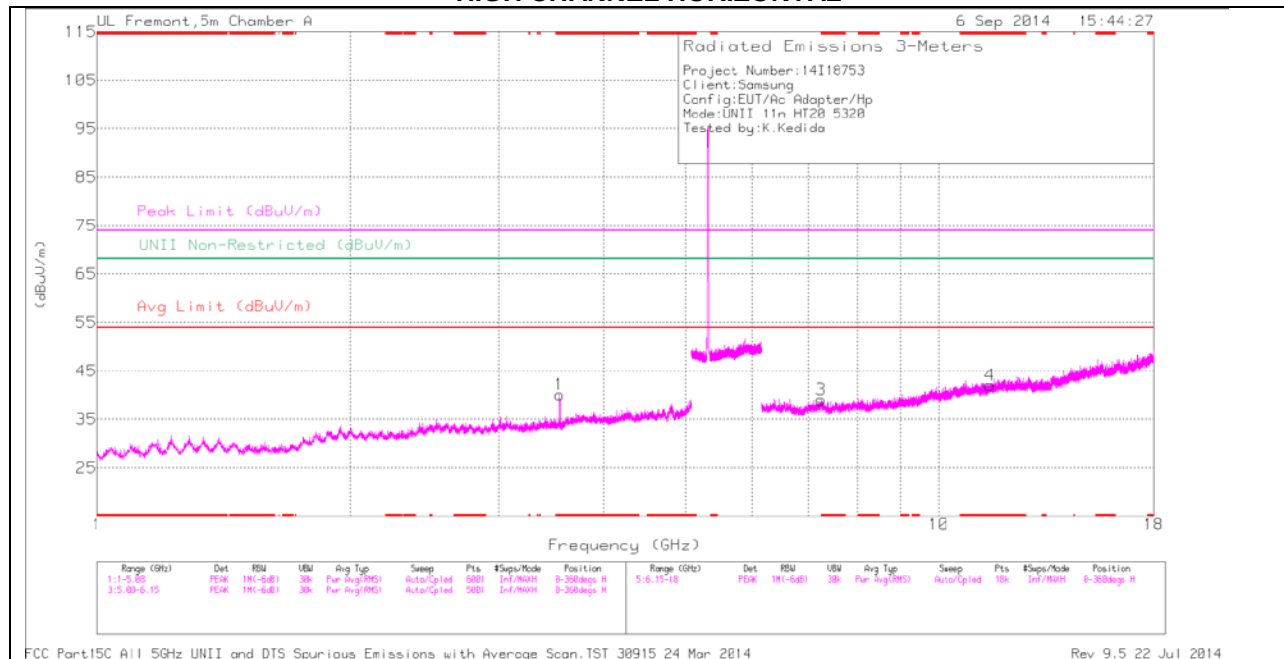
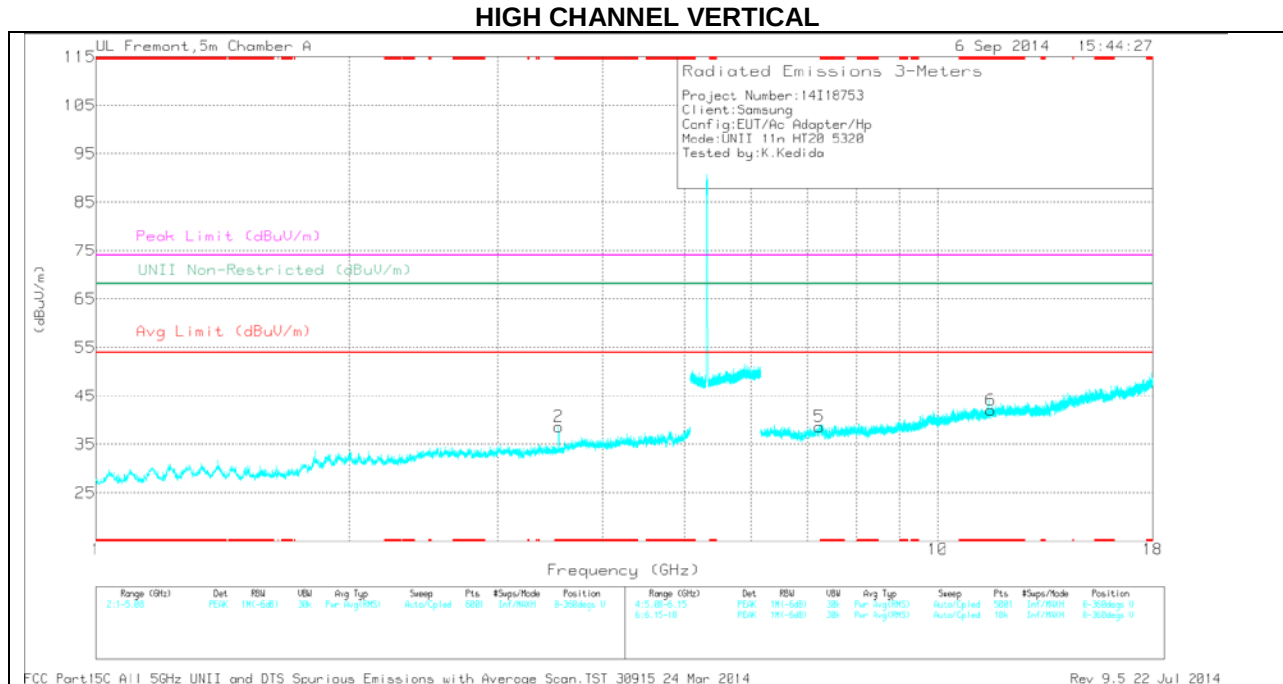


HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Ftr/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	38.17	PK	33.1	-31.1	0	40.17	-	-	74	-33.83	-	-	0-360	100	H
2	* 3.547	36.73	PK	33.1	-31.1	0	38.73	-	-	74	-35.27	-	-	0-360	201	V
4	* 11.503	26.04	PK	38.3	-22.3	0	42.04	-	-	74	-31.96	-	-	0-360	201	H
6	* 11.559	26.12	PK	38.4	-22.4	0	42.12	-	-	74	-31.88	-	-	0-360	100	V
5	7.236	29	PK	35.2	-25.5	0	38.7	-	-	-	-	68.2	-29.5	0-360	201	V
3	7.249	29.32	PK	35.2	-25.4	0	39.12	-	-	-	-	68.2	-29.08	0-360	100	H

PK - Peak detector

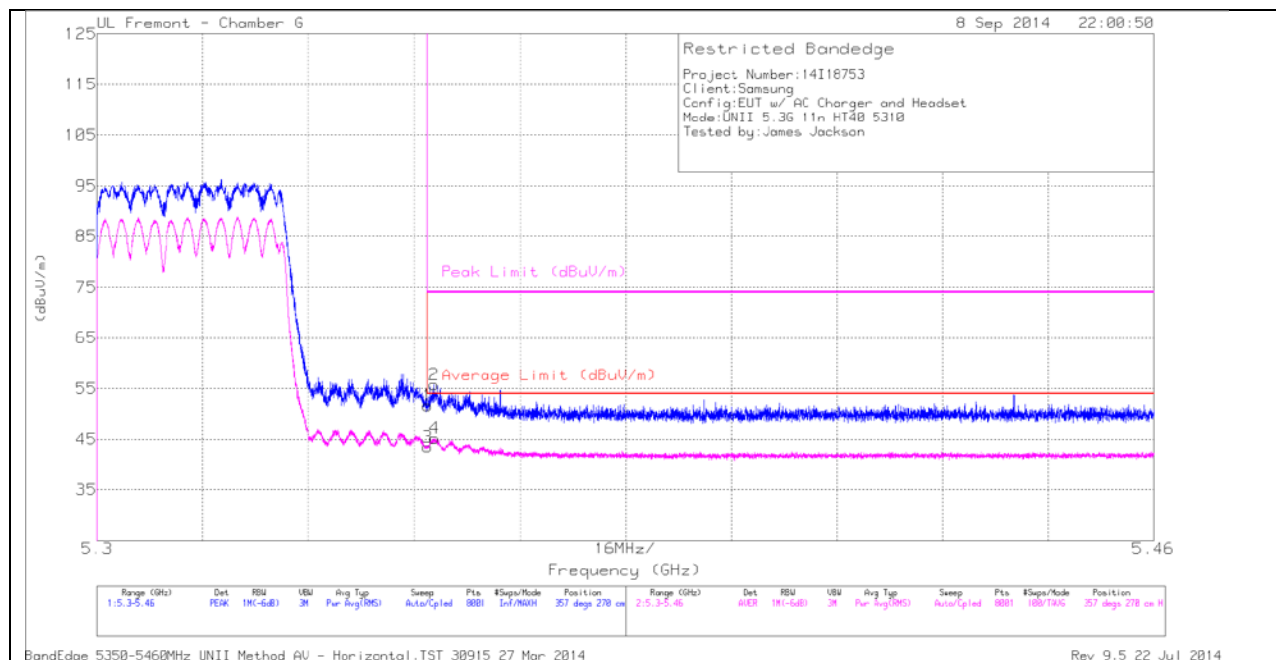
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.547	43.53	PK1	33.1	-31.1	0	45.53	-	-	74	-28.47	-	-	359	116	H
* 3.547	35.86	AD1	33.1	-31.1	.33	38.18	54	-15.82	-	-	-	-	359	116	H

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11.1.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.3 GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)

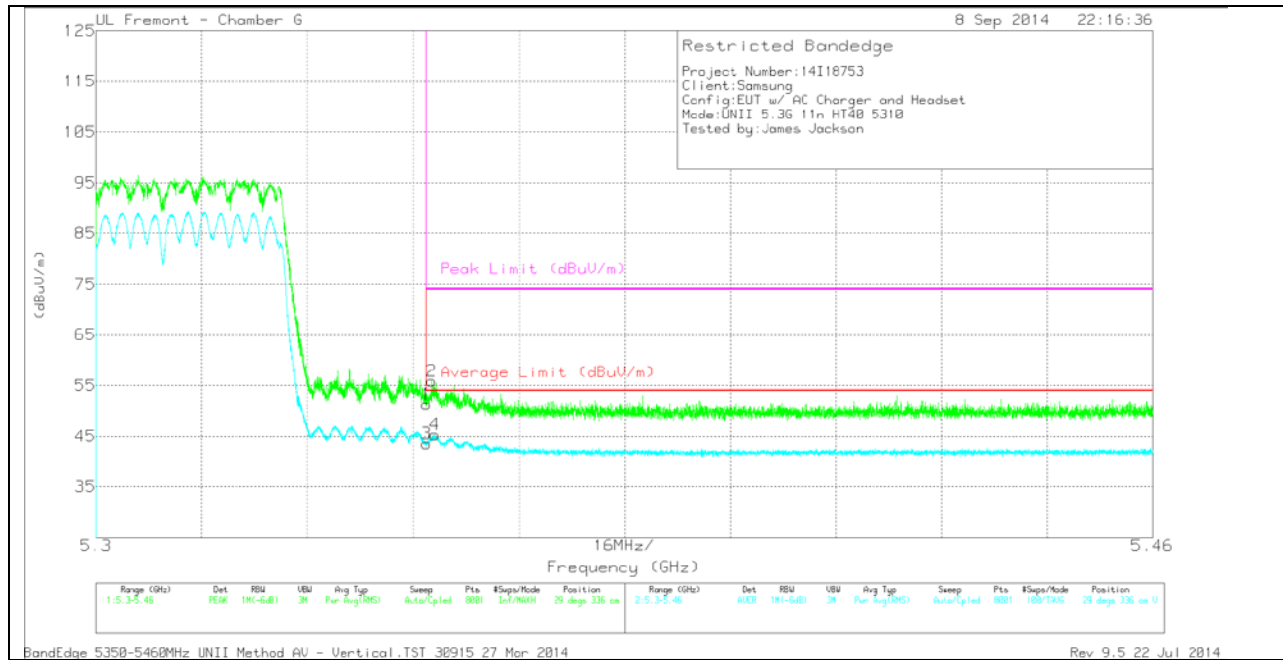
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	40.7	PK	34.6	-23.7	0	51.6	-	-	74	-22.4	357	270	H
3	* 5.35	31.47	RMS	34.6	-23.7	.56	43.47	54	-10.53	-	-	357	270	H
2	* 5.351	44.9	PK	34.6	-23.7	0	55.8	-	-	74	-18.2	357	270	H
4	* 5.351	33.22	RMS	34.6	-23.7	.56	45.22	54	-8.78	-	-	357	270	H

VERTICAL PEAK AND AVERAGE PLOT

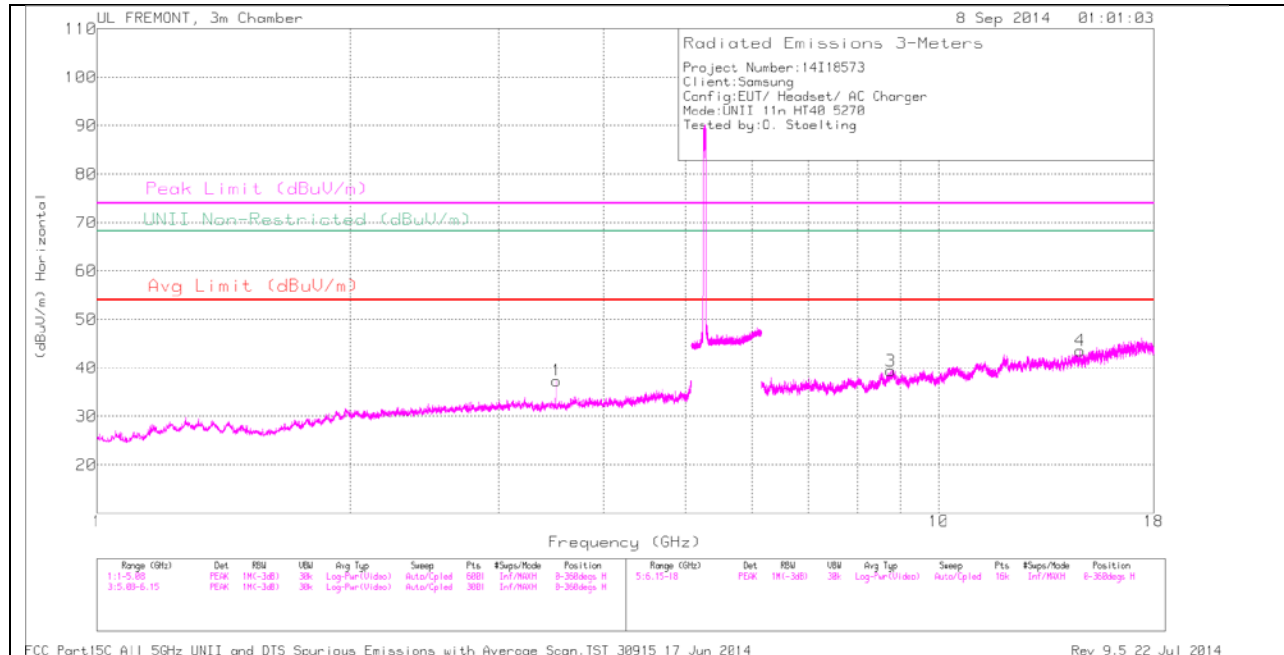


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb/r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	40.33	PK	34.6	-23.7	0	51.23	-	-	74	-22.77	29	336	V
3	* 5.35	31.53	RMS	34.6	-23.7	.56	43.53	54	-10.47	-	-	29	336	V
2	* 5.351	44.95	PK	34.6	-23.7	0	55.85	-	-	74	-18.15	29	336	V
4	* 5.351	33.3	RMS	34.6	-23.7	.56	45.3	54	-8.7	-	-	29	336	V

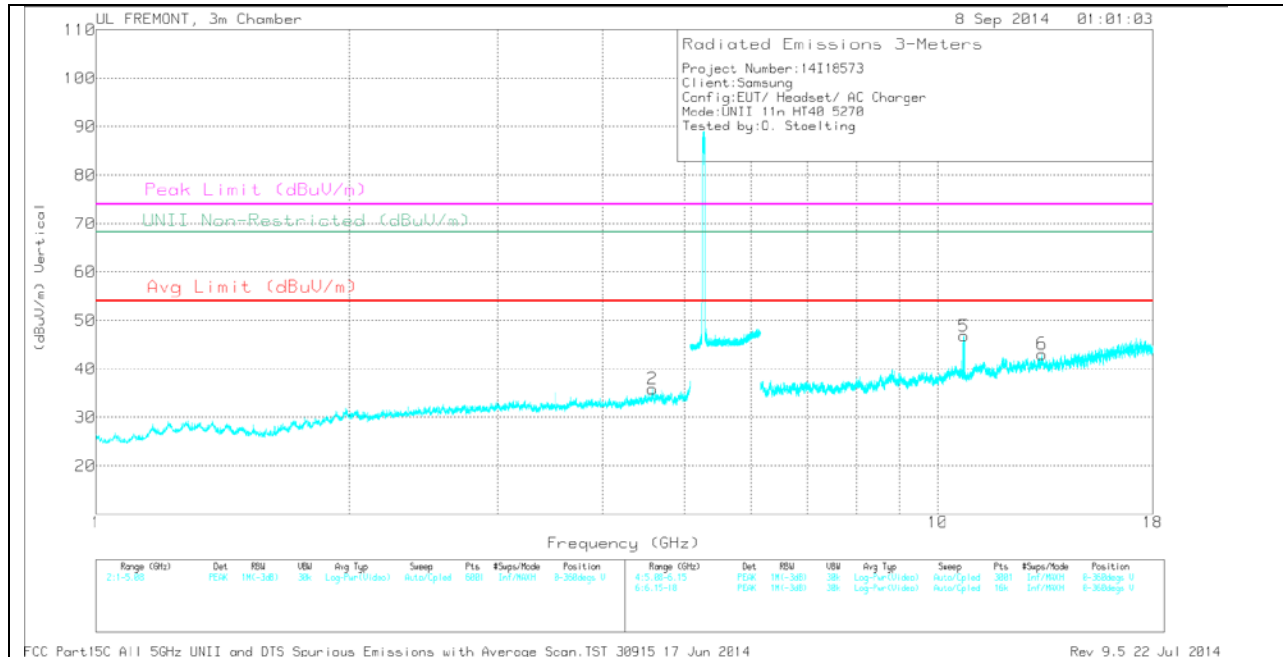
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/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	3.513	36.19	PK	33	-31.8	0	37.39	-	-	74	-36.61	-	-	0-360	100	H
2	4.575	32.55	PK	34	-30.7	0	35.85	-	-	74	-38.15	-	-	0-360	200	V
3	8.766	29.46	PK	35.9	-25.9	0	39.46	-	-	-	-	68.2	-28.74	0-360	200	H
5	10.736	34.35	PK	37.9	-25.4	0	46.85	-	-	74	-27.15	-	-	0-360	100	V
6	13.297	30.8	PK	39.2	-26.9	0	43.1	-	-	74	-30.9	-	-	0-360	200	V
4	14.71	31.37	PK	39.7	-27.5	0	43.57	-	-	-	-	68.2	-24.63	0-360	100	H

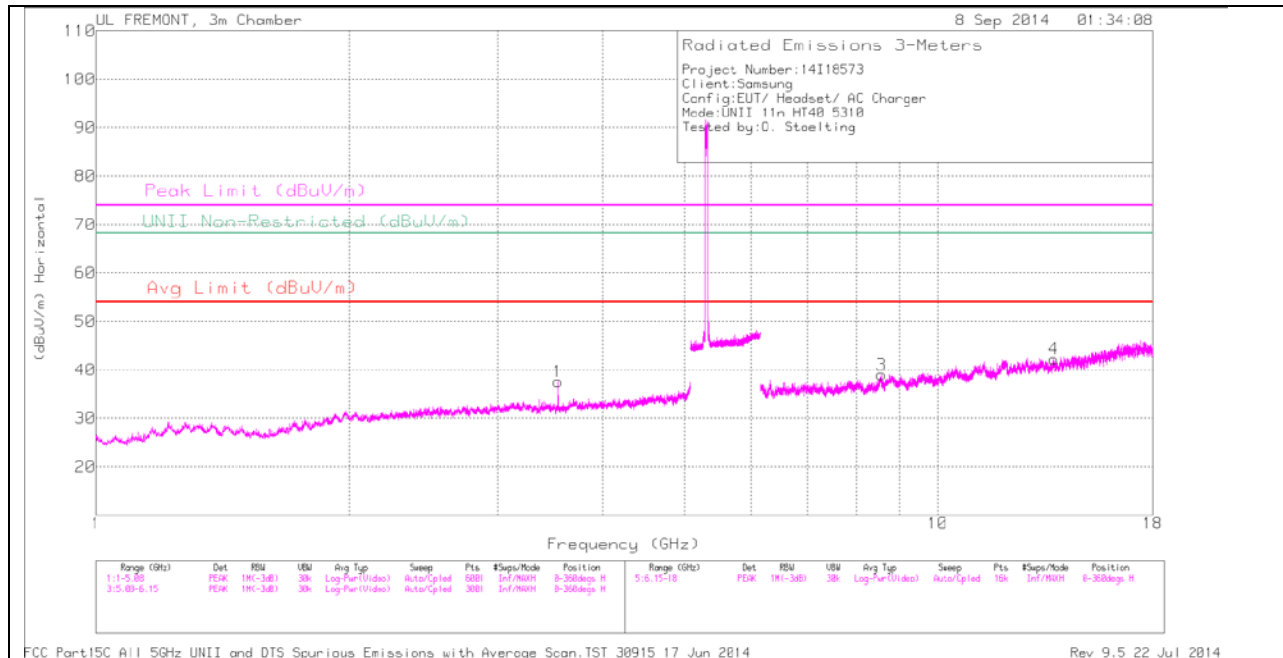
PK - Peak detector

RADIATED EMISSIONS

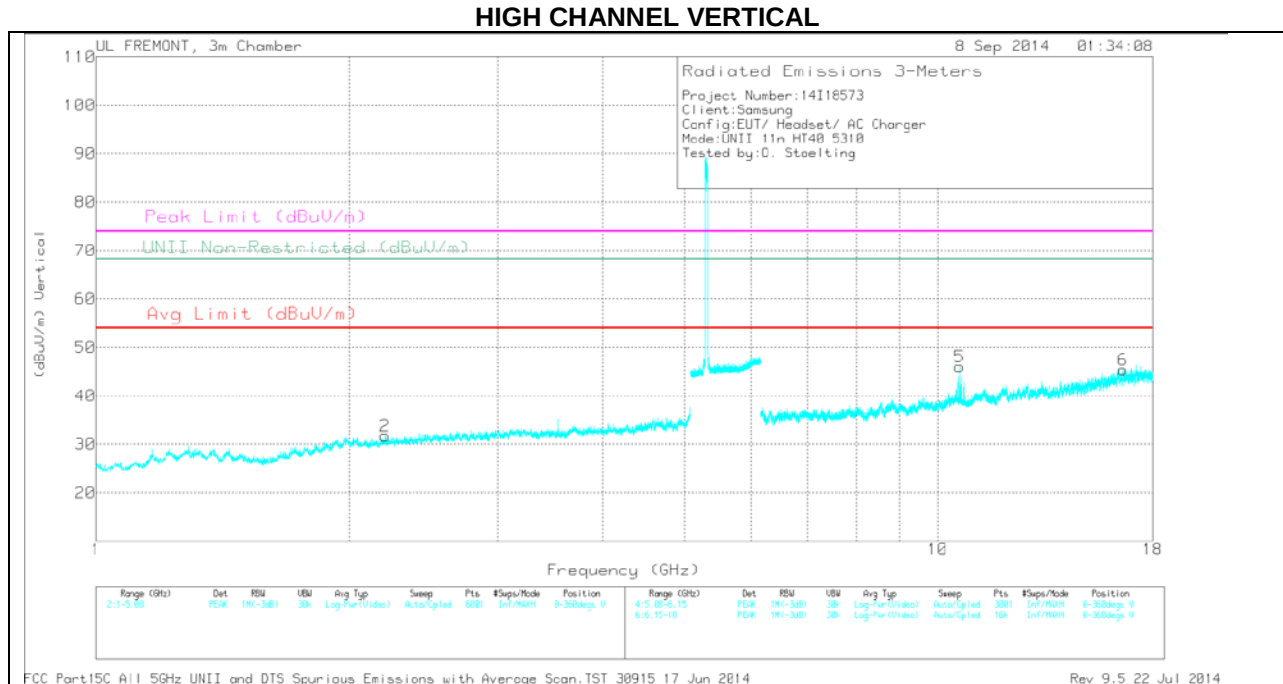
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.513	43.98	PK1	33	-31.8	0	45.18	-	-	74	-28.82	-	-	12	131	H
3.513	35.08	AD1	33	-31.8	.56	37.1	54	-16.9	-	-	-	-	12	131	H
10.735	36.69	PK1	37.9	-25.4	0	49.19	-	-	74	-24.81	-	-	330	353	V
10.737	24.69	AD1	37.9	-25.3	.56	38.11	54	-15.89	-	-	-	-	330	353	V

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HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fil 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
2	2.205	32.46	PK	31.7	-32.4	0	31.76	-	-	74	-42.24	-	-	0-360	200	V
1	3.54	36.42	PK	33	-31.8	0	37.62	-	-	74	-36.38	-	-	0-360	100	H
3	8.571	29.39	PK	35.8	-26.2	0	38.99	-	-	-	-	68.2	-29.21	0-360	100	H
5	10.62	33.32	PK	37.7	-25	0	46.02	-	-	74	-27.98	-	-	0-360	100	V
4	13.744	30.11	PK	38.8	-26.6	0	42.31	-	-	-	-	68.2	-25.89	0-360	100	H
6	16.607	28.61	PK	41.2	-24.4	0	45.41	-	-	-	-	68.2	-22.79	0-360	100	V

PK - Peak detector

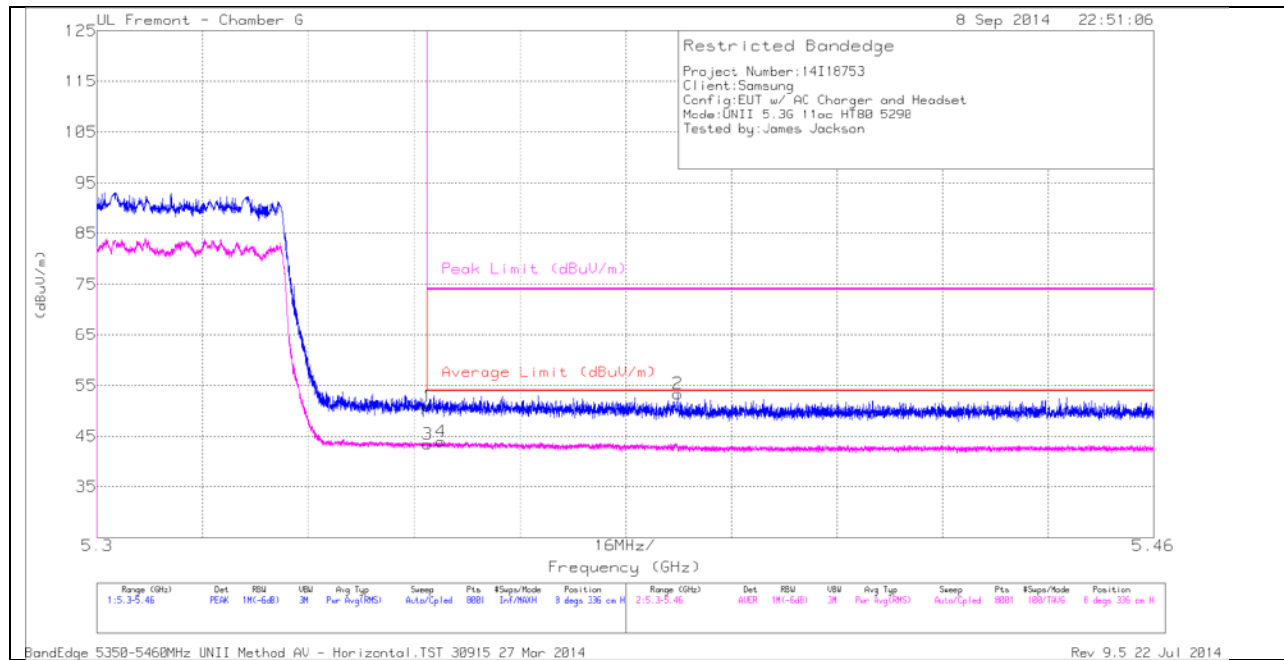
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fil 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
3.54	43.35	PK1	33	-31.8	0	44.55	-	-	74	-29.45	-	-	11	188	H
3.54	35.1	AD1	33	-31.8	.56	37.12	54	-16.88	-	-	-	-	11	188	H
10.62	24.88	AD1	37.7	-25	.56	38.4	54	-15.6	-	-	-	-	27	244	V
10.622	36.78	PK1	37.7	-25	0	49.48	-	-	74	-24.52	-	-	27	244	V

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11.1.4. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.3 GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)

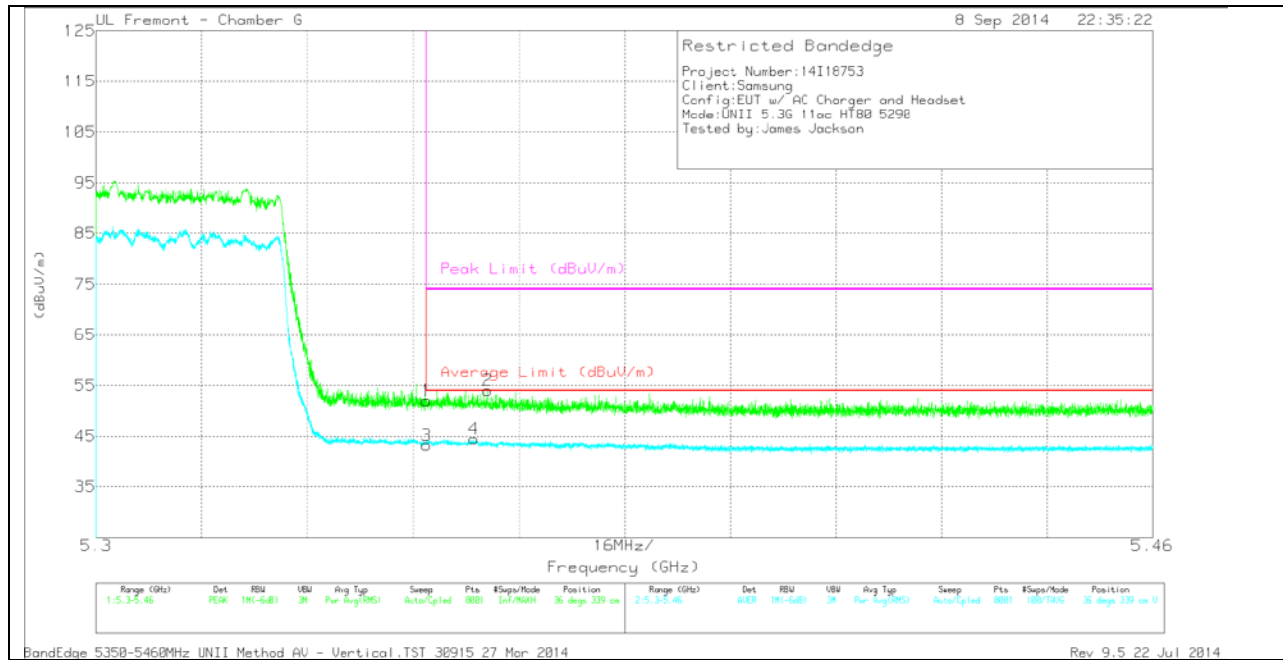
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb/Filter/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	39.99	PK	34.6	-23.7	0	50.89	-	-	74	-23.11	8	336	H
3	* 5.35	30.72	RMS	34.6	-23.7	1.68	43.45	54	-10.55	-	-	8	336	H
4	* 5.352	31.22	RMS	34.6	-23.7	1.68	43.95	54	-10.05	-	-	8	336	H
2	* 5.388	42.37	PK	34.6	-23.6	0	53.37	-	-	74	-20.63	8	336	H

VERTICAL PEAK AND AVERAGE PLOT

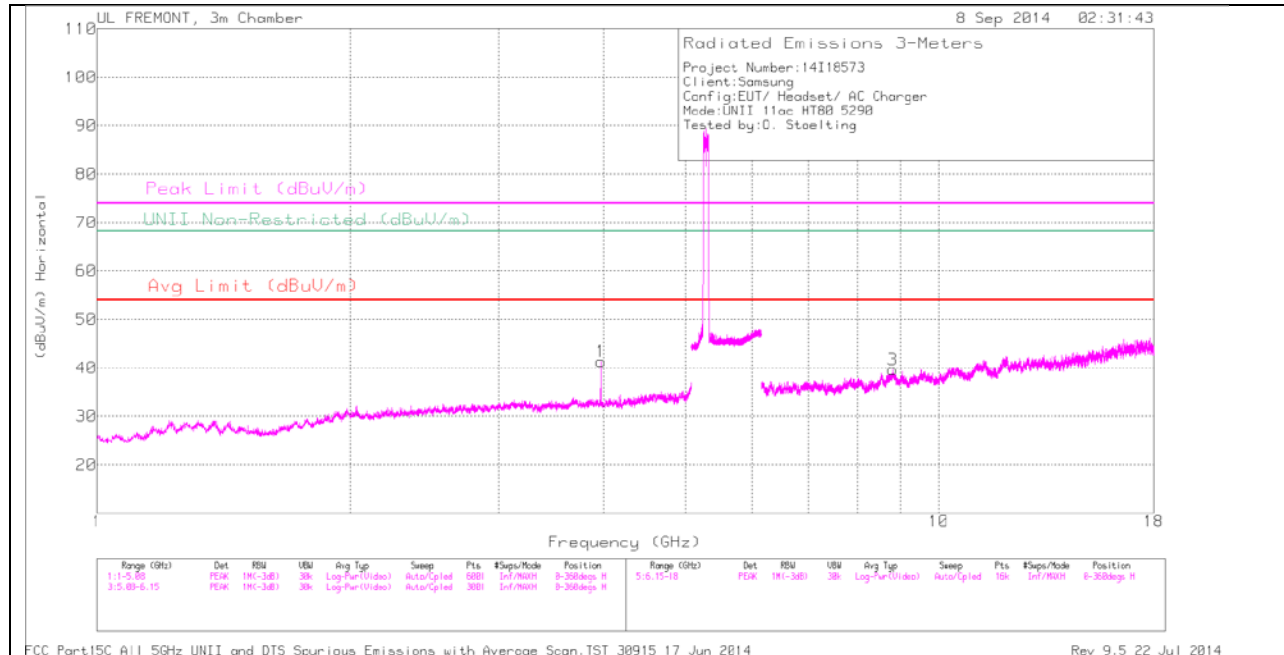


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	41.16	PK	34.6	-23.7	0	52.06	-	-	74	-21.94	36	339	V
3	* 5.35	30.5	RMS	34.6	-23.7	1.68	43.23	54	-10.77	-	-	36	339	V
4	* 5.357	31.76	RMS	34.6	-23.7	1.68	44.49	54	-9.51	-	-	36	339	V
2	* 5.359	43.15	PK	34.6	-23.7	0	54.05	-	-	74	-19.95	36	339	V

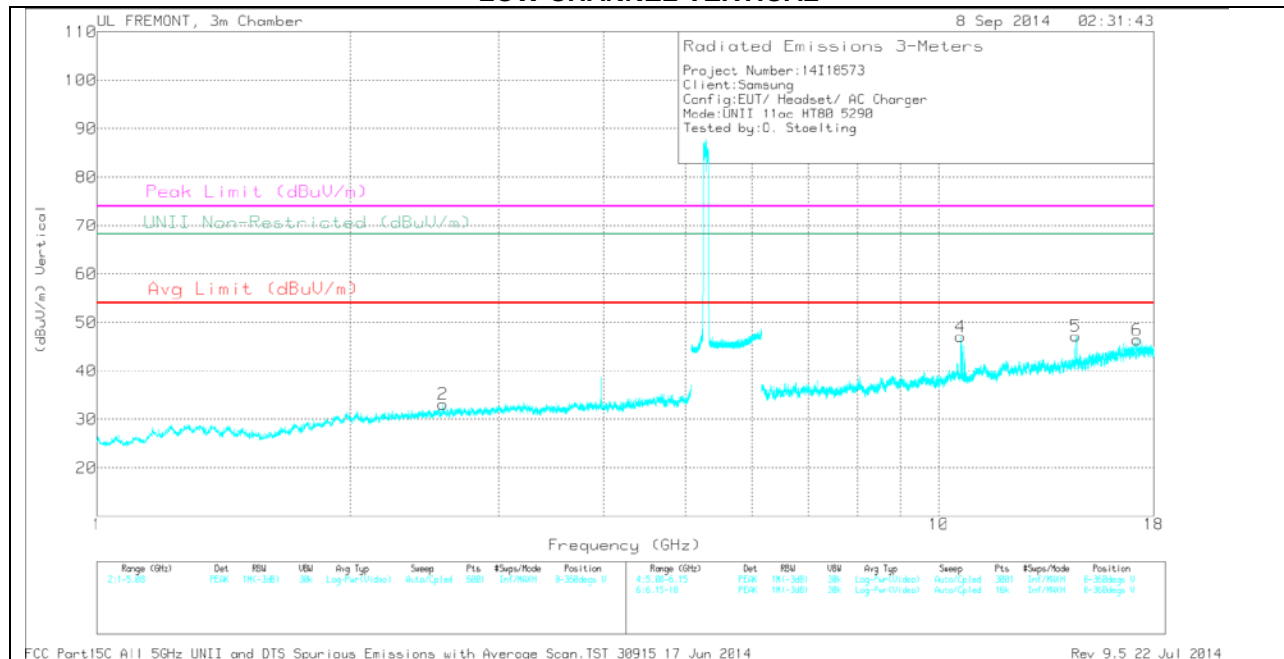
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.574	32.91	PK	32.5	-32.3	0	33.11	-	-	-	-	68.2	-35.09	0-360	200	V
1	3.968	39.5	PK	33.3	-31.5	0	41.3	-	-	74	-32.7	-	-	0-360	200	H
3	8.817	29.27	PK	36	-25.6	0	39.67	-	-	-	-	68.2	-28.53	0-360	200	H
4	10.619	34.48	PK	37.7	-25.1	0	47.08	-	-	74	-26.92	-	-	0-360	200	V
5	14.533	34.99	PK	39.6	-27.4	0	47.19	-	-	-	-	68.2	-21.01	0-360	100	V
6	17.205	28.17	PK	41.2	-22.9	0	46.47	-	-	-	-	68.2	-21.73	0-360	100	V

PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.968	45.77	PK1	33.3	-31.5	0	47.57	-	-	74	-26.43	-	-	271	329	H
3.968	38.67	AD1	33.3	-31.5	1.68	42.3	54	-11.7	-	-	-	-	271	329	H
10.621	36.54	PK1	37.7	-25	0	49.24	-	-	74	-24.76	-	-	158	365	V
10.621	24.72	AD1	37.7	-25	1.68	39.25	54	-14.75	-	-	-	-	158	365	V
14.534	39.72	PK1	39.6	-27.4	0	51.92	-	-	-	-	68.2	-16.28	225	209	V
14.534	27.37	AD1	39.6	-27.4	1.68	41.4	-	-	-	-	-	-	225	209	V

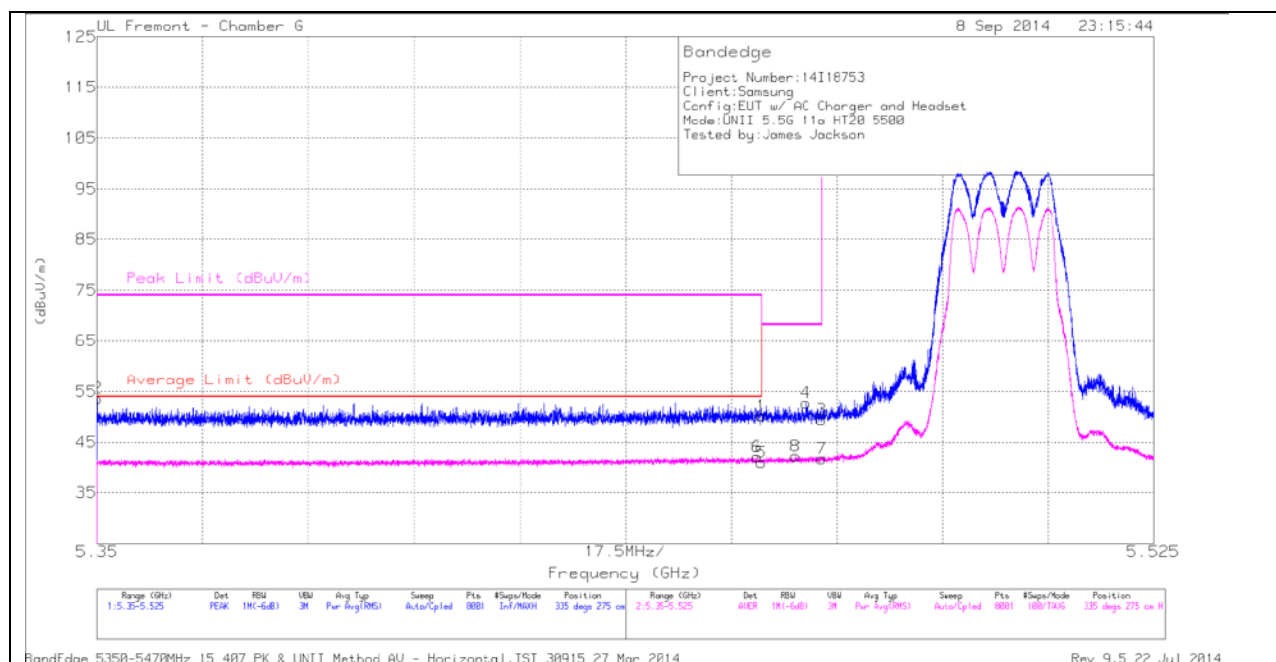
FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

11.2. 5.5-5.6 GHz

11.2.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.5 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

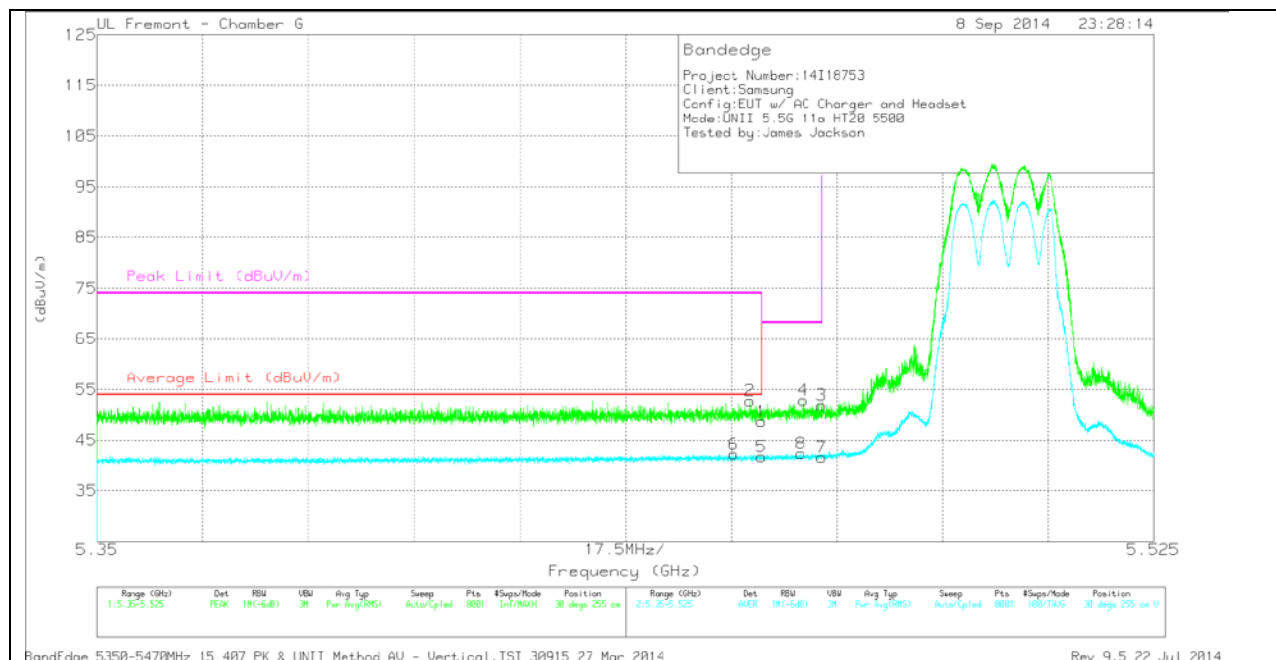
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filter/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.35	42.74	PK	34.6	-23.7	0	53.64	-	-	74	-20.36	335	275	H
6	* 5.459	30.66	RMS	34.7	-23.6	.3	42.06	54	-11.94	-	-	335	275	H
1	* 5.46	39.03	PK	34.7	-23.6	0	50.13	-	-	74	-23.87	335	275	H
5	* 5.46	29.56	RMS	34.7	-23.6	.3	40.96	54	-13.04	-	-	335	275	H
8	5.466	30.83	RMS	34.7	-23.6	.3	42.23	-	-	-	-	335	275	H
4	5.467	41.66	PK	34.7	-23.6	0	52.76	-	-	68.2	-15.44	335	275	H
3	5.47	38.3	PK	34.7	-23.6	0	49.4	-	-	68.2	-18.8	335	275	H
7	5.47	30.37	RMS	34.7	-23.6	.3	41.77	-	-	-	-	335	275	H

VERTICAL PEAK AND AVERAGE PLOT

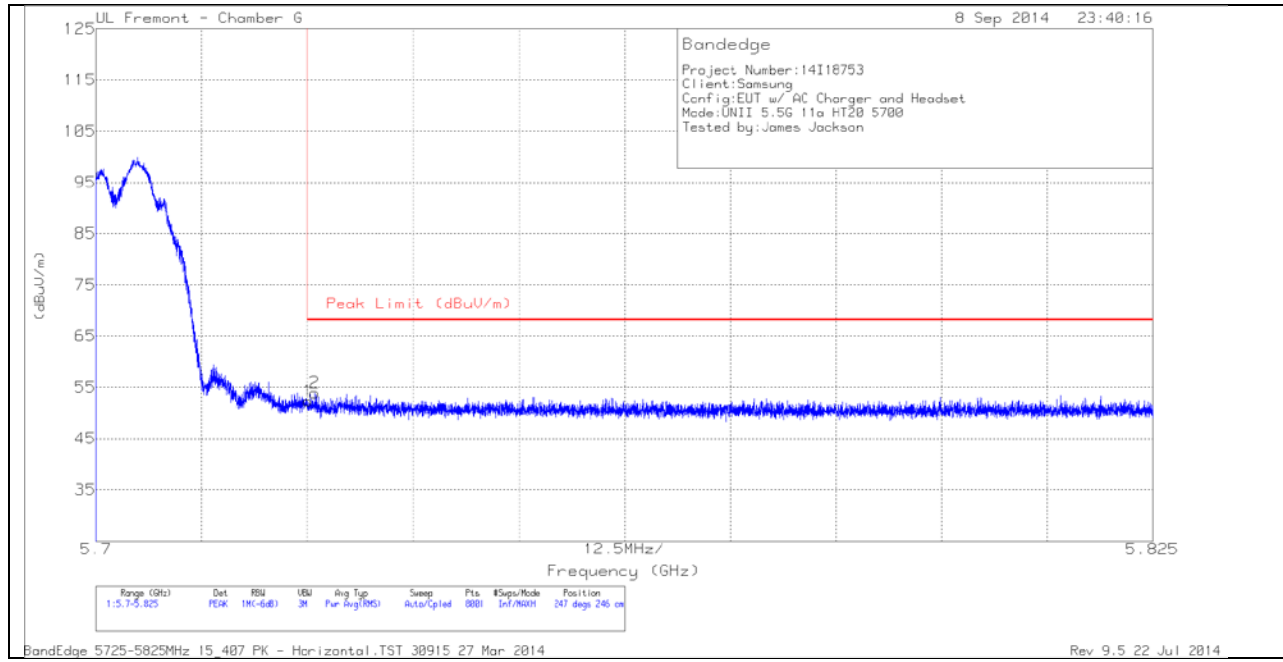


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	* 5.455	30.83	RMS	34.7	-23.6	.3	42.23	54	-11.77	-	-	30	255	V
2	* 5.458	41.71	PK	34.7	-23.6	0	52.81	-	-	74	-21.19	30	255	V
1	* 5.46	37.62	PK	34.7	-23.6	0	48.72	-	-	74	-25.28	30	255	V
5	* 5.46	30.36	RMS	34.7	-23.6	.3	41.76	54	-12.24	-	-	30	255	V
4	5.467	41.81	PK	34.7	-23.6	0	52.91	-	-	68.2	-15.29	30	255	V
8	5.467	30.99	RMS	34.7	-23.6	.3	42.39	-	-	-	-	30	255	V
3	5.47	40.78	PK	34.7	-23.6	0	51.88	-	-	68.2	-16.32	30	255	V
7	5.47	30.21	RMS	34.7	-23.6	.3	41.61	-	-	-	-	30	255	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

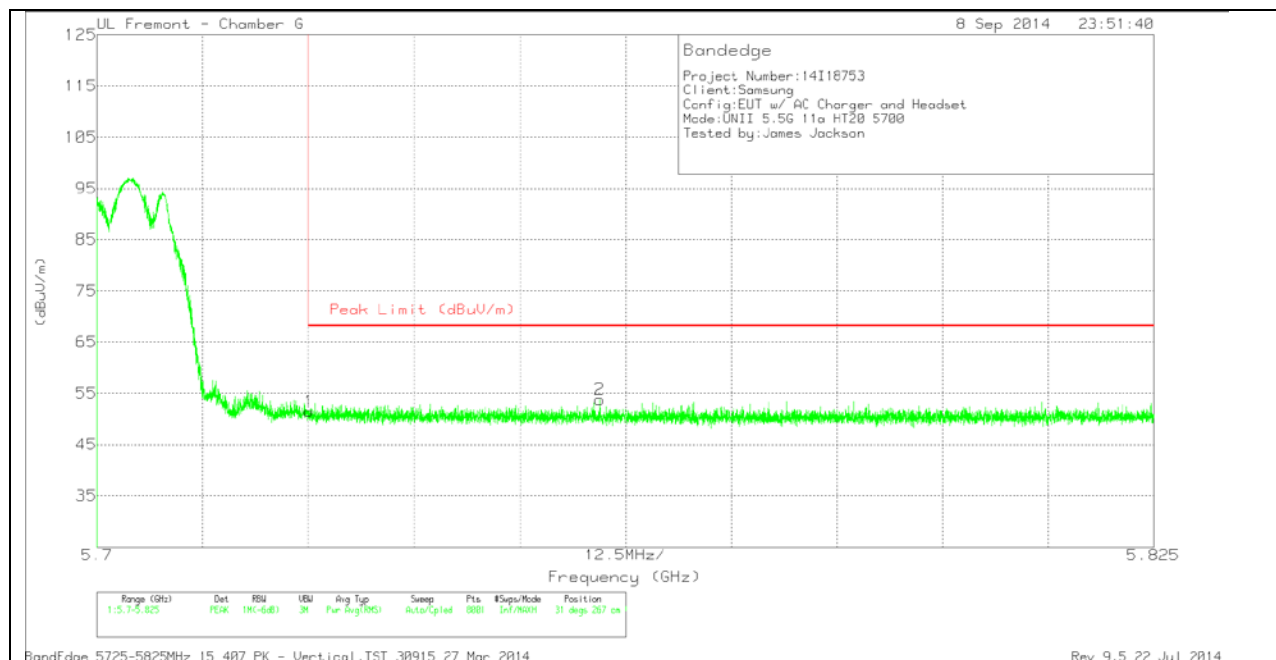
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	40.98	PK	34.8	-23.5	0	52.28	68.2	-15.92	247	246	H
2	5.726	42.74	PK	34.8	-23.6	0	53.94	68.2	-14.26	247	246	H

VERTICAL PEAK AND AVERAGE PLOT

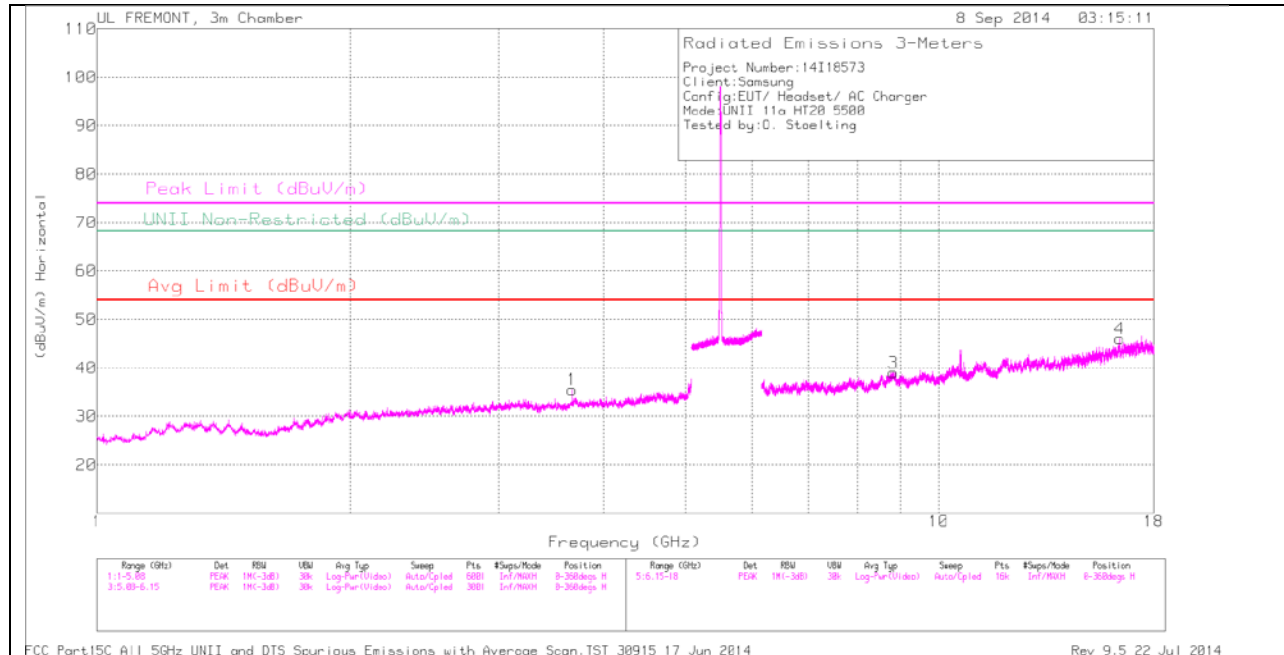


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	40.19	PK	34.8	-23.5	0	51.49	68.2	-16.71	31	267	V
2	5.759	42.52	PK	34.8	-23.5	0	53.82	68.2	-14.38	31	267	V

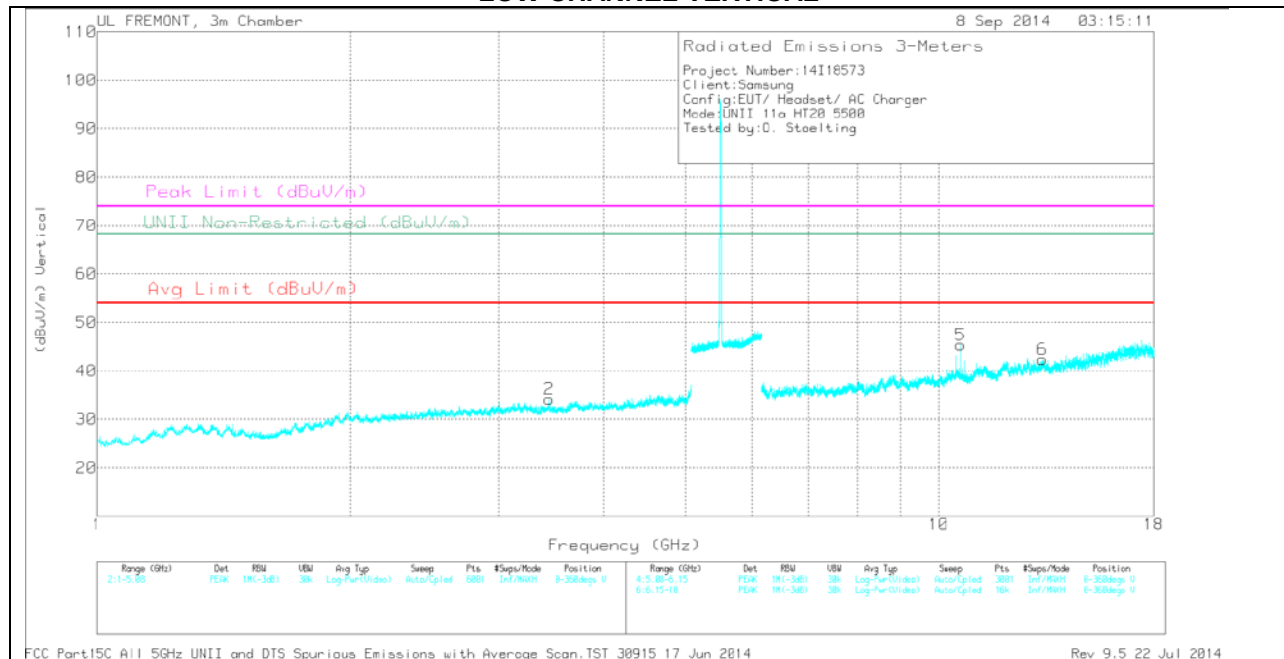
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
2	3.445	32.83	PK	32.9	-31.5	0	34.23	-	-	-	-	68.2	-33.97	0-360	200	V
1	3.666	33.16	PK	33.1	-30.7	0	35.56	-	-	74	-38.44	-	-	0-360	100	H
3	8.838	29.08	PK	36	-26.1	0	38.98	-	-	-	-	68.2	-29.22	0-360	200	H
5	10.62	32.65	PK	37.7	-25	0	45.35	-	-	74	-28.65	-	-	0-360	200	V
6	13.277	29.37	PK	39.1	-26.1	0	42.37	-	-	74	-31.63	-	-	0-360	100	V
4	16.393	29.27	PK	41	-24.2	0	46.07	-	-	-	-	68.2	-22.13	0-360	100	H

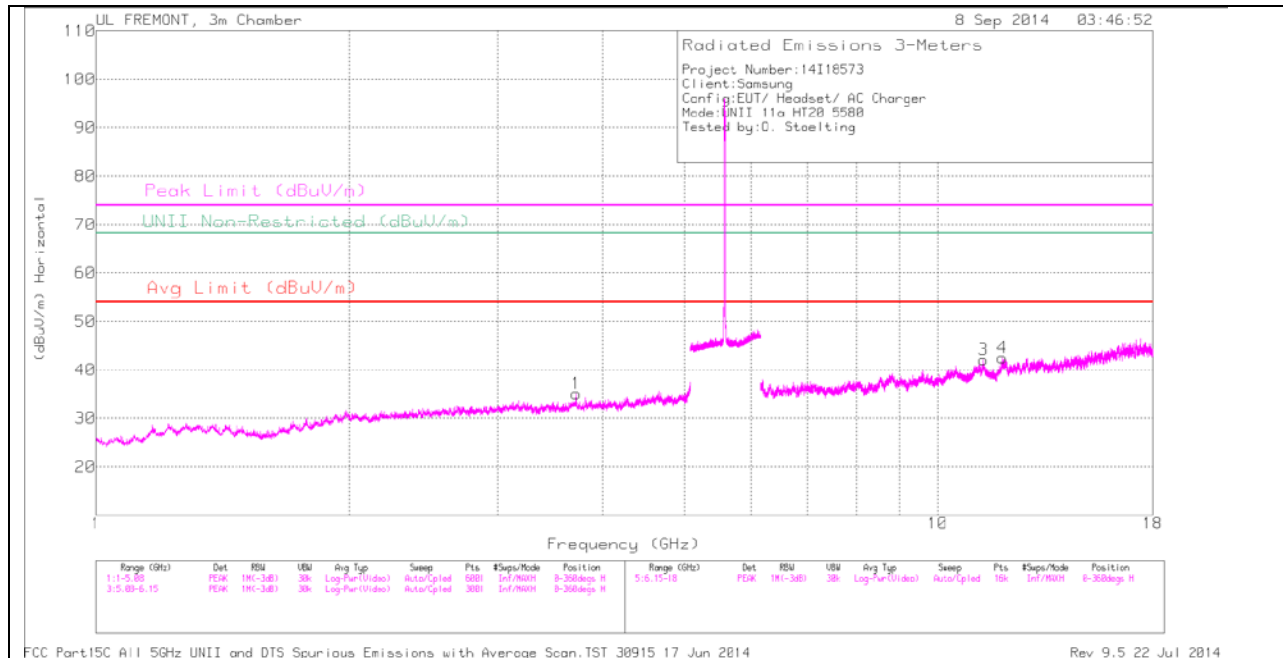
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
10.619	37.82	PK1	37.7	-25.1	0	50.42	-	-	74	-23.58	-	-	17	270	V
10.622	24.66	AD1	37.7	-25	.3	37.68	54	-16.32	-	-	-	-	17	270	V

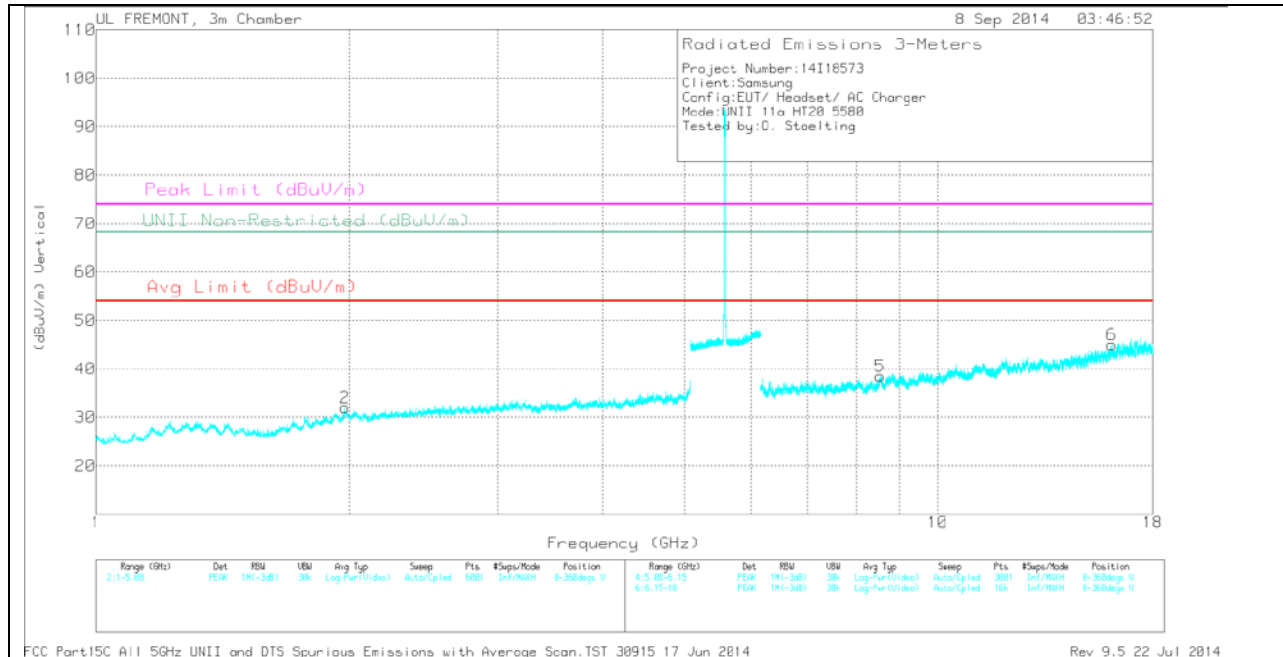
FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	1.976	32.68	PK	31.5	-32.2	0	31.98	-	-	-	-	68.2	-36.22	0-360	100	V
1	3.72	33.06	PK	33.2	-31.1	0	35.16	-	-	74	-38.84	-	-	0-360	100	H
5	8.552	28.82	PK	35.8	-26.1	0	38.52	-	-	-	-	68.2	-29.68	0-360	100	V
3	11.333	29.66	PK	38	-25.5	0	42.16	-	-	74	-31.84	-	-	0-360	100	H
4	11.932	29.76	PK	39	-26.3	0	42.46	-	-	74	-31.54	-	-	0-360	200	H
6	16.092	30.01	PK	40.5	-25.5	0	45.01	-	-	74	-28.99	-	-	0-360	200	V

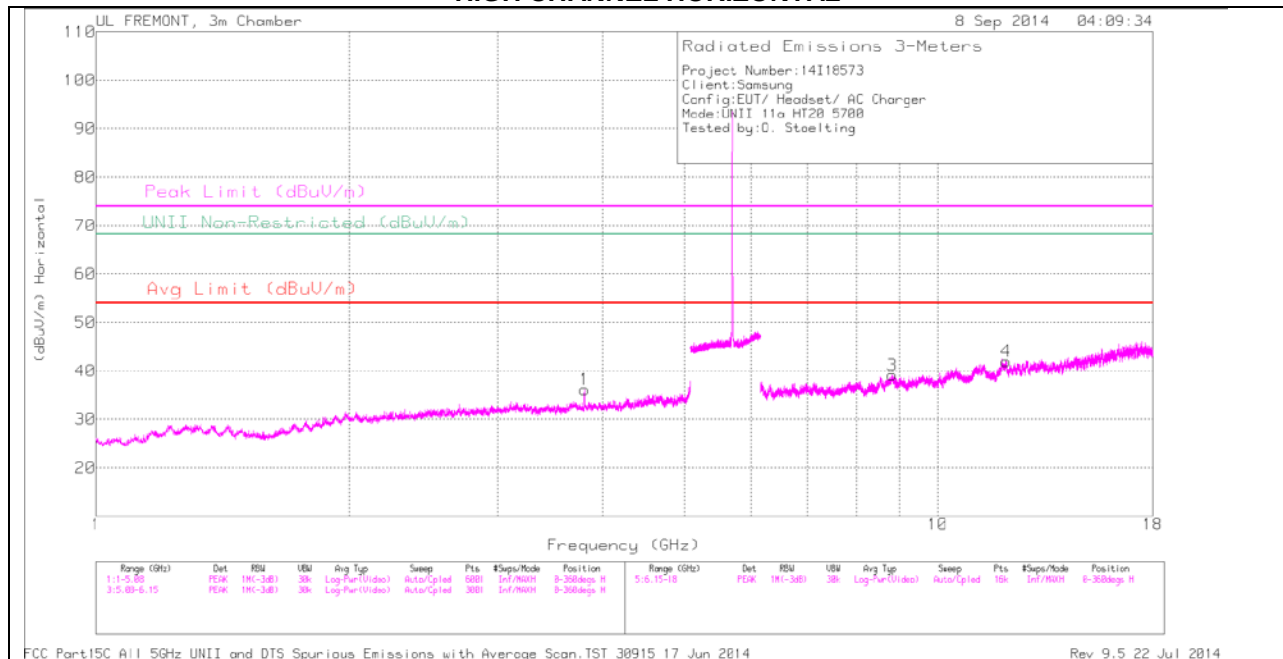
PK - Peak detector

RADIATED EMISSIONS

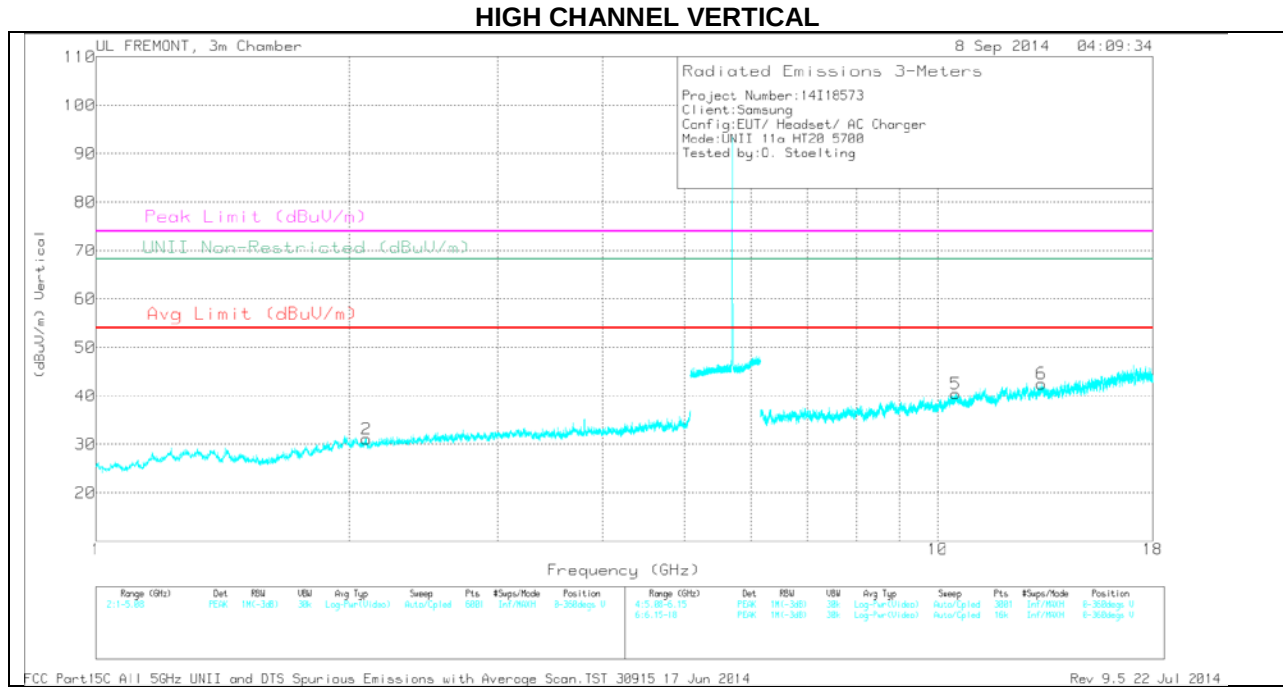
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
8.551	38.08	PK1	35.8	-26	0	47.88	-	-	-	-	68.2	-20.32	0	100	V
8.551	26.46	AD1	35.8	-26	.3	36.58	-	-	-	-	-	-	0	100	V

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.093	32.4	PK	31.5	-32.8	0	31.1	-	-	-	-	68.2	-37.1	0-360	200	V
1	3.8	34.56	PK	33.2	-31.6	0	36.16	-	-	74	-37.84	-	-	0-360	200	H
3	8.837	29.23	PK	36	-26.1	0	39.13	-	-	-	-	68.2	-29.07	0-360	100	H
5	10.499	28.46	PK	37.5	-25.5	0	40.46	-	-	-	-	68.2	-27.74	0-360	200	V
4	12.048	29.15	PK	39.1	-26.2	0	42.05	-	-	74	-31.95	-	-	0-360	200	H
6	13.28	29.53	PK	39.1	-26.1	0	42.53	-	-	74	-31.47	-	-	0-360	200	V

PK - Peak detector

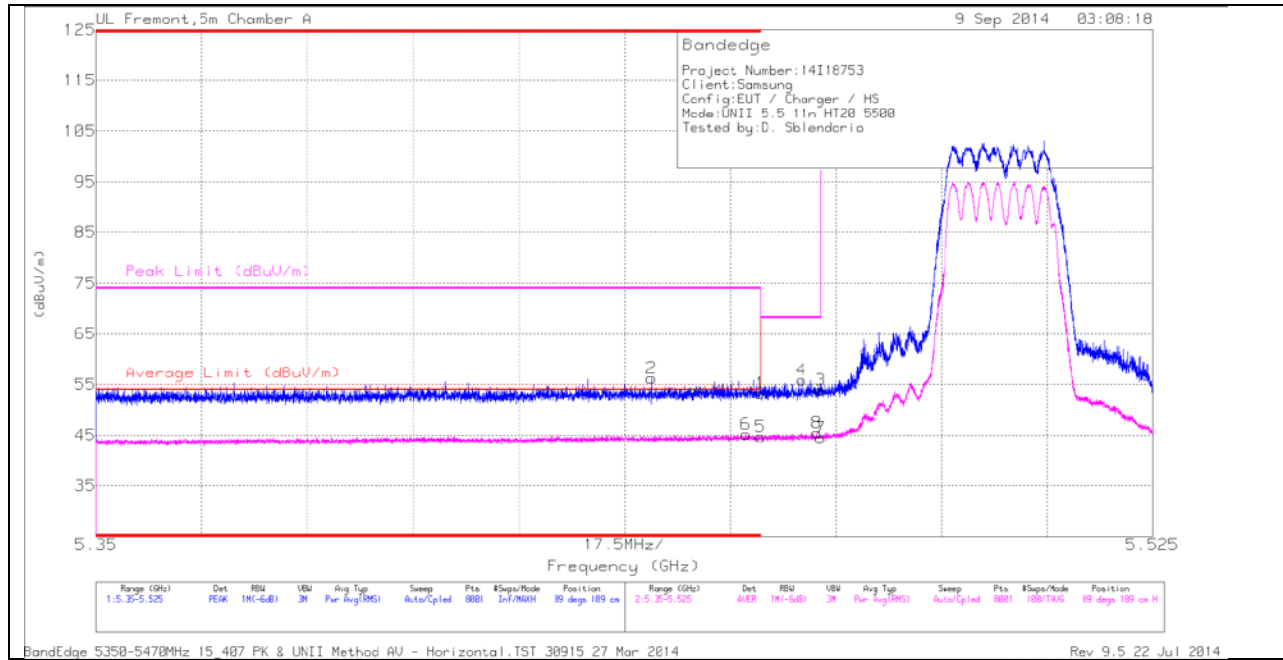
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/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
10.501	37.22	PK1	37.5	-25.4	0	49.32	-	-	-	-	68.2	-18.88	0	200	V
10.501	25.23	AD1	37.5	-25.4	.3	37.65	-	-	-	-	-	-	0	200	V

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

11.2.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.5 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

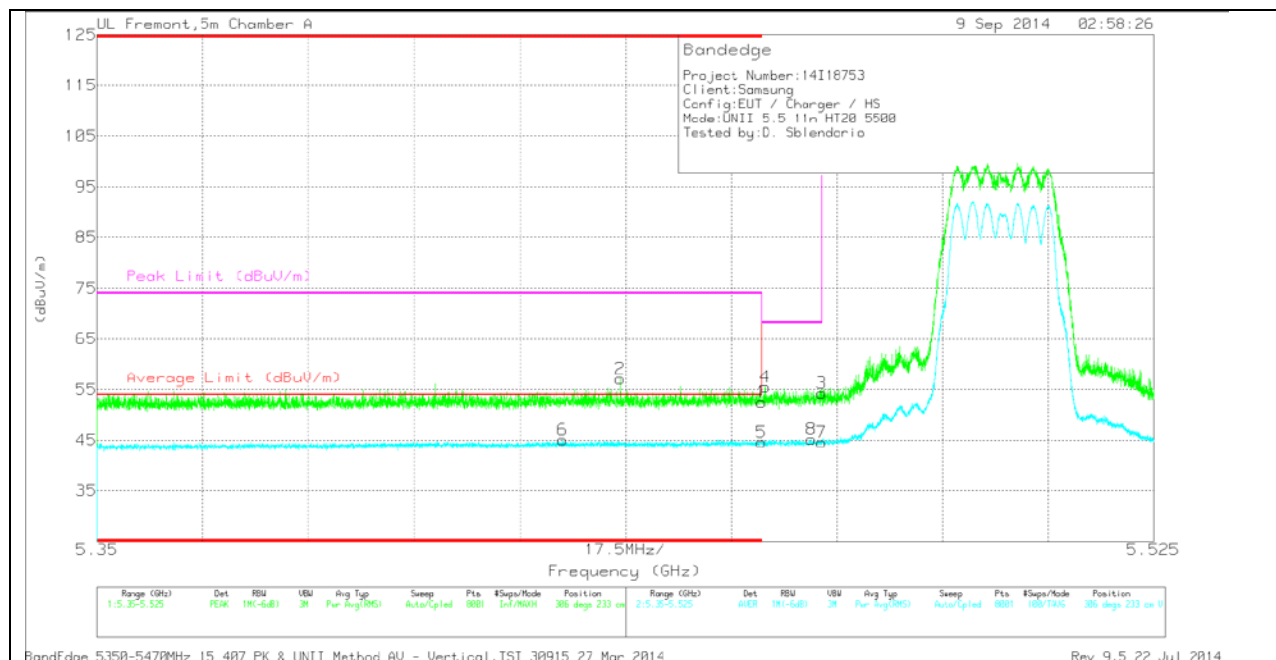
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	38.65	PK	34.4	-19.8	0	53.25	-	-	74	-20.75	89	189	H
2	* 5.442	41.66	PK	34.4	-19.8	0	56.26	-	-	74	-17.74	89	189	H
5	* 5.46	29.5	RMS	34.4	-19.8	.33	44.69	54	-9.31	-	-	89	189	H
6	* 5.458	30	RMS	34.4	-19.8	.33	45.19	54	-8.81	-	-	89	189	H
4	5.467	41.33	PK	34.4	-19.9	0	55.83	-	-	68.2	-12.37	89	189	H
8	5.469	30.43	RMS	34.4	-20	.33	45.42	-	-	-	-	89	189	H
3	5.47	39.54	PK	34.4	-20	0	53.94	-	-	68.2	-14.26	89	189	H
7	5.47	29.47	RMS	34.4	-20	.33	44.46	-	-	-	-	89	189	H

VERTICAL PEAK AND AVERAGE PLOT

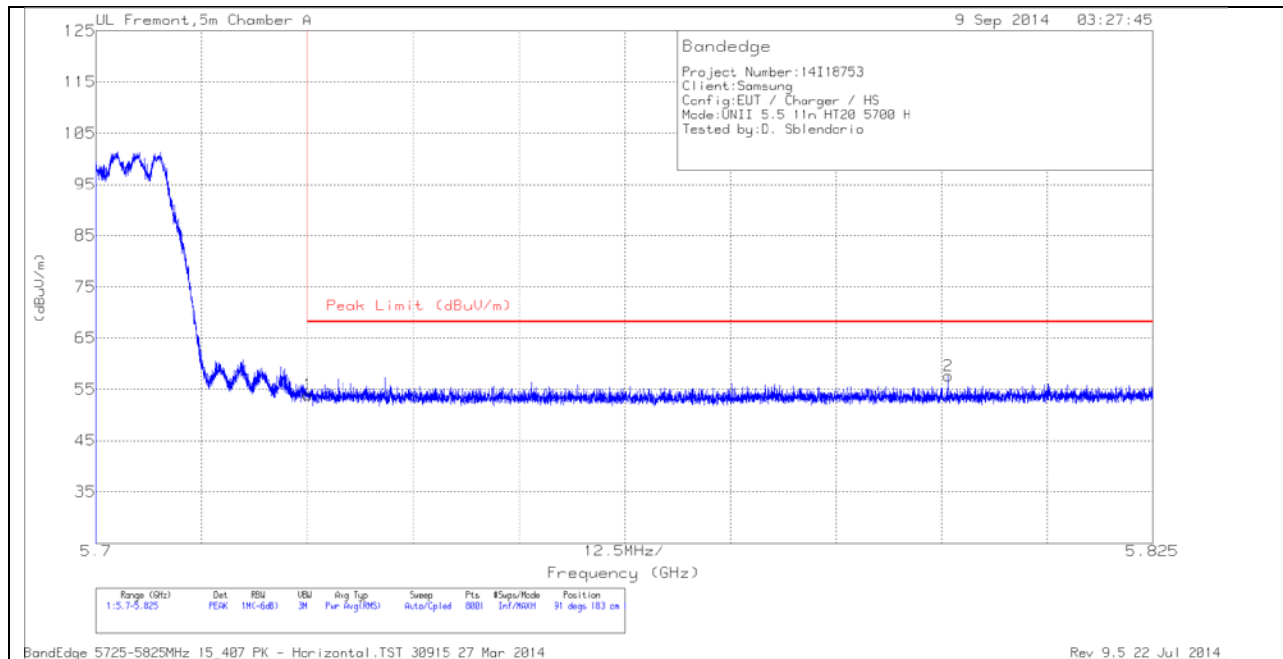


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	37.91	PK	34.4	-19.8	0	52.51	-	-	74	-21.49	306	233	V
2	* 5.437	42.3	PK	34.4	-19.6	0	57.1	-	-	74	-16.9	306	233	V
5	* 5.46	29.4	RMS	34.4	-19.8	.33	44.59	54	-9.41	-	-	306	233	V
6	* 5.427	29.66	RMS	34.4	-19.6	.33	45.05	54	-8.95	-	-	306	233	V
4	5.461	40.89	PK	34.4	-19.8	0	55.49	-	-	68.2	-12.71	306	233	V
8	5.468	30.1	RMS	34.4	-19.9	.33	45.19	-	-	-	-	306	233	V
3	5.47	39.82	PK	34.4	-20	0	54.22	-	-	68.2	-13.98	306	233	V
7	5.47	29.58	RMS	34.4	-20	.33	44.57	-	-	-	-	306	233	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

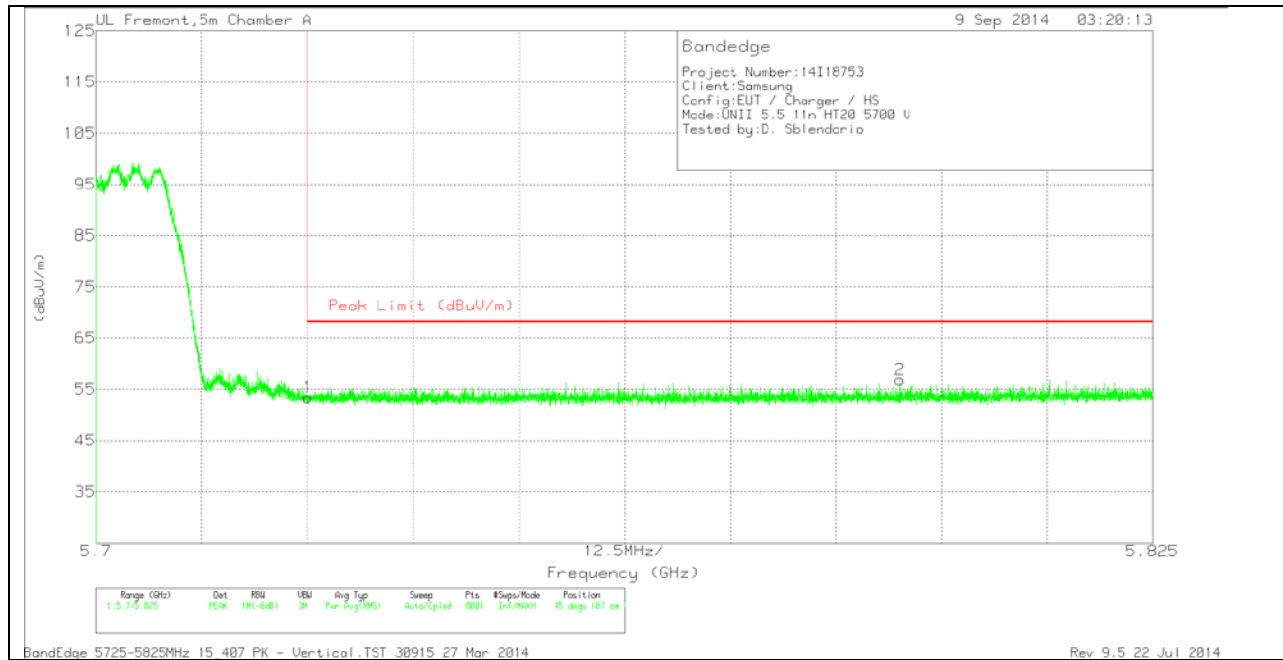
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.47	PK	34.6	-20.2	0	53.87	68.2	-14.33	91	183	H
2	5.801	42.75	PK	34.8	-19.9	0	57.65	68.2	-10.55	91	183	H

VERTICAL PEAK AND AVERAGE PLOT

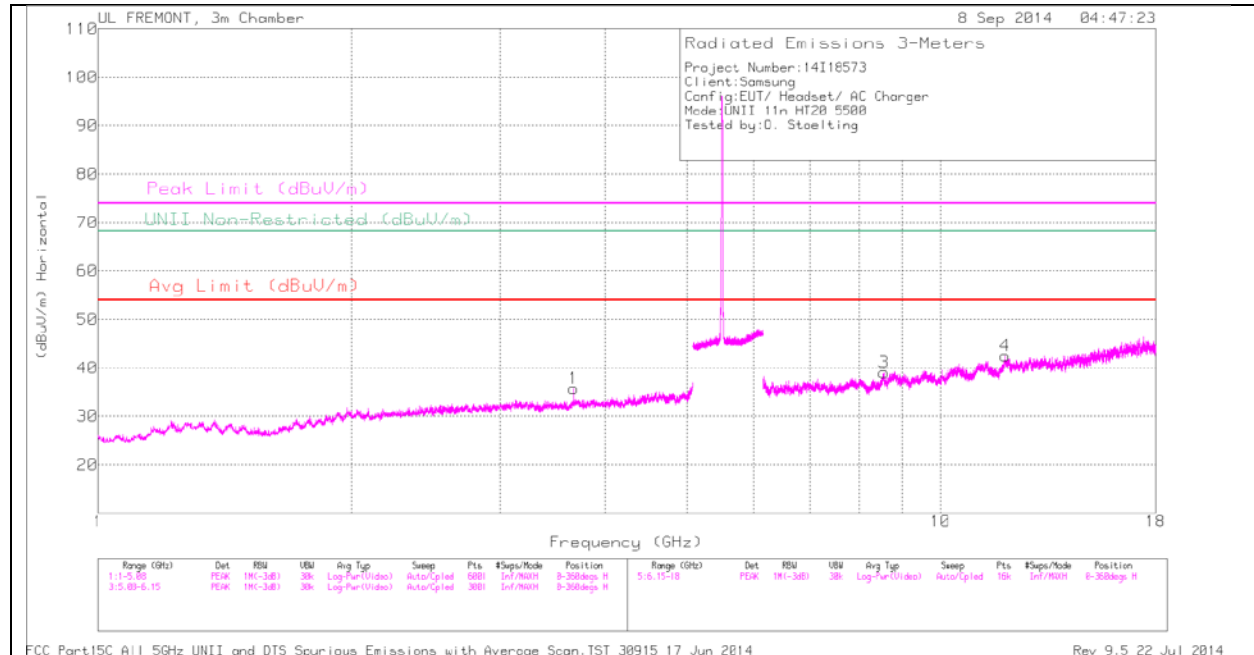


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.98	PK	34.6	-20.2	0	53.38	68.2	-14.82	45	187	V
2	5.795	42.08	PK	34.7	-19.9	0	56.88	68.2	-11.32	45	187	V

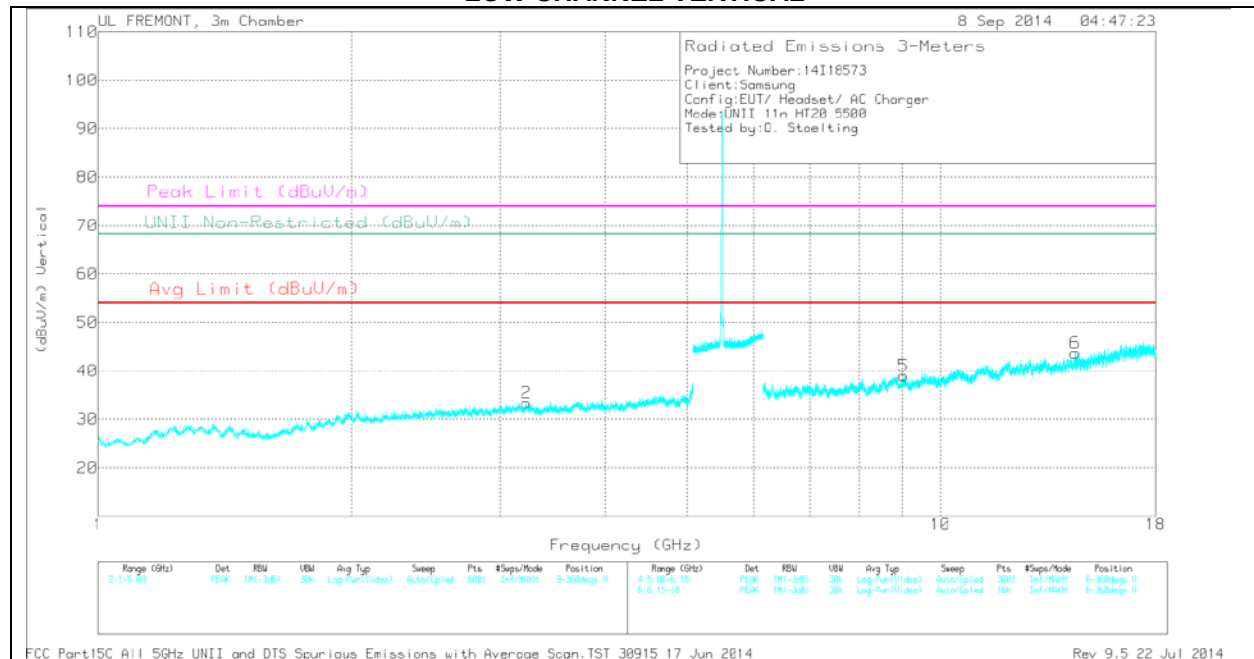
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	3.222	31.85	PK	32.9	-31.3	0	33.45	-	-	-	-	68.2	-34.75	0-360	200	V
1	3.667	33.24	PK	33.2	-30.7	0	35.74	-	-	74	-38.26	-	-	0-360	100	H
3	8.569	29.48	PK	35.8	-26.2	0	39.08	-	-	-	-	68.2	-29.12	0-360	100	H
5	9.032	28.3	PK	36.1	-25.4	0	39	-	-	74	-35	-	-	0-360	100	V
4	11.932	29.85	PK	39	-26.3	0	42.55	-	-	74	-31.45	-	-	0-360	200	H
6	14.453	31.49	PK	39.6	-27.4	0	43.69	-	-	-	-	68.2	-24.51	0-360	100	V

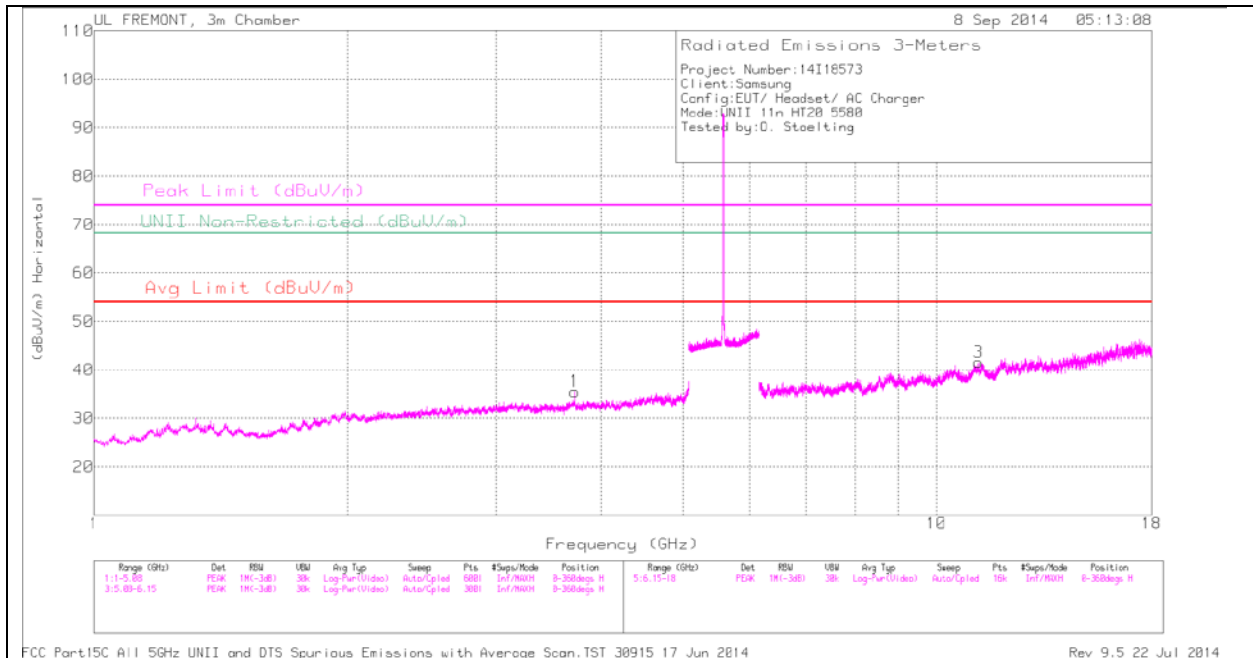
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.666	41.61	PK1	33.1	-30.7	0	44.01	-	-	74	-29.99	-	-	308	193	H
3.667	32.42	AD1	33.1	-30.7	.33	35.13	54	-18.87	-	-	-	-	308	193	H

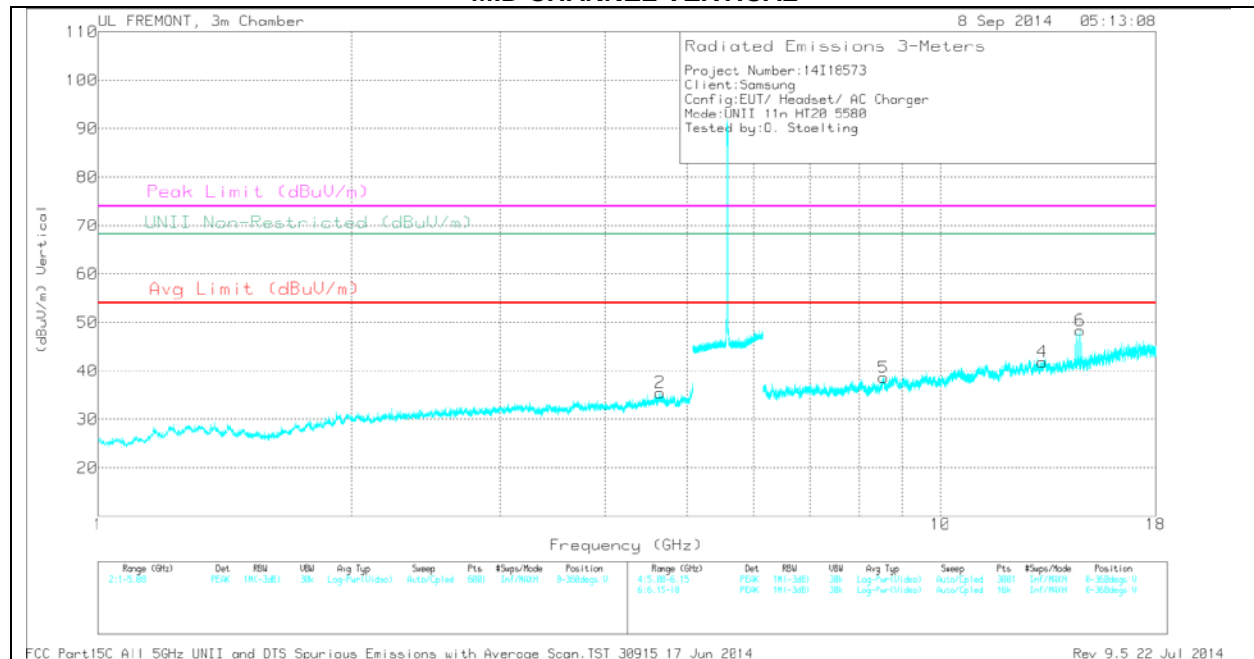
FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Chl/ Filt/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	3.72	33.47	PK	33.2	-31.1	0	35.57	-	-	74	-38.43	-	-	0-360	100	H
2	4.645	31.62	PK	34.1	-30.2	0	35.52	-	-	74	-38.48	-	-	0-360	200	V
5	8.564	28.98	PK	35.8	-26.2	0	38.58	-	-	-	-	68.2	-29.62	0-360	200	V
3	11.218	29.52	PK	37.9	-25.8	0	41.62	-	-	74	-32.38	-	-	0-360	100	H
4	13.214	29.17	PK	39.1	-26.4	0	41.87	-	-	-	-	68.2	-26.33	0-360	200	V
6	14.644	35.65	PK	39.7	-27	0	48.35	-	-	-	-	68.2	-19.85	0-360	100	V

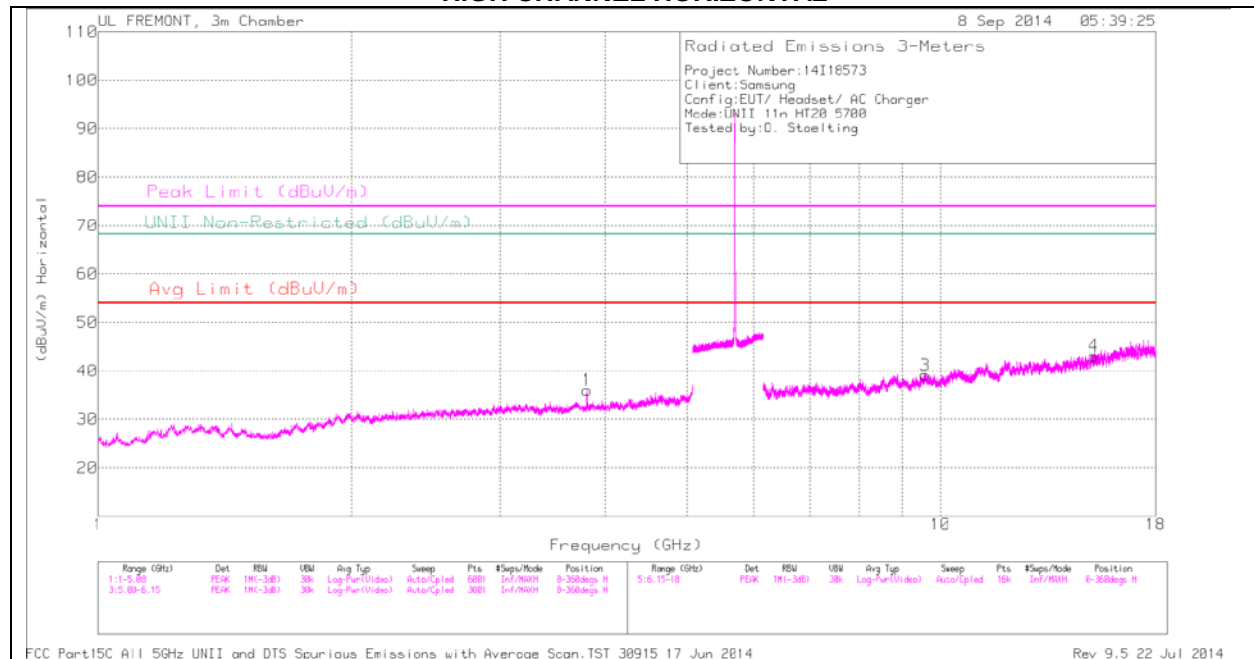
PK - Peak detector

RADIATED EMISSIONS

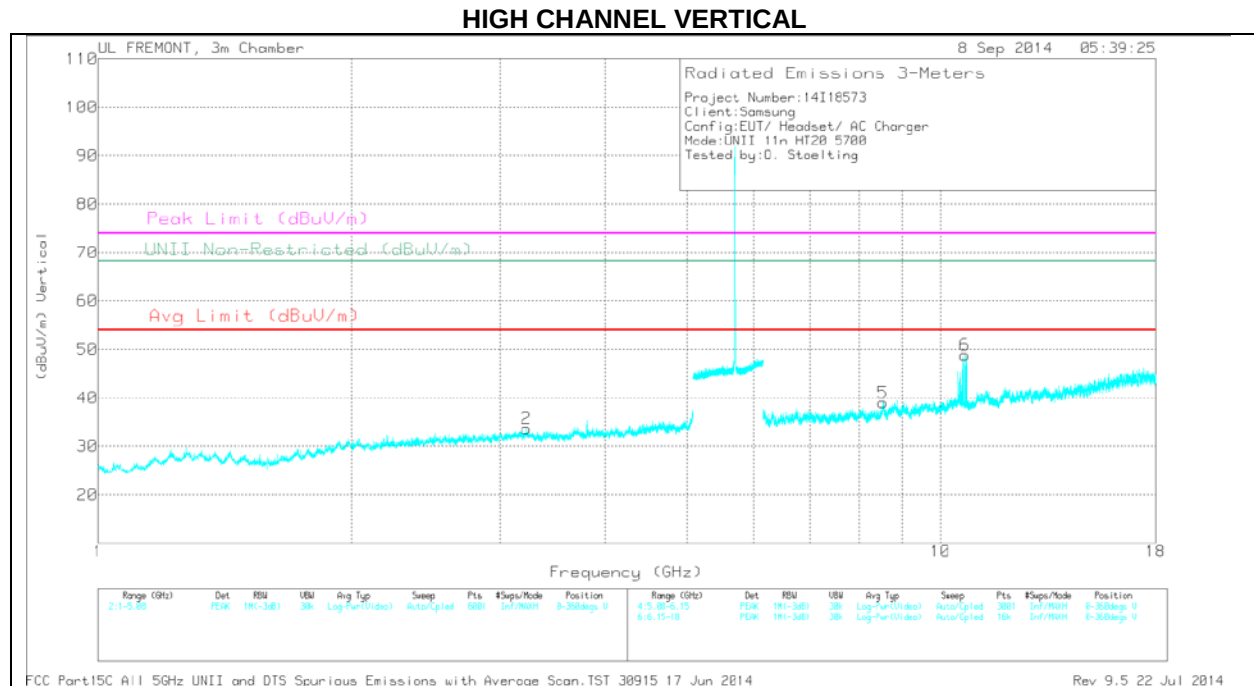
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Chl/ Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
14.646	39.05	PK1	39.7	-27	0	51.75	-	-	-	-	68.2	-16.45	295	113	V
14.646	27.28	AD1	39.7	-27	.33	40.29	-	-	-	-	-	-	295	113	V

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HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	3.224	32.03	PK	32.9	-31.3	0	33.63	-	-	-	-	68.2	-34.57	0-360	100	V
1	3.8	34.42	PK	33.2	-31.6	0	36.02	-	-	74	-37.98	-	-	0-360	100	H
5	8.552	29.28	PK	35.8	-26.1	0	38.98	-	-	-	-	68.2	-29.22	0-360	100	V
3	9.598	27.71	PK	36.7	-25.3	0	39.11	-	-	-	-	68.2	-29.09	0-360	200	H
6	10.682	36.77	PK	37.8	-25.7	0	48.87	-	-	74	-25.13	-	-	0-360	200	V
4	15.214	30	PK	39.9	-26.8	0	43.1	-	-	-	-	68.2	-25.1	0-360	200	H

PK - Peak detector

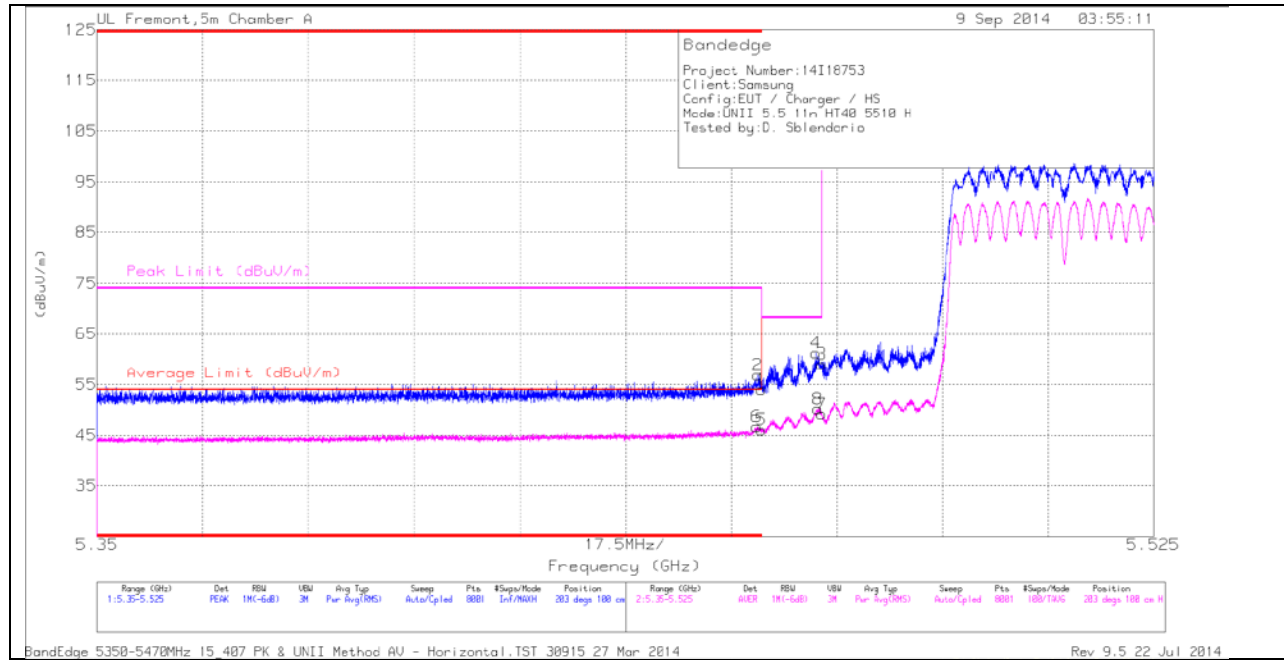
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.8	42.8	PK1	33.2	-31.6	0	44.4	-	-	74	-29.6	-	-	248	222	H
3.8	32.68	AD1	33.2	-31.6	.33	34.59	54	-19.41	-	-	-	-	248	222	H
10.681	36.64	PK1	37.8	-25.7	0	48.74	-	-	74	-25.26	-	-	184	105	V
10.683	24.86	AD1	37.8	-25.7	.33	37.27	54	-16.73	-	-	-	-	184	105	V

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11.2.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.5 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

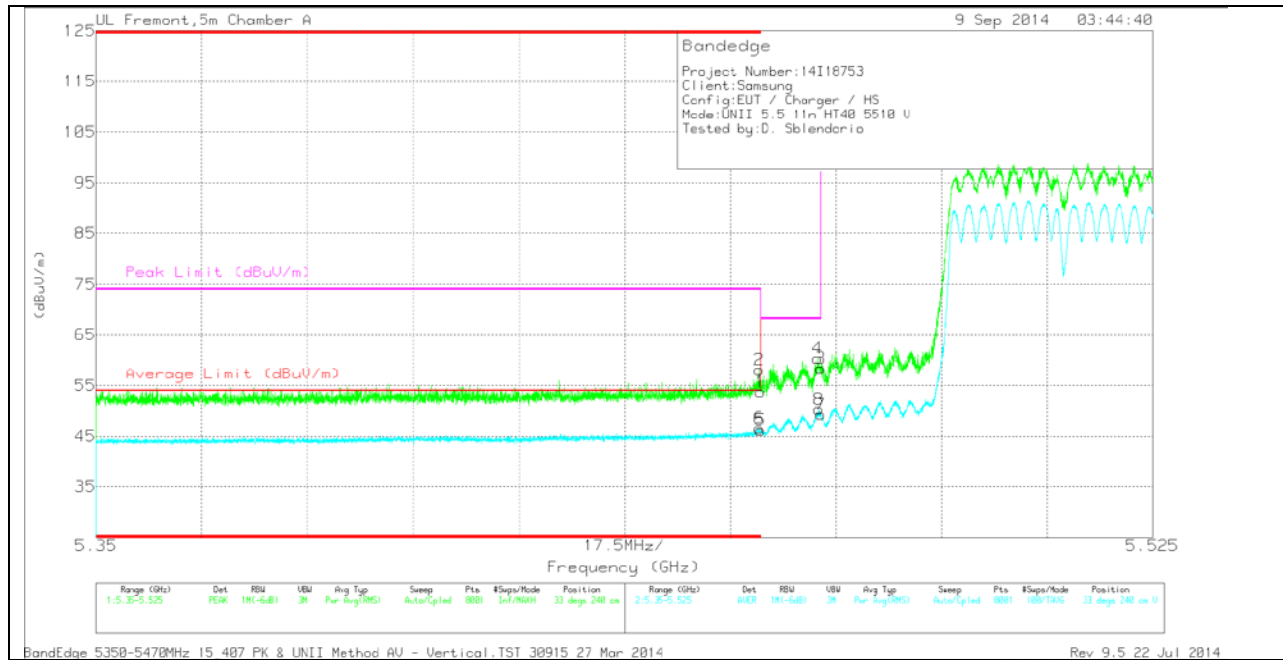
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	39.43	PK	34.4	-19.8	0	54.03	-	-	74	-19.97	203	100	H
2	* 5.459	42.22	PK	34.4	-19.8	0	56.82	-	-	74	-17.18	203	100	H
5	* 5.46	30.42	RMS	34.4	-19.8	.56	46.12	54	-7.88	-	-	203	100	H
6	* 5.459	30.96	RMS	34.4	-19.8	.56	46.66	54	-7.34	-	-	203	100	H
4	5.469	46.72	PK	34.4	-19.9	0	61.22	-	-	68.2	-6.98	203	100	H
8	5.469	34.72	RMS	34.4	-20	.56	50.22	-	-	-	-	203	100	H
3	5.47	44.64	PK	34.4	-20	0	59.04	-	-	68.2	-9.16	203	100	H
7	5.47	33.7	RMS	34.4	-20	.56	49.2	-	-	-	-	203	100	H

VERTICAL PEAK AND AVERAGE PLOT

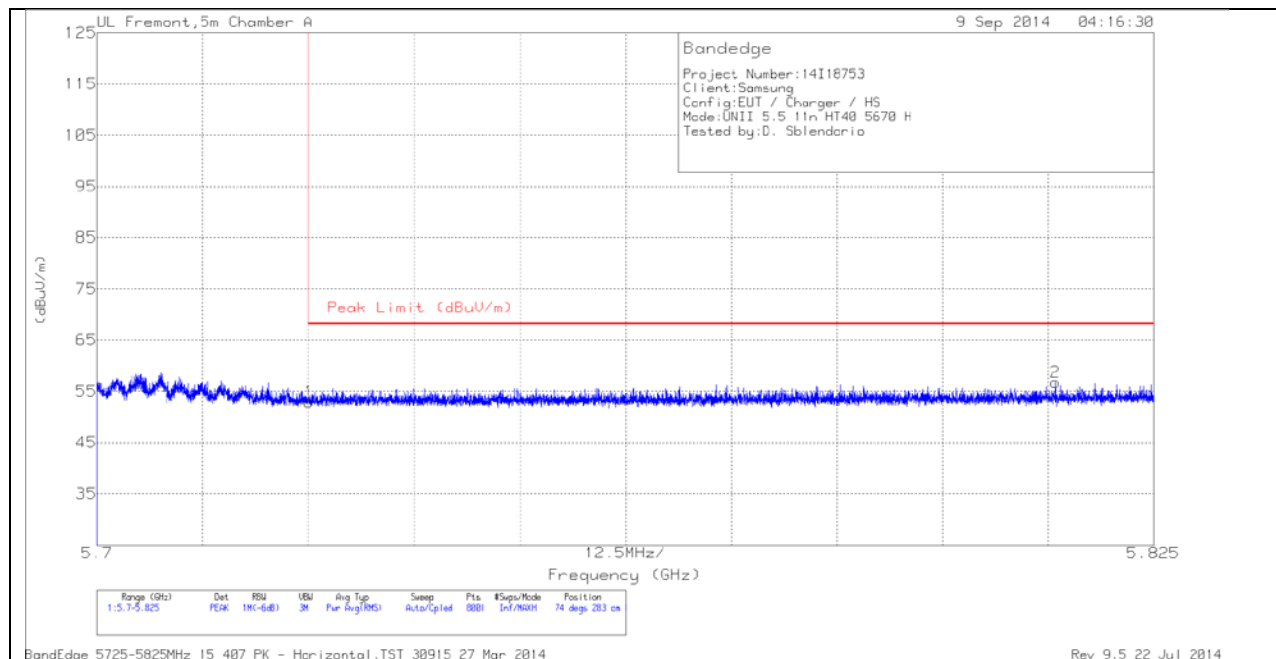


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	39.12	PK	34.4	-19.8	0	53.72	-	-	74	-20.28	33	240	V
2	* 5.46	43.5	PK	34.4	-19.8	0	58.1	-	-	74	-15.9	33	240	V
5	* 5.46	30.46	RMS	34.4	-19.8	.56	46.16	54	-7.84	-	-	33	240	V
6	* 5.46	30.84	RMS	34.4	-19.8	.56	46.54	54	-7.46	-	-	33	240	V
3	5.47	44.02	PK	34.4	-20	0	58.42	-	-	68.2	-9.78	33	240	V
4	5.47	45.94	PK	34.4	-20	0	60.34	-	-	68.2	-7.86	33	240	V
7	5.47	33.79	RMS	34.4	-20	.56	49.29	-	-	-	-	33	240	V
8	5.47	34.77	RMS	34.4	-20	.56	50.27	-	-	-	-	33	240	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

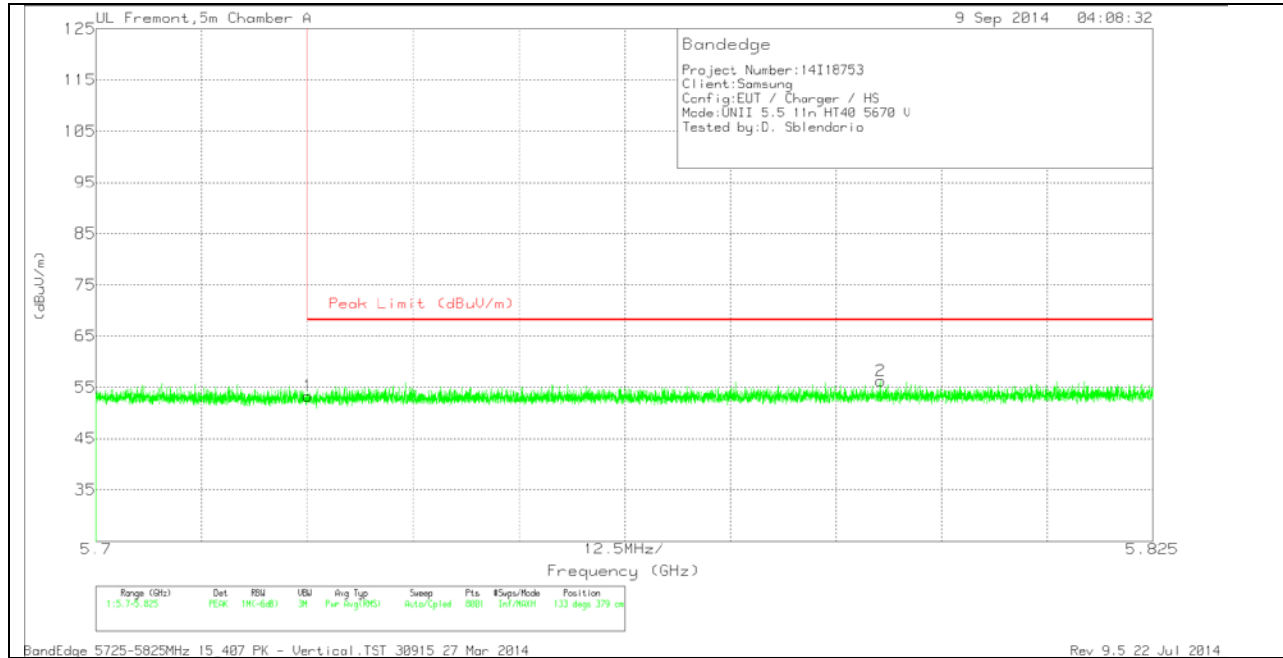
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.55	PK	34.6	-20.2	0	52.95	68.2	-15.25	74	283	H
2	5.813	41.73	PK	34.8	-19.8	0	56.73	68.2	-11.47	74	283	H

VERTICAL PEAK AND AVERAGE PLOT

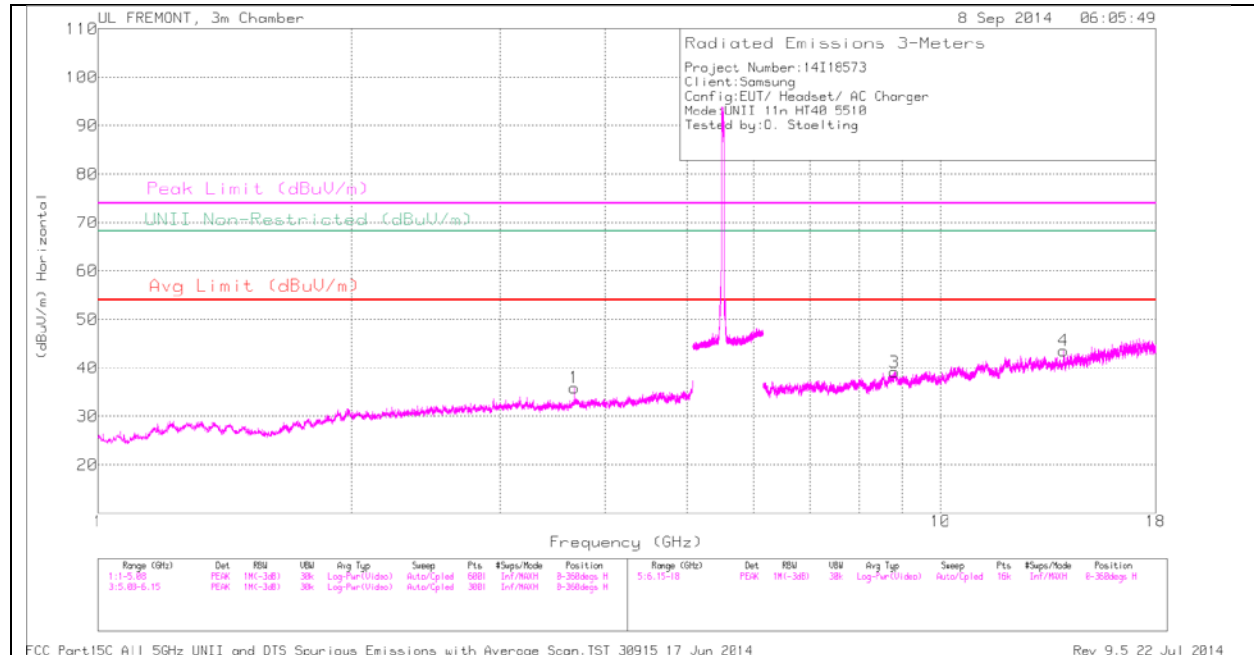


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.94	PK	34.6	-20.2	0	53.34	68.2	-14.86	133	379	V
2	5.793	41.45	PK	34.7	-19.9	0	56.25	68.2	-11.95	133	379	V

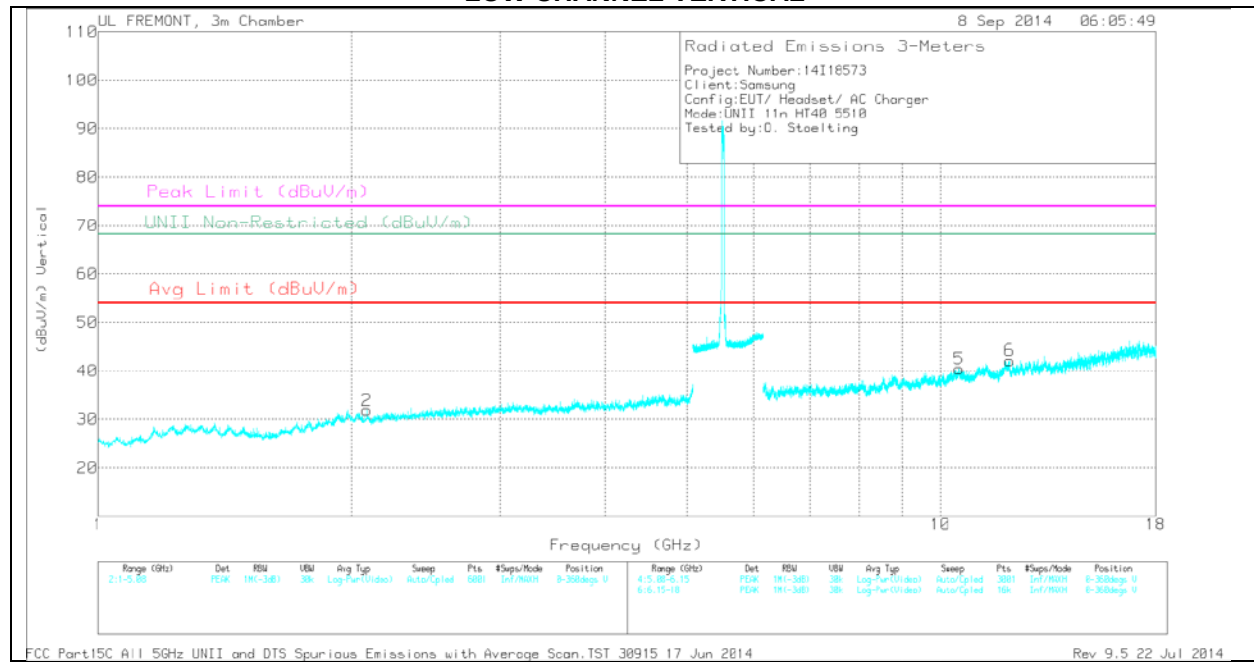
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.084	33.14	PK	31.5	-32.8	0	31.84	-	-	-	-	68.2	-36.36	0-360	200	V
1	3.674	33.27	PK	33.2	-30.6	0	35.87	-	-	74	-38.13	-	-	0-360	100	H
3	8.819	28.87	PK	36	-25.7	0	39.17	-	-	-	-	68.2	-29.03	0-360	100	H
5	10.516	28.04	PK	37.5	-25.1	0	40.44	-	-	-	-	68.2	-27.76	0-360	200	V
6	12.069	29.49	PK	39.1	-26.4	0	42.19	-	-	74	-31.81	-	-	0-360	200	V
4	14.005	32.41	PK	38.8	-27.7	0	43.51	-	-	-	-	68.2	-24.69	0-360	200	H

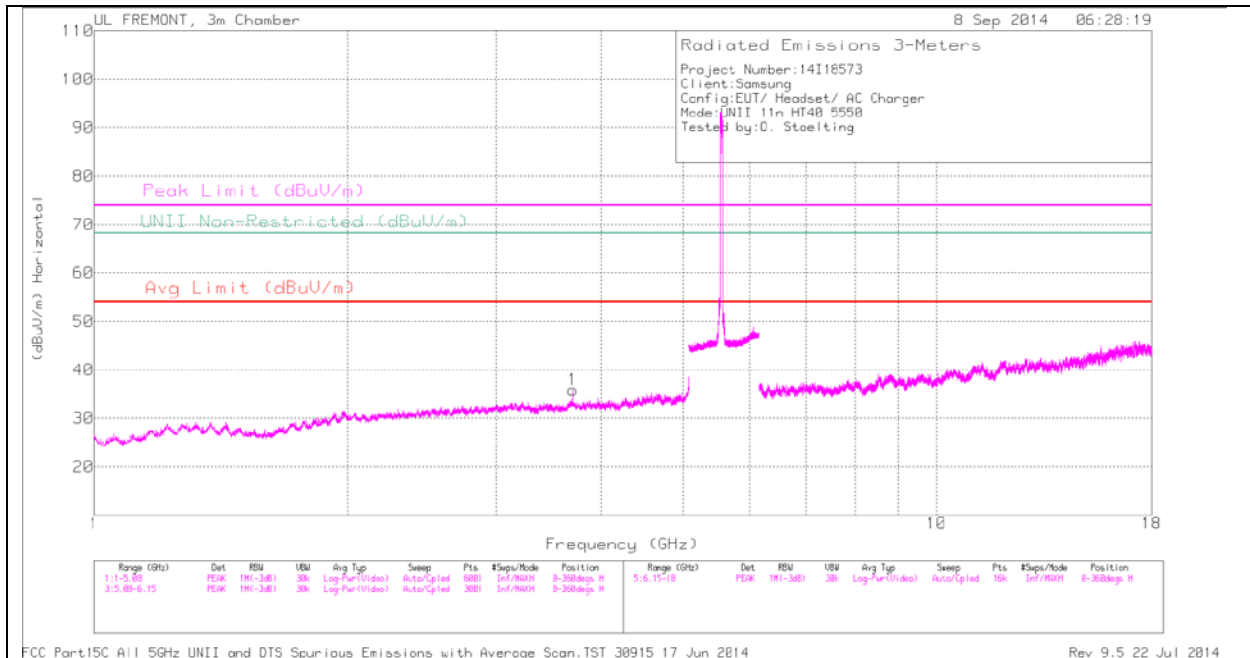
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.673	41.83	PK1	33.2	-30.6	0	44.43	-	-	74	-29.57	-	-	309	254	H
3.673	32.72	AD1	33.2	-30.6	.56	36.14	54	-17.86	-	-	-	-	309	254	H

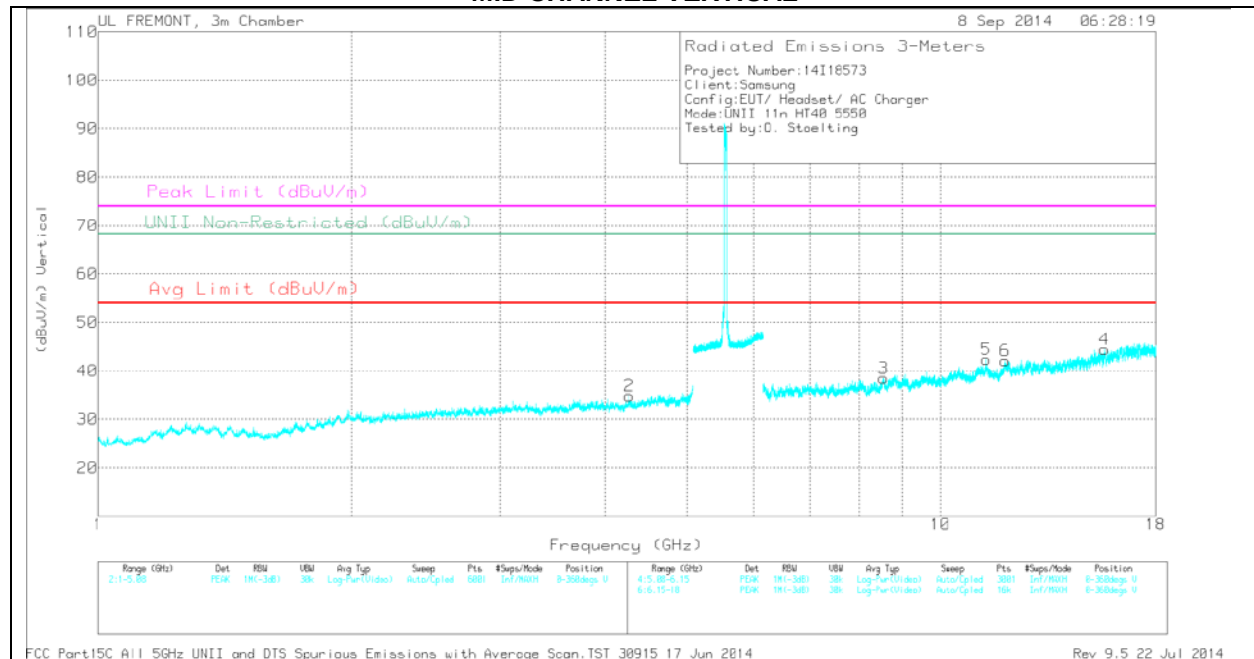
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MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Chl/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	3.7	33.35	PK	33.2	-30.7	0	35.85	-	-	74	-38.15	-	-	0-360	200	H
2	4.271	31.51	PK	33.6	-30.3	0	34.81	-	-	74	-39.19	-	-	0-360	200	V
3	8.564	28.88	PK	35.8	-26.2	0	38.48	-	-	-	-	68.2	-29.72	0-360	200	V
5	11.335	29.92	PK	38	-25.5	0	42.42	-	-	74	-31.58	-	-	0-360	200	V
6	11.932	29.41	PK	39	-26.3	0	42.11	-	-	74	-31.89	-	-	0-360	100	V
4	15.661	30.77	PK	40.4	-26.7	0	44.47	-	-	74	-29.53	-	-	0-360	100	V

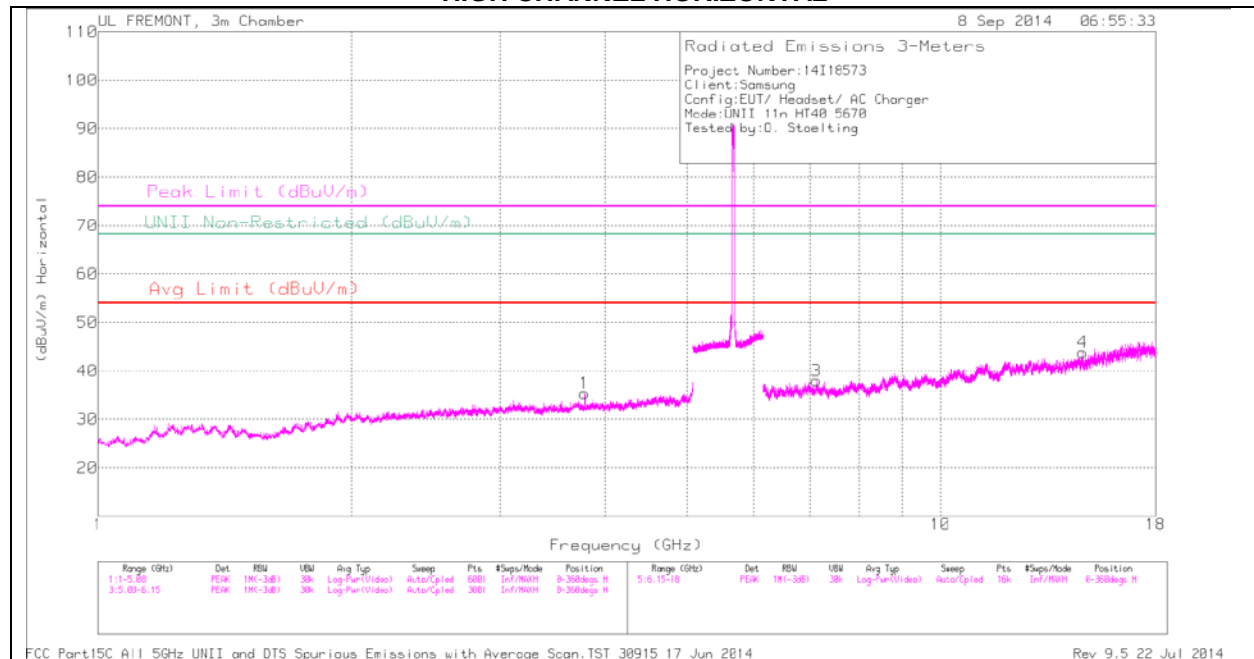
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Chl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.7	41.93	PK1	33.2	-30.7	0	44.43	-	-	74	-29.57	-	-	248	251	H
3.7	31.28	AD1	33.2	-30.7	.56	34.6	54	-19.4	-	-	-	-	248	251	H

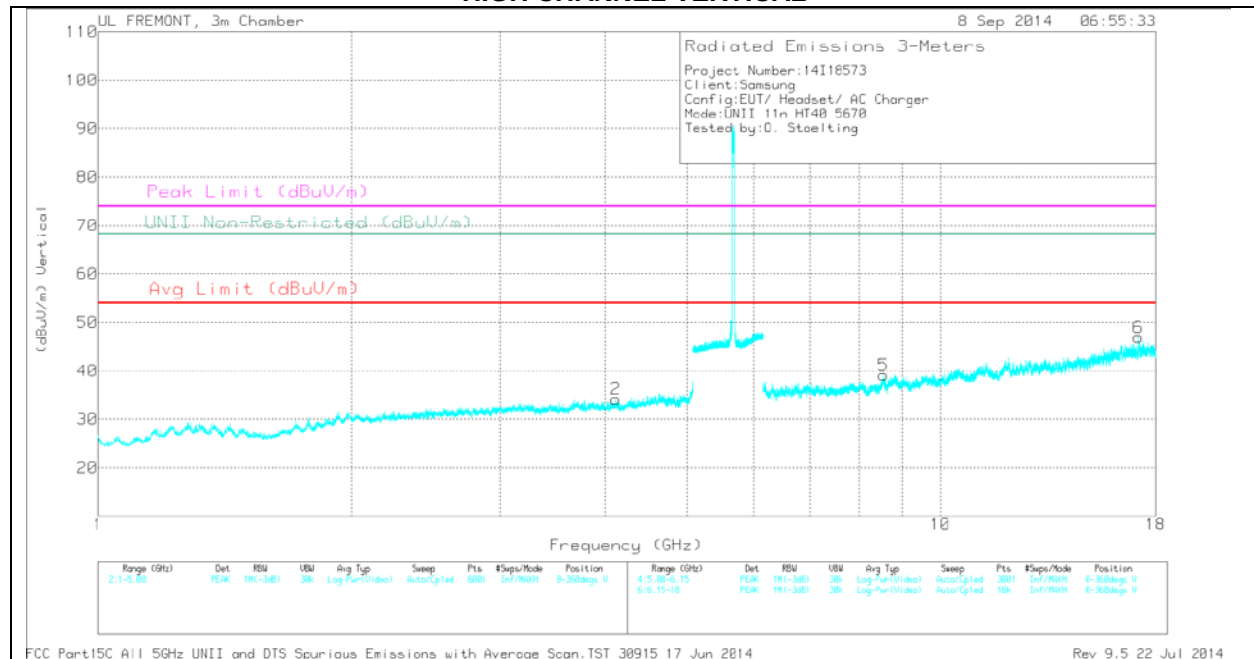
FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/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	3.78	33.98	PK	33.2	-31.8	0	35.38	-	-	74	-38.62	-	-	0-360	100	H
2	4.114	31.5	PK	33.5	-30.8	0	34.2	-	-	74	-39.8	-	-	0-360	200	V
3	7.119	31.25	PK	35.6	-28.9	0	37.95	-	-	-	-	68.2	-30.25	0-360	200	H
5	8.567	29.59	PK	35.8	-26.2	0	39.19	-	-	-	-	68.2	-29.01	0-360	100	V
4	14.734	31.41	PK	39.7	-27.3	0	43.81	-	-	-	-	68.2	-24.39	0-360	100	H
6	17.191	29.07	PK	41.2	-23.3	0	46.97	-	-	-	-	68.2	-21.23	0-360	100	V

PK - Peak detector

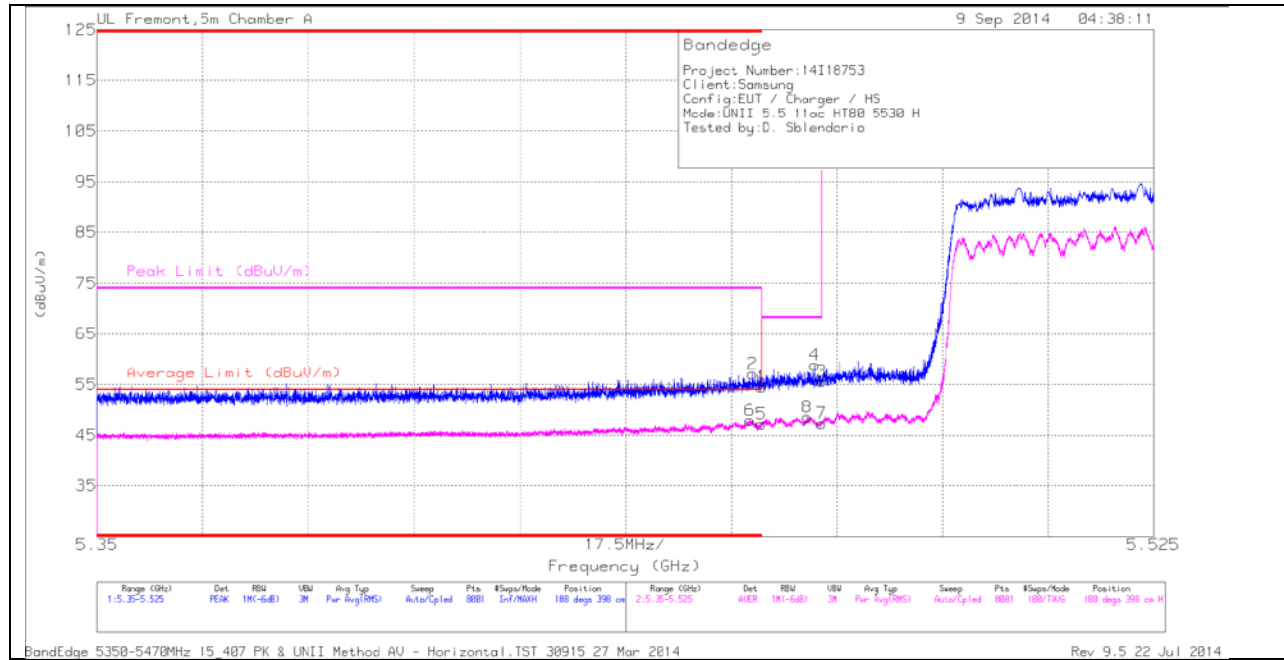
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.78	42.77	PK1	33.2	-31.8	0	44.17	-	-	74	-29.83	-	-	250	102	H
3.78	31.98	AD1	33.2	-31.8	.56	34.2	54	-19.8	-	-	-	-	250	102	H

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

11.2.4. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.5 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

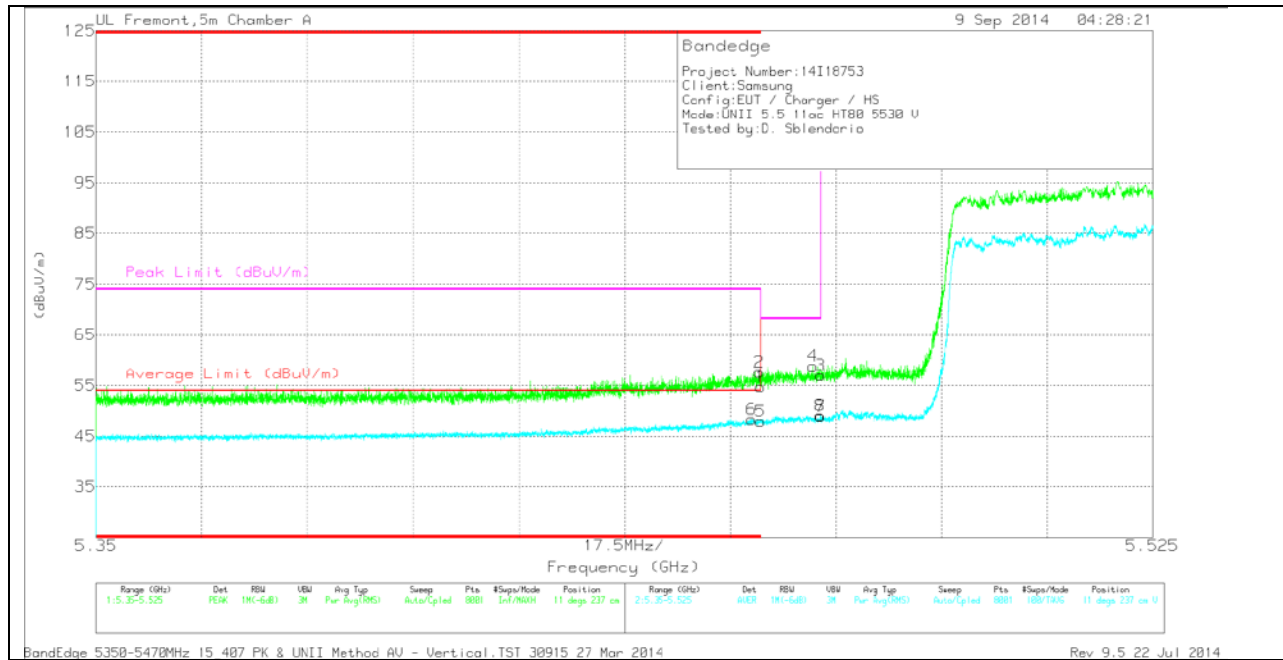
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	39.89	PK	34.4	-19.8	0	54.49	-	-	74	-19.51	188	398	H
2	* 5.459	42.55	PK	34.4	-19.8	0	57.15	-	-	74	-16.85	188	398	H
5	* 5.46	30.76	RMS	34.4	-19.8	1.68	47.19	54	-6.81	-	-	188	398	H
6	* 5.458	31.5	RMS	34.4	-19.8	1.68	47.93	54	-6.07	-	-	188	398	H
8	5.468	32.24	RMS	34.4	-19.9	1.68	48.57	-	-	-	-	188	398	H
4	5.469	44.31	PK	34.4	-19.9	0	58.81	-	-	68.2	-9.39	188	398	H
3	5.47	41.28	PK	34.4	-20	0	55.68	-	-	68.2	-12.52	188	398	H
7	5.47	31.08	RMS	34.4	-20	1.68	47.31	-	-	-	-	188	398	H

VERTICAL PEAK AND AVERAGE PLOT

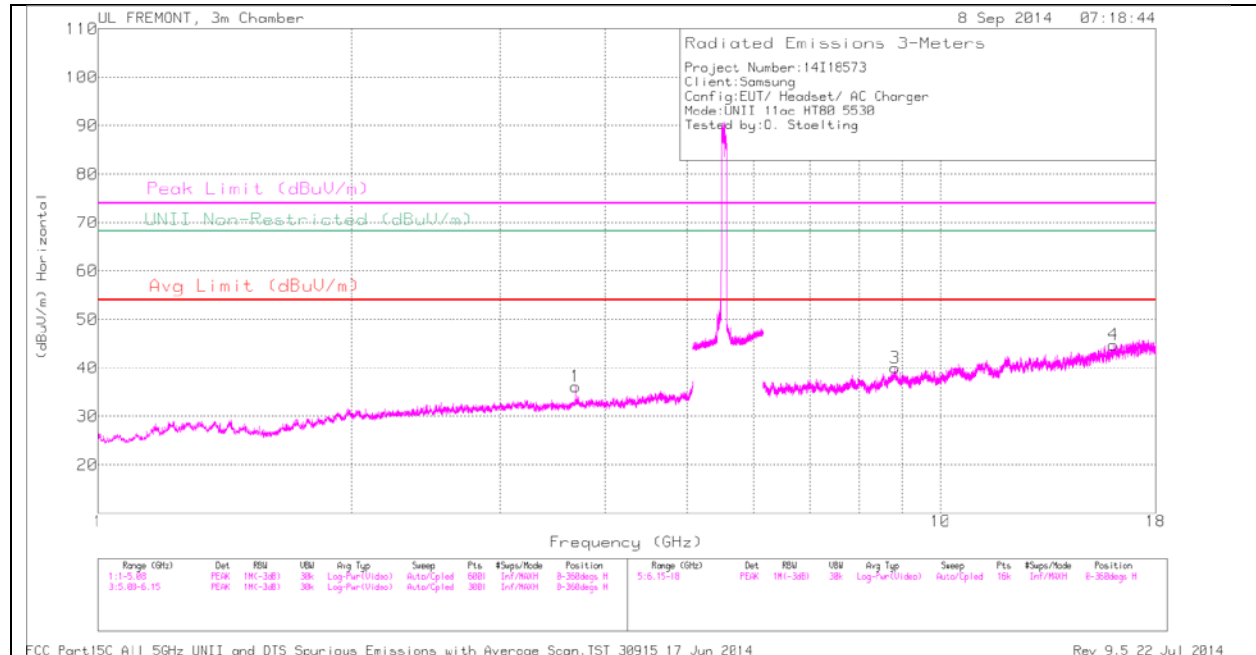


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	40.16	PK	34.4	-19.8	0	54.76	-	-	74	-19.24	11	237	V
2	* 5.46	43.03	PK	34.4	-19.8	0	57.63	-	-	74	-16.37	11	237	V
5	* 5.46	31.51	RMS	34.4	-19.8	1.68	47.94	54	-6.06	-	-	11	237	V
6	* 5.459	31.93	RMS	34.4	-19.8	1.68	48.36	54	-5.64	-	-	11	237	V
4	5.469	44.3	PK	34.4	-19.9	0	58.8	-	-	68.2	-9.4	11	237	V
3	5.47	42.62	PK	34.4	-20	0	57.02	-	-	68.2	-11.18	11	237	V
7	5.47	32.68	RMS	34.4	-20	1.68	48.91	-	-	-	-	11	237	V
8	5.47	32.86	RMS	34.4	-20	1.68	49.09	-	-	-	-	11	237	V

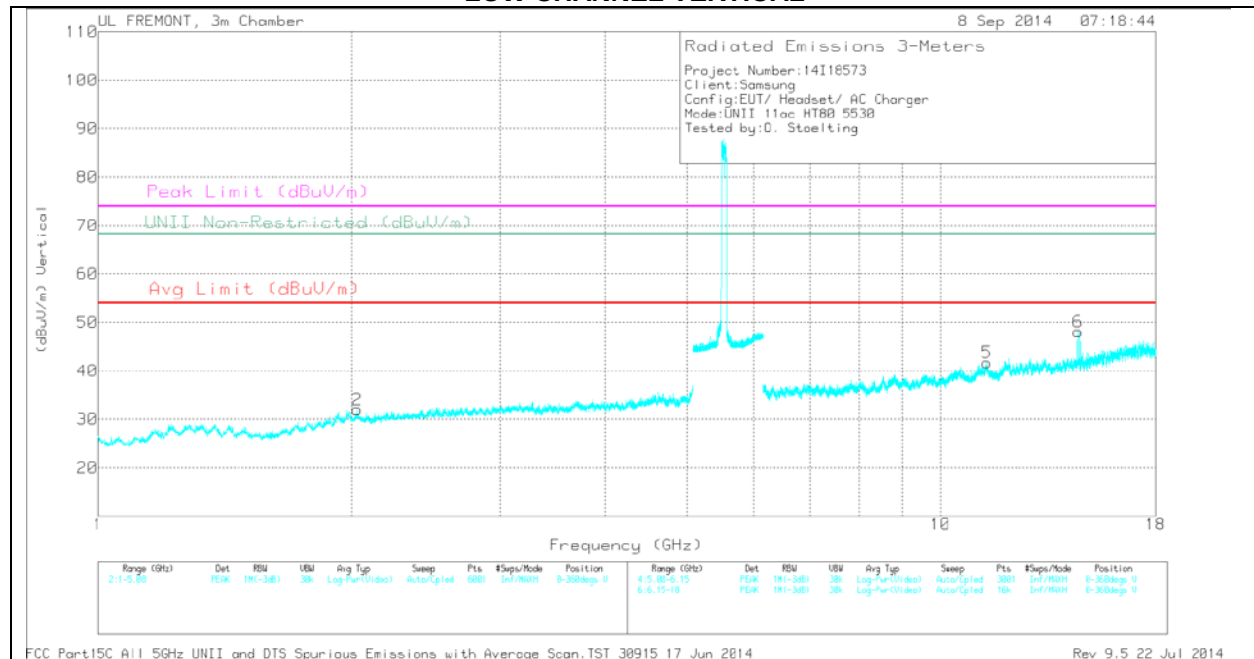
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.032	32.75	PK	31.6	-32.3	0	32.05	-	-	-	-	68.2	-36.15	0-360	100	V
1	3.687	33.55	PK	33.2	-30.6	0	36.15	-	-	74	-37.85	-	-	0-360	100	H
3	8.826	29.92	PK	36	-25.9	0	40.02	-	-	-	-	68.2	-28.18	0-360	100	H
5	11.357	29.31	PK	38.1	-25.7	0	41.71	-	-	74	-32.29	-	-	0-360	200	V
6	14.556	35.68	PK	39.7	-27.3	0	48.08	-	-	-	-	68.2	-20.12	0-360	200	V
4	16.039	29.89	PK	40.5	-25.6	0	44.79	-	-	74	-29.21	-	-	0-360	100	H

PK - Peak detector

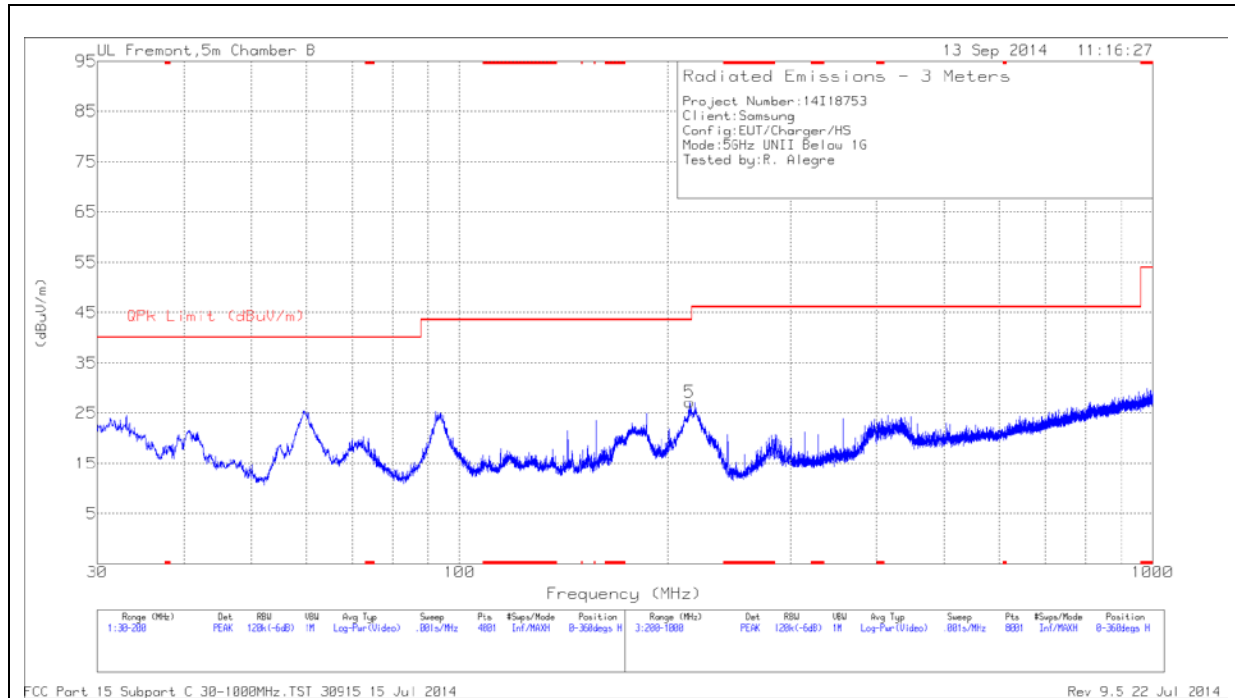
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/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
14.556	40.15	PK1	39.7	-27.3	0	52.55	-	-	-	-	68.2	-15.65	222	124	V
14.558	27.59	AD1	39.7	-27.3	1.68	41.82	-	-	-	-	-	-	222	124	V

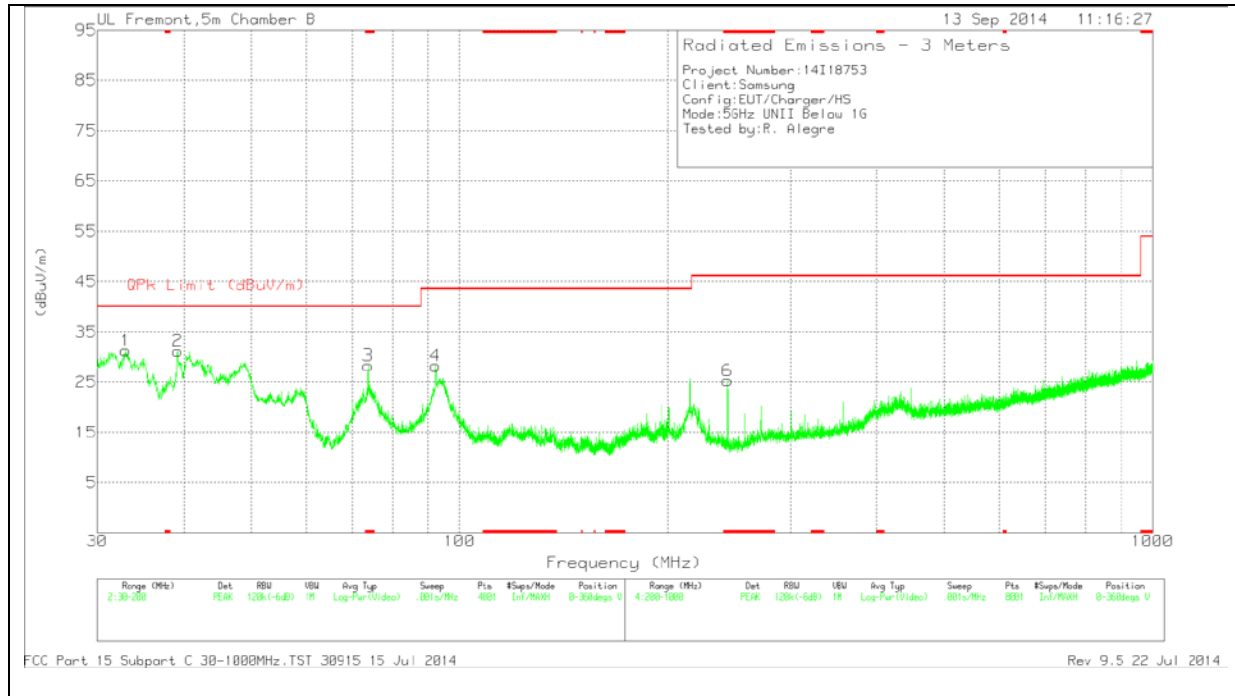
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12. WORST-CASE BELOW 1 GHz (in the 5.3 GHz Band)

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



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



Below 1G Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 73.7325	48.5	PK	8.1	-28.3	28.3	40	-11.7	0-360	101	V
6	* 243.4	39.97	PK	11.7	-26.4	25.27	46.02	-20.75	0-360	200	V
1	32.9325	40.65	PK	19.3	-28.7	31.25	40	-8.75	0-360	101	V
2	39.18	45.3	PK	14.6	-28.7	31.2	40	-8.8	0-360	101	V
4	92.3475	48.13	PK	8.2	-28.1	28.23	43.52	-15.29	0-360	101	V
5	214.7	43.38	PK	10.6	-26.8	27.18	43.52	-16.34	0-360	101	H

13. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

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

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

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 C63.4.

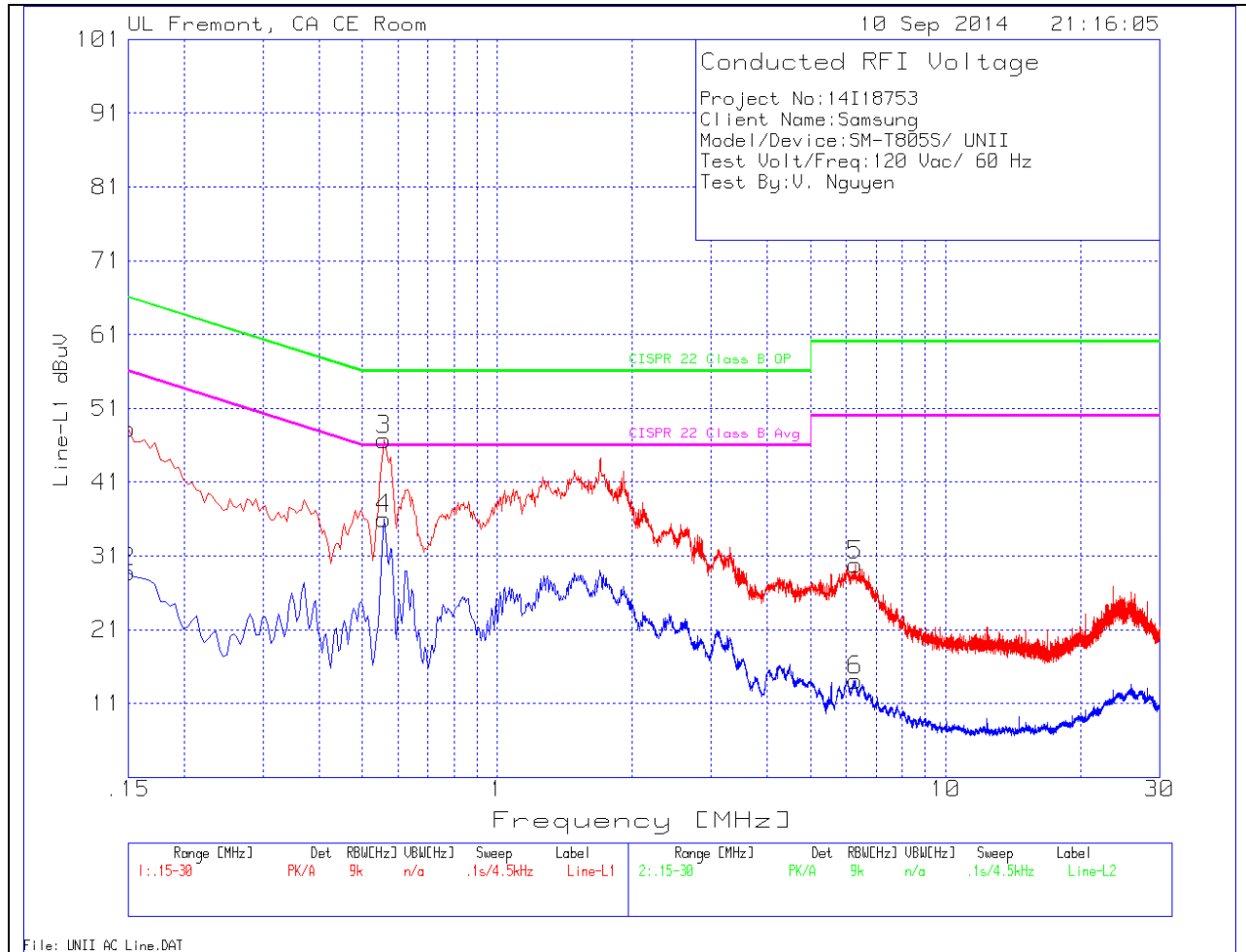
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT

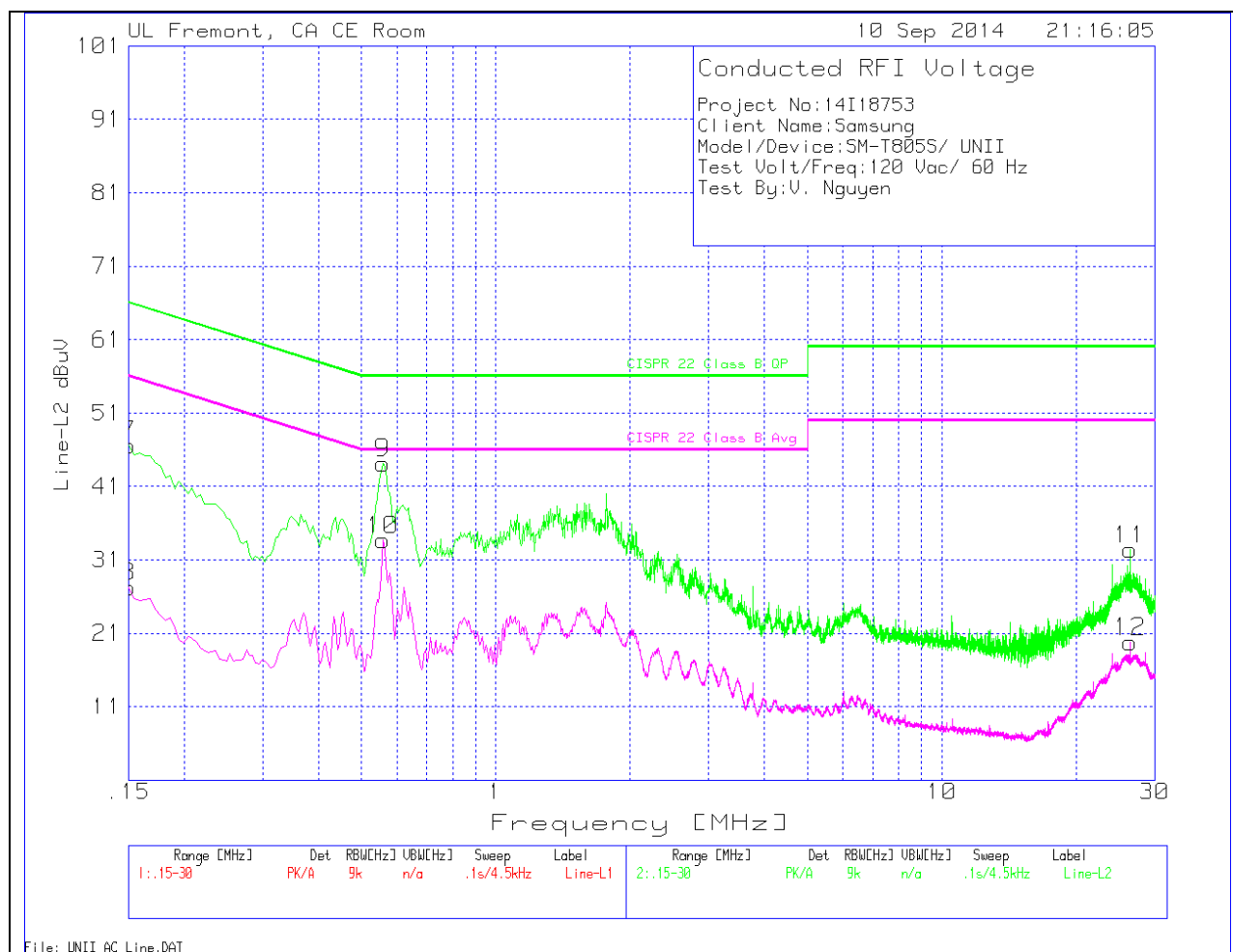


LINE 1 RESULTS

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L1 (dB)	LC Cables 1&3 (dB)	Corrected Reading dBuV	CISPR 22 Class B QP	Margin to Limit (dB)	CISPR 22 Class B Avg	Margin to Limit (dB)
1	.15	46.87	PK	1.4	0	48.27	66	-17.73	-	-
2	.15	27.45	Av	1.4	0	28.85	-	-	56	-27.15
3	.5595	46.38	PK	.3	0	46.68	56	-9.32	-	-
4	.5595	35.7	Av	.3	0	36	-	-	46	-10
5	6.2835	29.47	PK	.2	.1	29.77	60	-30.23	-	-
6	6.2835	13.82	Av	.2	.1	14.12	-	-	50	-35.88

LINE 2 PLOT



LINE 2 RESULTS

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L2 (dB)	LC Cables 2&3 (dB)	Corrected Reading dBuV	CISPR 22 Class B QP	Margin to Limit (dB)	CISPR 22 Class B Avg	Margin to Limit (dB)
7	.15	45.1	PK	1.5	0	46.6	66	-19.4	-	-
8	.15	25.78	Av	1.5	0	27.28	-	-	56	-28.72
9	.5595	43.88	PK	.3	0	44.18	56	-11.82	-	-
10	.5595	33.34	Av	.3	0	33.64	-	-	46	-12.36
11	26.3715	31.75	PK	.3	.3	32.35	60	-27.65	-	-
12	26.3715	19.14	Av	.3	.3	19.74	-	-	50	-30.26

14. DYNAMIC FREQUENCY SELECTION

14.1. OVERVIEW

14.1.1. LIMITS

FCC

§15.407 (h) and FCC 06-96 APPENDIX "COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVCIES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION".

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
Uniform Spreading	Yes	Not required	Not required

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

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

Maximum Transmit Power	Value (see note)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 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.

Table 4: DFS Response requirement values

Parameter	Value
<i>Non-occupancy period</i>	30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds
<i>Channel Closing Transmission Time</i>	200 milliseconds + approx. 60 milliseconds over remaining 10 second period
The instant that the <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> begins is as follows: For the Short pulse radar Test Signals this instant is the end of the <i>Burst</i>. For the Frequency Hopping radar Test Signal, this instant is the end of the last radar burst generated. For the Long Pulse radar Test Signal this instant is the end of the 12-second period defining the radar transmission. 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 channel changes (an aggregate of approximately 60 milliseconds) during the remainder of the 10-second period. The aggregate duration of control signals will not count quiet periods in between transmissions.	

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (Microseconds)	PRI (Microseconds)	Pulses	Minimum Percentage of Successful Detection	Minimum Trials
1	1	1428	18	60%	30
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
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Table 6 – Long Pulse Radar Test Signal

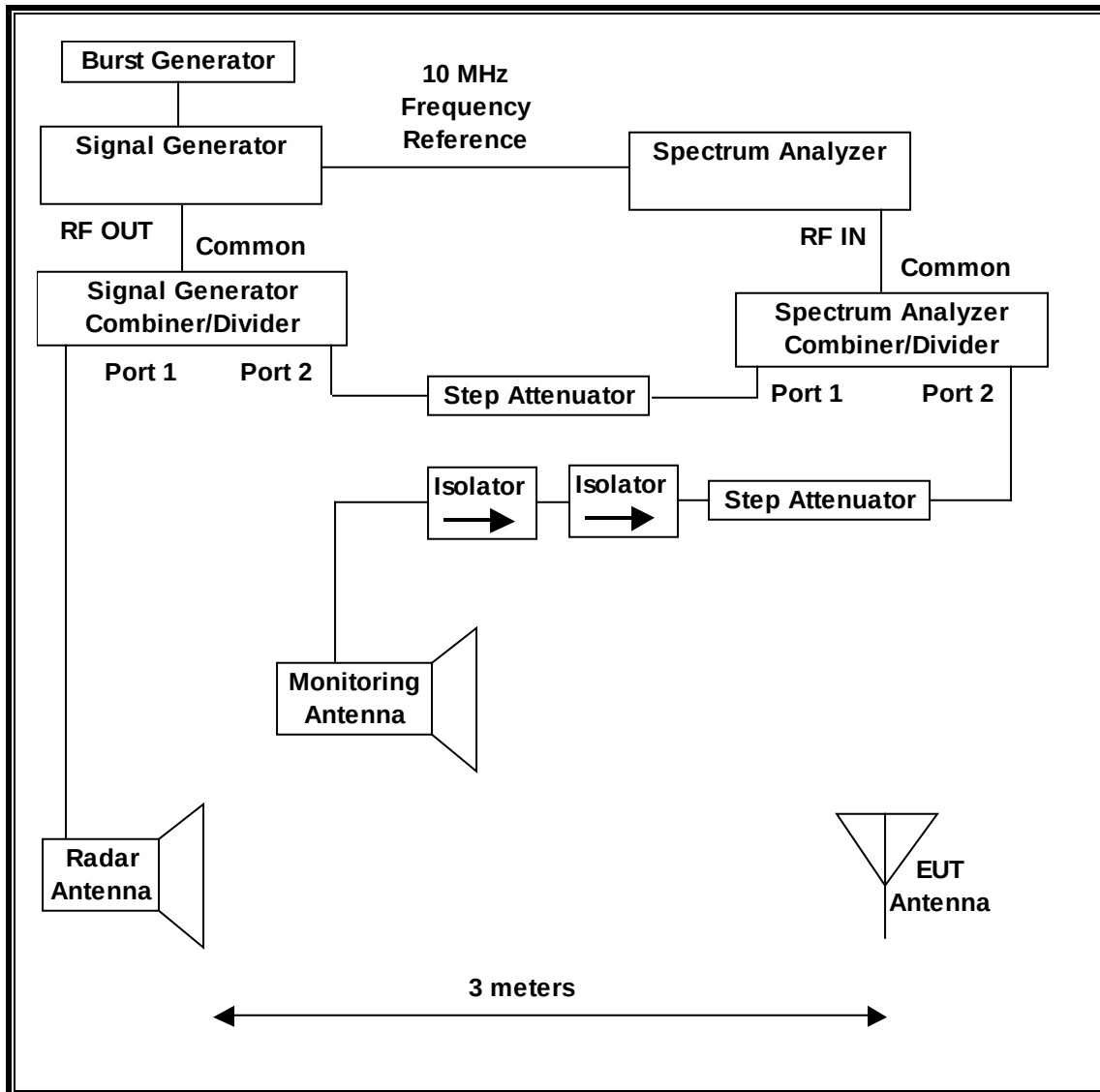
Radar Waveform	Bursts	Pulses per Burst	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Minimum Percentage of Successful Detection	Minimum Trials
5	8-20	1-3	50-100	5-20	1000-2000	80%	30

Table 7 – Frequency Hopping Radar Test Signal

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

14.1.2. TEST AND MEASUREMENT SYSTEM

RADIATED METHOD SYSTEM BLOCK DIAGRAM



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 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.

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.

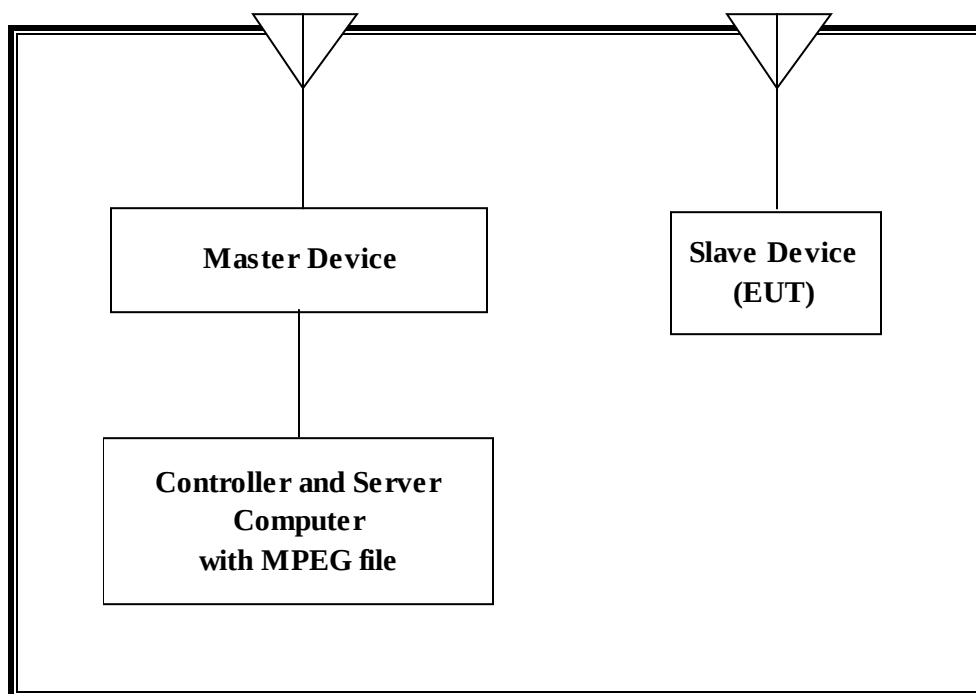
TEST AND MEASUREMENT EQUIPMENT

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
Spectrum Analyzer, 3Hz to 44 GHz	Agilent / HP	E444A	C01012	09/05/15
Vector Signal Generator, 20GHz	Agilent / HP	E4438C	C01197	09/03/15

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
Wireless Access Point	Cisco	AIR-CAP3703E-A-K9	FTX181570A6	LDK102078
Power Injector	Cisco	POE 30U-560G	HPI170102N2	DoC
Notebook PC (Controller/Server)	Dell	PP18L	10657517725	DoC
AC Adapter (Controller/Server PC)	Dell	LA65SN0-00	CN-ODF263-71615-6AU-1019	DoC

14.1.3. DESCRIPTION OF EUT

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 13.3 dBm EIRP in the 5250-5350 MHz band and 13.27 dBm EIRP in the 5470-5725 MHz band.

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

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 connected to an antenna to perform radiated tests.

WLAN traffic is generated by streaming the video file TestFile.mp2 "6 ½ Magic Hours" from the Master to the Slave in full motion video mode using the MP4 Player version 1.7.21 media play.

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

The EUT utilizes the 802.11ac architecture. Three nominal channel bandwidths are implemented: 20 MHz, 40 MHz and 80 MHz. Therefore, pursuant to FCC KDB Publication 905462 D3, "Client devices with 80 MHz BW mode can be tested with an approved master operating in 40 MHz BW mode". Therefore, 80MHz BW DFS testing in Client-to-Client Communications Mode was not performed and has been excluded from this report.

The software installed in the access point is 12.4(25d)JA1.

UNIFORM CHANNEL SPREADING

This requirement is not applicable to Slave radio devices.

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

The Master Device is a Cisco Access Point, FCC ID: LDK102061. The minimum antenna gain for the Master Device is 3.5 dBi.

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

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.

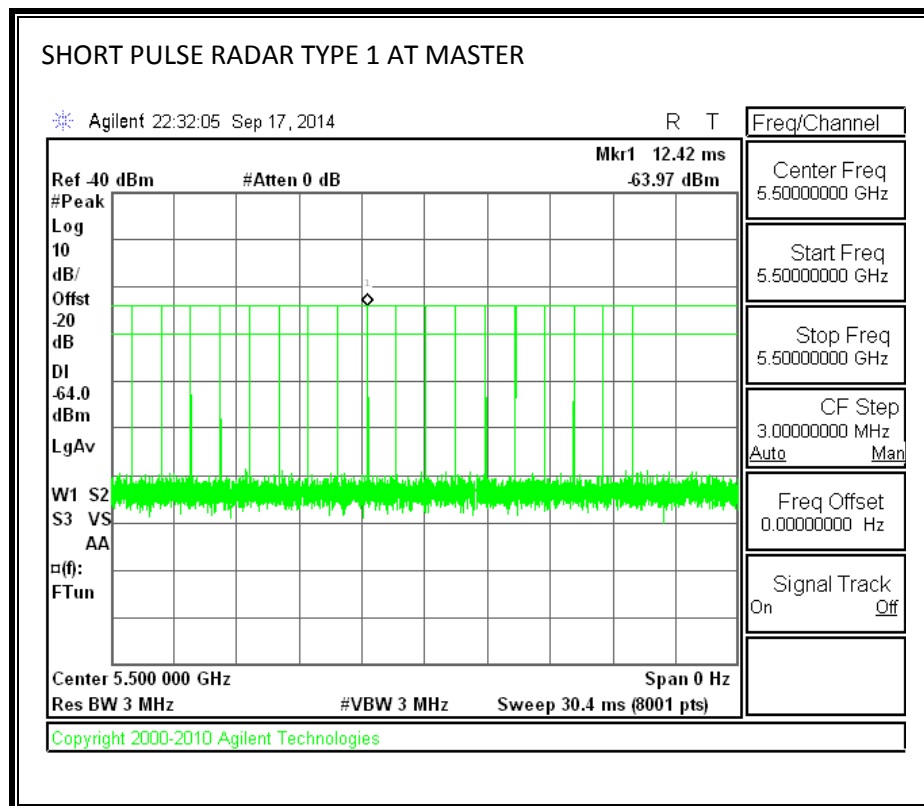
14.2. RESULTS FOR 20 MHz BANDWIDTH

14.2.1. TEST CHANNEL

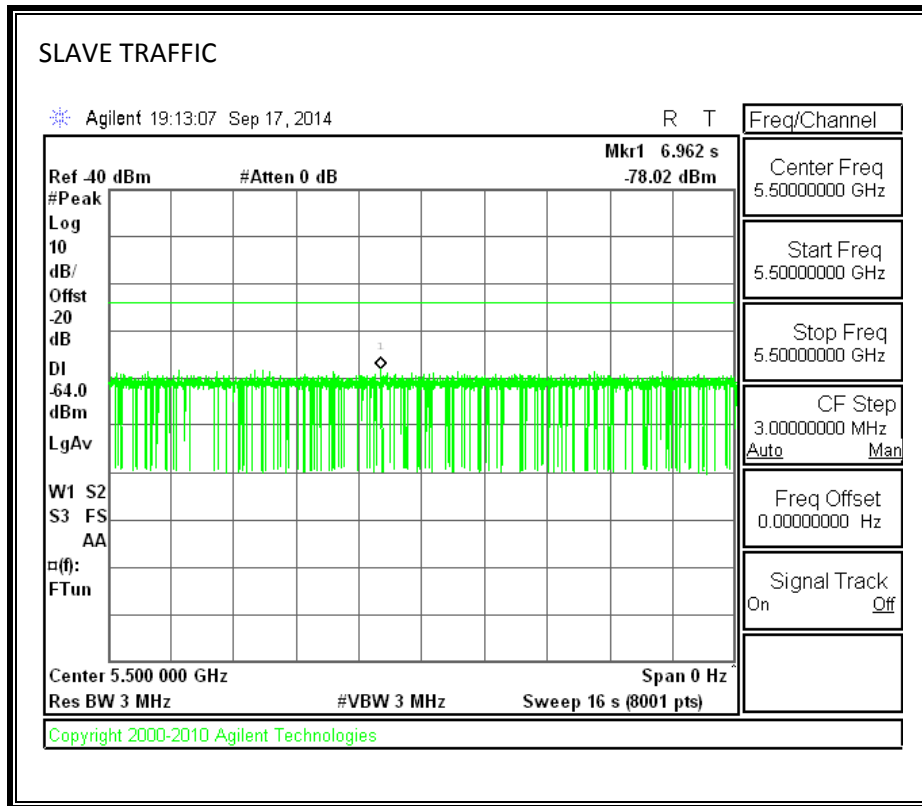
All tests were performed at a channel center frequency of 5500 MHz.

14.2.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



14.2.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

14.2.4. 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)

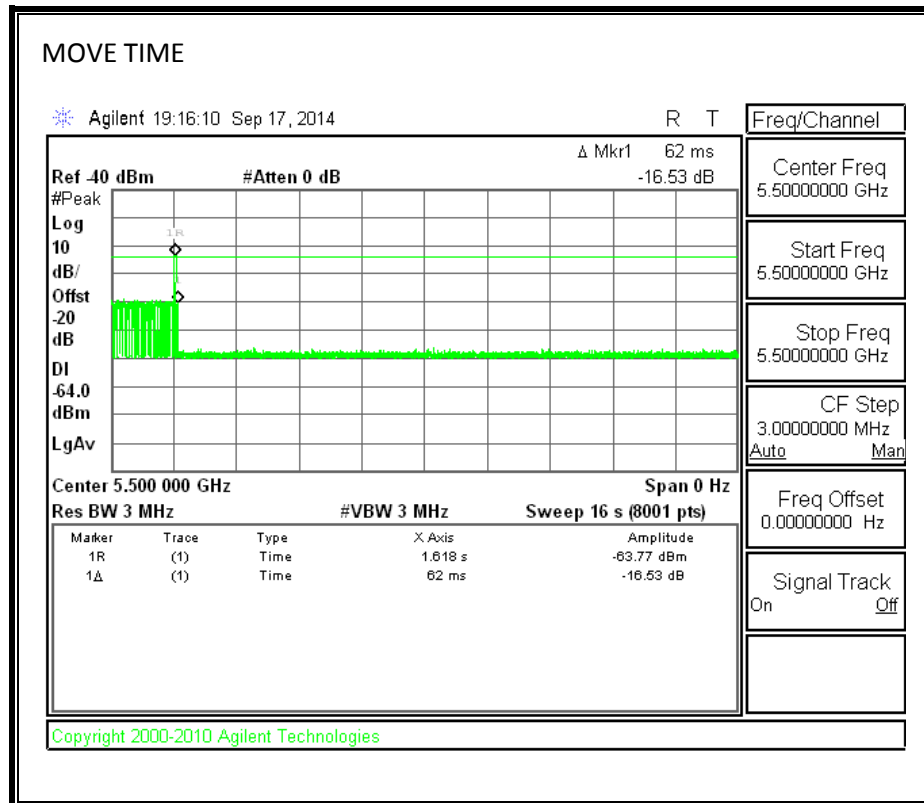
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

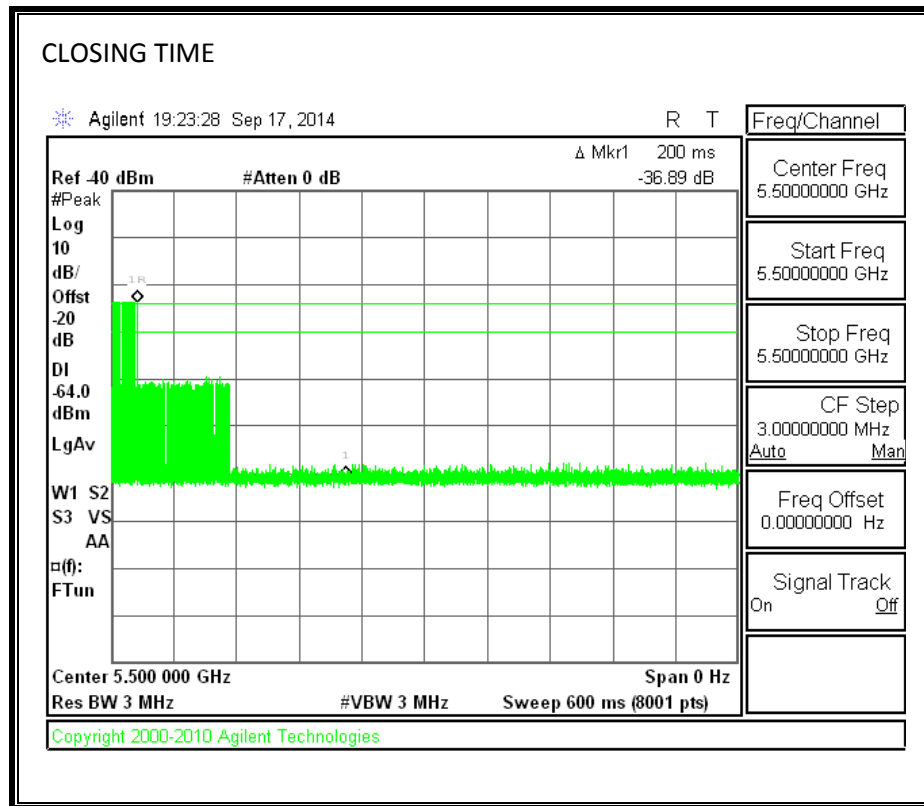
Channel Move Time (sec)	Limit (sec)
0.062	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
6.0	60

MOVE TIME

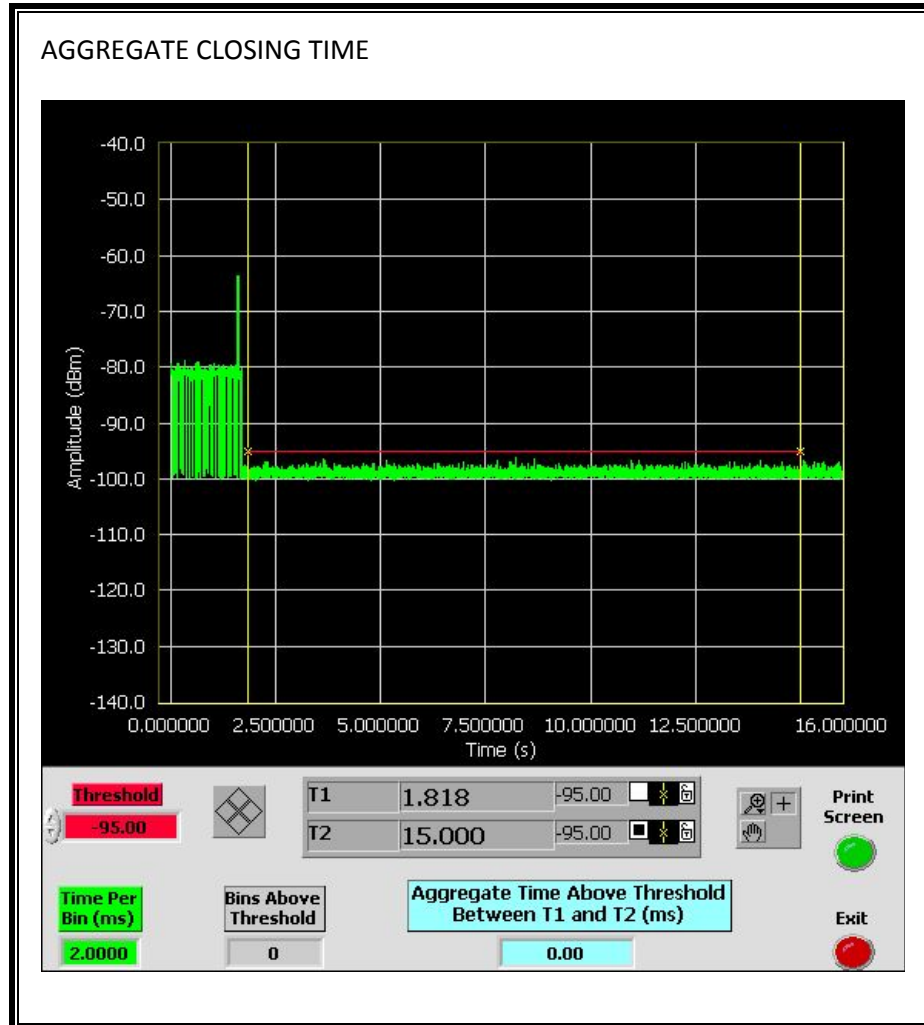


CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



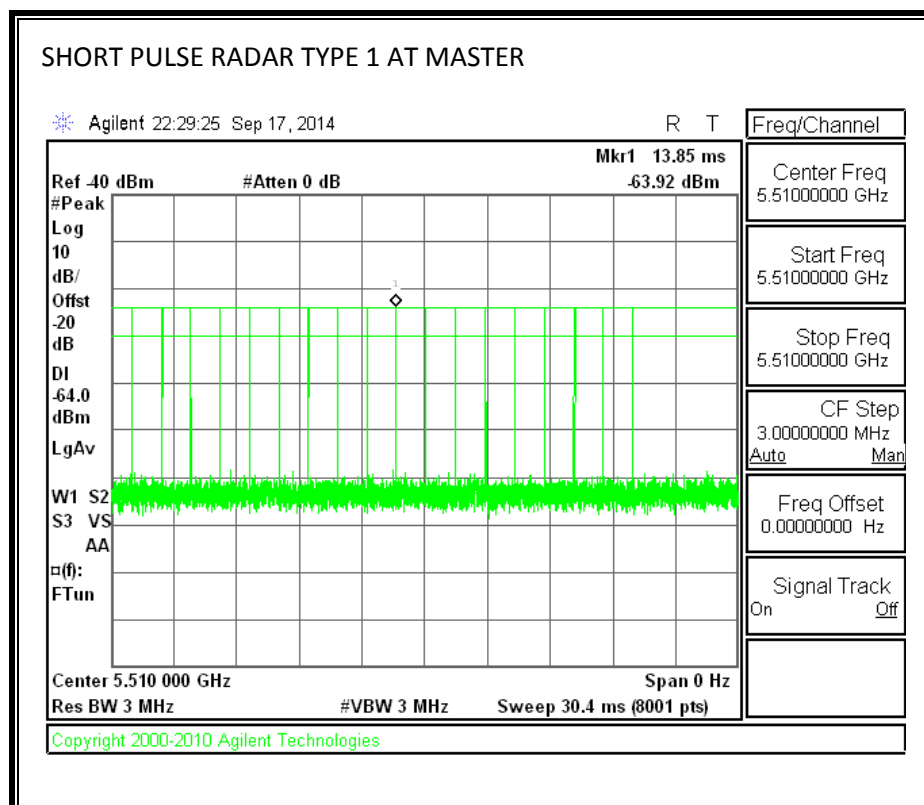
14.3. RESULTS FOR 40 MHz BANDWIDTH

14.3.1. TEST CHANNEL

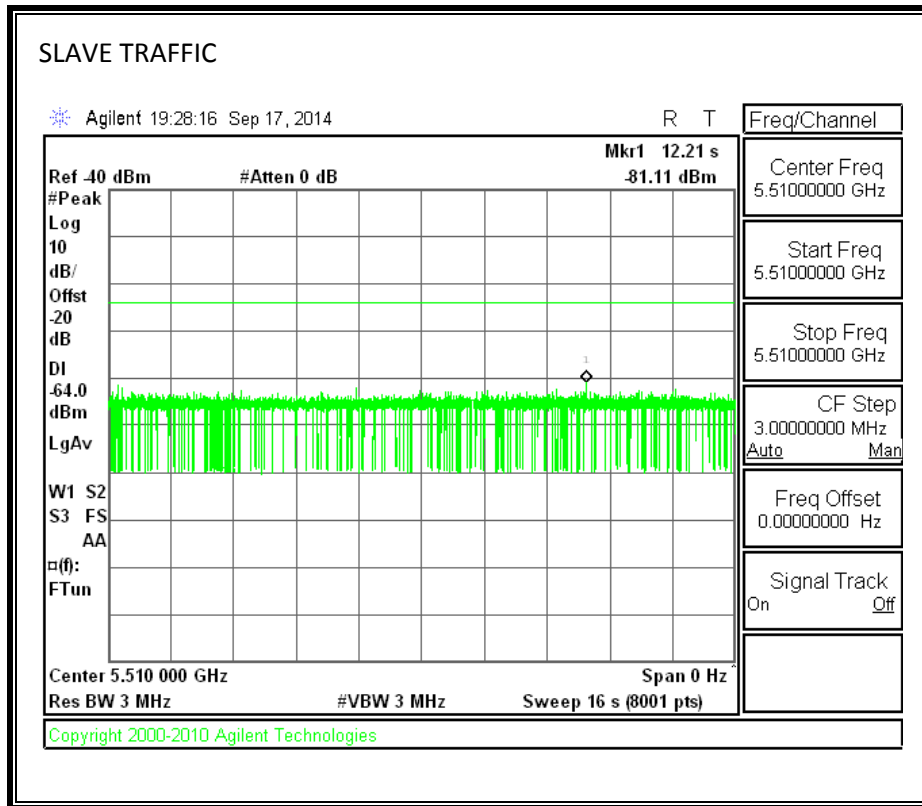
All tests were performed at a channel center frequency of 5510 MHz.

14.3.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



14.3.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

14.3.4. 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)

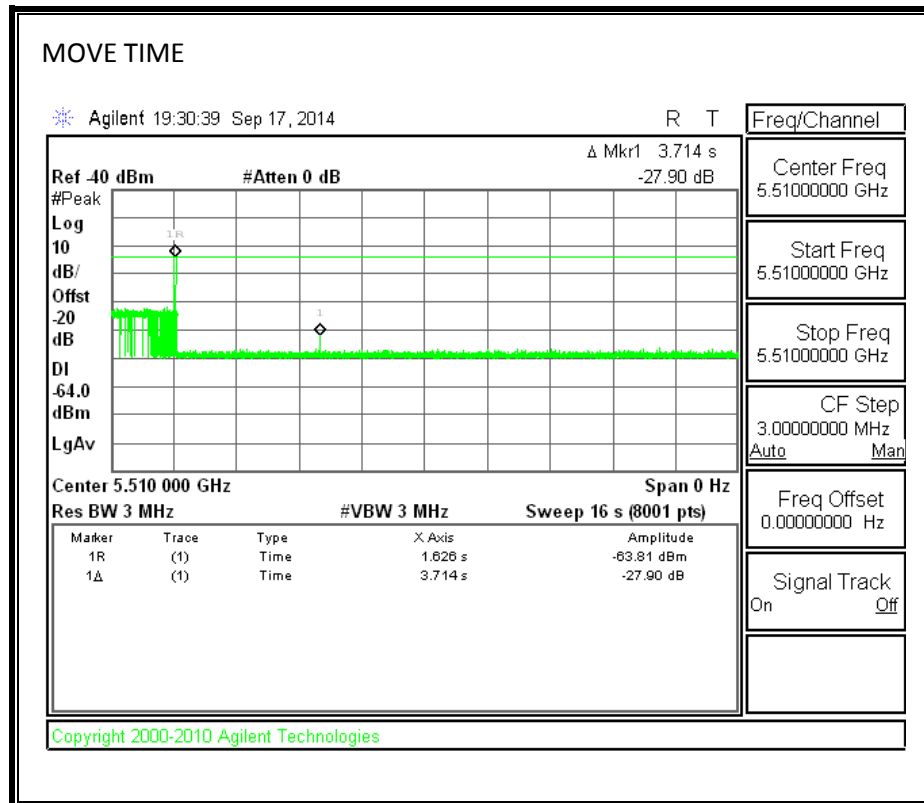
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

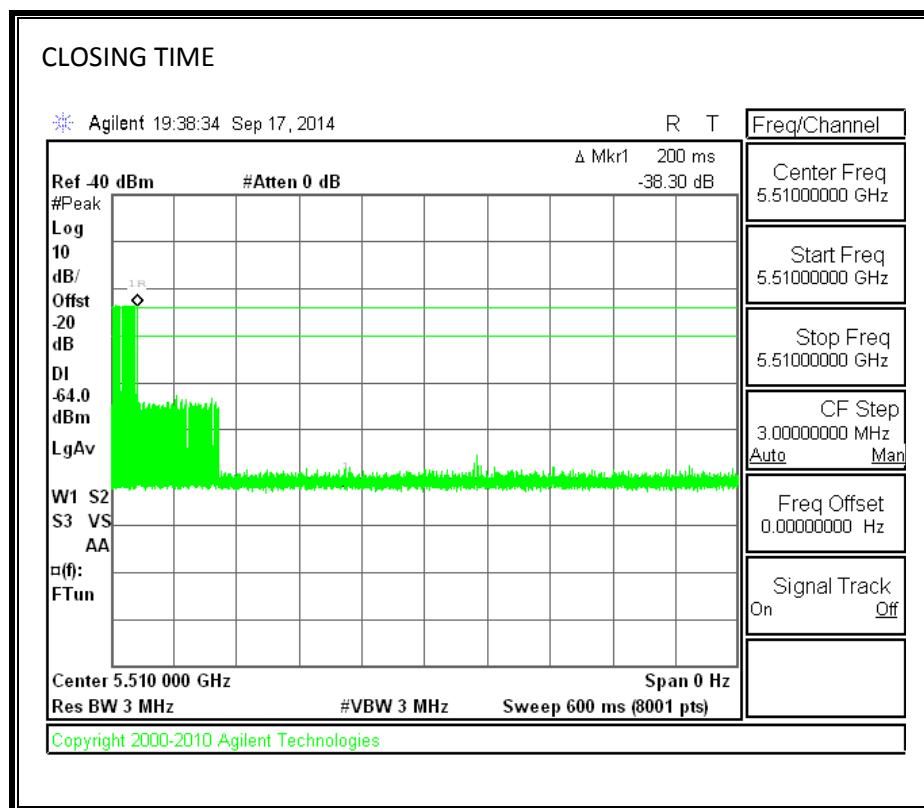
RESULTS

Channel Move Time (sec)	Limit (sec)
3.714	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
2.0	60

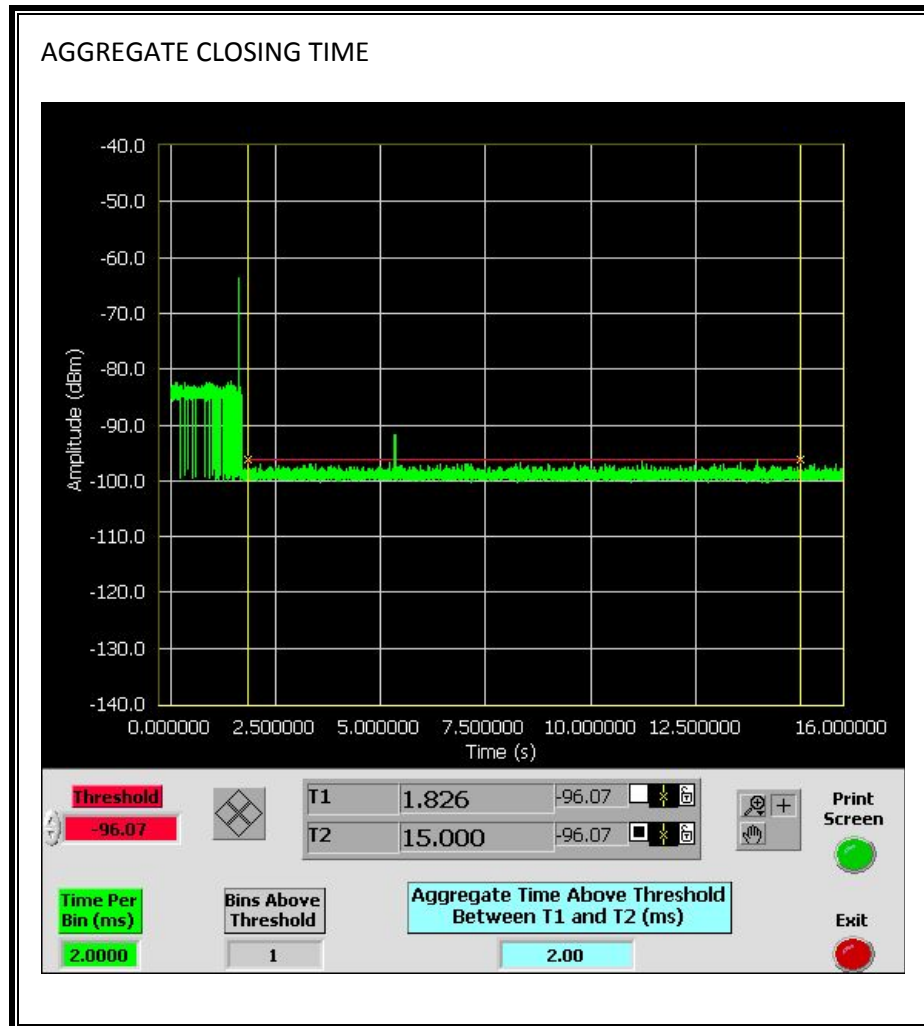
MOVE TIME





AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



14.3.5. NON-OCCUPANCY PERIOD

RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time.

