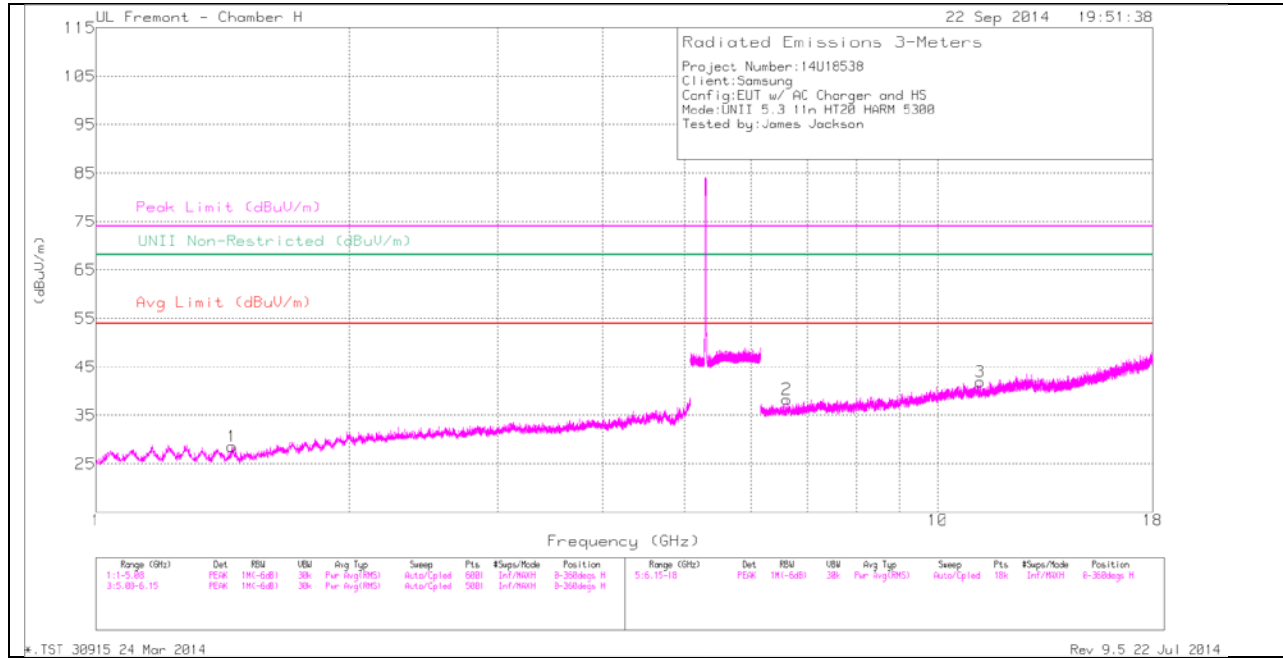
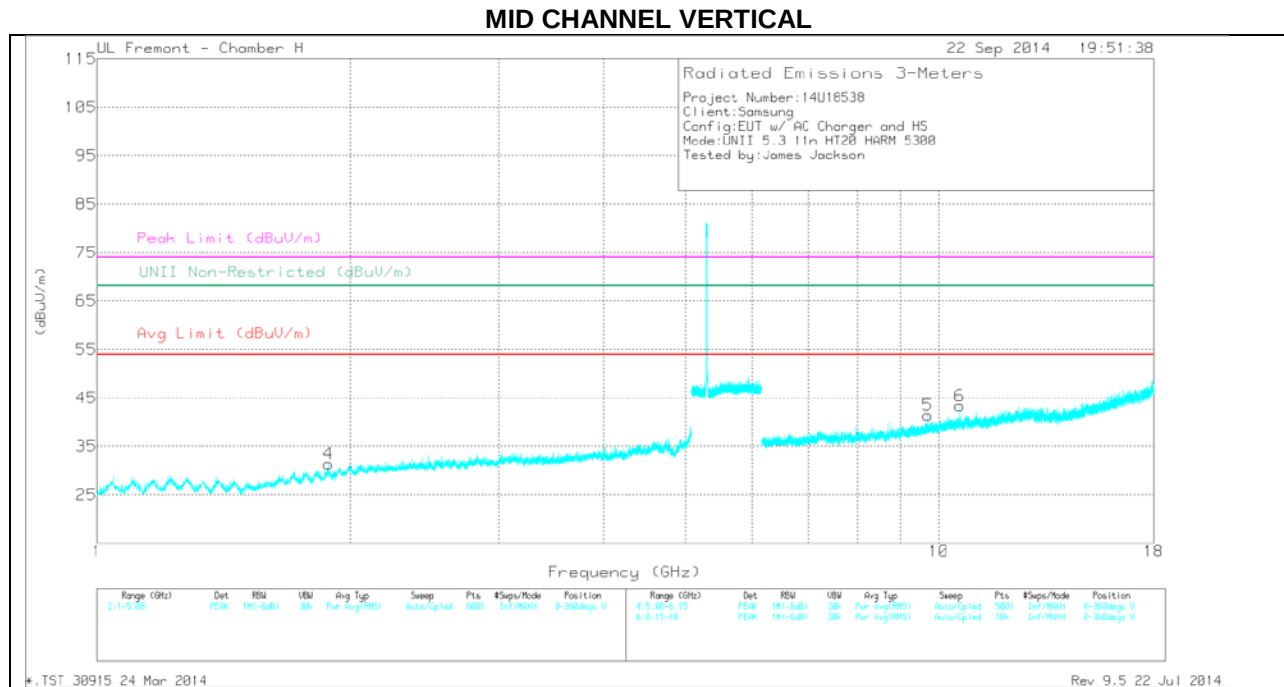


MID CHANNEL HORIZONTAL



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



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 T863 (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	* 1.449	35.37	PK	28	-34.8	0	28.57	-	-	74	-45.43	-	-	0-360	100	H
3	* 11.227	29.85	PK	37.9	-25.8	0	41.95	-	-	74	-32.05	-	-	0-360	201	H
6	* 10.6	31.29	PK	37.6	-25.5	0	43.39	-	-	74	-30.61	-	-	0-360	201	V
4	1.883	35.73	PK	30.5	-34.8	0	31.43	-	-	-	-	68.2	-36.77	0-360	100	V
2	6.616	33.09	PK	35.7	-30.5	0	38.29	-	-	-	-	68.2	-29.91	0-360	100	H
5	9.705	31.2	PK	36.9	-26.7	0	41.4	-	-	-	-	68.2	-26.8	0-360	201	V

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

PK - Peak detector

Radiated Emissions

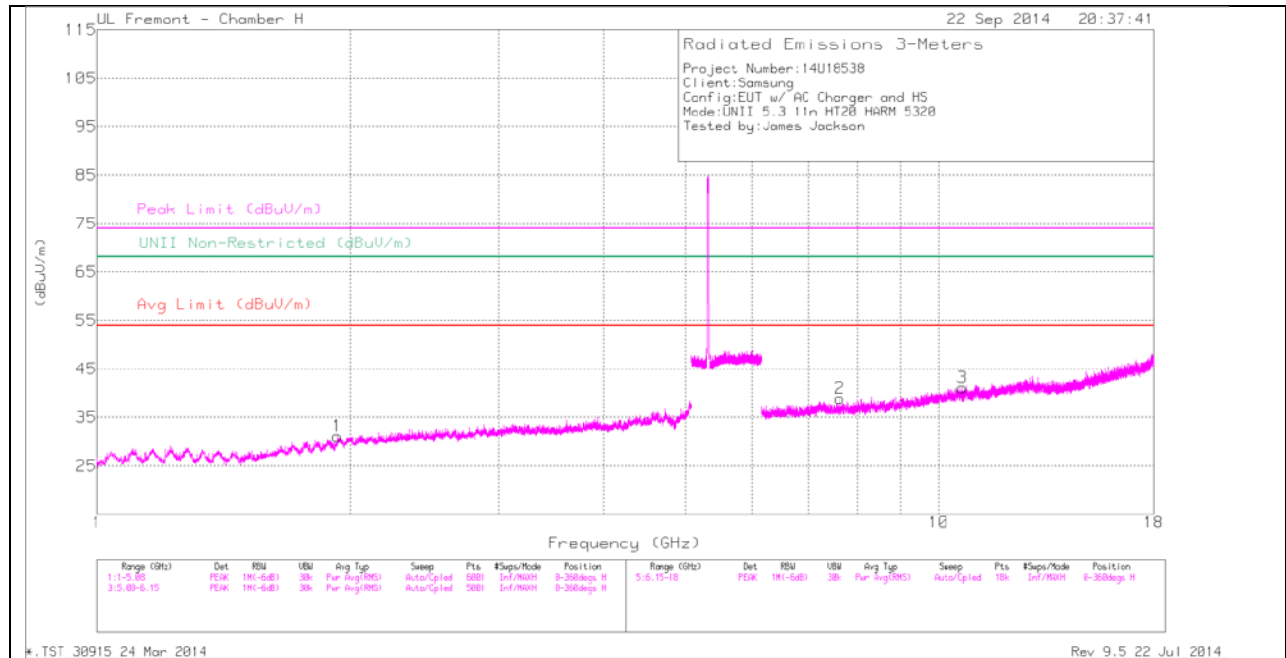
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.226	36.4	PK1	37.9	-25.8	0	48.5	-	-	74	-25.5	-	-	0	202	H
1.881	43.69	PK1	30.5	-34.8	0	39.39	-	-	-	-	68.2	-28.81	0	100	V
6.615	40.75	PK1	35.7	-30.5	0	45.95	-	-	-	-	68.2	-22.25	0	100	H
6.615	21.81	Avg	35.7	-30.5	.31	27.32	-	-	-	-	-	-	0	202	H
9.705	36.6	PK1	36.9	-26.7	0	46.8	-	-	-	-	68.2	-21.4	102	202	V

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

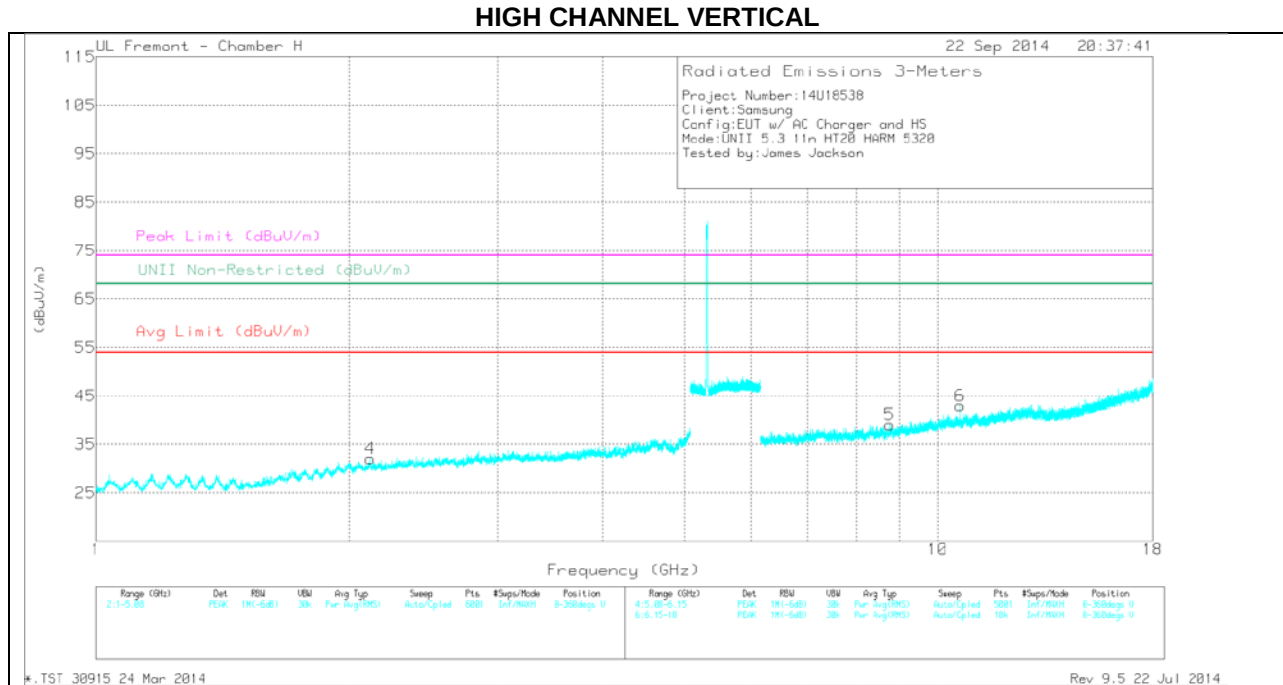
PK1 - KDB789033 Method: Peak

Avg - Average

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 T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 7.629	32.51	PK	36.1	-29.7	0	38.91	-	-	74	-35.09	-	-	0-360	201	H
3	* 10.678	29.52	PK	37.6	-26	0	41.12	-	-	74	-32.88	-	-	0-360	100	H
6	* 10.64	31.11	PK	37.6	-25.7	0	43.01	-	-	74	-30.99	-	-	0-360	201	V
1	1.928	35.08	PK	30.8	-34.7	0	31.18	-	-	-	-	68.2	-37.02	0-360	100	H
4	2.116	34.99	PK	31.5	-34.4	0	32.09	-	-	-	-	68.2	-36.11	0-360	100	V
5	8.77	30.32	PK	36.2	-27.4	0	39.12	-	-	-	-	68.2	-29.08	0-360	201	V

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

PK - Peak detector

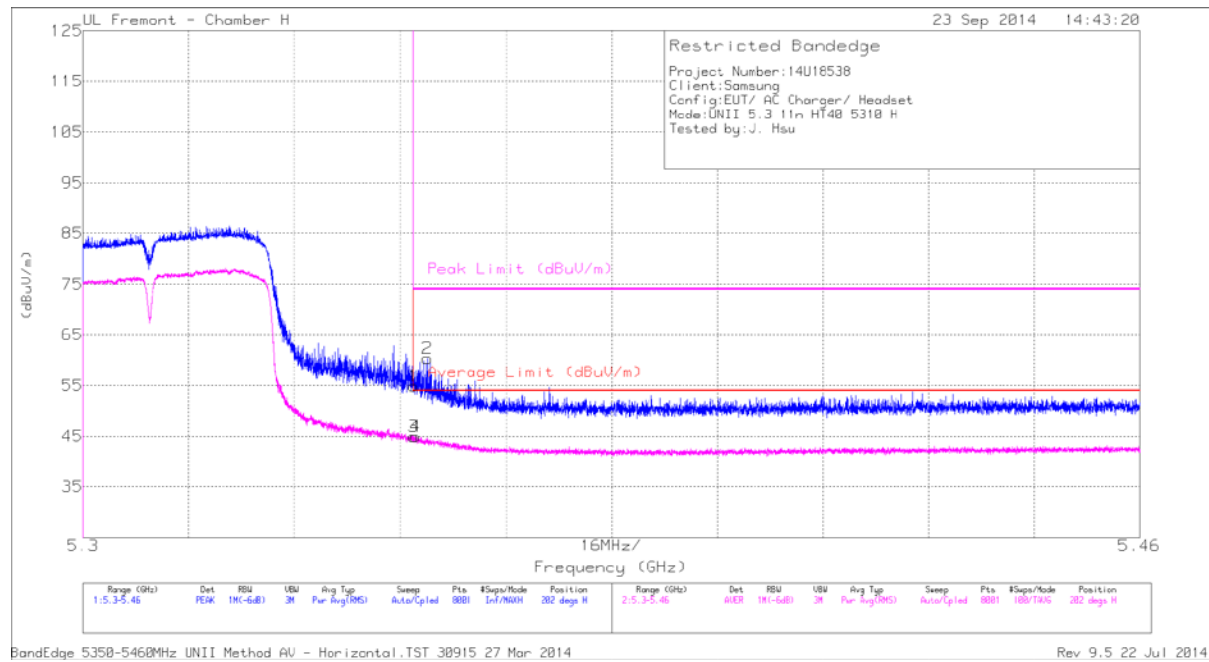
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.629	39.57	PK1	36.1	-29.7	0	45.97	-	-	74	-28.03	-	-	0	202	H
* 7.629	22.37	Avg	36.1	-29.7	.31	29.08	54	-24.92	-	-	-	-	0	100	H
* 10.68	36.88	PK1	37.6	-26	0	48.48	-	-	74	-25.52	-	-	0	100	H
* 10.64	36.73	PK1	37.6	-25.7	0	48.63	-	-	74	-25.37	-	-	0	202	V
1.928	43.11	PK1	30.8	-34.7	0	39.21	-	-	-	-	68.2	-28.99	0	100	H
2.115	42.93	PK1	31.5	-34.4	0	40.03	-	-	-	-	68.2	-28.17	0	100	V
8.769	37.35	PK1	36.2	-27.4	0	46.15	-	-	-	-	68.2	-22.05	0	202	V

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

AUTHORIZED BANDEDGE (HIGH CHANNEL)

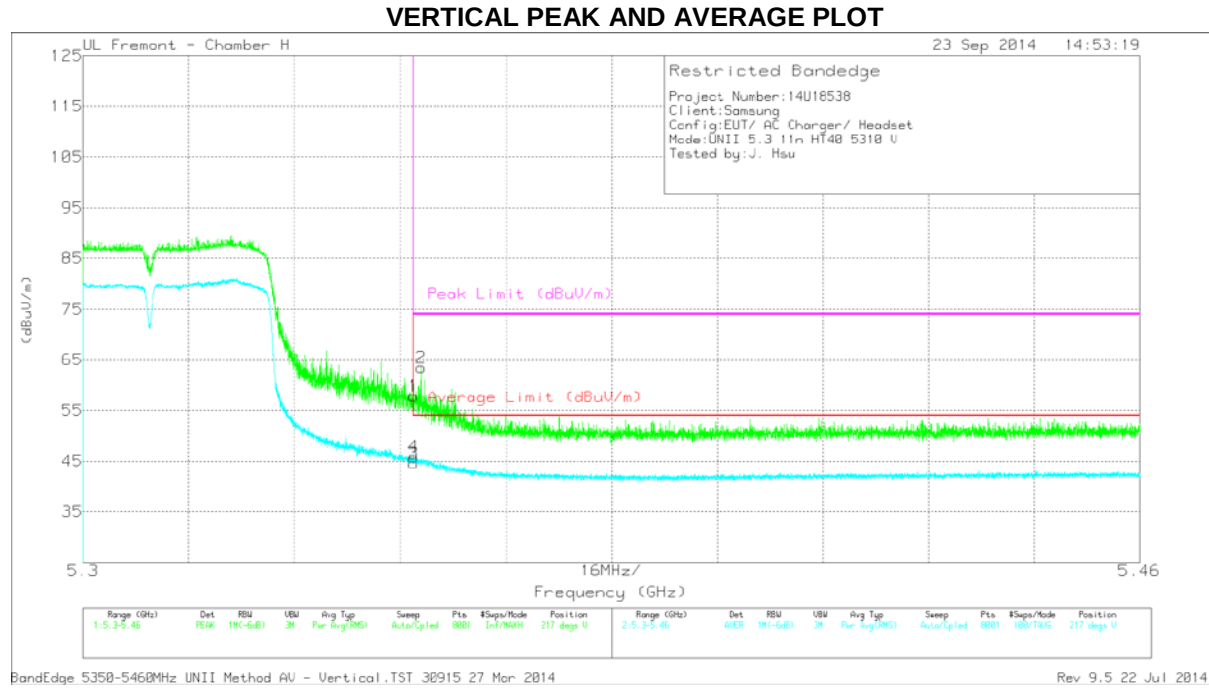
HORIZONTAL PEAK AND AVERAGE PLOT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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	42.73	PK	34.9	-22.7	0	54.93	-	-	74	-19.07	202	277	H
3	* 5.35	32.48	RMS	34.9	-22.7	.31	44.99	54	-9.01	-	-	202	277	H
4	* 5.35	32.42	RMS	34.9	-22.7	.31	44.93	54	-9.07	-	-	202	277	H
2	* 5.352	48.15	PK	34.9	-22.7	0	60.35	-	-	74	-13.65	202	277	H

PK - Peak detector

RMS - RMS detection

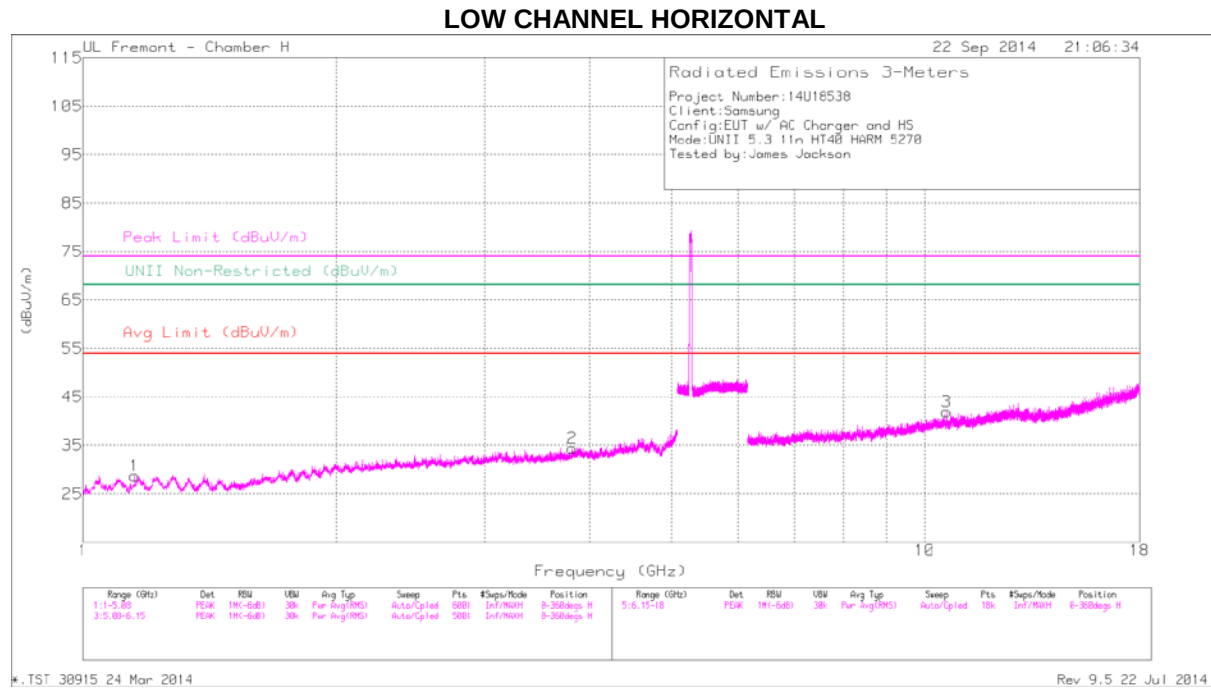


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	45.71	PK	34.9	-22.7	0	57.91	-	-	74	-16.09	217	253	V
3	* 5.35	32.12	RMS	34.9	-22.7	.31	44.63	54	-9.37	-	-	217	253	V
4	* 5.35	33.26	RMS	34.9	-22.7	.31	45.77	54	-8.23	-	-	217	253	V
2	* 5.351	51.26	PK	34.9	-22.7	0	63.46	-	-	74	-10.54	217	253	V

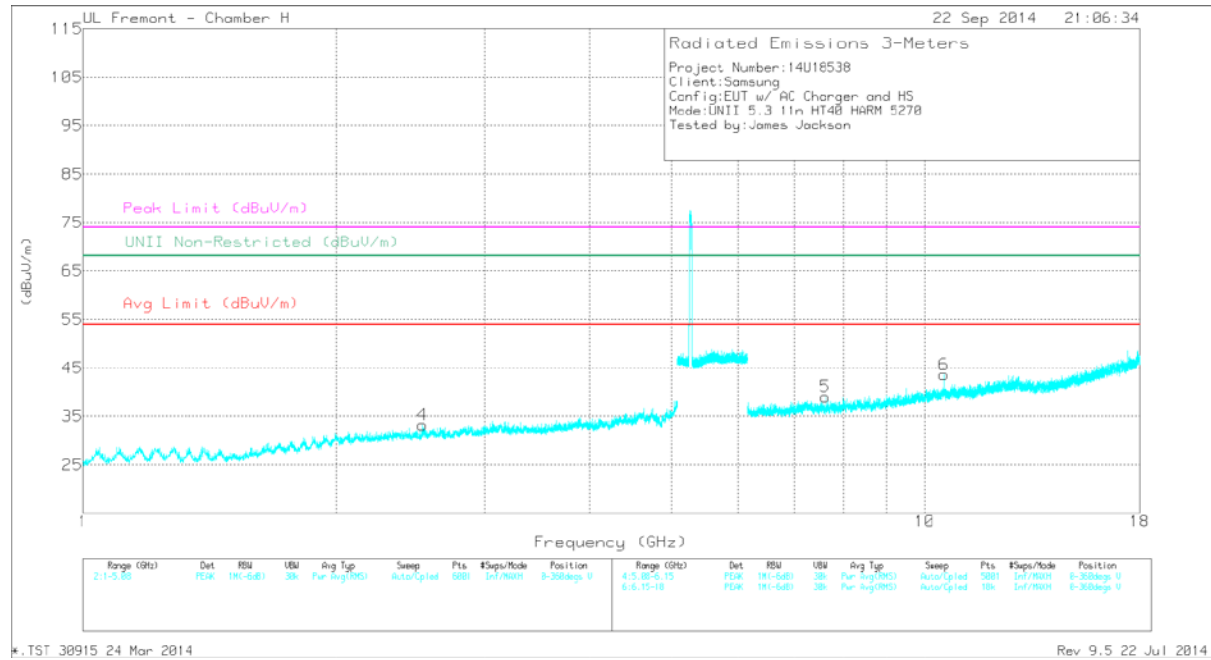
PK - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS



LOW CHANNEL VERTICAL



LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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	* 1.151	35.94	PK	28.5	-35.7	0	28.74	-	-	74	-45.26	-	-	0-360	201	H
2	* 3.811	33.86	PK	33.3	-32.7	0	34.46	-	-	74	-39.54	-	-	0-360	201	H
3	* 10.613	29.54	PK	37.6	-25.2	0	41.94	-	-	74	-32.06	-	-	0-360	201	H
5	* 7.611	32.52	PK	36.1	-29.6	0	39.02	-	-	74	-34.98	-	-	0-360	100	V
4	2.53	34.91	PK	32.2	-33.9	0	33.21	-	-	-	-	68.2	-34.99	0-360	201	V
6	10.54	31.28	PK	37.6	-25.3	0	43.58	-	-	-	-	68.2	-24.62	0-360	201	V

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

PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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
* 1.149	43.05	PK1	28.5	-35.7	0	35.85	-	-	74	-38.15	-	-	1	202	H
* 3.812	41.9	PK1	33.3	-32.7	0	42.5	-	-	74	-31.5	-	-	1	202	H
* 10.614	35.87	PK1	37.6	-25.2	0	48.27	-	-	74	-25.73	-	-	1	202	H
* 7.613	38.11	PK1	36.1	-29.6	0	44.61	-	-	74	-29.39	-	-	1	100	V
2.528	42.23	PK1	32.2	-33.9	0	40.53	-	-	-	-	68.2	-27.67	1	202	V
10.54	37.92	PK1	37.6	-25.2	0	50.32	-	-	-	-	68.2	-17.88	127	161	V
10.54	30.07	AD1	37.6	-25.2	.66	43.13	-	-	-	-	-	-	127	161	V
10.54	29.95	RMS	37.6	-25.2	.66	43.01	-	-	-	-	-	-	127	161	V

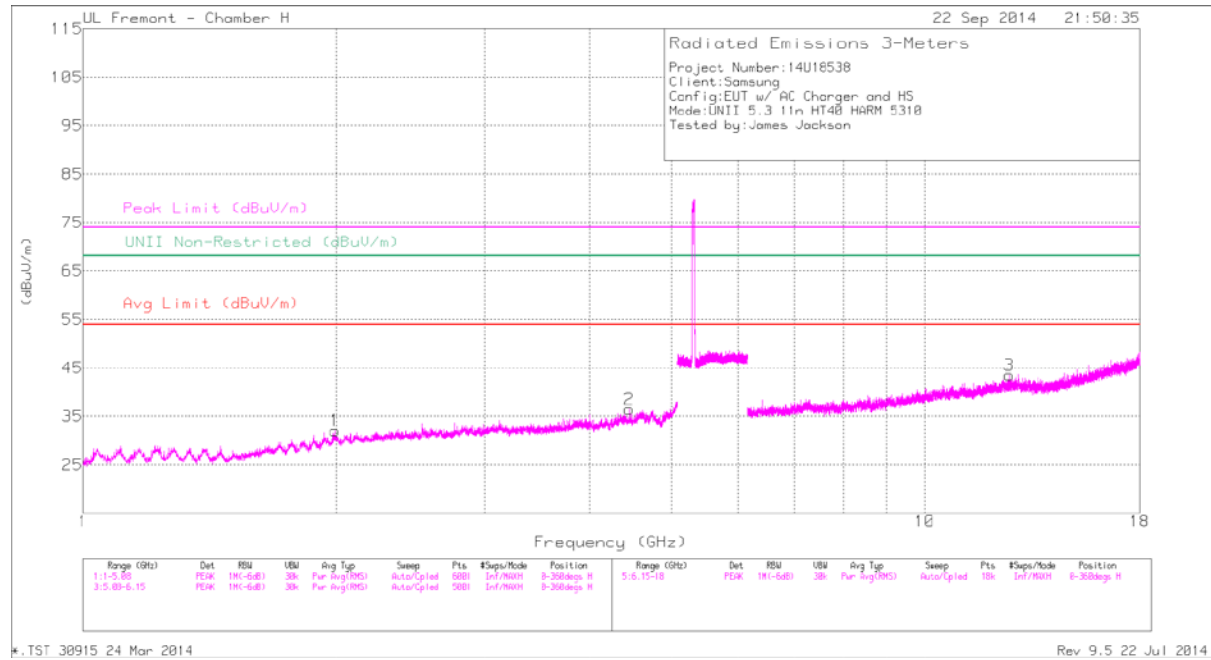
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

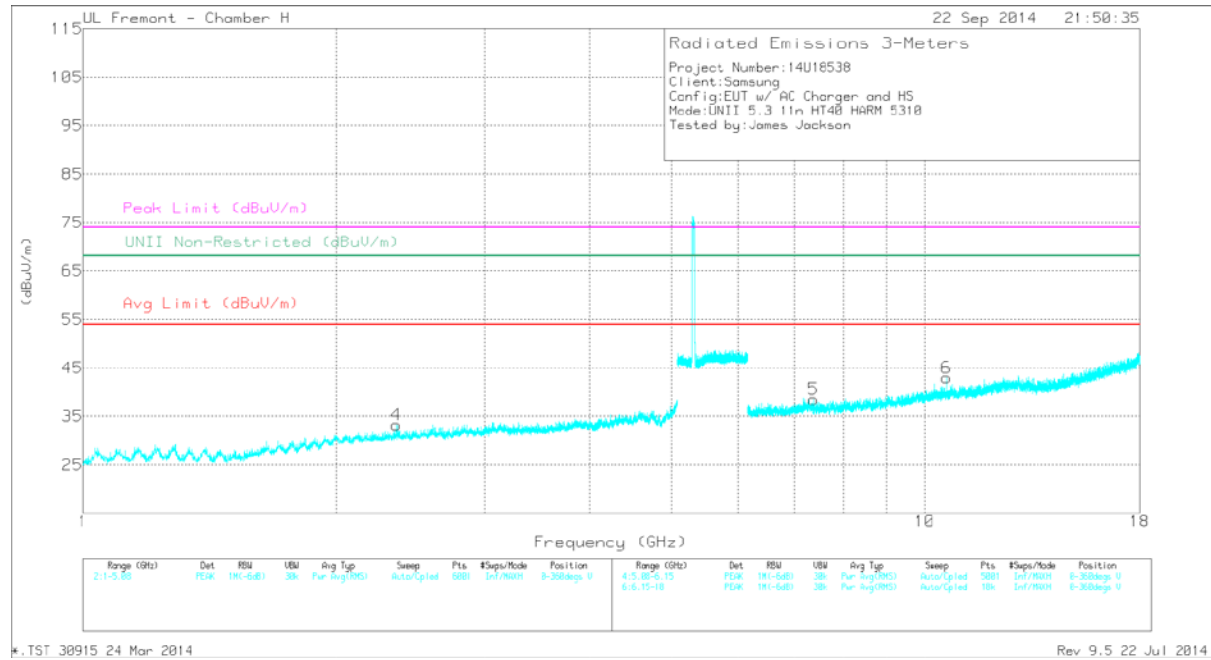
AD1 - KDB789033 Method: AD Primary Power Average

RMS - RMS detection

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fil tr/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
4	* 2.353	35.08	PK	31.9	-33.8	0	33.18	-	-	74	-40.82	-	-	0-360	100	V
3	* 12.614	29.67	PK	39.2	-25.4	0	43.47	-	-	74	-30.53	-	-	0-360	100	H
5	* 7.377	32.4	PK	36.1	-30	0	38.5	-	-	74	-35.5	-	-	0-360	100	V
6	* 10.62	30.73	PK	37.6	-25.3	0	43.03	-	-	74	-30.97	-	-	0-360	201	V
1	1.993	35.27	PK	31.3	-34.5	0	32.07	-	-	-	-	68.2	-36.13	0-360	201	H
2	4.456	35.1	PK	33.9	-32.5	0	36.5	-	-	-	-	68.2	-31.7	0-360	201	H

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

PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fil tr/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
* 2.353	41.81	PK1	31.9	-33.8	0	39.91	-	-	74	-34.09	-	-	1	100	V
* 12.615	36.64	PK1	39.2	-25.4	0	50.44	-	-	74	-23.56	-	-	1	100	H
* 7.378	38.64	PK1	36.1	-30	0	44.74	-	-	74	-29.26	-	-	1	100	V
* 10.62	39.48	PK1	37.6	-25.3	0	51.78	-	-	74	-22.22	-	-	110	245	V
* 10.62	30.46	AD1	37.6	-25.3	.66	43.42	54	-10.58	-	-	-	-	110	245	V
1.995	42.62	PK1	31.3	-34.5	0	39.42	-	-	-	-	68.2	-28.78	2	202	H
4.457	41.36	PK1	33.9	-32.5	0	42.76	-	-	-	-	68.2	-25.44	1	202	H

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

PK1 - KDB789033 Method: Peak

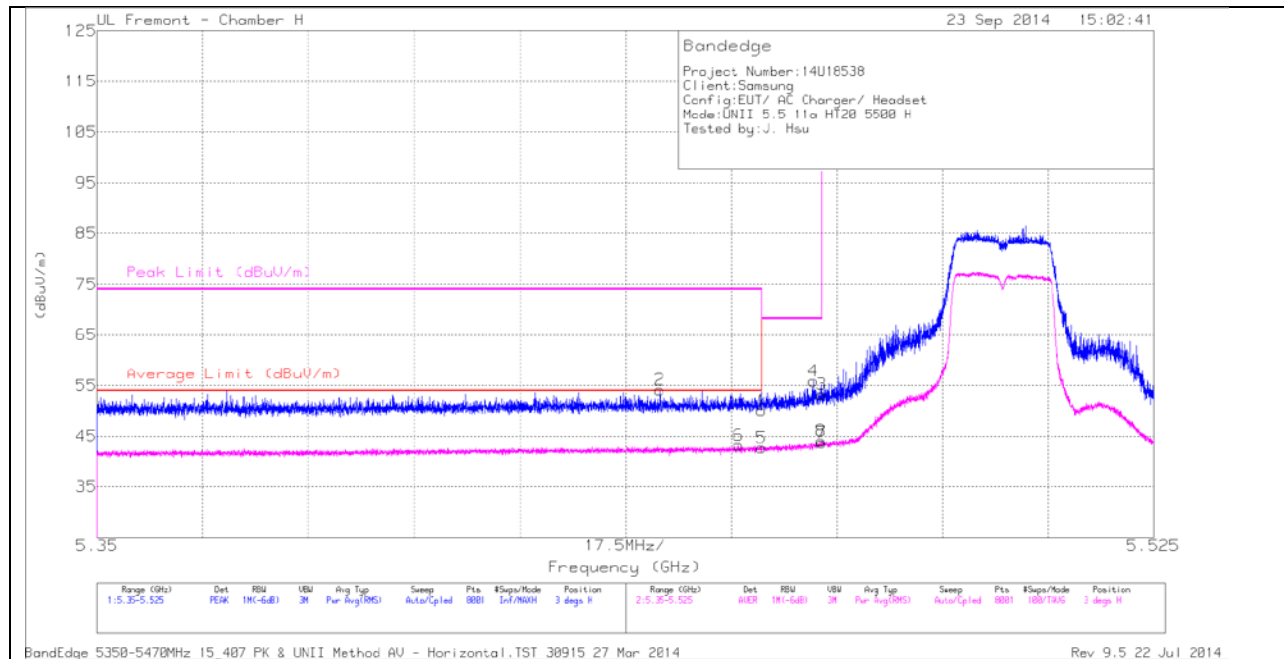
AD1 - KDB789033 Method: AD Primary Power Average

11.3. 5.5-5.6 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL)

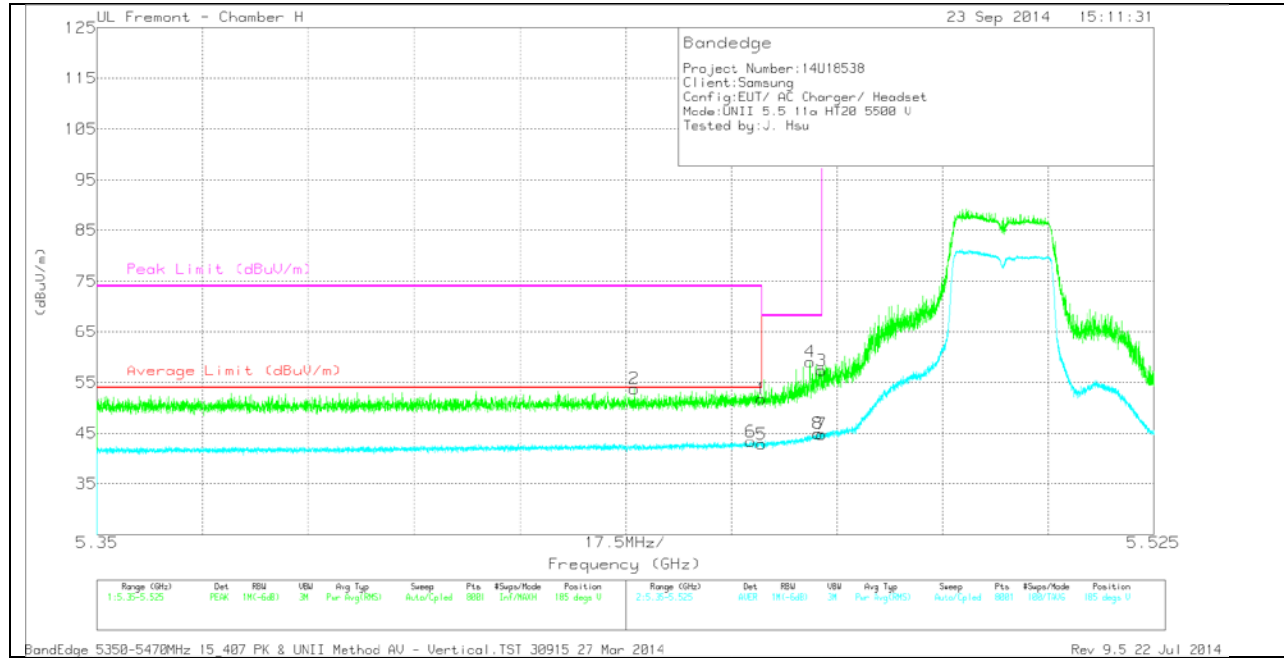
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Rtr (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	* 5.443	41.66	PK	35	-22.5	0	54.16	-	-	74	-19.84	3	232	H
6	* 5.456	30.37	RMS	35	-22.5	.29	43.16	54	-10.84	-	-	3	232	H
1	* 5.46	37.53	PK	35	-22.5	0	50.03	-	-	74	-23.97	3	232	H
5	* 5.46	29.96	RMS	35	-22.5	.29	42.75	54	-11.25	-	-	3	232	H
4	5.469	43.23	PK	35	-22.4	0	55.83	-	-	68.2	-12.37	3	232	H
3	5.47	40.61	PK	35.1	-22.4	0	53.31	-	-	68.2	-14.89	3	232	H
7	5.47	30.71	RMS	35.1	-22.4	.29	43.7	-	-	-	-	3	232	H
8	5.47	31.04	RMS	35.1	-22.4	.29	44.03	-	-	-	-	3	232	H

VERTICAL PEAK AND AVERAGE PLOT

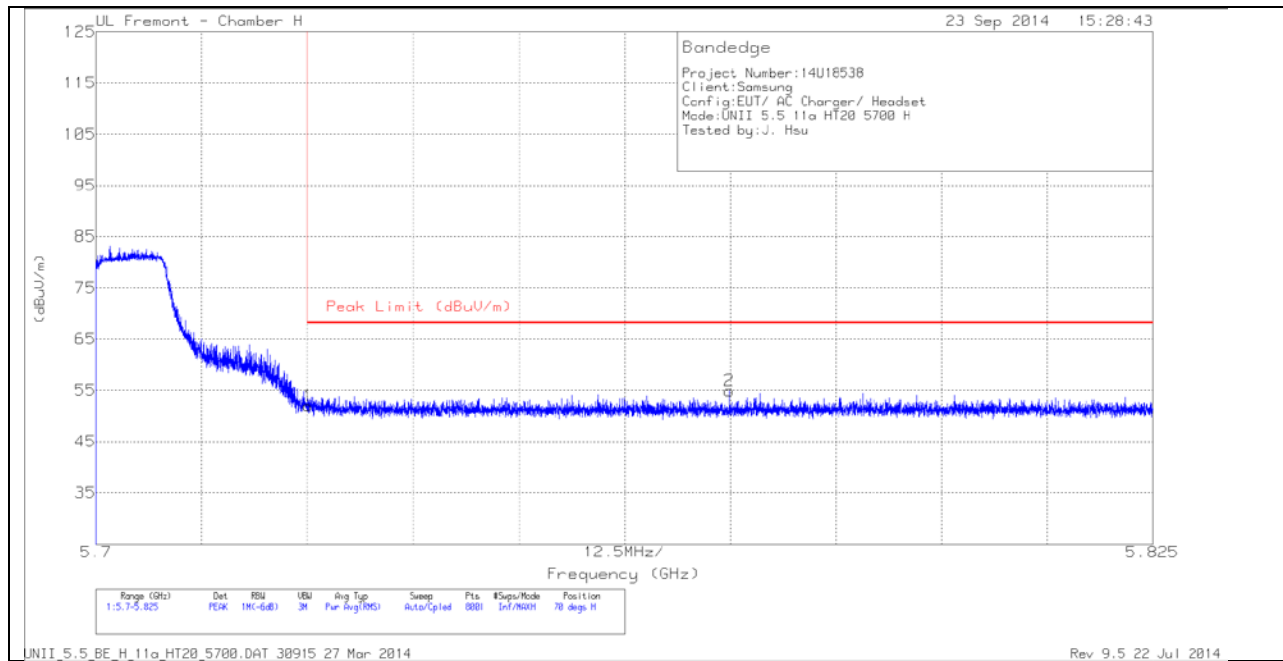


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Flt 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
2	* 5.439	41.28	PK	35	-22.5	0	53.78	-	-	74	-20.22	185	321	V
6	* 5.458	30.51	RMS	35	-22.5	.29	43.3	54	-10.7	-	-	185	321	V
1	* 5.46	39.3	PK	35	-22.5	0	51.8	-	-	74	-22.2	185	321	V
5	* 5.46	30.05	RMS	35	-22.5	.29	42.84	54	-11.16	-	-	185	321	V
4	5.468	46.45	PK	35	-22.4	0	59.05	-	-	68.2	-9.15	185	321	V
8	5.469	31.97	RMS	35.1	-22.4	.29	44.96	-	-	-	-	185	321	V
3	5.47	44.69	PK	35.1	-22.4	0	57.39	-	-	68.2	-10.81	185	321	V
7	5.47	31.82	RMS	35.1	-22.4	.29	44.81	-	-	-	-	185	321	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

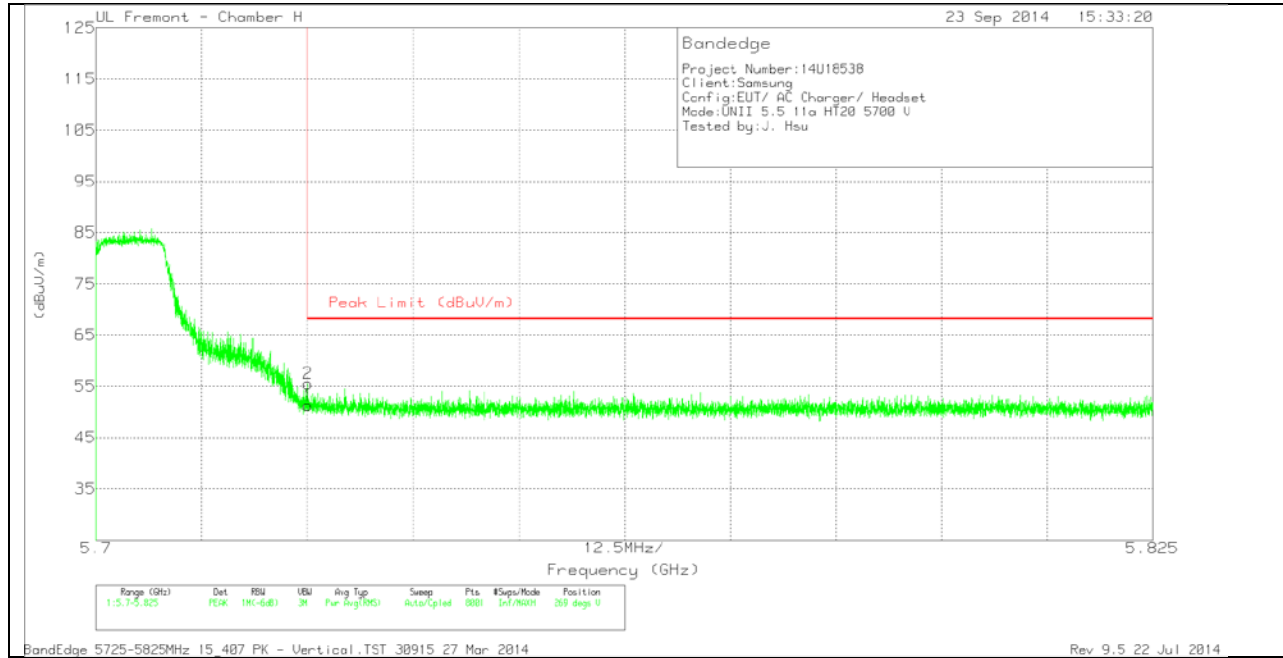
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.41	PK	35	-22.4	52.01	68.2	-16.19	70	398	H
2	5.775	42.25	PK	35	-22.3	54.95	68.2	-13.25	70	398	H

VERTICAL PEAK AND AVERAGE PLOT

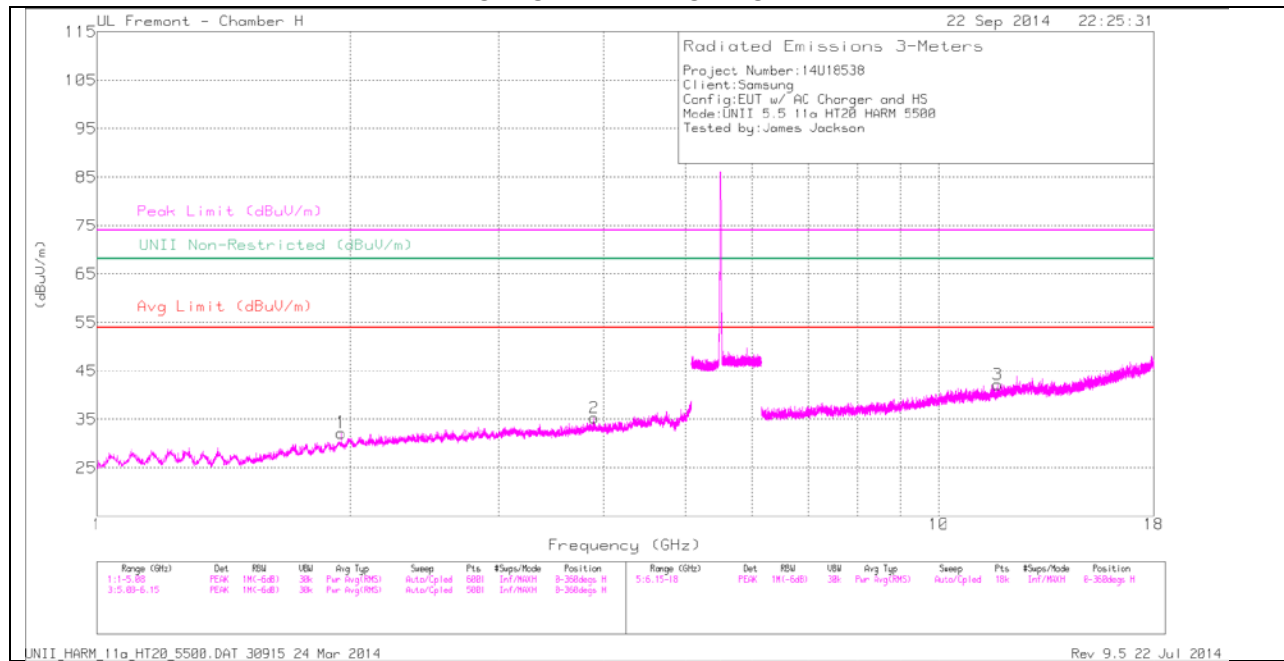


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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	38.57	PK	35	-22.4	51.17	68.2	-17.03	269	362	V
2	5.725	42.91	PK	35	-22.4	55.51	68.2	-12.69	269	362	V

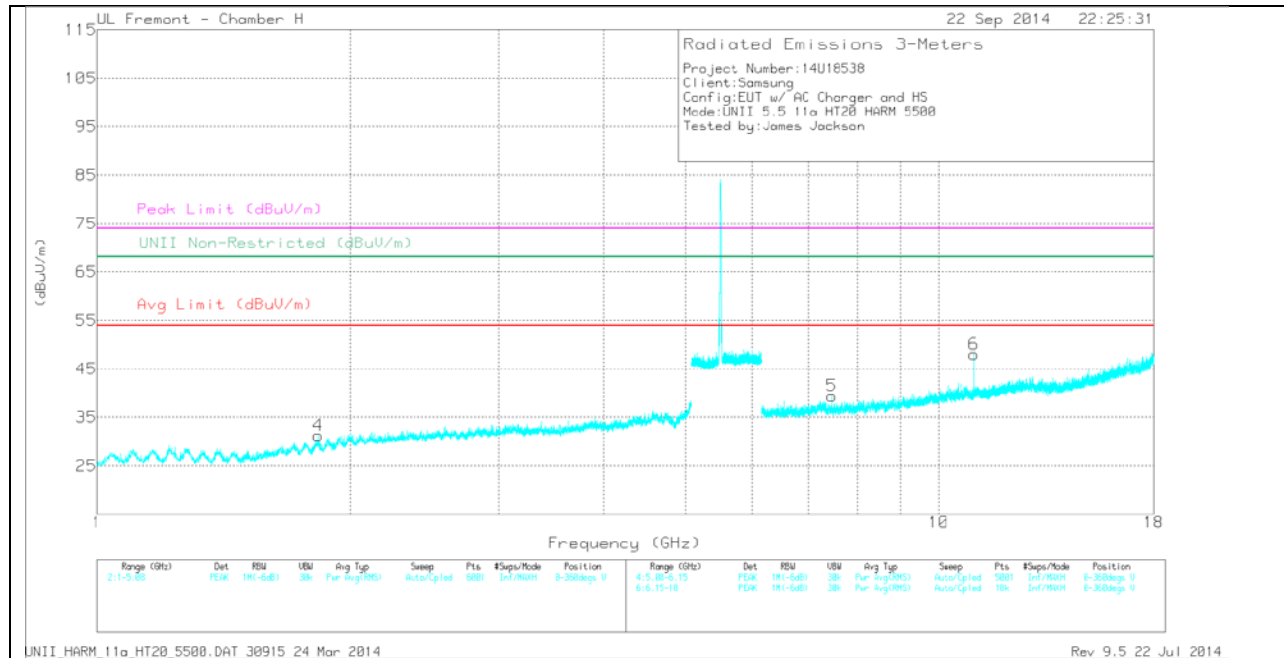
HARMONICS AND SPURIOUS EMISSIONS

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 T863 (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	* 3.893	34.87	PK	33.4	-32.9	0	35.37	-	-	74	-38.63	-	-	0-360	201	H
3	* 11.745	29.74	PK	38.5	-26.1	0	42.14	-	-	74	-31.86	-	-	0-360	201	H
5	* 7.462	33.01	PK	36.1	-29.6	0	39.51	-	-	74	-34.49	-	-	0-360	100	V
6	* 11	35.91	PK	37.8	-25.7	0	48.01	-	-	74	-25.99	-	-	0-360	100	V
4	1.832	36.03	PK	30.2	-34.9	0	31.33	-	-	-	-	68.2	-36.87	0-360	100	V
1	1.947	35.76	PK	31	-34.5	0	32.26	-	-	-	-	68.2	-35.94	0-360	100	H

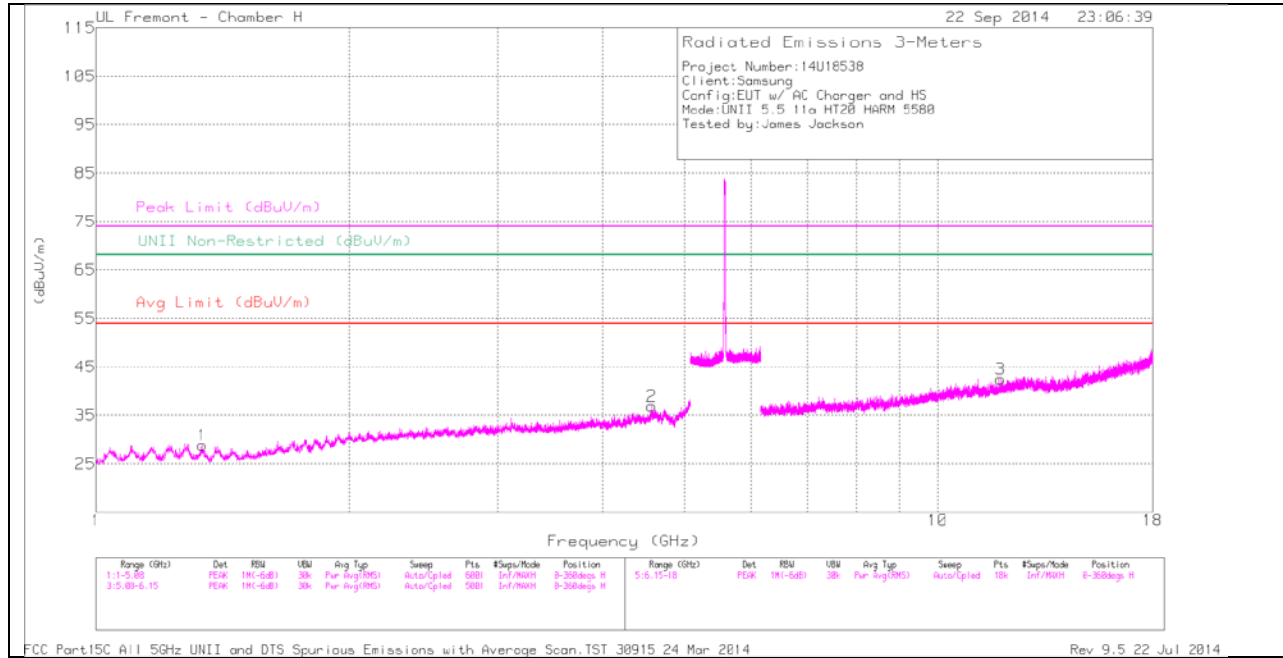
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

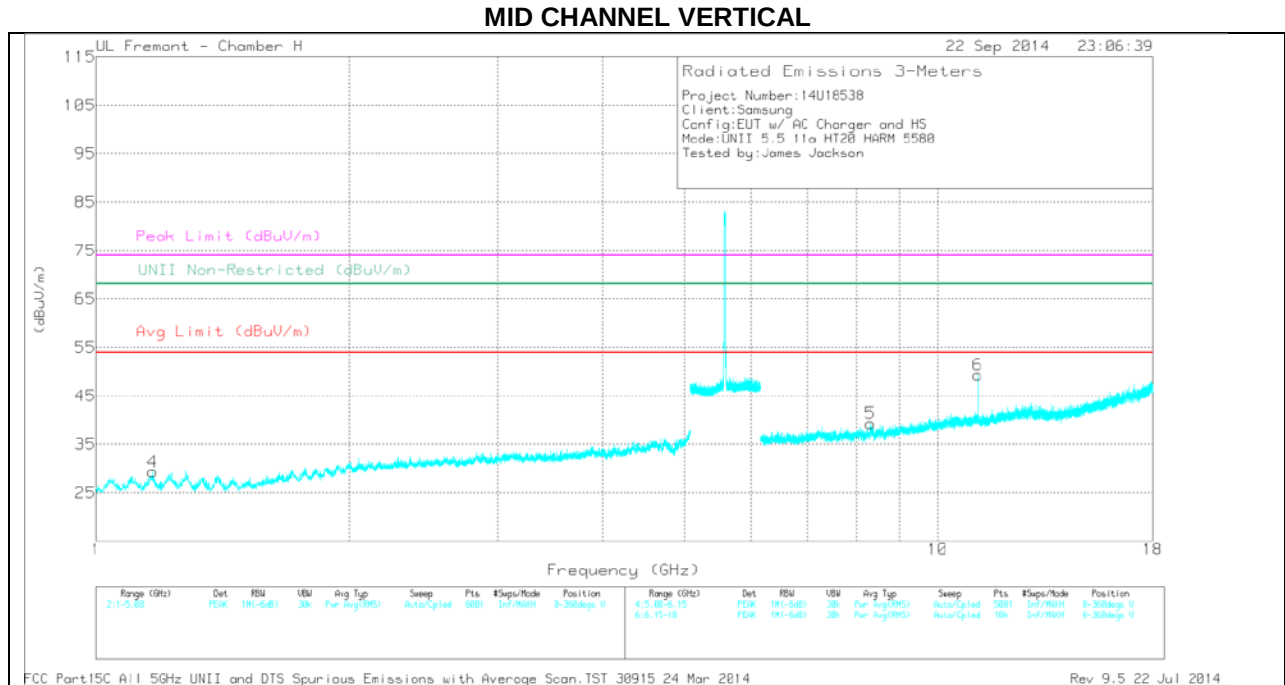
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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
* 3.895	41.53	PK1	33.4	-32.9	0	42.03	-	-	74	-31.97	-	-	1	202	H
* 11.745	36.74	PK1	38.5	-26.1	0	49.14	-	-	74	-24.86	-	-	1	202	H
* 7.461	38.41	PK1	36.1	-29.6	0	44.91	-	-	74	-29.09	-	-	1	100	V
* 11	40.94	PK1	37.8	-25.7	0	53.04	-	-	74	-20.96	-	-	192	100	V
* 11	34.81	AD1	37.8	-25.7	1.18	48.09	54	-5.91	-	-	-	-	192	100	V
1.832	43.08	PK1	30.2	-35	0	38.28	-	-	-	-	68.2	-29.92	1	100	V
1.946	42.67	PK1	31	-34.5	0	39.17	-	-	-	-	68.2	-29.03	1	100	H

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.



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 T863 (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	* 1.337	35.9	PK	28.5	-35.6	0	28.8	-	-	74	-45.2	-	-	0-360	100	H
2	* 4.575	34.52	PK	34.1	-31.8	0	36.82	-	-	74	-37.18	-	-	0-360	100	H
4	* 1.168	36.29	PK	28.6	-35.5	0	29.39	-	-	74	-44.61	-	-	0-360	201	V
3	* 11.878	29.21	PK	38.7	-25.4	0	42.51	-	-	74	-31.49	-	-	0-360	201	H
5	* 8.313	30.33	PK	36.1	-27.1	0	39.33	-	-	74	-34.67	-	-	0-360	201	V
6	* 11.16	37.12	PK	37.9	-25.7	0	49.32	-	-	74	-24.68	-	-	0-360	100	V

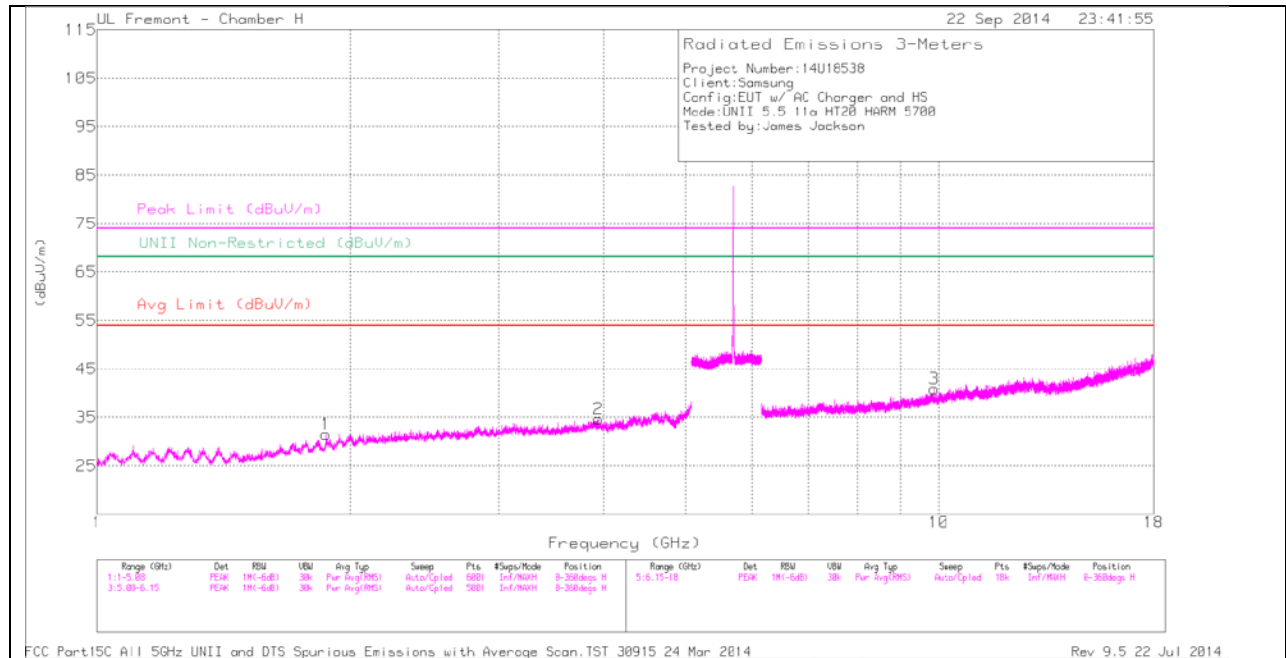
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

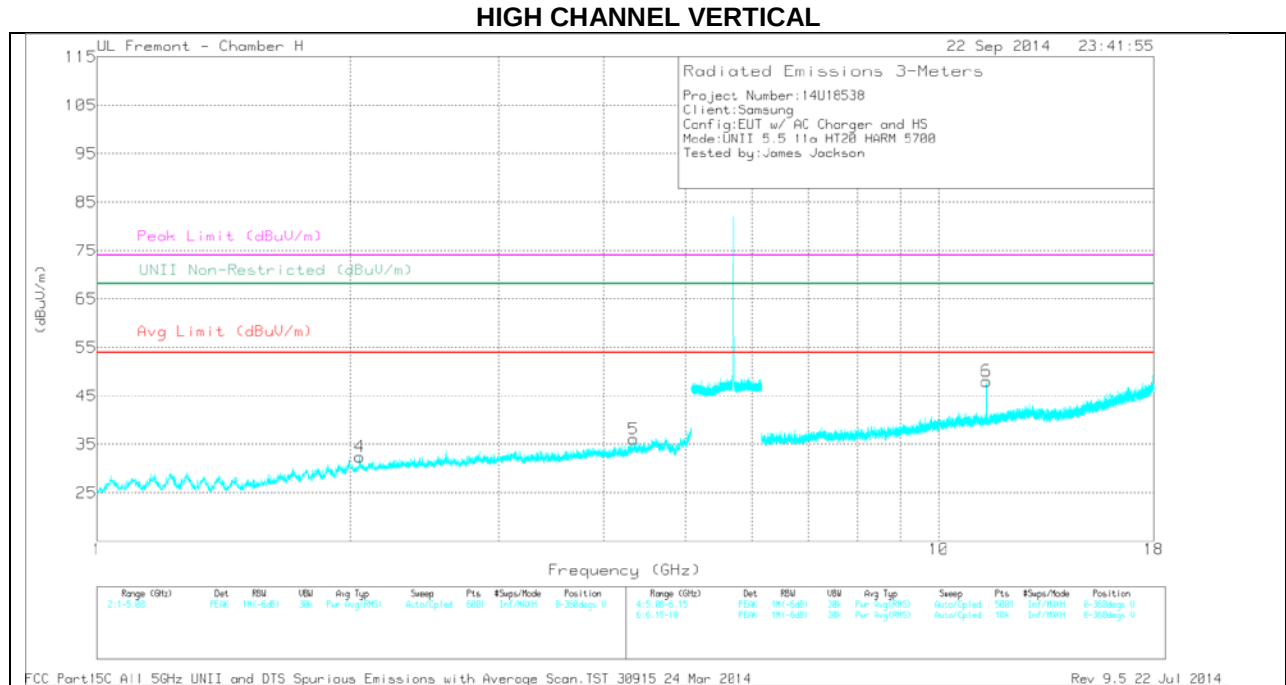
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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
* 1.335	43.54	PK1	28.6	-35.6	0	36.54	-	-	74	-37.46	-	-	360	100	H
* 1.168	43.67	PK1	28.6	-35.5	0	36.77	-	-	74	-37.23	-	-	360	202	V
* 11.879	36.22	PK1	38.7	-25.5	0	49.42	-	-	74	-24.58	-	-	360	202	H
* 8.312	37.15	PK1	36.1	-27.1	0	46.15	-	-	74	-27.85	-	-	125	202	V
* 11.16	41.5	PK1	37.9	-25.7	0	53.7	-	-	74	-20.3	-	-	194	104	V
* 11.16	36.42	AD1	37.9	-25.7	1.18	49.8	54	-4.2	-	-	-	-	194	104	V

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 T863 (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	* 3.944	34.02	PK	33.4	-32.8	0	34.62	-	-	74	-39.38	-	-	0-360	101	H
5	* 4.344	33.74	PK	33.7	-31.3	0	36.14	-	-	74	-37.86	-	-	0-360	100	V
6	* 11.4	35.69	PK	38	-25.6	0	48.09	-	-	74	-25.91	-	-	0-360	201	V
1	1.87	35.98	PK	30.5	-34.9	0	31.58	-	-	-	-	68.2	-36.62	0-360	201	H
4	2.05	35.42	PK	31.4	-34.4	0	32.42	-	-	-	-	68.2	-35.78	0-360	100	V
3	9.875	30.34	PK	37.1	-26.5	0	40.94	-	-	-	-	68.2	-27.26	0-360	100	H

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

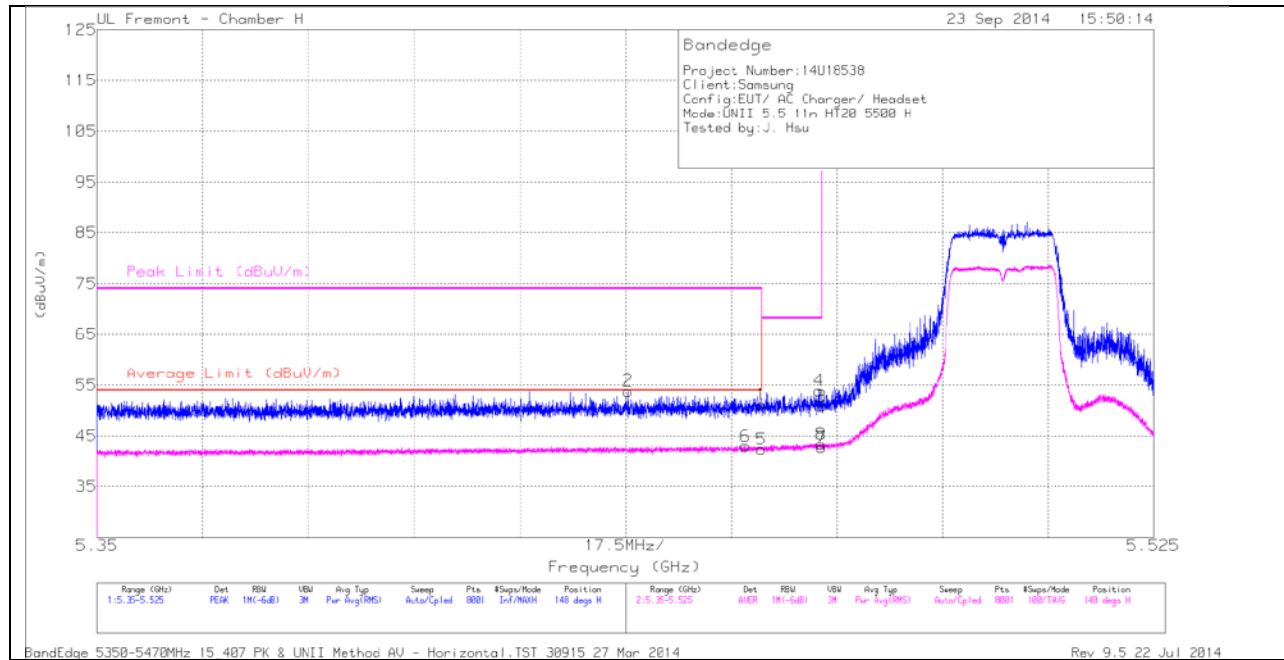
PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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
* 3.944	41.49	PK1	33.4	-32.8	0	42.09	-	-	74	-31.91	-	-	360	101	H
* 4.346	40.76	PK1	33.7	-31.4	0	43.06	-	-	74	-30.94	-	-	360	101	V
* 11.4	40.15	PK1	38	-25.6	0	52.55	-	-	74	-21.45	-	-	118	194	V
* 11.4	33.23	AD1	38	-25.6	1.18	46.81	54	-7.19	-	-	-	-	118	194	V
1.871	43.1	PK1	30.5	-34.9	0	38.7	-	-	-	-	68.2	-29.5	360	202	H
2.052	42.62	PK1	31.4	-34.4	0	39.62	-	-	-	-	68.2	-28.58	360	101	V
9.874	36.84	PK1	37.1	-26.5	0	47.44	-	-	-	-	68.2	-20.76	360	101	H

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

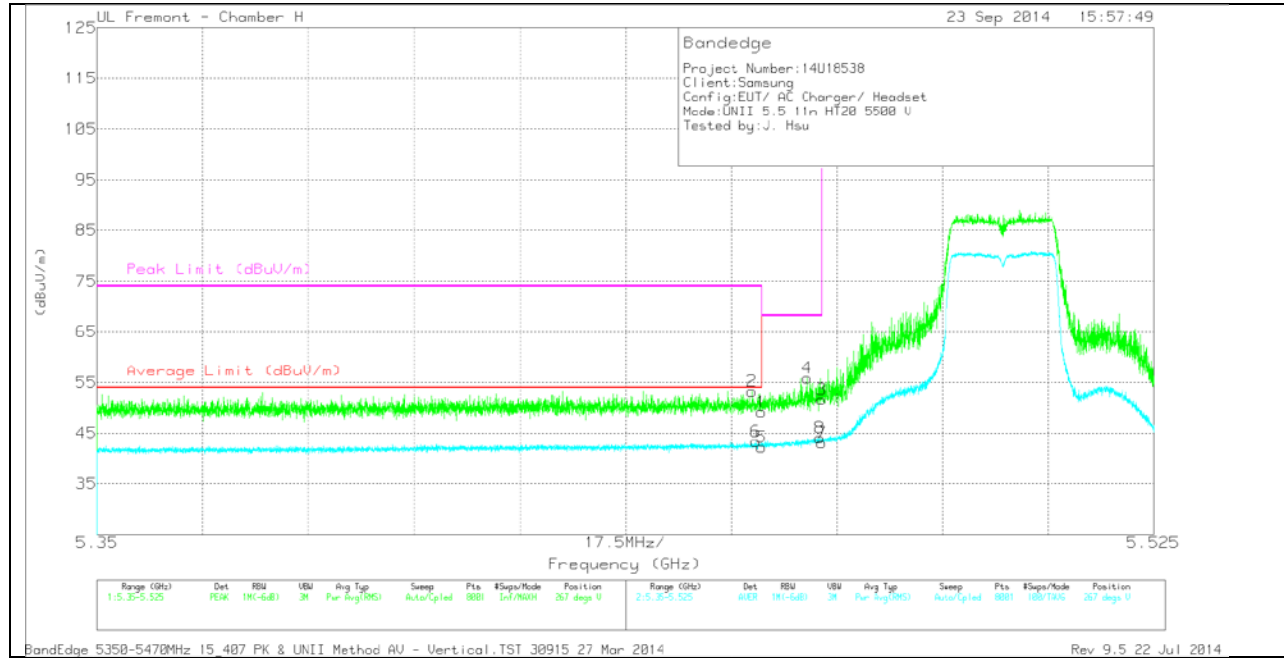
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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
2	* 5.438	41.33	PK	35	-22.5	0	53.83	-	-	74	-20.17	148	393	H
6	* 5.457	30.15	RMS	35	-22.5	.31	42.96	54	-11.04	-	-	148	393	H
1	* 5.46	38.68	PK	35	-22.5	0	51.18	-	-	74	-22.82	148	393	H
5	* 5.46	29.53	RMS	35	-22.5	.31	42.34	54	-11.66	-	-	148	393	H
3	5.47	38.13	PK	35.1	-22.4	0	50.83	-	-	68.2	-17.37	148	393	H
4	5.47	41.15	PK	35.1	-22.4	0	53.85	-	-	68.2	-14.35	148	393	H
7	5.47	29.66	RMS	35.1	-22.4	.31	42.67	-	-	-	-	148	393	H
8	5.47	30.35	RMS	35.1	-22.4	.31	43.36	-	-	-	-	148	393	H

VERTICAL PEAK AND AVERAGE PLOT

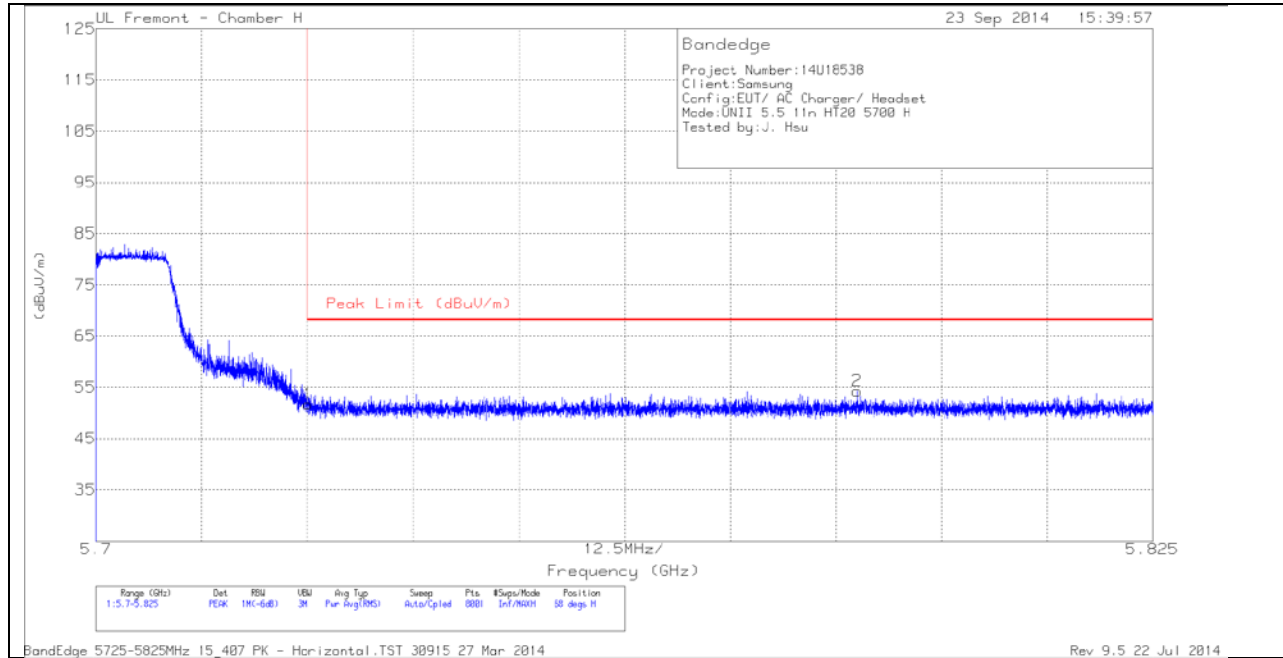


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Flt 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
2	* 5.458	40.82	PK	35	-22.5	0	53.32	-	-	74	-20.68	267	399	V
6	* 5.459	30.5	RMS	35	-22.5	.31	43.31	54	-10.69	-	-	267	399	V
1	* 5.46	36.67	PK	35	-22.5	0	49.17	-	-	74	-24.83	267	399	V
5	* 5.46	29.44	RMS	35	-22.5	.31	42.25	54	-11.75	-	-	267	399	V
4	5.468	43.24	PK	35	-22.4	0	55.84	-	-	68.2	-12.36	267	399	V
3	5.47	38.91	PK	35.1	-22.4	0	51.61	-	-	68.2	-16.59	267	399	V
7	5.47	30.11	RMS	35.1	-22.4	.31	43.12	-	-	-	-	267	399	V
8	5.47	31.1	RMS	35.1	-22.4	.31	44.11	-	-	-	-	267	399	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

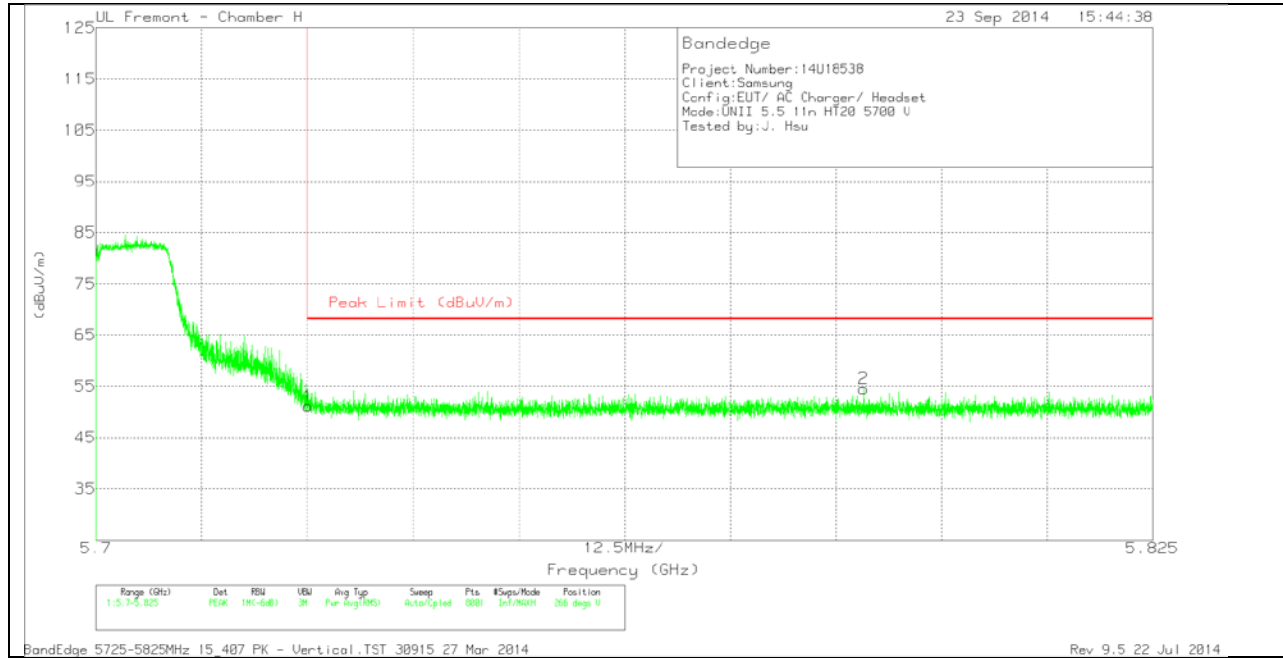
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.13	PK	35	-22.4	51.73	68.2	-16.47	68	401	H
2	5.79	41.46	PK	35	-22.2	54.26	68.2	-13.94	68	401	H

VERTICAL PEAK AND AVERAGE PLOT

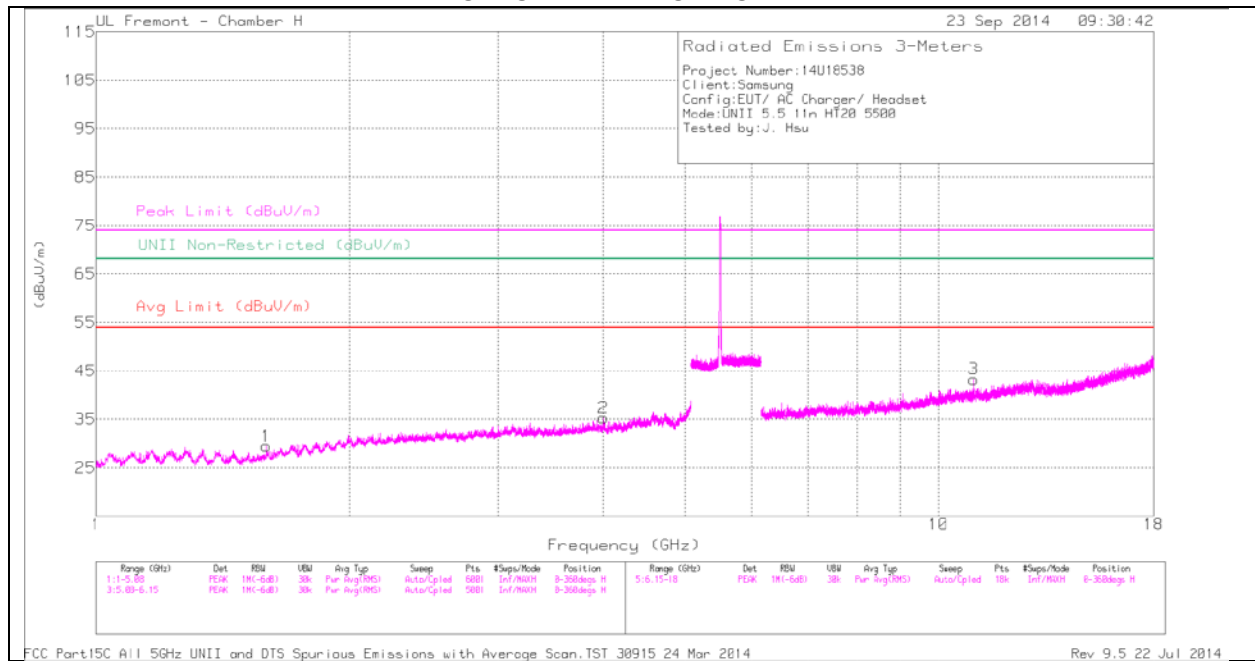


VERTICAL DATA

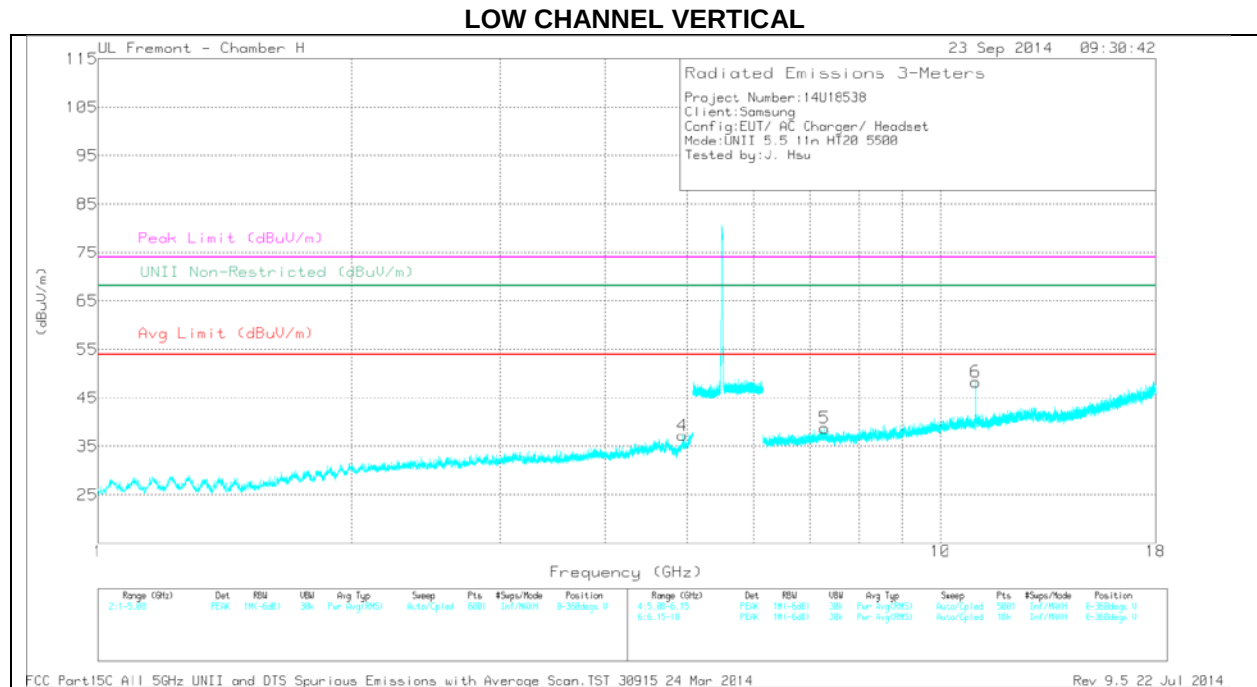
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.46	PK	35	-22.4	51.06	68.2	-17.14	266	360	V
2	5.791	41.79	PK	35	-22.2	54.59	68.2	-13.61	266	360	V

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.



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 T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.592	36.16	PK	28.4	-35.1	0	29.46	-	-	74	-44.54	-	-	0-360	100	H
2	* 4.001	34.72	PK	33.5	-32.9	0	35.32	-	-	74	-38.68	-	-	0-360	100	H
4	* 4.943	33.9	PK	34.3	-30.9	0	37.3	-	-	74	-36.7	-	-	0-360	100	V
3	* 11	31.2	PK	37.8	-25.7	0	43.3	-	-	74	-30.7	-	-	0-360	201	H
5	* 7.282	32.17	PK	36.2	-29.5	0	38.87	-	-	74	-35.13	-	-	0-360	100	V
6	* 11	36.21	PK	37.8	-25.7	0	48.31	-	-	74	-25.69	-	-	0-360	201	V

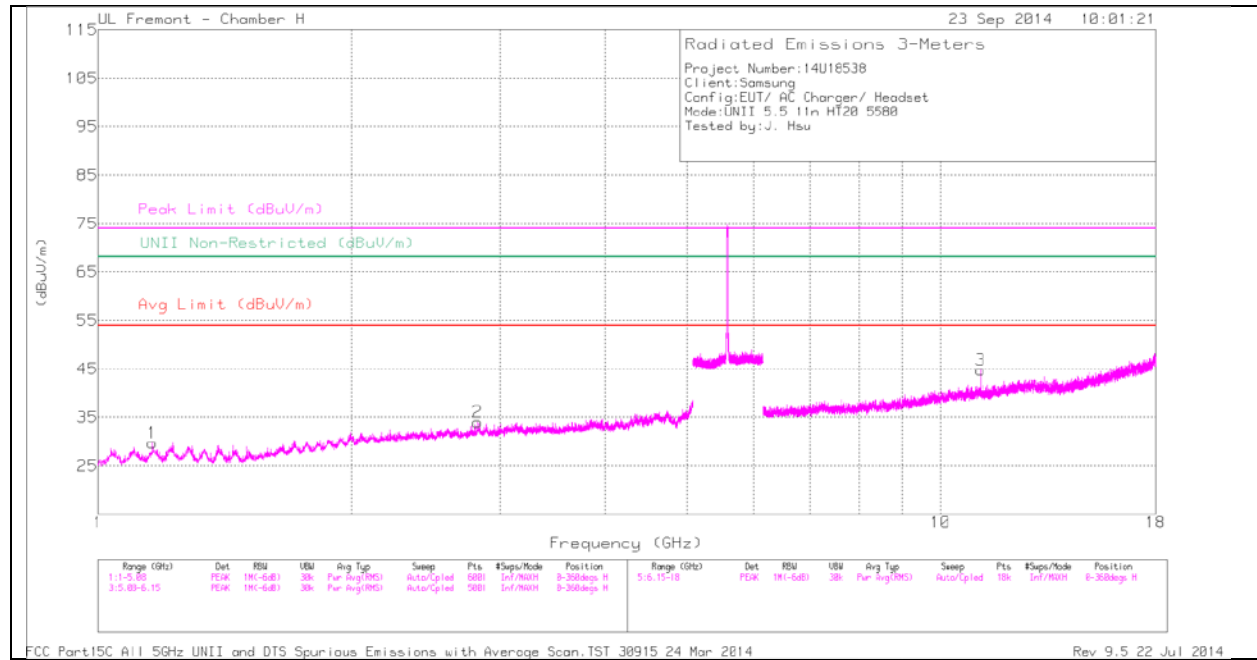
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

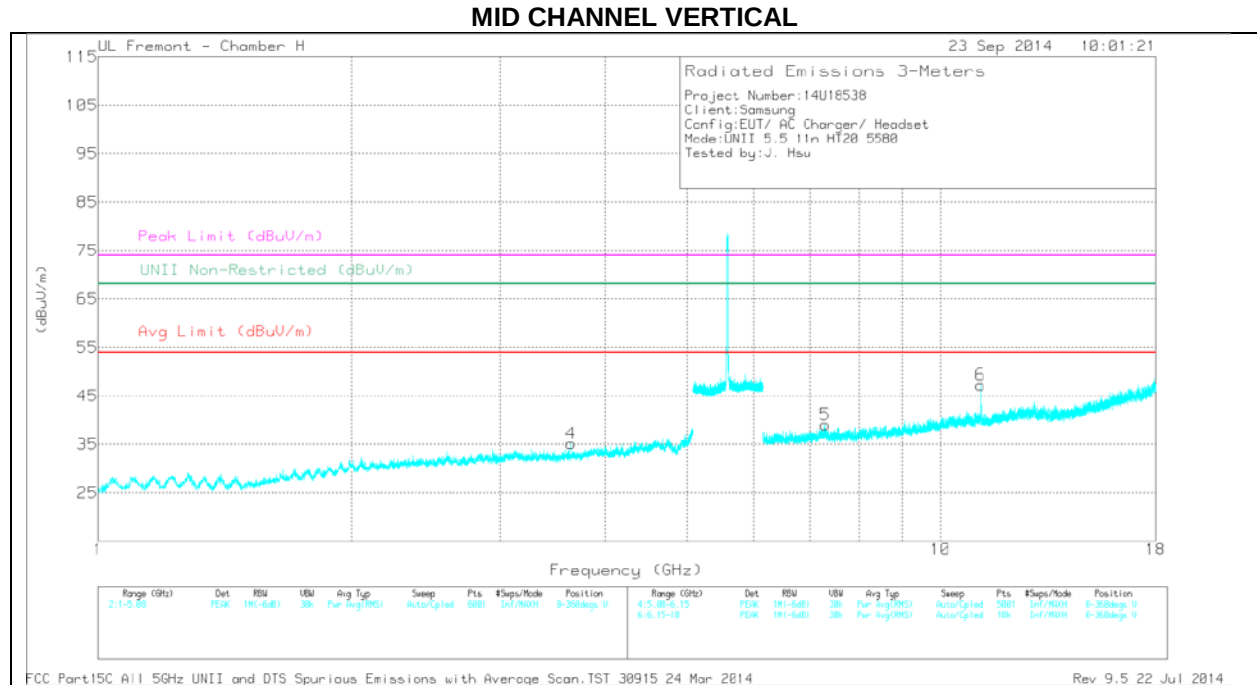
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 10.999	39.41	PK1	37.8	-25.7	0	51.51	-	-	74	-22.49	-	-	257	243	H
* 11	28.2	AD1	37.8	-25.7	.31	40.61	54	-13.39	-	-	-	-	257	243	H
* 11	42.29	PK1	37.8	-25.7	0	54.39	-	-	74	-19.61	-	-	312	252	V
* 11	36.18	AD1	37.8	-25.7	.31	48.59	54	-5.41	-	-	-	-	312	252	V

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.



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

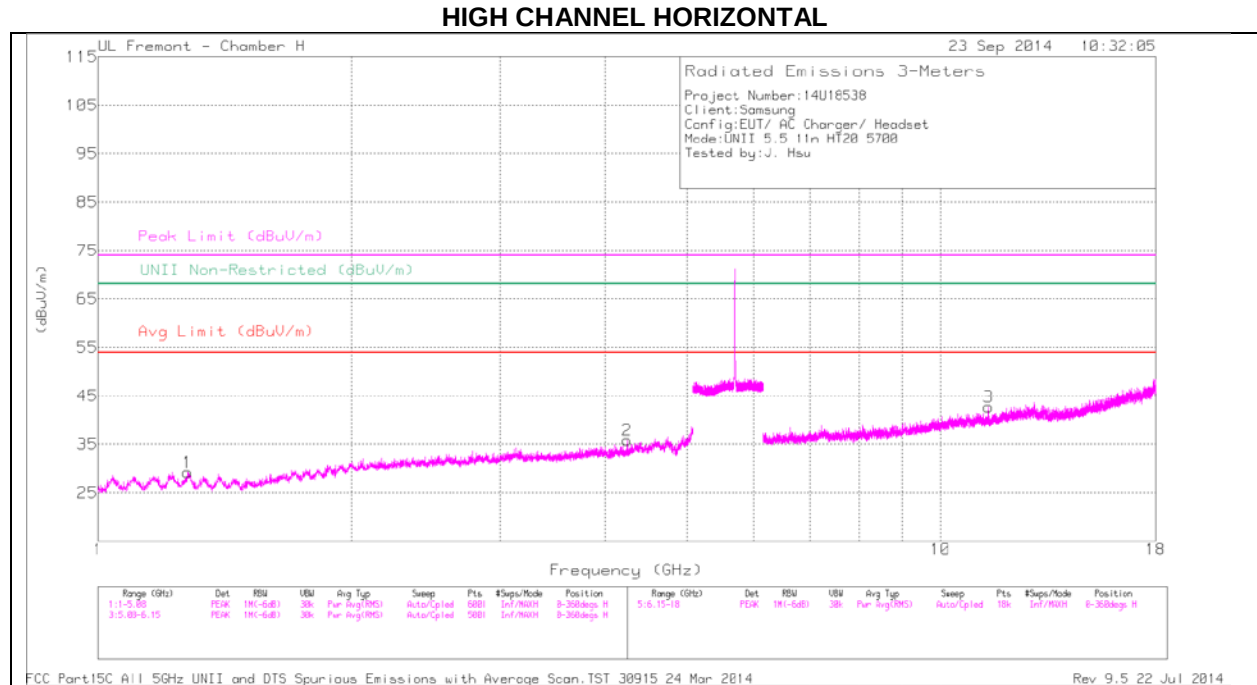
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.16	36.78	PK	28.5	-35.6	0	29.68	-	-	74	-44.32	-	-	0-360	100	H
2	* 2.819	34.74	PK	32.4	-33.1	0	34.04	-	-	74	-39.96	-	-	0-360	201	H
4	* 3.641	34.57	PK	33	-32.4	0	35.17	-	-	74	-38.83	-	-	0-360	201	V
3	* 11.16	32.59	PK	37.9	-25.7	0	44.79	-	-	74	-29.21	-	-	0-360	201	H
5	* 7.297	32.63	PK	36.2	-29.7	0	39.13	-	-	74	-34.87	-	-	0-360	100	V
6	* 11.16	35.12	PK	37.9	-25.7	0	47.32	-	-	74	-26.68	-	-	0-360	201	V

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

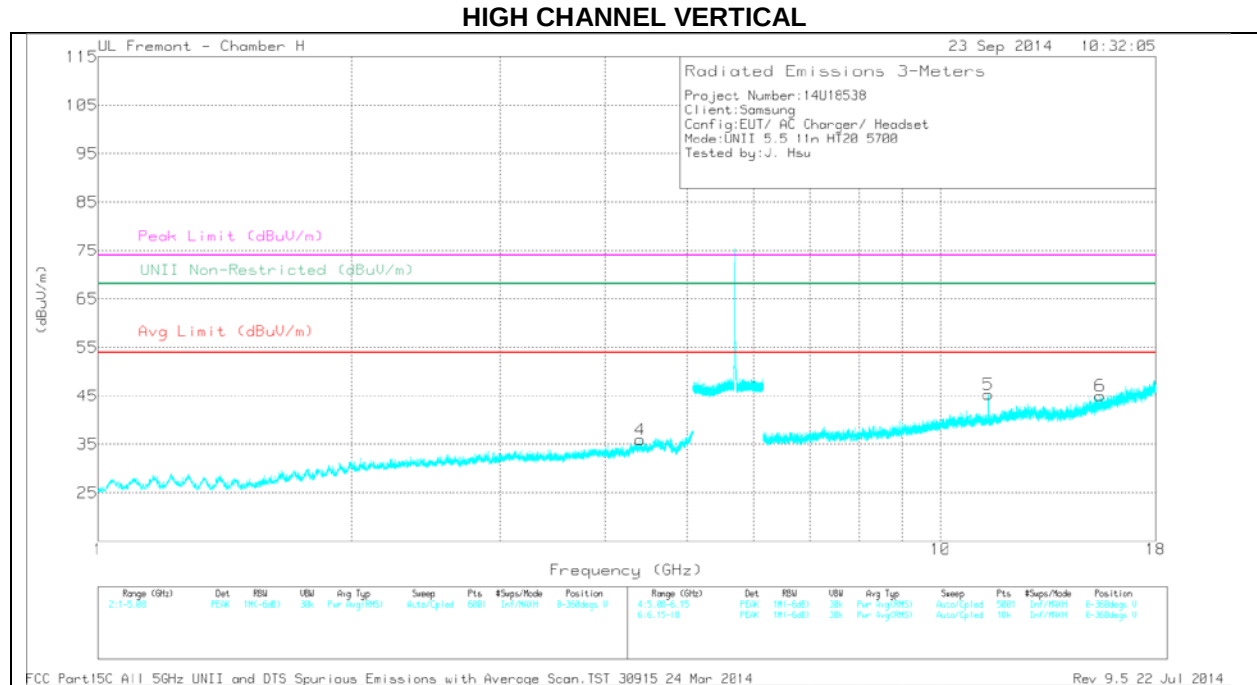
PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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
* 11.16	40.08	PK1	37.9	-25.7	0	52.28	-	-	74	-21.72	-	-	45	376	H
* 11.16	33.42	AD1	37.9	-25.7	31	45.93	54	-8.07	-	-	-	-	45	376	H
* 11.16	41.07	PK1	37.9	-25.7	0	53.27	-	-	74	-20.73	-	-	301	150	V
* 11.16	35.49	AD1	37.9	-25.7	31	48	54	-6	-	-	-	-	301	150	V



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 T863 (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	* 1.277	35.92	PK	28.9	-35.6	0	29.22	-	-	74	-44.78	-	-	0-360	201	H
2	* 4.247	35.12	PK	33.5	-32.8	0	35.82	-	-	74	-38.18	-	-	0-360	201	H
3	* 11.404	30.27	PK	38	-25.6	0	42.67	-	-	74	-31.33	-	-	0-360	201	H
5	* 11.4	32.94	PK	38	-25.6	0	45.34	-	-	74	-28.66	-	-	0-360	100	V
6	* 15.481	29.95	PK	40.8	-25.7	0	45.05	-	-	74	-28.95	-	-	0-360	201	V
4	4.404	33.67	PK	33.8	-31.5	0	35.97	-	-	-	-	68.2	-32.23	0-360	201	V

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

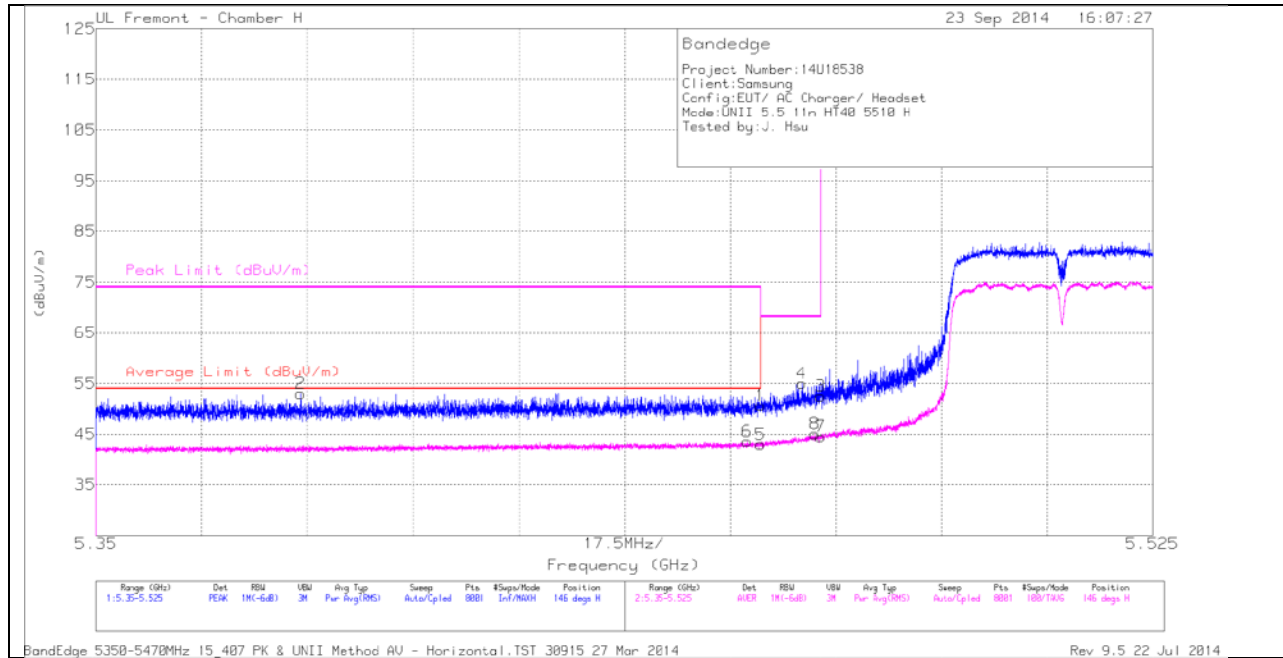
PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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
* 11.4	39.08	PK1	38	-25.6	0	51.48	-	-	74	-22.52	-	-	183	166	V
* 11.4	31.1	AD1	38	-25.6	.31	43.81	54	-10.19	-	-	-	-	183	166	V
6.15	40.81	PK1	35.3	-30.3	0	45.81	-	-	-	-	68.2	-22.39	321	179	V
6.15	28.57	AD1	35.3	-30.3	.31	33.88	-	-	-	-	-	-	321	179	V

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

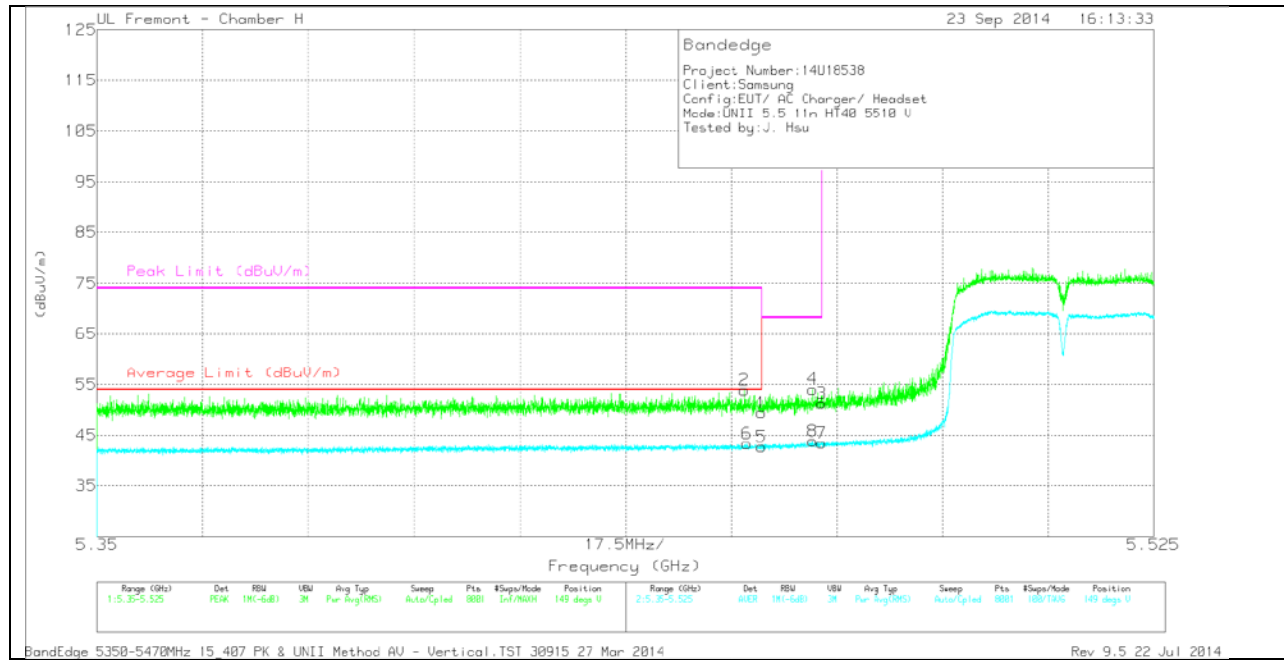
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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
2	* 5.384	40.77	PK	34.9	-22.6	0	53.07	-	-	74	-20.93	146	394	H
6	* 5.458	30.45	RMS	35	-22.5	.62	43.57	54	-10.43	-	-	146	394	H
1	* 5.46	38.16	PK	35	-22.5	0	50.66	-	-	74	-23.34	146	394	H
5	* 5.46	29.85	RMS	35	-22.5	.62	42.97	54	-11.03	-	-	146	394	H
4	5.467	42.44	PK	35	-22.4	0	55.04	-	-	68.2	-13.16	146	394	H
8	5.469	31.7	RMS	35.1	-22.4	.62	45.02	-	-	-	-	146	394	H
3	5.47	39.83	PK	35.1	-22.4	0	52.53	-	-	68.2	-15.67	146	394	H
7	5.47	31.2	RMS	35.1	-22.4	.62	44.52	-	-	-	-	146	394	H

VERTICAL PEAK AND AVERAGE PLOT

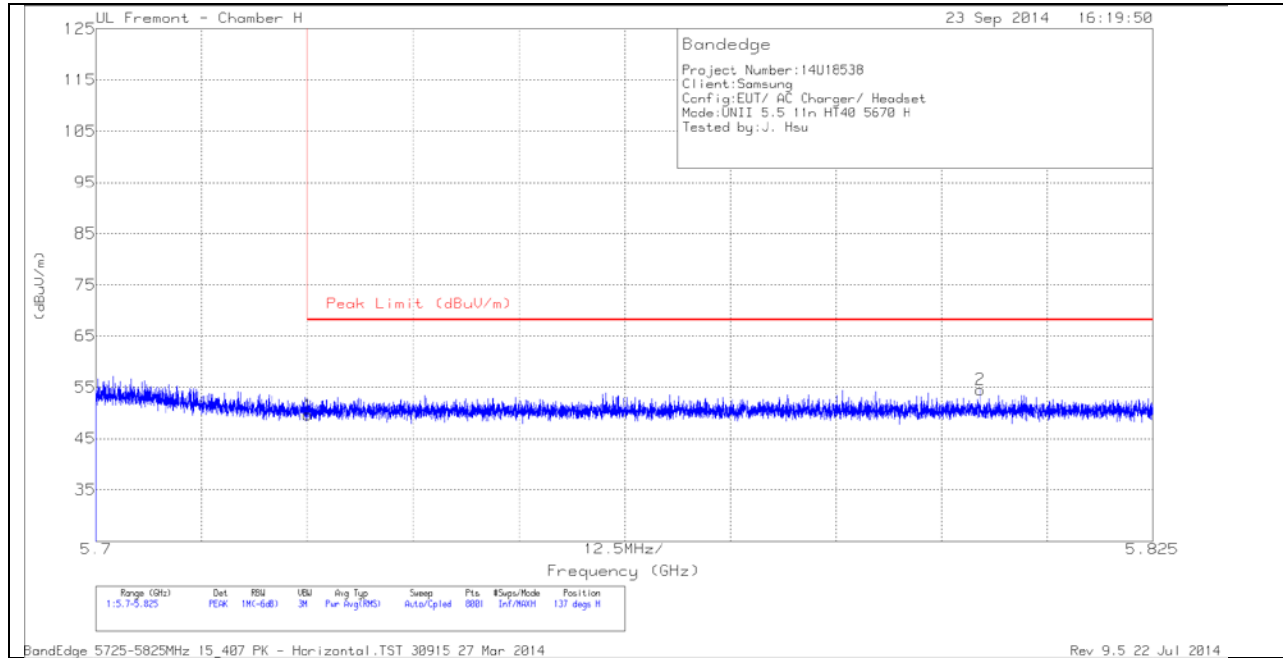


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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
2	* 5.457	41.39	PK	35	-22.5	0	53.89	-	-	74	-20.11	149	365	V
6	* 5.458	30.17	RMS	35	-22.5	.62	43.29	54	-10.71	-	-	149	365	V
1	* 5.46	36.91	PK	35	-22.5	0	49.41	-	-	74	-24.59	149	365	V
5	* 5.46	29.57	RMS	35	-22.5	.62	42.69	54	-11.31	-	-	149	365	V
4	5.469	41.48	PK	35	-22.4	0	54.08	-	-	68.2	-14.12	149	365	V
8	5.469	30.57	RMS	35	-22.4	.62	43.79	-	-	-	-	149	365	V
3	5.47	38.55	PK	35.1	-22.4	0	51.25	-	-	68.2	-16.95	149	365	V
7	5.47	30.19	RMS	35.1	-22.4	.62	43.51	-	-	-	-	149	365	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

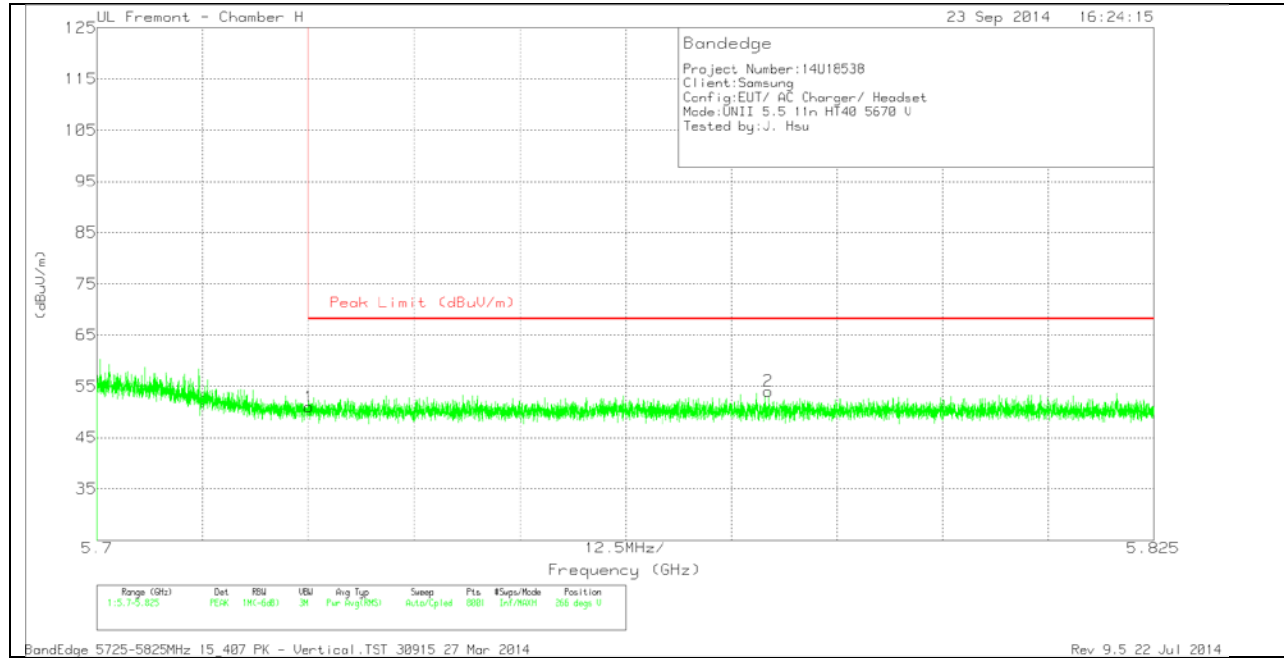
HORIZONTAL PEAK PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	37.04	PK	35	-22.4	49.64	68.2	-18.56	137	360	H
2	5.805	41.73	PK	35	-22.2	54.53	68.2	-13.67	137	360	H

VERTICAL PEAK PLOT

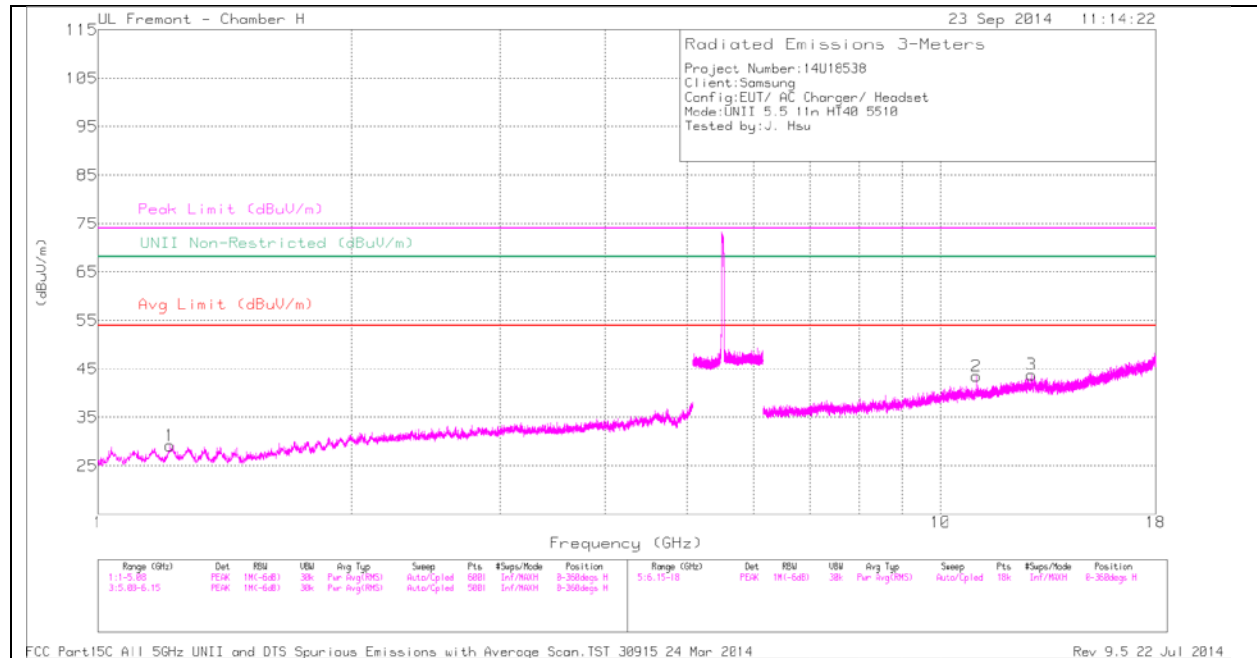


VERTICAL DATA

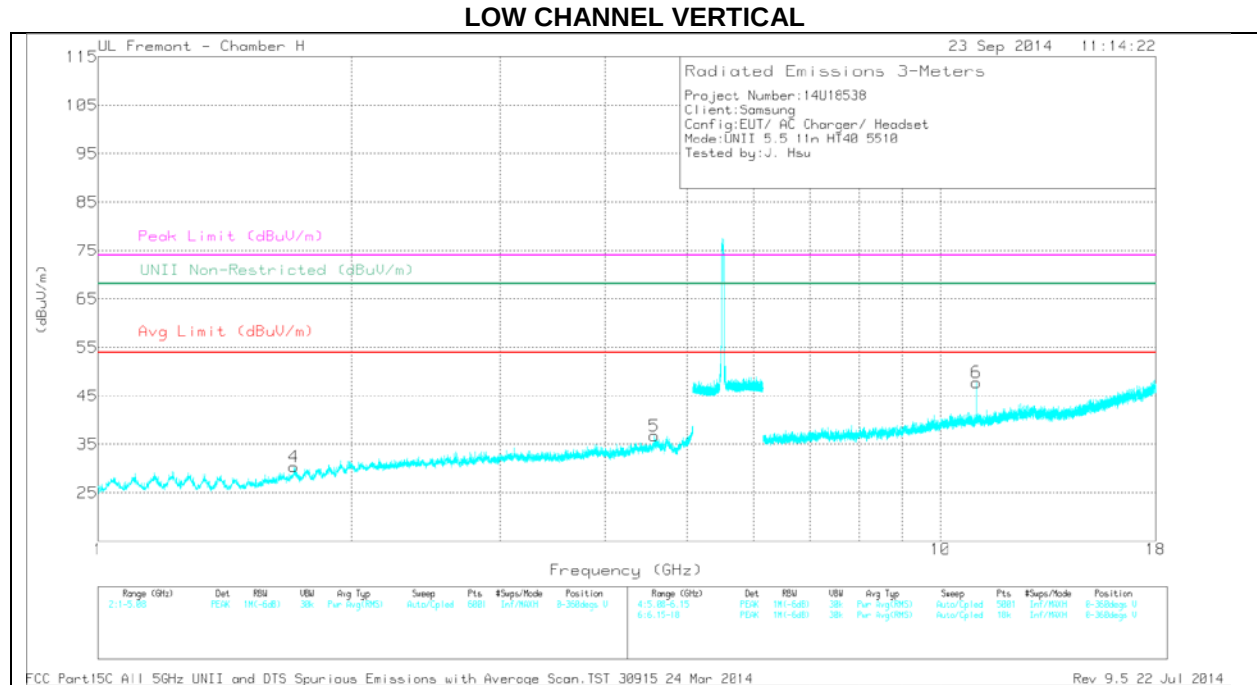
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.41	PK	35	-22.4	51.01	68.2	-17.19	266	365	V
2	5.779	41.3	PK	35	-22.2	54.1	68.2	-14.1	266	365	V

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.



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 T863 (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	* 1.216	35.95	PK	28.8	-35.6	0	29.15	-	-	74	-44.85	-	-	0-360	201	H
4	* 1.707	35.25	PK	29.4	-34.3	0	30.35	-	-	74	-43.65	-	-	0-360	201	V
5	* 4.573	34.46	PK	34.1	-31.8	0	36.76	-	-	74	-37.24	-	-	0-360	201	V
2	* 11.019	31.01	PK	37.8	-25.3	0	43.51	-	-	74	-30.49	-	-	0-360	201	H
6	* 11.02	35.27	PK	37.8	-25.3	0	47.77	-	-	74	-26.23	-	-	0-360	201	V
3	12.832	29.92	PK	39.3	-25.4	0	43.82	-	-	-	-	68.2	-24.38	0-360	100	H

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

PK - Peak detector

Radiated Emissions

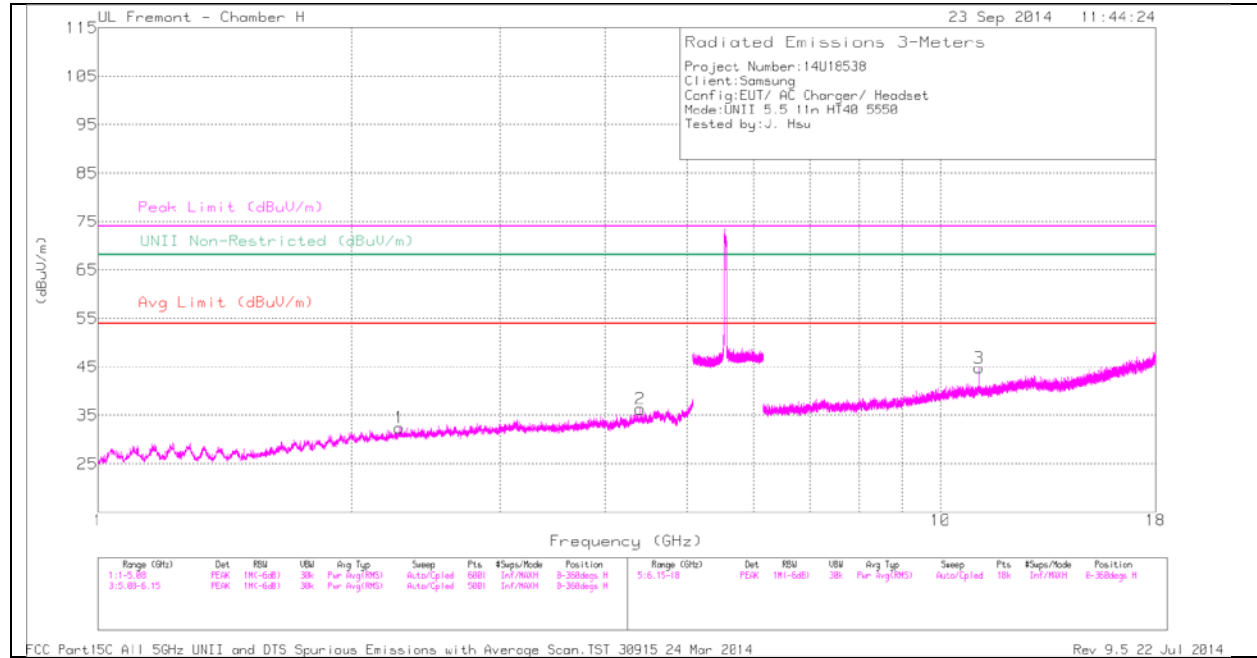
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.02	41.21	PK1	37.8	-25.3	0	53.71	-	-	74	-20.29	-	-	312	238	V
* 11.02	36.56	AD1	37.8	-25.3	.66	49.72	54	-4.28	-	-	-	-	312	238	V
12.831	35.69	PK1	39.3	-25.4	0	49.59	-	-	-	-	68.2	-18.61	272	282	H
12.833	24.92	AD1	39.3	-25.4	.66	39.48	-	-	-	-	-	-	272	282	H

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

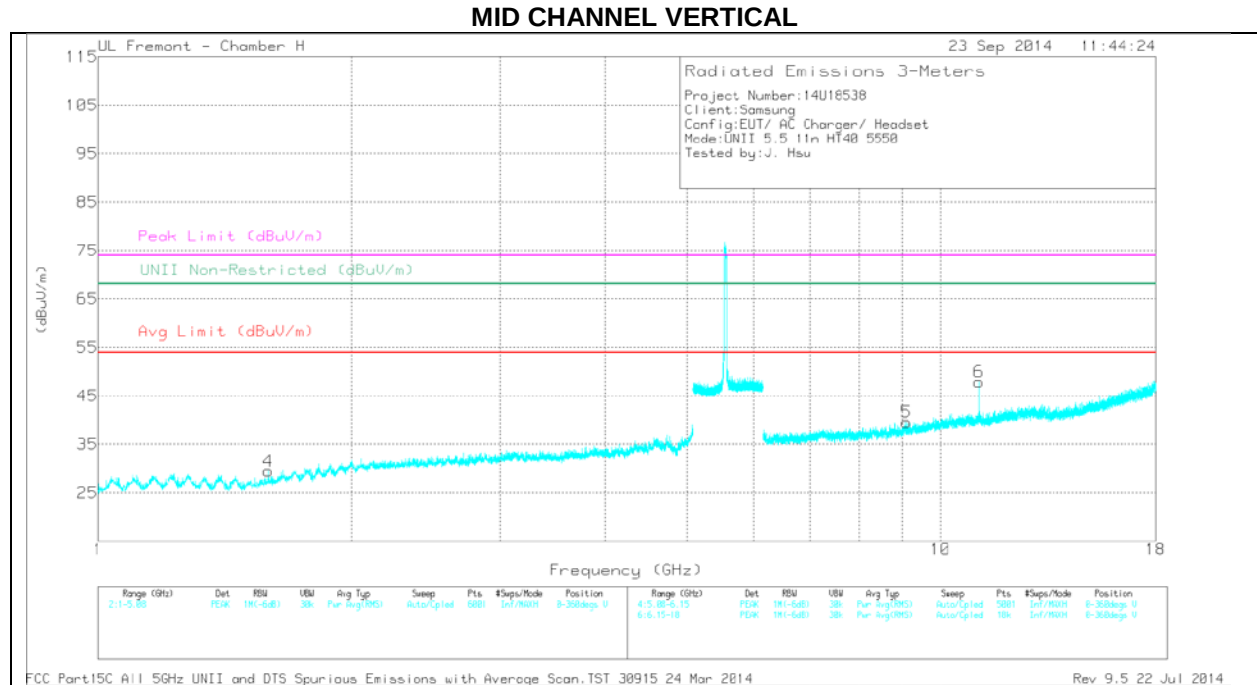
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

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.



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

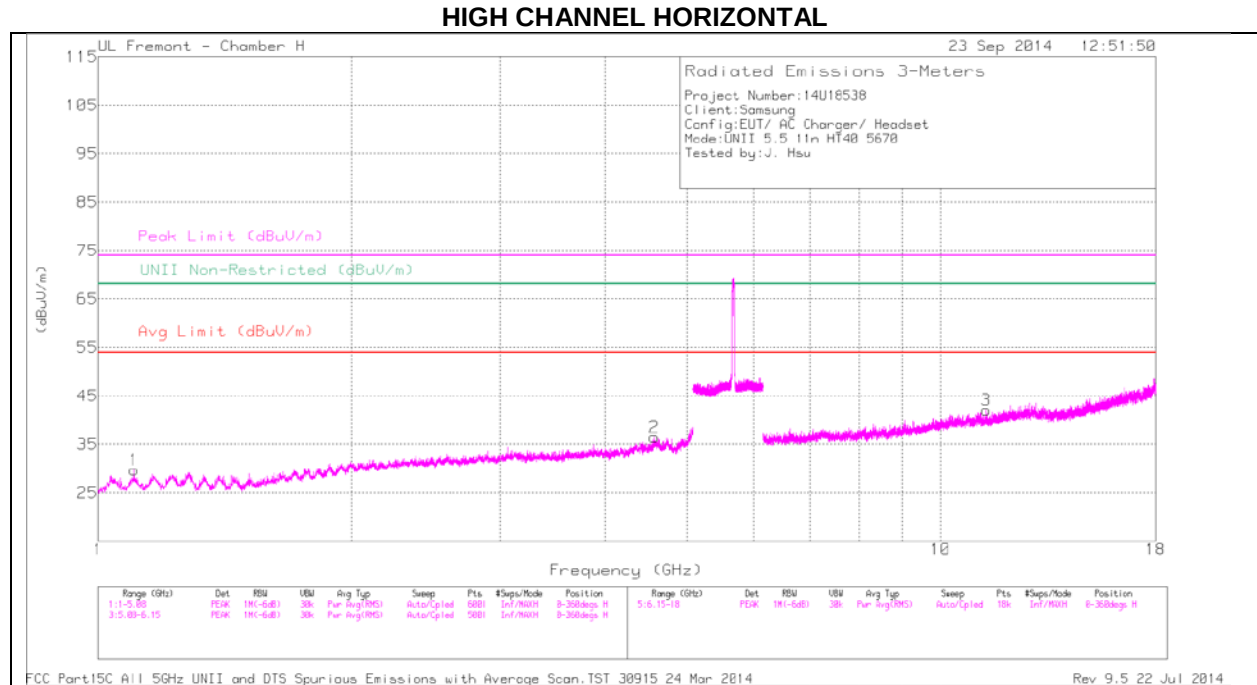
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.277	34.89	PK	31.8	-34.2	0	32.49	-	-	74	-41.51	-	-	0-360	201	H
4	* 1.59	36.12	PK	28.4	-35.1	0	29.42	-	-	74	-44.58	-	-	0-360	100	V
3	* 11.1	32.24	PK	37.8	-25.3	0	44.74	-	-	74	-29.26	-	-	0-360	201	H
5	* 9.115	30.08	PK	36.5	-27	0	39.58	-	-	74	-34.42	-	-	0-360	201	V
6	* 11.1	35.37	PK	37.8	-25.3	0	47.87	-	-	74	-26.13	-	-	0-360	201	V
2	4.401	33.89	PK	33.8	-31.4	0	36.29	-	-	-	-	68.2	-31.91	0-360	201	H

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

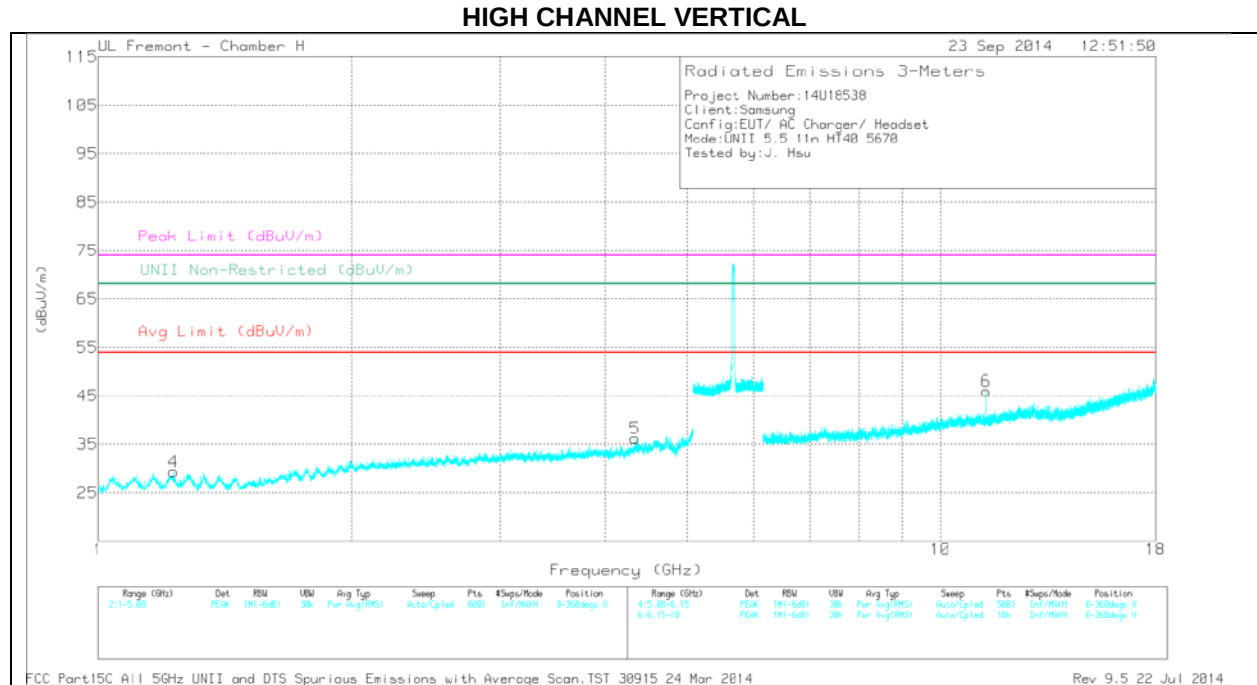
PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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
* 11.1	40.45	PK1	37.8	-25.3	0	52.95	-	-	74	-21.05	-	-	50	376	H
* 11.1	32.34	AD1	37.8	-25.3	.66	45.5	54	-8.5	-	-	-	-	50	376	H
* 11.1	41.17	PK1	37.8	-25.3	0	53.67	-	-	74	-20.33	-	-	315	258	V
* 11.1	36.63	AD1	37.8	-25.3	.66	49.79	54	-4.21	-	-	-	-	315	258	V



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 T863 (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	* 1.103	37	PK	28.2	-35.5	0	29.7	-	-	74	-44.3	-	-	0-360	201	H
2	* 4.568	34.07	PK	34.1	-31.7	0	36.47	-	-	74	-37.53	-	-	0-360	100	H
4	* 1.229	35.92	PK	28.9	-35.5	0	29.32	-	-	74	-44.68	-	-	0-360	201	V
5	* 4.339	33.76	PK	33.7	-31.2	0	36.26	-	-	74	-37.74	-	-	0-360	201	V
3	* 11.34	29.39	PK	38	-25.3	0	42.09	-	-	74	-31.91	-	-	0-360	201	H
6	* 11.339	33.38	PK	38	-25.4	0	45.98	-	-	74	-28.02	-	-	0-360	201	V

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

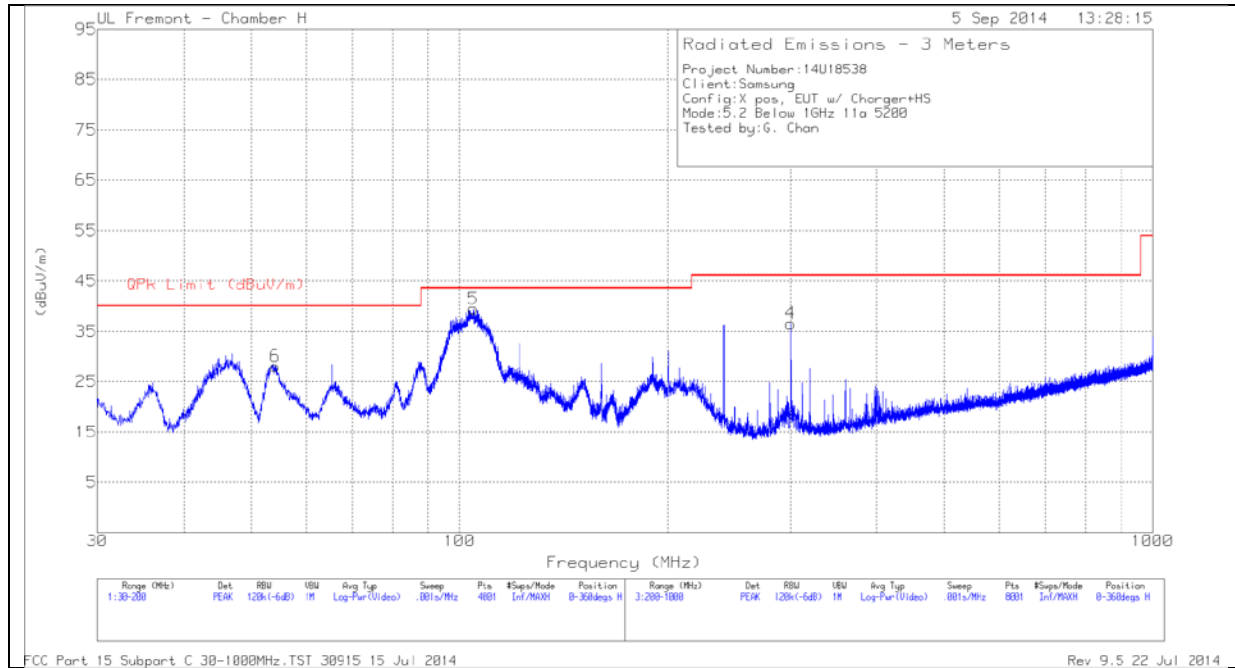
PK - Peak detector

Radiated Emissions

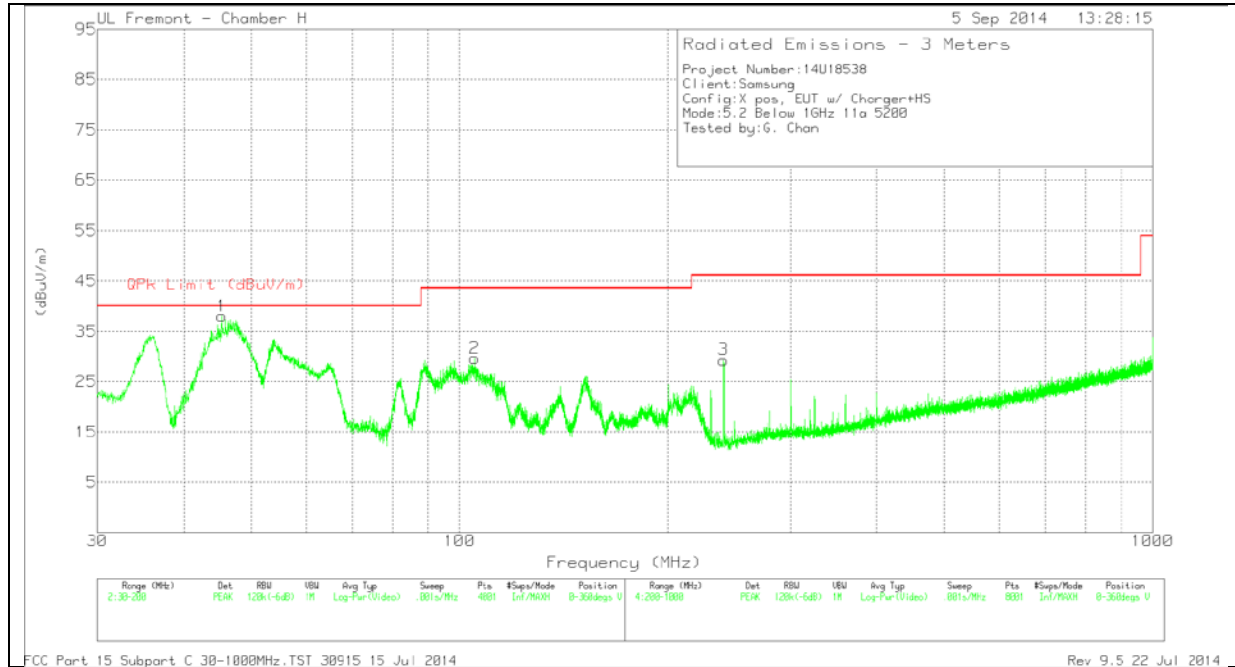
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.34	39.91	PK1	38	-25.3	0	52.61	-	-	74	-21.39	-	-	307	148	V
* 11.34	34.04	AD1	38	-25.3	.66	47.4	54	-6.6	-	-	-	-	307	148	V

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	SS JB3 SN A051314-1	Amp/Cbl (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 240.3	43.93	PK	14.4	-29	0	29.33	46.02	-16.69	0-360	100	V
1	45.3425	55.59	PK	13.2	-30.8	0	37.99	40	-2.01	0-360	100	V
6	54.225	48.57	PK	10.1	-30.6	0	28.07	40	-11.93	0-360	401	H
5	104.6725	55.26	PK	14.2	-30	0	39.46	43.52	-4.06	0-360	301	H
2	105.0975	45.33	PK	14.3	-30	0	29.63	43.52	-13.89	0-360	100	V
4	300.4	48.66	PK	16.5	-28.6	0	36.56	46.02	-9.46	0-360	100	H

13. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

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.

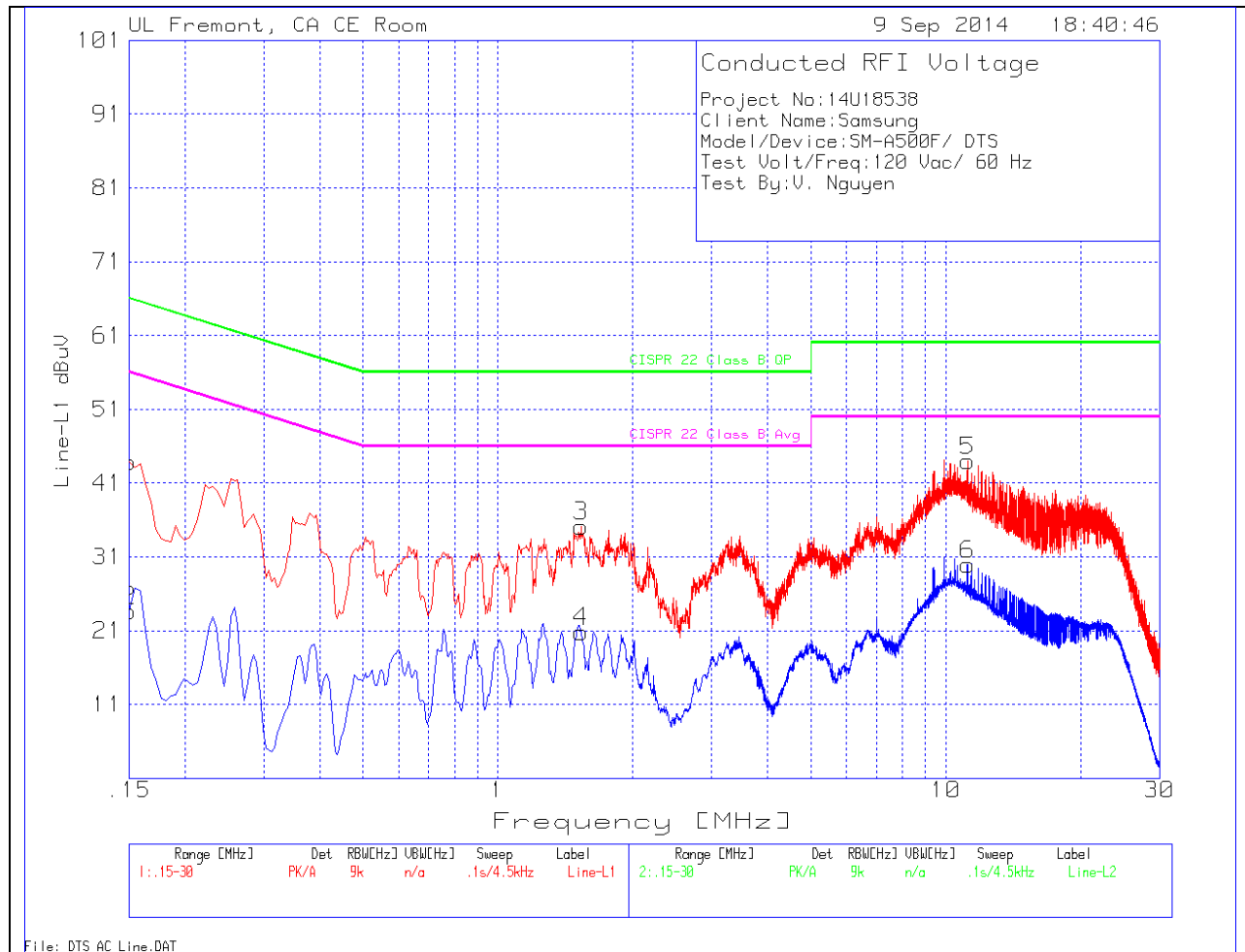
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT

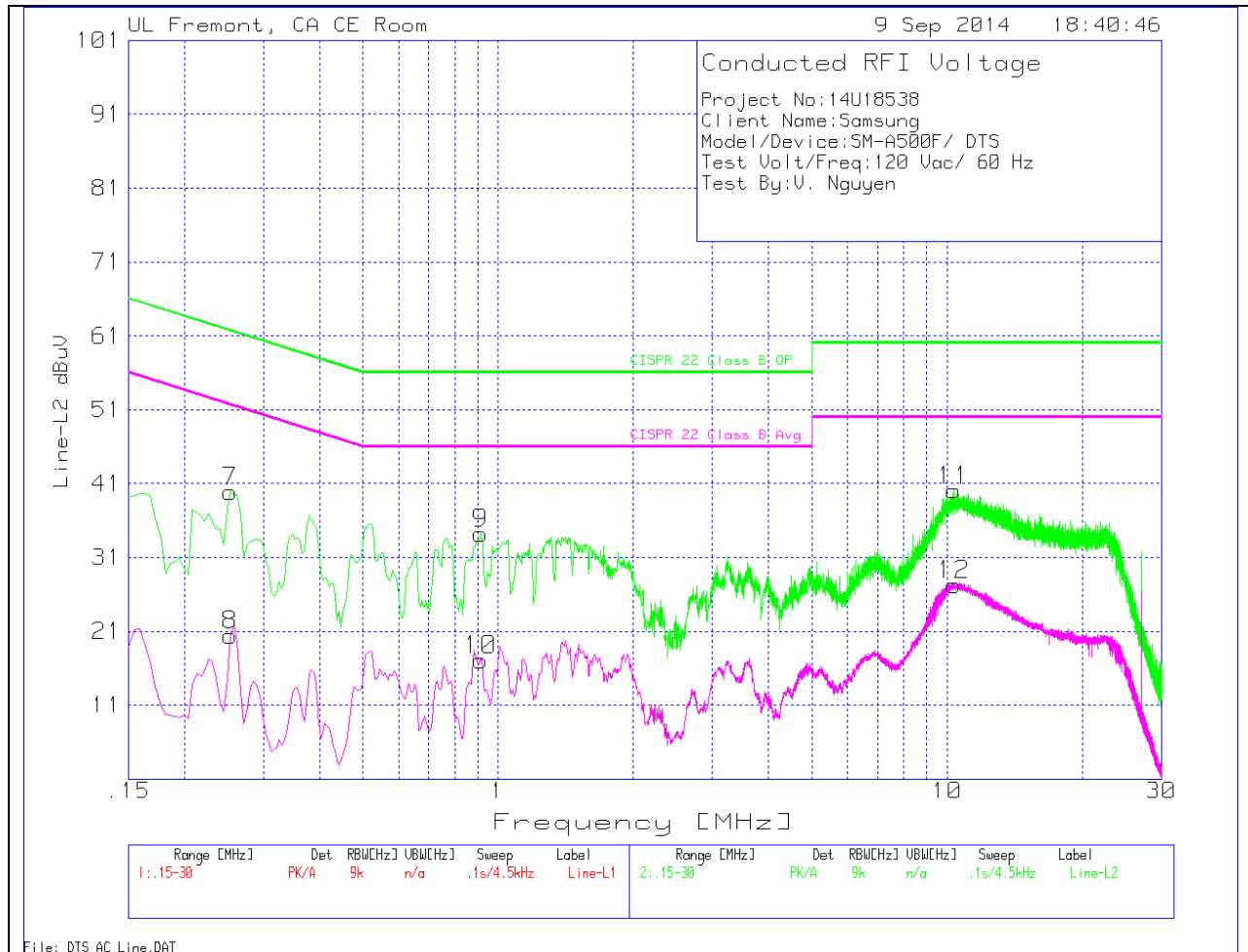


LINE 1 RESULTS

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	42.51	PK	1.4	0	43.91	66	-22.09	-	-
2	.15	22.29	Av	1.4	0	23.69	-	-	56	-32.31
3	1.5315	34.82	PK	.2	.1	35.12	56	-20.88	-	-
4	1.5315	20.54	Av	.2	.1	20.84	-	-	46	-25.16
5	11.2155	43.55	PK	.2	.2	43.95	60	-16.05	-	-
6	11.2155	29.5	Av	.2	.2	29.9	-	-	50	-20.1

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	.2535	39.15	PK	.7	0	39.85	61.6	-21.75	-	-
8	.2535	19.7	Av	.7	0	20.4	-	-	51.6	-31.2
9	.915	33.93	PK	.3	0	34.23	56	-21.77	-	-
10	.915	16.79	Av	.3	0	17.09	-	-	46	-28.91
11	10.356	39.68	PK	.2	.2	40.08	60	-19.92	-	-
12	10.356	26.87	Av	.2	.2	27.27	-	-	50	-22.73

14. DYNAMIC FREQUENCY SELECTION

14.1. OVERVIEW

14.1.1. LIMITS

INDUSTRY CANADA

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

RSS-210 Issue 7 A9.4 (b) (ii) **Channel Availability Check Time:** ...

Additional requirements for the band 5600-5650 MHz: Until further notice, devices subject to this Section shall not be capable of transmitting in the band 5600-5650 MHz, so that Environment Canada weather radars operating in this band are protected.

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 notes)
E.I.R.P. $\geq$ 200 milliwatt	-64 dBm
E.I.R.P. < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm

E.I.R.P. < 200 milliwatt 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
<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

Table 6 – Long Pulse Radar Test Signal

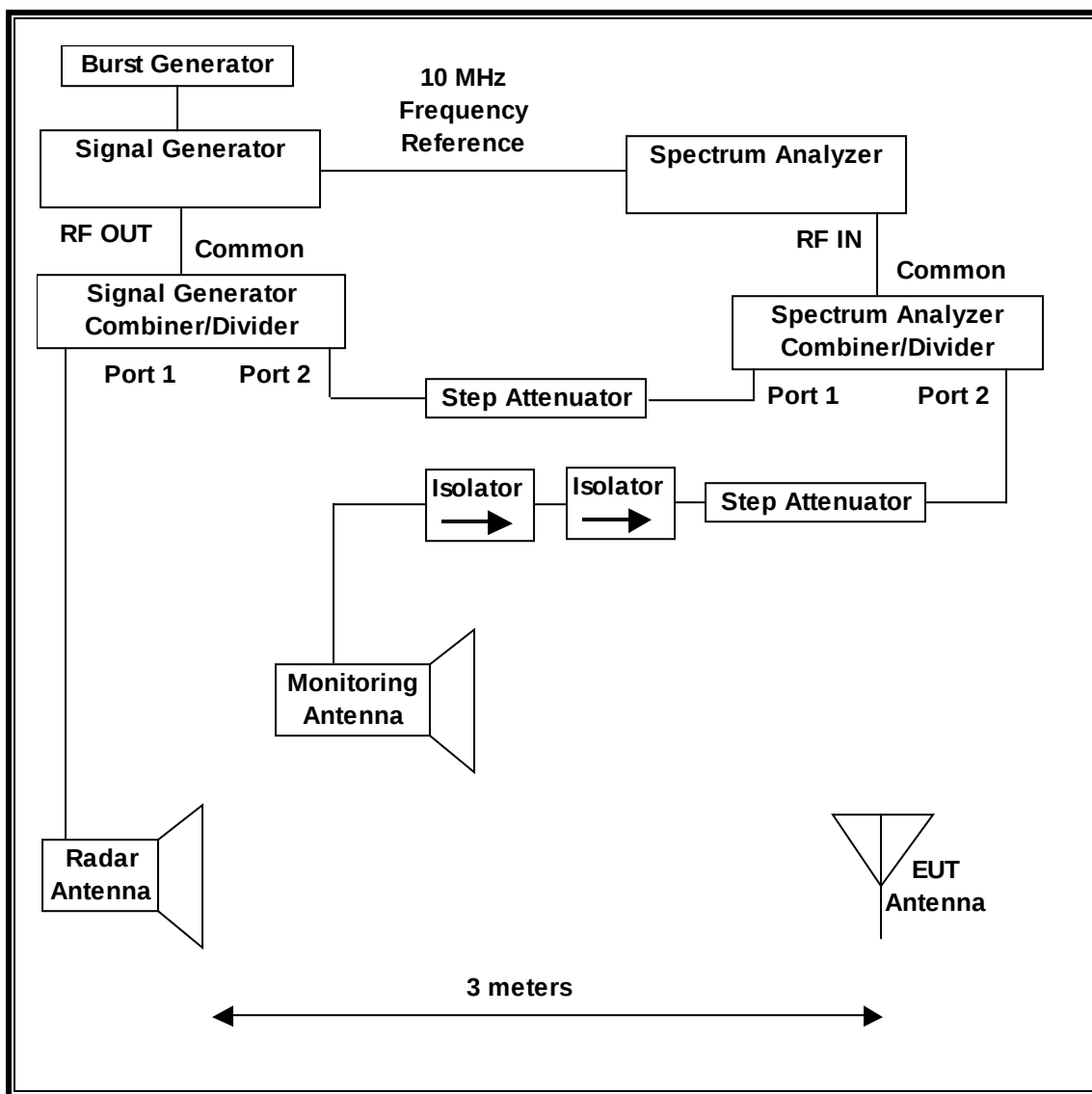
Radar Waveform	Bursts	Pulses per Burst	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Minimum Percentage of Successful Detection	Minimum Trials
5	8-20	1-3	50-100	5-20	1000-2000	80%	30

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.

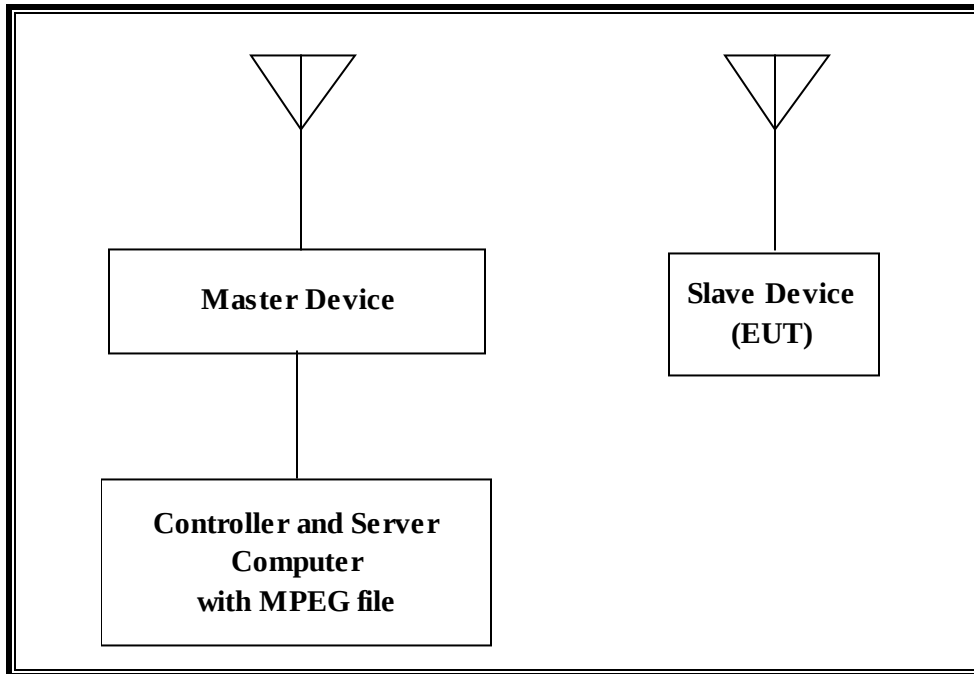
TEST AND MEASUREMENT EQUIPMENT

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	10/21/13
Vector Signal Generator, 20GHz	Agilent / HP	E4438C	C01197	01/17/14

14.1.3. 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
Wireless Access Point	Cisco	AIR-AP1252AG-A-K9	FTX120690N2	LDK102061
AC Adapter (AP)	Delta Electronics	EADP-45BB B	DTH112490BD	DoC
Notebook PC (Controller/Server)	Dell	PP18L	10657517725	DoC
AC Adapter (Controller/Server PC)	Dell	LA65SN0-00	CN-ODF263-71615-6AU-1019	DoC

14.1.4. 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 12.1 dBm EIRP in the 5250-5350 MHz band and 12.41 dBm EIRP in the 5470-5725 MHz band.

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

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.

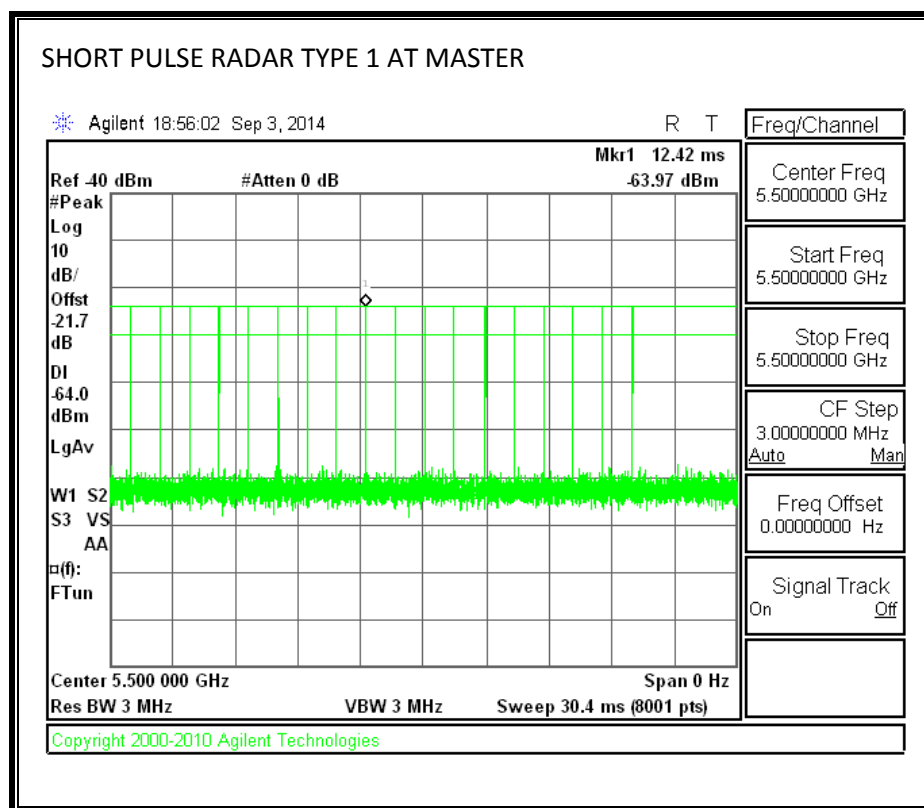
14.2. RESULTS FOR 20 MHz BANDWIDTH

14.2.1. TEST CHANNEL

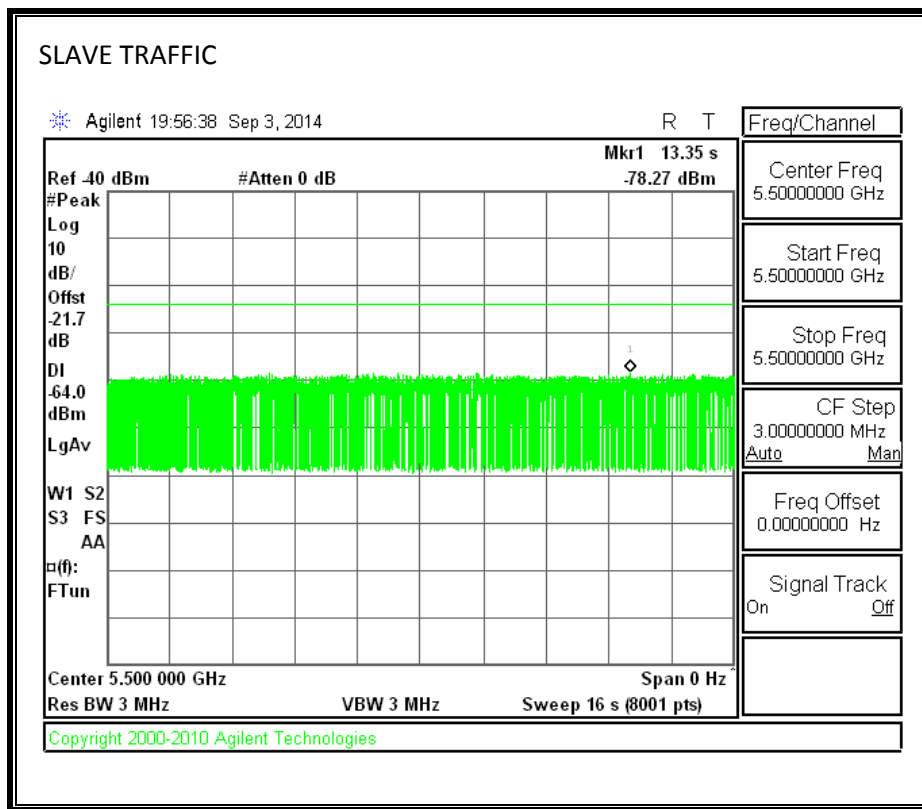
All tests were performed at a channel center frequency of 5500 MHz.

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)
0.210	10

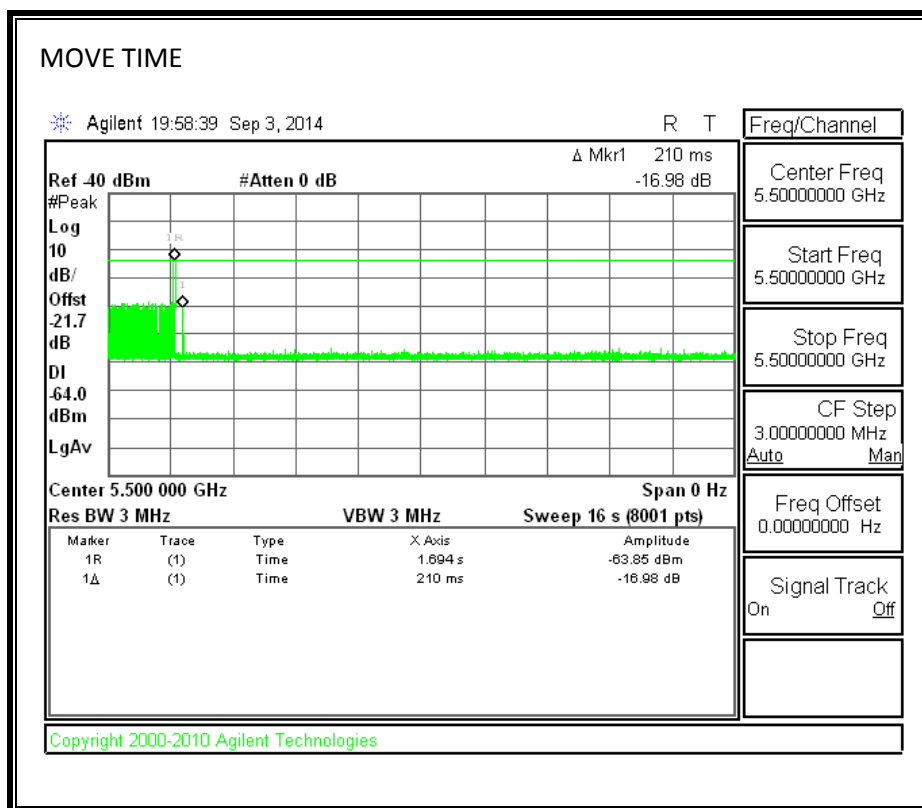
UL VERIFICATION SERVICES INC.

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

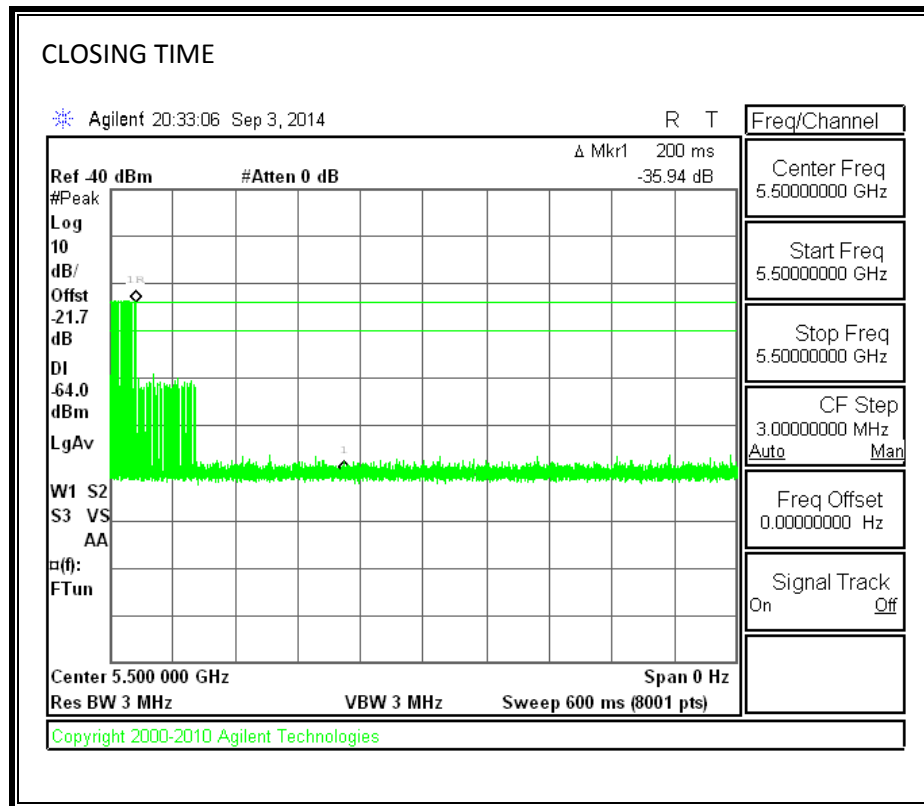
FORM NO: CCSUP4701H
FAX: (510) 661-0888

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MOVE TIME

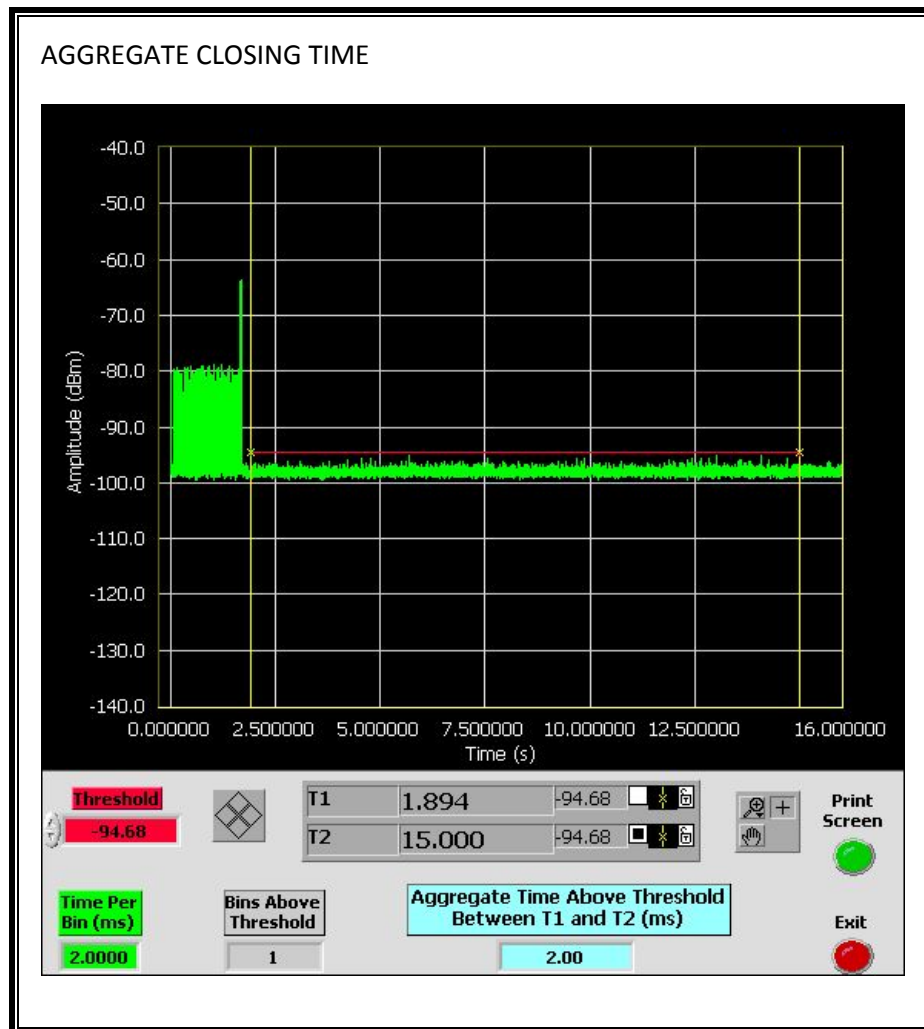


CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



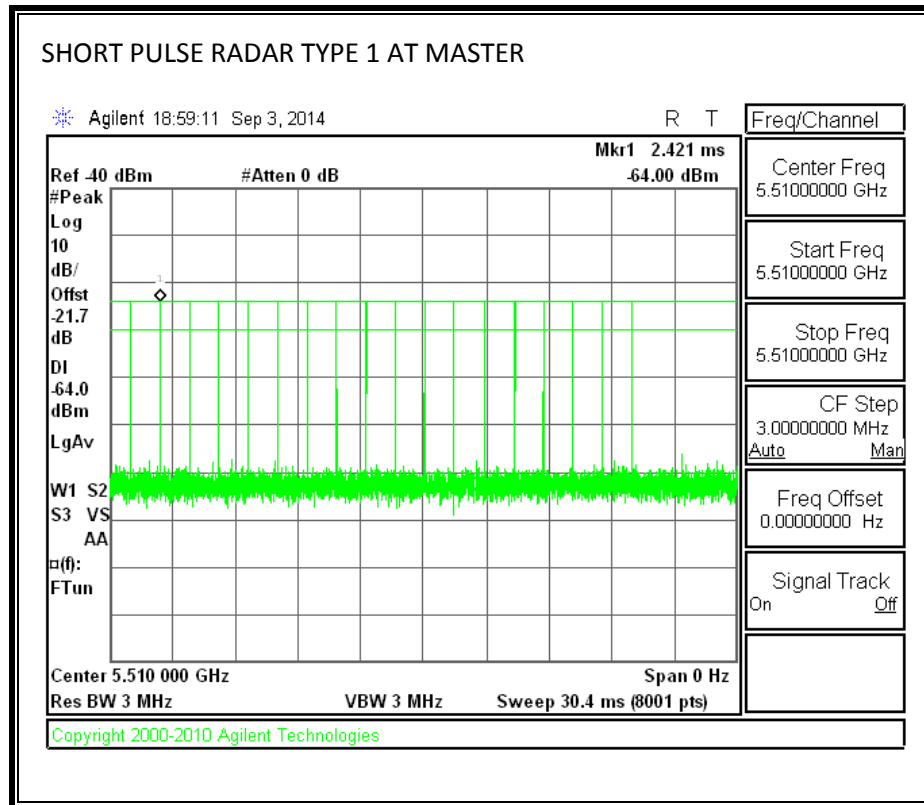
14.3. RESULTS FOR 40 MHz BANDWIDTH

14.3.1. TEST CHANNEL

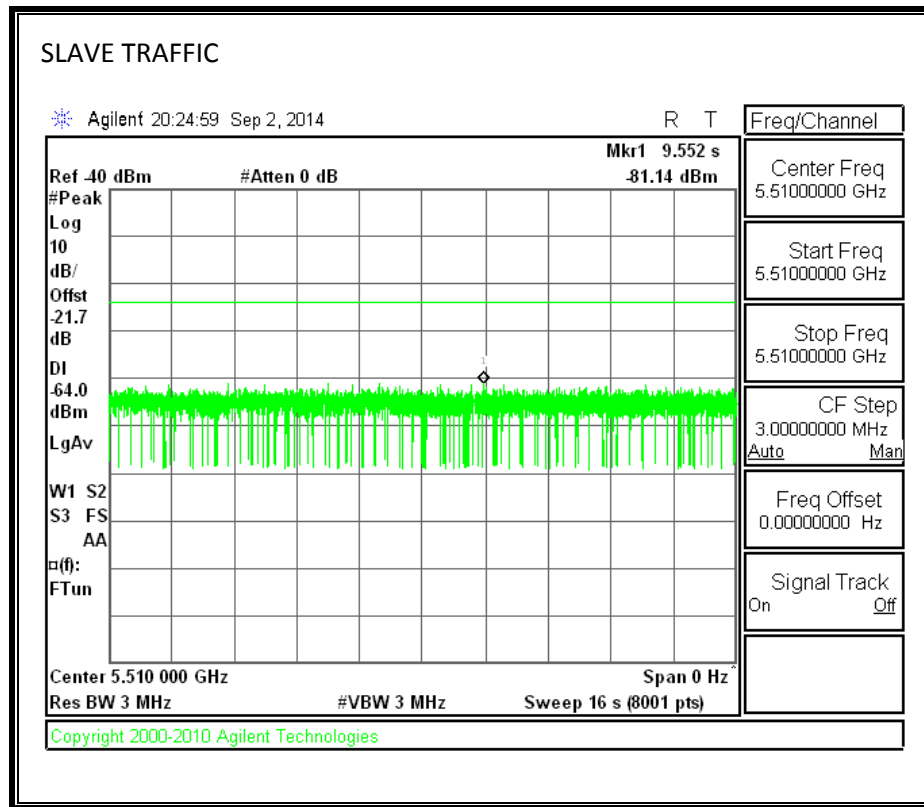
All tests were performed at a channel center frequency of 5510 MHz.

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)
4.452	10

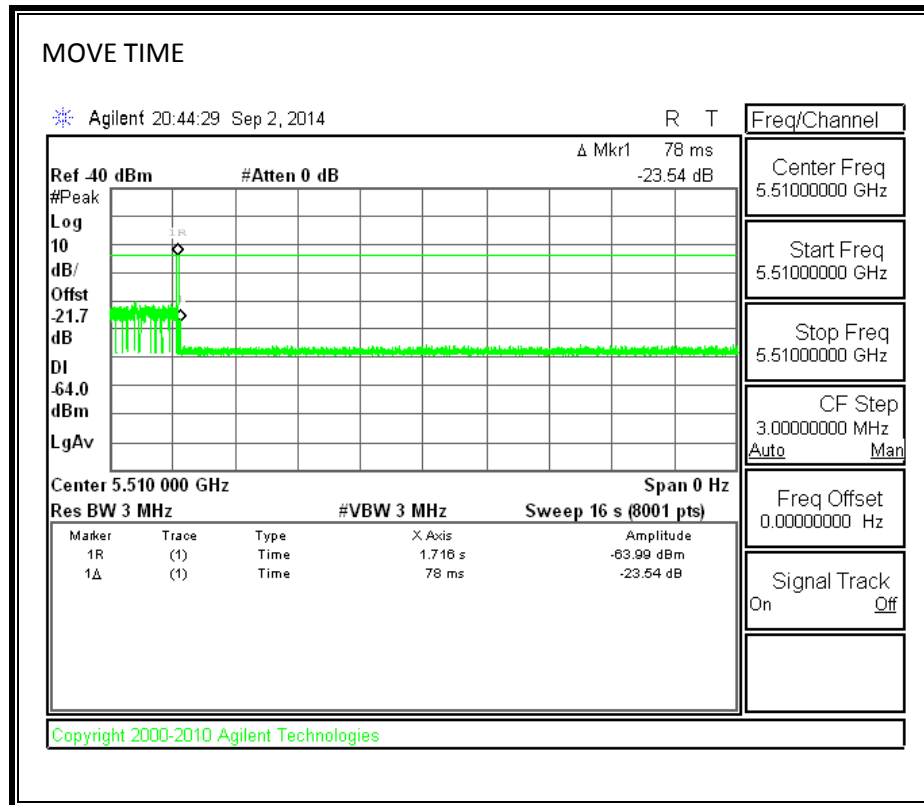
UL VERIFICATION SERVICES INC.

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

FORM NO: CCSUP4701H
FAX: (510) 661-0888

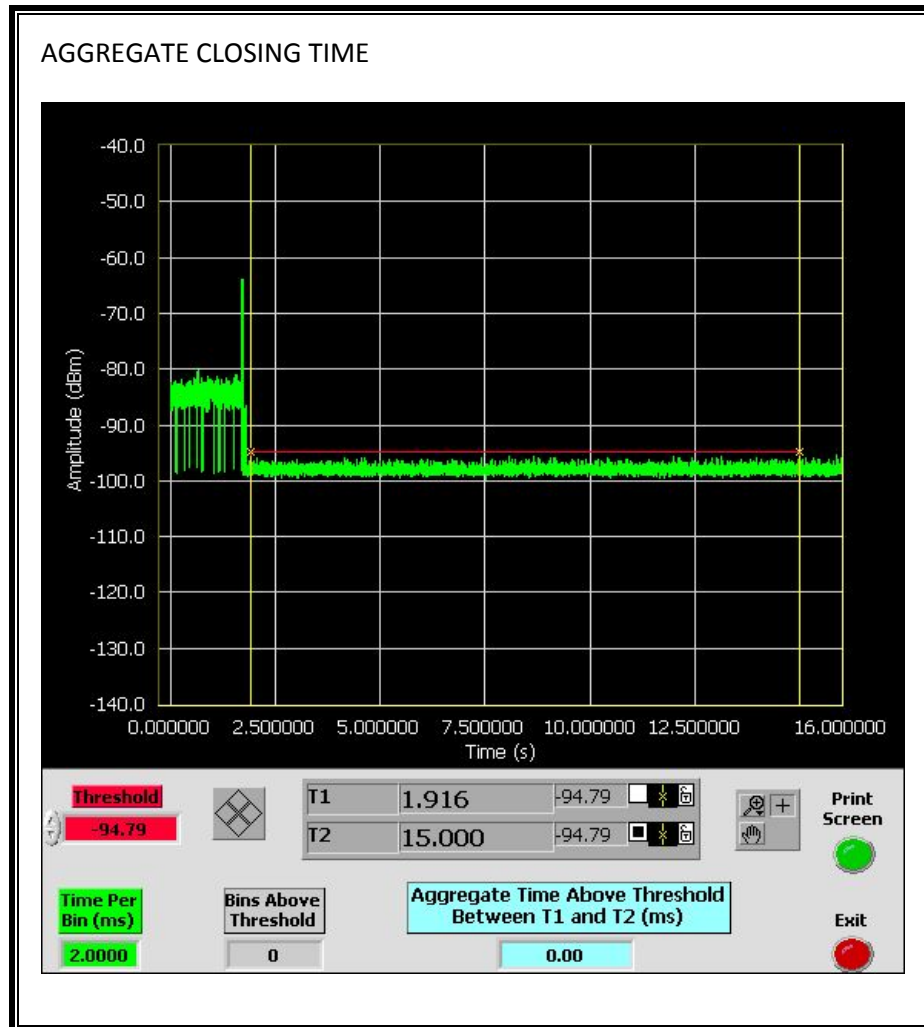
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MOVE TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No 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.

