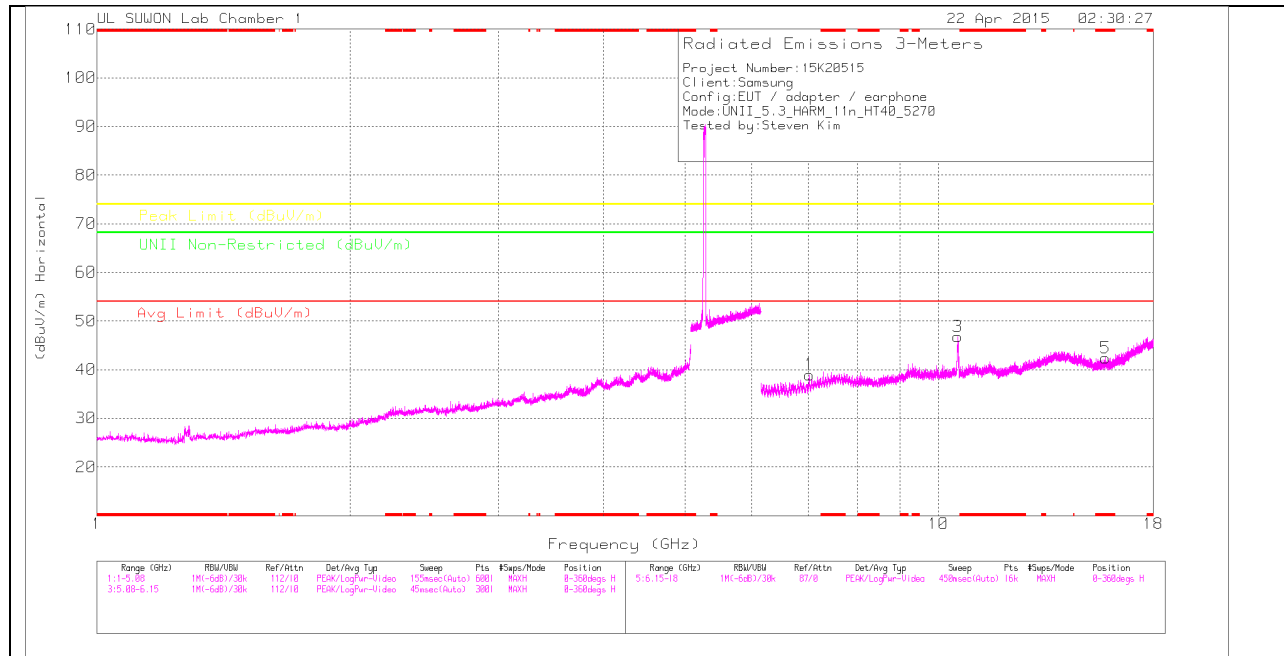
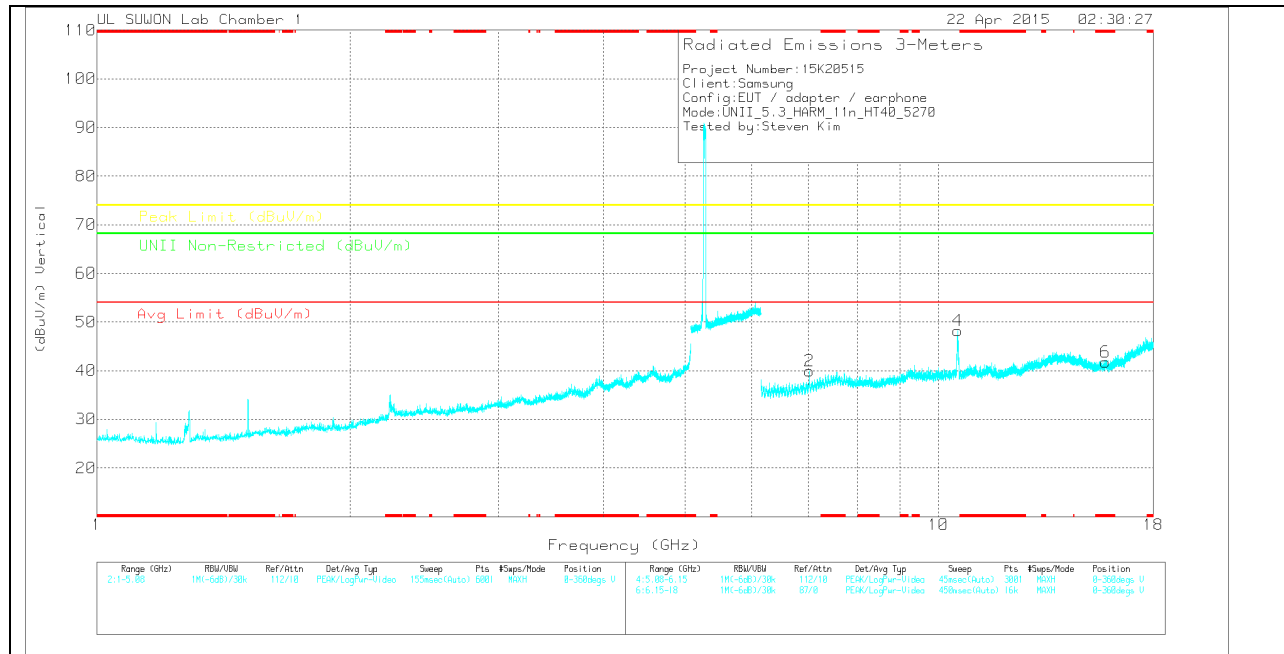


HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	7.026	27.97	PK	36.6	-25.6	0	38.97	-	-	-	-	68.2	-29.23	0-360	200	H
3	10.542	29.54	PK	38.4	-21.2	0	46.74	-	-	-	-	68.2	-21.46	0-360	100	H
5	* 15.801	22.61	PK	38.6	-18.8	0	42.41	-	-	74	-31.59	-	-	0-360	200	H
2	7.027	28.99	PK	36.6	-25.6	0	39.99	-	-	-	-	68.2	-28.21	0-360	200	V
4	10.539	31.01	PK	38.4	-21.2	0	48.21	-	-	-	-	68.2	-19.99	0-360	100	V
6	* 15.803	21.9	PK	38.6	-18.8	0	41.7	-	-	74	-32.3	-	-	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

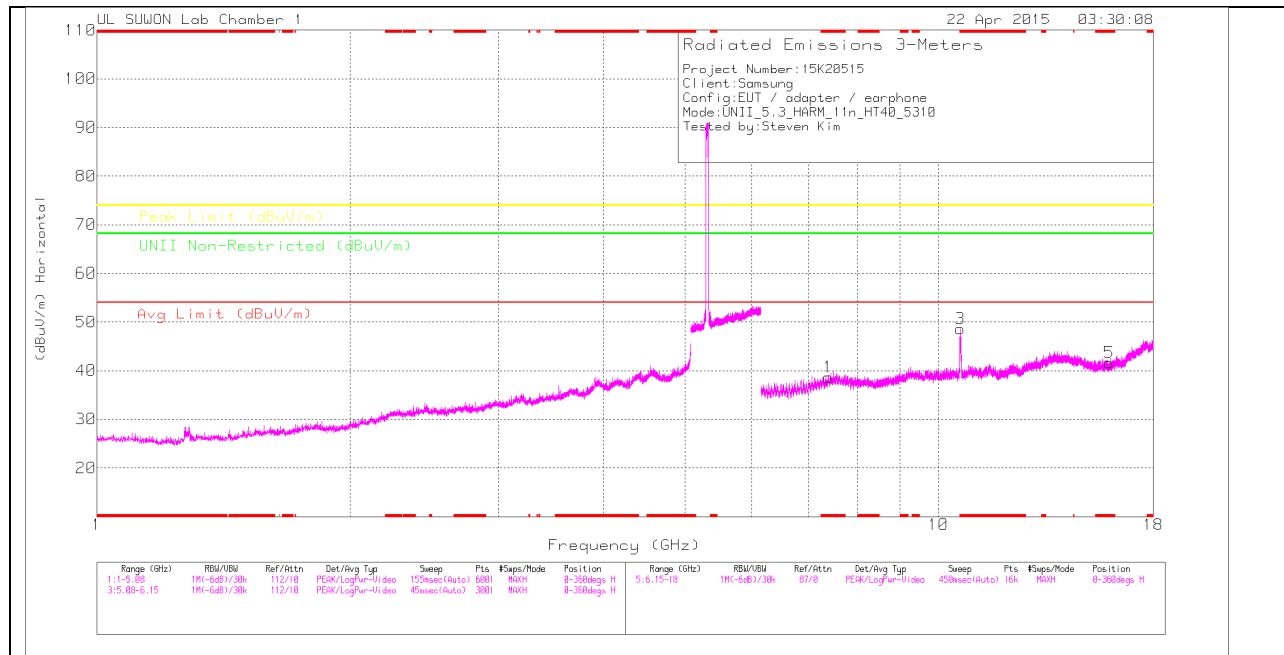
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
10.548	40.66	PK1	38.4	-21.1	0	57.96	-	-	-	-	68.2	-10.24	130	154	H
10.539	29.17	AD1	38.4	-21.2	.61	46.98	-	-	-	-	-	-	130	154	H
10.548	41.19	PK1	38.4	-21.1	0	58.49	-	-	-	-	68.2	-9.71	152	103	V
10.539	29.8	AD1	38.4	-21.2	.61	47.61	-	-	-	-	-	-	152	103	V

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

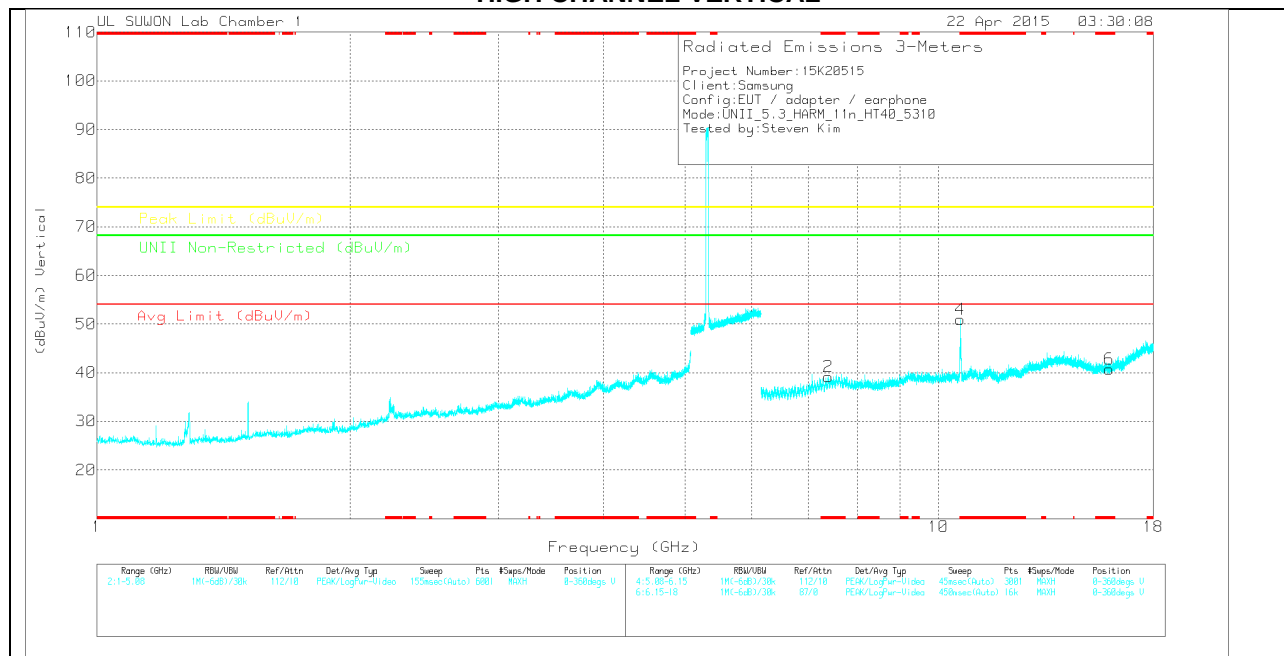
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

HIGH CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 7.4	26.27	PK	37.3	-24.9	0	38.67	-	-	74	-35.33	-	-	0-360	100	H
3	* 10.621	30.74	PK	38.4	-20.5	0	48.64	-	-	74	-25.36	-	-	0-360	100	H
5	* 15.952	21.74	PK	38.7	-18.8	0	41.64	-	-	74	-32.36	-	-	0-360	200	H
2	* 7.404	26.79	PK	37.3	-24.9	0	39.19	-	-	74	-34.81	-	-	0-360	200	V
4	* 10.619	33.09	PK	38.4	-20.6	0	50.89	-	-	74	-23.11	-	-	0-360	100	V
6	* 15.95	20.8	PK	38.7	-18.8	0	40.7	-	-	74	-33.3	-	-	0-360	200	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 10.617	40.62	PK1	38.4	-20.6	0	58.42	-	-	74	-15.58	-	-	133	400	H
* 10.617	30.05	AD1	38.4	-20.6	.61	48.46	54	-5.54	-	-	-	-	133	154	H
* 10.617	38.9	PK1	38.4	-20.6	0	56.7	-	-	74	-17.3	-	-	154	107	V
* 10.614	28.71	AD1	38.4	-20.6	.61	47.12	54	-6.88	-	-	-	-	154	107	V

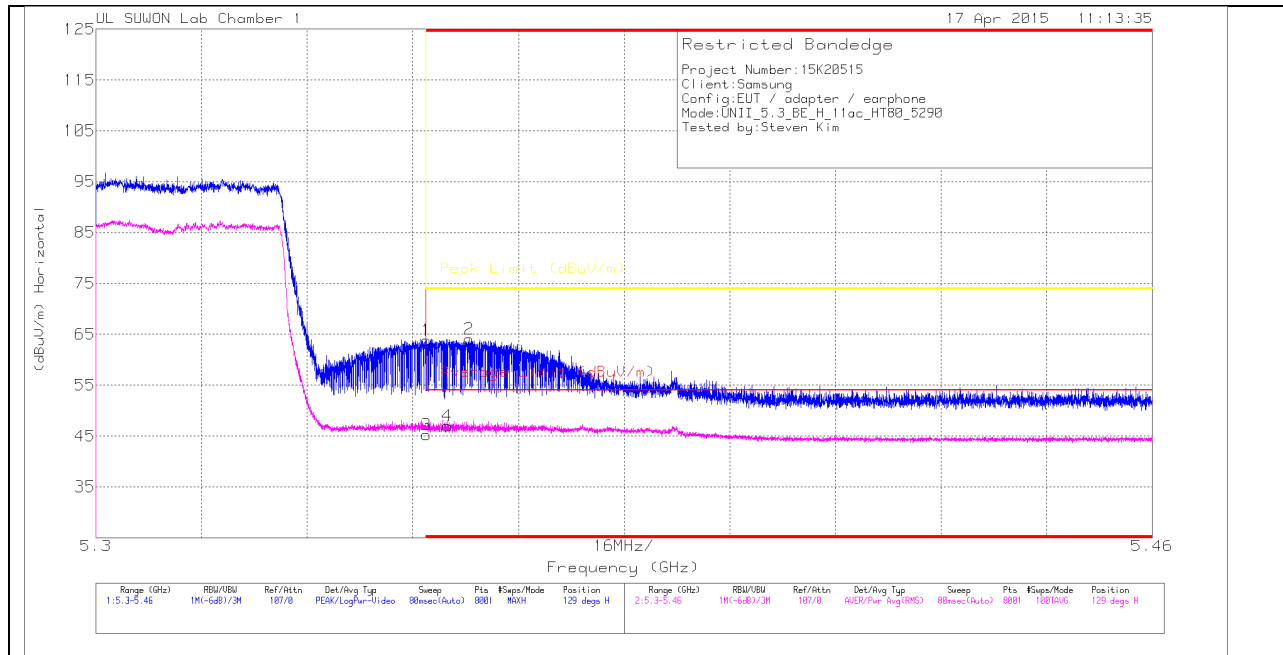
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

11.2.4. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.3 GHz BAND RESTRICTED BANDEDGE (High CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

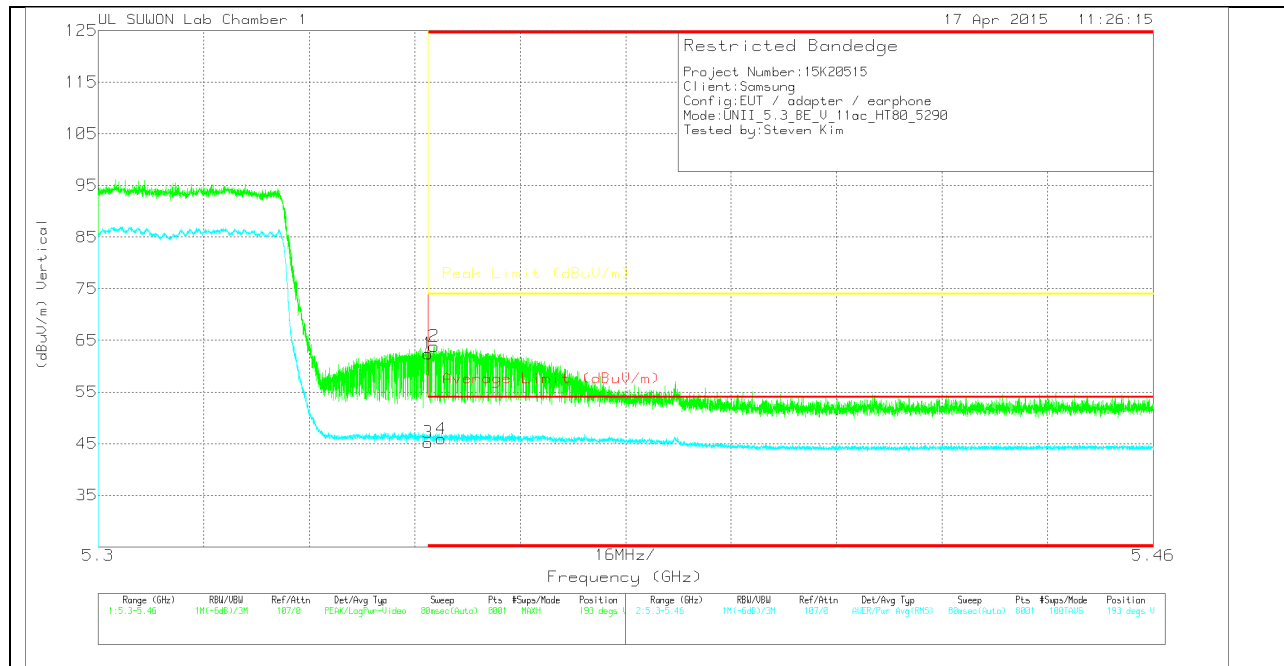
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	50.12	PK	33.3	-19.6	0	63.82	-	-	74	-10.18	129	176	H
2	* 5.356	50.41	PK	33.3	-19.6	0	64.11	-	-	74	-9.89	129	176	H
3	* 5.35	31.53	RMS	33.3	-19.6	1.14	46.37	54	-7.63	-	-	129	176	H
4	* 5.353	33.32	RMS	33.3	-19.6	1.14	48.16	54	-5.84	-	-	129	176	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	31150 Factor	Path_2_10dB	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	48.72	PK	33.3	-19.6	0	62.42	-	-	74	-11.58	193	162	V
2	* 5.351	50.17	PK	33.3	-19.6	0	63.87	-	-	74	-10.13	193	162	V
3	* 5.35	31.51	RMS	33.3	-19.6	1.14	46.35	54	-7.65	-	-	193	162	V
4	* 5.352	32.22	RMS	33.3	-19.6	1.14	47.06	54	-6.94	-	-	193	162	V

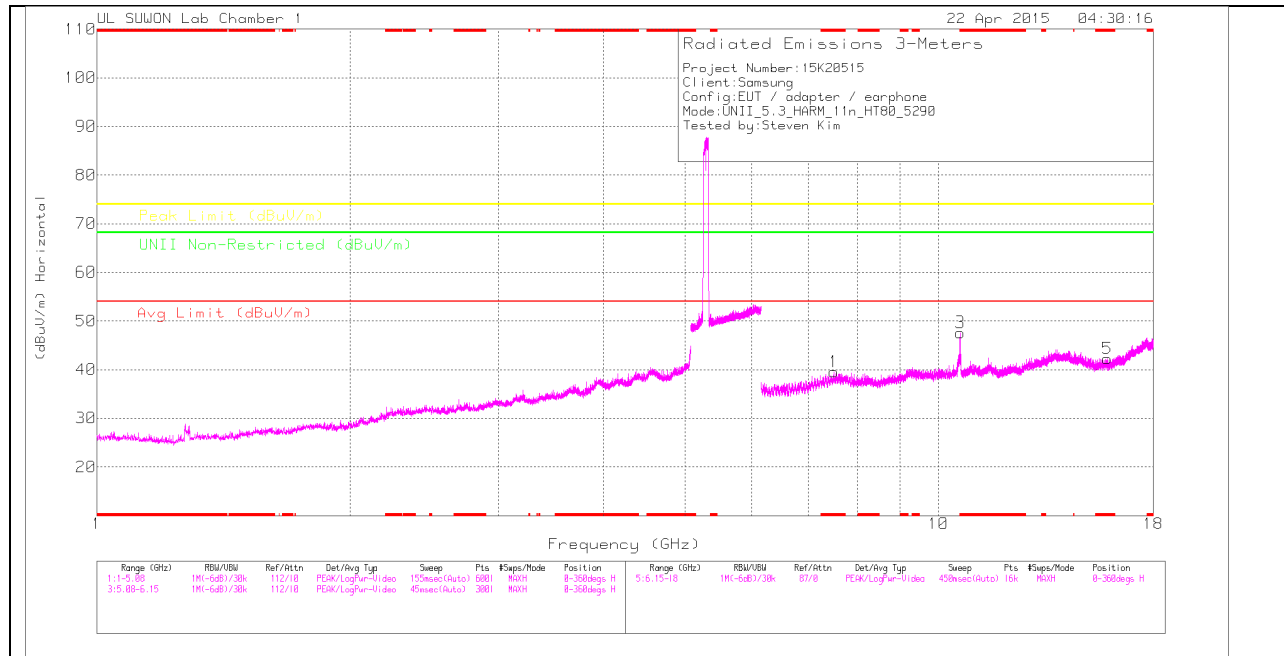
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

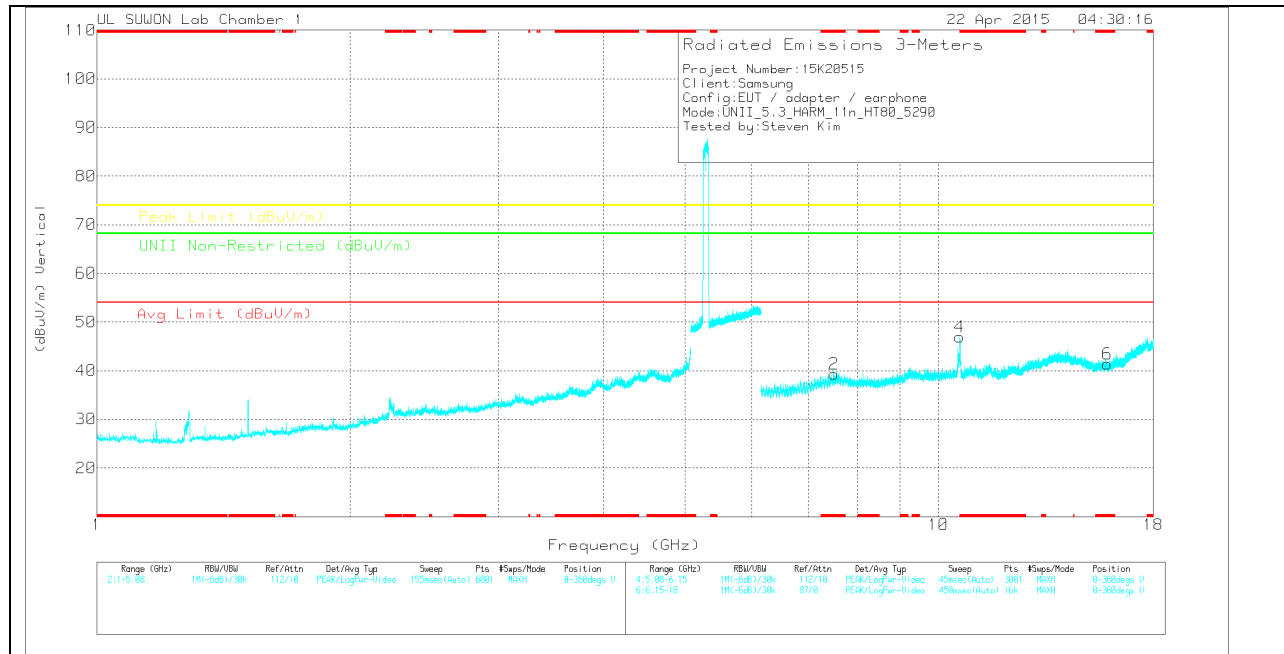
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 7.51	26.61	PK	37.4	-24.5	0	39.51	-	-	74	-34.49	-	-	0-360	100	H
3	* 10.611	29.93	PK	38.4	-20.7	0	47.63	-	-	74	-26.37	-	-	0-360	100	H
5	* 15.866	21.93	PK	38.6	-18.3	0	42.23	-	-	74	-31.77	-	-	0-360	100	H
2	* 7.507	26.36	PK	37.4	-24.5	0	39.26	-	-	74	-34.74	-	-	0-360	200	V
4	10.593	29.46	PK	38.4	-20.9	0	46.96	-	-	-	-	68.2	-21.24	0-360	100	V
6	* 15.863	21.12	PK	38.6	-18.4	0	41.32	-	-	74	-32.68	-	-	0-360	200	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
10.597	36.98	PK1	38.4	-20.9	0	54.48	-	-	-	-	68.2	-13.72	120	152	H
10.595	24.66	AD1	38.4	-20.9	1.14	43.3	-	-	-	-	-	-	120	152	H
10.596	38.28	PK1	38.4	-20.9	0	55.78	-	-	-	-	68.2	-12.42	151	100	V
10.589	24.87	AD1	38.4	-20.9	1.14	43.51	-	-	-	-	-	-	151	100	V

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

PK1 - KDB789033 Method: Peak

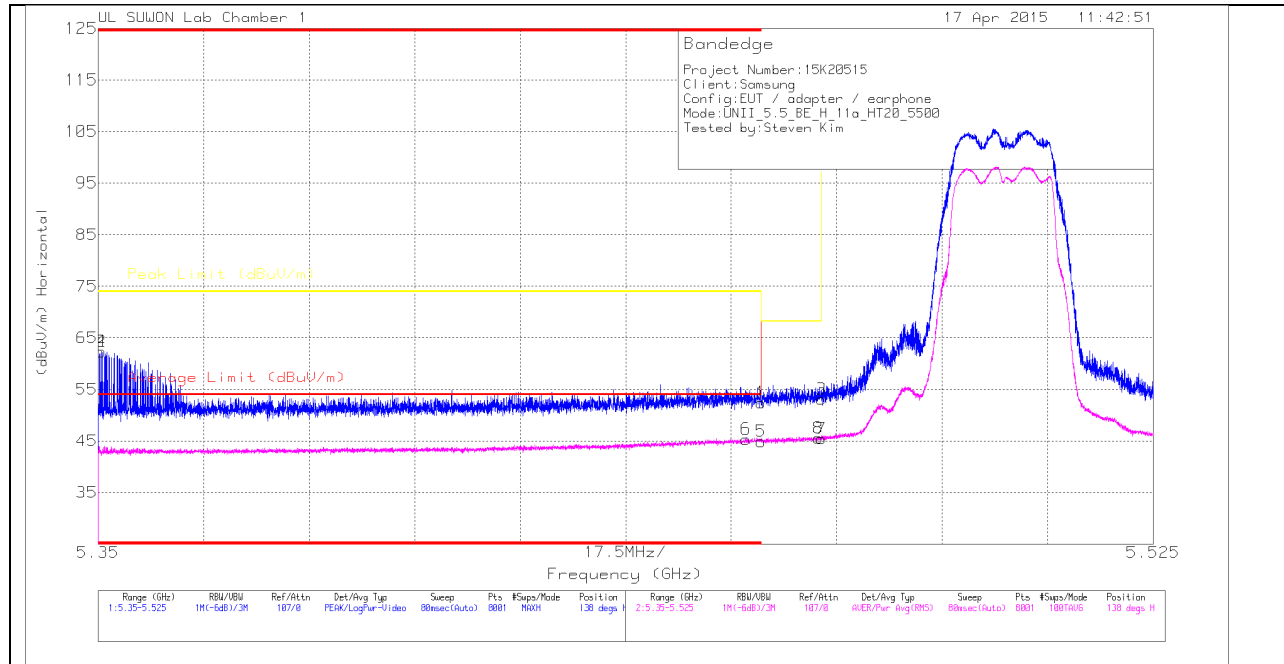
AD1 - KDB789033 Method: AD Primary Power Average

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

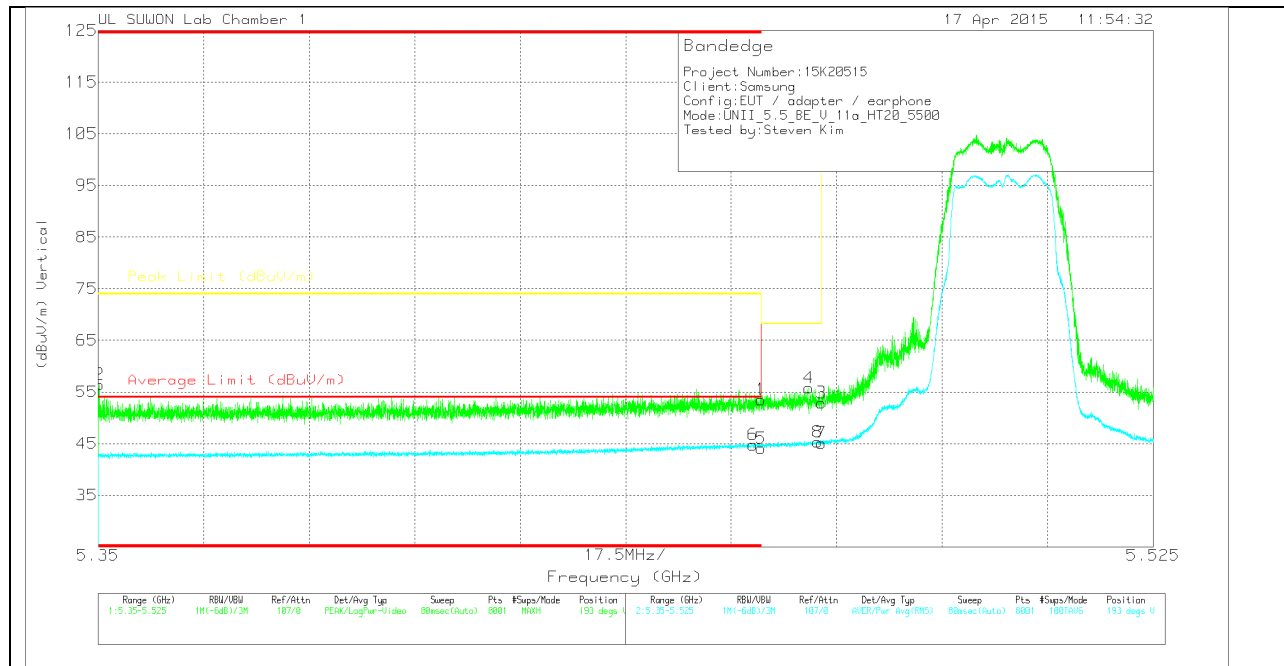
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	31150 Factor	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	37.92	PK	33.7	-19.2	0	52.42	-	-	74	-21.58	138	170	H
2	* 5.351	48.62	PK	33.3	-19.6	0	62.32	-	-	74	-11.68	138	170	H
3	5.47	38.59	PK	33.7	-19.2	0	53.09	-	-	68.2	-15.11	138	170	H
4	* 5.351	48.62	PK	33.3	-19.6	0	62.32	-	-	74	-11.68	138	170	H
5	* 5.46	30.39	RMS	33.7	-19.2	.3	45.19	54	-8.81	-	-	138	170	H
6	* 5.457	30.86	RMS	33.7	-19.2	.3	45.66	54	-8.34	-	-	138	170	H
7	5.47	30.92	RMS	33.7	-19.2	.3	45.72	-	-	-	-	138	170	H
8	5.469	31.06	RMS	33.7	-19.2	.3	45.86	-	-	-	-	138	170	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_2_10dB	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	PK	33.7	-19.2	0	53.5	-	-	74	-20.5	193	373	V
2	* 5.35	42.71	PK	33.3	-19.6	0	56.41	-	-	74	-17.59	193	373	V
3	5.47	38.38	PK	33.7	-19.2	0	52.88	-	-	68.2	-15.32	193	373	V
4	5.468	41.28	PK	33.7	-19.2	0	55.78	-	-	68.2	-12.42	193	373	V
5	* 5.46	29.58	RMS	33.7	-19.2	.3	44.38	54	-9.62	-	-	193	373	V
6	* 5.459	30.27	RMS	33.7	-19.2	.3	45.07	54	-8.93	-	-	193	373	V
7	5.47	30.62	RMS	33.7	-19.2	.3	45.42	-	-	-	-	193	373	V
8	5.469	30.81	RMS	33.7	-19.2	.3	45.61	-	-	-	-	193	373	V

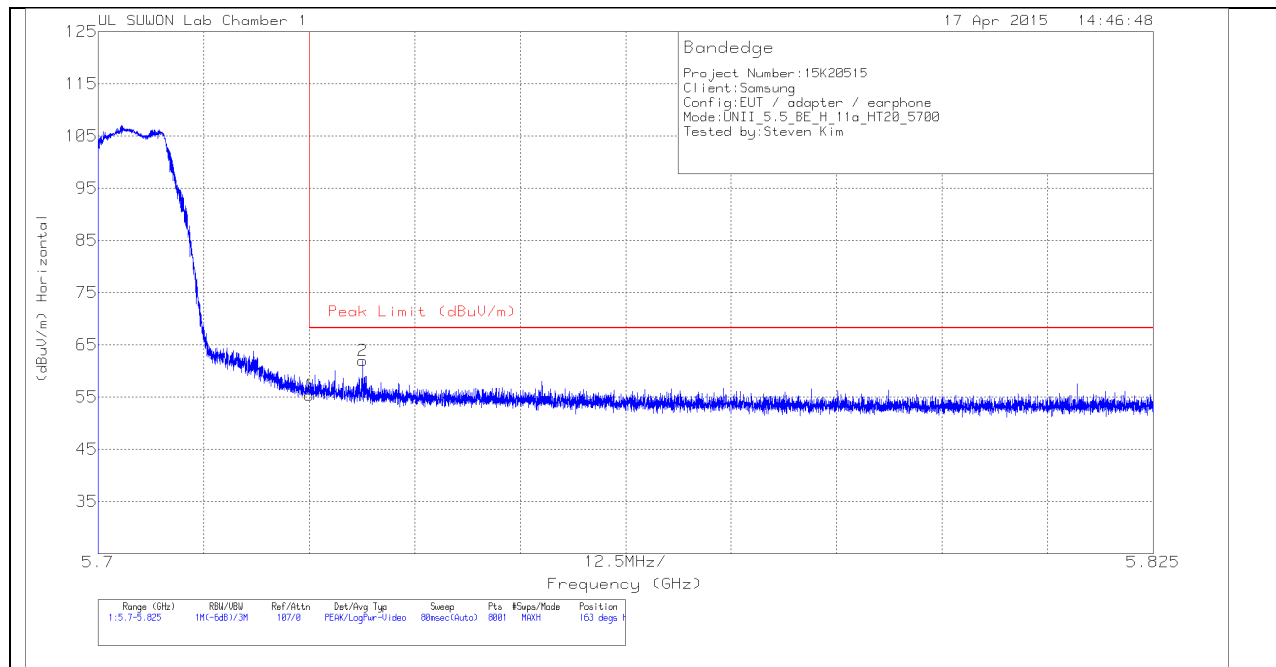
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

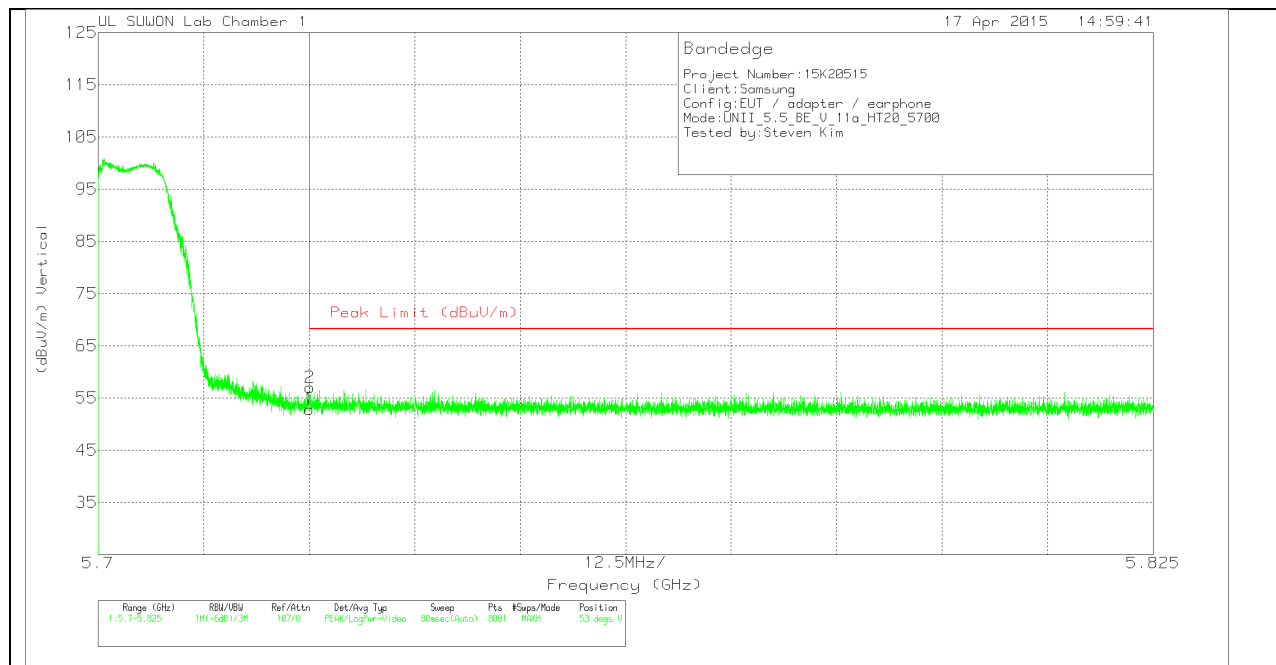
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_2_10 dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.84	Pk	34.3	-18.8	0	55.34	68.2	-12.86	163	144	H
2	5.731	46.33	Pk	34.4	-18.8	0	61.93	68.2	-6.27	163	144	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_2_10 dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	37.32	Pk	34.3	-18.8	0	52.82	68.2	-15.38	53	148	V
2	5.725	41.49	Pk	34.3	-18.8	0	56.99	68.2	-11.21	53	148	V

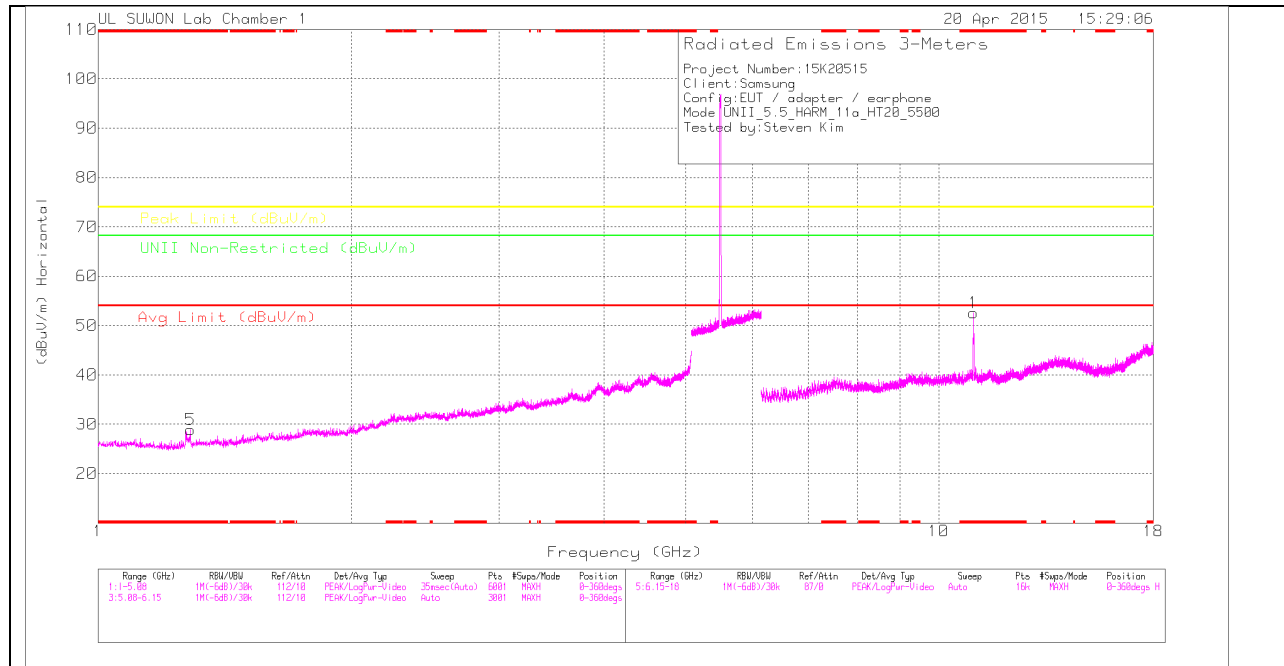
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

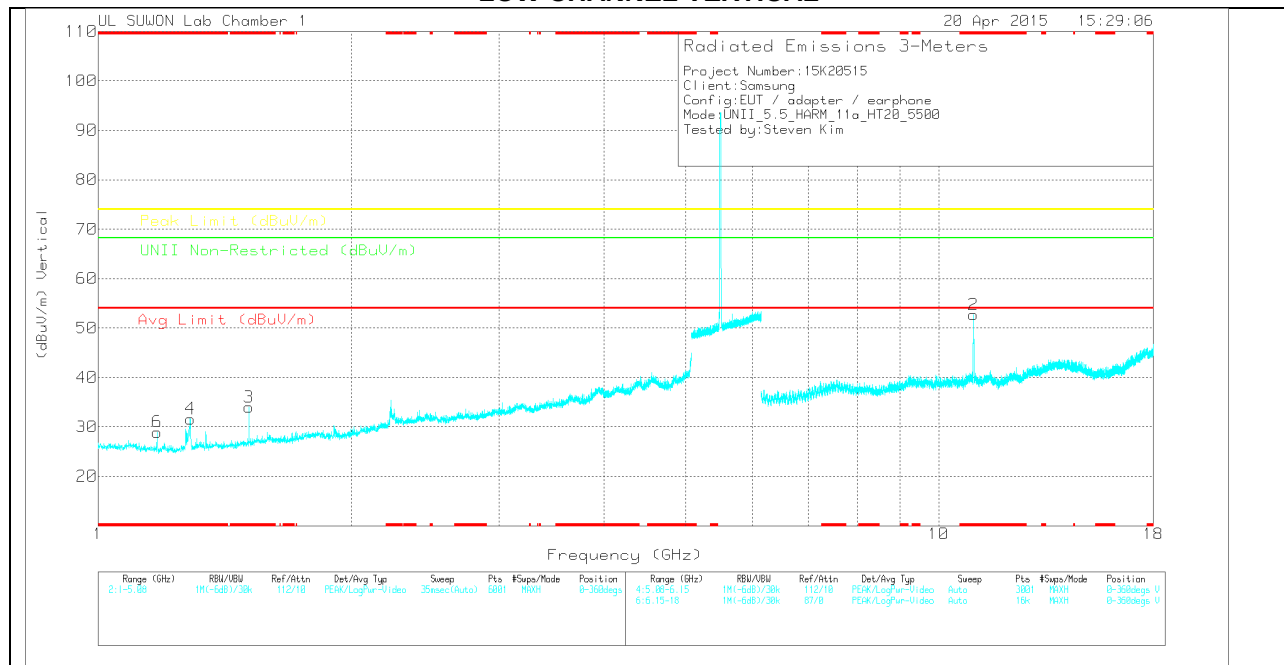
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



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	3115D Factor	Path_4_5G LP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 1.288	38.7	PK	23.8	-33.6	0	28.9	-	-	74	-45.1	-	-	0-360	200	H
3	* 1.512	42.89	PK	24.6	-33.5	0	33.99	-	-	74	-40.01	-	-	0-360	100	V
4	* 1.288	41.42	PK	23.8	-33.6	0	31.62	-	-	74	-42.38	-	-	0-360	100	V
6	* 1.175	39.37	PK	23.9	-34.3	0	28.97	-	-	74	-45.03	-	-	0-360	100	V
1	* 11.002	35.16	PK	38.4	-21	0	52.56	-	-	74	-21.44	-	-	0-360	100	H
2	* 11.002	35.28	PK	38.4	-21	0	52.68	-	-	74	-21.32	-	-	0-360	200	V

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

PK – Peak Detector

Radiated Emissions

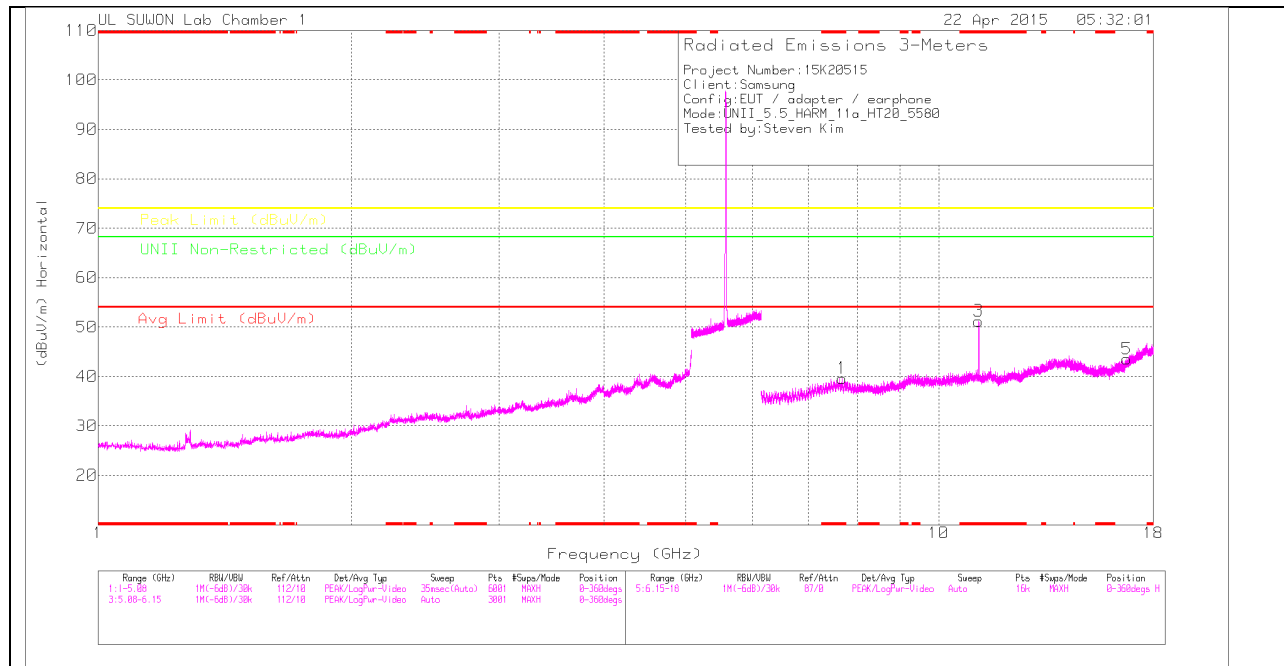
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.002	43.82	PK1	38.4	-21	0	61.22	-	-	74	-12.78	-	-	166	149	H
* 11.001	31	AD1	38.4	-21	.3	48.7	54	-5.3	-	-	-	-	166	149	H
* 10.602	36.63	PK1	38.4	-20.8	0	54.23	-	-	74	-19.77	-	-	198	286	V
* 10.602	27.78	AD1	38.4	-20.8	0	45.38	54	-8.62	-	-	-	-	198	286	V
* 11.003	43.37	PK1	38.4	-21	0	60.77	-	-	74	-13.23	-	-	135	242	V
* 11.002	31.28	AD1	38.4	-21	.3	48.98	54	-5.02	-	-	-	-	135	242	V
10.599	46.94	PK1	38.4	-20.9	0	64.44	-	-	-	-	68.2	-3.76	161	101	V
10.599	33.49	AD1	38.4	-20.9	0	50.99	-	-	-	-	-	-	161	101	V

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

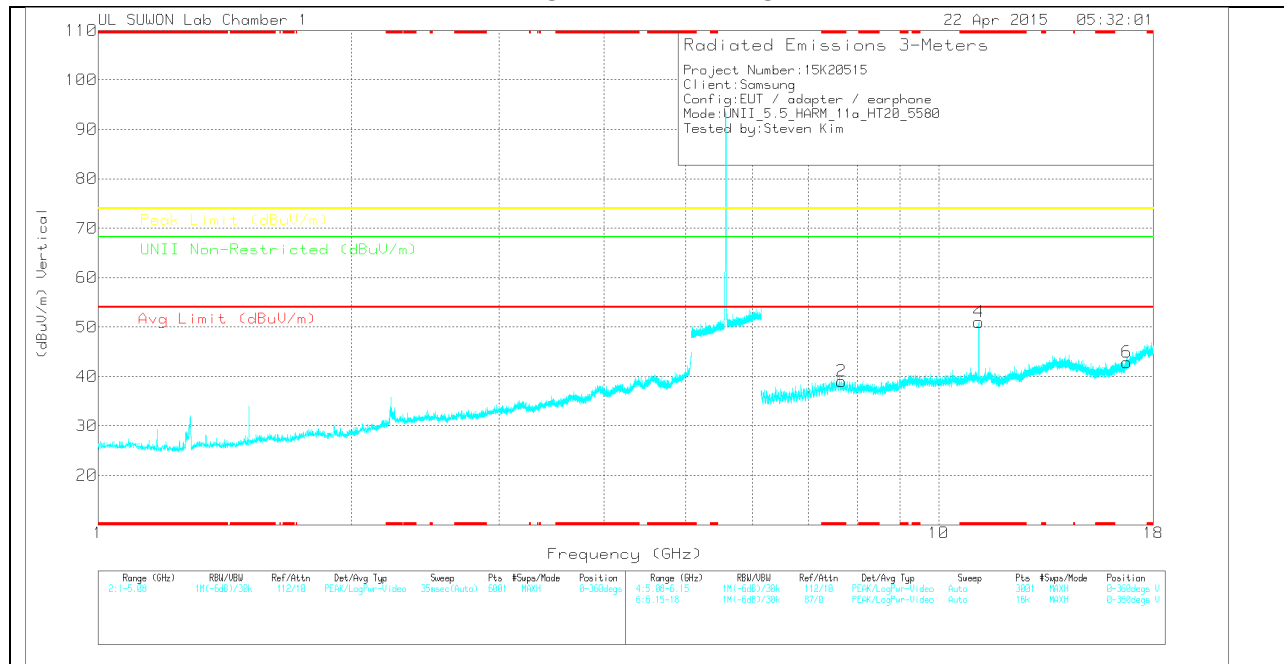
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

MID CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 7.682	26.83	PK	37.3	-24.5	0	39.63	-	-	74	-34.37	-	-	0-360	200	H
3	* 11.157	33.73	PK	38.5	-21	0	51.23	-	-	74	-22.77	-	-	0-360	100	H
5	16.737	20.35	PK	40.1	-16.9	0	43.55	-	-	-	-	68.2	-24.65	0-360	200	H
2	* 7.667	26.23	PK	37.3	-24.5	0	39.03	-	-	74	-34.97	-	-	0-360	100	V
4	* 11.163	33.51	PK	38.5	-21	0	51.01	-	-	74	-22.99	-	-	0-360	100	V
6	16.745	19.66	PK	40.1	-16.9	0	42.86	-	-	-	-	68.2	-25.34	0-360	200	V

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

PK – Peak Detector

Radiated Emissions

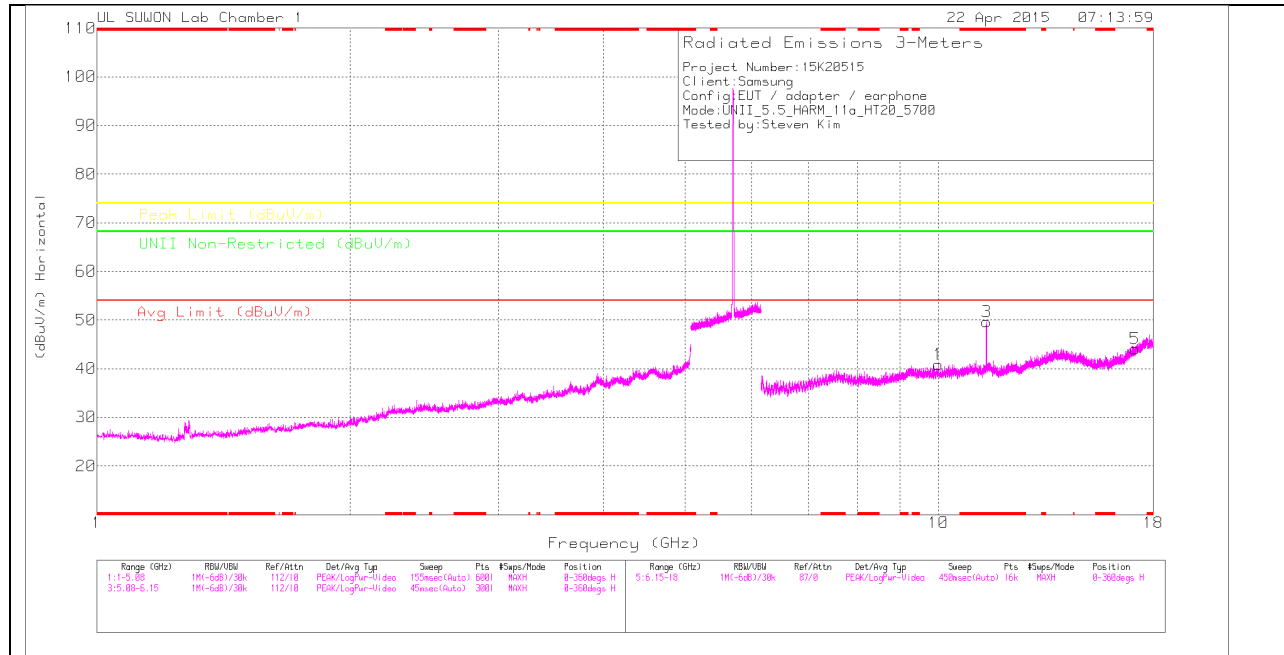
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.161	42.32	PK1	38.5	-21	0	59.82	-	-	74	-14.18	-	-	130	152	H
* 11.161	32.43	AD1	38.5	-21	.3	50.23	54	-3.77	-	-	-	-	130	152	H
* 10.602	36.63	PK1	38.4	-20.8	0	54.23	-	-	74	-19.77	-	-	198	286	V
* 10.602	27.78	AD1	38.4	-20.8	0	45.38	54	-8.62	-	-	-	-	198	286	V
* 11.163	44.85	PK1	38.5	-21	0	62.35	-	-	74	-11.65	-	-	223	102	V
* 11.162	32.95	AD1	38.5	-21	.3	50.75	54	-3.25	-	-	-	-	223	102	V
10.599	46.94	PK1	38.4	-20.9	0	64.44	-	-	-	-	68.2	-3.76	161	101	V
10.599	33.49	AD1	38.4	-20.9	0	50.99	-	-	-	-	-	-	161	101	V

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

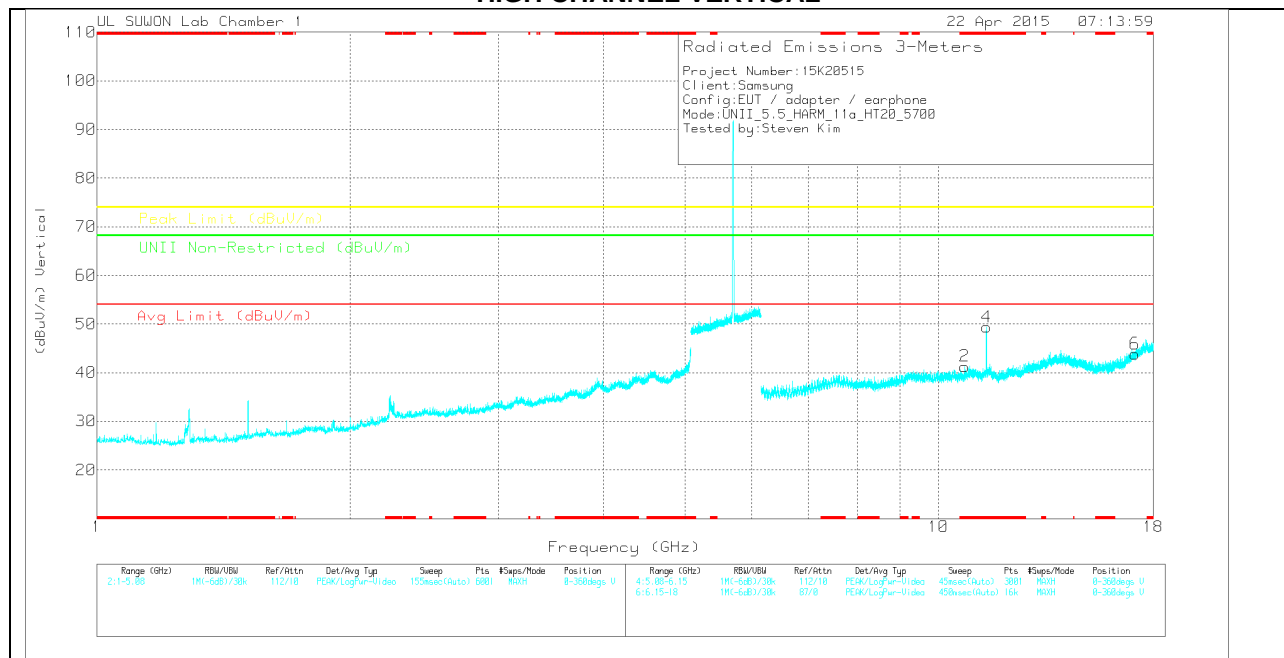
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

HIGH CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	9.988	23.79	Pk	38	-21	0	40.79	-	-	-	-	68.2	-27.41	0-360	100	H
3	* 11.402	31.95	Pk	38.6	-20.9	0	49.65	-	-	74	-24.35	-	-	0-360	200	H
5	17.107	19.71	Pk	41	-16.6	0	44.11	-	-	-	-	68.2	-24.09	0-360	100	H
2	* 10.751	23.9	Pk	38.5	-21.1	0	41.3	-	-	74	-32.7	-	-	0-360	100	V
4	* 11.403	31.65	Pk	38.6	-20.9	0	49.35	-	-	74	-24.65	-	-	0-360	100	V
6	17.114	19.38	Pk	41.1	-16.6	0	43.88	-	-	-	-	68.2	-24.32	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	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.401	39.37	PK1	38.6	-20.9	0	57.07	-	-	74	-16.93	-	-	257	131	H
* 11.401	25.2	AD1	38.6	-20.9	.3	43.2	54	-10.8	-	-	-	-	257	131	H
* 11.403	43.93	PK1	38.6	-20.9	0	61.63	-	-	74	-12.37	-	-	193	102	V
* 11.402	30.8	AD1	38.6	-20.9	.3	48.8	54	-5.2	-	-	-	-	193	102	V

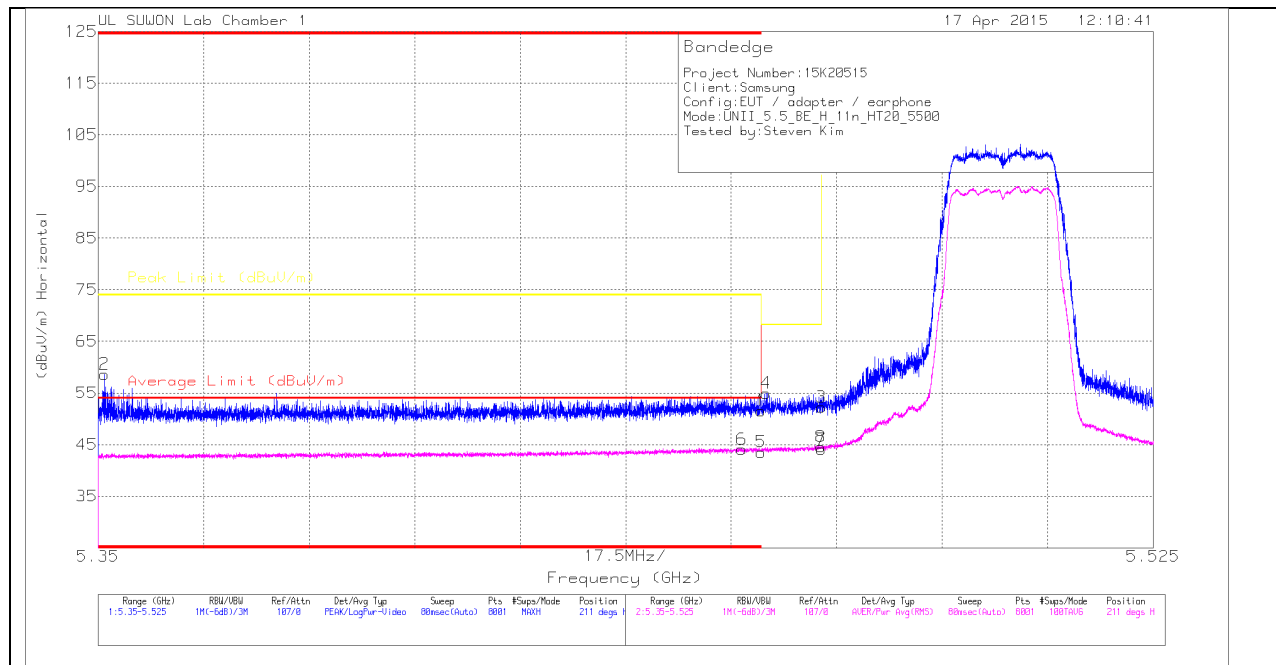
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

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

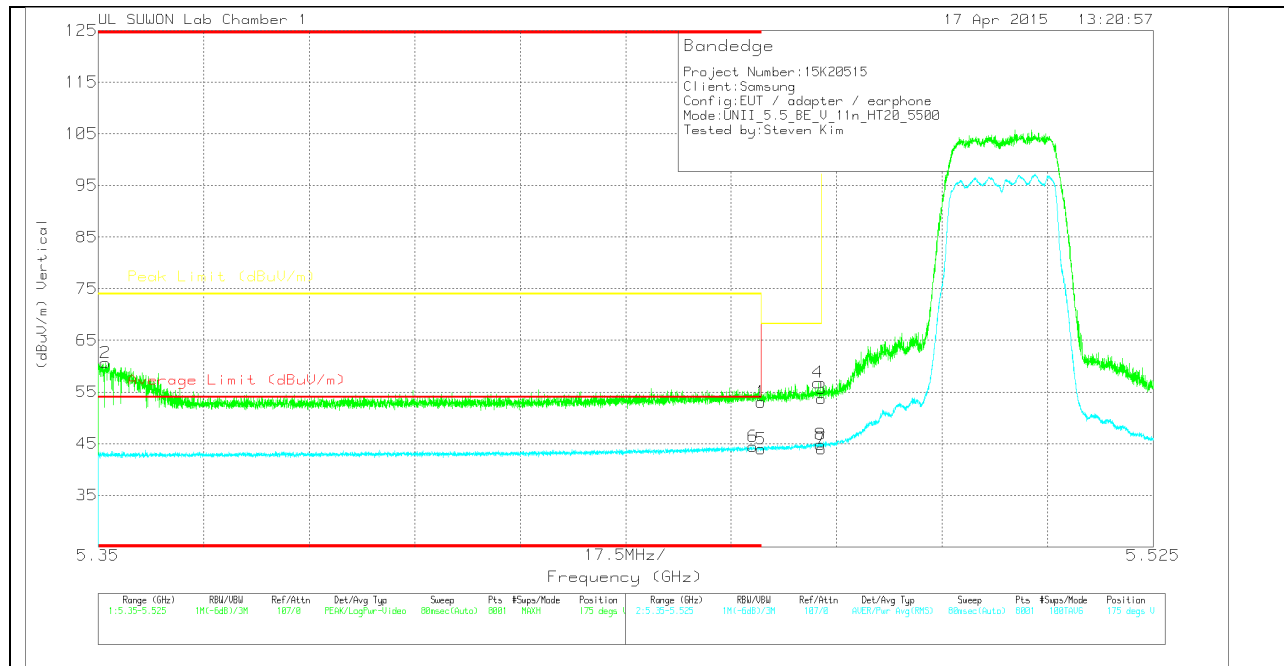
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	37.08	PK	33.7	-19.2	0	51.58	-	-	74	-22.42	211	368	H
2	* 5.351	44.93	PK	33.3	-19.6	0	58.63	-	-	74	-15.37	211	368	H
3	5.47	37.75	PK	33.7	-19.2	0	52.25	-	-	68.2	-15.95	211	368	H
4	5.461	40.45	PK	33.7	-19.2	0	54.95	-	-	68.2	-13.25	211	368	H
5	* 5.46	29.04	RMS	33.7	-19.2	.31	43.85	54	-10.15	-	-	211	368	H
6	* 5.457	29.58	RMS	33.7	-19.2	.31	44.39	54	-9.61	-	-	211	368	H
7	5.47	29.6	RMS	33.7	-19.2	.31	44.41	-	-	-	-	211	368	H
8	5.47	30.05	RMS	33.7	-19.2	.31	44.86	-	-	-	-	211	368	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	31150 Factor	Path_2_10dB	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	38.57	PK	33.7	-19.2	0	53.07	-	-	74	-20.93	175	366	V
2	* 5.351	46.94	PK	33.3	-19.6	0	60.64	-	-	74	-13.36	175	366	V
3	5.47	39.24	PK	33.7	-19.2	0	53.74	-	-	68.2	-14.46	175	366	V
4	5.469	42.32	PK	33.7	-19.2	0	56.82	-	-	68.2	-11.38	175	366	V
5	* 5.46	29.47	RMS	33.7	-19.2	.31	44.28	54	-9.72	-	-	175	366	V
6	* 5.459	29.94	RMS	33.7	-19.2	.31	44.75	54	-9.25	-	-	175	366	V
7	5.47	29.54	RMS	33.7	-19.2	.31	44.35	-	-	-	-	175	366	V
8	5.47	30.33	RMS	33.7	-19.2	.31	45.14	-	-	-	-	175	366	V

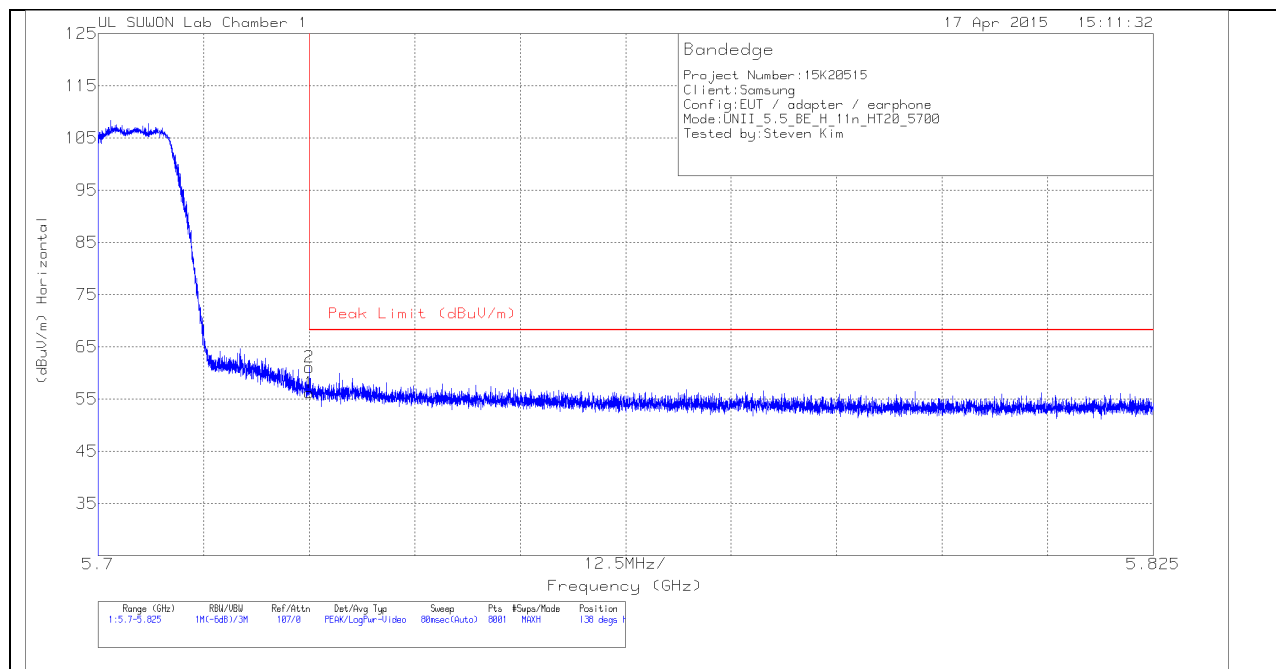
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

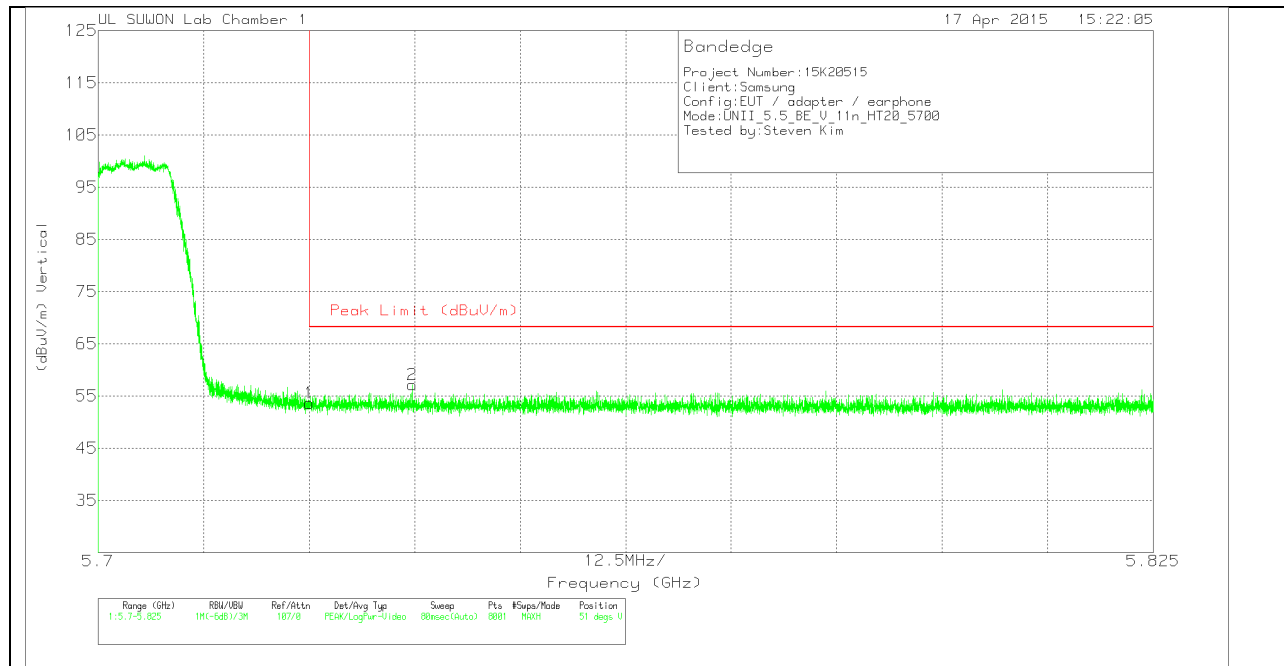
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_2_10 dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	40.67	Pk	34.3	-18.8	0	56.17	68.2	-12.03	138	147	H
2	5.725	45.56	Pk	34.3	-18.8	0	61.06	68.2	-7.14	138	147	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_2_10 dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.1	Pk	34.3	-18.8	0	53.6	68.2	-14.6	51	151	V
2	5.737	41.42	Pk	34.4	-18.7	0	57.12	68.2	-11.08	51	151	V

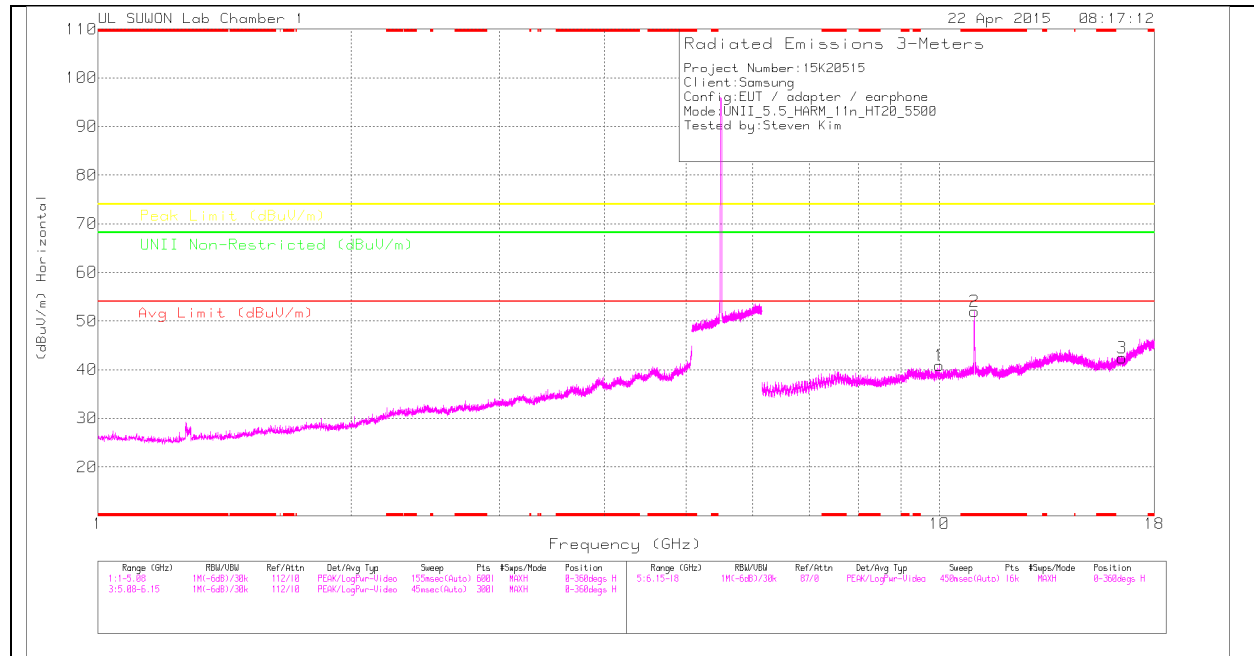
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

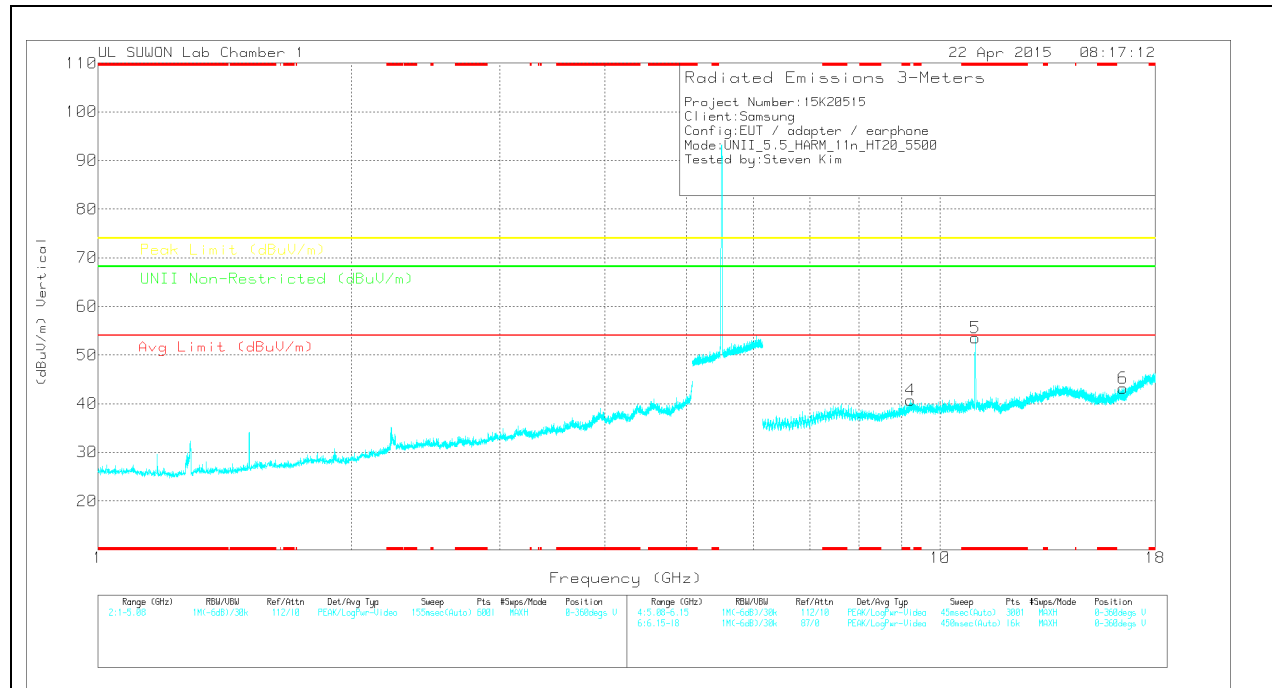
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	10	23.95	Pk	38	-21.1	0	40.85	-	-	-	-	68.2	-27.35	0-360	200	H
2	* 11.001	34.61	Pk	38.4	-21	0	52.01	-	-	74	-21.99	-	-	0-360	100	H
3	16.492	20.62	Pk	39.5	-17.7	0	42.42	-	-	-	-	68.2	-25.78	0-360	100	H
4	9.217	24.74	Pk	37.7	-21.7	0	40.74	-	-	-	-	68.2	-27.46	0-360	100	V
5	* 10.999	36.15	Pk	38.4	-21	0	53.55	-	-	74	-20.45	-	-	0-360	100	V
6	16.491	21.42	Pk	39.5	-17.7	0	43.22	-	-	-	-	68.2	-24.98	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

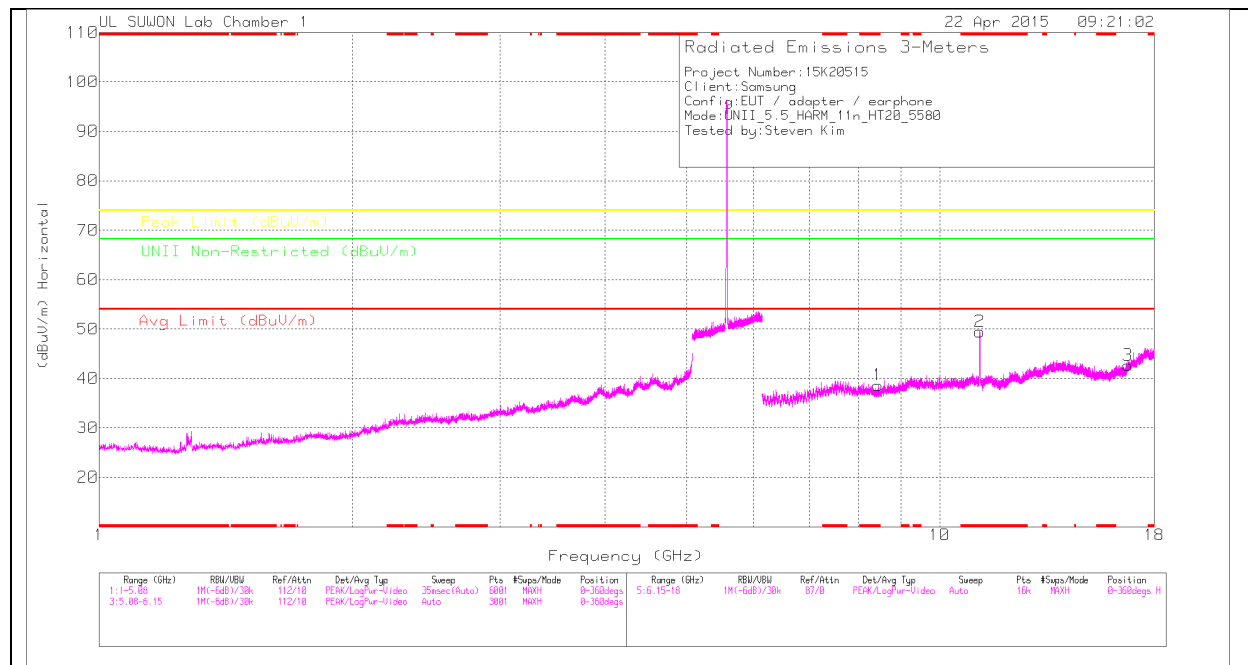
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 10.995	47.04	PK1	38.4	-21	0	64.44	-	-	74	-9.56	-	-	125	157	H
* 11	33.98	AD1	38.4	-21	.31	51.69	54	-2.31	-	-	-	-	125	157	H
* 10.995	44.24	PK1	38.4	-21	0	61.64	-	-	74	-12.36	-	-	189	157	V
* 11	31.69	AD1	38.4	-21	.31	49.4	54	-4.6	-	-	-	-	189	157	V

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

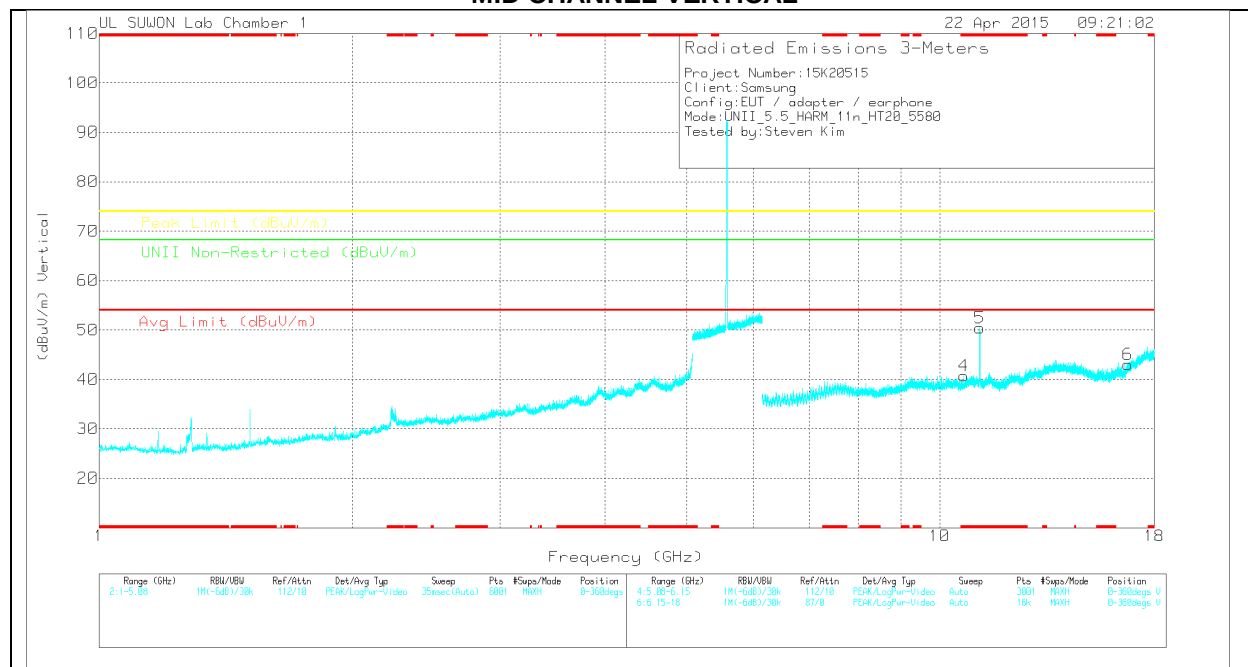
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

MID CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 8.446	25.14	PK	37.2	-23.7	0	38.64	-	-	74	-35.36	-	-	0-360	100	H
2	* 11.16	31.97	PK	38.5	-21	0	49.47	-	-	74	-24.53	-	-	0-360	100	H
3	16.74	19.47	PK	40.1	-16.9	0	42.67	-	-	-	-	68.2	-25.53	0-360	200	H
4	* 10.682	22.72	PK	38.5	-20.5	0	40.72	-	-	74	-33.28	-	-	0-360	100	V
5	* 11.161	32.91	PK	38.5	-21	0	50.41	-	-	74	-23.59	-	-	0-360	100	V
6	16.742	19.81	PK	40.1	-16.9	0	43.01	-	-	-	-	68.2	-25.19	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

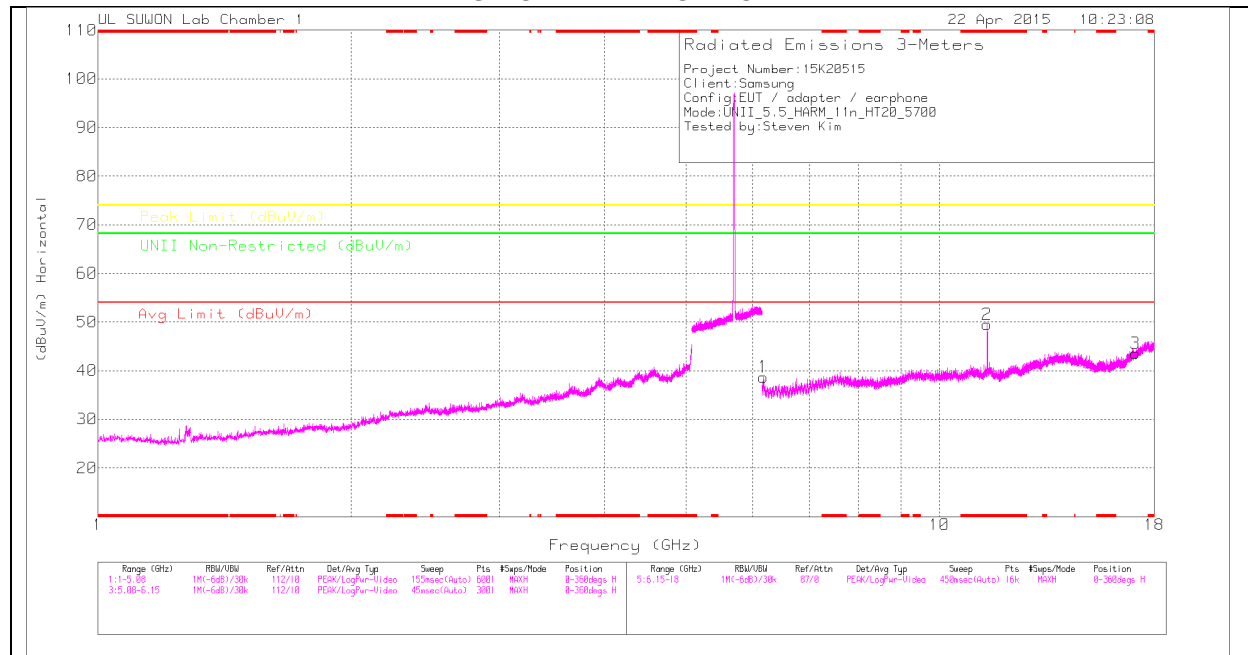
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 10.602	36.63	PK1	38.4	-20.8	0	54.23	-	-	74	-19.77	-	-	198	286	V
* 10.602	27.78	AD1	38.4	-20.8	0	45.38	54	-8.62	-	-	-	-	198	286	V
* 11.161	35.03	PK1	38.5	-21	0	52.53	-	-	74	-21.47	-	-	215	257	V
* 11.161	23.57	AD1	38.5	-21	.31	41.38	54	-12.62	-	-	-	-	215	257	V
10.599	46.94	PK1	38.4	-20.9	0	64.44	-	-	-	-	68.2	-3.76	161	101	V
10.599	33.49	AD1	38.4	-20.9	0	50.99	-	-	-	-	-	-	161	101	V

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

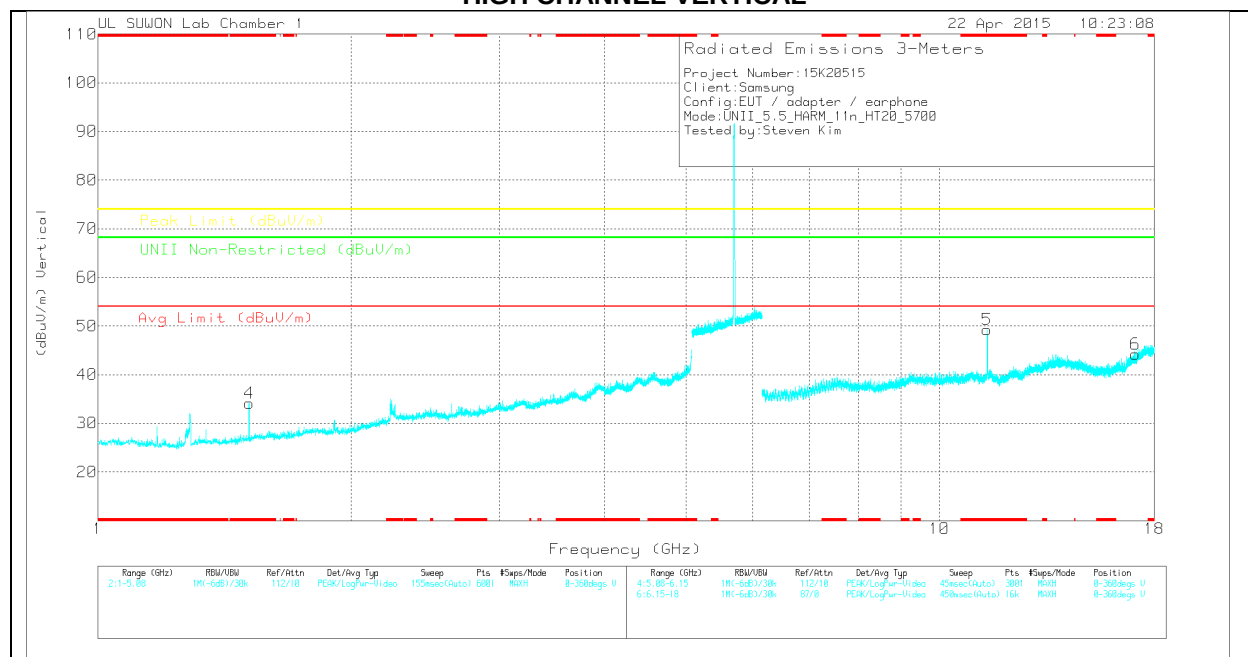
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

HIGH CHANNEL HORIZONTAL



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	3115D Factor	Path_4_5G LP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 1.512	42.99	Pk	24.6	-33.5	0	34.09	-	-	74	-39.91	-	-	0-360	100	V
1	6.18	30.01	Pk	35.3	-26.6	0	38.71	-	-	-	-	68.2	-29.49	0-360	100	H
2	* 11.398	31.76	Pk	38.6	-20.9	0	49.46	-	-	74	-24.54	-	-	0-360	100	H
3	17.101	19.14	Pk	41	-16.6	0	43.54	-	-	-	-	68.2	-24.66	0-360	100	H
5	* 11.396	31.42	Pk	38.6	-20.8	0	49.22	-	-	74	-24.78	-	-	0-360	100	V
6	17.094	19.77	Pk	41	-16.6	0	44.17	-	-	-	-	68.2	-24.03	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	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.401	40.41	PK1	38.6	-20.9	0	58.11	-	-	74	-15.89	-	-	136	156	H
* 11.401	27.9	AD1	38.6	-20.9	.31	45.91	54	-8.09	-	-	-	-	136	156	H
* 11.396	41.94	PK1	38.6	-20.8	0	59.74	-	-	74	-14.26	-	-	196	105	V
* 11.401	29.77	AD1	38.6	-20.9	.31	47.78	54	-6.22	-	-	-	-	196	105	V

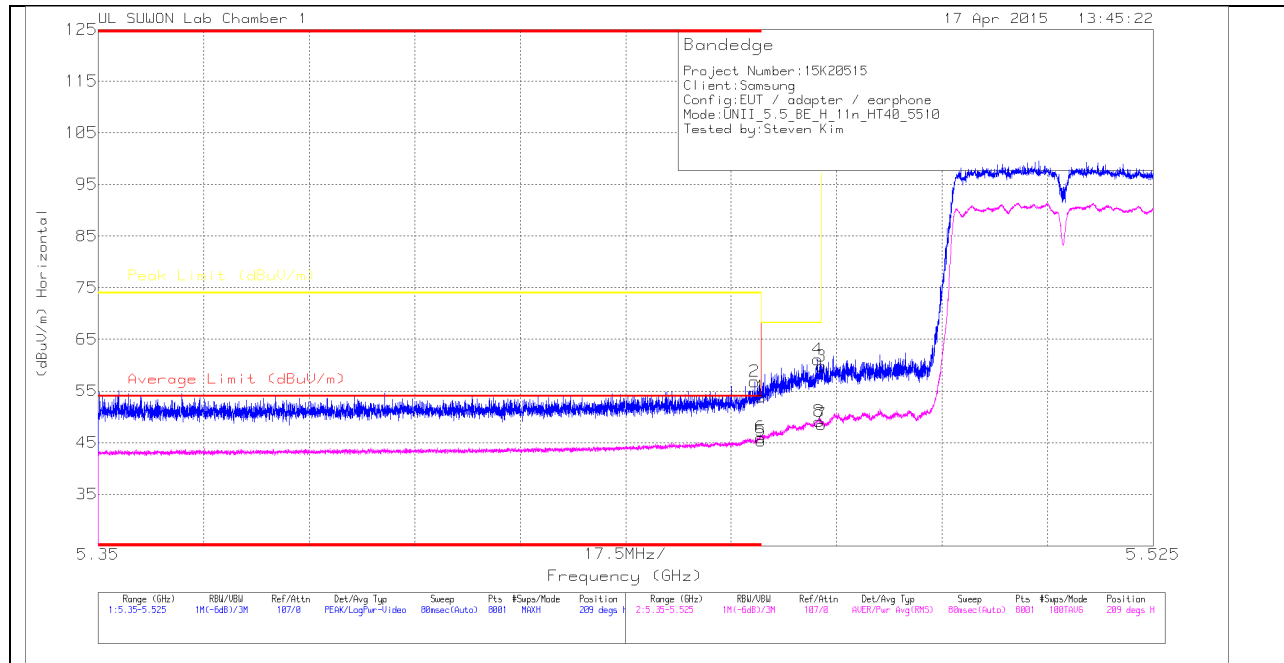
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

11.3.3. 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

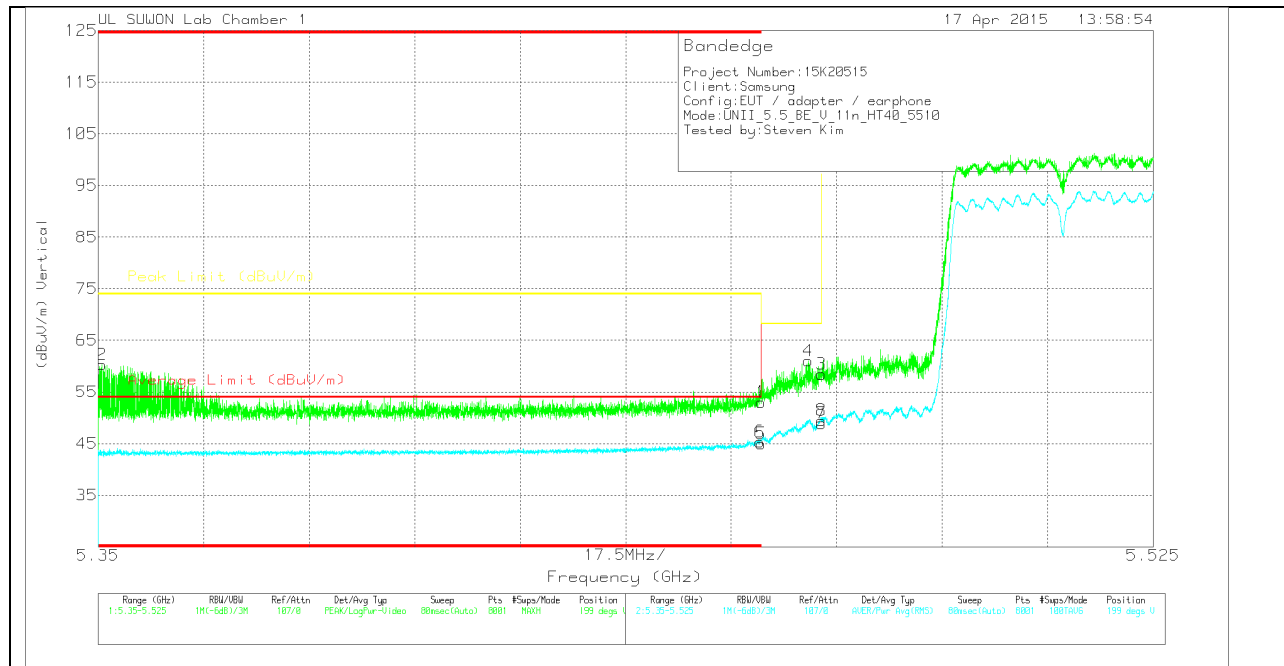
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	39.4	PK	33.7	-19.2	0	53.9	-	-	74	-20.1	209	370	H
2	* 5.459	42.33	PK	33.7	-19.2	0	56.83	-	-	74	-17.17	209	370	H
3	5.47	45.29	PK	33.7	-19.2	0	59.79	-	-	68.2	-8.41	209	370	H
4	5.469	46.6	PK	33.7	-19.2	0	61.1	-	-	68.2	-7.1	209	370	H
5	* 5.46	30.8	RMS	33.7	-19.2	.61	45.91	54	-8.09	-	-	209	370	H
6	* 5.46	31.46	RMS	33.7	-19.2	.61	46.57	54	-7.43	-	-	209	370	H
7	5.47	34.04	RMS	33.7	-19.2	.61	49.15	-	-	-	-	209	370	H
8	5.47	34.62	RMS	33.7	-19.2	.61	49.73	-	-	-	-	209	370	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	31150 Factor	Path_2_10dB	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	38.52	PK	33.7	-19.2	0	53.02	-	-	74	-20.98	199	368	V
2	* 5.351	46.57	PK	33.3	-19.6	0	60.27	-	-	74	-13.73	199	368	V
3	5.47	43.93	PK	33.7	-19.2	0	58.43	-	-	68.2	-9.77	199	368	V
4	5.468	46.51	PK	33.7	-19.2	0	61.01	-	-	68.2	-7.19	199	368	V
5	* 5.46	30.48	RMS	33.7	-19.2	.61	45.59	54	-8.41	-	-	199	368	V
6	* 5.46	30.83	RMS	33.7	-19.2	.61	45.94	54	-8.06	-	-	199	368	V
7	5.47	34.42	RMS	33.7	-19.2	.61	49.53	-	-	-	-	199	368	V
8	5.47	34.98	RMS	33.7	-19.2	.61	50.09	-	-	-	-	199	368	V

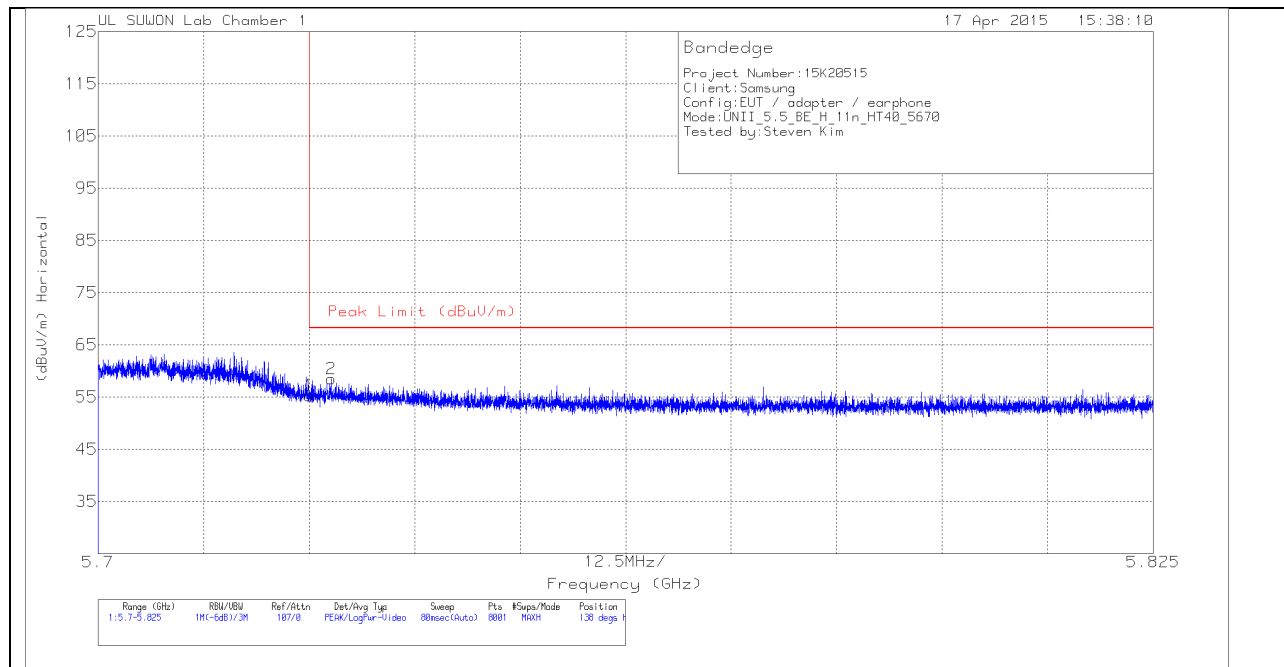
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

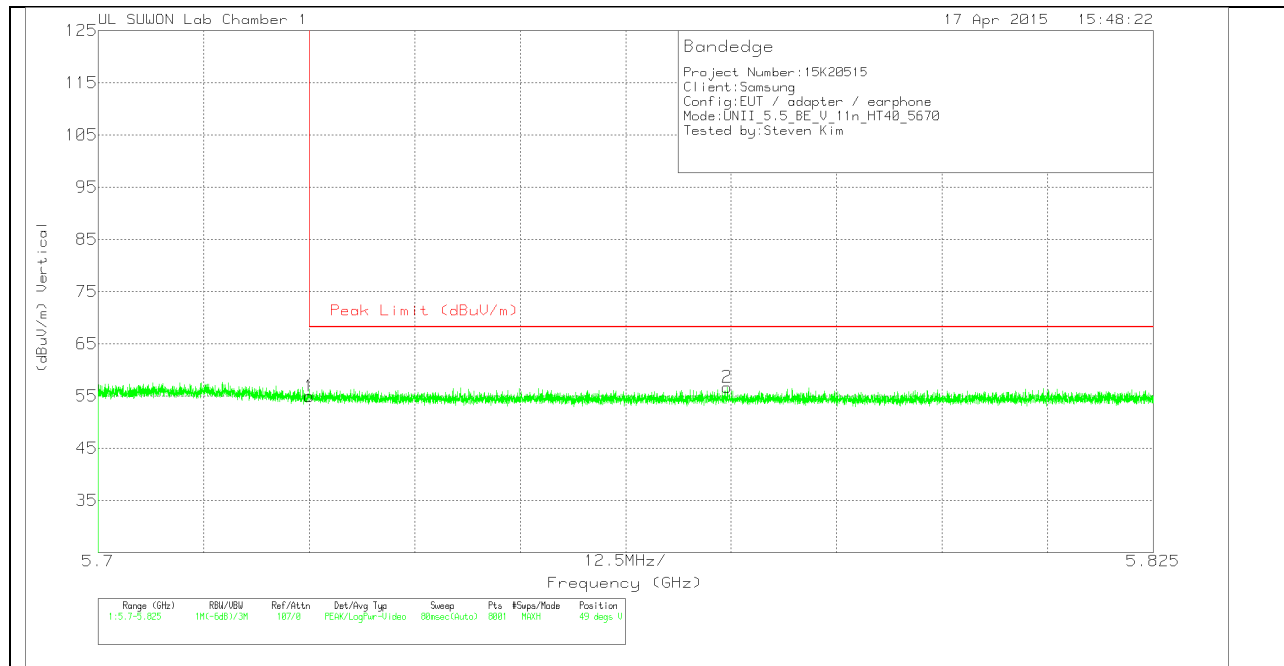
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_2_10 dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.78	Pk	34.3	-18.8	0	55.28	68.2	-12.92	138	154	H
2	5.728	42.95	Pk	34.3	-18.8	0	58.45	68.2	-9.75	138	154	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_2_10 dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.42	Pk	34.3	-18.8	0	54.92	68.2	-13.28	49	127	V
2	5.775	41	Pk	34.5	-18.8	0	56.7	68.2	-11.5	49	127	V

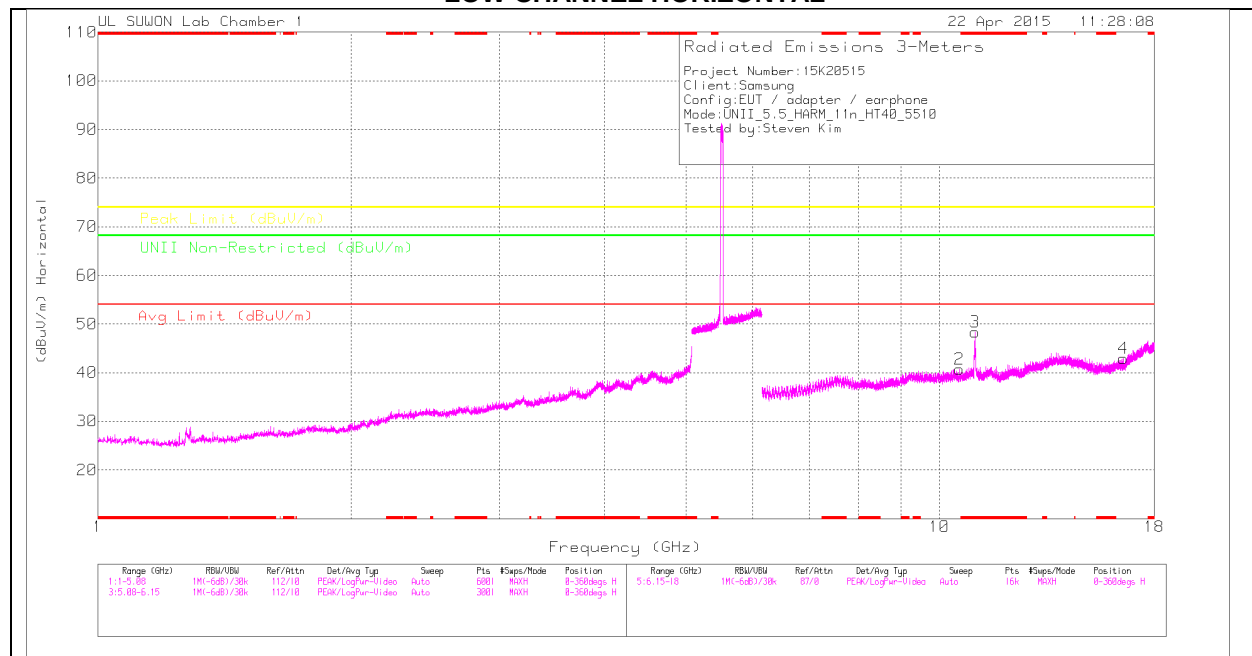
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

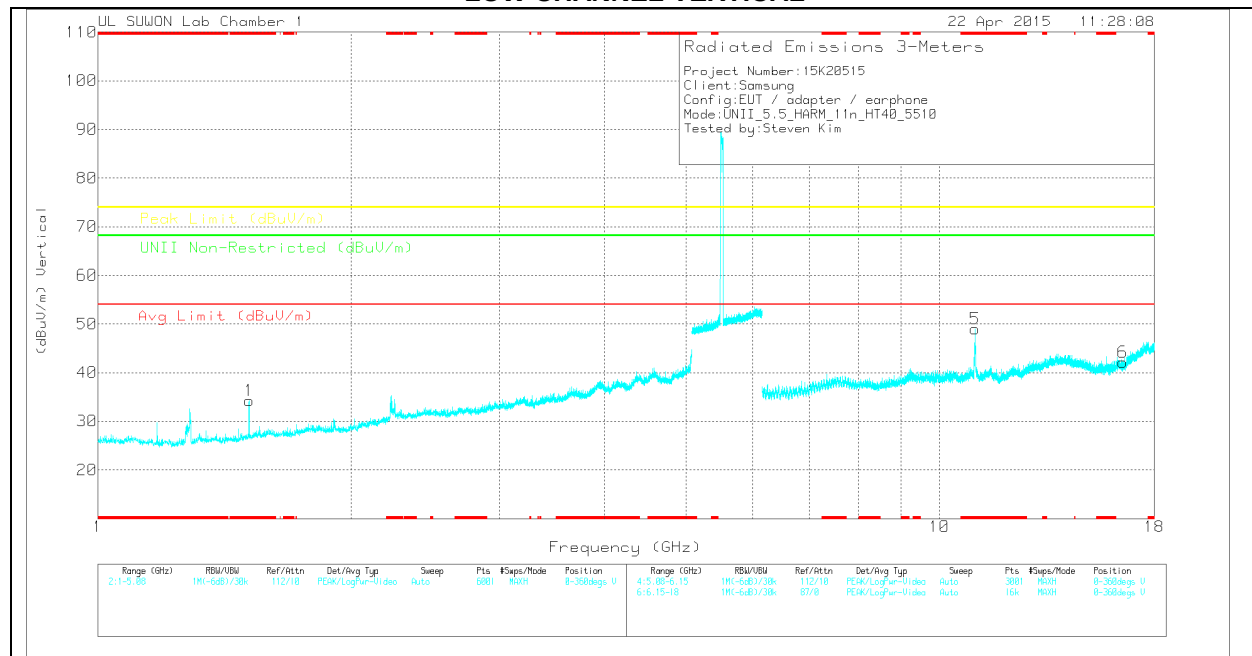
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



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	3115D Factor	Path_4_5G LP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.512	43.1	Pk	24.6	-33.5	0	34.2	-	-	74	-39.8	-	-	0-360	100	V
2	10.561	23.38	Pk	38.4	-21.1	0	40.68	-	-	-	-	68.2	-27.52	0-360	100	H
3	* 11.018	30.88	Pk	38.4	-20.9	0	48.38	-	-	74	-25.62	-	-	0-360	100	H
4	16.532	20.67	Pk	39.6	-17.3	0	42.97	-	-	-	-	68.2	-25.23	0-360	200	H
5	* 11.016	31.45	Pk	38.4	-20.9	0	48.95	-	-	74	-25.05	-	-	0-360	100	V
6	16.525	19.93	Pk	39.6	-17.4	0	42.13	-	-	-	-	68.2	-26.07	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

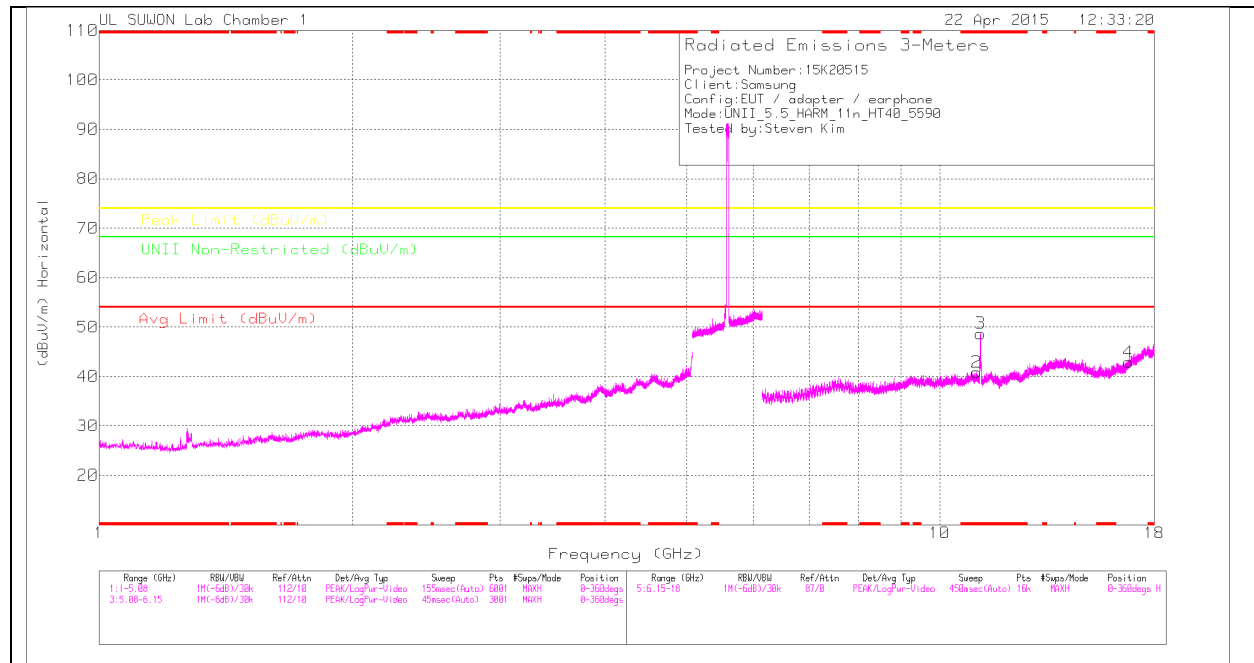
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.018	40.39	PK1	38.4	-20.9	0	57.89	-	-	74	-16.11	-	-	103	156	H
* 11.015	29.07	AD1	38.4	-20.9	.61	47.18	54	-6.82	-	-	-	-	103	156	H
* 11.02	41.04	PK1	38.4	-20.9	0	58.54	-	-	74	-15.46	-	-	166	100	V
* 11.02	28.38	AD1	38.4	-20.9	.61	46.49	54	-7.51	-	-	-	-	166	100	V

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

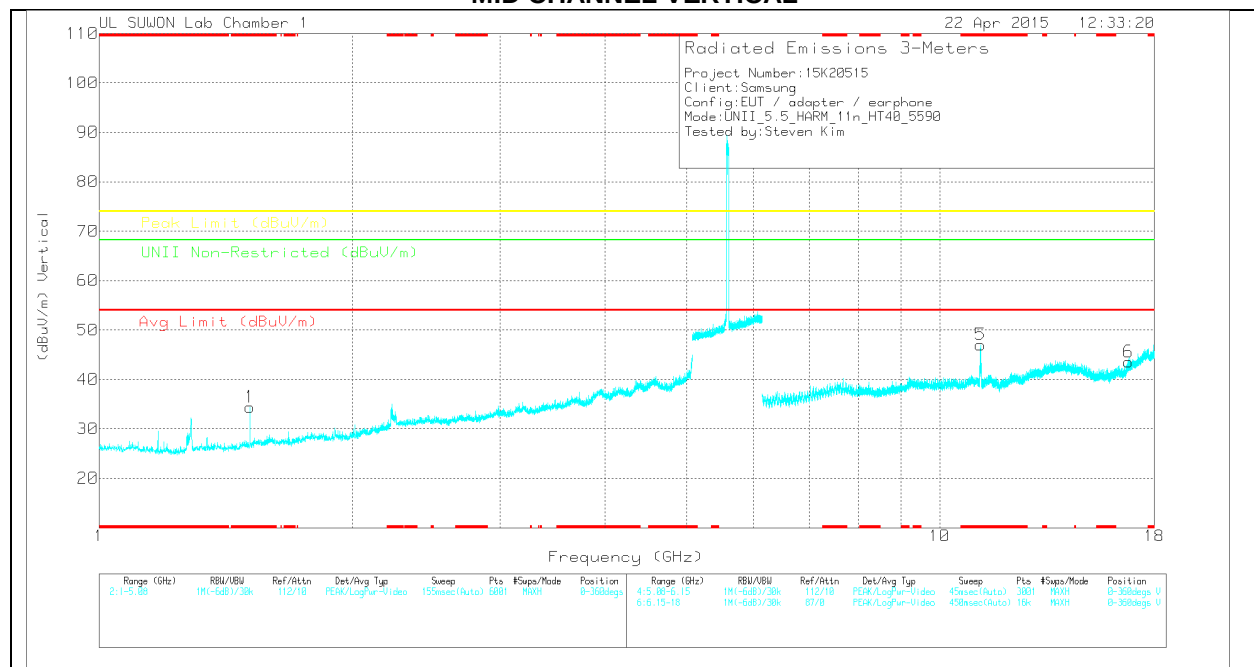
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

MID CHANNEL HORIZONTAL



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	3115D Factor	Path_4_5G LP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.512	43.32	Pk	24.6	-33.5	0	34.42	-	-	74	-39.58	-	-	0-360	100	V
2	* 11.065	23.16	Pk	38.4	-20.7	0	40.86	-	-	74	-33.14	-	-	0-360	100	H
3	* 11.181	31.09	Pk	38.5	-20.9	0	48.69	-	-	74	-25.31	-	-	0-360	200	H
4	16.771	19.58	Pk	40.2	-16.9	0	42.88	-	-	-	-	68.2	-25.32	0-360	200	H
5	* 11.181	29.44	Pk	38.5	-20.9	0	47.04	-	-	74	-26.96	-	-	0-360	100	V
6	16.774	20.26	Pk	40.2	-16.9	0	43.56	-	-	-	-	68.2	-24.64	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

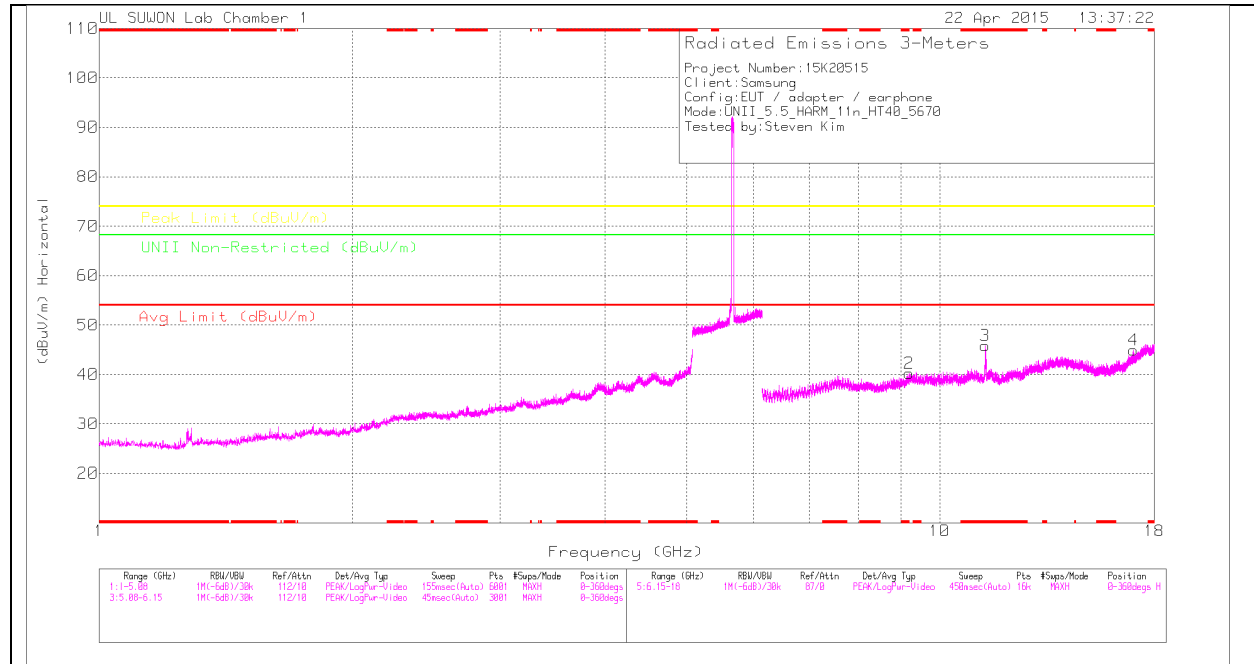
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.177	34.5	PK1	38.5	-20.9	0	52.1	-	-	74	-21.9	-	-	254	276	H
* 11.179	22.04	AD1	38.5	-20.9	.61	40.25	54	-13.75	-	-	-	-	254	276	H
* 11.186	39.44	PK1	38.5	-20.9	0	57.04	-	-	74	-16.96	-	-	213	102	V
* 11.18	26.03	AD1	38.5	-20.9	.61	44.24	54	-9.76	-	-	-	-	213	102	V

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

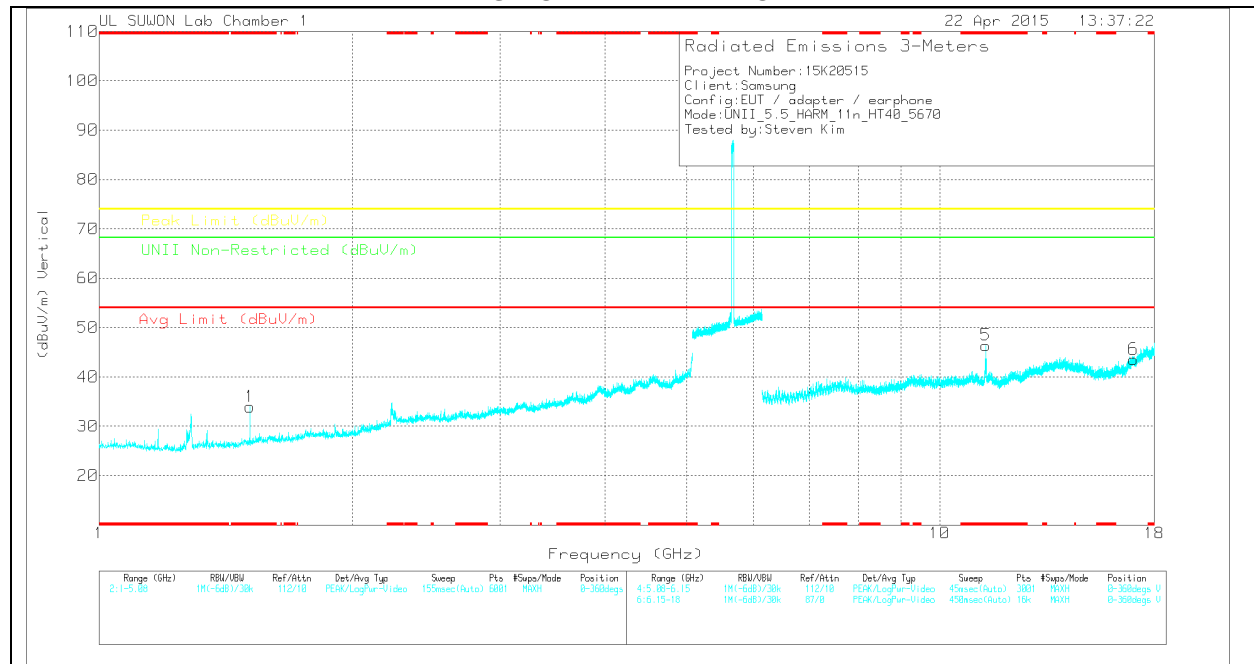
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

HIGH CHANNEL HORIZONTAL



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	3115D Factor	Path_4_5G LP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.512	42.86	Pk	24.6	-33.5	0	33.96	-	-	74	-40.04	-	-	0-360	100	V
2	9.201	24.52	Pk	37.6	-21.9	0	40.22	-	-	-	-	68.2	-27.98	0-360	100	H
3	* 11.327	27.72	Pk	38.5	-20.4	0	45.82	-	-	74	-28.18	-	-	0-360	200	H
4	16.994	20.33	Pk	40.7	-16.1	0	44.93	-	-	-	-	68.2	-23.27	0-360	100	H
5	* 11.341	28.3	Pk	38.5	-20.4	0	46.4	-	-	74	-27.6	-	-	0-360	100	V
6	17.011	18.98	Pk	40.7	-16.1	0	43.58	-	-	-	-	68.2	-24.62	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	3115D Factor	Path_5_5GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.348	38.4	PK1	38.5	-20.4	0	56.5	-	-	74	-17.5	-	-	130	213	H
* 11.341	25.06	AD1	38.5	-20.4	.61	43.77	54	-10.23	-	-	-	-	130	213	H
* 11.348	39.55	PK1	38.5	-20.4	0	57.65	-	-	74	-16.35	-	-	193	103	V
* 11.339	26.09	AD1	38.5	-20.4	.61	44.8	54	-9.2	-	-	-	-	193	103	V

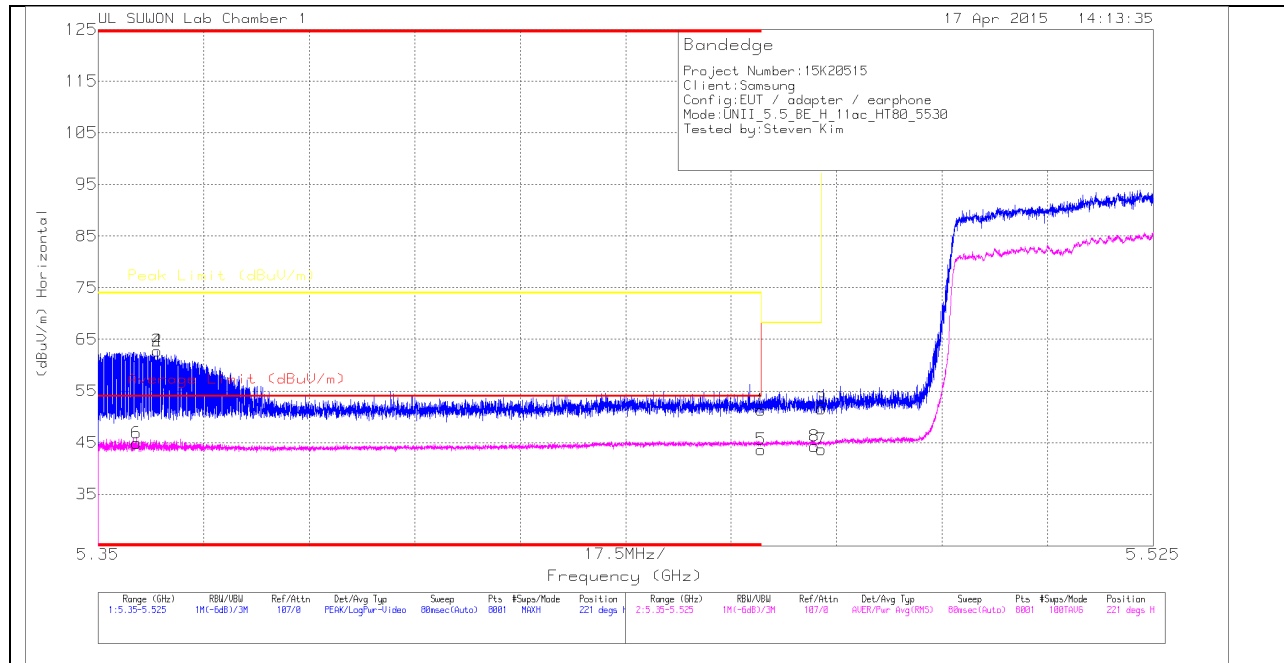
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

11.3.4. 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

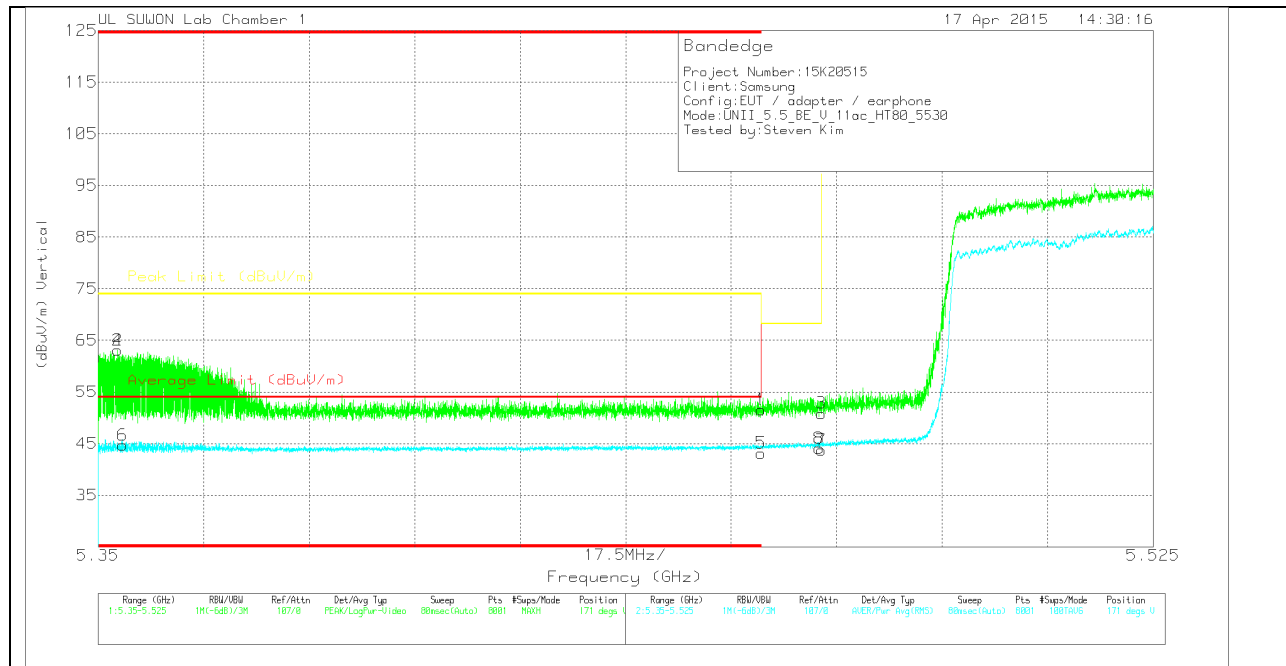
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	36.81	Pk	33.7	-19.2	0	51.31	-	-	74	-22.69	221	303	H
2	* 5.36	48.97	Pk	33.4	-19.6	0	62.77	-	-	74	-11.23	221	303	H
3	5.47	37.1	Pk	33.7	-19.2	0	51.6	-	-	68.2	-16.6	221	303	H
4	* 5.36	48.97	Pk	33.4	-19.6	0	62.77	-	-	74	-11.23	221	303	H
5	* 5.46	29.15	RMS	33.7	-19.2	1.14	44.79	54	-9.21	-	-	221	303	H
6	* 5.356	31.21	RMS	33.3	-19.6	1.14	46.05	54	-7.95	-	-	221	303	H
7	5.47	29.19	RMS	33.7	-19.2	1.14	44.83	-	-	-	-	221	303	H
8	5.469	29.79	RMS	33.7	-19.2	1.14	45.43	-	-	-	-	221	303	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	31150 Factor	Path_2_10dB	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	37.06	PK	33.7	-19.2	0	51.56	-	-	74	-22.44	171	360	V
2	* 5.353	49.4	PK	33.3	-19.6	0	63.1	-	-	74	-10.9	171	360	V
3	5.47	36.35	PK	33.7	-19.2	0	50.85	-	-	68.2	-17.35	171	360	V
4	* 5.353	49.4	PK	33.3	-19.6	0	63.1	-	-	74	-10.9	171	360	V
5	* 5.46	28.66	RMS	33.7	-19.2	1.14	44.3	54	-9.7	-	-	171	360	V
6	* 5.354	31.01	RMS	33.3	-19.6	1.14	45.85	54	-8.15	-	-	171	360	V
7	5.47	29.2	RMS	33.7	-19.2	1.14	44.84	-	-	-	-	171	360	V
8	5.47	29.59	RMS	33.7	-19.2	1.14	45.23	-	-	-	-	171	360	V

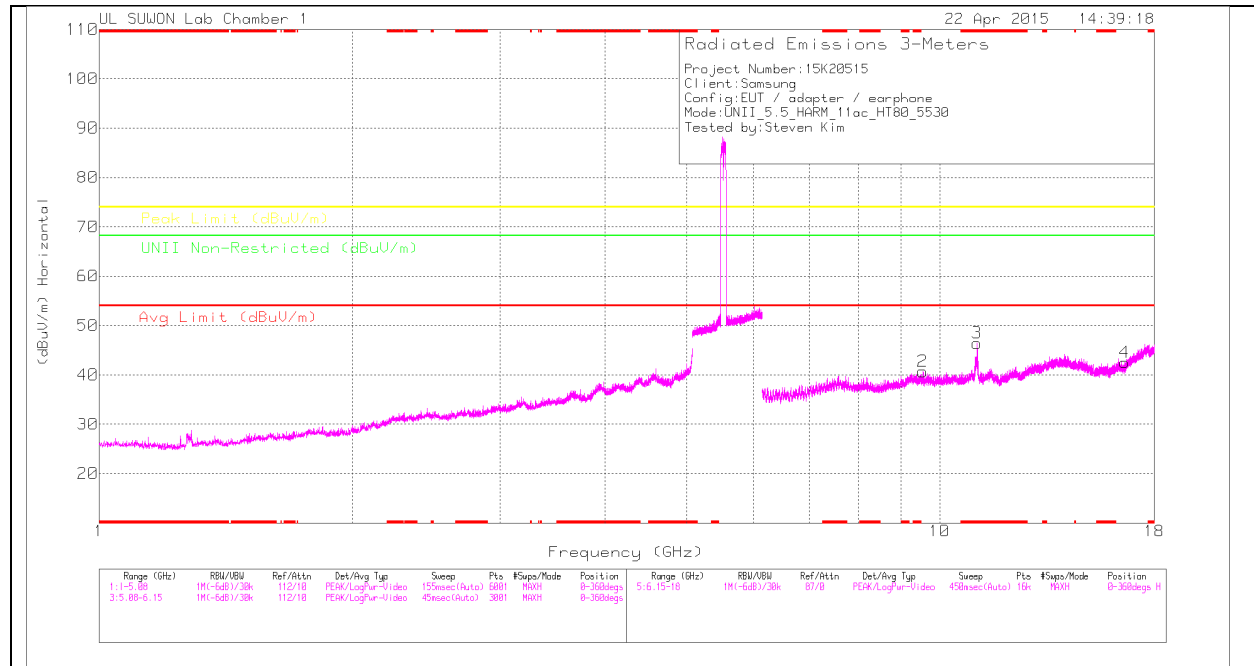
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

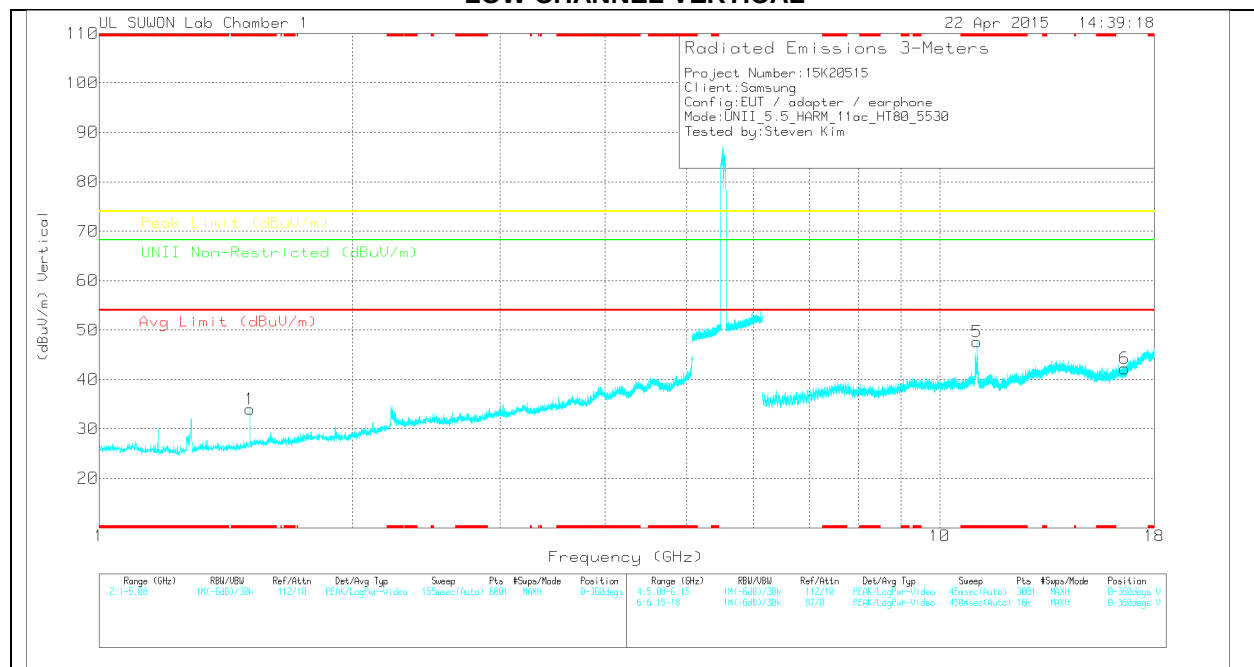
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



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	3115D Factor	Path_4_5G LP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.512	42.91	Pk	24.6	-33.5	0	34.01	-	-	74	-39.99	-	-	0-360	100	V
2	9.545	24.8	Pk	37.7	-21.8	0	40.7	-	-	-	-	68.2	-27.5	0-360	200	H
3	* 11.082	28.72	Pk	38.4	-20.7	0	46.42	-	-	74	-27.58	-	-	0-360	200	H
4	16.589	20.1	Pk	39.7	-17.3	0	42.5	-	-	-	-	68.2	-25.7	0-360	100	H
5	* 11.081	29.9	Pk	38.4	-20.7	0	47.6	-	-	74	-26.4	-	-	0-360	100	V
6	16.6	19.92	Pk	39.7	-17.4	0	42.22	-	-	-	-	68.2	-25.98	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	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.079	37.54	PK1	38.4	-20.7	0	55.24	-	-	74	-18.76	-	-	148	168	H
* 11.075	26.35	AD1	38.4	-20.7	1.14	45.19	54	-8.81	-	-	-	-	148	168	H
* 11.076	36.96	PK1	38.4	-20.7	0	54.66	-	-	74	-19.34	-	-	229	116	V
* 11.071	24.78	AD1	38.4	-20.7	1.14	43.62	54	-10.38	-	-	-	-	229	116	V

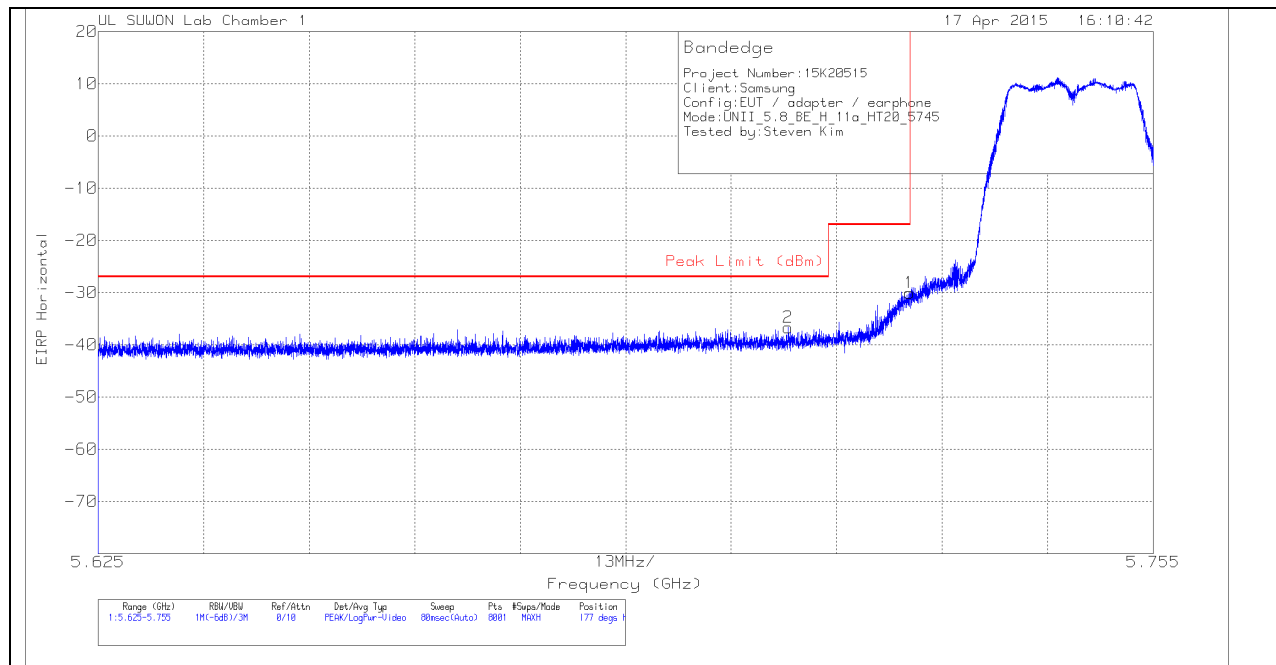
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

11.4. 5.8 GHz

11.4.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS HORIZONTAL PEAK PLOT



HORIZONTAL DATA

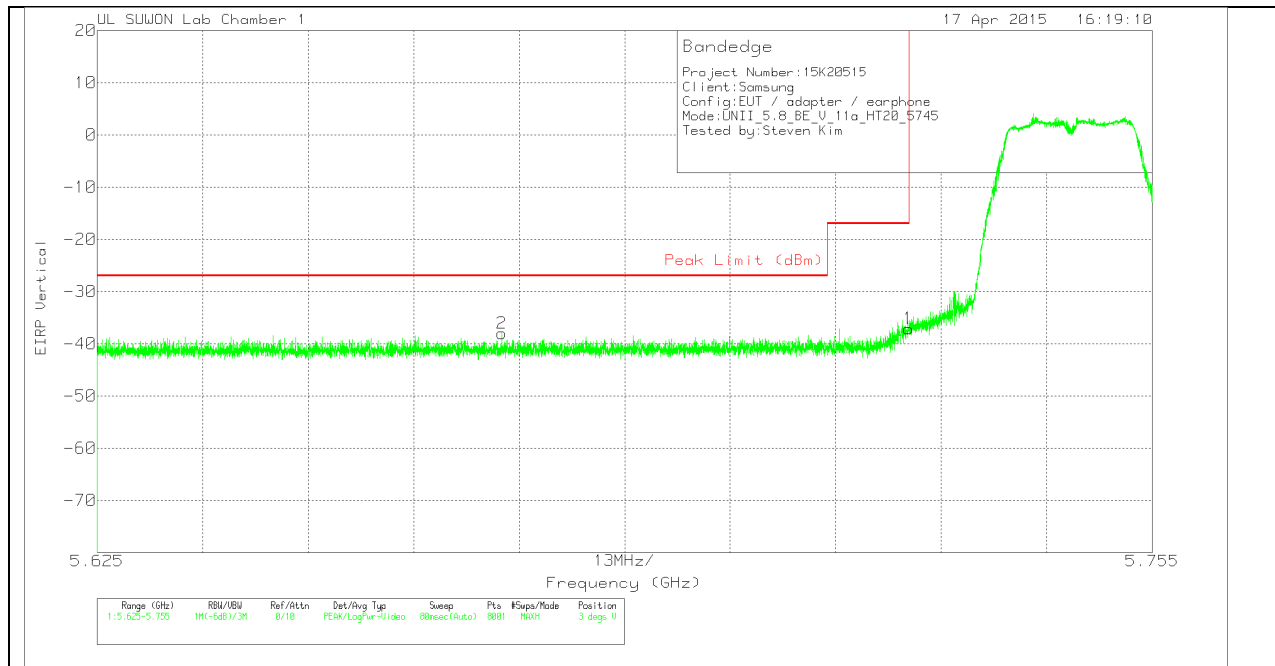
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3115D Factor	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-57.37	Pk	34.3	-18.8	11.8	0	-30.07	-17	-13.07	177	155	H
2	5.71	-64	Pk	34.3	-18.8	11.8	0	-36.7	-27	-9.7	177	155	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3115D Factor	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-64.4	Pk	34.3	-18.8	11.8	0	-37.1	-17	-20.1	3	126	V
2	5.675	-65.12	Pk	34.2	-18.9	11.8	0	-38.02	-27	-11.02	3	126	V

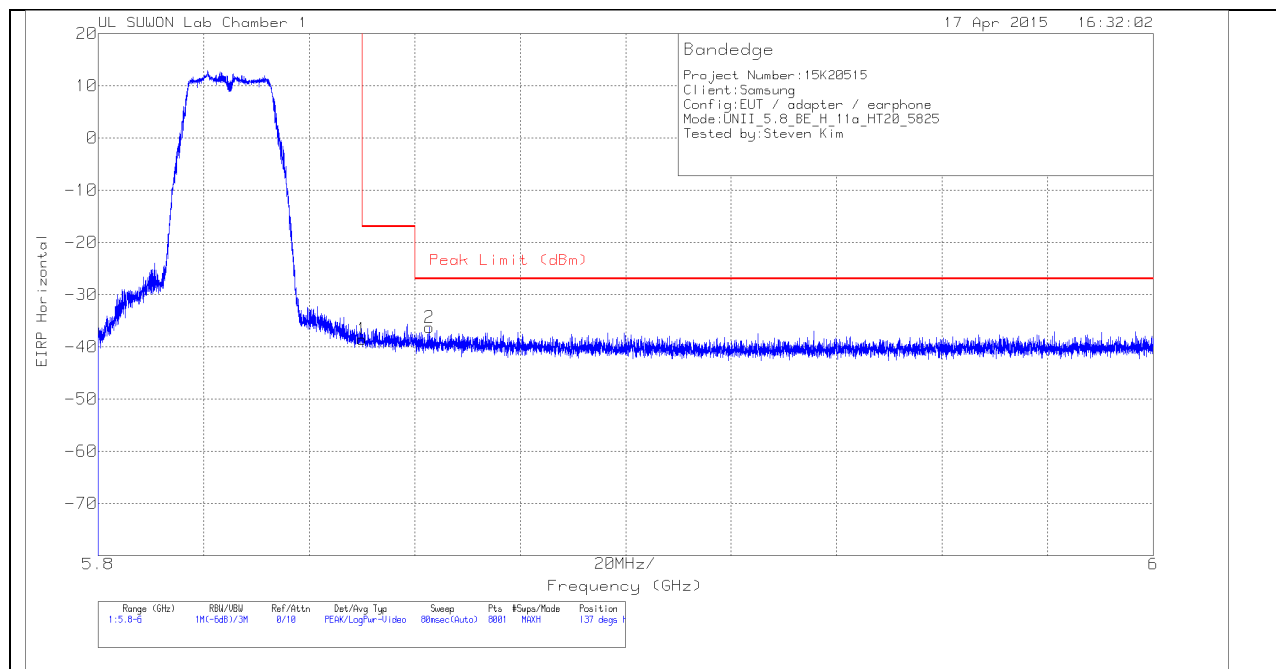
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK PLOT



HORIZONTAL DATA

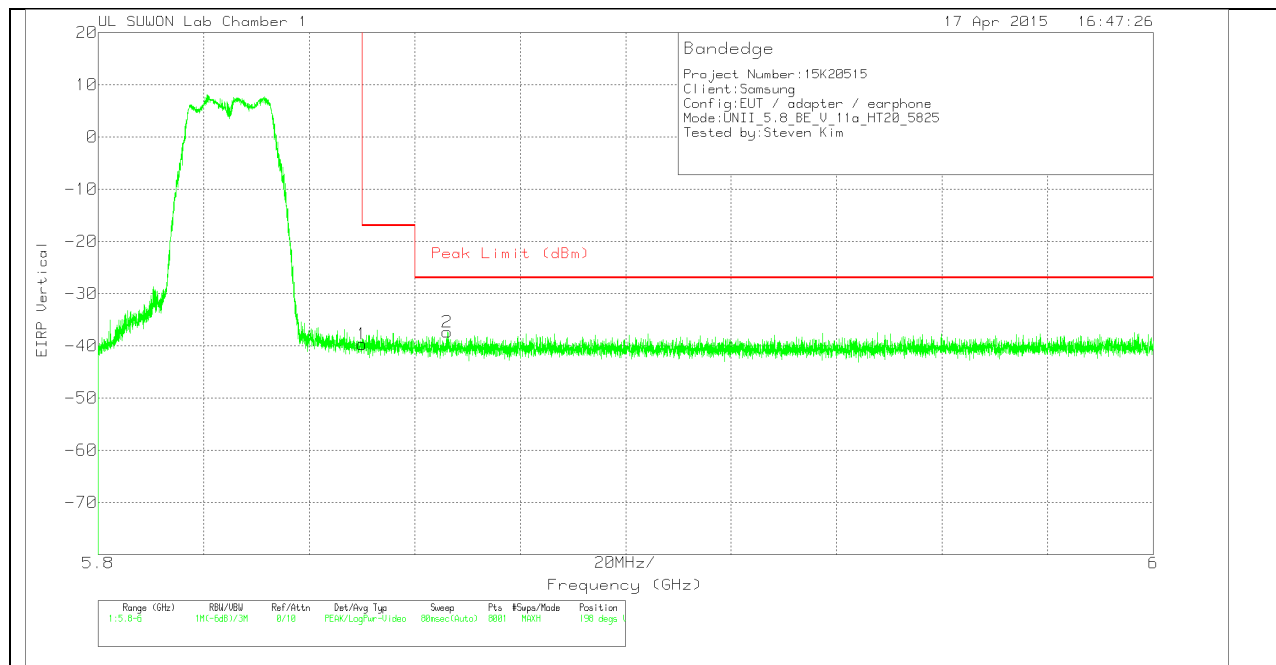
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3115D Factor	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.16	Pk	34.7	-18.9	11.8	0	-38.56	-17	-21.56	137	136	H
2	5.863	-63.98	Pk	34.8	-18.9	11.8	0	-36.28	-27	-9.28	137	136	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK PLOT



VERTICAL DATA

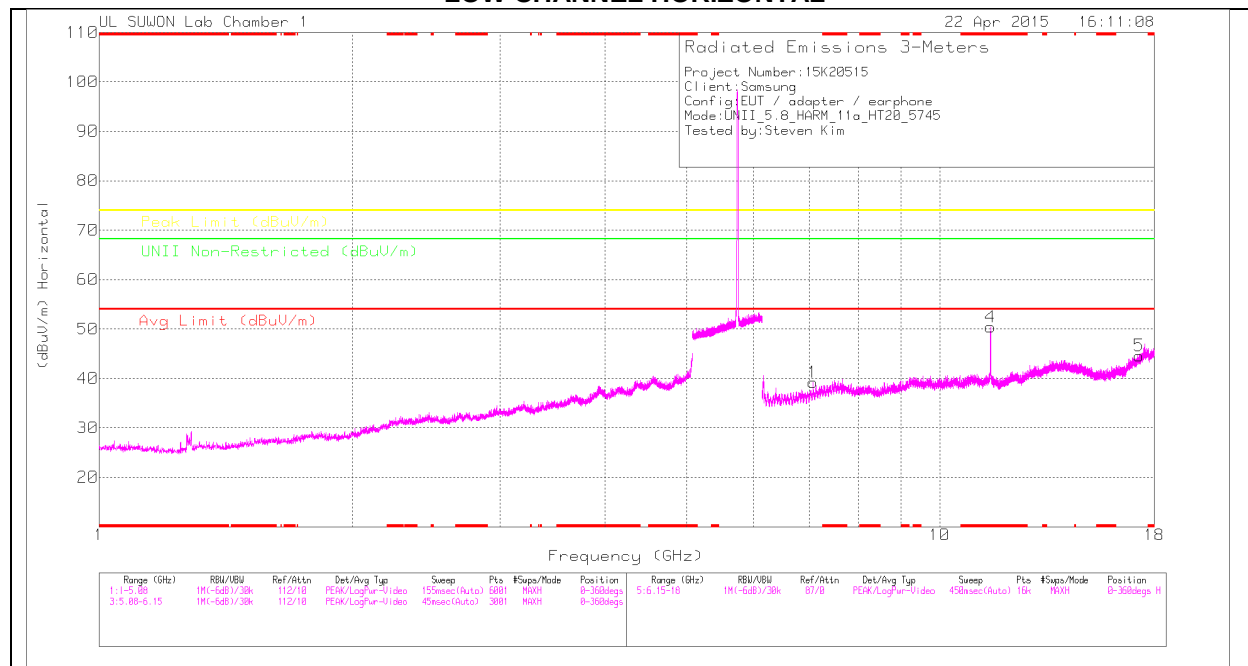
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3115D Factor	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-67.31	Pk	34.7	-18.9	11.8	0	-39.71	-17	-22.71	198	280	V
2	5.866	-65.09	Pk	34.8	-18.9	11.8	0	-37.39	-27	-10.39	198	280	V

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

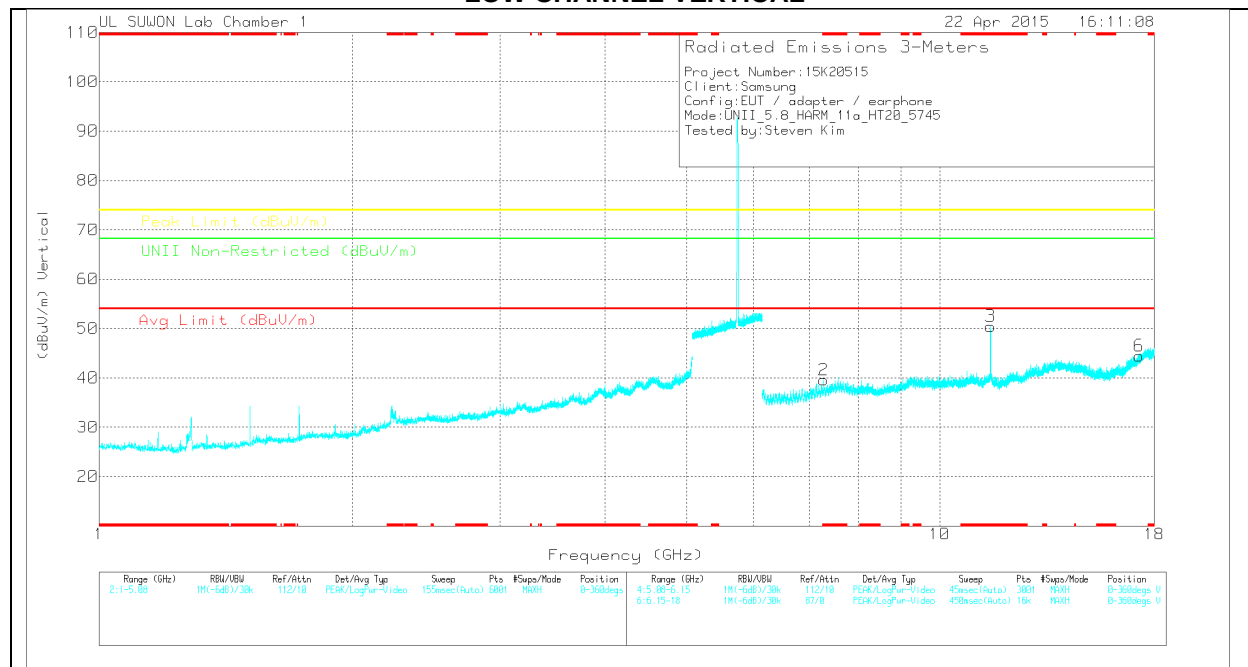
PK - Peak detector

RMS - RMS detection

LOW CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	7.065	27.82	PK	36.7	-25.3	0	39.22	-	-	-	-	68.2	-28.98	0-360	200	H
4	* 11.493	32.48	PK	38.6	-20.7	0	50.38	-	-	74	-23.62	-	-	0-360	200	H
5	17.265	18.7	PK	41.5	-15.6	0	44.6	-	-	-	-	68.2	-23.6	0-360	100	H
2	* 7.277	27.56	PK	37.1	-25.1	0	39.56	-	-	74	-34.44	-	-	0-360	100	V
3	* 11.493	32.55	PK	38.6	-20.7	0	50.45	-	-	74	-23.55	-	-	0-360	100	V
6	17.261	18.56	PK	41.5	-15.6	0	44.46	-	-	-	-	68.2	-23.74	0-360	200	V

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

PK – Peak detector

Radiated Emissions

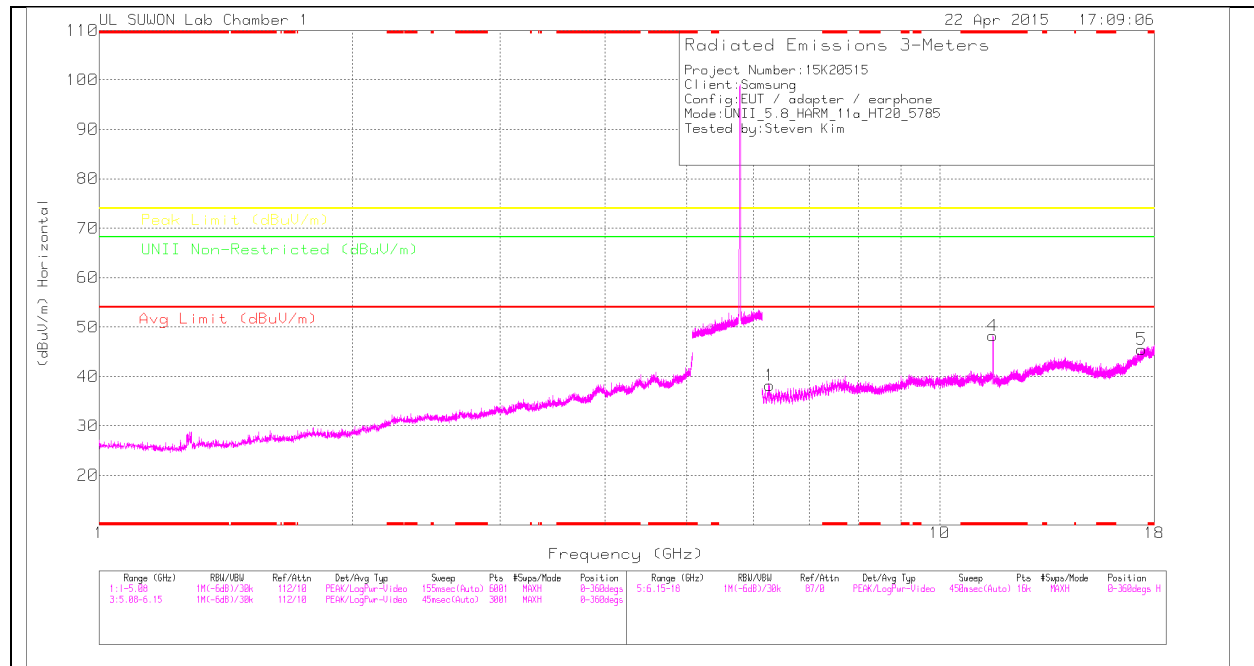
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.493	39.95	PK1	38.6	-20.7	0	57.85	-	-	74	-16.15	-	-	259	148	H
* 11.493	26.99	AD1	38.6	-20.7	.3	45.19	54	-8.81	-	-	-	-	259	148	H
* 11.489	43.25	PK1	38.6	-20.7	0	61.15	-	-	74	-12.85	-	-	192	100	V
* 11.493	30.34	AD1	38.6	-20.7	.3	48.54	54	-5.46	-	-	-	-	192	100	V

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

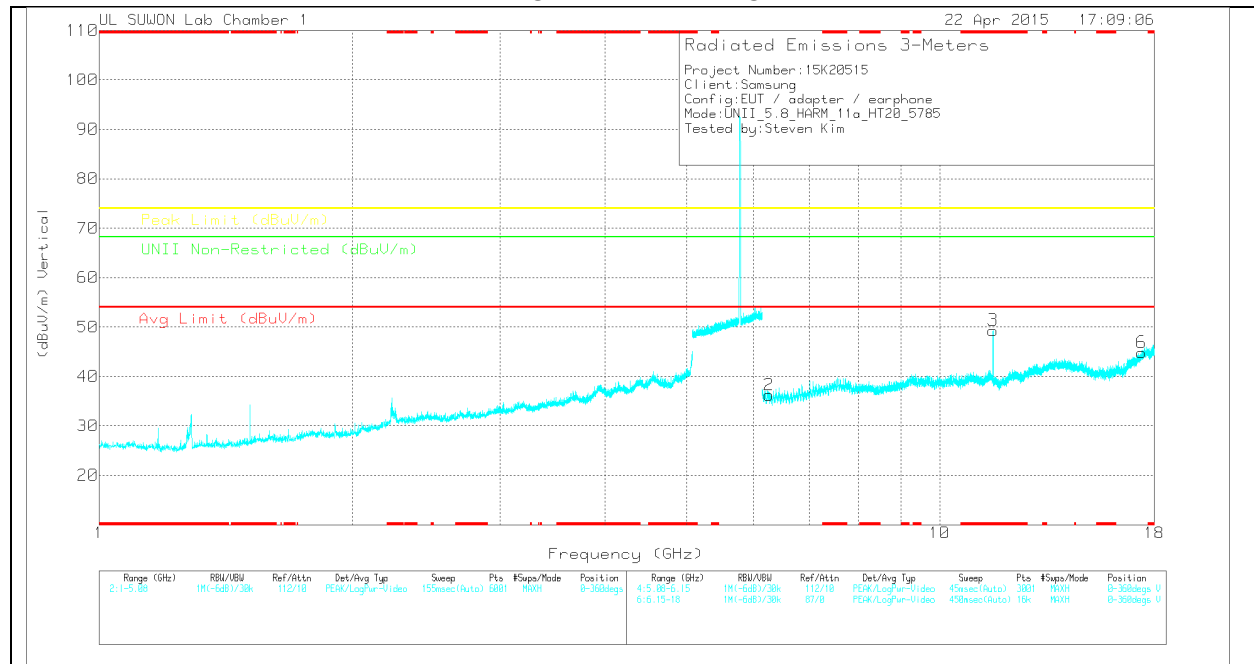
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

MID CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	6.274	29.57	PK	35.3	-26.7	0	38.17	-	-	-	-	68.2	-30.03	0-360	100	H
4	* 11.57	30.16	PK	38.6	-20.5	0	48.26	-	-	74	-25.74	-	-	0-360	100	H
5	17.388	19.2	PK	41.8	-15.5	0	45.5	-	-	-	-	68.2	-22.7	0-360	200	H
2	6.269	27.65	PK	35.3	-26.7	0	36.25	-	-	-	-	68.2	-31.95	0-360	200	V
3	* 11.573	31.22	PK	38.6	-20.5	0	49.32	-	-	74	-24.68	-	-	0-360	100	V
6	17.378	18.64	PK	41.8	-15.6	0	44.84	-	-	-	-	68.2	-23.36	0-360	200	V

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

PK – Peak Detector

Radiated Emissions

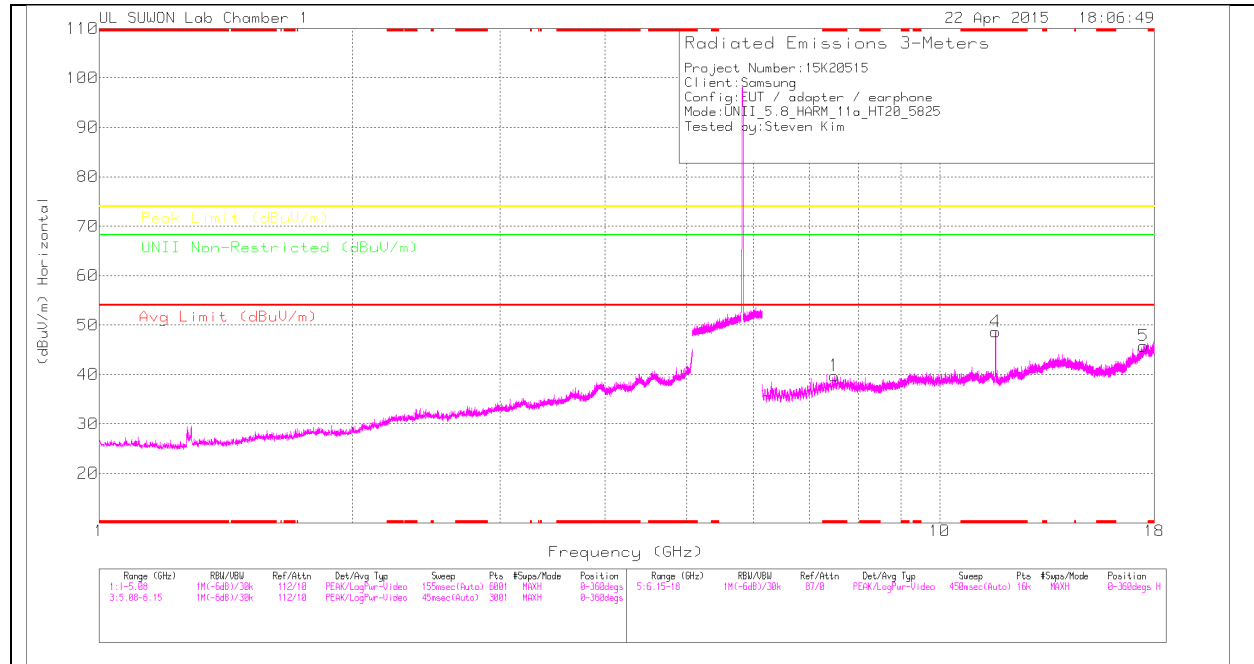
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.569	42.95	PK1	38.6	-20.6	0	60.95	-	-	74	-13.05	-	-	127	104	H
* 11.569	29.71	AD1	38.6	-20.6	.3	48.01	54	-5.99	-	-	-	-	127	104	H
* 11.576	38.2	PK1	38.6	-20.5	0	56.3	-	-	74	-17.7	-	-	207	196	V
* 11.572	26.24	AD1	38.6	-20.5	.3	44.64	54	-9.36	-	-	-	-	207	196	V

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

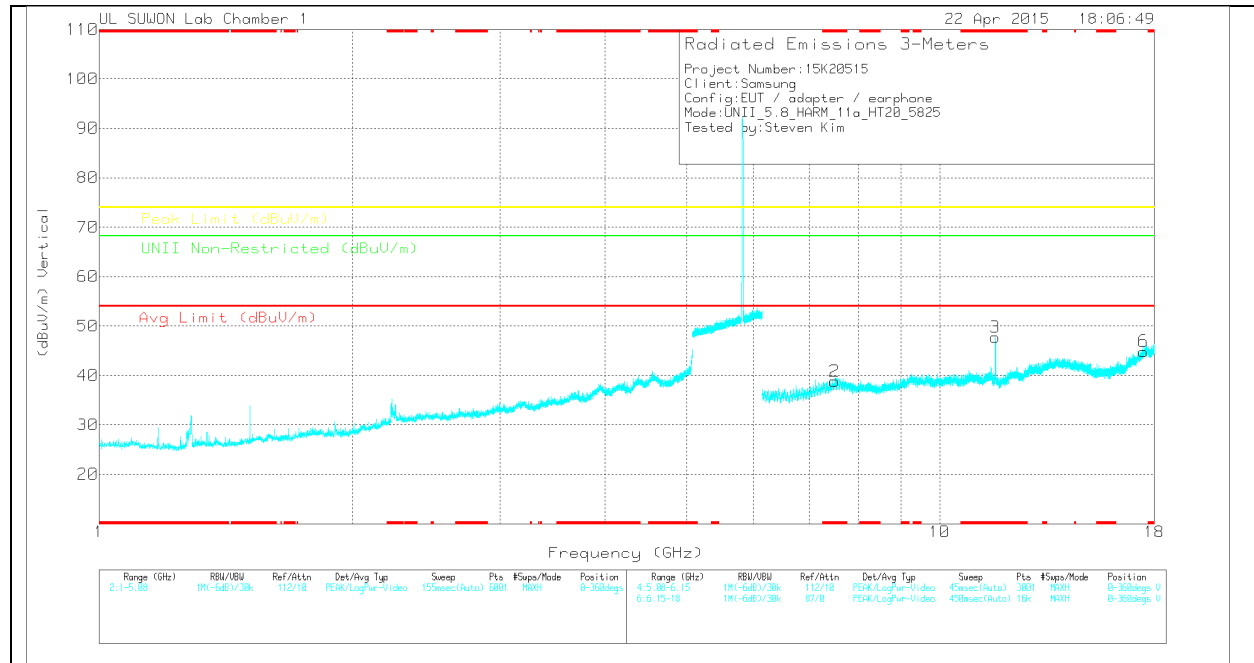
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

HIGH CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 7.494	26.96	PK	37.4	-24.6	0	39.76	-	-	74	-34.24	-	-	0-360	100	H
4	* 11.653	30.76	PK	38.5	-20.6	0	48.66	-	-	74	-25.34	-	-	0-360	100	H
5	17.486	19.28	PK	42	-15.5	0	45.78	-	-	-	-	68.2	-22.42	0-360	200	H
2	* 7.501	25.93	PK	37.4	-24.5	0	38.83	-	-	74	-35.17	-	-	0-360	100	V
3	* 11.65	29.81	PK	38.5	-20.6	0	47.71	-	-	74	-26.29	-	-	0-360	100	V
6	17.48	18.36	PK	42	-15.5	0	44.86	-	-	-	-	68.2	-23.34	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

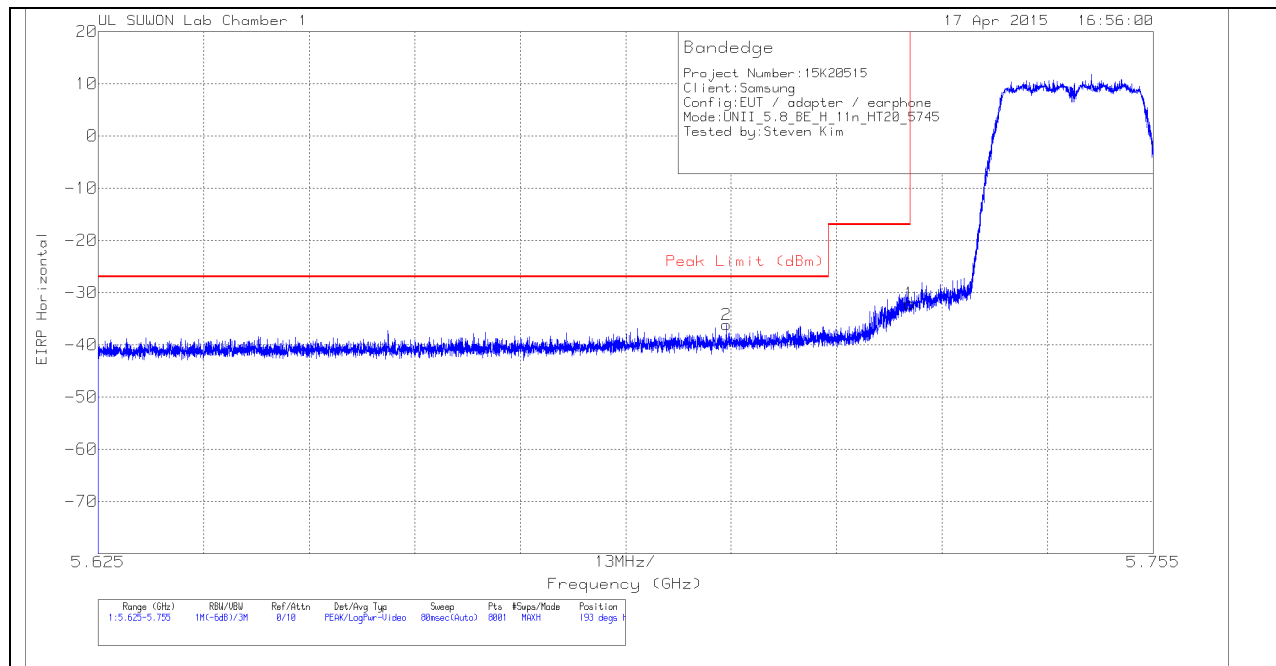
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.649	42.16	PK1	38.5	-20.6	0	60.06	-	-	74	-13.94	-	-	116	103	H
* 11.65	30.38	AD1	38.5	-20.6	.3	48.58	54	-5.42	-	-	-	-	116	103	H
* 11.649	43.04	PK1	38.5	-20.6	0	60.94	-	-	74	-13.06	-	-	187	111	V
* 11.649	29.64	AD1	38.5	-20.6	.3	47.84	54	-6.16	-	-	-	-	187	111	V

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

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

11.4.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS HORIZONTAL PEAK PLOT



HORIZONTAL DATA

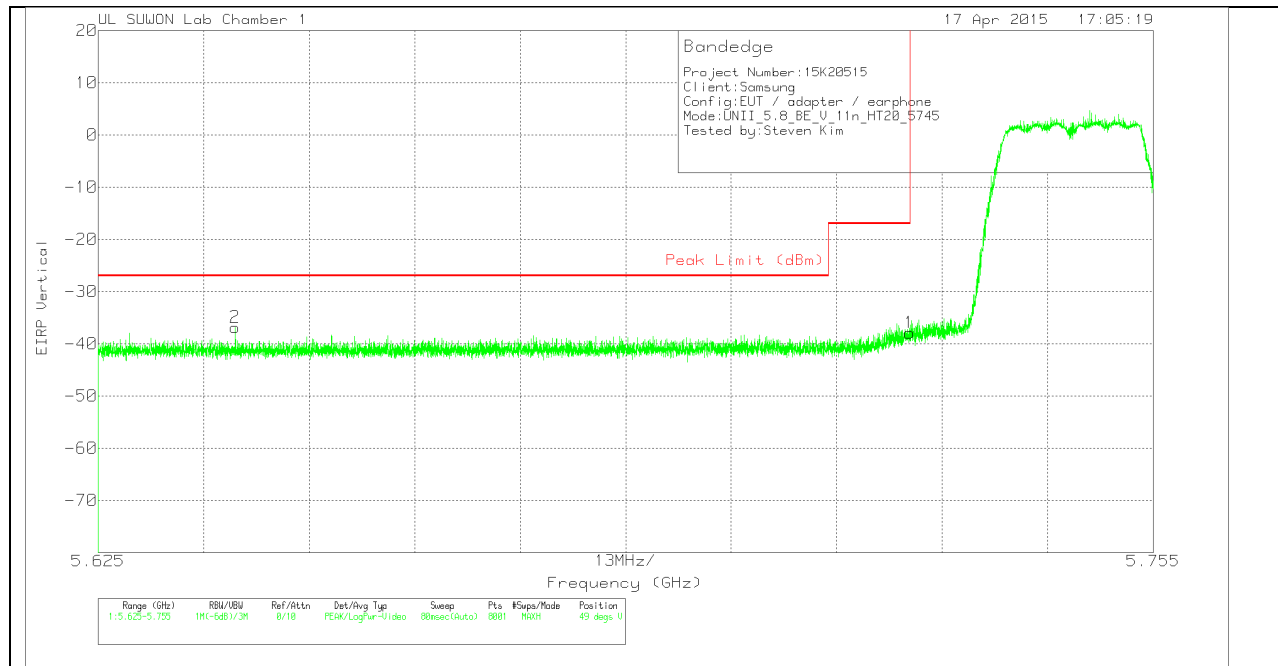
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3115D Factor	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-59.42	Pk	34.3	-18.8	11.8	0	-32.12	-17	-15.12	193	150	H
2	5.702	-63.39	Pk	34.3	-18.9	11.8	0	-36.19	-27	-9.19	193	150	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3115D Factor	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-65.21	Pk	34.3	-18.8	11.8	0	-37.91	-17	-20.91	49	167	V
2	5.642	-63.85	Pk	34.1	-18.9	11.8	0	-36.85	-27	-9.85	49	167	V

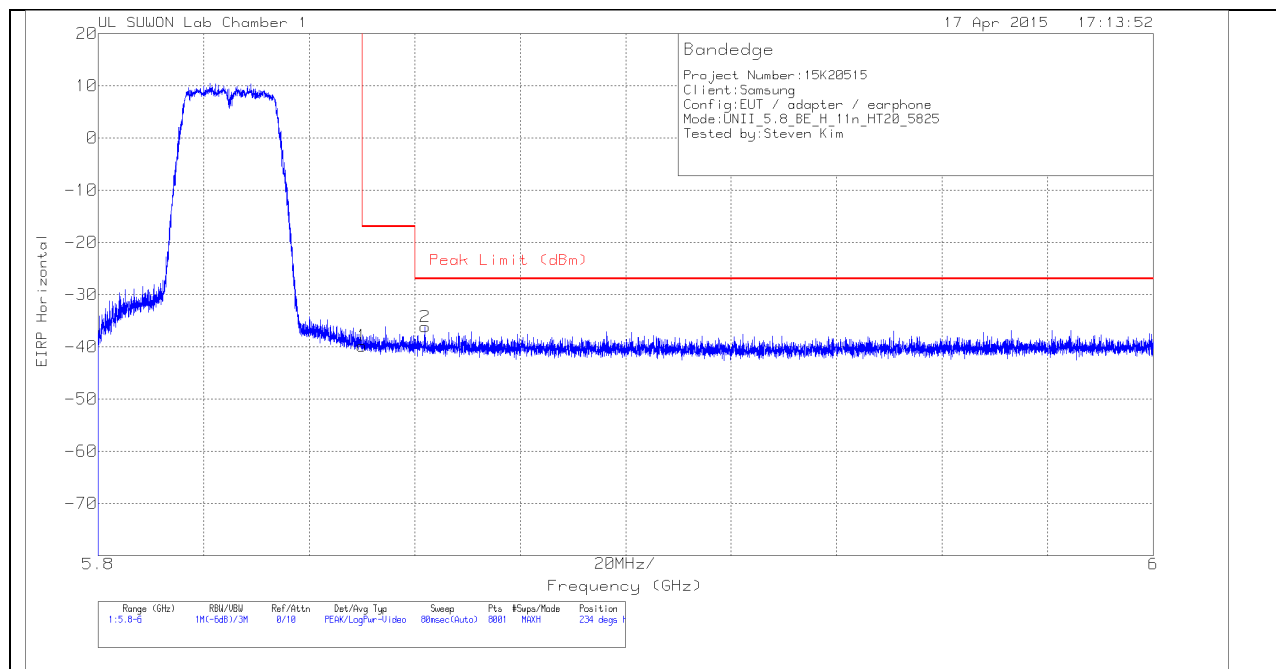
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

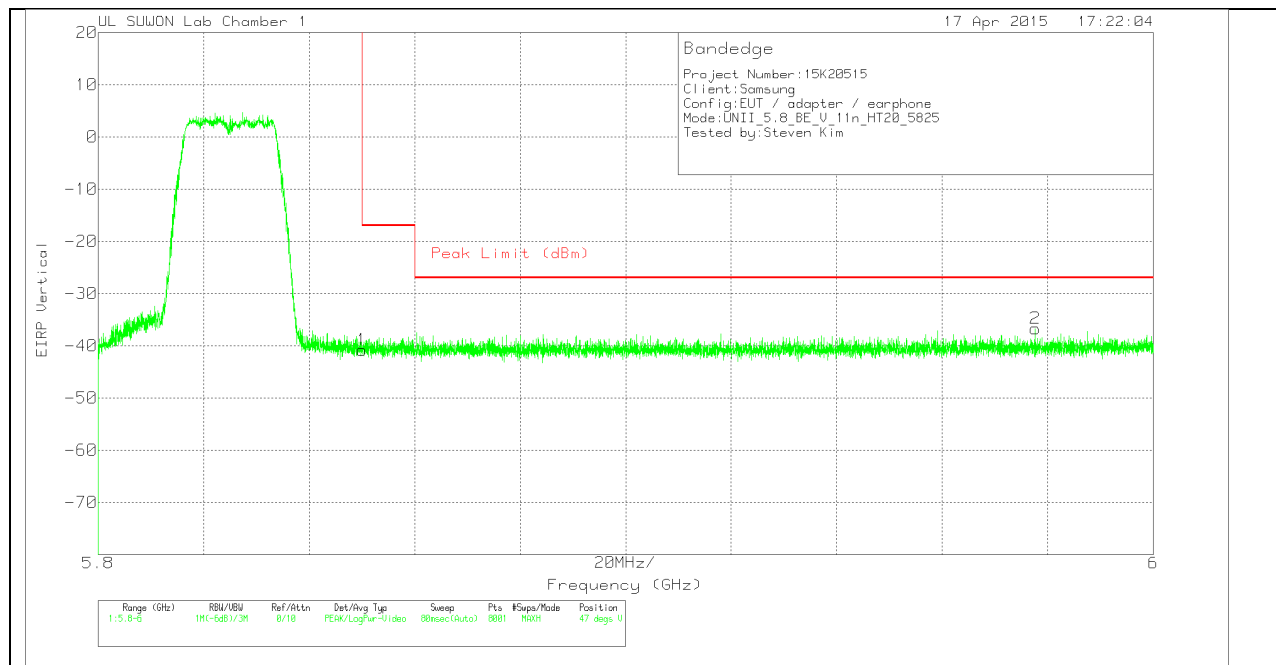
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3115D Factor	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-67.44	Pk	34.7	-18.9	11.8	0	-39.84	-17	-22.84	234	144	H
2	5.862	-63.9	Pk	34.8	-18.9	11.8	0	-36.2	-27	-9.2	234	144	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK PLOT



VERTICAL DATA

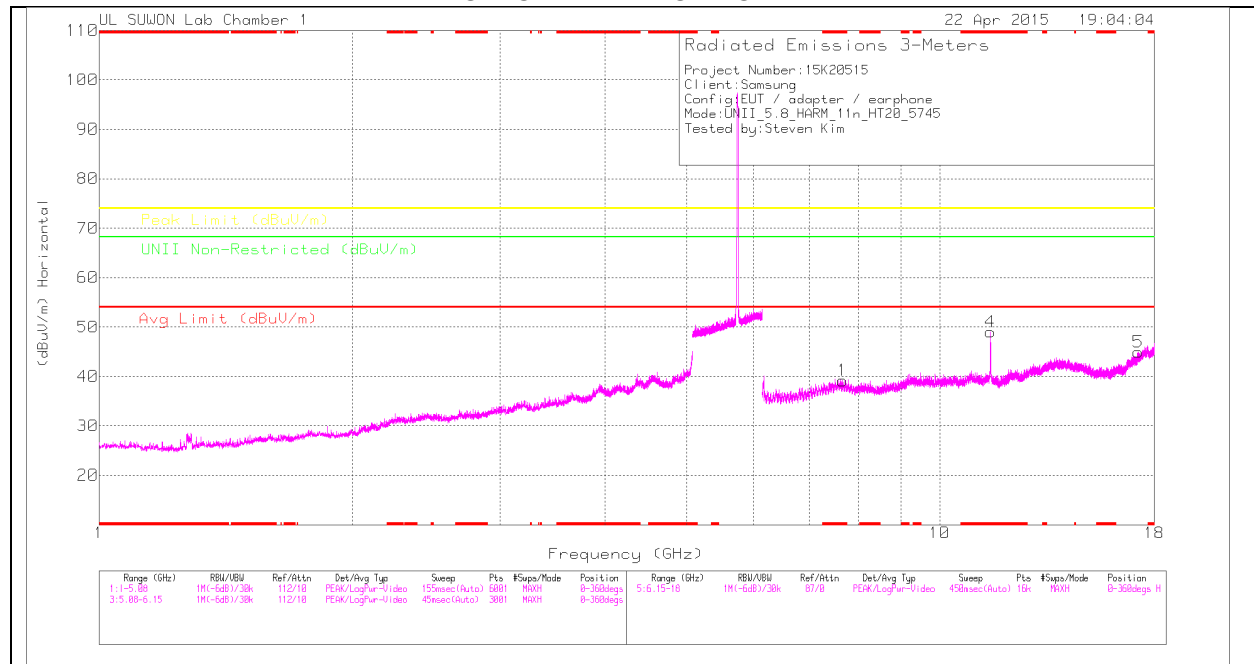
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3115D Factor	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-68.4	Pk	34.7	-18.9	11.8	0	-40.8	-17	-23.8	47	127	V
2	5.978	-65.01	Pk	35.1	-18.6	11.8	0	-36.71	-27	-9.71	47	127	V

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

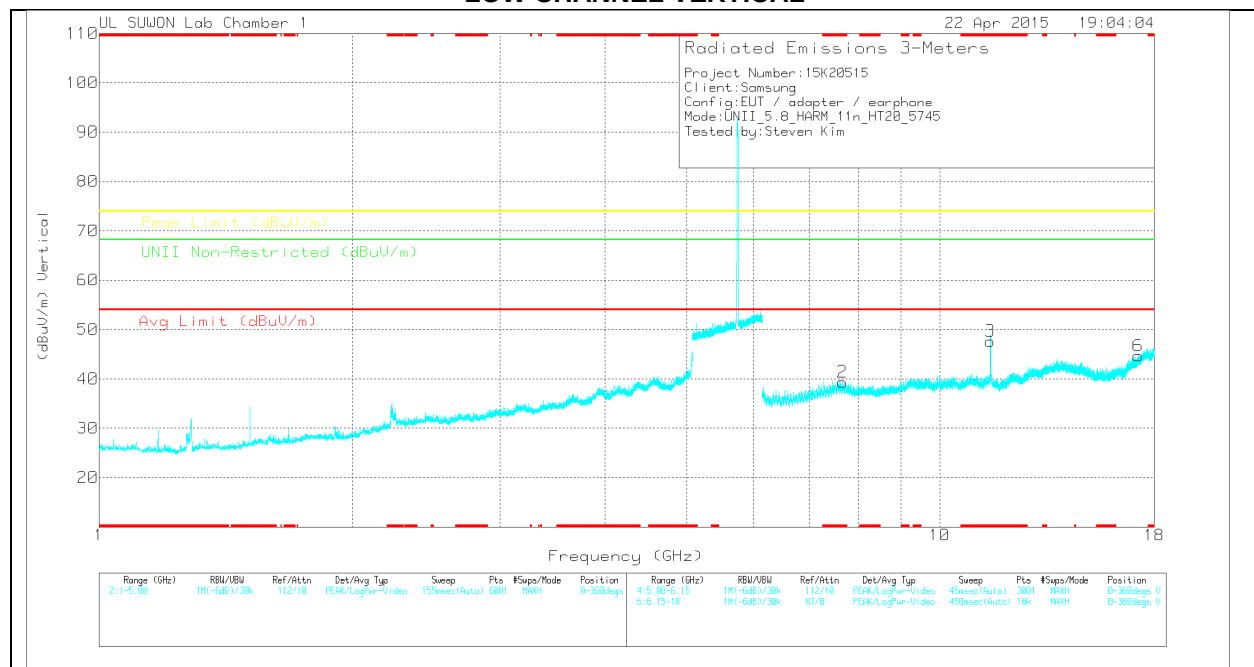
PK - Peak detector

RMS - RMS detection

LOW CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 7.66	26.37	PK	37.3	-24.5	0	39.17	-	-	74	-34.83	-	-	0-360	200	H
4	* 11.492	31.12	PK	38.6	-20.7	0	49.02	-	-	74	-24.98	-	-	0-360	200	H
5	17.226	19.12	PK	41.4	-15.6	0	44.92	-	-	-	-	68.2	-23.28	0-360	100	H
2	* 7.667	26.56	PK	37.3	-24.5	0	39.36	-	-	74	-34.64	-	-	0-360	200	V
3	* 11.487	29.75	PK	38.6	-20.7	0	47.65	-	-	74	-26.35	-	-	0-360	100	V
6	17.224	18.9	PK	41.4	-15.6	0	44.7	-	-	-	-	68.2	-23.5	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

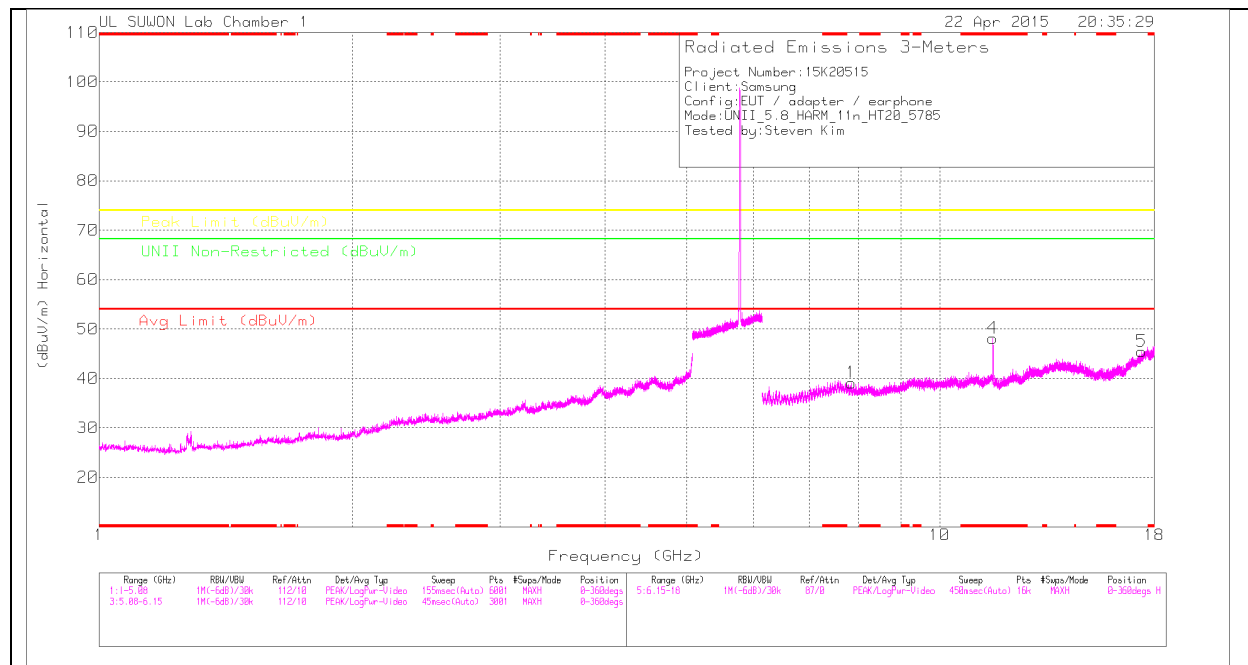
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.487	41.69	PK1	38.6	-20.7	0	59.59	-	-	74	-14.41	-	-	172	153	H
* 11.49	26.22	AD1	38.6	-20.7	.31	44.43	54	-9.57	-	-	-	-	172	153	H
* 11.491	40.43	PK1	38.6	-20.7	0	58.33	-	-	74	-15.67	-	-	198	103	V
* 11.491	28.29	AD1	38.6	-20.7	.31	46.5	54	-7.5	-	-	-	-	198	103	V

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

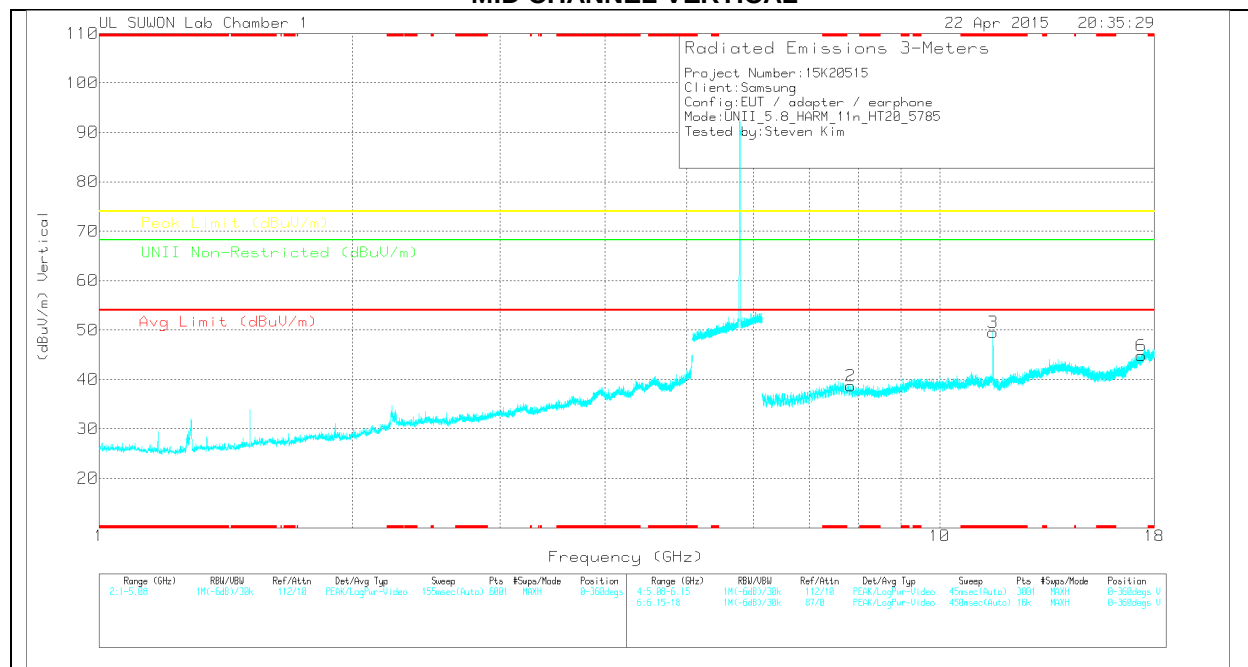
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

MID CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	7.845	25.95	PK	37.1	-23.9	0	39.15	-	-	-	-	68.2	-29.05	0-360	100	H
4	* 11.569	30.17	PK	38.6	-20.6	0	48.17	-	-	74	-25.83	-	-	0-360	100	H
5	17.377	19.3	PK	41.8	-15.6	0	45.5	-	-	-	-	68.2	-22.7	0-360	100	H
2	7.839	25.48	PK	37.1	-23.9	0	38.68	-	-	-	-	68.2	-29.52	0-360	100	V
3	* 11.573	31.43	PK	38.6	-20.5	0	49.53	-	-	74	-24.47	-	-	0-360	100	V
6	17.373	18.71	PK	41.7	-15.6	0	44.81	-	-	-	-	68.2	-23.39	0-360	200	V

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

PK – Peak

Radiated Emissions

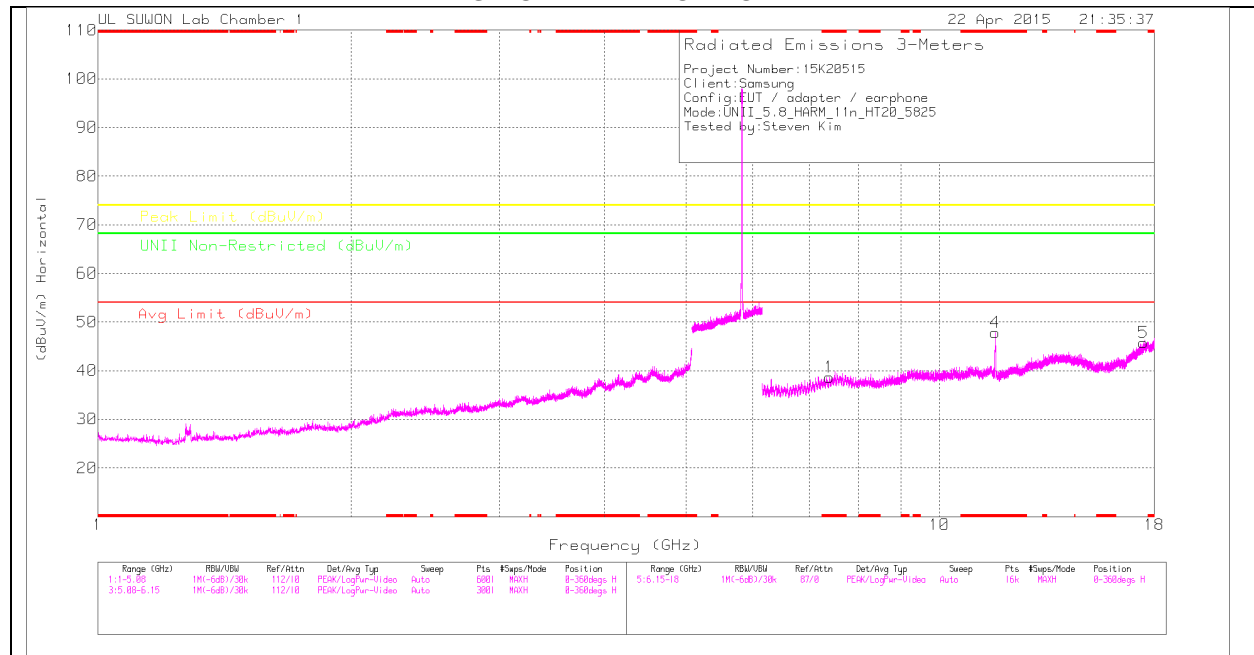
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.569	40.08	PK1	38.6	-20.6	0	58.08	-	-	74	-15.92	-	-	156	102	H
* 11.569	28.26	AD1	38.6	-20.6	.31	46.57	54	-7.43	-	-	-	-	156	102	H
* 11.572	39.79	PK1	38.6	-20.5	0	57.89	-	-	74	-16.11	-	-	210	100	V
* 11.569	26.52	AD1	38.6	-20.6	.31	44.83	54	-9.17	-	-	-	-	210	100	V

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

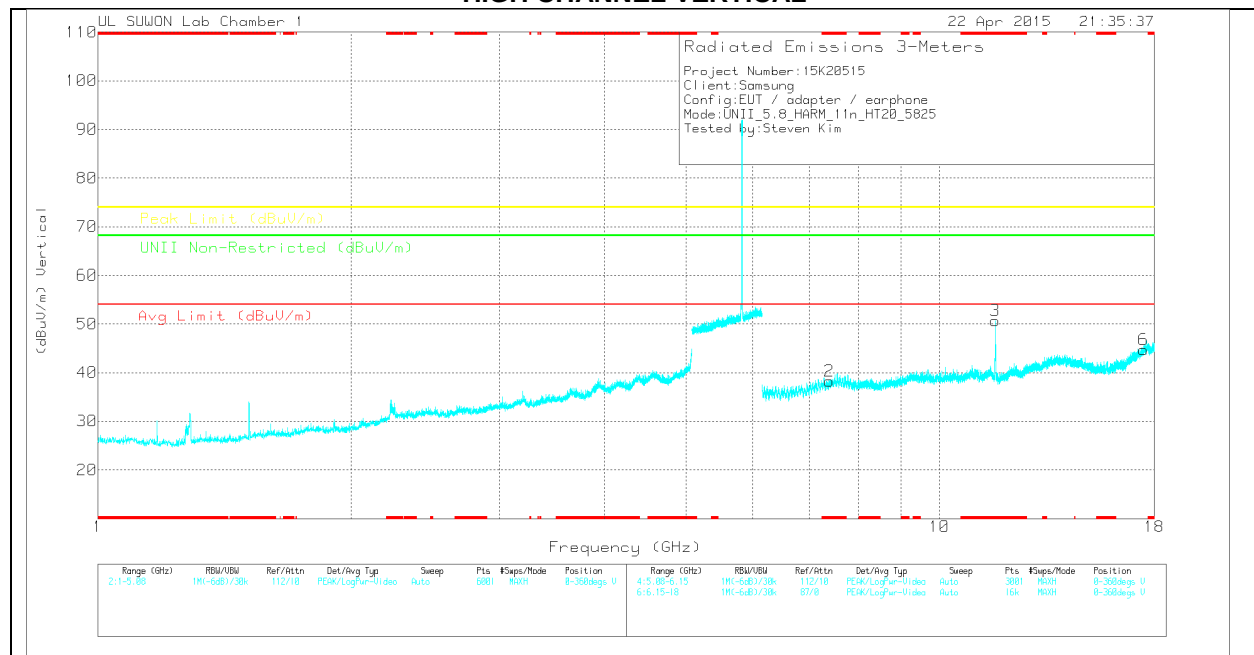
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

HIGH CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 7.399	26.2	PK	37.3	-24.9	0	38.6	-	-	74	-35.4	-	-	0-360	100	H
4	* 11.652	29.95	PK	38.5	-20.6	0	47.85	-	-	74	-26.15	-	-	0-360	100	H
5	17.48	19.22	PK	42	-15.5	0	45.72	-	-	-	-	68.2	-22.48	0-360	200	H
2	* 7.401	25.84	PK	37.3	-24.9	0	38.24	-	-	74	-35.76	-	-	0-360	200	V
3	* 11.65	32.81	PK	38.5	-20.6	0	50.71	-	-	74	-23.29	-	-	0-360	100	V
6	17.476	18.18	PK	42	-15.5	0	44.68	-	-	-	-	68.2	-23.52	0-360	200	V

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

PK – Peak Detector

Radiated Emissions

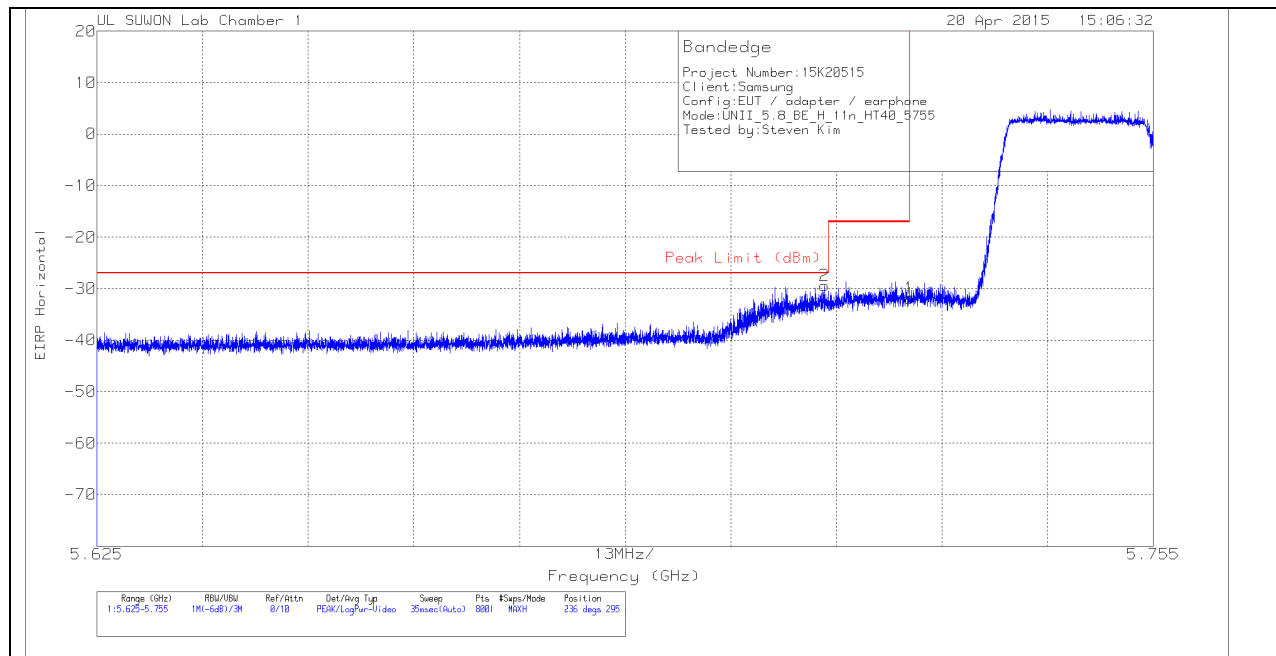
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.645	38.41	PK1	38.5	-20.6	0	56.31	-	-	74	-17.69	-	-	176	398	H
* 11.65	25.59	AD1	38.5	-20.6	.31	43.8	54	-10.2	-	-	-	-	176	398	H
* 11.645	41.61	PK1	38.5	-20.6	0	59.51	-	-	74	-14.49	-	-	180	108	V
* 11.65	27.52	AD1	38.5	-20.6	.31	45.73	54	-8.27	-	-	-	-	180	108	V

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

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

11.4.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS HORIZONTAL PEAK PLOT



HORIZONTAL DATA

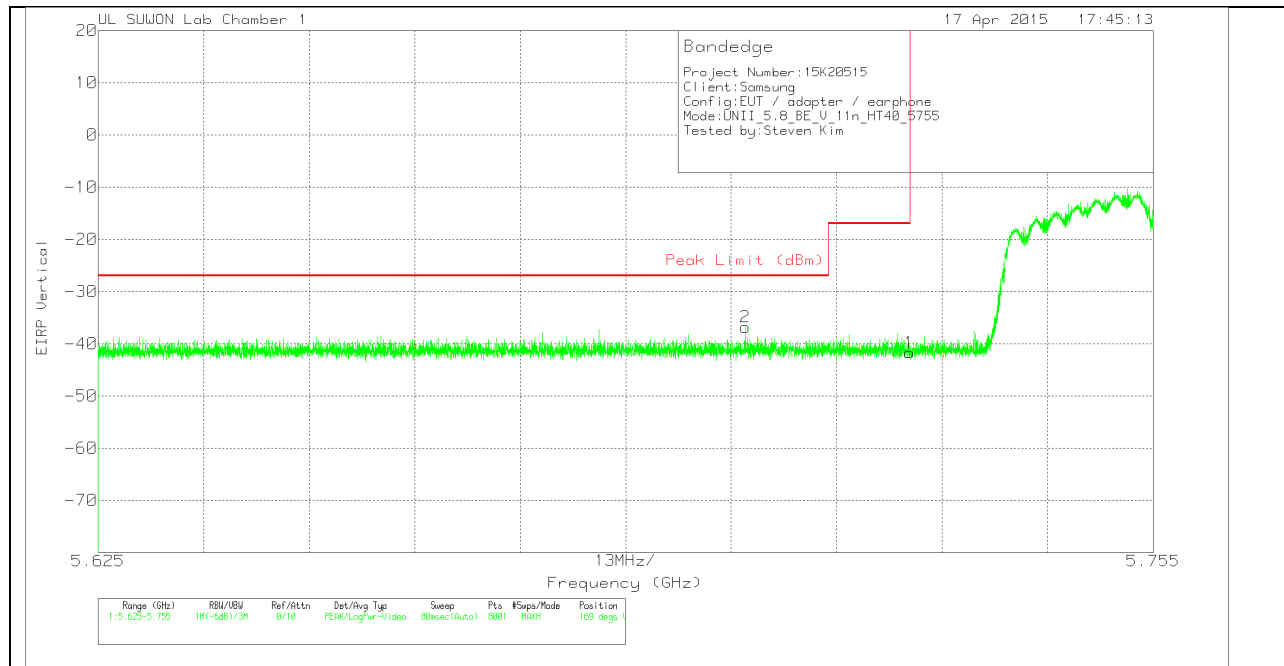
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3115D Factor	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-59.16	Pk	34.3	-18.8	11.8	0	-31.86	-17	-14.86	236	295	H
2	5.715	-56.72	Pk	34.3	-18.8	11.8	0	-29.42	-27	-2.42	236	295	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3115D Factor	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-69.02	Pk	34.3	-18.8	11.8	0	-41.72	-17	-24.72	169	160	V
2	5.705	-64.03	Pk	34.3	-18.9	11.8	0	-36.83	-27	-9.83	169	160	V

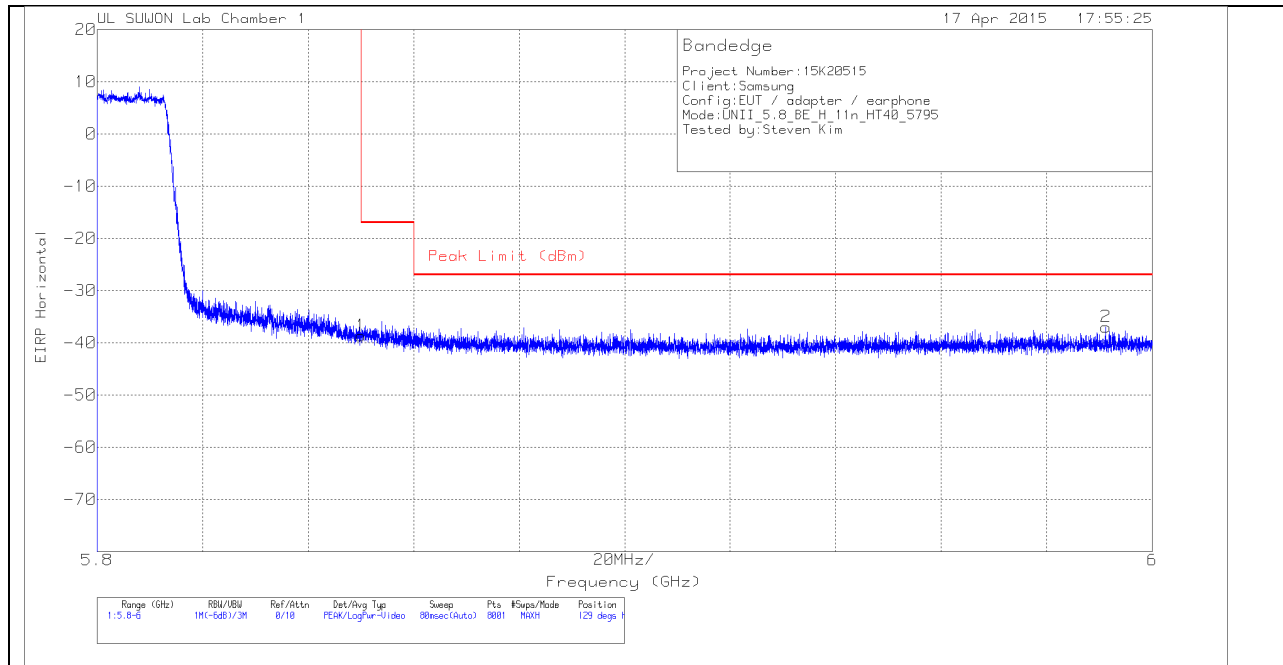
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK PLOT



HORIZONTAL DATA

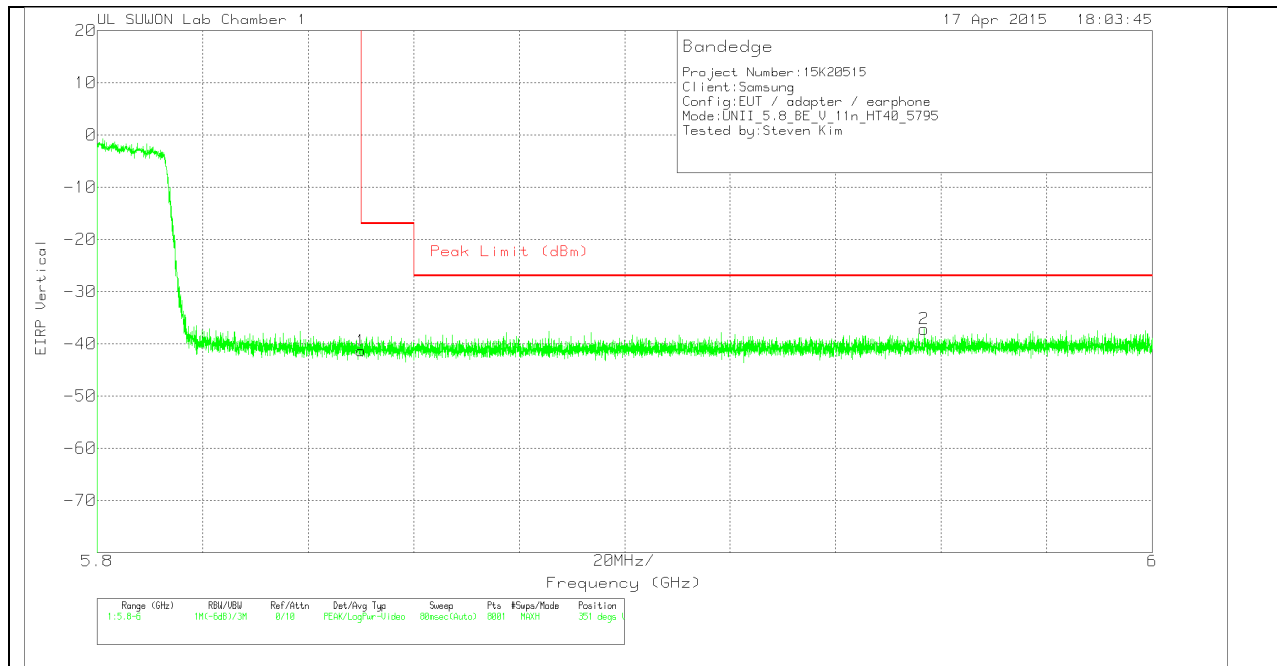
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3115D Factor	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.26	Pk	34.7	-18.9	11.8	0	-38.66	-17	-21.66	129	154	H
2	5.991	-65.36	Pk	35.2	-18.6	11.8	0	-36.96	-27	-9.96	129	154	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK PLOT



VERTICAL DATA

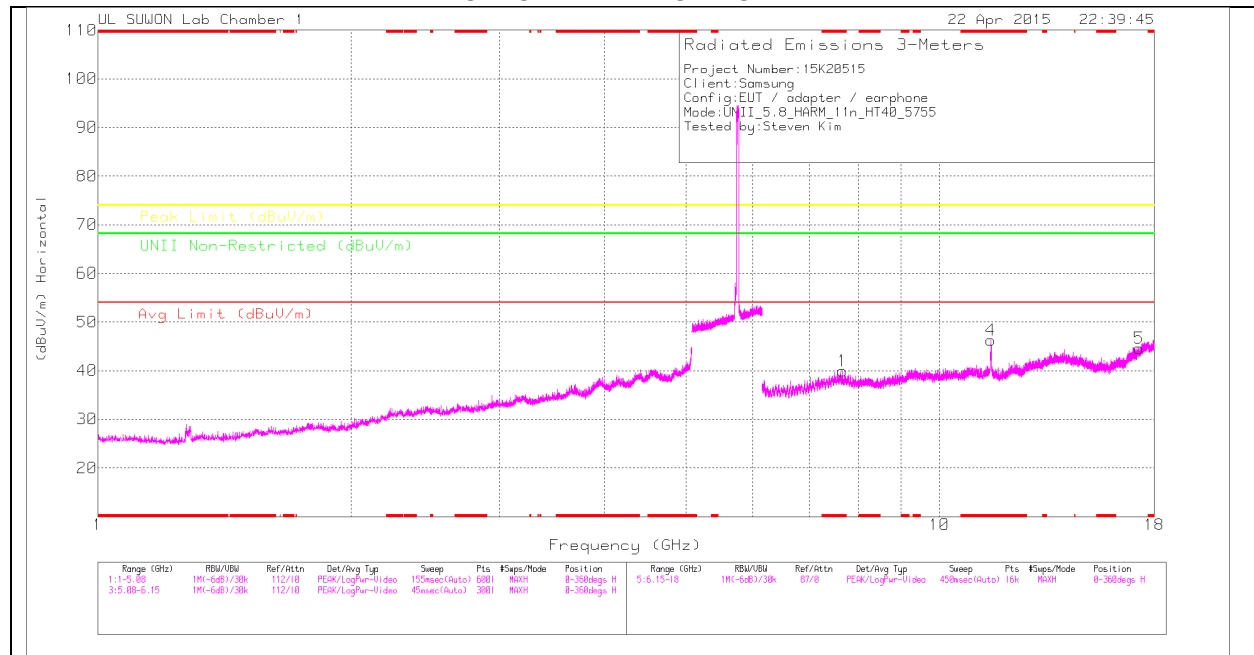
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3115D Factor	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-68.97	Pk	34.7	-18.9	11.8	0	-41.37	-17	-24.37	351	134	V
2	5.957	-65.38	Pk	35.1	-18.7	11.8	0	-37.18	-27	-10.18	351	134	V

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

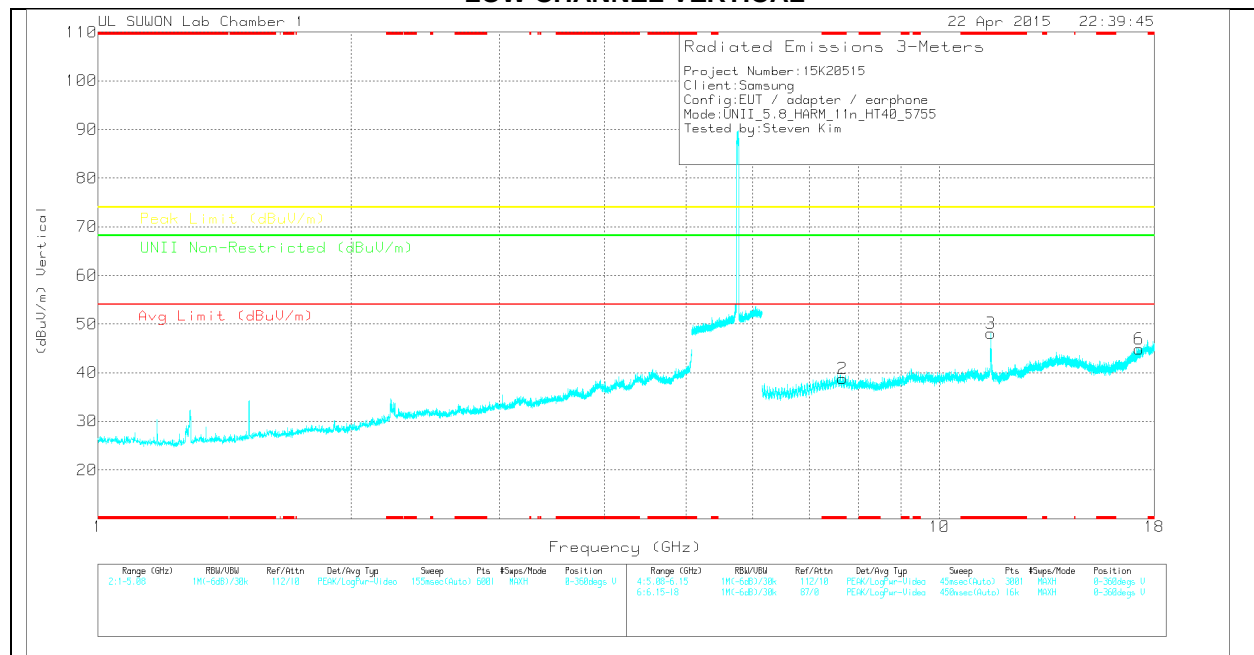
PK - Peak detector

RMS - RMS detection

LOW CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 7.673	27.1	PK	37.3	-24.5	0	39.9	-	-	74	-34.1	-	-	0-360	100	H
4	* 11.508	28.42	PK	38.6	-20.7	0	46.32	-	-	74	-27.68	-	-	0-360	100	H
5	17.275	18.77	PK	41.5	-15.7	0	44.57	-	-	-	-	68.2	-23.63	0-360	200	H
2	* 7.673	25.97	PK	37.3	-24.5	0	38.77	-	-	74	-35.23	-	-	0-360	100	V
3	* 11.508	30.23	PK	38.6	-20.7	0	48.13	-	-	74	-25.87	-	-	0-360	100	V
6	17.272	18.97	PK	41.5	-15.6	0	44.87	-	-	-	-	68.2	-23.33	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

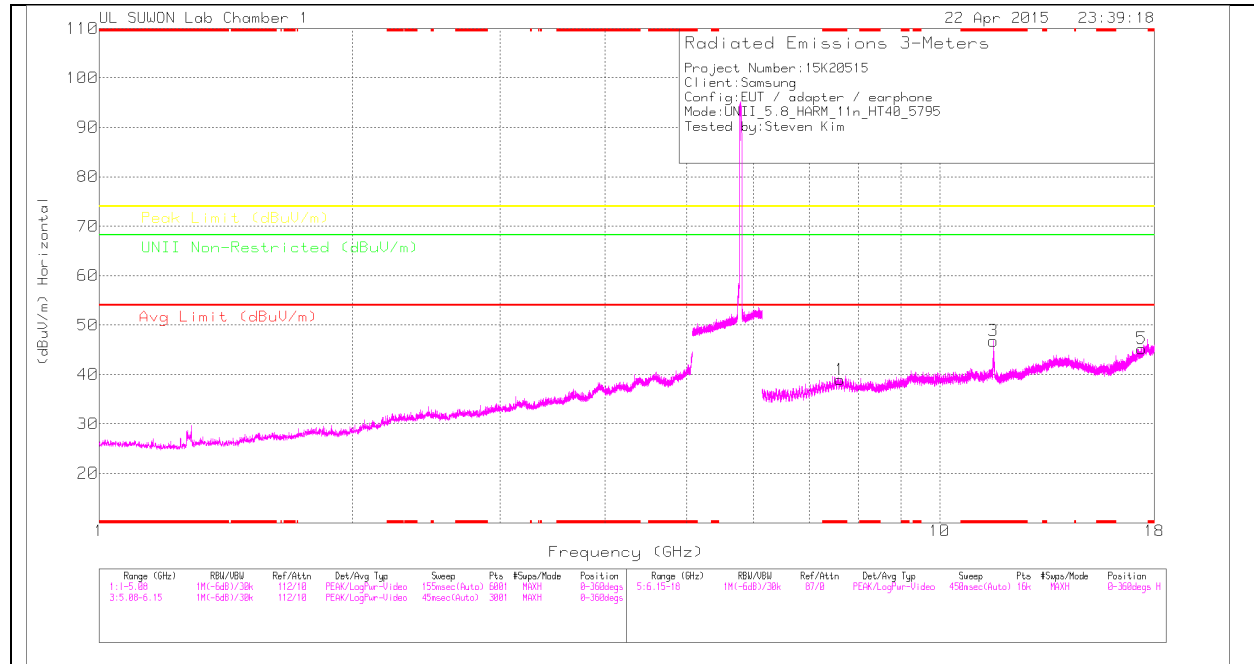
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.514	36.85	PK1	38.6	-20.7	0	54.75	-	-	74	-19.25	-	-	162	208	H
* 11.509	23.59	AD1	38.6	-20.7	.61	42.1	54	-11.9	-	-	-	-	162	208	H
* 11.518	39.95	PK1	38.6	-20.7	0	57.85	-	-	74	-16.15	-	-	185	108	V
* 11.509	26.08	AD1	38.6	-20.7	.61	44.59	54	-9.41	-	-	-	-	185	108	V

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

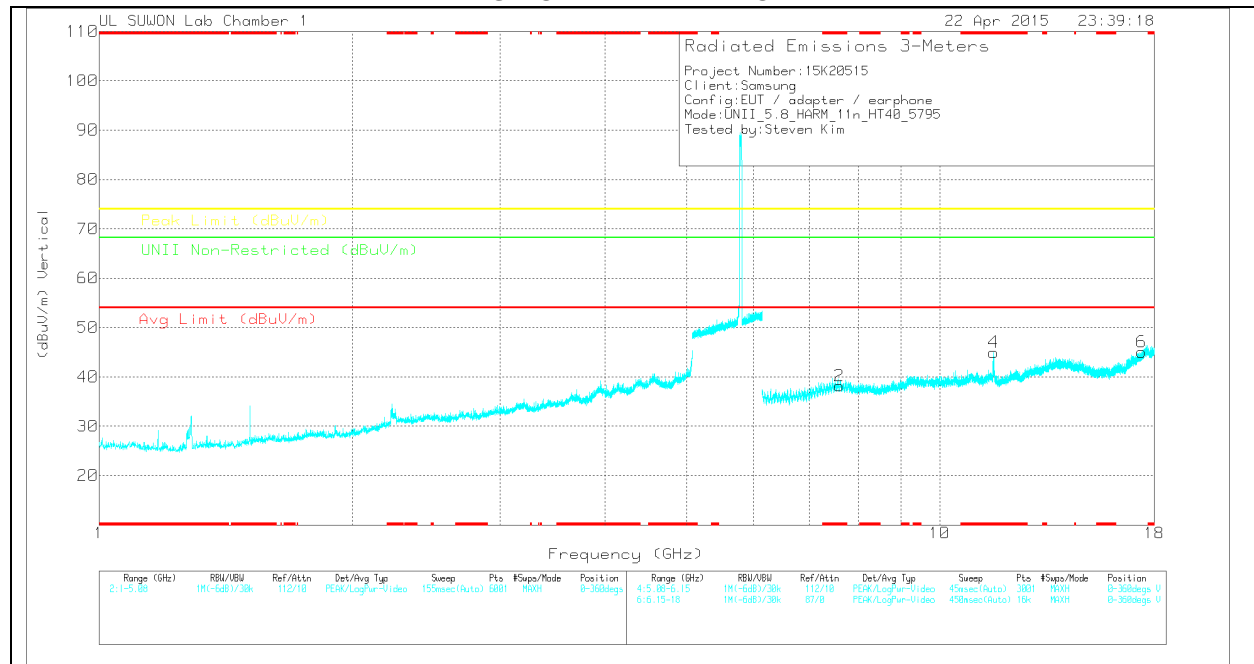
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

HIGH CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 7.613	26.16	PK	37.3	-24.5	0	38.96	-	-	74	-35.04	-	-	0-360	100	H
3	* 11.589	28.7	PK	38.6	-20.5	0	46.8	-	-	74	-27.2	-	-	0-360	100	H
5	17.382	19.05	PK	41.8	-15.6	0	45.25	-	-	-	-	68.2	-22.95	0-360	100	H
2	* 7.599	25.39	PK	37.3	-24.5	0	38.19	-	-	74	-35.81	-	-	0-360	100	V
4	* 11.592	26.87	PK	38.6	-20.5	0	44.97	-	-	74	-29.03	-	-	0-360	100	V
6	17.384	18.83	PK	41.8	-15.6	0	45.03	-	-	-	-	68.2	-23.17	0-360	200	V

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

PK –Peak Detector

Radiated Emissions

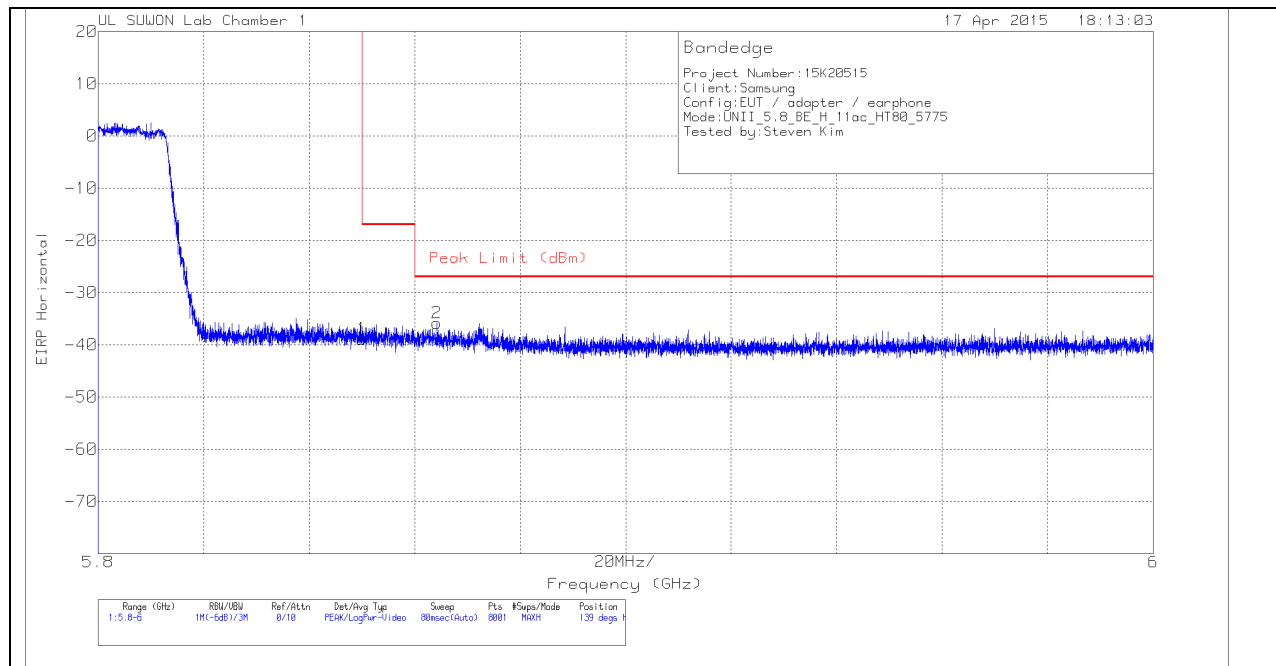
Frequency (GHz)	Meter Reading (dBuV)	Det	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.598	32.88	PK1	38.6	-20.4	0	51.08	-	-	74	-22.92	-	-	144	101	H
* 11.586	25.21	AD1	38.6	-20.5	.61	43.92	54	-10.08	-	-	-	-	144	101	H
* 11.589	36.56	PK1	38.6	-20.5	0	54.66	-	-	74	-19.34	-	-	191	103	V
* 11.589	26.83	AD1	38.6	-20.5	.61	45.54	54	-8.46	-	-	-	-	191	103	V

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

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

11.4.4. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.8 GHz BAND **HARMONICS AND SPURIOUS EMISSIONS** **HORIZONTAL PEAK PLOT**



HORIZONTAL DATA

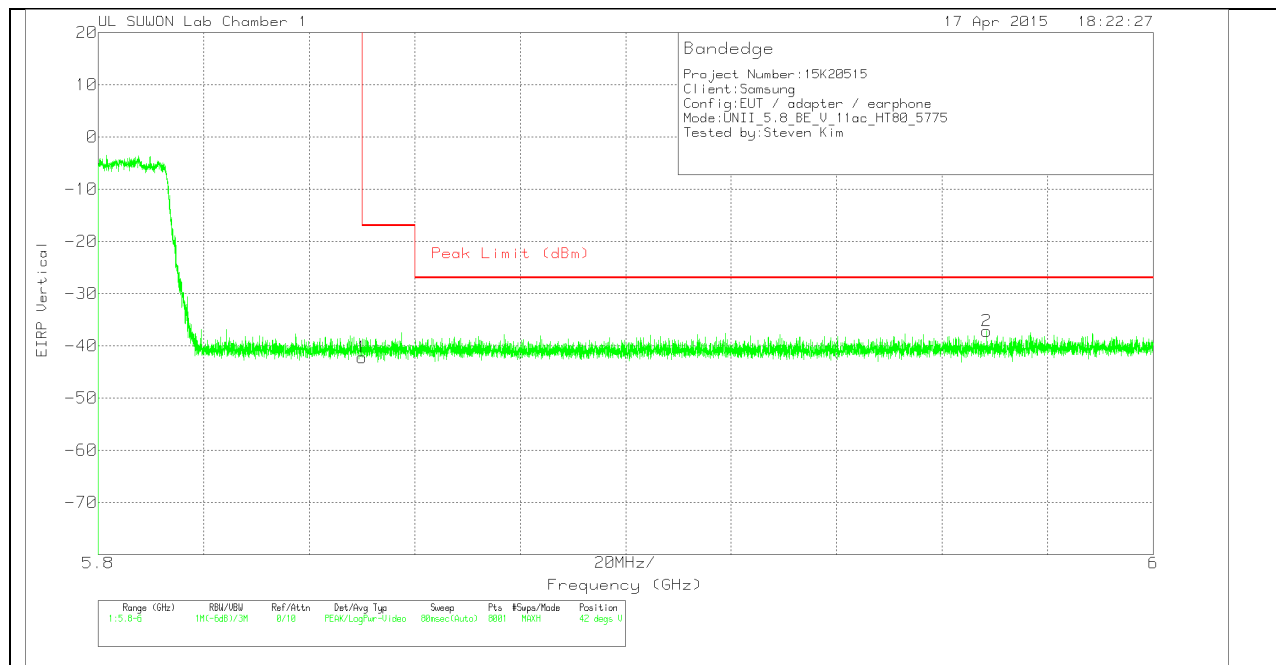
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3115D Factor	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.52	Pk	34.7	-18.9	11.8	0	-38.92	-17	-21.92	139	115	H
2	5.864	-63.55	Pk	34.8	-18.9	11.8	0	-35.85	-27	-8.85	139	115	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK PLOT



VERTICAL DATA

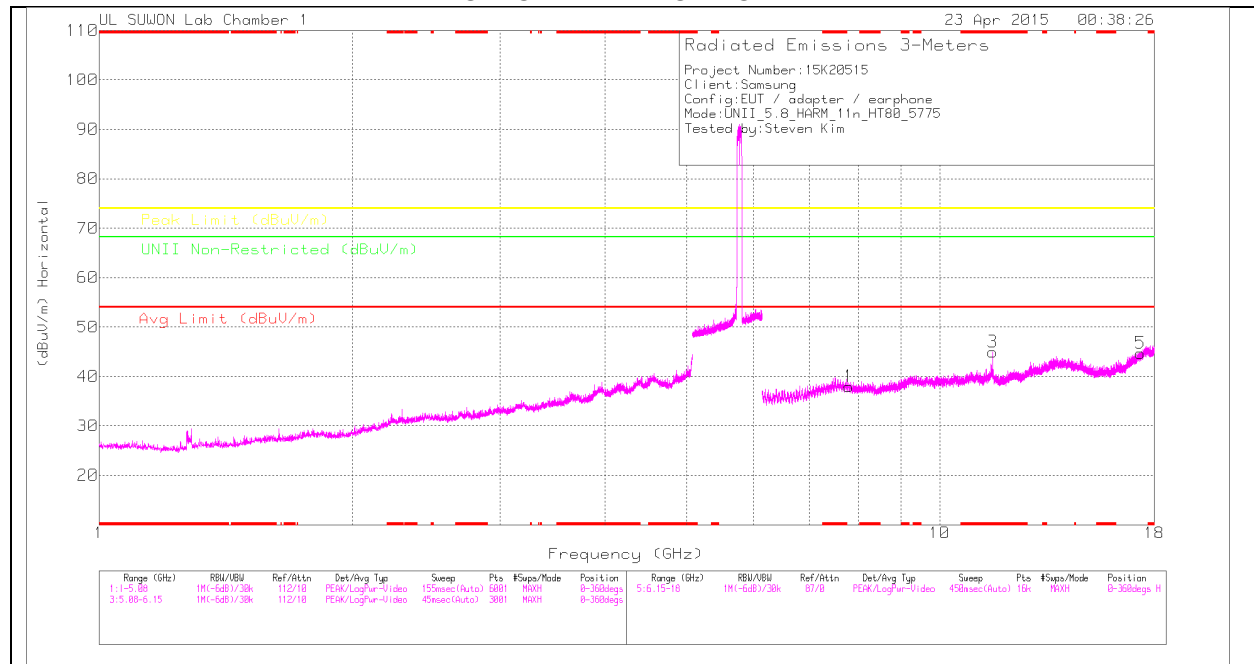
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3115D Factor	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-69.85	Pk	34.7	-18.9	11.8	0	-42.25	-17	-25.25	42	146	V
2	5.968	-65.38	Pk	35.1	-18.7	11.8	0	-37.18	-27	-10.18	42	146	V

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

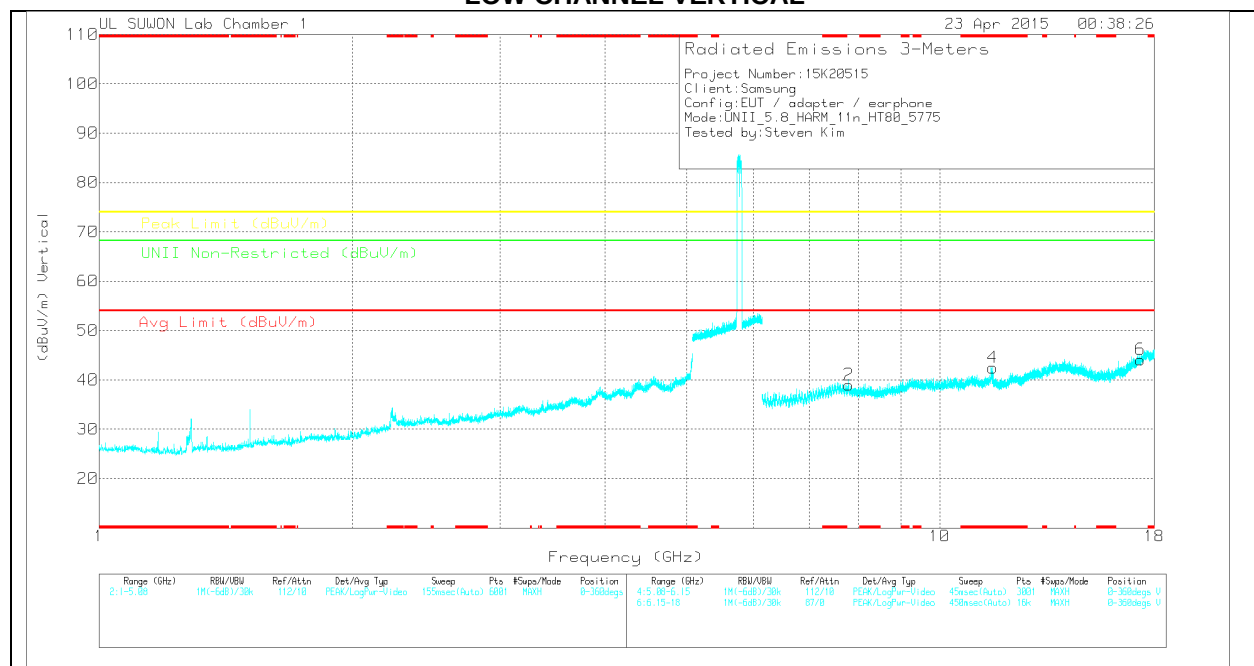
PK - Peak detector

RMS - RMS detection

LOW CHANNEL HORIZONTAL



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	3115D Factor	Path_5_6G HP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	7.797	24.89	PK	37.1	-24	0	37.99	-	-	-	-	68.2	-30.21	0-360	100	H
3	* 11.569	26.97	PK	38.6	-20.6	0	44.97	-	-	74	-29.03	-	-	0-360	200	H
5	17.325	18.73	PK	41.7	-15.7	0	44.73	-	-	-	-	68.2	-23.47	0-360	100	H
2	7.799	25.88	PK	37.1	-24	0	38.98	-	-	-	-	68.2	-29.22	0-360	200	V
4	* 11.564	24.47	PK	38.6	-20.6	0	42.47	-	-	74	-31.53	-	-	0-360	200	V
6	17.326	18.11	PK	41.7	-15.7	0	44.11	-	-	-	-	68.2	-24.09	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	3115D Factor	Path_5_6GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.567	34.81	PK1	38.6	-20.6	0	52.81	-	-	74	-21.19	-	-	142	103	H
* 11.559	22.52	AD1	38.6	-20.6	1.14	41.66	54	-12.34	-	-	-	-	142	103	H
* 11.567	35.57	PK1	38.6	-20.6	0	53.57	-	-	74	-20.43	-	-	161	157	V
* 11.569	22.57	AD1	38.6	-20.6	1.14	41.71	54	-12.29	-	-	-	-	161	157	V

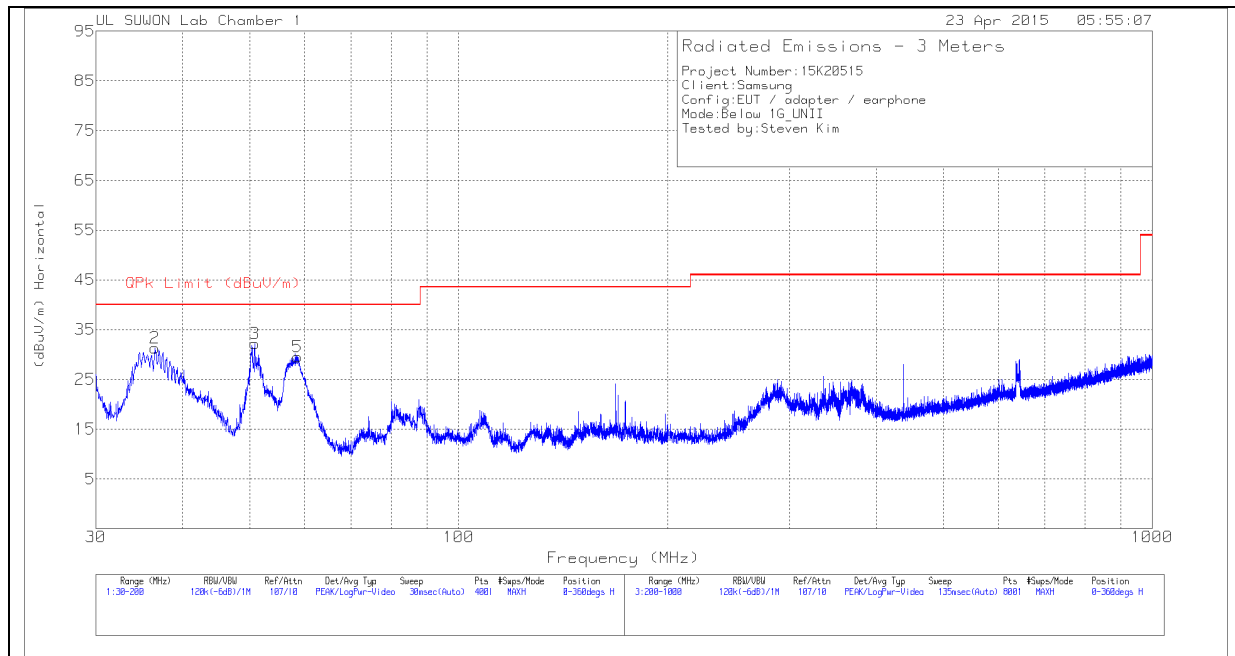
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

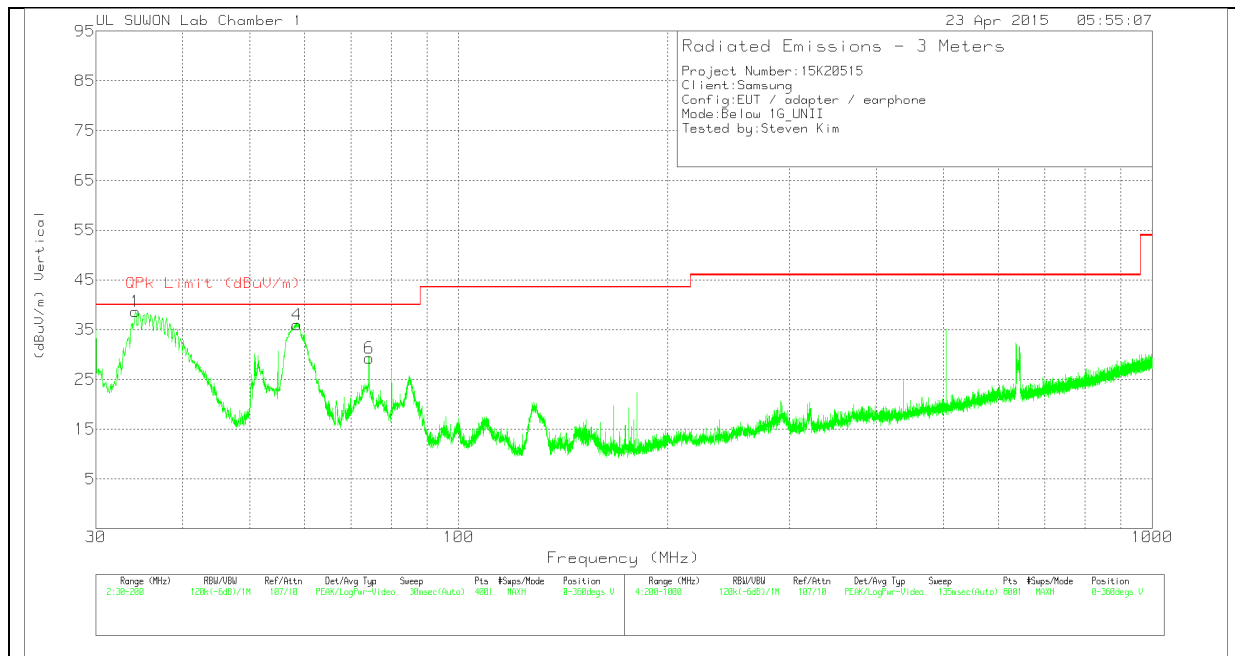
AD1 - KDB789033 Method: AD Primary Power Average

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	VULB9163-750	Bi-Log	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	36.46	50.64	Pk	11.1	-30.4	31.34	40	-8.66	0-360	300	H
3	50.825	48.51	Pk	13.8	-30.1	32.21	40	-7.79	0-360	400	H
5	58.645	46.71	Pk	12.8	-30	29.51	40	-10.49	0-360	400	H
1	34.2075	58.63	Pk	10.4	-30.4	38.63	40	-1.37	0-360	100	V
4	58.5175	53.17	Pk	12.8	-30	35.97	40	-4.03	0-360	100	V
6	74.2425	50.51	Pk	8.5	-29.7	29.31	40	-10.69	0-360	100	V

Pk - Peak detector

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163-750	Bi-Log	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
34.4247	52.43	Qp	10.5	-30.4	32.53	40	-7.47	28	130	V
58.3826	51.65	Qp	12.8	-30	34.45	40	-5.55	219	129	V

Qp - Quasi-Peak detector

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.

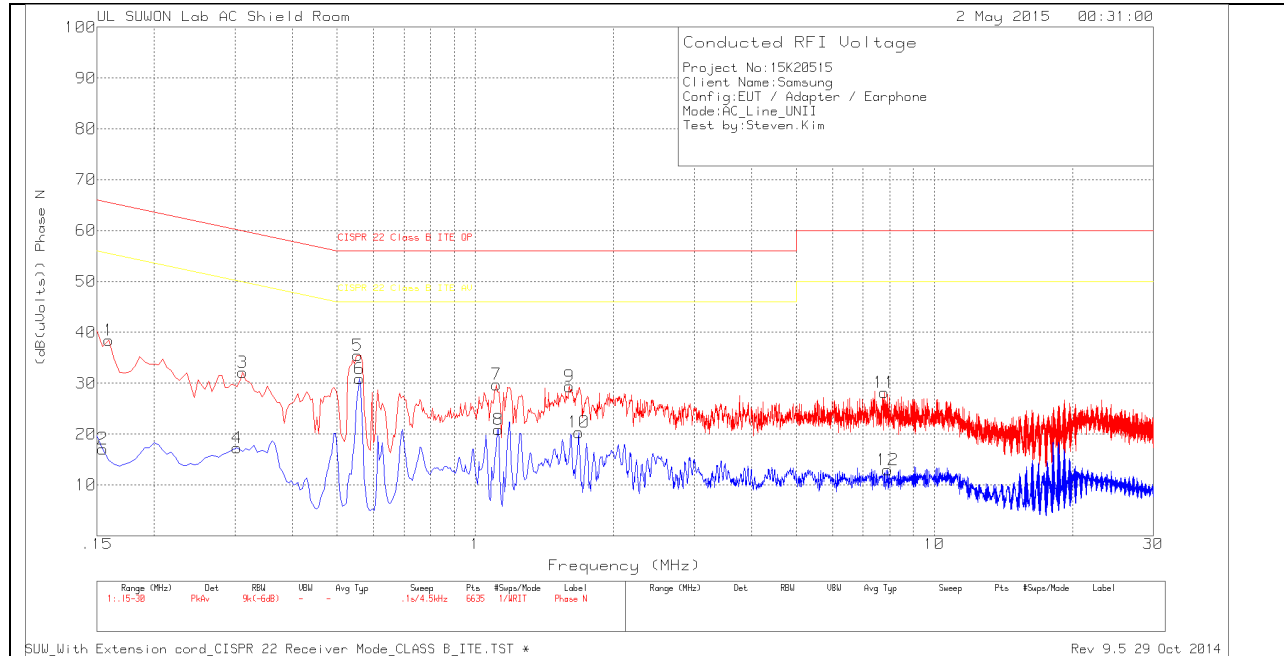
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

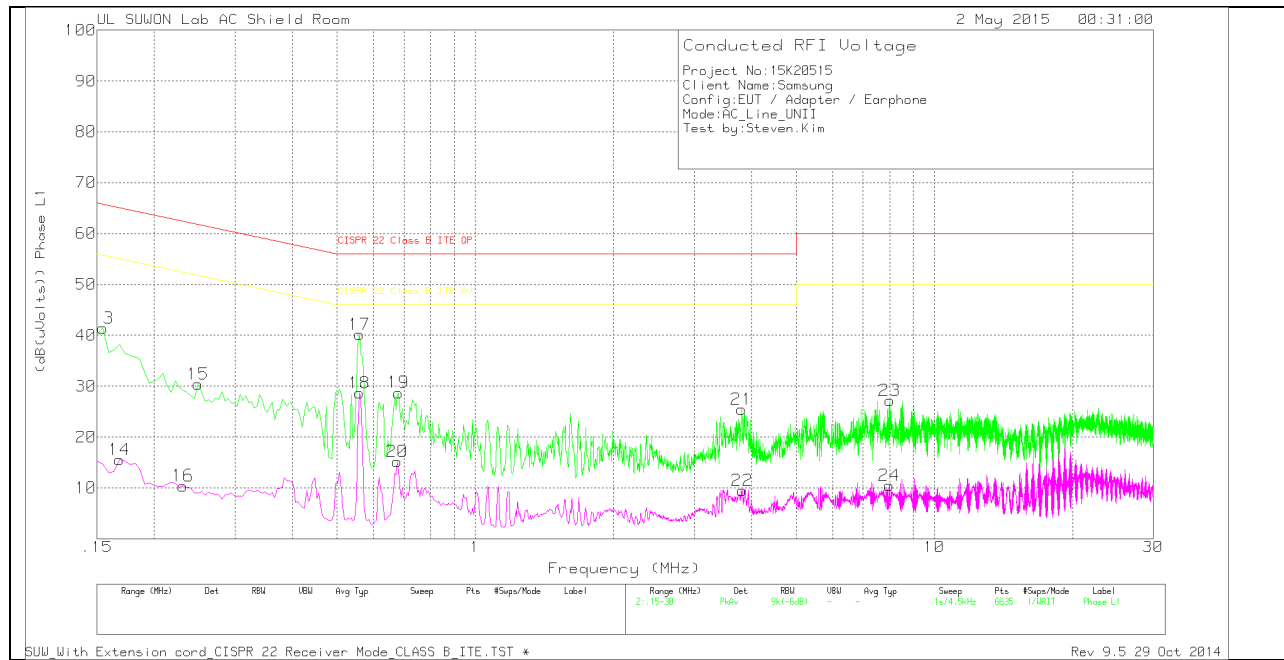
Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN HPF ON and Extension cord	CE Shield Room	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
1	.159	28.41	Pk	10	0	38.41	65.52	-27.11	-	-
2	.1545	7.2	Av	9.9	0	17.1	-	-	55.75	-38.65
3	.312	22.25	Pk	9.9	0	32.15	59.92	-27.77	-	-
4	.303	7.39	Av	9.9	0	17.29	-	-	50.16	-32.87
5	.555	25.36	Pk	10.1	0	35.46	56	-20.54	-	-
6	.5595	20.8	Av	10.1	0	30.9	-	-	46	-15.1
7	1.113	19.92	Pk	9.8	0	29.72	56	-26.28	-	-
8	1.122	11.03	Av	9.8	0	20.83	-	-	46	-25.17
9	1.6035	19.45	Pk	9.8	.1	29.35	56	-26.65	-	-
10	1.68	10.42	Av	9.8	.1	20.32	-	-	46	-25.68
11	7.782	18.13	Pk	9.9	.1	28.13	60	-31.87	-	-
12	7.917	2.99	Av	9.9	.1	12.99	-	-	50	-37.01

Pk - Peak detector

Av - Average detection

LINE 2 PLOT



LINE 2 RESULTS

Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_w ith extension cord_L1	CE Shield Room	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
13	.1545	31.49	Pk	9.9	0	41.39	65.75	-24.36	-	-
14	.168	5.32	Av	10.2	0	15.52	-	-	55.06	-39.54
15	.249	20.75	Pk	9.7	0	30.45	61.79	-31.34	-	-
16	.231	.62	Av	9.8	0	10.42	-	-	52.41	-41.99
17	.5595	30.11	Pk	10.1	0	40.21	56	-15.79	-	-
18	.5595	18.58	Av	10.1	0	28.68	-	-	46	-17.32
19	.681	18.63	Pk	10.1	0	28.73	56	-27.27	-	-
20	.6765	5.05	Av	10.1	0	15.15	-	-	46	-30.85
21	3.8085	15.51	Pk	9.8	.1	25.41	56	-30.59	-	-
22	3.8175	-.36	Av	9.8	.1	9.54	-	-	46	-36.46
23	7.9935	17.21	Pk	9.9	.1	27.21	60	-32.79	-	-
24	7.989	.47	Av	9.9	.1	10.47	-	-	50	-39.53

Pk - Peak detector

Av - Average detection

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 8 A9.3

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

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

FCC

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

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

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

Table 2: Applicability of DFS requirements during normal operation

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

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

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

Maximum Transmit Power	Value (see notes)
E.I.R.P. $\geq$ 200 mill watt	-64 dBm
E.I.R.P. $<$ 200 mill watt and power spectral density $<$ 10 dBm/MHz	-62 dBm
E.I.R.P. $<$ 200 mill watt that do not meet power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. Note 3: E.I.R.P. is based on the highest antenna gain. For MIMO devices refer to KDB publication 662911 D01.	

Table 4: DFS Response requirement values

Parameter	Value
<i>Non-occupancy period</i>	30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds (See Note 1)
<i>Channel Closing Transmission Time</i>	200 milliseconds + approx. 60 milliseconds over remaining 10 second period. (See Notes 1 and 2)
<i>U-NII Detection Bandwidth</i>	Minimum 100% of the U- NII 99% transmission power bandwidth. (See Note 3)
Note 1: <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The <i>Channel Closing Transmission Time</i> is comprised of 200 milliseconds starting at the beginning of the <i>Channel Move Time</i> plus any additional intermittent control signals required to facilitate a <i>Channel</i> move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the <i>U-NII Detection Bandwidth</i> detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

Table 5 – Short Pulse Radar Test Waveforms

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

Table 6 – Long Pulse Radar Test Signal

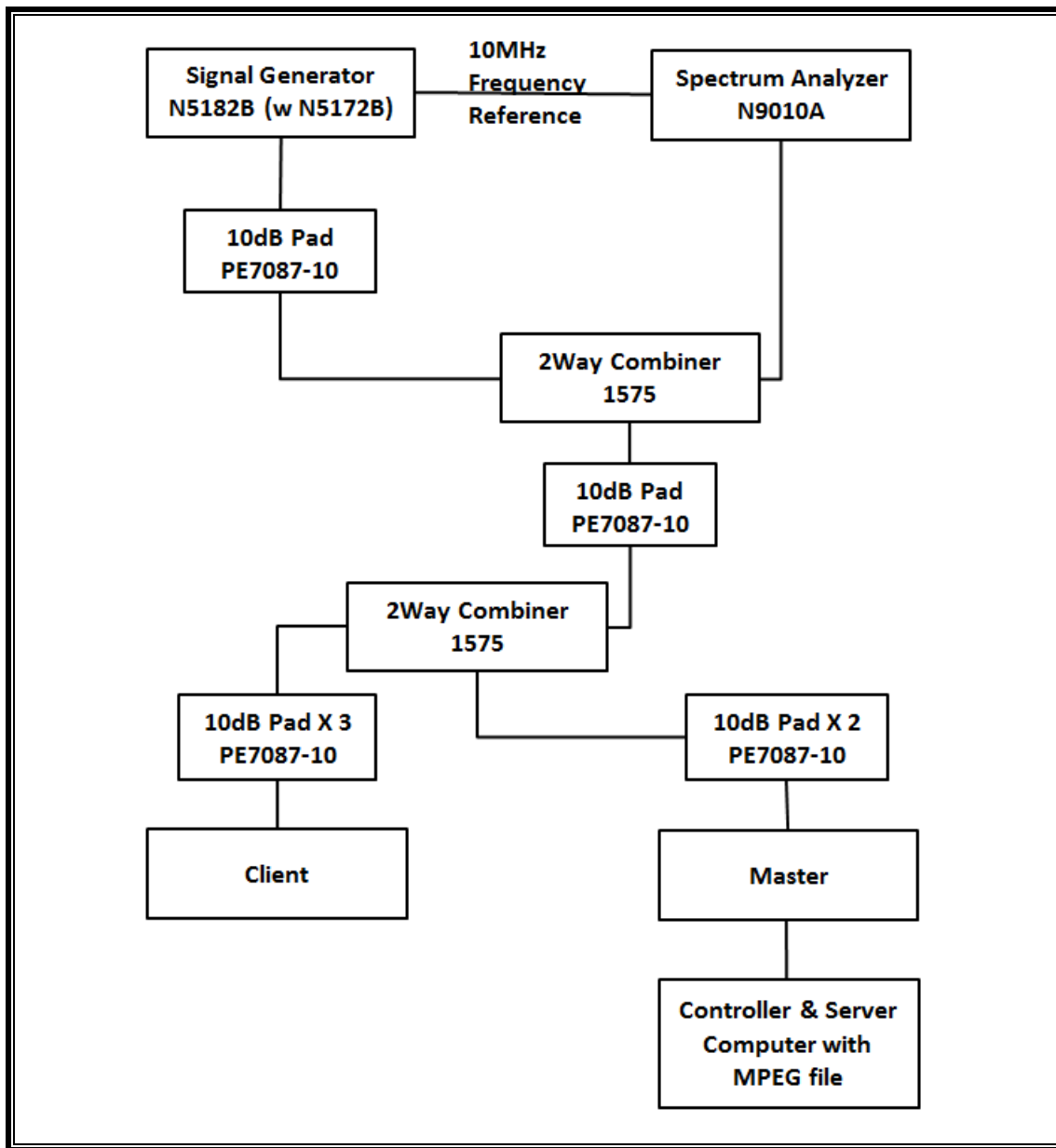
Radar Waveform Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

Table 7 – Frequency Hopping Radar Test Signal

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

14.1.1. TEST AND MEASUREMENT SYSTEM

CONDUCTED METHOD SYSTEM BLOCK DIAGRAM



SYSTEM OVERVIEW

The short pulse and long pulse signal generating system utilizes the Keysite Signal Studio for Pulse Building as N5172B. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

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

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

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

SYSTEM CALIBRATION

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

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

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

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.

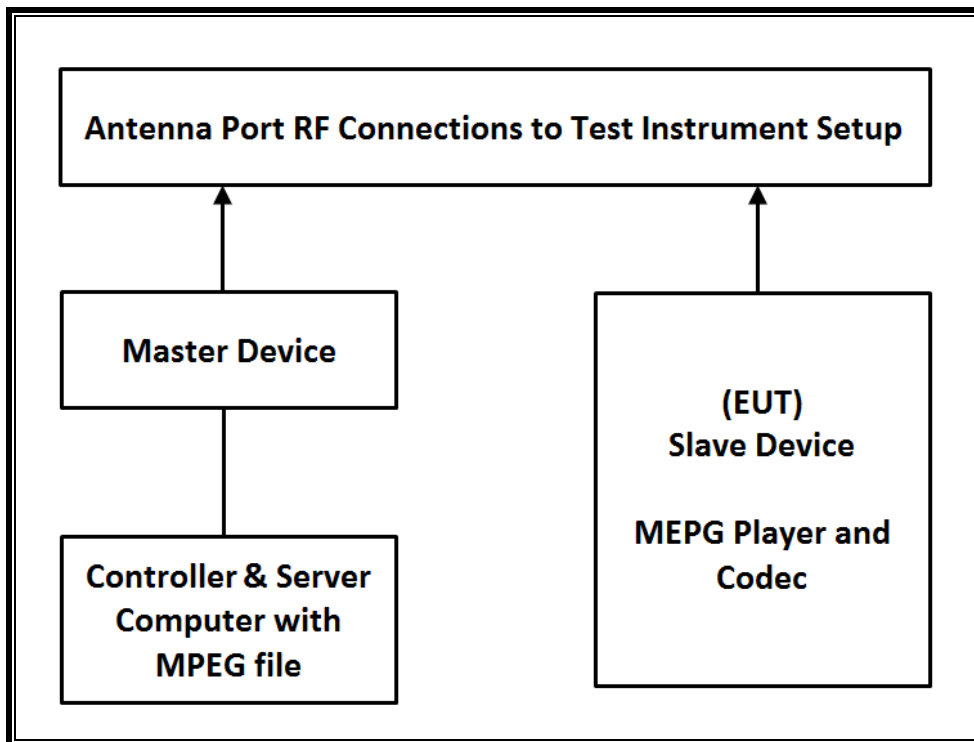
TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	S/N	Cal Due
Spectrum Analyzer, 7 GHz	Agilent / HP	N9010A	MY54200580	09-23-15
Vector Signal Generator, 6GHz	Agilent / HP	N5182B	MY53051241	09-23-15

14.1.2. SETUP OF EUT

CONDUCTED 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-CAP3702E-A-K9	FTX182276QX	LDK102087
Notebook PC (Controller/Server)	HP	HP EliteDesk 800 G1 TWR	CZC4125J25	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 14.37 dBm EIRP in the 5250-5350 MHz band and 14.37 dBm EIRP in the 5470-5725 MHz band.

The antenna assembly utilized two antenna with the EUT one is -1.27 dBi, and the other is -1.95 dBi.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is -64 dBm. After correction for procedural adjustments, the required conducted 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 that meets or exceeds the minimum required loading was generated by transferring a data stream from the controller/server PC to the EUT using iPerf version 2.0.5 software package.

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

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

The software installed in the 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: LDK102087. The minimum antenna gain for the Master Device is 6 dBi.

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

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

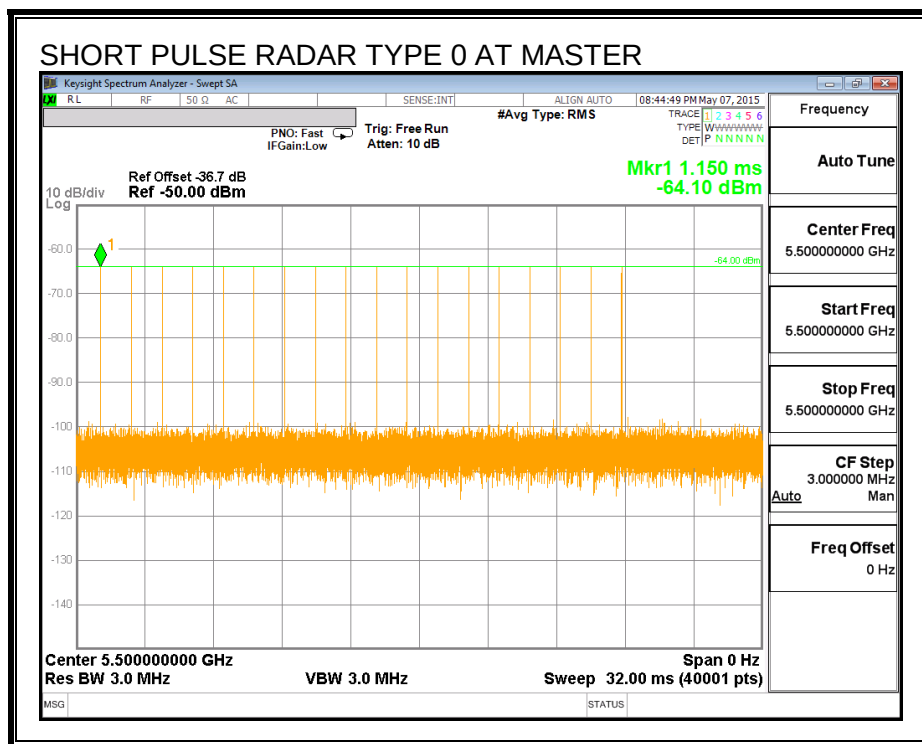
14.2. RESULTS FOR 20 MHz BANDWIDTH

14.2.1. TEST CHANNEL

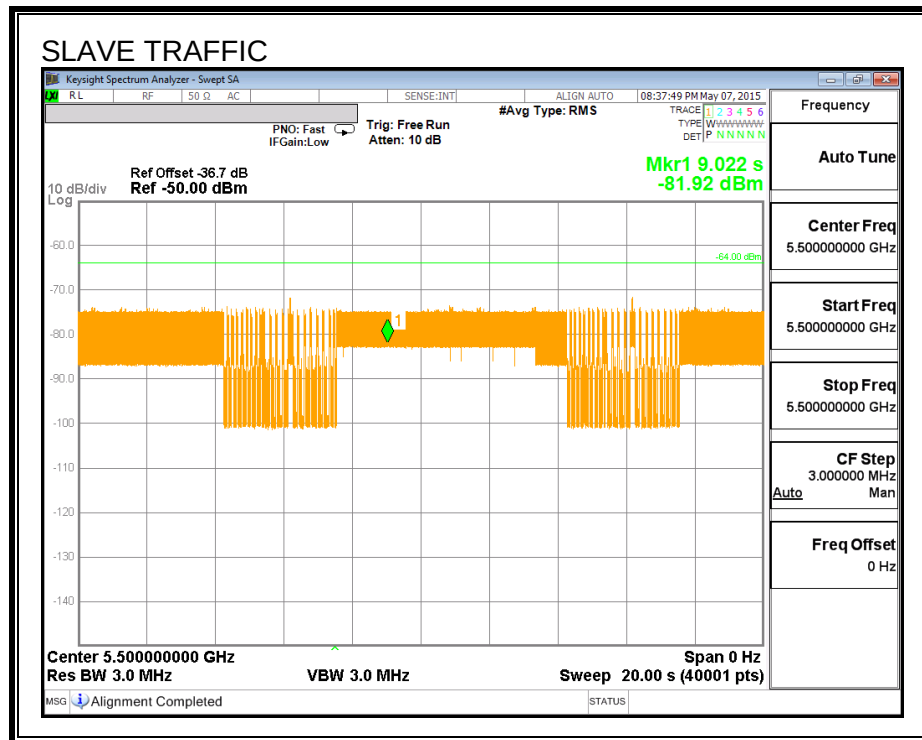
All tests were performed at a channel center frequency of 5500 MHz.

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

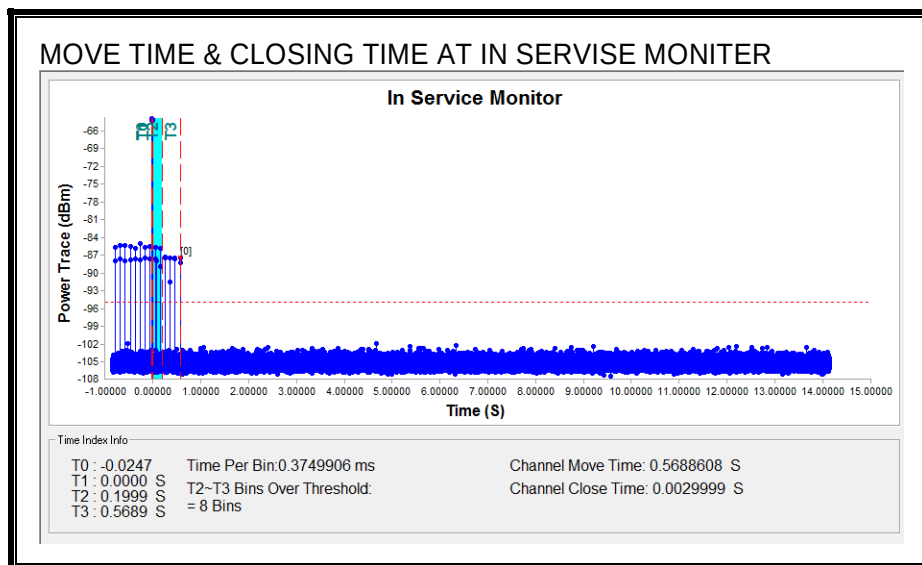
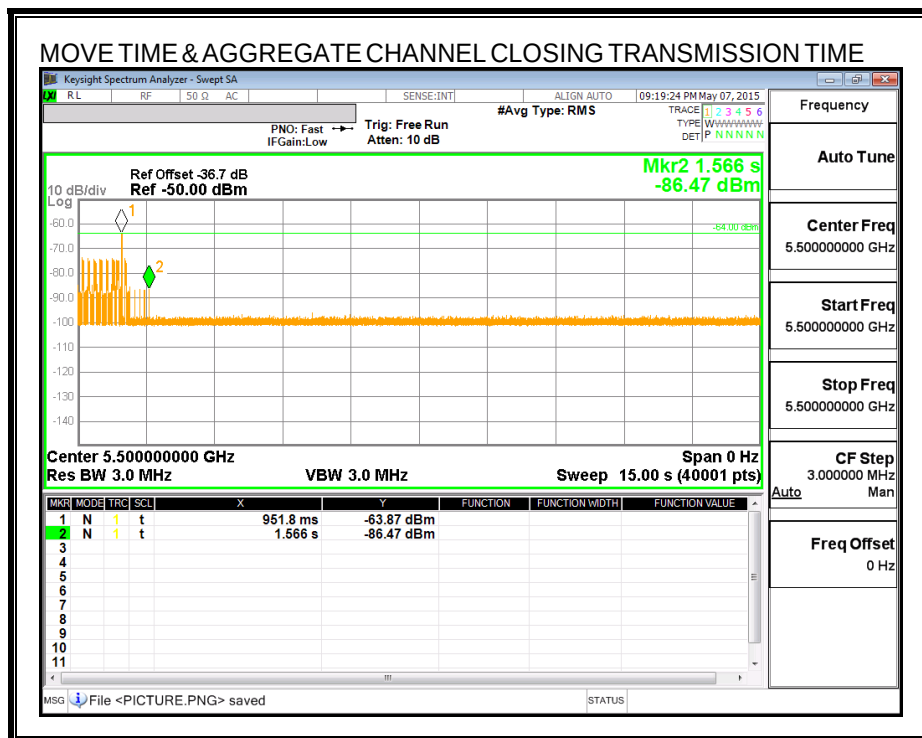
Channel Move Time (sec)	Limit (sec)
0.569	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
3.000	60

MOVE TIME & CHANNEL CLOSING TIME

AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

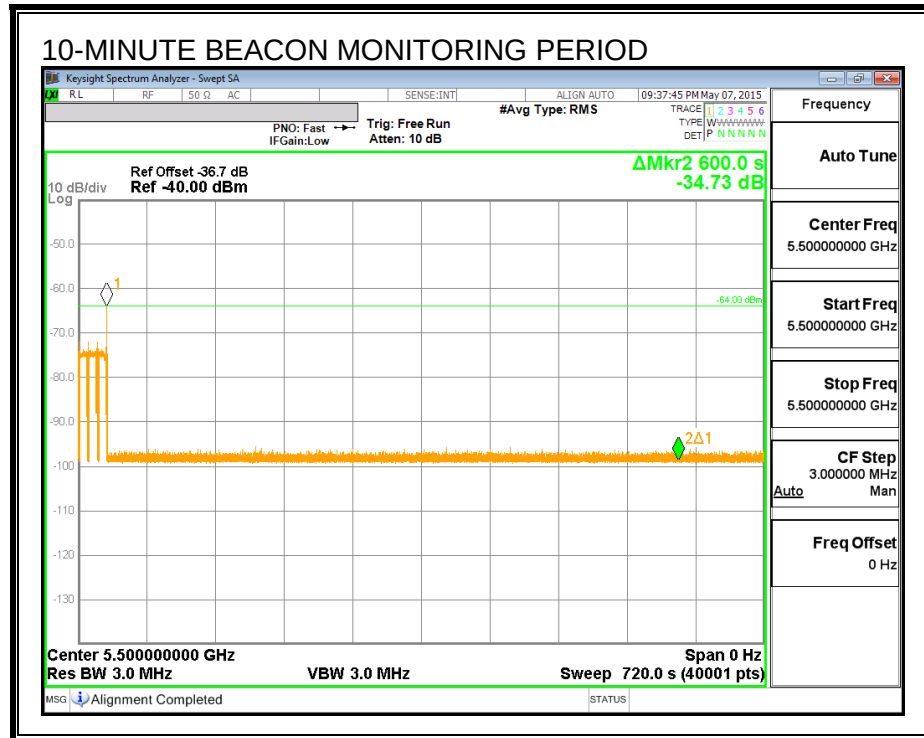
No transmissions are observed during the aggregate monitoring period.



NON-OCCUPANCY PERIOD

RESULTS

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



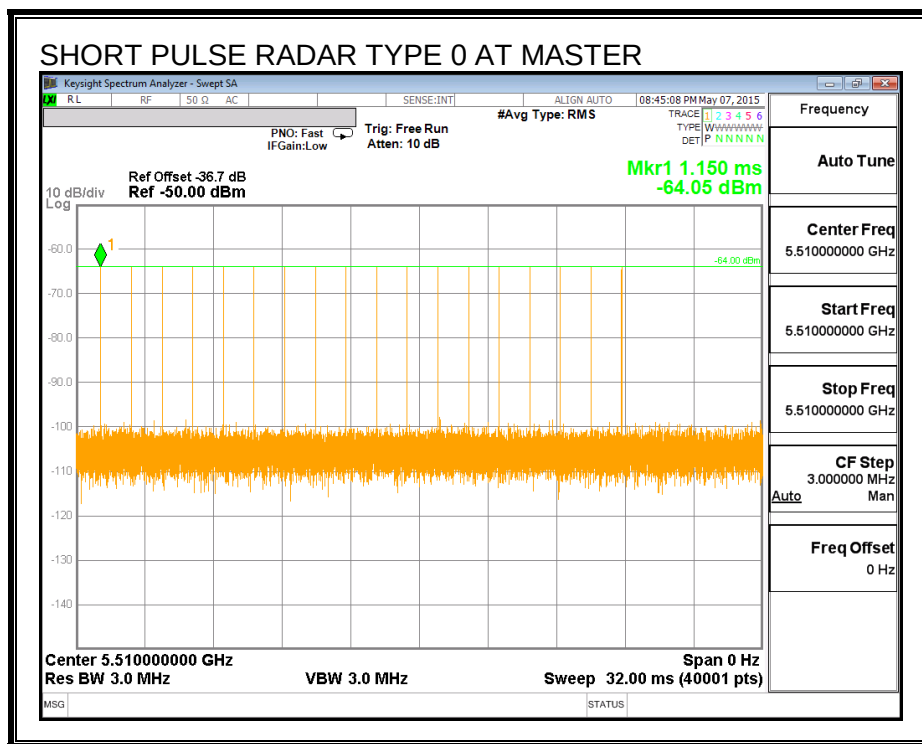
14.3. RESULTS FOR 40 MHz BANDWIDTH

14.3.1. TEST CHANNEL

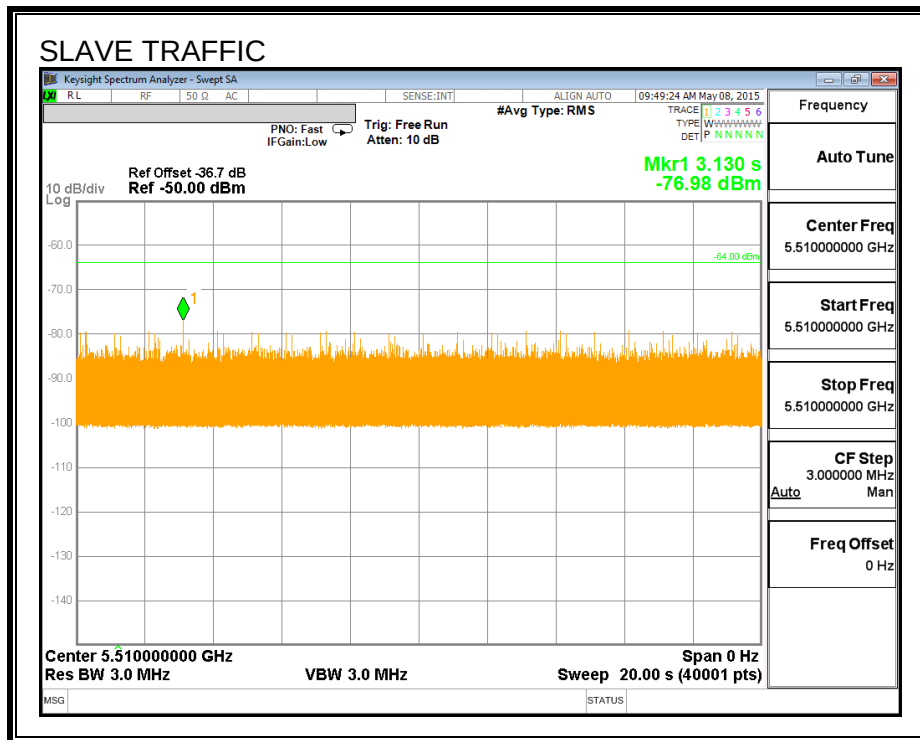
All tests were performed at a channel center frequency of 5510 MHz.

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

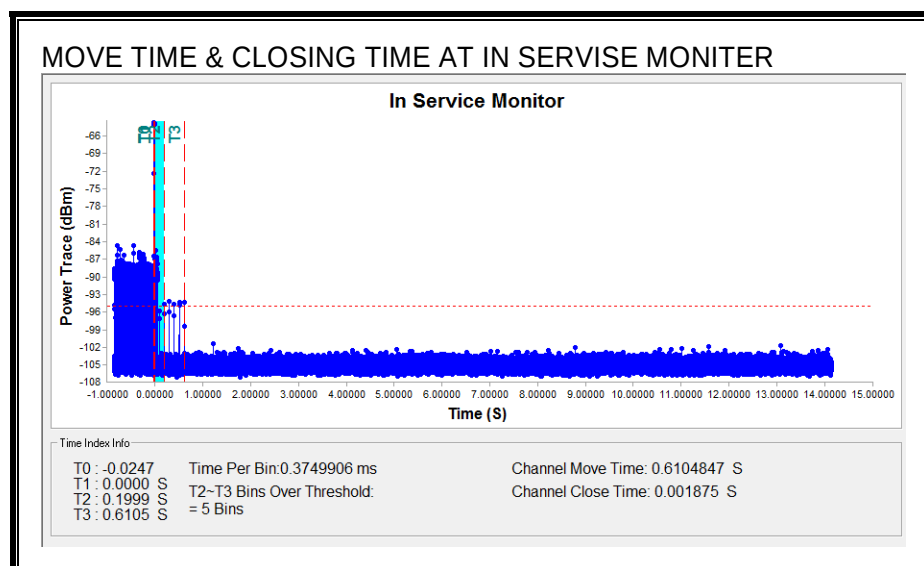
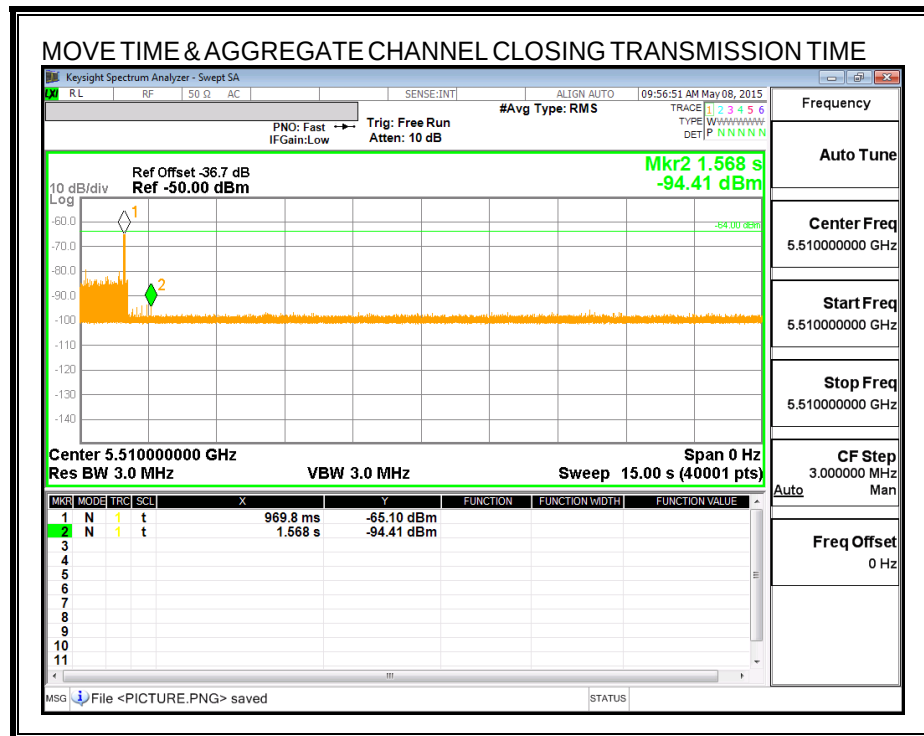
Channel Move Time (sec)	Limit (sec)
0.610	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
1.875	60

MOVE TIME & CHANNEL CLOSING TIME

AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

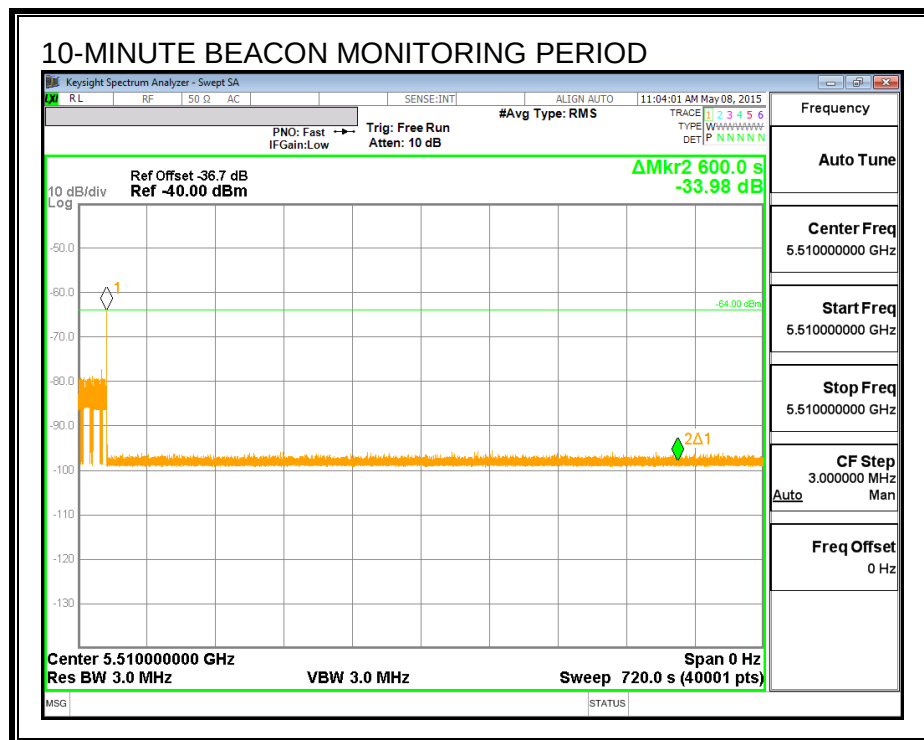
No transmissions are observed during the aggregate monitoring period.



NON-OCCUPANCY PERIOD

RESULTS

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



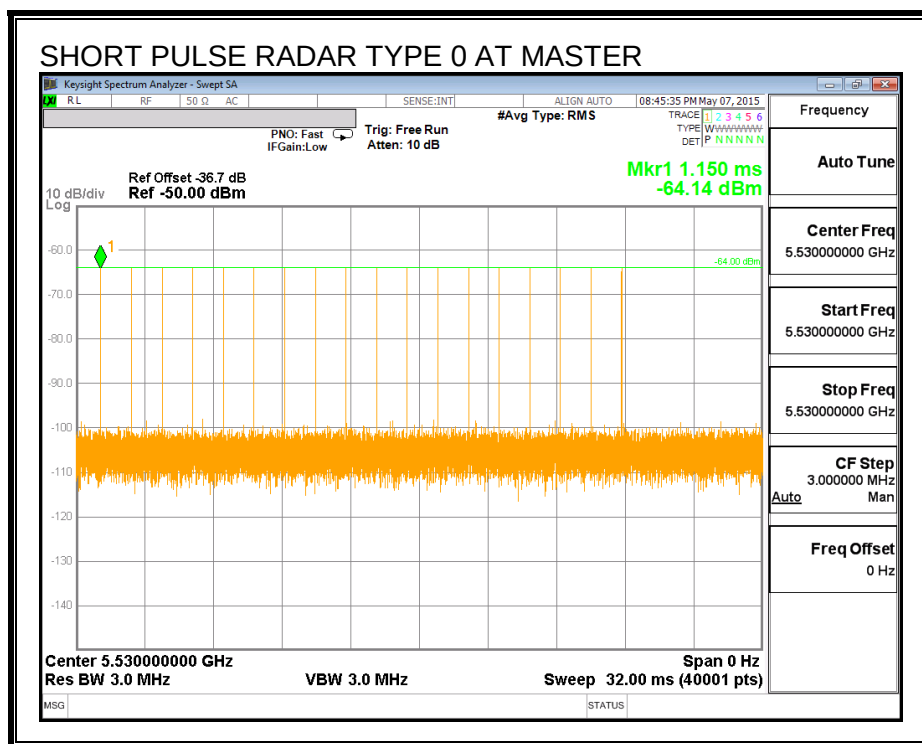
14.4. RESULTS FOR 80 MHz BANDWIDTH

14.4.1. TEST CHANNEL

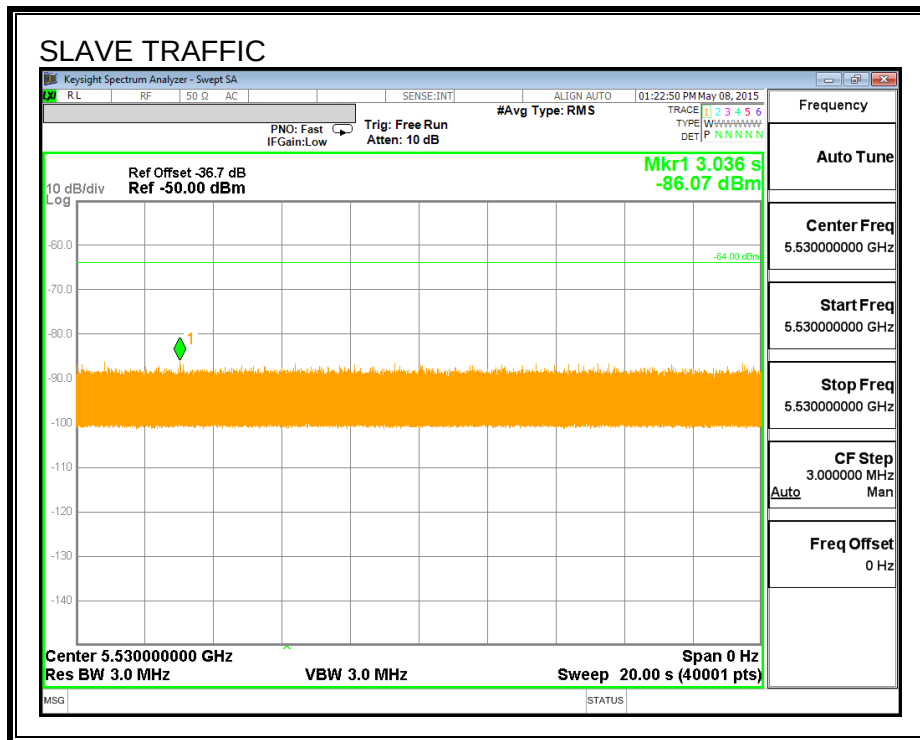
All tests were performed at a channel center frequency of 5530 MHz.

14.4.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



14.4.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

14.4.4. MOVE AND CLOSING TIME

REPORTING NOTES

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

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

The aggregate channel closing transmission time is calculated as follows:

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

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

RESULTS

Channel Move Time (sec)	Limit (sec)
0.543	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
3.000	60

MOVE TIME & CHANNEL CLOSING TIME

AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.

