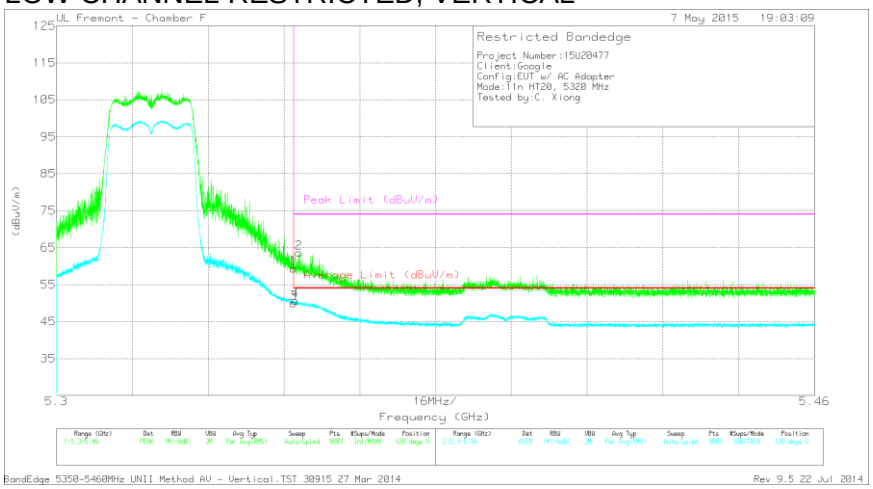
LOW CHANNEL RESTRICTED, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	43.31	PK	34.6	-18.5	59.41	-	-	74	-14.59	120	311	V
2	* 5.351	47.51	PK	34.6	-18.5	63.61	-	-	74	-10.39	120	311	V
3	* 5.35	33.89	RMS	34.6	-18.5	49.99	54	-4.01	-	-	120	311	V
4	* 5.35	34.55	RMS	34.6	-18.5	50.65	54	-3.35	-	-	120	311	V

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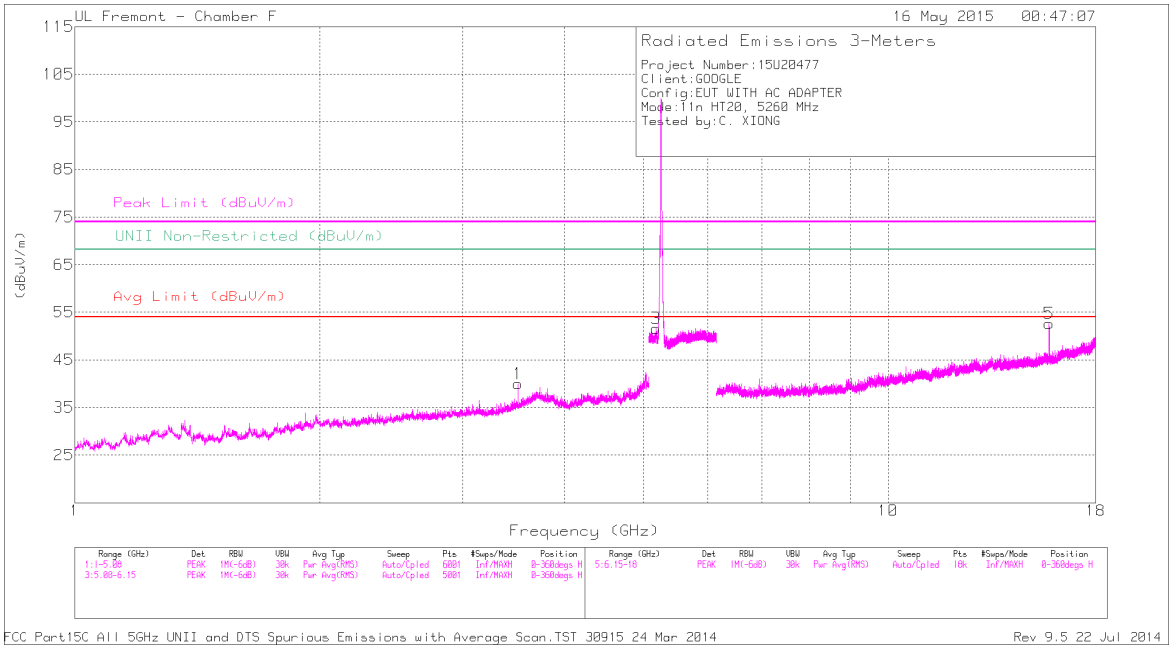
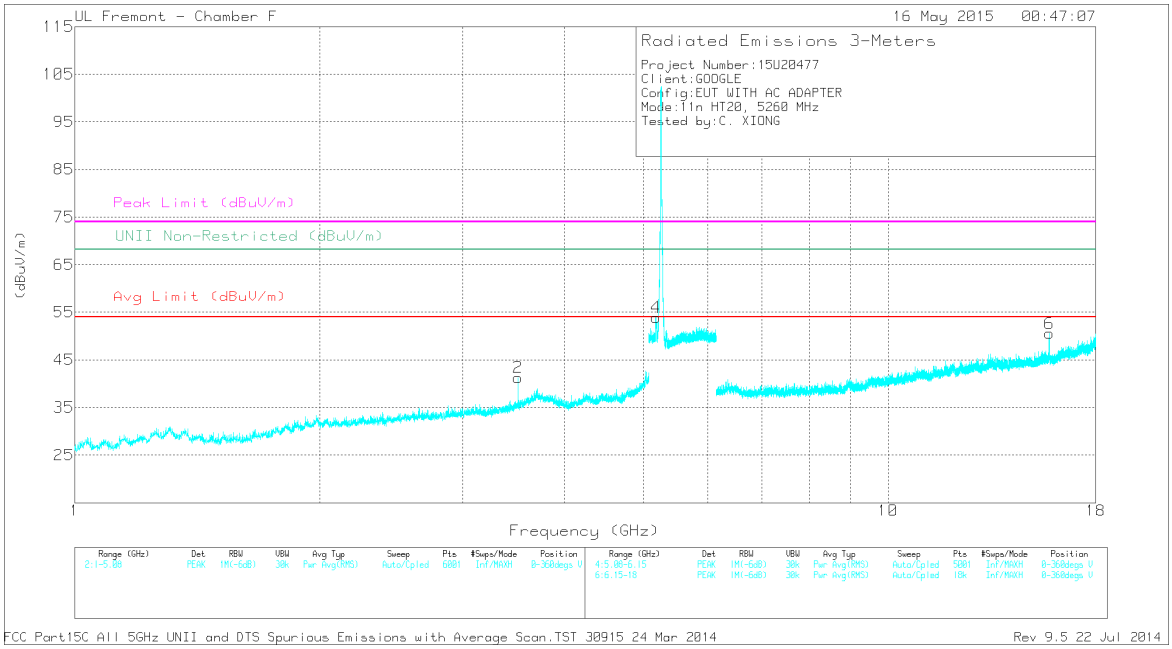
LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.507	41.93	PK1	34.6	-29.3	0	47.23	-	-	74	-26.77	-	-	134	102	H
	* 3.507	32.86	AD1	34.6	-29.3	0	38.16	54	-15.84	-	-	-	-	134	102	H
3	5.193	45.07	PK1	34.3	-18.4	0	60.97	-	-	-	-	68.2	-7.23	2	281	H
2	5.184	47.85	PK1	34.3	-18.4	0	63.75	-	-	-	-	68.2	-4.45	223	179	V
4	* 15.776	46.42	PK1	40.6	-22.5	0	64.52	-	-	74	-9.48	-	-	211	120	H
	* 15.78	32.18	AD1	40.6	-22.6	0	50.18	54	-3.82	-	-	-	-	211	120	H
5	* 15.773	44.15	PK1	40.6	-22.5	0	62.25	-	-	74	-11.75	-	-	150	184	V
	* 15.783	30.78	AD1	40.5	-22.6	0	48.68	54	-5.32	-	-	-	-	150	184	V

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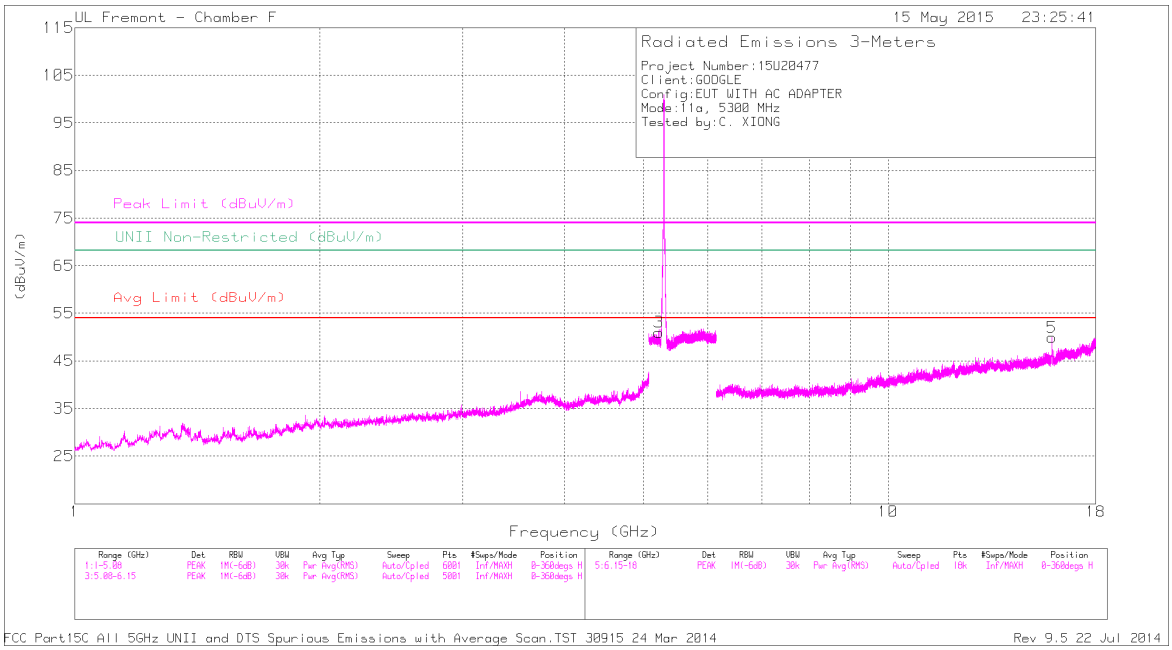
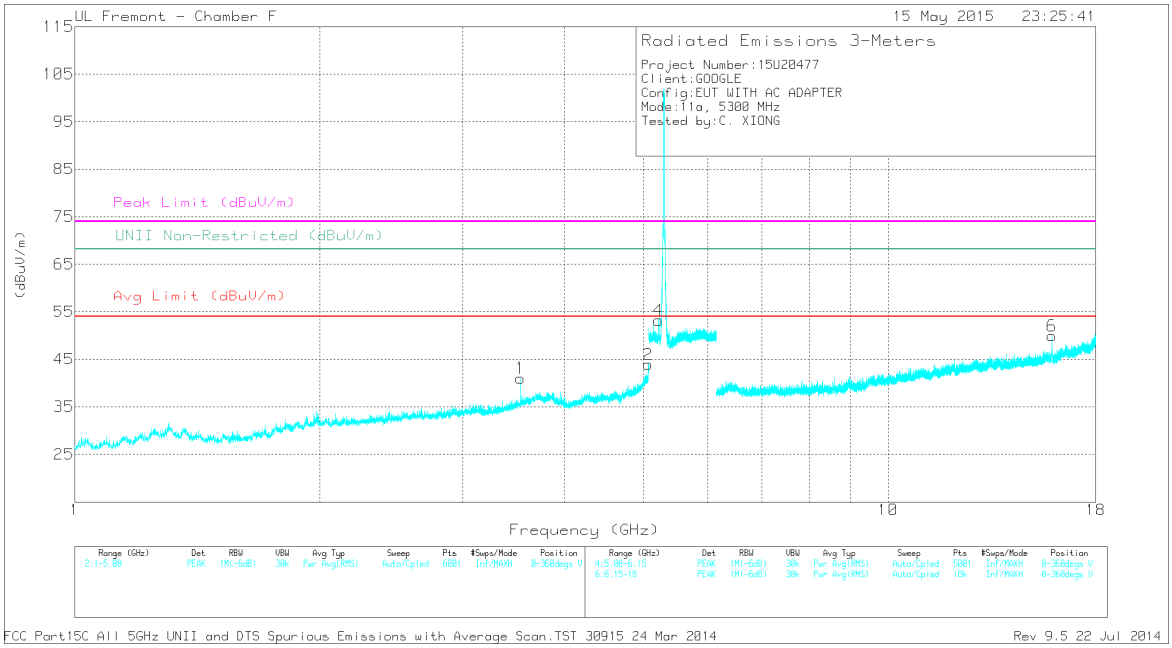
MID CHANNEL HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.534	43.19	PK1	34.7	-29.2	0	48.69	-	-	74	-25.31	-	-	221	207	V
	* 3.533	34.55	AD1	34.7	-29.2	0	40.05	54	-13.95	-	-	-	-	221	207	V
2	* 5.074	46.47	PK1	34.2	-26.1	0	54.57	-	-	74	-19.43	-	-	232	165	V
	* 5.073	35.32	AD1	34.2	-26.1	0	43.42	54	-10.58	-	-	-	-	232	165	V
3	5.228	46.24	PK1	34.4	-18.4	0	62.24	-	-	-	-	68.2	-5.96	20	303	H
4	5.232	46.39	PK1	34.4	-18.4	0	62.39	-	-	-	-	68.2	-5.81	220	177	V
5	* 15.896	43.16	PK1	40.6	-22.5	0	61.26	-	-	74	-12.74	-	-	212	107	H
	* 15.899	29.73	AD1	40.6	-22.5	0	47.83	54	-6.17	-	-	-	-	212	107	H
6	* 15.896	42.83	PK1	40.6	-22.5	0	60.93	-	-	74	-13.07	-	-	137	189	V
	* 15.899	29.7	AD1	40.6	-22.5	0	47.8	54	-6.2	-	-	-	-	137	189	V

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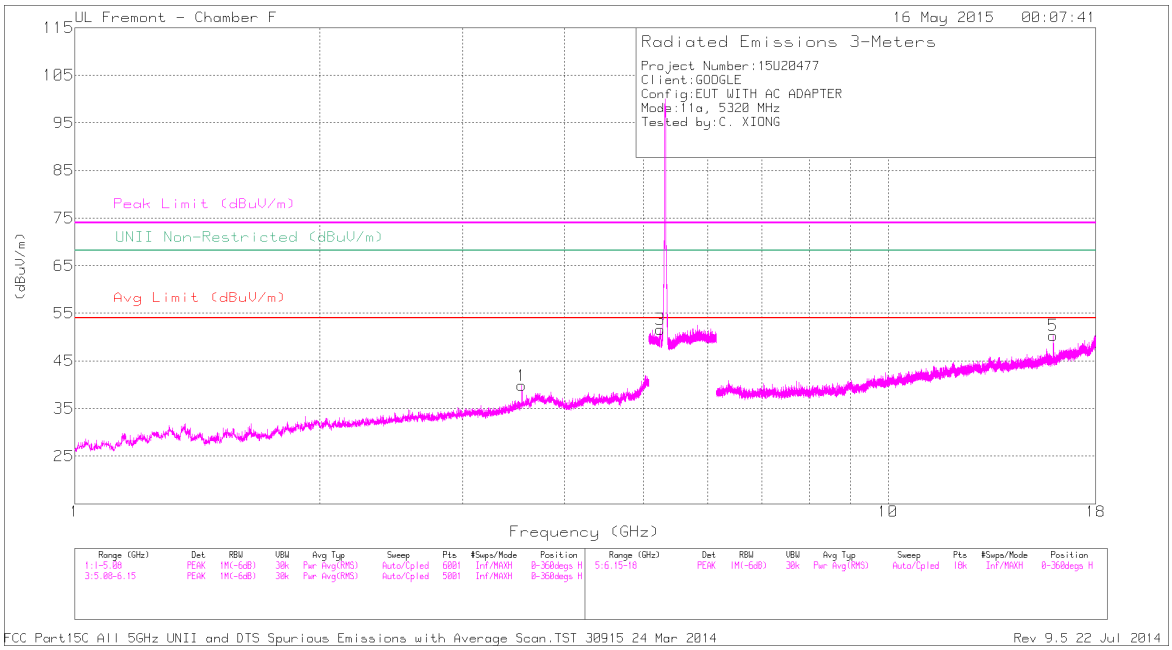
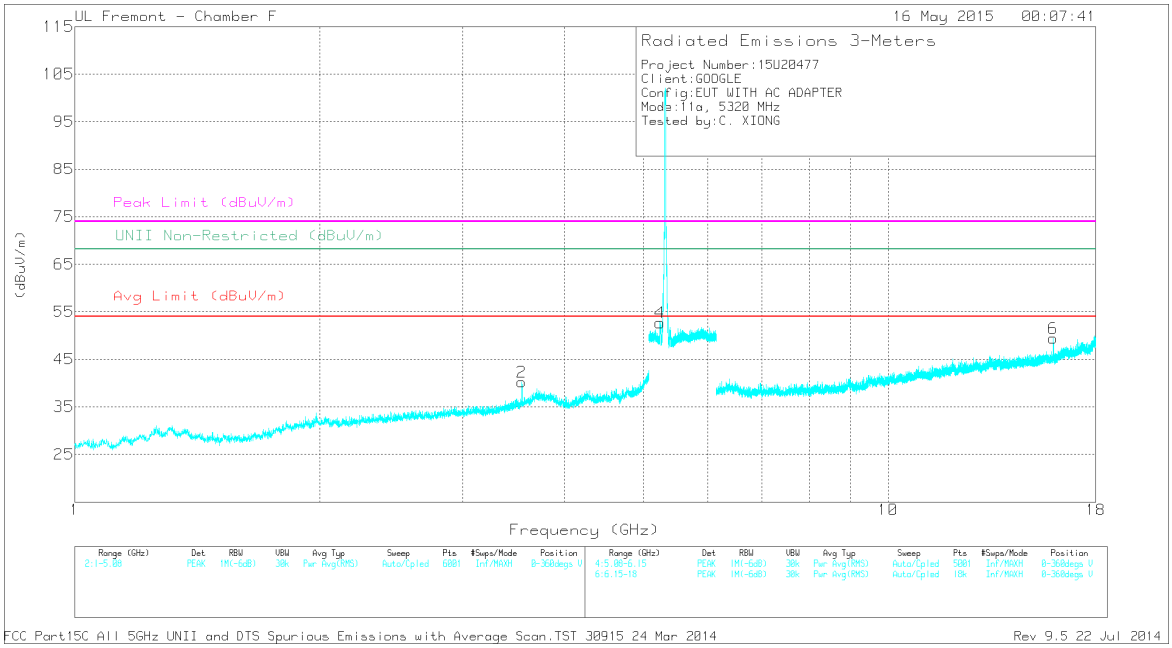
HIGH CHANNEL HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.547	41.58	PK1	34.8	-29	0	47.38	-	-	74	-26.62	-	-	137	157	H
	* 3.547	32.39	AD1	34.8	-29	0	38.19	54	-15.81	-	-	-	-	137	157	H
2	* 3.546	41.67	PK1	34.8	-29	0	47.47	-	-	74	-26.53	-	-	321	175	V
	* 3.547	34.13	AD1	34.8	-29	0	39.93	54	-14.07	-	-	-	-	321	175	V
3	5.248	46.17	PK1	34.4	-18.4	0	62.17	-	-	-	-	68.2	-6.03	12	276	H
4	5.247	46.16	PK1	34.4	-18.4	0	62.16	-	-	-	-	68.2	-6.04	218	176	V
5	* 15.956	41.82	PK1	40.6	-22.6	0	59.82	-	-	74	-14.18	-	-	193	120	H
	* 15.959	29.04	AD1	40.6	-22.6	0	47.04	54	-6.96	-	-	-	-	193	120	H
6	* 15.963	42.18	PK1	40.6	-22.6	0	60.18	-	-	74	-13.82	-	-	138	189	V
	* 15.959	29.25	AD1	40.6	-22.6	0	47.25	54	-6.75	-	-	-	-	138	189	V

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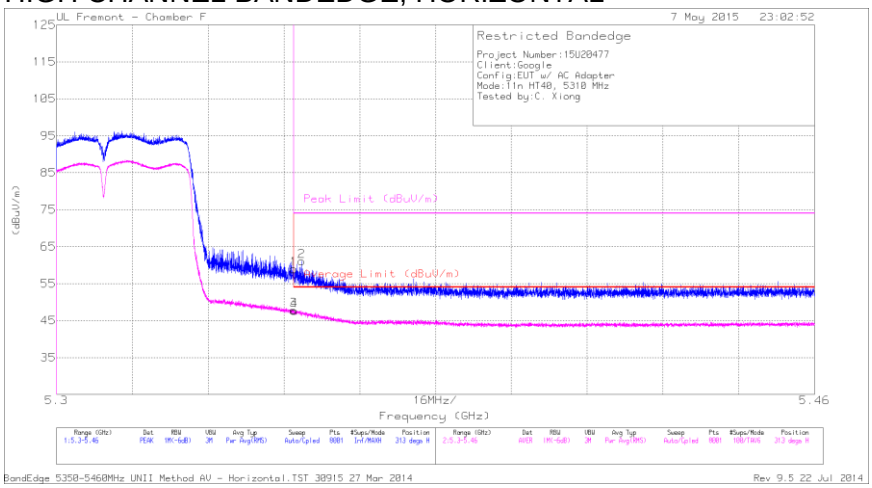
9.9. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.3 GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	42.85	PK	34.6	-18.5	58.95	-	-	74	-15.05	313	264	H
2	* 5.352	44.96	PK	34.6	-18.5	61.06	-	-	74	-12.94	313	264	H
3	* 5.35	31.72	RMS	34.6	-18.5	47.82	54	-6.18	-	-	313	264	H
4	* 5.35	31.6	RMS	34.6	-18.5	47.7	54	-6.3	-	-	313	264	H

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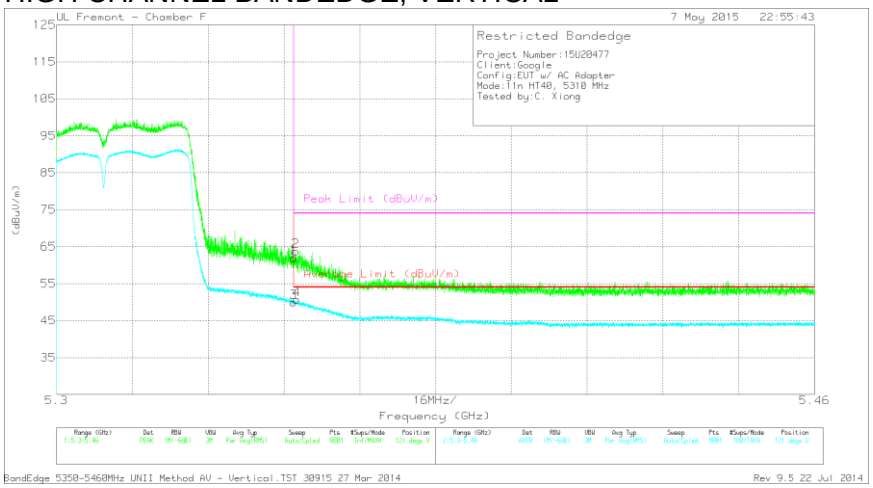
HIGH CHANNEL BANDEDGE, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	45.87	PK	34.6	-18.5	61.97	-	-	74	-12.03	121	283	V
2	* 5.35	47.69	PK	34.6	-18.5	63.79	-	-	74	-10.21	121	283	V
3	* 5.35	33.91	RMS	34.6	-18.5	50.01	54	-3.99	-	-	121	283	V
4	* 5.351	34.6	RMS	34.6	-18.5	50.7	54	-3.3	-	-	121	283	V

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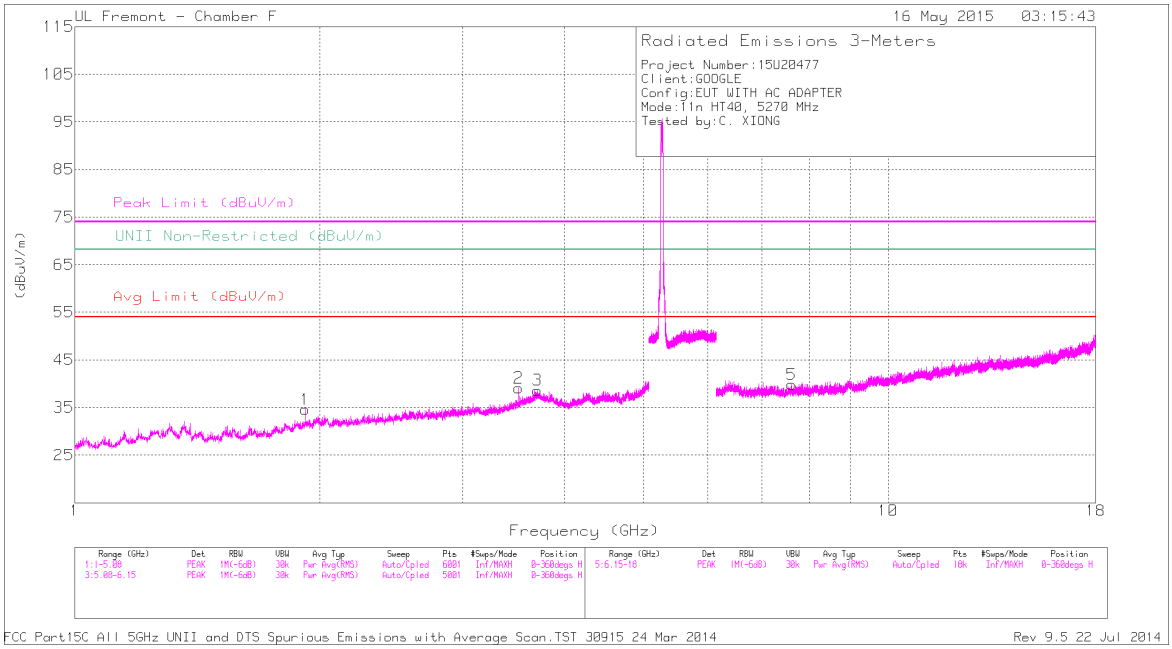
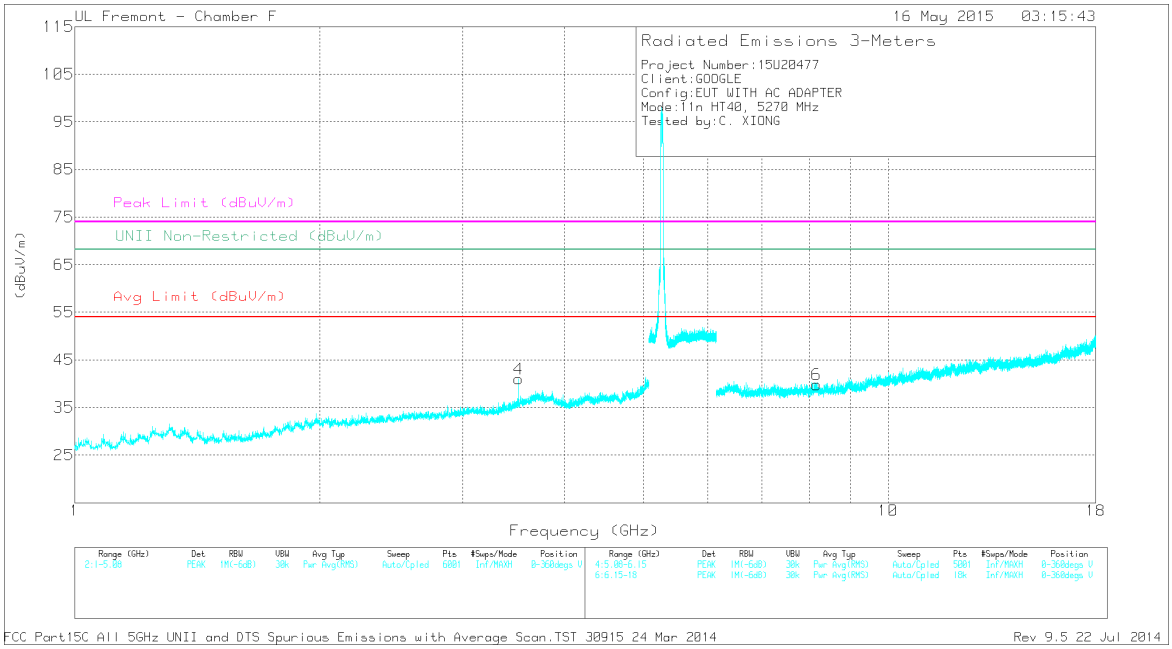
LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.92	43.02	PK1	31.3	-31.3	0	43.02	-	-	-	-	68.2	-25.18	158	123	H
2	* 3.513	42.04	PK1	34.6	-29.3	0	47.34	-	-	74	-26.66	-	-	152	109	H
	* 3.513	33.98	AD1	34.6	-29.3	0	39.28	54	-14.72	-	-	-	-	152	109	H
3	* 3.706	38.32	PK1	34.7	-28.8	0	44.22	-	-	74	-29.78	-	-	180	118	H
	* 3.704	27.36	AD1	34.7	-28.8	0	33.26	54	-20.74	-	-	-	-	180	118	H
4	* 3.513	42.23	PK1	34.6	-29.3	0	47.53	-	-	74	-26.47	-	-	255	199	V
	* 3.513	34.85	AD1	34.6	-29.3	0	40.15	54	-13.85	-	-	-	-	255	199	V
5	* 7.609	37.02	PK1	35.8	-25.2	0	47.62	-	-	74	-26.38	-	-	187	214	H
	* 7.608	25.94	AD1	35.8	-25.2	0	36.54	54	-17.46	-	-	-	-	187	214	H
6	* 8.166	35.98	PK1	35.8	-24.5	0	47.28	-	-	74	-26.72	-	-	125	149	V
	* 8.167	25.12	AD1	35.8	-24.5	0	36.42	54	-17.58	-	-	-	-	125	149	V

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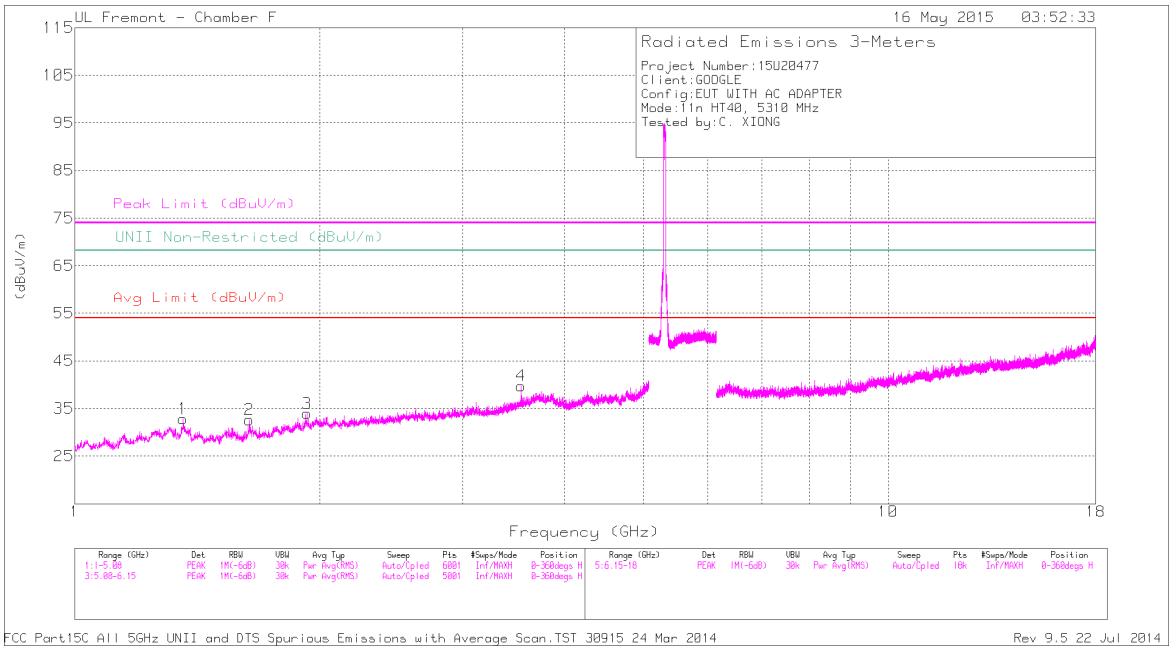
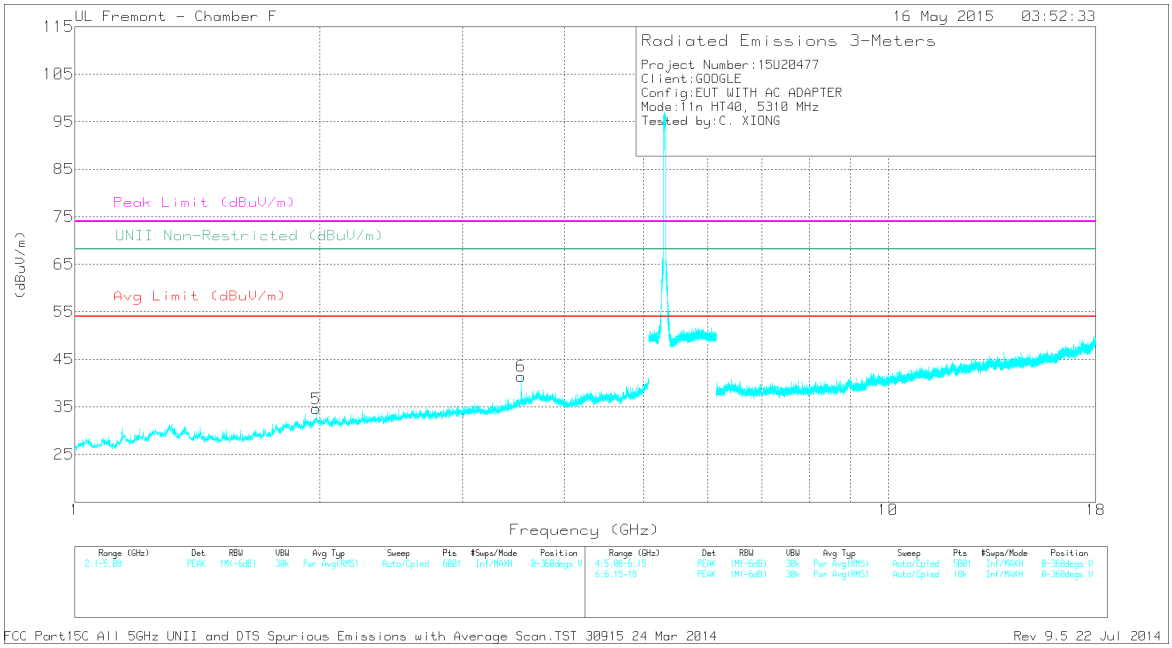
HIGH CHANNEL HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.359	42.68	PK1	29.5	-31.5	0	40.68	-	-	74	-33.32	-	-	194	208	H
	* 1.358	30.3	AD1	29.5	-31.5	0	28.3	54	-25.7	-	-	-	-	194	208	H
2	1.64	42.38	PK1	28.4	-31.5	0	39.28	-	-	-	-	68.2	-28.92	149	174	H
3	1.929	40.88	PK1	31.3	-31.3	0	40.88	-	-	-	-	68.2	-27.32	174	163	H
4	* 3.54	41.94	PK1	34.8	-29.1	0	47.64	-	-	74	-26.36	-	-	155	110	H
	* 3.54	33.55	AD1	34.8	-29.1	0	39.25	54	-14.75	-	-	-	-	155	110	H
5	1.98	43.28	PK1	31.5	-30.8	0	43.98	-	-	-	-	68.2	-24.22	144	338	V
6	* 3.54	42.43	PK1	34.8	-29.1	0	48.13	-	-	74	-25.87	-	-	302	198	V
	* 3.54	34.59	AD1	34.8	-29.1	0	40.29	54	-13.71	-	-	-	-	302	198	V

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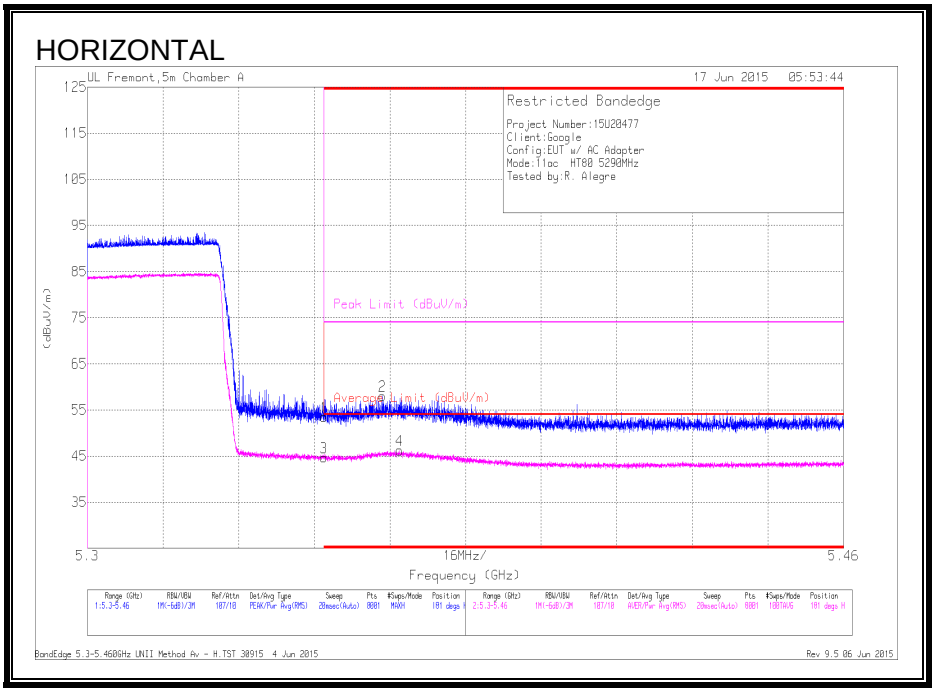
9.10. TX ABOVE 1 GHz 802.11ac VHT80 MODE IN THE 5.3 GHz BAND

AUTHORIZED BANDEDGE



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	39.99	Pk	34.6	-21.1	53.49	-	-	74	-20.51	181	315	H
2	* 5.362	44.44	Pk	34.6	-21	58.04	-	-	74	-15.96	181	315	H
3	* 5.35	31.19	RMS	34.6	-21.1	44.69	54	-9.31	-	-	181	315	H
4	* 5.366	32.64	RMS	34.6	-21	46.24	54	-7.76	-	-	181	315	H

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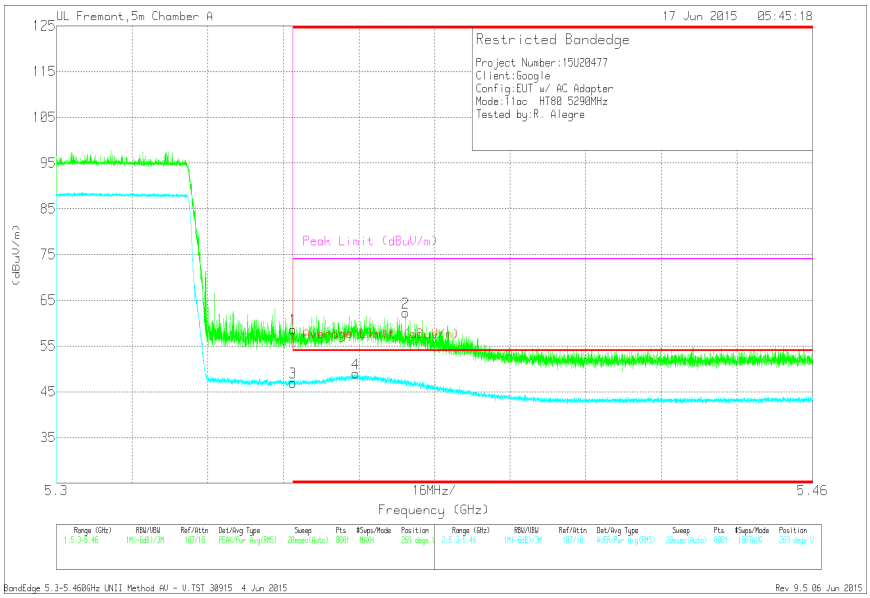
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	45.16	Pk	34.6	-21.1	58.66	-	-	74	-15.34	269	275	V
2	* 5.374	48.6	Pk	34.6	-20.9	62.3	-	-	74	-11.7	269	275	V
3	* 5.35	33.48	RMS	34.6	-21.1	46.98	54	-7.02	-	-	269	275	V
4	* 5.363	35.36	RMS	34.6	-21	48.96	54	-5.04	-	-	269	275	V

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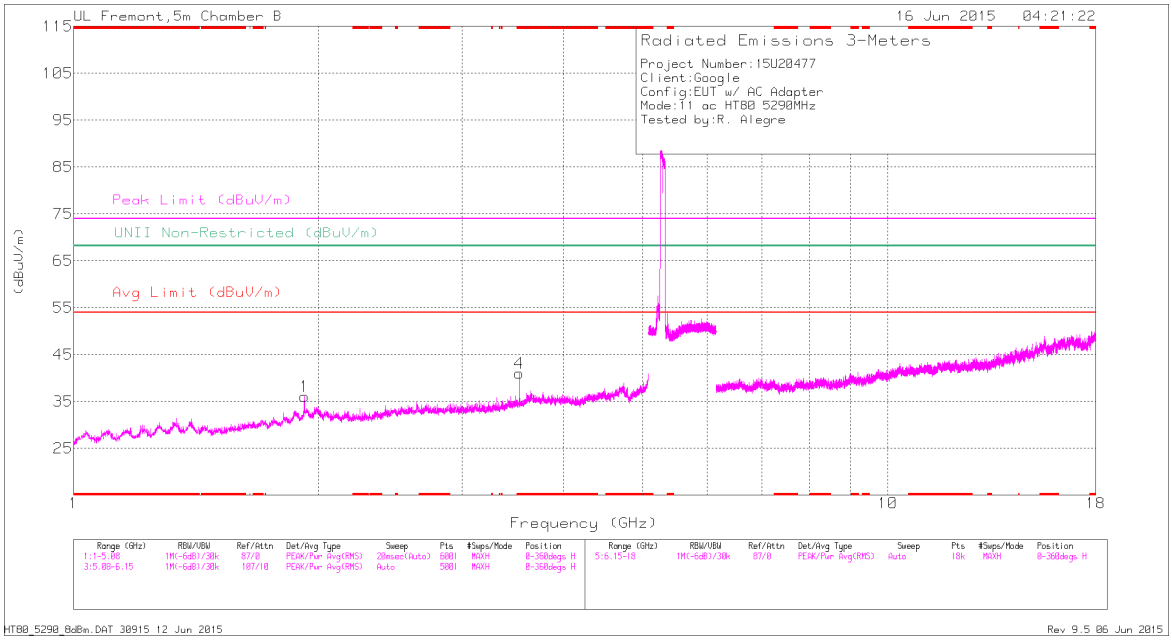
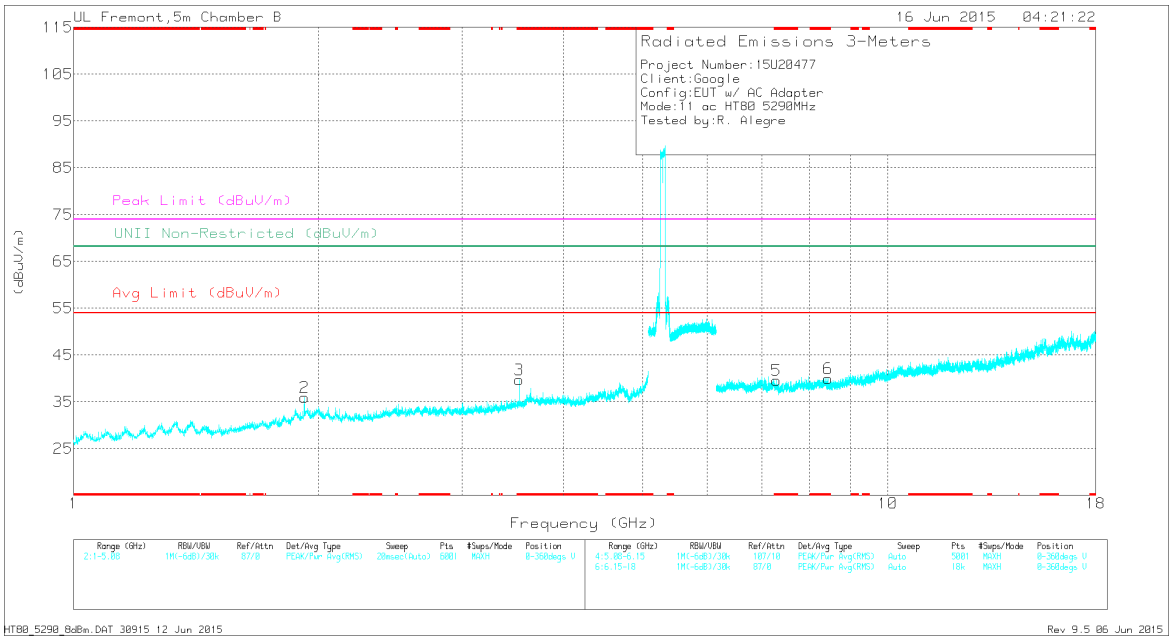
CHANNEL 58 HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL PLOT



VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 3.527	43.6	PK3	33.6	-30.9	46.3	-	-	74	-27.7	-	-	297	268	H
	* 3.527	36.67	ADR	33.6	-30.9	39.37	54	-14.63	-	-	-	-	297	268	H
3	* 3.526	43.51	PK3	33.6	-30.9	46.21	-	-	74	-27.79	-	-	271	253	V
	* 3.527	35.06	ADR	33.6	-30.9	37.76	54	-16.24	-	-	-	-	271	253	V
5	* 7.299	38.68	PK3	35.3	-26.5	47.48	-	-	74	-26.52	-	-	286	200	V
	* 7.297	27.46	ADR	35.3	-26.5	36.26	54	-17.74	-	-	-	-	286	200	V
6	* 8.443	37.61	PK3	35.7	-24.8	48.51	-	-	74	-25.49	-	-	286	102	V
	* 8.44	25.76	ADR	35.7	-24.8	36.66	54	-17.34	-	-	-	-	286	102	V
1	1.92	41.28	PK3	31.9	-31.7	41.48	-	-	-	-	68.2	-26.72	360	102	H
2	1.92	41.42	PK3	31.9	-31.7	41.62	-	-	-	-	68.2	-26.58	360	200	V

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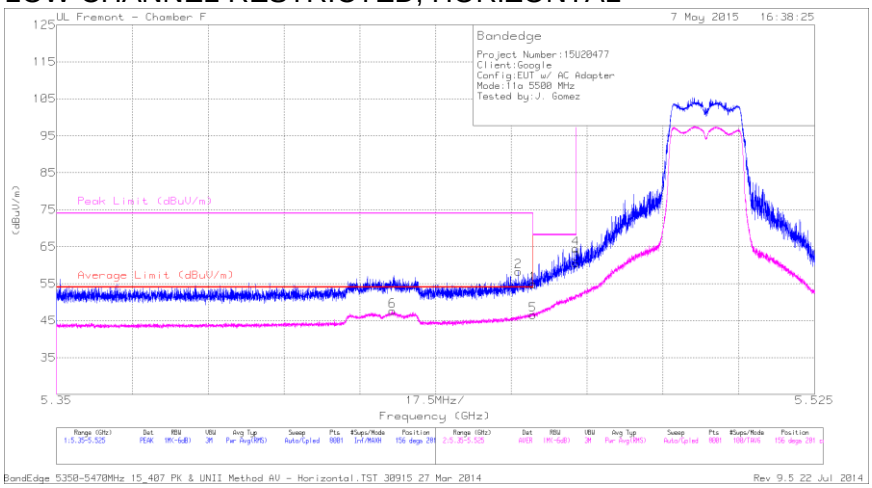
9.11. TX ABOVE 1 GHz 802.11a MODE IN THE 5.6 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	39.13	PK	34.6	-18.8	54.93	-	-	74	-19.07	156	281	H
2	* 5.457	42.51	PK	34.6	-18.8	58.31	-	-	74	-15.69	156	281	H
3	5.47	44.71	PK	34.6	-18.8	60.51	-	-	68.2	-7.69	156	281	H
4	5.47	48.66	PK	34.6	-18.8	64.46	-	-	68.2	-3.74	156	281	H
5	* 5.46	30.76	RMS	34.6	-18.8	46.56	54	-7.44	-	-	156	281	H
6	* 5.428	31.86	RMS	34.6	-18.8	47.66	54	-6.34	-	-	156	281	H

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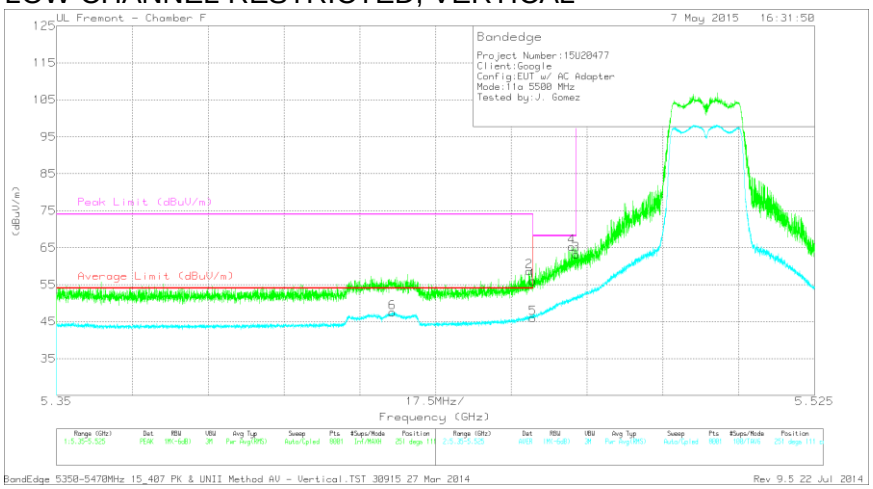
LOW CHANNEL RESTRICTED, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	40.23	PK	34.6	-18.8	56.03	-	-	74	-17.97	251	111	V
2	* 5.459	42.83	PK	34.6	-18.8	58.63	-	-	74	-15.37	251	111	V
3	5.47	47.4	PK	34.6	-18.8	63.2	-	-	68.2	-5	251	111	V
4	5.469	49.46	PK	34.6	-18.8	65.26	-	-	68.2	-2.94	251	111	V
5	* 5.46	30.17	RMS	34.6	-18.8	45.97	54	-8.03	-	-	251	111	V
6	* 5.428	31.71	RMS	34.6	-18.8	47.51	54	-6.49	-	-	251	111	V

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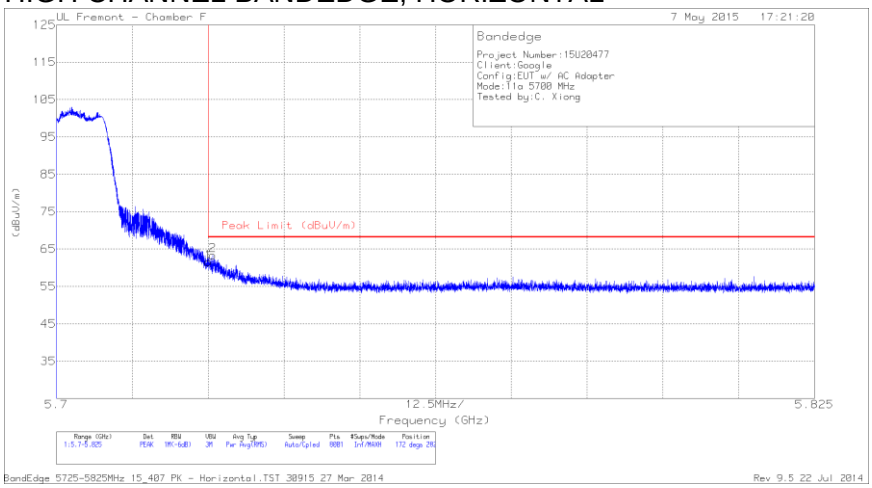
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	44.74	PK	34.9	-18.1	61.54	68.2	-6.66	172	282	H
2	5.726	46.52	PK	34.9	-18.1	63.32	68.2	-4.88	172	282	H

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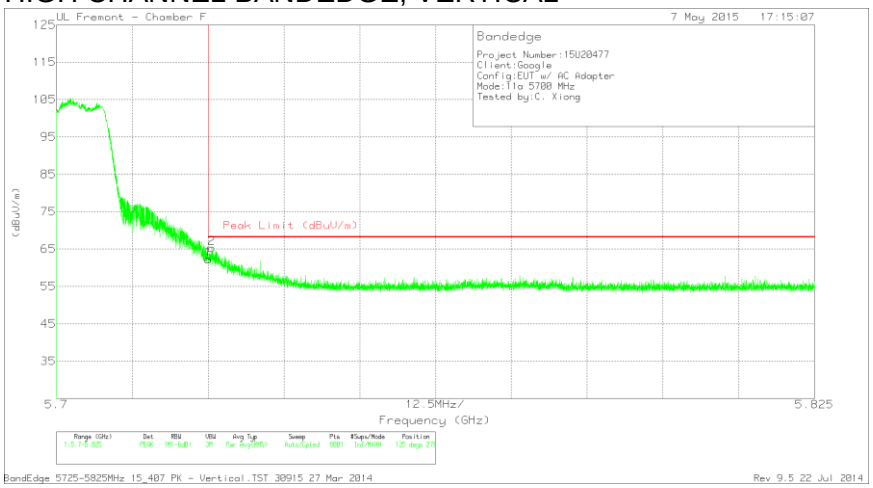
HIGH CHANNEL BANDEDGE, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	45.47	PK	34.9	-18.1	62.27	68.2	-5.93	135	276	V
2	5.726	48.48	PK	34.9	-18.1	65.28	68.2	-2.92	135	276	V

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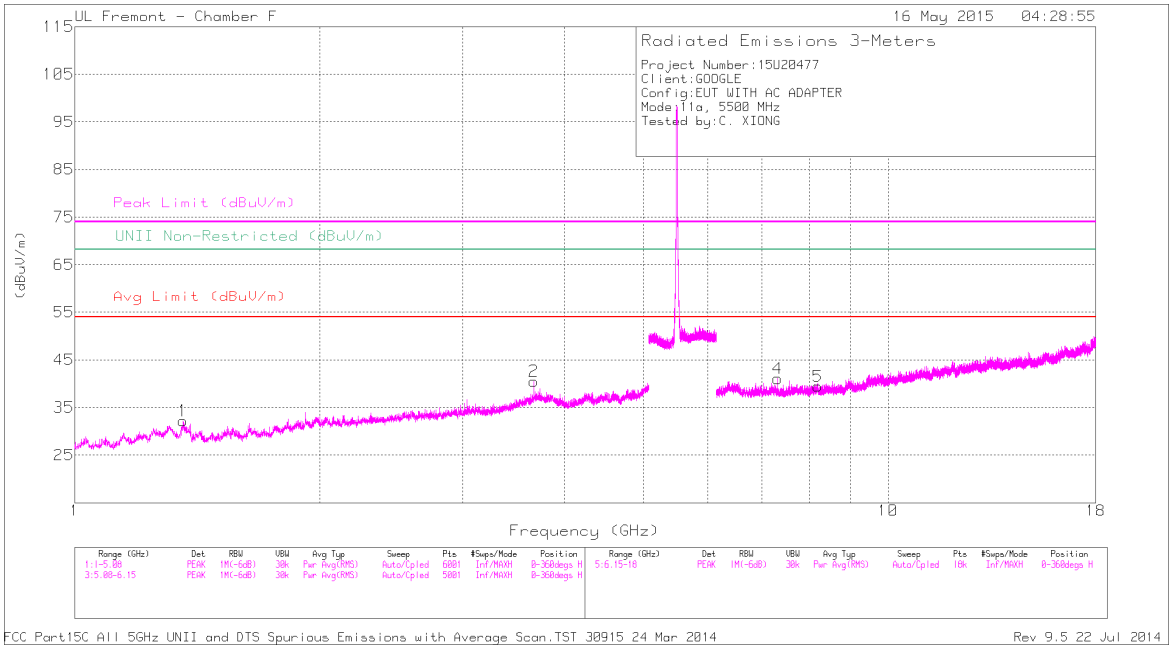
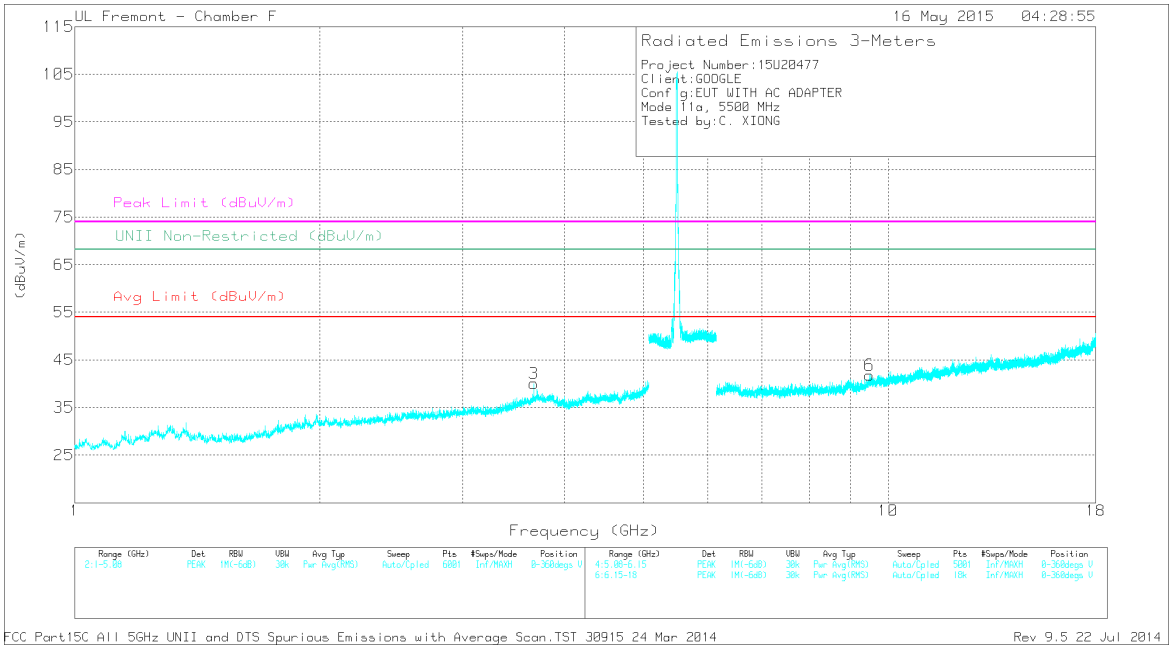
LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.358	42.6	PK1	29.5	-31.5	0	40.6	-	-	74	-33.4	-	-	347	199	H
	* 1.359	30.6	AD1	29.5	-31.5	0	28.6	54	-25.4	-	-	-	-	347	199	H
2	* 3.667	40.07	PK1	34.8	-28.7	0	46.17	-	-	74	-27.83	-	-	128	101	H
	* 3.667	29.81	AD1	34.8	-28.7	0	35.91	54	-18.09	-	-	-	-	128	101	H
3	* 3.666	40.42	PK1	34.8	-28.7	0	46.52	-	-	74	-27.48	-	-	3	193	V
	* 3.667	31.1	AD1	34.8	-28.7	0	37.2	54	-16.8	-	-	-	-	3	193	V
4	* 7.316	37	PK1	35.7	-25.6	0	47.1	-	-	74	-26.9	-	-	27	164	H
	* 7.316	25.88	AD1	35.7	-25.6	0	35.98	54	-18.02	-	-	-	-	27	164	H
5	* 8.198	35.43	PK1	35.8	-24.5	0	46.73	-	-	74	-27.27	-	-	91	179	H
	* 8.196	24.83	AD1	35.8	-24.4	0	36.23	54	-17.77	-	-	-	-	91	179	H
6	* 9.488	33.82	PK1	36.7	-21.6	0	48.92	-	-	74	-25.08	-	-	123	212	V
	* 9.487	22.9	AD1	36.7	-21.6	0	38	54	-16	-	-	-	-	123	212	V

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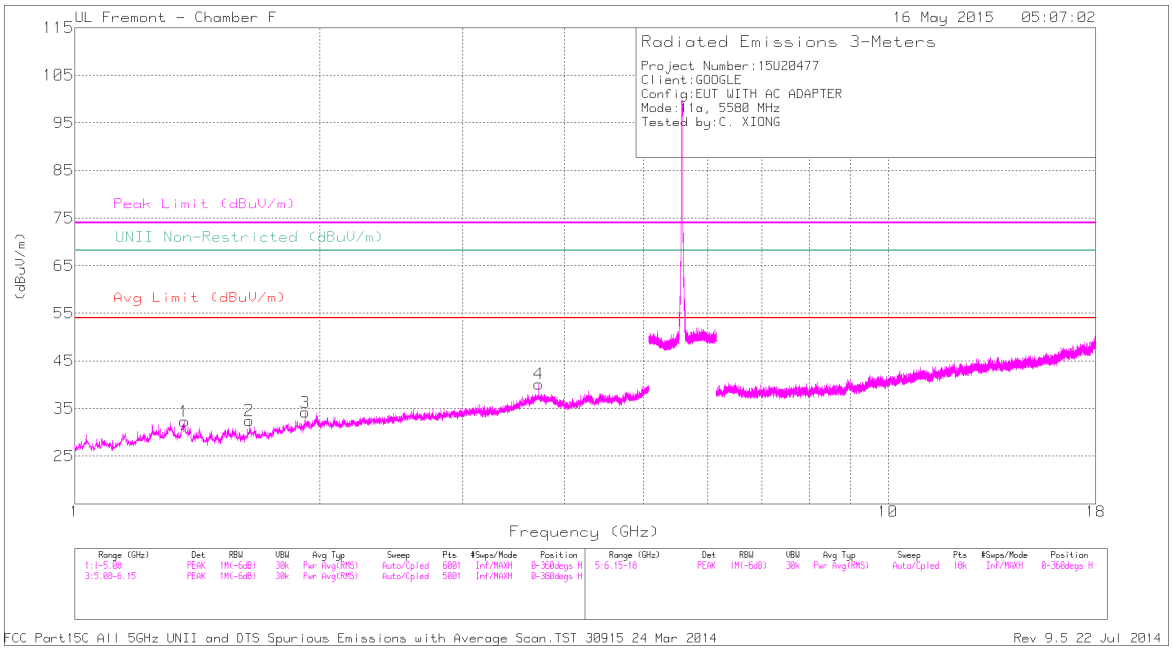
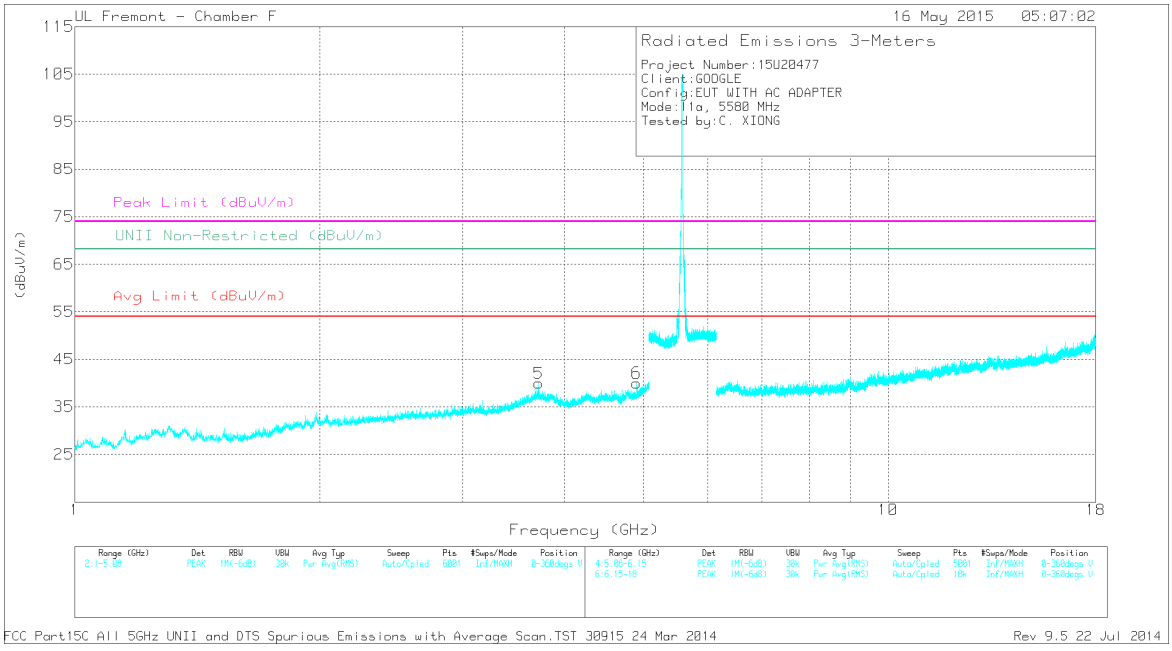
MID CHANNEL HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.364	41	PK1	29.4	-31.6	0	38.8	-	-	74	-35.2	-	-	12	126	H
	* 1.365	29.68	AD1	29.4	-31.6	0	27.48	54	-26.52	-	-	-	-	12	126	H
2	1.639	43.12	PK1	28.4	-31.5	0	40.02	-	-	-	-	68.2	-28.18	47	134	H
3	1.92	42.97	PK1	31.3	-31.3	0	42.97	-	-	-	-	68.2	-25.23	157	121	H
4	* 3.72	41.29	PK1	34.6	-29	0	46.89	-	-	74	-27.11	-	-	7	227	H
	* 3.72	32.07	AD1	34.6	-29	0	37.67	54	-16.33	-	-	-	-	7	227	H
5	* 3.72	41.03	PK1	34.6	-29	0	46.63	-	-	74	-27.37	-	-	359	182	V
	* 3.72	31.52	AD1	34.6	-29	0	37.12	54	-16.88	-	-	-	-	359	182	V
6	* 4.911	37.85	PK1	34.1	-27	0	44.95	-	-	74	-29.05	-	-	296	212	V
	* 4.91	26.74	AD1	34.1	-27	0	33.84	54	-20.16	-	-	-	-	296	212	V

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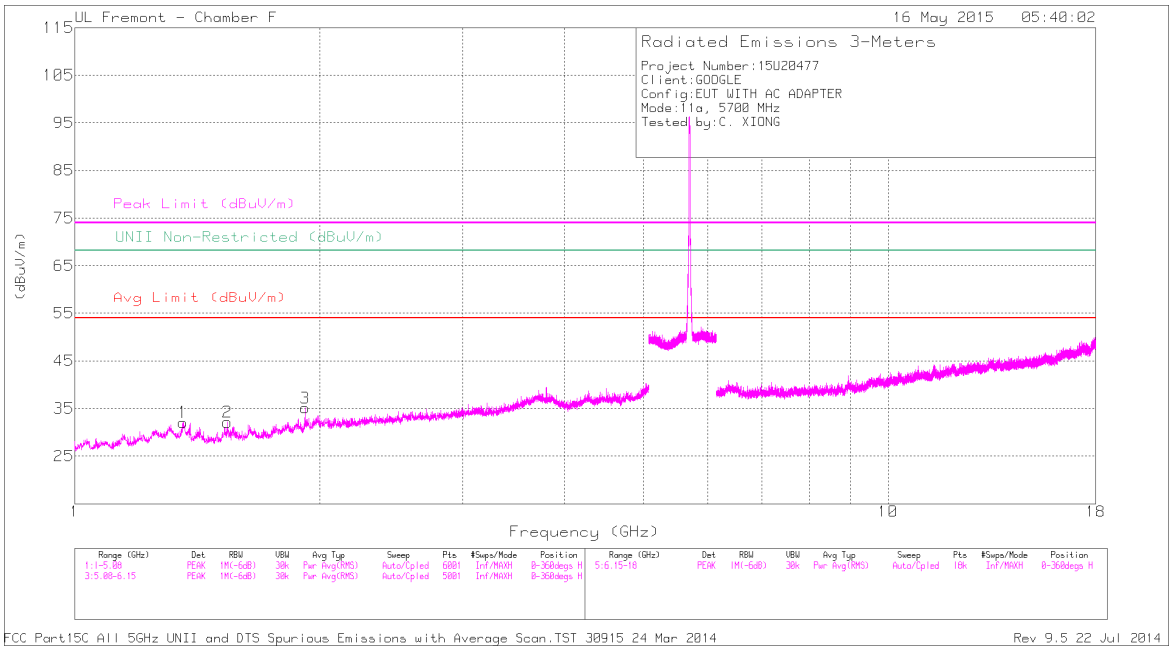
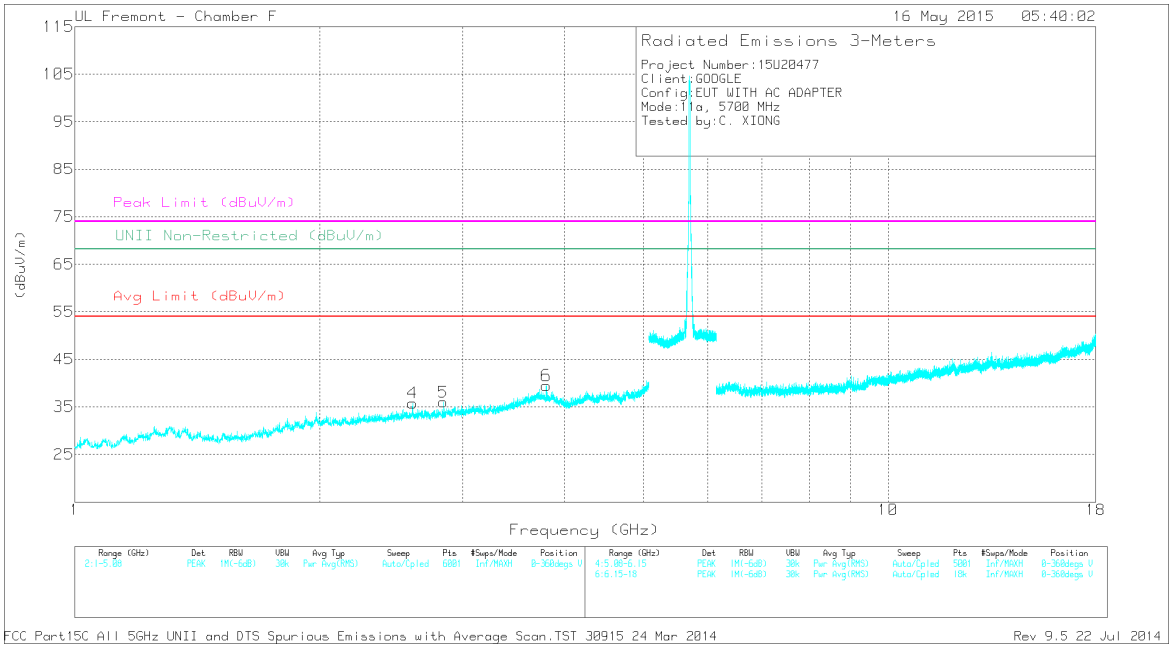
HIGH CHANNEL HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.358	42.79	PK1	29.5	-31.5	0	40.79	-	-	74	-33.21	-	-	328	201	H
	* 1.359	30.68	AD1	29.5	-31.5	0	28.68	54	-25.32	-	-	-	-	328	201	H
2	* 1.54	40.22	PK1	28.2	-31.4	0	37.02	-	-	74	-36.98	-	-	340	178	H
	* 1.539	29.05	AD1	28.2	-31.4	0	25.85	54	-28.15	-	-	-	-	340	178	H
3	1.92	42.98	PK1	31.3	-31.3	0	42.98	-	-	-	-	68.2	-25.22	163	120	H
4	2.605	40.49	PK1	32.6	-30.1	0	42.99	-	-	-	-	68.2	-25.21	182	148	V
5	* 2.839	40.22	PK1	32.7	-29.7	0	43.22	-	-	74	-30.78	-	-	159	192	V
	* 2.839	27.93	AD1	32.7	-29.7	0	30.93	54	-23.07	-	-	-	-	159	192	V
6	* 3.801	38.62	PK1	34.1	-29.2	0	43.52	-	-	74	-30.48	-	-	149	161	V
	* 3.8	28.38	AD1	34.1	-29.2	0	33.28	54	-20.72	-	-	-	-	149	161	V

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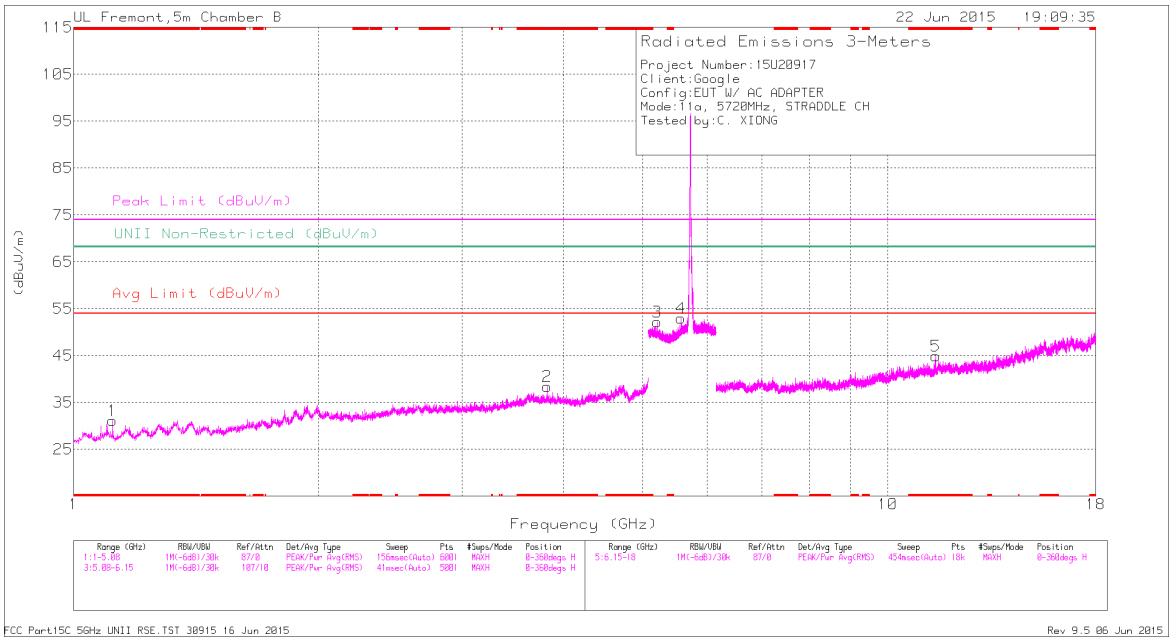
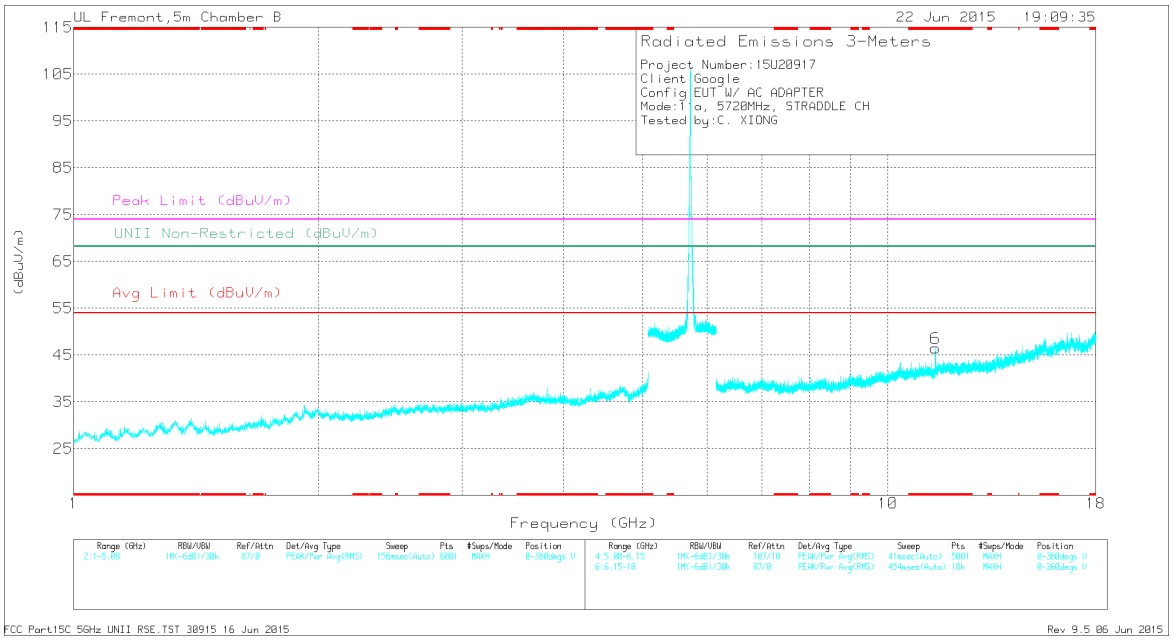
CHANNEL 144 HARMONICS AND SPURIOUS EMISSIONS

CHANNEL 144 HORIZONTAL PLOT



CHANNEL 144 VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.112	42.76	PK3	27.7	-33.5	36.96	-	-	74	-37.04	-	-	274	146	H
	* 1.111	31.01	ADR	27.7	-33.5	25.21	54	-28.79	-	-	-	-	274	146	H
2	* 3.813	42.9	PK3	33.3	-30.1	46.1	-	-	74	-27.9	-	-	248	199	H
	* 3.813	33.28	ADR	33.3	-30.1	36.48	54	-17.52	-	-	-	-	248	199	H
5	* 11.437	38.87	PK3	38.1	-22.4	54.57	-	-	74	-19.43	-	-	308	134	H
	* 11.44	27.33	ADR	38.1	-22.4	43.03	54	-10.97	-	-	-	-	308	134	H
6	* 11.439	37.84	PK3	38.1	-22.4	53.54	-	-	74	-20.46	-	-	253	200	V
	* 11.44	26.19	ADR	38.1	-22.4	41.89	54	-12.11	-	-	-	-	253	200	V
3	5.205	43.81	PK3	34.3	-19.4	58.71	-	-	-	-	68.2	-9.49	208	213	H
4	5.574	43.91	PK3	34.7	-19.3	59.31	-	-	-	-	68.2	-8.89	174	244	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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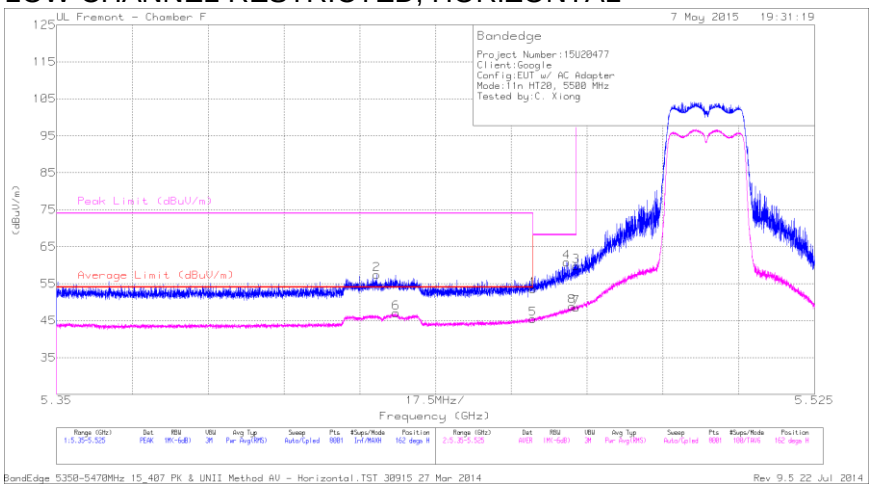
9.12. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.6 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	37.69	PK	34.6	-18.8	53.49	-	-	74	-20.51	162	145	H
2	* 5.424	41.67	PK	34.6	-18.8	57.47	-	-	74	-16.53	162	145	H
3	5.47	43.91	PK	34.6	-18.8	59.71	-	-	68.2	-8.49	162	145	H
4	5.468	44.99	PK	34.6	-18.8	60.79	-	-	68.2	-7.41	162	145	H
5	* 5.46	29.61	RMS	34.6	-18.8	45.41	54	-8.59	-	-	162	145	H
6	* 5.428	31.31	RMS	34.6	-18.8	47.11	54	-6.89	-	-	162	145	H
7	5.47	32.71	RMS	34.6	-18.8	48.51	-	-	-	-	162	145	H
8	5.469	33.06	RMS	34.6	-18.8	48.86	-	-	-	-	162	145	H

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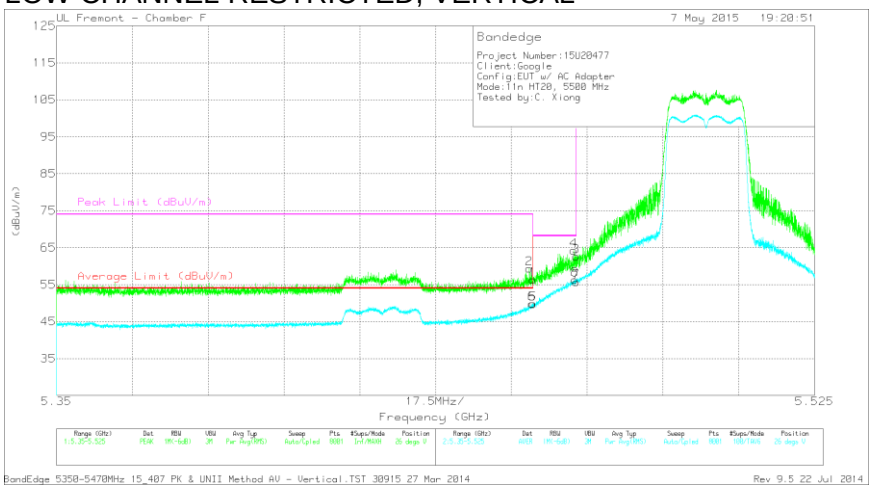
LOW CHANNEL RESTRICTED, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	40.56	PK	34.6	-18.8	56.36	-	-	74	-17.64	26	223	V
2	* 5.459	43.58	PK	34.6	-18.8	59.38	-	-	74	-14.62	26	223	V
3	5.47	46.83	PK	34.6	-18.8	62.63	-	-	68.2	-5.57	26	223	V
4	5.469	48.46	PK	34.6	-18.8	64.26	-	-	68.2	-3.94	26	223	V
5	* 5.46	33.99	RMS	34.6	-18.8	49.79	54	-4.21	-	-	26	223	V
6	* 5.46	34.04	RMS	34.6	-18.8	49.84	54	-4.16	-	-	26	223	V
7	5.47	39.93	RMS	34.6	-18.8	55.73	-	-	-	-	26	223	V
8	5.47	40.56	RMS	34.6	-18.8	56.36	-	-	-	-	26	223	V

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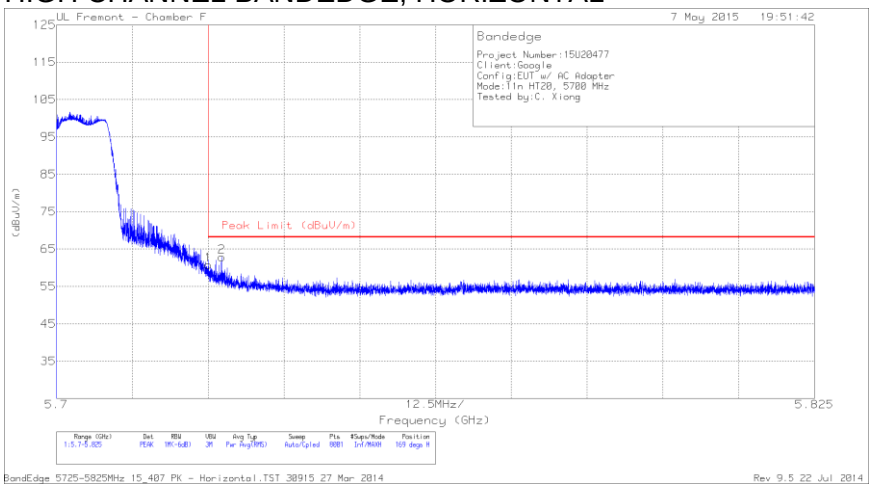
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	43.98	PK	34.9	-18.1	60.78	68.2	-7.42	169	183	H
2	5.727	46.11	PK	34.9	-18.1	62.91	68.2	-5.29	169	183	H

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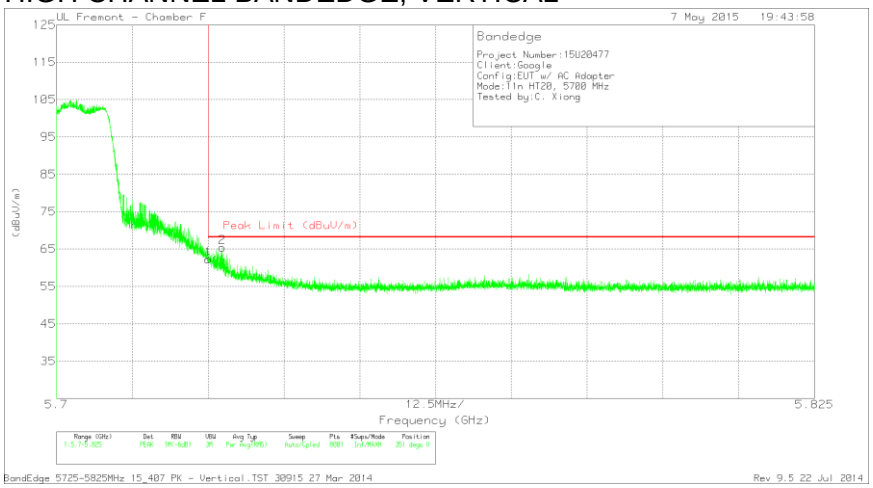
HIGH CHANNEL BANDEDGE, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	45.43	PK	34.9	-18.1	62.23	68.2	-5.97	351	208	V
2	5.727	48.65	PK	34.9	-18.1	65.45	68.2	-2.75	351	208	V

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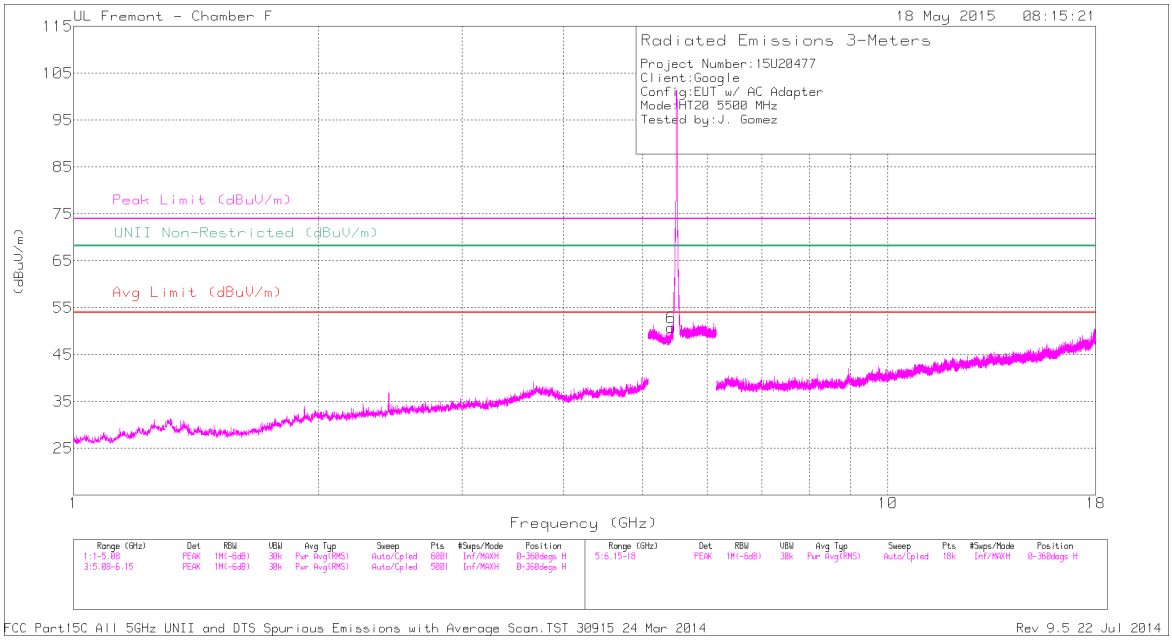
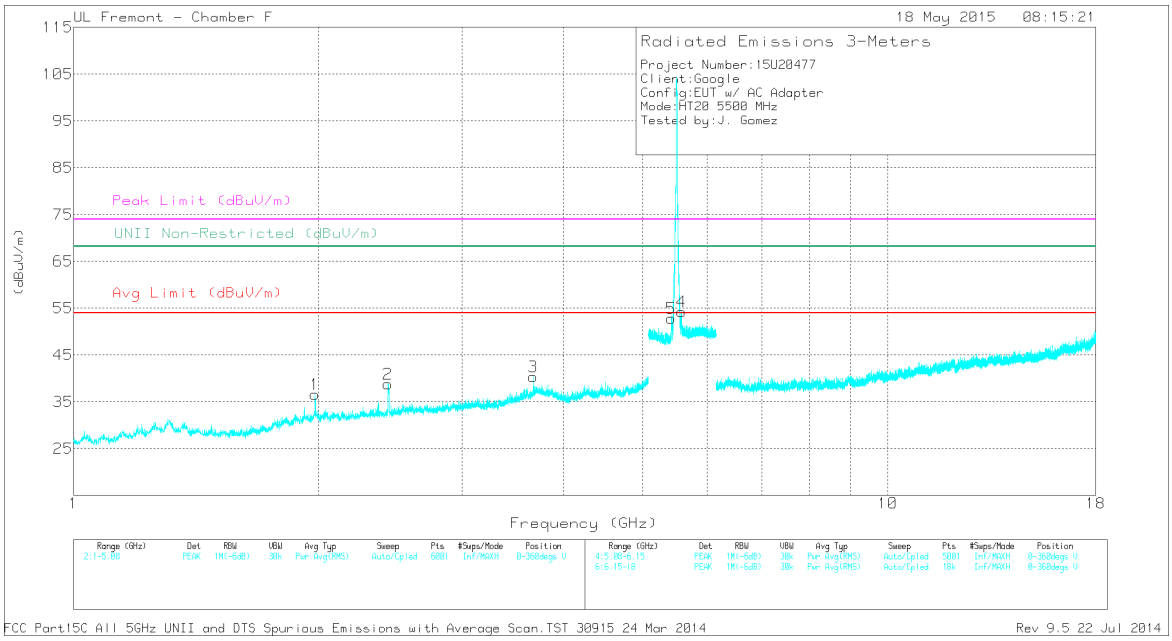
LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.98	44.06	PK1	31.5	-30.8	44.76	-	-	-	-	68.2	-23.44	198	294	V
2	2.434	43.04	PK1	32	-30.7	44.34	-	-	-	-	68.2	-23.86	122	393	V
3	* 3.667	40.58	PK1	34.8	-28.7	46.68	-	-	74	-27.32	-	-	328	168	V
	* 3.667	32.34	AD1	34.8	-28.7	38.44	54	-15.56	-	-	-	-	328	168	V
6	* 5.431	48.03	PK1	34.6	-18.8	63.83	-	-	74	-10.17	-	-	156	224	H
	* 5.428	33.7	AD1	34.6	-18.8	49.5	54	-4.5	-	-	-	-	156	224	H
4	5.57	51.59	PK1	34.7	-18.6	67.69	-	-	-	-	68.2	-.51	223	203	V
5	* 5.433	51.4	PK1	34.6	-18.8	67.2	-	-	74	-6.8	-	-	174	212	V
	* 5.428	34.79	AD1	34.6	-18.8	50.59	54	-3.41	-	-	-	-	174	212	V

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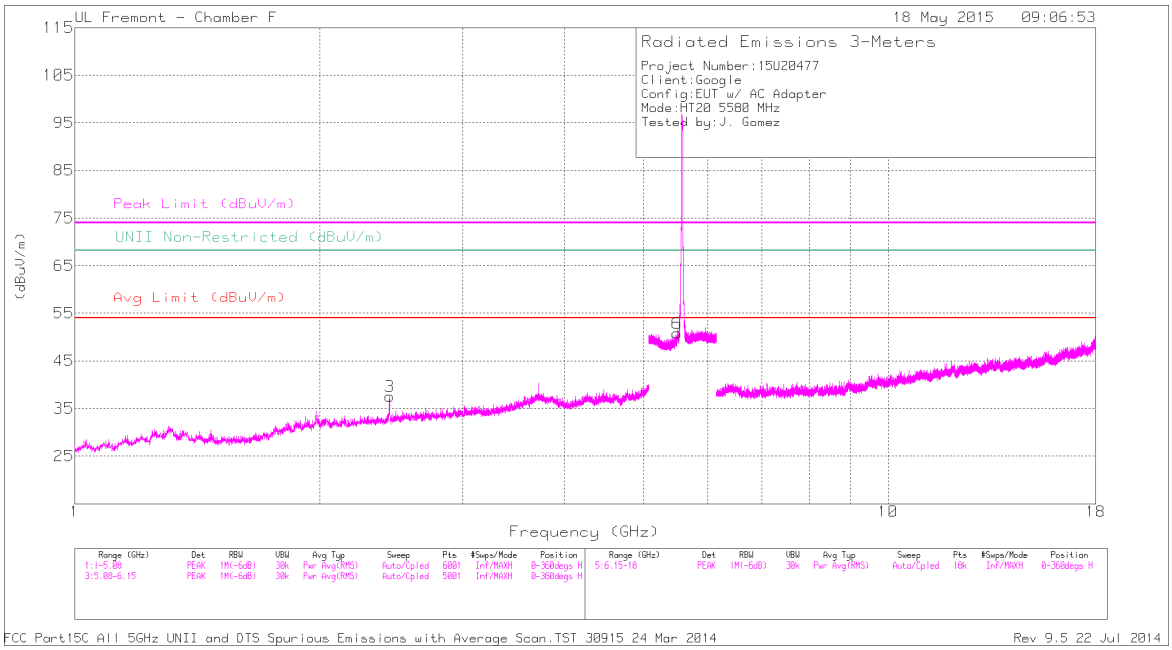
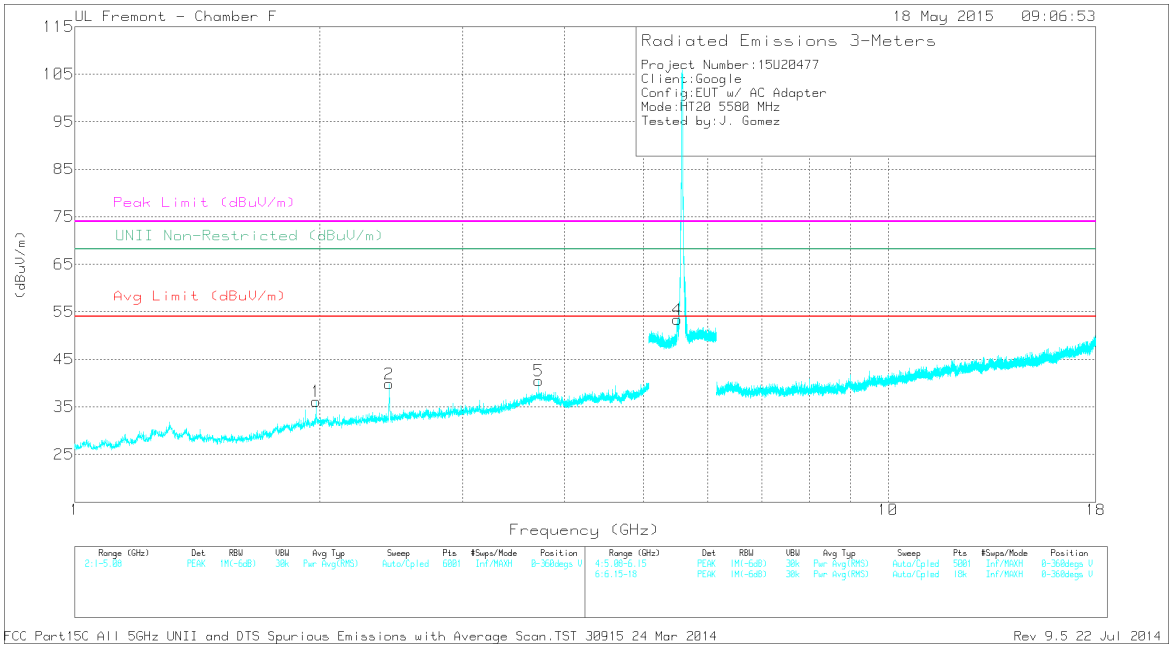
MID CHANNEL HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	2.439	45.26	PK1	32	-30.6	46.66	-	-	-	-	68.2	-21.54	295	380	H
1	1.98	43.37	PK1	31.5	-30.8	44.07	-	-	-	-	68.2	-24.13	357	294	V
2	2.437	44.1	PK1	32	-30.6	45.5	-	-	-	-	68.2	-22.7	64	264	V
5	* 3.72	41.15	PK1	34.6	-29	46.75	-	-	74	-27.25	-	-	327	193	V
	* 3.72	31.91	AD1	34.6	-29	37.51	54	-16.49	-	-	-	-	327	193	V
6	5.514	45.32	PK1	34.6	-18.6	61.32	-	-	-	-	68.2	-6.88	147	237	H
4	5.512	51.37	PK1	34.6	-18.7	67.27	-	-	-	-	68.2	-.93	215	188	V

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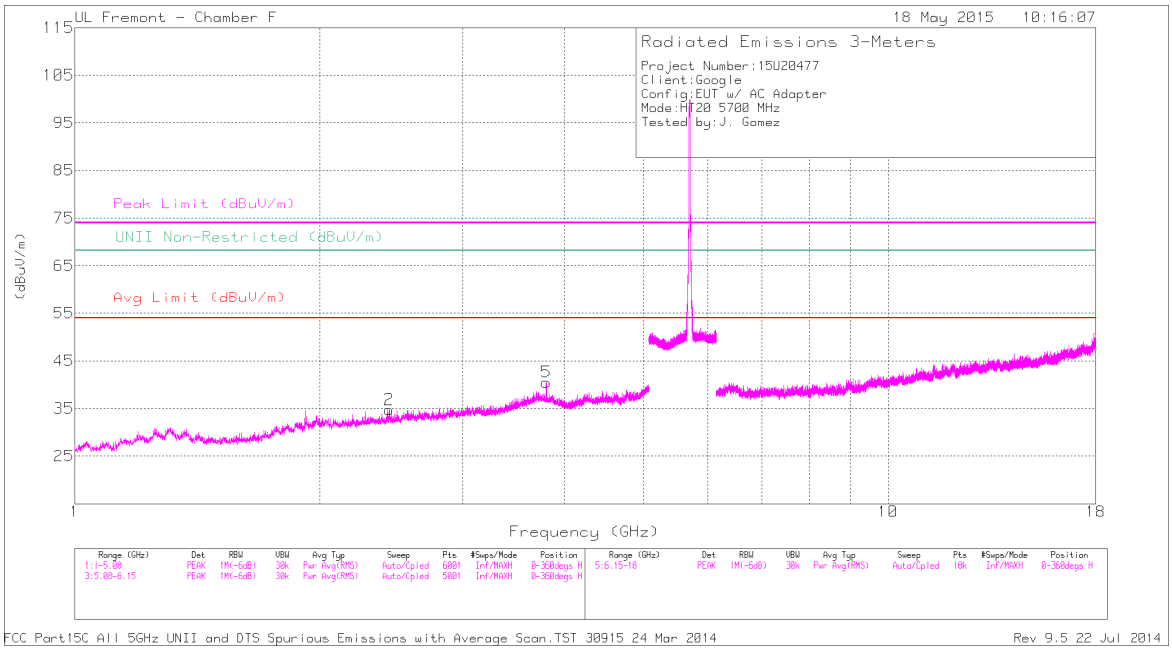
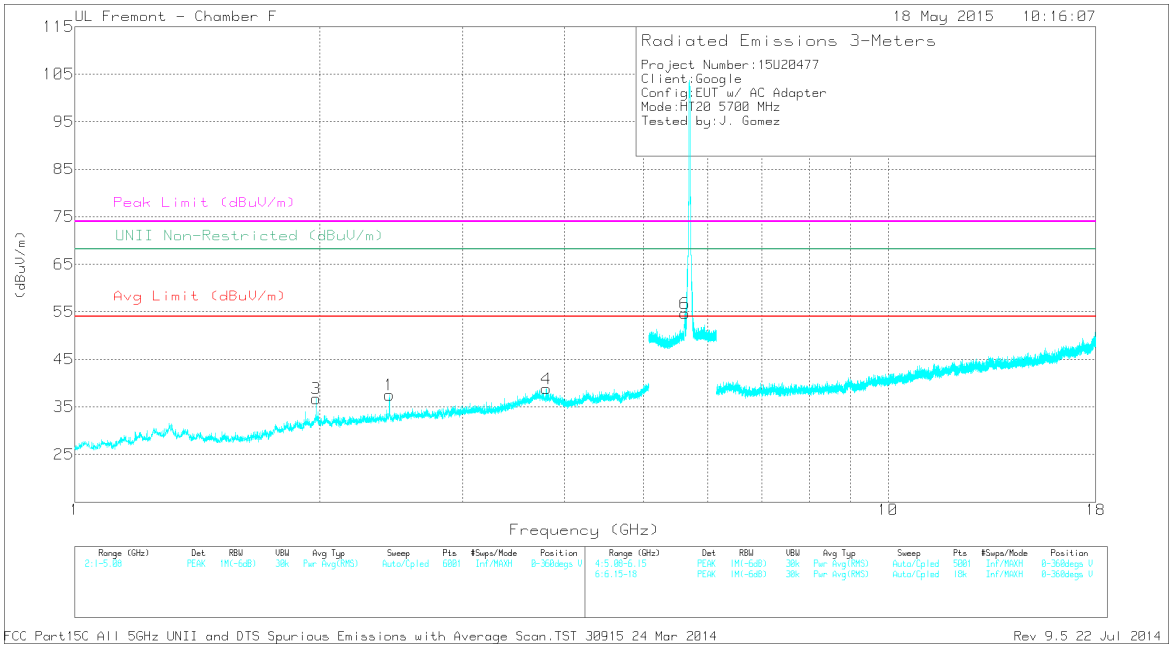
HIGH CHANNEL HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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
2	2.439	45.29	PK1	32	-30.6	46.69	-	-	-	-	68.2	-21.51	216	361	H
5	* 3.8	41.33	PK1	34.1	-29.2	46.23	-	-	74	-27.77	-	-	19	200	H
	* 3.8	31.69	AD1	34.1	-29.2	36.59	54	-17.41	-	-	-	-	19	200	H
1	2.439	46.08	PK1	32	-30.6	47.48	-	-	-	-	68.2	-20.72	18	201	V
3	1.98	43.7	PK1	31.5	-30.8	44.4	-	-	-	-	68.2	-23.8	210	292	V
4	* 3.8	40.29	PK1	34.1	-29.2	45.19	-	-	74	-28.81	-	-	319	184	V
	* 3.8	30.72	AD1	34.1	-29.2	35.62	54	-18.38	-	-	-	-	319	184	V
6	5.63	51.37	PK1	34.8	-18.3	67.87	-	-	-	-	68.2	-.33	233	197	V

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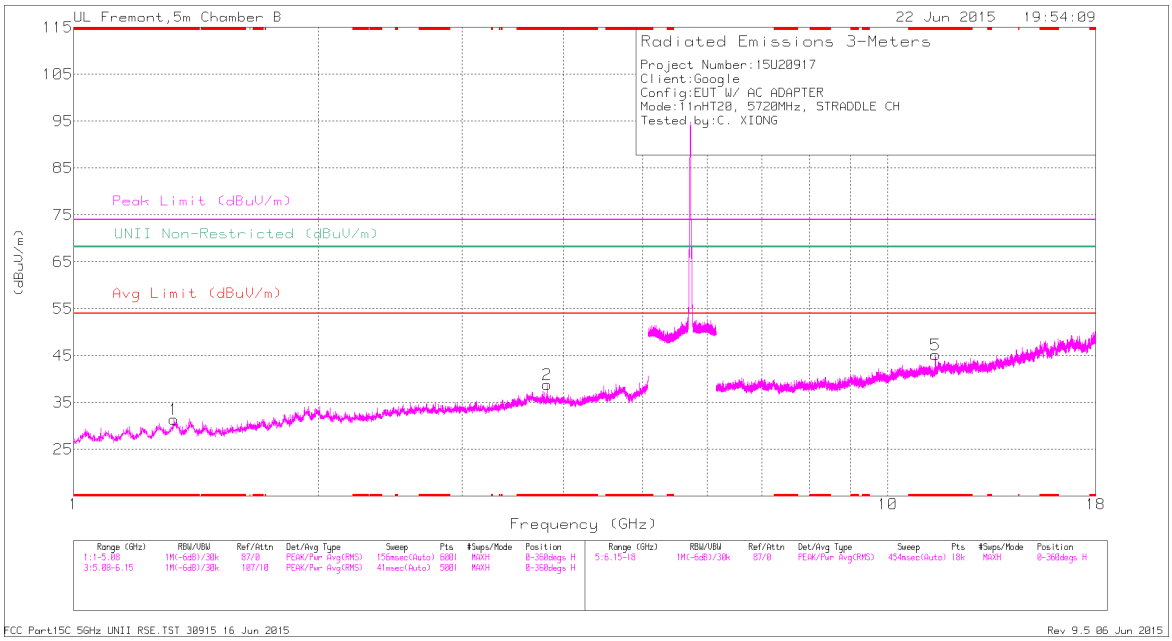
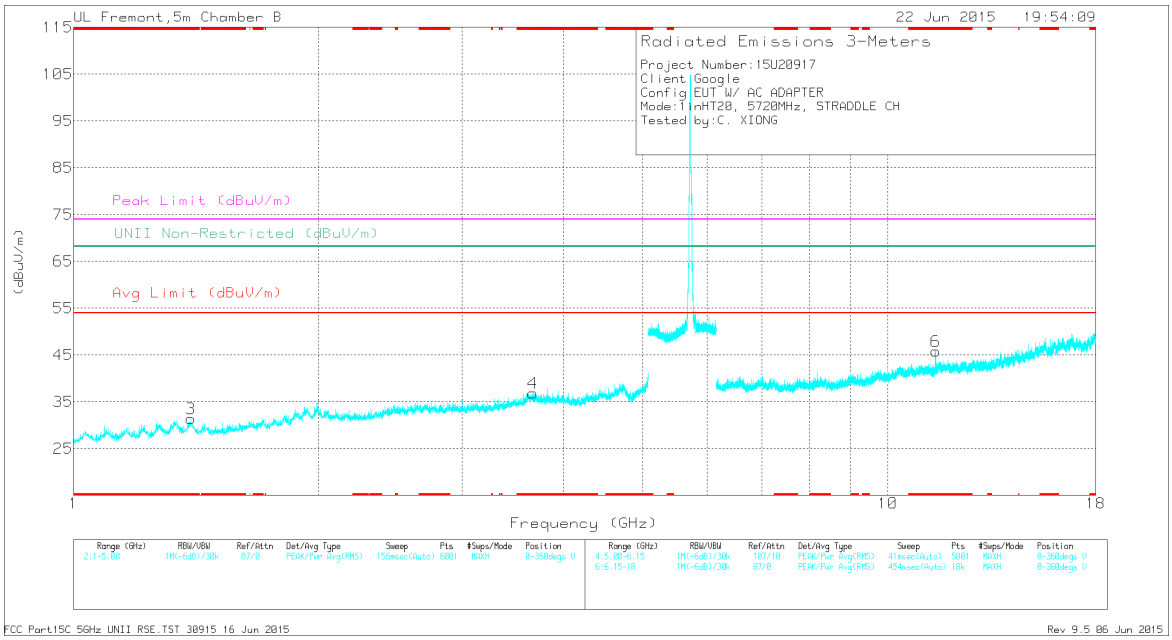
CHANNEL 144 HARMONICS AND SPURIOUS EMISSIONS

CHANNEL 144 HORIZONTAL PLOT



CHANNEL 144 VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.326	42.58	PK3	29.4	-32.9	39.08	-	-	74	-34.92	-	-	311	171	H
	* 1.327	31.15	ADR	29.4	-32.9	27.65	54	-26.35	-	-	-	-	311	171	H
2	* 3.812	41.34	PK3	33.3	-30.1	44.54	-	-	74	-29.46	-	-	274	213	H
	* 3.813	29.87	ADR	33.3	-30.1	33.07	54	-20.93	-	-	-	-	274	213	H
3	* 1.393	42.61	PK3	29.4	-32.8	39.21	-	-	74	-34.79	-	-	199	169	V
	* 1.393	31.19	ADR	29.4	-32.8	27.79	54	-26.21	-	-	-	-	199	169	V
4	* 3.663	40.42	PK3	33.7	-30.1	44.02	-	-	74	-29.98	-	-	171	174	V
	* 3.667	29.1	ADR	33.7	-30.1	32.7	54	-21.3	-	-	-	-	171	174	V
5	* 11.441	39.26	PK3	38.1	-22.4	54.96	-	-	74	-19.04	-	-	319	129	H
	* 11.441	27.18	ADR	38.1	-22.4	42.88	54	-11.12	-	-	-	-	319	129	H
6	* 11.44	37.92	PK3	38.1	-22.4	53.62	-	-	74	-20.38	-	-	254	200	V
	* 11.44	26.63	ADR	38.1	-22.4	42.33	54	-11.67	-	-	-	-	254	200	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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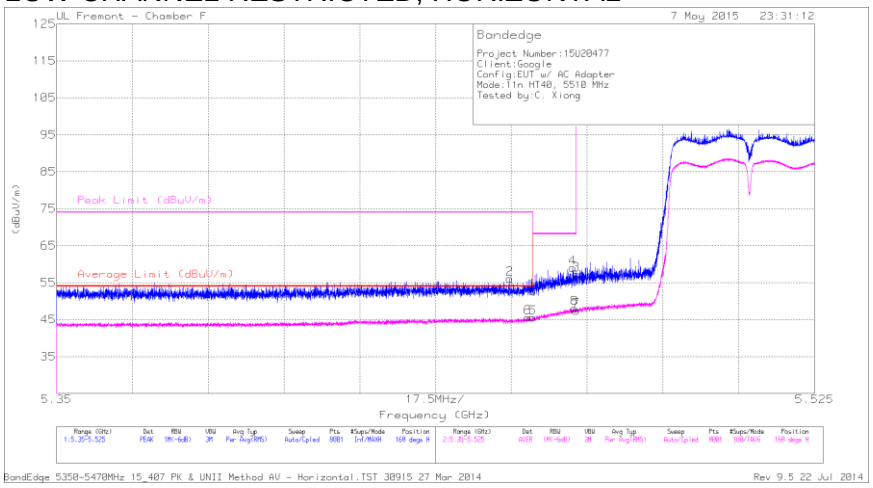
9.13. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.6 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	36.93	PK	34.6	-18.8	52.73	-	-	74	-21.27	168	233	H
2	* 5.455	40.24	PK	34.6	-18.8	56.04	-	-	74	-17.96	168	233	H
3	5.47	41.42	PK	34.6	-18.8	57.22	-	-	68.2	-10.98	168	233	H
4	5.469	43.19	PK	34.6	-18.8	58.99	-	-	68.2	-9.21	168	233	H
5	* 5.46	29.76	RMS	34.6	-18.8	45.56	54	-8.44	-	-	168	233	H
6	* 5.459	29.78	RMS	34.6	-18.8	45.58	54	-8.42	-	-	168	233	H
7	5.47	31.65	RMS	34.6	-18.8	47.45	-	-	-	-	168	233	H
8	5.47	32.27	RMS	34.6	-18.8	48.07	-	-	-	-	168	233	H

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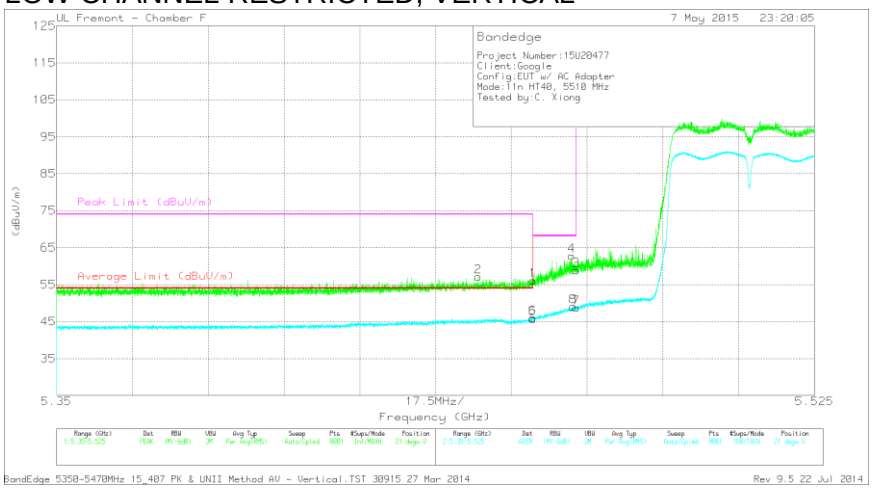
LOW CHANNEL RESTRICTED, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	40.31	PK	34.6	-18.8	56.11	-	-	74	-17.89	21	266	V
2	* 5.447	41.38	PK	34.6	-18.8	57.18	-	-	74	-16.82	21	266	V
3	5.47	43.12	PK	34.6	-18.8	58.92	-	-	68.2	-9.28	21	266	V
4	5.469	47.02	PK	34.6	-18.8	62.82	-	-	68.2	-5.38	21	266	V
5	* 5.46	29.95	RMS	34.6	-18.8	45.75	54	-8.25	-	-	21	266	V
6	* 5.46	30.26	RMS	34.6	-18.8	46.06	54	-7.94	-	-	21	266	V
7	5.47	32.92	RMS	34.6	-18.8	48.72	-	-	-	-	21	266	V
8	5.469	33.28	RMS	34.6	-18.8	49.08	-	-	-	-	21	266	V

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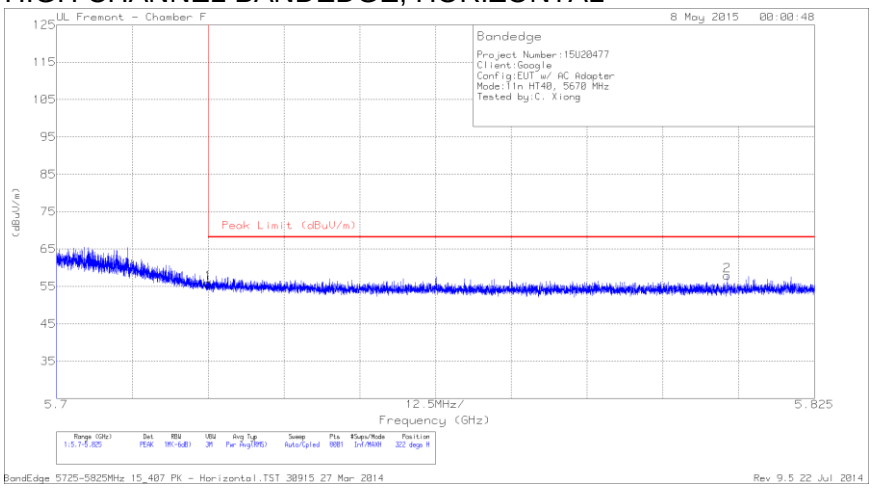
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.08	PK	34.9	-18.1	55.88	68.2	-12.32	322	260	H
2	5.811	41.05	PK	35.1	-18.2	57.95	68.2	-10.25	322	260	H

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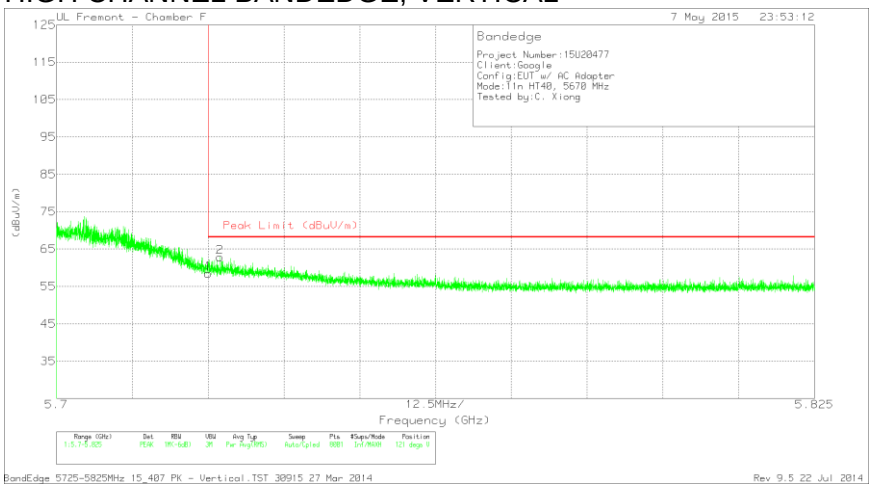
HIGH CHANNEL BANDEDGE, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	41.66	PK	34.9	-18.1	58.46	68.2	-9.74	121	271	V
2	5.727	46.02	PK	34.9	-18.1	62.82	68.2	-5.38	121	271	V

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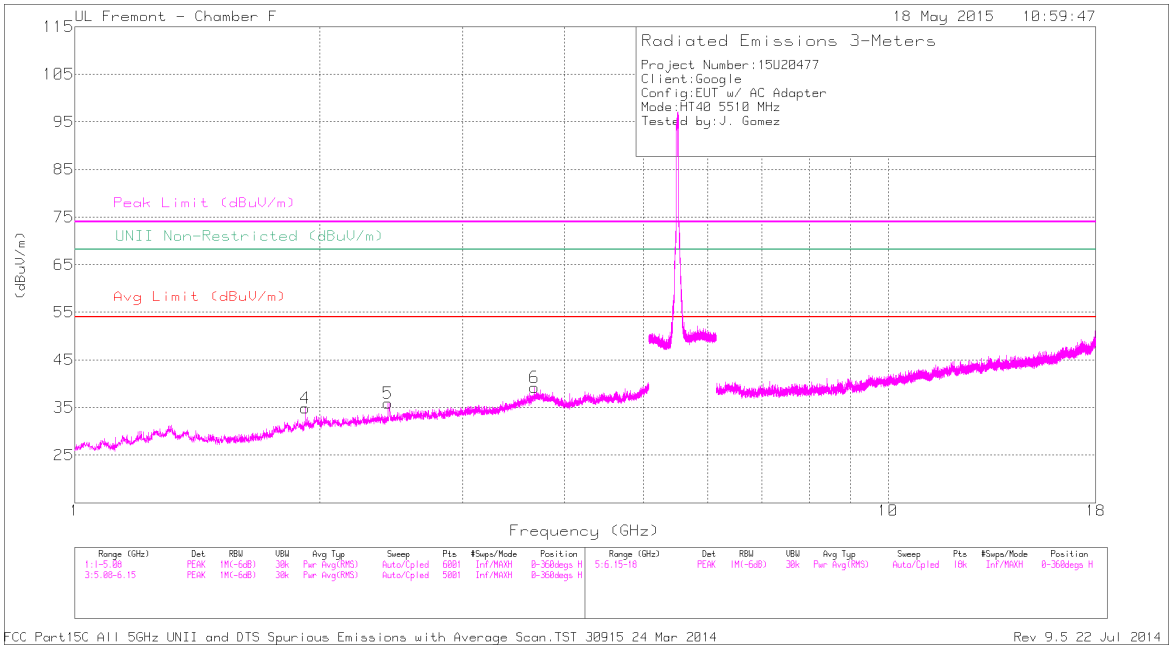
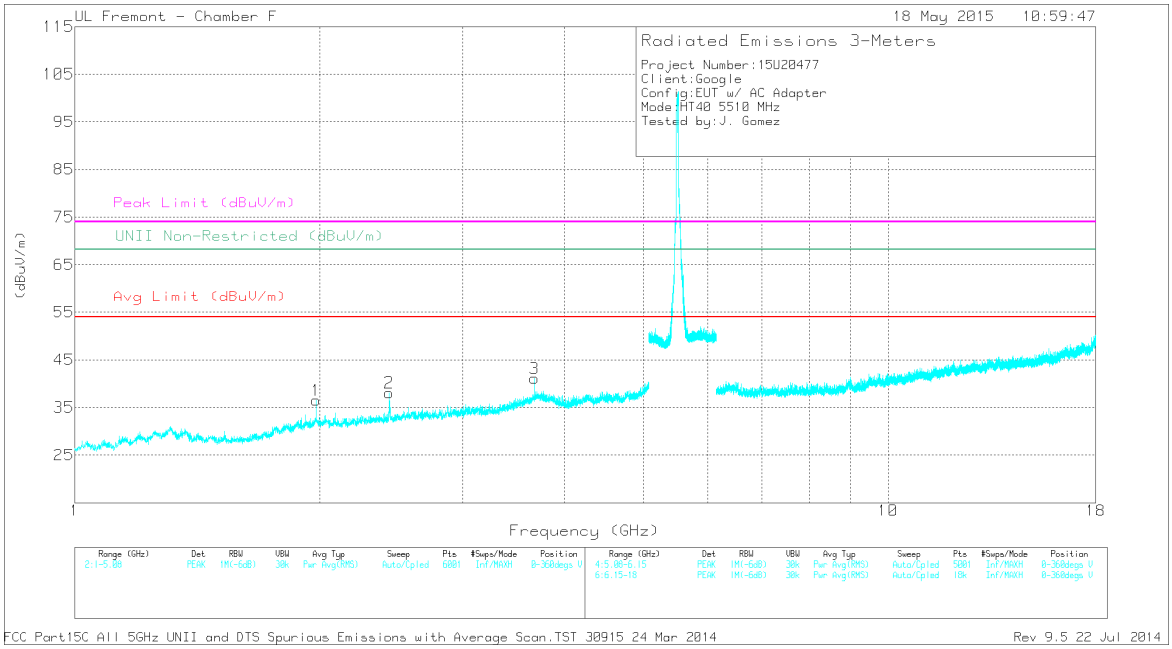
LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	1.92	42.72	PK1	31.3	-31.3	42.72	-	-	-	-	68.2	-25.48	157	150	H
5	2.438	45.69	PK1	32	-30.6	47.09	-	-	-	-	68.2	-21.11	282	353	H
6	* 3.674	40.03	PK1	34.8	-28.6	46.23	-	-	74	-27.77	-	-	353	242	H
	* 3.673	30.96	AD1	34.8	-28.6	37.16	54	-16.84	-	-	-	-	353	242	H
1	1.98	43.92	PK1	31.5	-30.8	44.62	-	-	-	-	68.2	-23.58	191	123	V
2	2.439	42.27	PK1	32	-30.6	43.67	-	-	-	-	68.2	-24.53	34	296	V
3	* 3.673	41.07	PK1	34.8	-28.6	47.27	-	-	74	-26.73	-	-	332	169	V
	* 3.673	31.76	AD1	34.8	-28.6	37.96	54	-16.04	-	-	-	-	332	169	V

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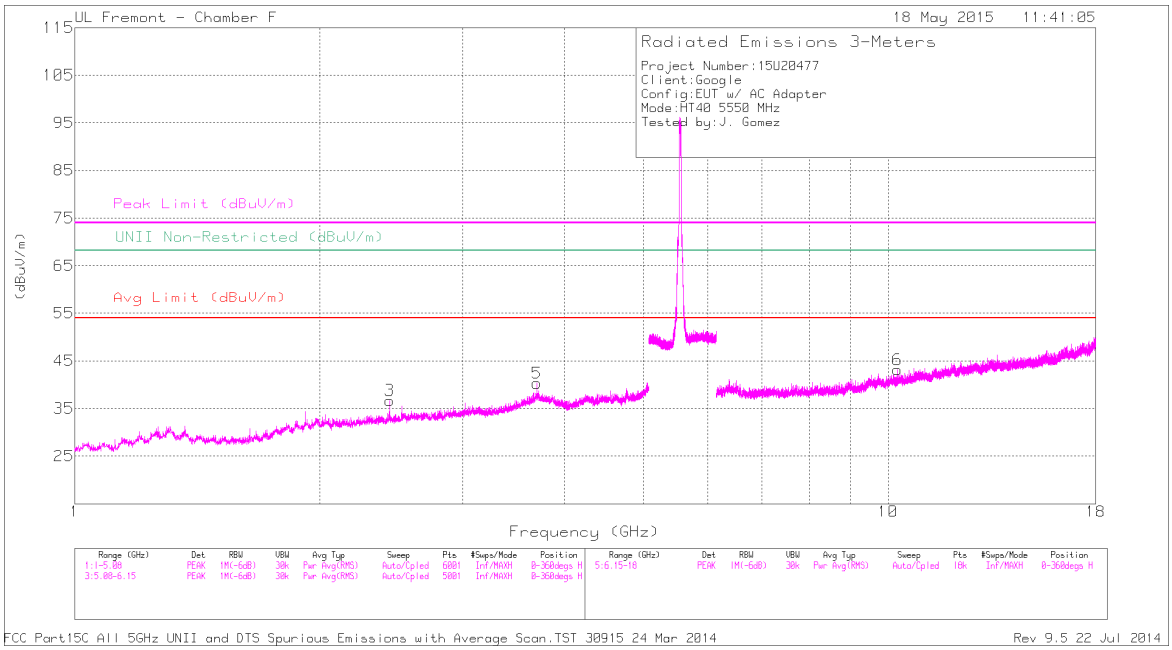
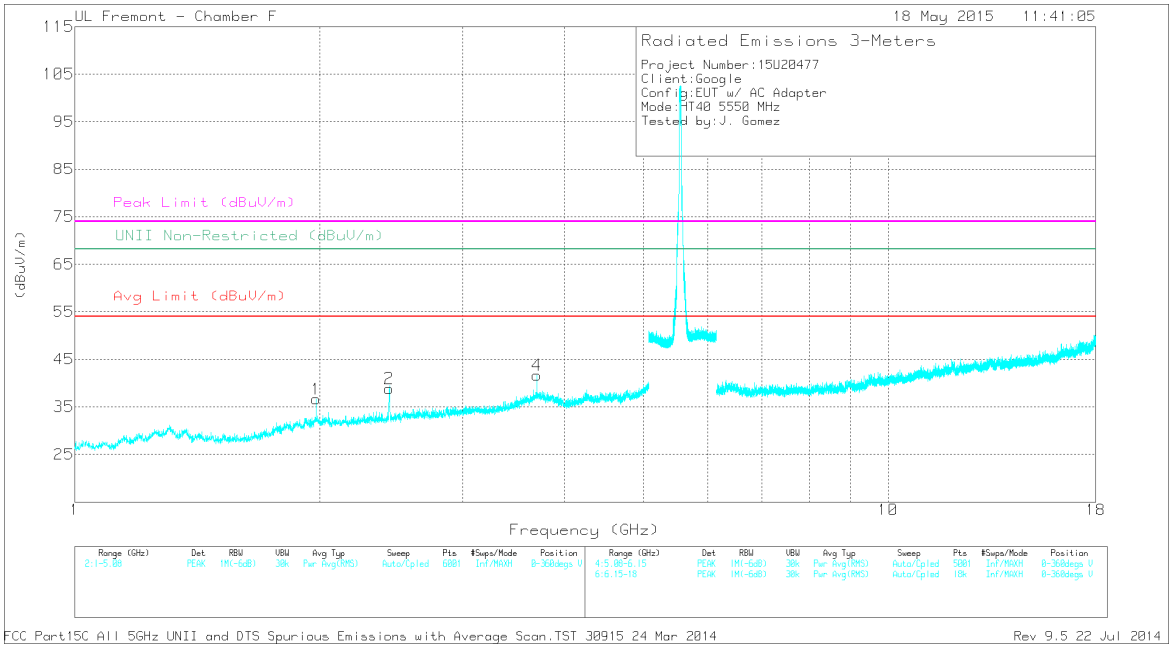
MID CHANNEL HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	2.436	42.59	PK1	32	-30.6	43.99	-	-	-	-	68.2	-24.21	149	238	H
5	* 3.7	40.91	PK1	34.7	-28.7	46.91	-	-	74	-27.09	-	-	350	271	H
	* 3.7	31.28	AD1	34.7	-28.7	37.28	54	-16.72	-	-	-	-	350	271	H
1	1.98	43.6	PK1	31.5	-30.8	44.3	-	-	-	-	68.2	-23.9	360	293	V
2	2.439	44.56	PK1	32	-30.6	45.96	-	-	-	-	68.2	-22.24	151	279	V
4	* 3.7	40.78	PK1	34.7	-28.7	46.78	-	-	74	-27.22	-	-	360	167	V
	* 3.7	32.08	AD1	34.7	-28.7	38.08	54	-15.92	-	-	-	-	360	167	V
6	10.275	35.37	PK1	37.3	-22.4	50.27	-	-	-	-	68.2	-17.93	218	258	H

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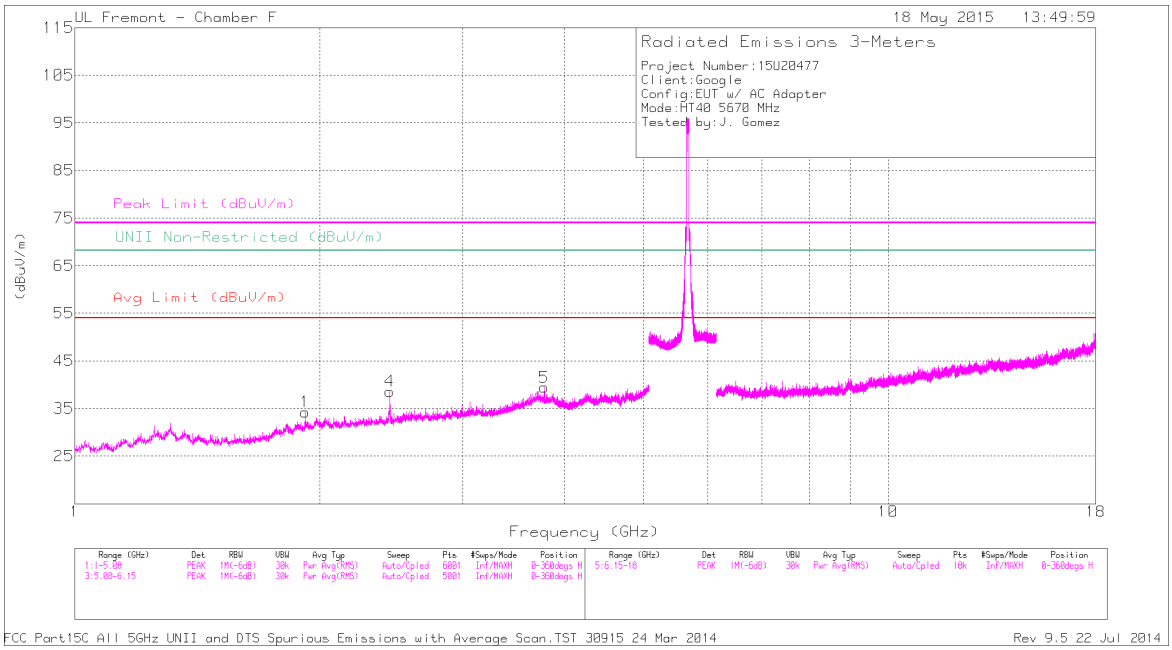
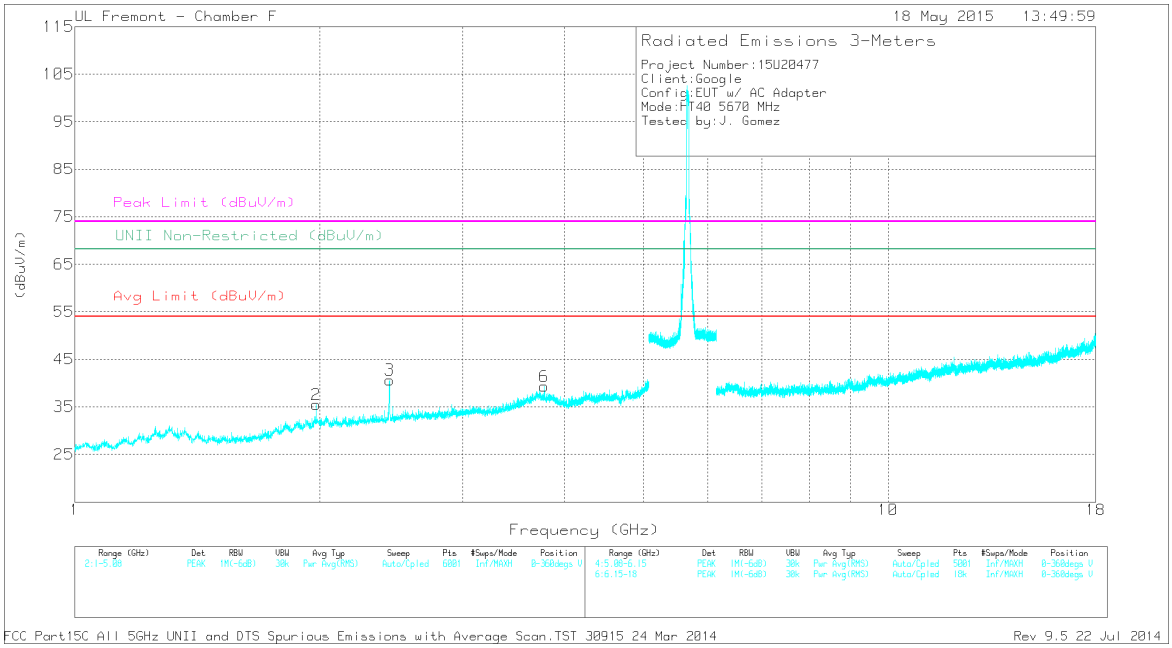
HIGH CHANNEL HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.92	42.7	PK1	31.3	-31.3	42.7	-	-	-	-	68.2	-25.5	155	101	H
4	2.438	45.3	PK1	32	-30.6	46.7	-	-	-	-	68.2	-21.5	309	343	H
5	* 3.78	40.19	PK1	34.3	-29.3	45.19	-	-	74	-28.81	-	-	8	234	H
	* 3.78	30.75	AD1	34.3	-29.3	35.75	54	-18.25	-	-	-	-	8	234	H
2	1.98	43.02	PK1	31.5	-30.8	43.72	-	-	-	-	68.2	-24.48	280	294	V
3	2.438	46.25	PK1	32	-30.6	47.65	-	-	-	-	68.2	-20.55	147	127	V
6	* 3.78	39.92	PK1	34.3	-29.3	44.92	-	-	74	-29.08	-	-	345	162	V
	* 3.78	30.53	AD1	34.3	-29.3	35.53	54	-18.47	-	-	-	-	345	162	V

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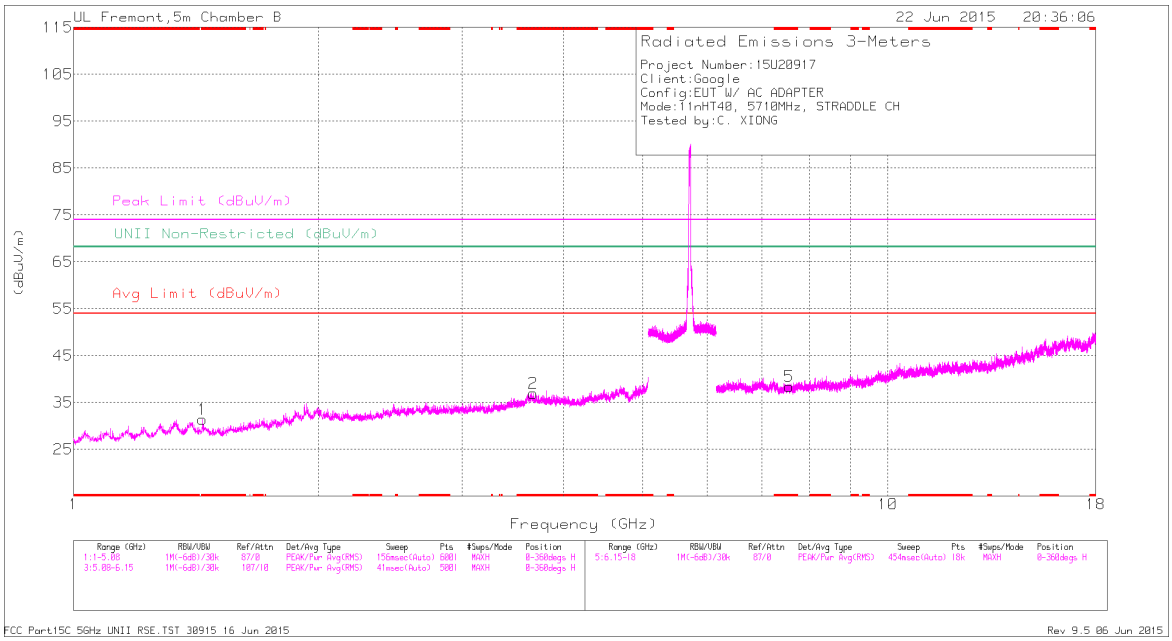
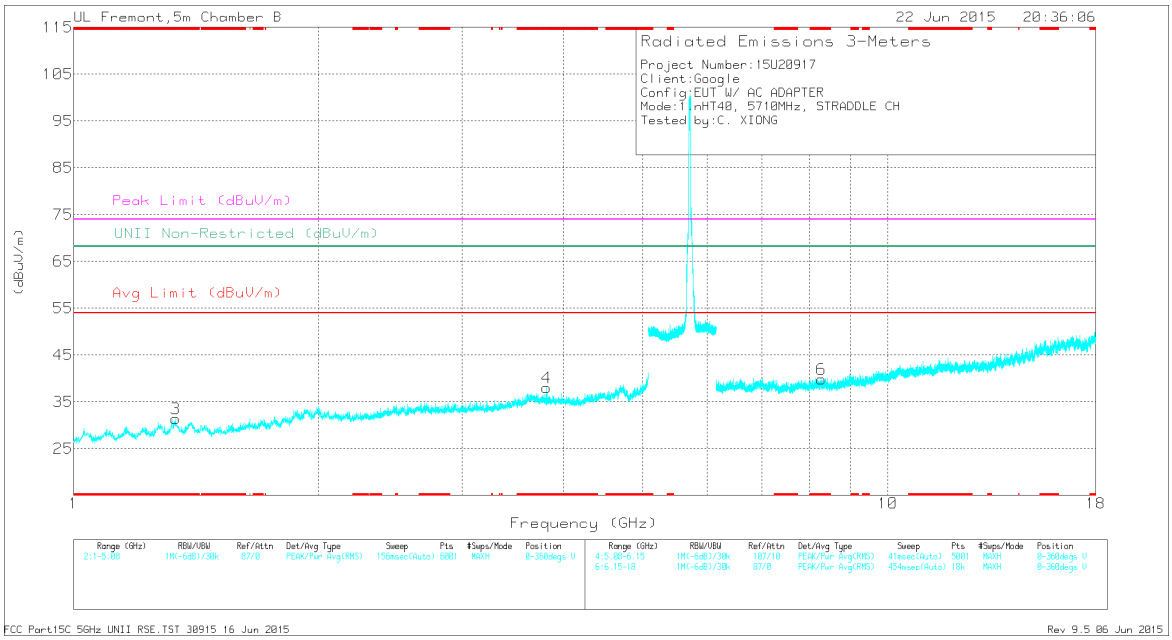
CHANNEL 142 HARMONICS AND SPURIOUS EMISSIONS

CHANNEL 142 HORIZONTAL PLOT



CHANNEL 142 VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.44	42.59	PK3	29.1	-33.2	38.49	-	-	74	-35.51	-	-	187	141	H
	* 1.44	31.15	ADR	29.1	-33.2	27.05	54	-26.95	-	-	-	-	187	141	H
2	* 3.666	41.05	PK3	33.7	-30.1	44.65	-	-	74	-29.35	-	-	211	162	H
	* 3.667	29.08	ADR	33.7	-30.1	32.68	54	-21.32	-	-	-	-	211	162	H
3	* 1.334	42.94	PK3	29.4	-32.9	39.44	-	-	74	-34.56	-	-	179	212	V
	* 1.334	31.25	ADR	29.4	-32.9	27.75	54	-26.25	-	-	-	-	179	212	V
4	* 3.807	41.02	PK3	33.3	-30.1	44.22	-	-	74	-29.78	-	-	211	235	V
	* 3.806	29.92	ADR	33.3	-30.1	33.12	54	-20.88	-	-	-	-	211	235	V
5	* 7.568	37.5	PK3	35.4	-26.1	46.8	-	-	74	-27.2	-	-	132	185	H
	* 7.569	26.03	ADR	35.4	-26.1	35.33	54	-18.67	-	-	-	-	132	185	H
6	* 8.286	38.85	PK3	35.7	-25.9	48.65	-	-	74	-25.35	-	-	191	247	V
	* 8.286	26.46	ADR	35.7	-25.9	36.26	54	-17.74	-	-	-	-	191	247	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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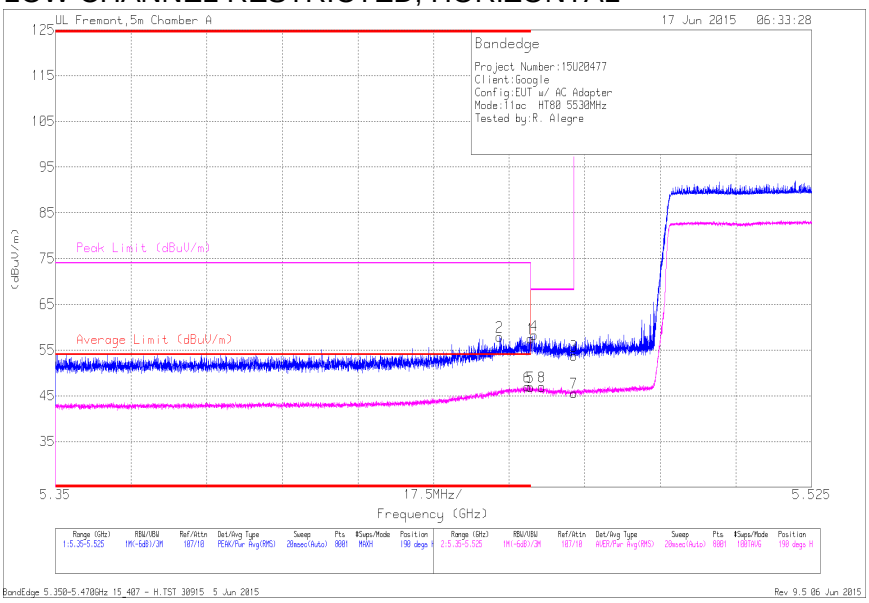
TX ABOVE 1 GHz 802.11ac VHT80 MODE IN THE 5.6 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	43.88	Pk	34.5	-20.8	57.58	-	-	74	-16.42	190	290	H
2	* 5.453	44.22	Pk	34.5	-20.8	57.92	-	-	74	-16.08	190	290	H
5	* 5.46	33.24	RMS	34.5	-20.8	46.94	54	-7.06	-	-	190	290	H
6	* 5.459	33.3	RMS	34.5	-20.8	47	54	-7	-	-	190	290	H
4	5.461	44.56	Pk	34.5	-20.8	58.26	-	-	68.2	-9.94	190	290	H
8	5.463	33.29	RMS	34.5	-20.8	46.99	54	-7.01	-	-	190	290	H
3	5.47	40.08	Pk	34.5	-20.8	53.78	-	-	68.2	-14.42	190	290	H
7	5.47	31.92	RMS	34.5	-20.8	45.62	-54	-8.38	-	-	190	290	H

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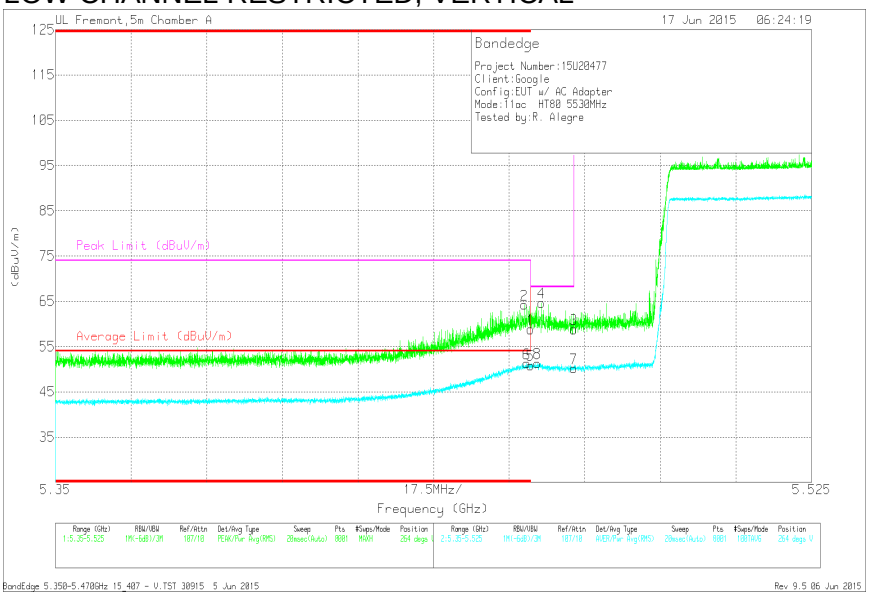
LOW CHANNEL RESTRICTED, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	45.14	Pk	34.5	-20.8	58.84	-	-	74	-15.16	264	284	V
2	* 5.458	50.54	Pk	34.5	-20.8	64.24	-	-	74	-9.76	264	284	V
5	* 5.46	37.17	RMS	34.5	-20.8	50.87	54	-3.13	-	-	264	284	V
6	* 5.459	37.6	RMS	34.5	-20.8	51.3	54	-2.7	-	-	264	284	V
4	5.462	50.99	Pk	34.5	-20.8	64.69	-	-	68.2	-3.51	264	284	V
8	5.462	37.64	RMS	34.5	-20.8	51.34	54	-2.66	-	-	264	284	V
3	5.47	45.13	Pk	34.5	-20.8	58.83	-	-	68.2	-9.37	264	284	V
7	5.47	36.49	RMS	34.5	-20.8	50.19	54	-3.81	-	-	264	284	V

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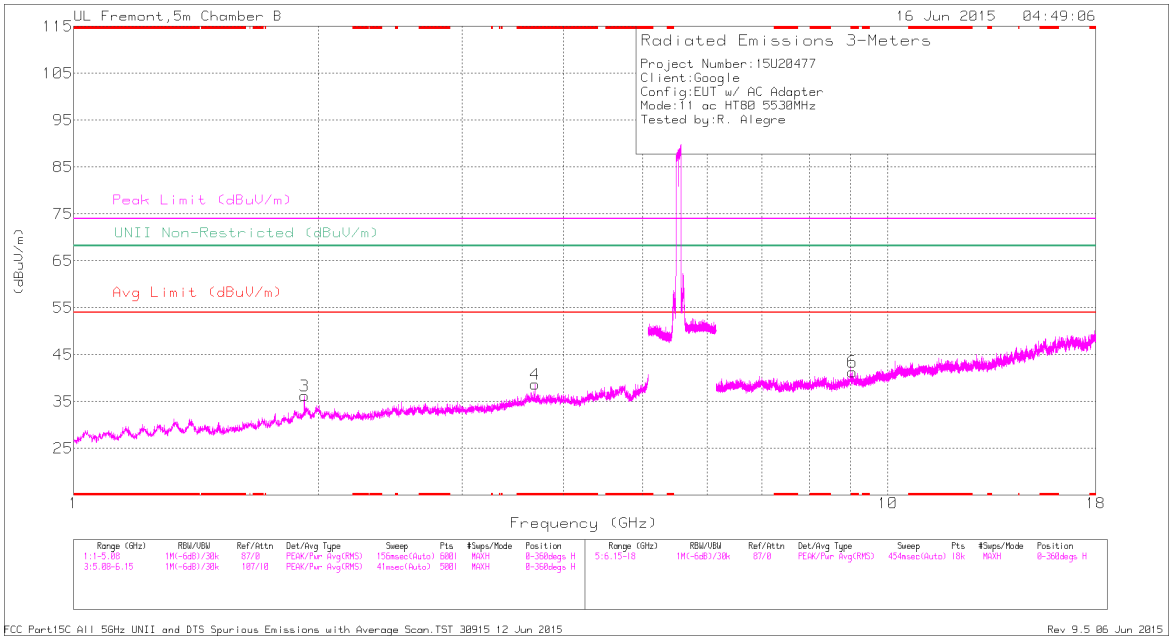
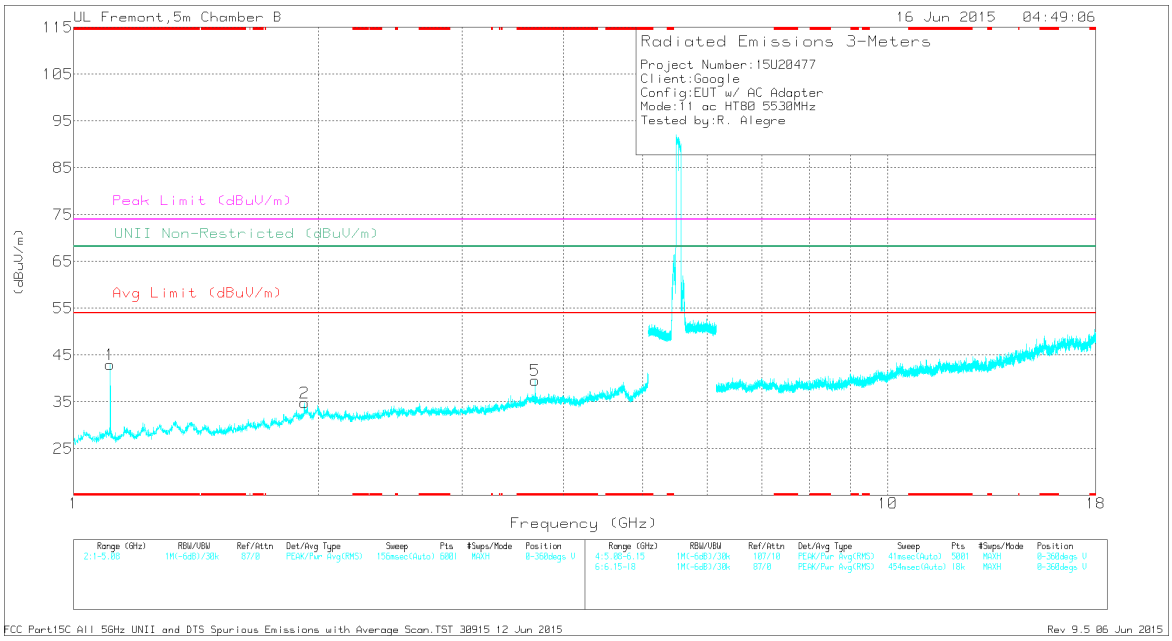
LOW CHANNELHARMONICS AND SPURIOUS EMISSIONS

LOW CH HORIZONTAL PLOT



LOW CH VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 3.687	43.47	PK3	33.6	-30.3	46.77	-	-	74	-27.23	-	-	99	248	H
	* 3.687	35.52	ADR	33.6	-30.3	38.82	54	-15.18	-	-	-	-	99	248	H
1	* 1.11	43.04	PK3	27.7	-33.5	37.24	-	-	74	-36.76	-	-	99	201	V
	* 1.107	31.08	ADR	27.7	-33.5	25.28	54	-28.72	-	-	-	-	99	201	V
5	* 3.687	44.03	PK3	33.6	-30.3	47.33	-	-	74	-26.67	-	-	17	259	V
	* 3.687	36.26	ADR	33.6	-30.3	39.56	54	-14.44	-	-	-	-	17	259	V
6	* 9.043	36.31	PK3	36.1	-24.2	48.21	-	-	74	-25.79	-	-	99	149	H
	* 9.045	25.66	ADR	36.1	-24.2	37.56	54	-16.44	-	-	-	-	99	149	H
3	1.92	43.54	PK3	31.9	-31.7	43.74	-	-	-	-	68.2	-24.46	279	158	H
2	1.92	43.81	PK3	31.9	-31.7	44.01	-	-	-	-	68.2	-24.19	323	259	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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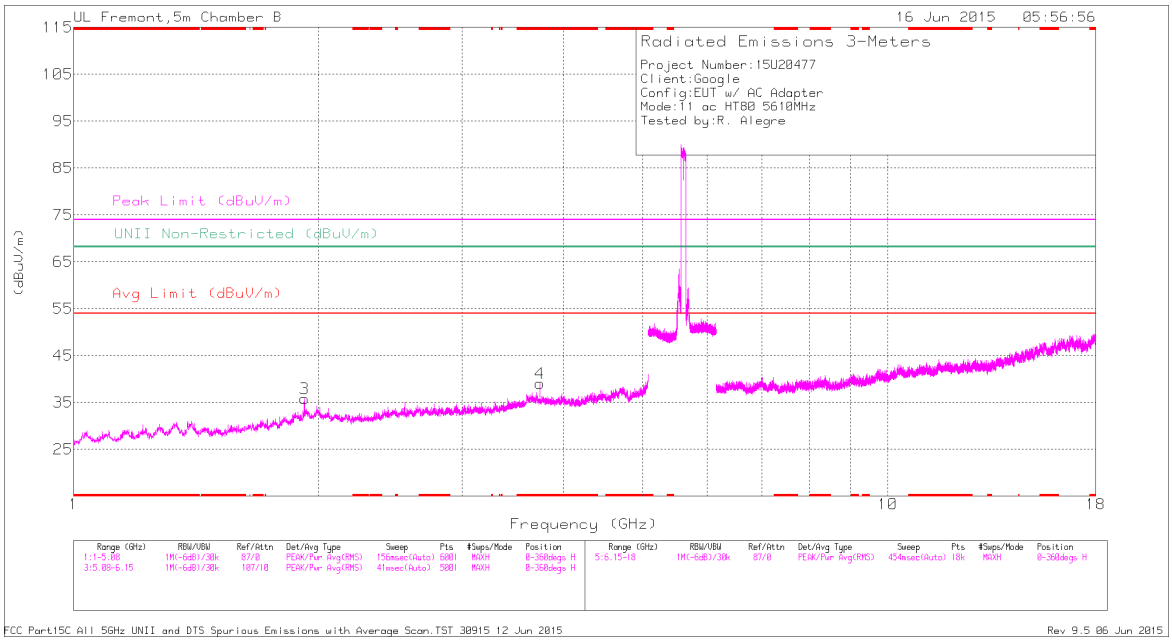
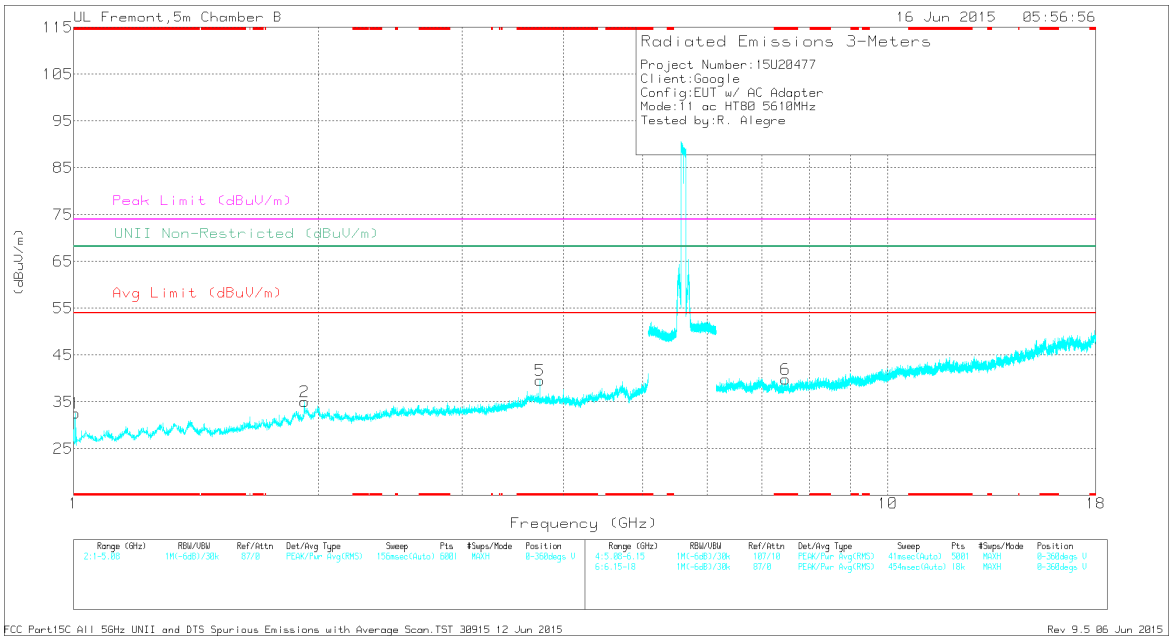
MID CHANNEL HARMONICS AND SPURIOUS EMISSIONS

MID CH HORIZONTAL PLOT



MID CH VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 3.74	43.16	PK3	33.5	-30.2	46.46	-	-	74	-27.54	-	-	92	207	H
	* 3.74	34.45	ADR	33.5	-30.2	37.75	54	-16.25	-	-	-	-	92	207	H
1	* 1.007	42.42	PK3	27.3	-33.5	36.22	-	-	74	-37.78	-	-	92	158	V
	* 1.004	30.38	ADR	27.3	-33.5	24.18	54	-29.82	-	-	-	-	92	158	V
5	* 3.74	42.9	PK3	33.5	-30.2	46.2	-	-	74	-27.8	-	-	54	226	V
	* 3.74	34.49	ADR	33.5	-30.2	37.79	54	-16.21	-	-	-	-	54	226	V
6	* 7.484	38.11	PK3	35.3	-26	47.41	-	-	74	-26.59	-	-	54	200	V
	* 7.482	26.68	ADR	35.3	-25.9	36.08	54	-17.92	-	-	-	-	54	200	V
3	1.92	43.44	PK3	31.9	-31.7	43.64	-	-	-	-	68.2	-24.56	280	152	H
2	1.92	43.6	PK3	31.9	-31.7	43.8	-	-	-	-	68.2	-24.4	321	198	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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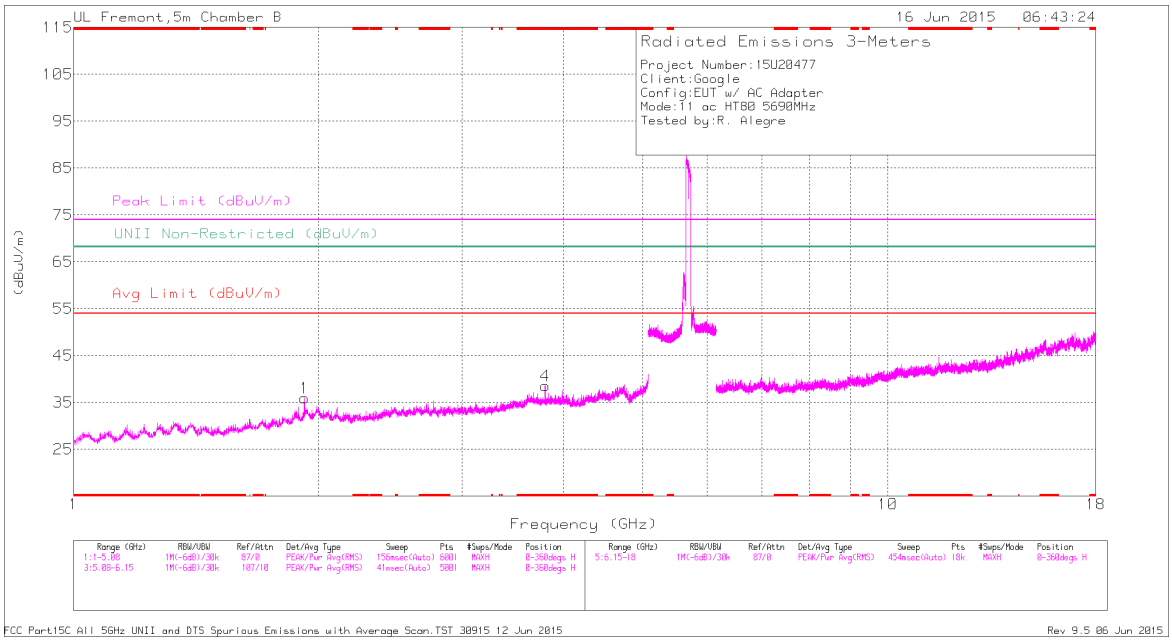
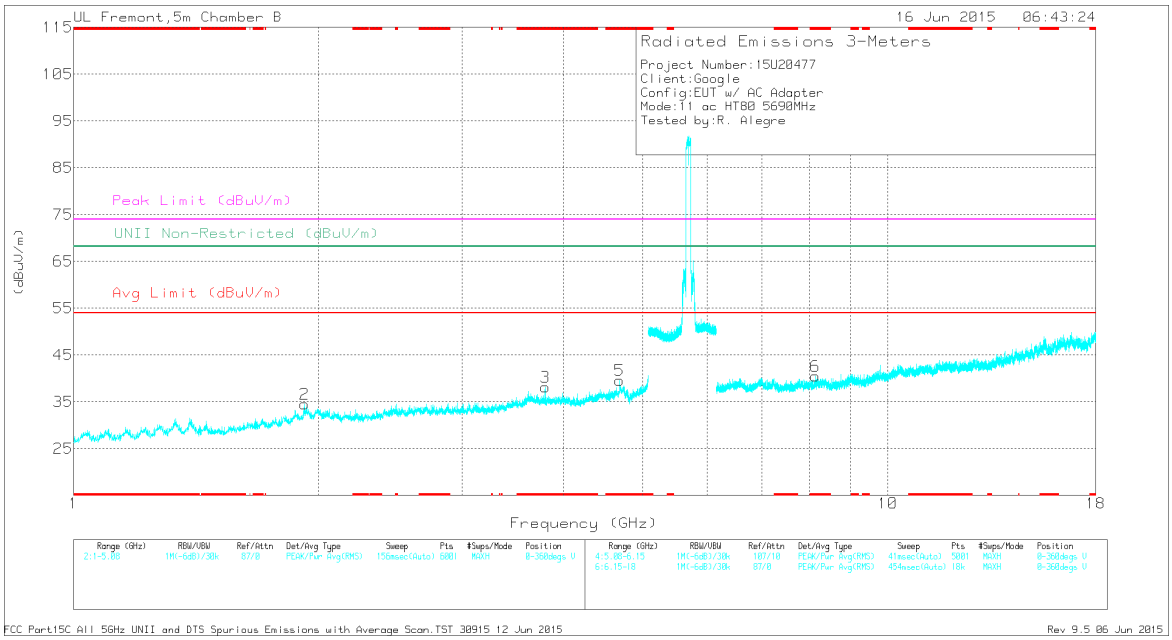
CHANNEL 138 HARMONICS AND SPURIOUS EMISSIONS

HIGH CH HORIZONTAL PLOT



HIGH CH VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 3.793	42.4	PK3	33.3	-29.9	45.8	-	-	74	-28.2	-	-	95	115	H
	* 3.793	33.49	ADR	33.3	-29.9	36.89	54	-17.11	-	-	-	-	95	115	H
3	* 3.793	42.51	PK3	33.3	-29.9	45.91	-	-	74	-28.09	-	-	309	289	V
	* 3.793	34.44	ADR	33.3	-29.9	37.84	54	-16.16	-	-	-	-	309	289	V
5	* 4.688	41.05	PK3	34.2	-28.9	46.35	-	-	74	-27.65	-	-	309	200	V
	* 4.688	30	ADR	34.2	-28.9	35.3	54	-18.7	-	-	-	-	309	200	V
6	* 8.146	38.35	PK3	35.7	-25.8	48.25	-	-	74	-25.75	-	-	309	152	V
	* 8.145	26.65	ADR	35.7	-25.8	36.55	54	-17.45	-	-	-	-	309	152	V
1	1.92	42.62	PK3	31.9	-31.7	42.82	-	-	-	-	68.2	-25.38	338	196	H
2	1.92	43.05	PK3	31.9	-31.7	43.25	-	-	-	-	68.2	-24.95	321	260	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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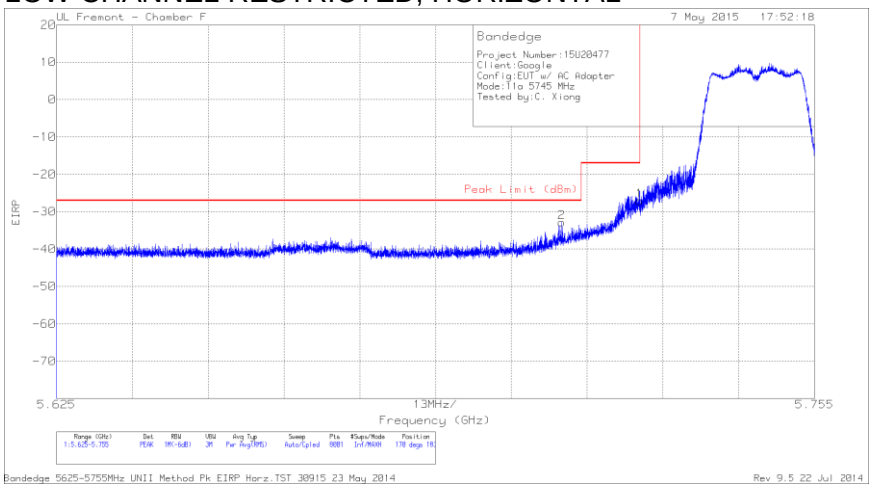
9.14. TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T120 (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	-55.69	PK	34.9	-18.1	11.8	-27.09	-17	-10.09	170	183	H
2	5.712	-61.36	PK	34.8	-18.1	11.8	-32.86	-27	-5.86	170	183	H

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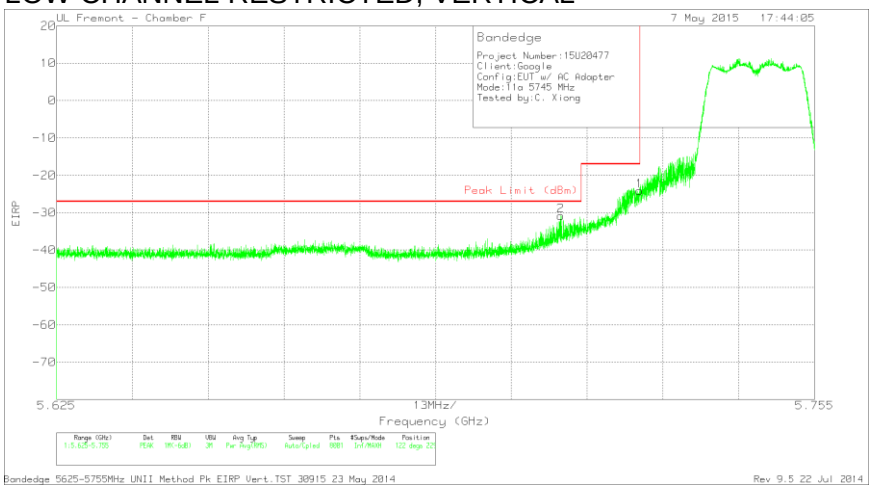
LOW CHANNEL RESTRICTED, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T120 (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	-52.76	PK	34.9	-18.1	11.8	-24.16	-17	-7.16	122	229	V
2	5.711	-59.33	PK	34.8	-18.1	11.8	-30.83	-27	-3.83	122	229	V

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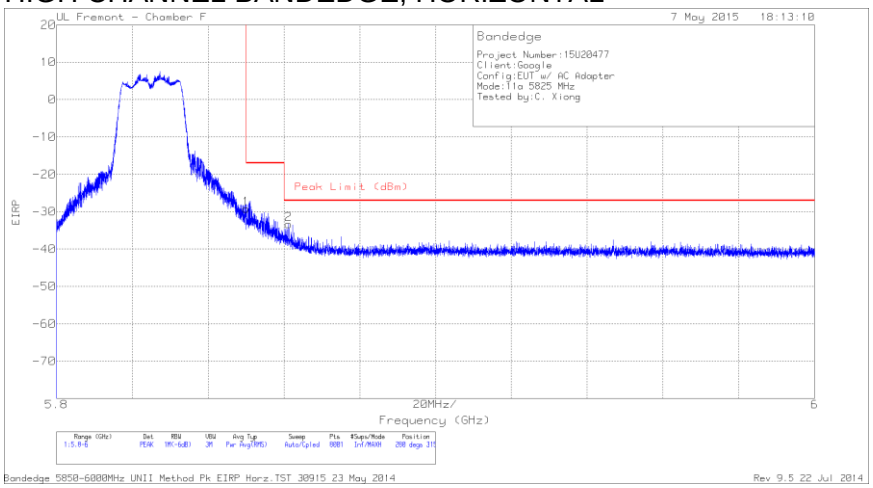
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T120 (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	-57.92	PK	35.1	-18.2	11.8	-29.22	-17	-12.22	280	315	H
2	5.861	-61.95	PK	35.1	-18.3	11.8	-33.35	-27	-6.35	280	315	H

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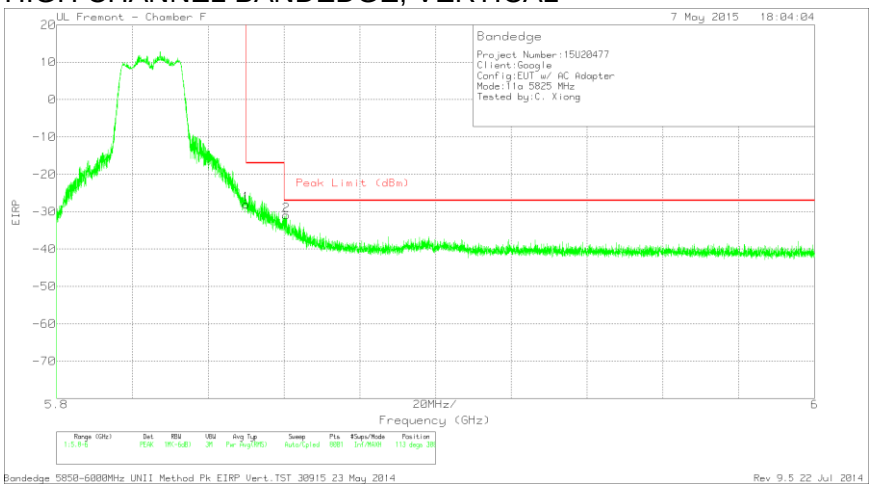
HIGH CHANNEL BANDEDGE, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-56.68	PK	35.1	-18.2	11.8	-27.98	-17	-10.98	113	308	V
2	5.861	-59.5	PK	35.1	-18.3	11.8	-30.9	-27	-3.9	113	308	V

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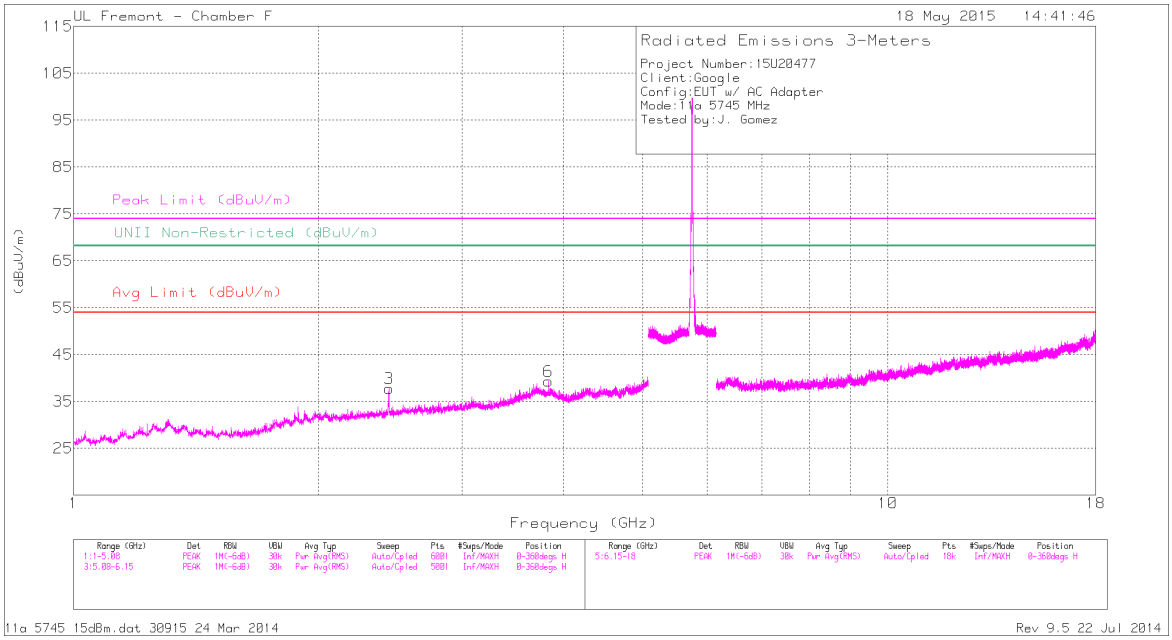
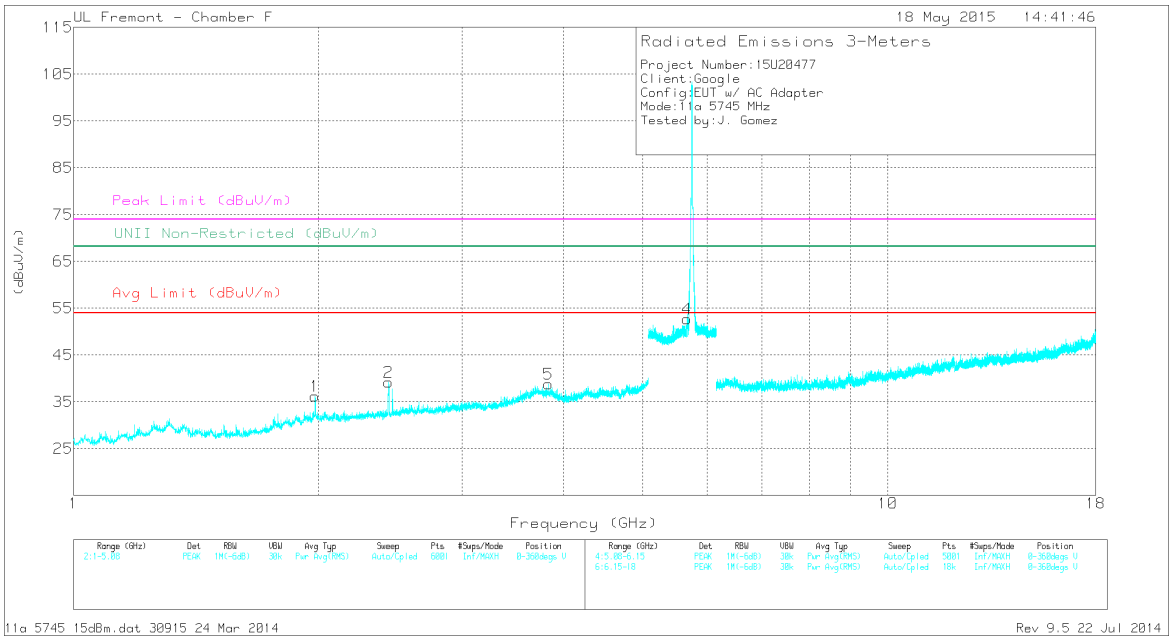
LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	2.437	45.63	PK1	32	-30.6	47.03	-	-	-	-	68.2	-21.17	119	341	H
6	* 3.83	40.48	PK1	34	-29	45.48	-	-	74	-28.52	-	-	30	225	H
	* 3.83	31.53	AD1	34	-29	36.53	54	-17.47	-	-	-	-	30	225	H
1	1.981	42.96	PK1	31.5	-30.8	43.66	-	-	-	-	68.2	-24.54	174	400	V
2	2.438	46.39	PK1	32	-30.6	47.79	-	-	-	-	68.2	-20.41	73	168	V
5	* 3.83	40.71	PK1	34	-29	45.71	-	-	74	-28.29	-	-	327	211	V
	* 3.83	30.9	AD1	34	-29	35.9	54	-18.1	-	-	-	-	327	211	V
4	5.665	43.11	PK1	34.8	-18.4	59.51	-	-	-	-	68.2	-8.69	215	261	V

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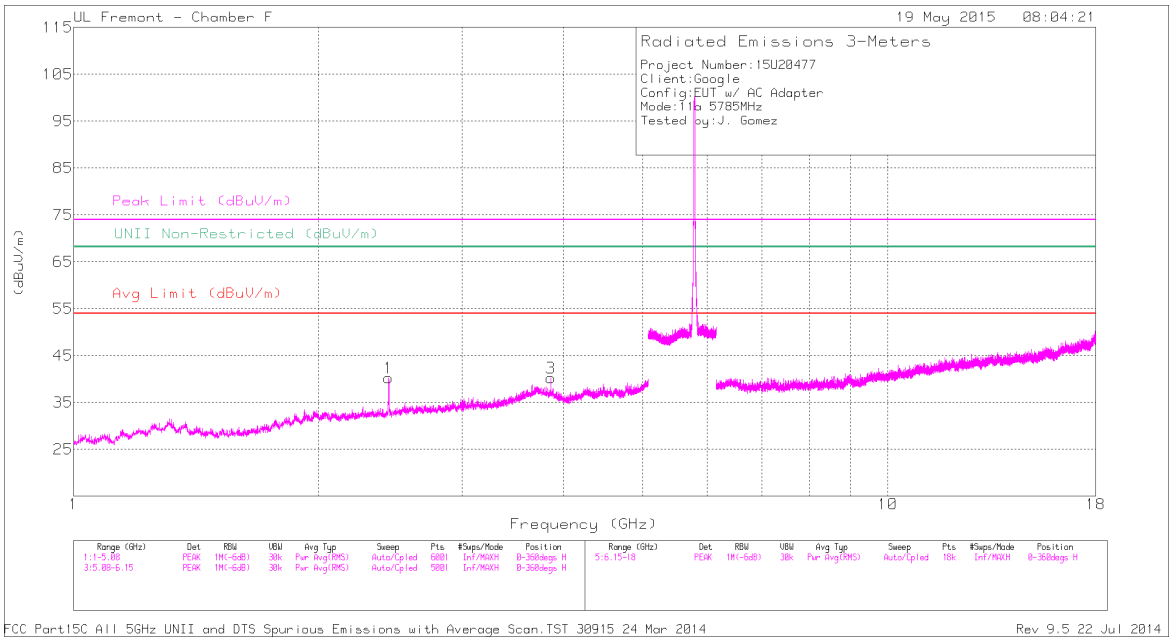
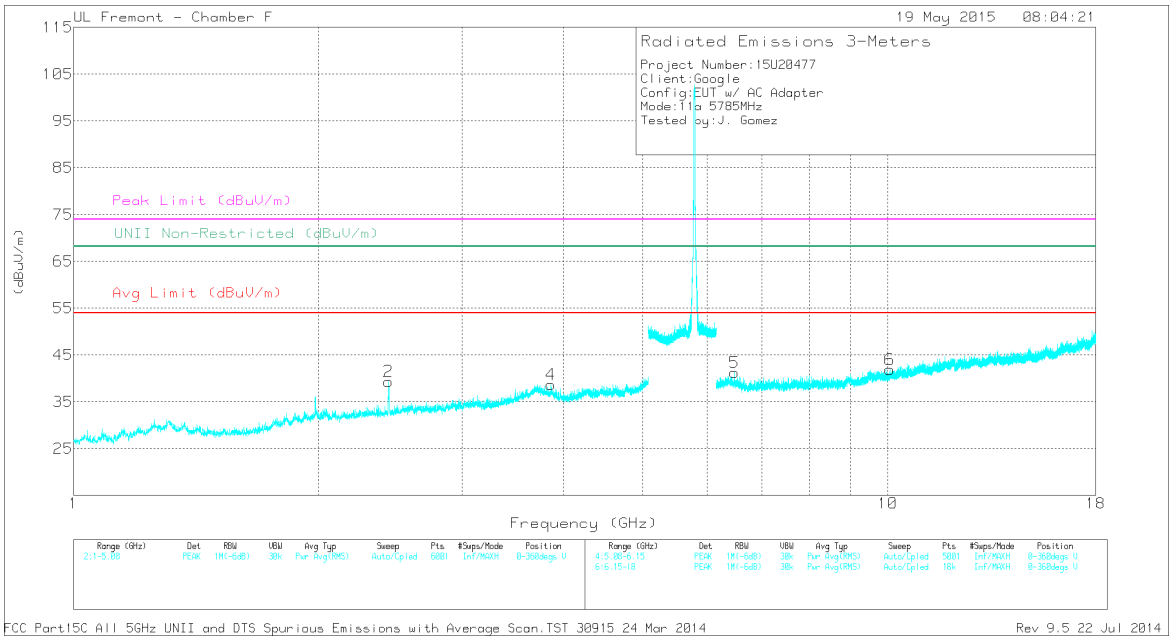
MID CHANNEL HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	2.439	43.09	PK1	32	-30.6	44.49	-	-	-	-	68.2	-23.71	52	268	H
3	* 3.856	40.75	PK1	34	-29	45.75	-	-	74	-28.25	-	-	13	172	H
	* 3.857	31.47	AD1	34	-29	36.47	54	-17.53	-	-	-	-	13	172	H
2	2.439	45.67	PK1	32	-30.6	47.07	-	-	-	-	68.2	-21.13	315	273	V
4	* 3.856	40.46	PK1	34	-29	45.46	-	-	74	-28.54	-	-	25	180	V
	* 3.857	30.62	AD1	34	-29	35.62	54	-18.38	-	-	-	-	25	180	V
5	6.481	38.79	PK1	35.9	-26.6	48.09	-	-	-	-	68.2	-20.11	242	304	V
6	10.055	34.67	PK1	37.2	-21.6	50.27	-	-	-	-	68.2	-17.93	6	383	V

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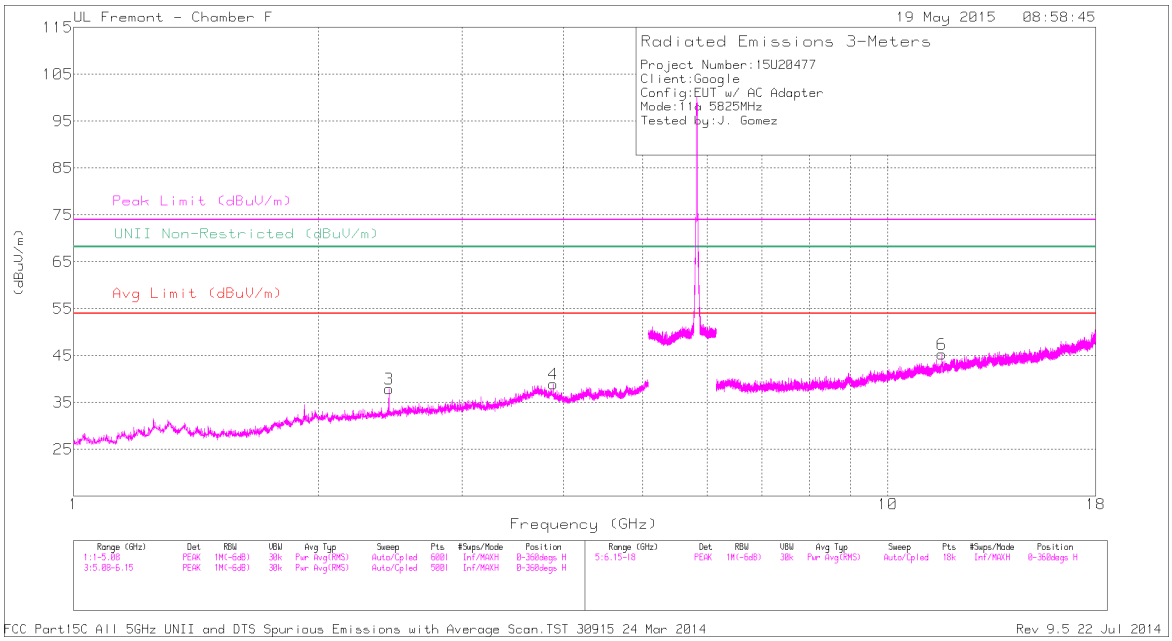
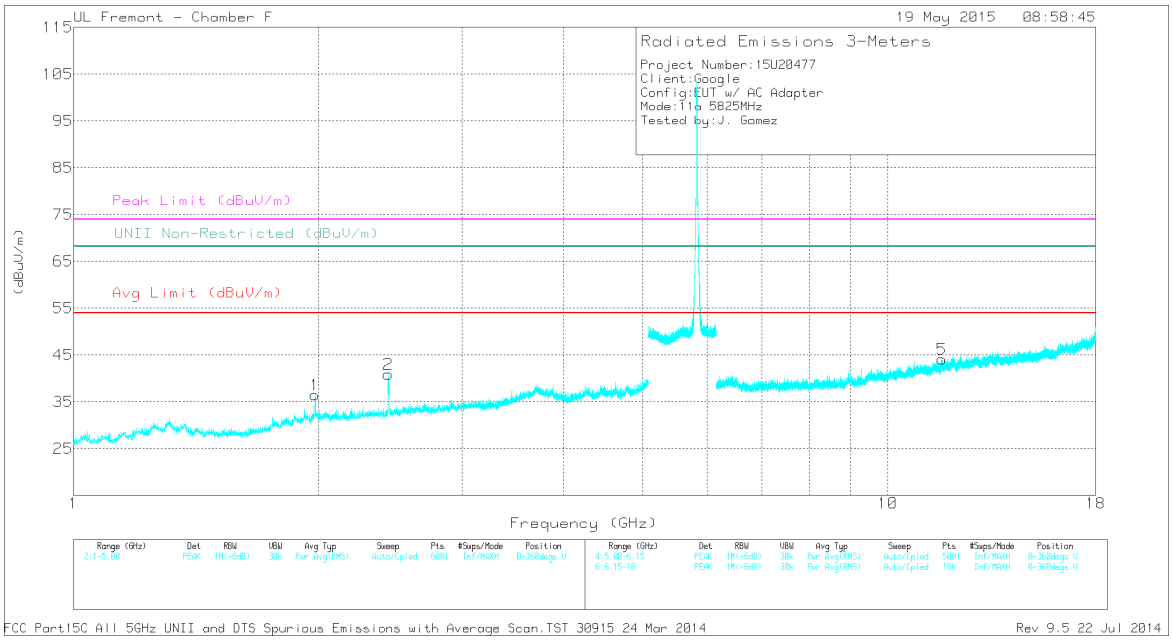
HIGH CHANNEL HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	2.438	45.07	PK1	32	-30.6	46.47	-	-	-	-	68.2	-21.73	180	185	H
4	* 3.884	40.28	PK1	33.9	-29	45.18	-	-	74	-28.82	-	-	136	128	H
	* 3.883	30.16	AD1	33.9	-29	35.06	54	-18.94	-	-	-	-	136	128	H
1	1.98	43.66	PK1	31.5	-30.8	44.36	-	-	-	-	68.2	-23.84	96	292	V
2	2.439	47.11	PK1	32	-30.6	48.51	-	-	-	-	68.2	-19.69	21	214	V
6	* 11.642	36.86	PK1	38.7	-22.3	53.26	-	-	74	-20.74	-	-	185	125	H
	* 11.643	25.16	AD1	38.7	-22.3	41.56	54	-12.44	-	-	-	-	185	125	H
5	* 11.651	37.66	PK1	38.8	-22.4	54.06	-	-	74	-19.94	-	-	146	368	V
	* 11.65	26.26	AD1	38.8	-22.4	42.66	54	-11.34	-	-	-	-	146	368	V

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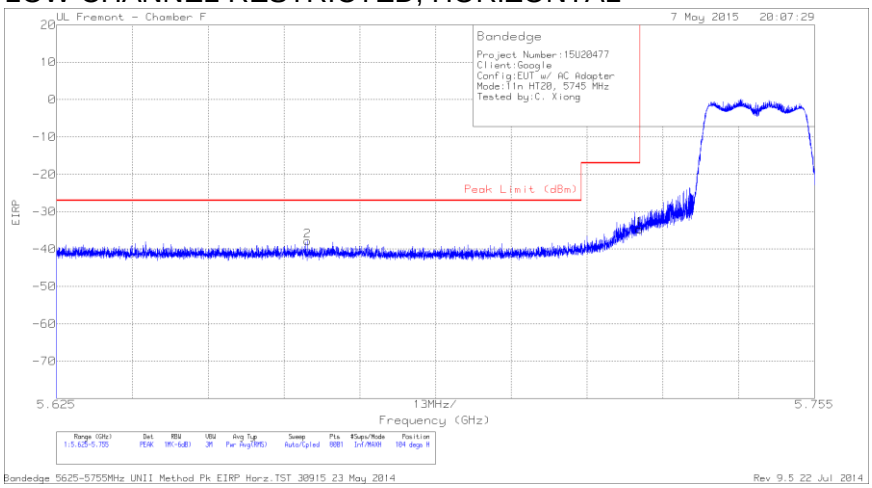
9.15. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T120 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-63.3	PK	34.9	-18.1	11.8	-34.7	-17	-17.7	104	276	H
2	5.668	-66.13	PK	34.8	-18.3	11.8	-37.83	-27	-10.83	104	276	H

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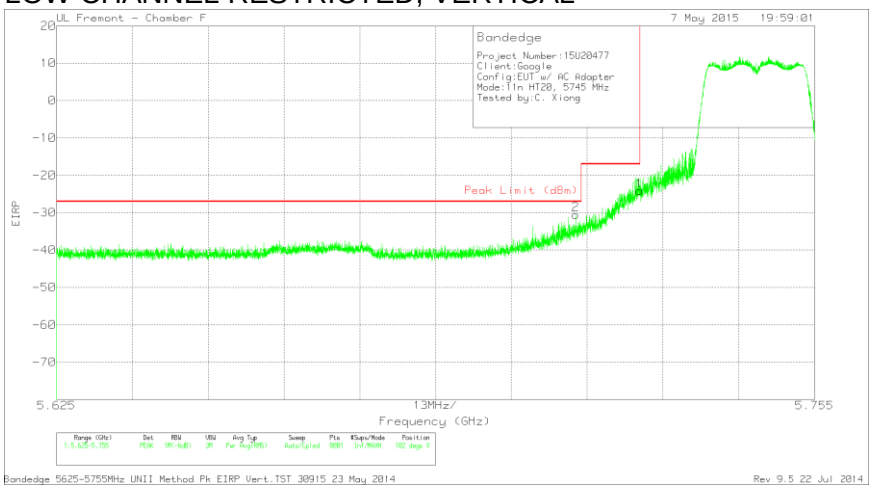
LOW CHANNEL RESTRICTED, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T120 (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	-52.76	PK	34.9	-18.1	11.8	-24.16	-17	-7.16	102	248	V
2	5.714	-58.99	PK	34.8	-18.1	11.8	-30.49	-27	-3.49	102	248	V

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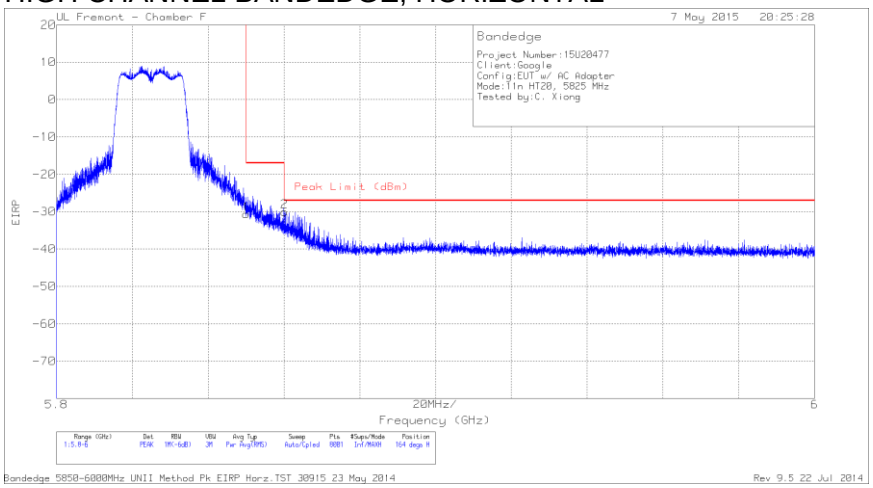
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-59.35	PK	35.1	-18.2	11.8	-30.65	-17	-13.65	164	161	H
2	5.86	-58.6	PK	35.1	-18.3	11.8	-30	-27	-3	164	161	H

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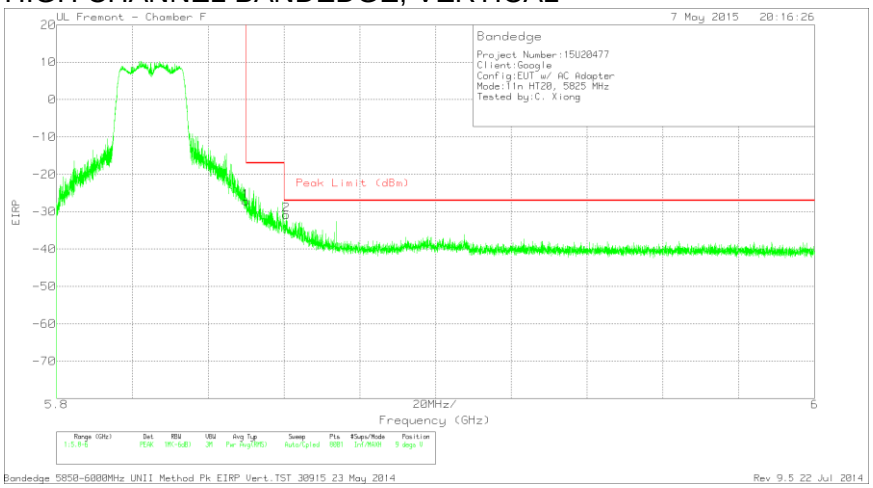
HIGH CHANNEL BANDEDGE, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-55.85	PK	35.1	-18.2	11.8	-27.15	-17	-10.15	9	213	V
2	5.861	-59.42	PK	35.1	-18.3	11.8	-30.82	-27	-3.82	9	213	V

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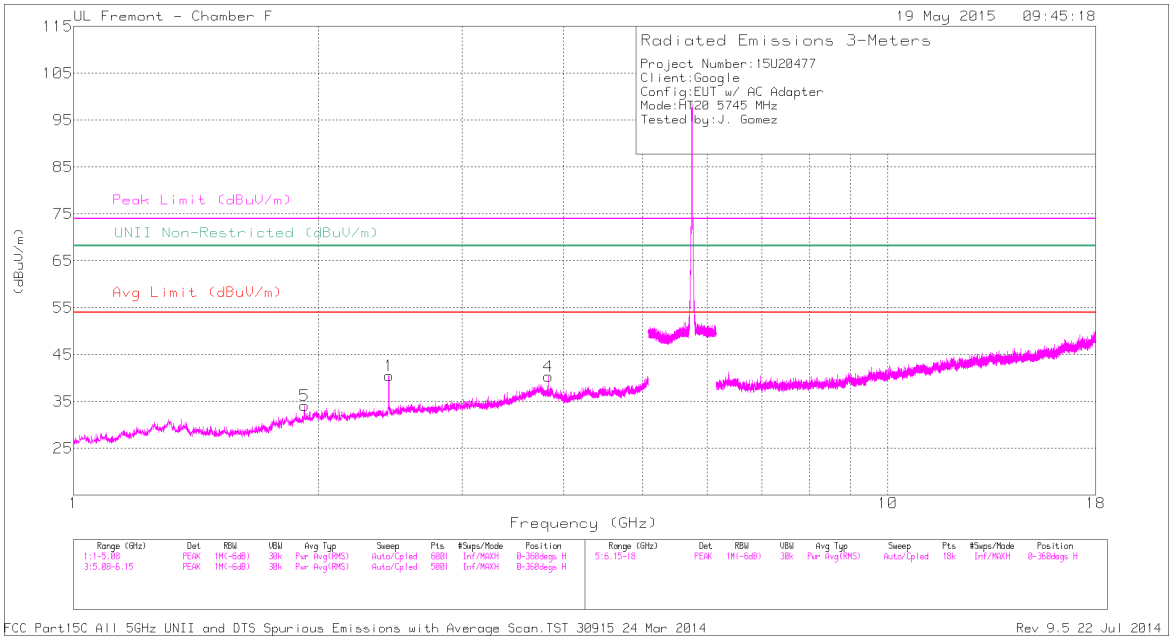
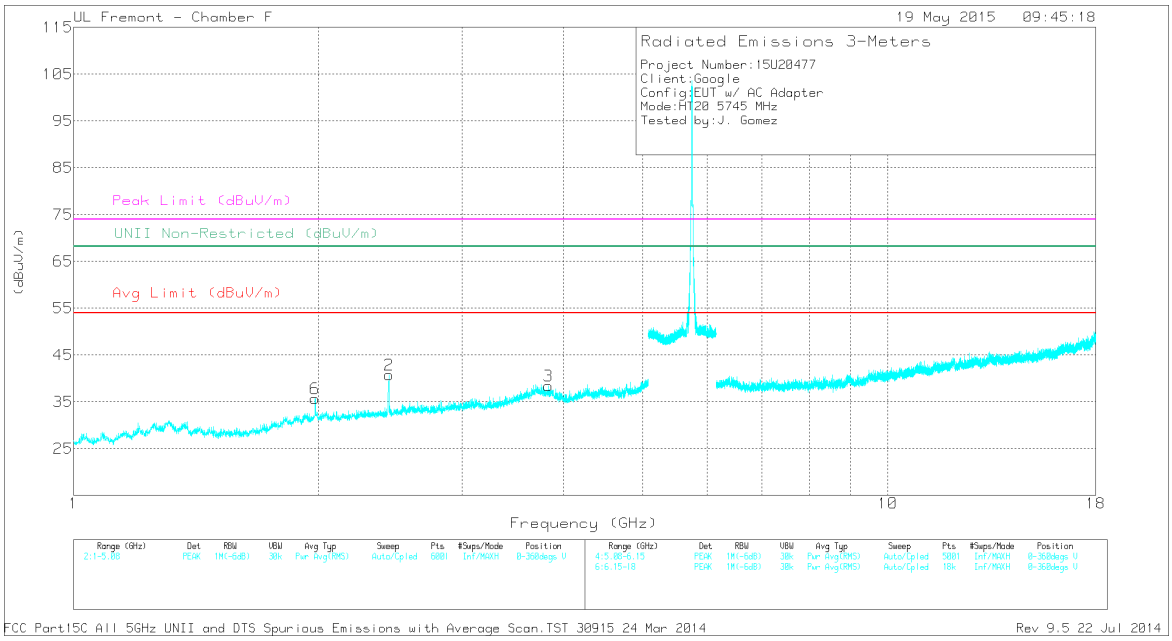
LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	2.438	45.26	PK1	32	-30.6	46.66	-	-	-	-	68.2	-21.54	93	291	H
4	* 3.829	40.47	PK1	34	-29	45.47	-	-	74	-28.53	-	-	14	200	H
	* 3.83	31.42	AD1	34	-29	36.42	54	-17.58	-	-	-	-	14	200	H
5	1.92	42.44	PK1	31.3	-31.3	42.44	-	-	-	-	68.2	-25.76	149	119	H
2	2.439	47.36	PK1	32	-30.6	48.76	-	-	-	-	68.2	-19.44	151	157	V
3	* 3.83	40.77	PK1	34	-29	45.77	-	-	74	-28.23	-	-	24	181	V
	* 3.83	30.57	AD1	34	-29	35.57	54	-18.43	-	-	-	-	24	181	V
6	1.98	43.59	PK1	31.5	-30.8	44.29	-	-	-	-	68.2	-23.91	303	294	V

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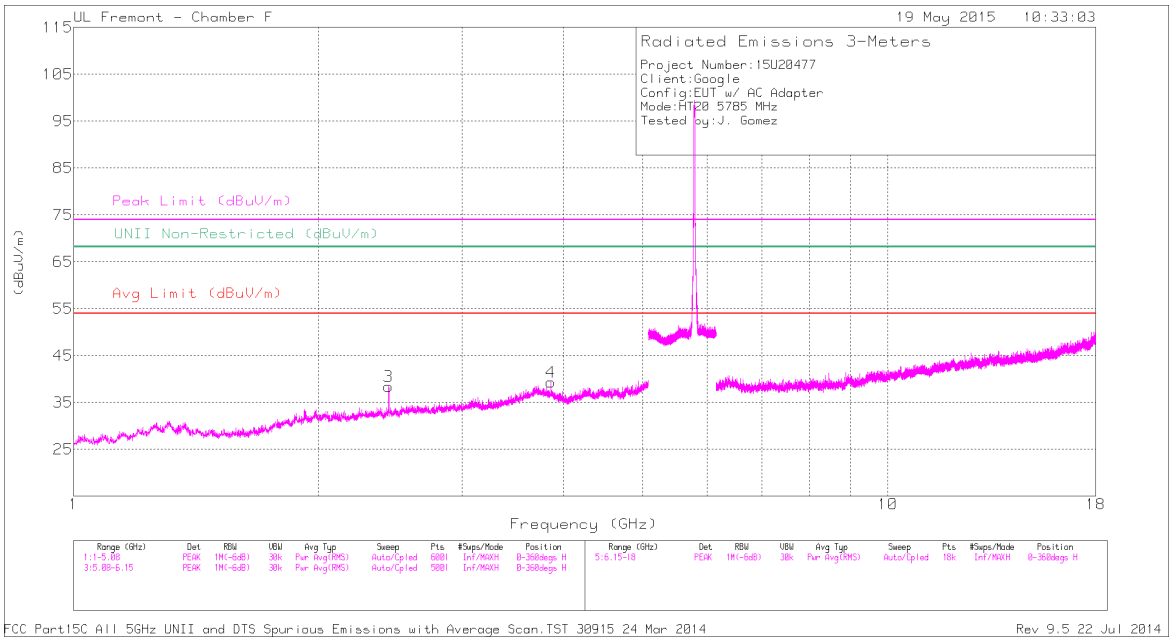
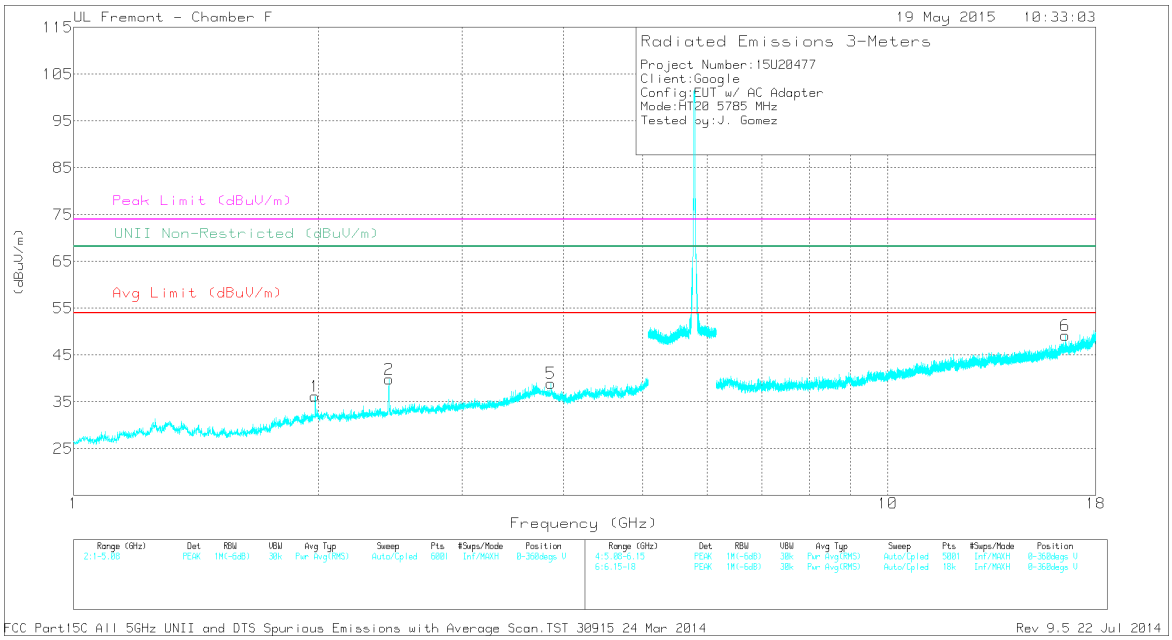
MID CHANNEL HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	2.44	44.51	PK1	32	-30.6	45.91	-	-	-	-	68.2	-22.29	258	156	H
	2.44	30.12	AD1	32	-30.6	31.52	-	-	-	-	-	-	258	156	H
4	* 3.857	40.57	PK1	34	-29	45.57	-	-	74	-28.43	-	-	140	103	H
	* 3.857	30.63	AD1	34	-29	35.63	54	-18.37	-	-	-	-	140	103	H
1	1.98	43.74	PK1	31.5	-30.8	44.44	-	-	-	-	68.2	-23.76	206	358	V
	1.98	35.78	AD1	31.5	-30.8	36.48	-	-	-	-	-	-	206	358	V
2	2.438	44.77	PK1	32	-30.6	46.17	-	-	-	-	68.2	-22.03	31	364	V
	2.438	29.43	AD1	32	-30.6	30.83	-	-	-	-	-	-	31	364	V
5	* 3.857	40.45	PK1	34	-29	45.45	-	-	74	-28.55	-	-	300	180	V
	* 3.857	30.61	AD1	34	-29	35.61	54	-18.39	-	-	-	-	300	180	V
6	16.52	35.13	PK1	41.3	-21.2	55.23	-	-	-	-	68.2	-12.97	266	375	V
	16.518	23.27	AD1	41.3	-21.3	43.27	-	-	-	-	-	-	266	375	V

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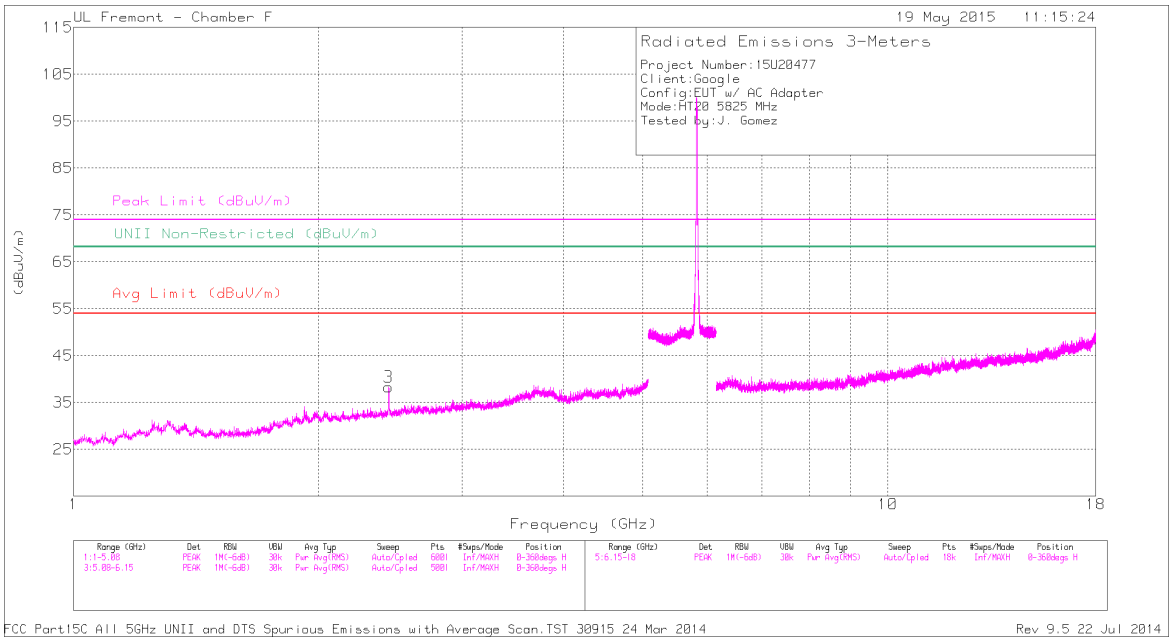
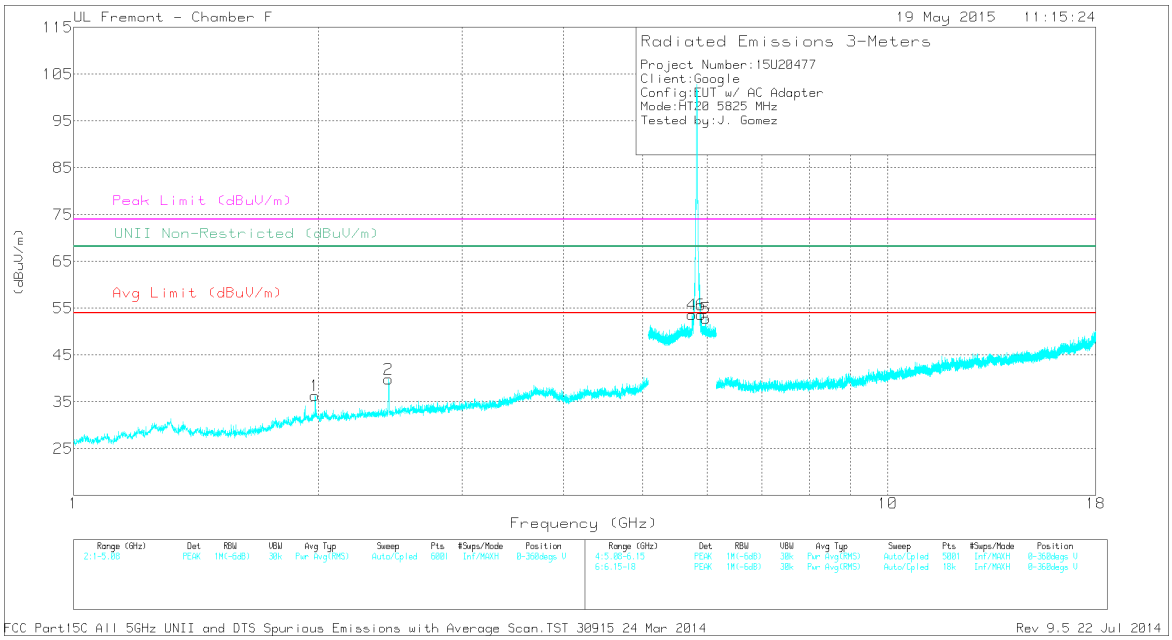
HIGH CHANNEL HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	2.439	44.62	PK1	32	-30.6	46.02	-	-	-	-	68.2	-22.18	48	365	H
1	1.98	44.03	PK1	31.5	-30.8	44.73	-	-	-	-	68.2	-23.47	5	295	V
2	2.438	45.96	PK1	32	-30.6	47.36	-	-	-	-	68.2	-20.84	148	111	V
4	5.755	49.18	PK1	34.9	-18.1	65.98	-	-	-	-	68.2	-2.22	221	232	V
5	5.979	42.7	PK1	35.4	-18.2	59.9	-	-	-	-	68.2	-8.3	323	201	V

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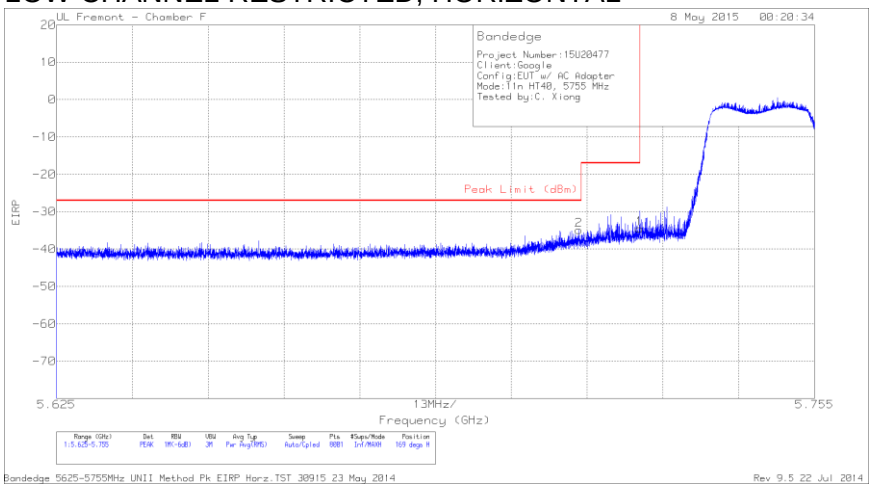
9.16. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T120 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-63.11	PK	34.9	-18.1	11.8	-34.51	-17	-17.51	169	238	H
2	5.715	-63.41	PK	34.8	-18.1	11.8	-34.91	-27	-7.91	169	238	H

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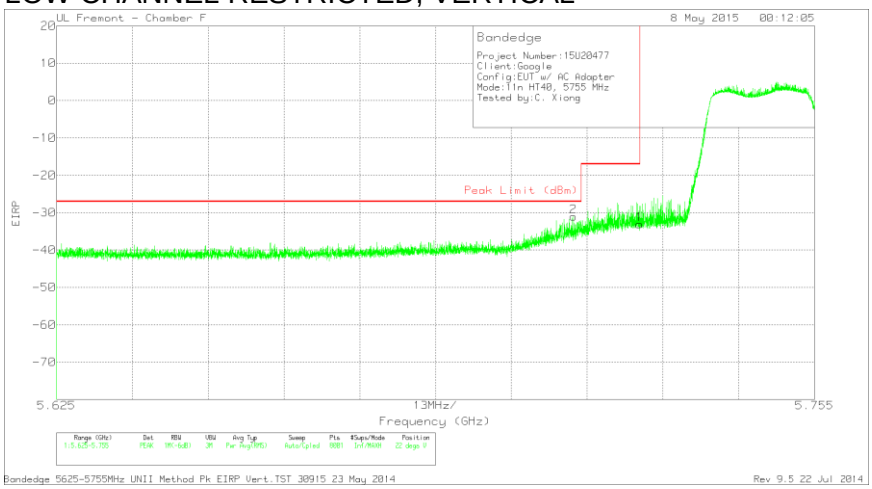
LOW CHANNEL RESTRICTED, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T120 (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	-61.7	PK	34.9	-18.1	11.8	-33.1	-17	-16.1	22	291	V
2	5.714	-59.52	PK	34.8	-18.1	11.8	-31.02	-27	-4.02	22	291	V

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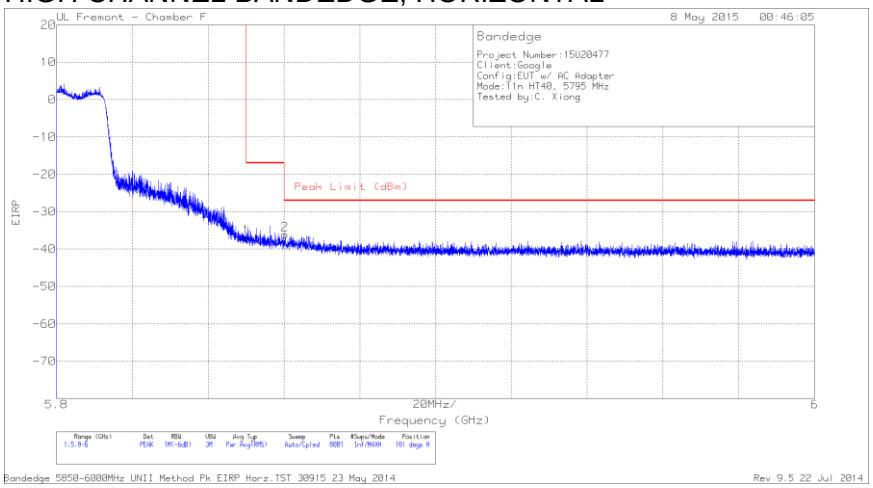
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T120 (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	-65.61	PK	35.1	-18.2	11.8	-36.91	-17	-19.91	181	297	H
2	5.86	-64.67	PK	35.1	-18.3	11.8	-36.07	-27	-9.07	181	297	H

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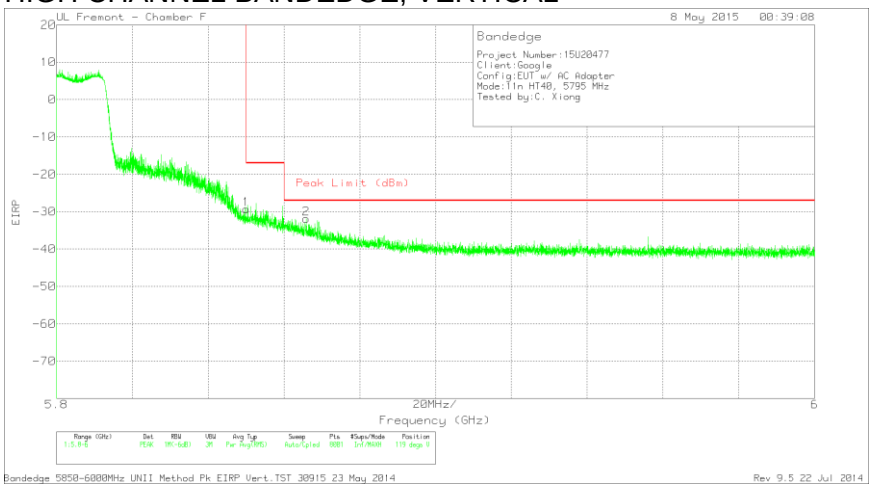
HIGH CHANNEL BANDEDGE, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T120 (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	-58.04	PK	35.1	-18.2	11.8	-29.34	-17	-12.34	119	312	V
2	5.866	-60.58	PK	35.1	-18.2	11.8	-31.88	-27	-4.88	119	312	V

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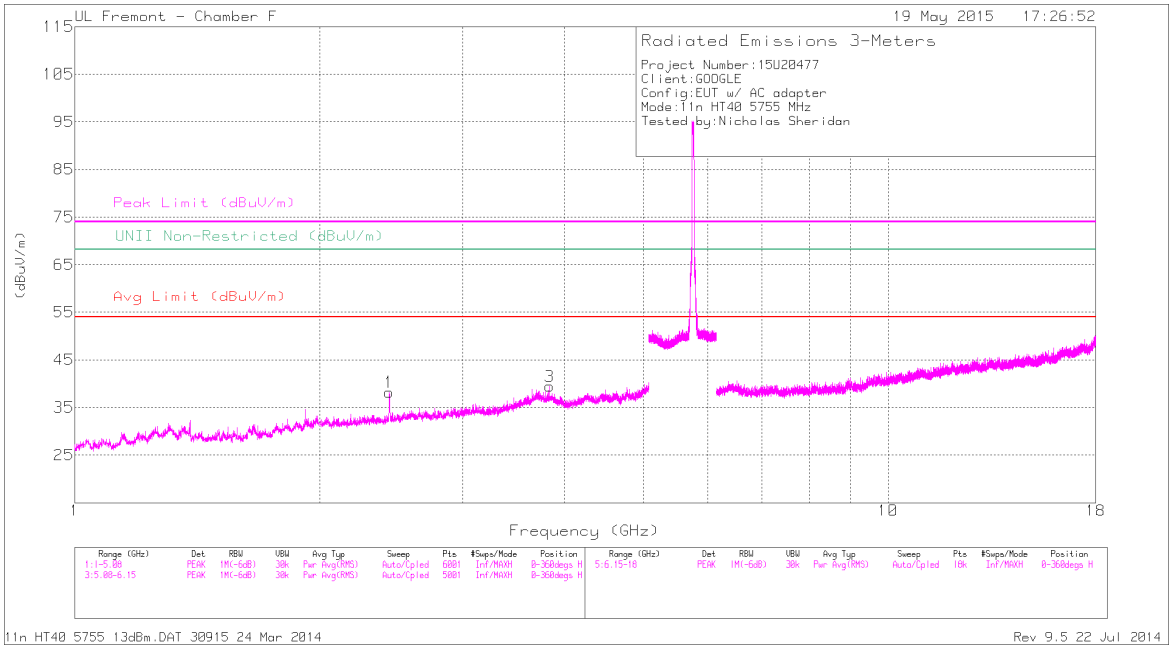
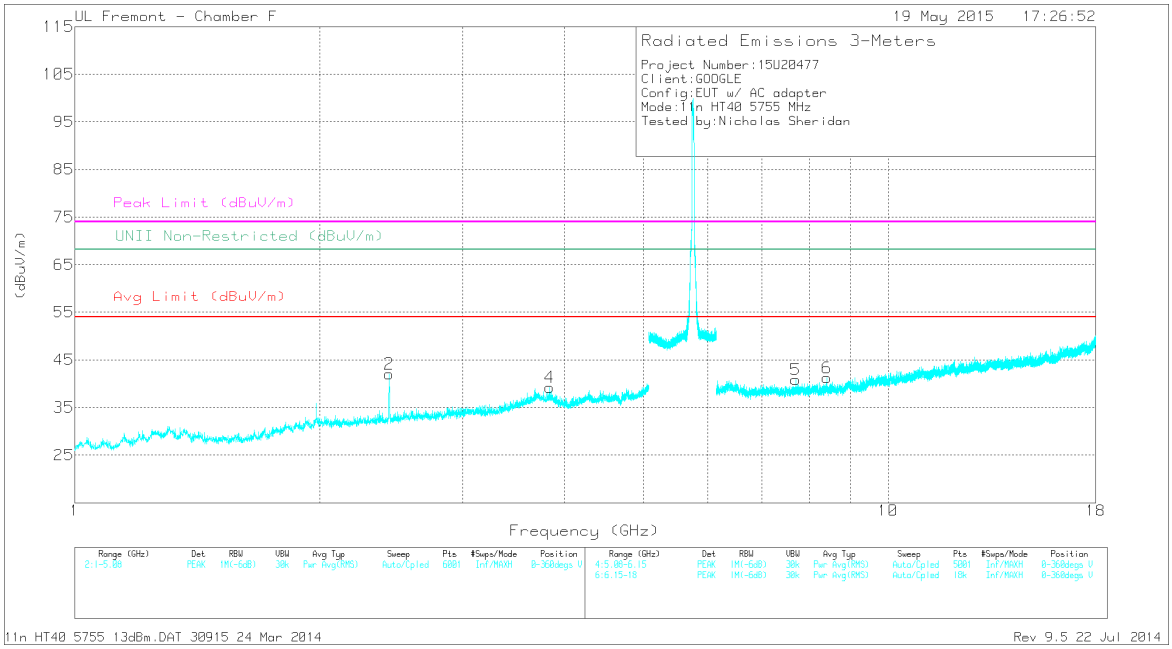
LOW CHANNEL HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 3.837	40.83	PK1	34	-28.9	45.93	-	-	74	-28.07	-	-	343	333	H
	* 3.837	31.41	AD1	34	-28.9	36.51	54	-17.49	-	-	-	-	343	333	H
1	2.435	34.98	PK1	32	-30.6	36.38	-	-	-	-	68.2	-31.82	98	361	H
2	2.435	46.44	PK1	32	-30.6	47.84	-	-	-	-	68.2	-20.36	164	213	V
4	* 3.836	39.63	PK1	34	-28.9	44.73	-	-	74	-29.27	-	-	108	183	V
	* 3.837	30.47	AD1	34	-28.9	35.57	54	-18.43	-	-	-	-	108	183	V
5	* 7.698	36.35	PK1	35.7	-25.5	46.55	-	-	74	-27.45	-	-	266	107	V
	* 7.698	25.04	AD1	35.7	-25.5	35.24	54	-18.76	-	-	-	-	266	107	V
6	* 8.404	35.06	PK1	35.8	-23.6	47.26	-	-	74	-26.74	-	-	214	295	V
	* 8.404	23.58	AD1	35.8	-23.6	35.78	54	-18.22	-	-	-	-	214	295	V

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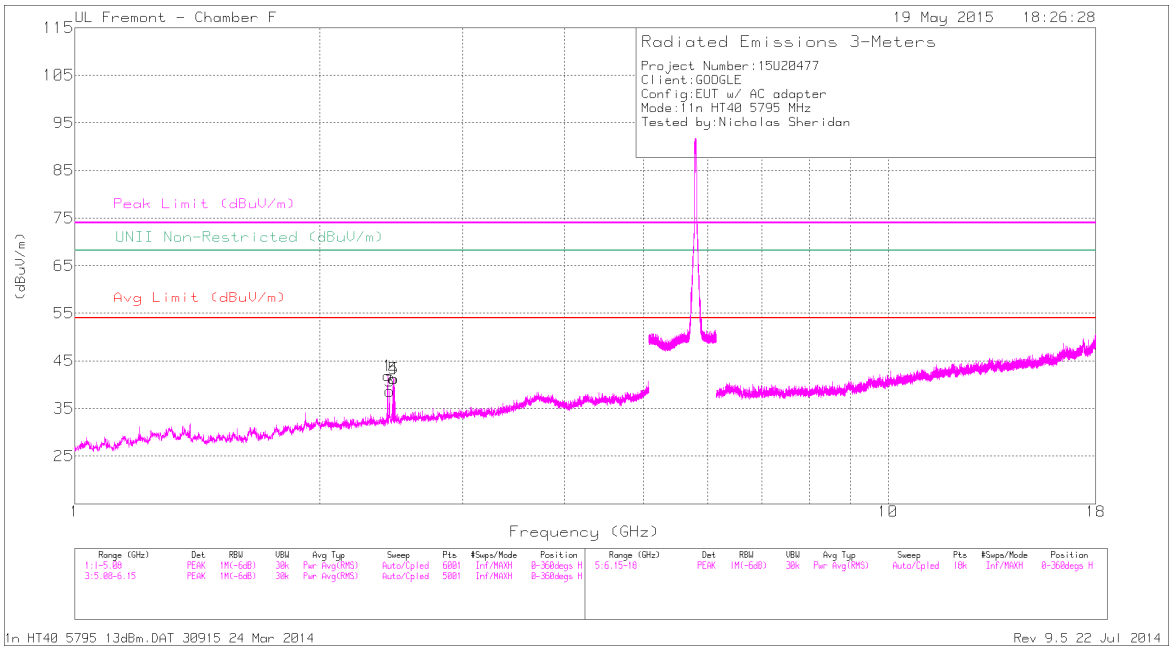
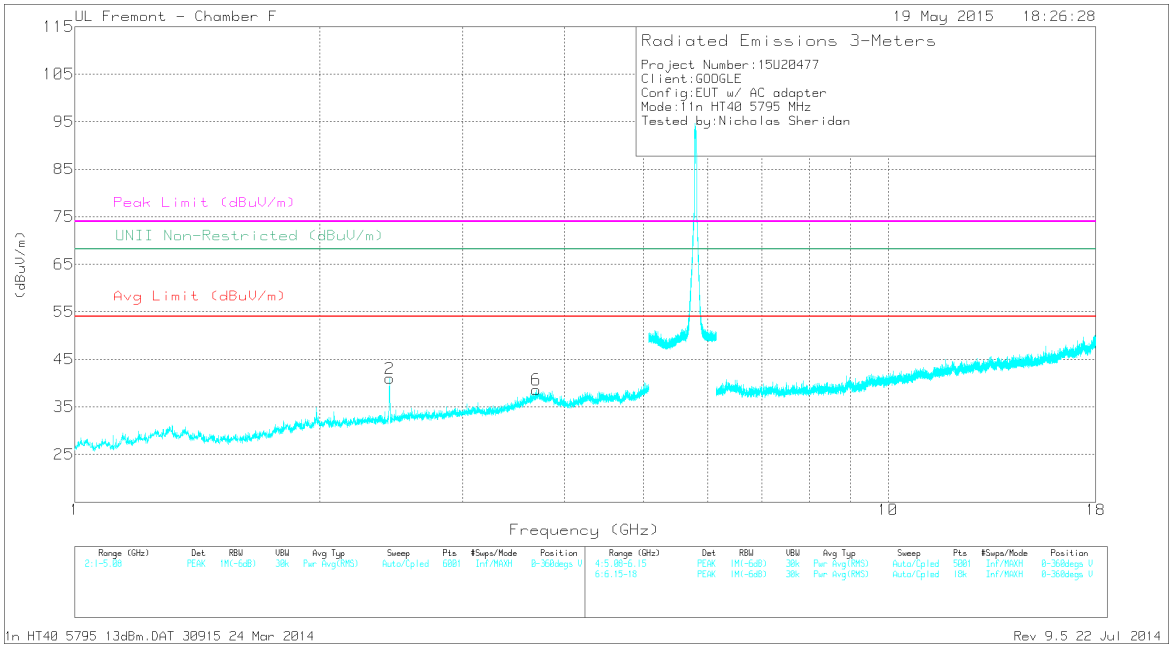
HIGH CHANNEL HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	2.427	39.92	PK1	32	-30.7	41.22	-	-	-	-	68.2	-26.98	282	367	H
3	2.433	48.42	PK1	32	-30.7	49.72	-	-	-	-	68.2	-18.48	164	225	H
4	2.459	40.82	PK1	32.1	-30.4	42.52	-	-	-	-	68.2	-25.68	290	301	H
5	2.468	39.81	PK1	32.2	-30.5	41.51	-	-	-	-	68.2	-26.69	288	309	H
2	2.437	47.9	PK1	32	-30.6	49.3	-	-	-	-	68.2	-18.9	119	283	V
6	* 3.694	38.39	PK1	34.7	-28.7	44.39	-	-	74	-29.61	-	-	96	339	V
	* 3.692	26.94	AD1	34.7	-28.7	32.94	54	-21.06	-	-	-	-	96	339	V

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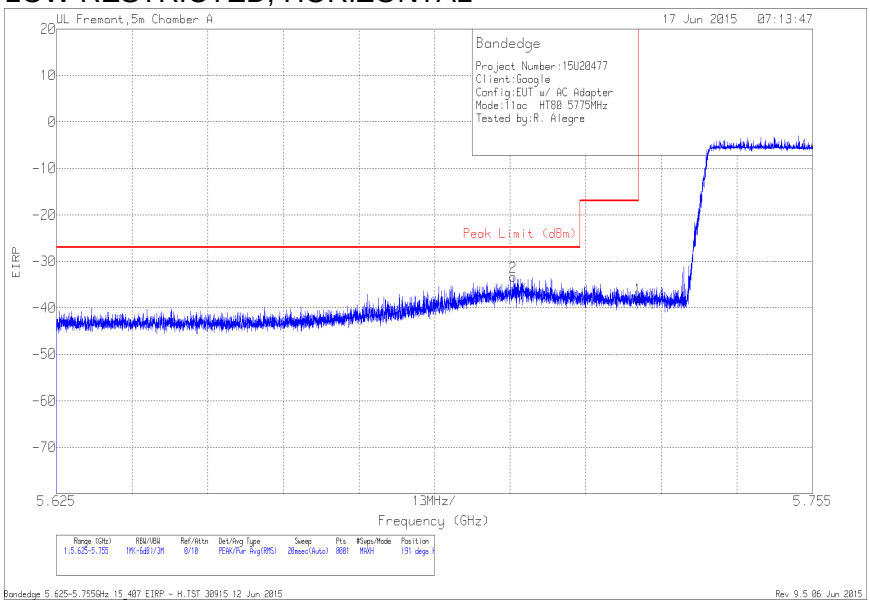
9.17. TX ABOVE 1 GHz 802.11ac VHT80 MODE IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE

LOW RESTRICTED, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.703	-59.21	Pk	34.7	-20.6	11.8	-33.31	-27	-6.31	191	271	H
1	5.725	-63.71	Pk	34.7	-20.7	11.8	-37.91	-17	-20.91	191	271	H

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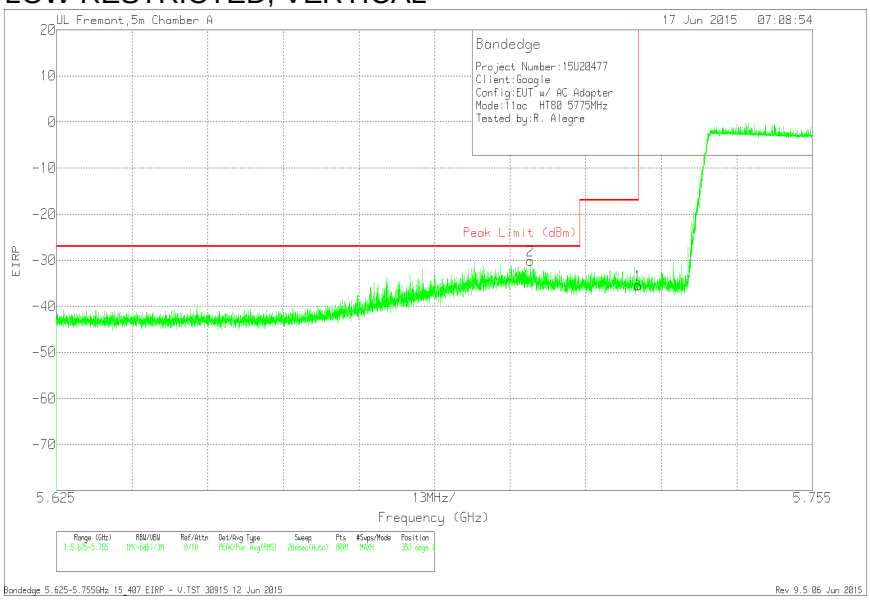
LOW RESTRICTED, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.706	-55.91	Pk	34.7	-20.7	11.8	-30.11	-27	-3.11	353	267	V
1	5.725	-61.22	Pk	34.7	-20.7	11.8	-35.42	-17	-18.42	353	267	V

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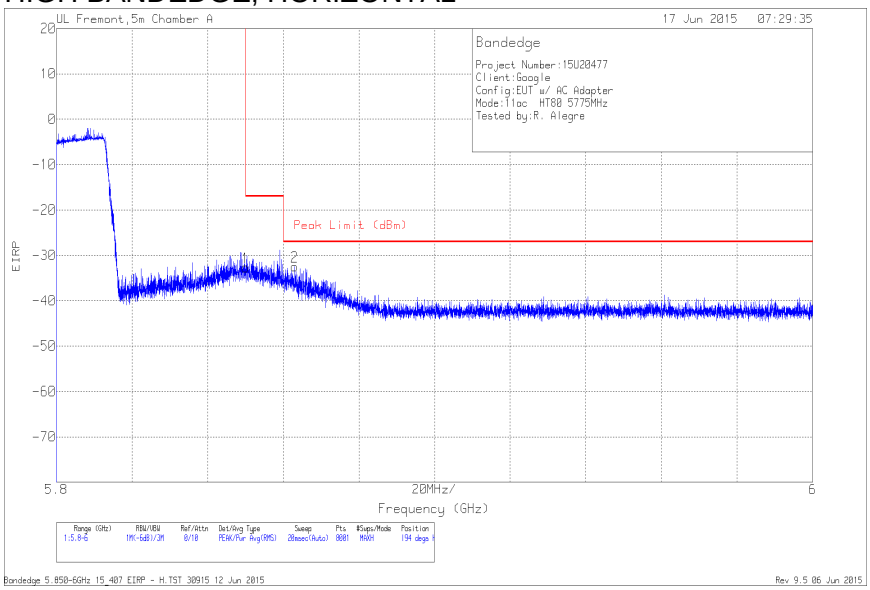
AUTHORIZED BANDEDGE

HIGH BANDEDGE, HORIZONTAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-59.25	Pk	35.1	-20.3	11.8	-32.65	-17	-15.65	194	288	H
2	5.863	-59.04	Pk	35.1	-20.3	11.8	-32.44	-27	-5.44	194	288	H

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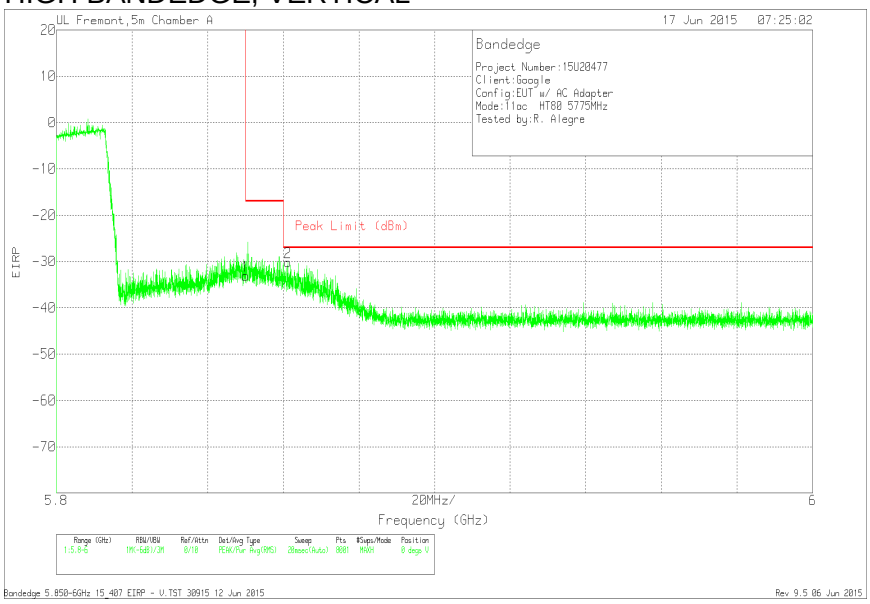
HIGH BANDEDGE, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-59.67	Pk	35.1	-20.3	11.8	-33.07	-17	-16.07	0	261	V
2	5.861	-56.79	Pk	35.1	-20.3	11.8	-30.19	-27	-3.19	0	261	V

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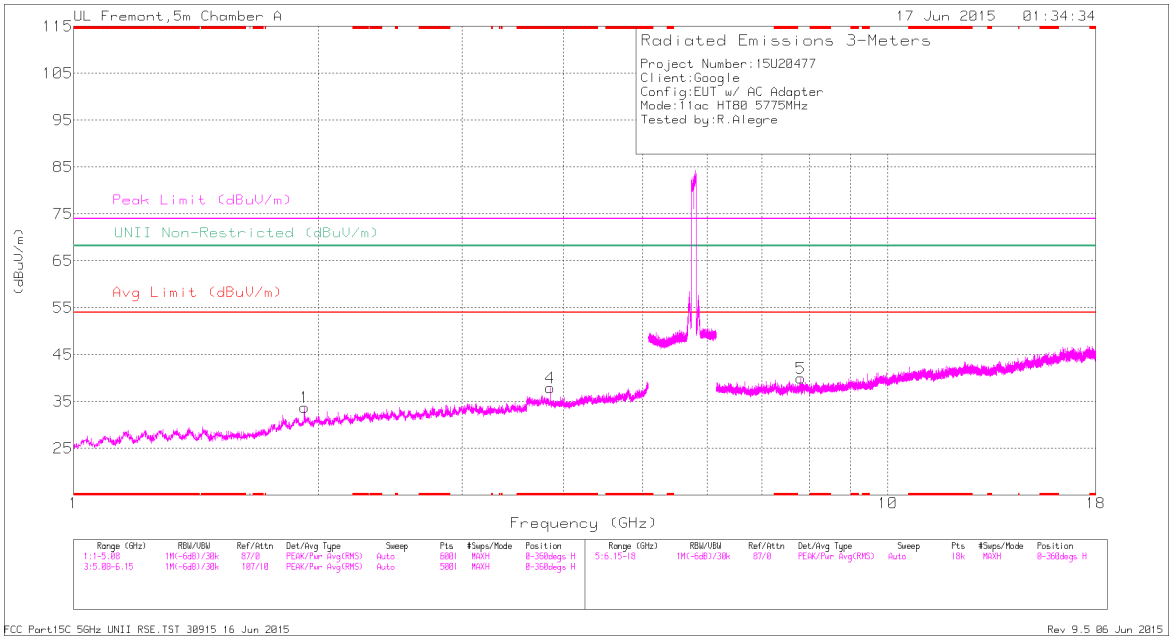
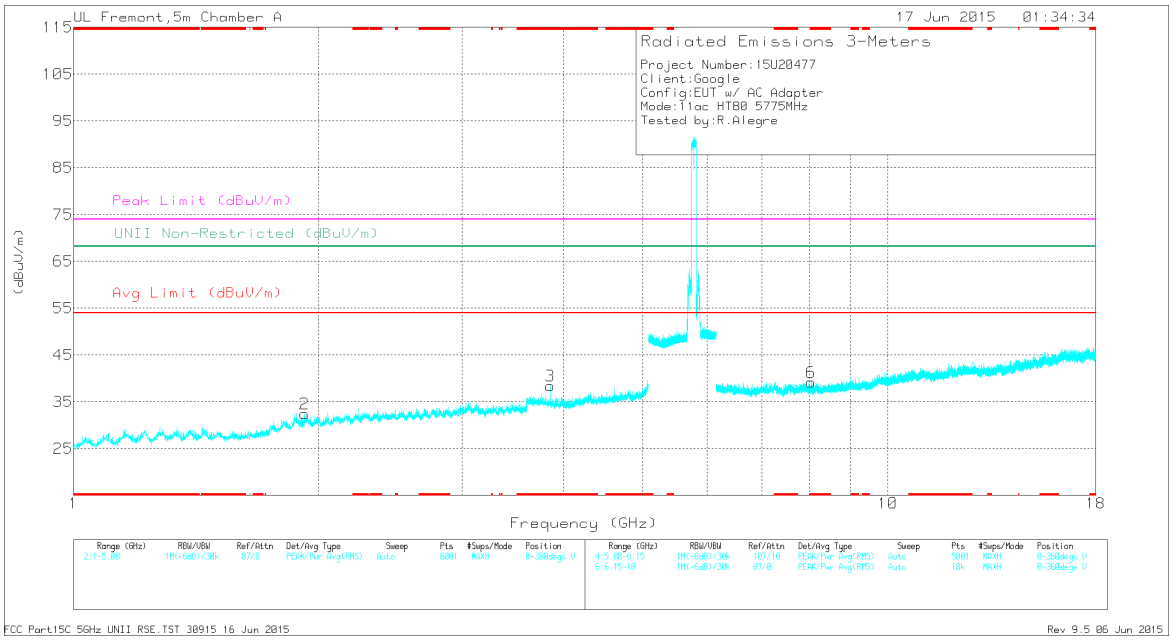
CHANNEL 155 HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL PLOT



VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (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	* 3.85	44.13	PK3	33.4	-32.5	45.03	-	-	74	-28.97	-	-	206	103	H
	* 3.85	35.95	ADR	33.4	-32.5	36.85	54	-17.15	-	-	-	-	206	103	H
3	* 3.85	43.43	PK3	33.4	-32.5	44.33	-	-	74	-29.67	-	-	225	367	V
	* 3.85	34.14	ADR	33.4	-32.5	35.04	54	-18.96	-	-	-	-	225	367	V
6	* 8.047	36.96	PK3	35.7	-26.3	46.36	-	-	74	-27.64	-	-	225	151	V
	* 8.045	26.09	ADR	35.7	-26.3	35.49	54	-18.51	-	-	-	-	225	151	V
1	1.92	45.31	PK3	30.9	-34.5	41.71	-	-	-	-	68.2	-26.49	239	195	H
2	1.92	44.14	PK3	30.9	-34.5	40.54	-	-	-	-	68.2	-27.66	184	144	V
5	7.811	25.56	ADR	35.7	-25.9	35.36	-	-	-	-	-	-	225	201	H

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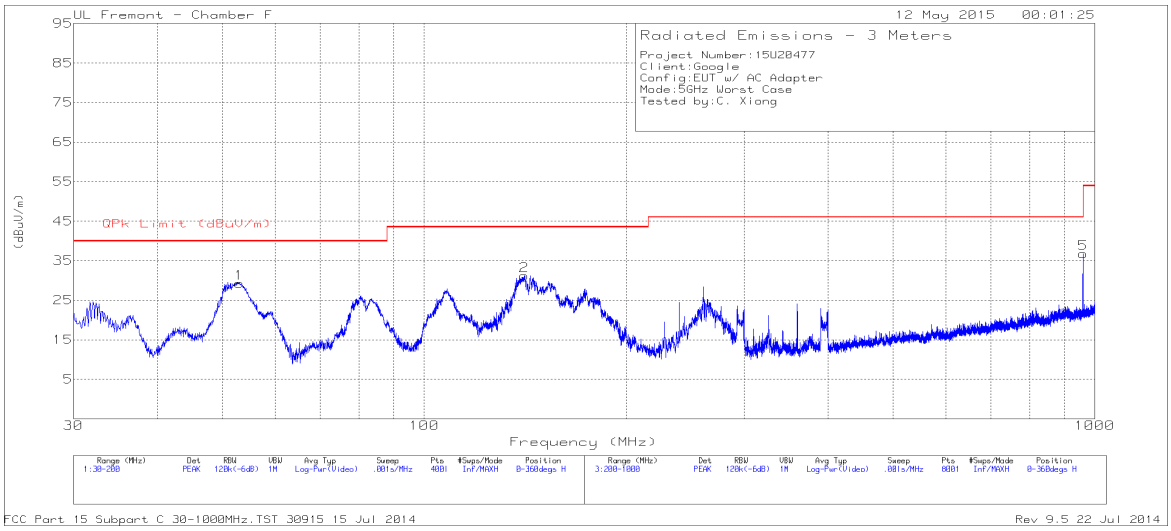
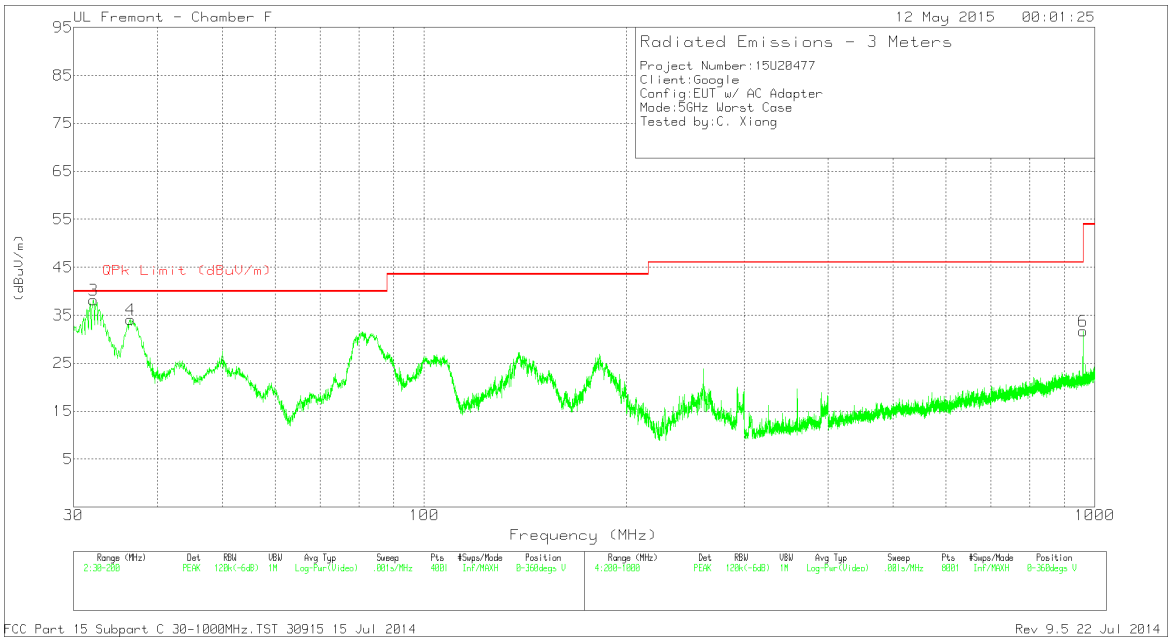
9.18. WORST-CASE BELOW 1 GHz

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

HORIZONTAL PLOT



VERTICAL PLOT



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DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T122 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	53.035	53.53	PK	7.5	-31.7	29.33	40	-10.67	0-360	401	H
2	141.095	49.34	PK	12.8	-30.9	31.24	43.52	-12.28	0-360	201	H
3	32.125	50.54	PK	19.5	-31.9	38.14	40	-1.86	0-360	100	V
	32.4189	47.78	QP	19.3	-31.9	35.18	40	-4.82	13	100	V
4	36.46	49.36	PK	16.6	-31.8	34.16	40	-5.84	0-360	100	V
5	* 960	41.36	PK	22.1	-26.7	36.76	46.02	-9.26	0-360	100	H
6	* 960	36.28	PK	22.1	-26.7	31.68	46.02	-14.34	0-360	100	V

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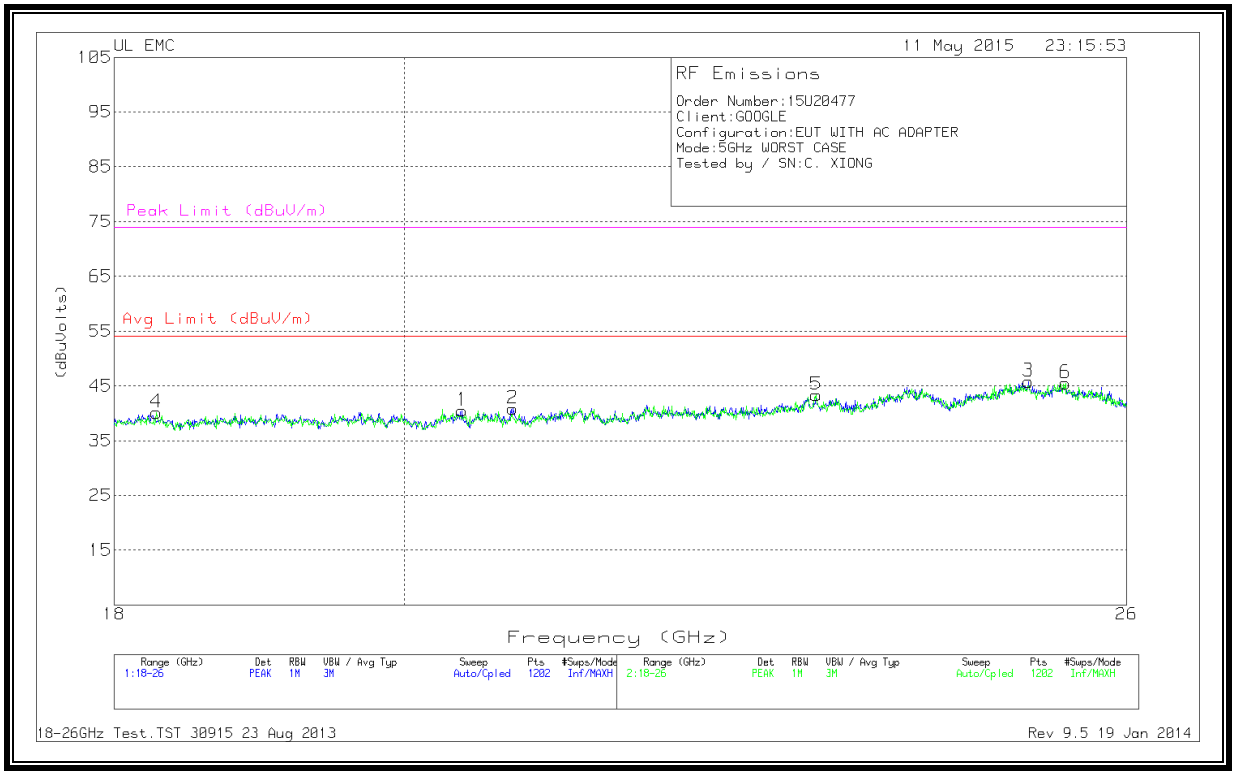
9.19. WORST-CASE ABOVE 18GHz

SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T89 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	20.425	41.8	PK	33	-24.8	-9.5	40.5	54	-13.5	74	-33.5
2	20.804	42.33	PK	33.2	-25.2	-9.5	40.83	54	-13.17	74	-33.17
3	25.087	44.83	PK	34.5	-24	-9.5	45.83	54	-8.17	74	-28.17
4	18.28	42.57	PK	32.5	-25.4	-9.5	40.17	54	-13.83	74	-33.83
5	23.229	42.43	PK	33.8	-23.4	-9.5	43.33	54	-10.67	74	-30.67
6	25.427	44.3	PK	34.6	-23.9	-9.5	45.5	54	-8.5	74	-28.5

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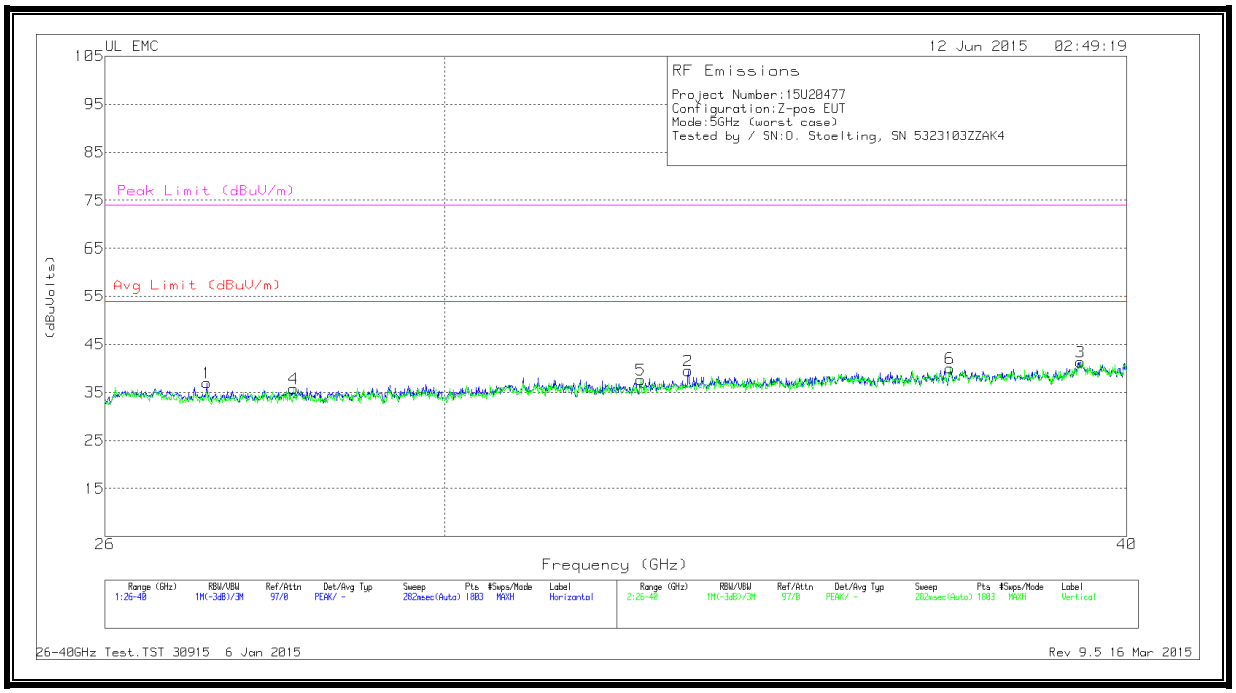
SPURIOUS EMISSIONS 26 TO 40 GHz (WORST-CASE CONFIGURATION)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T90 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	27.142	44.9	Pk	35.5	-33.9	-9.5	37	54	-17	74	-37
2	33.249	48.3	Pk	36.9	-36.2	-9.5	39.5	54	-14.5	74	-34.5
3	39.223	48.33	Pk	38.5	-36	-9.5	41.33	54	-12.67	74	-32.67
4	28.152	44.43	Pk	35.8	-34.9	-9.5	35.83	54	-18.17	74	-38.17
5	32.588	46.97	Pk	36.3	-36.1	-9.5	37.67	54	-16.33	74	-36.33
6	37.125	49.8	Pk	37.2	-37.5	-9.5	40	54	-14	74	-34

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10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

NCC LP0002 §2.3

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

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

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

Line conducted data is recorded for both NEUTRAL and HOT lines

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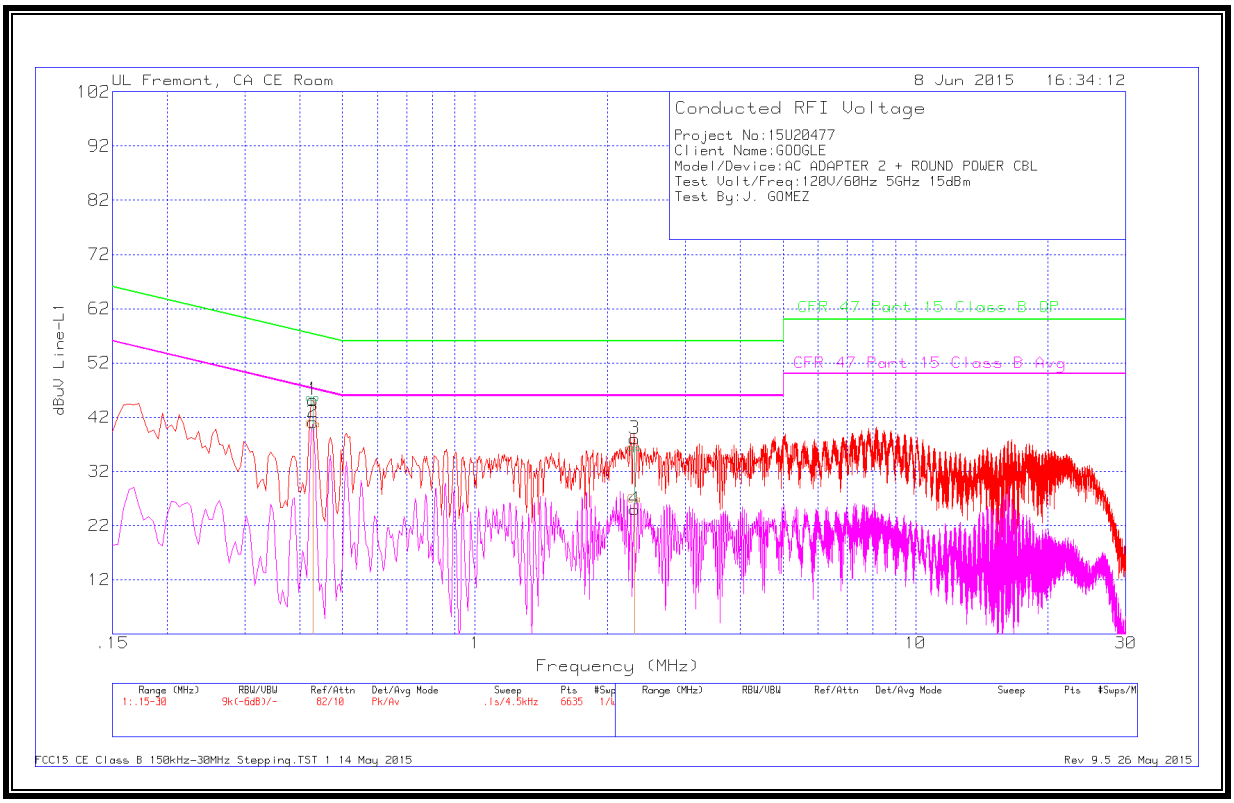
RESULTS

LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L1	LC Cables 1&3	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	Margin (dB)	CFR 47 Part 15 Class B Avg	Margin (dB)
1	.42788	44.04	Qp	.4	0	44.44	57.29	-12.85	-	-
2	.42788	39.15	Ca	.4	0	39.55	-	-	47.29	-7.74
3	2.29988	34.89	Qp	.2	.1	35.19	56	-20.81	-	-
4	2.29988	25.48	Ca	.2	.1	25.78	-	-	46	-20.22

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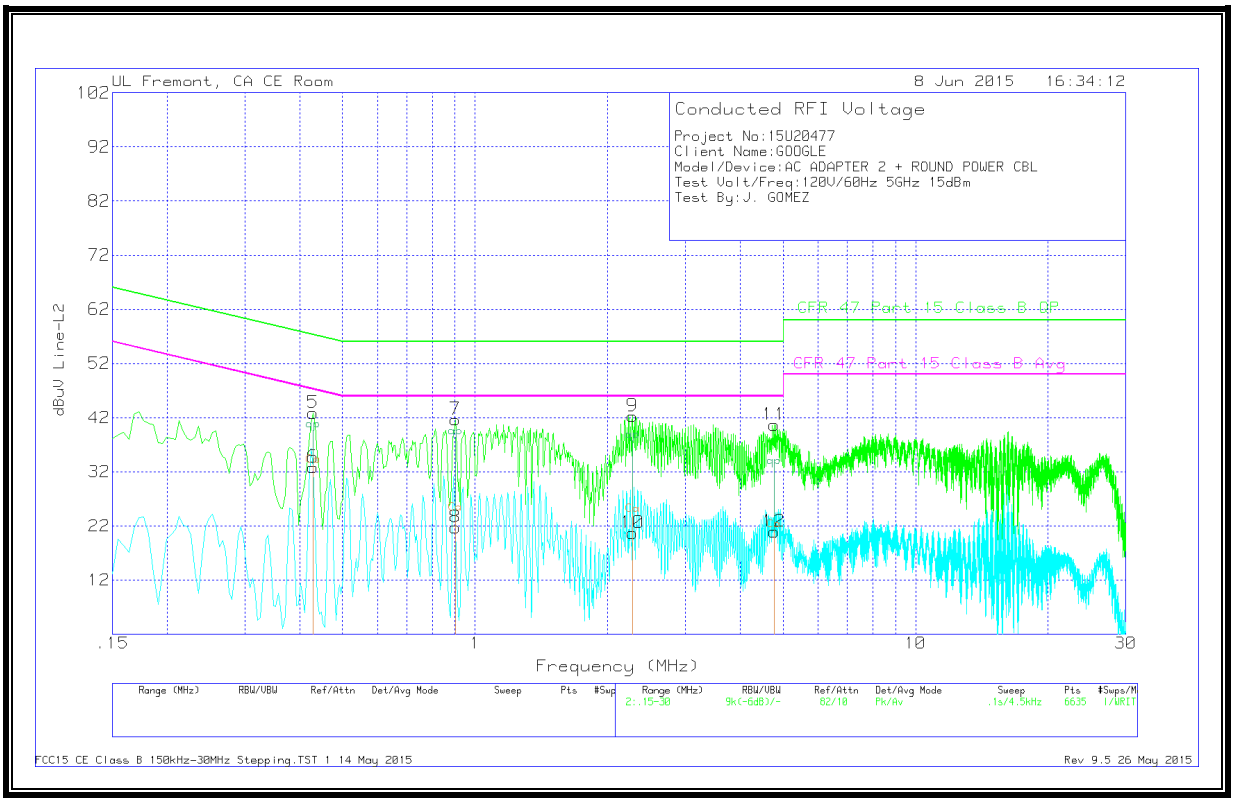
LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L2	LC Cables 2&3	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	Margin (dB)	CFR 47 Part 15 Class B Avg	Margin (dB)
5	.42878	39.26	Qp	.4	0	39.66	57.28	-17.62	-	-
6	.42878	32.78	Ca	.4	0	33.18	-	-	47.28	-14.1
7	.90218	38.13	Qp	.3	0	38.43	56	-17.57	-	-
8	.90218	24.06	Ca	.3	0	24.36	-	-	46	-21.64
9	2.27963	37.46	Qp	.2	.1	37.76	56	-18.24	-	-
10	2.27963	23.81	Ca	.2	.1	24.11	-	-	46	-21.89
11	4.77128	32.62	Qp	.2	.1	32.92	56	-23.08	-	-
12	4.77128	20.93	Ca	.2	.1	21.23	-	-	46	-24.77

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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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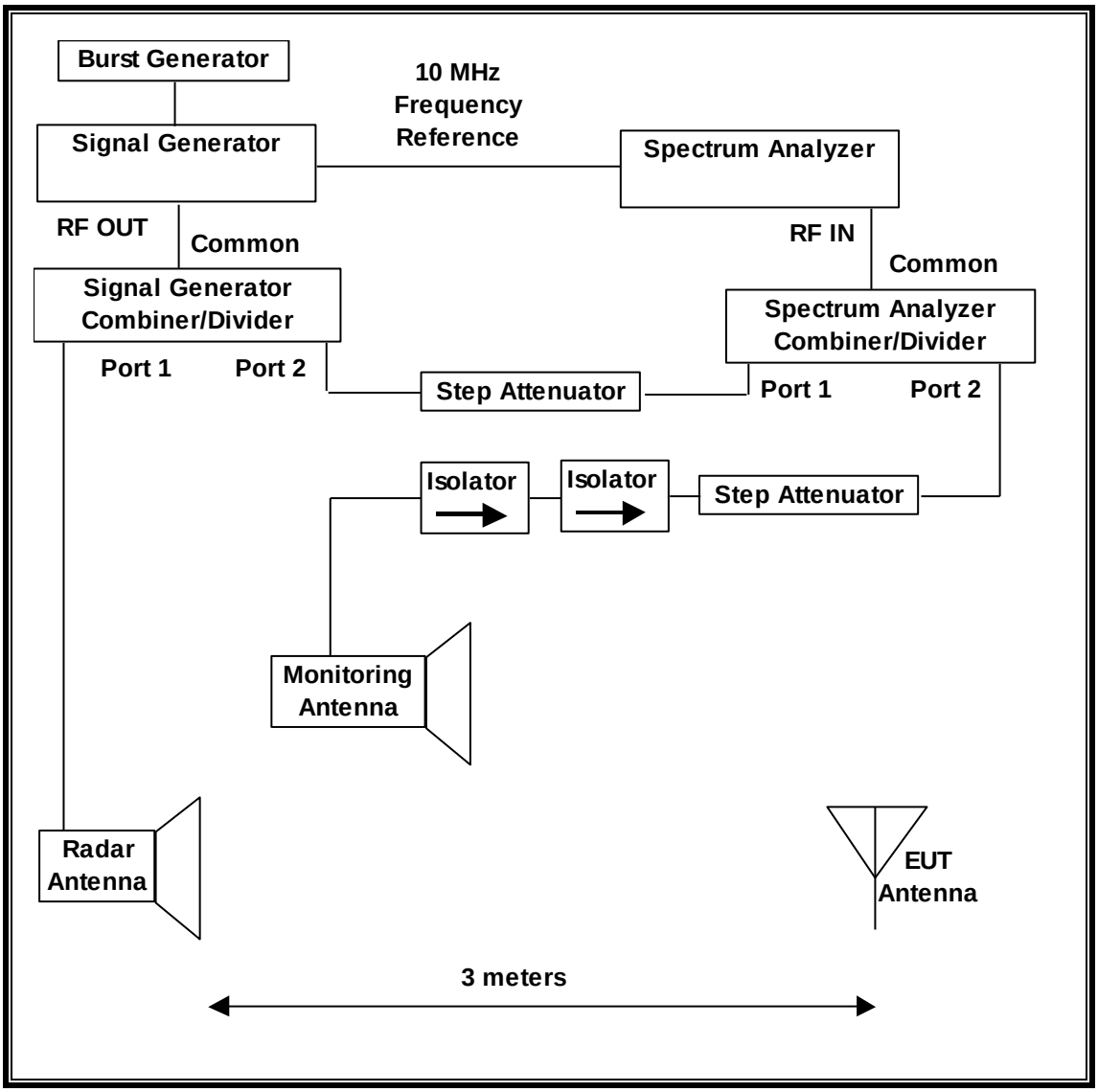
11.1.2. TEST AND MEASUREMENT SYSTEM

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	Asset Number	Cal Due	ue
Spectrum Analyzer, PXA, 3Hz to 50GHz	Agilent	N9030A	MY52350671	06/26/15	15
Signal Generator, MXG X-Series RF Vector	Agilent	N5172B	MY51350337	02/17/18	18

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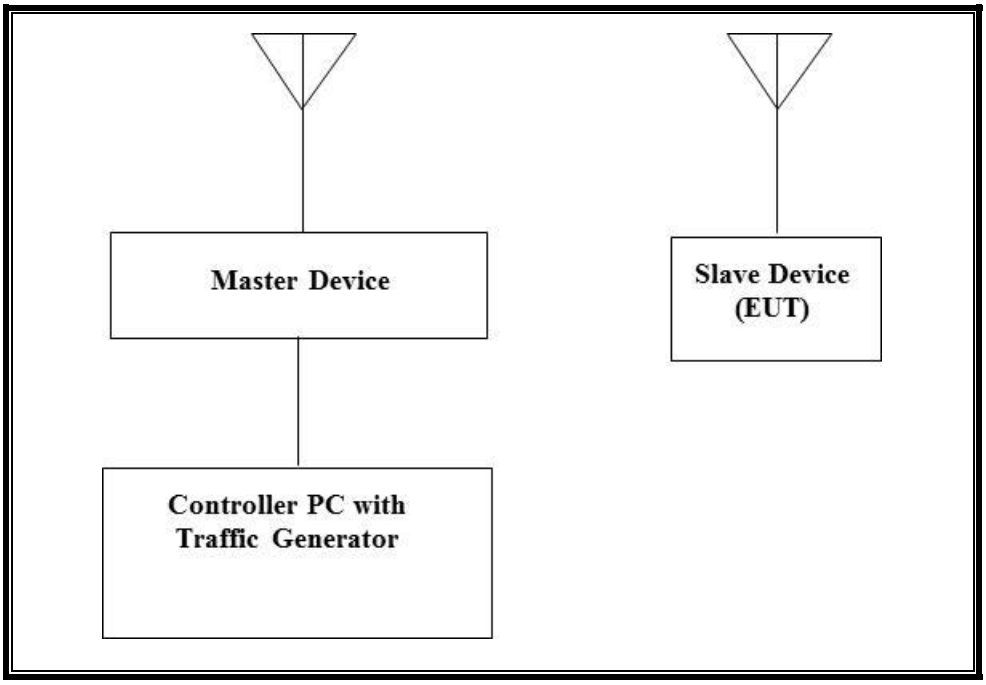
11.1.3. SETUP OF EUT

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	Cisco	AIR-CAP3702E-A-K9	FTX181570A6	LDK102087
P.O.E. Injector	Phihong	POE30U-560(G)	PHI170102N2	DoC
Notebook PC (Controller/Server)	Lenovo	Type 4236-B92	PB-HEX04 12/05	DoC
AC Adapter (Controller/Server PC)	Lenovo	42T4418	11S42T4418Z1ZGWG08 R90M	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 16.44 dBm EIRP in the 5250-5350 MHz band and 16.2 dBm EIRP in the 5470-5725 MHz band.

The only antenna assembly utilized with the EUT has a gain of 2.1 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.

The EUT uses one transmitter/receiver chain to perform radiated tests.

WLAN traffic was generated by transferring a data stream from the controller/server PC to the EUT using iPerf version 2.0.5 software package.

The effective channel loading is around 13.74%.

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

The EUT utilizes the 802.11a/n architecture. Two nominal channel bandwidths are implemented: 20 MHz and 40 MHz.

The software installed in the EUT is Build=1.15.32444.

UNIFORM CHANNEL SPREADING

This is requirement not applicable to Slave Devices.

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

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

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

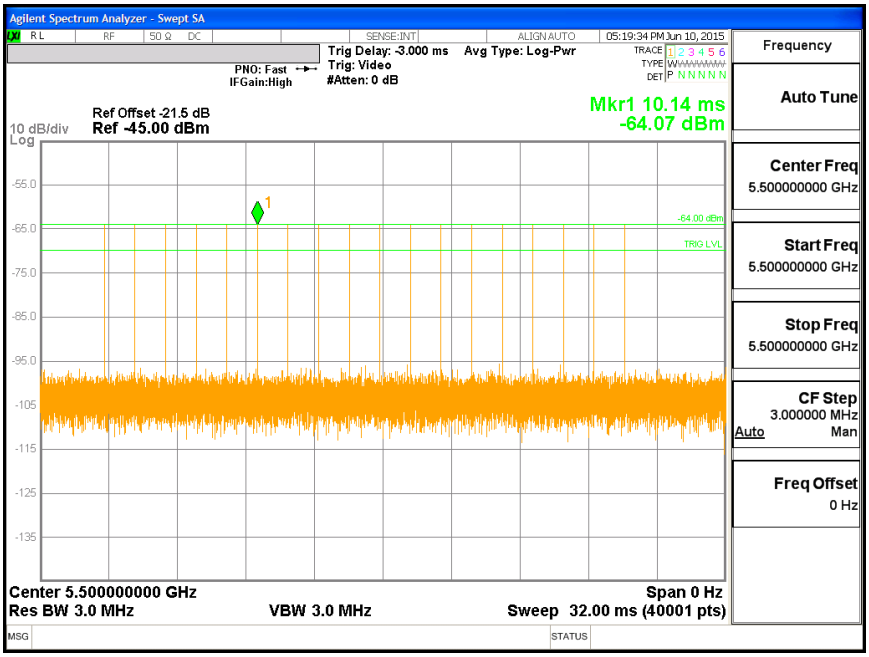
11.2.1. TEST CHANNEL

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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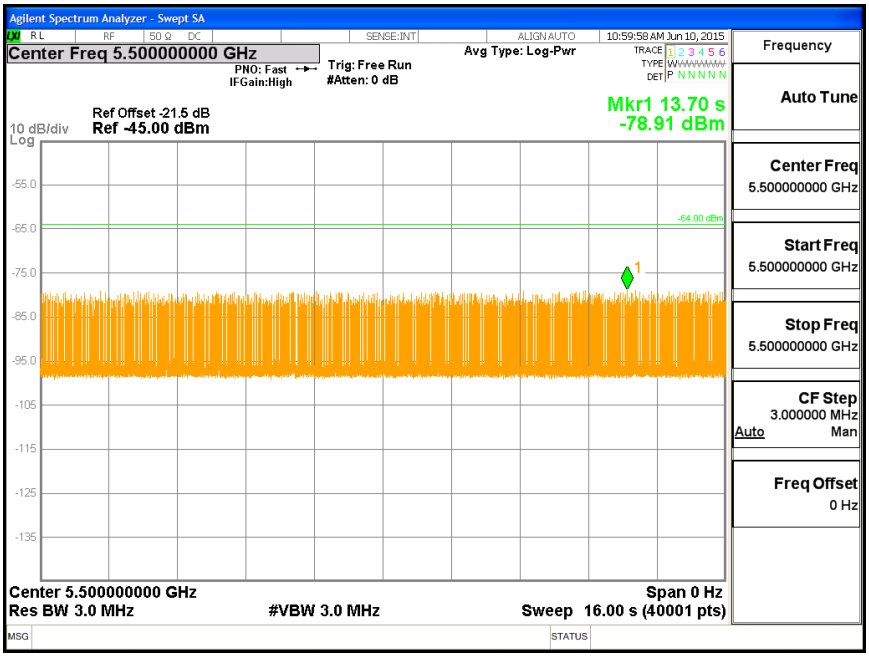
TRAFFIC

SLAVE TRAFFIC



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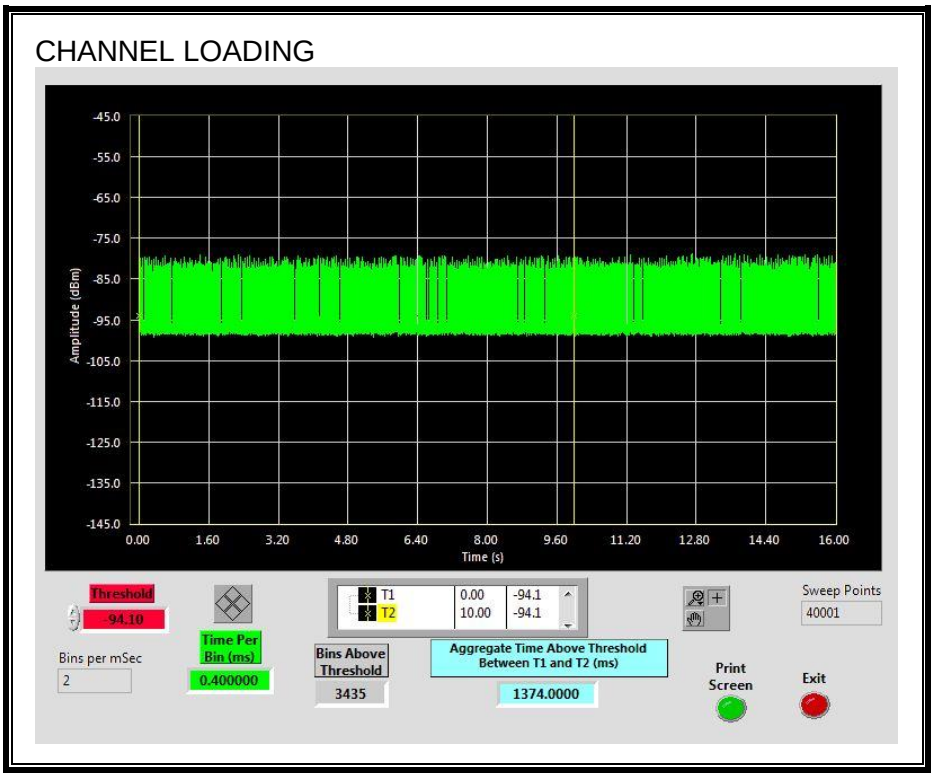
CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 13.74%

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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)
0.0852	**10**

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

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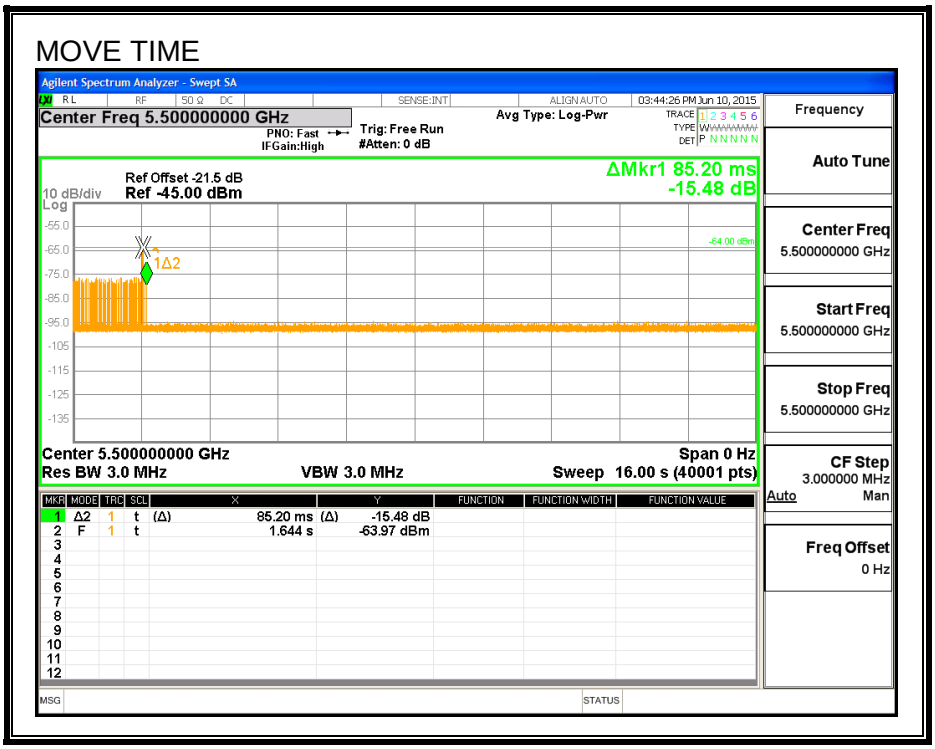
MOVE TIME



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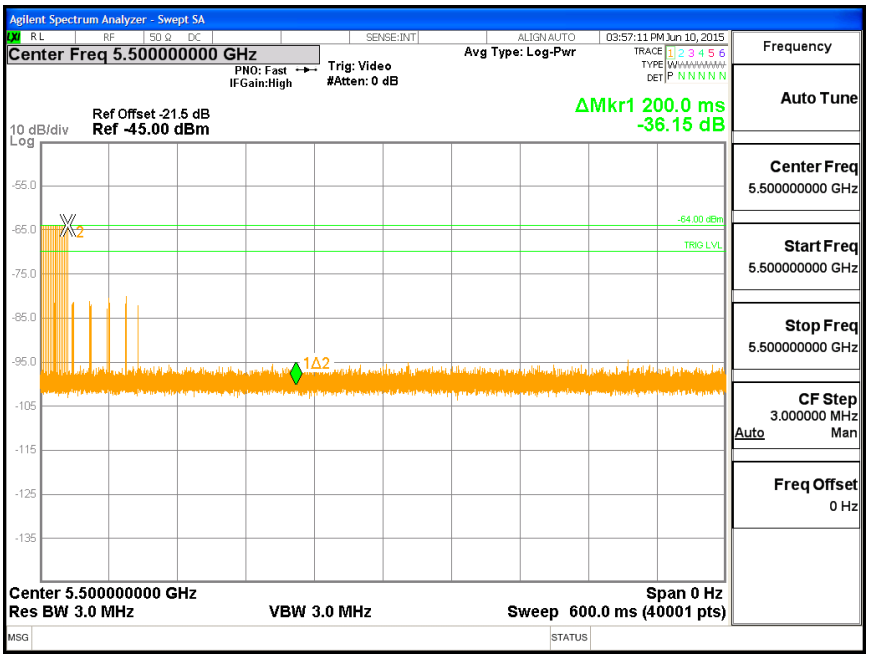
CHANNEL CLOSING TIME

CLOSING TIME



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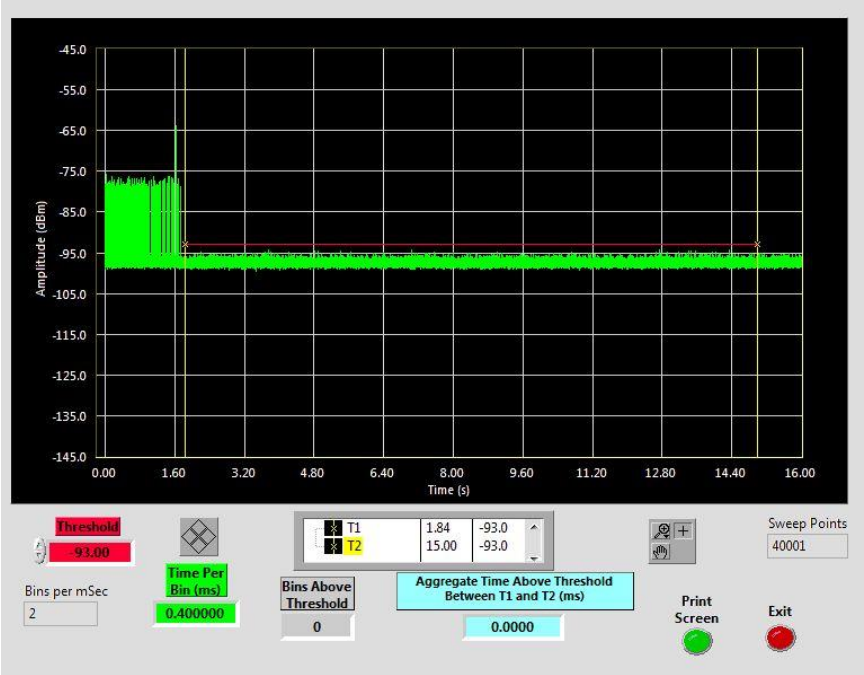
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.

AGGREGATE CLOSING TIME



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11.3. RESULTS FOR 40 MHz BANDWIDTH

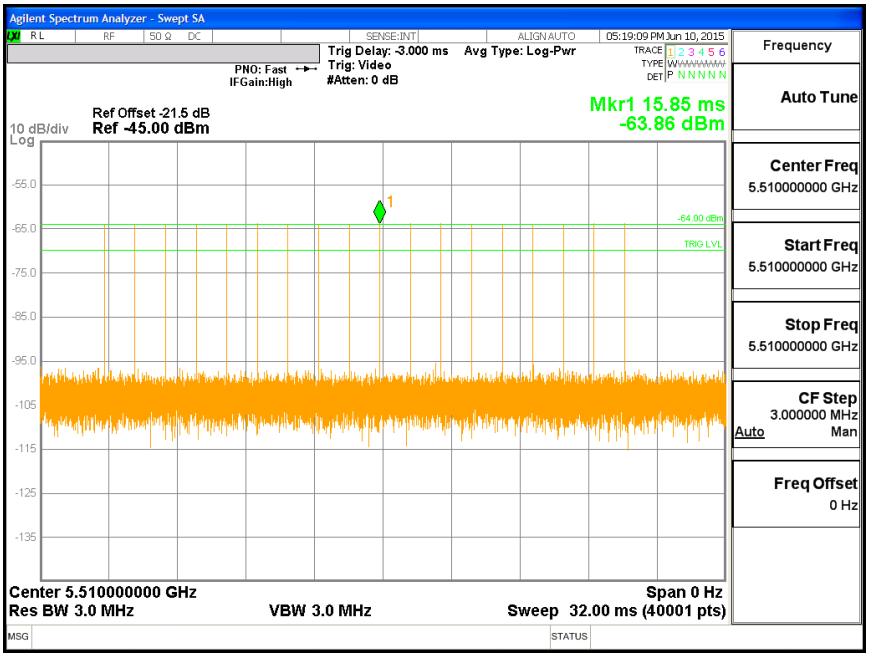
11.3.1. TEST CHANNEL

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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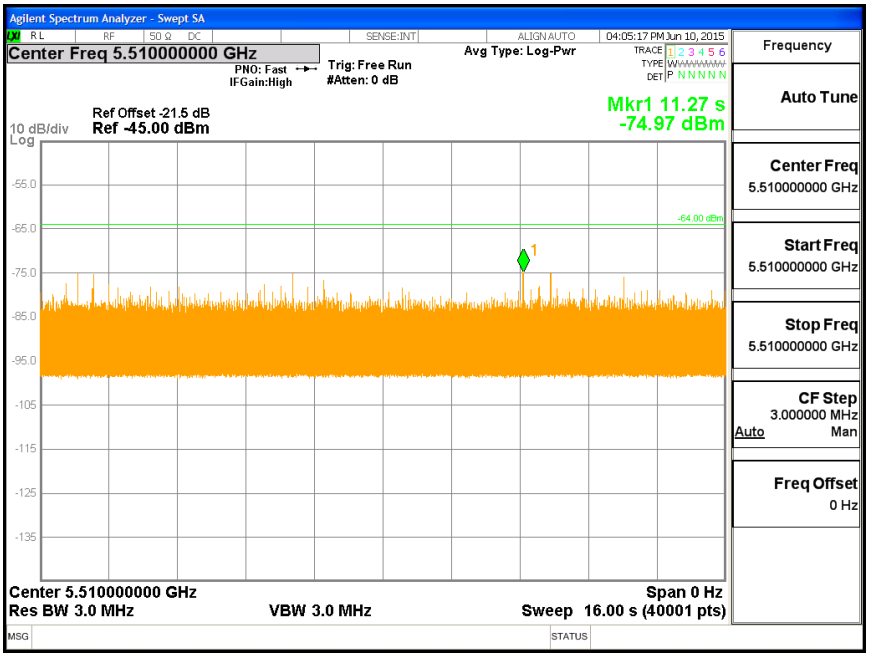
TRAFFIC

SLAVE TRAFFIC



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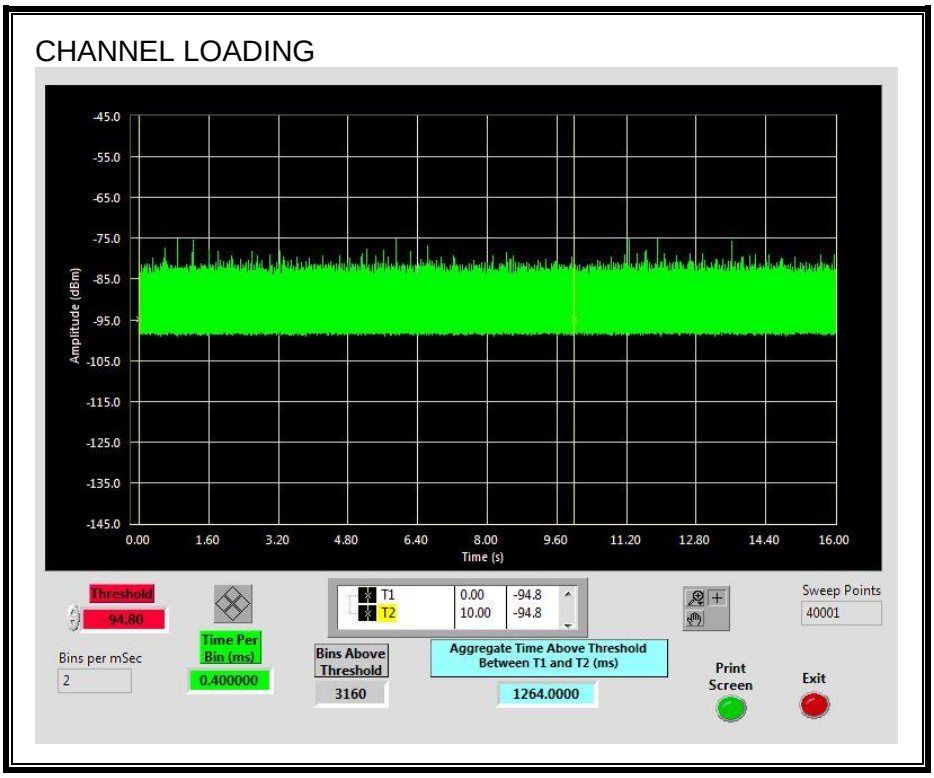
CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 12.64%

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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)
0.2544	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.40	60

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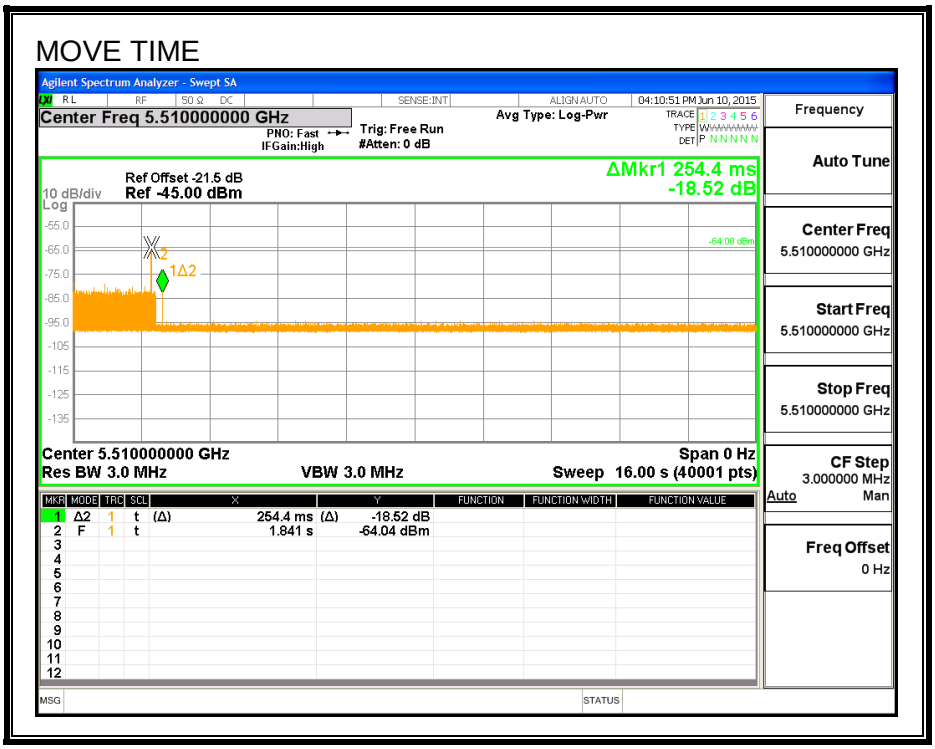
MOVE TIME



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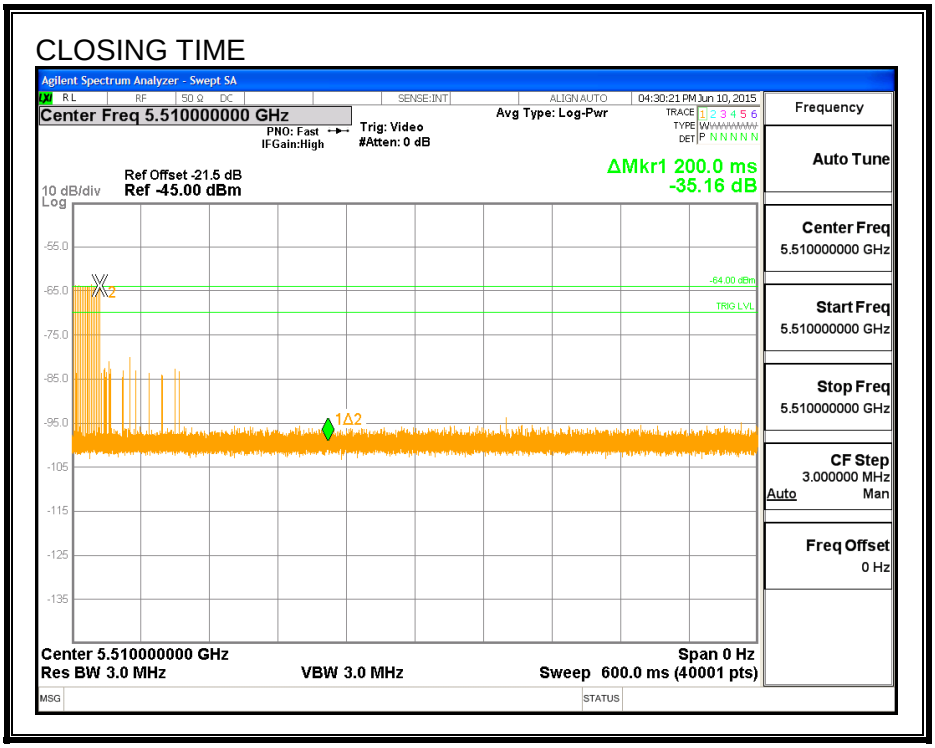
CHANNEL CLOSING TIME



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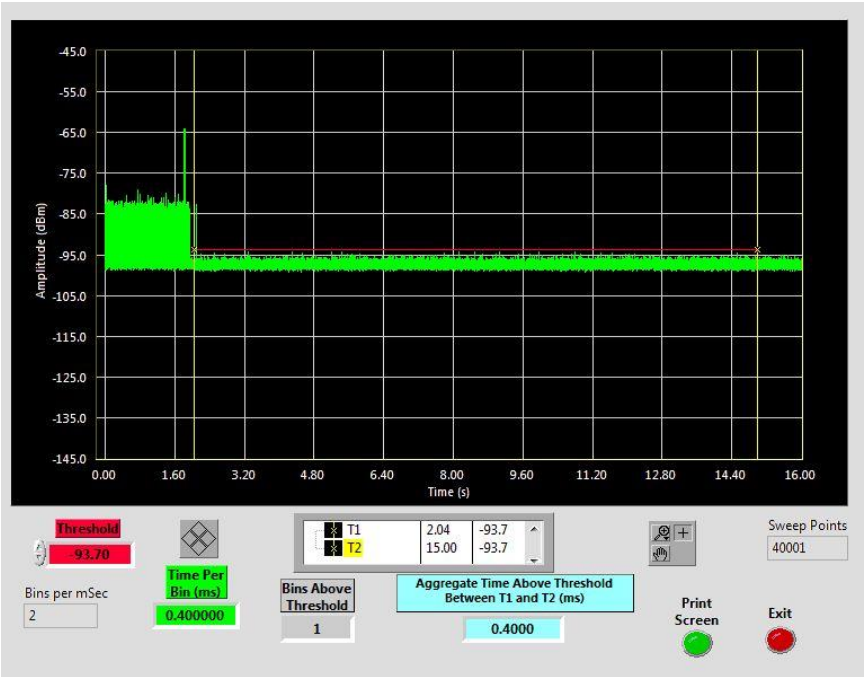
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.

AGGREGATE CLOSING TIME



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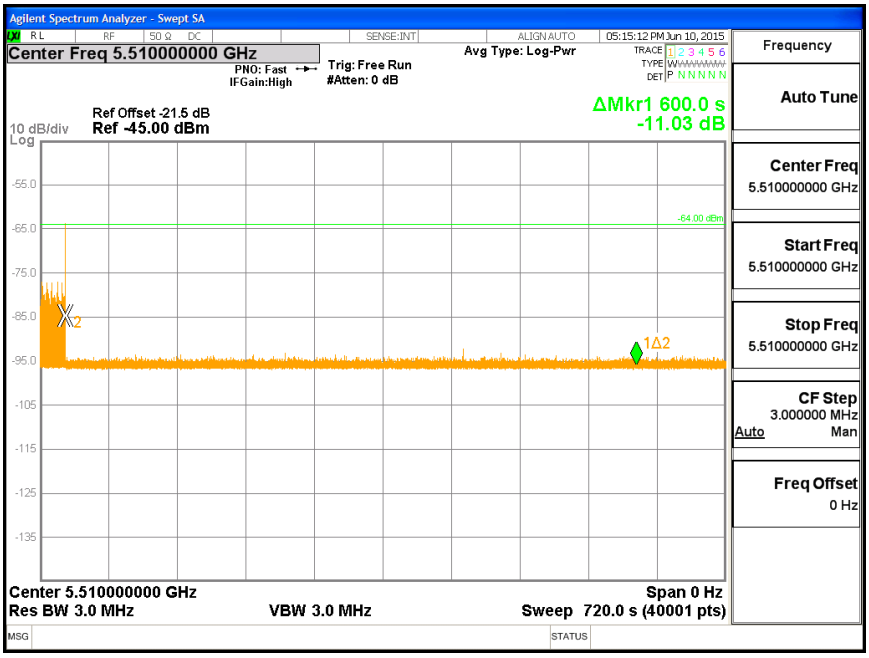
11.3.5. 10-MINUTE BEACON MONITORING PERIOD

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

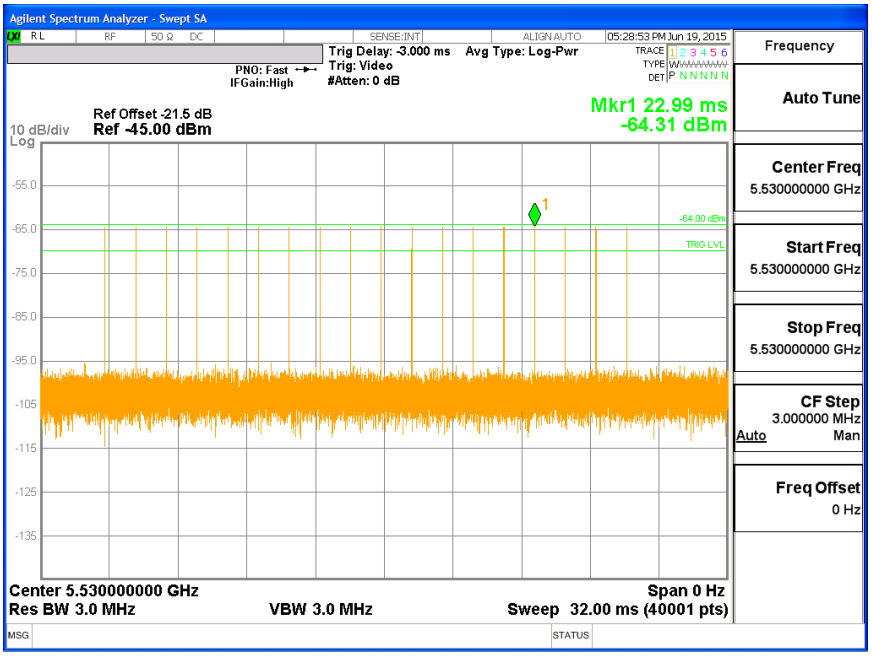
11.4.1. TEST CHANNEL

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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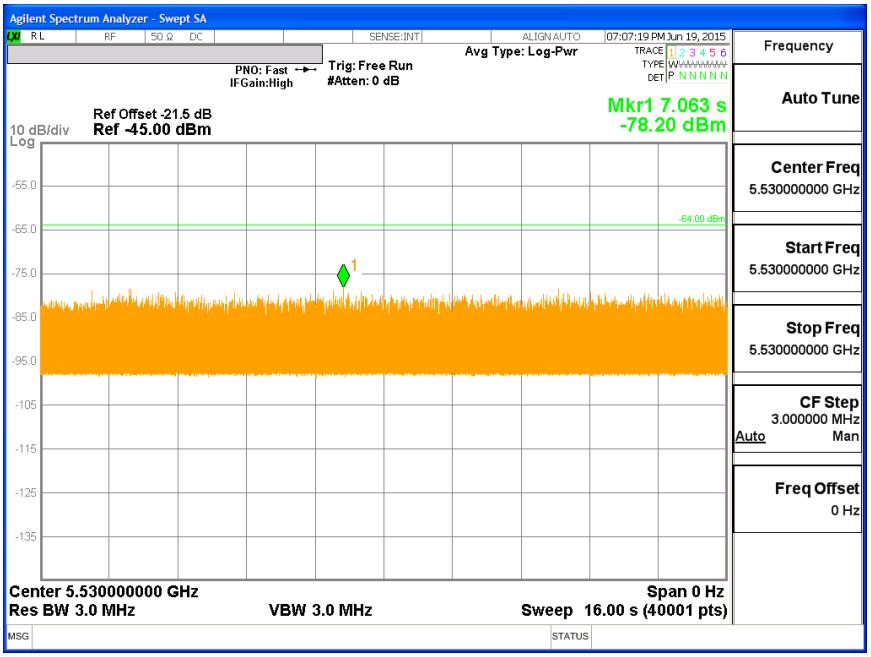
TRAFFIC

SLAVE TRAFFIC



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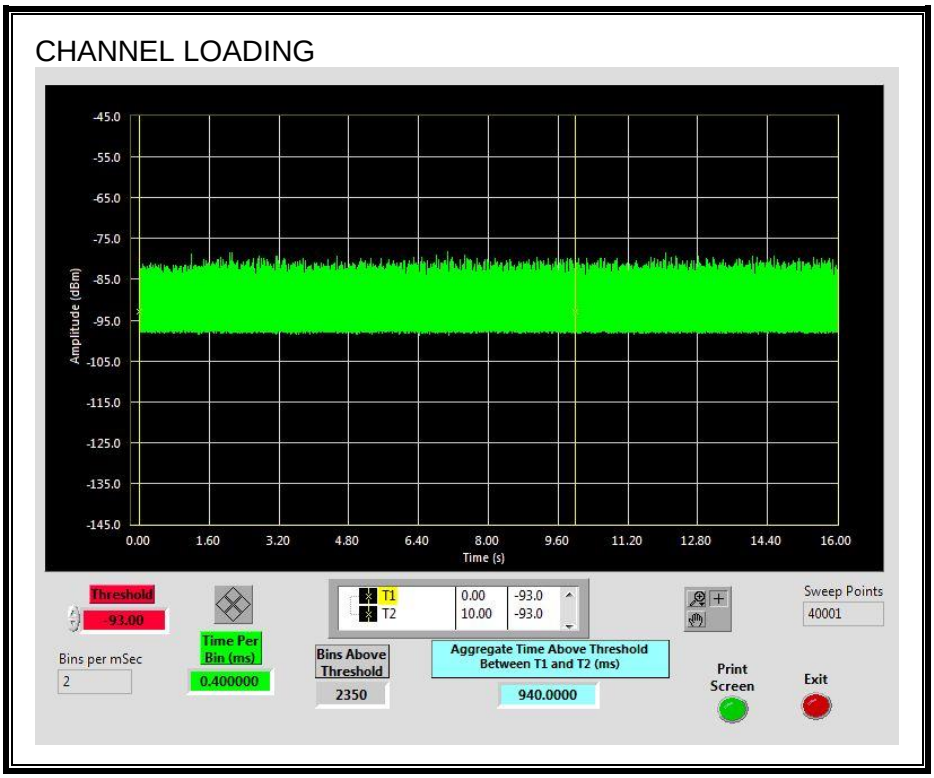
CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 9.40%

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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)
0.040	10

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

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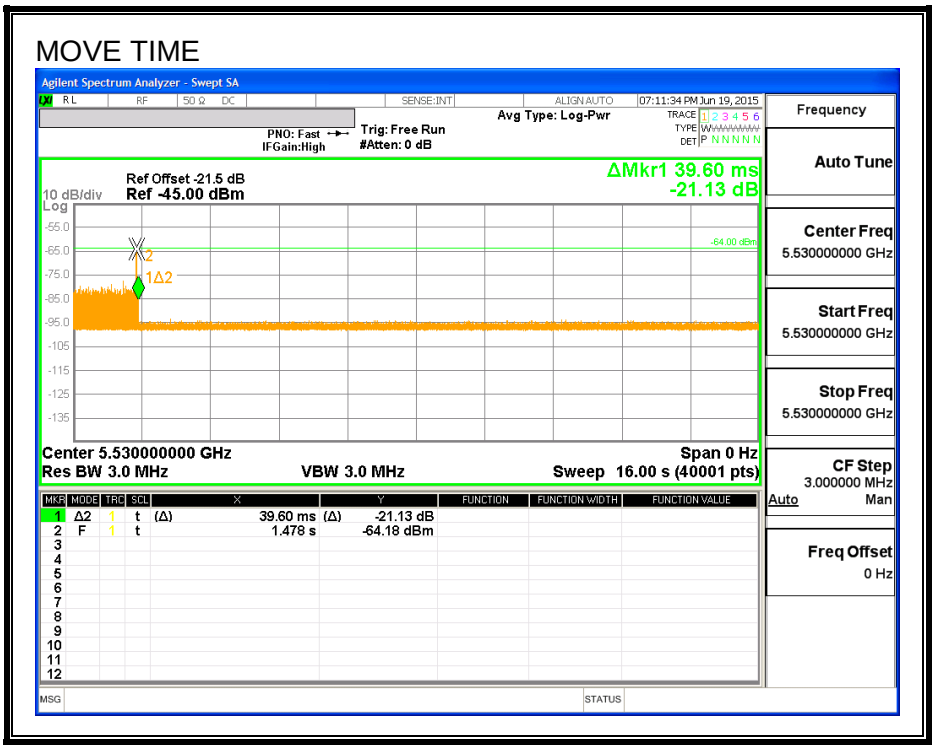
MOVE TIME



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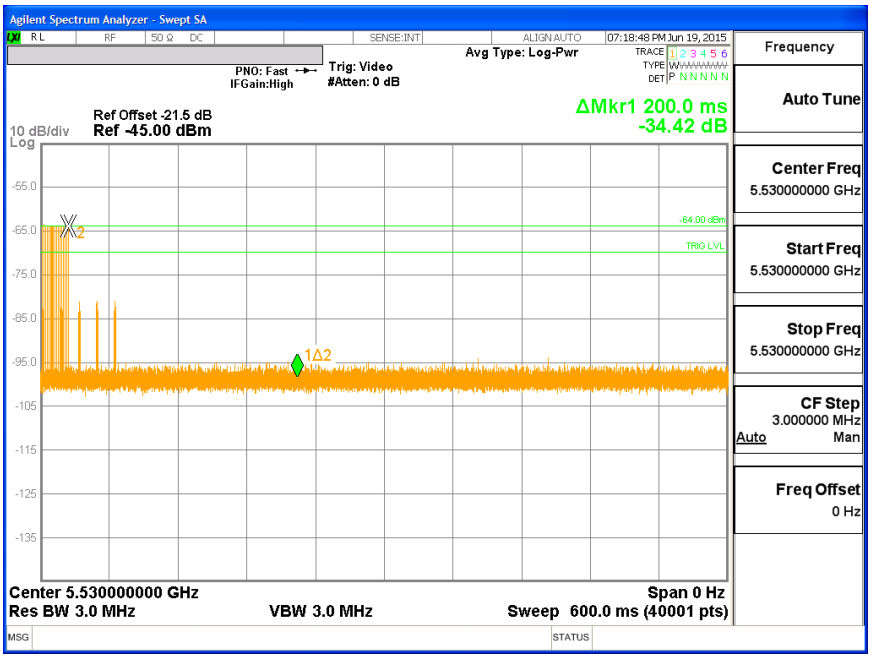
CHANNEL CLOSING TIME

CLOSING TIME



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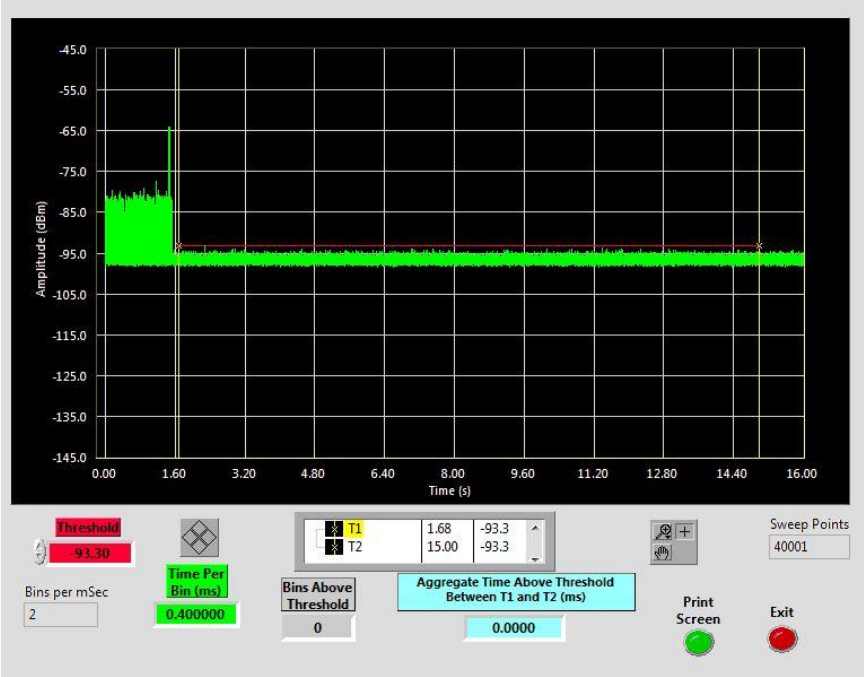
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.

AGGREGATE CLOSING TIME



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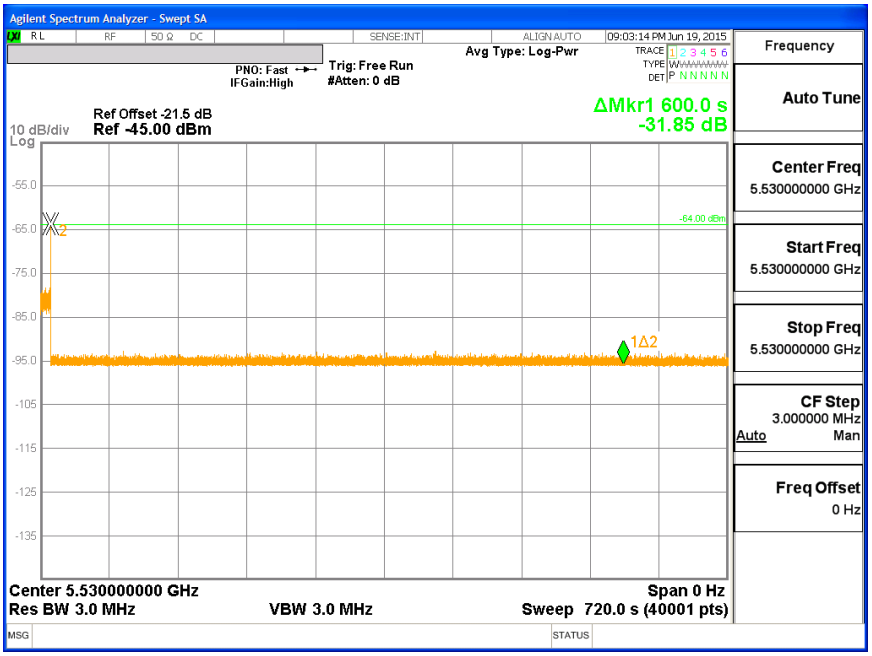
11.4.5. 10-MINUTE BEACON MONITORING PERIOD

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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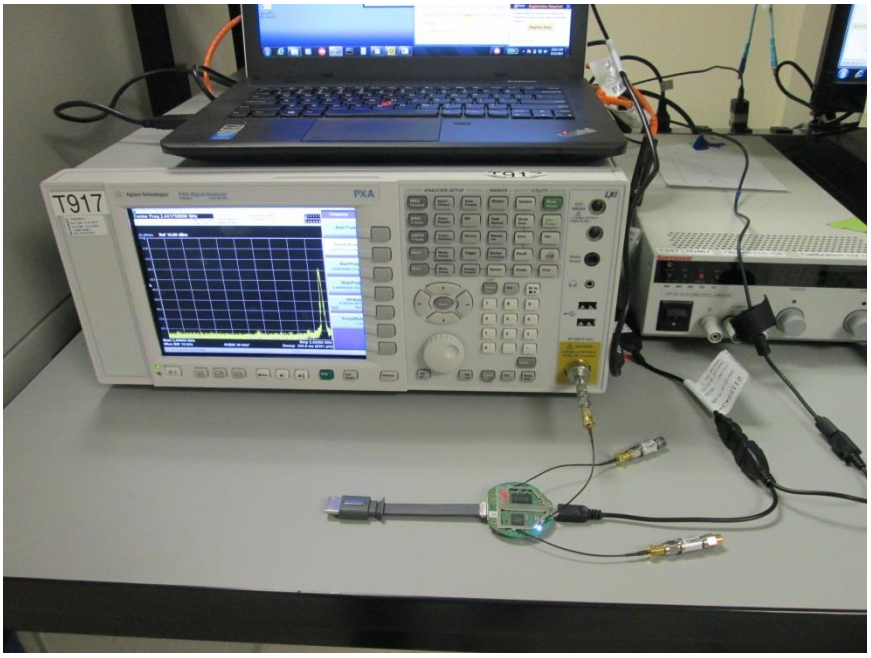
12. SETUP PHOTOS

ANTENNA PORT CONDUCTED RF MEASUREMENT SETUP

ANTENNA PORT CONDUCTED PHOTO



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