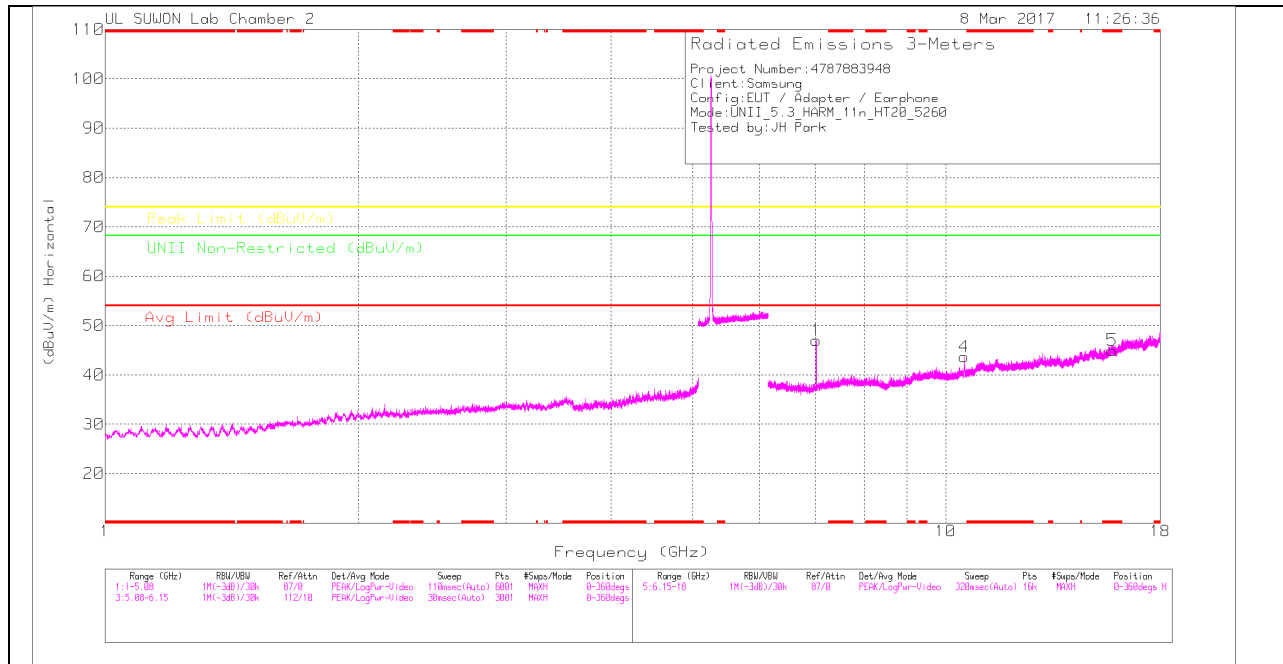
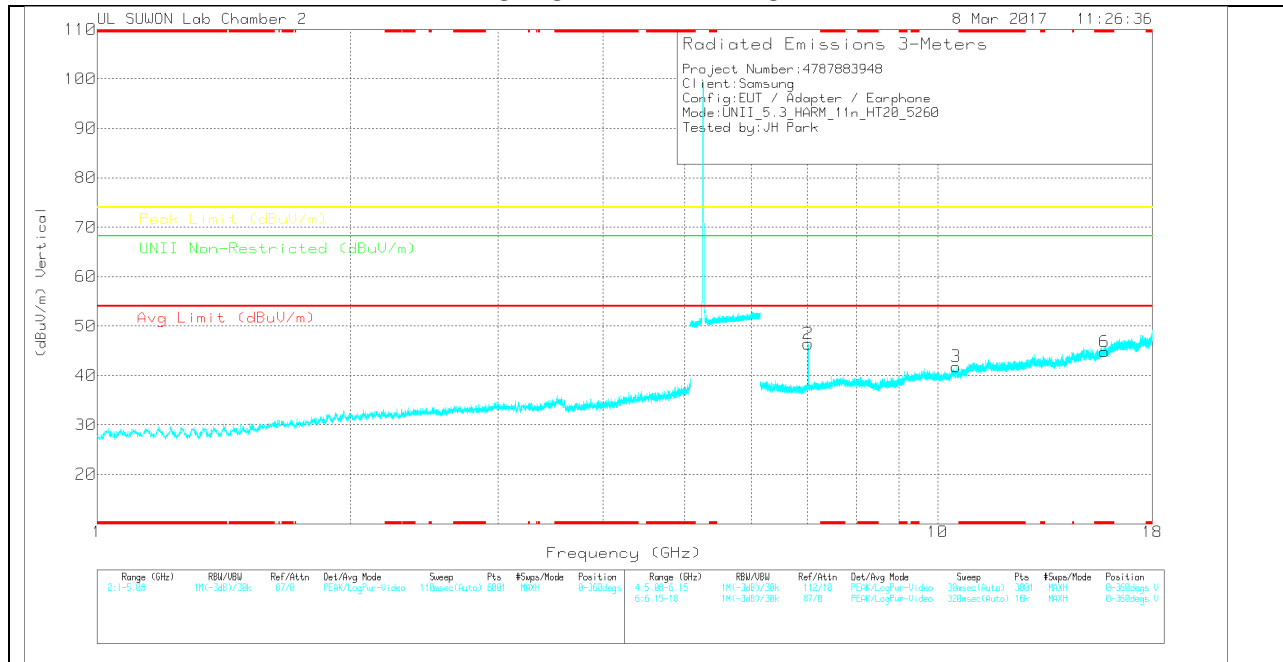


HARMONICS AND SPURIOUS EMISSIONS

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	3117/0016 8724_150 619	6GHz_HP[d B]	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	7.014	31.67	PK	35.6	-20.3	0	46.97	-	-	-	-	68.2	-21.23	0-360	150	H
4	10.521	22.56	PK	37.7	-16.6	0	43.66	-	-	-	-	68.2	-24.54	0-360	150	H
5	* 15.779	19.57	PK	40.2	-14.8	0	44.97	-	-	74	-29.03	-	-	0-360	150	H
2	7.013	31.13	PK	35.6	-20.3	0	46.43	-	-	-	-	68.2	-21.77	0-360	150	V
3	10.522	20.69	PK	37.7	-16.6	0	41.79	-	-	-	-	68.2	-26.41	0-360	150	V
6	* 15.783	19.31	PK	40.2	-14.7	0	44.81	-	-	74	-29.19	-	-	0-360	250	V

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

PK – Peak Detector

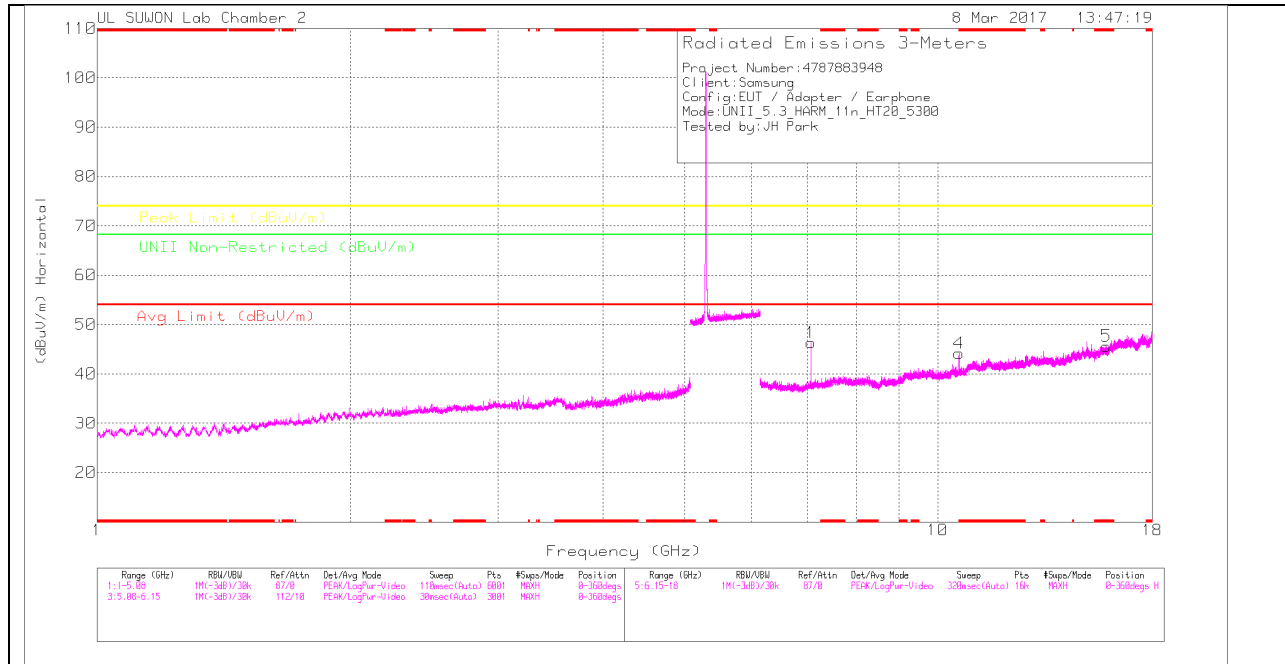
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 24_150619	6GHz_HP[dB]	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
7.013	37.9	PK-U	35.6	-20.3	0	53.2	-	-	-	-	68.2	-15	4	150	H
7.013	37.14	PK-U	35.6	-20.3	0	52.44	-	-	-	-	68.2	-15.76	253	164	V
10.513	31.53	PK-U	37.7	-16.6	0	52.63	-	-	-	-	68.2	-15.57	228	143	V
10.522	34.54	PK-U	37.7	-16.6	0	55.64	-	-	-	-	68.2	-12.56	238	144	H

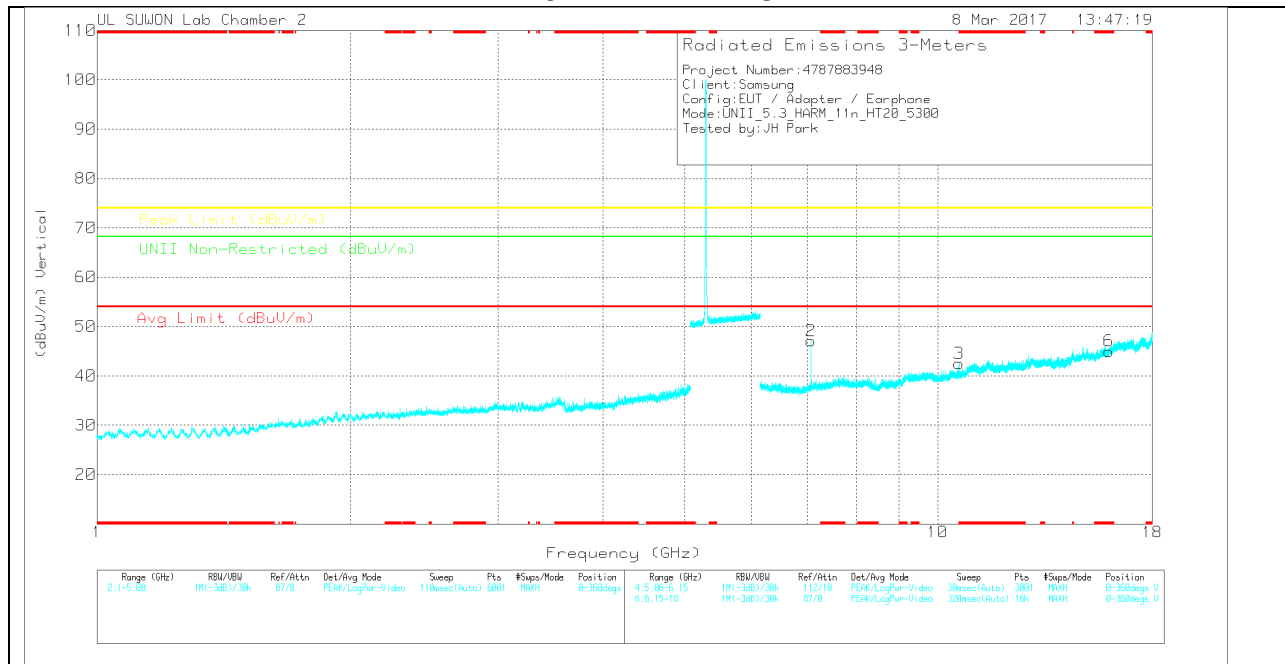
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

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	3117/0016 8724_150 619	6GHz_HP[d B]	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	7.066	31.21	PK	35.6	-20.5	0	46.31	-	-	-	-	68.2	-21.89	0-360	250	H
4	* 10.602	22.97	PK	37.8	-16.6	0	44.17	-	-	74	-29.83	-	-	0-360	150	H
5	* 15.868	20.12	PK	40.3	-14.8	0	45.62	-	-	74	-28.38	-	-	0-360	250	H
2	7.066	32.01	PK	35.6	-20.5	0	47.11	-	-	-	-	68.2	-21.09	0-360	150	V
3	* 10.602	21.3	PK	37.8	-16.6	0	42.5	-	-	74	-31.5	-	-	0-360	150	V
6	* 15.985	18.8	PK	40.5	-14.3	0	45	-	-	74	-29	-	-	0-360	250	V

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

PK – Peak Detector

Radiated Emissions

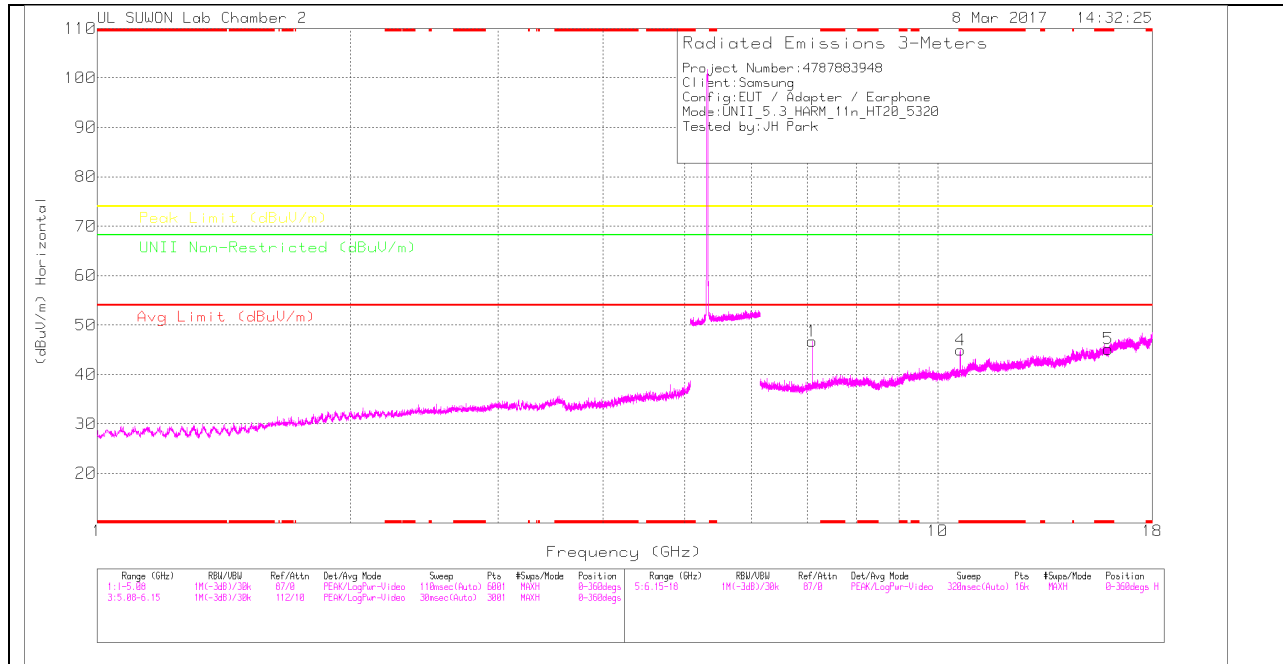
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 24_150619	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.067	37.64	PK-U	35.6	-20.5	0	52.74	-	-	-	-	68.2	-15.46	5	162	H
7.067	37.52	PK-U	35.6	-20.6	0	52.52	-	-	-	-	68.2	-15.68	229	147	V
* 10.601	31.5	PK-U	37.8	-16.6	0	52.7	-	-	74	-21.3	-	-	253	153	V
* 10.601	23.69	ADR	37.8	-16.6	.24	45.13	54	-8.87	-	-	-	-	277	172	H
* 10.602	36.55	PK-U	37.8	-16.6	0	57.75	-	-	74	-16.25	-	-	277	172	H
* 10.602	18.63	ADR	37.8	-16.6	.24	40.07	54	-13.93	-	-	-	-	253	153	V

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

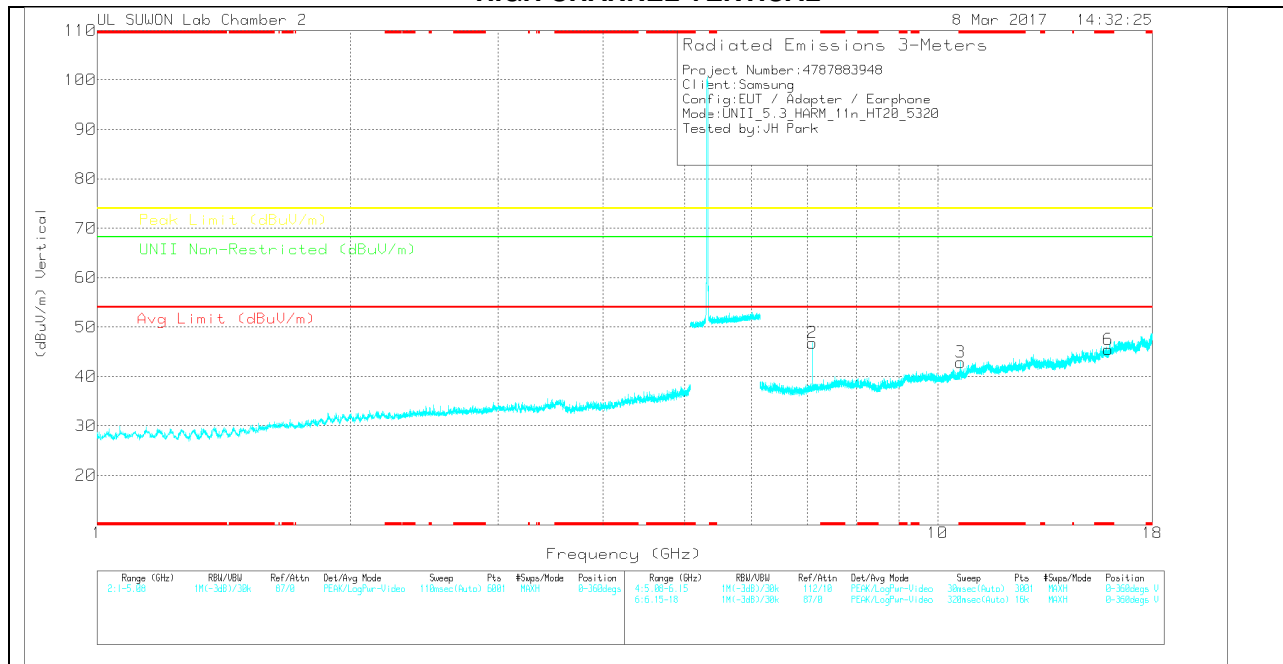
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS 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	3117[0016 8724], 150 619	6GHz_HP[dB]	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	7.093	32.22	PK	35.6	-21.1	0	46.72	-	-	-	-	68.2	-21.48	0-360	150	H
4	* 10.642	23.72	PK	37.8	-16.6	0	44.92	-	-	74	-29.08	-	-	0-360	150	H
5	* 15.959	19.14	PK	40.4	-14.4	0	45.14	-	-	74	-28.86	-	-	0-360	150	H
2	7.093	32.21	PK	35.6	-21	0	46.81	-	-	-	-	68.2	-21.39	0-360	150	V
3	* 10.64	21.66	PK	37.8	-16.6	0	42.86	-	-	74	-31.14	-	-	0-360	250	V
6	* 15.961	19.44	PK	40.4	-14.4	0	45.44	-	-	74	-28.56	-	-	0-360	150	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117[001687 24], 150619	6GHz_HP[dB]	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
7.093	38.09	PK-U	35.6	-21.1	0	52.59	-	-	-	-	68.2	-15.61	352	168	H
7.093	38.49	PK-U	35.6	-21.1	0	52.99	-	-	-	-	68.2	-15.21	251	169	V
* 10.641	32.39	PK-U	37.8	-16.6	0	53.59	-	-	74	-20.41	-	-	248	157	V
* 10.641	19.41	ADR	37.8	-16.6	.24	40.85	54	-13.15	-	-	-	-	248	157	V
* 10.641	36.09	PK-U	37.8	-16.6	0	57.29	-	-	74	-16.71	-	-	267	179	H
* 10.641	22.56	ADR	37.8	-16.6	.24	44	54	-10	-	-	-	-	267	179	H

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

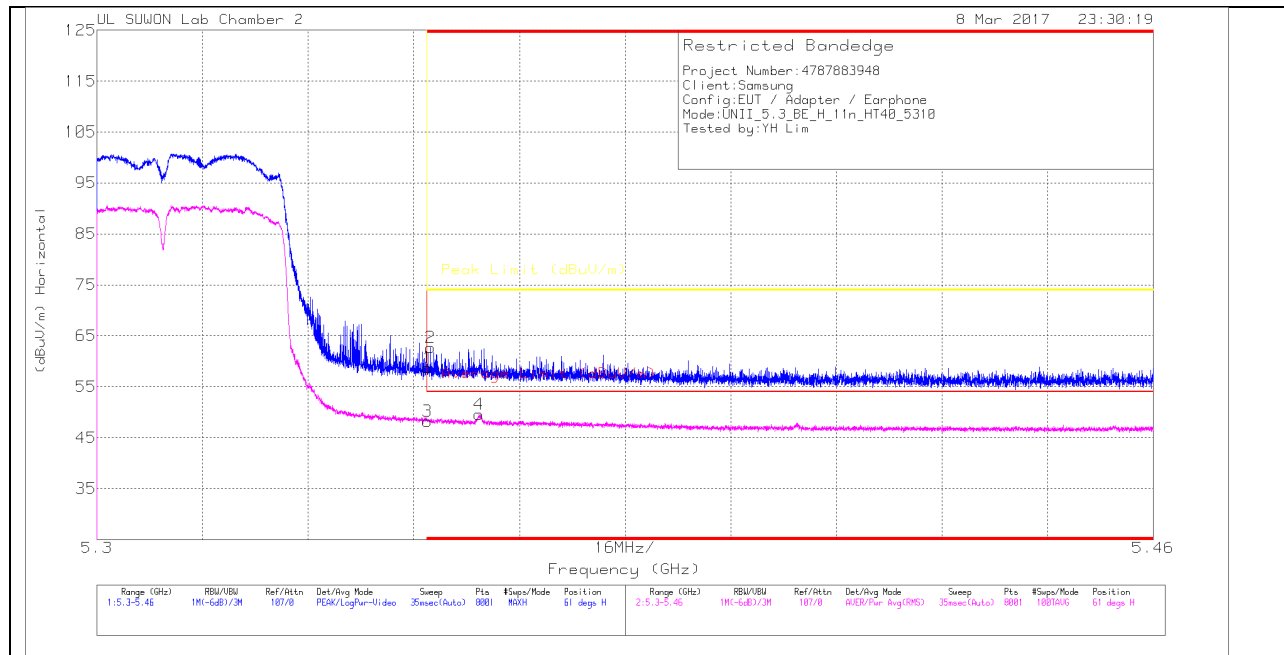
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.2.3. TX ABOVE 1GHz 802.11n HT40 2Tx CDD MODE IN THE 5.3GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

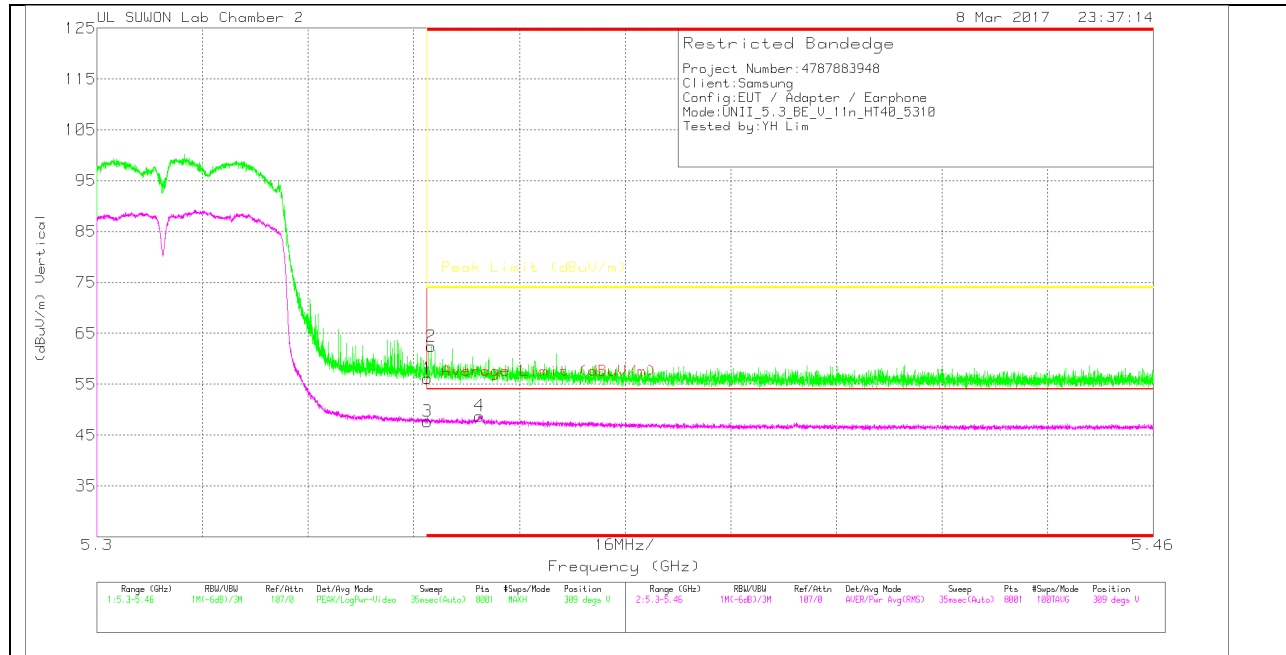
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	39.57	Pk	34.4	-15.2	0	58.77	-	-	74	-15.23	61	184	H
2	* 5.351	43.49	Pk	34.4	-15.2	0	62.69	-	-	74	-11.31	61	184	H
3	* 5.35	28.54	RMS	34.4	-15.2	.48	48.22	54	-5.78	-	-	61	184	H
4	* 5.358	29.91	RMS	34.4	-15.2	.48	49.59	54	-4.41	-	-	61	184	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	10dB(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	36.95	Pk	34.4	-15.2	0	56.15	-	-	74	-17.85	309	129	V
2	* 5.351	43.25	Pk	34.4	-15.2	0	62.45	-	-	74	-11.55	309	129	V
3	* 5.35	27.99	RMS	34.4	-15.2	.48	47.67	54	-6.33	-	-	309	129	V
4	* 5.358	29.1	RMS	34.4	-15.2	.48	48.78	54	-5.22	-	-	309	129	V

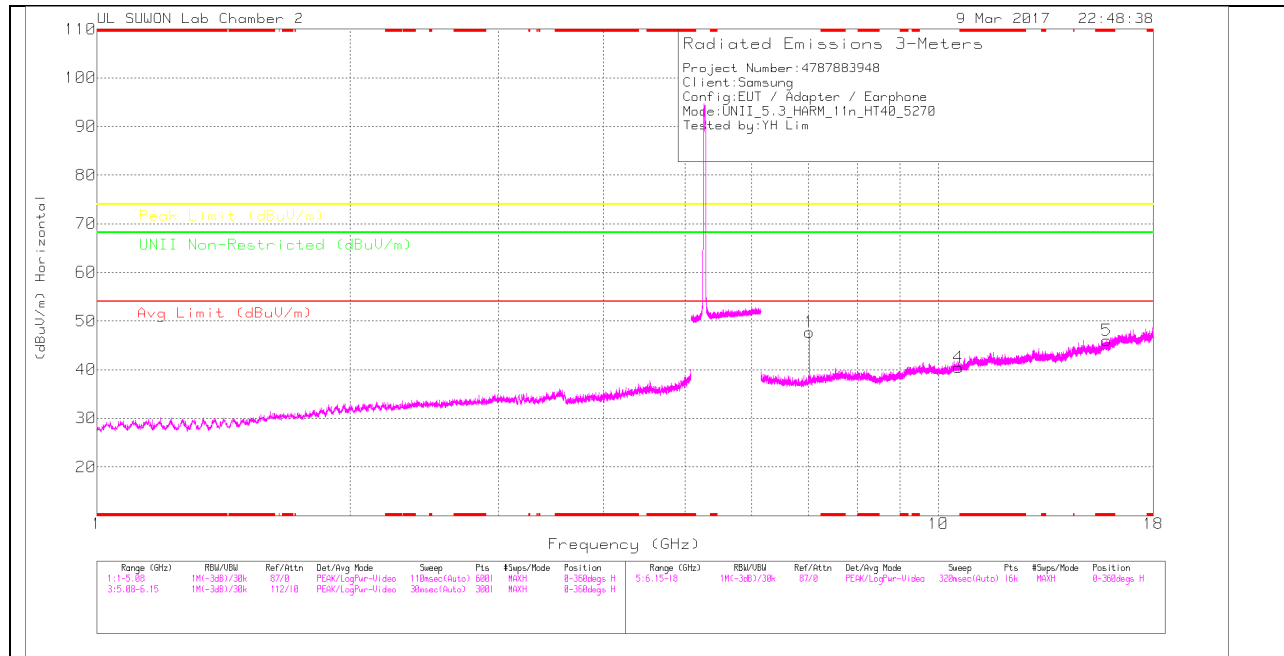
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

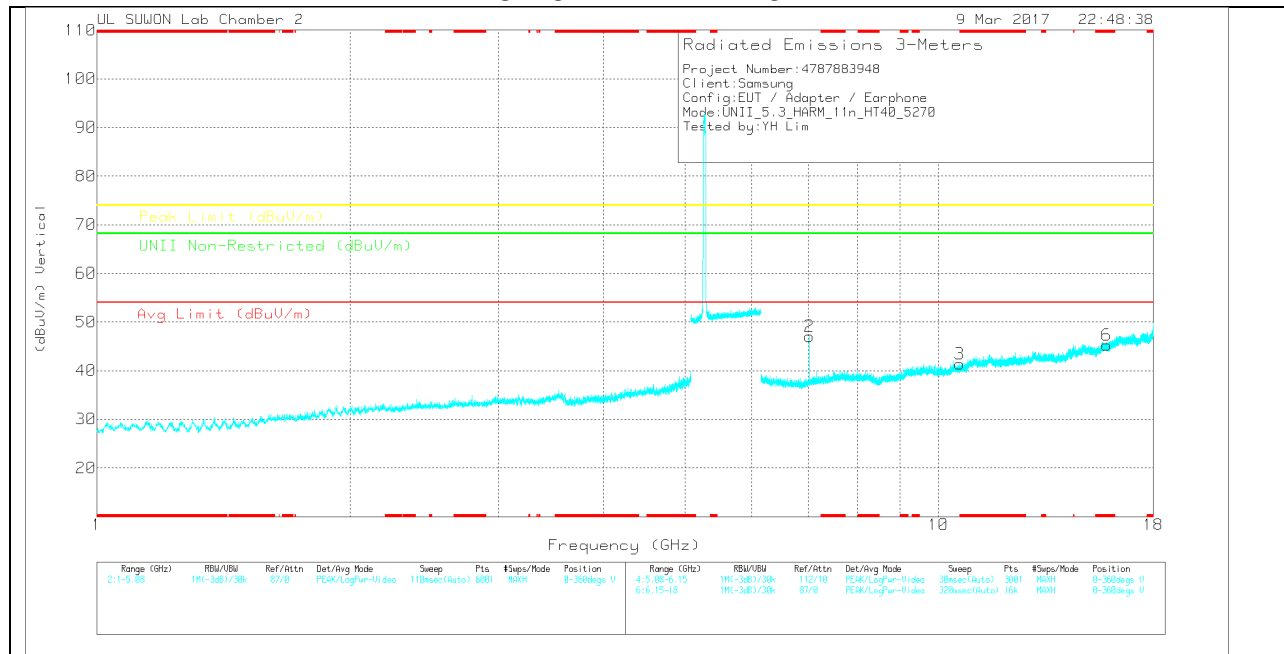
RMS - RMS detection

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	3117(0016 8724)_150 619	6GHz_HP[dB]	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	32.28	PK	35.6	-20.2	0	47.68	-	-	-	-	68.2	-20.52	0-360	250	H
4	10.566	19.17	PK	37.8	-16.5	0	40.47	-	-	-	-	68.2	-27.73	0-360	250	H
5	* 15.838	20.36	PK	40.3	-14.7	0	45.96	-	-	74	-28.04	-	-	0-360	150	H
2	7.026	31.6	PK	35.6	-20.2	0	47	-	-	-	-	68.2	-21.2	0-360	150	V
3	10.599	20.13	PK	37.8	-16.6	0	41.33	-	-	-	-	68.2	-26.87	0-360	150	V
6	* 15.849	19.76	PK	40.3	-14.8	0	45.26	-	-	74	-28.74	-	-	0-360	150	V

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

PK – Peak detector

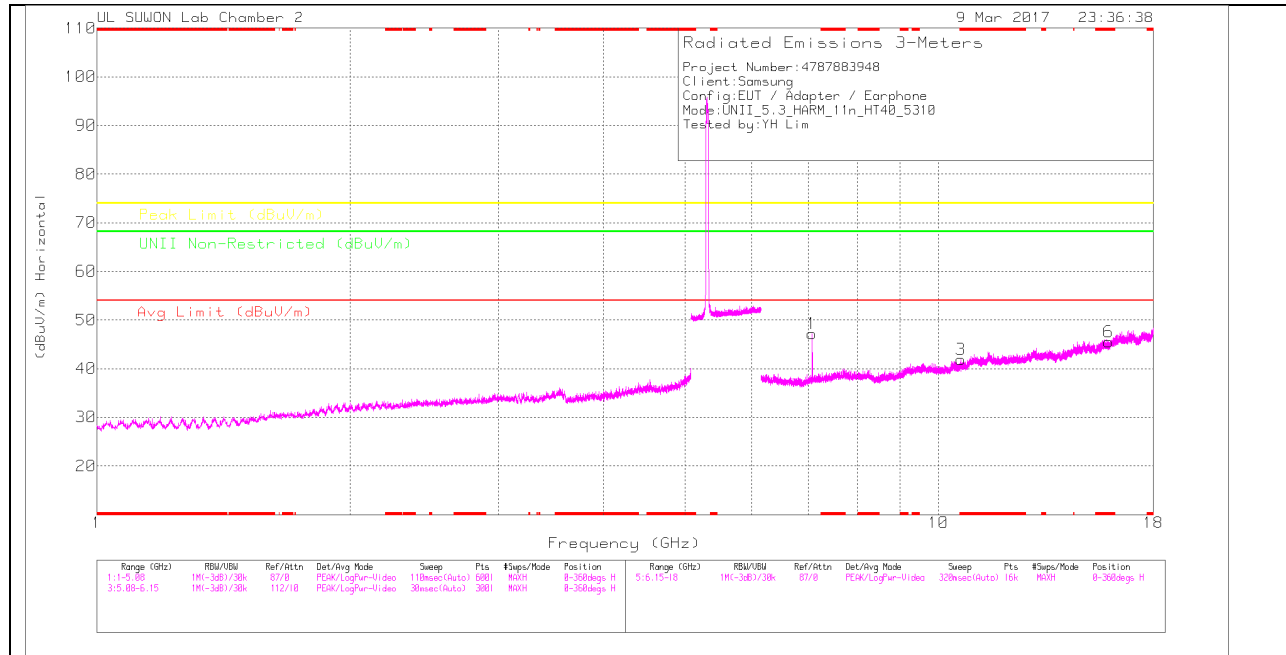
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	6GHz_HP[dB]	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
7.027	37.47	PK-U	35.6	-20.2	0	52.87	-	-	-	-	68.2	-15.33	77	151	H
7.027	36.8	PK-U	35.6	-20.2	0	52.2	-	-	-	-	68.2	-16	232	164	V

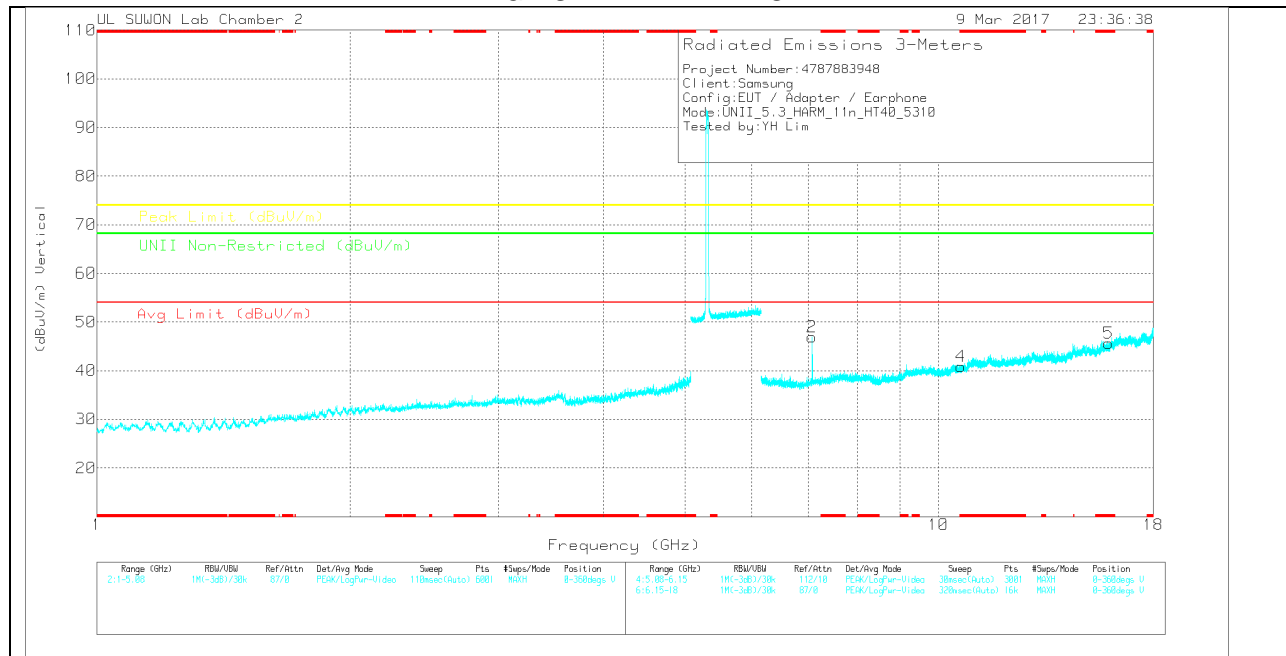
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

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	3117/0016 8724_150 619	6GHz_HP[d B]	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	7.079	32.33	PK	35.6	-20.7	0	47.23	-	-	-	-	68.2	-20.97	0-360	150	H
3	* 10.625	20.73	PK	37.8	-16.7	0	41.83	-	-	74	-32.17	-	-	0-360	150	H
6	* 15.928	19.75	PK	40.4	-14.7	0	45.45	-	-	74	-28.55	-	-	0-360	150	H
2	7.079	32.03	PK	35.6	-20.7	0	46.93	-	-	-	-	68.2	-21.27	0-360	150	V
4	* 10.628	19.69	PK	37.8	-16.7	0	40.79	-	-	74	-33.21	-	-	0-360	150	V
5	* 15.923	19.82	PK	40.4	-14.6	0	45.62	-	-	74	-28.38	-	-	0-360	250	V

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

PK – Peak detector

Radiated Emissions

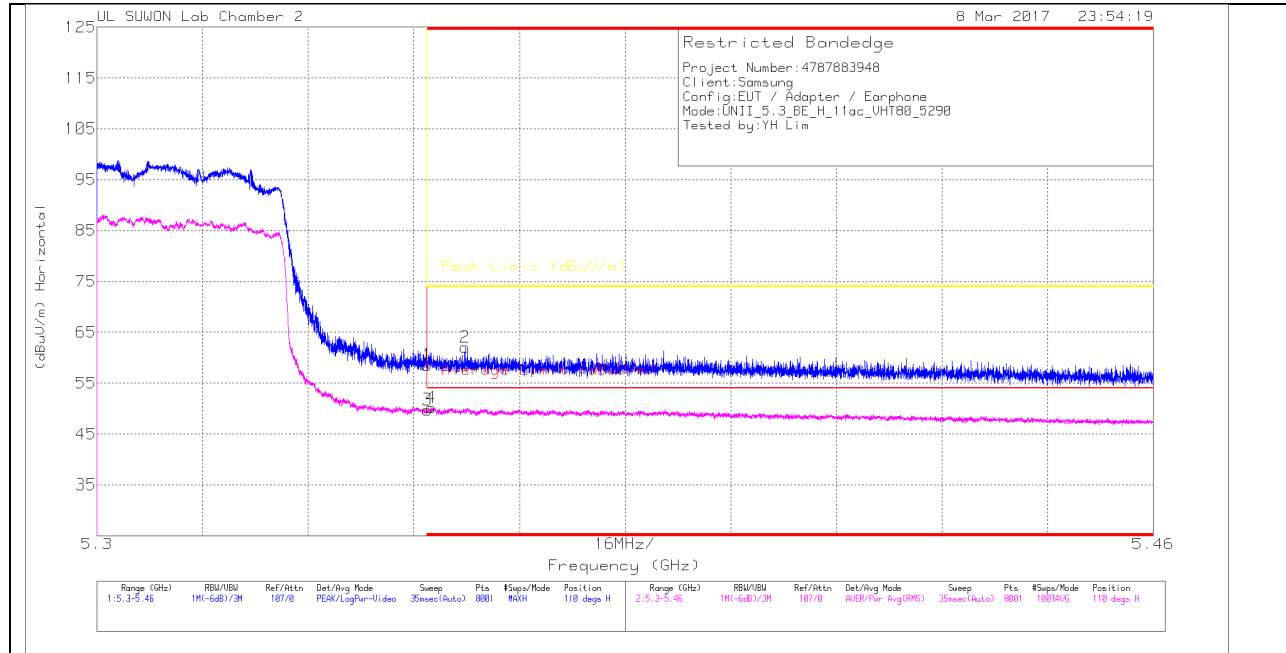
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 24_150619	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.08	37.75	PK-U	35.6	-20.7	0	52.65	-	-	-	-	68.2	-15.55	323	146	H
7.08	38.14	PK-U	35.6	-20.7	0	53.04	-	-	-	-	68.2	-15.16	240	163	V

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

PK-U - U-NII: Maximum Peak

10.2.4. TX ABOVE 1GHz 802.11ac VHT80 2Tx CDD MODE IN THE 5.3GHz BAND

RESTRICTED BANDEDGE (High CHANNEL) HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

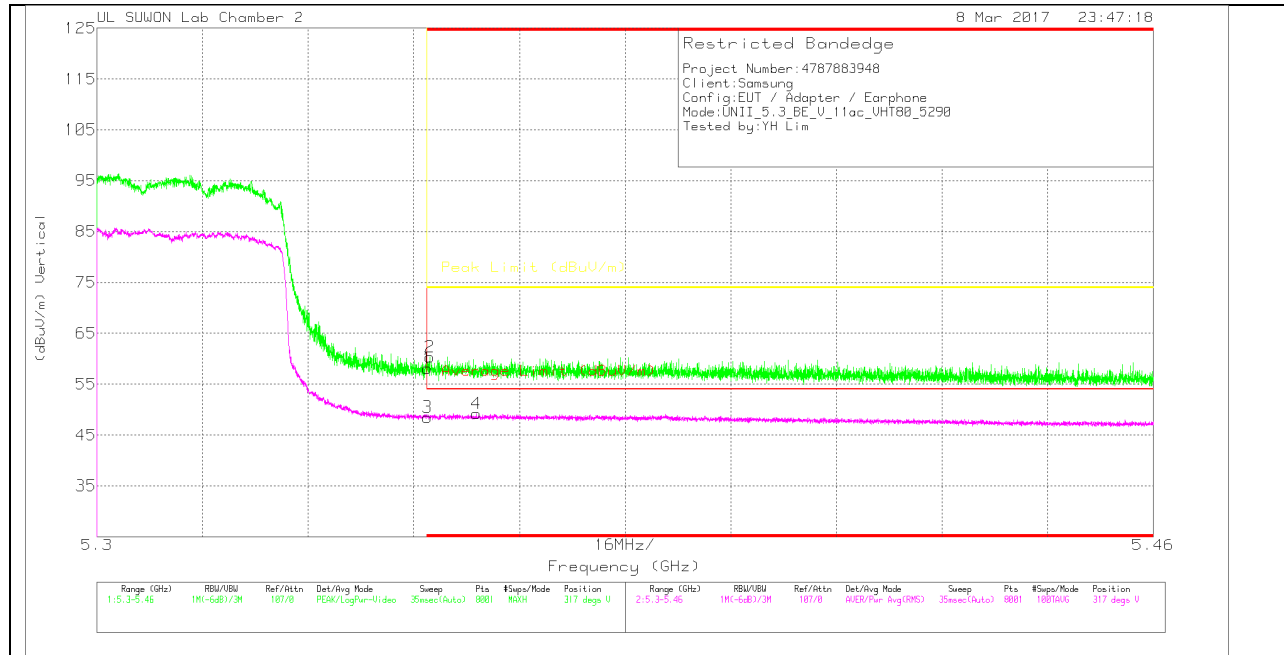
Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	3117(001687 24)_150619	10dB(dB)	DC Corr (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	39.35	Pk	34.4	-15.2	0	58.55	-	-	74	-15.45	110	190	H
2	* 5.356	42.91	Pk	34.4	-15.2	0	62.11	-	-	74	-11.89	110	190	H
3	* 5.35	29.69	RMS	34.4	-15.2	.88	49.77	54	-4.23	-	-	110	190	H
4	* 5.351	30.11	RMS	34.4	-15.2	.88	50.19	54	-3.81	-	-	110	190	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	10dB(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	38.87	Pk	34.4	-15.2	0	58.07	-	-	74	-15.93	317	135	V
2	* 5.35	41.18	Pk	34.4	-15.2	0	60.38	-	-	74	-13.62	317	135	V
3	* 5.35	28.45	RMS	34.4	-15.2	.88	48.53	54	-5.47	-	-	317	135	V
4	* 5.357	29.11	RMS	34.4	-15.2	.88	49.19	54	-4.81	-	-	317	135	V

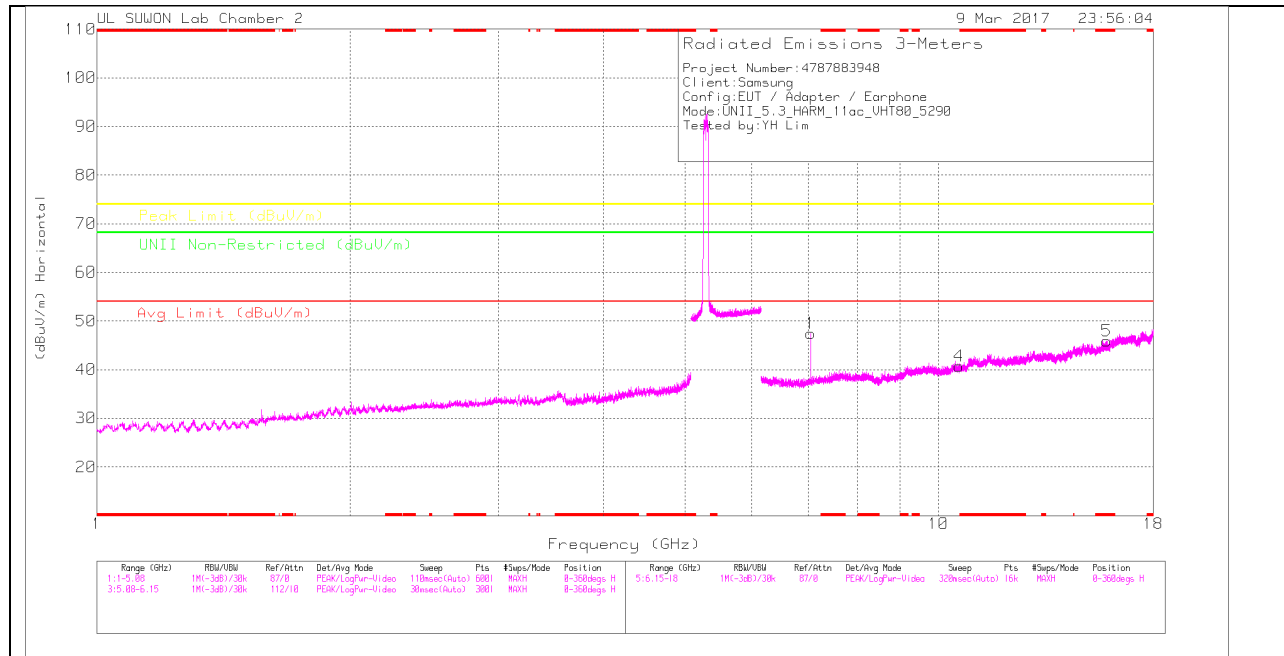
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

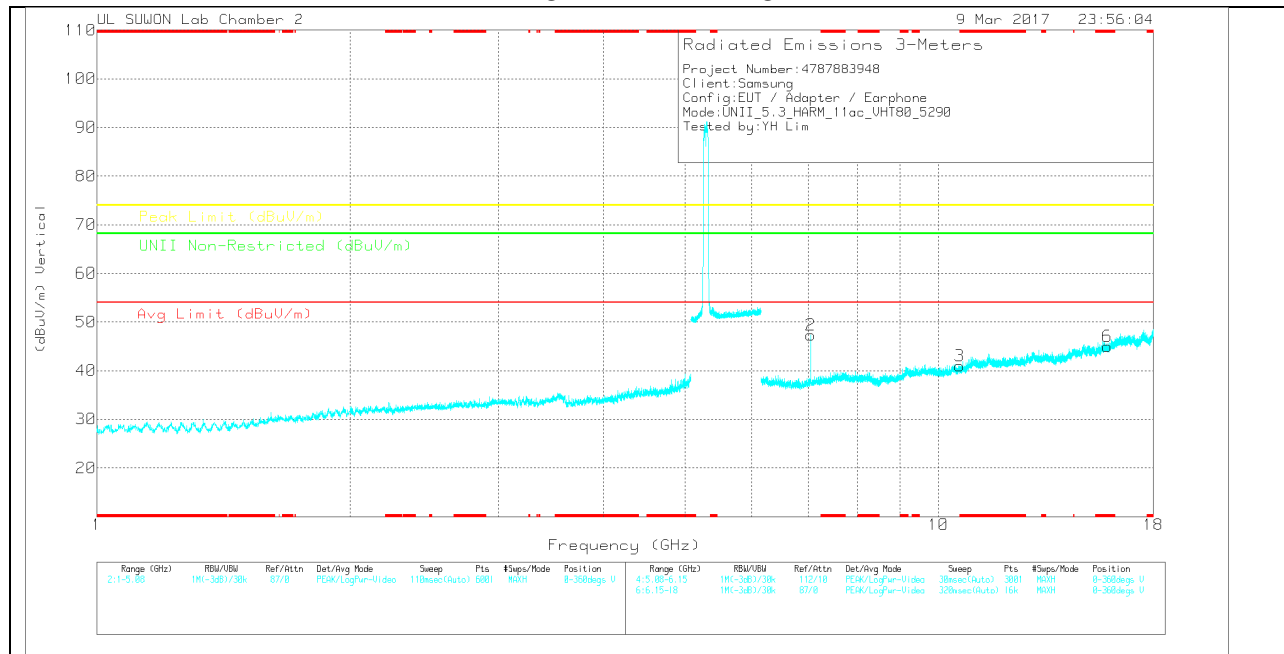
RMS - RMS detection

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	3117(0016 8724)_150 619	6GHz_HP[dB]	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	7.053	32.19	PK	35.6	-20.3	0	47.49	-	-	-	-	68.2	-20.71	0-360	250	H
4	10.578	19.42	PK	37.8	-16.5	0	40.72	-	-	-	-	68.2	-27.48	0-360	250	H
5	* 15.84	20.23	PK	40.3	-14.6	0	45.93	-	-	74	-28.07	-	-	0-360	250	H
2	7.053	31.96	PK	35.6	-20.3	0	47.26	-	-	-	-	68.2	-20.94	0-360	150	V
3	10.59	19.74	PK	37.8	-16.6	0	40.94	-	-	-	-	68.2	-27.26	0-360	250	V
6	* 15.867	19.35	PK	40.3	-14.7	0	44.95	-	-	74	-29.05	-	-	0-360	150	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	6GHz_HP[dB]	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
7.053	37.39	PK-U	35.6	-20.3	0	52.69	-	-	-	-	68.2	-15.51	356	140	H
7.053	37.34	PK-U	35.6	-20.3	0	52.64	-	-	-	-	68.2	-15.56	238	156	V

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

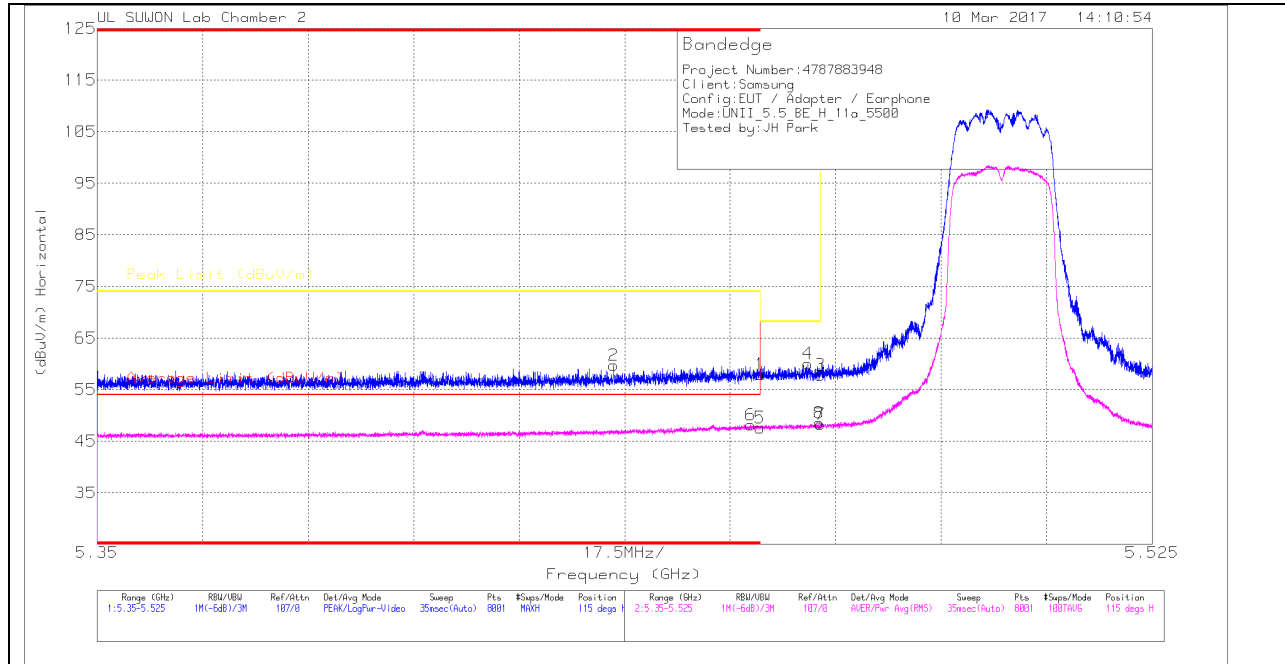
PK-U - U-NII: Maximum Peak

10.3. 5.5-5.6 GHz

10.3.1. TX ABOVE 1 GHz 802.11a 2Tx CDD MODE IN THE 5.5 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

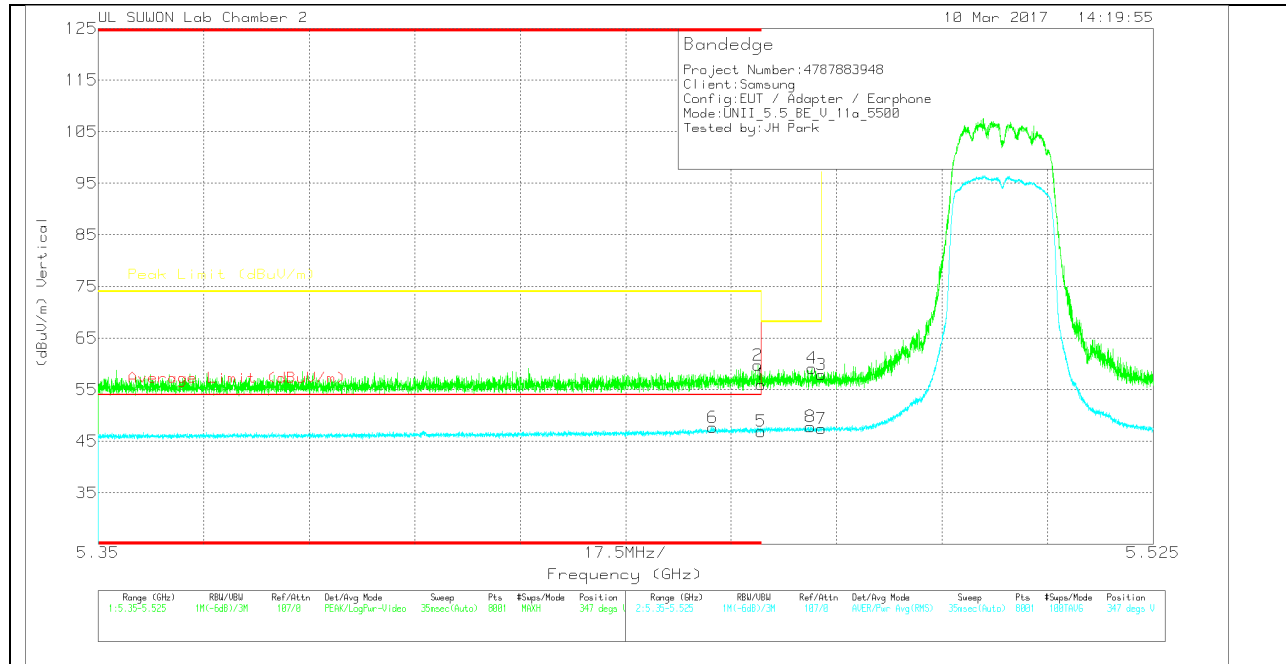
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	38.45	Pk		-15	0	57.95	-	-	74	-16.05	115	132	H
2	* 5.436	40.31	Pk		-15.1	0	59.71	-	-	74	-14.29	115	132	H
3	5.47	38.32	Pk		-15	0	57.82	-	-	68.2	-10.38	115	132	H
4	5.468	40.52	Pk		-15	0	60.02	-	-	68.2	-8.18	115	132	H
5	* 5.46	27.86	RMS		-15	.23	47.59	54	-6.41	-	-	115	132	H
6	* 5.458	28.54	RMS		-15.1	.23	48.17	54	-5.83	-	-	115	132	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	36.49	Pk	34.5	-15	0	55.99	-	-	74	-18.01	347	150	V
2	* 5.459	40.22	Pk	34.5	-15	0	59.72	-	-	74	-14.28	347	150	V
3	5.47	38.42	Pk	34.5	-15	0	57.92	-	-	68.2	-10.28	347	150	V
4	5.468	39.66	Pk	34.5	-15	0	59.16	-	-	68.2	-9.04	347	150	V
5	* 5.46	27.18	RMS	34.5	-15	.23	46.91	54	-7.09	-	-	347	150	V
6	* 5.452	28.05	RMS	34.5	-15.1	.23	47.68	54	-6.32	-	-	347	150	V

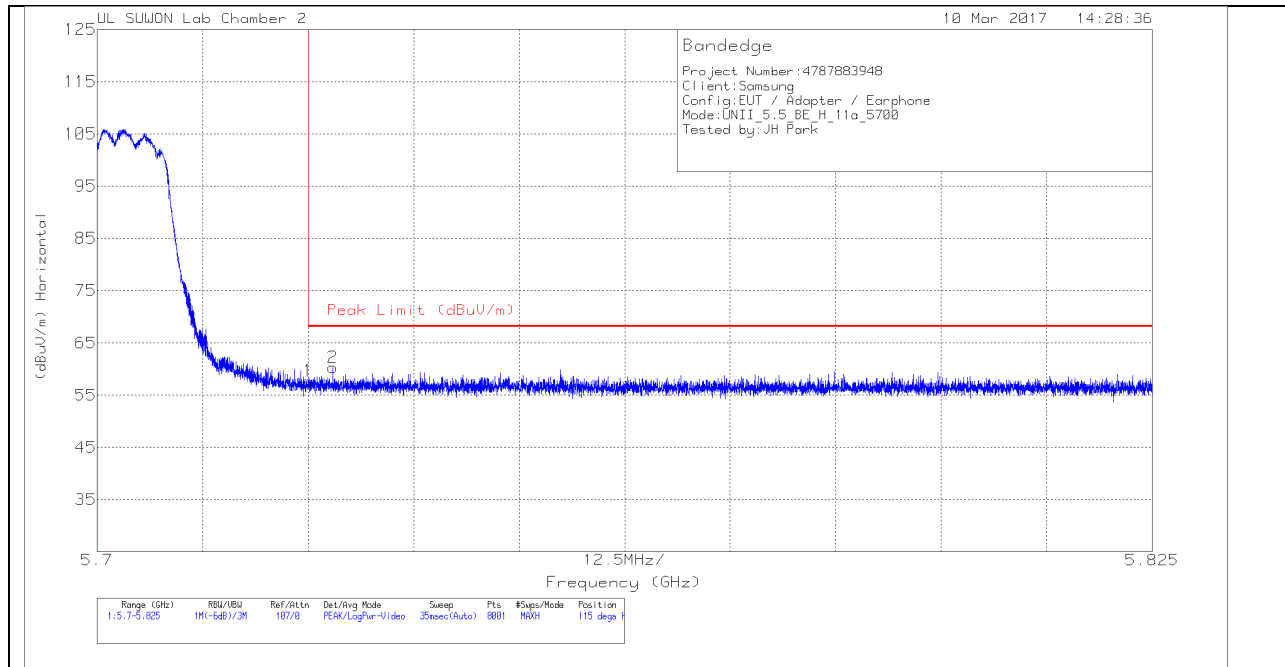
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



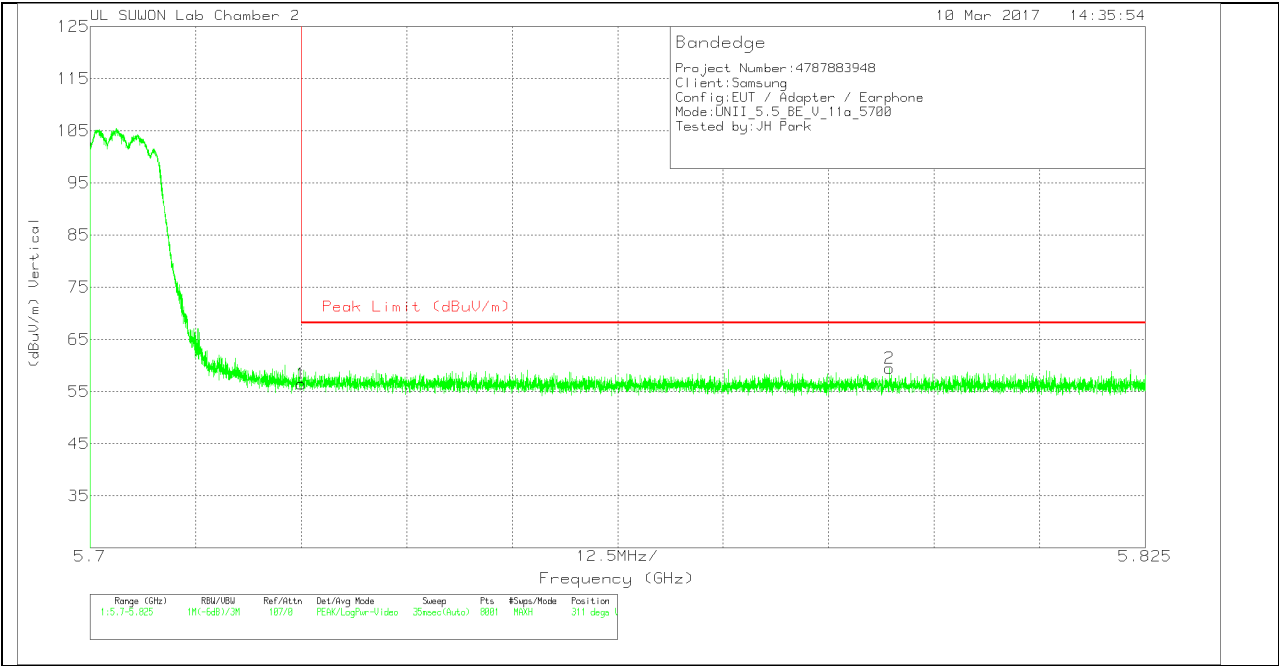
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	37.51	Pk	34.7	-14.5	0	57.71	68.2	-10.49	115	113	H
2	5.728	40.09	Pk	34.7	-14.5	0	60.29	68.2	-7.91	115	113	H

Pk - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

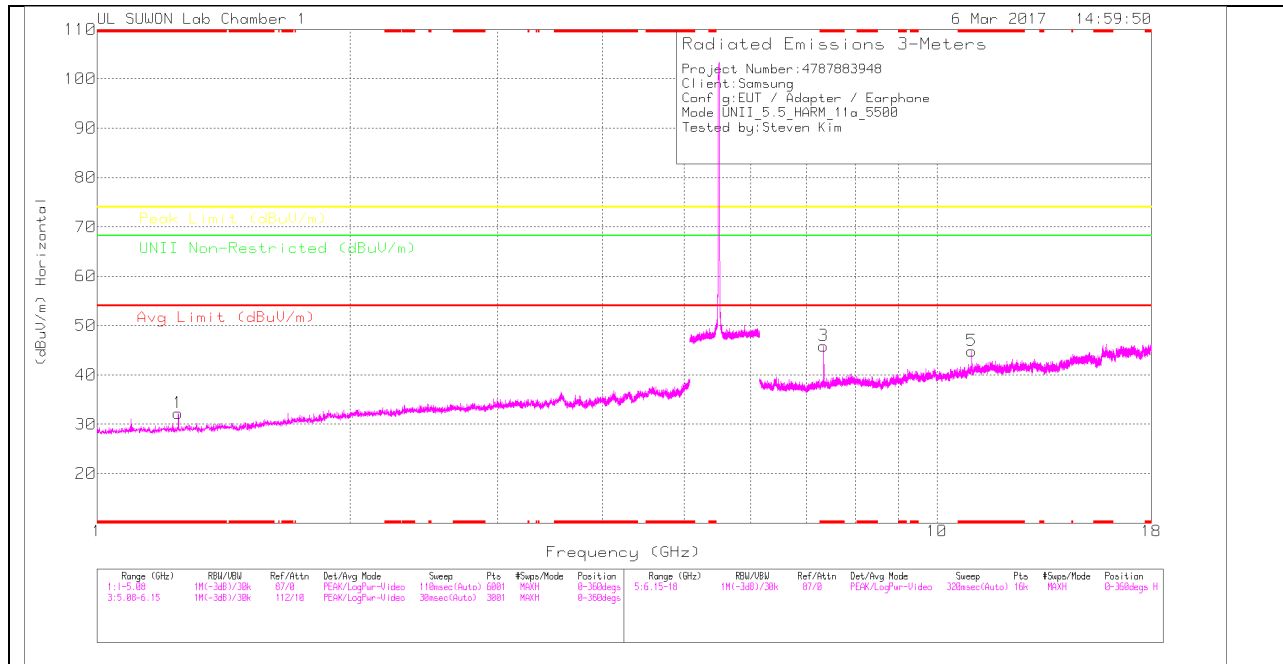
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	36.26	Pk	34.7	-14.5	0	56.46	68.2	-11.74	311	150	V
2	5.795	39.16	Pk	34.7	-14.4	0	59.46	68.2	-8.74	311	150	V

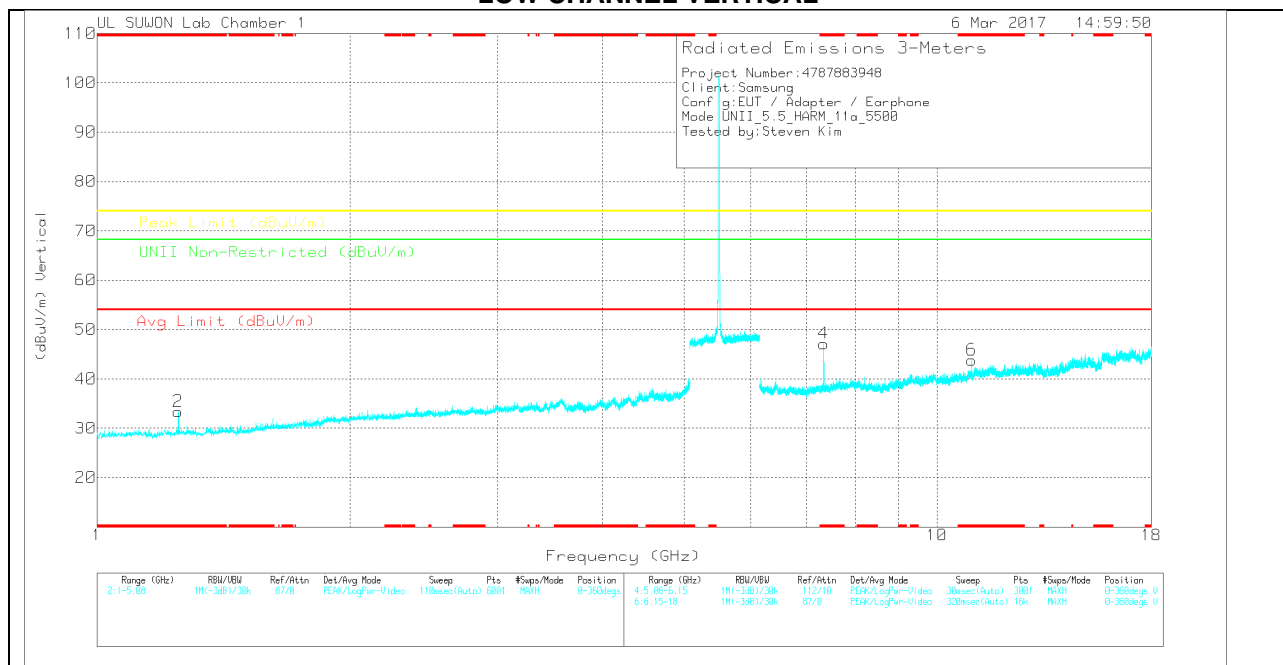
Pk - Peak detector

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	3117/0016 8717_150 619	5Ghz_LP(d B)	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	* 1.25	43.58	PK	28.3	-39.6	0	32.28	-	-	74	-41.72	-	-	0-360	150	H
2	* 1.25	44.68	PK	28.3	-39.6	0	33.38	-	-	74	-40.62	-	-	0-360	250	V
3	* 7.333	41	PK	35.8	-30.9	0	45.9	-	-	74	-28.1	-	-	0-360	250	H
5	* 11.002	34.68	PK	38.2	-28	0	44.88	-	-	74	-29.12	-	-	0-360	150	H
4	* 7.333	42.26	PK	35.8	-30.9	0	47.16	-	-	74	-26.84	-	-	0-360	150	V
6	* 10.999	33.65	PK	38.2	-28	0	43.85	-	-	74	-30.15	-	-	0-360	150	V

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

PK – Peak Detector

Radiated Emissions

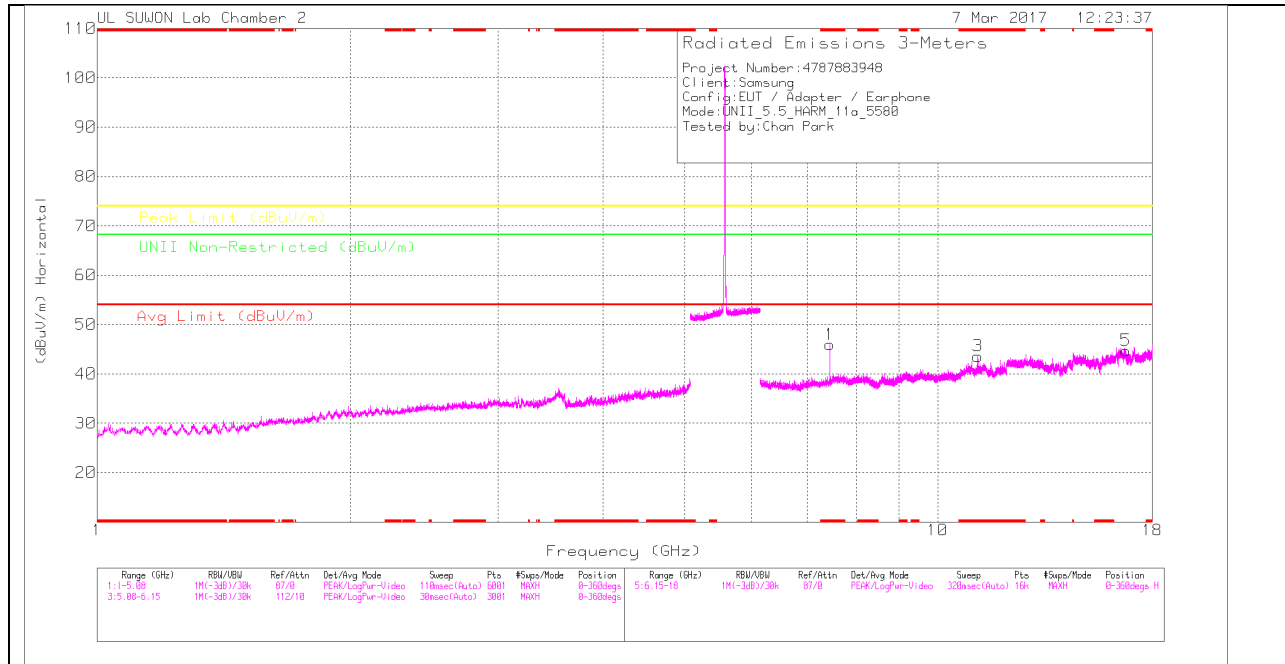
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.333	48.11	PK-U	35.8	-30.9	0	53.01	-	-	74	-20.99	-	-	191	307	H
* 7.333	40.74	ADR	35.8	-30.9	0	45.64	54	-8.36	-	-	-	-	191	307	H
* 7.333	48.82	PK-U	35.8	-30.9	0	53.72	-	-	74	-20.28	-	-	313	163	V
* 7.333	42.31	ADR	35.8	-30.9	0	47.21	54	-6.79	-	-	-	-	313	163	V
* 11.001	45.73	PK-U	38.2	-27.9	0	56.03	-	-	74	-17.97	-	-	293	165	H
* 11	32.85	ADR	38.2	-28	.23	43.28	54	-10.72	-	-	-	-	293	165	H
* 10.994	43.78	PK-U	38.2	-27.9	0	54.08	-	-	74	-19.92	-	-	10	237	V
* 11	30.82	ADR	38.2	-28	.23	41.25	54	-12.75	-	-	-	-	10	237	V

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

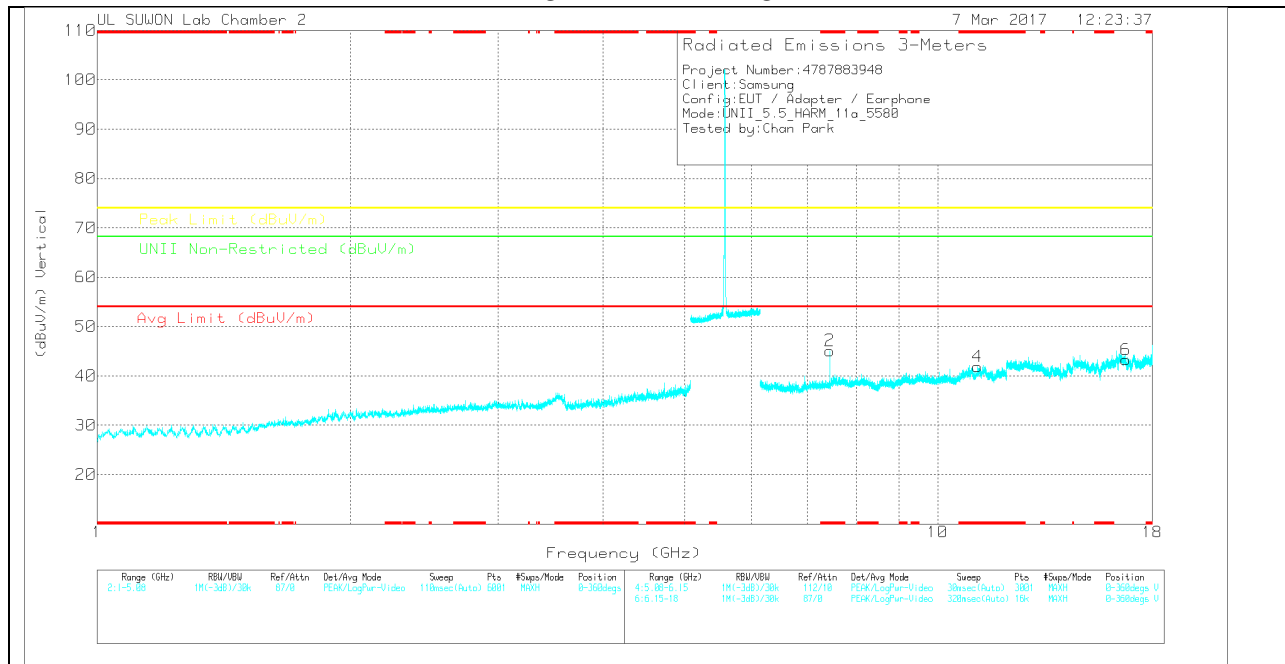
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS 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	3117(0016 8724)_150 619	6GHz_HP[d B]	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	* 7.439	31.15	Pk	36	-21.2	0	45.95	-	-	74	-28.05	-	-	0-360	250	H
3	* 11.161	21.7	Pk	38.1	-16.2	0	43.6	-	-	74	-30.4	-	-	0-360	150	H
5	16.735	17.53	Pk	41	-13.8	0	44.73	-	-	-	-	68.2	-23.47	0-360	150	H
2	* 7.44	30.32	Pk	36	-21.2	0	45.12	-	-	74	-28.88	-	-	0-360	150	V
4	* 11.16	19.96	Pk	38.1	-16.2	0	41.86	-	-	74	-32.14	-	-	0-360	150	V
6	16.733	16.1	Pk	41	-13.8	0	43.3	-	-	-	-	68.2	-24.9	0-360	150	V

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

Pk – Peak detector

Radiated Emissions

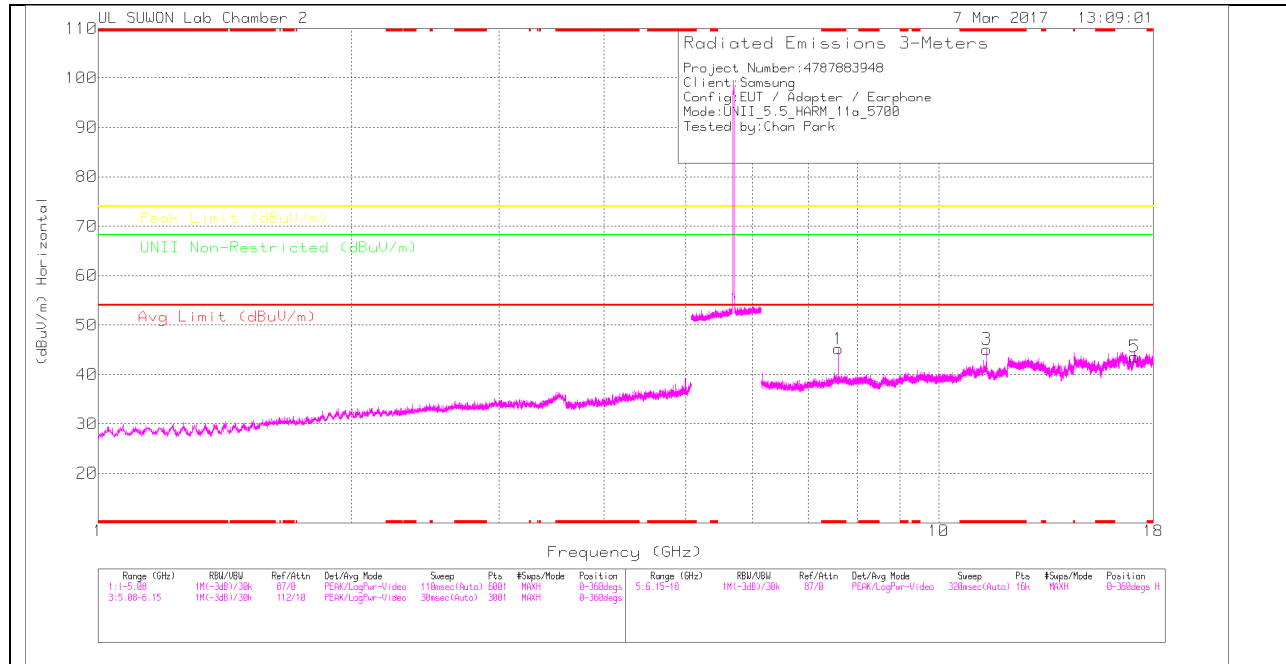
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.44	37.36	PK-U	36	-21.2	0	52.16	-	-	74	-21.84	-	-	65	157	H
* 7.44	30.02	ADR	36	-21.2	0	44.82	54	-9.18	-	-	-	-	65	157	H
* 7.44	37.23	PK-U	36	-21.2	0	52.03	-	-	74	-21.97	-	-	284	174	V
* 7.44	29.29	ADR	36	-21.2	0	44.09	54	-9.91	-	-	-	-	284	174	V
* 11.161	34.38	PK-U	38.1	-16.2	0	56.28	-	-	74	-17.72	-	-	272	143	H
* 11.161	21.89	ADR	38.1	-16.2	.23	44.02	54	-9.98	-	-	-	-	272	143	H

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

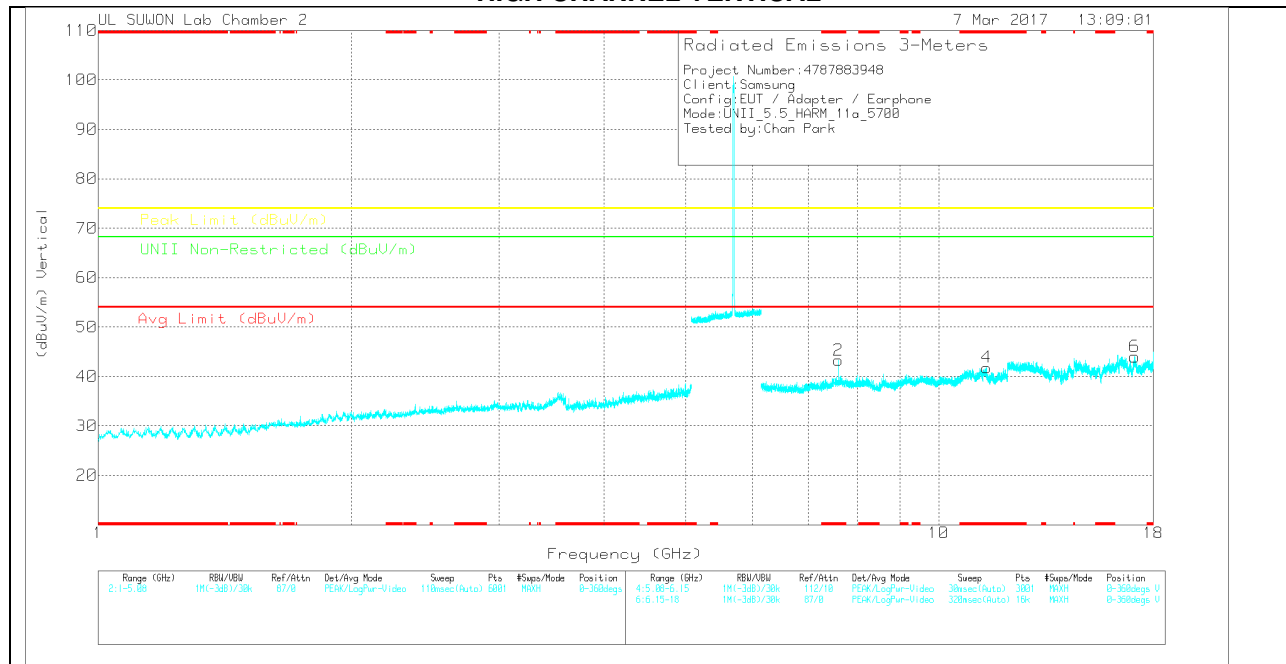
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS 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	3117[0016 8724], 150 619	6GHz_HP[dB]	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	* 7.6	29.5	Pk	36.1	-20.4	0	45.2	-	-	74	-28.8	-	-	0-360	150	H
3	* 11.401	22.52	Pk	38.3	-15.7	0	45.12	-	-	74	-28.88	-	-	0-360	250	H
5	17.104	15.97	Pk	41.1	-13.5	0	43.57	-	-	-	-	68.2	-24.63	0-360	250	H
2	* 7.6	27.6	Pk	36.1	-20.4	0	43.3	-	-	74	-30.7	-	-	0-360	150	V
4	* 11.4	19.12	Pk	38.3	-15.6	0	41.82	-	-	74	-32.18	-	-	0-360	250	V
6	17.104	16.4	Pk	41.1	-13.5	0	44	-	-	-	-	68.2	-24.2	0-360	250	V

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

Pk – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117[001687 24], 150619	6GHz_HP[dB]	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
* 7.6	36.7	PK-U	36.1	-20.4	0	52.4	-	-	74	-21.6	-	-	324	121	H
* 7.6	30.13	ADR	36.1	-20.4	0	45.83	54	-8.17	-	-	-	-	324	121	H
* 7.6	35.55	PK-U	36.1	-20.4	0	51.25	-	-	74	-22.75	-	-	360	150	V
* 7.6	26.66	ADR	36.1	-20.4	0	42.36	54	-11.64	-	-	-	-	360	150	V
* 11.401	33.97	PK-U	38.3	-15.7	0	56.57	-	-	74	-17.43	-	-	240	138	H
* 11.402	20.76	ADR	38.3	-15.7	.23	43.59	54	-10.41	-	-	-	-	240	138	H

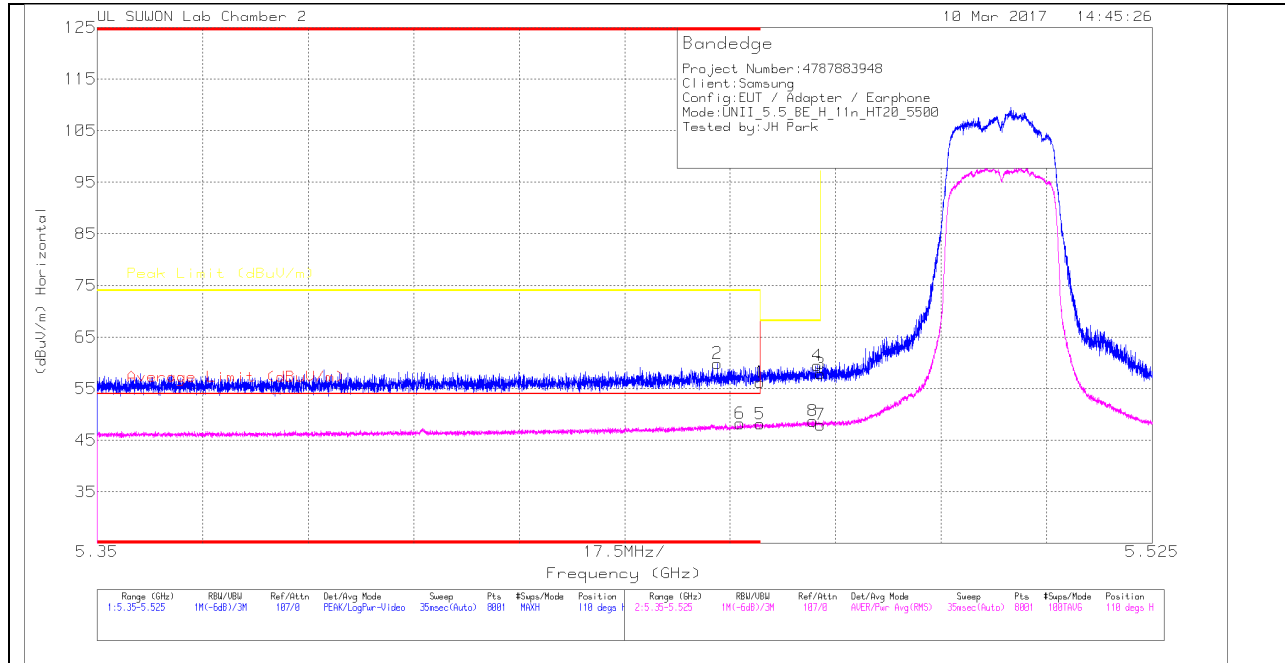
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.3.2. TX ABOVE 1GHz 802.11n HT20 2Tx CDD MODE IN THE 5.5GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

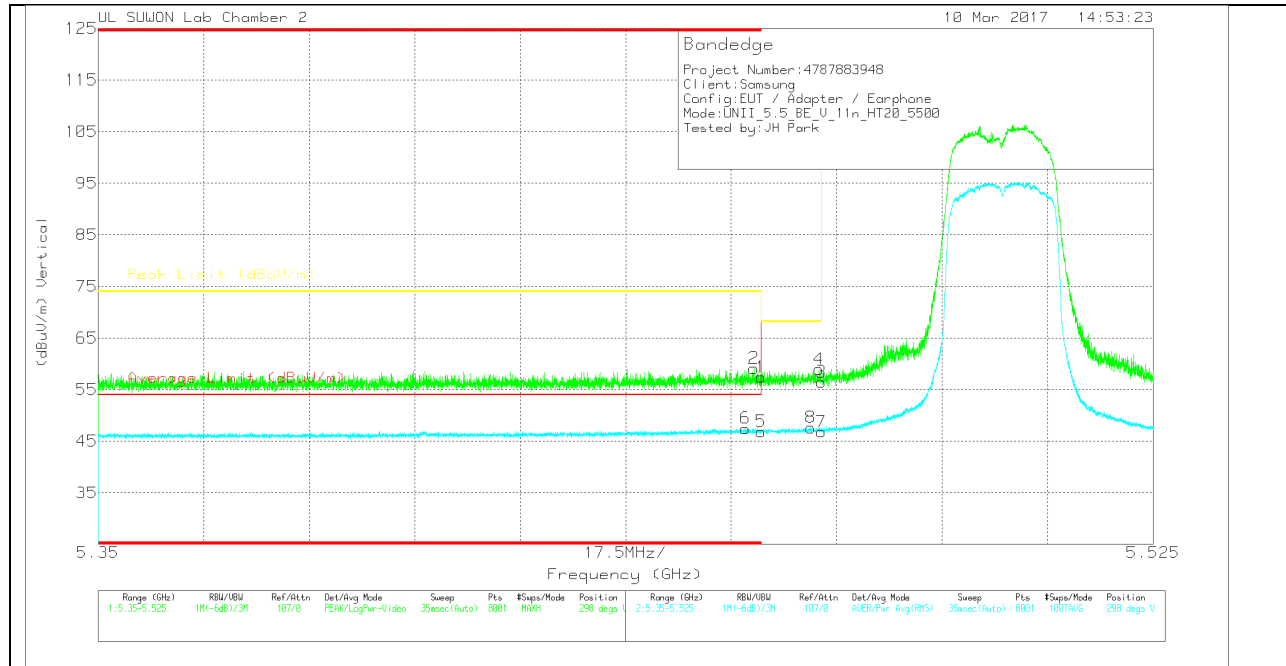
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	36.73	Pk	34.5	-15	0	56.23	-	-	74	-17.77	110	150	H
2	* 5.453	40.48	Pk	34.5	-15.1	0	59.88	-	-	74	-14.12	110	150	H
3	5.47	38.42	Pk	34.5	-15	0	57.92	-	-	68.2	-10.28	110	150	H
4	5.469	40	Pk	34.5	-15	0	59.5	-	-	68.2	-8.7	110	150	H
5	* 5.46	28.4	RMS	34.5	-15	.24	48.14	54	-5.86	-	-	110	150	H
6	* 5.457	28.6	RMS	34.5	-15.1	.24	48.24	54	-5.76	-	-	110	150	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	37.91	Pk	34.5	-15	0	57.41	-	-	74	-16.59	298	180	V
2	* 5.459	39.64	Pk	34.5	-15	0	59.14	-	-	74	-14.86	298	180	V
3	5.47	36.97	Pk	34.5	-15	0	56.47	-	-	68.2	-11.73	298	180	V
4	5.47	39.45	Pk	34.5	-15	0	58.95	-	-	68.2	-9.25	298	180	V
5	* 5.46	27.13	RMS	34.5	-15	.24	46.87	54	-7.13	-	-	298	180	V
6	* 5.457	27.86	RMS	34.5	-15.1	.24	47.5	54	-6.5	-	-	298	180	V

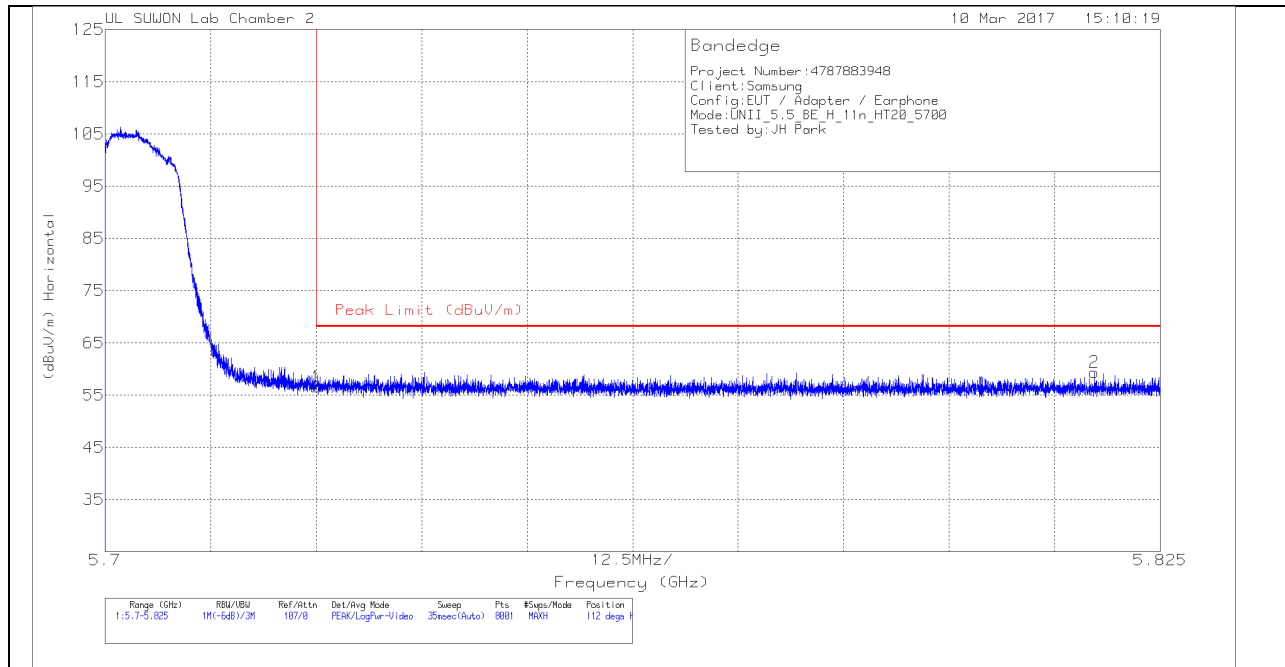
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



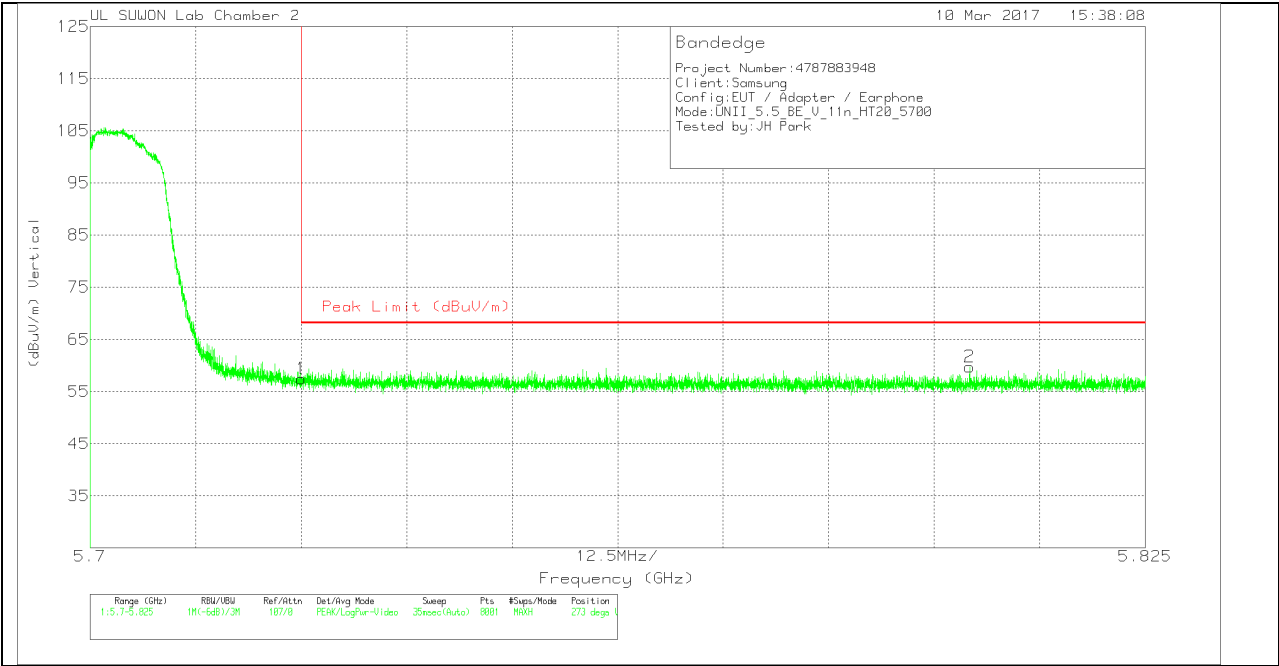
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	36.36	Pk	34.7	-14.5	0	56.56	68.2	-11.64	112	137	H
2	5.817	39.07	Pk	34.7	-14.4	0	59.37	68.2	-8.83	112	137	H

Pk - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

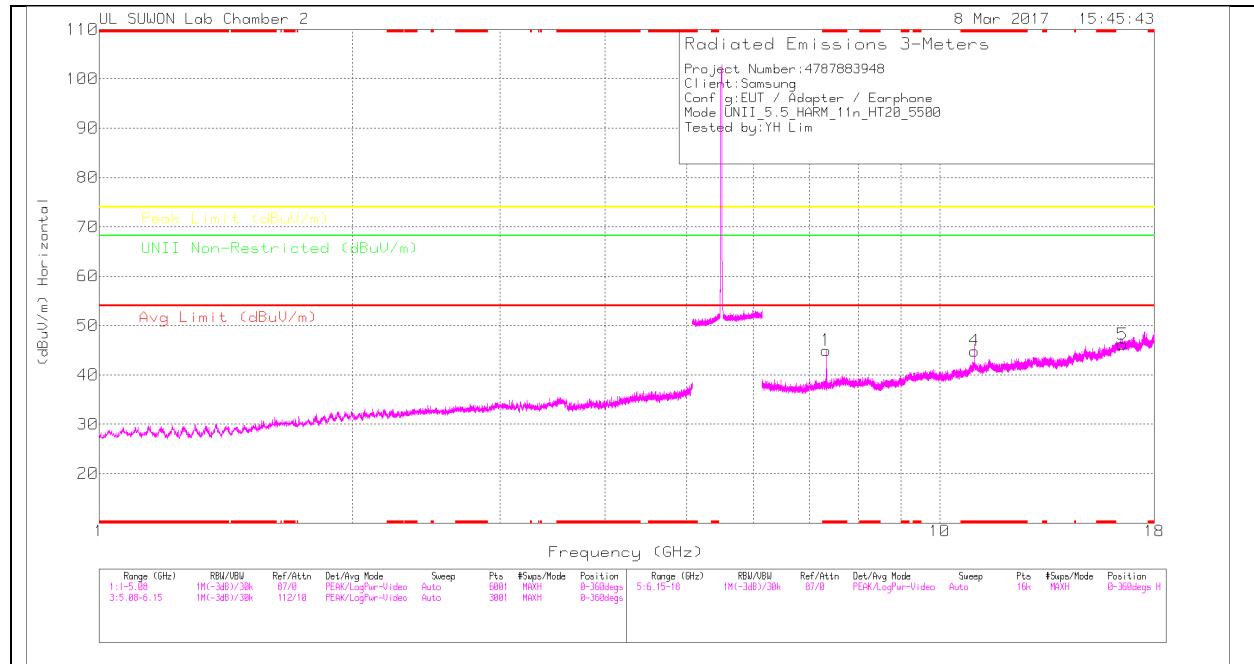
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	37.25	Pk	34.7	-14.5	0	57.45	68.2	-10.75	273	171	V
2	5.804	39.46	Pk	34.7	-14.4	0	59.76	68.2	-8.44	273	171	V

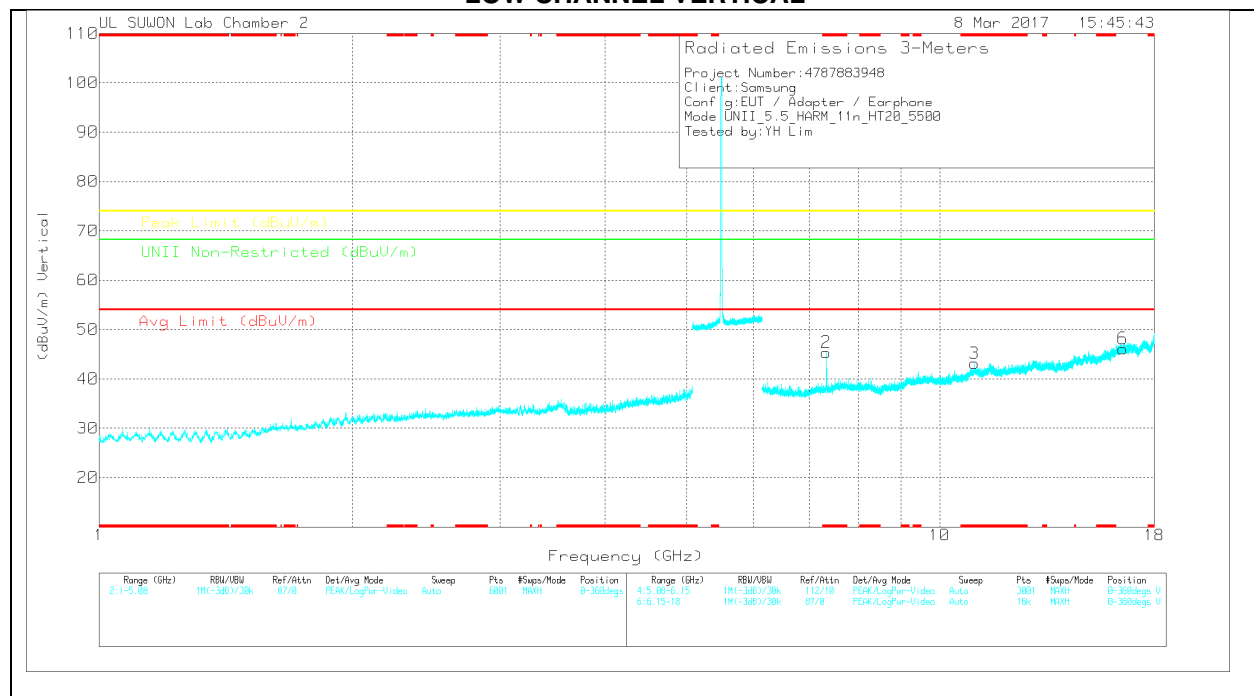
Pk - Peak detector

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	3117[0016 8724], 150 619	6GHz_HP[dB]	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	* 7.333	29.78	PK	35.9	-20.7	0	44.98	-	-	74	-29.02	-	-	0-360	250	H
4	* 11.001	22.88	PK	38	-16	0	44.88	-	-	74	-29.12	-	-	0-360	150	H
5	16.5	19.62	PK	41	-14.4	0	46.22	-	-	-	-	68.2	-21.98	0-360	250	H
2	* 7.333	30.16	PK	35.9	-20.7	0	45.36	-	-	74	-28.64	-	-	0-360	150	V
3	* 10.999	21.16	PK	38	-16	0	43.16	-	-	74	-30.84	-	-	0-360	150	V
6	16.504	19.53	PK	41	-14.4	0	46.13	-	-	-	-	68.2	-22.07	0-360	250	V

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

PK – Peak detector

Radiated Emissions

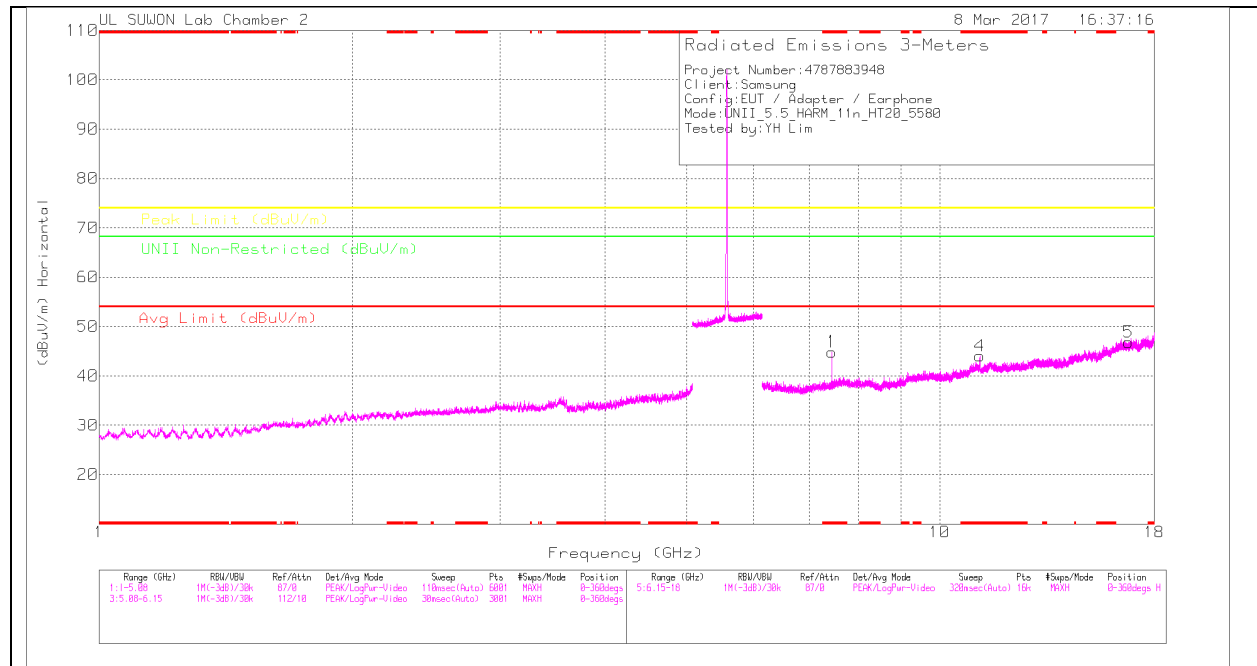
Frequency (GHz)	Meter Reading (dBuV)	Det	3117[001687 24], 150619	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.333	37.34	PK-U	35.9	-20.7	0	52.54	-	-	74	-21.46	-	-	194	306	H
* 7.333	30.17	ADR	35.9	-20.7	0	45.37	54	-8.63	-	-	-	-	194	306	H
* 7.333	37.18	PK-U	35.9	-20.7	0	52.38	-	-	74	-21.62	-	-	246	166	V
* 7.333	29.79	ADR	35.9	-20.7	0	44.99	54	-9.01	-	-	-	-	246	166	V
* 11	31.59	PK-U	38	-16	0	53.59	-	-	74	-20.41	-	-	6	247	V
* 11	19.76	ADR	38	-16	.24	42	54	-12	-	-	-	-	6	247	V
* 11.003	33.86	PK-U	38	-16	0	55.86	-	-	74	-18.14	-	-	284	153	H
* 11.003	21.31	ADR	38	-16	.24	43.55	54	-10.45	-	-	-	-	284	153	H

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

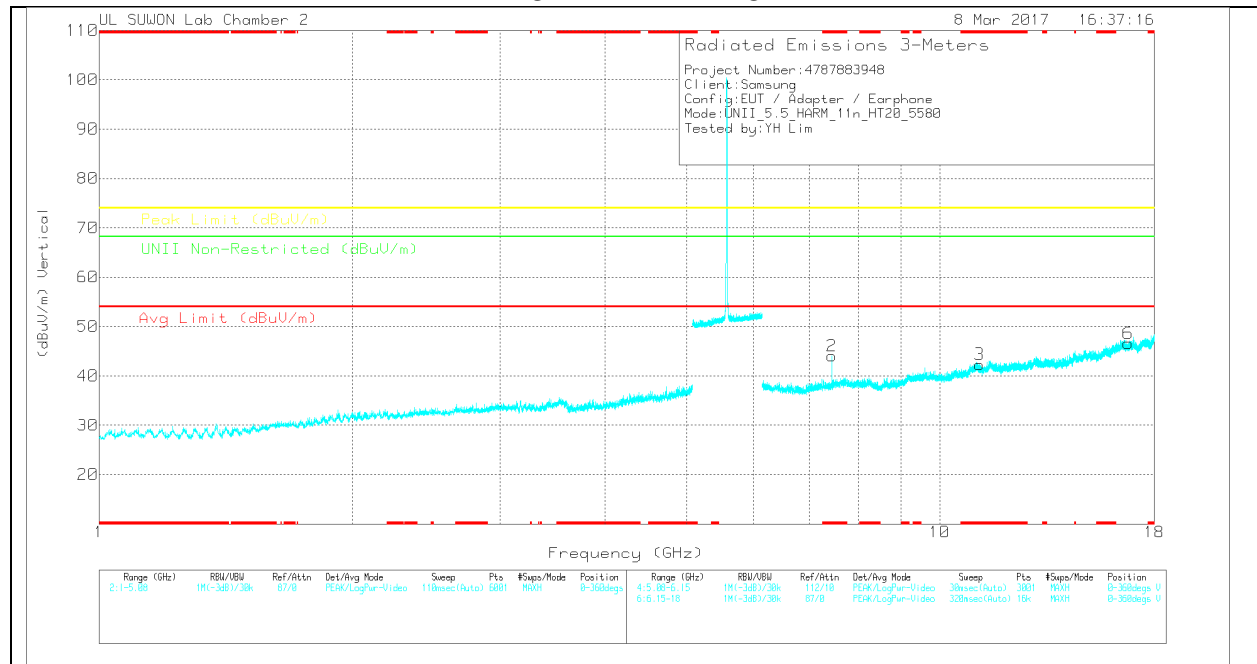
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS 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	3117/0016 8724_150 619	6GHz_HP[d B]	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	* 7.439	30.05	PK	36	-21.2	0	44.85	-	-	74	-29.15	-	-	0-360	150	H
4	* 11.164	22.22	PK	38.1	-16.3	0	44.02	-	-	74	-29.98	-	-	0-360	150	H
5	16.761	19.41	PK	41	-13.6	0	46.81	-	-	-	-	68.2	-21.39	0-360	150	H
2	* 7.439	29.25	PK	36	-21.2	0	44.05	-	-	74	-29.95	-	-	0-360	150	V
3	* 11.159	20.39	PK	38.1	-16.2	0	42.29	-	-	74	-31.71	-	-	0-360	250	V
6	16.757	19.18	PK	41	-13.6	0	46.58	-	-	-	-	68.2	-21.62	0-360	250	V

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

PK – Peak detector

Radiated Emissions

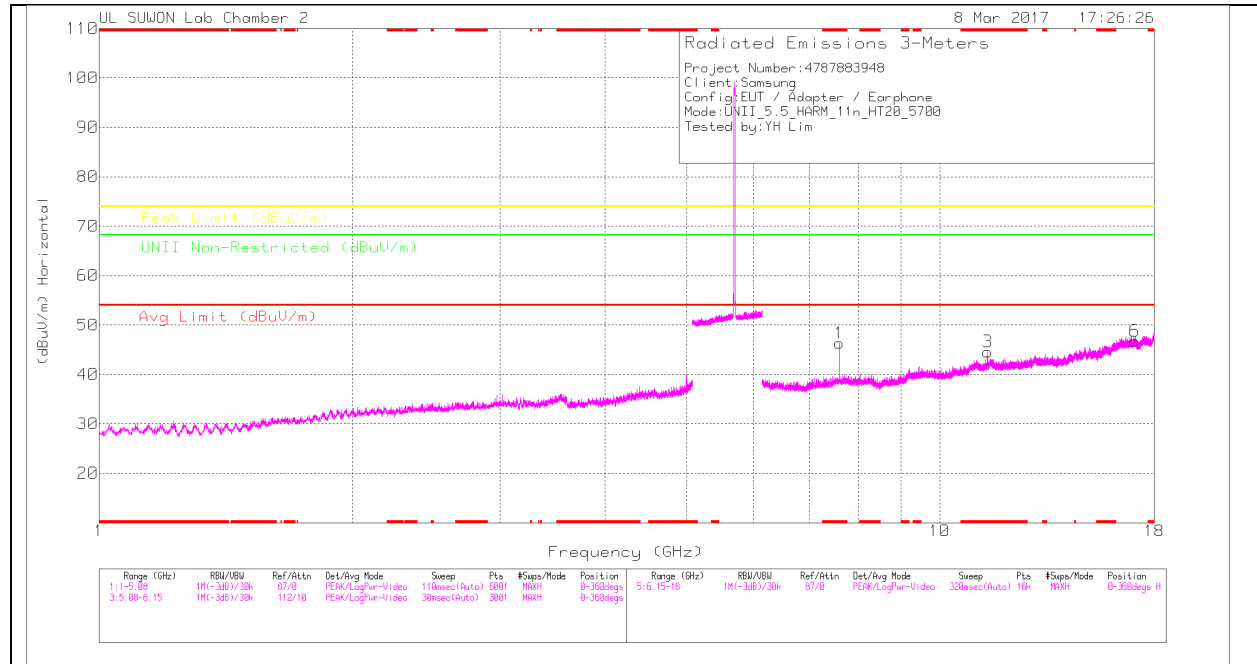
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 24_150619	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.44	37.93	PK-U	36	-21.2	0	52.73	-	-	74	-21.27	-	-	191	182	H
* 7.44	31.08	ADR	36	-21.2	0	45.88	54	-8.12	-	-	-	-	191	182	H
* 7.44	37.1	PK-U	36	-21.2	0	51.9	-	-	74	-22.1	-	-	238	142	V
* 7.44	29.65	ADR	36	-21.2	0	44.45	54	-9.55	-	-	-	-	238	142	V
* 11.158	32.6	PK-U	38.1	-16.2	0	54.5	-	-	74	-19.5	-	-	274	170	V
* 11.16	19.89	ADR	38.1	-16.2	.24	42.03	54	-11.97	-	-	-	-	274	170	V
* 11.158	33.78	PK-U	38.1	-16.2	0	55.68	-	-	74	-18.32	-	-	287	340	H
* 11.16	20.48	ADR	38.1	-16.2	.24	42.62	54	-11.38	-	-	-	-	287	340	H

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

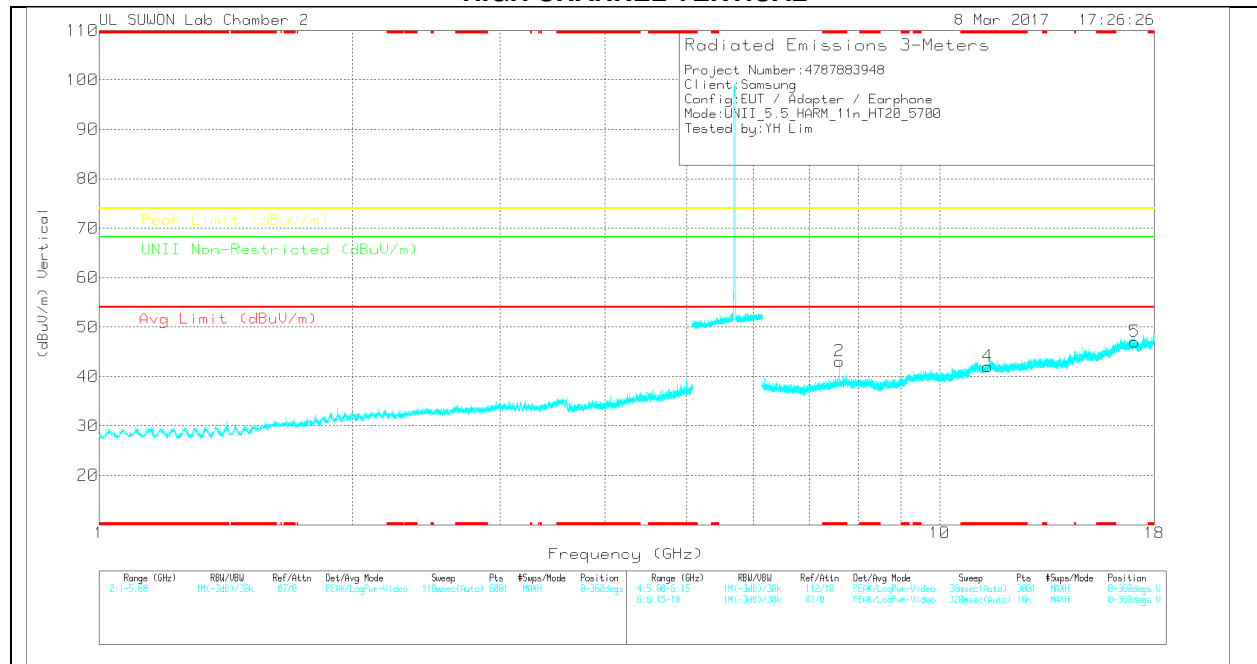
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS 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	3117[0016 8724], 150 619	6GHz_HP[dB]	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	* 7.599	30.65	PK	36.1	-20.4	0	46.35	-	-	74	-27.65	-	-	0-360	150	H
3	* 11.398	21.88	PK	38.3	-15.6	0	44.58	-	-	74	-29.42	-	-	0-360	150	H
6	17.067	19.16	PK	41.1	-13.5	0	46.76	-	-	-	-	68.2	-21.44	0-360	250	H
2	* 7.6	27.4	PK	36.1	-20.4	0	43.1	-	-	74	-30.9	-	-	0-360	150	V
4	* 11.404	19.45	PK	38.3	-15.7	0	42.05	-	-	74	-31.95	-	-	0-360	150	V
5	17.073	19.34	PK	41.1	-13.4	0	47.04	-	-	-	-	68.2	-21.16	0-360	150	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117[001687 24], 150619	6GHz_HP[dB]	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
* 7.6	36.88	PK-U	36.1	-20.4	0	52.58	-	-	74	-21.42	-	-	333	132	H
* 7.6	30.06	ADR	36.1	-20.4	0	45.76	54	-8.24	-	-	-	-	333	132	H
* 7.6	35.79	PK-U	36.1	-20.4	0	51.49	-	-	74	-22.51	-	-	207	165	V
* 7.6	27.06	ADR	36.1	-20.4	0	42.76	54	-11.24	-	-	-	-	207	165	V
* 11.399	32.7	PK-U	38.3	-15.6	0	55.4	-	-	74	-18.6	-	-	190	225	V
* 11.4	18.83	ADR	38.3	-15.6	.24	41.77	54	-12.23	-	-	-	-	190	225	V
* 11.398	32.9	PK-U	38.3	-15.6	0	55.6	-	-	74	-18.4	-	-	224	132	H
* 11.4	19.62	ADR	38.3	-15.6	.24	42.56	54	-11.44	-	-	-	-	224	132	H

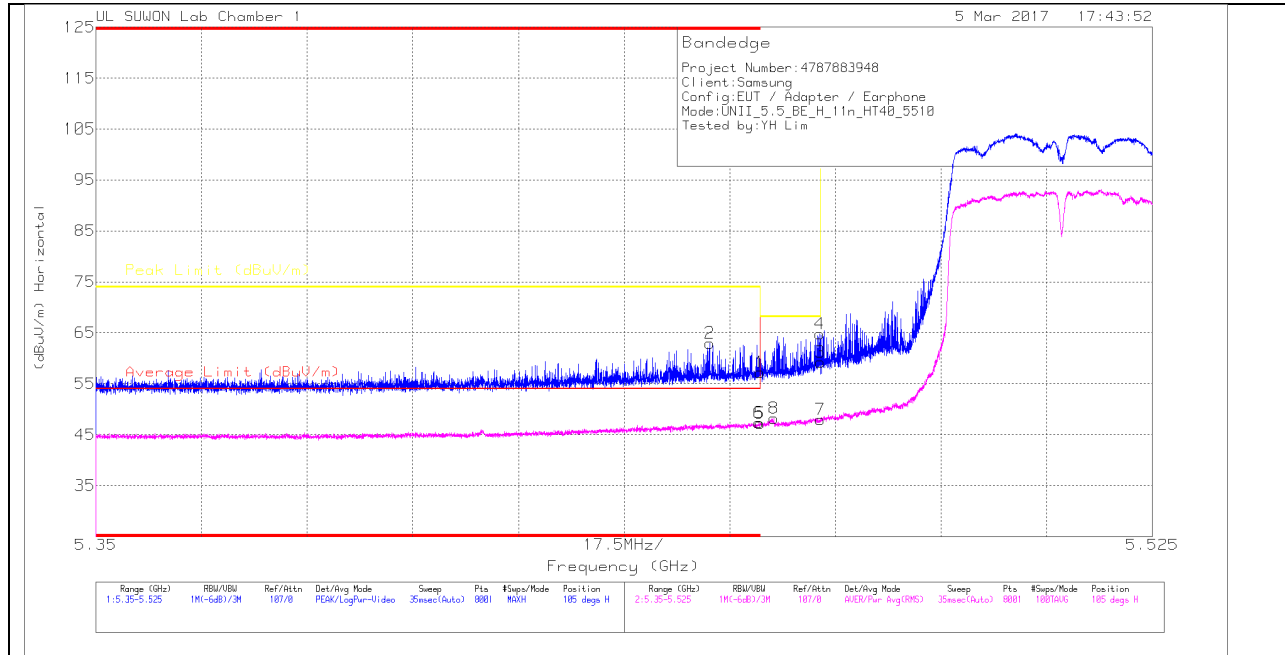
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.3.3. TX ABOVE 1GHz 802.11n HT40 2Tx CDD MODE IN THE 5.5GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

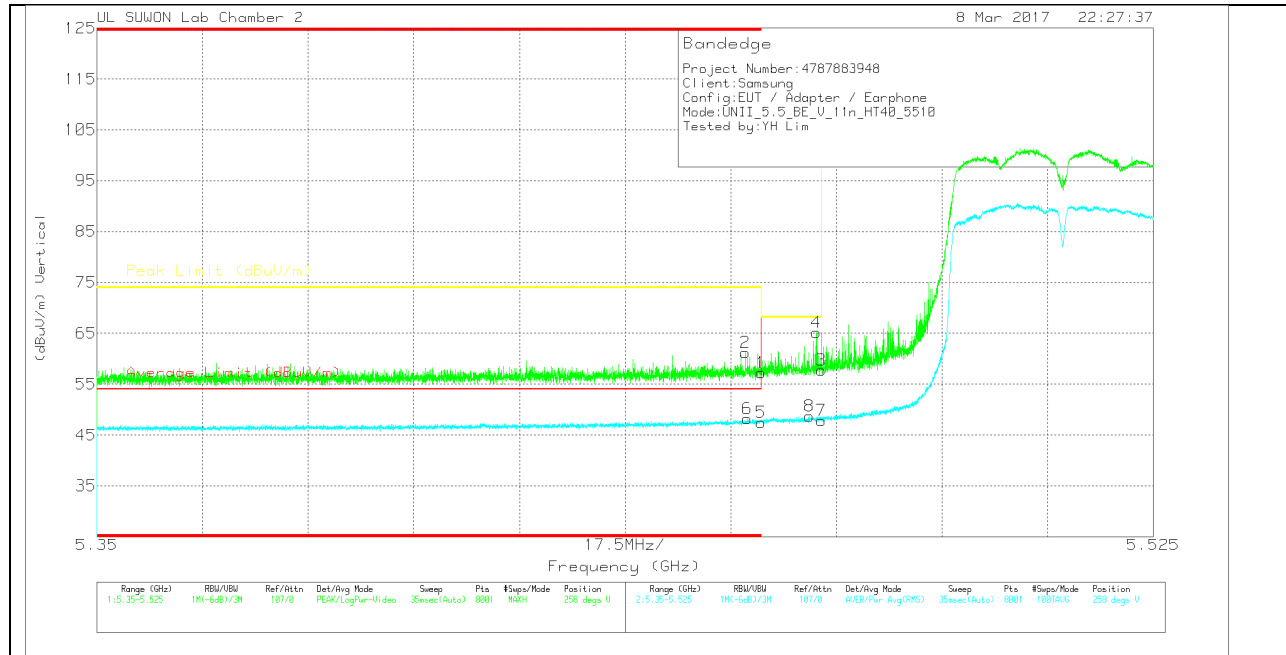
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	45.54	Pk		-22.9	0	57.24	-	-	74	-16.76	105	178	H
2	* 5.452	51.3	Pk		-22.9	0	63	-	-	74	-11	105	178	H
3	5.47	47.56	Pk		-22.9	0	59.26	-	-	68.2	-8.94	105	178	H
4	5.47	53.12	Pk		-22.9	0	64.82	-	-	68.2	-3.38	105	178	H
5	* 5.46	35.03	RMS		-22.9	.48	47.21	54	-6.79	-	-	105	178	H
6	* 5.46	35.13	RMS		-22.9	.48	47.31	54	-6.69	-	-	105	178	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	37.8	Pk	34.5	-15	0	57.3	-	-	74	-16.7	258	153	V
2	* 5.457	41.84	Pk	34.5	-15.1	0	61.24	-	-	74	-12.76	258	153	V
3	5.47	38.21	Pk	34.5	-15	0	57.71	-	-	68.2	-10.49	258	153	V
4	5.469	45.71	Pk	34.5	-15	0	65.21	-	-	68.2	-2.99	258	153	V
5	* 5.46	27.5	RMS	34.5	-15	.48	47.48	54	-6.52	-	-	258	153	V
6	* 5.458	28.32	RMS	34.5	-15.1	.48	48.2	54	-5.8	-	-	258	153	V

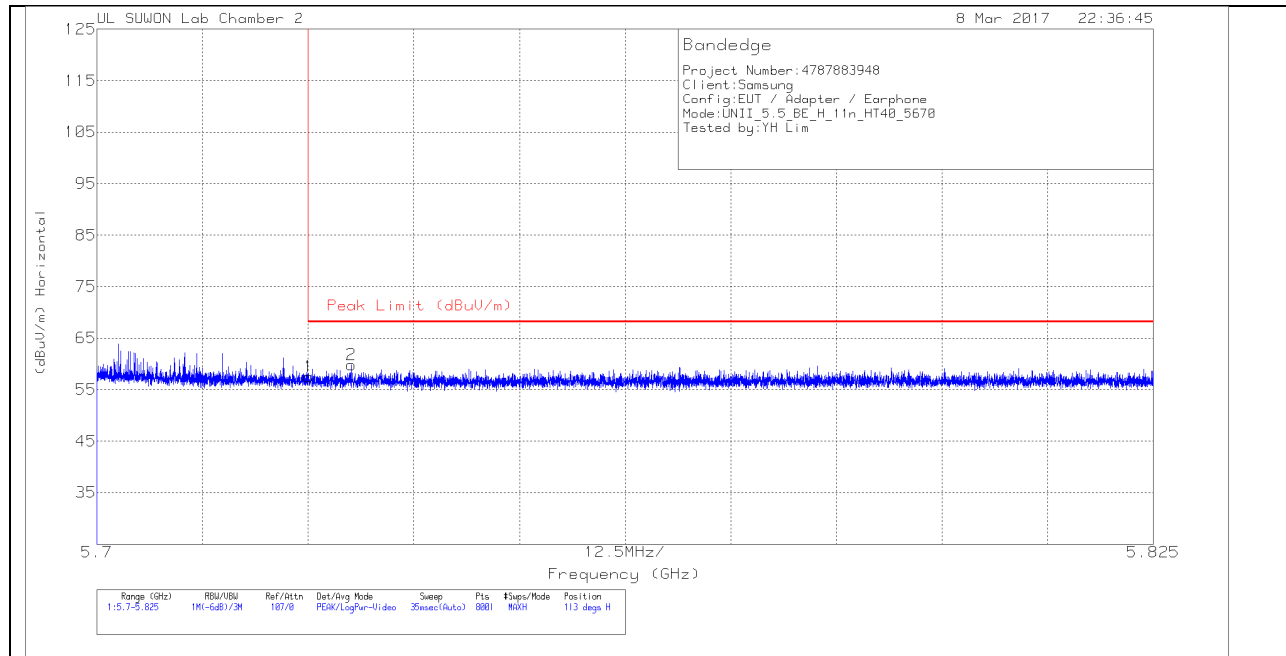
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



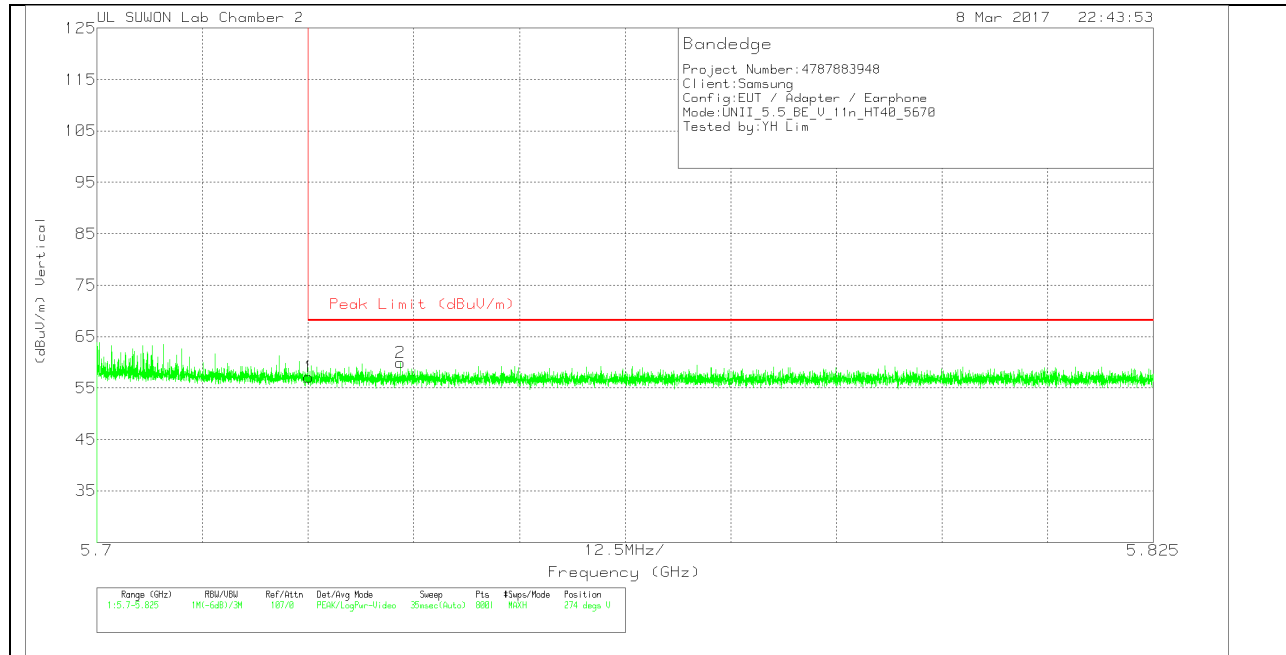
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	37.29	Pk	34.7	-14.5	0	57.49	68.2	-10.71	113	164	H
2	5.73	39.58	Pk	34.7	-14.5	0	59.78	68.2	-8.42	113	164	H

Pk - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

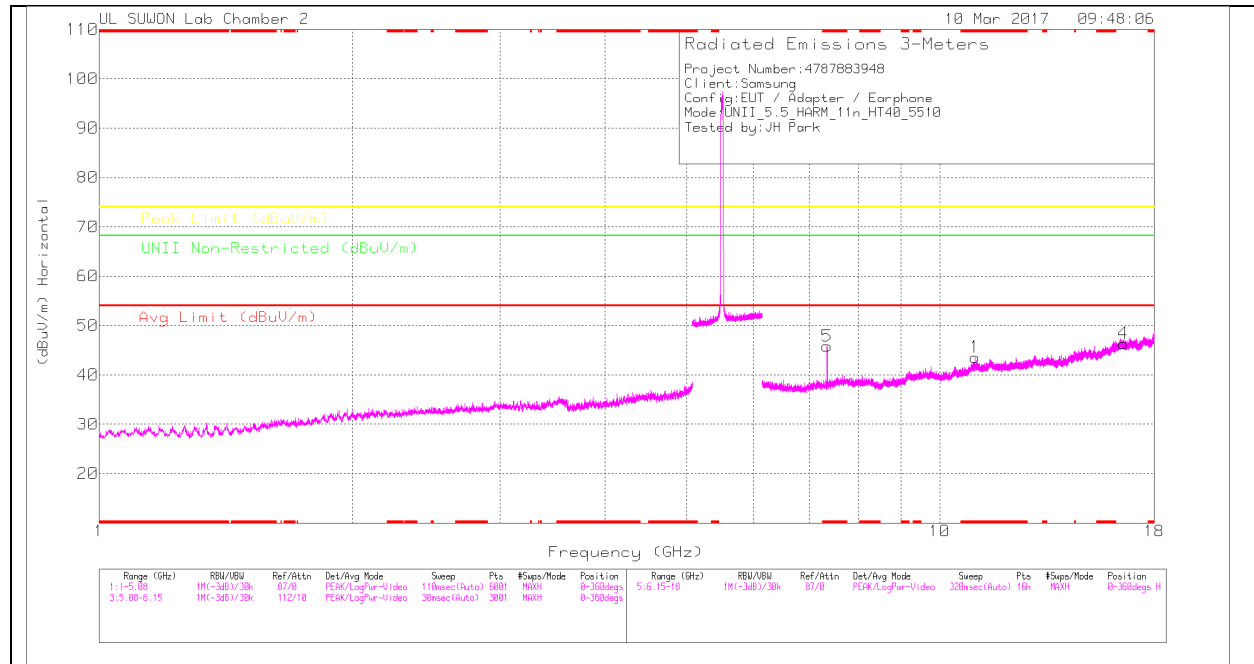
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	36.92	Pk	34.7	-14.5	0	57.12	68.2	-11.08	274	159	V
2	5.736	39.66	Pk	34.7	-14.4	0	59.96	68.2	-8.24	274	159	V

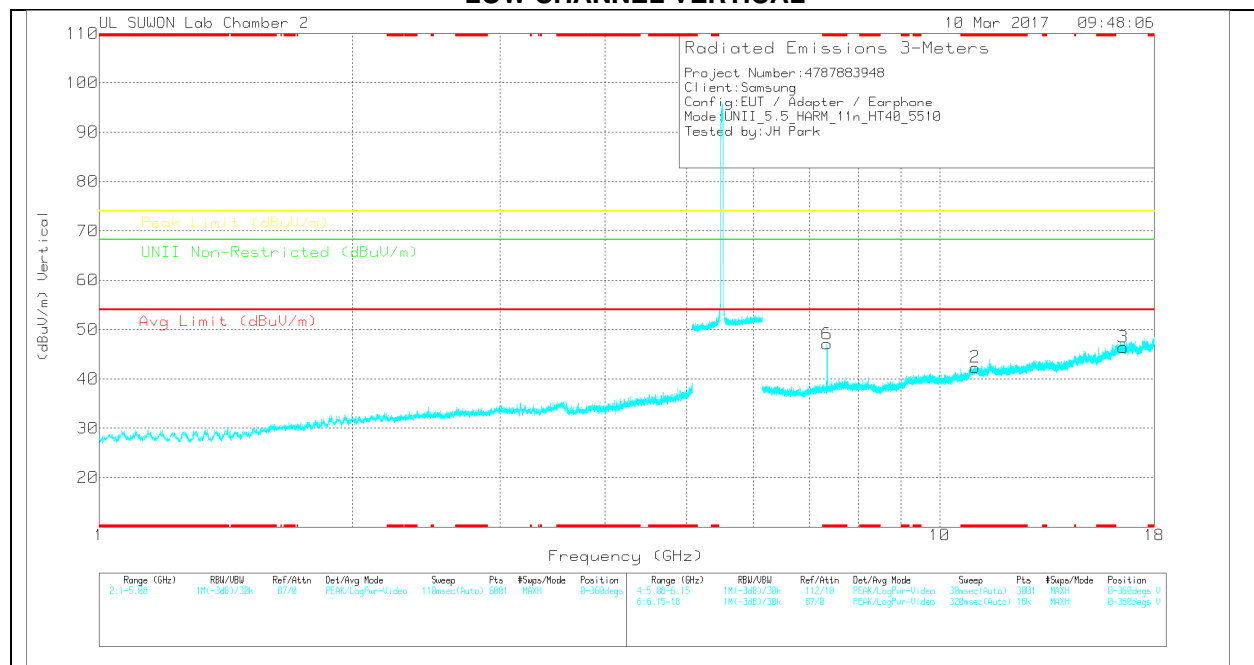
Pk - Peak detector

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	3117(0016 8724)_150 619	6GHz_HP[dB]	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	* 11.023	21.78	PK	38	-16.2	0	43.58	-	-	74	-30.42	-	-	0-360	150	H
4	16.531	19.68	PK	41	-14.3	0	46.38	-	-	-	-	68.2	-21.82	0-360	150	H
5	* 7.346	30.62	PK	35.9	-20.7	0	45.82	-	-	74	-28.18	-	-	0-360	250	H
2	* 11.016	20.43	PK	38	-16.1	0	42.33	-	-	74	-31.67	-	-	0-360	150	V
3	16.529	19.71	PK	41	-14.3	0	46.41	-	-	-	-	68.2	-21.79	0-360	150	V
6	* 7.346	31.88	PK	35.9	-20.7	0	47.08	-	-	74	-26.92	-	-	0-360	150	V

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

PK – Peak Detector

Radiated Emissions

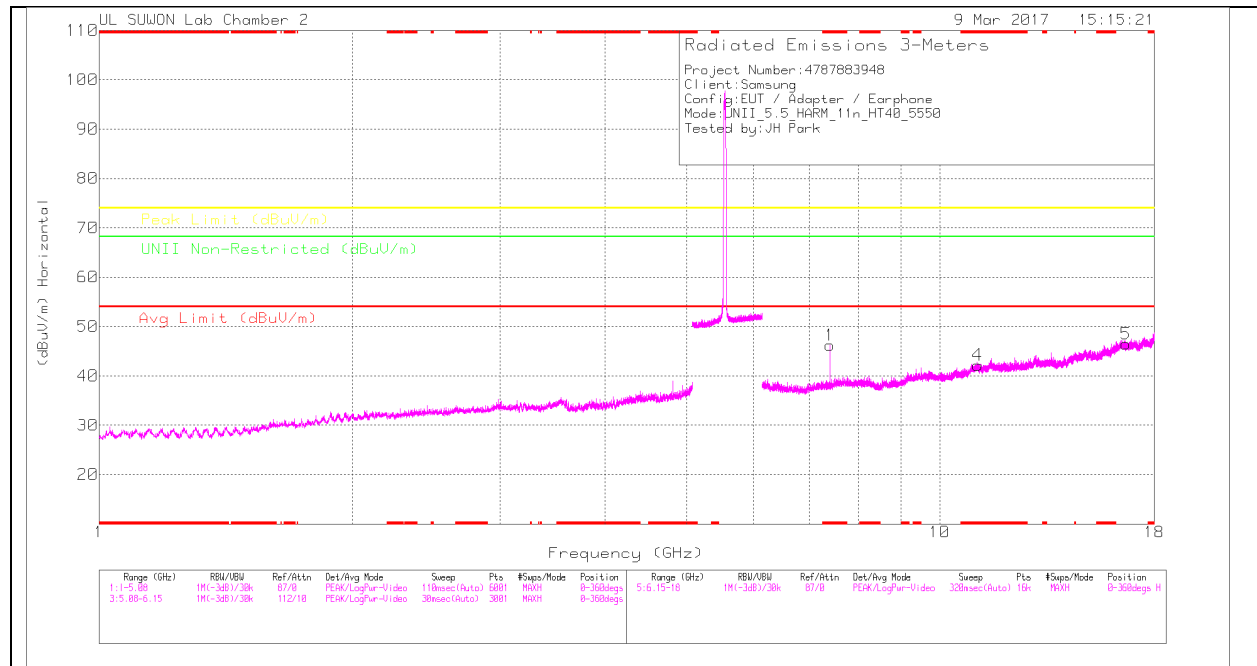
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.347	37.27	PK-U	35.9	-20.7	0	52.47	-	-	74	-21.53	-	-	213	326	H
* 7.347	30.37	ADR	35.9	-20.7	0	45.57	54	-8.43	-	-	-	-	213	326	H
* 7.346	38.06	PK-U	35.9	-20.7	0	53.26	-	-	74	-20.74	-	-	318	162	V
* 7.347	30.92	ADR	35.9	-20.7	0	46.12	54	-7.88	-	-	-	-	318	162	V

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

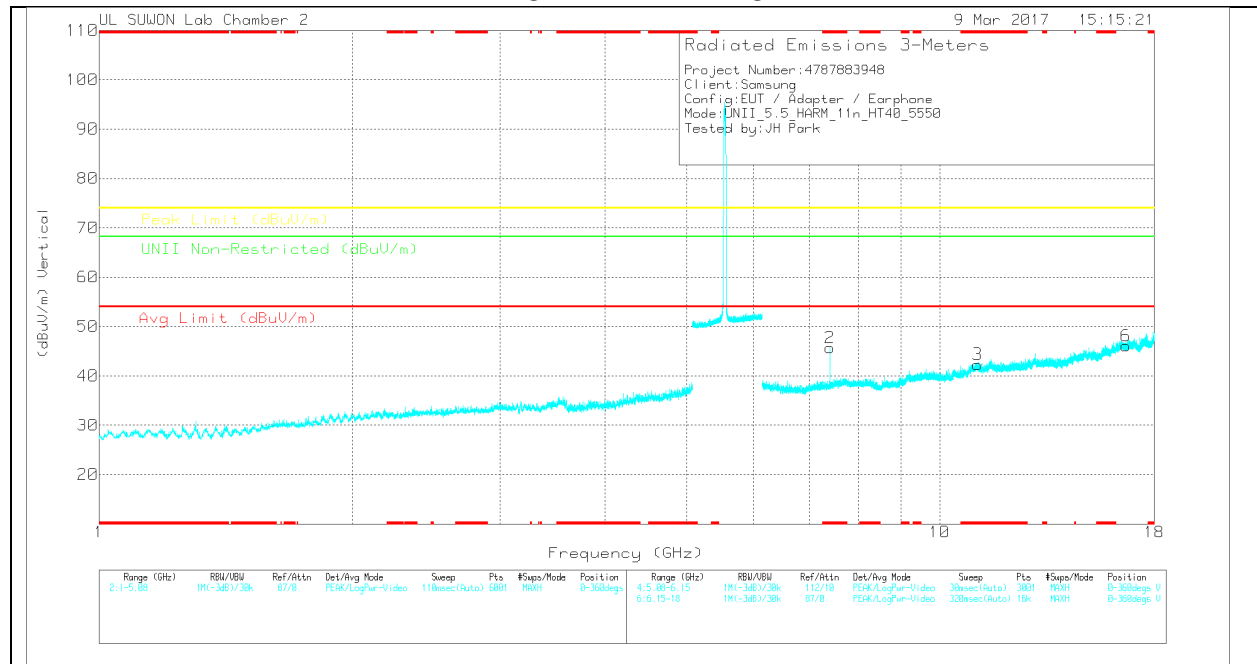
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS 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	3117/0016 8724_150 619	6GHz_HP[d B]	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	31.3	PK	36	-21.1	0	46.2	-	-	74	-27.8	-	-	0-360	250	H
4	* 11.103	20.08	PK	38.1	-16	0	42.18	-	-	74	-31.82	-	-	0-360	150	H
5	16.651	19.64	PK	41	-14.2	0	46.44	-	-	-	-	68.2	-21.76	0-360	150	H
2	* 7.399	30.79	PK	36	-21.1	0	45.69	-	-	74	-28.31	-	-	0-360	150	V
3	* 11.099	20.3	PK	38.1	-16.1	0	42.3	-	-	74	-31.7	-	-	0-360	250	V
6	16.65	19.29	PK	41	-14.2	0	46.09	-	-	-	-	68.2	-22.11	0-360	250	V

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

PK – Peak Detector

Radiated Emissions

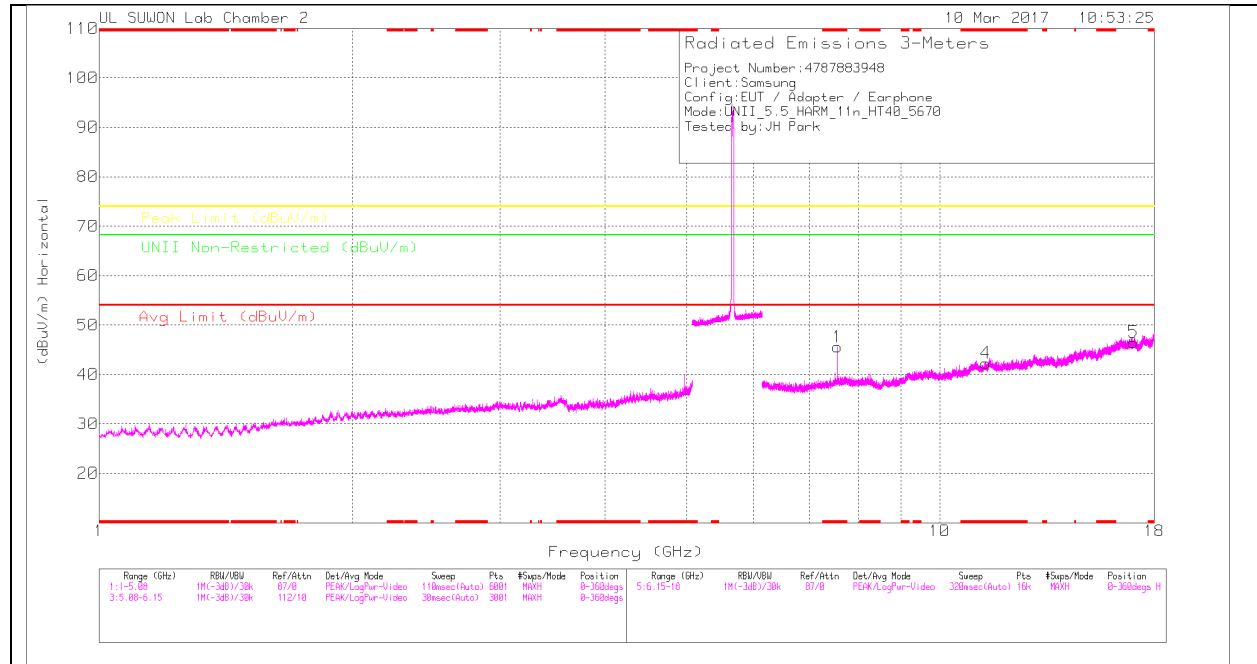
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 24_150619	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.4	37.75	PK-U	36	-21.1	0	52.65	-	-	74	-21.35	-	-	6	157	H
* 7.4	30.37	ADR	36	-21.1	0	45.27	54	-8.73	-	-	-	-	6	157	H
* 7.4	38.49	PK-U	36	-21.1	0	53.39	-	-	74	-20.61	-	-	312	169	V
* 7.4	30.41	ADR	36	-21.1	0	45.31	54	-8.69	-	-	-	-	312	169	V

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

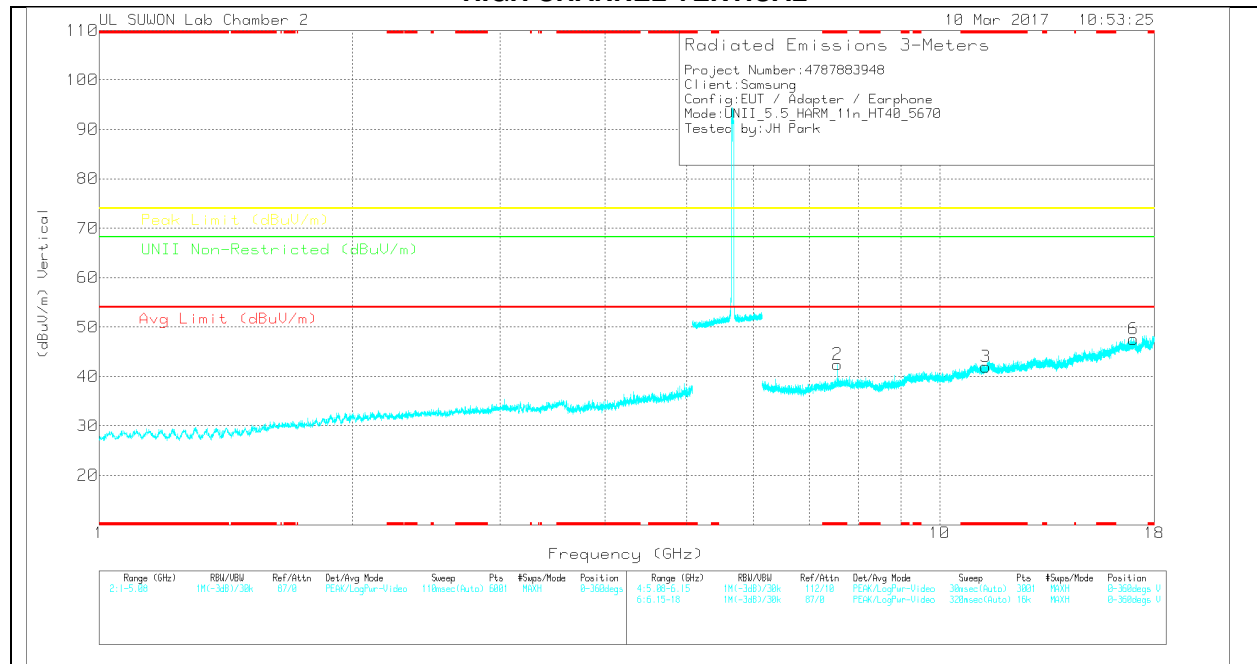
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS 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	3117(0016 8724)_150 619	6GHz_HP[d B]	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	* 7.559	29.85	PK	36.1	-20.4	0	45.55	-	-	74	-28.45	-	-	0-360	150	H
4	* 11.341	19.6	PK	38.2	-15.5	0	42.3	-	-	74	-31.7	-	-	0-360	250	H
5	17.012	18.62	PK	41.1	-13.2	0	46.52	-	-	-	-	68.2	-21.68	0-360	250	H
2	* 7.559	26.73	PK	36.1	-20.4	0	42.43	-	-	74	-31.57	-	-	0-360	150	V
3	* 11.341	19.26	PK	38.2	-15.5	0	41.96	-	-	74	-32.04	-	-	0-360	250	V
6	17.011	19.67	PK	41.1	-13.2	0	47.57	-	-	-	-	68.2	-20.63	0-360	150	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	6GHz_HP[dB]	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
* 7.56	36.36	PK-U	36.1	-20.4	0	52.06	-	-	74	-21.94	-	-	356	135	H
* 7.56	28.76	ADR	36.1	-20.4	0	44.46	54	-9.54	-	-	-	-	356	135	H
* 7.56	35.84	PK-U	36.1	-20.4	0	51.54	-	-	74	-22.46	-	-	212	150	V
* 7.56	27.04	ADR	36.1	-20.4	0	42.74	54	-11.26	-	-	-	-	212	150	V

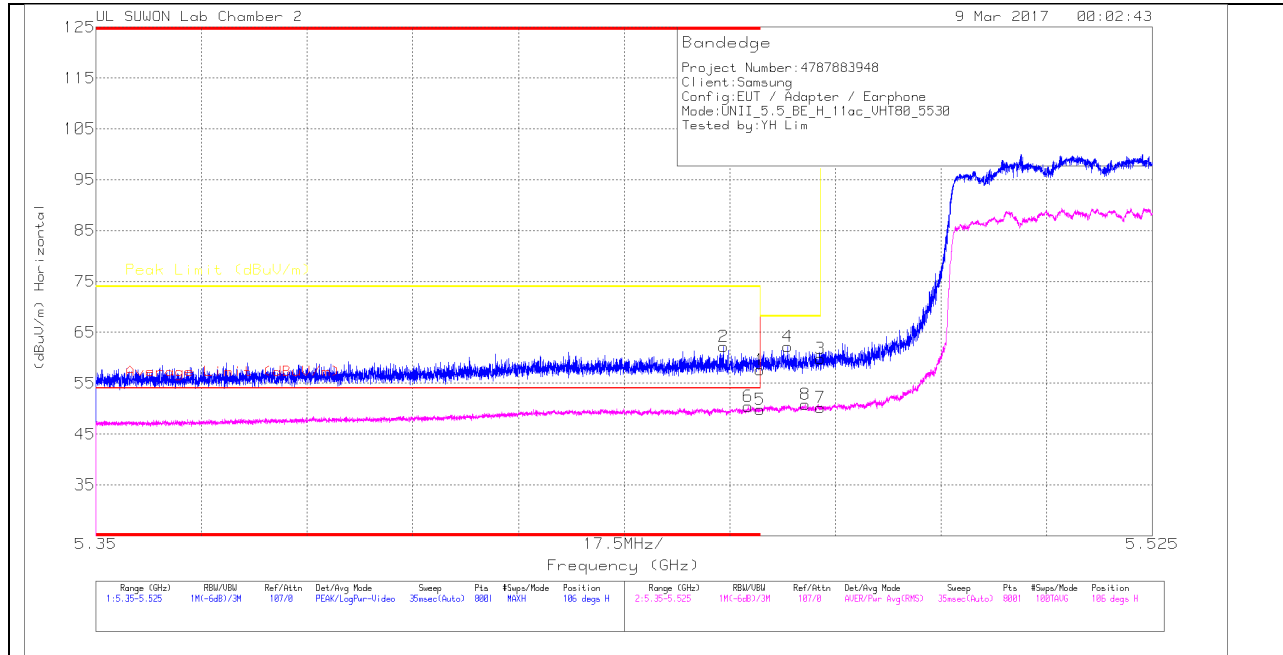
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.3.4. TX ABOVE 1GHz 802.11ac VHT80 2Tx CDD MODE IN THE 5.5GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

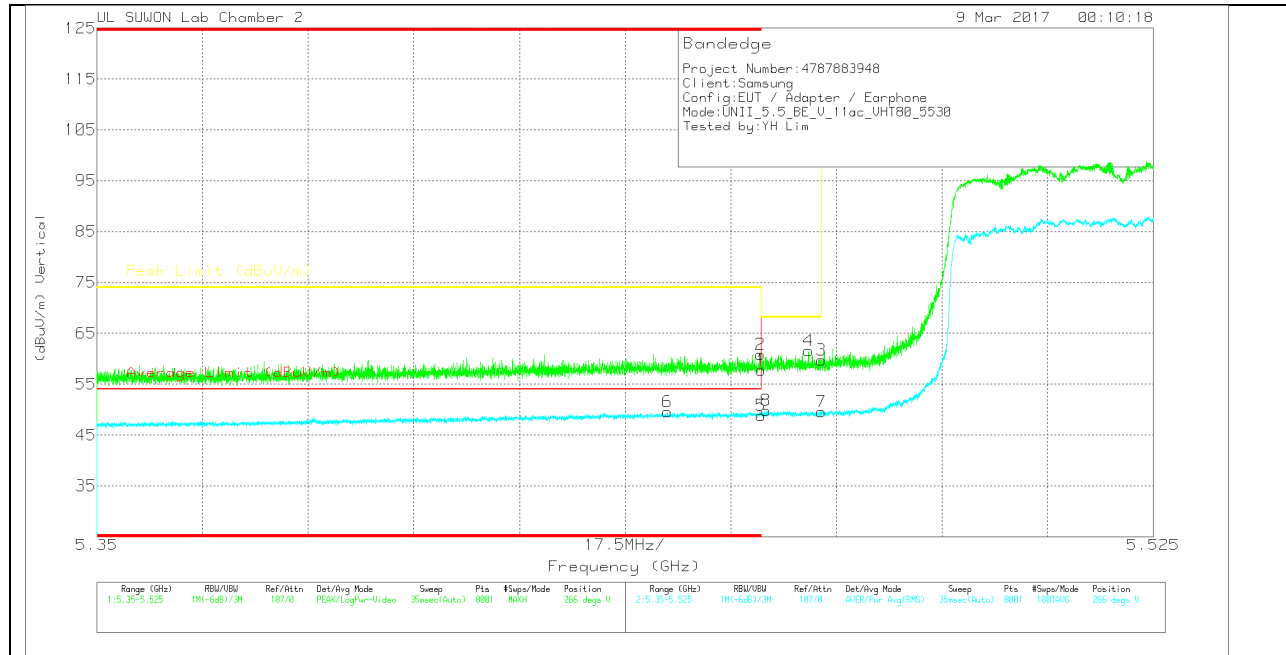
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	38.17	Pk		-15	0	57.67	-	-	74	-16.33	106	137	H
2	* 5.454	42.76	Pk		-15.1	0	62.16	-	-	74	-11.84	106	137	H
3	5.47	40.35	Pk		-15	0	59.85	-	-	68.2	-8.35	106	137	H
4	5.465	42.81	Pk		-15.1	0	62.21	-	-	68.2	-5.99	106	137	H
5	* 5.46	29.45	RMS		-15	.88	49.83	54	-4.17	-	-	106	137	H
6	* 5.458	30.17	RMS		-15.1	.88	50.45	54	-3.55	-	-	106	137	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	38.25	Pk	34.5	-15	0	57.75	-	-	74	-16.25	266	137	V
2	* 5.46	41.39	Pk	34.5	-15	0	60.89	-	-	74	-13.11	266	137	V
3	5.47	40.18	Pk	34.5	-15	0	59.68	-	-	68.2	-8.52	266	137	V
4	5.468	42.13	Pk	34.5	-15	0	61.63	-	-	68.2	-6.57	266	137	V
5	* 5.46	28.45	RMS	34.5	-15	.88	48.83	54	-5.17	-	-	266	137	V
6	* 5.444	29.26	RMS	34.5	-15.1	.88	49.54	54	-4.46	-	-	266	137	V

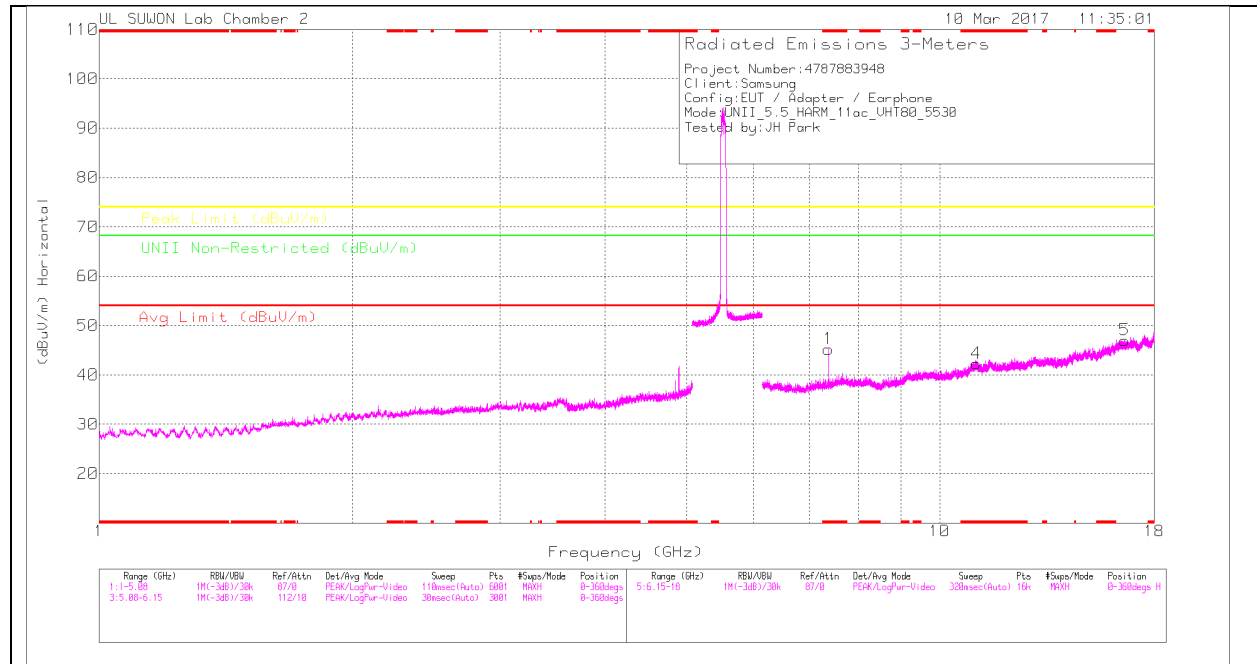
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

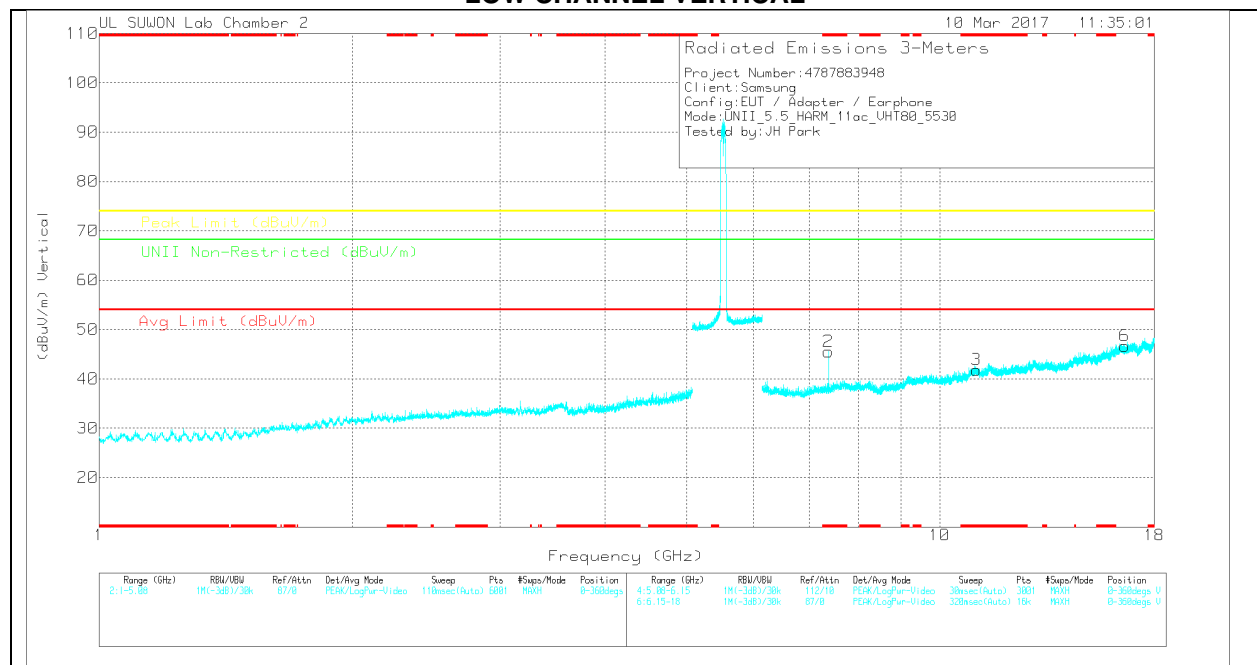
RMS - RMS detection

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	3117(0016 8724)_150 619	6GHz_HP[dB]	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	* 7.373	30.36	PK	35.9	-21	0	45.26	-	-	74	-28.74	-	-	0-360	250	H
4	* 11.059	20.4	PK	38.1	-16.2	0	42.3	-	-	74	-31.7	-	-	0-360	150	H
5	16.589	20.14	PK	41	-14.1	0	47.04	-	-	-	-	68.2	-21.16	0-360	250	H
2	* 7.373	30.64	PK	35.9	-21	0	45.54	-	-	74	-28.46	-	-	0-360	150	V
3	* 11.059	19.93	PK	38.1	-16.2	0	41.83	-	-	74	-32.17	-	-	0-360	250	V
6	16.589	19.78	PK	41	-14.1	0	46.68	-	-	-	-	68.2	-21.52	0-360	150	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	6GHz_HP[dB]	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
* 7.373	37.59	PK-U	35.9	-21	0	52.49	-	-	74	-21.51	-	-	203	195	H
* 7.373	31.21	ADR	35.9	-21	0	46.11	54	-7.89	-	-	-	-	203	195	H
* 7.373	37.07	PK-U	35.9	-21	0	51.97	-	-	74	-22.03	-	-	254	153	V
* 7.373	28.84	ADR	35.9	-21	0	43.74	54	-10.26	-	-	-	-	254	153	V

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

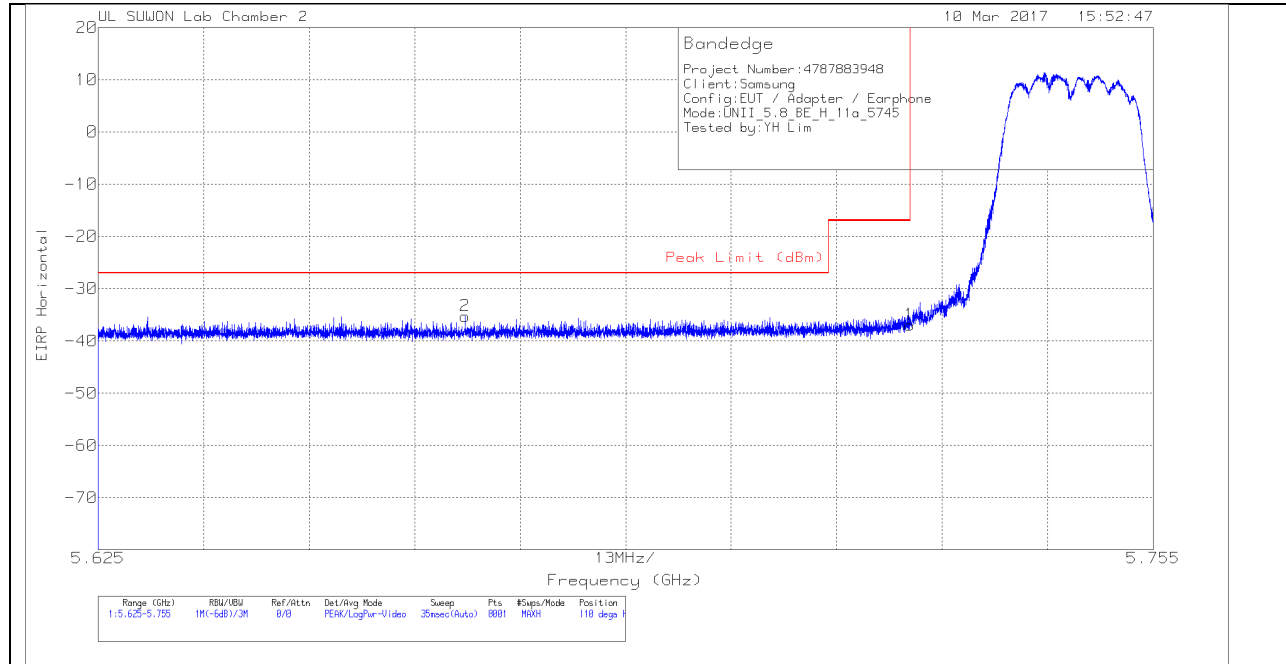
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.4. 5.8 GHz

10.4.1. TX ABOVE 1GHz 802.11a 2Tx CDD MODE IN THE 5.8GHz BAND BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK PLOT



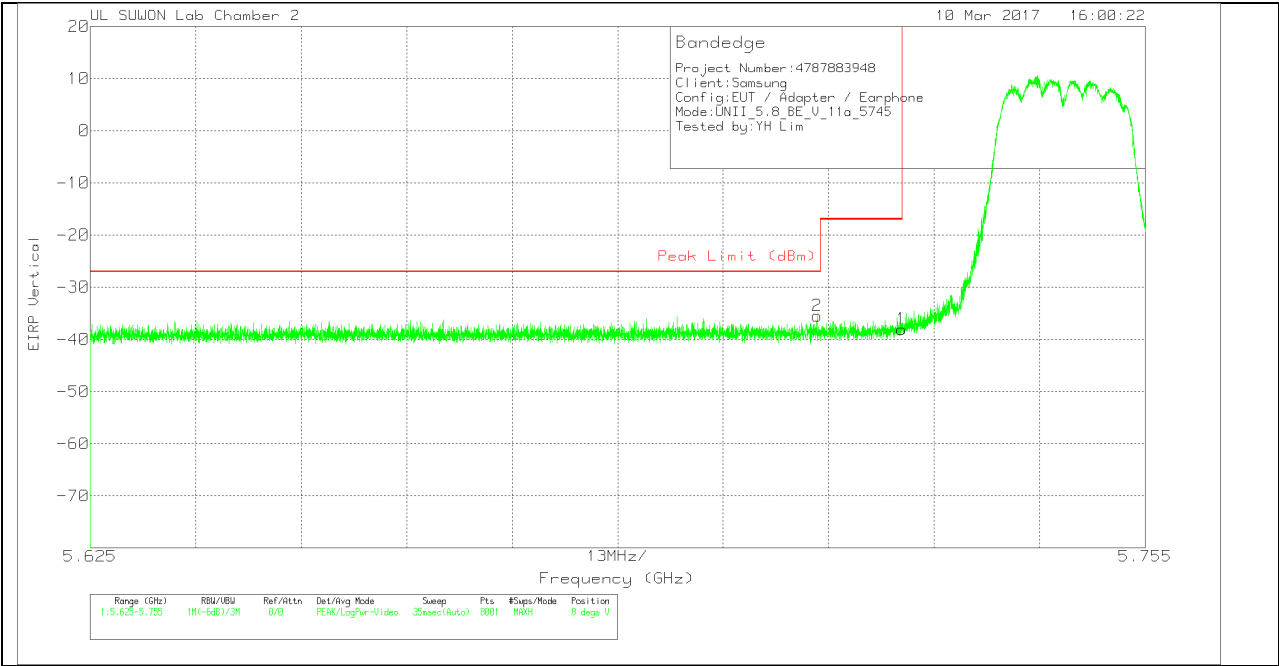
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	10dB[dB]	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-68.93	Pk		-14.5	11.8	0	-36.93	-17	-19.93	110	103	H
2	5.67	-67.14	Pk		-14.5	11.8	0	-35.24	-27	-8.24	110	103	H

Pk - Peak detector

VERTICAL PEAK PLOT



VERTICAL DATA

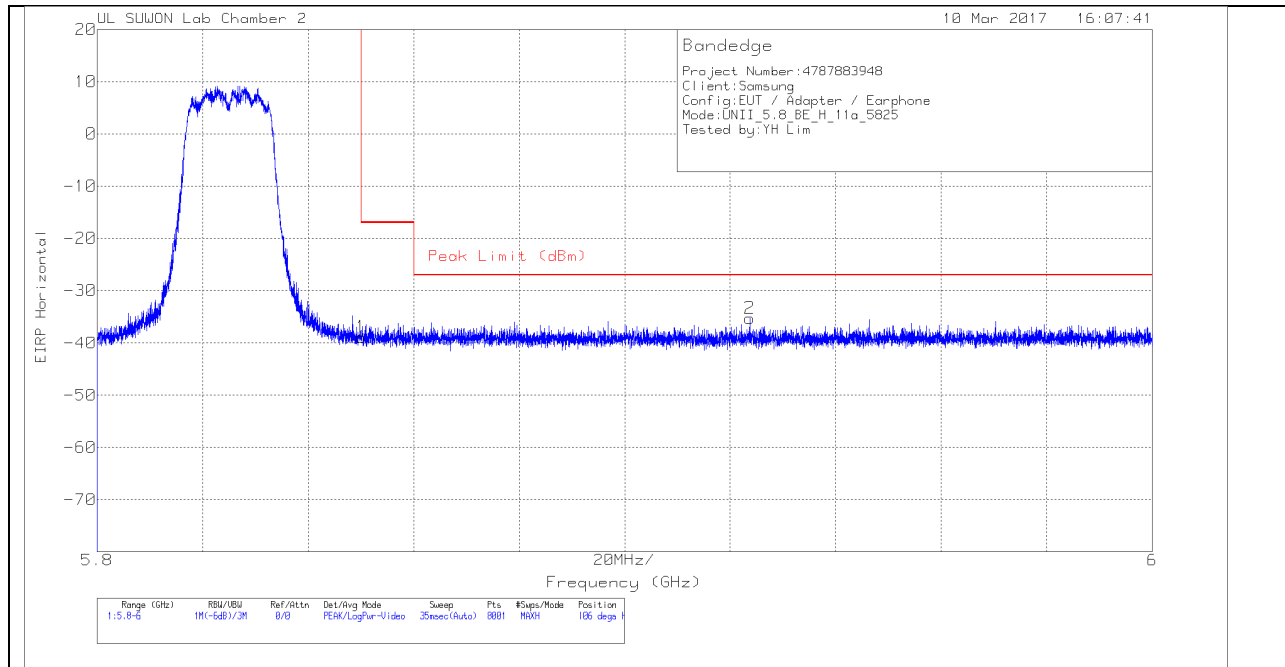
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117/0016 8724_150 619	10dB[dB]	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-70	Pk	34.7	-14.5	11.8	0	-38	-17	-21	8	137	V
2	5.715	-67.45	Pk	34.7	-14.5	11.8	0	-35.45	-27	-8.45	8	137	V

Pk - Peak detector

BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK PLOT



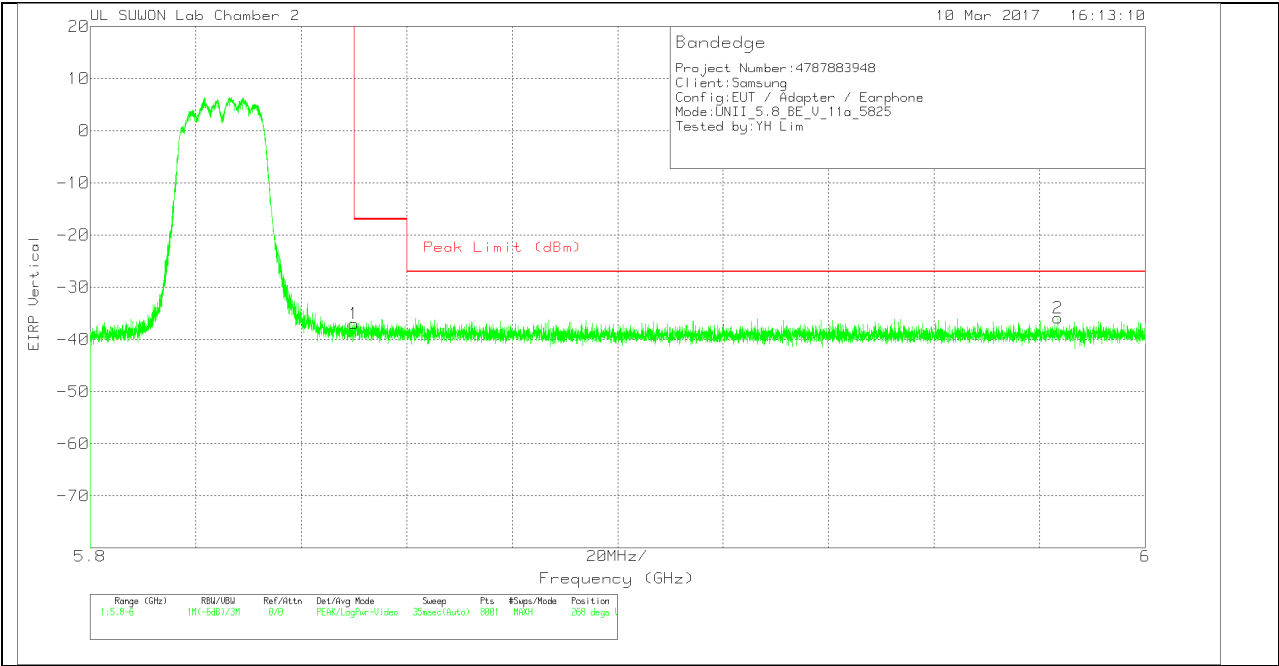
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	10dB[dB]	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-71.07	Pk	34.7	-14.3	11.8	0	-38.87	-17	-21.87	106	242	H
2	5.924	-67.46	Pk	34.8	-14.4	11.8	0	-35.26	-27	-8.26	106	242	H

Pk - Peak detector

VERTICAL PEAK PLOT



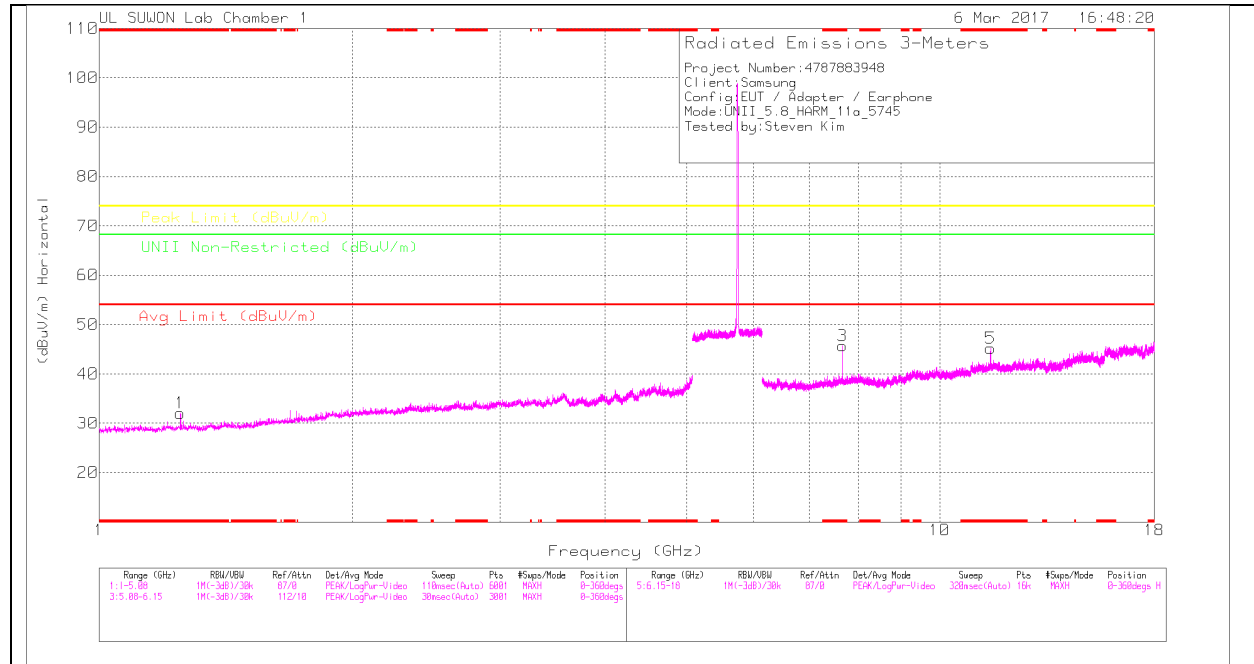
VERTICAL DATA

Trace Markers

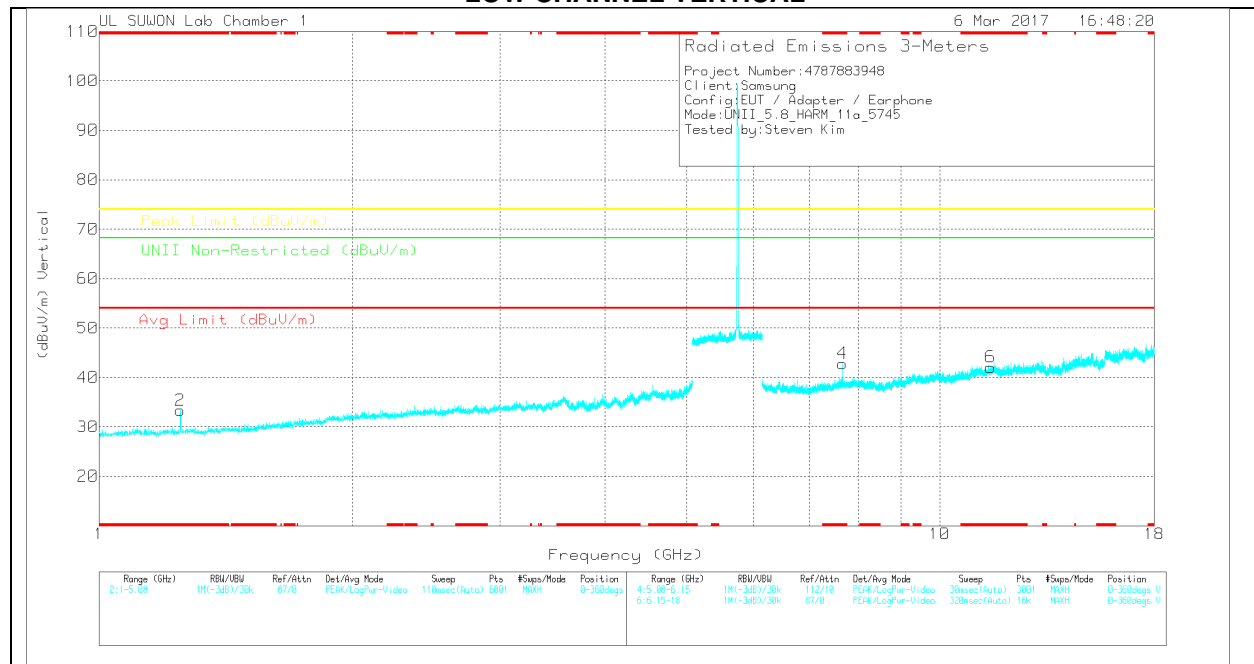
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117/0016 8724_150 619	10dB[dB]	Conversio n Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-69.21	Pk	34.7	-14.3	11.8	0	-37.01	-17	-20.01	268	344	V
2	5.983	-68.22	Pk	34.8	-14.3	11.8	0	-35.92	-27	-8.92	268	344	V

Pk - Peak detector

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	3117(0016 8717)_150 619	5Ghz_LP(d B)	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	* 1.25	43.34	Avg	28.3	-39.6	0	32.04	-	-	74	-41.96	-	-	0-360	150	H
2	* 1.25	44.63	Avg	28.3	-39.6	0	33.33	-	-	74	-40.67	-	-	0-360	250	V
3	* 7.659	40.3	Avg	36	-30.6	0	45.7	-	-	74	-28.3	-	-	0-360	150	H
5	* 11.493	34.57	Avg	38.6	-28	0	45.17	-	-	74	-28.83	-	-	0-360	150	H
4	* 7.66	37.42	Avg	36	-30.6	0	42.82	-	-	74	-31.18	-	-	0-360	150	V
6	* 11.494	31.48	Avg	38.6	-28	0	42.08	-	-	74	-31.92	-	-	0-360	250	V

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

PK – Peak Detector

Radiated Emissions

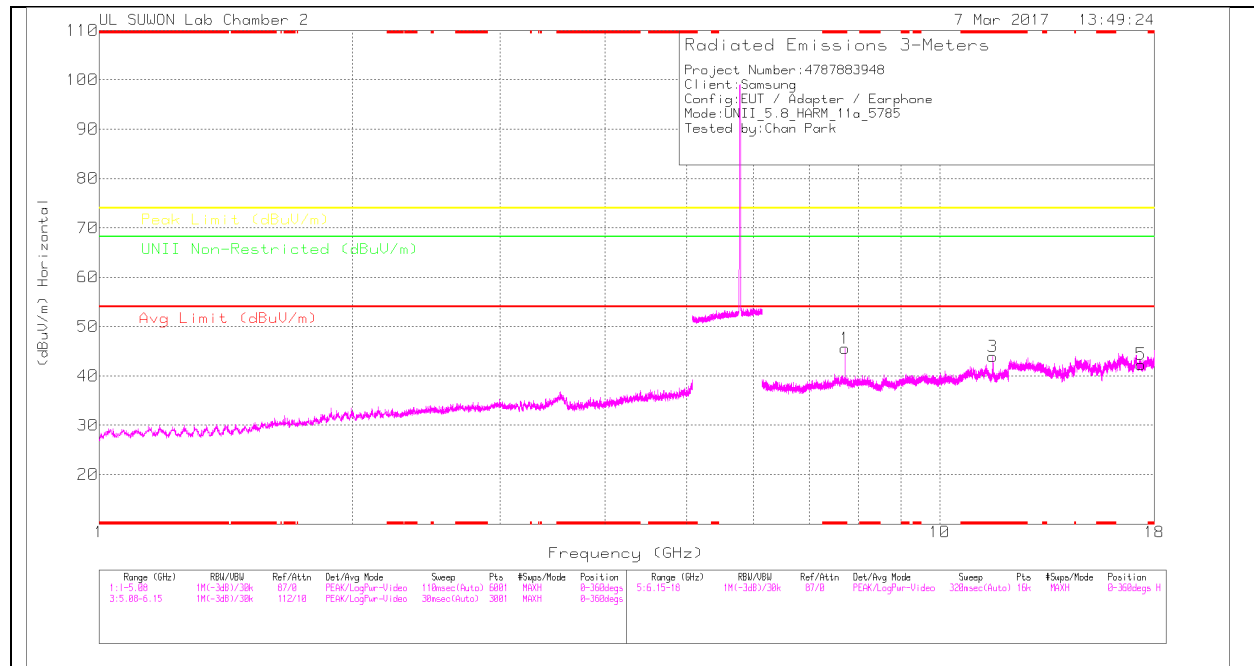
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.66	46.84	PK-U	36	-30.6	0	52.24	-	-	74	-21.76	-	-	341	140	H
* 7.66	39	ADR	36	-30.6	0	44.4	54	-9.6	-	-	-	-	341	140	H
* 7.66	45.36	PK-U	36	-30.6	0	50.76	-	-	74	-23.24	-	-	12	146	V
* 7.66	36.42	ADR	36	-30.6	0	41.82	54	-12.18	-	-	-	-	12	146	V
* 11.491	45.28	PK-U	38.6	-28.1	0	55.78	-	-	74	-18.22	-	-	221	139	H
* 11.49	32.66	ADR	38.6	-28.1	.23	43.39	54	-10.61	-	-	-	-	221	139	H

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

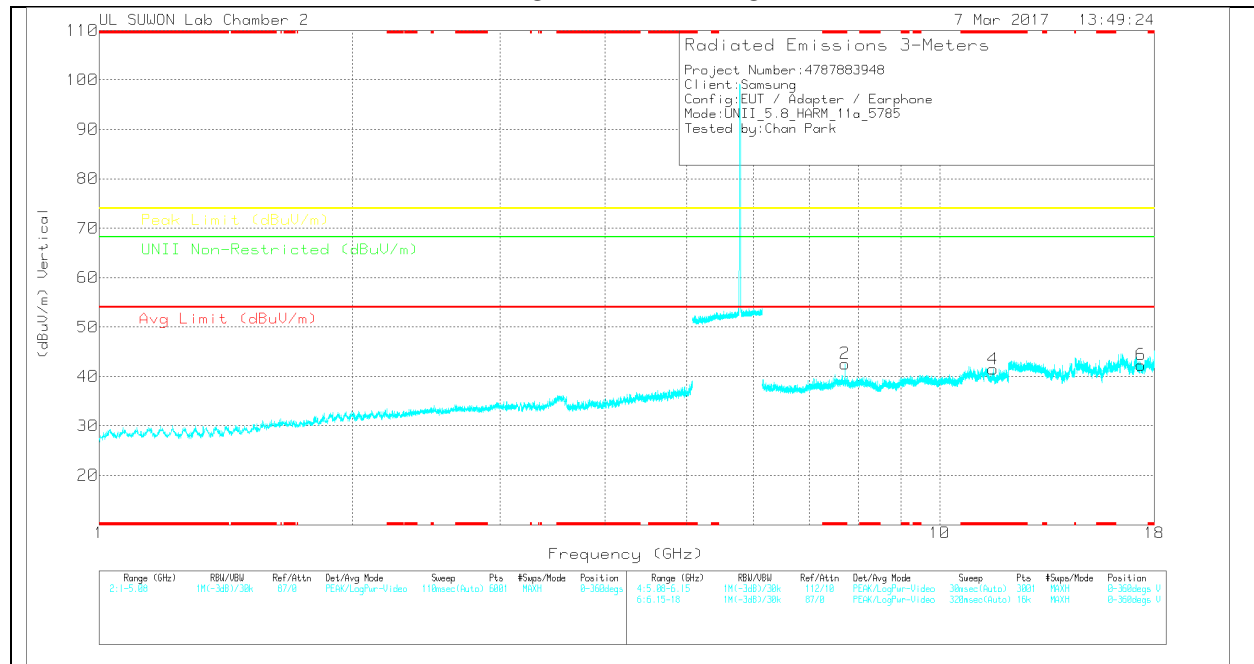
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS 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	3117(00168724)_150619	6GHz_HP[dB]	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	* 7.713	29.39	Pk	36	-19.8	0	45.59	-	-	74	-28.41	-	-	0-360	150	H
3	* 11.569	21.42	Pk	38.4	-15.9	0	43.92	-	-	74	-30.08	-	-	0-360	150	H
5	17.354	14.41	Pk	41.2	-13.3	0	42.31	-	-	-	-	68.2	-25.89	0-360	150	H
2	* 7.713	26.38	Pk	36	-19.8	0	42.58	-	-	74	-31.42	-	-	0-360	150	V
4	* 11.573	18.99	Pk	38.4	-15.9	0	41.49	-	-	74	-32.51	-	-	0-360	250	V
6	17.357	14.43	Pk	41.2	-13.3	0	42.33	-	-	-	-	68.2	-25.87	0-360	250	V

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

Pk – Peak detector

Radiated Emissions

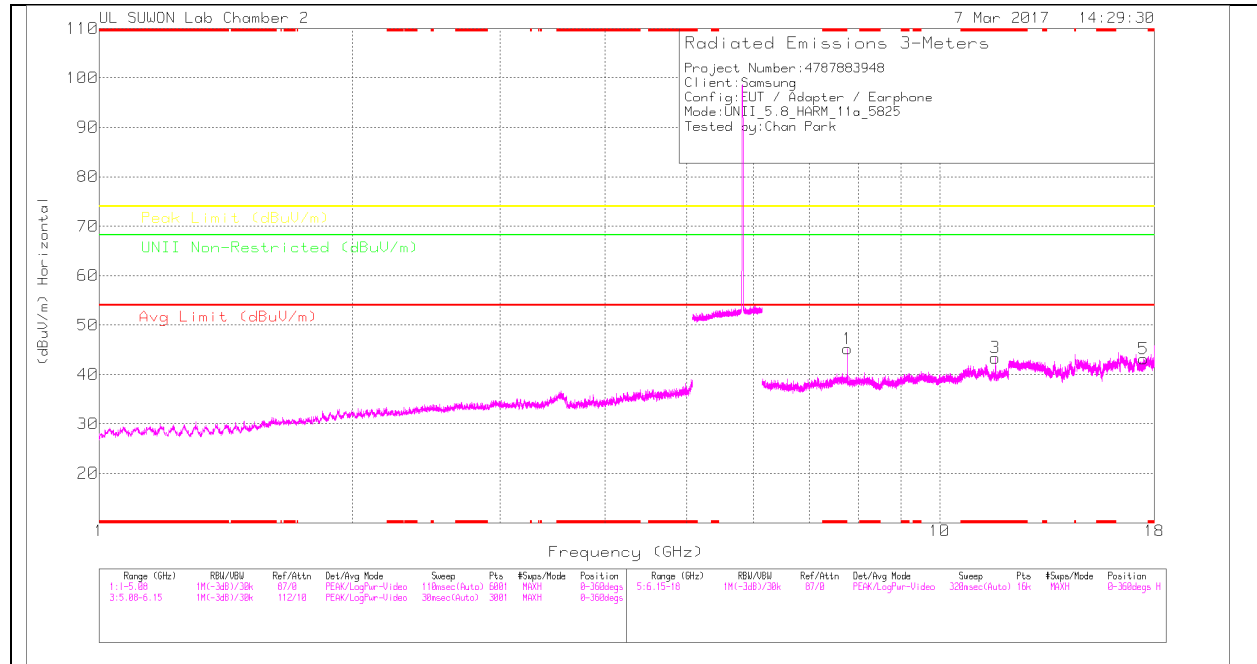
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168724)_150619	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.714	36.34	PK-U	36	-19.8	0	52.54	-	-	74	-21.46	-	-	325	138	H
* 7.713	28.68	ADR	36	-19.8	0	44.88	54	-9.12	-	-	-	-	325	138	H
* 7.713	34.81	PK-U	36	-19.8	0	51.01	-	-	74	-22.99	-	-	15	279	V
* 7.713	25.73	ADR	36	-19.8	0	41.93	54	-12.07	-	-	-	-	15	279	V
* 11.571	34.52	PK-U	38.4	-15.9	0	57.02	-	-	74	-16.98	-	-	223	141	H
* 11.57	22.99	ADR	38.4	-15.9	.23	45.72	54	-8.28	-	-	-	-	223	141	H

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

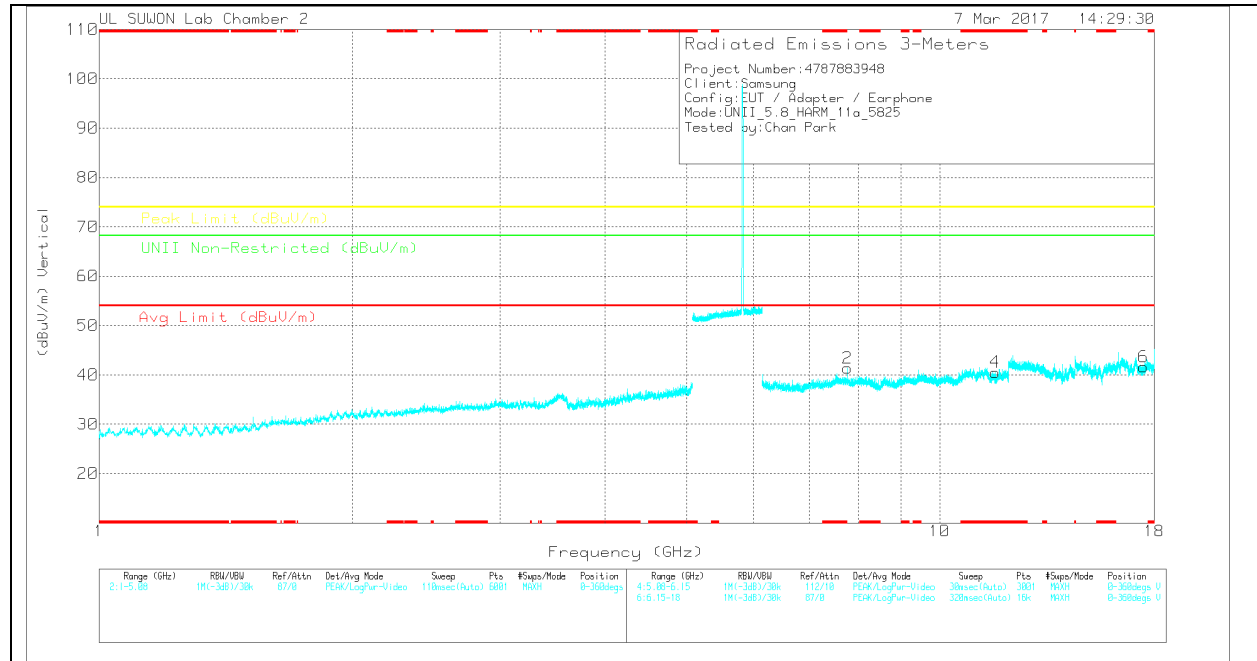
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS 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	3117[0016 8724], 150 619	6GHz_HP[dB]	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	7.766	29.4	Pk	36	-20.2	0	45.2	-	-	-	-	68.2	-23	0-360	150	H
3	* 11.648	20.66	Pk	38.4	-15.7	0	43.36	-	-	74	-30.64	-	-	0-360	150	H
5	17.478	14.05	Pk	41.3	-12.2	0	43.15	-	-	-	-	68.2	-25.05	0-360	150	H
2	7.767	25.67	Pk	36	-20.3	0	41.37	-	-	-	-	68.2	-26.83	0-360	150	V
4	* 11.646	17.94	Pk	38.4	-15.8	0	40.54	-	-	74	-33.46	-	-	0-360	250	V
6	17.48	12.63	Pk	41.3	-12.3	0	41.63	-	-	-	-	68.2	-26.57	0-360	150	V

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

Pk – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117[001687 24], 150619	6GHz_HP[dB]	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
7.767	36.11	PK-U	36	-20.3	0	51.81	-	-	-	-	68.2	-16.39	340	142	H
7.767	34.83	PK-U	36	-20.3	0	50.53	-	-	-	-	68.2	-17.67	281	137	V
* 11.645	33.84	PK-U	38.4	-15.8	0	56.44	-	-	74	-17.56	-	-	211	141	H
* 11.65	21.67	ADR	38.4	-15.7	.23	44.6	54	-9.4	-	-	-	-	211	141	H

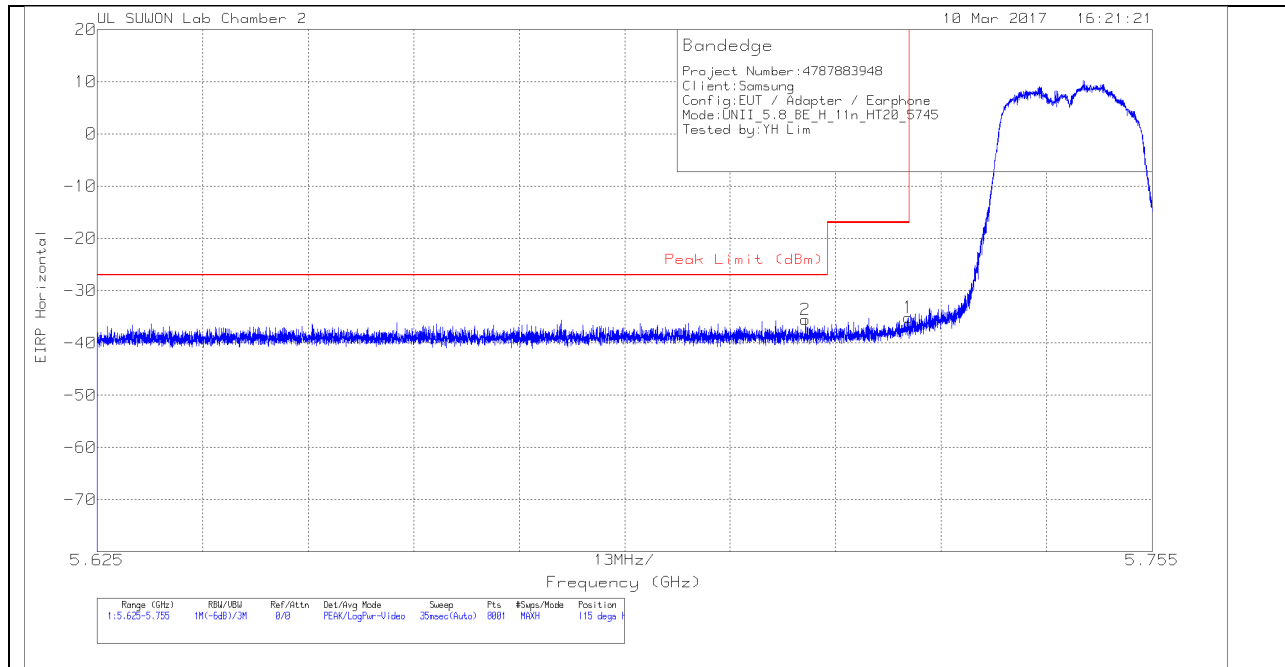
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.4.2. TX ABOVE 1GHz 802.11n HT20 2Tx CDD MODE IN THE 5.8GHz BAND BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK PLOT



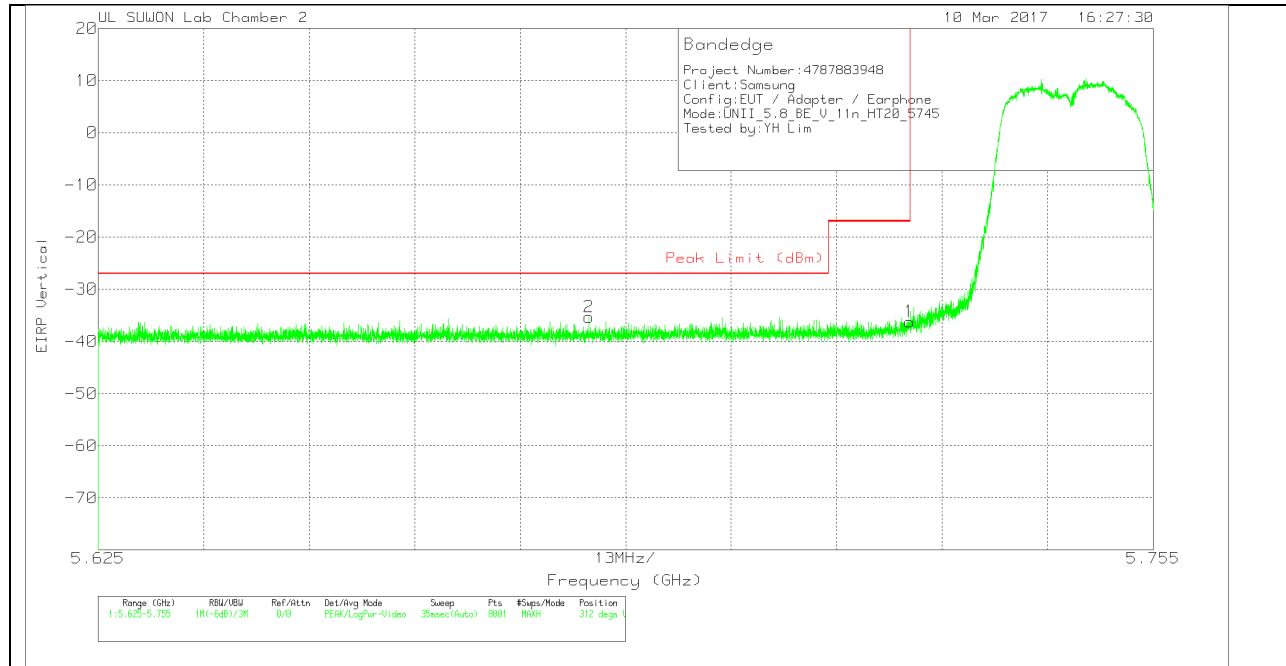
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117/0016 8724)_150 619	10dB[dB]	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-67.14	Pk	34.7	-14.5	11.8	0	-35.14	-17	-18.14	115	113	H
2	5.712	-67.54	Pk	34.7	-14.5	11.8	0	-35.54	-27	-8.54	115	113	H

Pk - Peak detector

VERTICAL PEAK PLOT



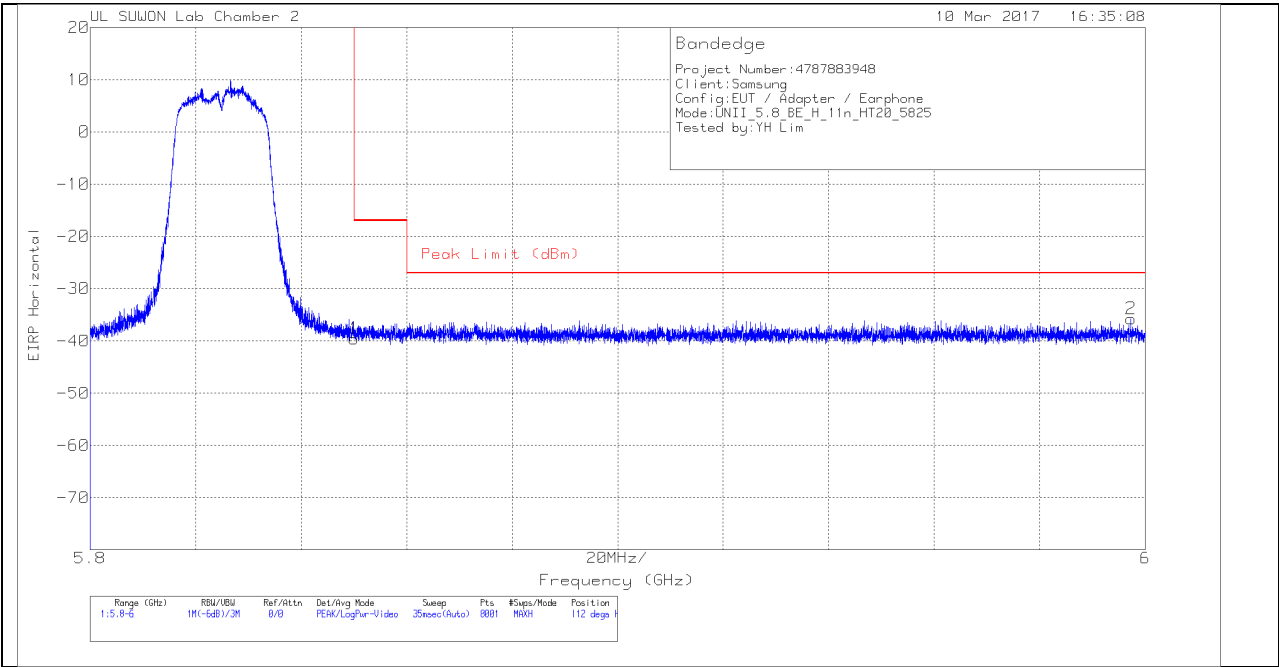
VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117/0016 8724_150 619	10dB[dB]	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-68.21	Pk	34.7	-14.5	11.8	0	-36.21	-17	-19.21	312	149	V
2	5.685	-67.24	Pk	34.6	-14.5	11.8	0	-35.34	-27	-8.34	312	149	V

Pk - Peak detector

BANDEDGE (HIGH CHANNEL)
HORIZONTAL PEAK AND AVERAGE PLOT



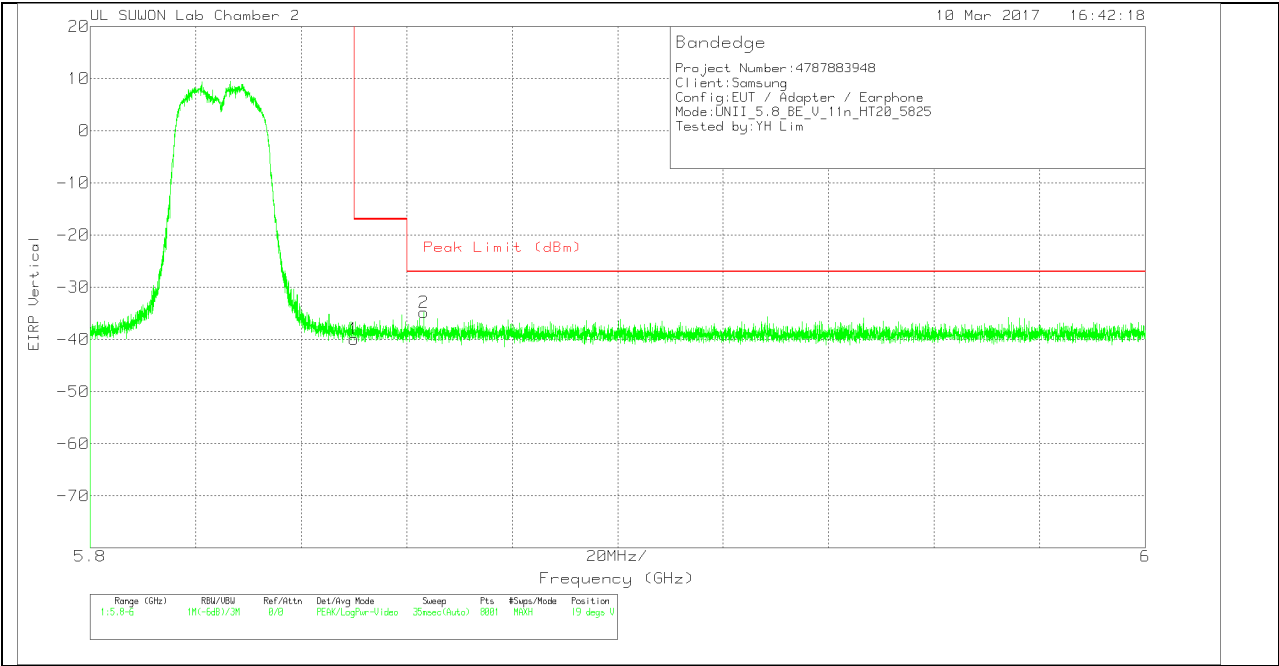
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	10dB[dB]	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-71.78	Pk	34.7	-14.3	11.8	0	-39.58	-17	-22.58	112	229	H
2	5.997	-68.04	Pk	34.8	-14.3	11.8	0	-35.74	-27	-8.74	112	229	H

Pk - Peak detector

VERTICAL PEAK PLOT



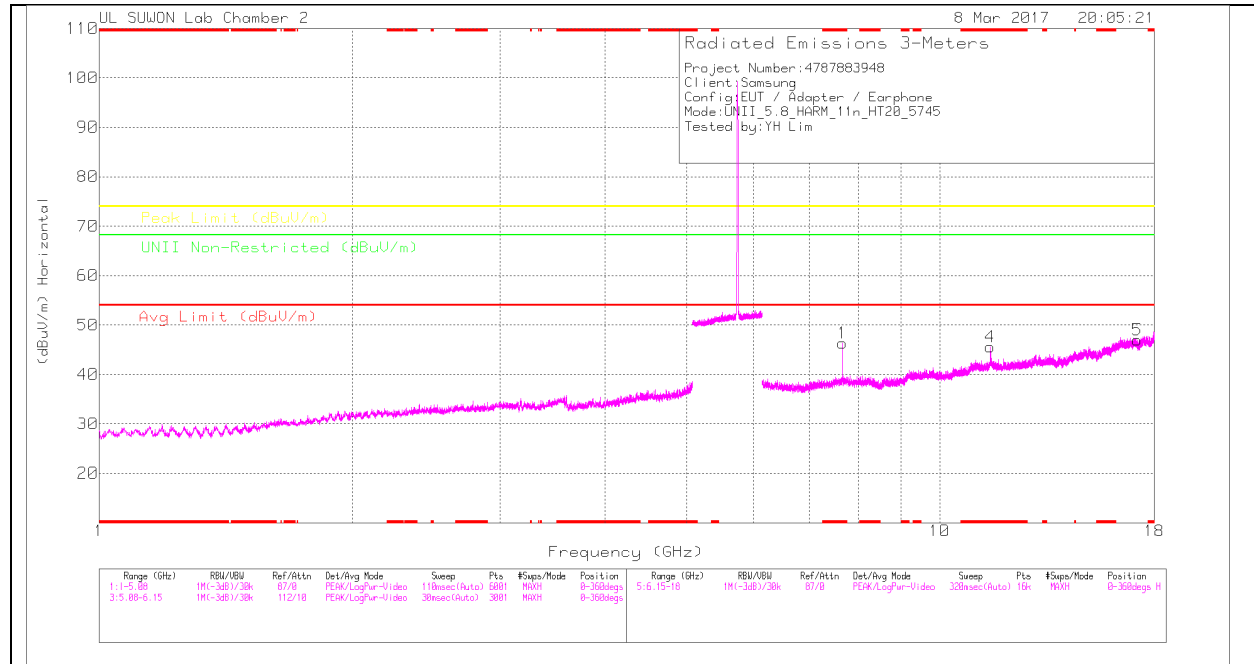
VERTICAL DATA

Trace Markers

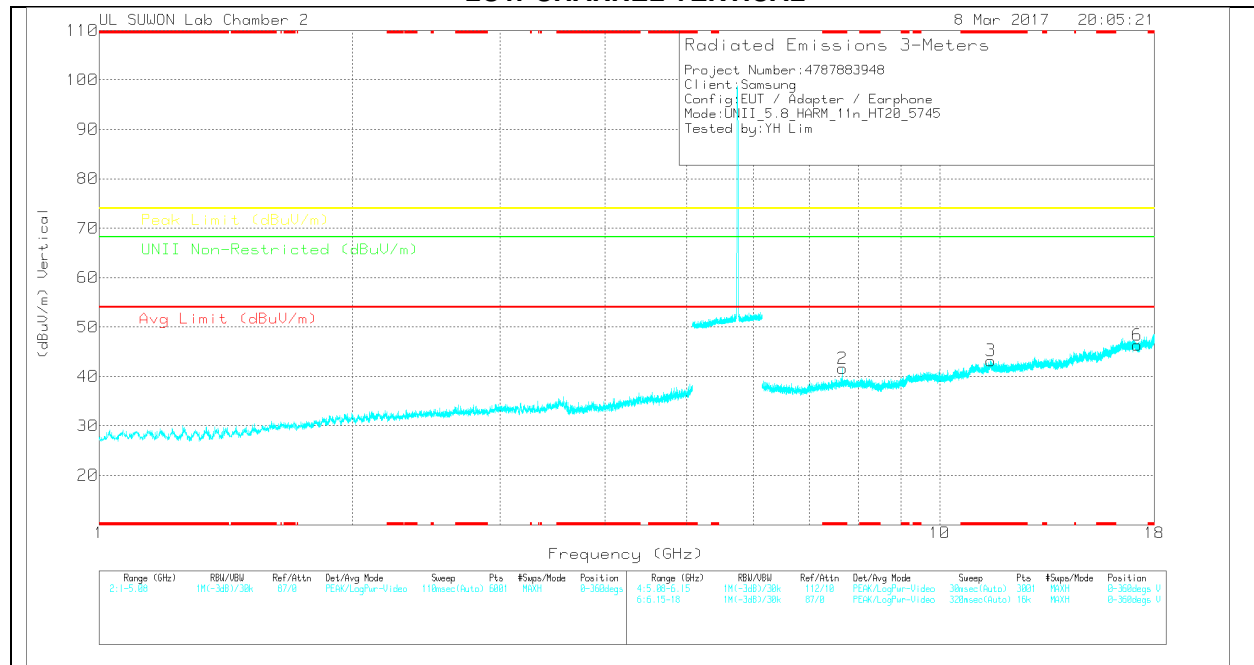
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117/0016 8724_150 619	10dB[dB]	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-72.11	Pk	34.7	-14.3	11.8	0	-39.91	-17	-22.91	19	139	V
2	5.863	-66.91	Pk	34.7	-14.4	11.8	0	-34.81	-27	-7.81	19	139	V

Pk - Peak detector

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	3117[0016 8724], 150 619	6GHz_HP[dB]	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	* 7.659	30.23	PK	36.1	-20	0	46.33	-	-	74	-27.67	-	-	0-360	150	H
4	* 11.491	23.17	PK	38.3	-15.9	0	45.57	-	-	74	-28.43	-	-	0-360	150	H
5	17.187	19.25	PK	41.2	-13.5	0	46.95	-	-	-	-	68.2	-21.25	0-360	150	H
2	* 7.659	25.53	PK	36.1	-20	0	41.63	-	-	74	-32.37	-	-	0-360	150	V
3	* 11.498	20.8	PK	38.3	-15.9	0	43.2	-	-	74	-30.8	-	-	0-360	150	V
6	17.182	18.61	PK	41.2	-13.5	0	46.31	-	-	-	-	68.2	-21.89	0-360	250	V

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

PK – Peak detector

Radiated Emissions

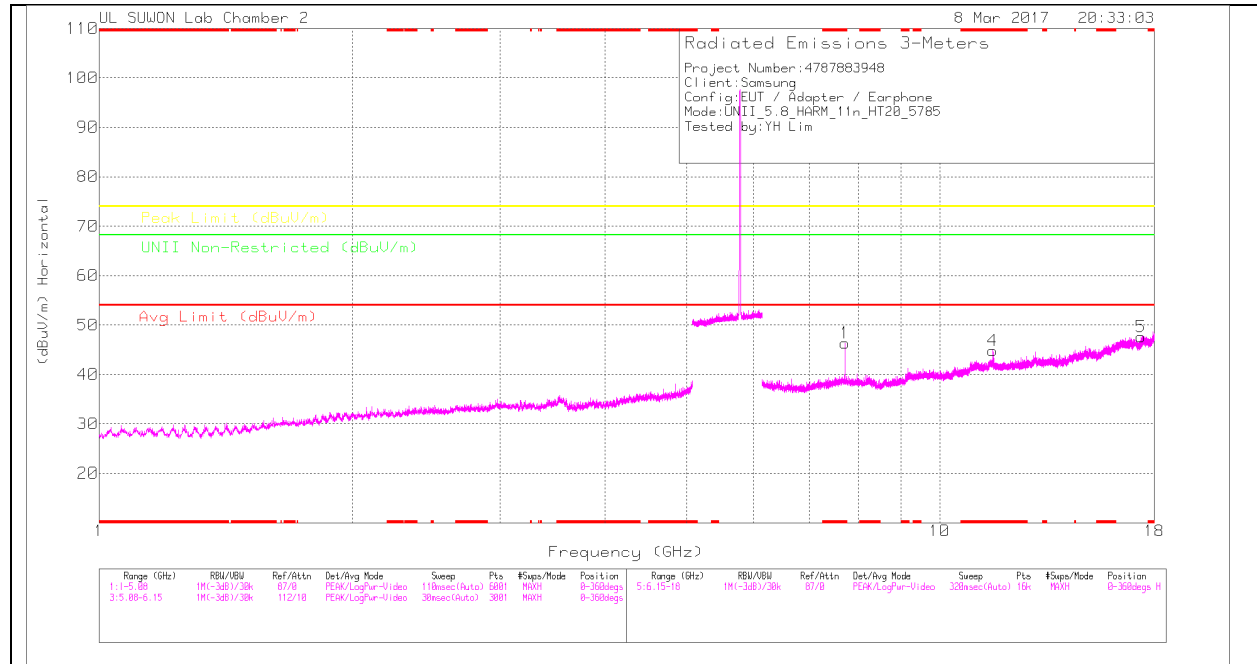
Frequency (GHz)	Meter Reading (dBuV)	Det	3117[001687 24], 150619	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.66	36.86	PK-U	36.1	-20	0	52.96	-	-	74	-21.04	-	-	353	133	H
* 7.66	30.16	ADR	36.1	-20	0	46.26	54	-7.74	-	-	-	-	353	133	H
* 7.66	35.64	PK-U	36.1	-20	0	51.74	-	-	74	-22.26	-	-	17	304	V
* 7.66	25.95	ADR	36.1	-20	0	42.05	54	-11.95	-	-	-	-	17	304	V
* 11.486	31.02	PK-U	38.3	-15.9	0	53.42	-	-	74	-20.58	-	-	22	236	V
* 11.49	18.48	ADR	38.3	-15.9	.24	41.12	54	-12.88	-	-	-	-	22	236	V
* 11.488	34.95	PK-U	38.3	-15.9	0	57.35	-	-	74	-16.65	-	-	204	130	H
* 11.487	20.52	ADR	38.3	-15.9	.24	43.16	54	-10.84	-	-	-	-	204	130	H

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

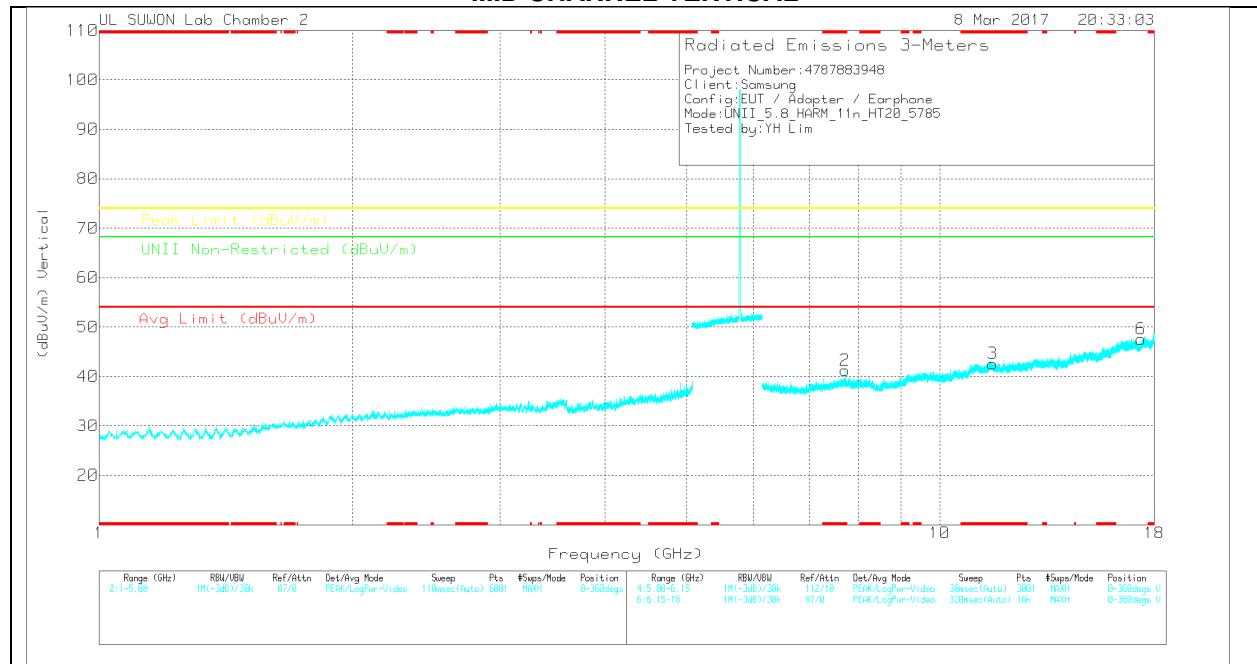
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS 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	3117(00168724)_150619	6GHz_HP[dB]	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	* 7.713	30.16	PK	36	-19.8	0	46.36	-	-	74	-27.64	-	-	0-360	150	H
4	* 11.564	22.32	PK	38.4	-15.9	0	44.82	-	-	74	-29.18	-	-	0-360	150	H
5	17.351	19.62	PK	41.2	-13.2	0	47.62	-	-	-	-	68.2	-20.58	0-360	250	H
2	* 7.713	25.05	PK	36	-19.8	0	41.25	-	-	74	-32.75	-	-	0-360	150	V
3	* 11.57	20.08	PK	38.4	-15.9	0	42.58	-	-	74	-31.42	-	-	0-360	250	V
6	17.353	19.66	PK	41.2	-13.3	0	47.56	-	-	-	-	68.2	-20.64	0-360	150	V

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

PK – Peak detector

Radiated Emissions

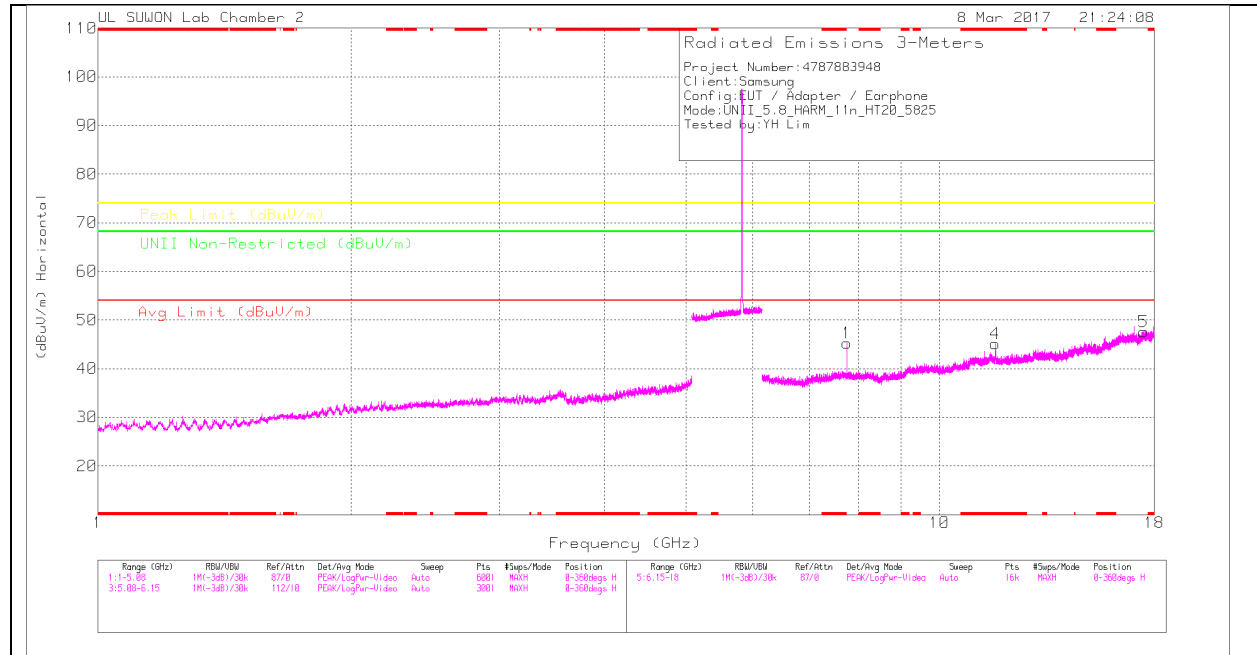
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168724)_150619	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.713	37.4	PK-U	36	-19.8	0	53.6	-	-	74	-20.4	-	-	338	139	H
* 7.713	29.2	ADR	36	-19.8	0	45.4	54	-8.6	-	-	-	-	338	139	H
* 7.714	34.44	PK-U	36	-19.8	0	50.64	-	-	74	-23.36	-	-	15	307	V
* 7.713	24.43	ADR	36	-19.8	0	40.63	54	-13.37	-	-	-	-	15	307	V
* 11.575	30.6	PK-U	38.4	-15.9	0	53.1	-	-	74	-20.9	-	-	204	327	V
* 11.572	18.22	ADR	38.4	-15.9	.24	40.96	54	-13.04	-	-	-	-	204	327	V
* 11.568	36.04	PK-U	38.4	-15.9	0	58.54	-	-	74	-15.46	-	-	192	142	H
* 11.568	21.52	ADR	38.4	-15.9	.24	44.26	54	-9.74	-	-	-	-	192	142	H

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

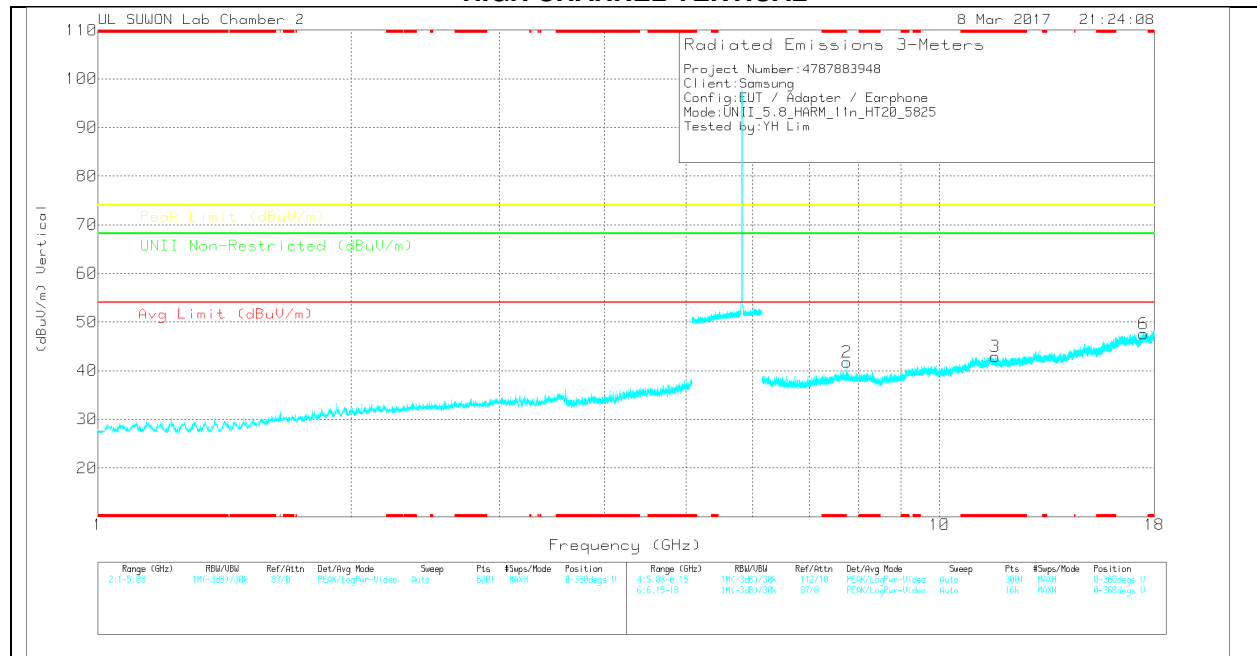
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS 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	3117[001687 24]_150619	6GHz_HP[dB]	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	7.767	29.52	PK	36	-20.3	0	45.22	-	-	-	-	68.2	-22.98	0-360	150	H
4	* 11.65	22.36	PK	38.4	-15.7	0	45.06	-	-	74	-28.94	-	-	0-360	250	H
5	17.484	18.51	PK	41.3	-12.2	0	47.61	-	-	-	-	68.2	-20.59	0-360	150	H
2	7.766	25.97	PK	36	-20.2	0	41.77	-	-	-	-	68.2	-26.43	0-360	150	V
3	* 11.651	20.21	PK	38.4	-15.7	0	42.91	-	-	74	-31.09	-	-	0-360	250	V
6	17.49	18.39	PK	41.3	-12.1	0	47.59	-	-	-	-	68.2	-20.61	0-360	250	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117[001687 24]_150619	6GHz_HP[dB]	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
7.766	36.57	PK-U	36	-20.3	0	52.27	-	-	-	-	68.2	-15.93	343	140	H
* 11.648	34.44	PK-U	38.4	-15.7	0	57.14	-	-	74	-16.86	-	-	206	135	H
* 11.65	21.33	ADR	38.4	-15.7	.24	44.27	54	-9.73	-	-	-	-	206	135	H
7.766	34.55	PK-U	36	-20.3	0	50.25	-	-	-	-	68.2	-17.95	274	310	V
* 11.654	30.98	PK-U	38.5	-15.8	0	53.68	-	-	74	-20.32	-	-	190	324	V
* 11.654	17.87	ADR	38.5	-15.8	.24	40.81	54	-13.19	-	-	-	-	190	324	V

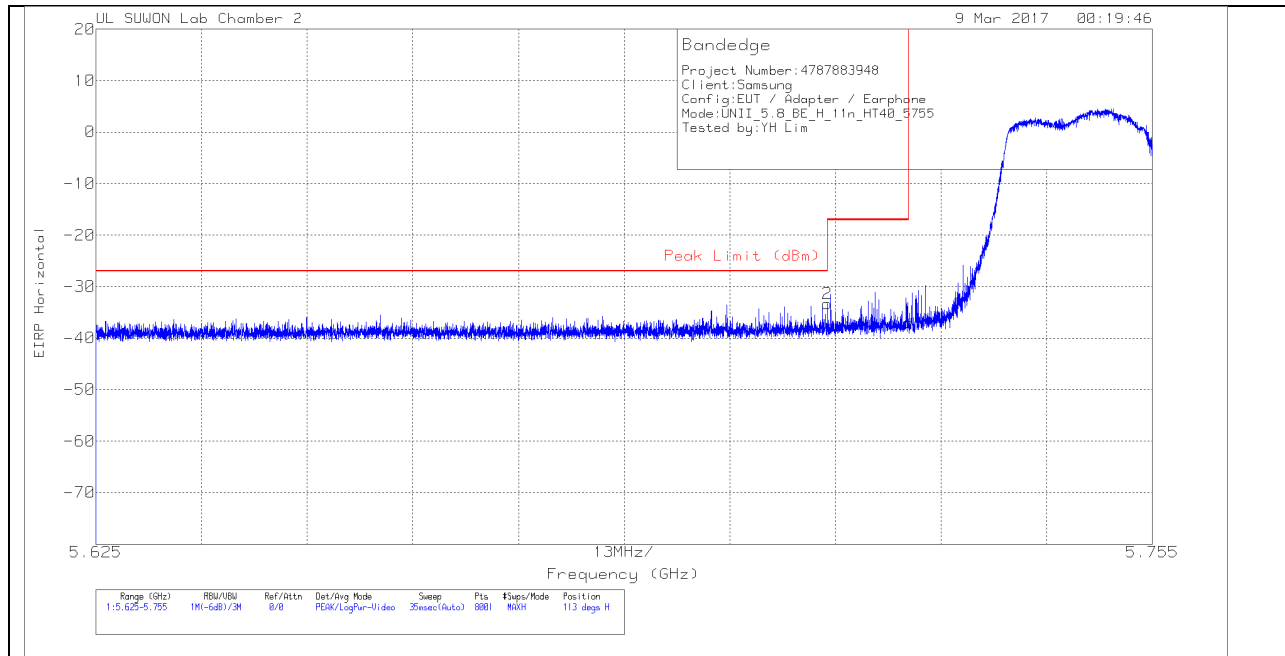
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.4.3. TX ABOVE 1GHz 802.11n HT40 2Tx CDD MODE IN THE 5.8GHz BAND BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK PLOT



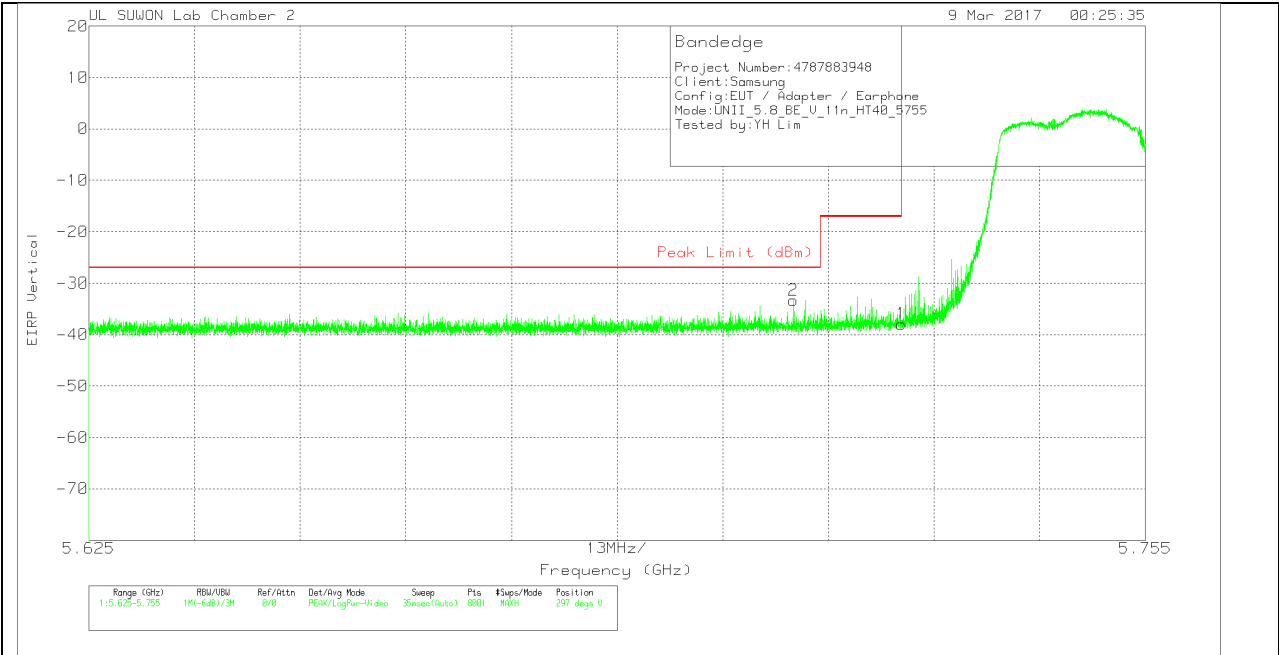
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	10dB[dB]	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-68.98	Pk	34.7	-14.5	11.8	0	-36.98	-17	-19.98	113	101	H
2	5.715	-65.26	Pk	34.7	-14.5	11.8	0	-33.26	-27	-6.26	113	101	H

Pk - Peak detector

VERTICAL PEAK PLOT



VERTICAL DATA

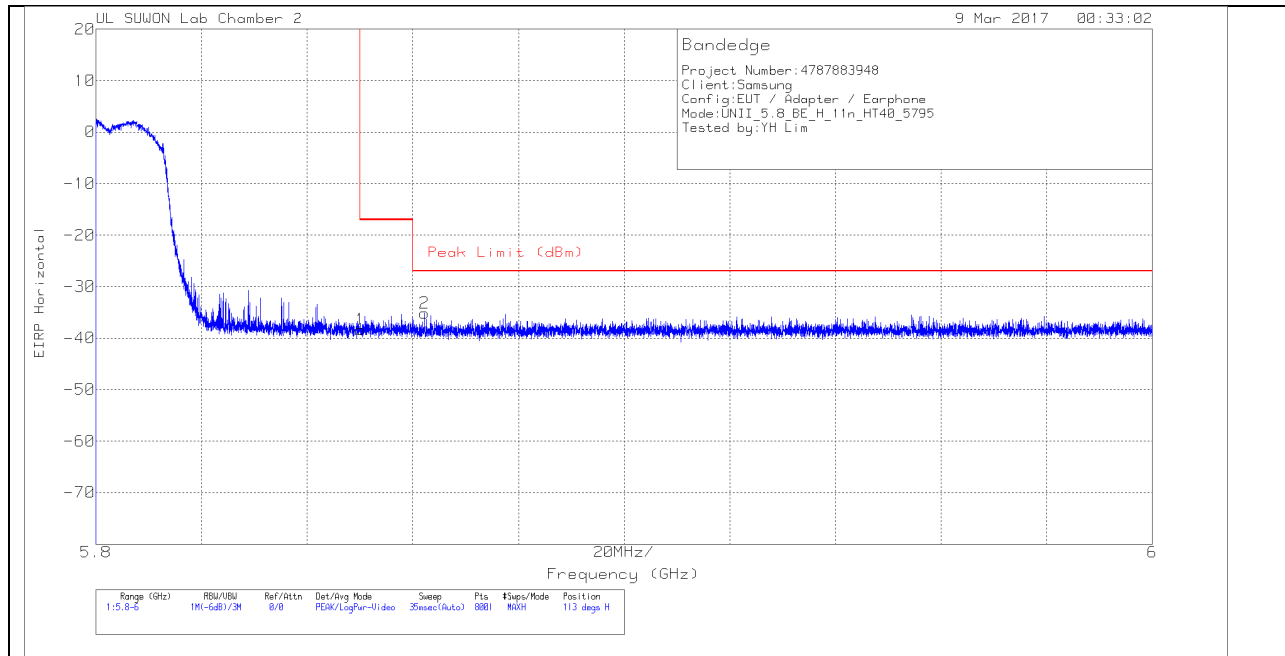
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	10dB[dB]	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-69.9	Pk	34.7	-14.5	11.8	0	-37.9	-17	-20.9	297	148	V
2	5.712	-65.31	Pk	34.7	-14.5	11.8	0	-33.31	-27	-6.31	297	148	V

Pk - Peak detector

BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK PLOT



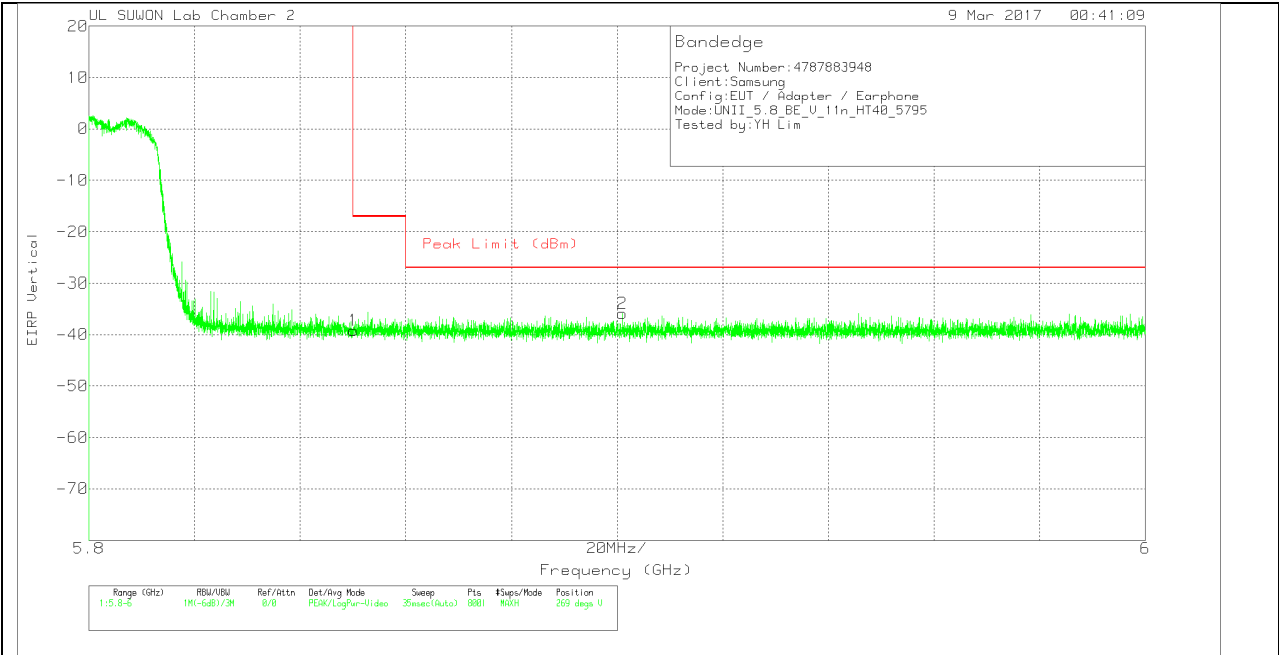
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	10dB[dB]	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-70.58	Pk	34.7	-14.3	11.8	0	-38.38	-17	-21.38	113	176	H
2	5.862	-67.22	Pk	34.7	-14.4	11.8	0	-35.12	-27	-8.12	113	176	H

Pk - Peak detector

VERTICAL PEAK PLOT



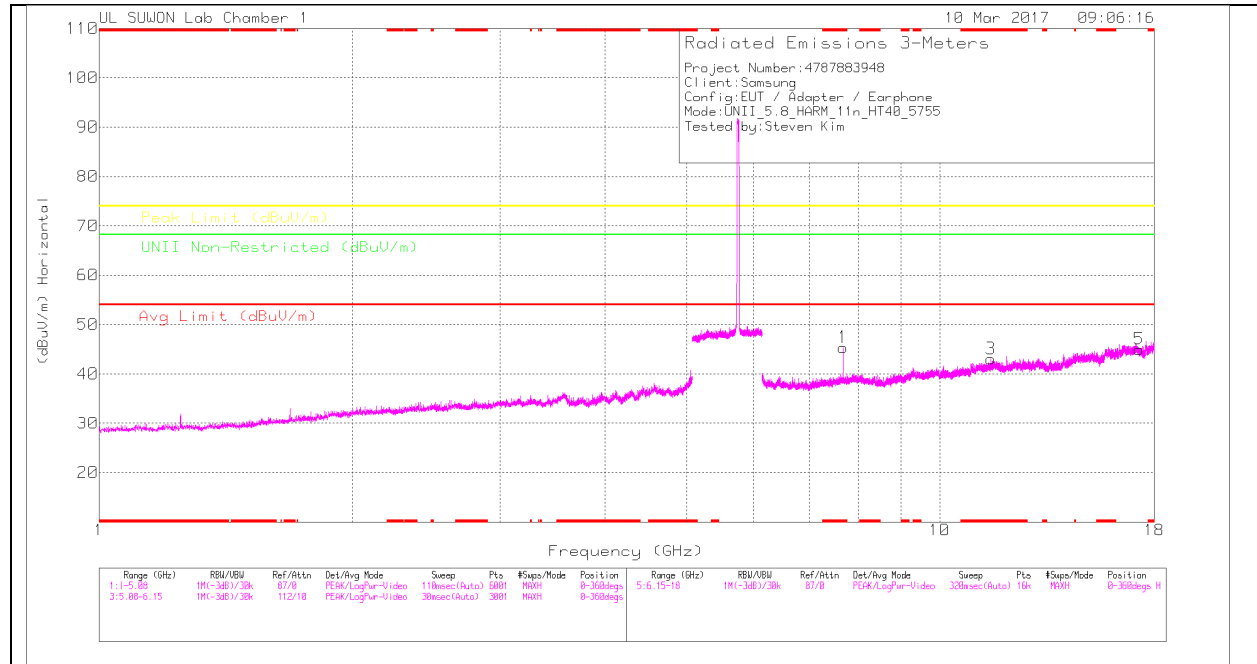
VERTICAL DATA

Trace Markers

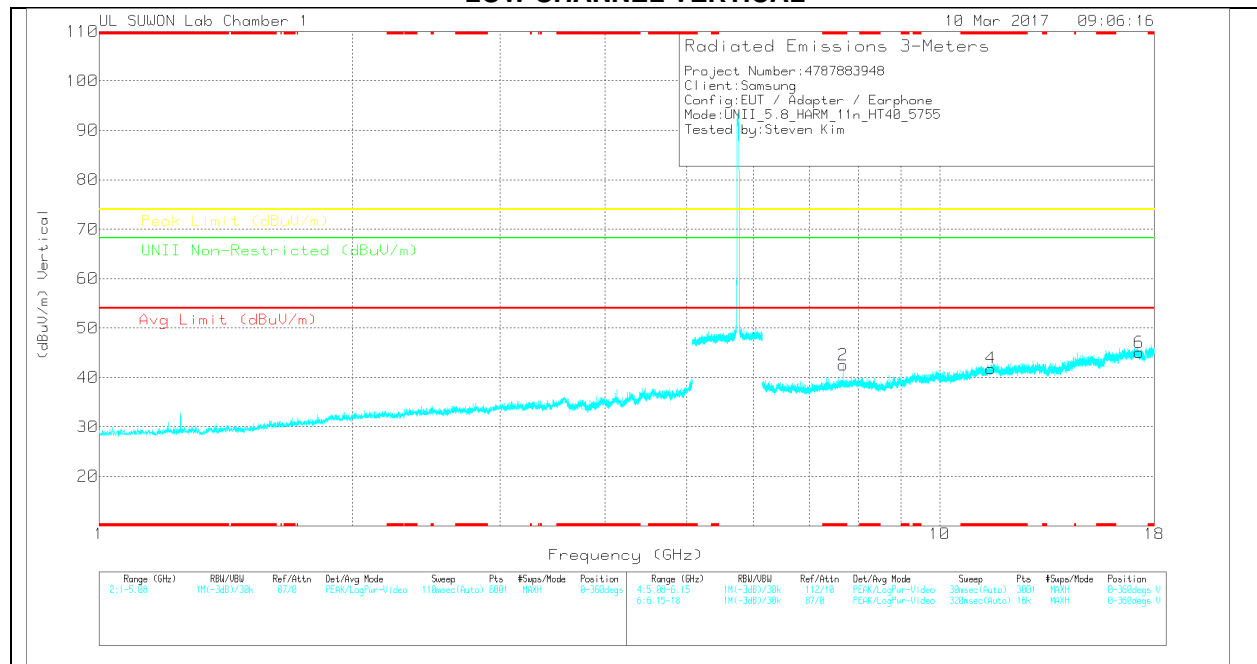
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	10dB[dB]	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-71.4	Pk	34.7	-14.3	11.8	0	-39.2	-17	-22.2	269	150	V
2	5.901	-68.08	Pk	34.8	-14.4	11.8	0	-35.88	-27	-8.88	269	150	V

Pk - Peak detector

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	3117(0016 8717)_150 619	6GHz_HP(d B)	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	39.97	PK	36	-30.6	0	45.37	-	-	74	-28.63	-	-	0-360	150	H
3	* 11.51	32.16	PK	38.6	-27.7	0	43.06	-	-	74	-30.94	-	-	0-360	150	H
5	17.268	27	PK	41.2	-23.2	0	45	-	-	-	-	68.2	-23.2	0-360	150	H
2	* 7.673	37.1	PK	36	-30.6	0	42.5	-	-	74	-31.5	-	-	0-360	250	V
4	* 11.51	30.92	PK	38.6	-27.7	0	41.82	-	-	74	-32.18	-	-	0-360	250	V
6	17.266	26.97	PK	41.2	-23.1	0	45.07	-	-	-	-	68.2	-23.13	0-360	250	V

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

PK – Peak Detector

Radiated Emissions

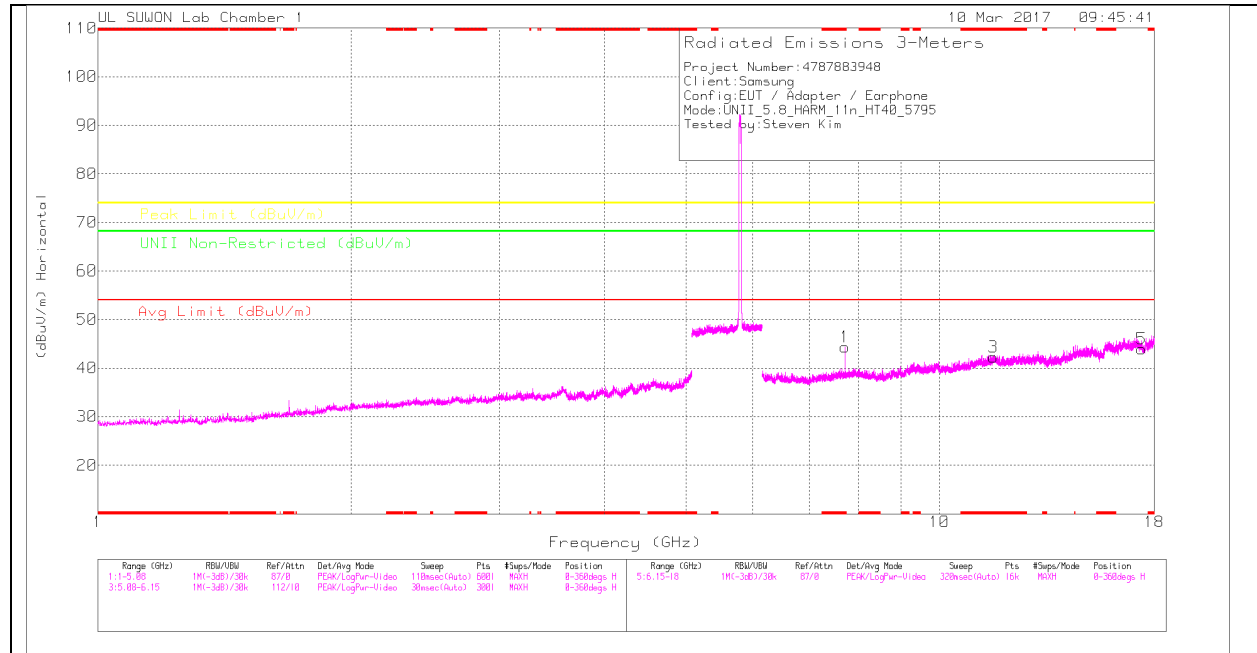
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.673	46.72	PK-U	36	-30.6	0	52.12	-	-	74	-21.88	-	-	326	134	H
* 7.673	38.12	ADR	36	-30.6	0	43.52	54	-10.48	-	-	-	-	326	134	H
* 7.673	45.22	PK-U	36	-30.6	0	50.62	-	-	74	-23.38	-	-	240	134	V
* 7.673	35.41	ADR	36	-30.6	0	40.81	54	-13.19	-	-	-	-	240	134	V

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

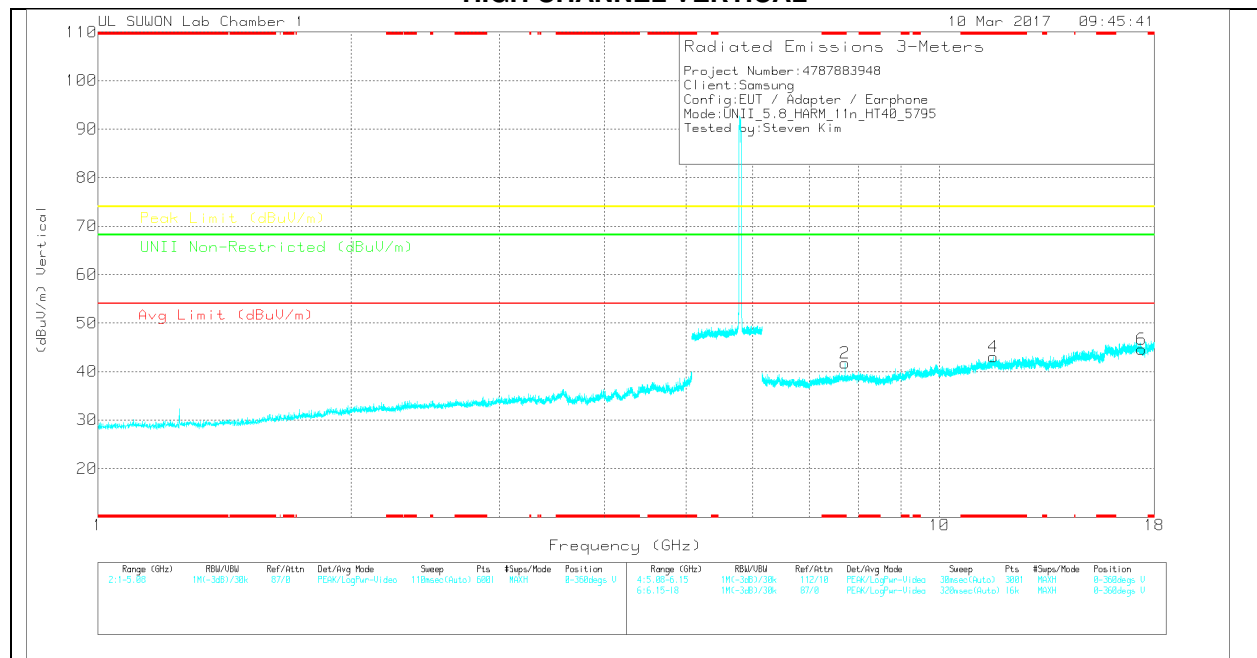
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS 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	3117(0016 8717)_150 619	6GHz_HP(d B)	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	* 7.726	38.96	PK	36.1	-30.7	0	44.36	-	-	74	-29.64	-	-	0-360	150	H
3	* 11.59	31.57	PK	38.7	-28	0	42.27	-	-	74	-31.73	-	-	0-360	150	H
5	17.385	24.8	PK	41.2	-22	0	44	-	-	-	-	68.2	-24.2	0-360	150	H
2	* 7.727	36.34	PK	36.1	-30.7	0	41.74	-	-	74	-32.26	-	-	0-360	250	V
4	* 11.592	32.32	PK	38.7	-28	0	43.02	-	-	74	-30.98	-	-	0-360	150	V
6	17.385	25.34	PK	41.2	-22	0	44.54	-	-	-	-	68.2	-23.66	0-360	250	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	6GHz_HP(dB)	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
* 7.727	46.26	PK-U	36.1	-30.7	0	51.66	-	-	74	-22.34	-	-	329	151	H
* 7.727	37.29	ADR	36.1	-30.7	0	42.69	54	-11.31	-	-	-	-	329	151	H
* 7.727	45.46	PK-U	36.1	-30.7	0	50.86	-	-	74	-23.14	-	-	259	165	V
* 7.727	33.24	ADR	36.1	-30.7	0	38.64	54	-15.36	-	-	-	-	259	165	V

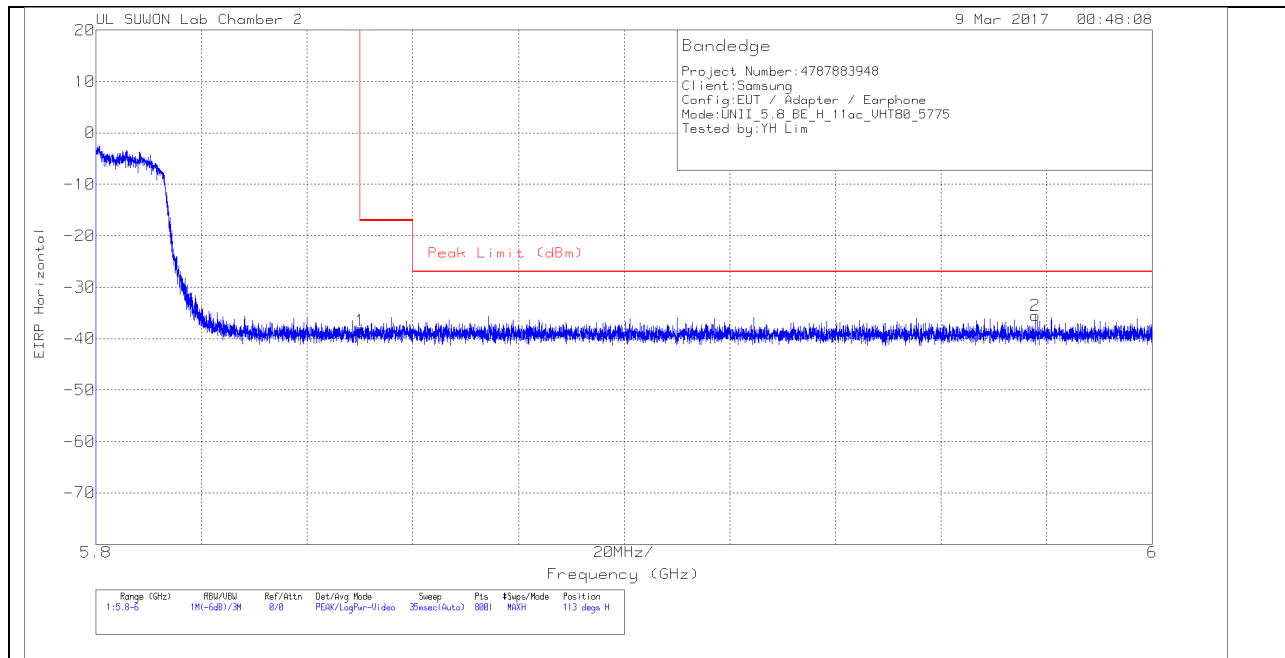
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.4.4. TX ABOVE 1GHz 802.11ac VHT80 2Tx CDD MODE IN THE 5.8GHz BAND BANDEDGE

HORIZONTAL PEAK PLOT



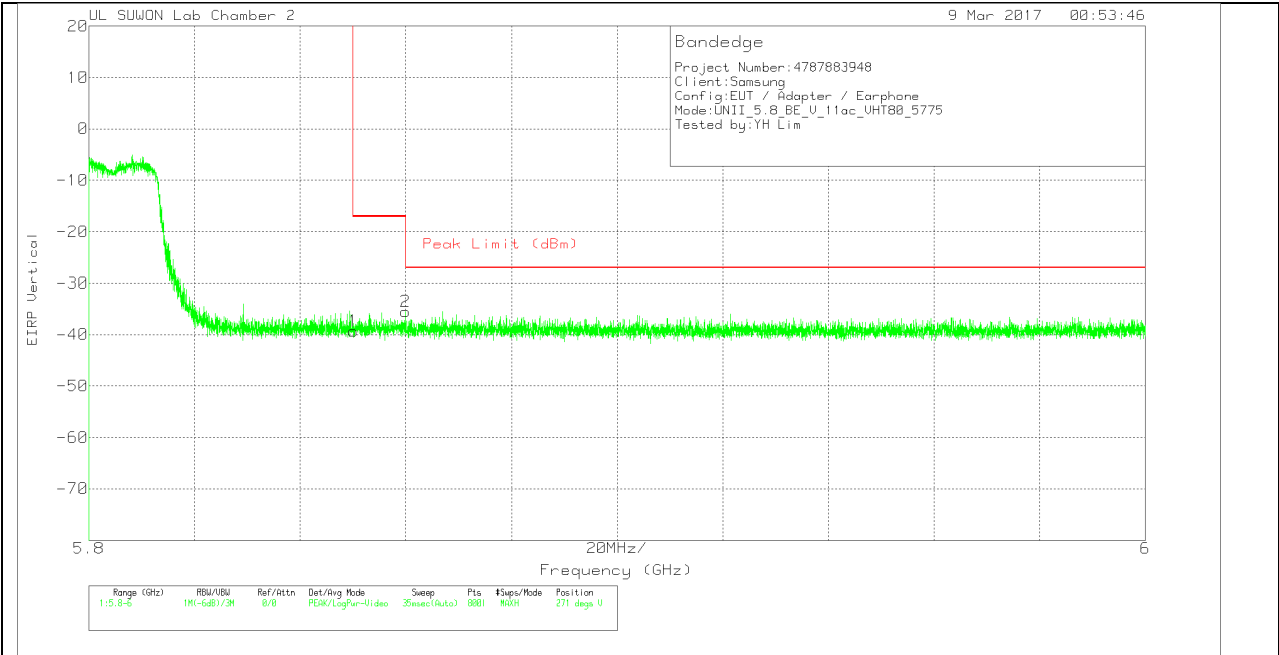
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	10dB[dB]	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-70.71	Pk	34.7	-14.3	11.8	0	-38.51	-17	-21.51	113	245	H
2	5.978	-67.87	Pk	34.8	-14.3	11.8	0	-35.57	-27	-8.57	113	245	H

Pk - Peak detector

VERTICAL PEAK PLOT



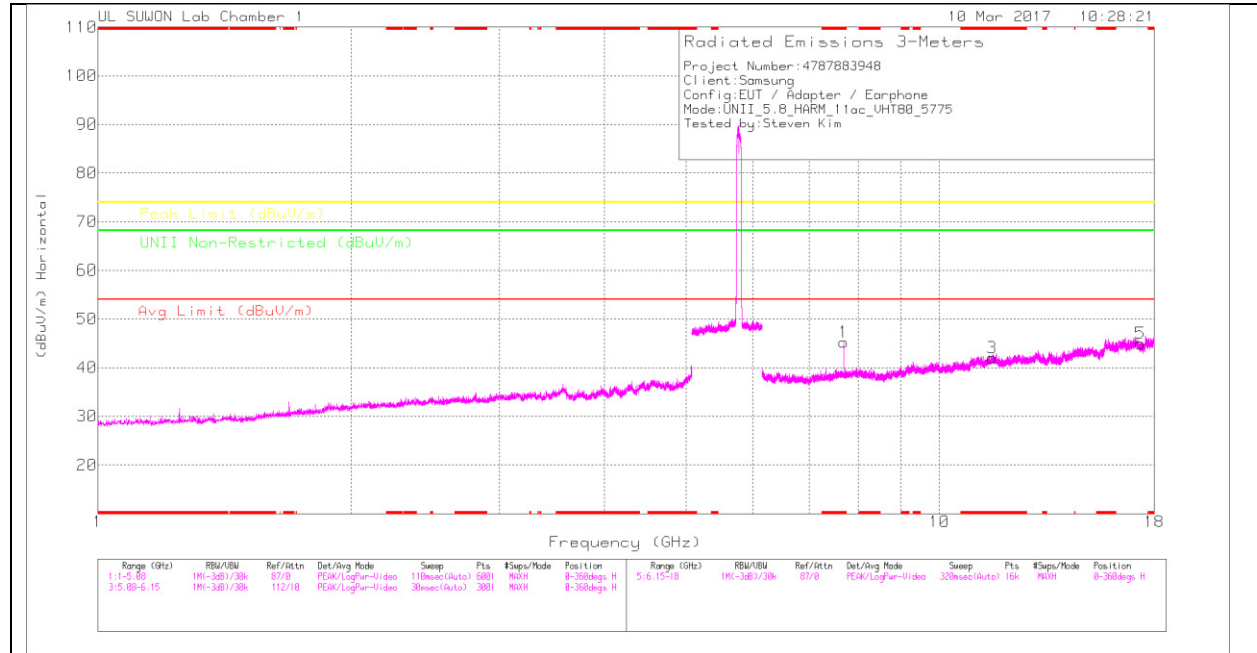
VERTICAL DATA

Trace Markers

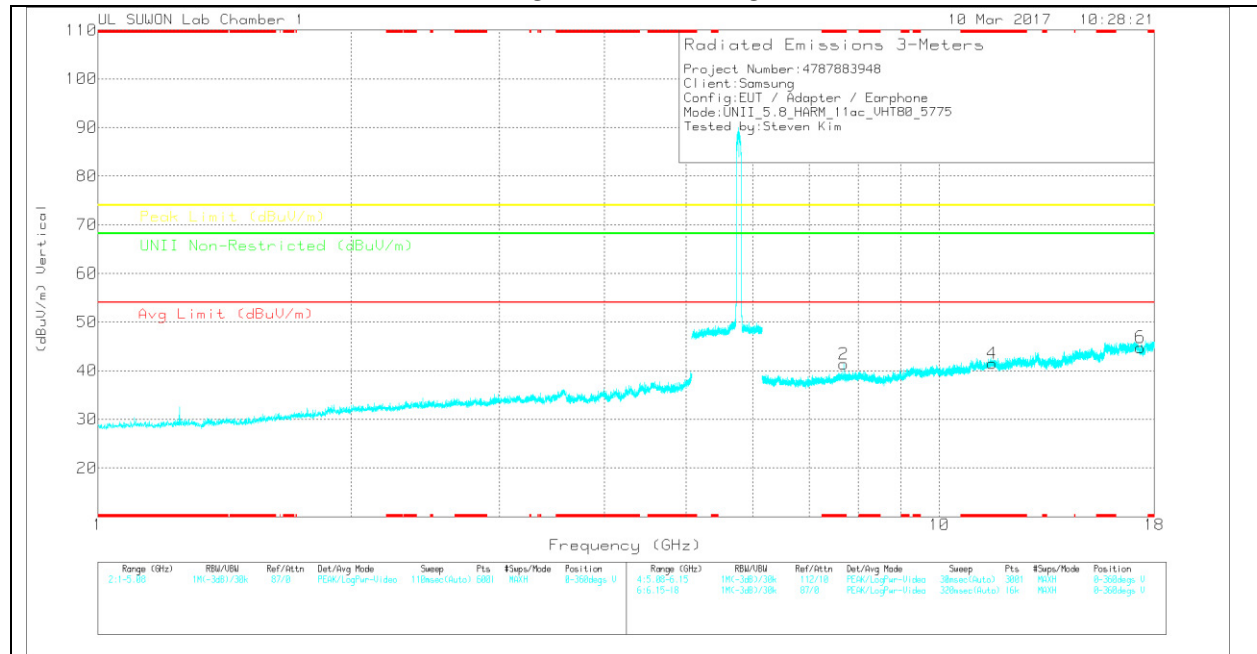
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	10dB[dB]	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-71.52	Pk	34.7	-14.3	11.8	0	-39.32	-17	-22.32	271	363	V
2	5.86	-67.57	Pk	34.7	-14.4	11.8	0	-35.47	-27	-8.47	271	363	V

Pk - Peak detector

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	3117(0016 8717)_150 619	6Ghz_HP(d B)	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	* 7.7	39.83	PK	36.1	-30.7	0	45.23	-	-	74	-28.77	-	-	0-360	150	H
3	* 11.55	31.14	PK	38.6	-27.7	0	42.04	-	-	74	-31.96	-	-	0-360	150	H
5	17.325	26.86	PK	41.2	-23.1	0	44.96	-	-	-	-	68.2	-23.24	0-360	150	H
2	* 7.699	35.83	PK	36.1	-30.6	0	41.33	-	-	74	-32.67	-	-	0-360	250	V
4	* 11.552	30.71	PK	38.6	-27.8	0	41.51	-	-	74	-32.49	-	-	0-360	150	V
6	17.327	26.59	PK	41.2	-23	0	44.79	-	-	-	-	68.2	-23.41	0-360	150	V

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

PK – Peak Detector

Radiated Emissions

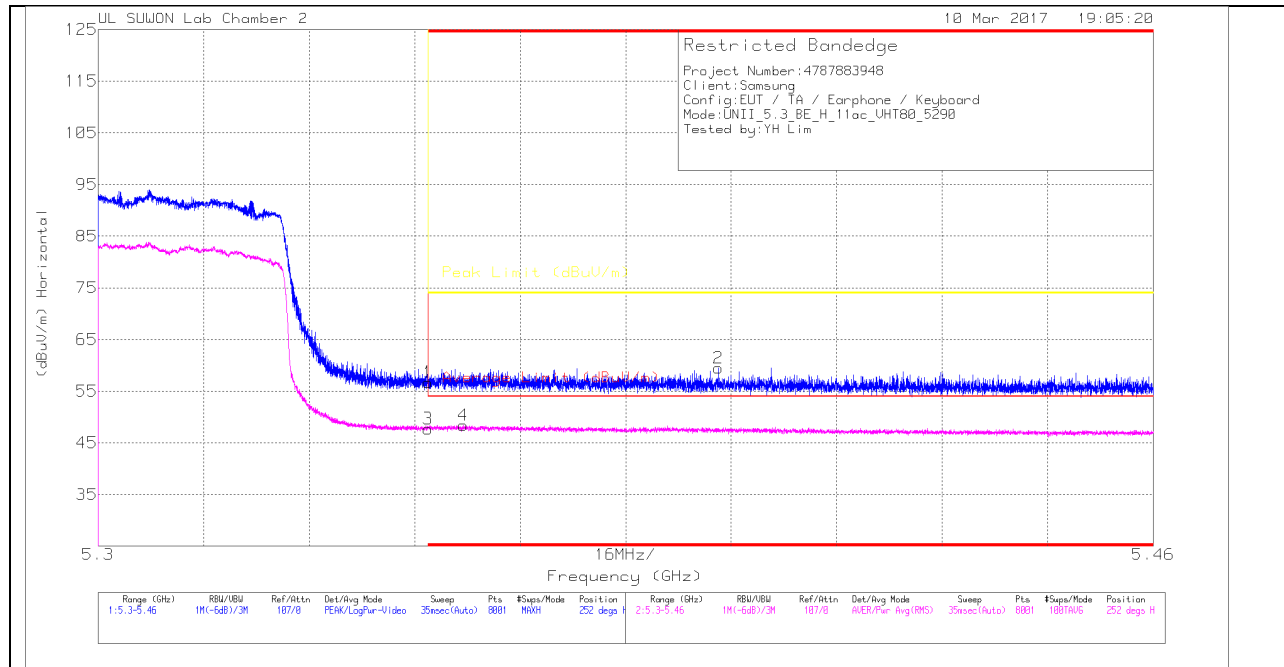
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.7	46.78	PK-U	36.1	-30.7	0	52.18	-	-	74	-21.82	-	-	329	154	H
* 7.7	37.66	ADR	36.1	-30.7	0	43.06	54	-10.94	-	-	-	-	329	154	H
* 7.7	45.08	PK-U	36.1	-30.7	0	50.48	-	-	74	-23.52	-	-	238	147	V
* 7.7	35.59	ADR	36.1	-30.7	0	40.99	54	-13.01	-	-	-	-	238	147	V

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

AUTHORIZED BANDEDGE

**TX ABOVE 1GHz 802.11ac VHT80 2Tx CDD MODE IN THE 5.3GHz MID CHANNEL
equipped with keyboard**

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

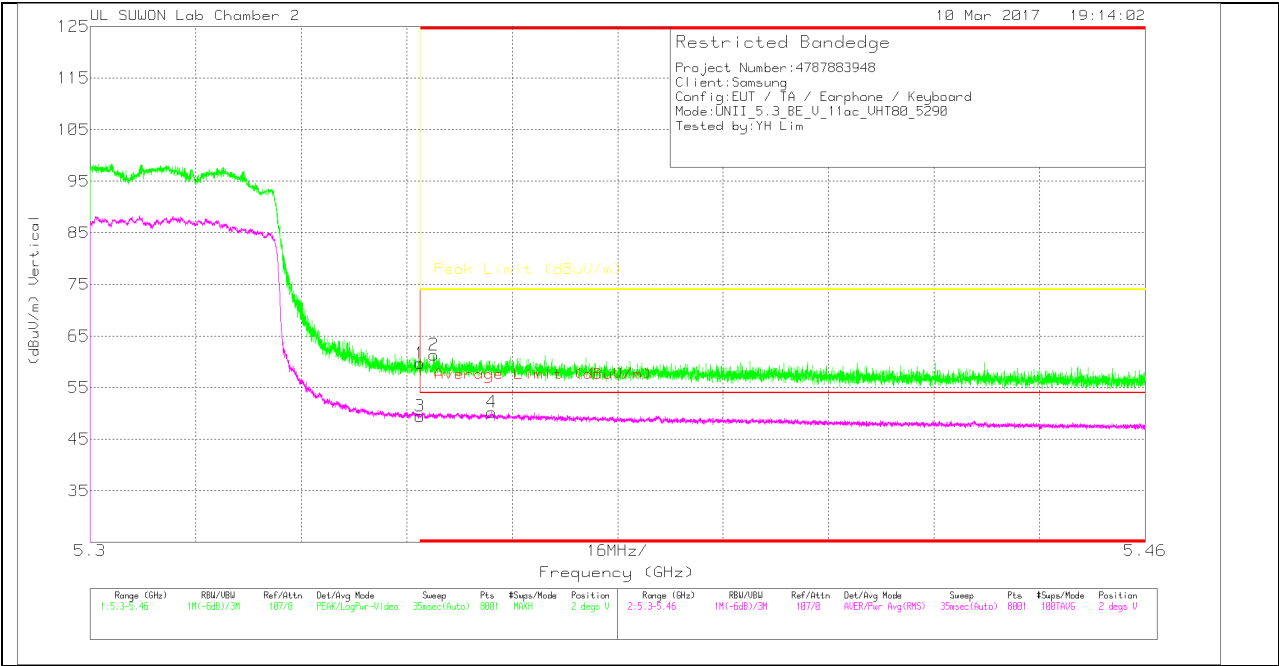
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[001687 24]_150619	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	37.51	Pk	34.4	-15.2	0	56.71	-	-	74	-17.29	252	134	H
2	* 5.394	40.29	Pk	34.4	-15.2	0	59.49	-	-	74	-14.51	252	134	H
3	* 5.35	27.62	RMS	34.4	-15.2	.88	47.7	54	-6.3	-	-	252	134	H
4	* 5.355	28.34	RMS	34.4	-15.2	.88	48.42	54	-5.58	-	-	252	134	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	40.54	Pk	34.4	-15.2	0	59.74	-	-	74	-14.26	2	291	V
2	* 5.352	42.16	Pk	34.4	-15.2	0	61.36	-	-	74	-12.64	2	291	V
3	* 5.35	29.39	RMS	34.4	-15.2	.88	49.47	54	-4.53	-	-	2	291	V
4	* 5.361	30.09	RMS	34.4	-15.2	.88	50.17	54	-3.83	-	-	2	291	V

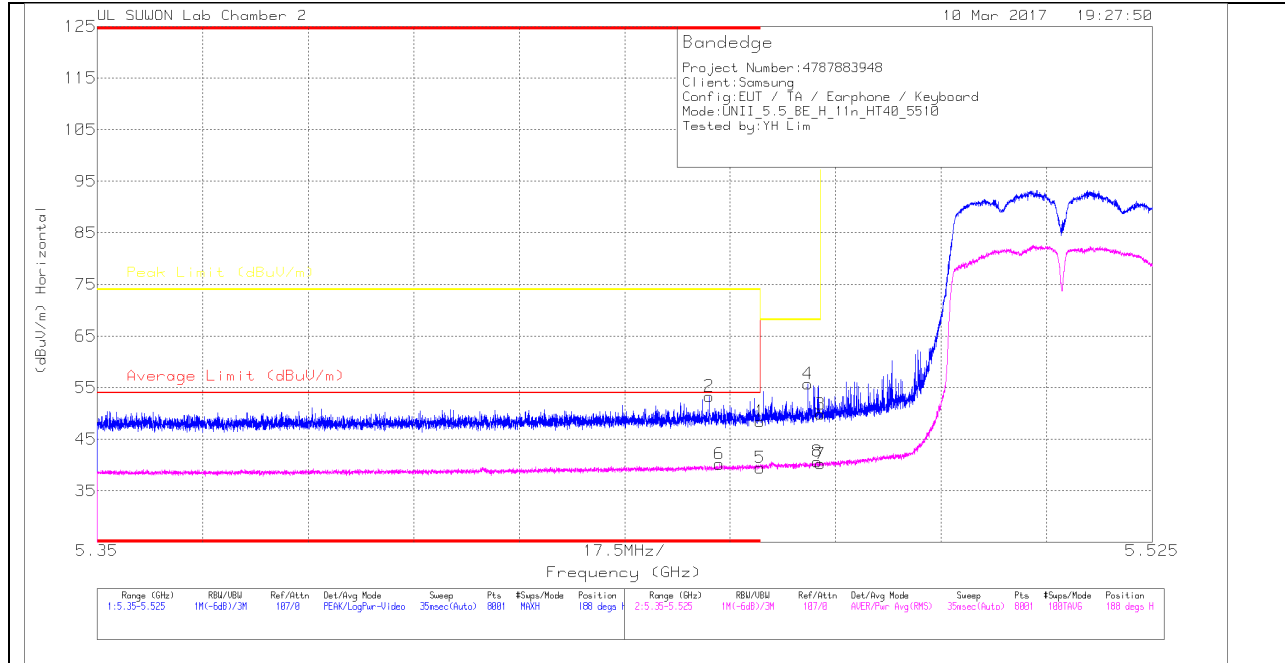
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE
TX ABOVE 1GHz 802.11n HT40 2Tx CDD MODE IN THE 5.5GHz LOW CHANNEL
equipped with keyboard

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

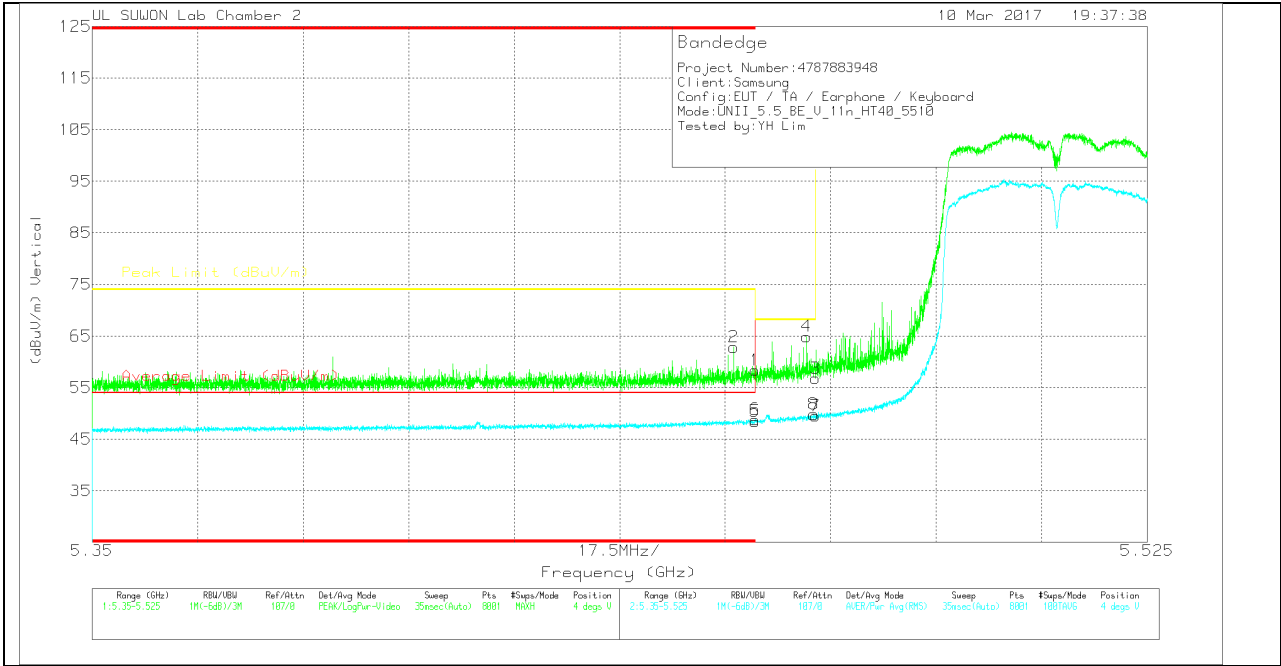
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	36.76	Pk		34.6	-22.9	0	48.46	-	74	-25.54	188	236	H
2	* 5.452	41.62	Pk		34.6	-22.9	0	53.32	-	74	-20.68	188	236	H
3	5.47	38.18	Pk		34.6	-22.9	0	49.88	-	68.2	-18.32	188	236	H
4	5.468	44.04	Pk		34.6	-22.9	0	55.74	-	68.2	-12.46	188	236	H
5	* 5.46	27.3	RMS		34.6	-22.9	.48	39.48	54	-14.52	-	188	236	H
6	* 5.453	28.03	RMS		34.6	-22.9	.48	40.21	54	-13.79	-	188	236	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	10dB[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	38.88	Pk	34.5	-15	0	58.38	-	-	74	-15.62	4	398	V
2	* 5.456	43.45	Pk	34.5	-15.1	0	62.85	-	-	74	-11.15	4	398	V
3	5.47	37.32	Pk	34.5	-15	0	56.82	-	-	68.2	-11.38	4	398	V
4	5.469	45.4	Pk	34.5	-15	0	64.9	-	-	68.2	-3.3	4	398	V
5	* 5.46	28.06	RMS	34.5	-15	.88	48.44	54	-5.56	-	-	4	398	V
6	* 5.46	28.44	RMS	34.5	-15	.88	48.82	54	-5.18	-	-	4	398	V

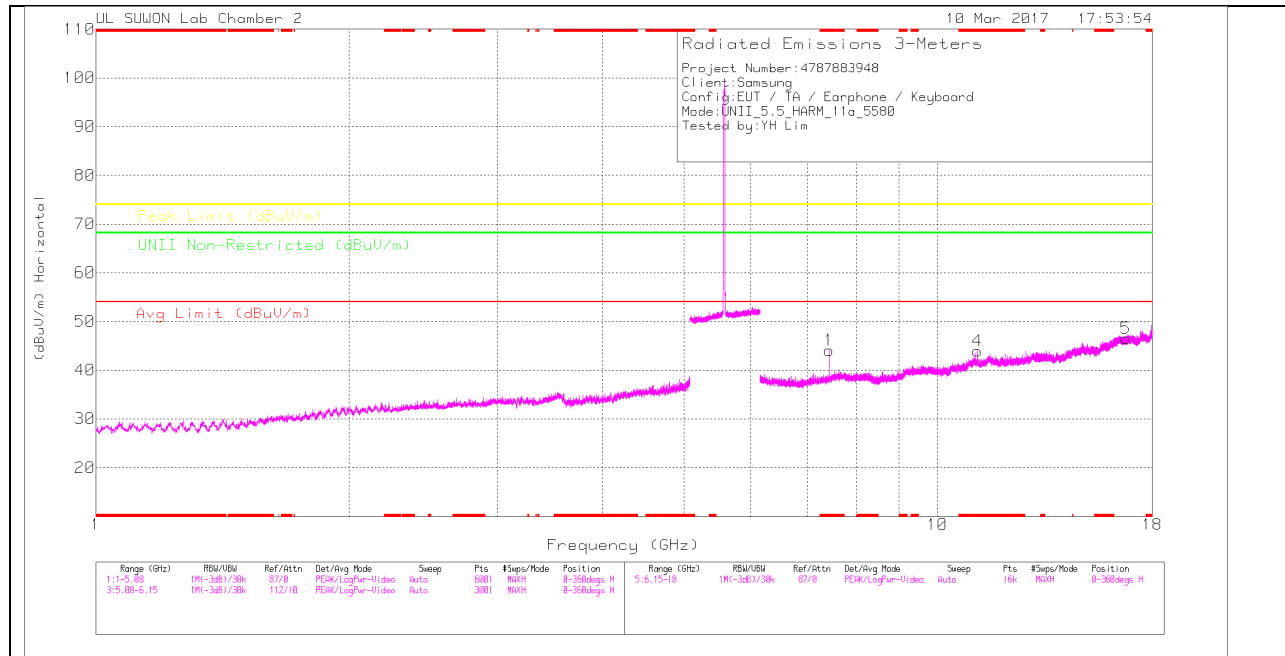
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

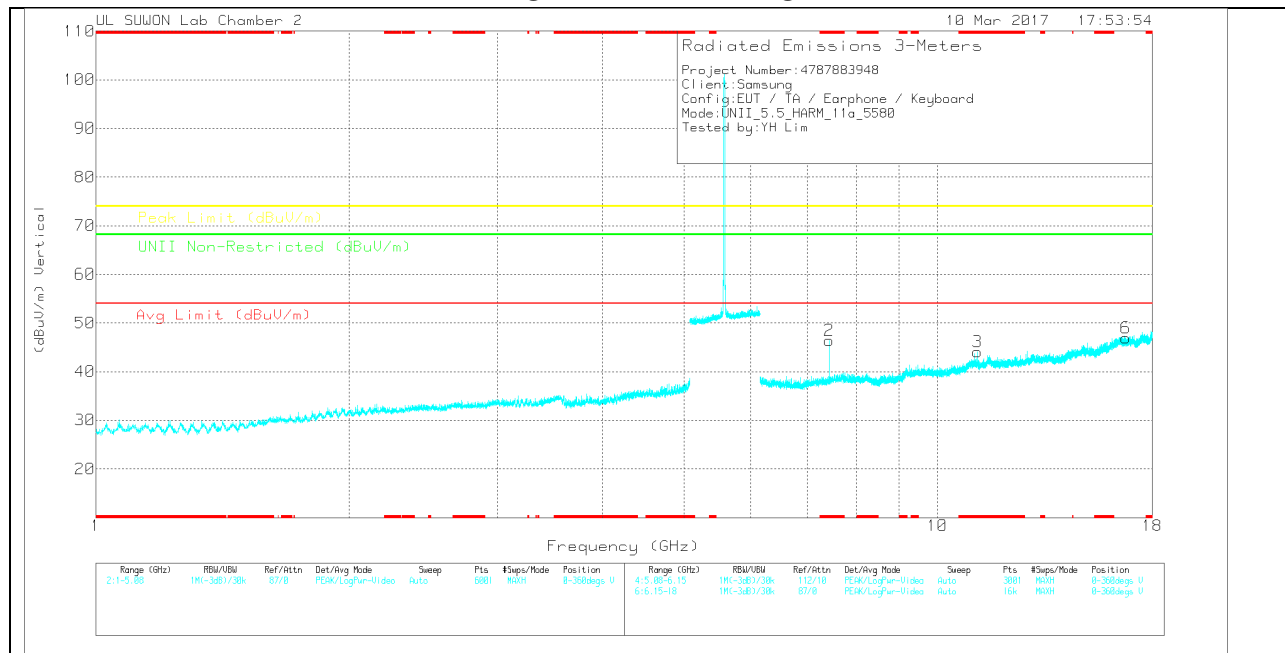
RMS - RMS detection

**802.11a 2Tx CDD MODE IN THE 5.5GHz
HARMONICS AND SPURIOUS EMISSIONS
equipped with keyboard**

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; 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	3117(0016 8724)_150 619	6GHz_HP[d B]	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	* 7.44	29.24	PK	36	-21.2	0	44.04	-	-	74	-29.96	-	-	0-360	150	H
4	* 11.155	22.09	PK	38.1	-16.2	0	43.99	-	-	74	-30.01	-	-	0-360	150	H
5	16.734	19.37	PK	41	-13.8	0	46.57	-	-	-	-	68.2	-21.63	0-360	150	H
2	* 7.439	31.58	PK	36	-21.2	0	46.38	-	-	74	-27.62	-	-	0-360	250	V
3	* 11.16	22.14	PK	38.1	-16.2	0	44.04	-	-	74	-29.96	-	-	0-360	150	V
6	16.742	19.62	PK	41	-13.7	0	46.92	-	-	-	-	68.2	-21.28	0-360	150	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	6GHz_HP[dB]	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
* 7.44	37.19	PK-U	36	-21.2	0	51.99	-	-	74	-22.01	-	-	58	149	H
* 7.44	29.74	ADR	36	-21.2	0	44.54	54	-9.46	-	-	-	-	58	149	H
* 7.44	37.95	PK-U	36	-21.2	0	52.75	-	-	74	-21.25	-	-	153	128	V
* 7.44	29.55	ADR	36	-21.2	0	44.35	54	-9.65	-	-	-	-	153	128	V

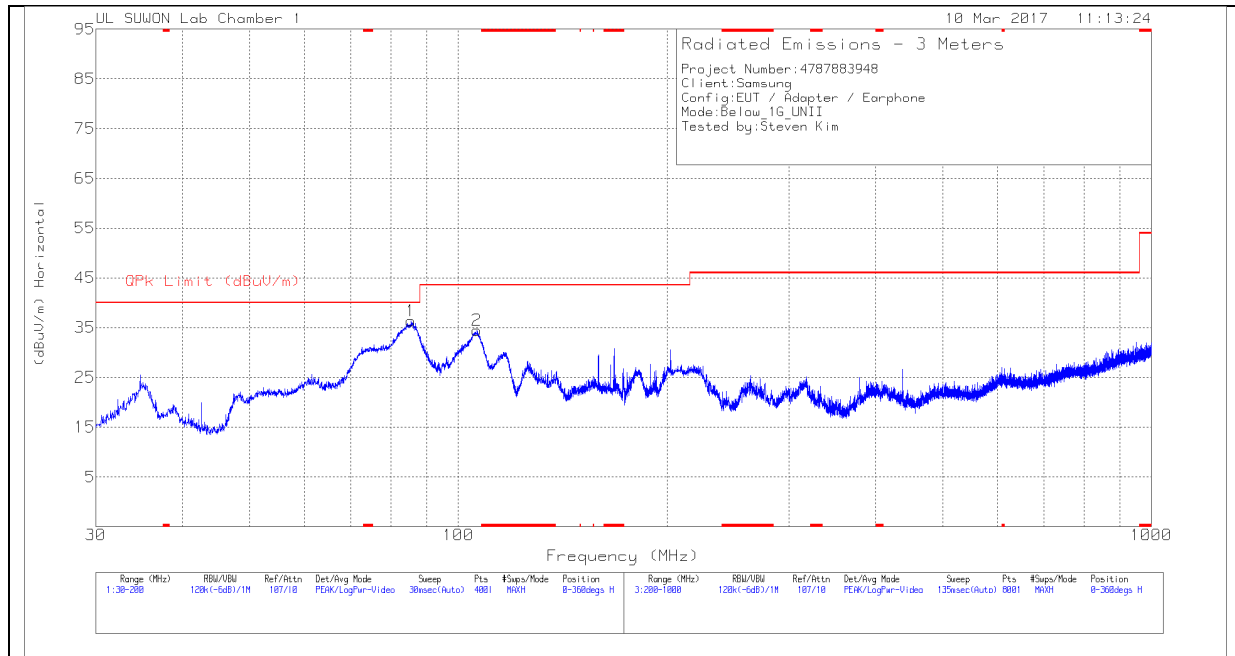
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

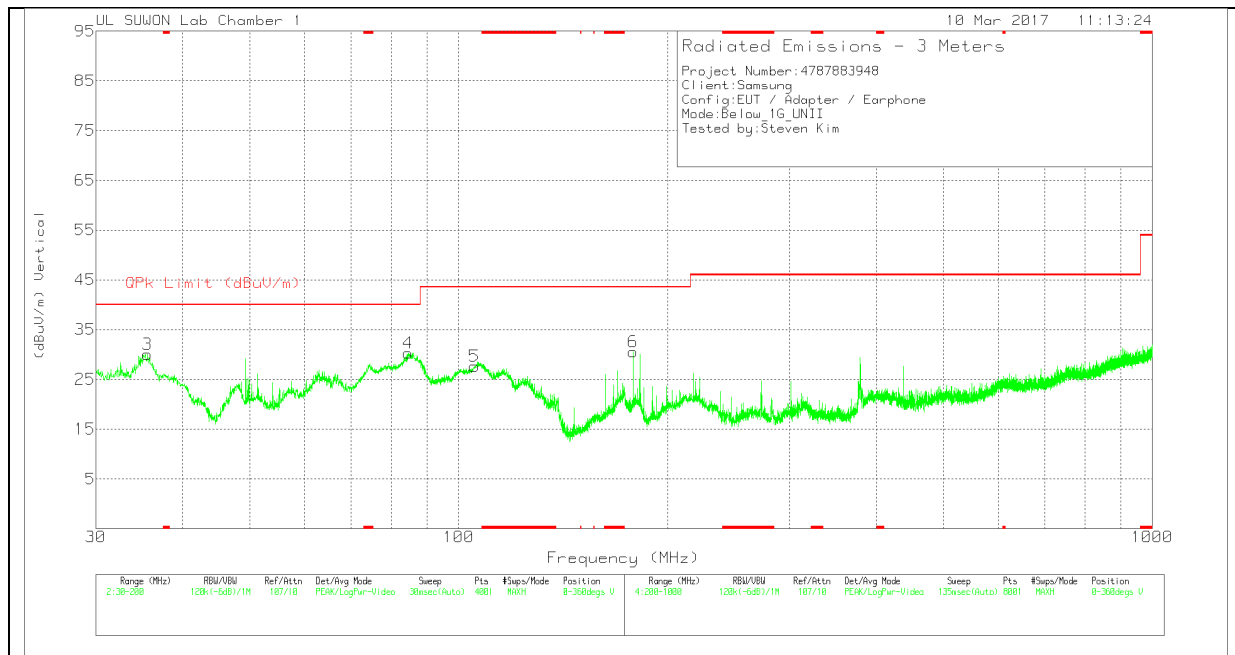
ADR - U-NII AD primary method, RMS average

11. 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

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_7 50(dB)	30-1000MHz(dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	85.4625	55.82	Pk	8.3	-27.8	36.32	40	-3.68	0-360	200	H
2	106.415	50.01	Pk	11.6	-27.2	34.41	43.52	-9.11	0-360	300	H
3	35.61	47.9	Pk	10.9	-28.7	30.1	40	-9.9	0-360	100	V
4	84.57	49.77	Pk	8.1	-27.6	30.27	40	-9.73	0-360	300	V
5	105.395	43.08	Pk	11.7	-27.1	27.68	43.52	-15.84	0-360	100	V
6	178.41	47.84	Pk	9.3	-26.6	30.54	43.52	-12.98	0-360	100	V

Pk - Peak detector

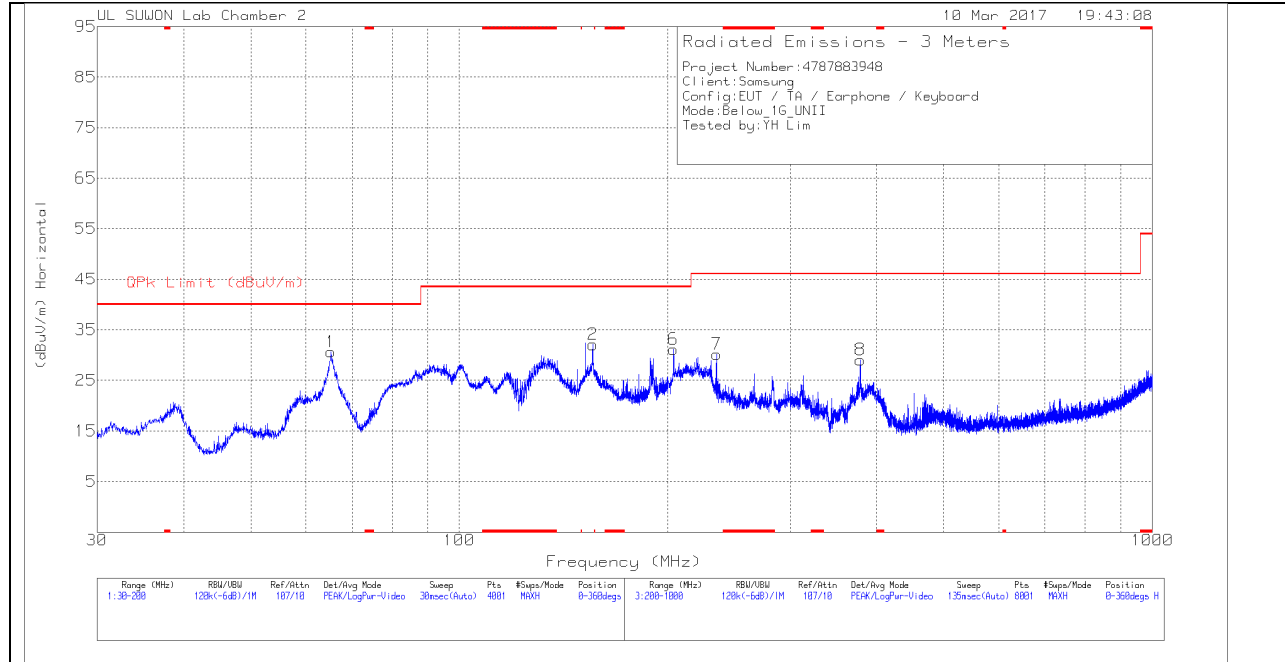
Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163 _750(dB)	30-1000MHz(dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
85.8475	51.87	Qp	8.4	-27.8	32.47	40	-7.53	160	222	H

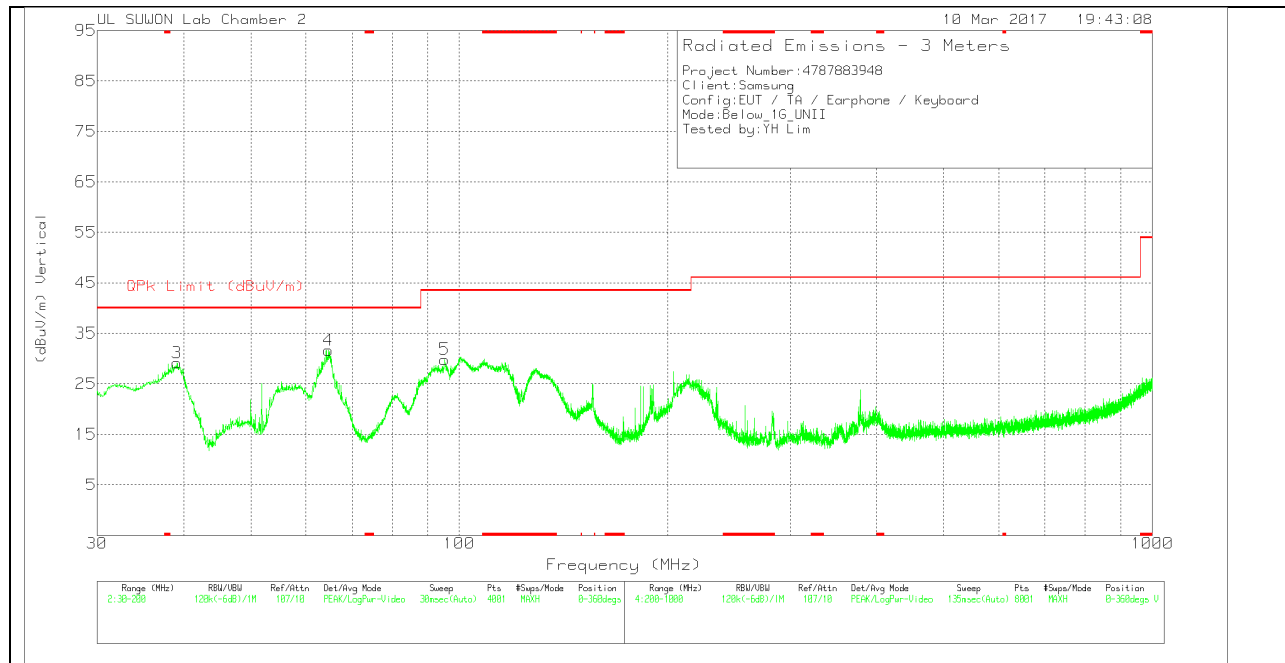
Qp - Quasi-Peak detector

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

HORIZONTAL PLOT



VERTICAL PLOT



Below 1G Data

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163-749	30-1000MHz[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	65.2325	50.83	Pk	11.1	-31.3	30.63	40	-9.37	0-360	300	H
2	155.8425	54.39	Pk	8.4	-30.7	32.09	43.52	-11.43	0-360	200	H
3	39.095	48.24	Pk	12.4	-31.5	29.14	40	-10.86	0-360	100	V
4	64.765	51.61	Pk	11.3	-31.3	31.61	40	-8.39	0-360	100	V
5	95.195	50.31	Pk	10.6	-31.1	29.81	43.52	-13.71	0-360	100	V
6	203.7	50.17	Pk	11.5	-30.5	31.17	43.52	-12.35	0-360	100	H
7	235.1	48.36	Pk	12.1	-30.3	30.16	46.02	-15.86	0-360	100	H
8	379.1	43.97	Pk	14.9	-29.8	29.07	46.02	-16.95	0-360	100	H

Pk - Peak detector

12. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)
IC RSS-GEN Clause 8.8

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

⁺ Decreases with the logarithm of the frequency.

TEST PROCEDURE

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

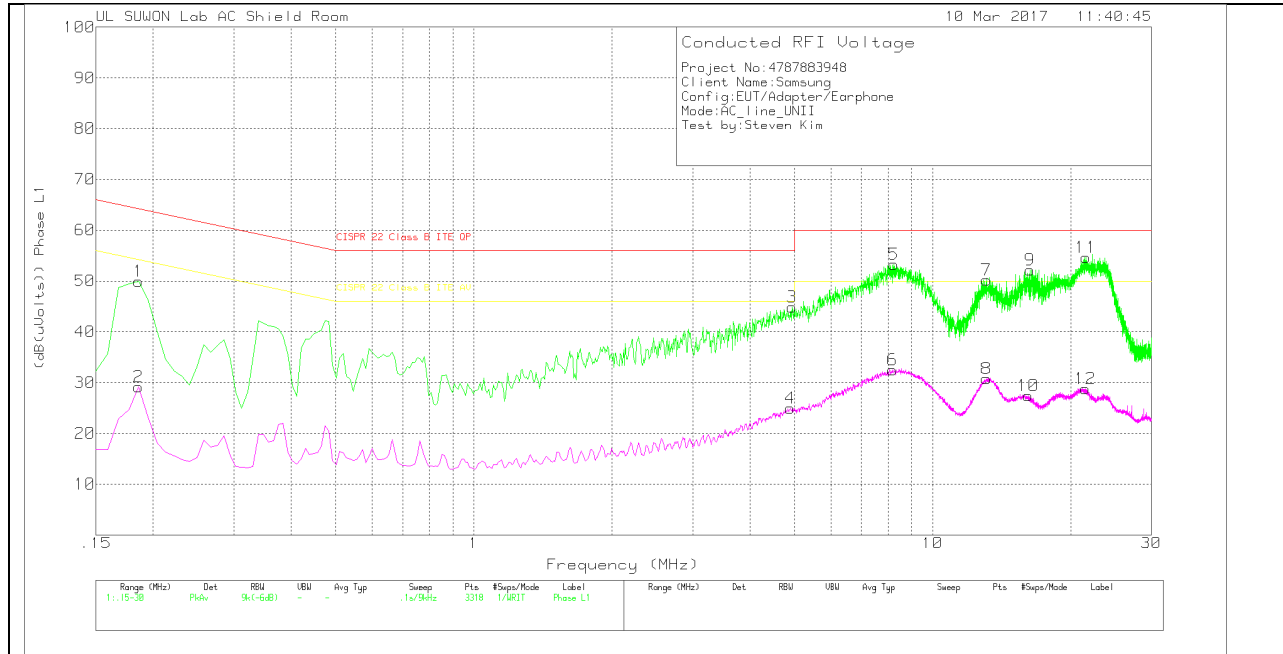
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

Trace Markers

Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_w ith ex- cord_L1	CABLELOS S(dB)	Corrected Reading (dB(uVolts)	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
1	.186	39.79	Pk	9.9	.2	49.89	64.21	-14.32	-	-
2	.186	19.1	Av	9.9	.2	29.2	-	-	54.21	-25.01
3	4.947	34.81	Pk	9.8	.3	44.91	56	-11.09	-	-
4	4.893	14.88	Av	9.8	.3	24.98	-	-	46	-21.02
5	8.232	43.12	Pk	9.9	.3	53.32	60	-6.68	-	-
6	8.178	22.35	Av	9.9	.3	32.55	-	-	50	-17.45
7	13.11	39.71	Pk	10.1	.4	50.21	60	-9.79	-	-
8	13.11	20.22	Av	10.1	.4	30.72	-	-	50	-19.28
9	16.296	41.6	Pk	10.2	.4	52.2	60	-7.8	-	-
10	16.161	16.81	Av	10.2	.4	27.41	-	-	50	-22.59
11	21.624	43.85	Pk	10.4	.4	54.65	60	-5.35	-	-
12	21.534	18.01	Av	10.4	.4	28.81	-	-	50	-21.19

Pk - Peak detector

Av - Average detection

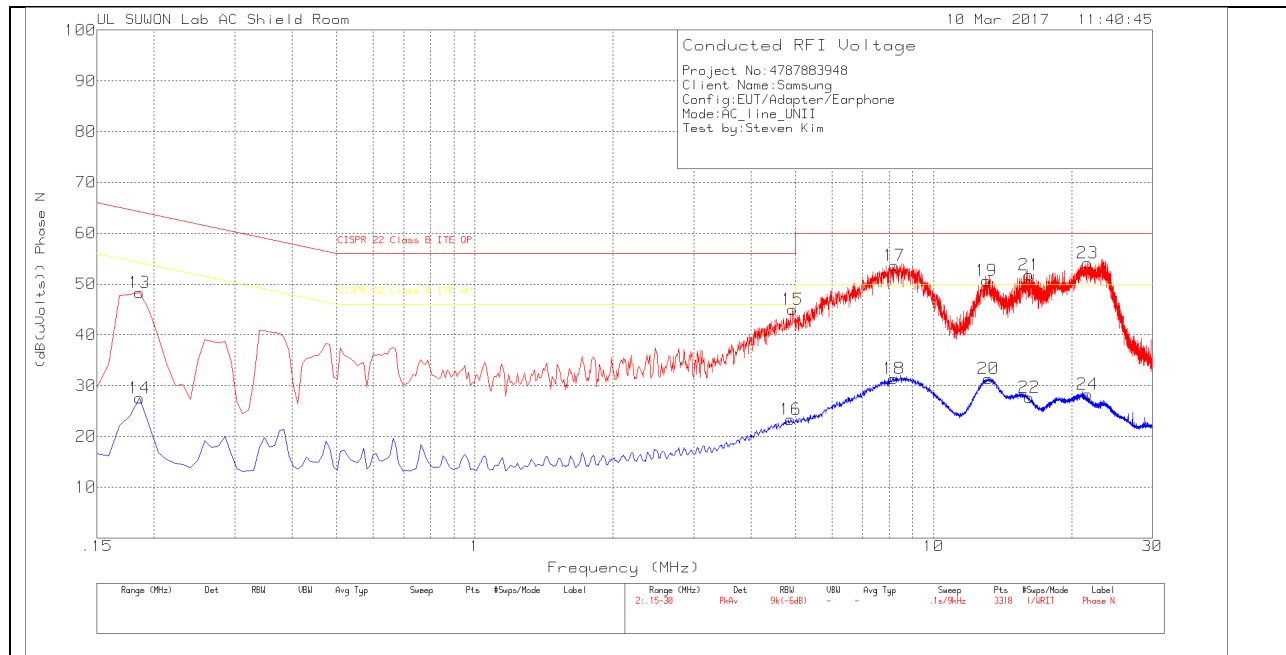
Quasi-Peak Emissions

Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_wit h ex-cord_L1	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
.1896	27.96	Qp	9.9	.2	38.06	64.05	-25.99	-	-
4.9497	23.43	Qp	9.8	.3	33.53	56	-22.47	-	-
8.2275	31.6	Qp	9.9	.3	41.8	60	-18.2	-	-
13.11	28.86	Qp	10.1	.4	39.36	60	-20.64	-	-
16.2951	29.85	Qp	10.2	.4	40.45	60	-19.55	-	-
21.6195	29.44	Qp	10.4	.4	40.24	60	-19.76	-	-

Qp - Quasi-Peak detector

LINE 2 PLOT



LINE 2 RESULTS

Trace Markers

Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_w ith ex- cord_N	CABLELOS S(dB)	Corrected Reading (dB(uVolts)	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
13	.186	38.21	Pk	9.9	.2	48.31	64.21	-15.9	-	-
14	.186	17.43	Av	9.9	.2	27.53	-	-	54.21	-26.68
15	4.929	34.92	Pk	9.8	.3	45.02	56	-10.98	-	-
16	4.884	13.2	Av	9.8	.3	23.3	-	-	46	-22.7
17	8.214	43.38	Pk	10	.3	53.68	60	-6.32	-	-
18	8.196	21.14	Av	10	.3	31.44	-	-	50	-18.56
19	13.056	39.95	Pk	10.3	.4	50.65	60	-9.35	-	-
20	13.173	20.67	Av	10.3	.4	31.37	-	-	50	-18.63
21	16.152	41.01	Pk	10.4	.4	51.81	60	-8.19	-	-
22	16.152	16.87	Av	10.4	.4	27.67	-	-	50	-22.33
23	21.651	43.02	Pk	10.7	.4	54.12	60	-5.88	-	-
24	21.669	17.2	Av	10.7	.4	28.3	-	-	50	-21.7

Pk - Peak detector

Av - Average detection

Quasi-Peak Emissions

Phase N .15 - 30MHz

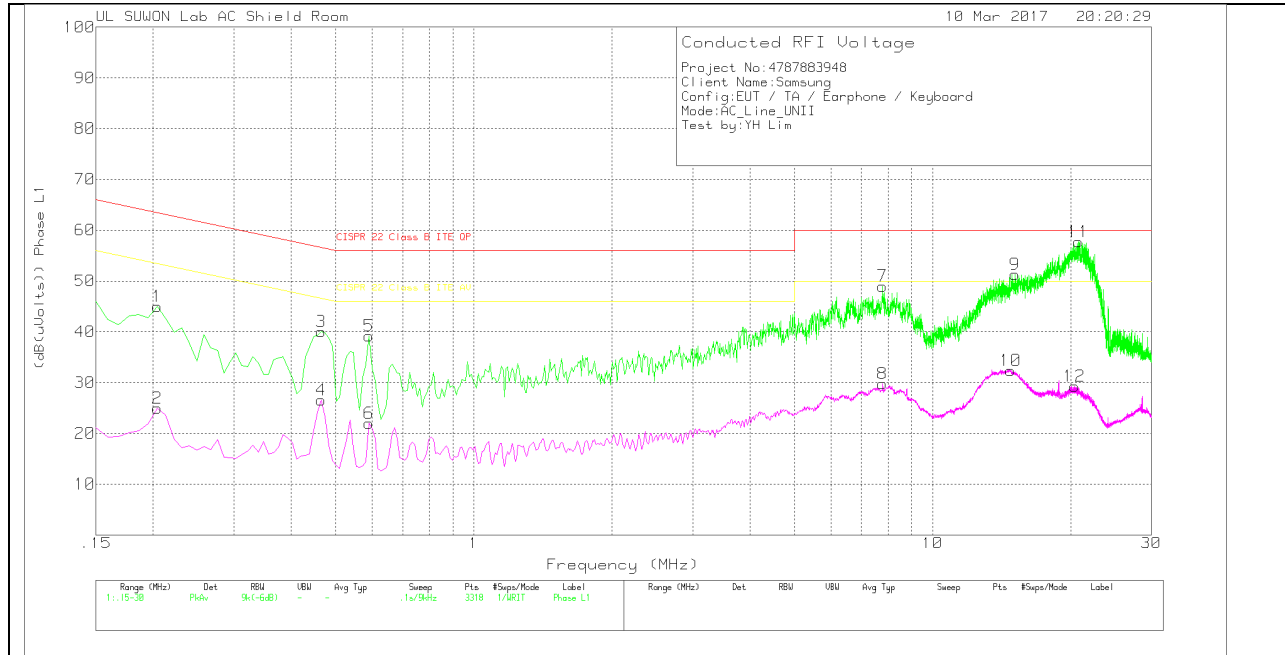
Frequency (MHz)	Meter Reading (dBuV)	Det	101837_wit h ex-cord_N	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
.1824	27.48	Qp	10	.2	37.68	64.38	-26.7	-	-
4.9308	21.88	Qp	9.8	.3	31.98	56	-24.02	-	-
8.2122	31.53	Qp	10	.3	41.83	60	-18.17	-	-
13.0551	30.51	Qp	10.3	.4	41.21	60	-18.79	-	-
16.1529	29.73	Qp	10.4	.4	40.53	60	-19.47	-	-
21.6501	30.39	Qp	10.7	.4	41.49	60	-18.51	-	-

Qp - Quasi-Peak detector

RESULTS equipped with keyboard

WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

Trace Markers

Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_w ith ex- cord_L1	CABLELOS S(dB)	Corrected Reading (dB(uVolts)	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
1	.204	34.92	Pk	9.9	.2	45.02	63.45	-18.43	-	-
2	.204	14.81	Av	9.9	.2	24.91	-	-	53.45	-28.54
3	.465	29.99	Pk	9.9	.2	40.09	56.6	-16.51	-	-
4	.465	16.42	Av	9.9	.2	26.52	-	-	46.6	-20.08
5	.591	29.1	Pk	9.9	.2	39.2	56	-16.8	-	-
6	.591	11.86	Av	9.9	.2	21.96	-	-	46	-24.04
7	7.791	38.81	Pk	9.9	.3	49.01	60	-10.99	-	-
8	7.791	19.63	Av	9.9	.3	29.83	-	-	50	-20.17
9	15.126	40.72	Pk	10.2	.4	51.32	60	-8.68	-	-
10	14.82	21.89	Av	10.1	.4	32.39	-	-	50	-17.61
11	20.832	46.97	Pk	10.4	.4	57.77	60	-2.23	-	-
12	20.382	18.46	Av	10.4	.4	29.26	-	-	50	-20.74

Pk - Peak detector

Av - Average detection

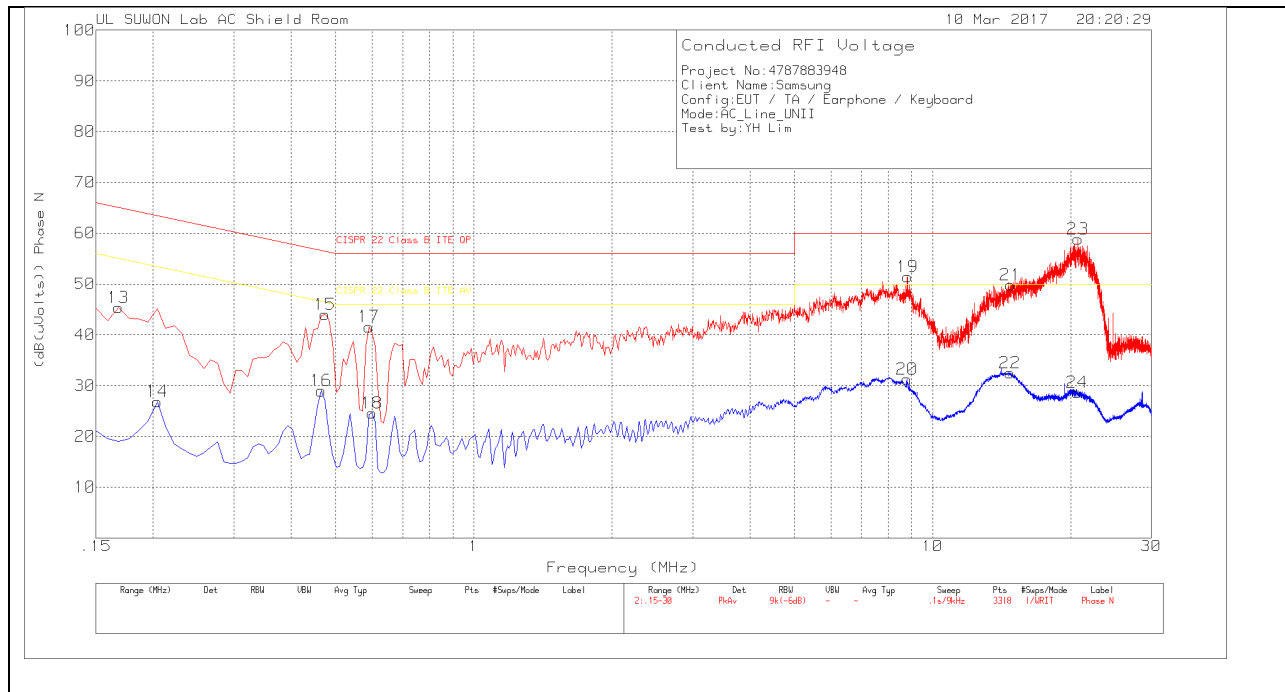
Quasi-Peak Emissions

Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_wit h ex-cord_L1	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
7.791	28.85	Qp	9.9	.3	39.05	60	-20.95	-	-
15.1224	31.8	Qp	10.2	.4	42.4	60	-17.6	-	-
20.8275	37.67	Qp	10.4	.4	48.47	60	-11.53	-	-

Qp - Quasi-Peak detector

LINE 2 PLOT



LINE 2 RESULTS

Trace Markers

Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_w ith ex- cord_N	CABLELOS S(dB)	Corrected Reading (dB(uVolts)	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
13	.168	35.29	Pk	10	.1	45.39	65.06	-19.67	-	-
14	.204	16.77	Av	9.9	.2	26.87	-	-	53.45	-26.58
15	.474	33.92	Pk	9.9	.2	44.02	56.44	-12.42	-	-
16	.465	18.88	Av	9.9	.2	28.98	-	-	46.6	-17.62
17	.591	31.49	Pk	9.9	.2	41.59	56	-14.41	-	-
18	.6	14.44	Av	9.9	.2	24.54	-	-	46	-21.46
19	8.817	40.98	Pk	10	.4	51.38	60	-8.62	-	-
20	8.799	20.86	Av	10	.4	31.26	-	-	50	-18.74
21	14.802	39.07	Pk	10.4	.4	49.87	60	-10.13	-	-
22	14.7345	21.71	Av	10.4	.4	32.51	-	-	50	-17.49
23	20.769	47.75	Pk	10.7	.4	58.85	60	-1.15	-	-
24	20.688	17.57	Av	10.7	.4	28.67	-	-	50	-21.33

Pk - Peak detector

Av - Average detection

Quasi-Peak Emissions

Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_wit h ex-cord_N	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
8.8125	30.5	Qp	10	.4	40.9	60	-19.1	-	-
14.802	31.09	Qp	10.4	.4	41.89	60	-18.11	-	-
20.7699	37.8	Qp	10.7	.4	48.9	60	-11.1	-	-

Qp - Quasi-Peak detector

13. DYNAMIC FREQUENCY SELECTION

13.1. OVERVIEW

13.1.1.LIMITS

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

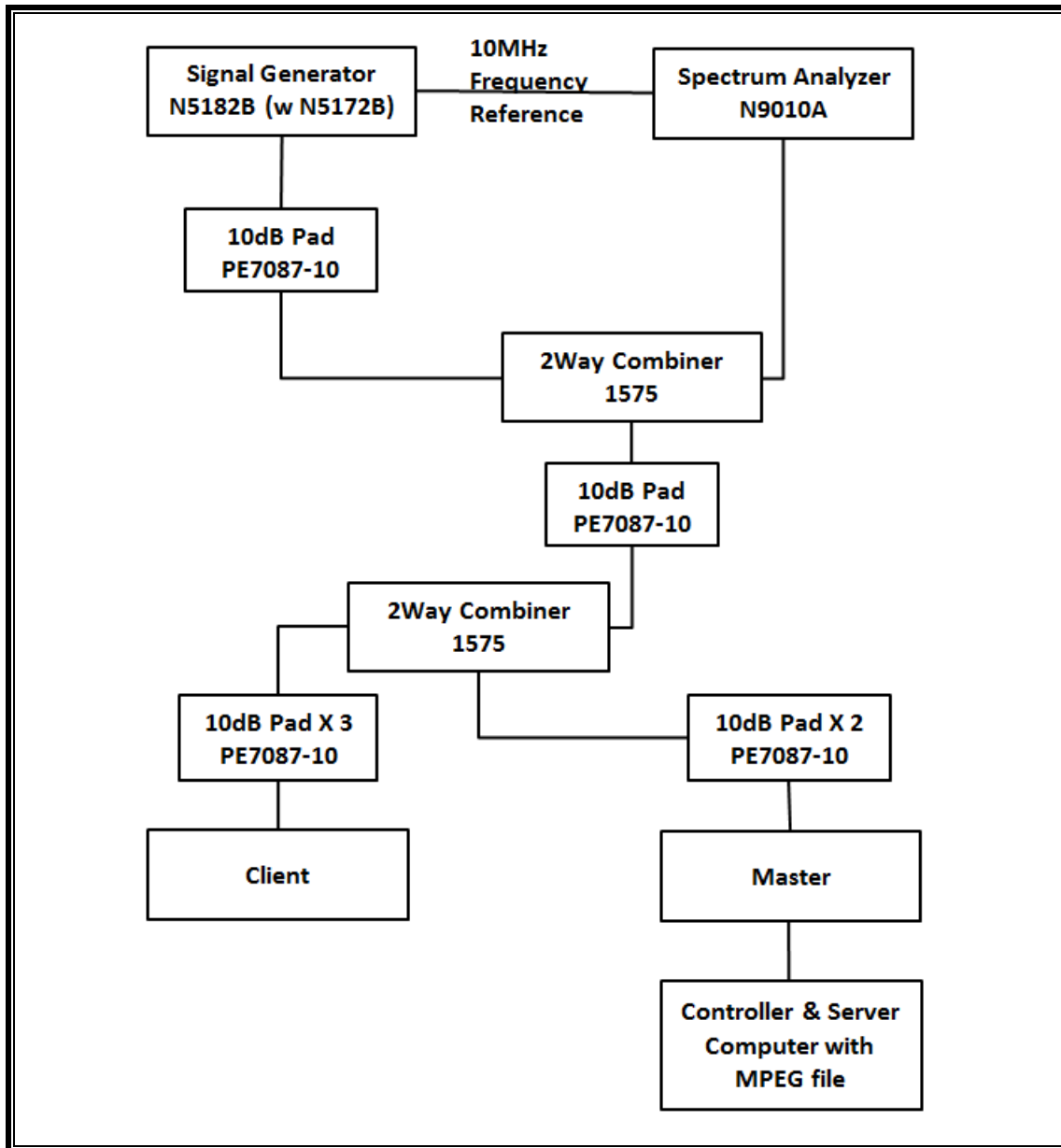
Radar Waveform Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

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

13.1.1. 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.

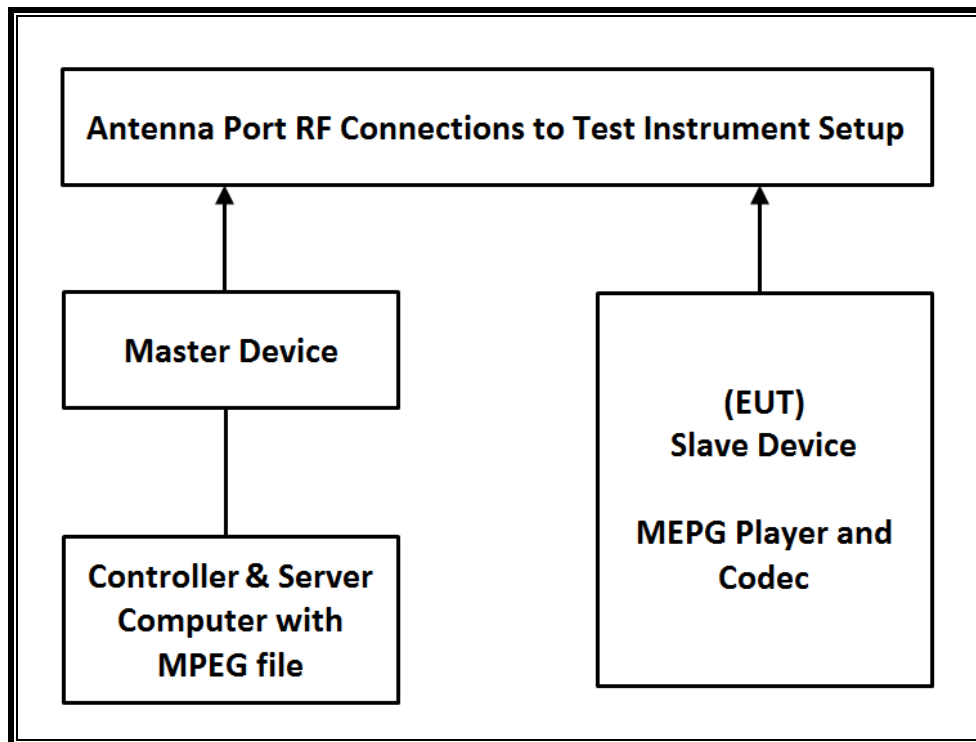
TEST AND MEASUREMENT EQUIPMENT

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	08-17-17
Vector Signal Generator, 6GHz	Agilent / HP	N5182B	MY53051241	08-16-17

13.1.2.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

13.1.3.DESCRPTION OF EUT

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

The EUT is a Slave Device without Radar Detection.

The highest power level within these bands is 17.08 dBm in the 5250-5350 MHz band and 17.08 dBm in the 5470-5725 MHz band.

The antenna assembly utilized two antenna with the EUT one is 0.5 dBi, and the other is 1.3 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.

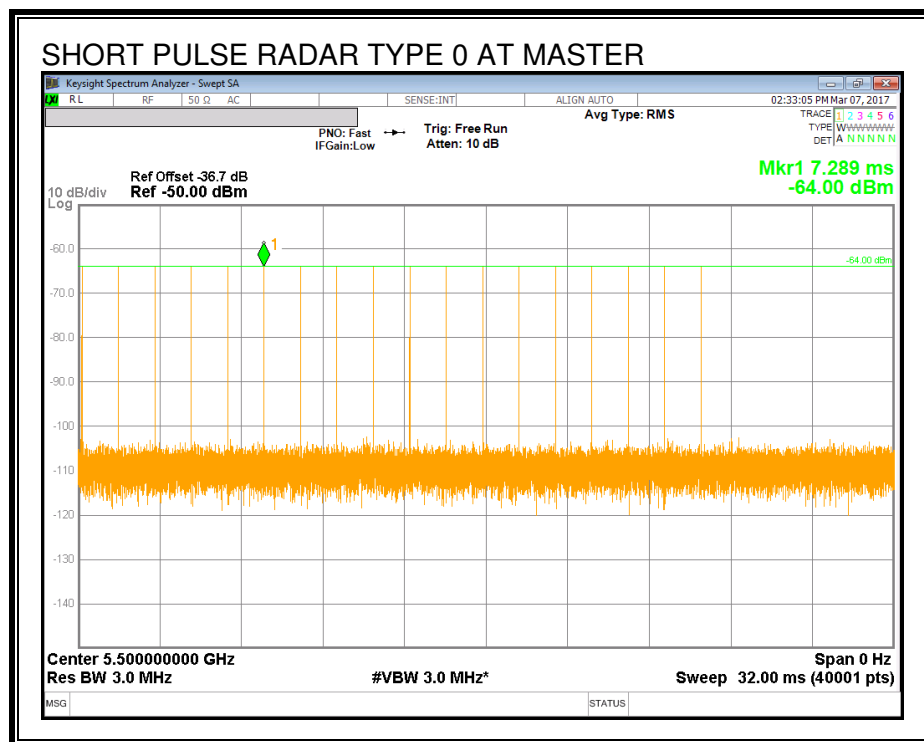
13.2. RESULTS FOR 20 MHz BANDWIDTH

13.2.1. TEST CHANNEL

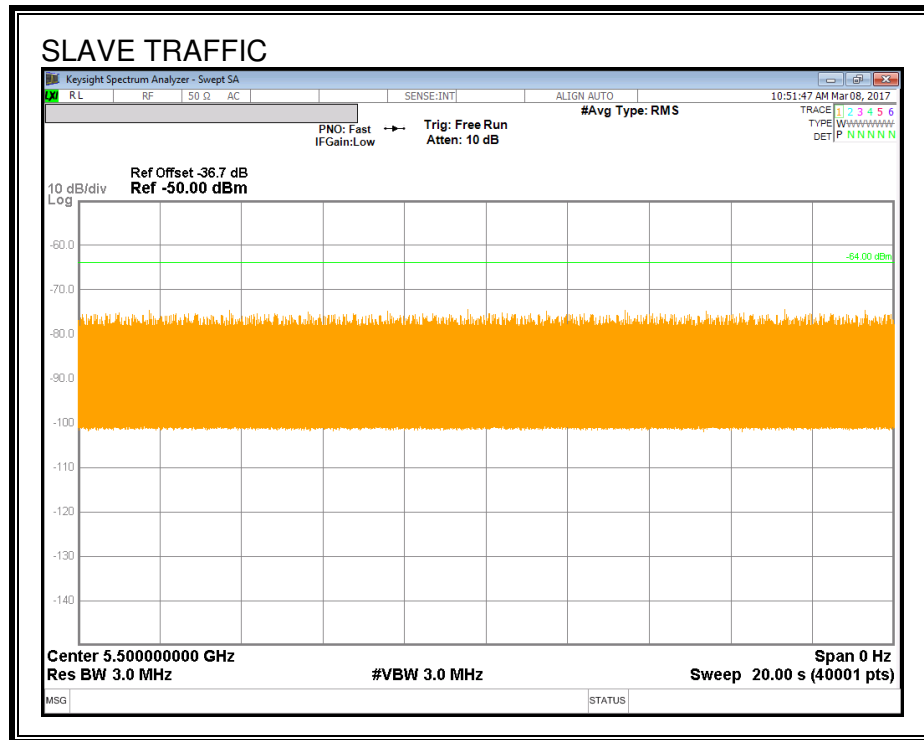
All tests were performed at a channel center frequency of 5500 MHz.

13.2.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



13.2.3.OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

13.2.4.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

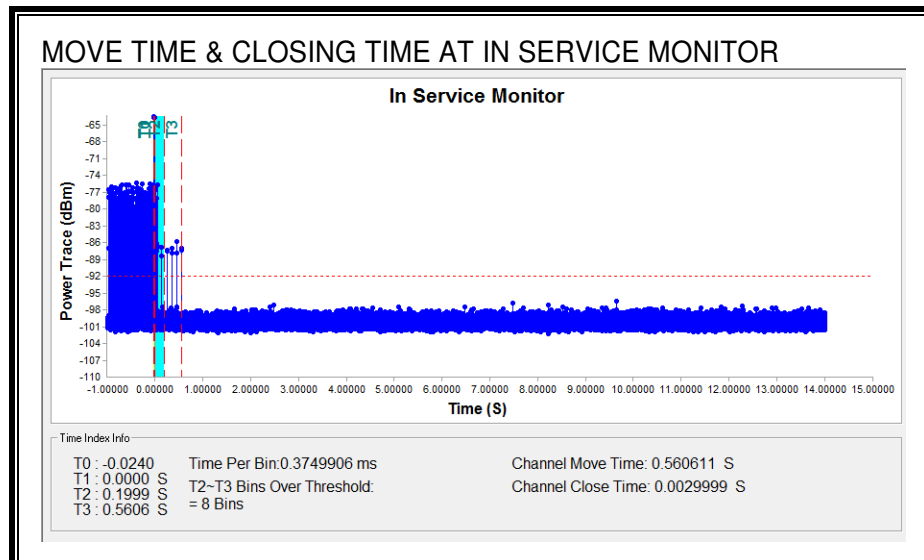
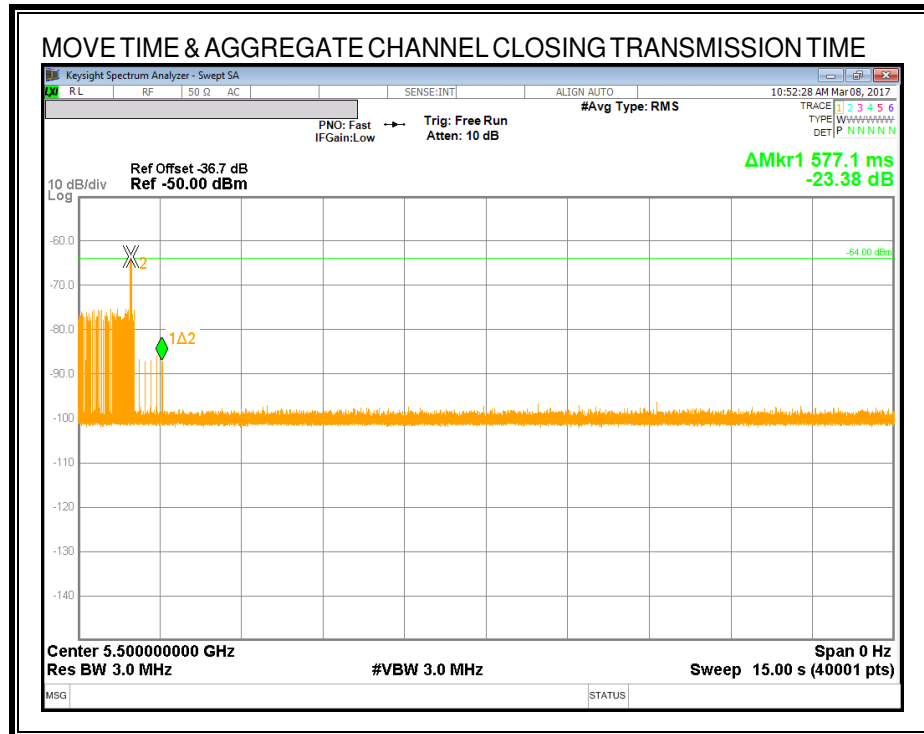
Channel Move Time (sec)	Limit (sec)
0.561	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
2.999	60

MOVE TIME & CHANNEL CLOSING TIME

AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

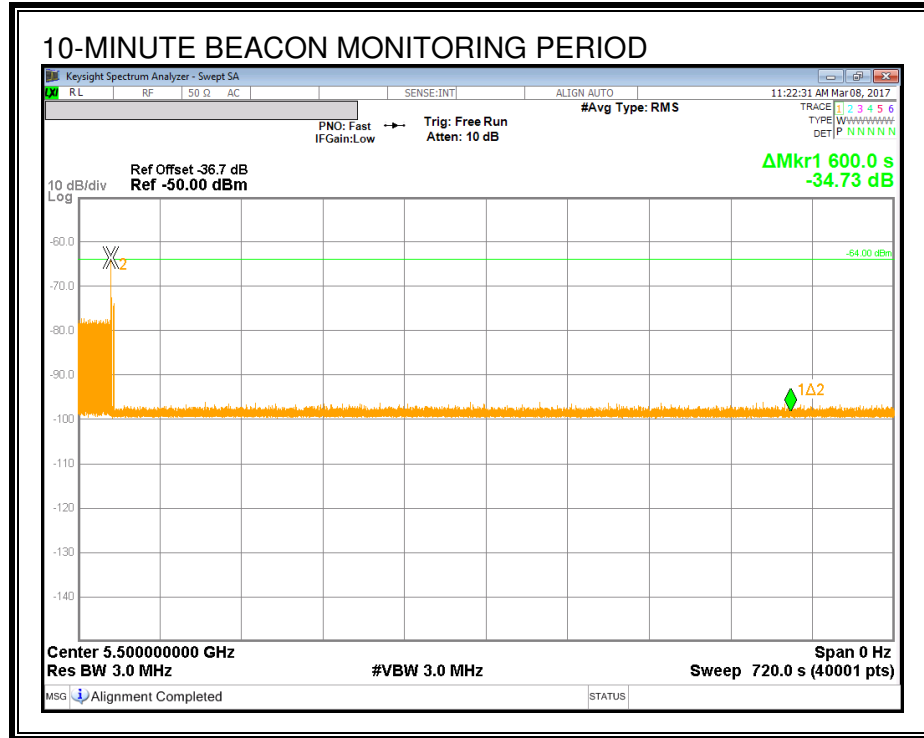
No transmissions are observed during the aggregate monitoring period.



NON-OCCUPANCY PERIOD

RESULTS

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



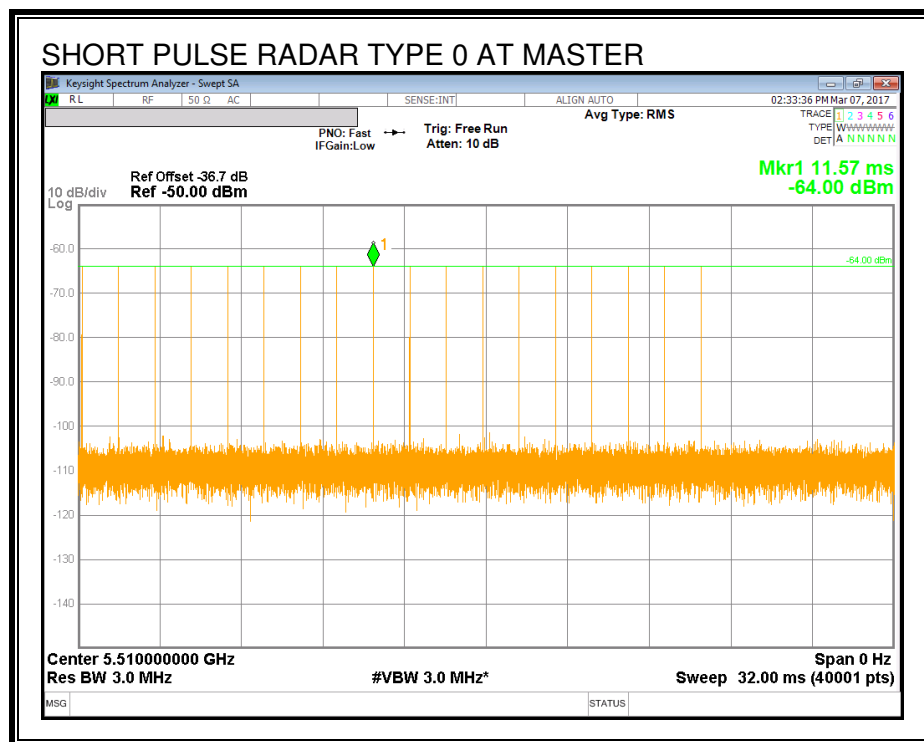
13.3. RESULTS FOR 40 MHz BANDWIDTH

13.3.1. TEST CHANNEL

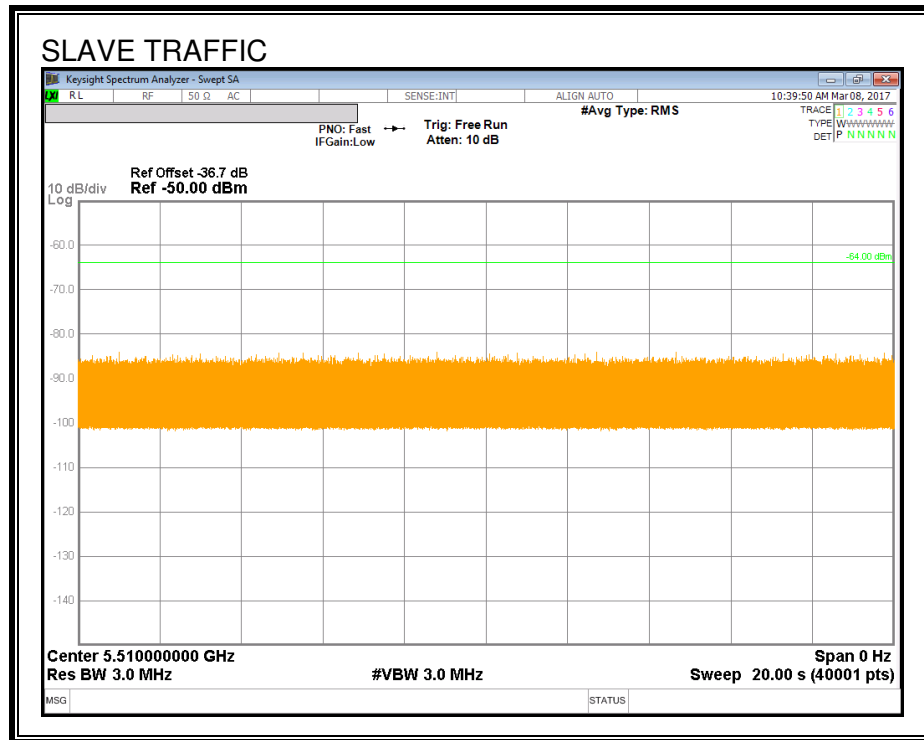
All tests were performed at a channel center frequency of 5510 MHz.

13.3.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



13.3.3.OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

13.3.4.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

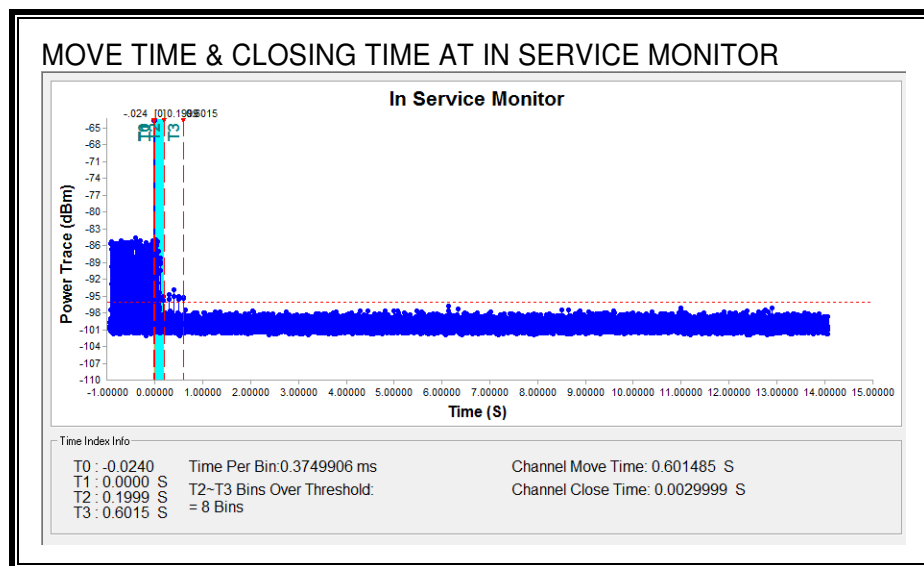
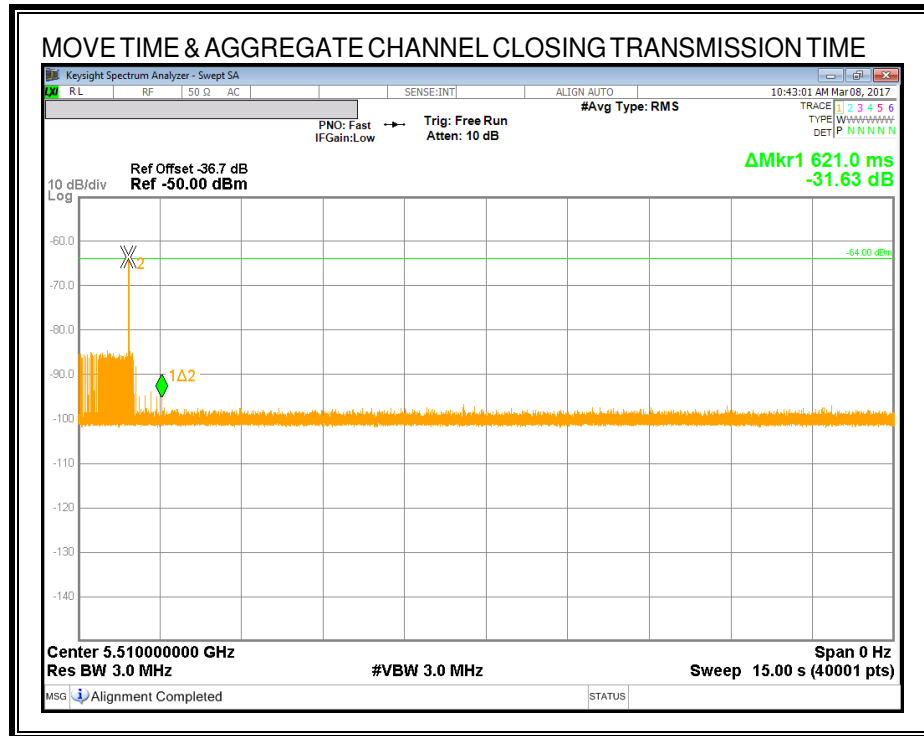
Channel Move Time (sec)	Limit (sec)
0.601	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
2.999	60

MOVE TIME & CHANNEL CLOSING TIME

AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

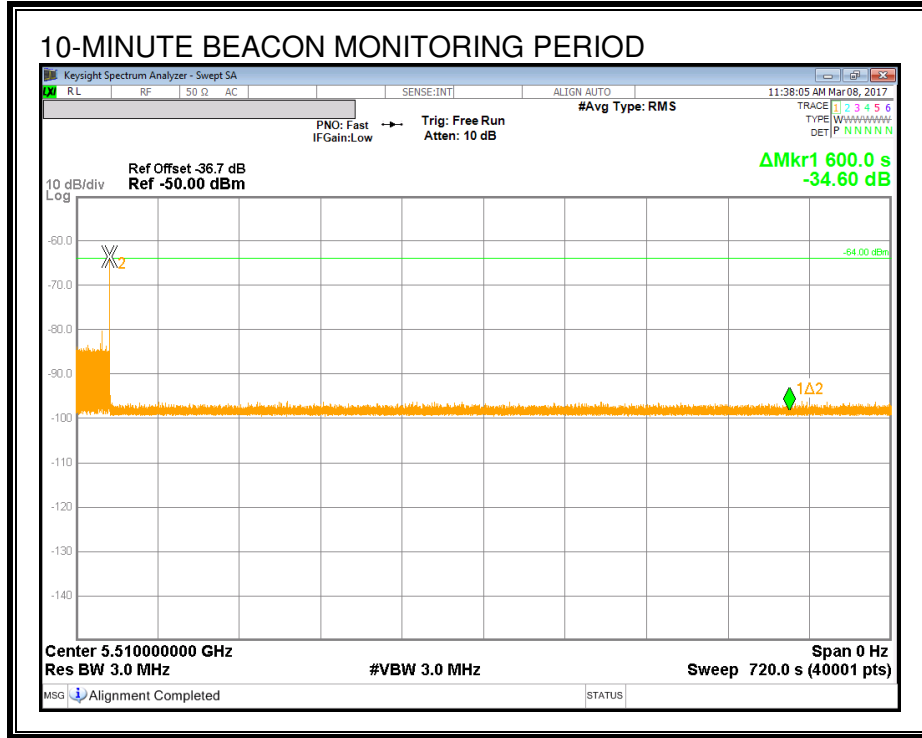
No transmissions are observed during the aggregate monitoring period.



NON-OCCUPANCY PERIOD

RESULTS

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



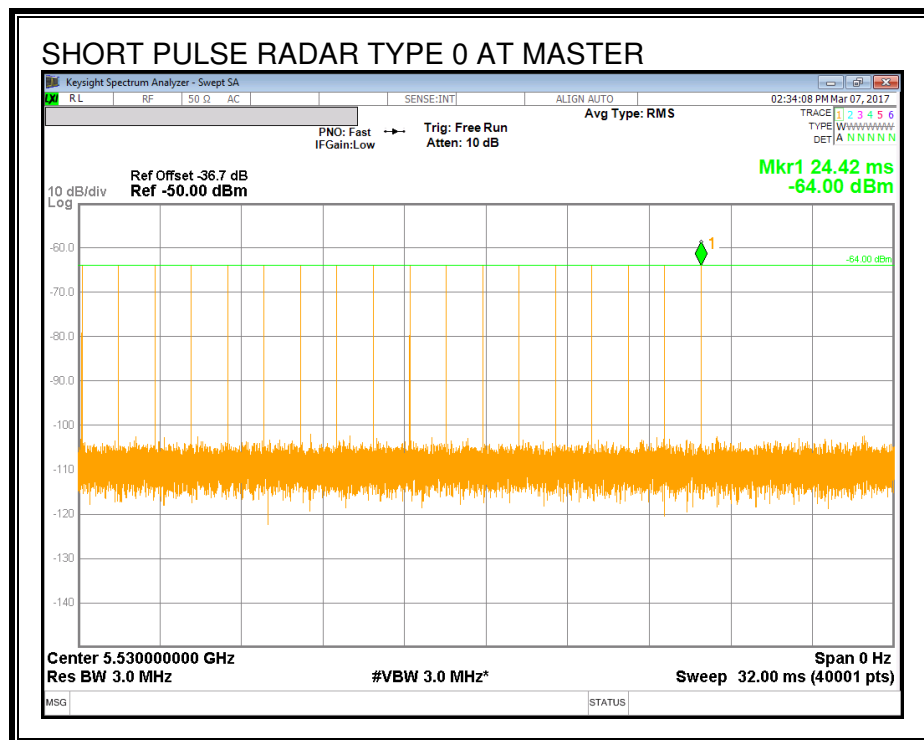
13.4. RESULTS FOR 80 MHz BANDWIDTH

13.4.1. TEST CHANNEL

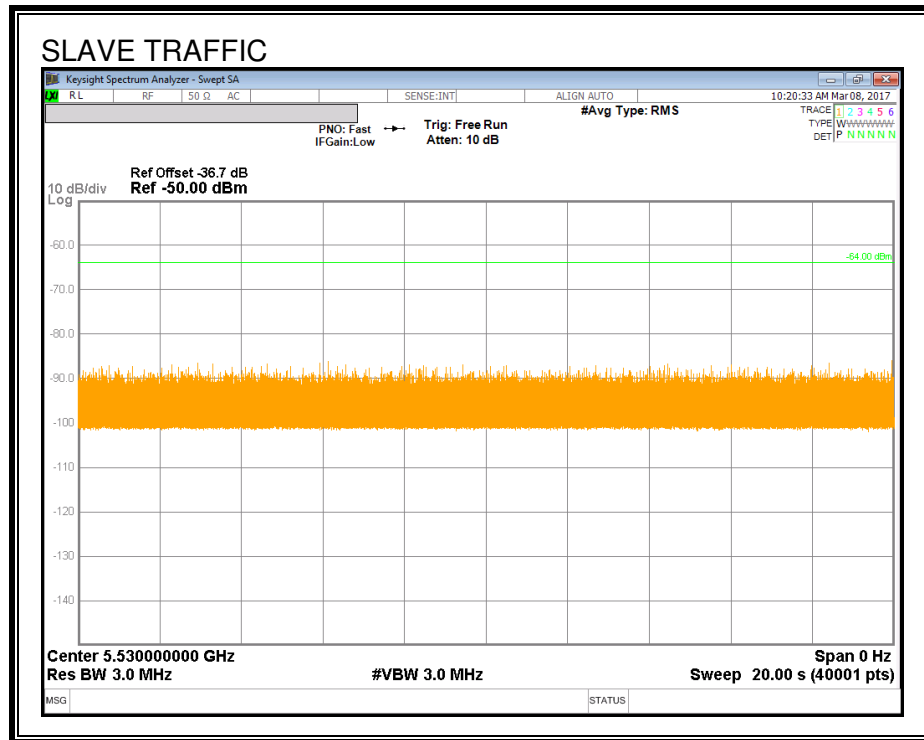
All tests were performed at a channel center frequency of 5530 MHz.

13.4.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



13.4.3.OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

13.4.4.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

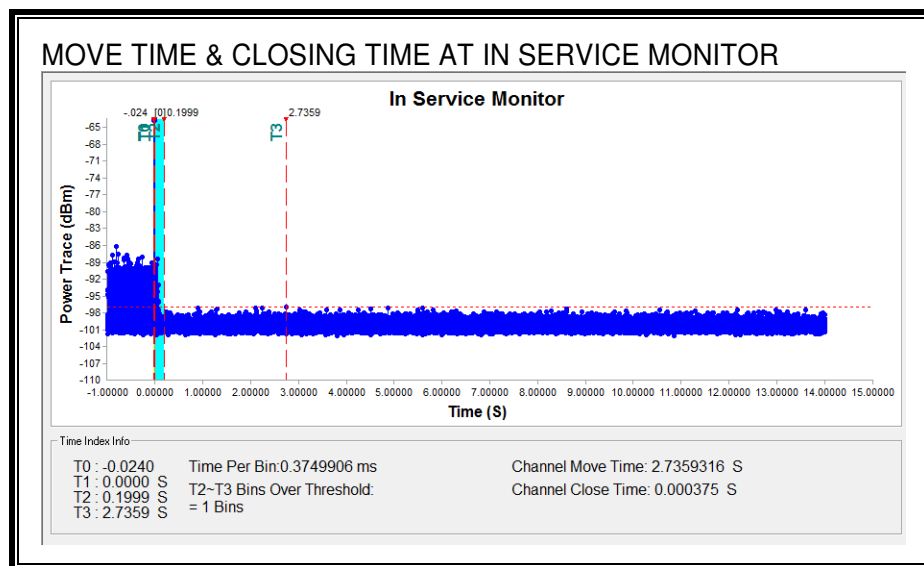
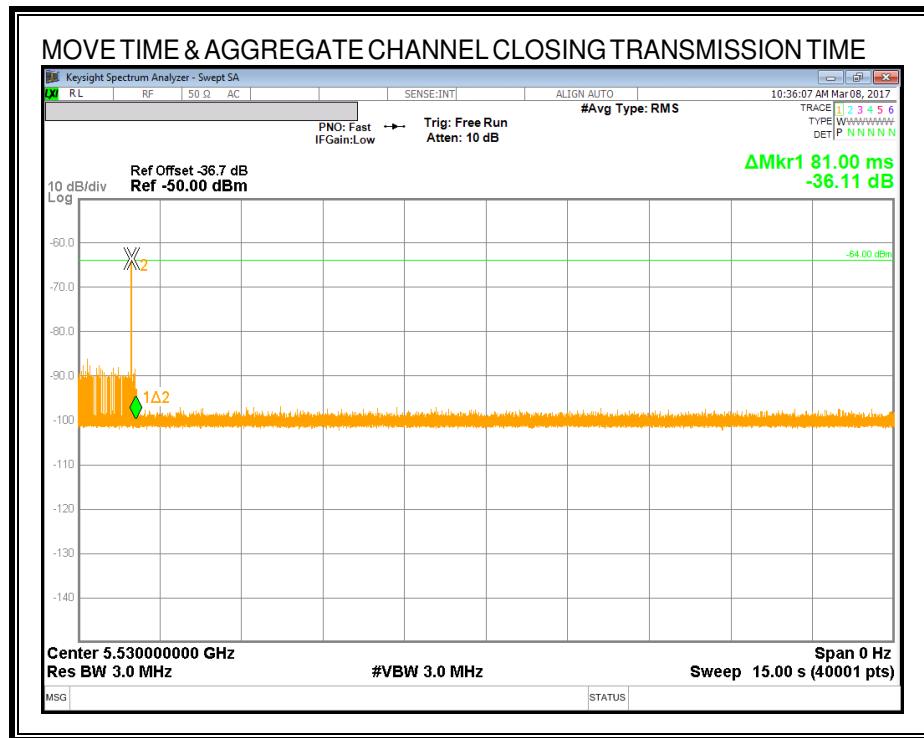
Channel Move Time (sec)	Limit (sec)
2.736	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.375	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.

