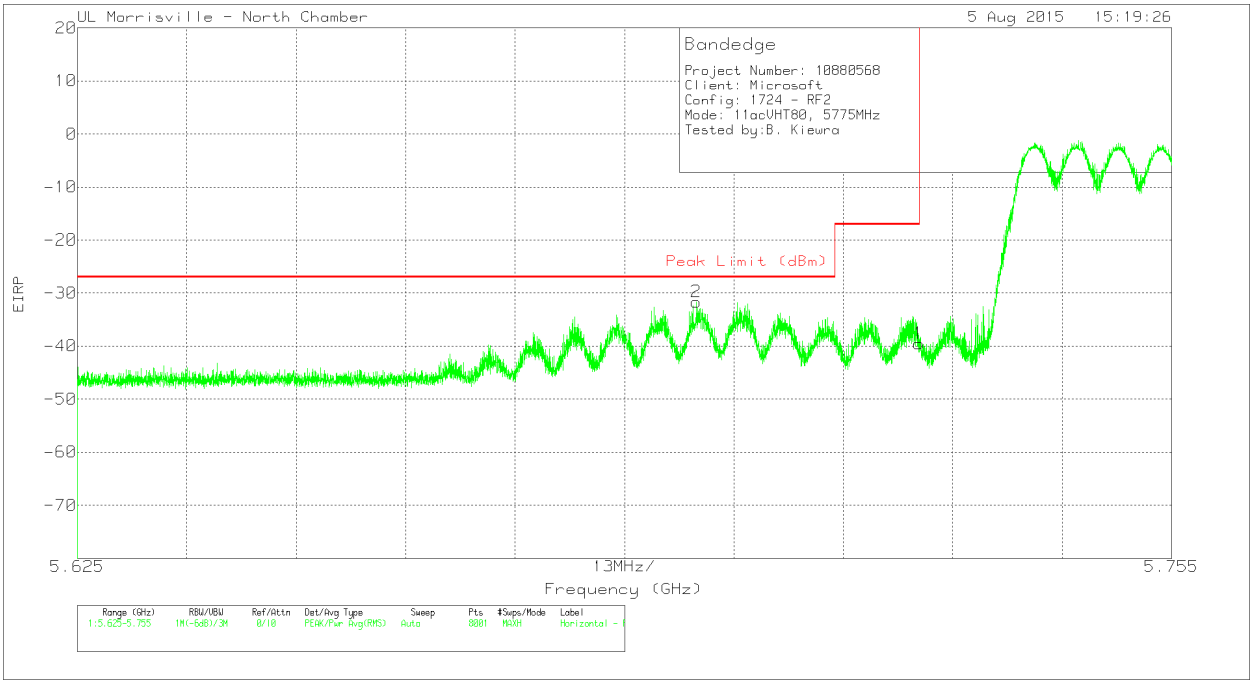
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-64.54	Pk	34.7	-21.5	11.8	-39.54	-17	-22.54	1	234	V
2	5.699	-56.62	Pk	34.7	-21.6	11.8	-31.72	-27	-4.72	1	234	V

Pk - Peak detector

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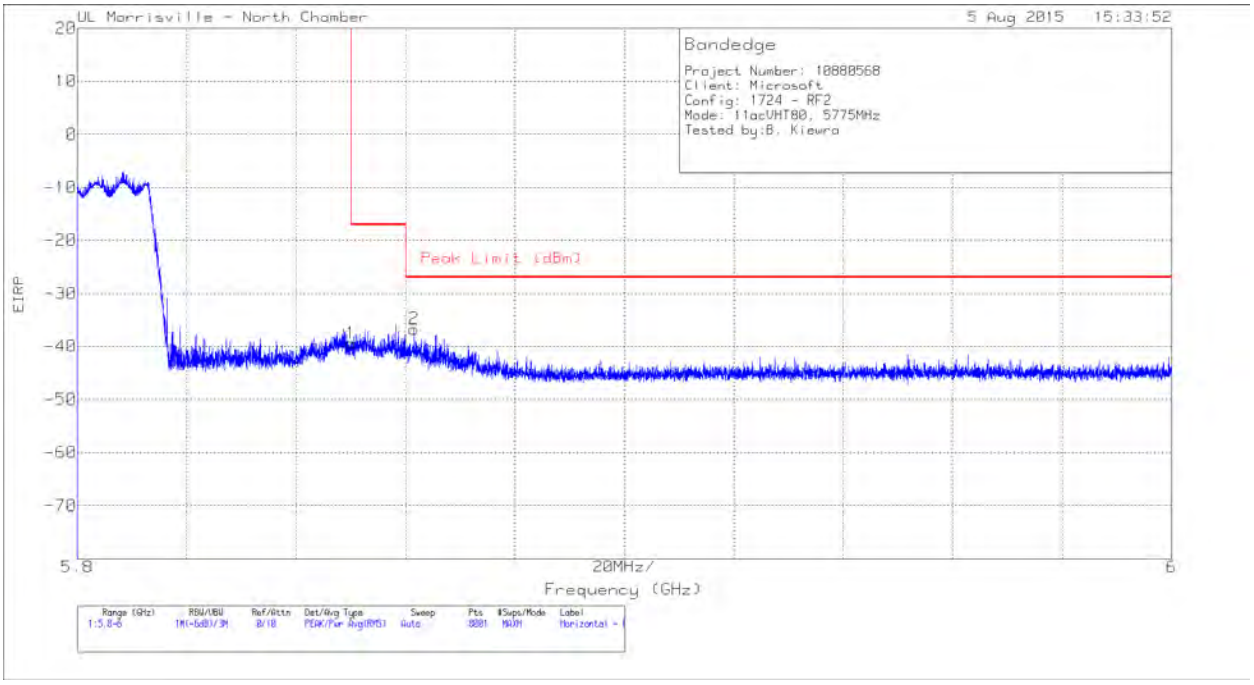
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-65.07	Pk	34.9	-21	11.8	-39.37	-17	-22.37	15	165	H
2	5.862	-62.36	Pk	34.9	-21	11.8	-36.66	-27	-9.66	15	165	H

Pk - Peak detector

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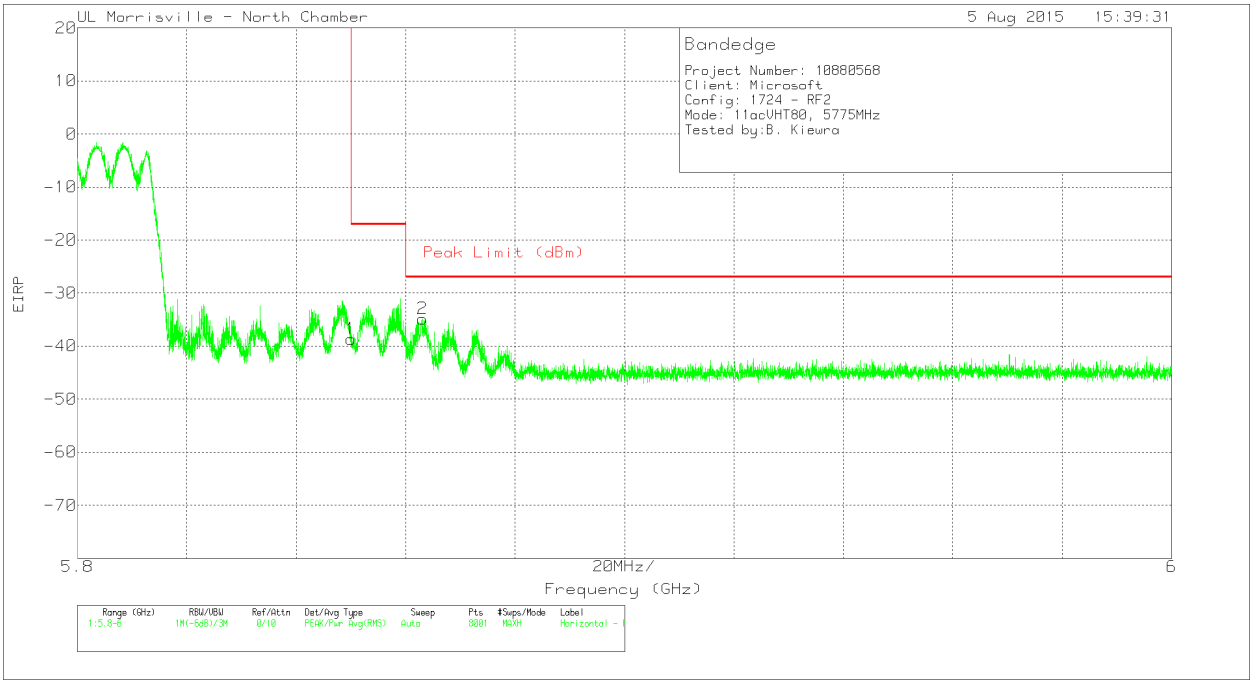
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (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	-64.38	Pk	34.9	-21	11.8	-38.68	-17	-21.68	0	236	V
2	5.863	-60.62	Pk	34.9	-21	11.8	-34.92	-27	-7.92	0	236	V

Pk - Peak detector

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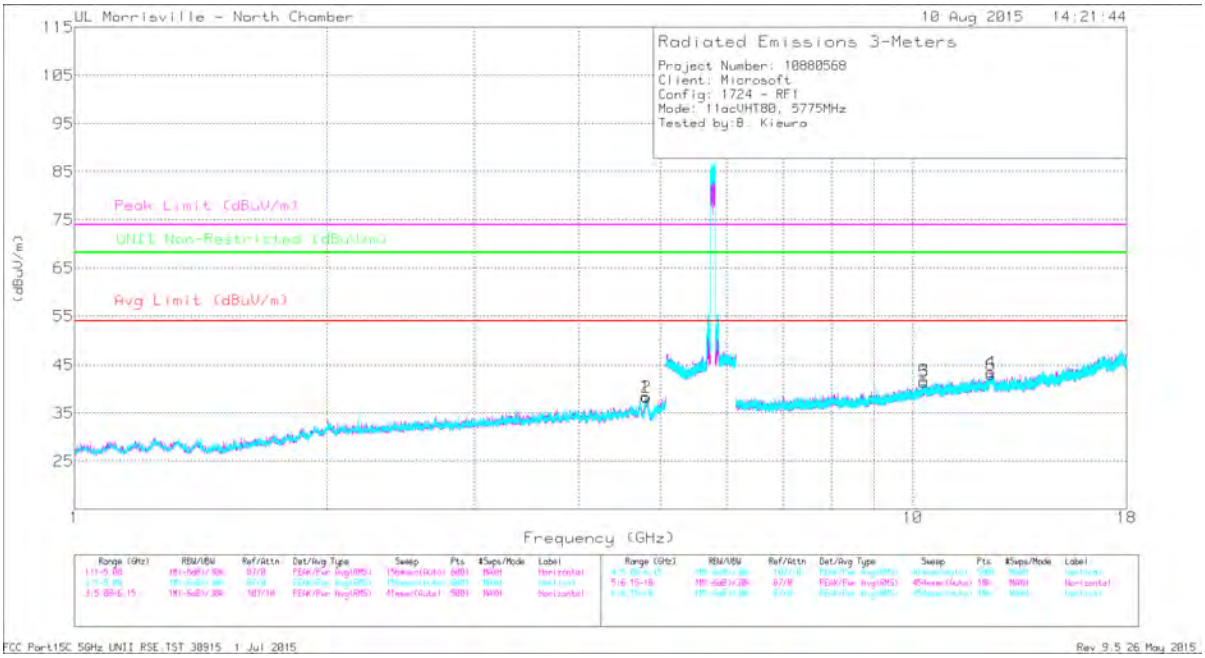
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (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	* 4.81	41.15	PK3	34.1	-30.2	45.05	-	-	74	-28.95	-	-	278	293	H
	* 4.807	29.68	ADR	34.1	-30.3	33.48	54	-20.52	-	-	-	-	278	293	H
2	* 4.817	41.32	PK3	34.1	-30.2	45.22	-	-	74	-28.78	-	-	196	293	V
	* 4.808	29.71	ADR	34.1	-30.2	33.61	54	-20.39	-	-	-	-	196	293	V
4	* 12.384	35.06	PK3	39.1	-22.9	51.26	-	-	74	-22.74	-	-	114	381	H
	* 12.374	22.87	ADR	39	-22.9	38.97	54	-15.03	-	-	-	-	114	381	H
6	* 12.41	34.81	PK3	39.1	-23.1	50.81	-	-	74	-23.19	-	-	212	395	V
	* 12.404	22.91	ADR	39.1	-22.9	39.11	54	-14.89	-	-	-	-	212	395	V
3	10.317	34.93	PK3	37.6	-23.8	48.73	-	-	-	-	68.2	-19.47	44	228	H
5	10.327	34.83	PK3	37.6	-23.7	48.73	-	-	-	-	68.2	-19.47	189	371	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK3 - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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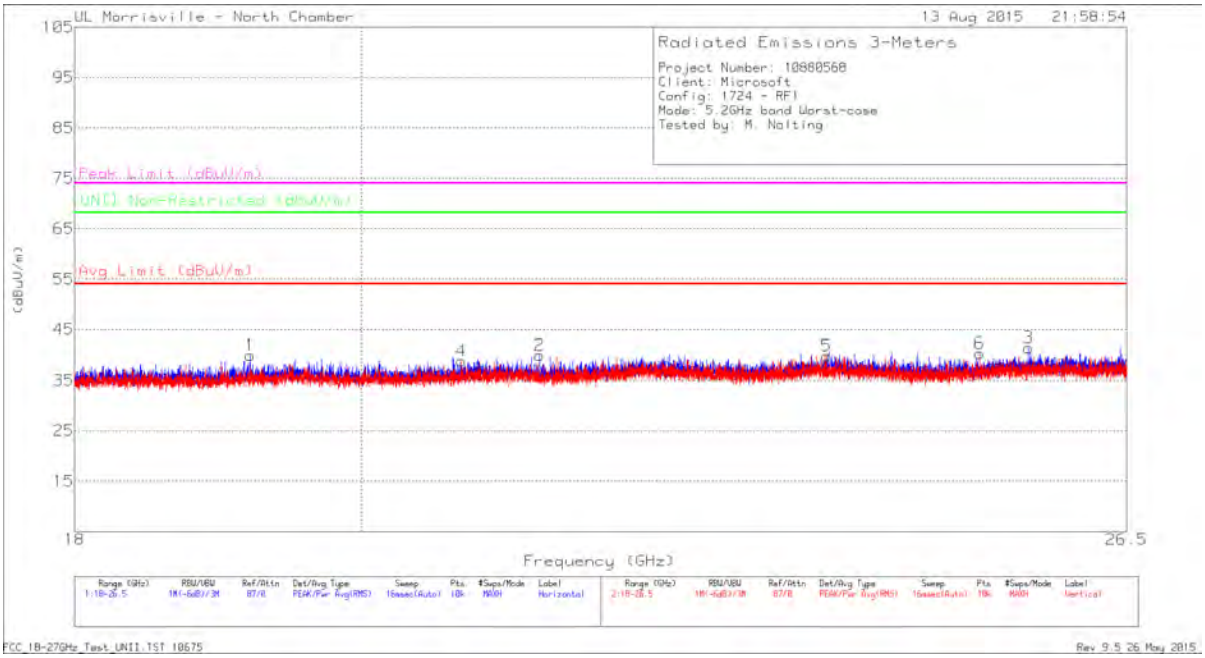
9.3. WORST-CASE 18-40GHz

SPURIOUS EMISSIONS 18 TO 26.5GHz (WORST-CASE 5.2GHz CONFIGURATION)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF & G/L (dB/m)	Dist Cor (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)
1	* 19.198	41.92	Pk	7.6	-9.5	40.02	54	-13.98	74	-33.98	68.2	-28.18	0-360
2	* 21.356	39.57	Pk	9.9	-9.5	39.97	54	-14.03	74	-34.03	68.2	-28.23	0-360
4	* 20.753	38.72	Pk	9.6	-9.5	38.82	54	-15.18	74	-35.18	68.2	-29.38	0-360
5	* 23.733	37.76	Pk	11.6	-9.5	39.86	54	-14.14	74	-34.14	68.2	-28.34	0-360
6	25.105	38.96	Pk	10.9	-9.5	40.36	-	-	-	-	68.2	-27.84	0-360
3	25.559	40.13	Pk	10.8	-9.5	41.43	-	-	-	-	68.2	-26.77	0-360

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

Pk - Peak detector

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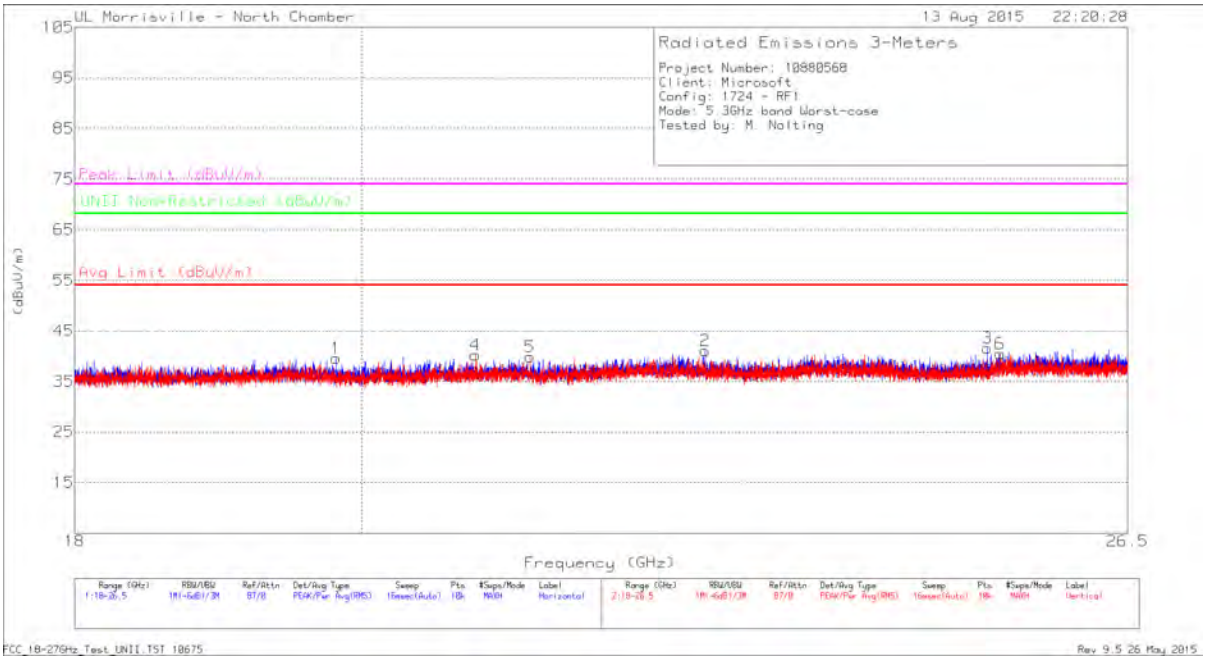
SPURIOUS EMISSIONS 18 TO 26.5GHz (WORST-CASE 5.3GHz CONFIGURATION)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF & G/L (dB/m)	Dist Cor (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)
1	* 19.815	41.26	Pk	7.8	-9.5	39.56	54	-14.44	74	-34.44	68.2	-28.64	0-360
4	* 20.854	39.87	Pk	9.8	-9.5	40.17	54	-13.83	74	-33.83	68.2	-28.03	0-360
5	* 21.278	39.34	Pk	10	-9.5	39.84	54	-14.16	74	-34.16	68.2	-28.36	0-360
2	* 22.69	39.5	Pk	11.1	-9.5	41.1	54	-12.9	74	-32.9	68.2	-27.1	0-360
3	25.172	40.22	Pk	10.9	-9.5	41.62	-	-	-	-	68.2	-26.58	0-360
6	25.289	39.01	Pk	11	-9.5	40.51	-	-	-	-	68.2	-27.69	0-360

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

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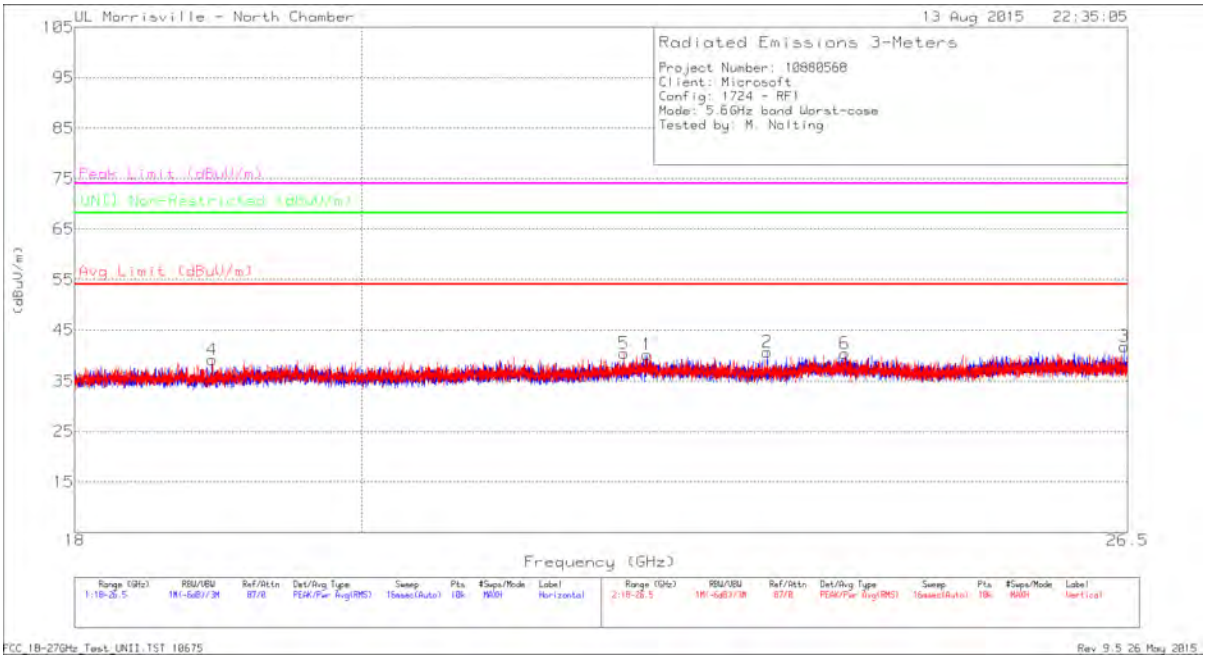
SPURIOUS EMISSIONS 18 TO 26.5GHz (WORST-CASE 5.6GHz CONFIGURATION)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF & G/L (dB/m)	Dist Cor (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)
4	* 18.933	42.04	Pk	6.7	-9.5	39.24	54	-14.76	74	-34.76	68.2	-28.96	0-360
5	* 22.025	38.78	Pk	11.2	-9.5	40.48	54	-13.52	74	-33.52	68.2	-27.72	0-360
1	* 22.212	38.37	Pk	11.3	-9.5	40.17	54	-13.83	74	-33.83	68.2	-28.03	0-360
6	* 23.884	38.51	Pk	11.5	-9.5	40.51	54	-13.49	74	-33.49	68.2	-27.69	0-360
2	23.215	39.01	Pk	11.2	-9.5	40.71	-	-	-	-	68.2	-27.49	0-360
3	26.471	40.52	Pk	10.8	-9.5	41.82	-	-	-	-	68.2	-26.38	0-360

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

Pk - Peak detector

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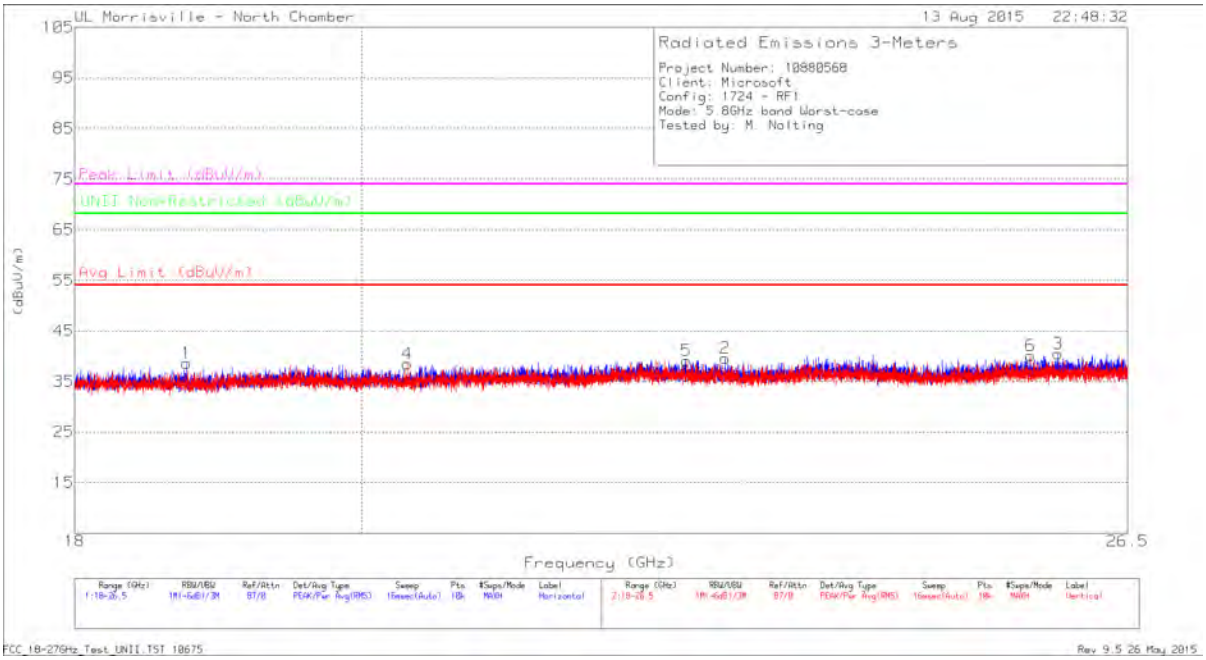
SPURIOUS EMISSIONS 18 TO 26.5GHz (WORST-CASE 5.8GHz CONFIGURATION)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF & G/L (dB/m)	Dist Cor (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)
1	* 18.756	41.95	Pk	6.2	-9.5	38.65	54	-15.35	74	-35.35	68.2	-29.55	0-360
4	* 20.341	39.25	Pk	8.7	-9.5	38.45	54	-15.55	74	-35.55	68.2	-29.75	0-360
5	* 22.537	37.36	Pk	11.2	-9.5	39.06	54	-14.94	74	-34.94	68.2	-29.14	0-360
2	* 22.86	38.1	Pk	11	-9.5	39.6	54	-14.4	74	-34.4	68.2	-28.6	0-360
6	25.571	38.77	Pk	10.8	-9.5	40.07	-	-	-	-	68.2	-28.13	0-360
3	25.831	39.23	Pk	10.7	-9.5	40.43	-	-	-	-	68.2	-27.77	0-360

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

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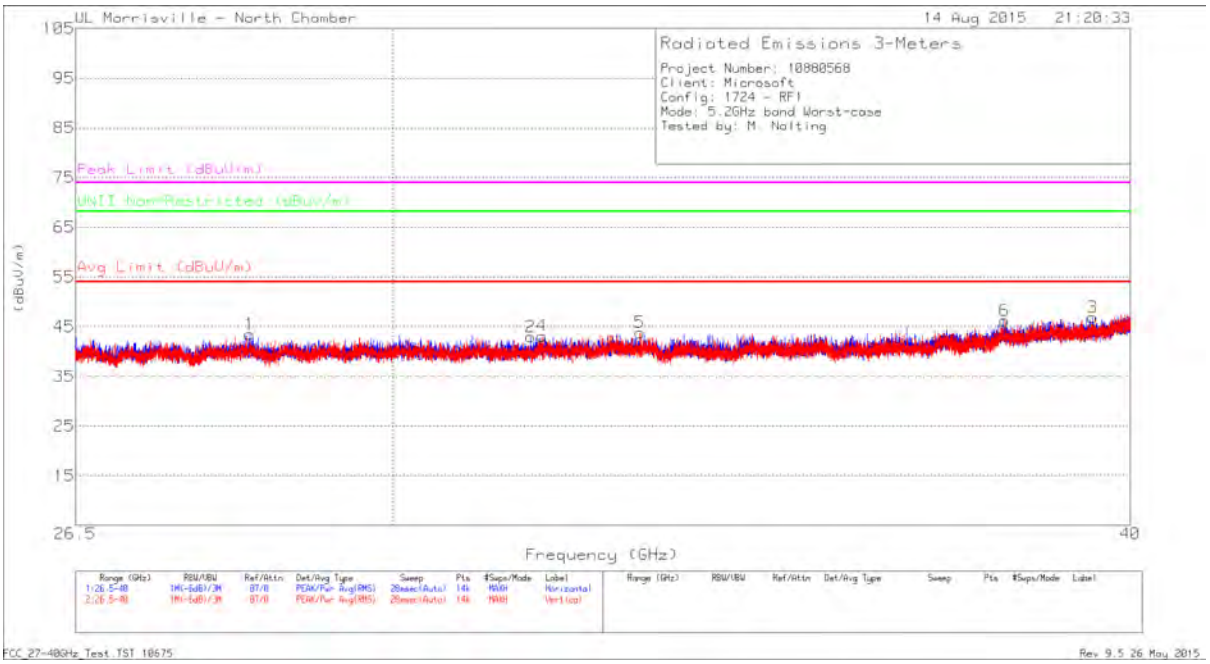
SPURIOUS EMISSIONS 26.5 TO 40GHz (WORST-CASE 5.2GHz CONFIGURATION)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF & G/L (dB/m)	Dist Cor (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)
2	* 31.656	42.32	Pk	10.2	-9.5	43.02	54	-10.98	74	-30.98	68.2	-25.18	0-360
3	* 39.414	39.21	Pk	17.2	-9.5	46.91	54	-7.09	74	-27.09	68.2	-21.29	0-360
4	* 31.795	42.47	Pk	10.2	-9.5	43.17	54	-10.83	74	-30.83	68.2	-25.03	0-360
1	28.368	40.81	Pk	12.2	-9.5	43.51	-	-	-	-	68.2	-24.69	0-360
5	33.036	43.21	Pk	10.1	-9.5	43.81	-	-	-	-	68.2	-24.39	0-360
6	38.083	42.11	Pk	13.7	-9.5	46.31	-	-	-	-	68.2	-21.89	0-360

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

Pk - Peak detector

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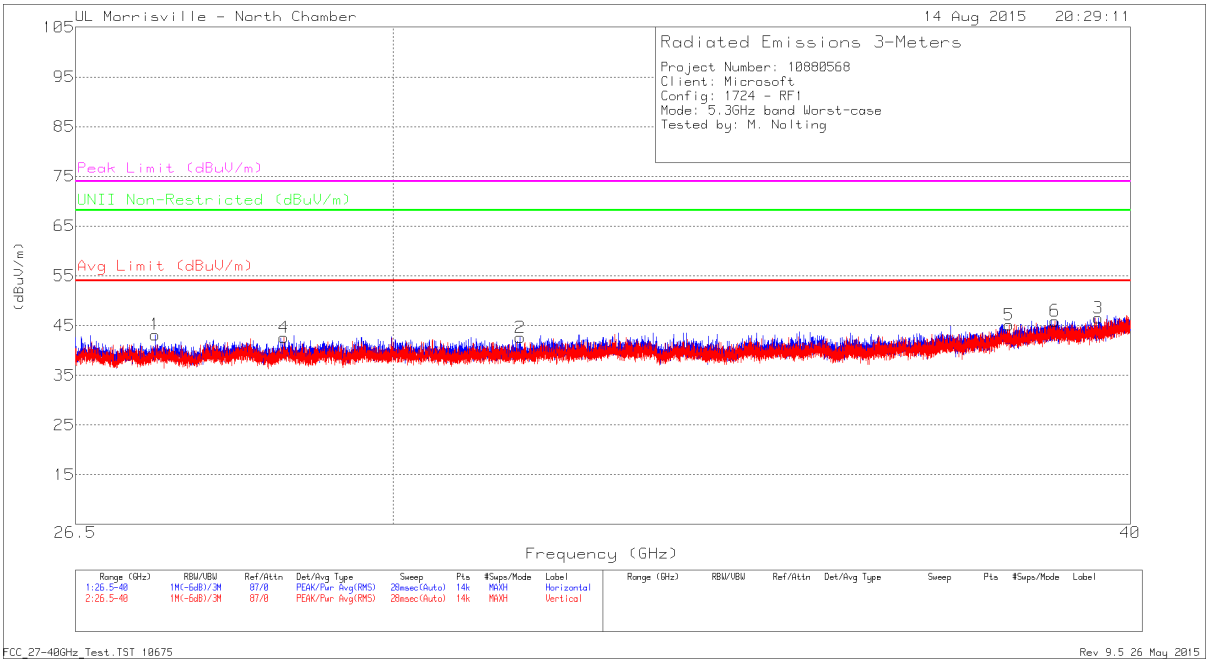
SPURIOUS EMISSIONS 26.5 TO 40GHz (WORST-CASE 5.3GHz CONFIGURATION)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF & G/L (dB/m)	Dist Cor (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)
2	* 31.526	41.8	Pk	10.3	-9.5	42.6	54	-11.4	74	-31.4	68.2	-25.6	0-360
3	* 39.502	38.74	Pk	17.3	-9.5	46.54	54	-7.46	74	-27.46	68.2	-21.66	0-360
6	* 38.84	39.44	Pk	16	-9.5	45.94	54	-8.06	74	-28.06	68.2	-22.26	0-360
1	27.34	40.47	Pk	12.2	-9.5	43.17	-	-	-	-	68.2	-25.03	0-360
4	28.746	40.42	Pk	11.7	-9.5	42.62	-	-	-	-	68.2	-25.58	0-360
5	38.154	40.74	Pk	13.9	-9.5	45.14	-	-	-	-	68.2	-23.06	0-360

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

Pk - Peak detector

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SPURIOUS EMISSIONS 26.5 TO 40GHz (WORST-CASE 5.6GHz CONFIGURATION)

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF & G/L (dB/m)	Dist Cor (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)
1	* 31.437	42.49	Pk	10.4	-9.5	43.39	54	-10.61	74	-30.61	68.2	-24.81	0-360
3	* 38.994	39.98	Pk	16.4	-9.5	46.88	54	-7.12	74	-27.12	68.2	-21.32	0-360
6	* 39.452	39.27	Pk	17.2	-9.5	46.97	54	-7.03	74	-27.03	68.2	-21.23	0-360
4	32.633	43.17	Pk	10.1	-9.5	43.77	-	-	-	-	68.2	-24.43	0-360
2	37.703	42.04	Pk	12.6	-9.5	45.14	-	-	-	-	68.2	-23.06	0-360
5	38.073	41.42	Pk	13.6	-9.5	45.52	-	-	-	-	68.2	-22.68	0-360

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

Pk - Peak detector

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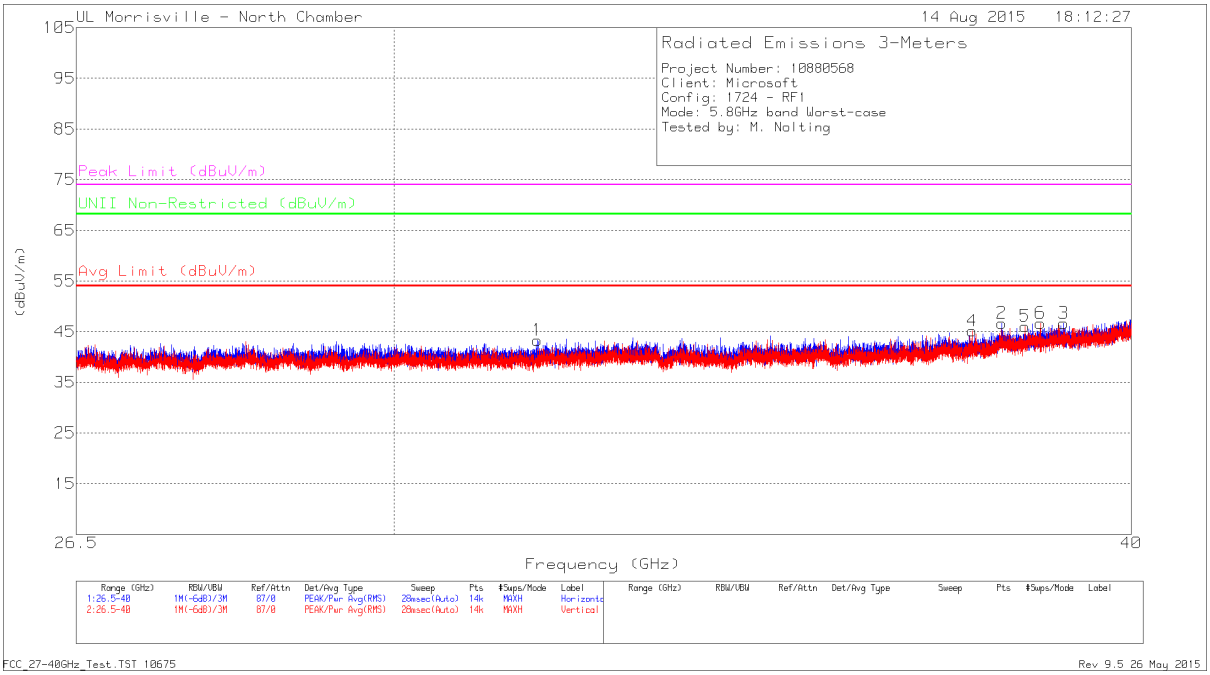
SPURIOUS EMISSIONS 26.5 TO 40GHz (WORST-CASE 5.8GHz CONFIGURATION)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF & G/L (dB/m)	Dist Cor (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)
1	* 31.727	42.63	Pk	10.2	-9.5	43.33	54	-10.67	74	-30.67	68.2	-24.87	0-360
3	* 38.958	39.86	Pk	16.3	-9.5	46.66	54	-7.34	74	-27.34	68.2	-21.54	0-360
6	* 38.607	40.69	Pk	15.5	-9.5	46.69	54	-7.31	74	-27.31	68.2	-21.51	0-360
4	37.595	42.02	Pk	12.6	-9.5	45.12	-	-	-	-	68.2	-23.08	0-360
2	38.031	42.67	Pk	13.5	-9.5	46.67	-	-	-	-	68.2	-21.53	0-360
5	38.377	40.87	Pk	14.7	-9.5	46.07	-	-	-	-	68.2	-22.13	0-360

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

Pk - Peak detector

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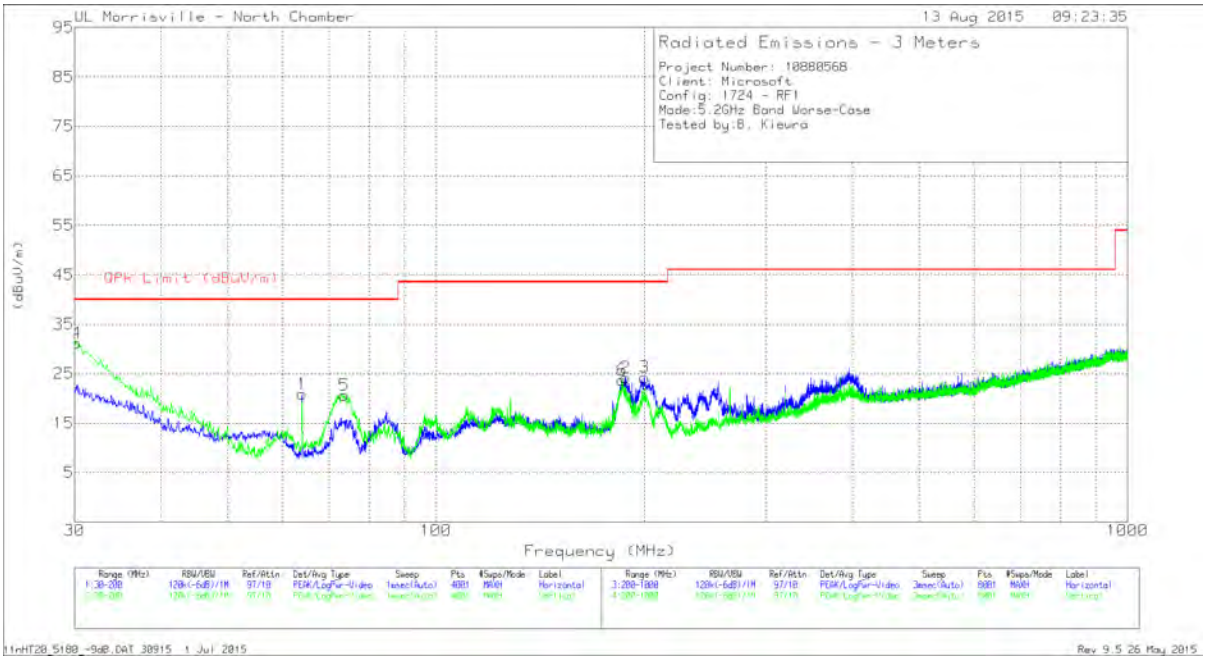
9.4. WORST-CASE BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (5.2GHz Band WORST-CASE CONFIGURATION)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF JB3 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	64	40.41	Pk	11.7	-31.2	20.91	40	-19.09	0-360	399	H
2	187.845	38.97	Pk	15.4	-30.2	24.17	43.52	-19.35	0-360	100	H
3	200	37.47	Pk	16.9	-30.1	24.27	43.52	-19.25	0-360	100	H
4	30.17	37.8	Pk	25	-31.6	31.2	40	-8.8	0-360	102	V
5	* 73.5625	39.97	Pk	11.9	-31.2	20.67	40	-19.33	0-360	102	V
6	185.55	38.55	Pk	15.3	-30.2	23.65	43.52	-19.87	0-360	102	V

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

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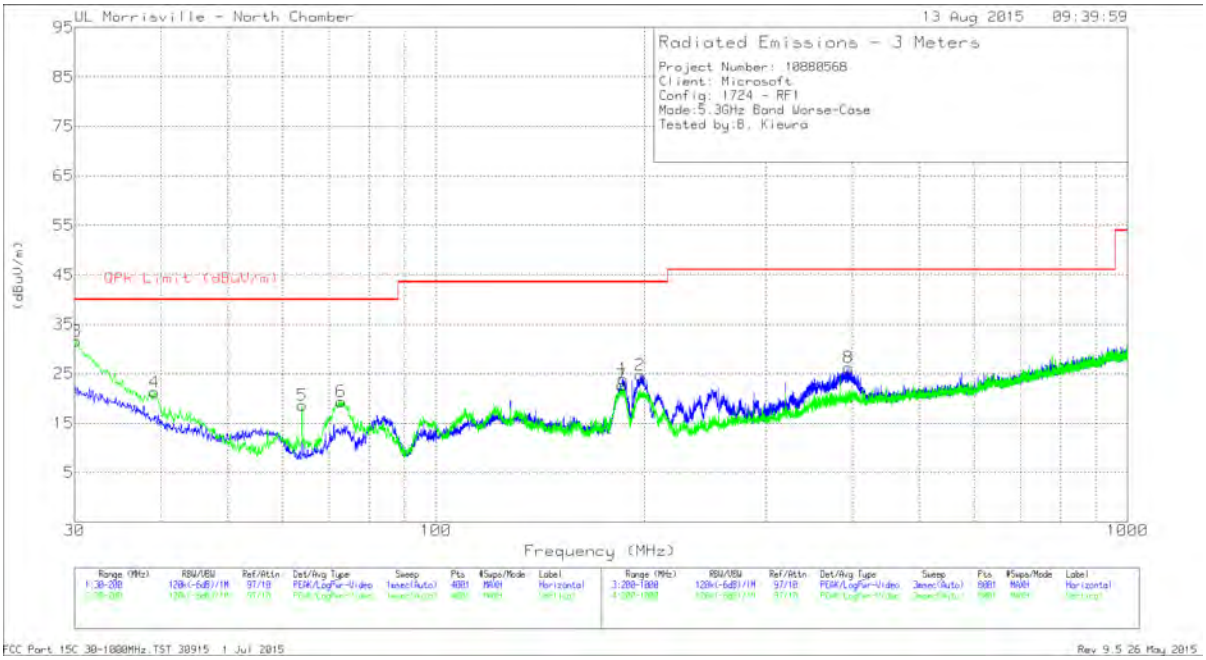
SPURIOUS EMISSIONS 30 TO 1000 MHz (5.3GHz Band WORST-CASE CONFIGURATION)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF JB3 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	186.3575	38.83	Pk	15.3	-30.2	23.93	43.52	-19.59	0-360	100	H
2	197.2375	38.24	Pk	16.6	-30.1	24.74	43.52	-18.78	0-360	100	H
8	394.6	35.54	Pk	19.7	-29	26.24	46.02	-19.78	0-360	102	H
3	30.17	38.16	Pk	25	-31.6	31.56	40	-8.44	0-360	102	V
4	39.18	34.27	Pk	18.5	-31.5	21.27	40	-18.73	0-360	102	V
5	64	38.09	Pk	11.7	-31.2	18.59	40	-21.41	0-360	102	V
6	72.925	38.55	Pk	12	-31.2	19.35	40	-20.65	0-360	102	V
7	185.72	37.6	Pk	15.3	-30.2	22.7	43.52	-20.82	0-360	102	V

Pk - Peak detector

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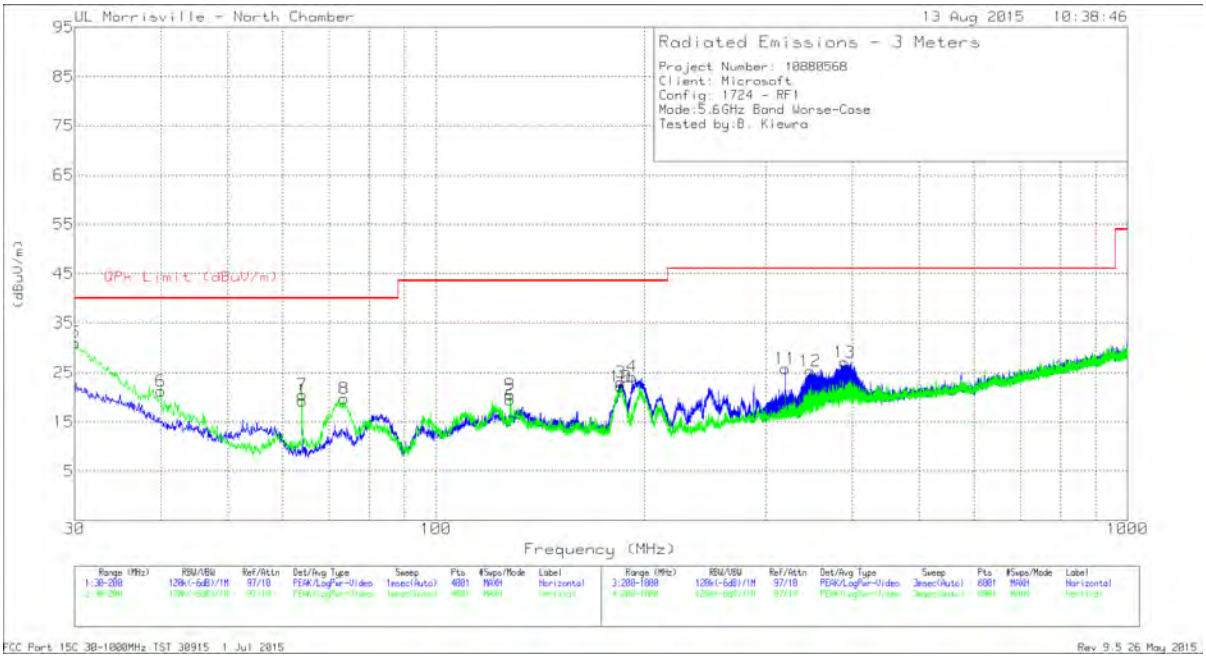
SPURIOUS EMISSIONS 30 TO 1000 MHz (5.6GHz Band WORST-CASE CONFIGURATION)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF JB3 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	64	38.82	Pk	11.7	-31.2	19.32	40	-20.68	0-360	299	H
2	* 128.005	32.19	Pk	17.9	-30.6	19.49	43.52	-24.03	0-360	199	H
3	184.9975	37.94	Pk	15.3	-30.2	23.04	43.52	-20.48	0-360	100	H
4	192.01	38.62	Pk	15.8	-30.2	24.22	43.52	-19.3	0-360	100	H
11	320	37.24	Pk	18	-29.4	25.84	46.02	-20.18	0-360	102	H
12	347.7	36.22	Pk	18.3	-29.2	25.32	46.02	-20.7	0-360	102	H
13	389.9	36.75	Pk	19.5	-29.1	27.15	46.02	-18.87	0-360	102	H
5	30.085	37.54	Pk	25.1	-31.6	31.04	40	-8.96	0-360	102	V
6	39.945	34.96	Pk	17.8	-31.5	21.26	40	-18.74	0-360	102	V
7	64	40.07	Pk	11.7	-31.2	20.57	40	-19.43	0-360	102	V
8	* 73.6475	39.05	Pk	11.9	-31.2	19.75	40	-20.25	0-360	102	V
9	* 128.005	33.2	Pk	17.9	-30.6	20.5	43.52	-23.02	0-360	102	V
10	184.9975	37.1	Pk	15.3	-30.2	22.2	43.52	-21.32	0-360	102	V

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

Pk - Peak detector

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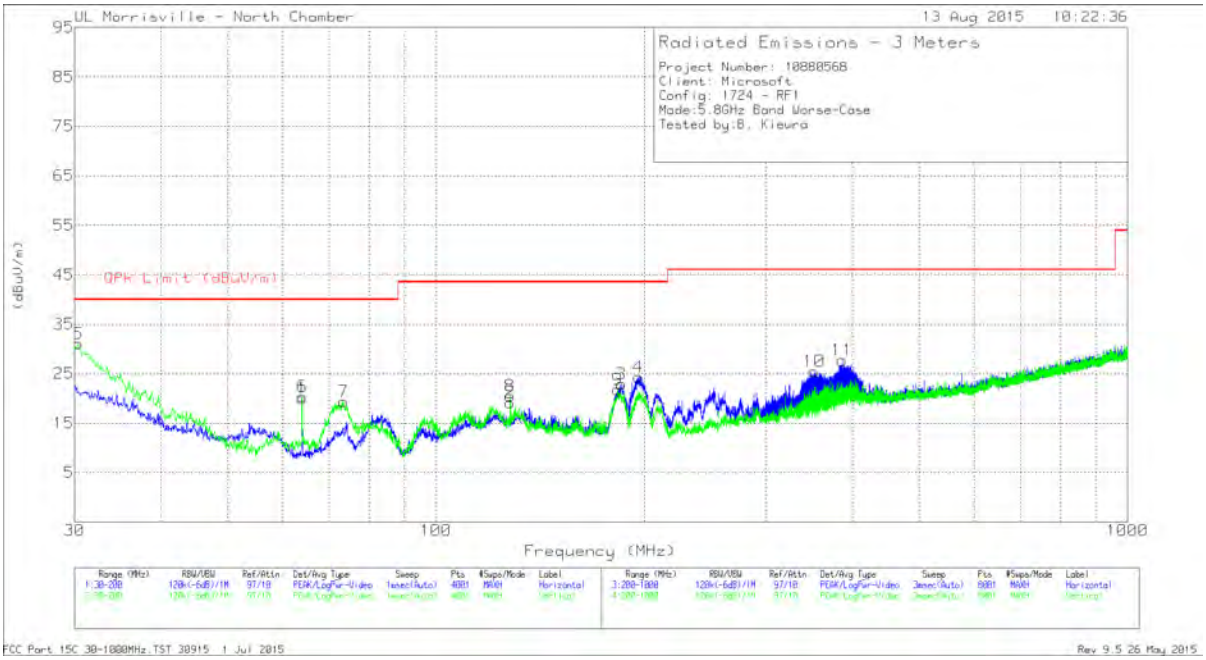
SPURIOUS EMISSIONS 30 TO 1000 MHz (5.8GHz Band WORST-CASE CONFIGURATION)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF JB3 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	64	39.48	Pk	11.7	-31.2	19.98	40	-20.02	0-360	399	H
2	* 128.005	31.86	Pk	17.9	-30.6	19.16	43.52	-24.36	0-360	199	H
3	185.38	37.81	Pk	15.3	-30.2	22.91	43.52	-20.61	0-360	100	H
4	196.09	38.08	Pk	16.4	-30.1	24.38	43.52	-19.14	0-360	100	H
10	352.4	36.28	Pk	18.5	-29.3	25.48	46.02	-20.54	0-360	103	H
11	386.5	37.4	Pk	19.4	-29.1	27.7	46.02	-18.32	0-360	103	H
5	30.34	37.79	Pk	24.9	-31.6	31.09	40	-8.91	0-360	103	V
6	64	39.9	Pk	11.7	-31.2	20.4	40	-19.6	0-360	103	V
7	* 73.4775	38.56	Pk	12	-31.2	19.36	40	-20.64	0-360	103	V
8	* 128.005	33.23	Pk	17.9	-30.6	20.53	43.52	-22.99	0-360	103	V
9	183.1275	36.67	Pk	15.3	-30.2	21.77	43.52	-21.75	0-360	103	V

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

Pk - Peak detector

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10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	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

ANSI C63.10

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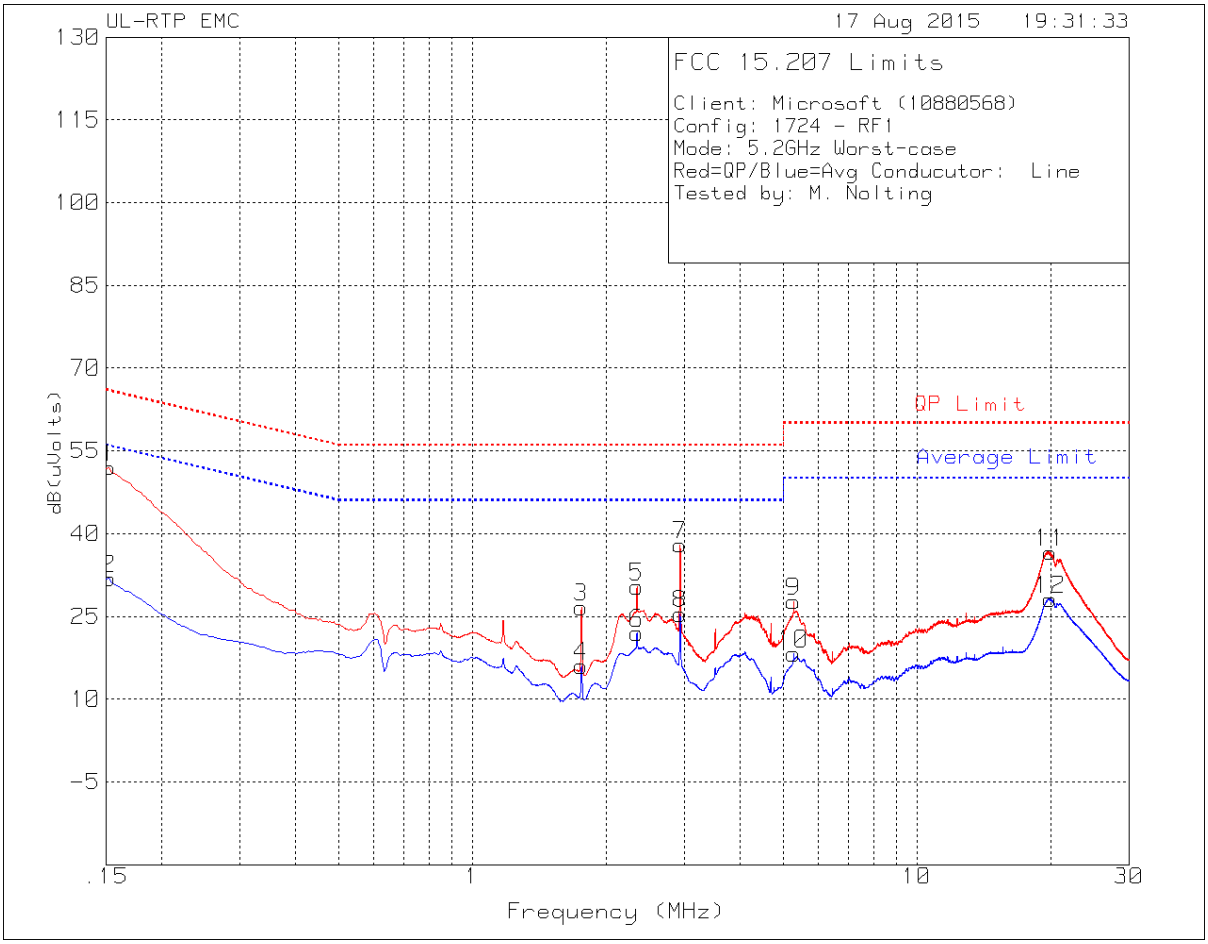
RESULTS

LINE 1 RESULTS (5.2GHz Band)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Limiter/Cbl (dB)	Corrected Reading dB(uVolts)	QP Limit	Margin (dB)	Average Limit	Margin (dB)
1	.15225	42.29	Qp	.4	9.3	51.99	65.88	-13.89	-	-
2	.15225	22.17	Ca	.4	9.3	31.87	-	-	55.88	-24.01
3	1.75875	17.24	Qp	0	9.4	26.64	56	-29.36	-	-
4	1.75875	6.57	Ca	0	9.4	15.97	-	-	46	-30.03
5	2.346	20.97	Qp	0	9.4	30.37	56	-25.63	-	-
6	2.346	12.57	Ca	0	9.4	21.97	-	-	46	-24.03
7	2.93325	28.57	Qp	0	9.4	37.97	56	-18.03	-	-
8	2.93325	16.07	Ca	0	9.4	25.47	-	-	46	-20.53
9	5.27775	18.2	Qp	.1	9.4	27.7	60	-32.3	-	-
10	5.27775	8.71	Ca	.1	9.4	18.21	-	-	50	-31.79
11	19.94325	26.84	Qp	.2	9.6	36.64	60	-23.36	-	-
12	19.95	18.31	Ca	.2	9.6	28.11	-	-	50	-21.89

Qp - Quasi-Peak detector
Ca - CISPR average detection

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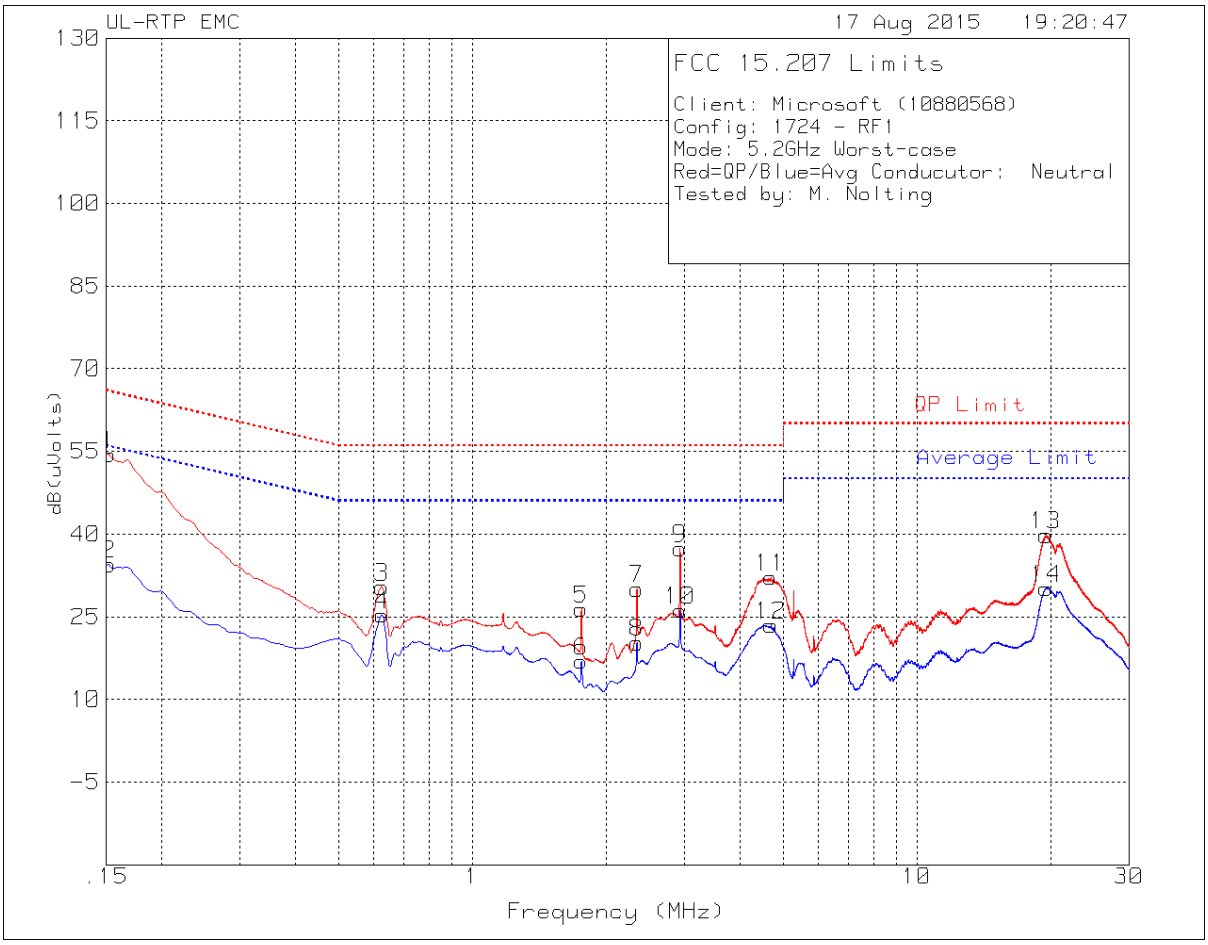
LINE 2 RESULTS (5.2GHz Band)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Limiter/Cbl (dB)	Corrected Reading dB(uVolts)	QP Limit	Margin (dB)	Average Limit	Margin (dB)
1	.15225	44.75	Qp	.4	9.3	54.45	65.88	-11.43	-	-
2	.15225	24.8	Ca	.4	9.3	34.5	-	-	55.88	-21.38
3	.62587	20.87	Qp	.1	9.4	30.37	56	-25.63	-	-
4	.627	15.86	Ca	.1	9.4	25.36	-	-	46	-20.64
5	1.75875	16.99	Qp	0	9.4	26.39	56	-29.61	-	-
6	1.75875	7.56	Ca	0	9.4	16.96	-	-	46	-29.04
7	2.346	20.66	Qp	0	9.4	30.06	56	-25.94	-	-
8	2.346	10.93	Ca	0	9.4	20.33	-	-	46	-25.67
9	2.931	27.98	Qp	0	9.4	37.38	56	-18.62	-	-
10	2.931	16.79	Ca	0	9.4	26.19	-	-	46	-19.81
11	4.6905	22.7	Qp	.1	9.4	32.2	56	-23.8	-	-
12	4.69275	13.99	Ca	.1	9.4	23.49	-	-	46	-22.51
13	19.52475	29.99	Qp	.2	9.6	39.79	60	-20.21	-	-
14	19.52813	20.36	Ca	.2	9.6	30.16	-	-	50	-19.84

Qp - Quasi-Peak detector
Ca - CISPR average detection

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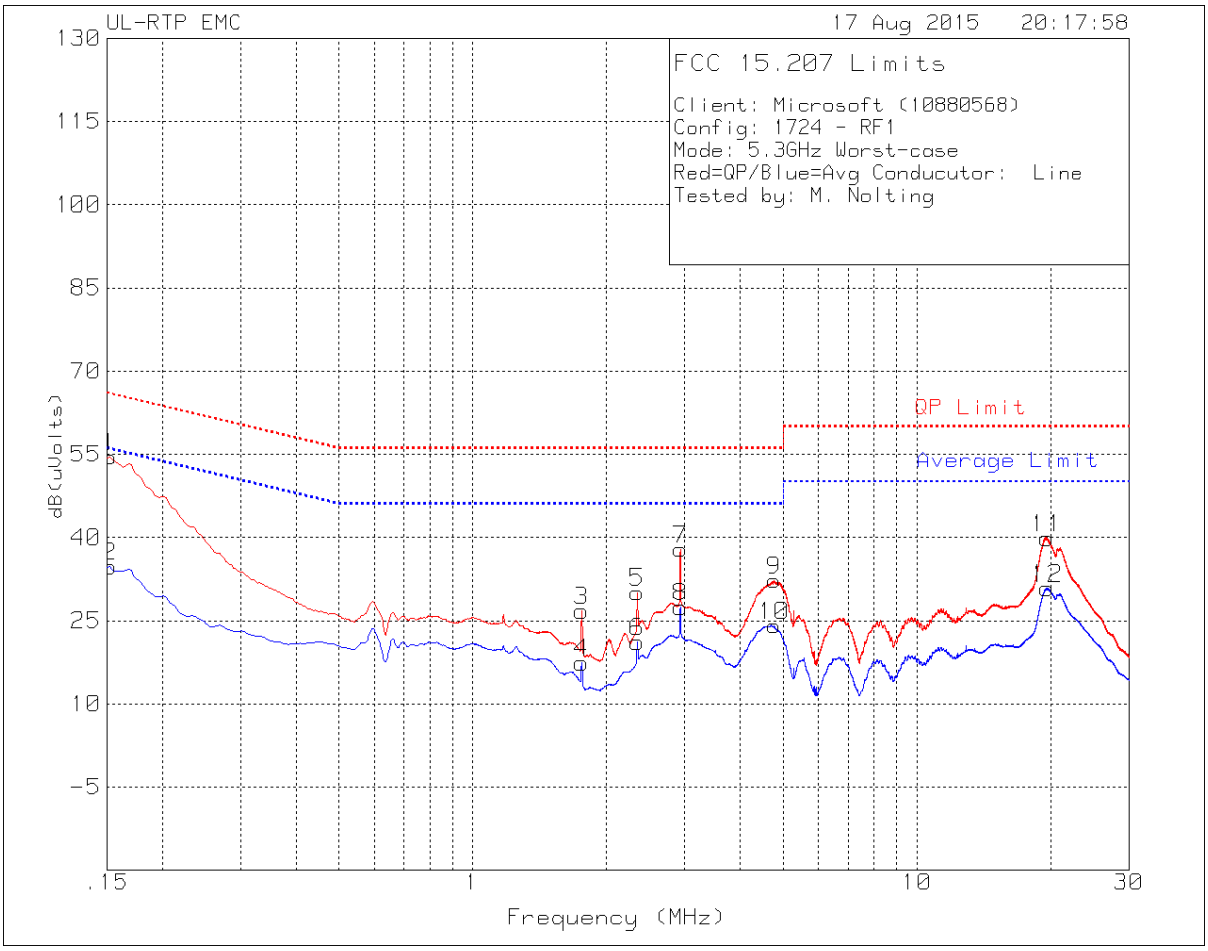
LINE 1 RESULTS (5.3GHz Band)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Limiter/Cbl (dB)	Corrected Reading dB(uVolts)	QP Limit	Margin (dB)	Average Limit	Margin (dB)
1	.15225	44.84	Qp	.4	9.3	54.54	65.88	-11.34	-	-
2	.15225	25.05	Ca	.4	9.3	34.75	-	-	55.88	-21.13
3	1.75875	17.37	Qp	0	9.4	26.77	56	-29.23	-	-
4	1.75875	8.05	Ca	0	9.4	17.45	-	-	46	-28.55
5	2.346	20.7	Qp	0	9.4	30.1	56	-25.9	-	-
6	2.346	11.78	Ca	0	9.4	21.18	-	-	46	-24.82
7	2.93325	28.49	Qp	0	9.4	37.89	56	-18.11	-	-
8	2.93325	18.05	Ca	0	9.4	27.45	-	-	46	-18.55
9	4.77375	22.79	Qp	.1	9.4	32.29	56	-23.71	-	-
10	4.77375	14.62	Ca	.1	9.4	24.12	-	-	46	-21.88
11	19.62825	30.11	Qp	.2	9.6	39.91	60	-20.09	-	-
12	19.6305	21.03	Ca	.2	9.6	30.83	-	-	50	-19.17

Qp - Quasi-Peak detector
Ca - CISPR average detection

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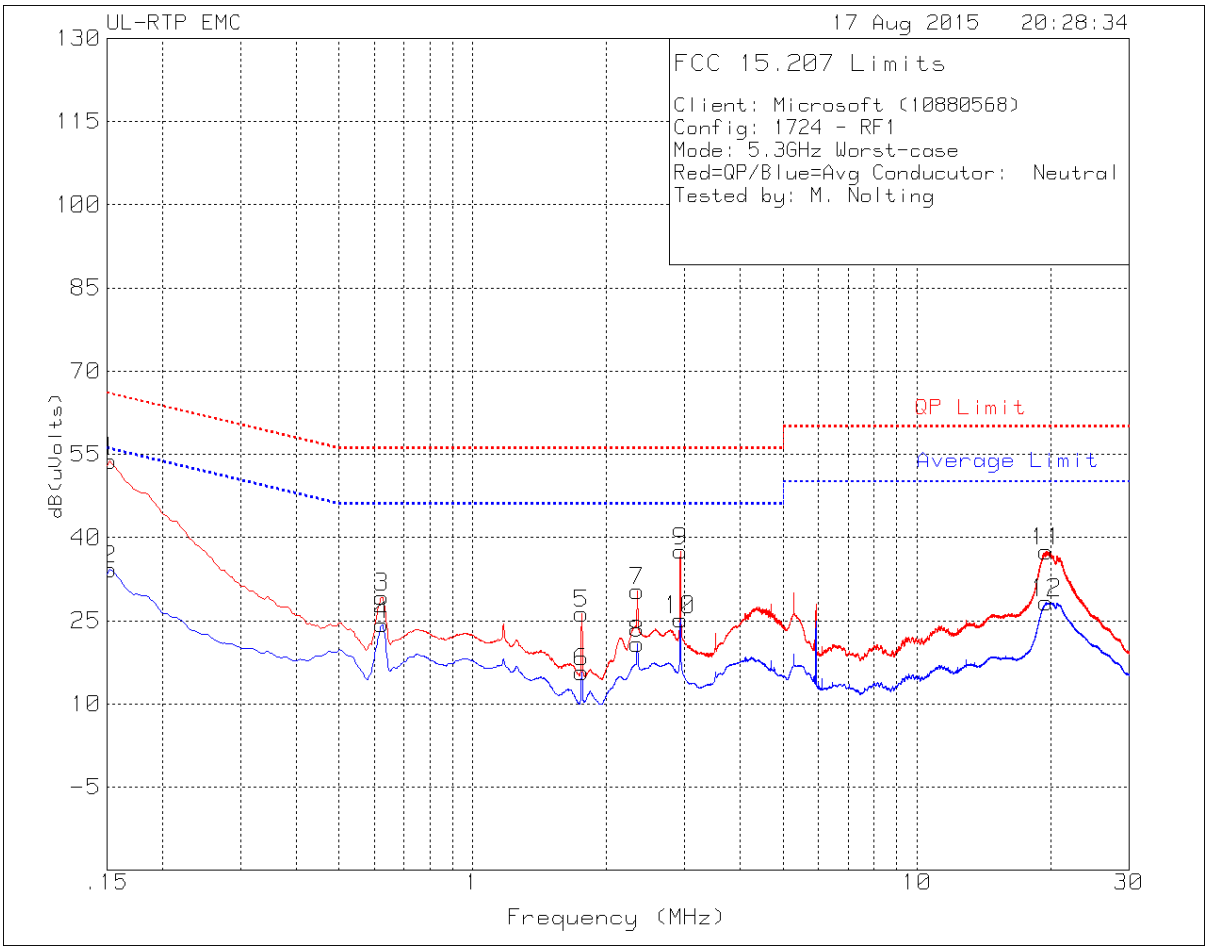
LINE 2 RESULTS (5.3GHz Band)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Limiter/Cbl (dB)	Corrected Reading dB(uVolts)	QP Limit	Margin (dB)	Average Limit	Margin (dB)
1	.15225	44.12	Qp	.4	9.3	53.82	65.88	-12.06	-	-
2	.15225	24.57	Ca	.4	9.3	34.27	-	-	55.88	-21.61
3	.62475	19.75	Qp	.1	9.4	29.25	56	-26.75	-	-
4	.62475	14.81	Ca	.1	9.4	24.31	-	-	46	-21.69
5	1.75875	16.86	Qp	0	9.4	26.26	56	-29.74	-	-
6	1.75875	6.33	Ca	0	9.4	15.73	-	-	46	-30.27
7	2.346	20.93	Qp	0	9.4	30.33	56	-25.67	-	-
8	2.346	11.42	Ca	0	9.4	20.82	-	-	46	-25.18
9	2.93325	28.15	Qp	0	9.4	37.55	56	-18.45	-	-
10	2.93325	15.78	Ca	0	9.4	25.18	-	-	46	-20.82
11	19.54275	27.69	Qp	.2	9.6	37.49	60	-22.51	-	-
12	19.545	18.46	Ca	.2	9.6	28.26	-	-	50	-21.74

Qp - Quasi-Peak detector
Ca - CISPR average detection

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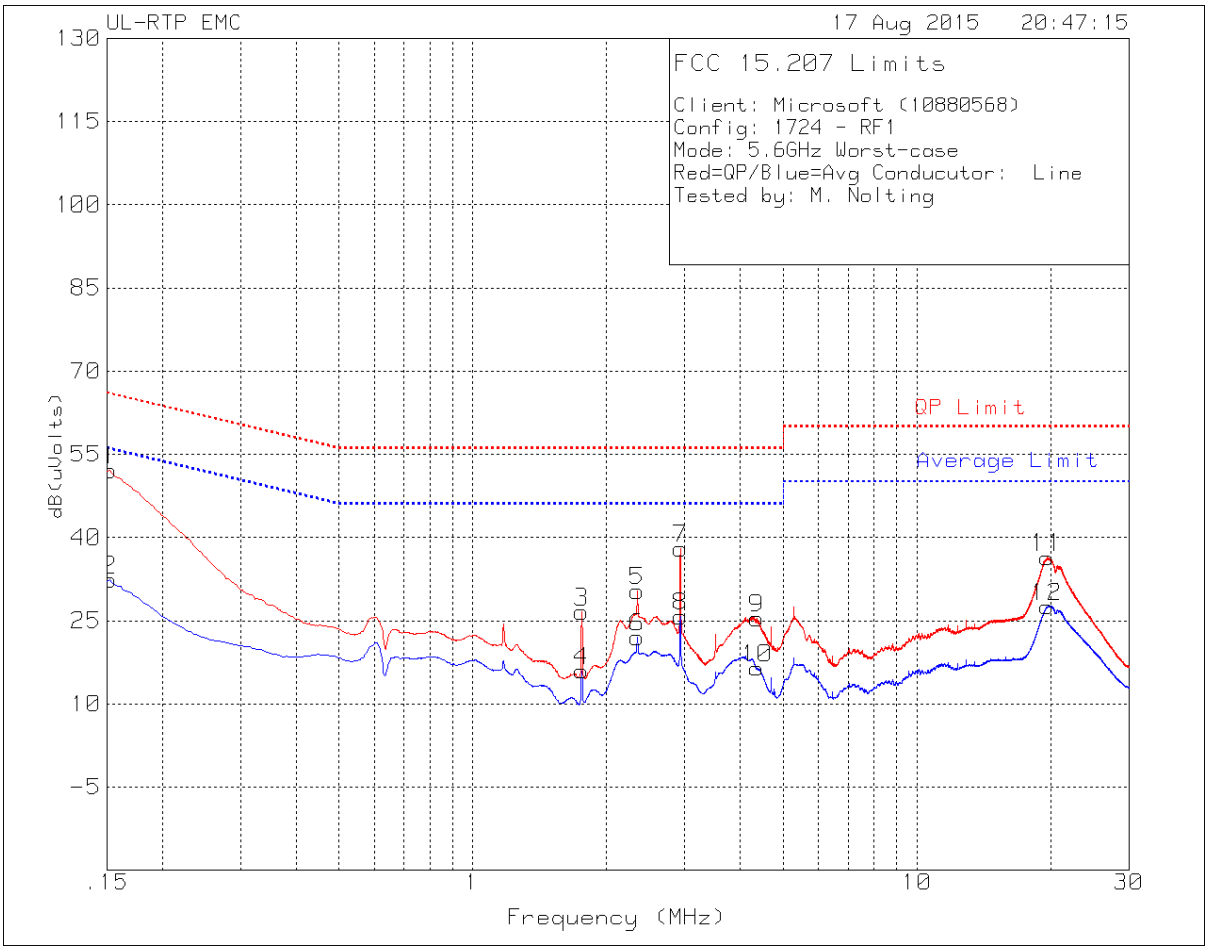
LINE 1 RESULTS (5.6GHz Band)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Limiter/Cbl (dB)	Corrected Reading dB(uVolts)	QP Limit	Margin (dB)	Average Limit	Margin (dB)
1	.15225	42.45	Qp	.4	9.3	52.15	65.88	-13.73	-	-
2	.15225	22.63	Ca	.4	9.3	32.33	-	-	55.88	-23.55
3	1.75875	17.16	Qp	0	9.4	26.56	56	-29.44	-	-
4	1.761	6.58	Ca	0	9.4	15.98	-	-	46	-30.02
5	2.346	20.97	Qp	0	9.4	30.37	56	-25.63	-	-
6	2.346	12.6	Ca	0	9.4	22	-	-	46	-24
7	2.93325	28.58	Qp	0	9.4	37.98	56	-18.02	-	-
8	2.93325	16.35	Ca	0	9.4	25.75	-	-	46	-20.25
9	4.3665	15.9	Qp	.1	9.4	25.4	56	-30.6	-	-
10	4.3665	6.96	Ca	.1	9.4	16.46	-	-	46	-29.54
11	19.61475	26.59	Qp	.2	9.6	36.39	60	-23.61	-	-
12	19.61588	17.72	Ca	.2	9.6	27.52	-	-	50	-22.48

Qp - Quasi-Peak detector
Ca - CISPR average detection

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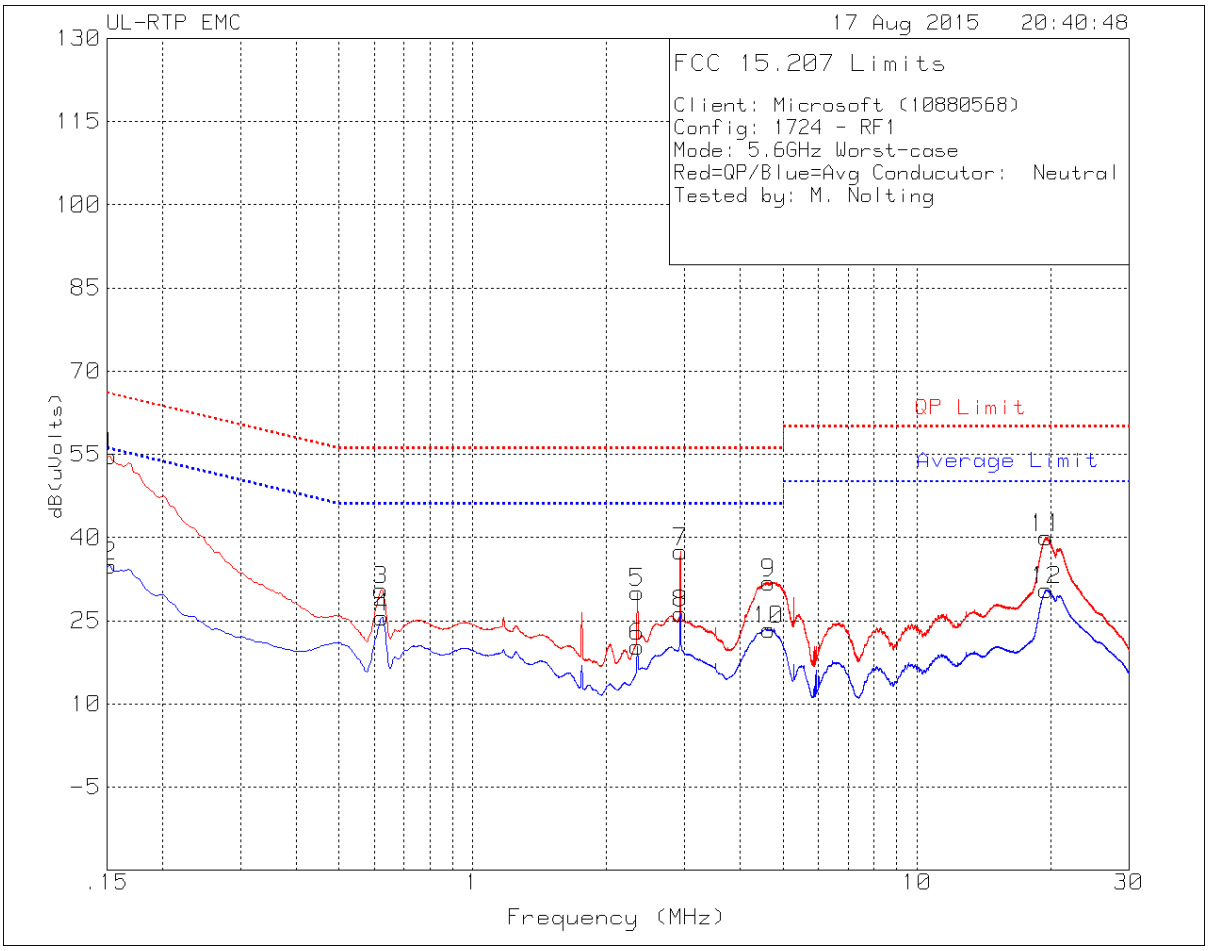
LINE 2 RESULTS (5.6GHz Band)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Limiter/Cbl (dB)	Corrected Reading dB(uVolts)	QP Limit	Margin (dB)	Average Limit	Margin (dB)
1	.15225	44.93	Qp	.4	9.3	54.63	65.88	-11.25	-	-
2	.15225	25.17	Ca	.4	9.3	34.87	-	-	55.88	-21.01
3	.6225	21.01	Qp	.1	9.4	30.51	56	-25.49	-	-
4	.62475	16.1	Ca	.1	9.4	25.6	-	-	46	-20.4
5	2.346	20.7	Qp	0	9.4	30.1	56	-25.9	-	-
6	2.346	10.91	Ca	0	9.4	20.31	-	-	46	-25.69
7	2.93325	28.03	Qp	0	9.4	37.43	56	-18.57	-	-
8	2.93325	16.88	Ca	0	9.4	26.28	-	-	46	-19.72
9	4.6365	22.35	Qp	.1	9.4	31.85	56	-24.15	-	-
10	4.63875	13.89	Ca	.1	9.4	23.39	-	-	46	-22.61
11	19.53375	30.2	Qp	.2	9.6	40	60	-20	-	-
12	19.53825	20.73	Ca	.2	9.6	30.53	-	-	50	-19.47

Qp - Quasi-Peak detector
Ca - CISPR average detection

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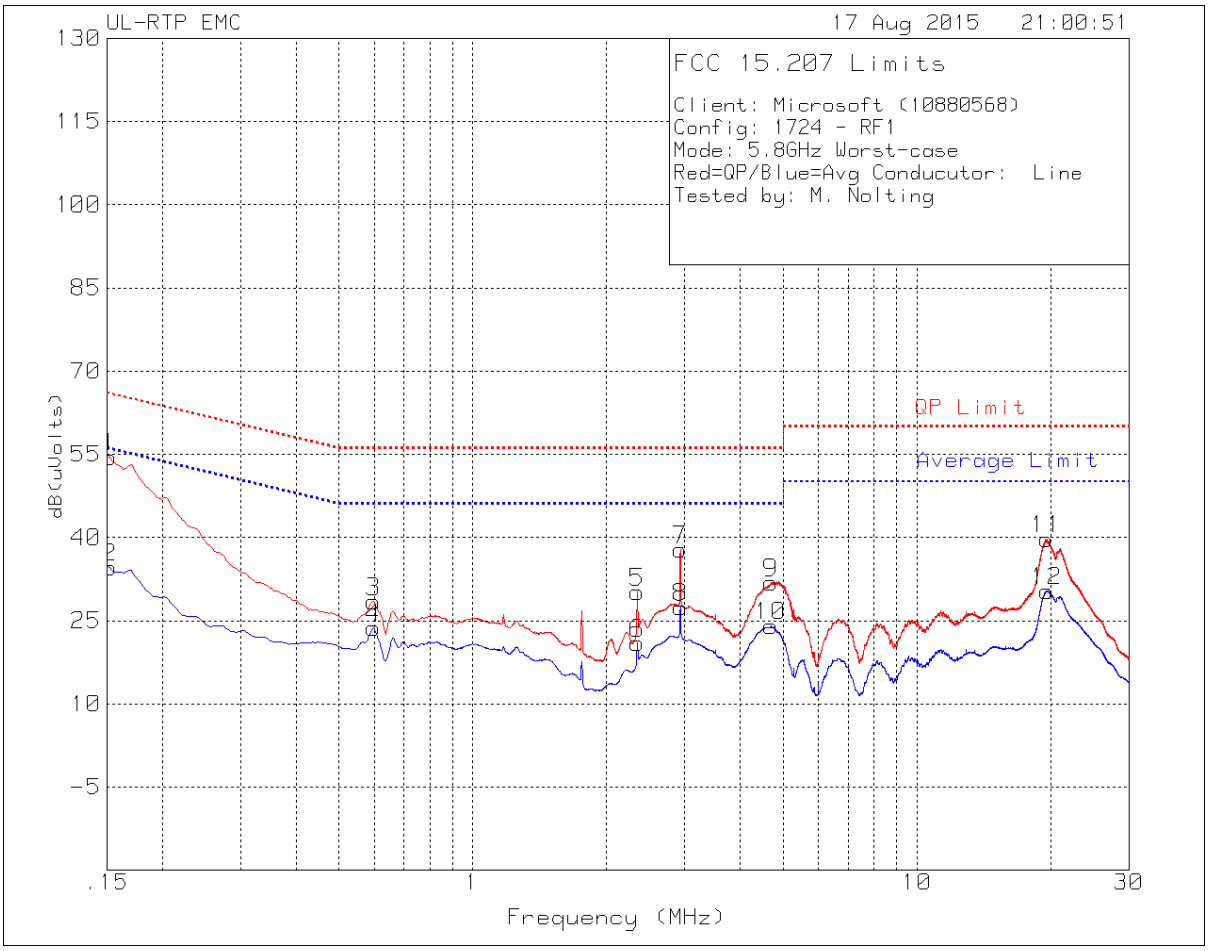
LINE 1 RESULTS (5.8GHz Band)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Limiter/Cbl (dB)	Corrected Reading dB(uVolts)	QP Limit	Margin (dB)	Average Limit	Margin (dB)
1	.15225	44.79	Qp	.4	9.3	54.49	65.88	-11.39	-	-
2	.15225	24.92	Ca	.4	9.3	34.62	-	-	55.88	-21.26
3	.59775	19.04	Qp	.1	9.3	28.44	56	-27.56	-	-
4	.59775	14.29	Ca	.1	9.3	23.69	-	-	46	-22.31
5	2.346	20.72	Qp	0	9.4	30.12	56	-25.88	-	-
6	2.346	11.55	Ca	0	9.4	20.95	-	-	46	-25.05
7	2.93213	28.4	Qp	0	9.4	37.8	56	-18.2	-	-
8	2.93325	17.99	Ca	0	9.4	27.39	-	-	46	-18.61
9	4.69275	22.32	Qp	.1	9.4	31.82	56	-24.18	-	-
10	4.6905	14.59	Ca	.1	9.4	24.09	-	-	46	-21.91
11	19.57875	29.93	Qp	.2	9.6	39.73	60	-20.27	-	-
12	19.5855	20.54	Ca	.2	9.6	30.34	-	-	50	-19.66

Qp - Quasi-Peak detector
Ca - CISPR average detection

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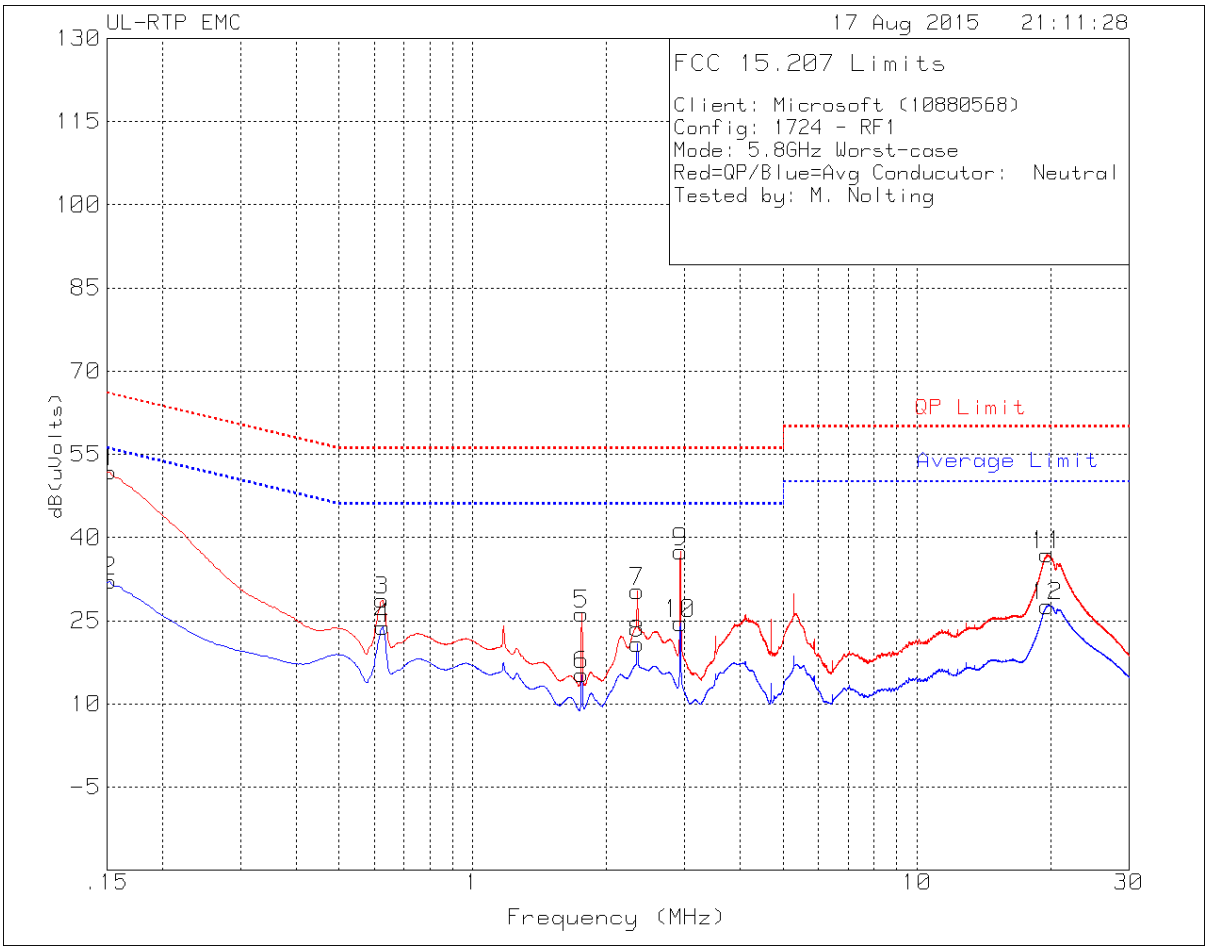
LINE 2 RESULTS (5.8GHz Band)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Limiter/Cbl (dB)	Corrected Reading dB(uVolts)	QP Limit	Margin (dB)	Average Limit	Margin (dB)
1	.15225	42.13	Qp	.4	9.3	51.83	65.88	-14.05	-	-
2	.15225	22.44	Ca	.4	9.3	32.14	-	-	55.88	-23.74
3	.62475	19.22	Qp	.1	9.4	28.72	56	-27.28	-	-
4	.627	14.32	Ca	.1	9.4	23.82	-	-	46	-22.18
5	1.75875	16.8	Qp	0	9.4	26.2	56	-29.8	-	-
6	1.75875	5.9	Ca	0	9.4	15.3	-	-	46	-30.7
7	2.346	20.89	Qp	0	9.4	30.29	56	-25.71	-	-
8	2.346	11.47	Ca	0	9.4	20.87	-	-	46	-25.13
9	2.93325	28.03	Qp	0	9.4	37.43	56	-18.57	-	-
10	2.93325	15.13	Ca	0	9.4	24.53	-	-	46	-21.47
11	19.62825	27.11	Qp	.2	9.6	36.91	60	-23.09	-	-
12	19.62713	17.87	Ca	.2	9.6	27.67	-	-	50	-22.33

Qp - Quasi-Peak detector
Ca - CISPR average detection

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11. DYNAMIC FREQUENCY SELECTION

11.1. OVERVIEW

11.1.1. LIMITS

INDUSTRY CANADA

IC RSS-210 is closely harmonized with FCC Part 15 DFS rules. The deviations are as follows:

RSS-210 Issue 8 A9.3

Note: For the band 5600–5650 MHz, no operation is permitted.

Until further notice, devices subject to this annex shall not be capable of transmitting in the band 5600–5650 MHz. This restriction is for the protection of Environment Canada weather radars operating in this band.

FCC

§15.407 (h), FCC KDB 905462 D02 “COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION” and KDB 905462 D03 “U-NII CLIENT DEVICES WITHOUT RADAR DETECTION CAPABILITY”.

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Table 1: Applicability of DFS requirements prior to use of a channel

Requirement	Operational Mode		
	Master	Client (without radar detection)	Client (with radar detection)
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode		
	Master	Client **(without DFS)**	Client **(with DFS)**
DFS Detection Threshold	Yes	Not required	Yes
Channel Closing Transmission Time	Yes	Yes	Yes
Channel Move Time	Yes	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required	Yes

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar DFS	Client (without DFS)
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in all 20 MHz channel blocks and a null frequency between the bonded 20 MHz channel blocks.		

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Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (see notes)
E.I.R.P. ≥ 200 mill watt	-64 dBm
E.I.R.P. < 200 mill watt and power spectral density < 10 dBm/MHz	-62 dBm
E.I.R.P. < 200 mill watt that do not meet power spectral density requirement	-64 dBm

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna
Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.
Note 3: E.I.R.P. is based on the highest antenna gain. For MIMO devices refer to KDB publication 662911 D01.

Table 4: DFS Response requirement values

Parameter	Value
Non-occupancy period	30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds (See Note 1)
Channel Closing Transmission Time	200 milliseconds + approx. 60 milliseconds over remaining 10 second period. (See Notes 1 and 2)
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. (See Note 3)

Note 1: *Channel Move Time* and the *Channel Closing Transmission Time* should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.
Note 2: The *Channel Closing Transmission Time* is comprised of 200 milliseconds starting at the beginning of the *Channel Move Time* plus any additional intermittent control signals required to facilitate a *Channel* move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.
Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

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Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (usec)	PRI (usec)	Pulses	Minimum Percentage of Successful Detection	Minimum Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in table 5a	Roundup: {(1/360) x (19 x 10^6 PRI_{usec})}	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 usec. With a minimum increment of 1 usec, excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the *Detection Bandwidth* test, *Channel Move Time*, and *Channel Closing Time* tests.					

Table 6 – Long Pulse Radar Test Signal

Radar Waveform Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

Table 7 – Frequency Hopping Radar Test Signal

Radar Waveform Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	9	0.333	300	70%	30

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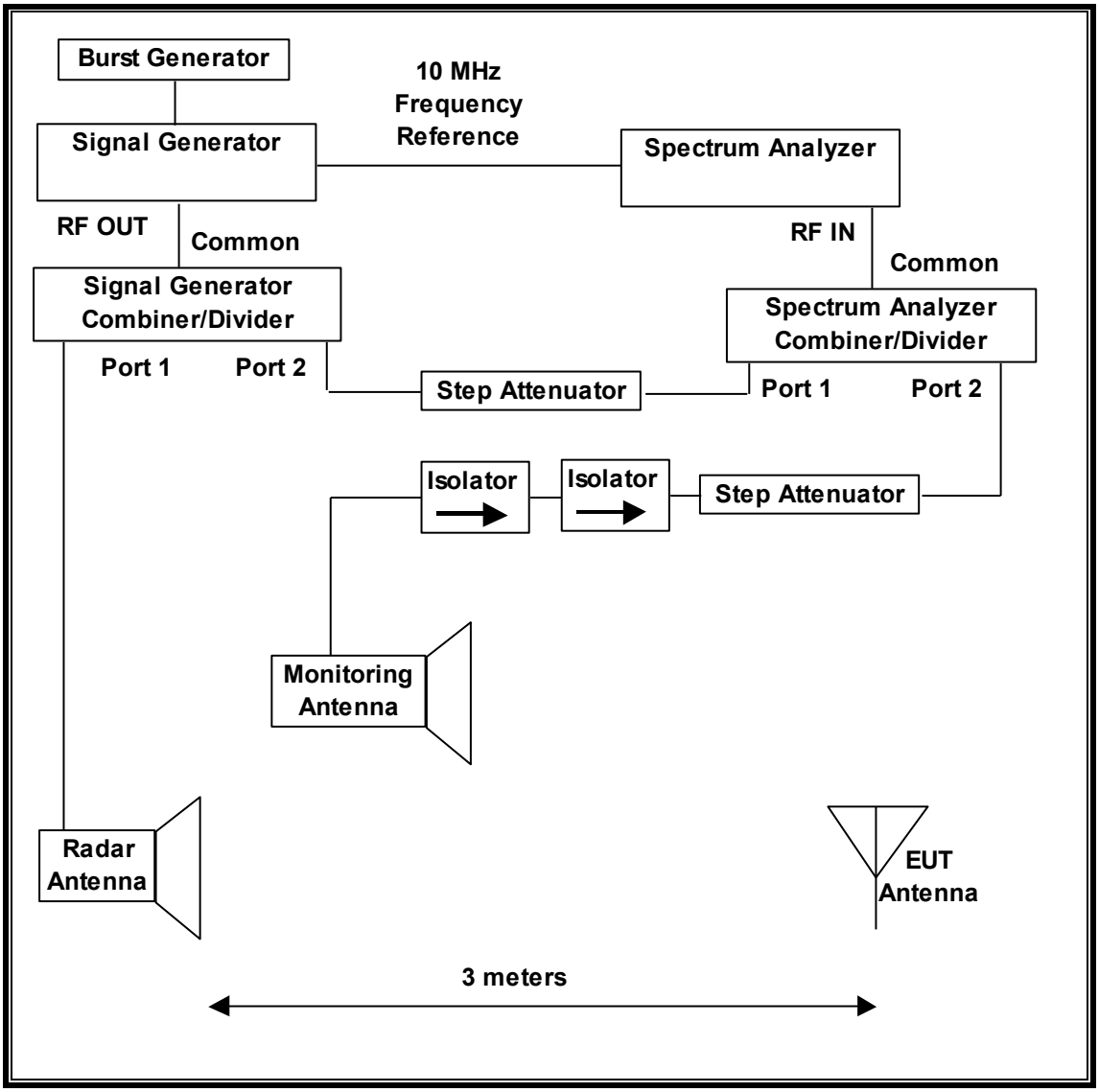
11.1.2. TEST AND MEASUREMENT SYSTEM

RADIATED METHOD SYSTEM BLOCK DIAGRAM



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SYSTEM OVERVIEW

The short pulse and long pulse signal generating system utilizes the NTIA software. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

The short pulse types 1, 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time.

The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List. The initial starting point randomized at run-time and each subsequent starting point is incremented by 475. Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Frequency Hopping Radar Waveform Generating Subsystem of KDB 905462 D02. The frequency of the signal generator is incremented in 1 MHz steps from F_L to F_H for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

The signal monitoring equipment consists of a spectrum analyzer. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection and max hold.

SYSTEM CALIBRATION

A 50-ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to a horn antenna via a coaxial cable, with the reference level offset set to (horn antenna gain – coaxial cable loss). The signal generator is set to CW mode. The amplitude of the signal generator is adjusted to yield a level of –64 dBm as measured on the spectrum analyzer.

Without changing any of the instrument settings, the spectrum analyzer is reconnected to the Common port of the Spectrum Analyzer Combiner/Divider. The Reference Level Offset of the spectrum analyzer is adjusted so that the displayed amplitude of the signal is –64 dBm.

The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of –64 dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

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ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL

A link is established between the Master and Slave and the distance between the units is adjusted as needed to provide a suitable received level at the Master and Slave devices. The video test file is streamed to generate WLAN traffic. The monitoring antenna is adjusted so that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold.

TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the DFS tests documented in this report:

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Equipment ID**	**Cal Due**
Spectrum Analyzer, 8.4 GHz	Keysight	N9030A	SA0021	03/31/16
Vector Signal Generator, 6 GHz	Agilent	N5182B	SIG003	04/30/16

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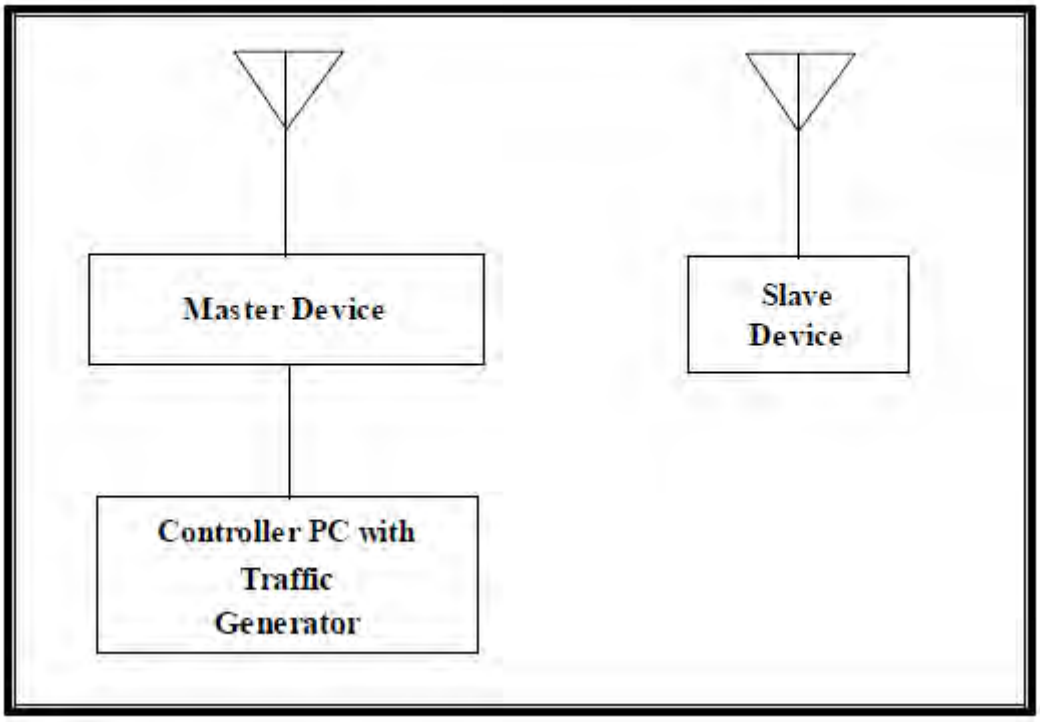
11.1.3. SETUP OF EUT

RADIATED METHOD EUT TEST SETUP



SUPPORT EQUIPMENT

The following support equipment was utilized for the DFS tests documented in this report:

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
802.11ac Dual Band Wireless Access Point (Master Device)	Cisco	AIR-CAP3702E-A-K9	FTX1827R5FF	LDK102087
P.O.E. Injector (Master AP)	Cisco	DPSN-35FBA	DCA183510NA	DoC
Notebook PC (Controller)	Lenovo	20B6-002AUS	PC-041B0F 15/03	Doc
AC Adapter (Controller PC)	Lenovo	ADLX90NLC2A	11S45N0247Z1ZS9B4BVJ0H	Doc

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11.1.4. DESCRIPTION OF EUT

For FCC the EUT operates over the 5250-5350 MHz and 5470-5725 MHz ranges.

For IC the EUT operates over the 5250-5350 MHz and 5470-5725 MHz ranges, excluding the 5600-5650 MHz range.

The EUT is a Slave Device without Radar Detection.

The highest power level within these bands is 18.95 dBm EIRP in the 5250-5350 MHz band and 19.25 dBm EIRP in the 5470-5725 MHz band.

The only antenna assembly utilized with the EUT is composed of two antennas. Each has a respective gain of 2.2 dBi and 2.4 dBi in the 5250 MHz to 5350 MHz band, and 2.1 dBi and 2.3 dBi in the 5470 MHz to 5725 MHz band.

Two antennas are utilized to meet the diversity and MIMO operational requirements.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is –64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is –64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides a margin to the limit.

The EUT uses two transmitter/receiver chains, each connected to an antenna to perform radiated tests.

WLAN traffic that meets or exceeds the minimum required loading was generated by transferring a data stream from the controller/server PC to the EUT using iPerf version 2.0.5 software package.

TPC is not required since the maximum EIRP is less than 500 mW (27 dBm).

The EUT utilizes the 802.11ac architecture. Three nominal channel bandwidths are implemented: 20 MHz, 40 MHz and 80 MHz.

The software installed in the EUT is Windows 10 Pro (Build 10240).

The software installed in the access point is AP3G2-K9W7-XX 153-3.JAB revision 15.3(3)JAB.

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UNIFORM CHANNEL SPREADING

This is requirement not applicable to Slave Devices.

OVERVIEW OF MASTER DEVICE WITH RESPECT TO §15.407 (h) REQUIREMENTS

The Master Device is a Cisco Access Point, LDK102087. The minimum antenna gain for the Master Device is 6 dBi.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is –64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is –64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides a margin to the limit.

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11.2. RESULTS FOR 20 MHz BANDWIDTH

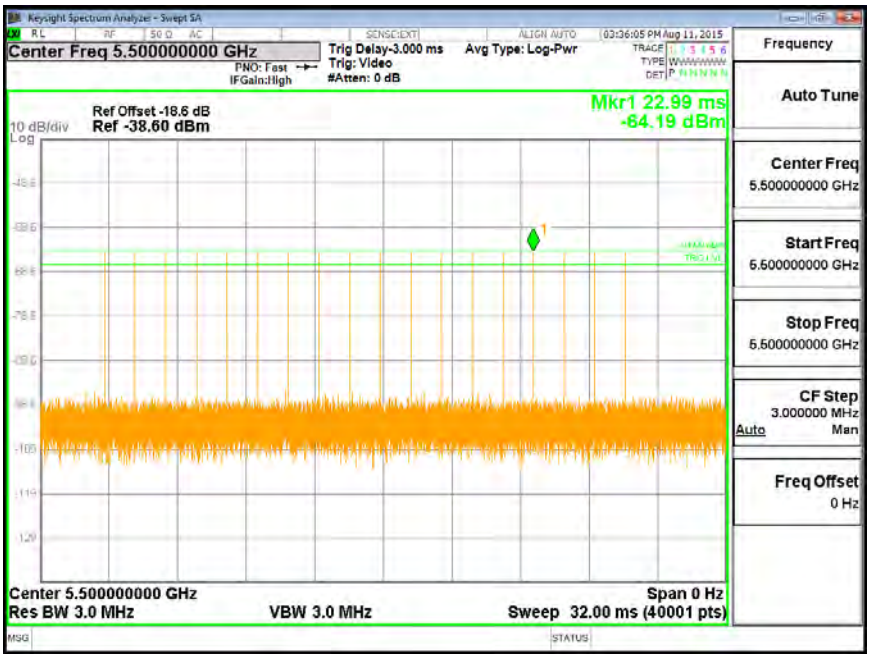
11.2.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5500 MHz.

11.2.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM

SHORT PULSE RADAR TYPE 0 AT MASTER



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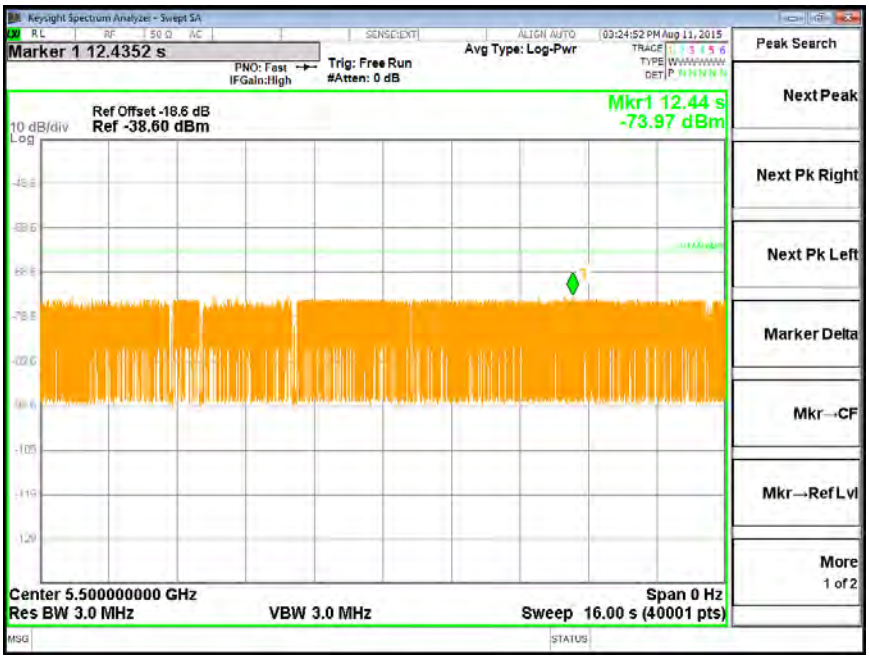
TRAFFIC

SLAVE TRAFFIC



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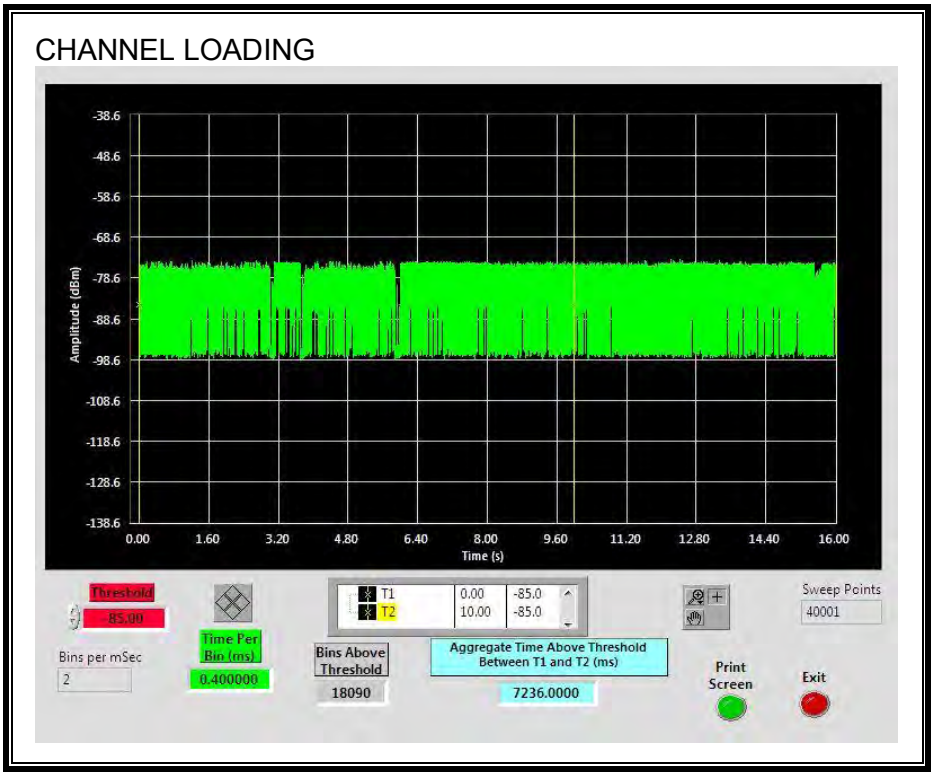
CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 72.36%

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11.2.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

11.2.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

Channel Move Time (sec)	Limit (sec)
0.663	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
4.0	60

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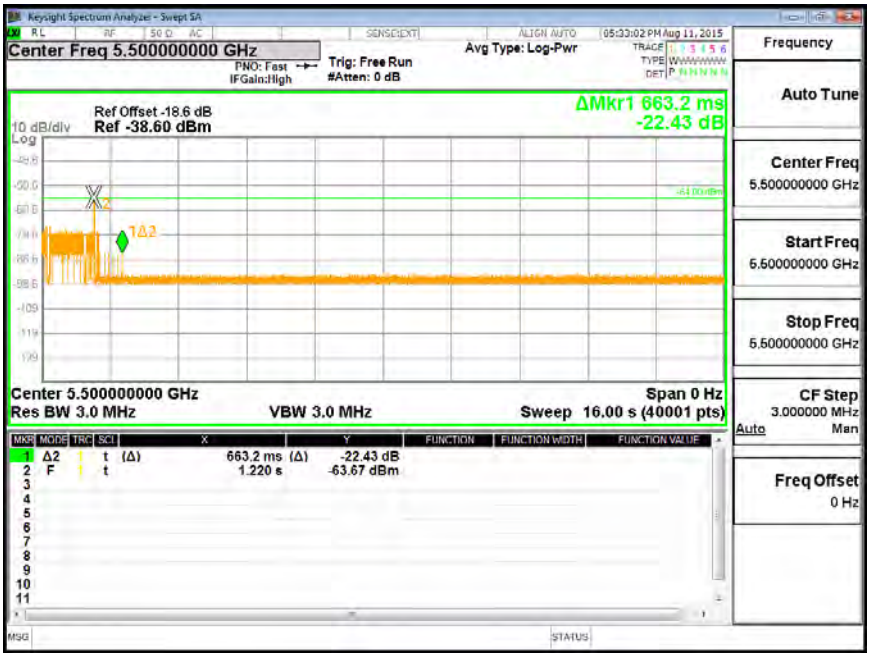
MOVE TIME

MOVE TIME



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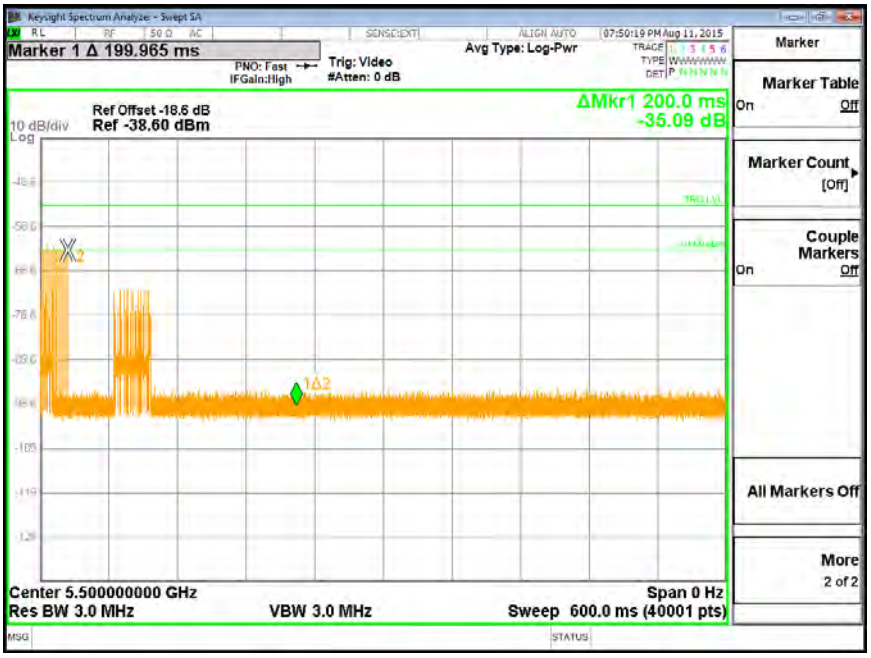
CHANNEL CLOSING TIME

CLOSING TIME



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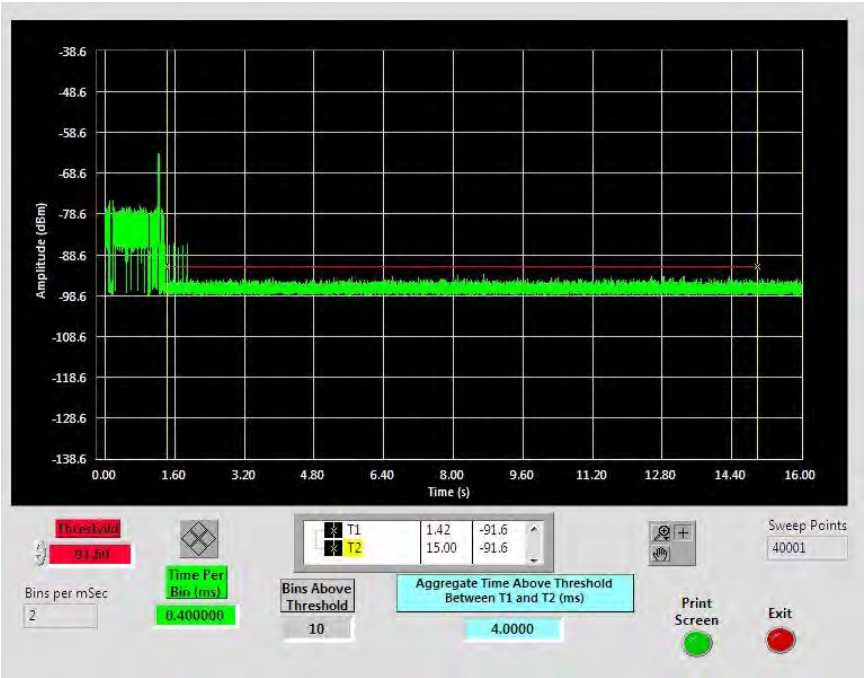
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.

AGGREGATE CLOSING TIME



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11.3. RESULTS FOR 40 MHz BANDWIDTH

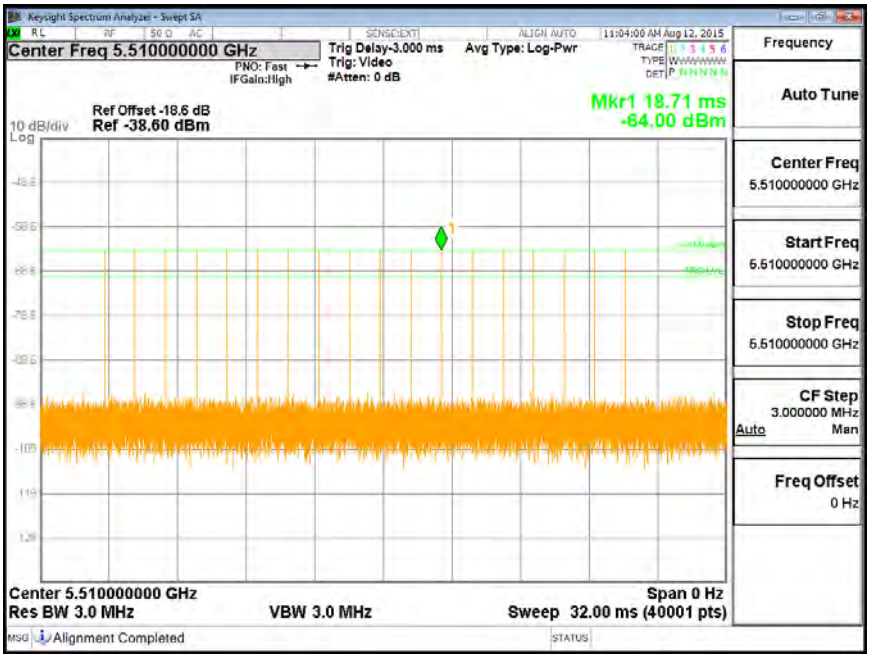
11.3.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5510 MHz.

11.3.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM

SHORT PULSE RADAR TYPE 0 AT MASTER



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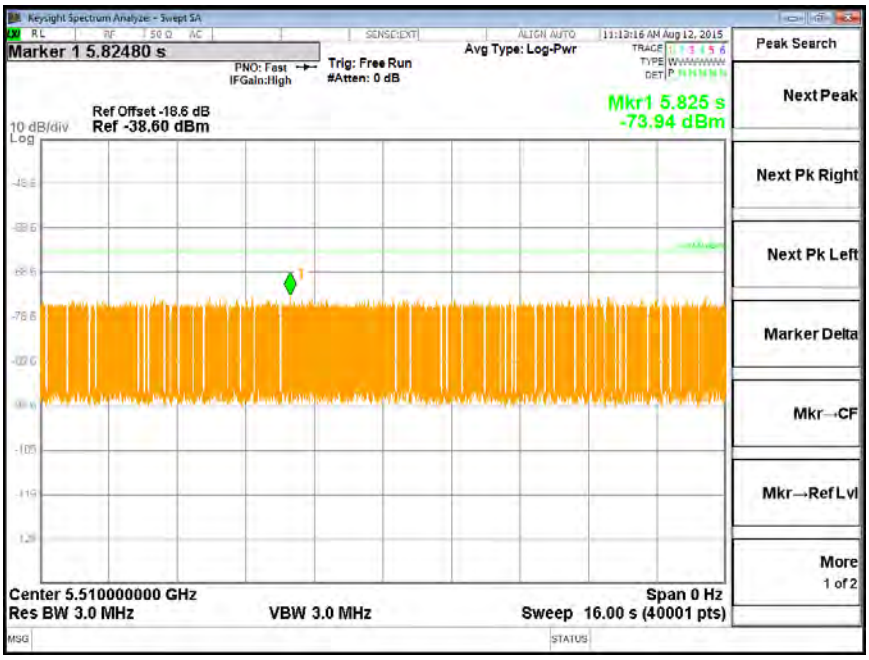
TRAFFIC

SLAVE TRAFFIC



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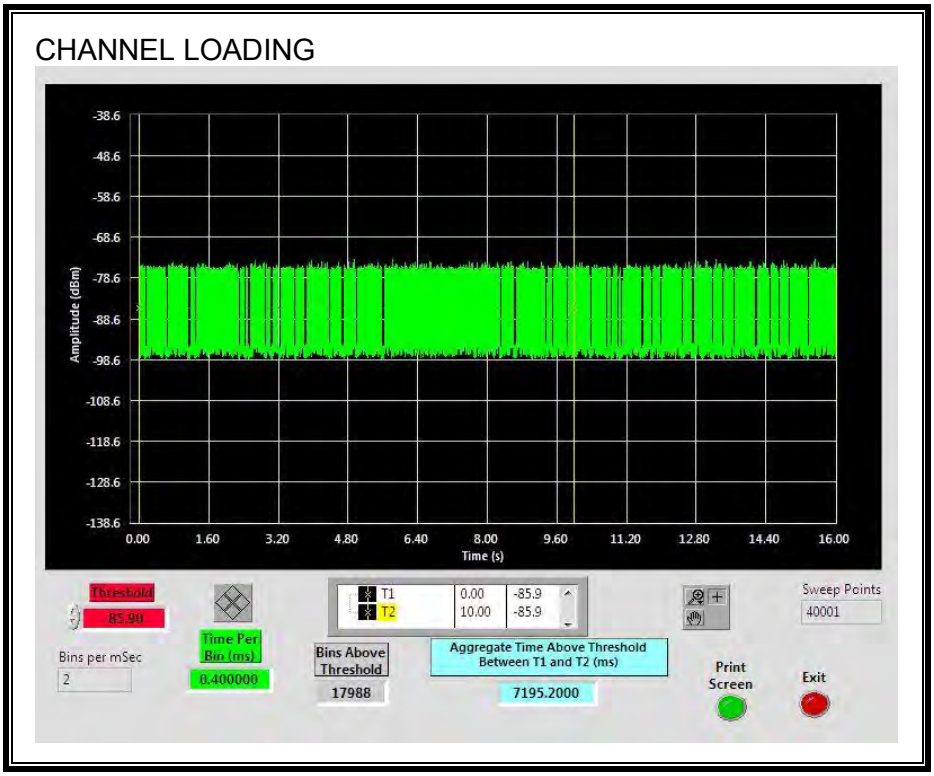
CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 71.95%

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11.3.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

11.3.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

Channel Move Time (sec)	Limit (sec)
0.076	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.0	60

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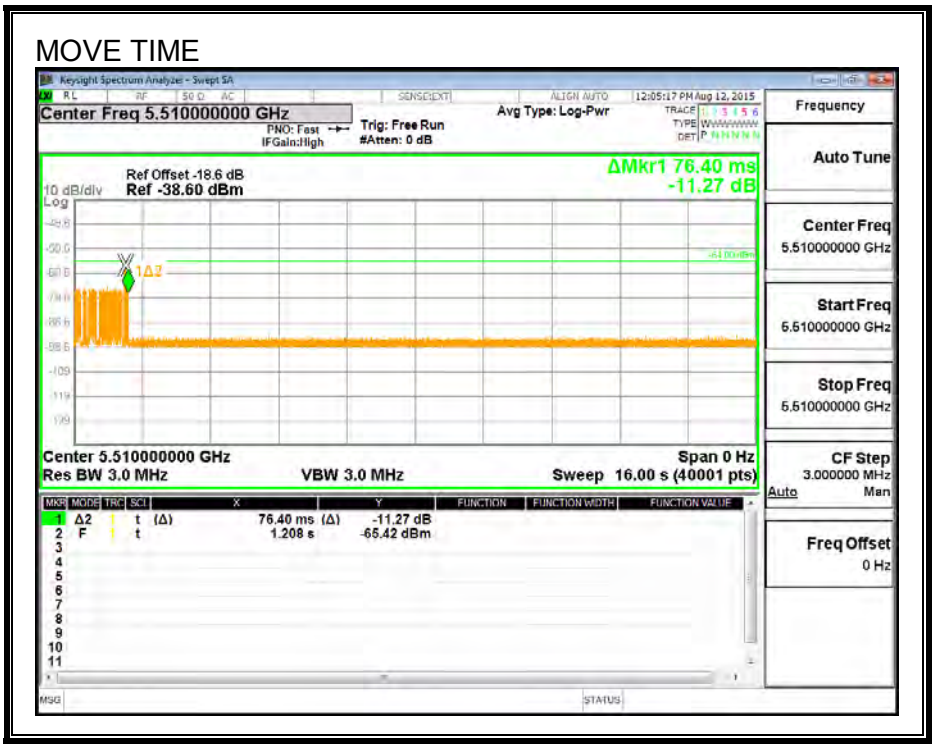
MOVE TIME



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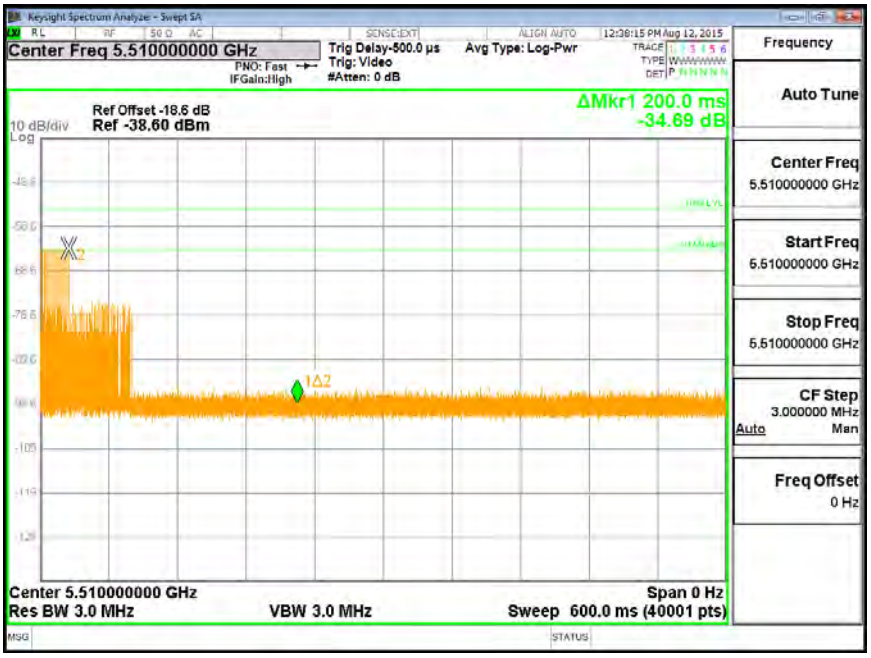
CHANNEL CLOSING TIME

CLOSING TIME



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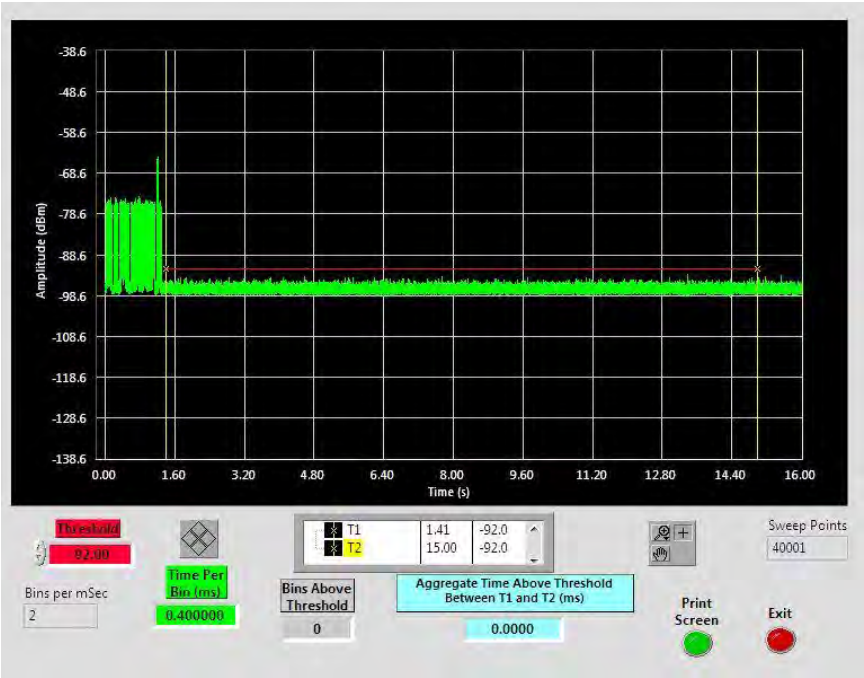
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.

AGGREGATE CLOSING TIME



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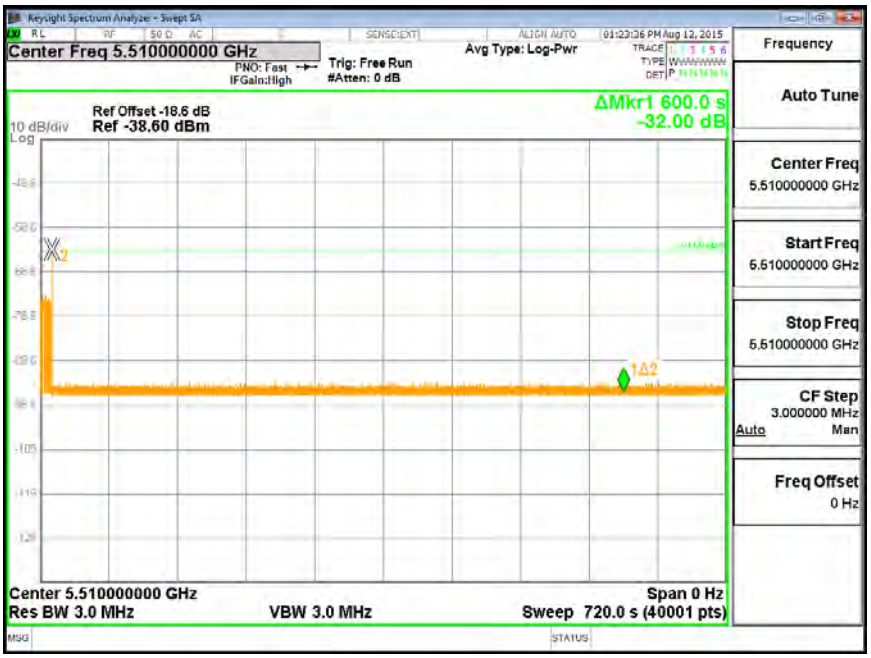
11.3.5. 10-MINUTE BEACON MONITORING PERIOD

RESULTS

No EUT transmissions were observed on the test channel during the 10-minute observation time.

10-MINUTE BEACON MONITORING PERIOD



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11.4. RESULTS FOR 80 MHz BANDWIDTH

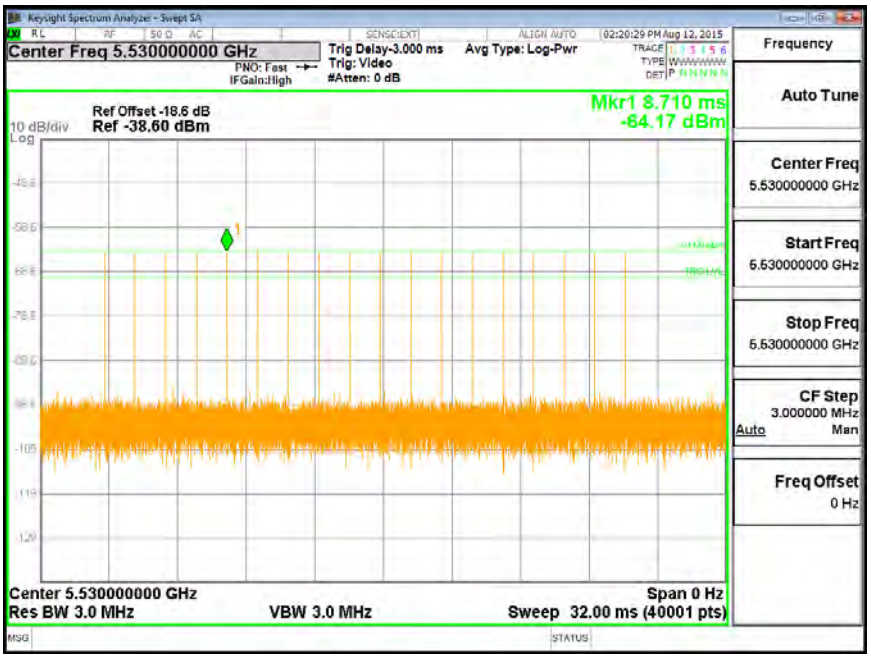
11.4.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5530 MHz.

11.4.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM

SHORT PULSE RADAR TYPE 0 AT MASTER



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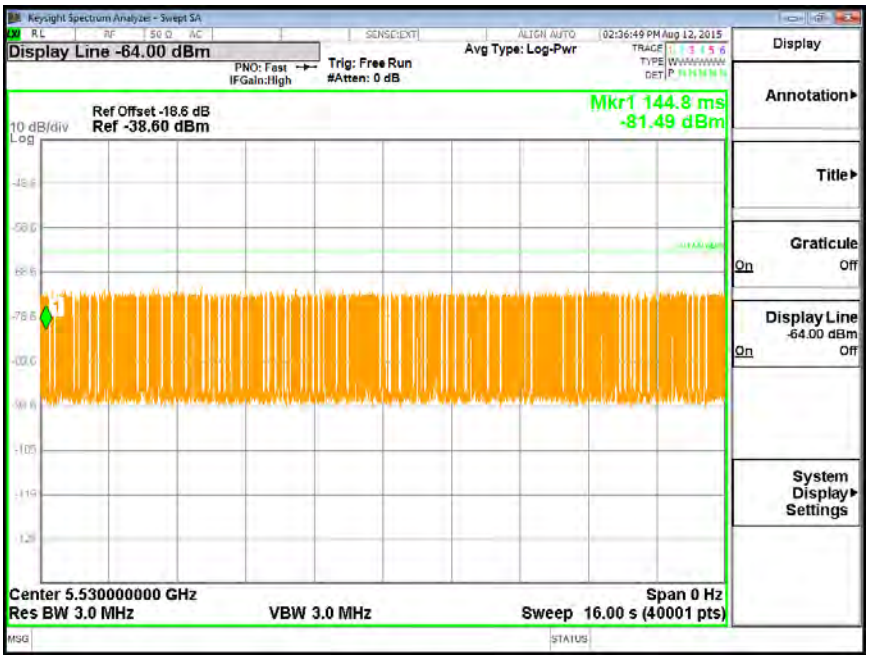
TRAFFIC

SLAVE TRAFFIC



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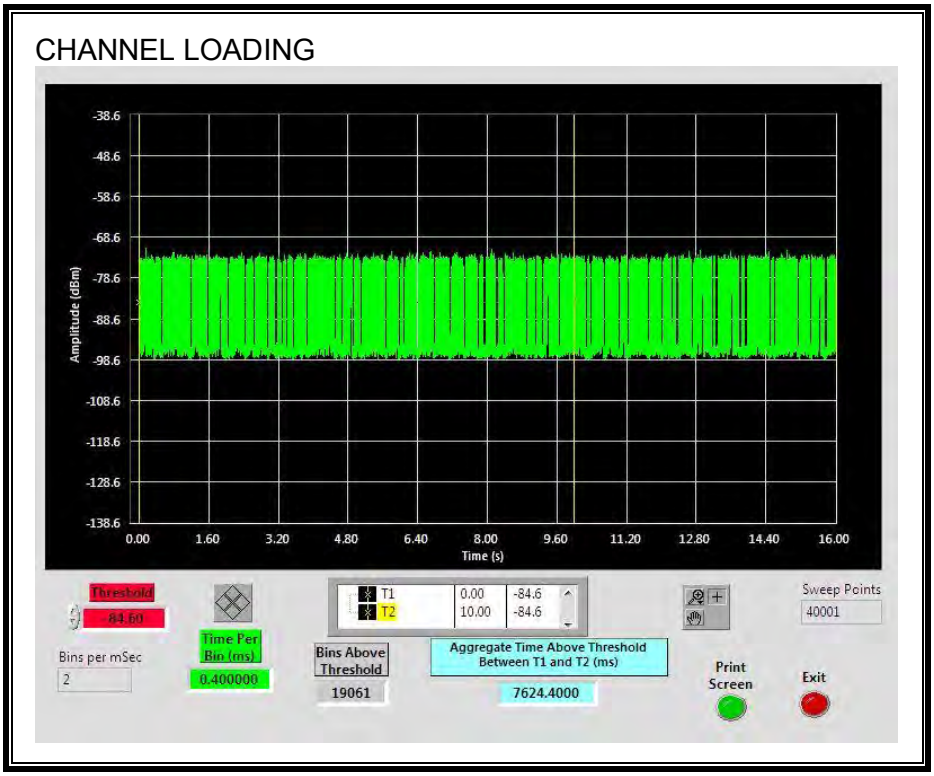
CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 76.24%

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11.4.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

11.4.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

Channel Move Time (sec)	Limit (sec)
0.115	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.0	60

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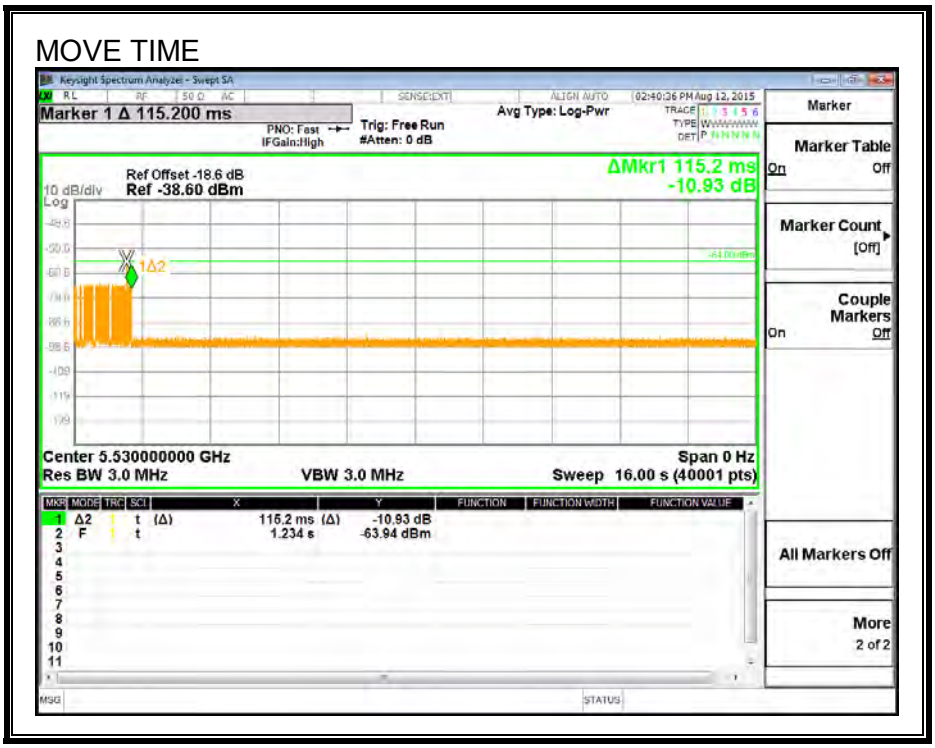
MOVE TIME



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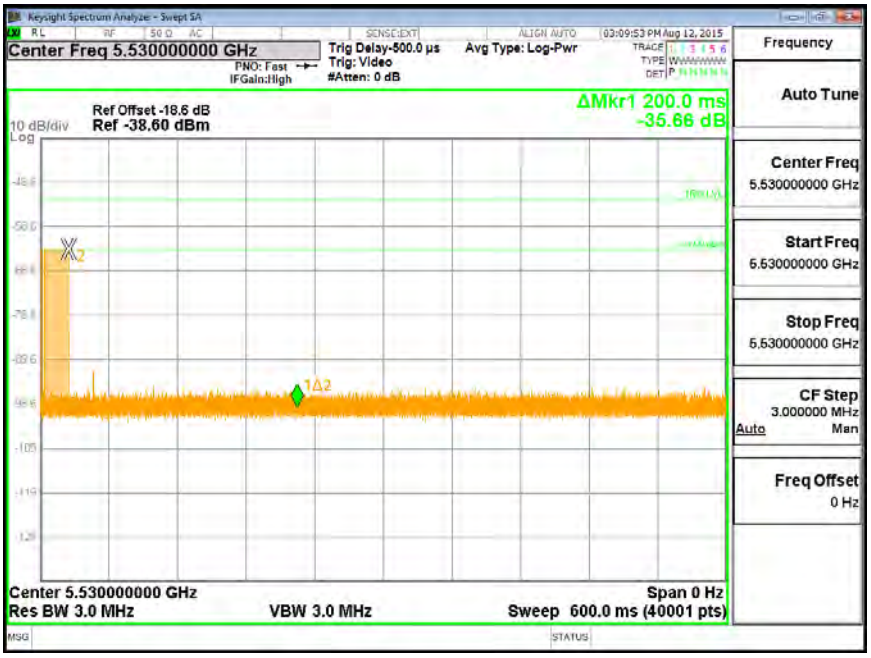
CHANNEL CLOSING TIME

CLOSING TIME



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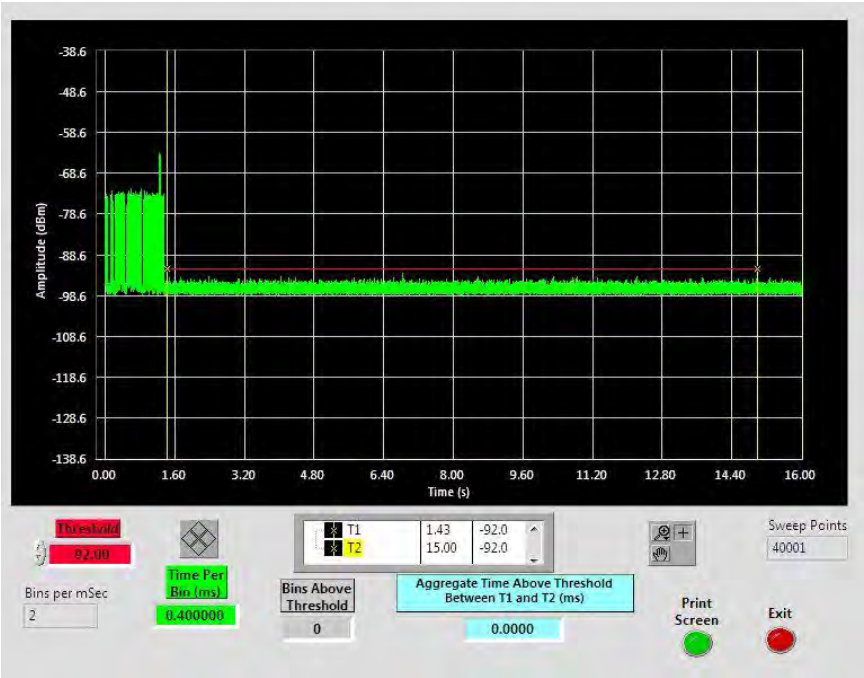
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.

AGGREGATE CLOSING TIME



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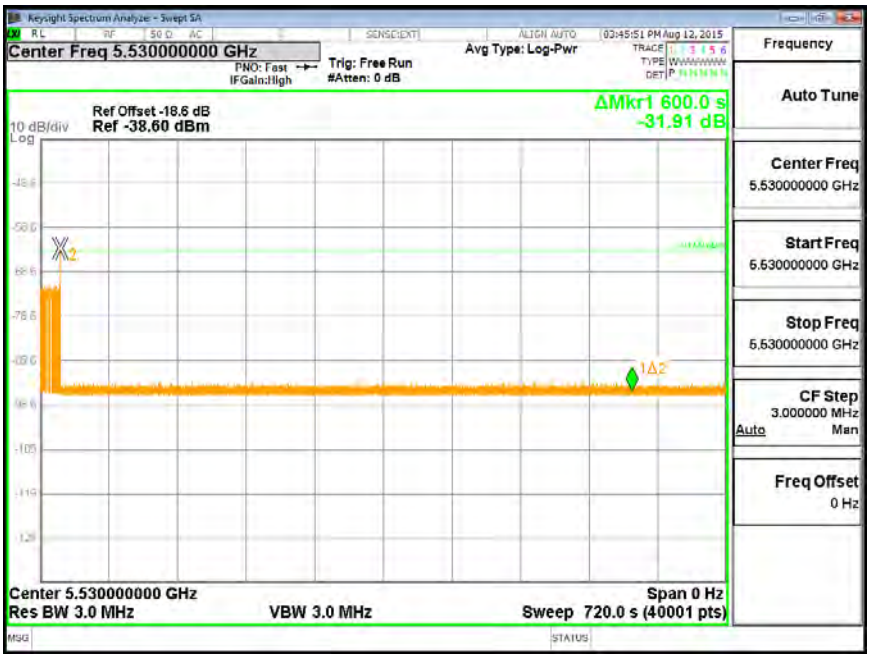
11.4.5. 10-MINUTE BEACON MONITORING PERIOD

RESULTS

No EUT transmissions were observed on the test channel during the 10-minute observation time.

10-MINUTE BEACON MONITORING PERIOD



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