

UNII 5.8 GHz IEEE 802.11n HT40 mode

11n HT40 Mode Low Channel Chain 0



11n HT40 Mode Low Channel Chain 1



11n HT40 Mode High Channel Chain 0



11n HT40 Mode High Channel Chain 1



UNII 5.8 GHz IEEE 802.11ac VHT80 mode

11ac HT80 Mode Middle Channel Chain 0



11ac HT80 Mode Middle Channel Chain 1



11. TRANSMITTER ABOVE 1 GHz

LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

FCC §15.407 (b)

(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.
- (6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.
- (7) The provisions of §15.205 apply to intentional radiators operating under this section.
- (8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

Note

- Limit translation to field strength level (FCC §15.407)

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2 = -27\text{dBm} + 95.2 = 68.2\text{dBuV/m}$$

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2 = -17\text{dBm} + 95.2 = 78.2\text{dBuV/m}$$

(For frequency range 5715MHz ~ 5725MHz, 5850MHz ~ 5860MHz)

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

Reference to KDB 789033 D02 v01r01 UNII part G) 6) c) Method AD:

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor to the reading offset for average measurements.

The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

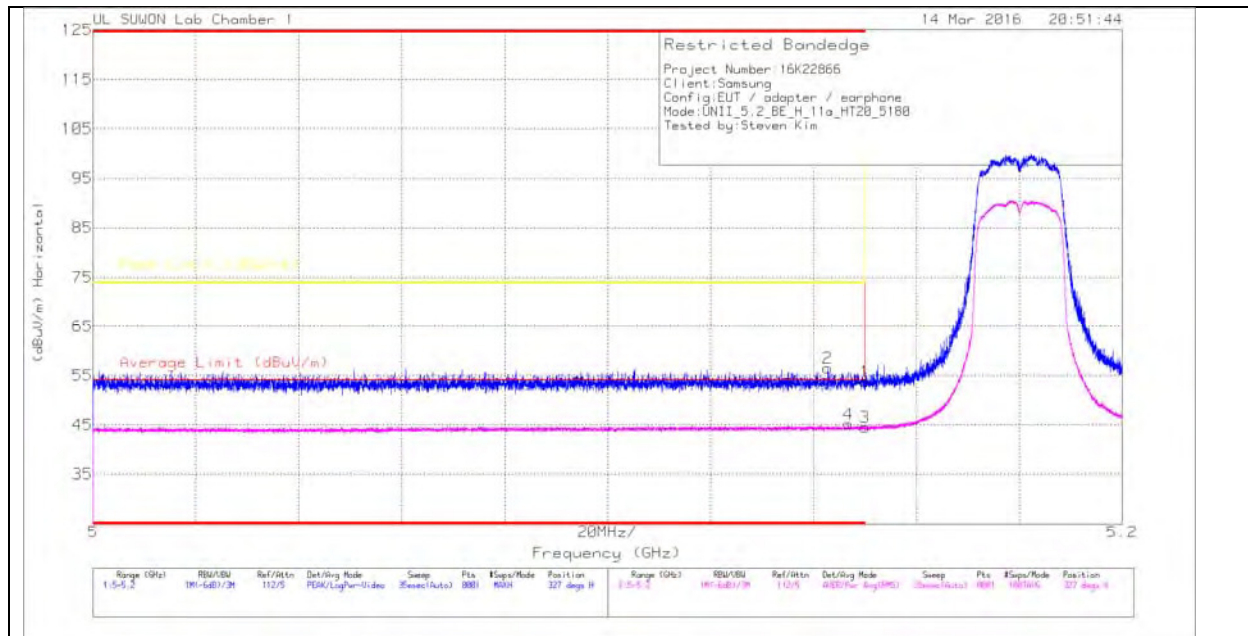
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

11.1. 5.2 GHz

11.1.1. TX Above 1GHz 802.11a 2TX CDD MODE IN THE 5.2GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

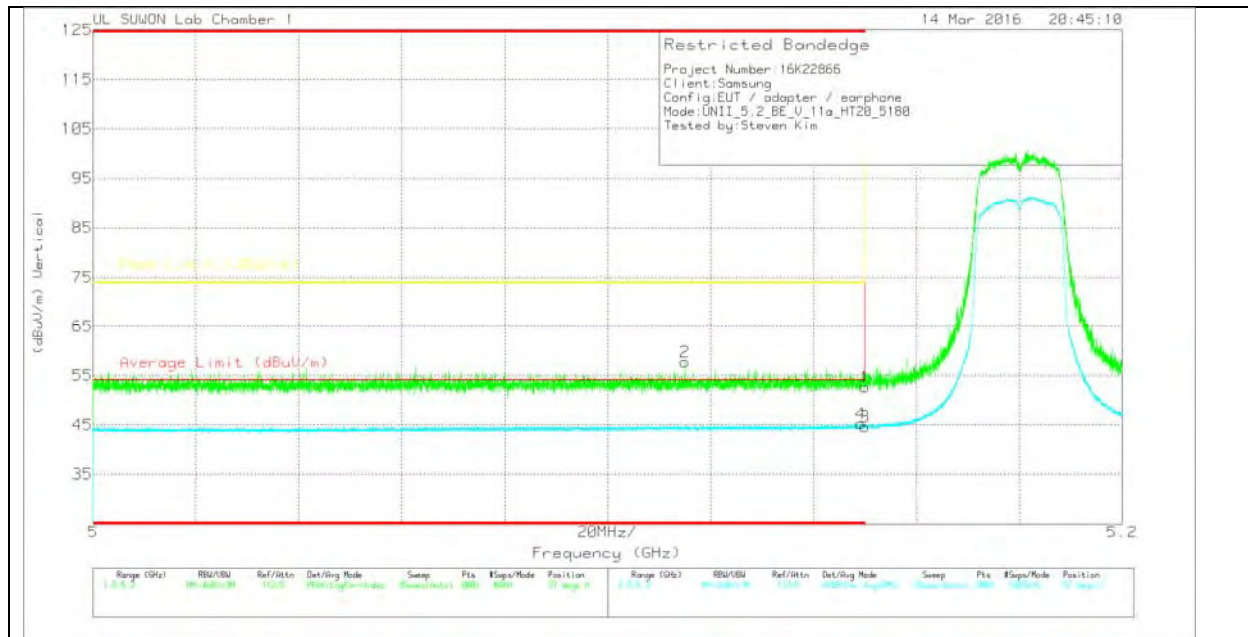
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	43.73	Pk	34.2	-24.1	0	53.83	-	-	74	-20.17	327	385	H
2	* 5.143	46.38	Pk	34.2	-24.1	0	56.48	-	-	74	-17.52	327	385	H
3	* 5.15	34.12	RMS	34.2	-24.1	.29	44.51	54	-9.49	-	-	327	385	H
4	* 5.147	34.72	RMS	34.2	-24.1	.29	45.11	54	-8.89	-	-	327	385	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 17_150619)	Path_2	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	* 5.15	42.57	PK	34.2	-24.1	0	52.67	-	-	74	-21.33	57	102	V
2	* 5.115	47.6	PK	34.2	-24.1	0	57.7	-	-	74	-16.3	57	102	V
3	* 5.15	34.21	RMS	34.2	-24.1	.29	44.6	54	-9.4	-	-	57	102	V
4	* 5.149	34.85	RMS	34.2	-24.1	.29	45.24	54	-8.76	-	-	57	102	V

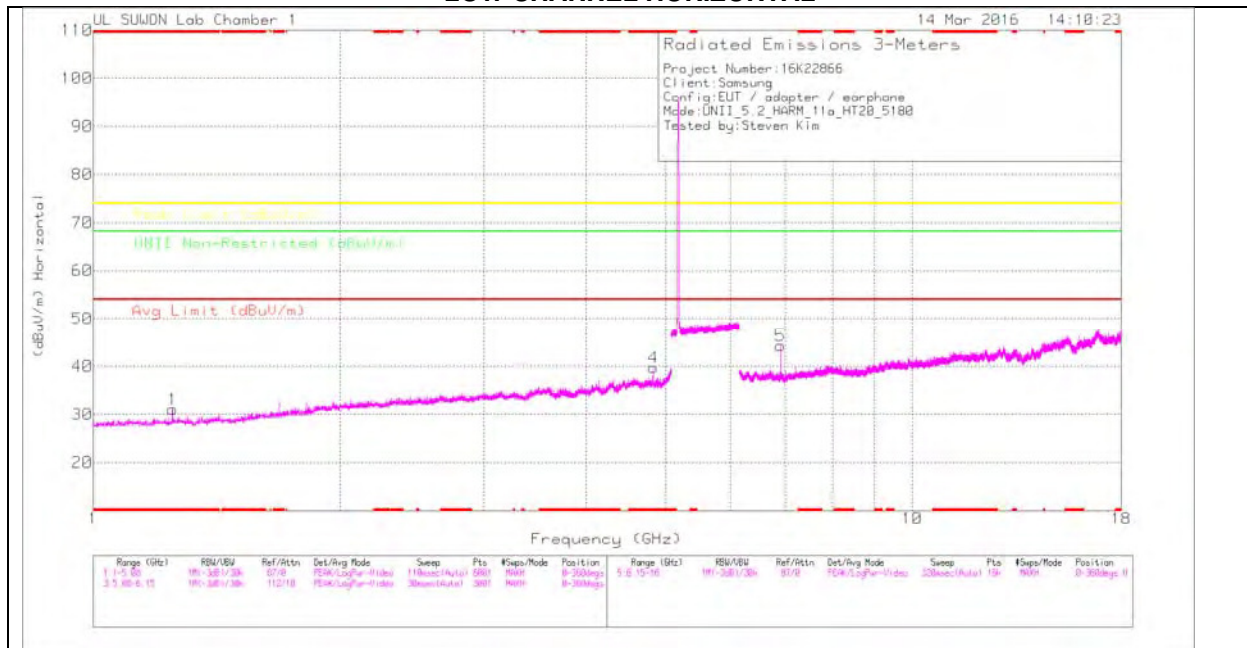
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

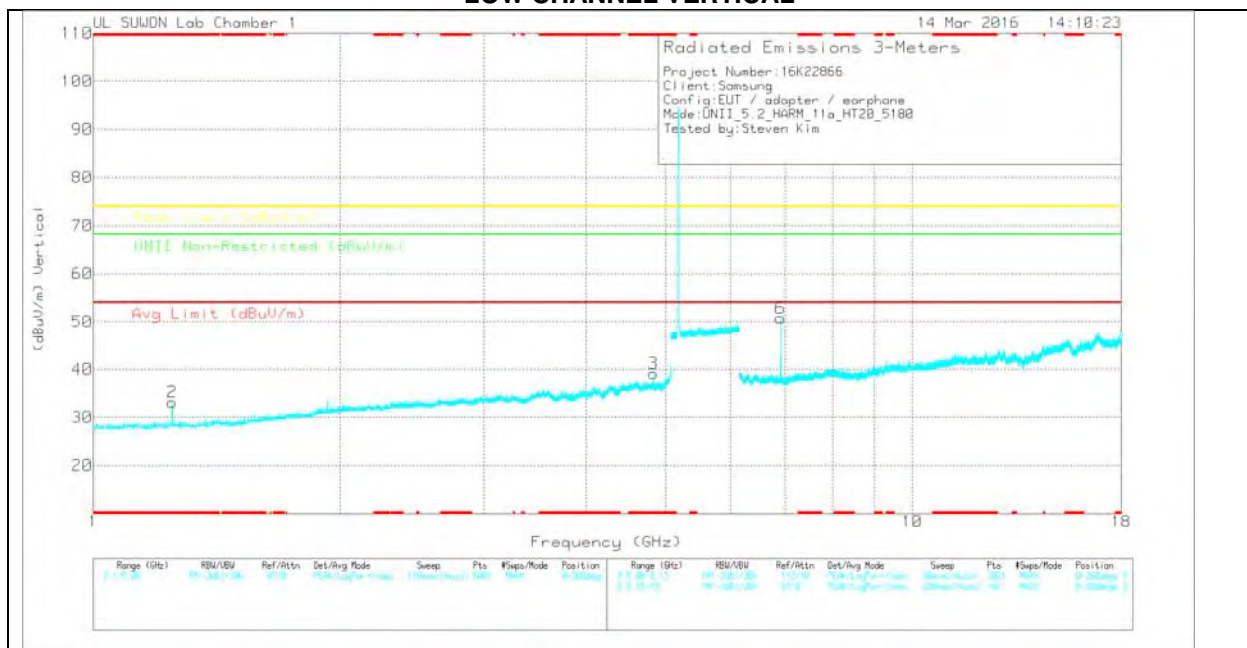
RMS - RMS detection

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 8717_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.95	PK	28.3	-40.2	0	31.05	-	-	74	-42.95	-	-	0-360	200	H
4	* 4.828	38.8	PK	34	-33.1	0	39.7	-	-	74	-34.3	-	-	0-360	100	H
2	* 1.25	45.07	PK	28.3	-40.2	0	33.17	-	-	74	-40.83	-	-	0-360	200	V
3	* 4.828	38.24	PK	34	-33.1	0	39.14	-	-	74	-34.86	-	-	0-360	200	V
5	6.906	39.53	PK	35.6	-30.8	0	44.33	-	-	-	-	68.2	-23.87	0-360	200	H
6	6.906	46.01	PK	35.6	-30.8	0	50.81	-	-	-	-	68.2	-17.39	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

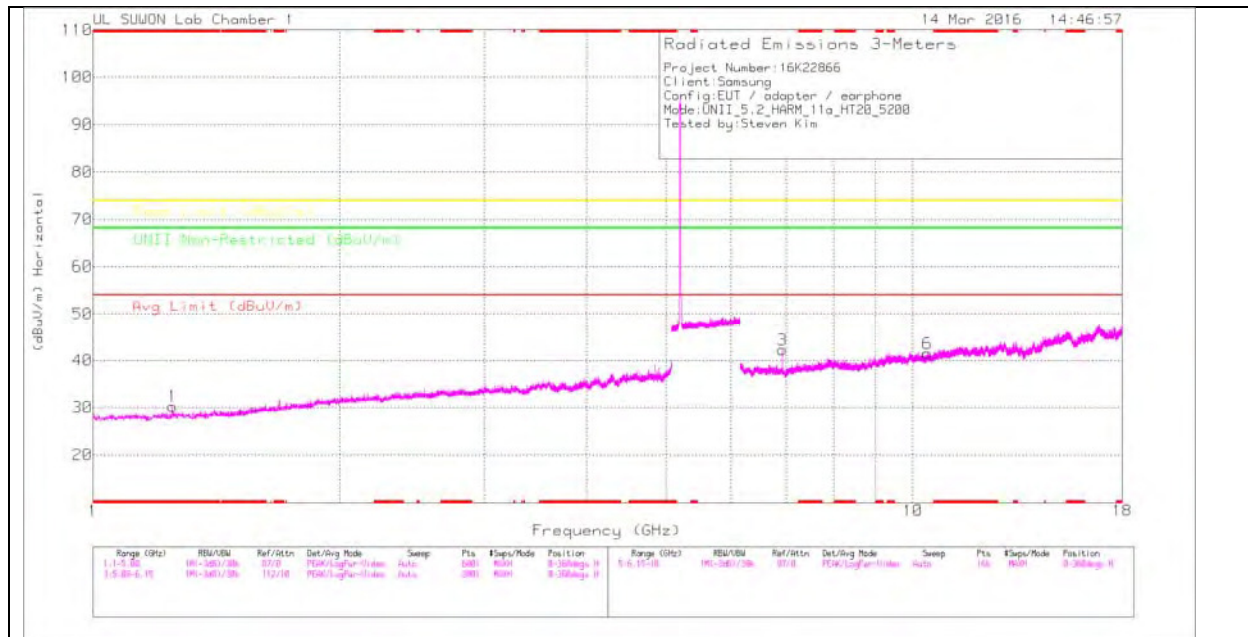
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.828	50.28	PK-U	34	-33.1	0	51.18	-	-	74	-22.82	-	-	183	310	H
* 4.828	40.95	ADR	34	-33.1	0	41.85	54	-12.15	-	-	-	-	183	310	H
* 4.828	49.08	PK-U	34	-33.1	0	49.98	-	-	74	-24.02	-	-	185	101	V
* 4.828	39.07	ADR	34	-33.1	0	39.97	54	-14.03	-	-	-	-	185	101	V
6.907	42.41	ADR	35.6	-30.8	0	47.21	54	-6.79	-	-	-	-	258	250	H
6.907	44.11	ADR	35.6	-30.8	0	48.91	54	-5.09	-	-	-	-	307	103	V
6.907	50.78	PK-U	35.6	-30.8	0	55.58	-	-	-	-	68.2	-12.62	307	103	V
6.907	48.43	PK-U	35.6	-30.8	0	53.23	-	-	-	-	68.2	-14.97	258	250	H

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

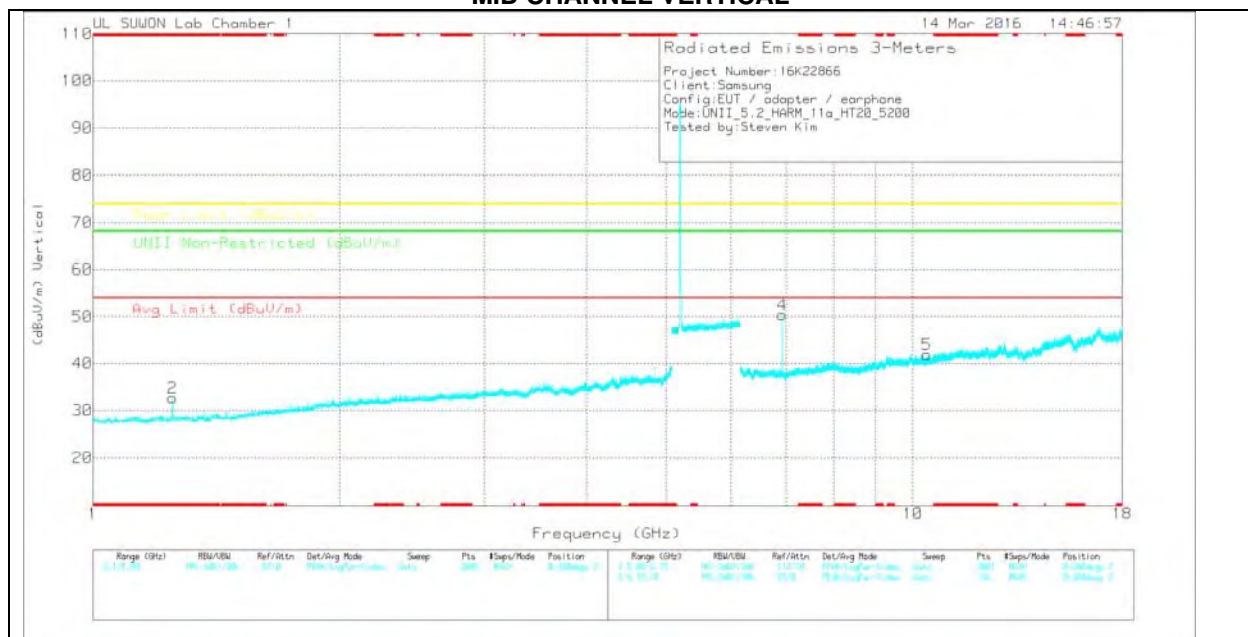
PK-U - U-NII: Maximum Peak

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 8717)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unil non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.2	PK	28.3	-40.2	0	30.3	-	-	74	-43.7	-	-	0-360	200	H
2	* 1.25	44.64	PK	28.3	-40.2	0	32.74	-	-	74	-41.26	-	-	0-360	200	V
3	6.934	37.29	PK	35.7	-30.7	0	42.29	-	-	-	-	68.2	-25.91	0-360	200	H
6	10.408	30.45	PK	37.8	-26.7	0	41.55	-	-	-	-	68.2	-26.65	0-360	100	H
4	6.933	45.41	PK	35.7	-30.7	0	50.41	-	-	-	-	68.2	-17.79	0-360	100	V
5	10.402	30.81	PK	37.8	-26.7	0	41.91	-	-	-	-	68.2	-26.29	0-360	100	V

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

PK – Peak detector

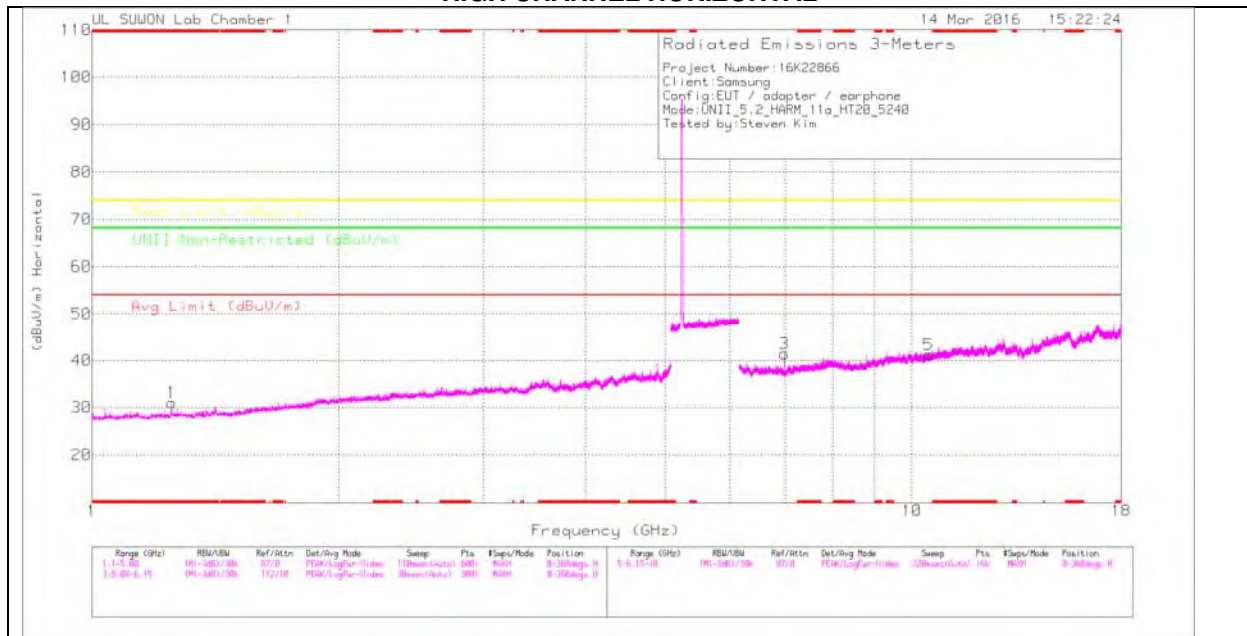
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unil non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6.933	45.58	PK-U	35.7	-30.7	0	50.58	-	-	-	-	68.2	-17.62	180	148	H
6.933	49.76	PK-U	35.7	-30.7	0	54.76	-	-	-	-	68.2	-13.44	309	100	V
6.933	30.4	ADR	35.7	-30.7	0	35.4	54	-18.6	-	-	-	-	180	148	H
6.933	44.47	ADR	35.7	-30.7	0	49.47	54	-4.53	-	-	-	-	309	100	V

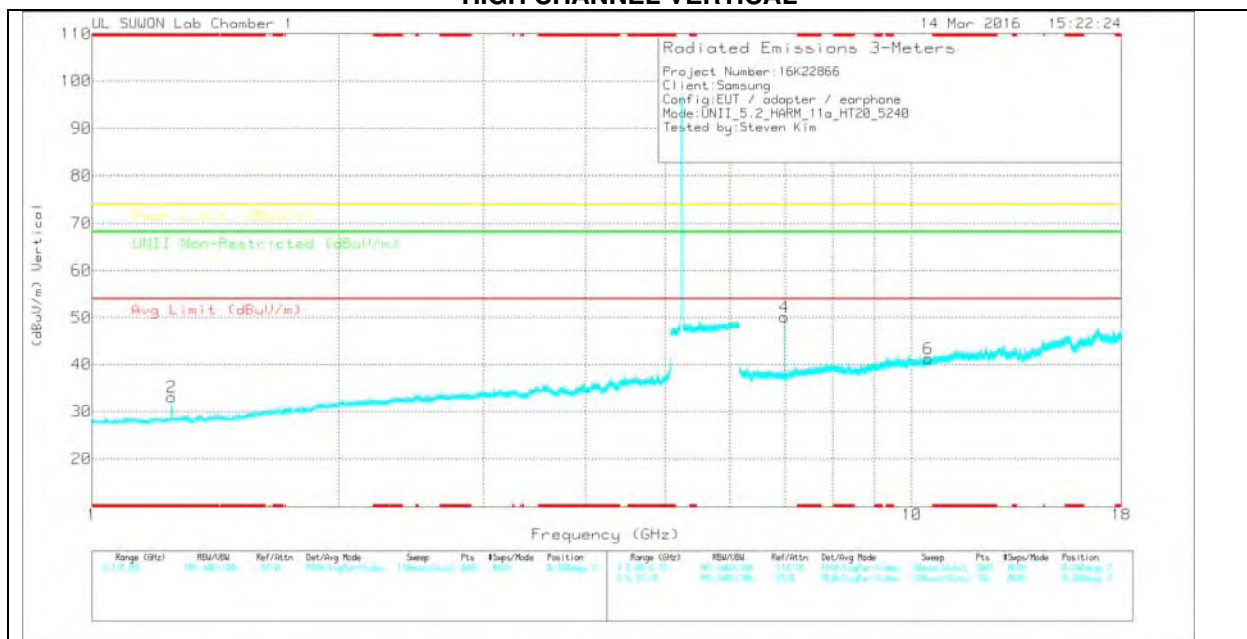
PK-U - U-NII: Maximum Peak

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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.98	PK	28.3	-40.2	0	31.08	-	-	74	-42.92	-	-	0-360	200	H
2	* 1.25	44.94	PK	28.3	-40.2	0	33.04	-	-	74	-40.96	-	-	0-360	200	V
3	6.986	36.33	PK	35.7	-30.6	0	41.43	-	-	-	-	68.2	-26.77	0-360	200	H
5	10.479	31.16	PK	37.8	-27.7	0	41.26	-	-	-	-	68.2	-26.94	0-360	200	H
4	6.986	45.08	PK	35.7	-30.6	0	50.18	-	-	-	-	68.2	-18.02	0-360	100	V
6	10.475	31.01	PK	37.8	-27.6	0	41.21	-	-	-	-	68.2	-26.99	0-360	100	V

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

PK – Peak detector

Radiated Emissions

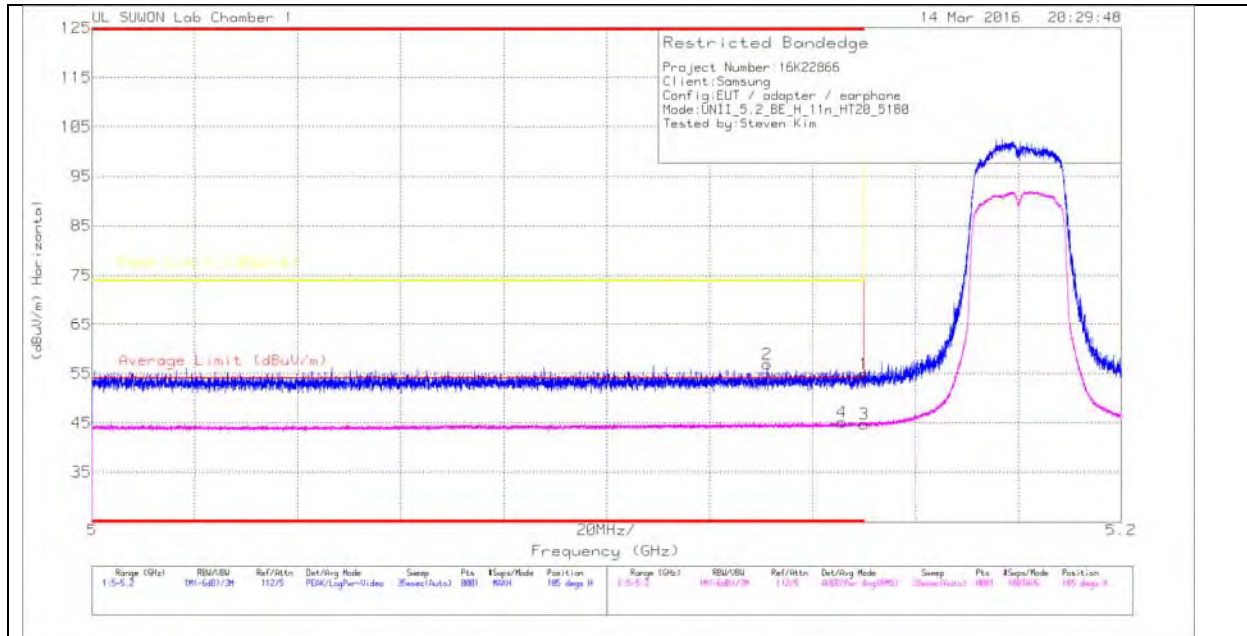
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6.987	44.66	PK-U	35.7	-30.6	0	49.76	-	-	-	-	68.2	-18.44	172	132	H
6.987	33.5	ADR	35.7	-30.6	0	38.6	54	-15.4	-	-	-	-	172	132	H
6.987	42.33	ADR	35.7	-30.6	0	47.43	54	-6.57	-	-	-	-	311	101	V
6.987	49.34	PK-U	35.7	-30.6	0	54.44	-	-	-	-	68.2	-13.76	311	101	V

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.1.2. TX Above 1GHz 802.11n HT20 2TX CDD MODE IN THE 5.2GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

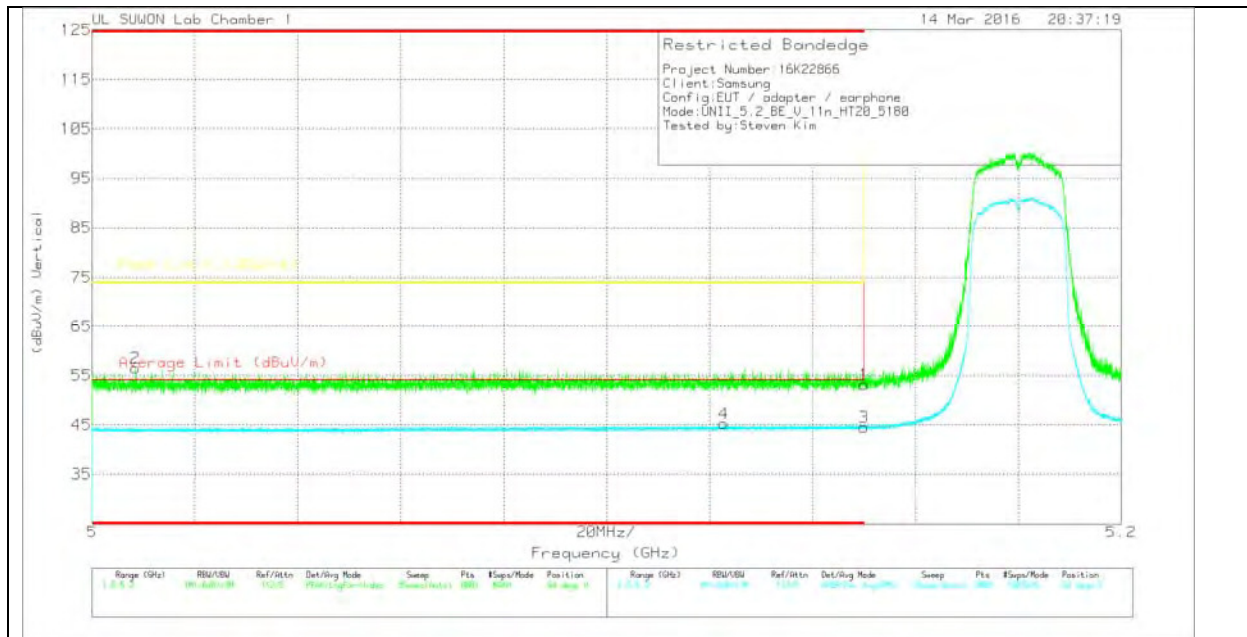
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	44.78	Pk	34.2	-24.1	0	54.88	-	-	74	-19.12	185	323	H
2	* 5.131	46.67	Pk	34.2	-24	0	56.87	-	-	74	-17.13	185	323	H
3	* 5.15	34.36	RMS	34.2	-24.1	.31	44.77	54	-9.23	-	-	185	323	H
4	* 5.146	34.73	RMS	34.2	-24.1	.31	45.14	54	-8.86	-	-	185	323	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 17)_150619	Path_2	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	* 5.15	43.07	Pk	34.2	-24.1	0	53.17	-	-	74	-20.83	64	104	V
2	* 5.008	46.74	Pk	34.1	-24.3	0	56.54	-	-	74	-17.46	64	104	V
3	* 5.15	34.08	RMS	34.2	-24.1	.31	44.49	54	-9.51	-	-	64	104	V
4	* 5.123	34.7	RMS	34.2	-24	.31	45.21	54	-8.79	-	-	64	104	V

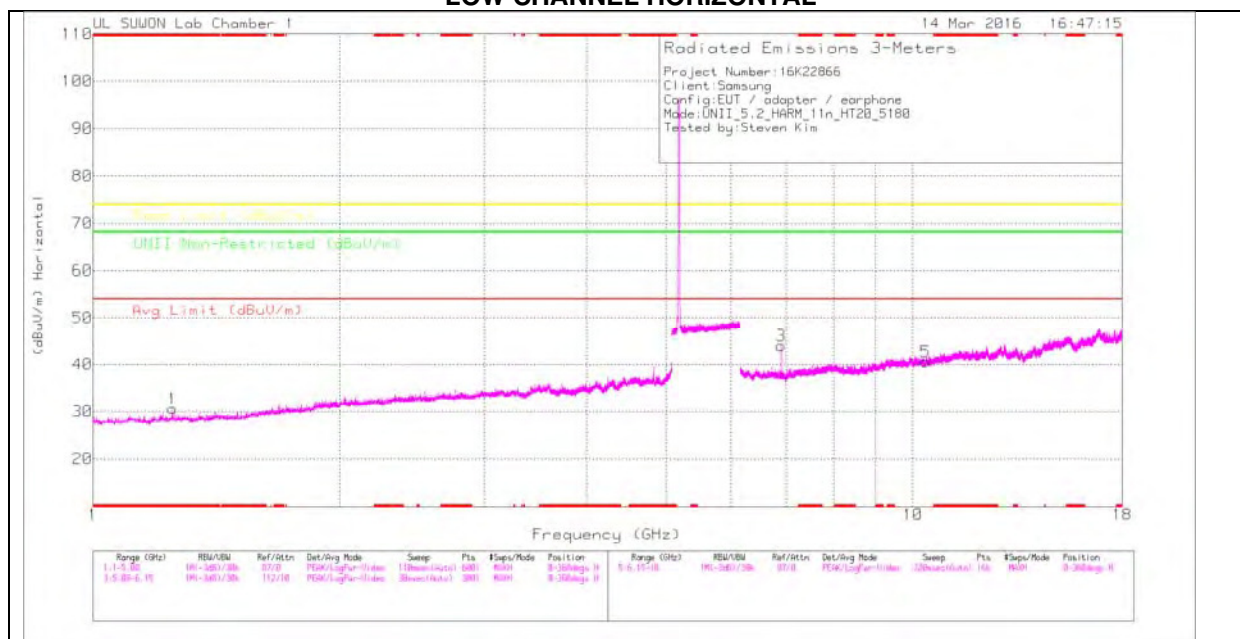
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

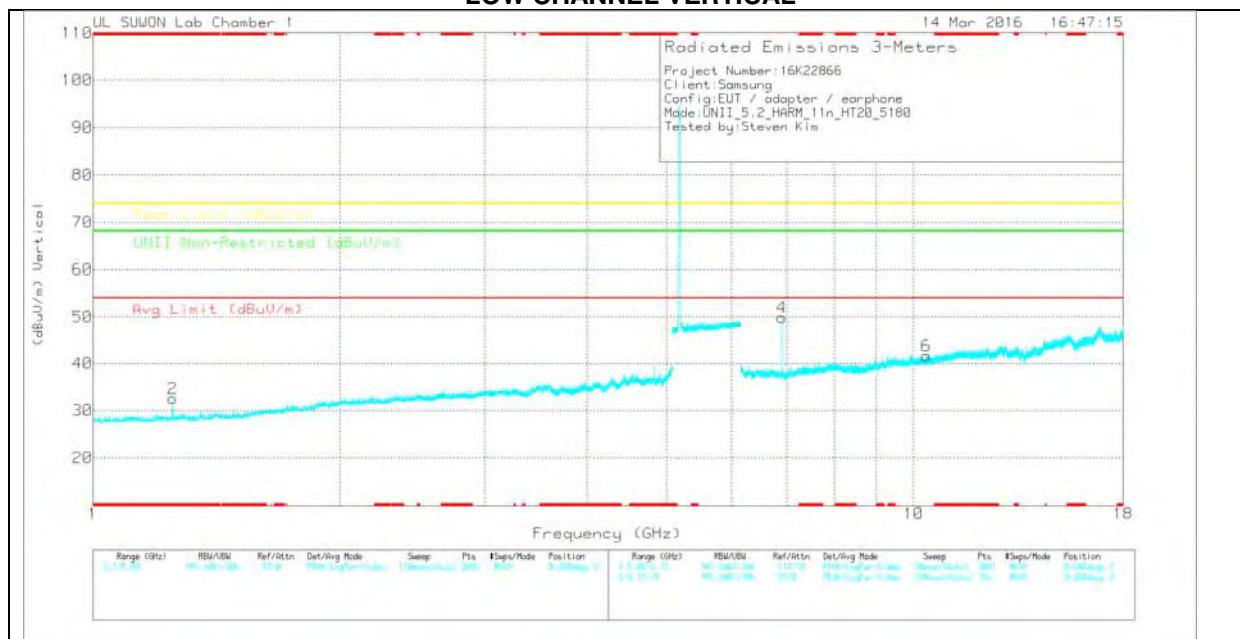
RMS - RMS detection

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 8717_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unli non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.51	PK	28.3	-40.2	0	30.61	-	-	74	-43.39	-	-	0-360	200	H
2	* 1.25	44.5	PK	28.3	-40.2	0	32.6	-	-	74	-41.4	-	-	0-360	200	V
3	6.907	39.21	PK	35.6	-30.8	0	44.01	-	-	-	-	68.2	-24.19	0-360	200	H
5	10.362	30.08	PK	37.8	-27.3	0	40.58	-	-	-	-	68.2	-27.62	0-360	100	H
4	6.907	45.1	PK	35.6	-30.8	0	49.9	-	-	-	-	68.2	-18.3	0-360	100	V
6	10.359	31.23	PK	37.8	-27.4	0	41.63	-	-	-	-	68.2	-26.57	0-360	100	V

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

PK – Peak detector

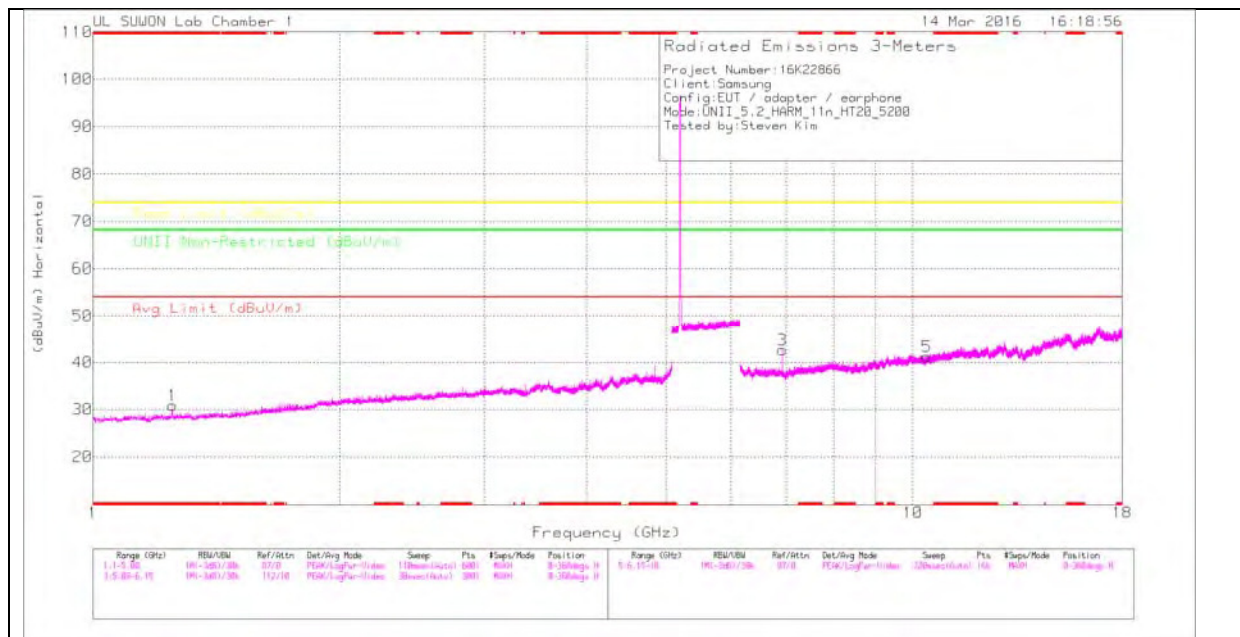
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unli non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6.907	46.44	PK-U	35.6	-30.8	0	51.24	-	-	-	-	68.2	-16.96	69	378	H
6.907	38.4	ADR	35.6	-30.8	0	43.2	54	-10.8	-	-	-	-	69	378	H
6.907	50.22	PK-U	35.6	-30.8	0	55.02	-	-	-	-	68.2	-13.18	307	100	V
6.907	45.45	ADR	35.6	-30.8	0	50.25	54	-3.75	-	-	-	-	307	100	V

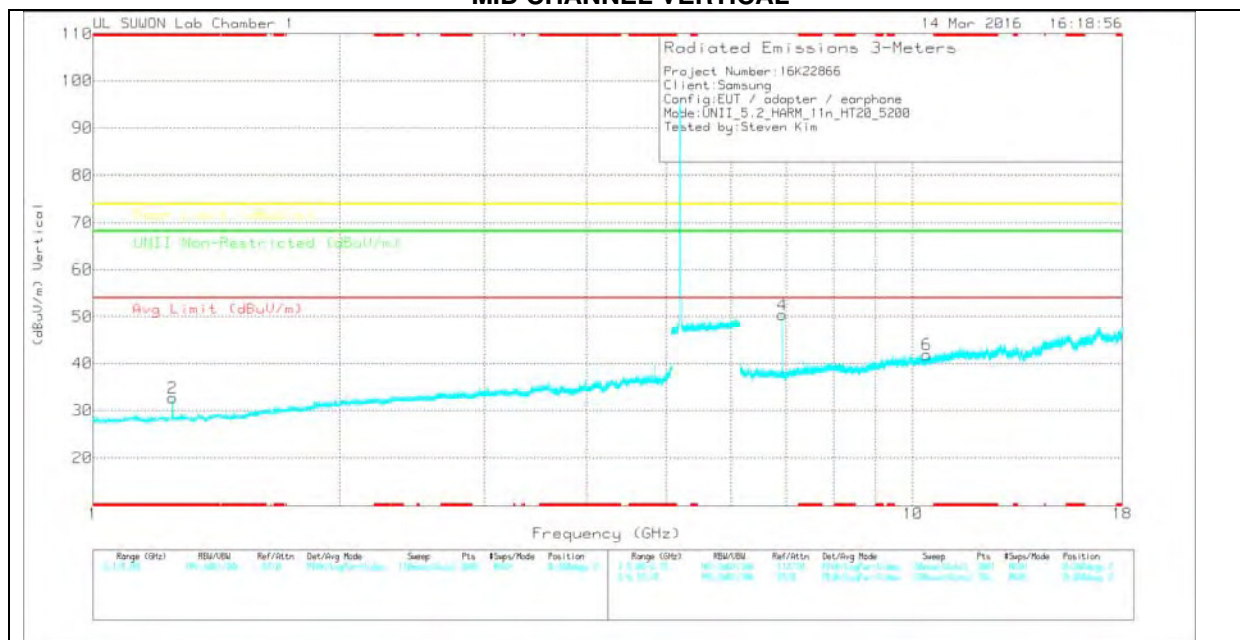
PK-U - U-NII: Maximum Peak

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(00168717)_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.76	PK	28.3	-40.2	0	30.86	-	-	74	-43.14	-	-	0-360	200	H
2	* 1.25	44.54	PK	28.3	-40.2	0	32.64	-	-	74	-41.36	-	-	0-360	200	V
3	6.933	37.68	PK	35.7	-30.7	0	42.68	-	-	-	-	68.2	-25.52	0-360	200	H
5	10.399	30.1	PK	37.8	-26.7	0	41.2	-	-	-	-	68.2	-27	0-360	200	H
4	6.933	45.41	PK	35.7	-30.7	0	50.41	-	-	-	-	68.2	-17.79	0-360	100	V
6	10.399	30.72	PK	37.8	-26.7	0	41.82	-	-	-	-	68.2	-26.38	0-360	100	V

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

PK – Peak detector

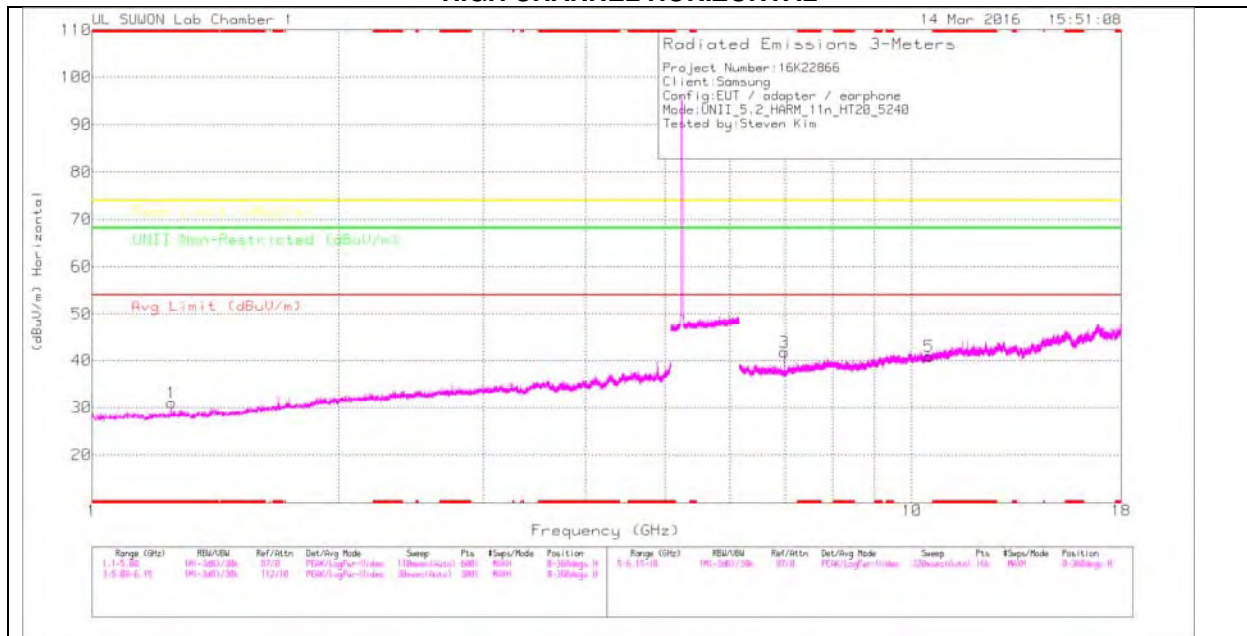
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6.933	46.78	PK-U	35.7	-30.7	0	51.78	-	-	-	-	68.2	-16.42	176	151	H
6.934	33.56	ADR	35.7	-30.7	0	38.56	54	-15.44	-	-	-	-	176	151	H
6.933	50.34	PK-U	35.7	-30.7	0	55.34	-	-	-	-	68.2	-12.86	307	101	V
6.933	44.36	ADR	35.7	-30.7	0	49.36	54	-4.64	-	-	-	-	307	101	V

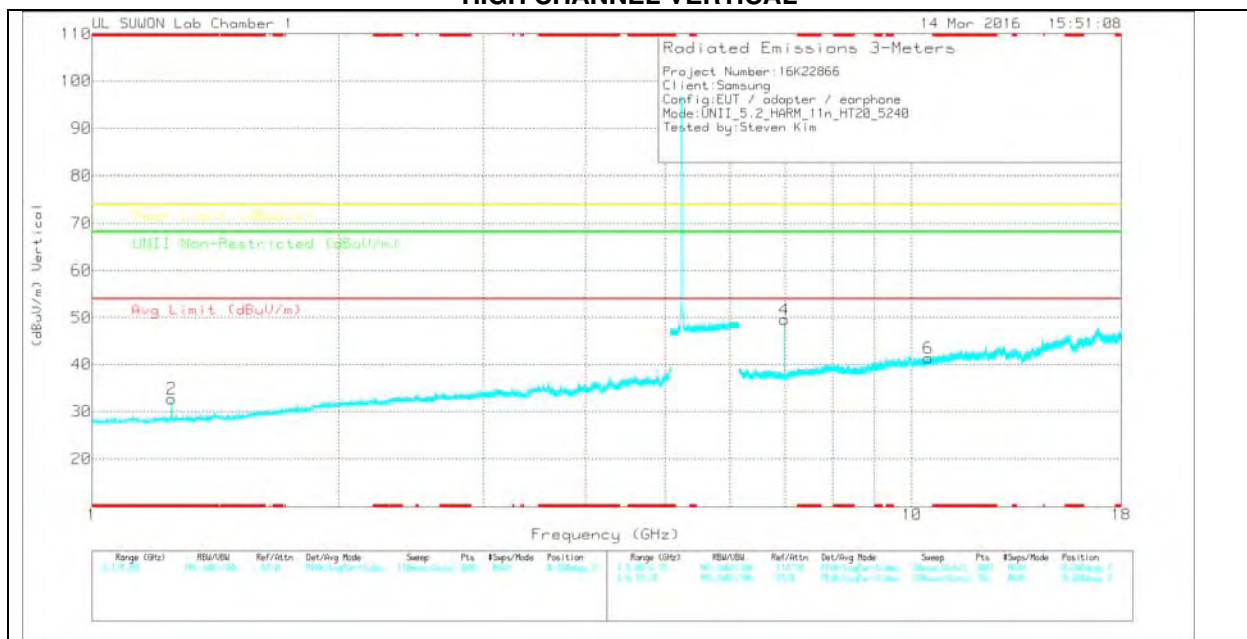
PK-U - U-NII: Maximum Peak

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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unli non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.96	PK	28.3	-40.2	0	31.06	-	-	74	-42.94	-	-	0-360	200	H
2	* 1.25	44.66	PK	28.3	-40.2	0	32.76	-	-	74	-41.24	-	-	0-360	200	V
3	6.986	36.62	PK	35.7	-30.6	0	41.72	-	-	-	-	68.2	-26.48	0-360	200	H
5	10.483	30.79	PK	37.8	-27.7	0	40.89	-	-	-	-	68.2	-27.31	0-360	200	H
4	6.986	44.58	PK	35.7	-30.6	0	49.68	-	-	-	-	68.2	-18.52	0-360	100	V
6	10.476	31.32	PK	37.8	-27.7	0	41.42	-	-	-	-	68.2	-26.78	0-360	200	V

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

PK – Peak detector

Radiated Emissions

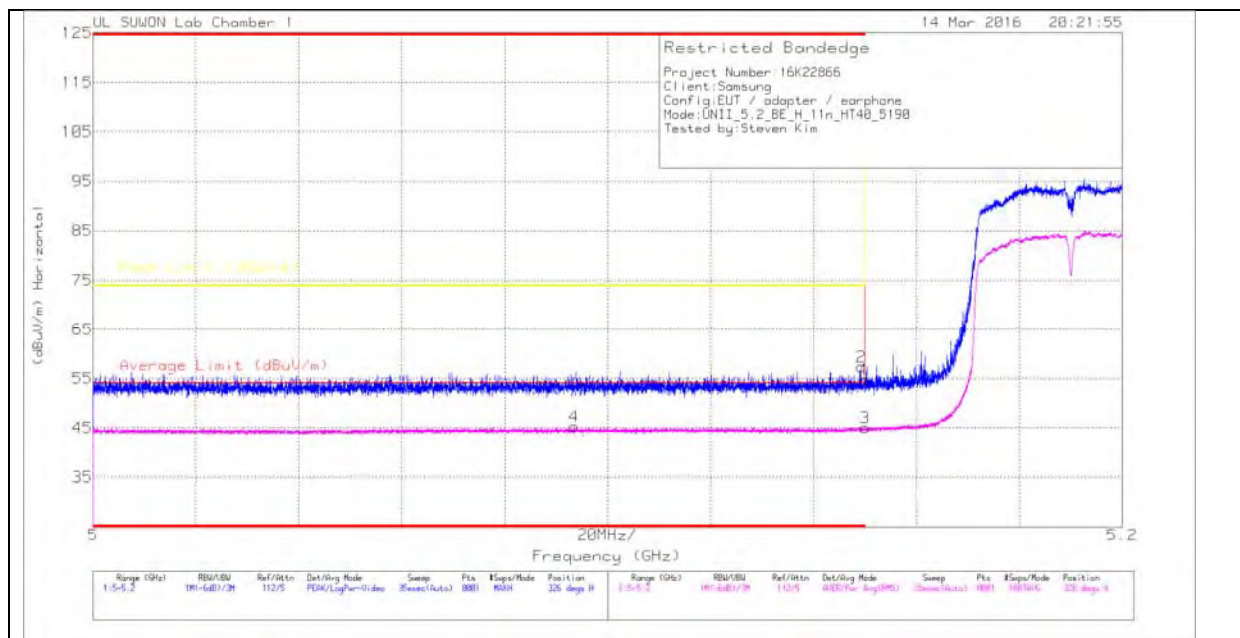
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unli non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6.98	43.97	PK-U	35.7	-30.6	0	49.07	-	-	-	-	68.2	-19.13	163	312	H
6.987	32.94	ADR	35.7	-30.6	0	38.04	54	-15.96	-	-	-	-	163	312	H
6.987	43.34	ADR	35.7	-30.6	0	48.44	54	-5.56	-	-	-	-	307	100	V
6.987	49.39	PK-U	35.7	-30.6	0	54.49	-	-	-	-	68.2	-13.71	307	100	V

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.1.3. TX Above 1GHz 802.11n HT40 2TX CDD MODE IN THE 5.2GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

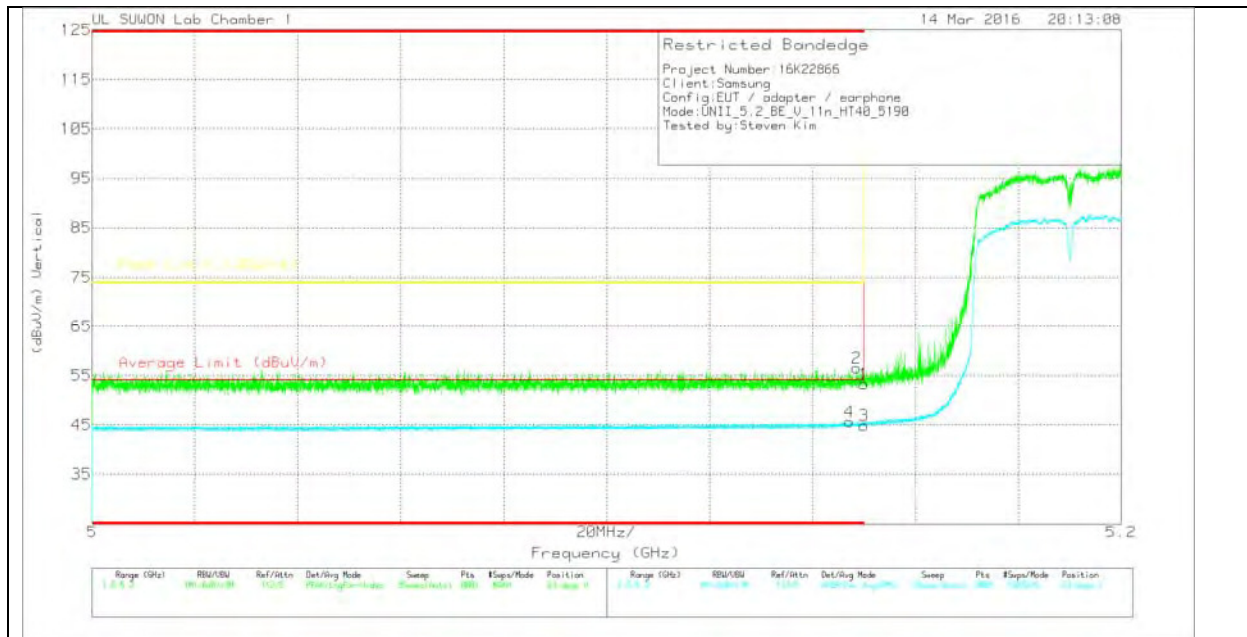
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	44.67	Pk	34.2	-24.1	0	54.77	-	-	74	-19.23	326	312	H
2	* 5.149	47.27	Pk	34.2	-24.1	0	57.37	-	-	74	-16.63	326	312	H
3	* 5.15	34.31	RMS	34.2	-24.1	.59	45	54	-9	-	-	326	312	H
4	* 5.093	34.64	RMS	34.2	-24.2	.59	45.23	54	-8.77	-	-	326	312	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 17)_150619	Path_2	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	* 5.15	43.19	Pk	34.2	-24.1	0	53.29	-	-	74	-20.71	63	101	V
2	* 5.149	46.4	Pk	34.2	-24.1	0	56.5	-	-	74	-17.5	63	101	V
3	* 5.15	34.24	RMS	34.2	-24.1	.59	44.93	54	-9.07	-	-	63	101	V
4	* 5.147	34.97	RMS	34.2	-24.1	.59	45.66	54	-8.34	-	-	63	101	V

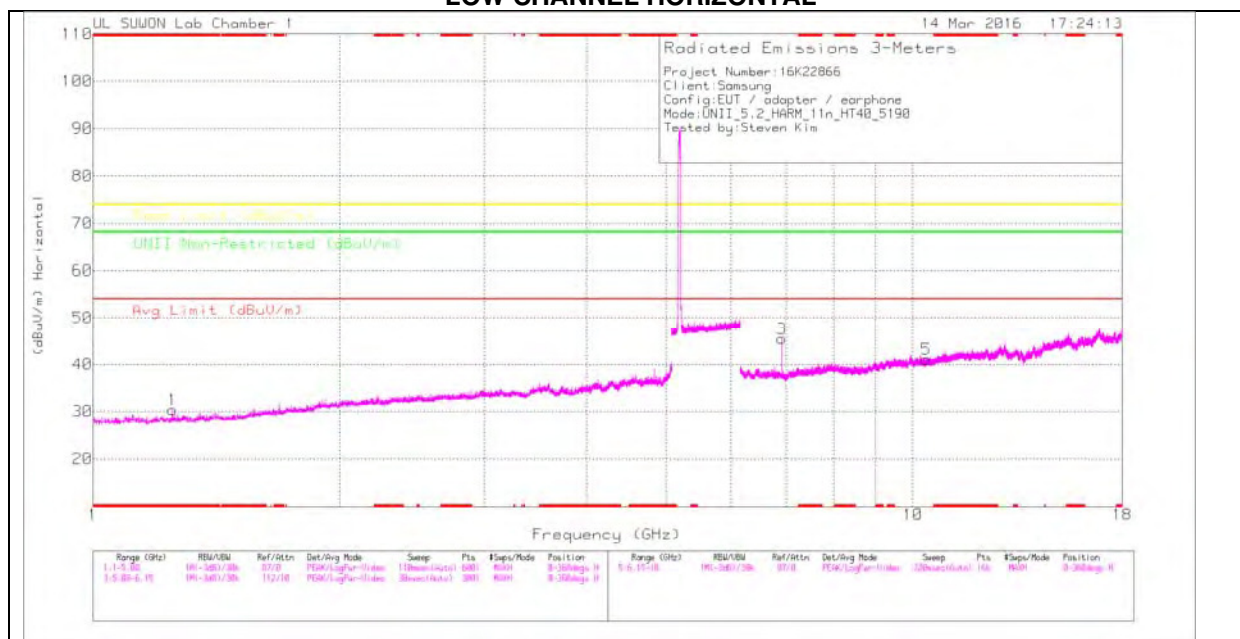
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

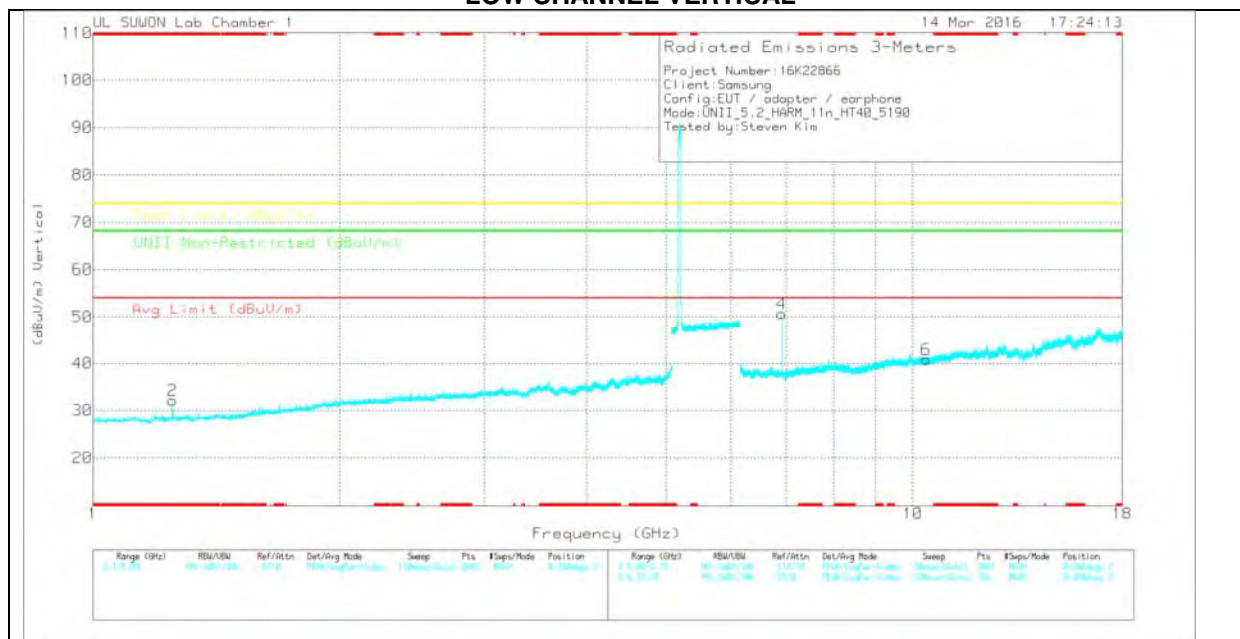
RMS - RMS detection

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 8717_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.28	PK	28.3	-40.2	0	30.38	-	-	74	-43.62	-	-	0-360	200	H
2	* 1.25	44.13	PK	28.3	-40.2	0	32.23	-	-	74	-41.77	-	-	0-360	200	V
3	6.919	40.53	PK	35.7	-30.7	0	45.53	-	-	-	-	68.2	-22.67	0-360	200	H
5	10.385	30.35	PK	37.8	-27	0	41.15	-	-	-	-	68.2	-27.05	0-360	200	H
4	6.919	45.63	PK	35.7	-30.7	0	50.63	-	-	-	-	68.2	-17.57	0-360	100	V
6	10.384	30.08	PK	37.8	-27	0	40.88	-	-	-	-	68.2	-27.32	0-360	200	V

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

PK – Peak detector

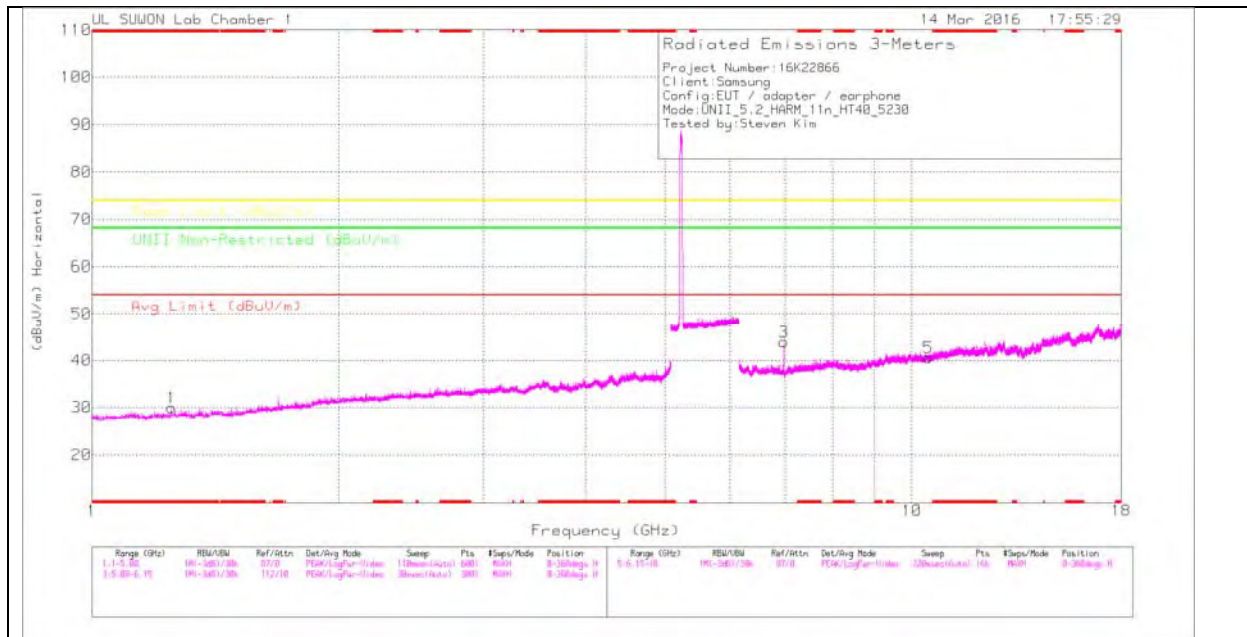
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6.92	45.74	PK-U	35.7	-30.7	0	50.74	-	-	-	-	68.2	-17.46	231	268	H
6.92	40.16	ADR	35.7	-30.7	0	45.16	54	-8.84	-	-	-	-	231	268	H
6.92	50.65	PK-U	35.7	-30.7	0	55.65	-	-	-	-	68.2	-12.55	309	100	V
6.92	45.46	ADR	35.7	-30.7	0	50.46	54	-3.54	-	-	-	-	309	100	V

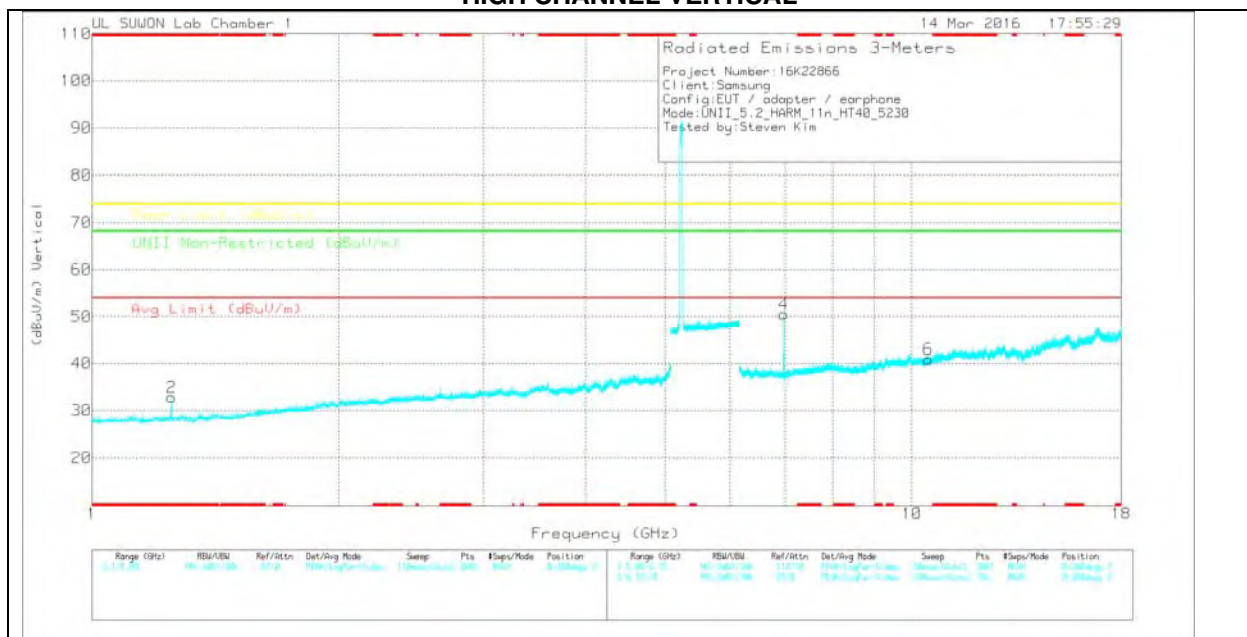
PK-U - U-NII: Maximum Peak

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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unli non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	41.84	PK	28.3	-40.2	0	29.94	-	-	74	-44.06	-	-	0-360	200	H
2	* 1.25	44.75	PK	28.3	-40.2	0	32.85	-	-	74	-41.15	-	-	0-360	200	V
3	6.973	38.69	PK	35.7	-30.5	0	43.89	-	-	-	-	68.2	-24.31	0-360	200	H
5	10.462	30.24	PK	37.8	-27.5	0	40.54	-	-	-	-	68.2	-27.66	0-360	200	H
4	6.973	45.33	PK	35.7	-30.5	0	50.53	-	-	-	-	68.2	-17.67	0-360	100	V
6	10.462	30.61	PK	37.8	-27.5	0	40.91	-	-	-	-	68.2	-27.29	0-360	100	V

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

PK – Peak detector

Radiated Emissions

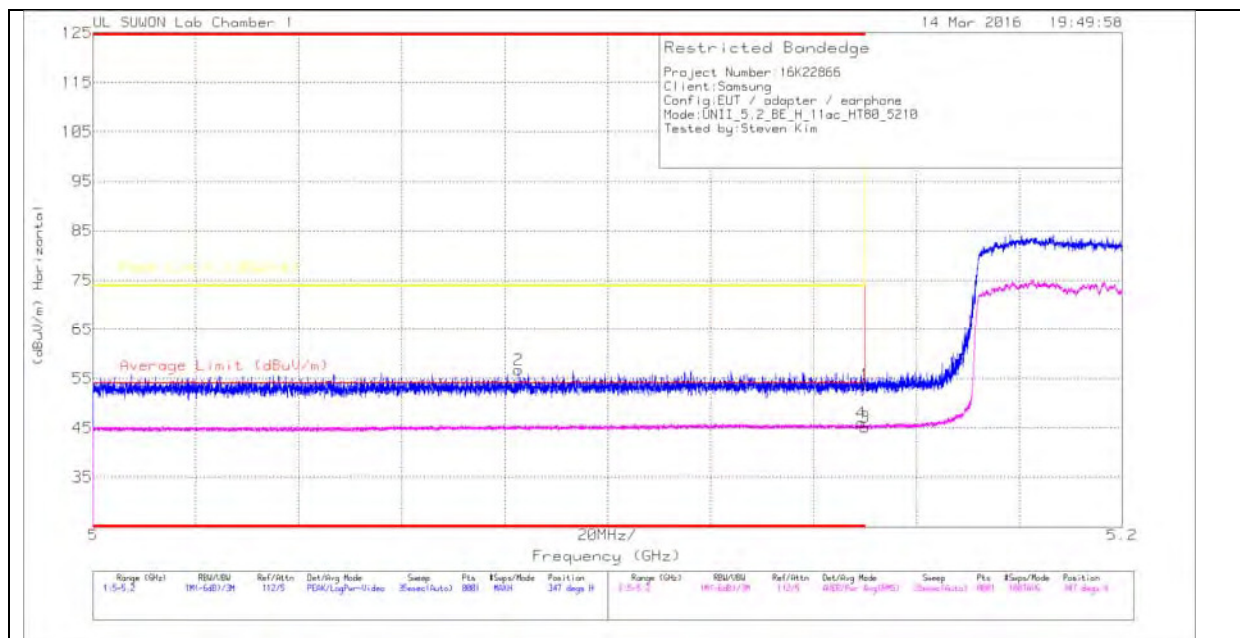
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unli non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6.974	45.71	PK-U	35.7	-30.5	0	50.91	-	-	-	-	68.2	-17.29	204	306	H
6.973	32.8	ADR	35.7	-30.5	0	38	54	-16	-	-	-	-	204	306	H
6.973	49.71	PK-U	35.7	-30.5	0	54.91	-	-	-	-	68.2	-13.29	311	100	V
6.973	44.2	ADR	35.7	-30.5	0	49.4	54	-4.6	-	-	-	-	311	100	V

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.1.4. TX ABOVE 1GHz 802.11ac HT80 2TX CDD MODE IN THE 5.2GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

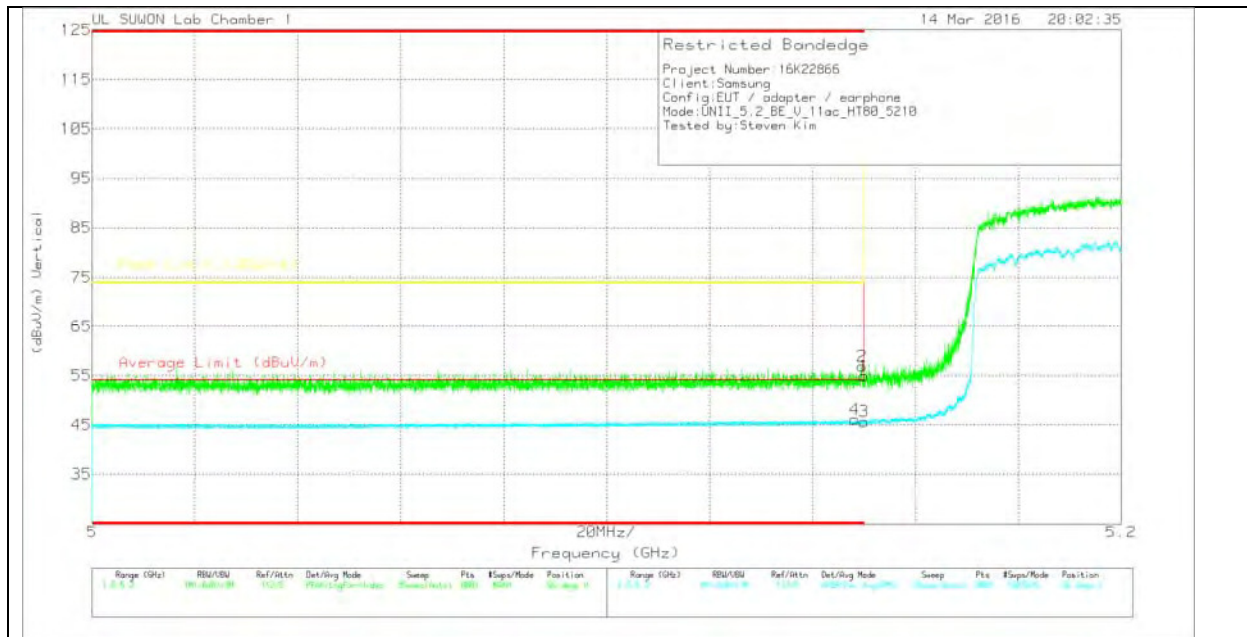
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	43.74	PK	34.2	-24.1	0	53.84	-	-	74	-20.16	347	296	H
2	* 5.083	46.79	PK	34.2	-24.2	0	56.79	-	-	74	-17.21	347	296	H
3	* 5.15	33.87	RMS	34.2	-24.1	1.11	45.08	54	-8.92	-	-	347	296	H
4	* 5.149	34.74	RMS	34.2	-24.1	1.11	45.95	54	-8.05	-	-	347	296	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 17_150619)	Path_2	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	* 5.15	44.75	Pk	34.2	-24.1	0	54.85	-	-	74	-19.15	66	103	V
2	* 5.15	46.82	Pk	34.2	-24.1	0	56.92	-	-	74	-17.08	66	103	V
3	* 5.15	34.48	RMS	34.2	-24.1	1.11	45.69	54	-8.31	-	-	66	103	V
4	* 5.148	34.92	RMS	34.2	-24.1	1.11	46.13	54	-7.87	-	-	66	103	V

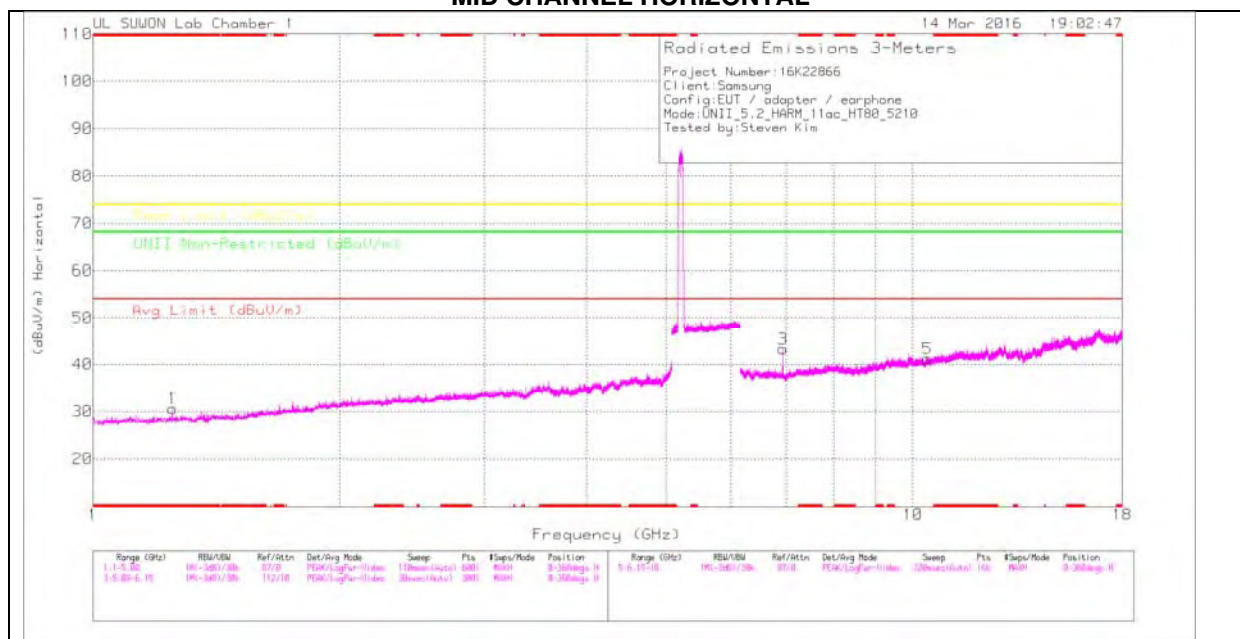
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

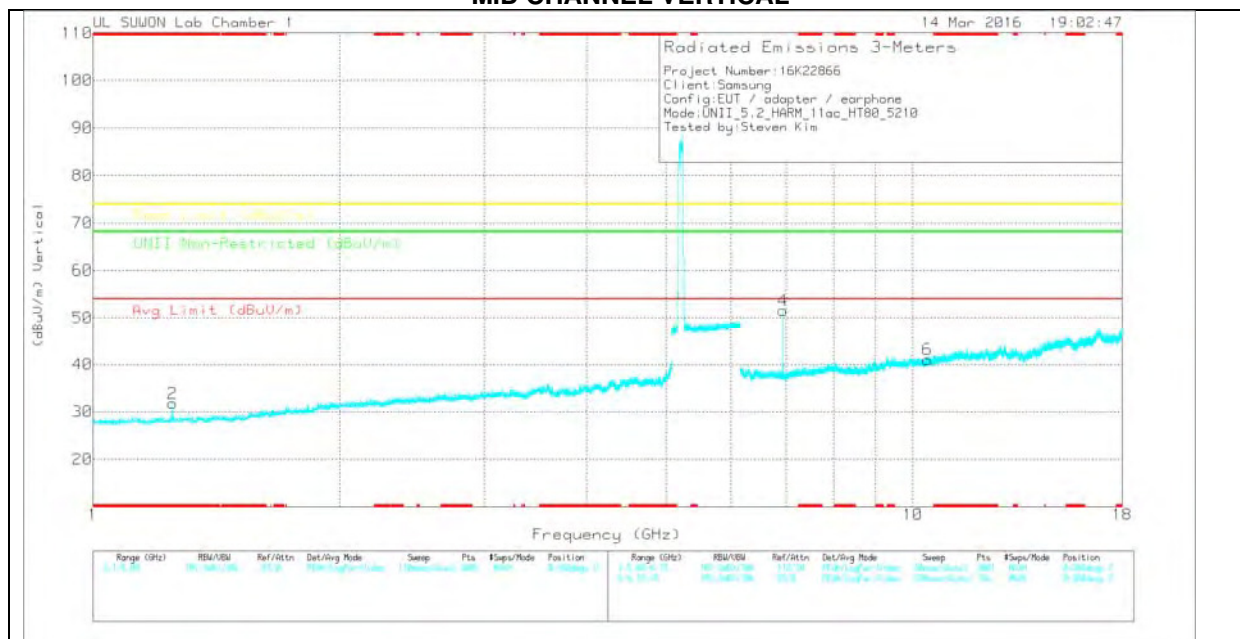
RMS - RMS detection

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 8717)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.59	PK	28.3	-40.2	0	30.69	-	-	74	-43.31	-	-	0-360	200	H
2	* 1.25	43.7	PK	28.3	-40.2	0	31.8	-	-	74	-42.2	-	-	0-360	200	V
3	6.946	38.17	PK	35.7	-30.6	0	43.27	-	-	-	-	68.2	-24.93	0-360	200	H
5	10.419	30.17	PK	37.8	-26.7	0	41.27	-	-	-	-	68.2	-26.93	0-360	100	H
4	6.946	46.47	PK	35.7	-30.6	0	51.57	-	-	-	-	68.2	-16.63	0-360	100	V
6	10.416	29.94	PK	37.8	-26.7	0	41.04	-	-	-	-	68.2	-27.16	0-360	200	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6.946	46.05	PK-U	35.7	-30.6	0	51.15	-	-	-	-	68.2	-17.05	204	400	H
6.947	37.93	ADR	35.7	-30.6	0	43.03	54	-10.97	-	-	-	-	204	400	H
6.947	50.68	PK-U	35.7	-30.6	0	55.78	-	-	-	-	68.2	-12.42	311	100	V
6.947	45.81	ADR	35.7	-30.6	0	50.91	54	-3.09	-	-	-	-	311	100	V

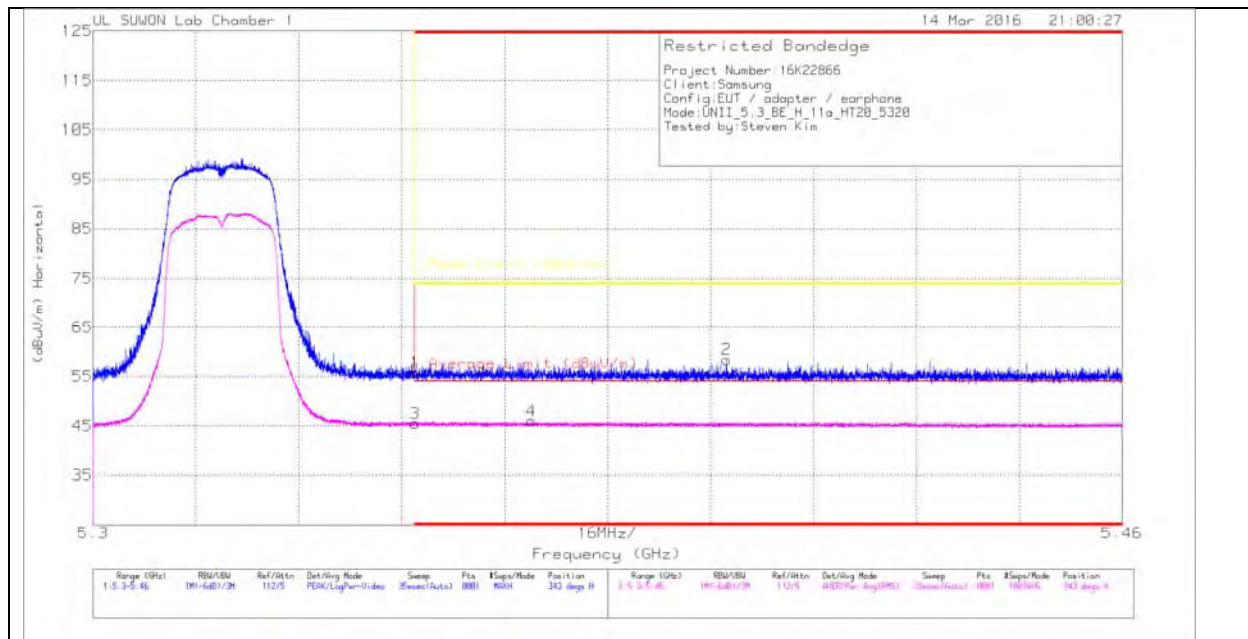
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.2. 5.3 GHz

11.2.1. TX ABOVE 1 GHz 802.11a 2TX CDD MODE IN THE 5.3 GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

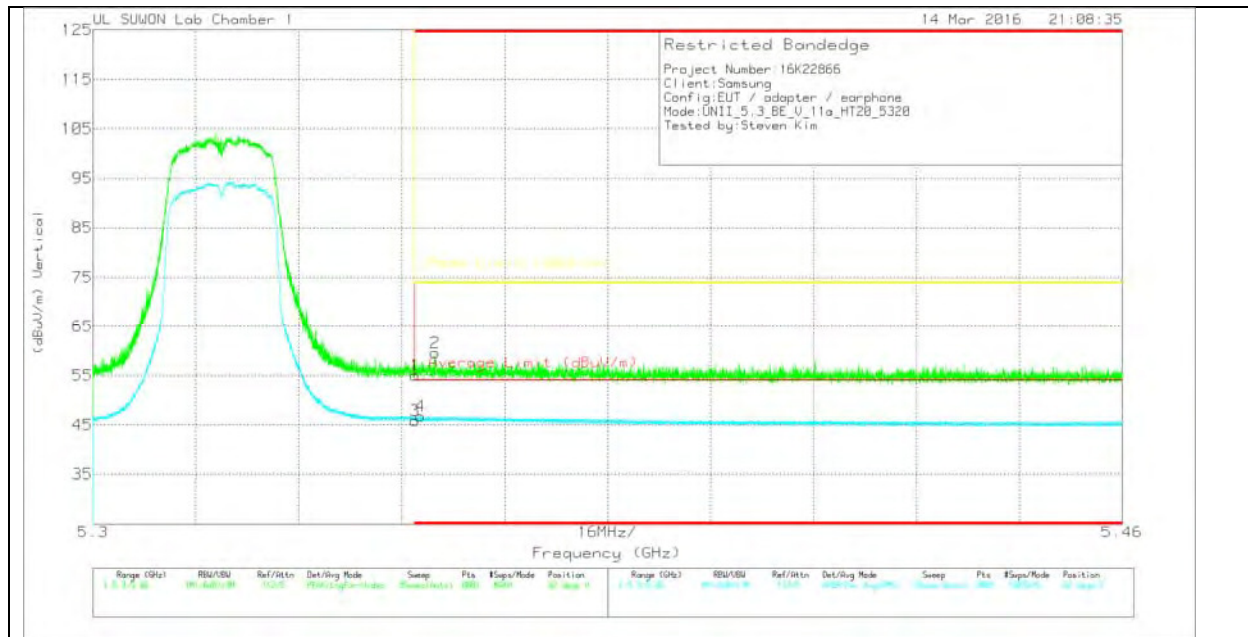
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	44.59	Pk	34.5	-23.3	0	55.79	-	-	74	-18.21	343	107	H
2	* 5.398	47.13	Pk	34.6	-23.3	0	58.43	-	-	74	-15.57	343	107	H
3	* 5.35	34.01	RMS	34.5	-23.3	.29	45.5	54	-8.5	-	-	343	107	H
4	* 5.368	34.5	RMS	34.5	-23.3	.29	45.99	54	-8.01	-	-	343	107	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 17_150619)	Path_2	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	43.79	Pk	34.5	-23.3	0	54.99	-	-	74	-19.01	62	101	V
2	* 5.353	48.41	Pk	34.5	-23.3	0	59.61	-	-	74	-14.39	62	101	V
3	* 5.35	34.36	RMS	34.5	-23.3	.29	45.85	54	-8.15	-	-	62	101	V
4	* 5.351	35.24	RMS	34.5	-23.3	.29	46.73	54	-7.27	-	-	62	101	V

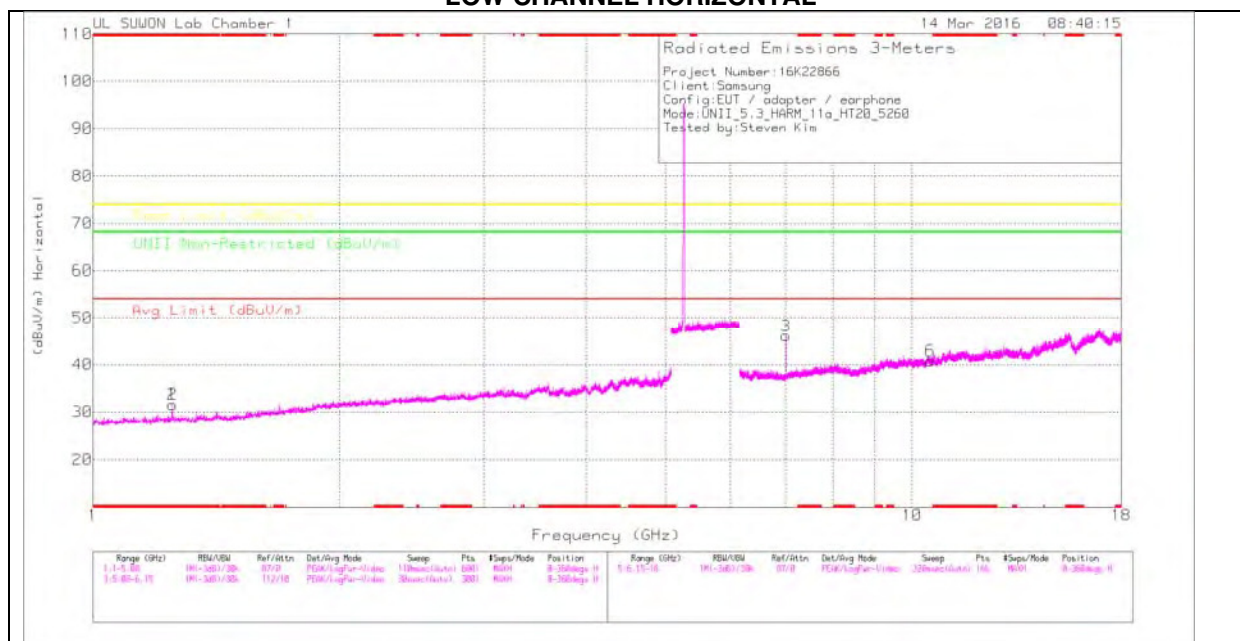
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

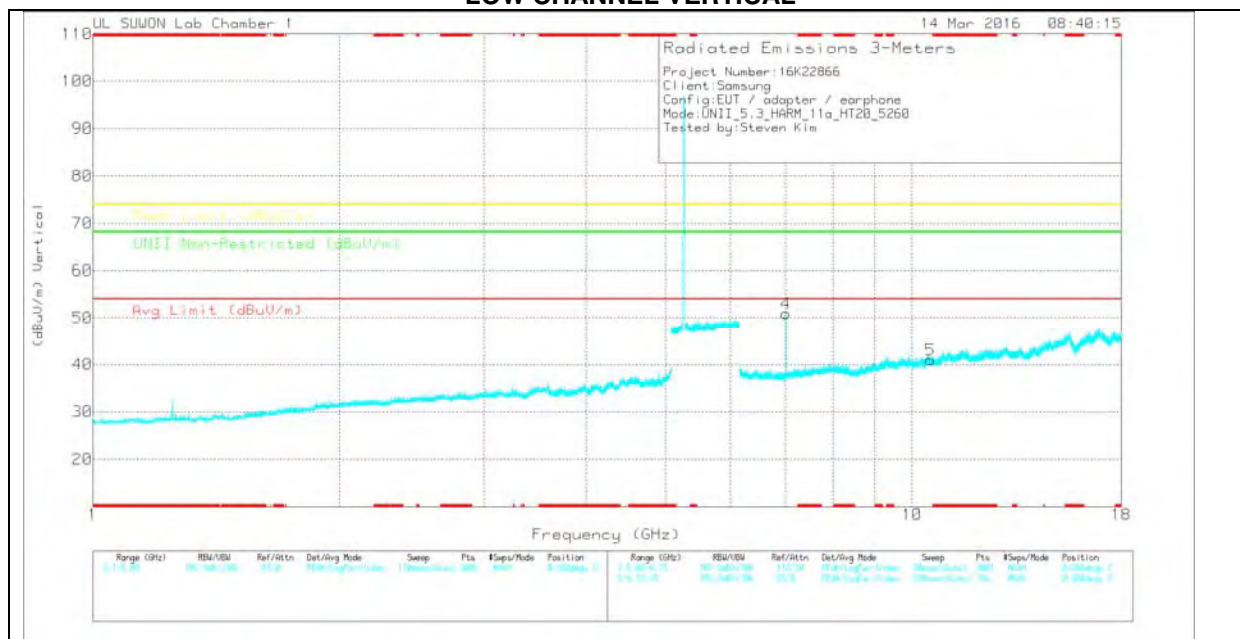
RMS - RMS detection

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 8717_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.5	PK	28.3	-40.2	0	31.6	-	-	74	-42.4	-	-	0-360	200	H
2	* 1.25	43.5	PK	28.3	-40.2	0	31.6	-	-	74	-42.4	-	-	0-360	200	H
3	7.013	41.05	PK	35.7	-30.6	0	46.15	-	-	-	-	68.2	-22.05	0-360	200	H
6	10.517	30.18	PK	37.9	-27.3	0	40.78	-	-	-	-	68.2	-27.42	0-360	100	H
4	7.013	45.85	PK	35.7	-30.6	0	50.95	-	-	-	-	68.2	-17.25	0-360	100	V
5	10.519	30.26	PK	37.9	-27.2	0	40.96	-	-	-	-	68.2	-27.24	0-360	100	V

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

PK – Peak Detector

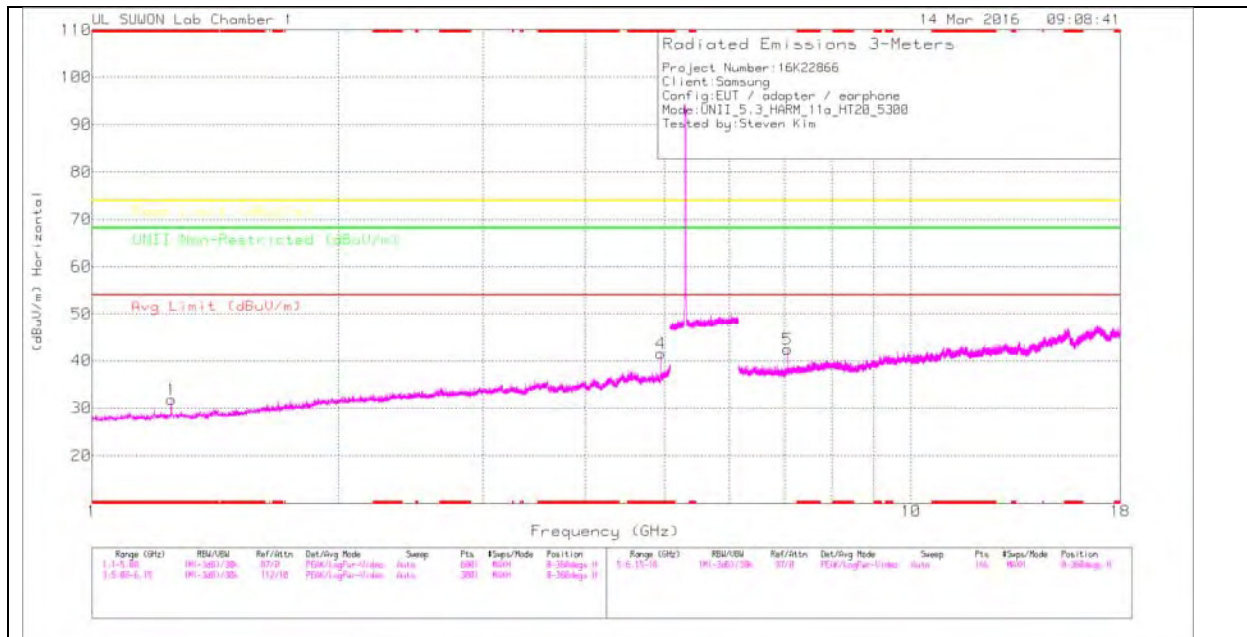
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.013	45.04	PK-U	35.7	-30.6	0	50.14	-	-	-	-	68.2	-18.06	185	132	H
7.013	49.39	PK-U	35.7	-30.6	0	54.49	-	-	-	-	68.2	-13.71	313	100	V
7.013	32.73	ADR	35.7	-30.6	0	37.83	54	-16.17	-	-	-	-	185	132	H
7.013	41.19	ADR	35.7	-30.6	0	46.29	54	-7.71	-	-	-	-	313	100	V

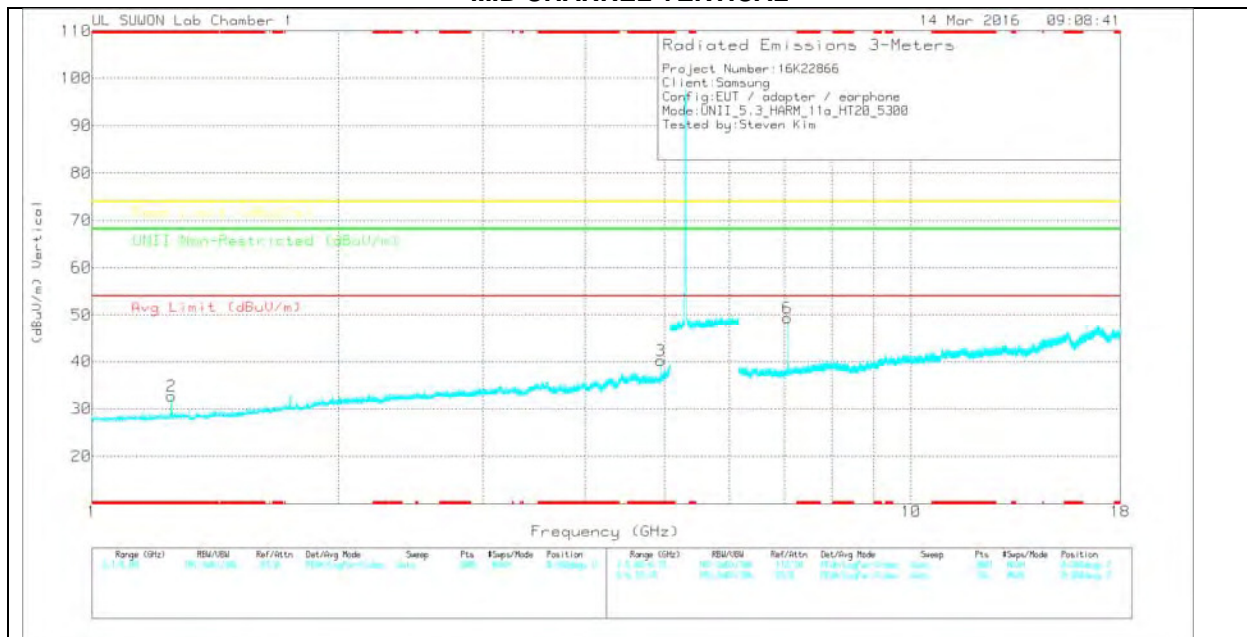
PK-U - U-NII: Maximum Peak

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 8717_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.64	PK	28.3	-40.2	0	31.74	-	-	74	-42.26	-	-	0-360	200	H
4	* 4.949	40.32	PK	34	-32.8	0	41.52	-	-	74	-32.48	-	-	0-360	100	H
2	* 1.25	44.54	PK	28.3	-40.2	0	32.64	-	-	74	-41.36	-	-	0-360	200	V
3	* 4.949	38.94	PK	34	-32.8	0	40.14	-	-	74	-33.86	-	-	0-360	100	V
5	7.066	37.14	PK	35.7	-30.5	0	42.34	-	-	-	-	68.2	-25.86	0-360	200	H
6	7.066	44.13	PK	35.7	-30.5	0	49.33	-	-	-	-	68.2	-18.87	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

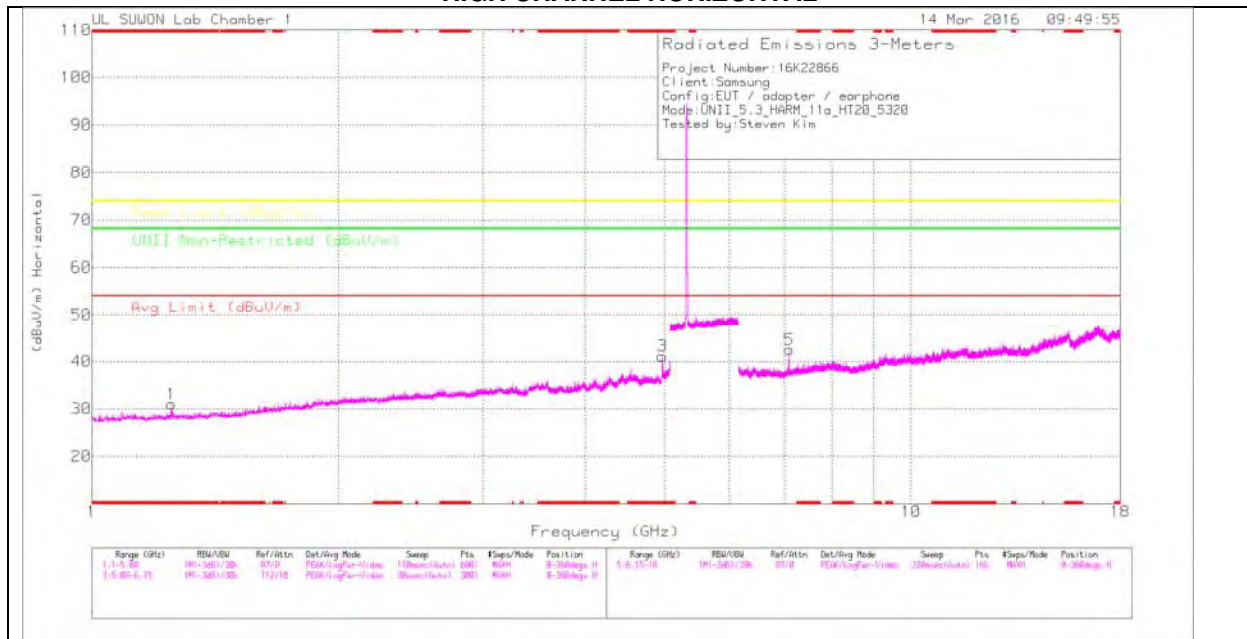
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.948	49.5	PK-U	34	-32.8	0	50.7	-	-	74	-23.3	-	-	185	132	H
* 4.948	40.71	ADR	34	-32.8	0	41.91	54	-12.09	-	-	-	-	185	132	H
* 4.948	49.07	PK-U	34	-32.8	0	50.27	-	-	74	-23.73	-	-	178	100	V
* 4.948	39.36	ADR	34	-32.8	0	40.56	54	-13.44	-	-	-	-	178	100	V
7.067	31.22	ADR	35.7	-30.5	0	36.42	54	-17.58	-	-	-	-	172	122	H
7.067	41.34	ADR	35.7	-30.5	0	46.54	54	-7.46	-	-	-	-	309	100	V
7.066	48.95	PK-U	35.7	-30.5	0	54.15	-	-	-	-	68.2	-14.05	309	100	V
7.067	45.21	PK-U	35.7	-30.5	0	50.41	-	-	-	-	68.2	-17.79	172	122	H

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

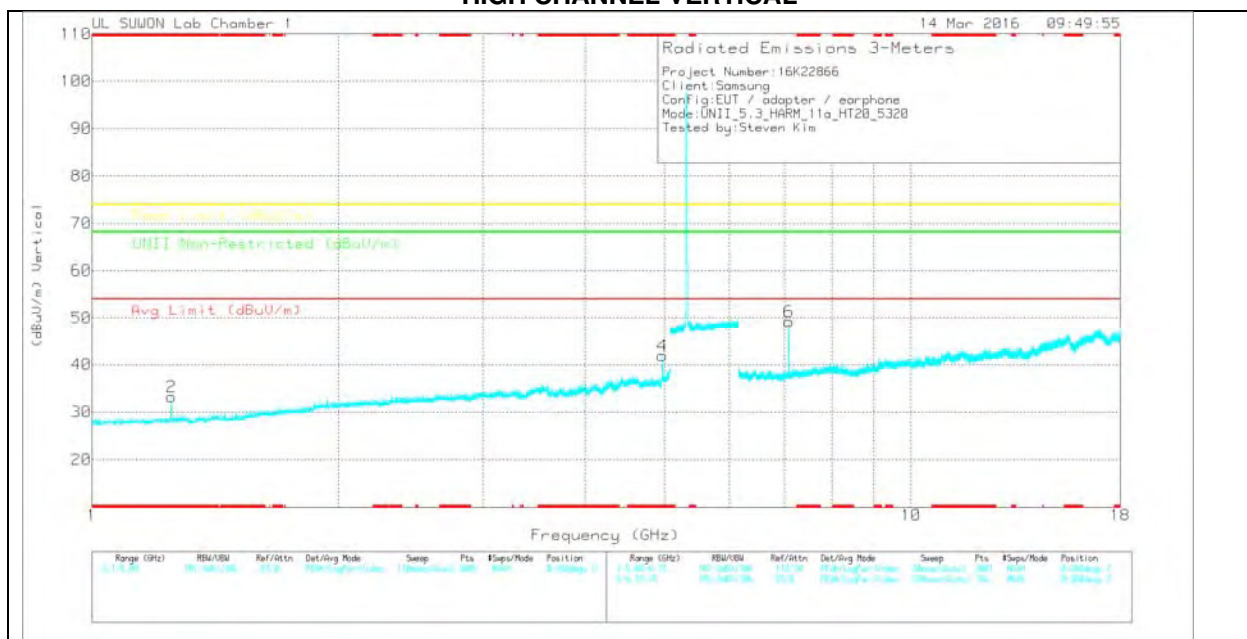
PK-U - U-NII: Maximum Peak

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 8717)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.92	PK	28.3	-40.2	0	31.02	-	-	74	-42.98	-	-	0-360	100	H
3	* 4.968	39.67	PK	34.1	-32.6	0	41.17	-	-	74	-32.83	-	-	0-360	100	H
2	* 1.25	45.09	PK	28.3	-40.2	0	33.19	-	-	74	-40.81	-	-	0-360	200	V
4	* 4.968	40.4	PK	34.1	-32.6	0	41.9	-	-	74	-32.1	-	-	0-360	100	V
5	7.093	37.29	PK	35.7	-30.5	0	42.49	-	-	-	-	68.2	-25.71	0-360	200	H
6	7.093	44.01	PK	35.7	-30.5	0	49.21	-	-	-	-	68.2	-18.99	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.968	49.34	PK-U	34.1	-32.6	0	50.84	-	-	74	-23.16	-	-	177	354	H
* 4.968	38.68	ADR	34.1	-32.6	0	40.18	54	-13.82	-	-	-	-	177	354	H
* 4.968	49.97	PK-U	34.1	-32.6	0	51.47	-	-	74	-22.53	-	-	163	103	V
* 4.968	40.55	ADR	34.1	-32.6	0	42.05	54	-11.95	-	-	-	-	163	103	V
7.093	33.22	ADR	35.7	-30.5	0	38.42	54	-15.58	-	-	-	-	159	169	H
7.093	42.37	ADR	35.7	-30.5	0	47.57	54	-6.43	-	-	-	-	309	100	V
7.093	49.08	PK-U	35.7	-30.5	0	54.28	-	-	-	-	68.2	-13.92	309	100	V
7.093	46.06	PK-U	35.7	-30.5	0	51.26	-	-	-	-	68.2	-16.94	159	169	H

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

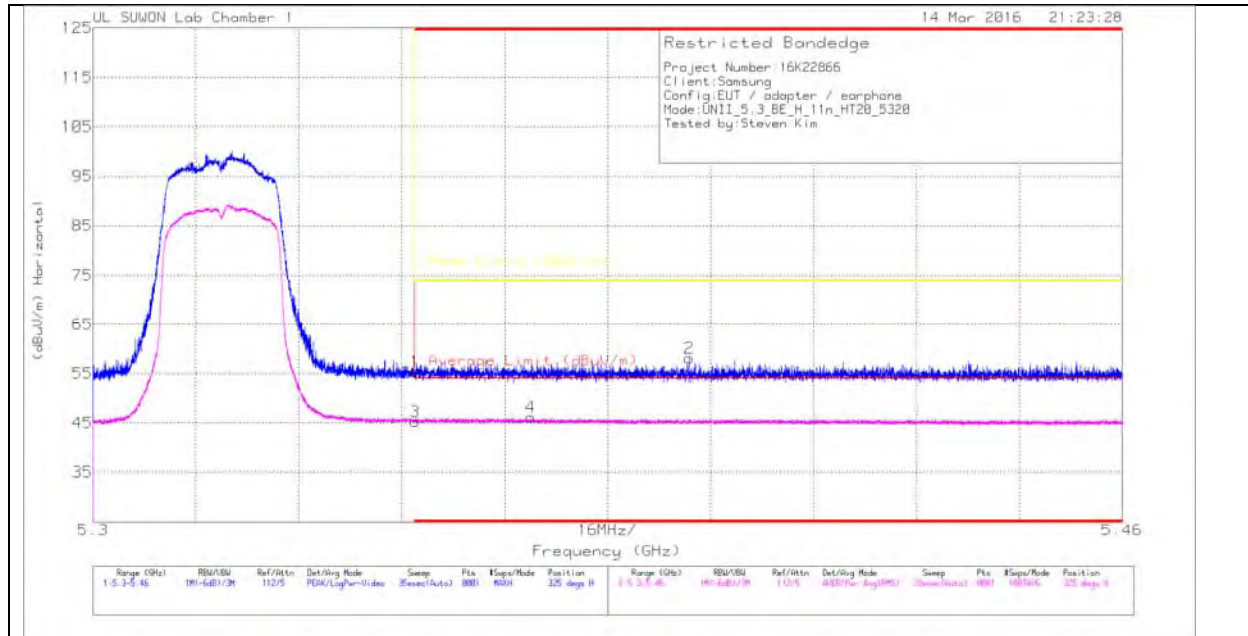
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.2.2. TX ABOVE 1GHz 802.11n HT20 2TX CDD MODE IN THE 5.3GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

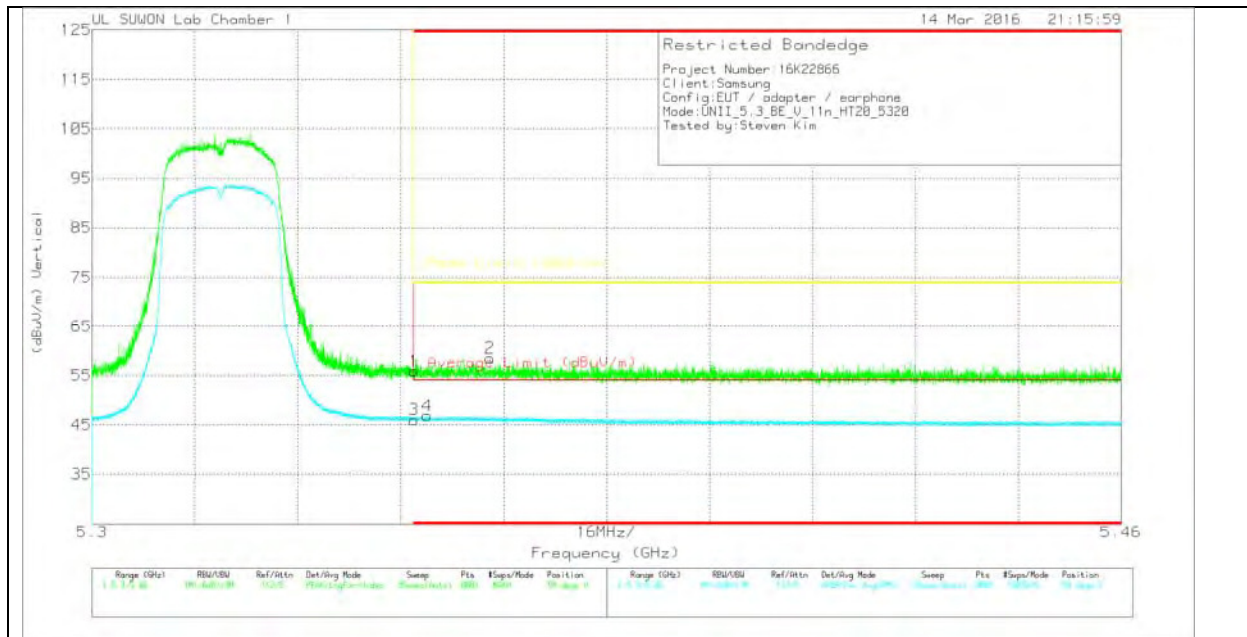
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	44.19	PK	34.5	-23.3	0	55.39	-	-	74	-18.61	325	368	H
2	* 5.393	46.95	PK	34.5	-23.3	0	58.15	-	-	74	-15.85	325	368	H
3	* 5.35	33.71	RMS	34.5	-23.3	.31	45.22	54	-8.78	-	-	325	368	H
4	* 5.368	34.6	RMS	34.5	-23.3	.31	46.11	54	-7.89	-	-	325	368	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	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	44.69	Pk	34.5	-23.3	0	55.89	-	-	74	-18.11	59	104	V
2	* 5.362	47.35	Pk	34.5	-23.3	0	58.55	-	-	74	-15.45	59	104	V
3	* 5.35	34.55	RMS	34.5	-23.3	.31	46.06	54	-7.94	-	-	59	104	V
4	* 5.352	35.3	RMS	34.5	-23.3	.31	46.81	54	-7.19	-	-	59	104	V

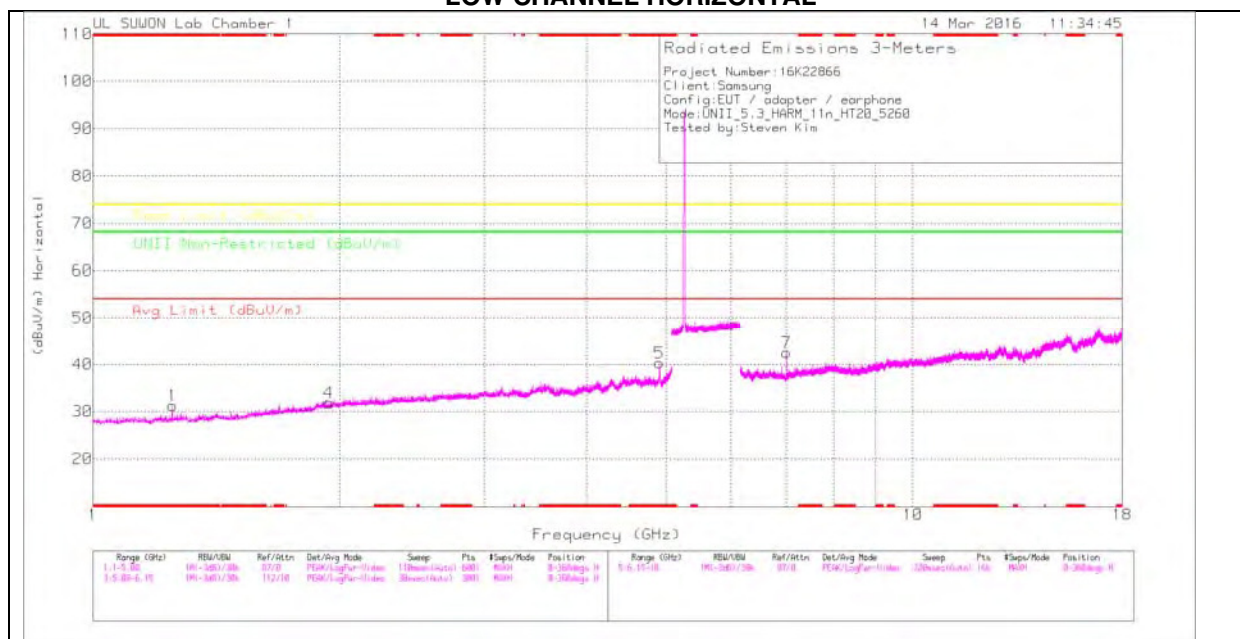
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

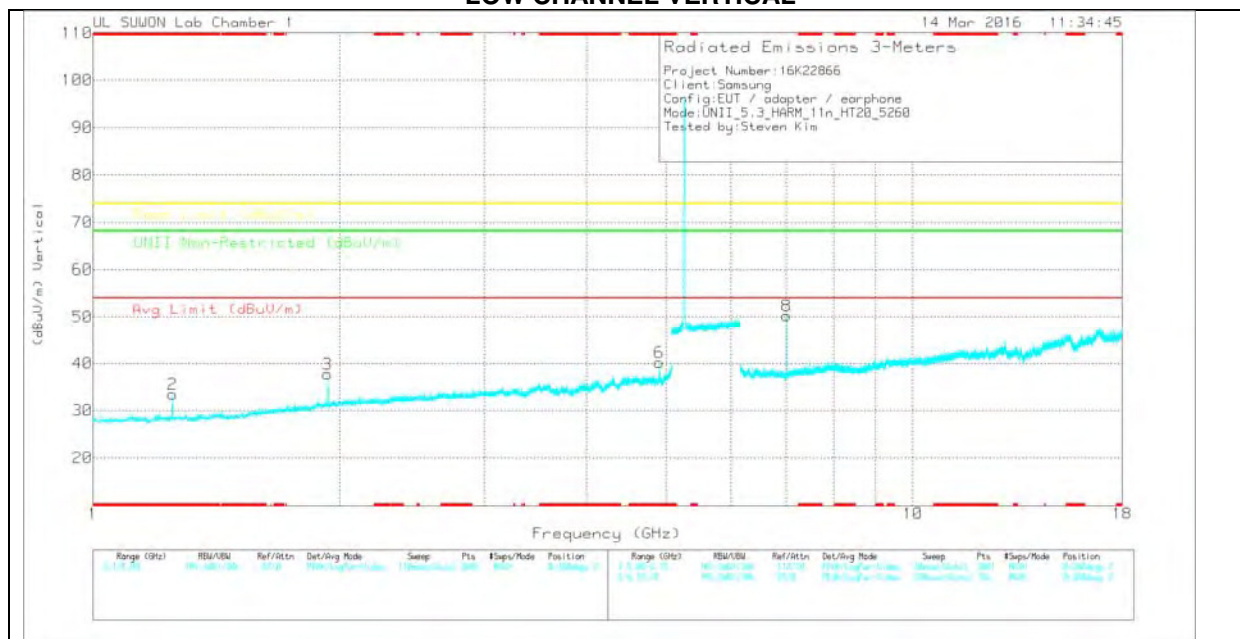
RMS - RMS detection

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 8717)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.15	Pk	28.3	-40.2	0	31.25	-	-	74	-42.75	-	-	0-360	200	H
4	1.937	40.15	Pk	30.8	-39	0	31.95	-	-	-	-	68.2	-36.25	0-360	200	H
5	* 4.909	38.94	Pk	34	-32.6	0	40.34	-	-	74	-33.66	-	-	0-360	100	H
2	* 1.25	45.39	Pk	28.3	-40.2	0	33.49	-	-	74	-40.51	-	-	0-360	200	V
3	1.932	45.96	Pk	30.8	-39	0	37.76	-	-	-	-	68.2	-30.44	0-360	200	V
6	* 4.908	38.84	Pk	34	-32.6	0	40.24	-	-	74	-33.76	-	-	0-360	200	V
7	7.013	37.45	Pk	35.7	-30.6	0	42.55	-	-	-	-	68.2	-25.65	0-360	200	H
8	7.014	45.17	Pk	35.7	-30.6	0	50.27	-	-	-	-	68.2	-17.93	0-360	100	V

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

Pk – Peak detector

Radiated Emissions

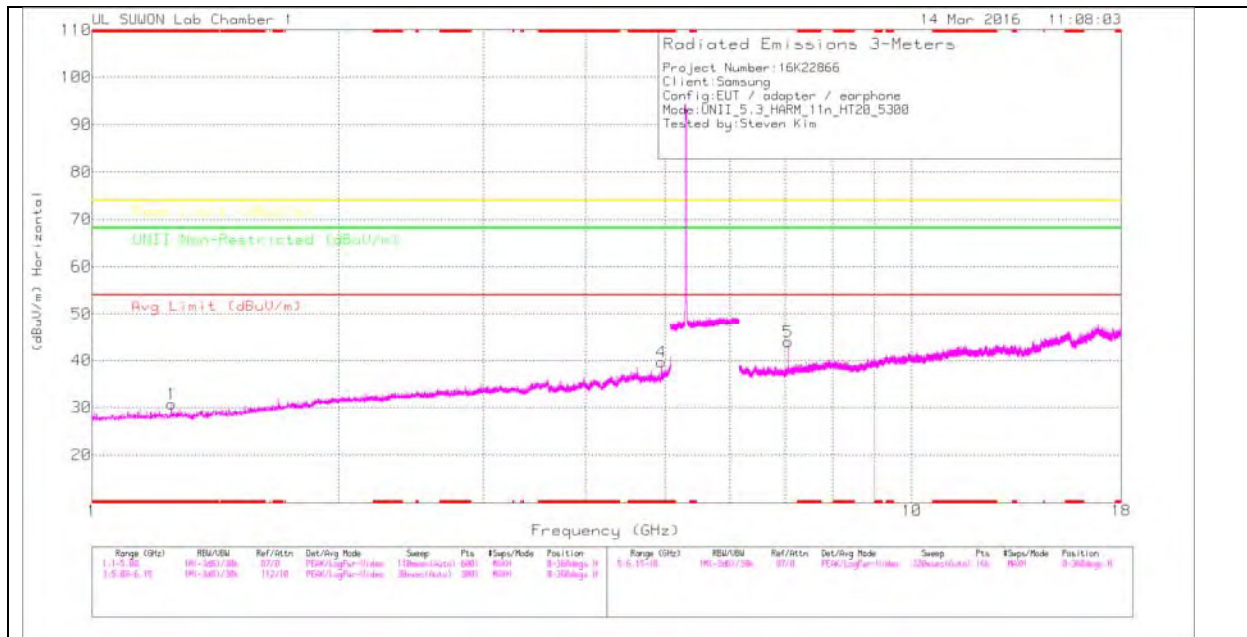
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.908	50.35	PK-U	34	-32.6	0	51.75	-	-	74	-22.25	-	-	183	107	H
* 4.908	40.51	ADR	34	-32.6	0	41.91	54	-12.09	-	-	-	-	183	107	H
* 4.908	49.37	PK-U	34	-32.6	0	50.77	-	-	74	-23.23	-	-	178	102	V
* 4.908	38.04	ADR	34	-32.6	0	39.44	54	-14.56	-	-	-	-	178	102	V
7.014	32.24	ADR	35.7	-30.6	0	37.34	54	-16.66	-	-	-	-	183	117	H
7.013	44.35	ADR	35.7	-30.6	0	49.45	54	-4.55	-	-	-	-	143	104	V
7.013	37.3	ADR	35.7	-30.6	0	42.4	54	-11.6	-	-	-	-	183	117	H
7.013	44.8	ADR	35.7	-30.6	0	49.9	54	-4.1	-	-	-	-	143	104	V
7.013	49.33	PK-U	35.7	-30.6	0	54.43	-	-	-	-	68.2	-13.77	143	104	V
7.013	45.27	PK-U	35.7	-30.6	0	50.37	-	-	-	-	68.2	-17.83	183	117	H

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

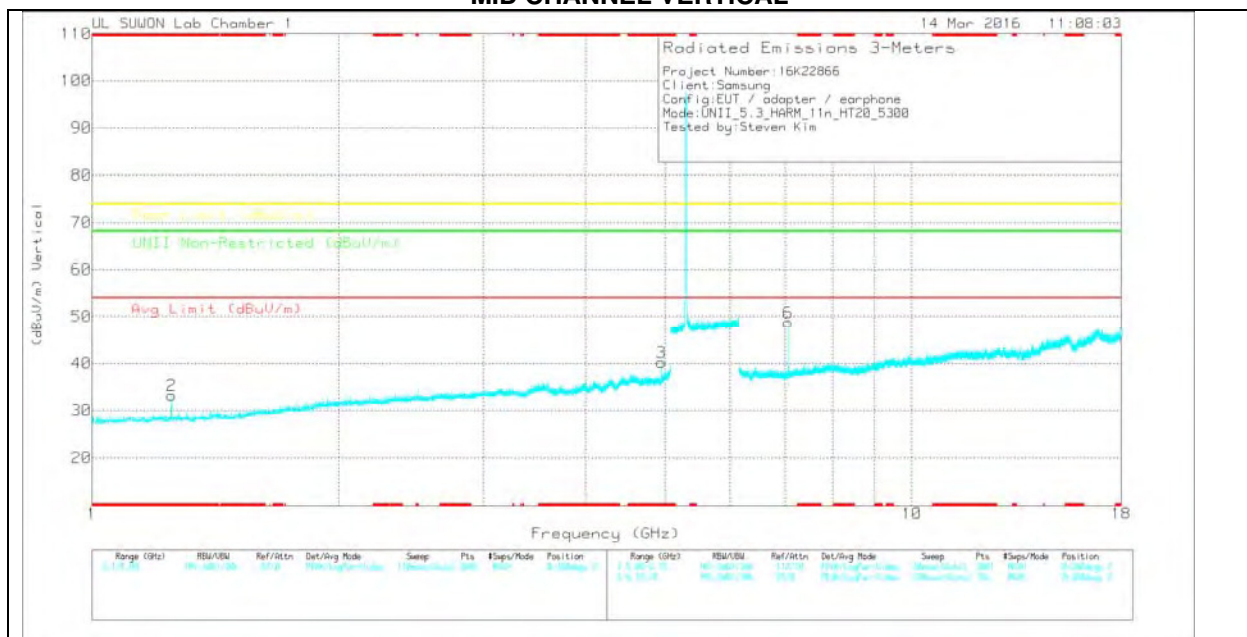
PK-U - U-NII: Maximum Peak

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(001687 17)_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unil non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.69	PK	28.3	-40.2	0	30.79	-	-	74	-43.21	-	-	0-360	200	H
4	* 4.948	38.51	PK	34	-32.8	0	39.71	-	-	74	-34.29	-	-	0-360	100	H
2	* 1.25	45.16	PK	28.3	-40.2	0	33.26	-	-	74	-40.74	-	-	0-360	200	V
3	* 4.948	38.95	PK	34	-32.8	0	40.15	-	-	74	-33.85	-	-	0-360	100	V
5	7.066	38.73	PK	35.7	-30.5	0	43.93	-	-	-	-	68.2	-24.27	0-360	200	H
6	7.066	43.51	PK	35.7	-30.5	0	48.71	-	-	-	-	68.2	-19.49	0-360	100	V

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

PK – Peak Detector

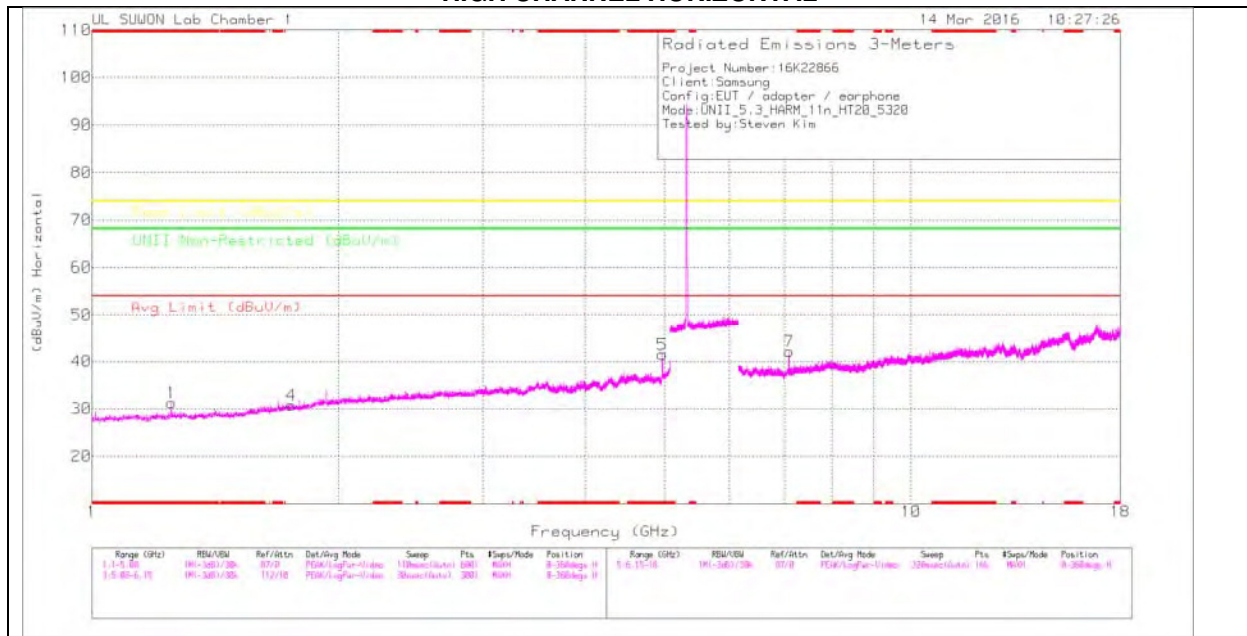
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unil non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.067	46.18	PK-U	35.7	-30.5	0	51.38	-	-	-	-	68.2	-16.82	160	149	H
7.067	33.68	ADR	35.7	-30.5	0	38.88	54	-15.12	-	-	-	-	160	149	H
7.067	48.72	PK-U	35.7	-30.5	0	53.92	-	-	-	-	68.2	-14.28	307	100	V
7.067	42.21	ADR	35.7	-30.5	0	47.41	54	-6.59	-	-	-	-	307	100	V

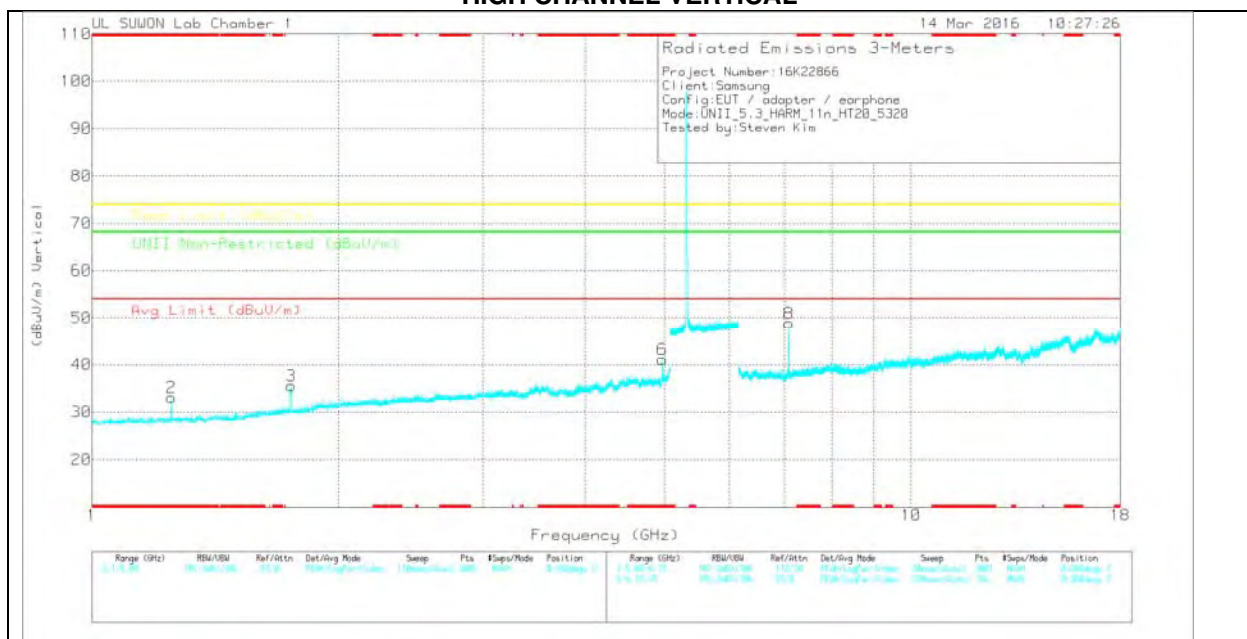
PK-U - U-NII: Maximum Peak

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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unli non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.2	PK	28.3	-40.2	0	31.3	-	-	74	-42.7	-	-	0-360	200	H
4	1.75	40.01	PK	29.9	-39.2	0	30.71	-	-	-	-	68.2	-37.49	0-360	100	H
5	* 4.968	40.01	PK	34.1	-32.6	0	41.51	-	-	74	-32.49	-	-	0-360	100	H
2	* 1.25	45.03	PK	28.3	-40.2	0	33.13	-	-	74	-40.87	-	-	0-360	200	V
3	1.75	44.89	PK	29.9	-39.2	0	35.59	-	-	-	-	68.2	-32.61	0-360	100	V
6	* 4.968	39.56	PK	34.1	-32.6	0	41.06	-	-	74	-32.94	-	-	0-360	100	V
7	7.093	36.97	PK	35.7	-30.5	0	42.17	-	-	-	-	68.2	-26.03	0-360	200	H
8	7.093	43.68	PK	35.7	-30.5	0	48.88	-	-	-	-	68.2	-19.32	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unli non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.968	51.27	PK-U	34.1	-32.6	0	52.77	-	-	74	-21.23	-	-	185	327	H
* 4.968	39.38	ADR	34.1	-32.6	0	40.88	54	-13.12	-	-	-	-	185	327	H
* 4.968	49.31	PK-U	34.1	-32.6	0	50.81	-	-	74	-23.19	-	-	180	102	V
* 4.968	40.17	ADR	34.1	-32.6	0	41.67	54	-12.33	-	-	-	-	180	102	V
7.091	29.34	ADR	35.7	-30.5	0	34.54	54	-19.46	-	-	-	-	172	151	H
7.093	42.18	ADR	35.7	-30.5	0	47.38	54	-6.62	-	-	-	-	310	100	V
7.093	49.33	PK-U	35.7	-30.5	0	54.53	-	-	-	-	68.2	-13.67	310	100	V
7.093	45.64	PK-U	35.7	-30.5	0	50.84	-	-	-	-	68.2	-17.36	172	151	H

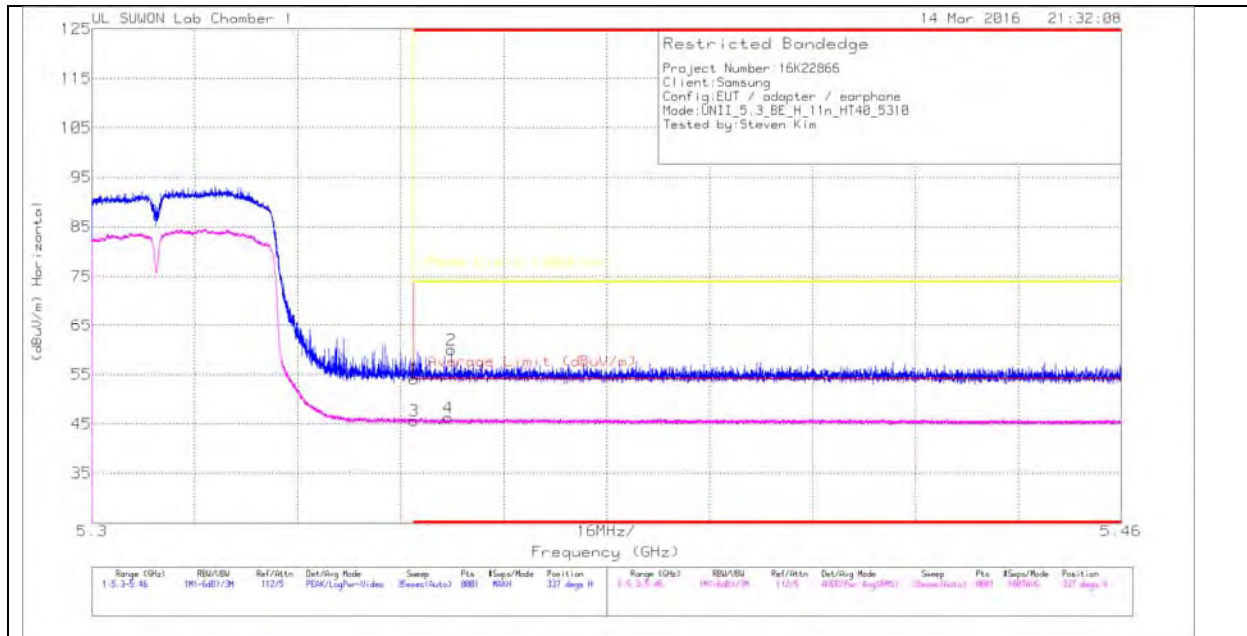
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.2.3. 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

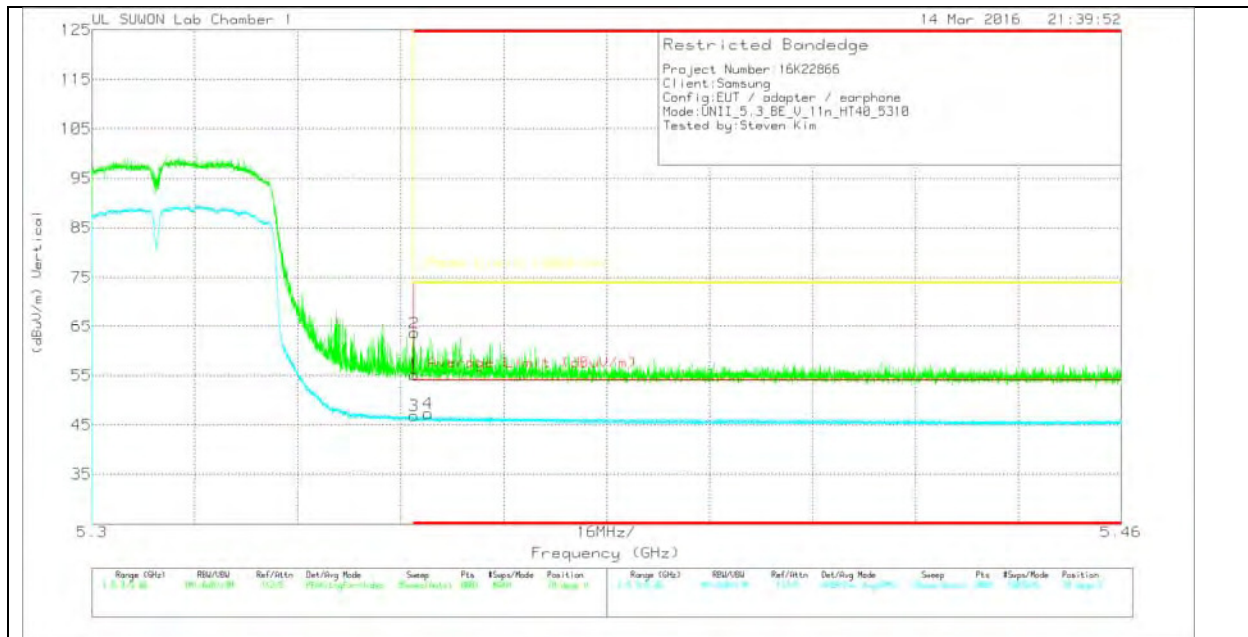
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	42.79	Pk	34.5	-23.3	0	53.99	-	-	74	-20.01	337	175	H
2	* 5.356	48.72	Pk	34.5	-23.3	0	59.92	-	-	74	-14.08	337	175	H
3	* 5.35	33.84	RMS	34.5	-23.3	.59	45.63	54	-8.37	-	-	337	175	H
4	* 5.355	34.4	RMS	34.5	-23.3	.59	46.19	54	-7.81	-	-	337	175	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 17_150619)	Path_2	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	43.92	Pk	34.5	-23.3	0	55.12	-	-	74	-18.88	70	117	V
2	* 5.35	52.5	Pk	34.5	-23.3	0	63.7	-	-	74	-10.3	70	117	V
3	* 5.35	34.55	RMS	34.5	-23.3	.59	46.34	54	-7.66	-	-	70	117	V
4	* 5.352	34.99	RMS	34.5	-23.3	.59	46.78	54	-7.22	-	-	70	117	V

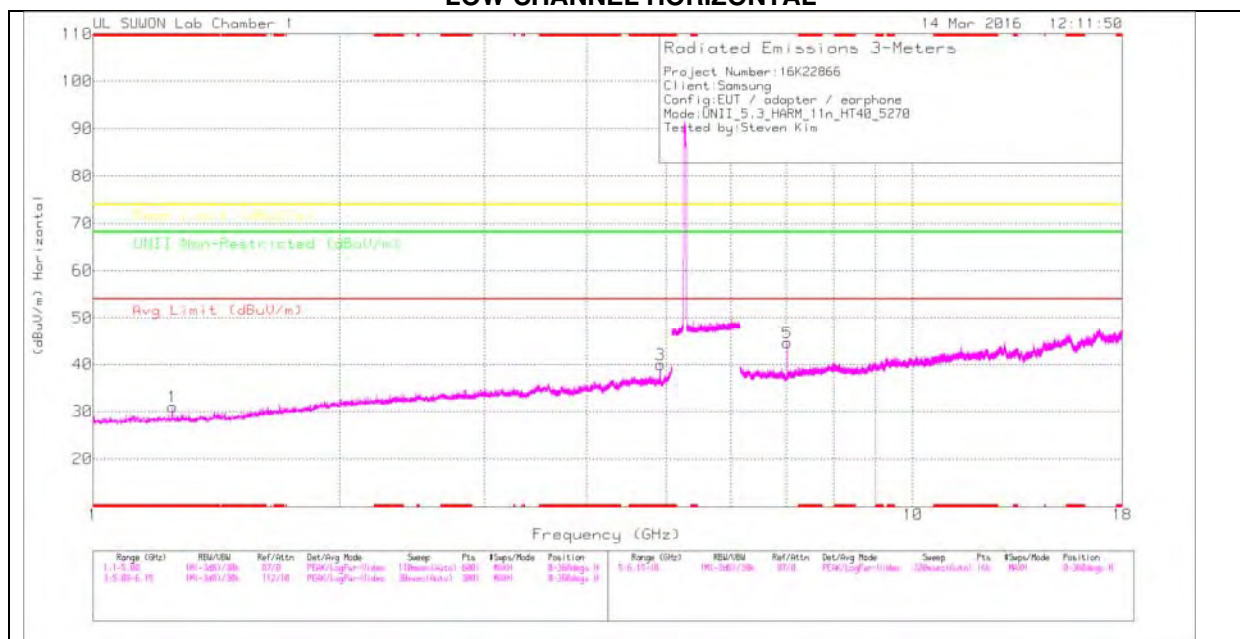
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

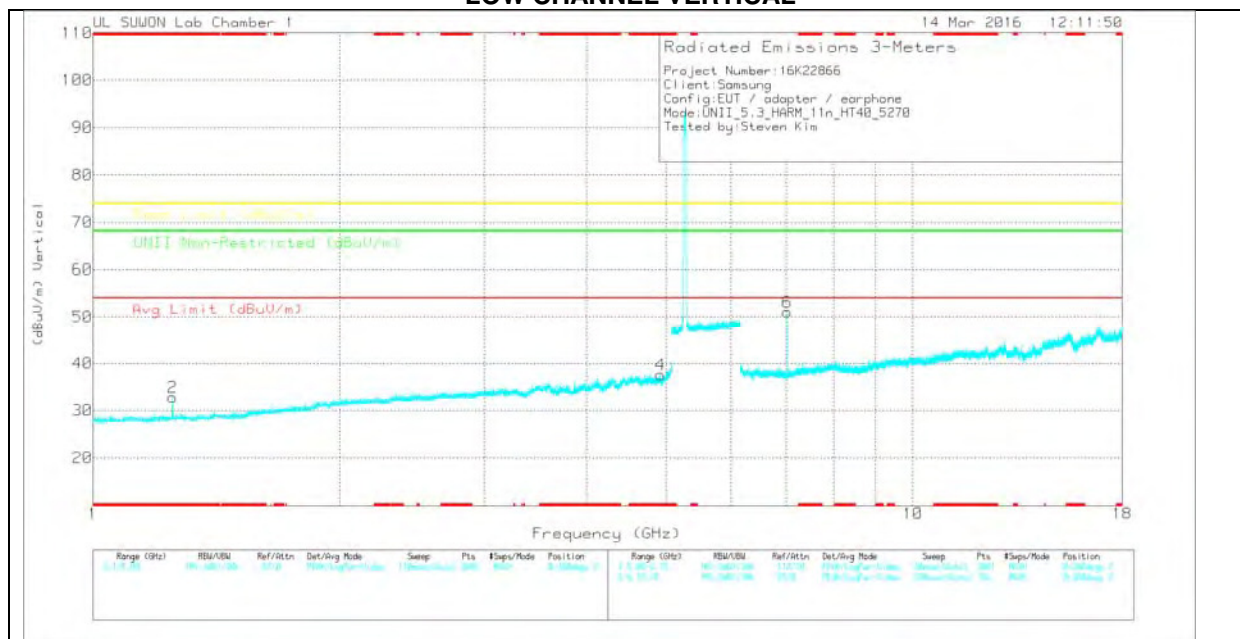
RMS - RMS detection

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 8717)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.86	PK	28.3	-40.2	0	30.96	-	-	74	-43.04	-	-	0-360	200	H
3	* 4.918	38.5	PK	34	-32.6	0	39.9	-	-	74	-34.1	-	-	0-360	100	H
2	* 1.25	44.78	PK	28.3	-40.2	0	32.88	-	-	74	-41.12	-	-	0-360	200	V
4	* 4.918	36.17	PK	34	-32.6	0	37.57	-	-	74	-36.43	-	-	0-360	100	V
5	7.026	39.51	PK	35.7	-30.6	0	44.61	-	-	-	-	68.2	-23.59	0-360	200	H
6	7.026	45.93	PK	35.7	-30.6	0	51.03	-	-	-	-	68.2	-17.17	0-360	100	V

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

PK – Peak Detector

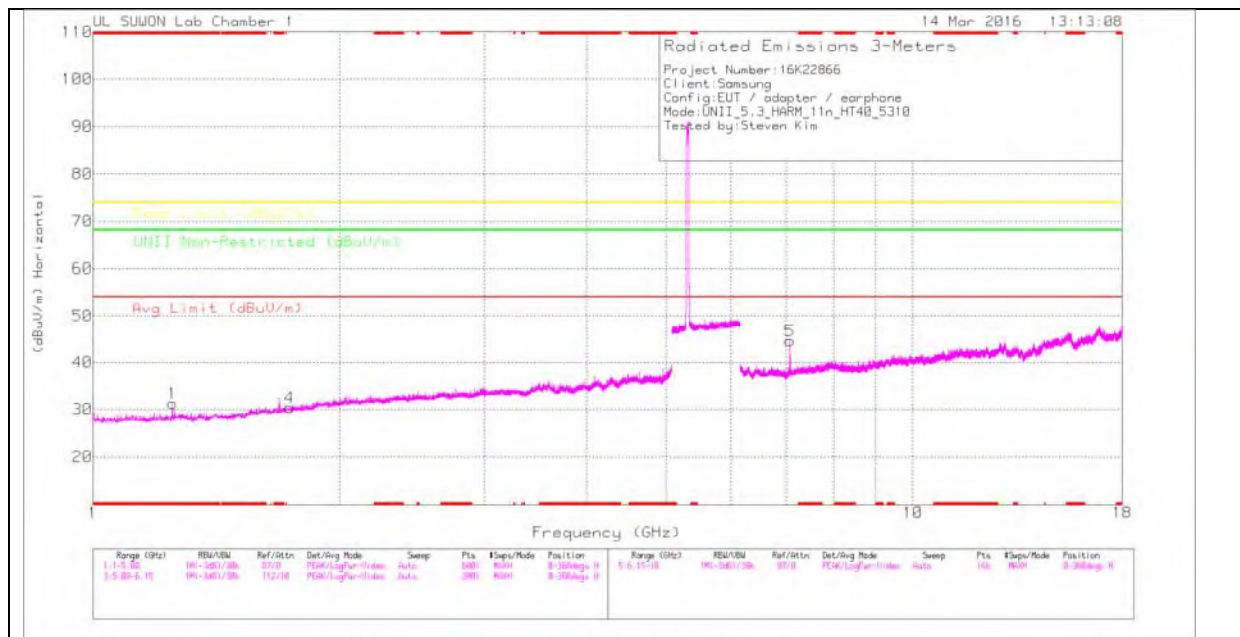
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.026	45.45	PK-U	35.7	-30.6	0	50.55	-	-	-	-	68.2	-17.65	179	131	H
7.027	49.64	PK-U	35.7	-30.6	0	54.74	-	-	-	-	68.2	-13.46	306	102	V
7.024	31.93	ADR	35.7	-30.6	0	37.03	54	-16.97	-	-	-	-	179	131	H
7.027	43.35	ADR	35.7	-30.6	0	48.45	54	-5.55	-	-	-	-	306	102	V

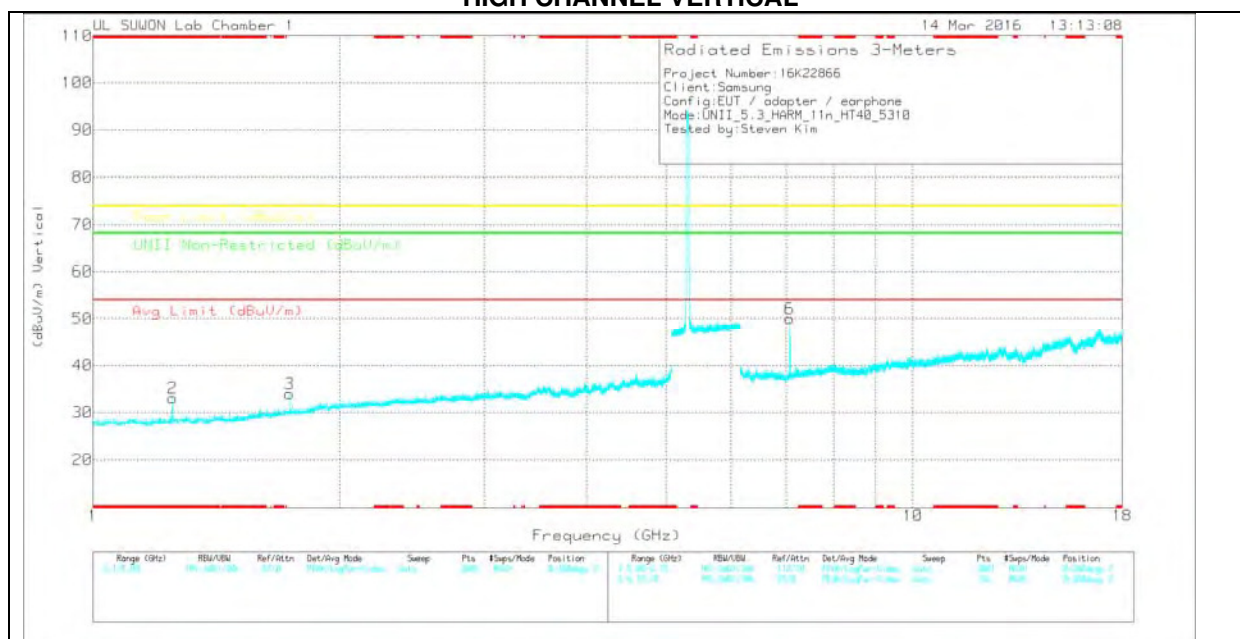
PK-U - U-NII: Maximum Peak

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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unli non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.12	PK	28.3	-40.2	0	31.22	-	-	74	-42.78	-	-	0-360	200	H
4	1.737	39.91	PK	29.8	-39.3	0	30.41	-	-	-	-	68.2	-37.79	0-360	100	H
2	* 1.25	44.93	PK	28.3	-40.2	0	33.03	-	-	74	-40.97	-	-	0-360	200	V
3	1.736	43.48	PK	29.8	-39.3	0	33.98	-	-	-	-	68.2	-34.22	0-360	200	V
5	7.08	39.38	PK	35.7	-30.5	0	44.58	-	-	-	-	68.2	-23.62	0-360	200	H
6	7.079	44.86	PK	35.7	-30.5	0	50.06	-	-	-	-	68.2	-18.14	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

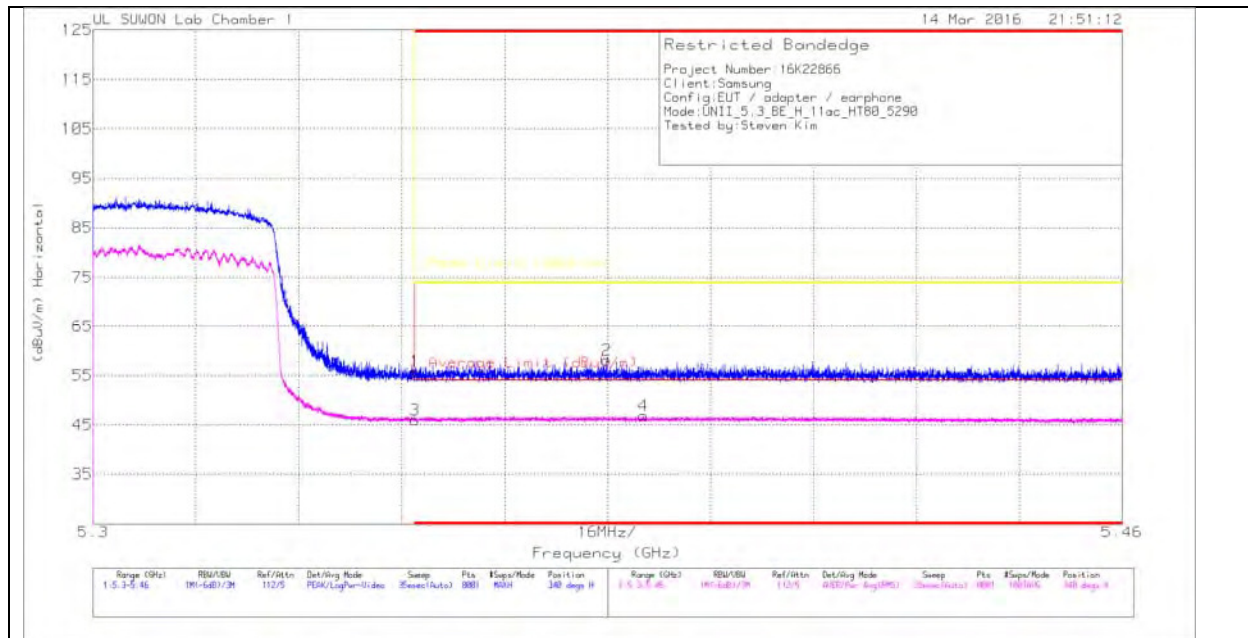
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unli non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.08	45.09	PK-U	35.7	-30.5	0	50.29	-	-	-	-	68.2	-17.91	180	147	H
7.08	49.23	PK-U	35.7	-30.5	0	54.43	-	-	-	-	68.2	-13.77	143	104	V
7.079	32.24	ADR	35.7	-30.5	0	37.44	54	-16.56	-	-	-	-	180	147	H
7.08	42.18	ADR	35.7	-30.5	0	47.38	54	-6.62	-	-	-	-	143	104	V

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.2.4. TX ABOVE 1GHz 802.11ac HT80 2TX CDD MODE IN THE 5.3GHz BAND RESTRICTED BANDEDGE (High CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

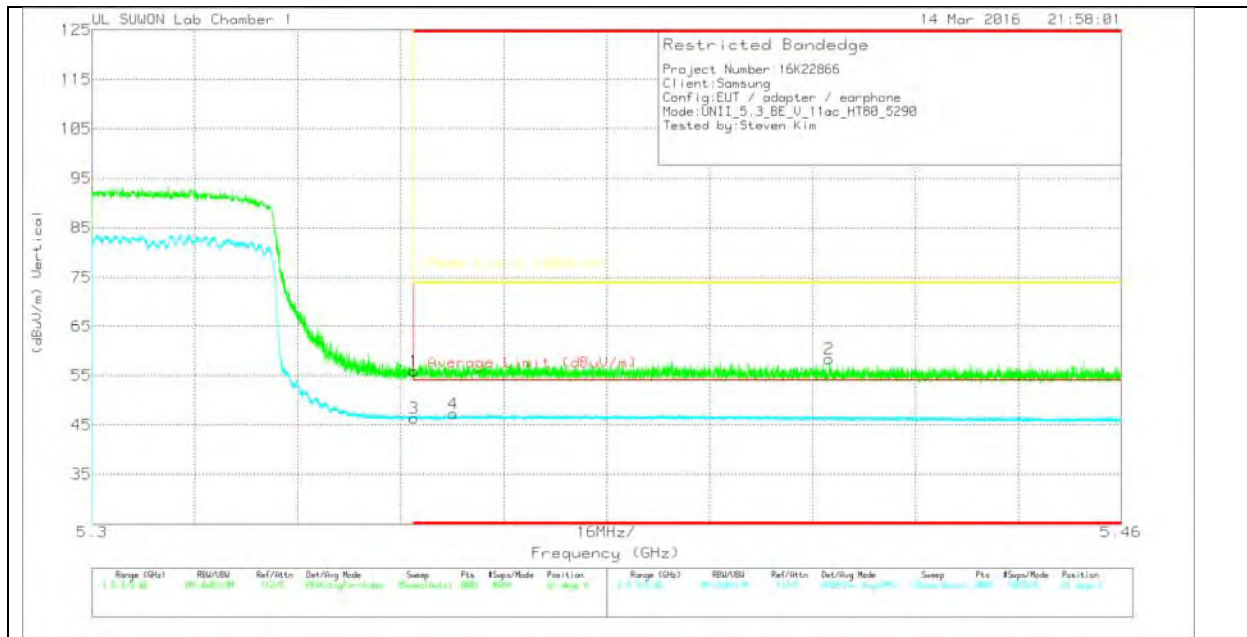
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	44.63	Pk	34.5	-23.3	0	55.83	-	-	74	-18.17	340	110	H
2	* 5.38	46.97	Pk	34.5	-23.3	0	58.17	-	-	74	-15.83	340	110	H
3	* 5.35	33.69	RMS	34.5	-23.3	1.11	46	54	-8	-	-	340	110	H
4	* 5.386	34.6	RMS	34.5	-23.3	1.11	46.91	54	-7.09	-	-	340	110	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 17_150619)	Path_2	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	44.72	Pk	34.5	-23.3	0	55.92	-	-	74	-18.08	61	106	V
2	* 5.415	47.05	Pk	34.6	-23.3	0	58.35	-	-	74	-15.65	61	106	V
3	* 5.35	34.05	RMS	34.5	-23.3	1.11	46.36	54	-7.64	-	-	61	106	V
4	* 5.356	34.89	RMS	34.5	-23.3	1.11	47.2	54	-6.8	-	-	61	106	V

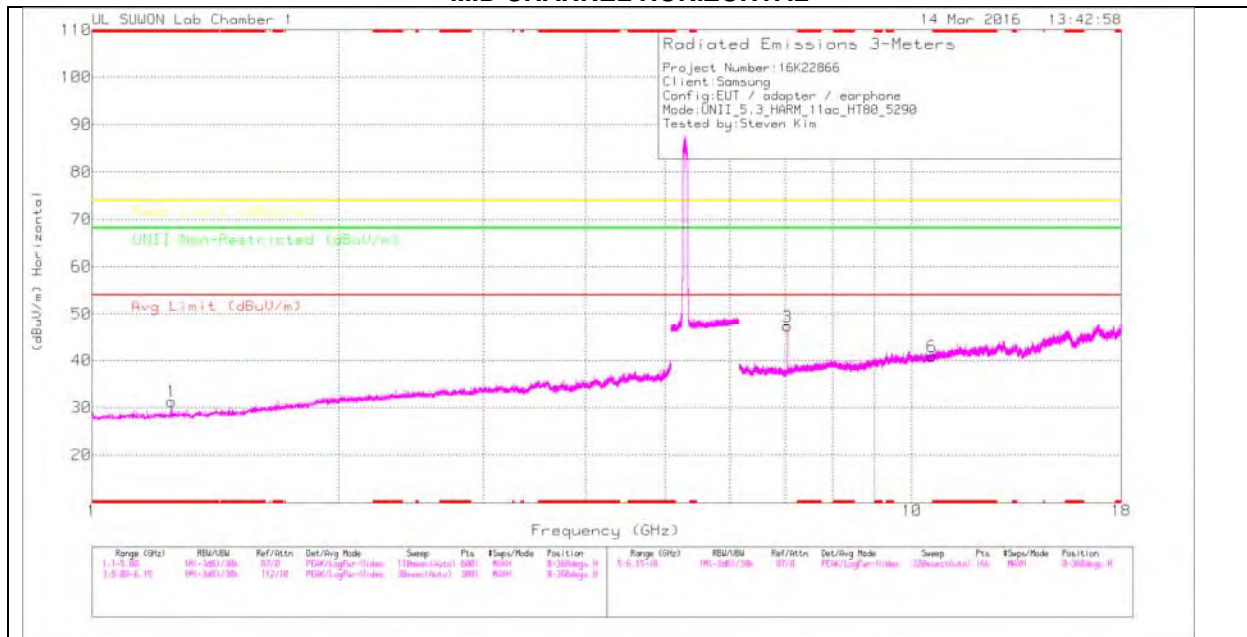
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

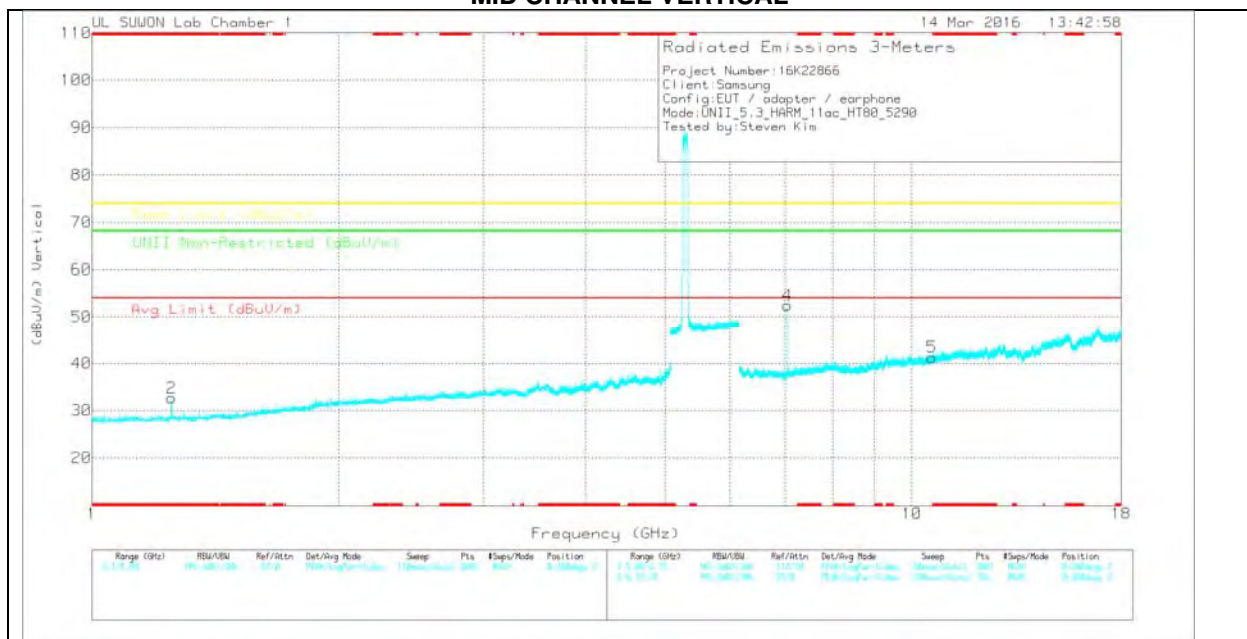
RMS - RMS detection

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 8717)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unil non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.17	PK	28.3	-40.2	0	31.27	-	-	74	-42.73	-	-	0-360	200	H
2	* 1.25	44.55	PK	28.3	-40.2	0	32.65	-	-	74	-41.35	-	-	0-360	200	V
3	7.053	42.12	PK	35.7	-30.5	0	47.32	-	-	-	-	68.2	-20.88	0-360	200	H
6	10.582	29.73	PK	37.9	-26.8	0	40.83	-	-	-	-	68.2	-27.37	0-360	100	H
4	7.053	47.32	PK	35.7	-30.5	0	52.52	-	-	-	-	68.2	-15.68	0-360	100	V
5	10.582	30.2	PK	37.9	-26.8	0	41.3	-	-	-	-	68.2	-26.9	0-360	200	V

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unil non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.053	37	ADR	35.7	-30.5	0	42.2	54	-11.8	-	-	-	-	160	244	H
7.053	43.77	ADR	35.7	-30.5	0	48.97	54	-5.03	-	-	-	-	311	100	V
7.054	44.52	PK-U	35.7	-30.5	0	49.72	-	-	-	-	68.2	-18.48	160	244	H
7.053	50.74	PK-U	35.7	-30.5	0	55.94	-	-	-	-	68.2	-12.26	311	100	V

PK-U - U-NII: Maximum Peak

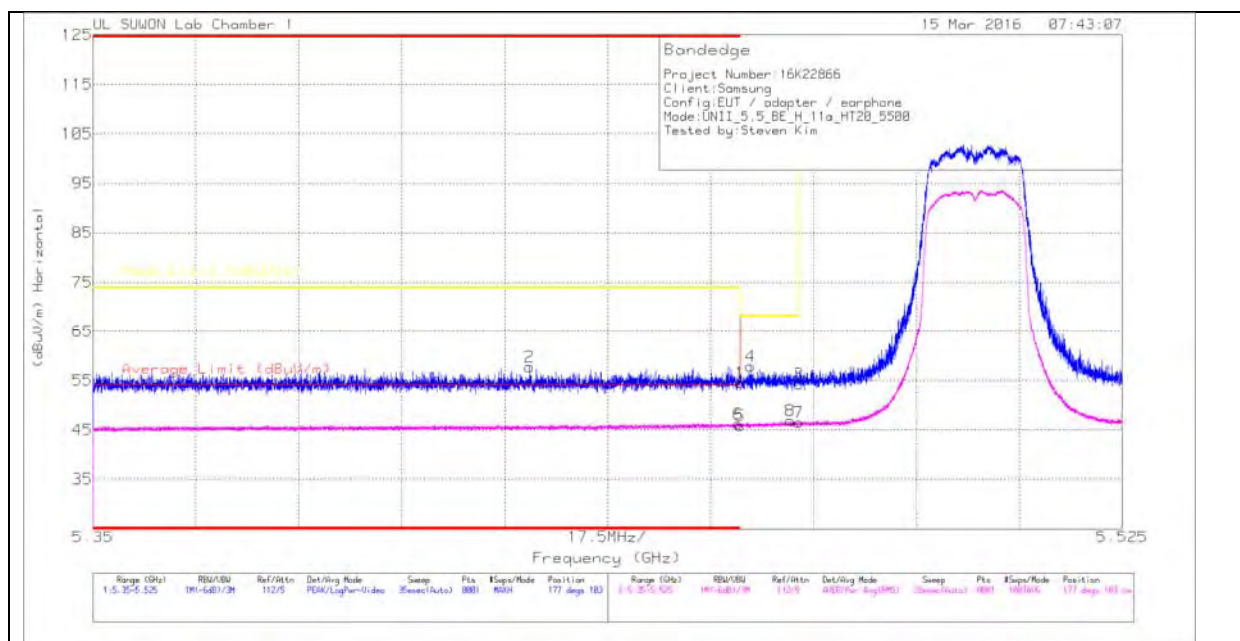
ADR - U-NII AD primary method, RMS average

11.3. 5.5-5.6 GHz

11.3.1. 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

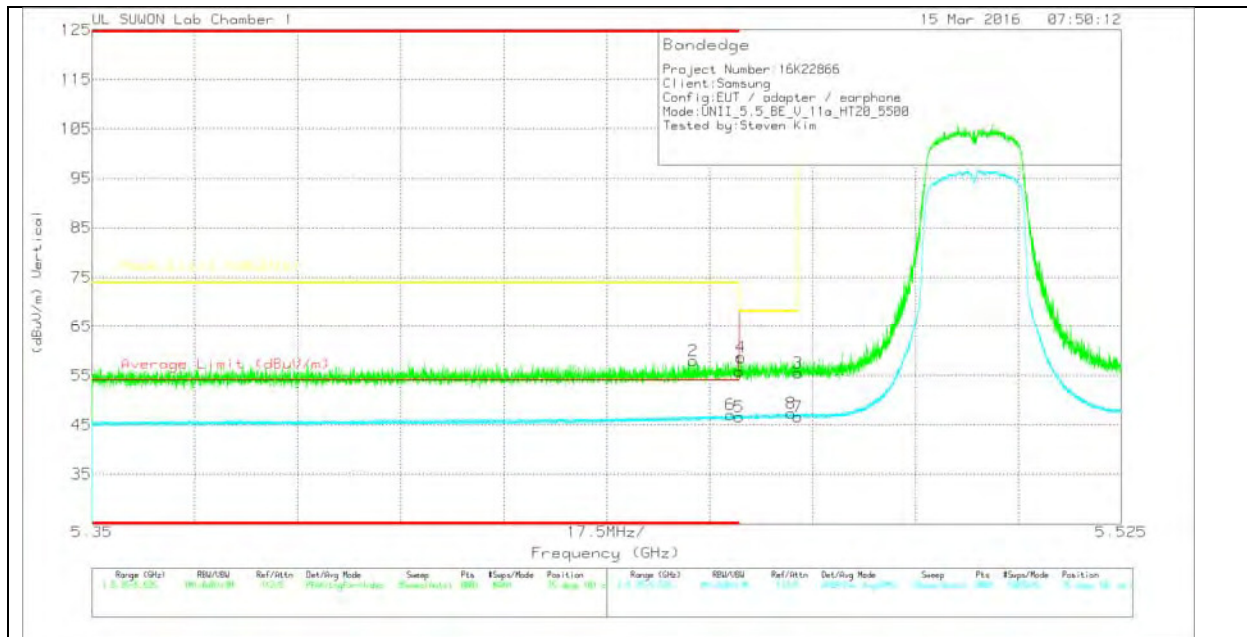
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	43.1	PK	34.6	-23.2	0	54.5	-	-	74	-19.5	177	103	H
2	* 5.424	46.3	PK	34.6	-23.2	0	57.7	-	-	74	-16.3	177	103	H
3	5.47	42.73	PK	34.6	-23.1	0	54.23	-	-	68.2	-13.97	177	103	H
4	5.462	46.5	PK	34.6	-23.2	0	57.9	-	-	68.2	-10.3	177	103	H
5	* 5.46	34.2	RMS	34.6	-23.2	.29	45.89	54	-8.11	-	-	177	103	H
6	* 5.46	34.6	RMS	34.6	-23.2	.29	46.29	54	-7.71	-	-	177	103	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 17_150619)	Path_2	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	44.35	Pk	34.6	-23.2	0	55.75	-	-	74	-18.25	75	101	V
2	* 5.452	46.54	Pk	34.6	-23.2	0	57.94	-	-	74	-16.06	75	101	V
3	5.47	43.98	Pk	34.6	-23.1	0	55.48	-	-	68.2	-12.72	75	101	V
4	5.46	47.28	Pk	34.6	-23.2	0	58.68	-	-	68.2	-9.52	75	101	V
5	* 5.46	34.91	RMS	34.6	-23.2	.29	46.6	54	-7.4	-	-	75	101	V
6	* 5.459	35.36	RMS	34.6	-23.2	.29	47.05	54	-6.95	-	-	75	101	V

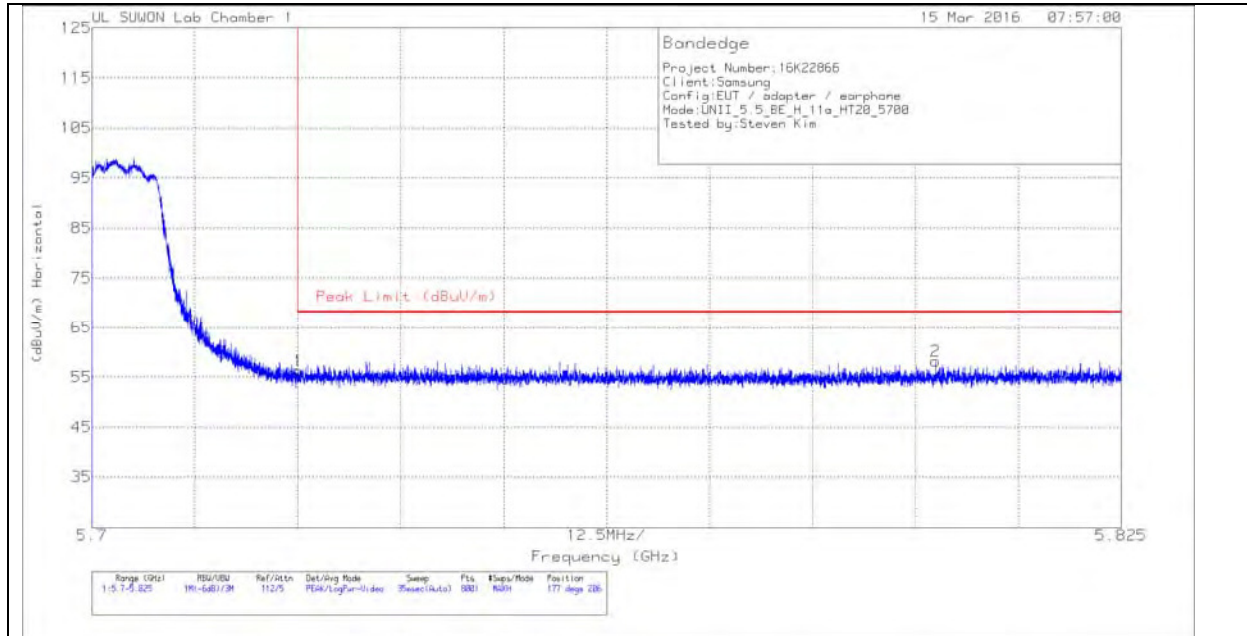
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



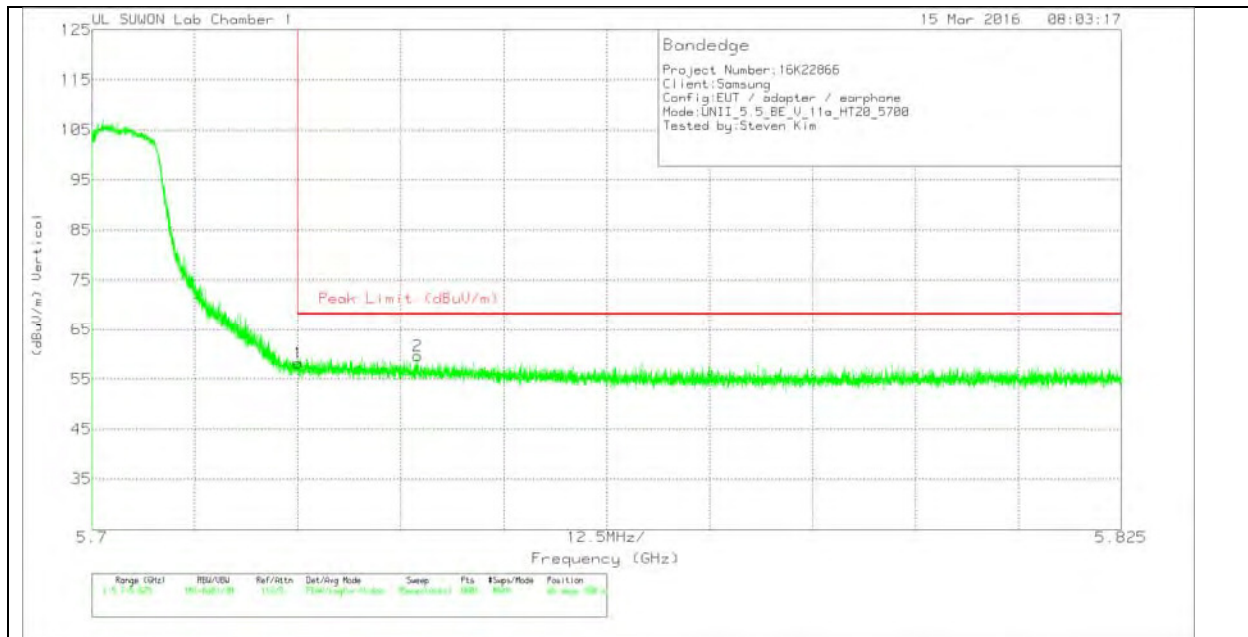
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	44.24	Pk	34.8	-22.8	0	56.24	68.2	-11.96	177	206	H
2	5.802	45.88	Pk	34.8	-22.5	0	58.18	68.2	-10.02	177	206	H

Pk - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

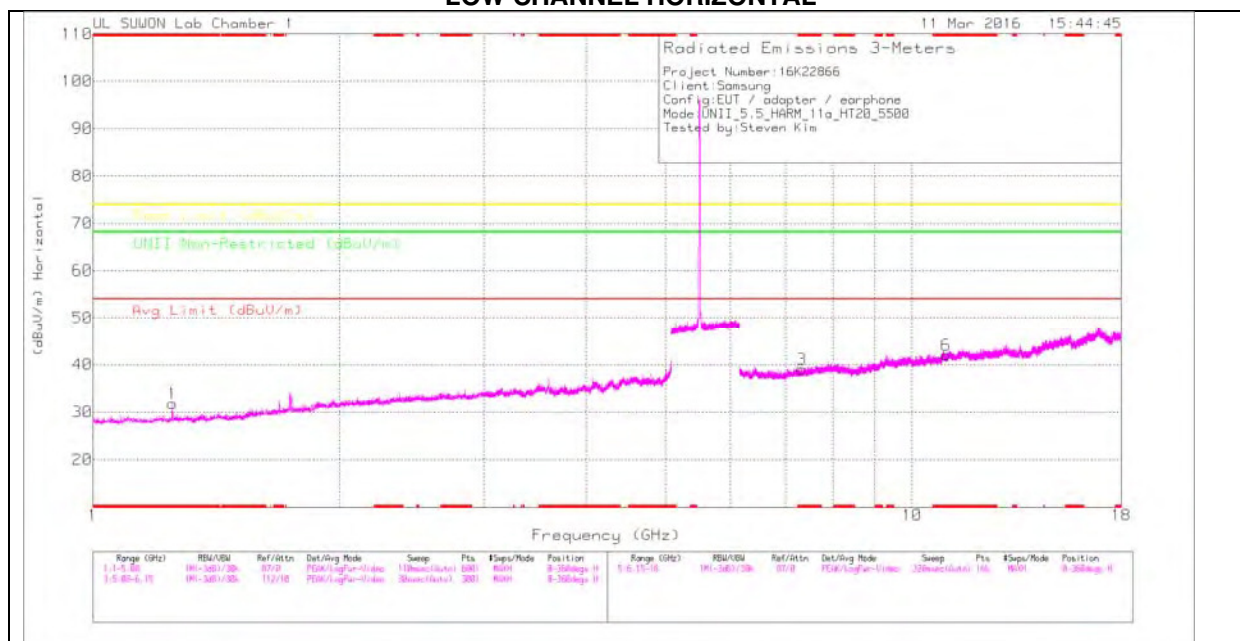
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	46.21	Pk	34.8	-22.8	0	58.21	68.2	-9.99	66	100	V
2	5.74	47.73	Pk	34.8	-22.8	0	59.73	68.2	-8.47	66	100	V

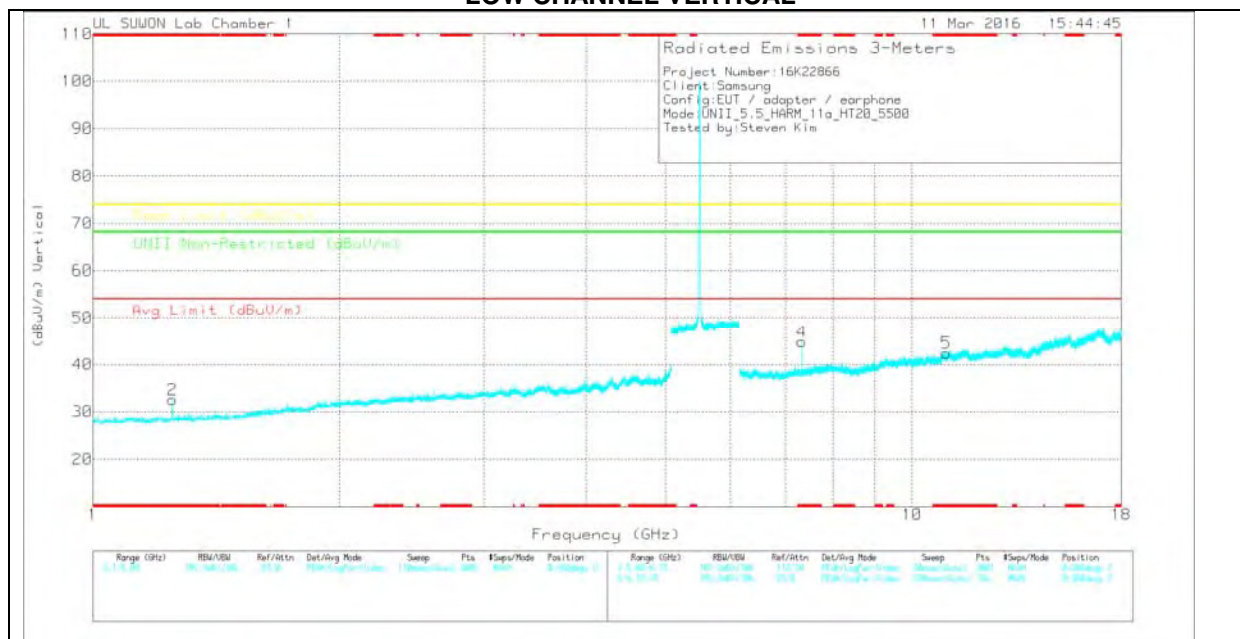
Pk - Peak detector

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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.65	Pk	28.3	-40.2	0	31.75	-	-	74	-42.25	-	-	0-360	200	H
2	* 1.25	44.45	Pk	28.3	-40.2	0	32.55	-	-	74	-41.45	-	-	0-360	200	V
3	* 7.331	33.68	Pk	35.8	-30.5	0	38.98	-	-	74	-35.02	-	-	0-360	200	H
6	* 11.013	31.07	Pk	38.2	-27.3	0	41.97	-	-	74	-32.03	-	-	0-360	100	H
4	* 7.333	39.55	Pk	35.8	-30.5	0	44.85	-	-	74	-29.15	-	-	0-360	100	V
5	* 10.999	31.66	pk	38.2	-27.4	0	42.46	-	-	74	-31.54	-	-	0-360	100	V

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

Pk - Peak detector

Radiated Emissions

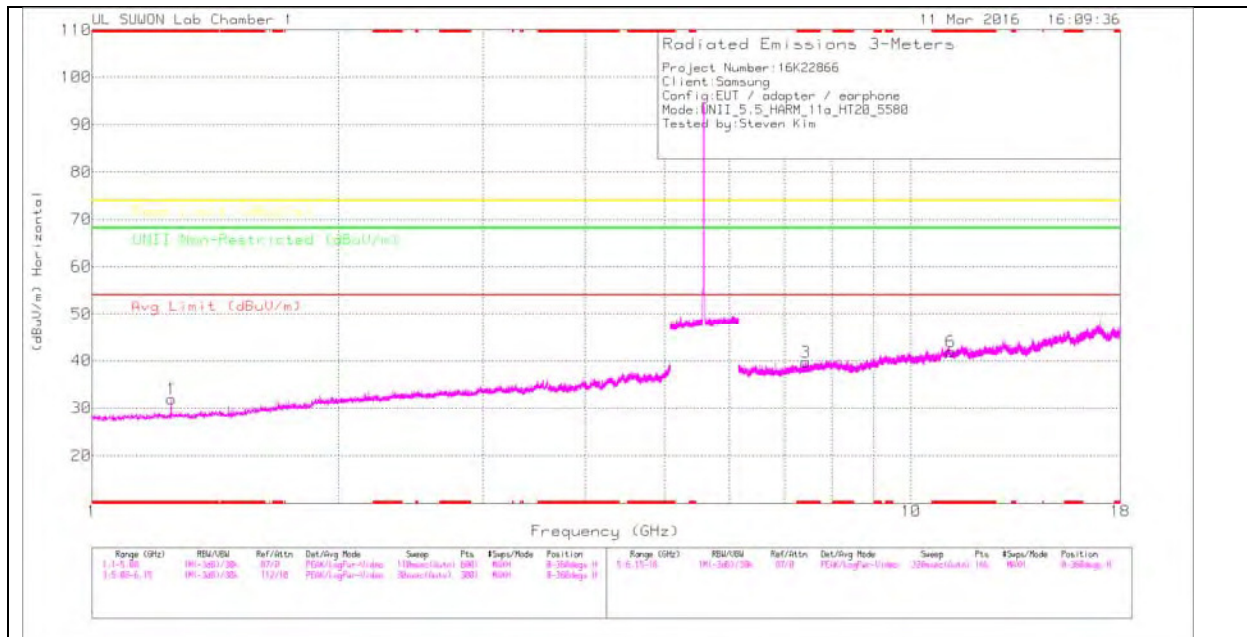
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.333	45.08	PK-U	35.8	-30.5	0	50.38	-	-	74	-23.62	-	-	89	181	V
* 7.333	35.64	ADR	35.8	-30.5	0	40.94	54	-13.06	-	-	-	-	89	181	V

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

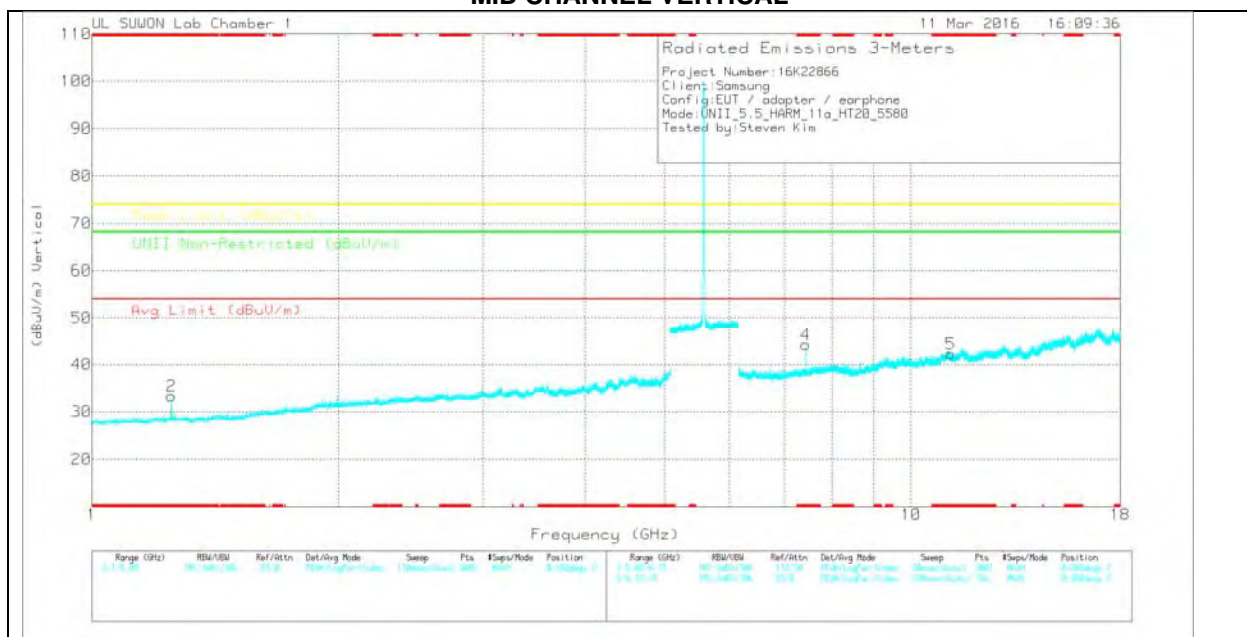
PK-U - U-NII: Maximum Peak

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 8717)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.85	Pk	28.3	-40.2	0	31.95	-	-	74	-42.05	-	-	0-360	200	H
2	* 1.25	45.24	Pk	28.3	-40.2	0	33.34	-	-	74	-40.66	-	-	0-360	200	V
3	* 7.439	34.54	Pk	35.8	-30.6	0	39.74	-	-	74	-34.26	-	-	0-360	200	H
6	* 11.17	30.53	Pk	38.3	-27	0	41.83	-	-	74	-32.17	-	-	0-360	100	H
4	* 7.439	38.97	Pk	35.8	-30.6	0	44.17	-	-	74	-29.83	-	-	0-360	100	V
5	* 11.172	30.92	Pk	38.3	-27	0	42.22	-	-	74	-31.78	-	-	0-360	200	V

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

Pk – Peak detector

Radiated Emissions

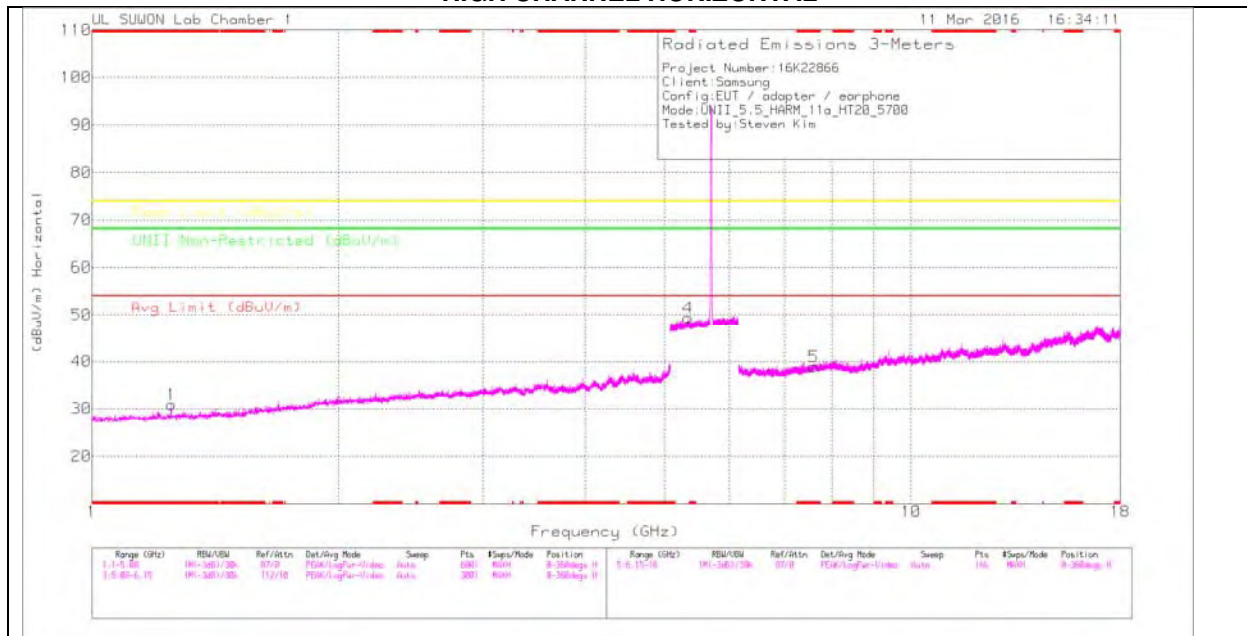
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.44	46.28	PK-U	35.8	-30.5	0	51.58	-	-	74	-22.42	-	-	180	100	V
* 7.44	37.13	ADR	35.8	-30.5	0	42.43	54	-11.57	-	-	-	-	180	100	V

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

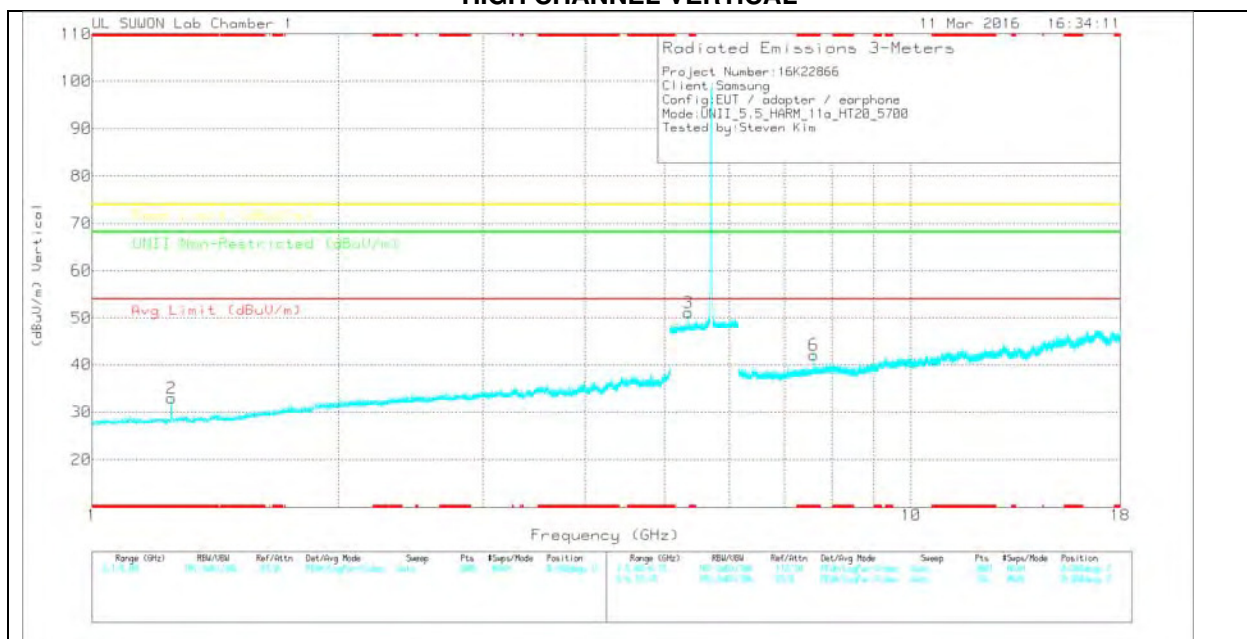
PK-U - U-NII: Maximum Peak

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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unil non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.76	Pk	28.3	-40.2	0	30.86	-	-	74	-43.14	-	-	0-360	200	H
2	* 1.25	44.8	Pk	28.3	-40.2	0	32.9	-	-	74	-41.1	-	-	0-360	200	V
4	5.341	38.2	Pk	34.5	-23.3	0	49.4	-	-	-	-	68.2	-18.8	0-360	100	H
3	5.348	40.05	Pk	34.5	-23.3	0	51.25	-	-	-	-	68.2	-16.95	0-360	100	V
5	* 7.599	33.17	Pk	35.9	-30.2	0	38.87	-	-	74	-35.13	-	-	0-360	200	H
6	* 7.6	36.47	Pk	35.9	-30.3	0	42.07	-	-	74	-31.93	-	-	0-360	100	V

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

Pk – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016871 7)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unil non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.348	50.49	PK-U	34.5	-23.3	0	61.69	-	-	-	-	68.2	-6.51	55	100	V
* 7.6	31.26	ADR	35.9	-30.3	0	36.86	54	-17.14	-	-	-	-	78	265	V
* 7.602	43.45	PK-U	35.9	-30.3	0	49.05	-	-	74	-24.95	-	-	78	265	V

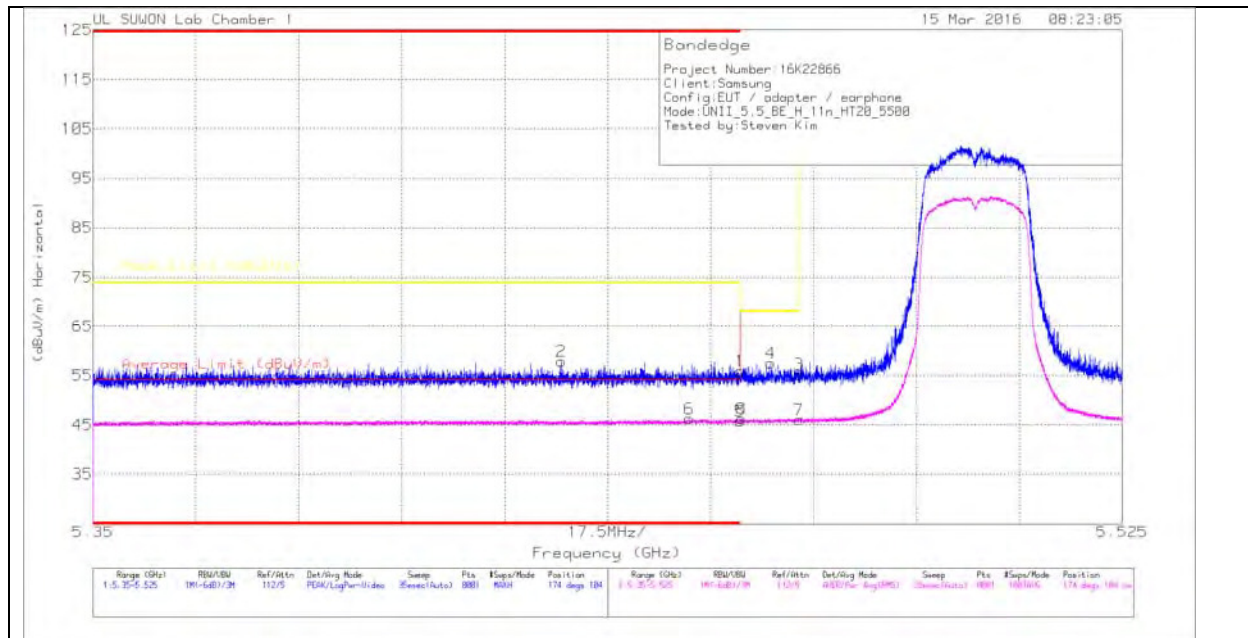
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.3.2. 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

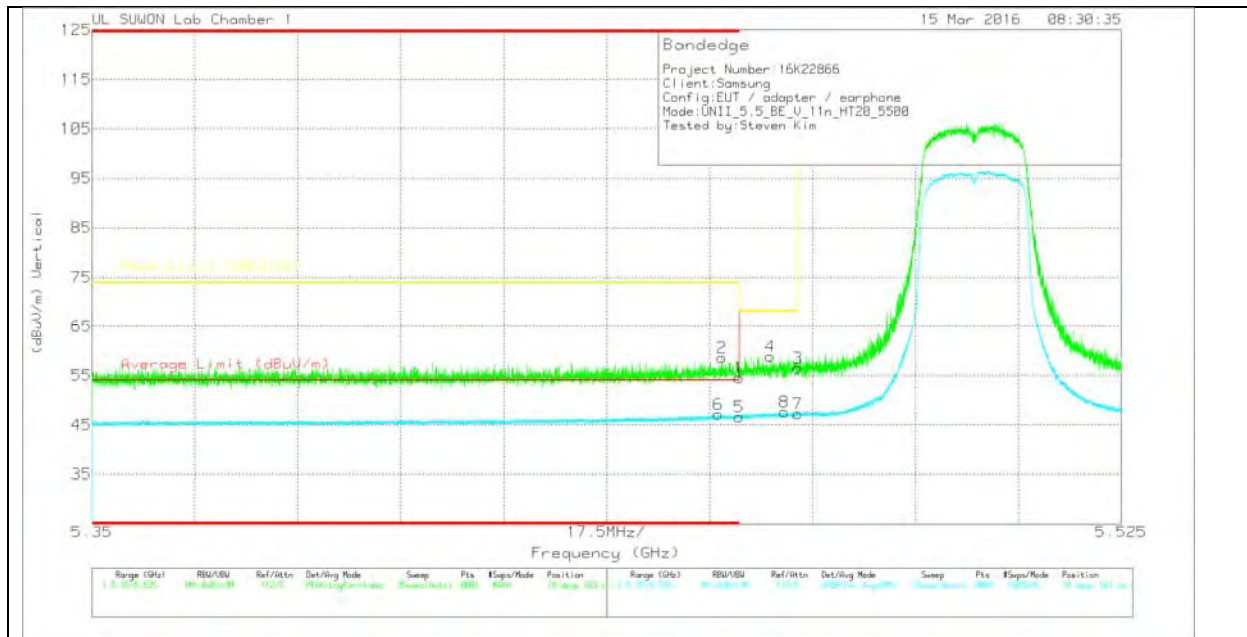
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	44.45	Pk	34.6	-23.2	0	55.85	-	-	74	-18.15	174	104	H
2	* 5.43	46.49	Pk	34.6	-23.2	0	57.89	-	-	74	-16.11	174	104	H
3	5.47	43.71	Pk	34.6	-23.1	0	55.21	-	-	68.2	-12.99	174	104	H
4	5.465	46.04	Pk	34.6	-23.1	0	57.54	-	-	68.2	-10.66	174	104	H
5	* 5.46	34.03	RMS	34.6	-23.2	.31	45.74	54	-8.26	-	-	174	104	H
6	* 5.451	34.5	RMS	34.6	-23.2	.31	46.21	54	-7.79	-	-	174	104	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 17_150619)	Path_2	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	43.14	Pk	34.6	-23.2	0	54.54	-	-	74	-19.46	70	103	V
2	* 5.457	47.27	Pk	34.6	-23.2	0	58.67	-	-	74	-15.33	70	103	V
3	5.47	45.02	Pk	34.6	-23.1	0	56.52	-	-	68.2	-11.68	70	103	V
4	5.465	47.41	Pk	34.6	-23.1	0	58.91	-	-	68.2	-9.29	70	103	V
5	* 5.46	34.88	RMS	34.6	-23.2	.31	46.59	54	-7.41	-	-	70	103	V
6	* 5.456	35.41	RMS	34.6	-23.2	.31	47.12	54	-6.88	-	-	70	103	V

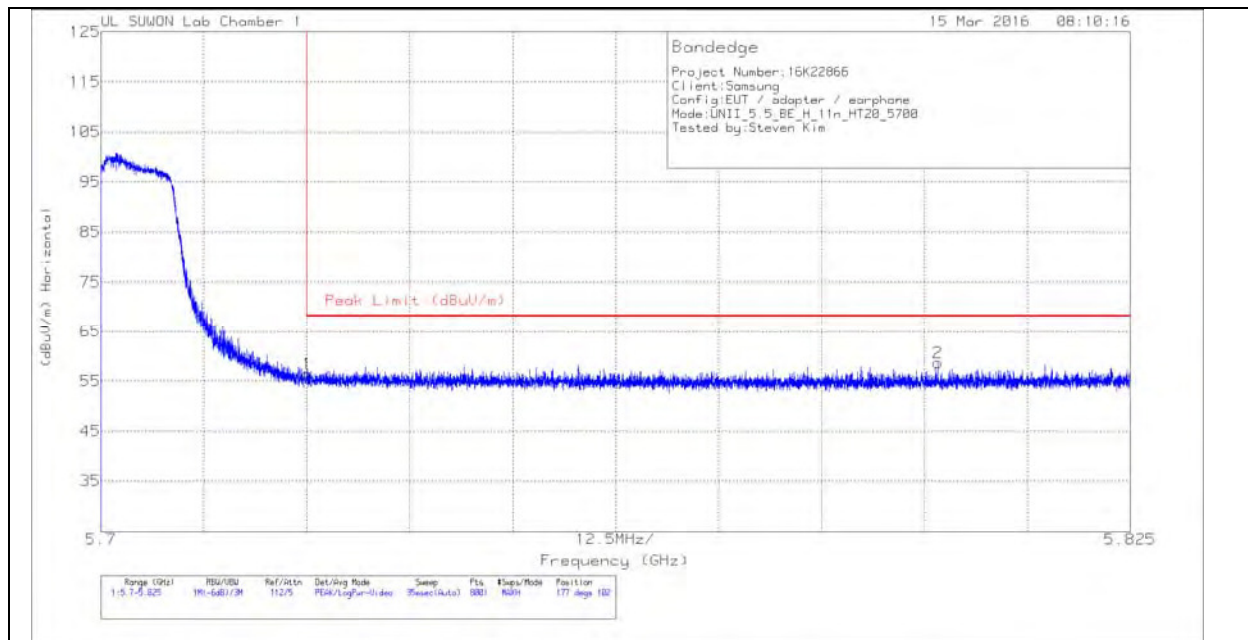
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



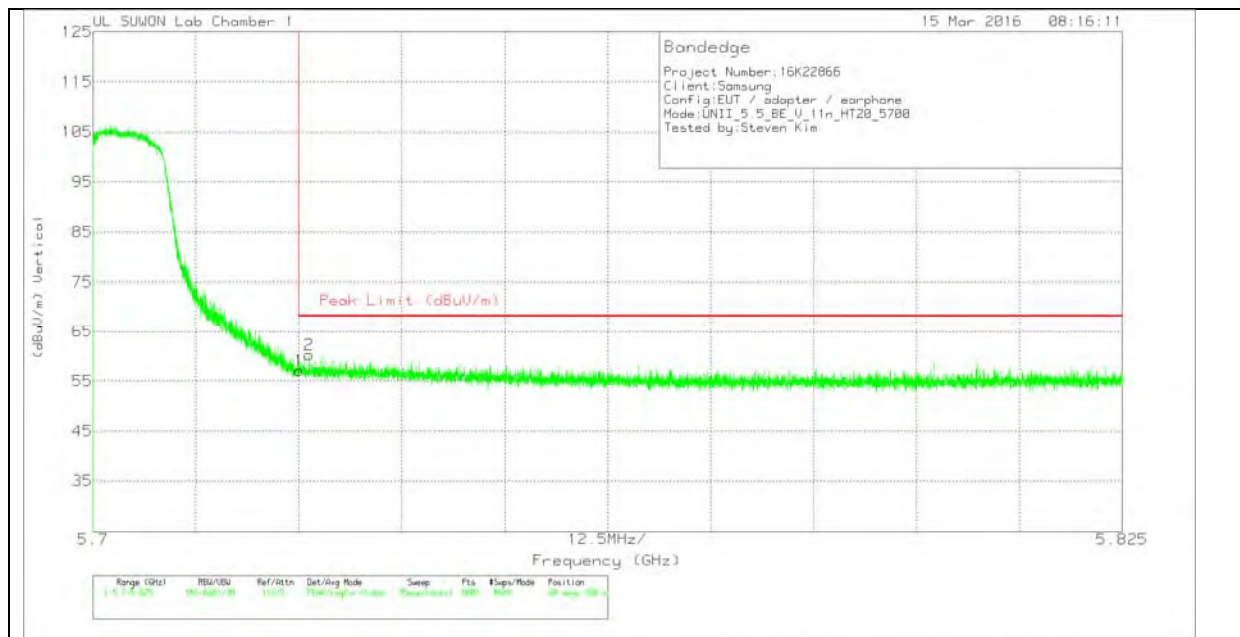
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	44.52	Pk	34.8	-22.8	0	56.52	68.2	-11.68	177	102	H
2	5.802	46.37	Pk	34.8	-22.5	0	58.67	68.2	-9.53	177	102	H

Pk - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

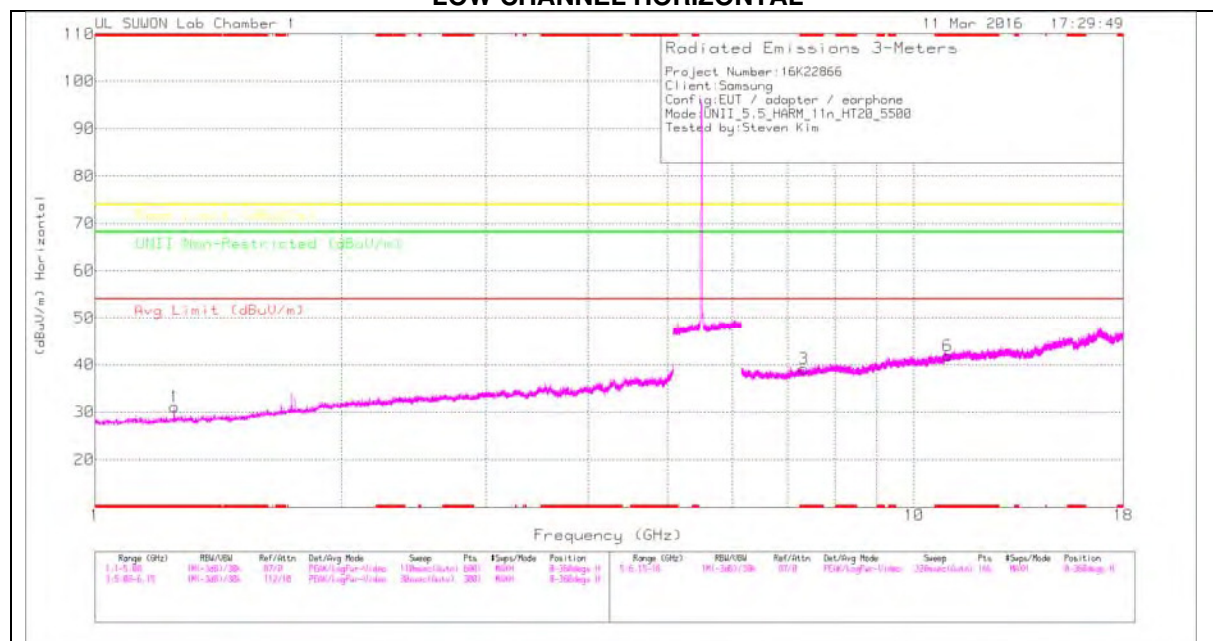
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	45.18	Pk	34.8	-22.8	0	57.18	68.2	-11.02	68	100	V
2	5.726	48.33	Pk	34.8	-22.8	0	60.33	68.2	-7.87	68	100	V

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

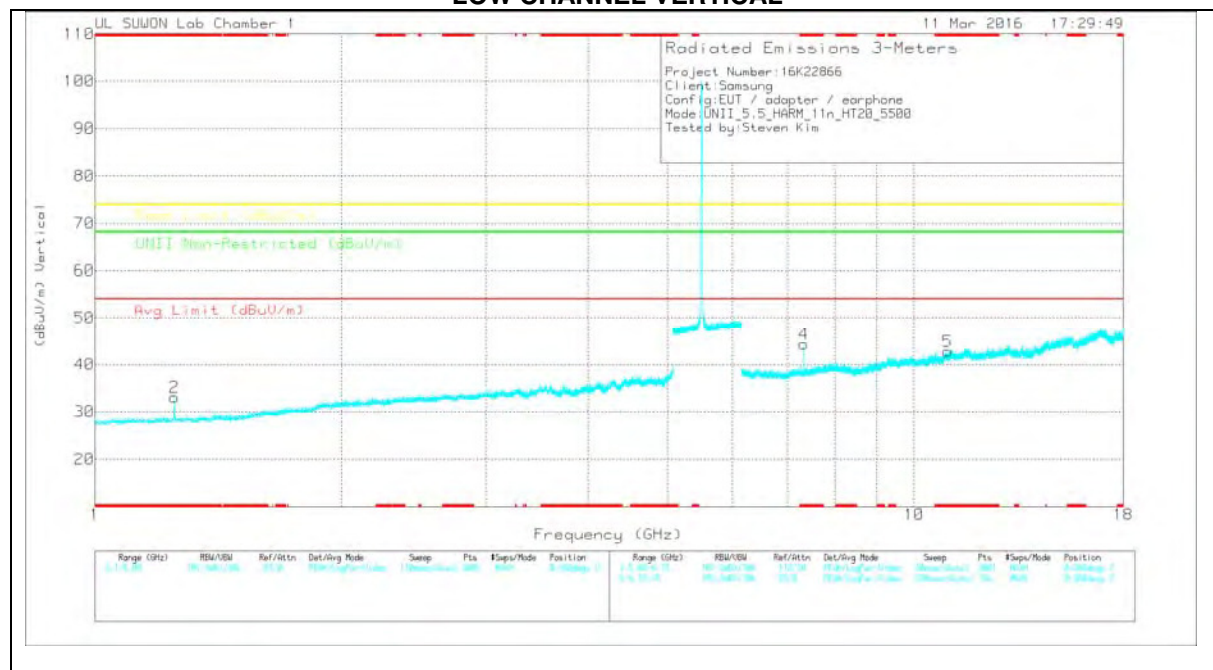
Pk - Peak detector

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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.02	Pk	28.3	-40.2	0	31.12	-	-	74	-42.88	-	-	0-360	200	H
2	* 1.25	45.02	Pk	28.3	-40.2	0	33.12	-	-	74	-40.88	-	-	0-360	200	V
3	* 7.333	33.91	Pk	35.8	-30.5	0	39.21	-	-	74	-34.79	-	-	0-360	200	H
6	* 10.981	30.98	Pk	38.2	-27.3	0	41.88	-	-	74	-32.12	-	-	0-360	100	H
4	* 7.333	39.01	Pk	35.8	-30.5	0	44.31	-	-	74	-29.69	-	-	0-360	100	V
5	* 10.994	31.98	Pk	38.2	-27.4	0	42.78	-	-	74	-31.22	-	-	0-360	100	V

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

Pk – Peak detector

Radiated Emissions

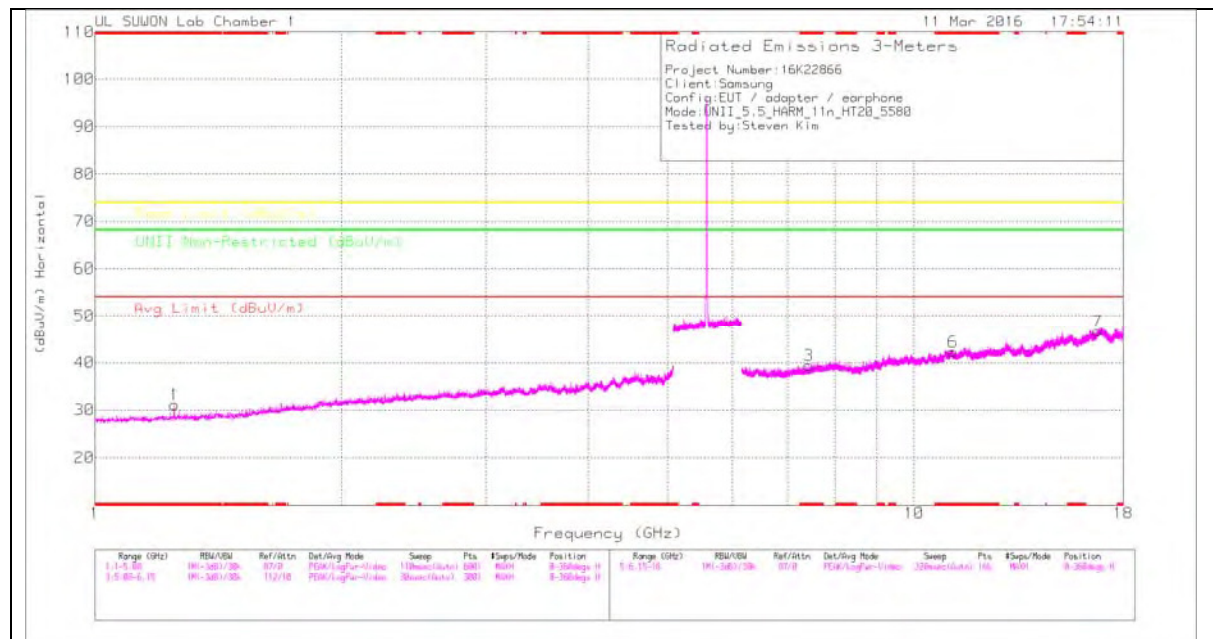
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.333	46.87	PK-U	35.8	-30.5	0	52.17	-	-	74	-21.83	-	-	177	102	V
* 7.333	38.99	ADR	35.8	-30.5	0	44.29	54	-9.71	-	-	-	-	177	102	V

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

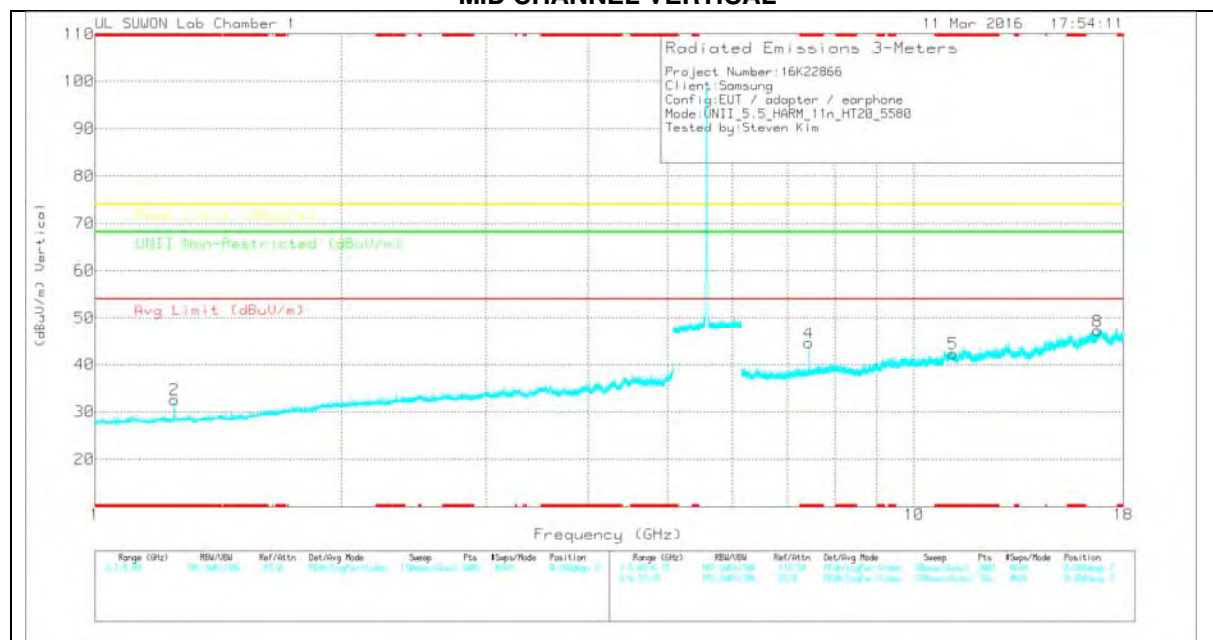
PK-U - U-NII: Maximum Peak

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 8717_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.04	PK	28.3	-40.2	0	31.14	-	-	74	-42.86	-	-	0-360	200	H
2	* 1.25	44.47	PK	28.3	-40.2	0	32.57	-	-	74	-41.43	-	-	0-360	200	V
3	* 7.439	34.18	PK	35.8	-30.6	0	39.38	-	-	74	-34.62	-	-	0-360	200	H
6	* 11.156	31.04	PK	38.3	-27.1	0	42.24	-	-	74	-31.76	-	-	0-360	200	H
7	16.748	26.62	PK	41.3	-21.2	0	46.72	-	-	-	-	68.2	-21.48	0-360	200	H
4	* 7.44	39.31	PK	35.8	-30.5	0	44.61	-	-	74	-29.39	-	-	0-360	100	V
5	* 11.16	31.03	PK	38.3	-27.1	0	42.23	-	-	74	-31.77	-	-	0-360	100	V
8	16.743	27.05	PK	41.3	-21.2	0	47.15	-	-	-	-	68.2	-21.05	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

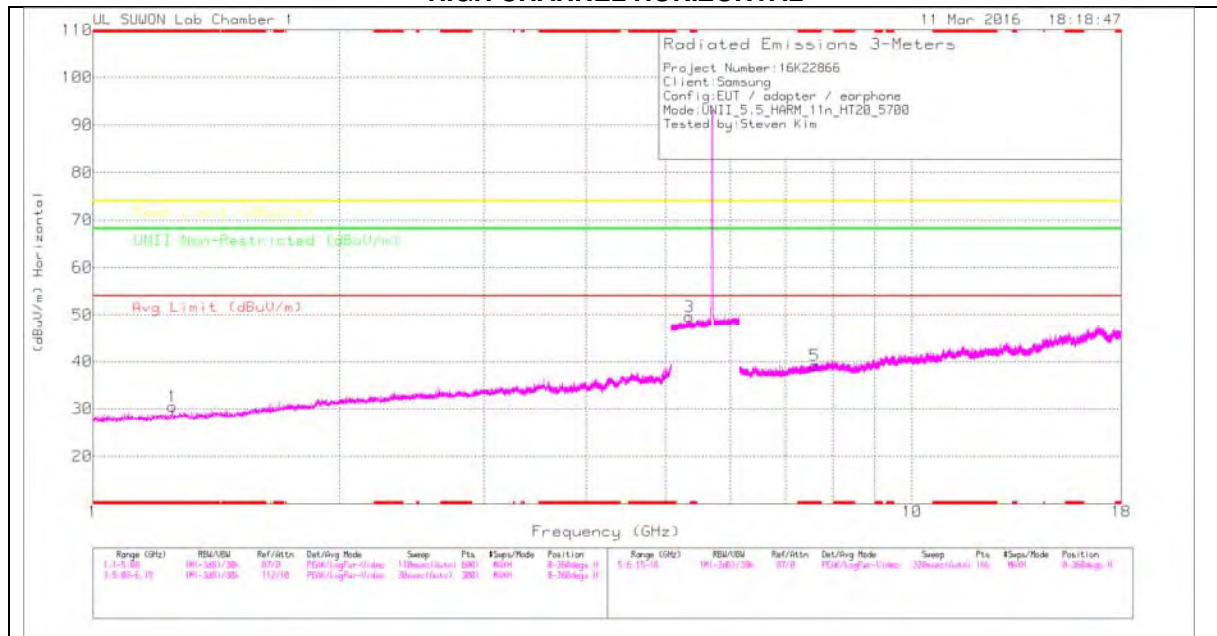
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.44	46.6	PK-U	35.8	-30.5	0	51.9	-	-	74	-22.1	-	-	171	100	V
* 7.44	38.69	ADR	35.8	-30.5	0	43.99	54	-10.01	-	-	-	-	171	100	V

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

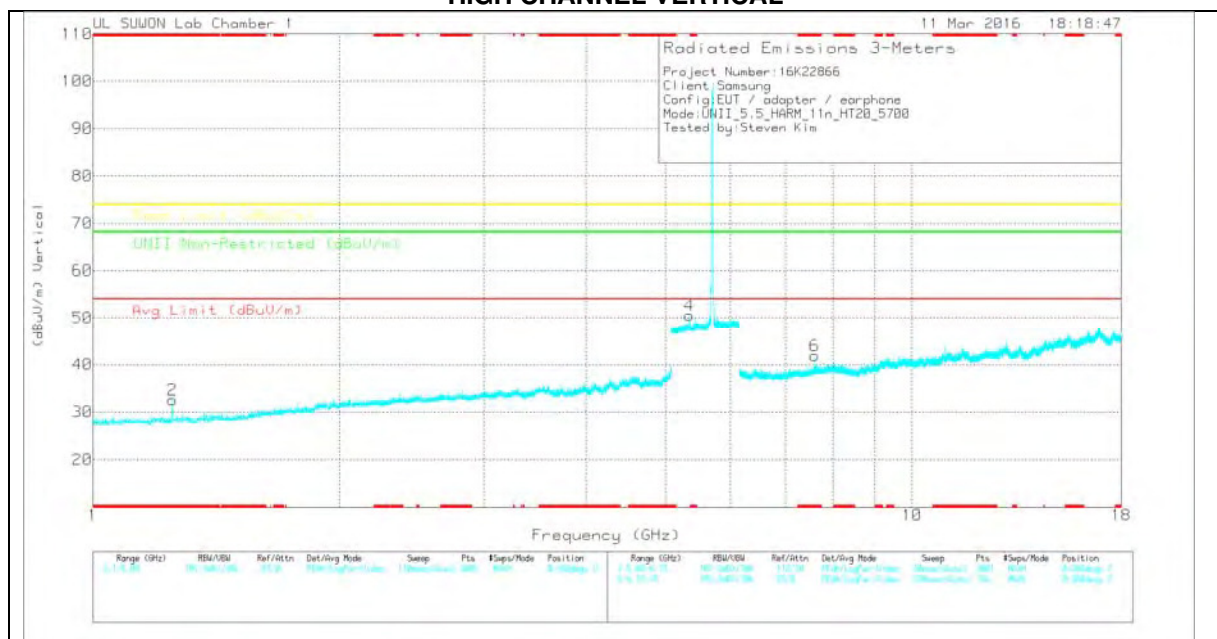
PK-U - U-NII: Maximum Peak

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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.38	PK	28.3	-40.2	0	30.48	-	-	74	-43.52	-	-	0-360	200	H
2	* 1.25	44.46	PK	28.3	-40.2	0	32.56	-	-	74	-41.44	-	-	0-360	200	V
3	5.348	38.4	PK	34.5	-23.3	0	49.6	-	-	-	-	68.2	-18.6	0-360	100	H
4	5.348	39.35	PK	34.5	-23.3	0	50.55	-	-	-	-	68.2	-17.65	0-360	100	V
5	* 7.602	33.61	PK	35.9	-30.3	0	39.21	-	-	74	-34.79	-	-	0-360	100	H
6	* 7.599	36.29	PK	35.9	-30.3	0	41.89	-	-	74	-32.11	-	-	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016871 7)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.348	50.67	PK-U	34.5	-23.3	0	61.87	-	-	-	-	68.2	-6.33	59	103	V
* 7.6	33.91	ADR	35.9	-30.3	0	39.51	54	-14.49	-	-	-	-	180	109	V
* 7.6	44.87	PK-U	35.9	-30.3	0	50.47	-	-	74	-23.53	-	-	180	109	V

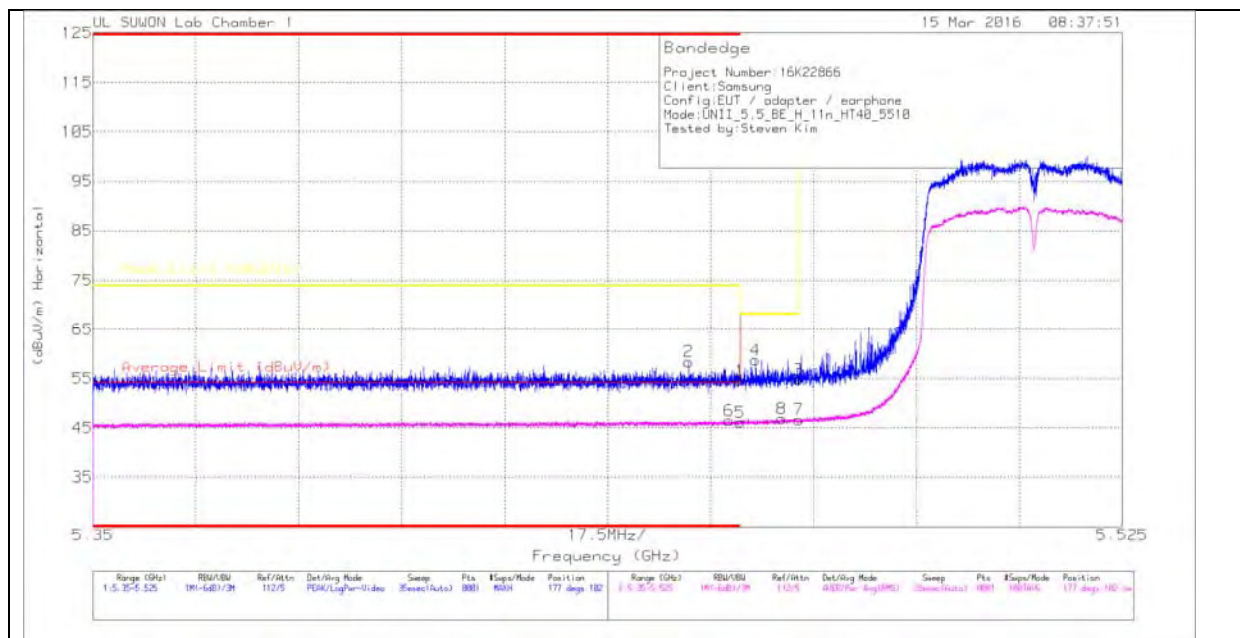
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.3.3. 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

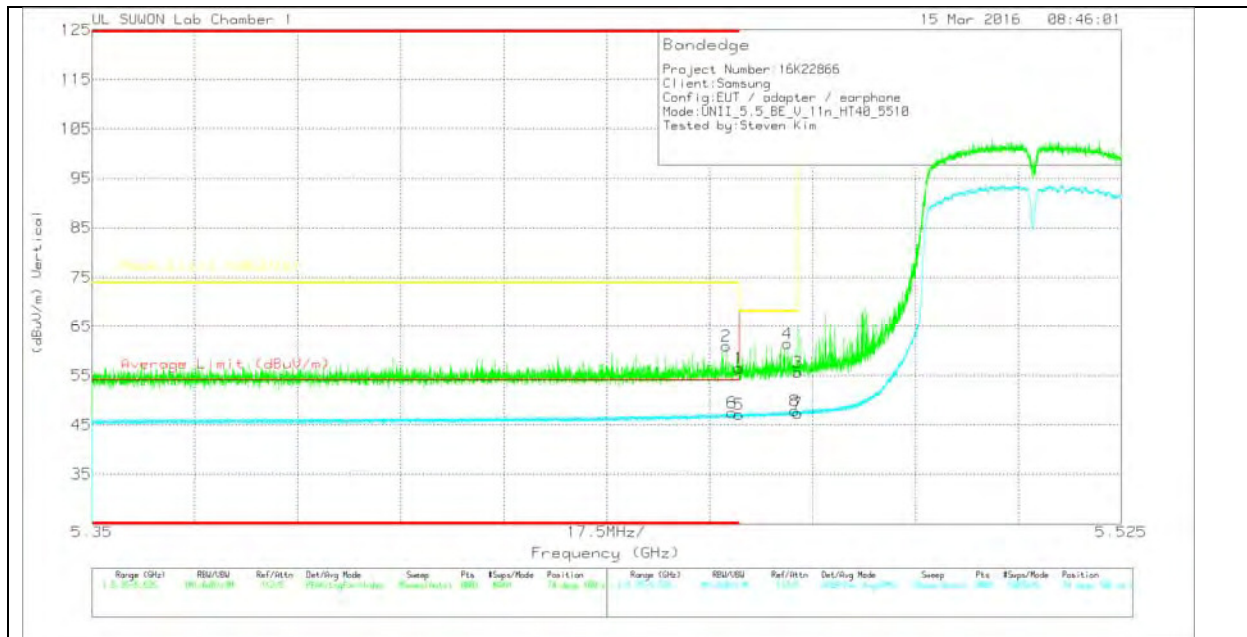
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	43.28	Pk	34.6	-23.2	0	54.68	-	-	74	-19.32	177	102	H
2	* 5.451	47.03	Pk	34.6	-23.2	0	58.43	-	-	74	-15.57	177	102	H
3	5.47	43.26	Pk	34.6	-23.1	0	54.76	-	-	68.2	-13.44	177	102	H
4	5.463	47.27	Pk	34.6	-23.1	0	58.77	-	-	68.2	-9.43	177	102	H
5	* 5.46	34.18	RMS	34.6	-23.2	.59	46.17	54	-7.83	-	-	177	102	H
6	* 5.458	34.51	RMS	34.6	-23.2	.59	46.5	54	-7.5	-	-	177	102	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 17_150619)	Path_2	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	45.09	Pk	34.6	-23.2	0	56.49	-	-	74	-17.51	74	100	V
2	* 5.458	49.55	Pk	34.6	-23.2	0	60.95	-	-	74	-13.05	74	100	V
3	5.47	44.18	Pk	34.6	-23.1	0	55.68	-	-	68.2	-12.52	74	100	V
4	5.468	50.01	Pk	34.6	-23.1	0	61.51	-	-	68.2	-6.69	74	100	V
5	* 5.46	35.13	RMS	34.6	-23.2	.59	47.12	54	-6.88	-	-	74	100	V
6	* 5.459	35.54	RMS	34.6	-23.2	.59	47.53	54	-6.47	-	-	74	100	V

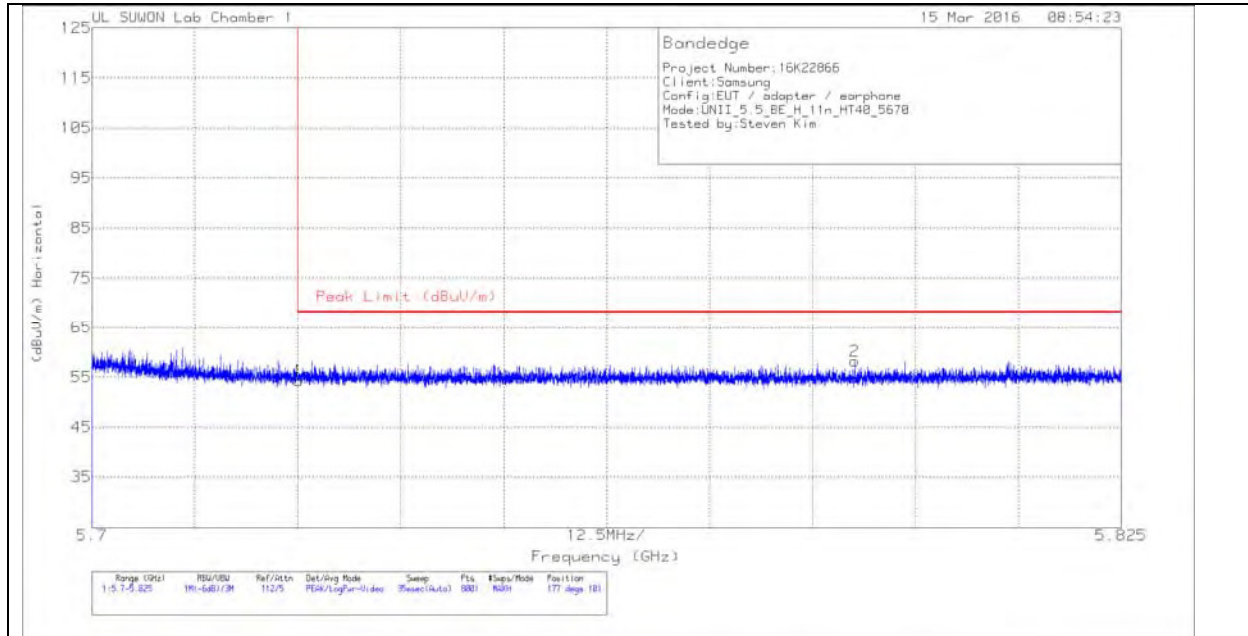
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



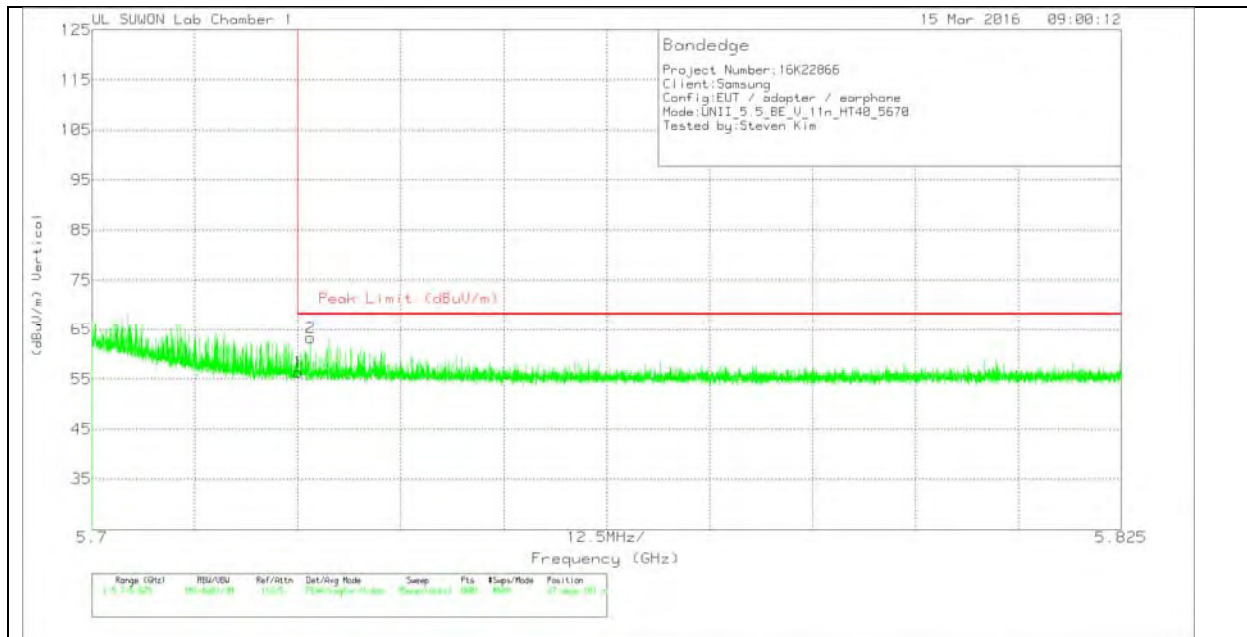
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	42.37	Pk	34.8	-22.8	0	54.37	68.2	-13.83	177	101	H
2	5.793	46.08	Pk	34.8	-22.6	0	58.28	68.2	-9.92	177	101	H

Pk - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

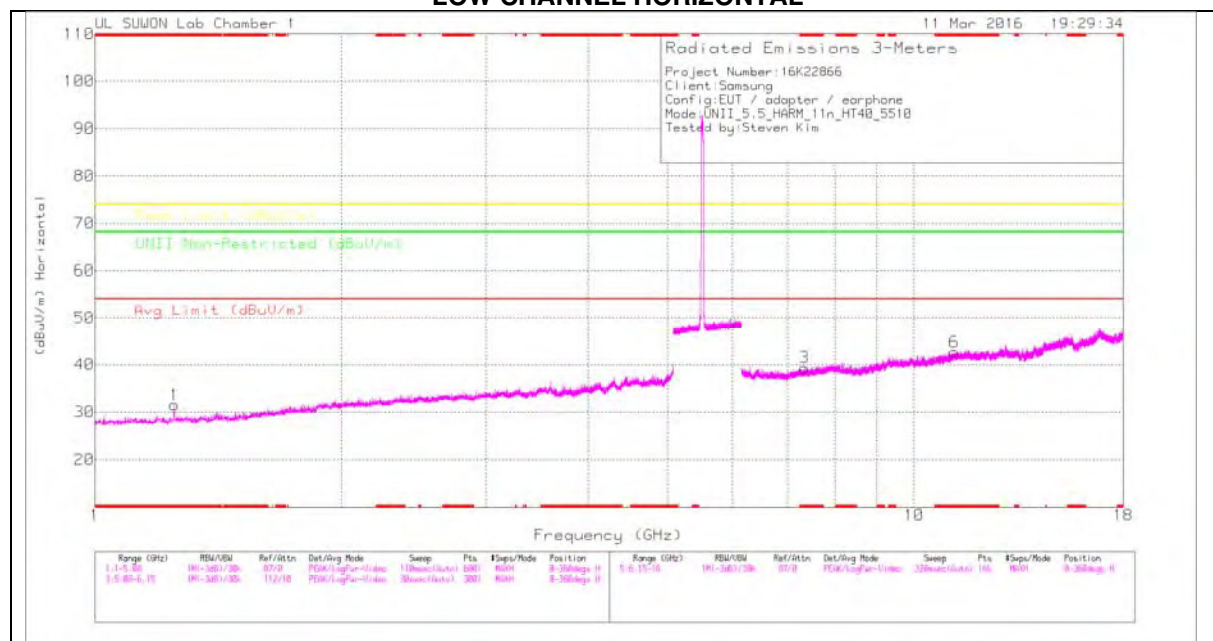
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	44.42	Pk	34.8	-22.8	0	56.42	68.2	-11.78	67	101	V
2	5.727	51.31	Pk	34.8	-22.8	0	63.31	68.2	-4.89	67	101	V

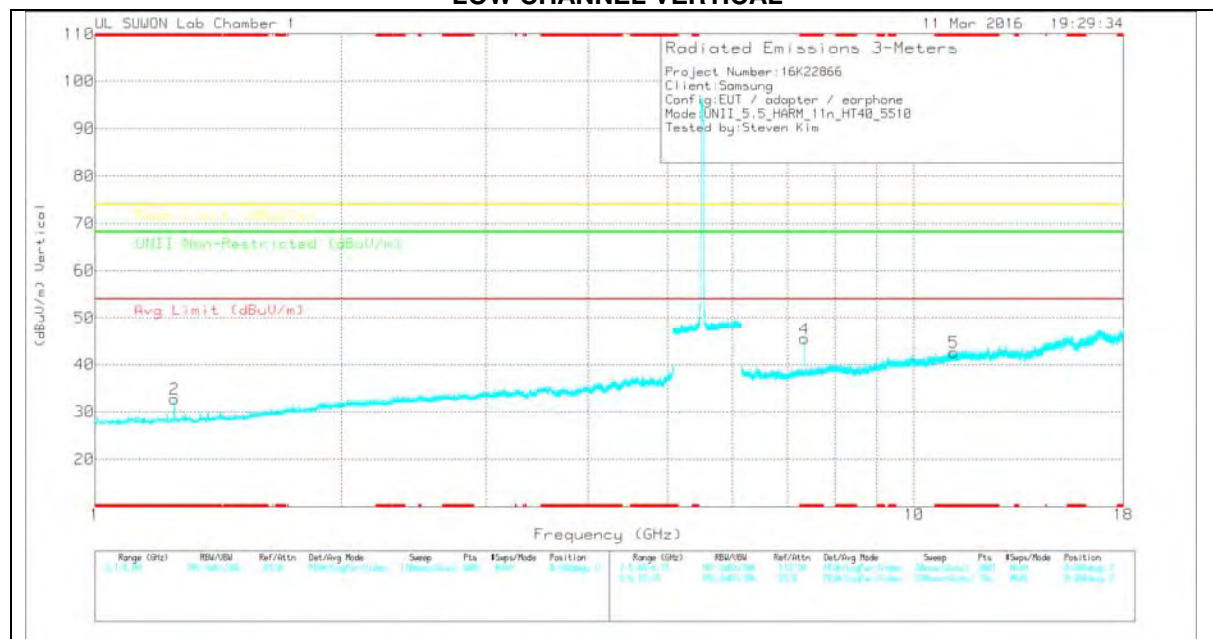
Pk - Peak detector

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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.43	Pk	28.3	-40.2	0	31.53	-	-	74	-42.47	-	-	0-360	200	H
2	* 1.25	44.55	Pk	28.3	-40.2	0	32.65	-	-	74	-41.35	-	-	0-360	200	V
3	* 7.347	34.06	Pk	35.8	-30.5	0	39.36	-	-	74	-34.64	-	-	0-360	200	H
6	* 11.204	31.72	Pk	38.4	-27.5	0	42.62	-	-	74	-31.38	-	-	0-360	100	H
4	* 7.347	40.26	Pk	35.8	-30.5	0	45.56	-	-	74	-28.44	-	-	0-360	100	V
5	* 11.184	31.37	Pk	38.3	-27.2	0	42.47	-	-	74	-31.53	-	-	0-360	200	V

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

Pk – Peak detector

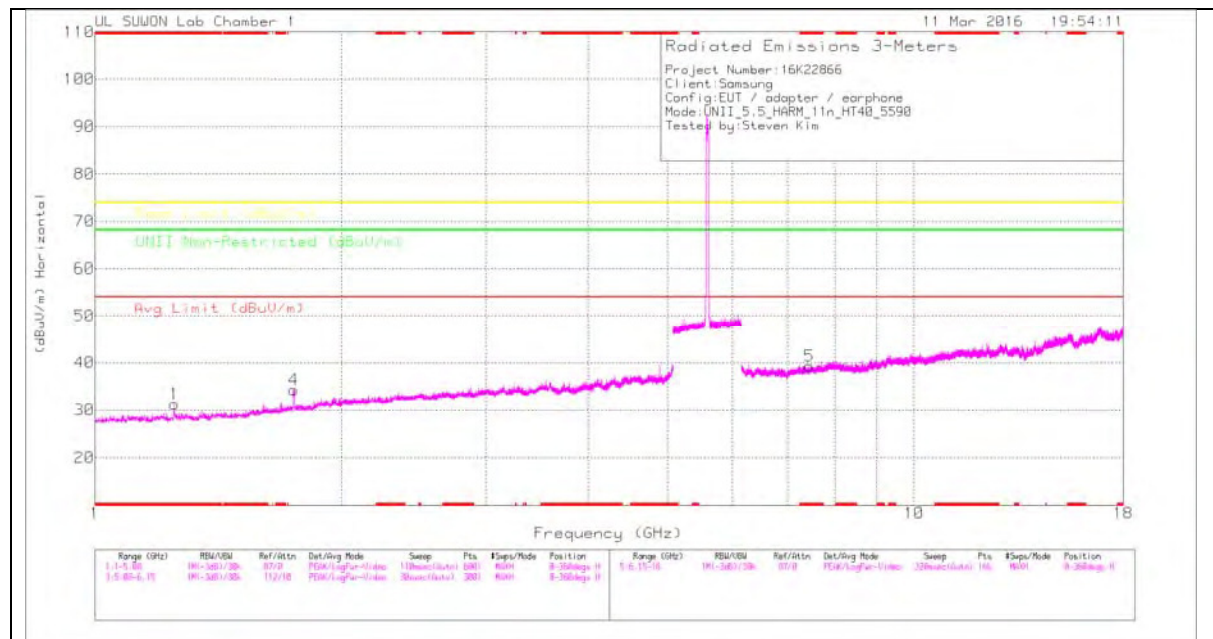
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.347	46.23	PK-U	35.8	-30.5	0	51.53	-	-	74	-22.47	-	-	82	184	V
* 7.347	37.15	ADR	35.8	-30.5	0	42.45	54	-11.55	-	-	-	-	82	184	V

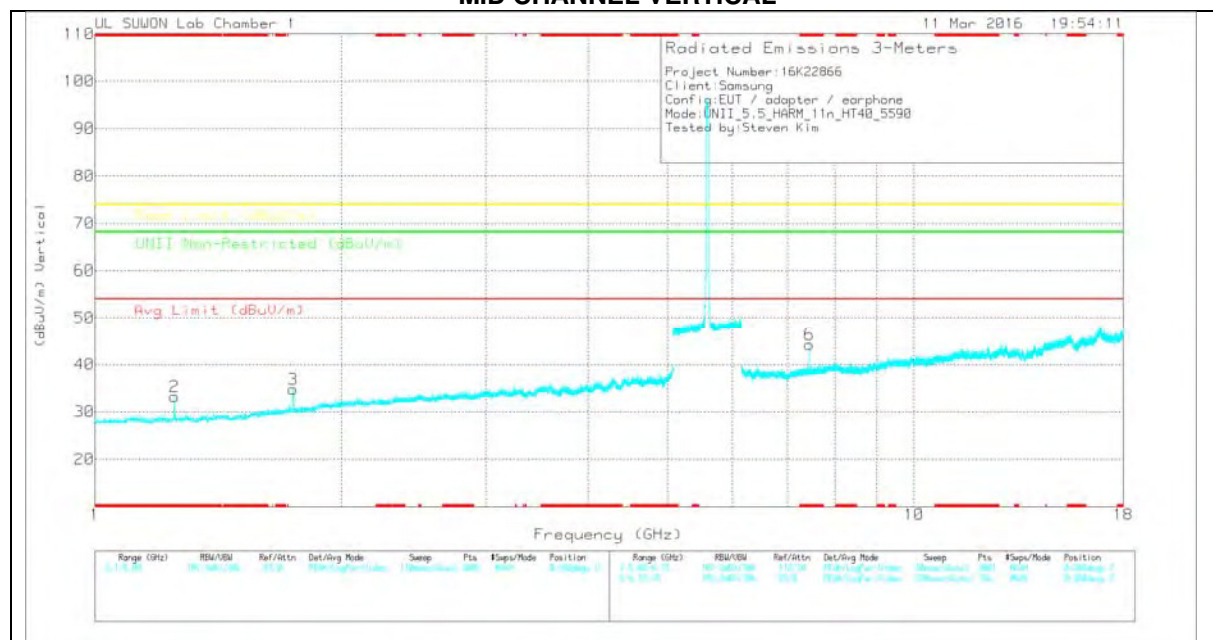
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

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 8717)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.19	PK	28.3	-40.2	0	31.29	-	-	74	-42.71	-	-	0-360	200	H
4	1.748	43.71	PK	29.8	-39.2	0	34.31	-	-	-	-	68.2	-33.89	0-360	100	H
2	* 1.25	45.14	PK	28.3	-40.2	0	33.24	-	-	74	-40.76	-	-	0-360	200	V
3	1.747	44.22	PK	29.8	-39.2	0	34.82	-	-	-	-	68.2	-33.38	0-360	200	V
5	* 7.453	34.04	PK	35.8	-30.5	0	39.34	-	-	74	-34.66	-	-	0-360	200	H
6	* 7.453	38.97	PK	35.8	-30.5	0	44.27	-	-	74	-29.73	-	-	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

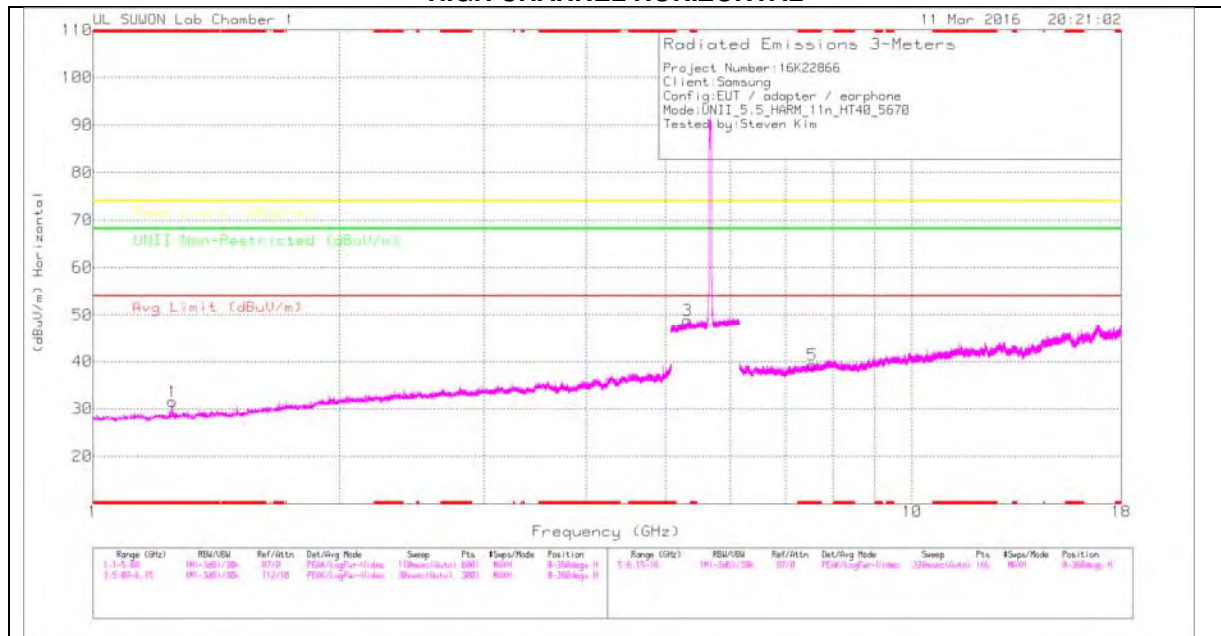
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.453	46.67	PK-U	35.8	-30.5	0	51.97	-	-	74	-22.03	-	-	173	104	V
* 7.453	38.14	ADR	35.8	-30.5	0	43.44	54	-10.56	-	-	-	-	173	104	V

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

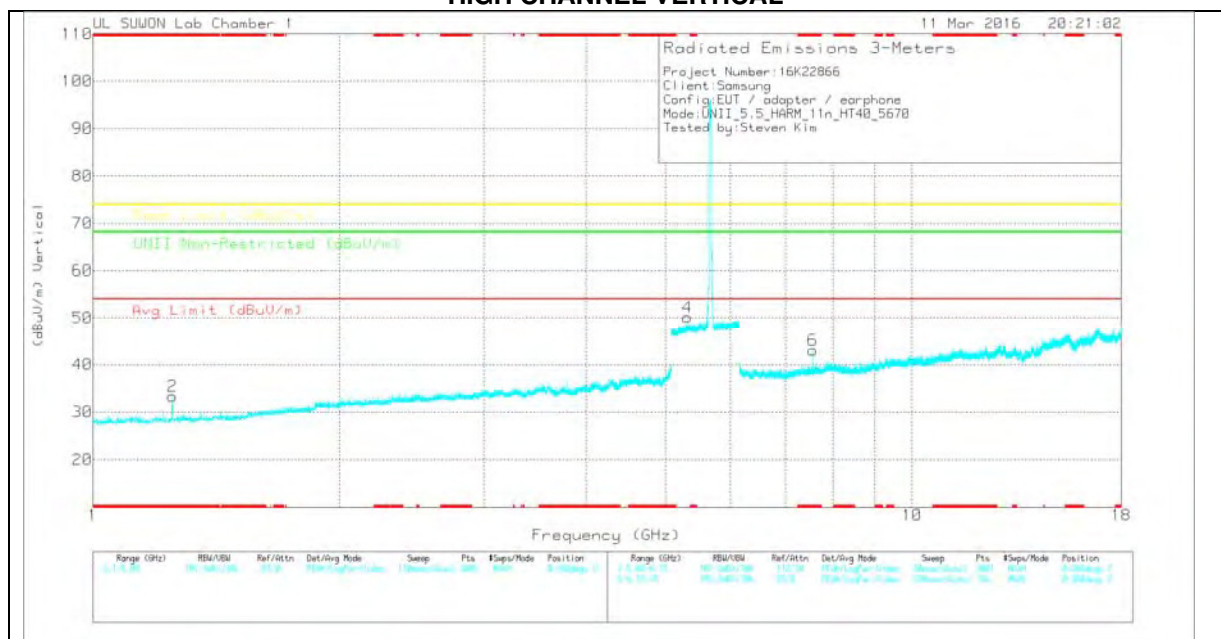
PK-U - U-NII: Maximum Peak

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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.41	PK	28.3	-40.2	0	31.51	-	-	74	-42.49	-	-	0-360	200	H
2	* 1.25	45.22	PK	28.3	-40.2	0	33.32	-	-	74	-40.68	-	-	0-360	200	V
3	5.318	37.61	PK	34.5	-23.3	0	48.81	-	-	-	-	68.2	-19.39	0-360	100	H
4	5.318	38.93	PK	34.5	-23.3	0	50.13	-	-	-	-	68.2	-18.07	0-360	100	V
5	* 7.55	33.43	PK	35.9	-30	0	39.33	-	-	74	-34.67	-	-	0-360	100	H
6	* 7.559	37.09	PK	35.9	-30	0	42.99	-	-	74	-31.01	-	-	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016871 7)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.318	48.66	PK-U	34.5	-23.3	0	59.86	-	-	-	-	68.2	-8.34	55	101	V
* 7.545	31.33	ADR	35.8	-30	0	37.13	54	-16.87	-	-	-	-	201	212	V
* 7.548	43.86	PK-U	35.9	-30	0	49.76	-	-	74	-24.24	-	-	201	212	V

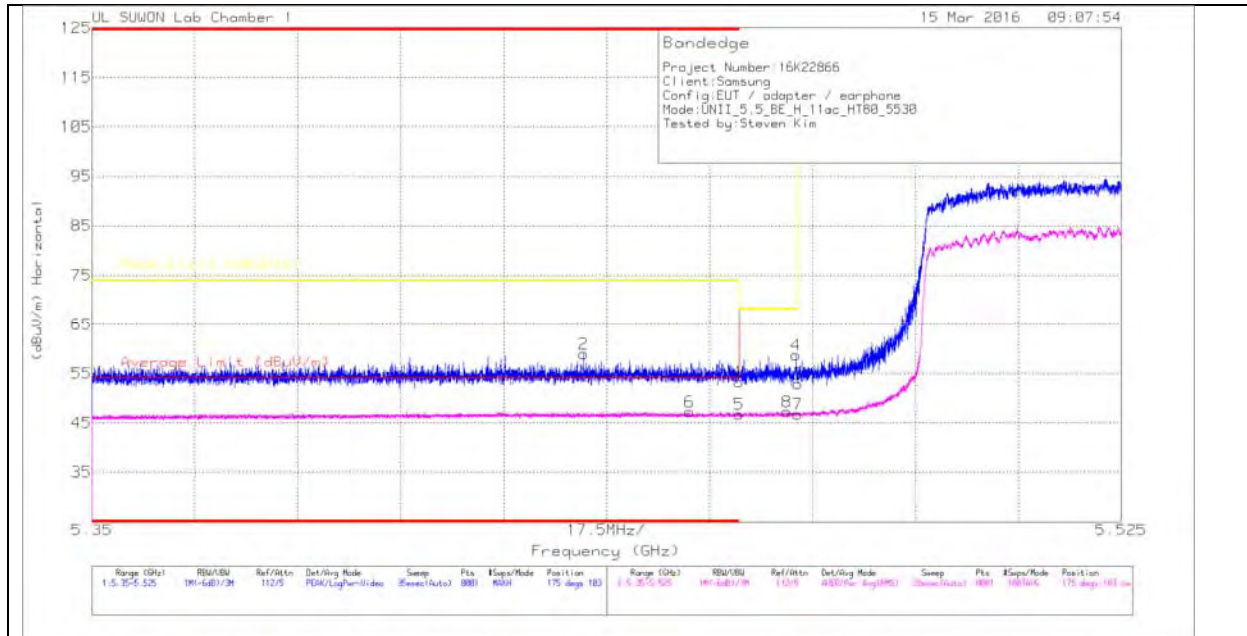
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.3.4. TX ABOVE 1GHz 802.11ac HT80 2TX CDD MODE IN THE 5.5GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

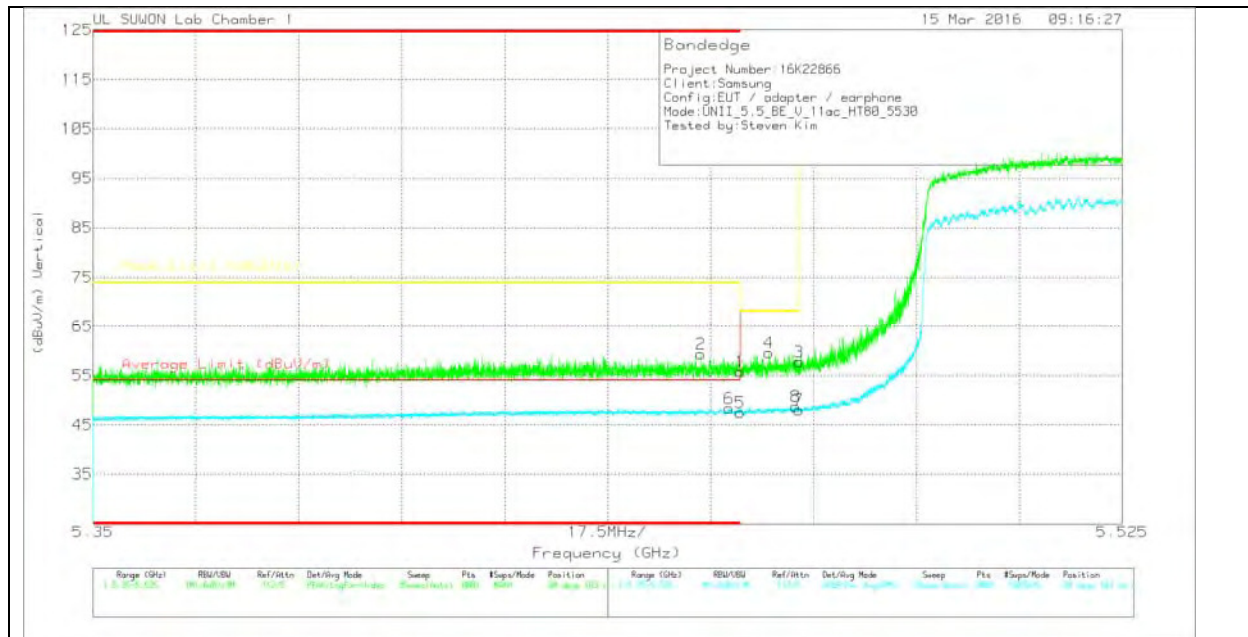
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	41.92	Pk	34.6	-23.2	0	53.32	-	-	74	-20.68	175	103	H
2	* 5.434	47.53	Pk	34.6	-23.2	0	58.93	-	-	74	-15.07	175	103	H
3	5.47	41.44	Pk	34.6	-23.1	0	52.94	-	-	68.2	-15.26	175	103	H
4	5.47	47.27	Pk	34.6	-23.1	0	58.77	-	-	68.2	-9.43	175	103	H
5	* 5.46	34.19	RMS	34.6	-23.2	1.11	46.7	54	-7.3	-	-	175	103	H
6	* 5.452	34.75	RMS	34.6	-23.2	1.11	47.26	54	-6.74	-	-	175	103	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 17_150619)	Path_2	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	44.35	Pk	34.6	-23.2	0	55.75	-	-	74	-18.25	68	103	V
2	* 5.453	47.94	Pk	34.6	-23.2	0	59.34	-	-	74	-14.66	68	103	V
3	5.47	46.25	Pk	34.6	-23.1	0	57.75	-	-	68.2	-10.45	68	103	V
4	5.465	48.07	Pk	34.6	-23.1	0	59.57	-	-	68.2	-8.63	68	103	V
5	* 5.46	35.02	RMS	34.6	-23.2	1.11	47.53	54	-6.47	-	-	68	103	V
6	* 5.458	35.79	RMS	34.6	-23.2	1.11	48.3	54	-5.7	-	-	68	103	V

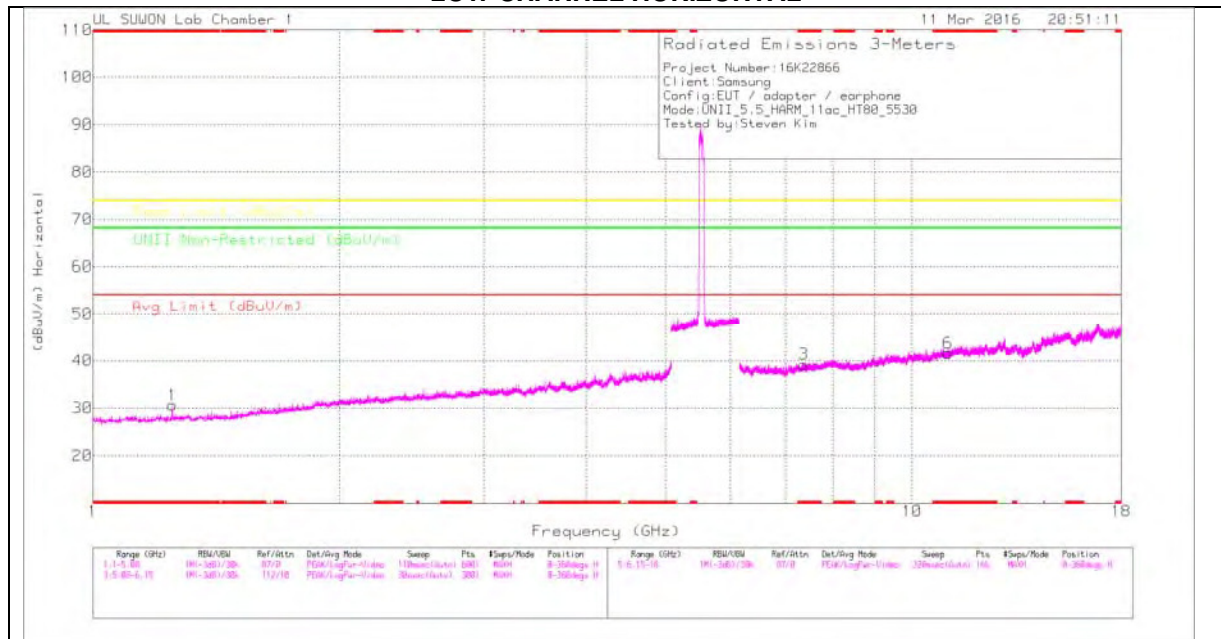
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

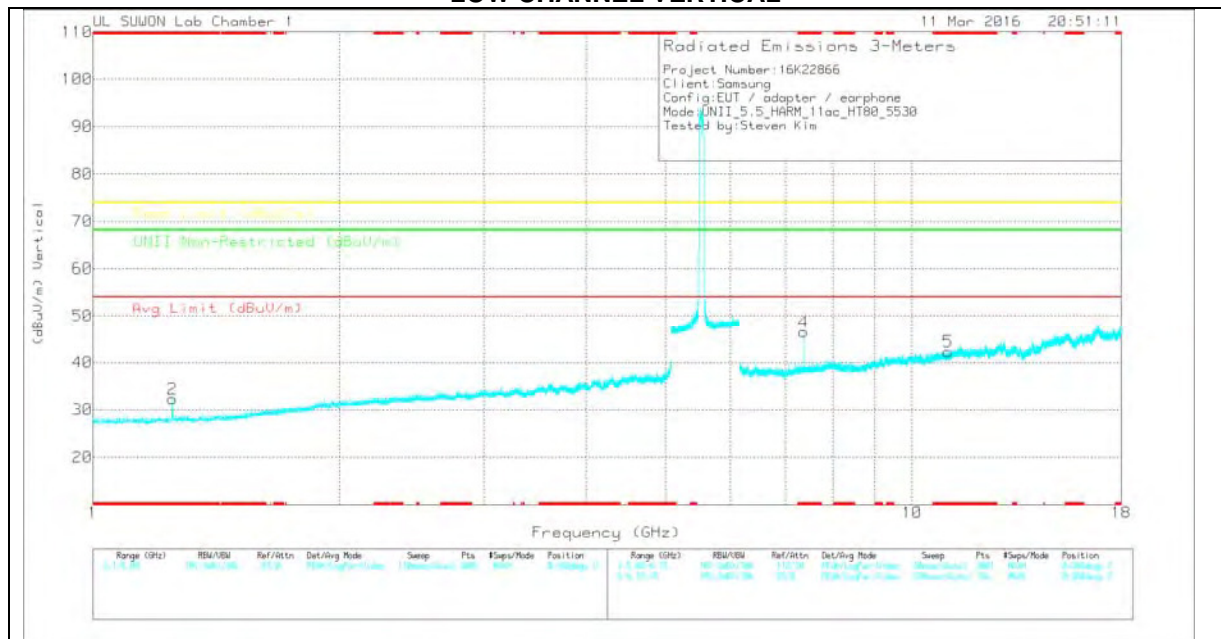
RMS - RMS detection

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 8717_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.47	Pk	28.3	-40.2	0	30.57	-	-	74	-43.43	-	-	0-360	200	H
2	* 1.25	44.25	Pk	28.3	-40.2	0	32.35	-	-	74	-41.65	-	-	0-360	200	V
3	* 7.373	33.83	Pk	35.8	-30.4	0	39.23	-	-	74	-34.77	-	-	0-360	200	H
6	* 11.067	30.36	Pk	38.2	-27	0	41.56	-	-	74	-32.44	-	-	0-360	100	H
4	* 7.373	41.17	Pk	35.8	-30.4	0	46.57	-	-	74	-27.43	-	-	0-360	100	V
5	* 11.069	31.13	Pk	38.2	-27	0	42.33	-	-	74	-31.67	-	-	0-360	100	V

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

Pk – Peak Detector

Radiated Emissions

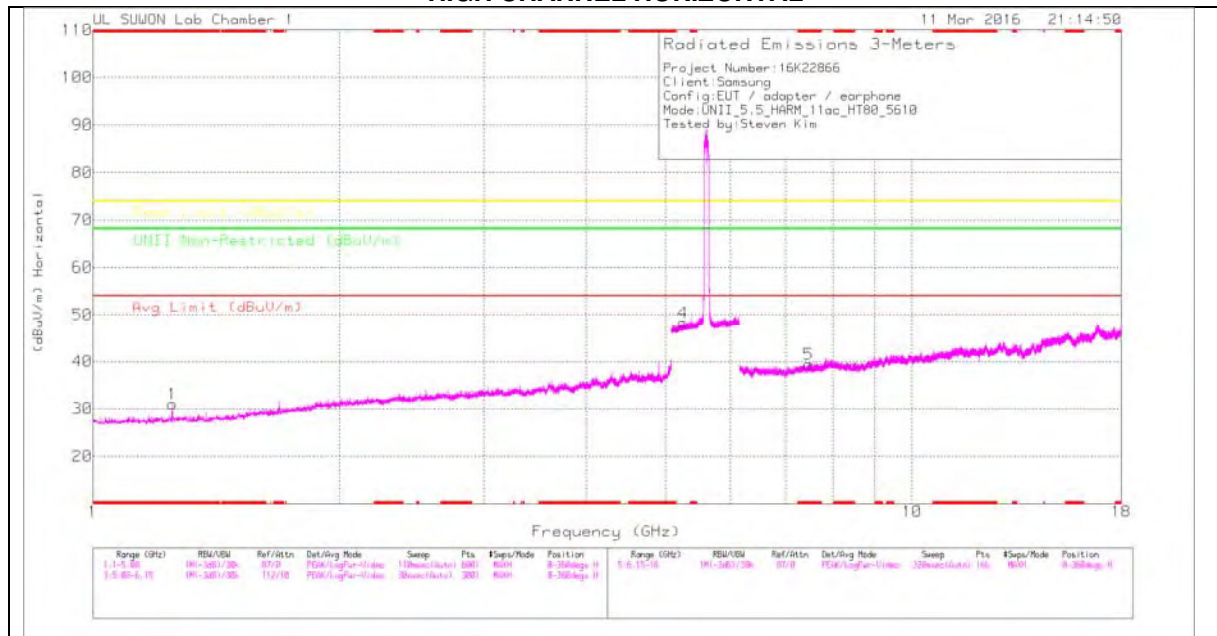
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.373	46.03	PK-U	35.8	-30.4	0	51.43	-	-	74	-22.57	-	-	85	179	V
* 7.373	37.16	ADR	35.8	-30.4	0	42.56	54	-11.44	-	-	-	-	85	179	V

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

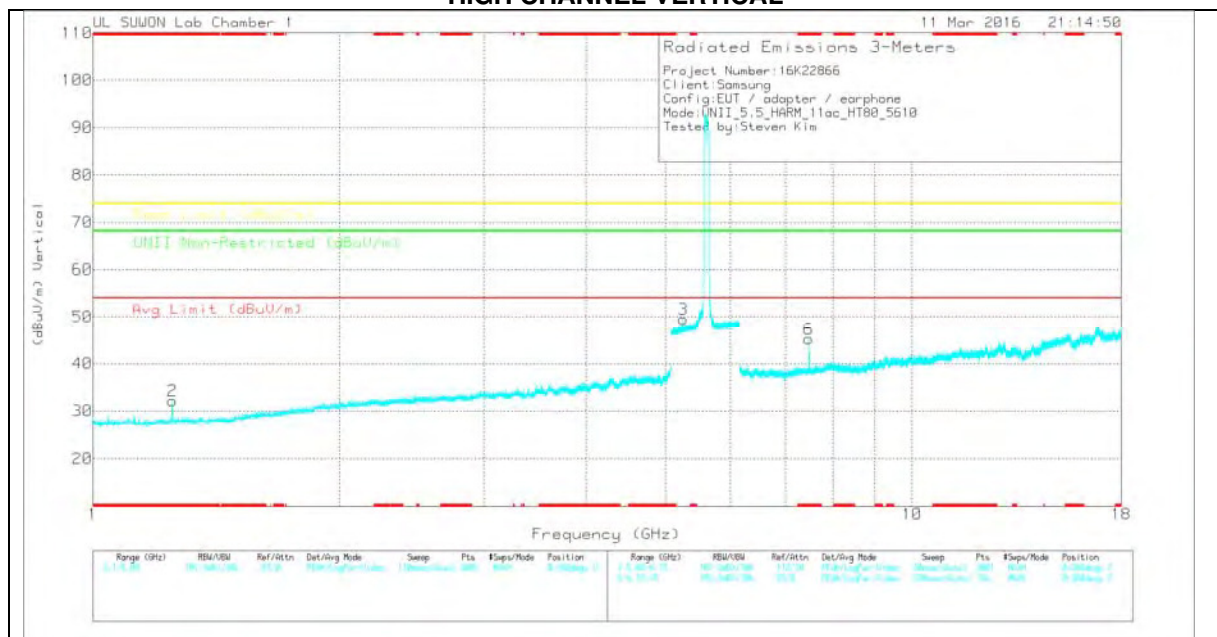
PK-U - U-NII: Maximum Peak

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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.91	Pk	28.3	-40.2	0	31.01	-	-	74	-42.99	-	-	0-360	200	H
2	* 1.25	44.1	Pk	28.3	-40.2	0	32.2	-	-	74	-41.8	-	-	0-360	200	V
4	5.258	37.57	Pk	34.4	-23.6	0	48.37	-	-	-	-	68.2	-19.83	0-360	100	H
3	5.258	38.72	Pk	34.4	-23.6	0	49.52	-	-	-	-	68.2	-18.68	0-360	100	V
5	* 7.48	33.92	Pk	35.8	-30.3	0	39.42	-	-	74	-34.58	-	-	0-360	100	H
6	* 7.479	39.86	Pk	35.8	-30.4	0	45.26	-	-	74	-28.74	-	-	0-360	100	V

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

Pk - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016871 7_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.255	48.55	PK-U	34.4	-23.7	0	59.25	-	-	-	-	68.2	-8.95	68	116	V
* 7.48	40.02	ADR	35.8	-30.3	0	45.52	54	-8.48	-	-	-	-	169	103	V
* 7.48	47.01	PK-U	35.8	-30.3	0	52.51	-	-	74	-21.49	-	-	169	103	V

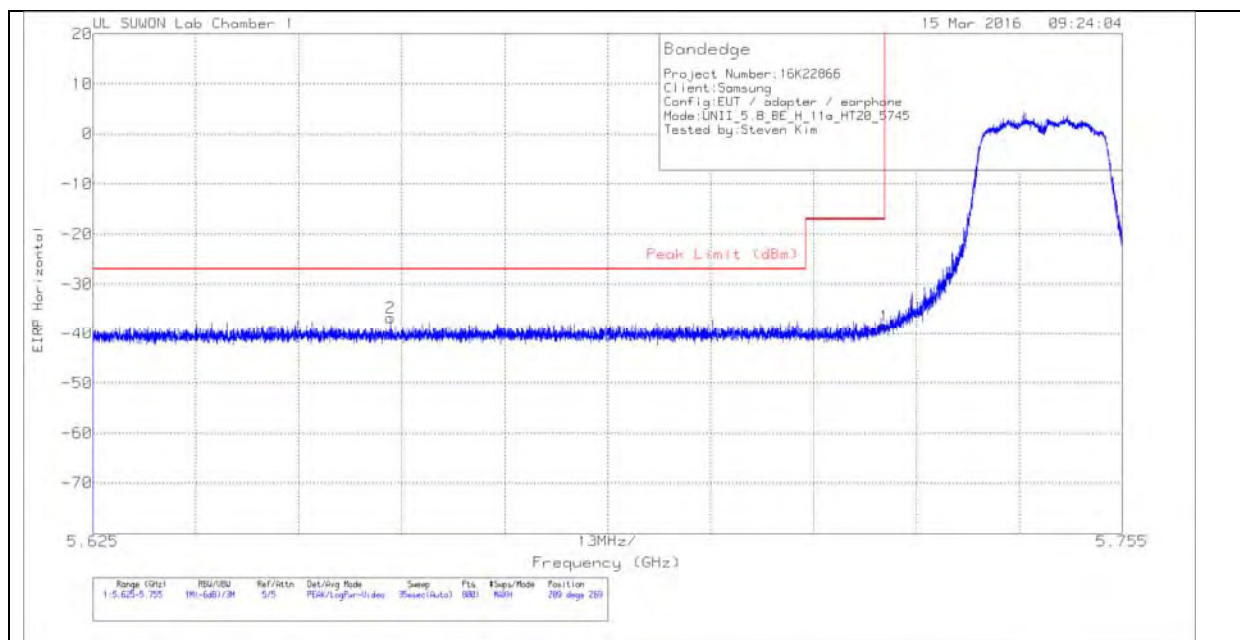
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.4. 5.8 GHz

11.4.1. TX ABOVE 1GHz 802.11a 2TX CDD MODE IN THE 5.8GHz BAND HARMONICS AND SPURIOUS EMISSIONS HORIZONTAL PEAK PLOT



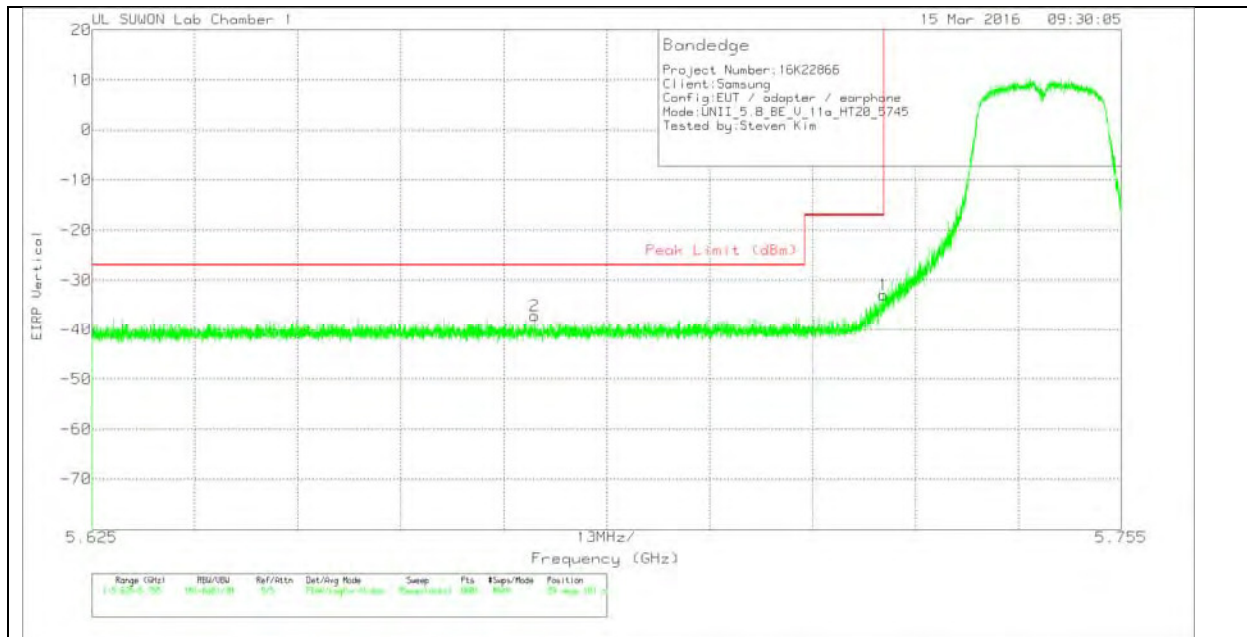
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8717)_150 619	Path_2	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-62.23	Pk	34.8	-22.8	11.8	0	-38.43	-17	-21.43	209	269	H
2	5.663	-60.37	Pk	34.8	-23	11.8	0	-36.77	-27	-9.77	209	269	H

Pk - Peak detector

VERTICAL PEAK PLOT



VERTICAL DATA

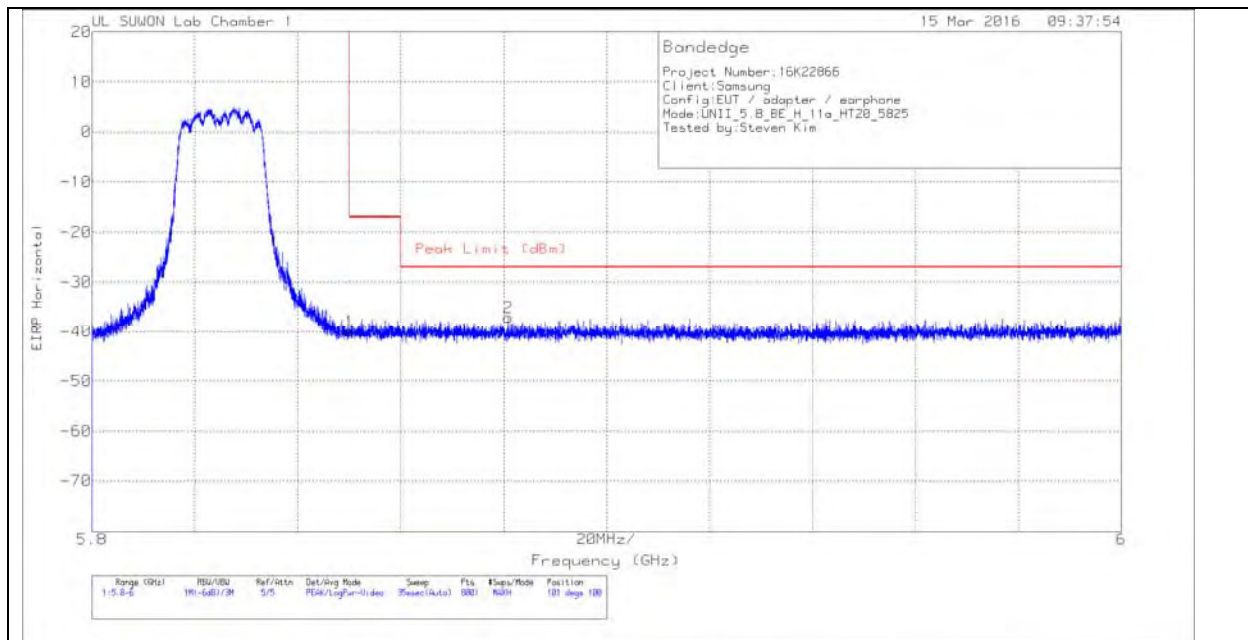
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8717)_150 619	Path_2	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-56.77	Pk	34.8	-22.8	11.8	0	-32.97	-17	-15.97	59	101	V
2	5.681	-60.82	Pk	34.8	-22.9	11.8	0	-37.12	-27	-10.12	59	101	V

Pk - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK PLOT



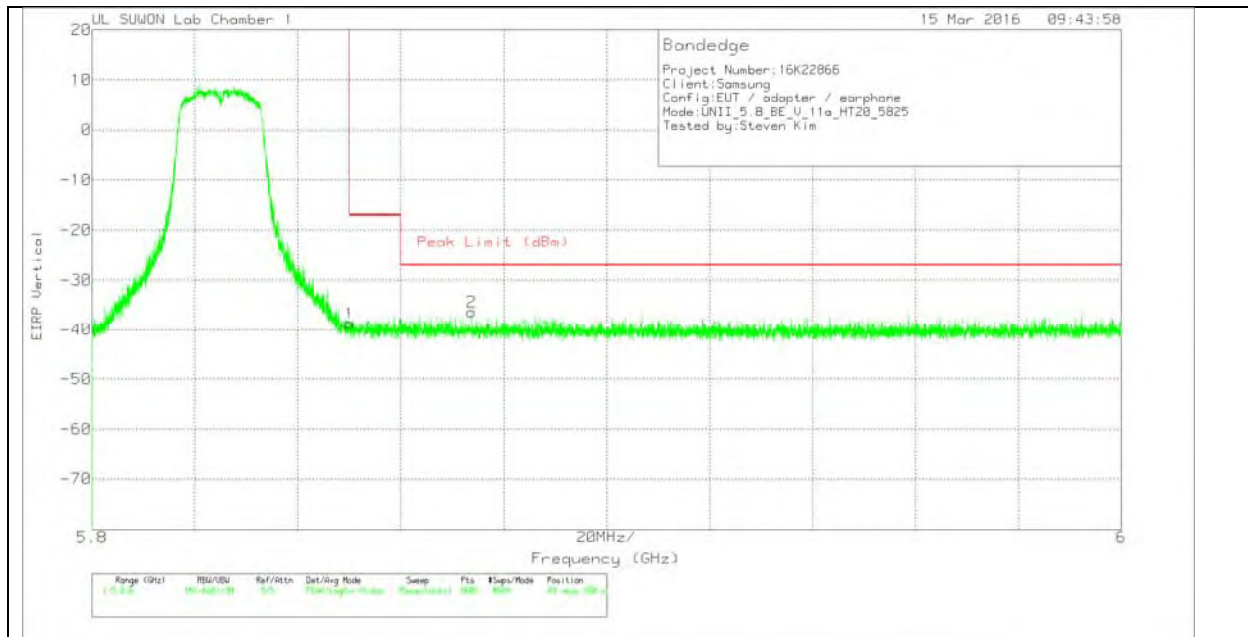
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8717)_150 619	Path_2	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-64.43	Pk	34.9	-22.2	11.8	0	-39.93	-17	-22.93	101	100	H
2	5.881	-61.48	Pk	34.9	-22.3	11.8	0	-37.08	-27	-10.08	101	100	H

Pk - Peak detector

VERTICAL PEAK PLOT



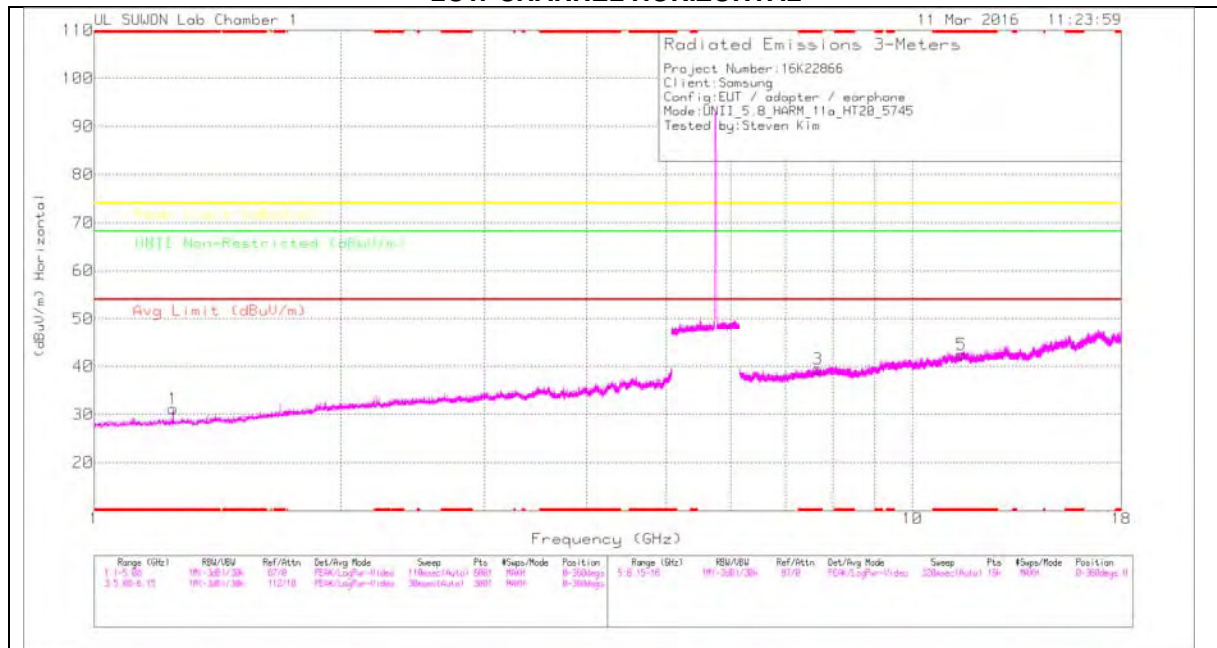
VERTICAL DATA

Trace Markers

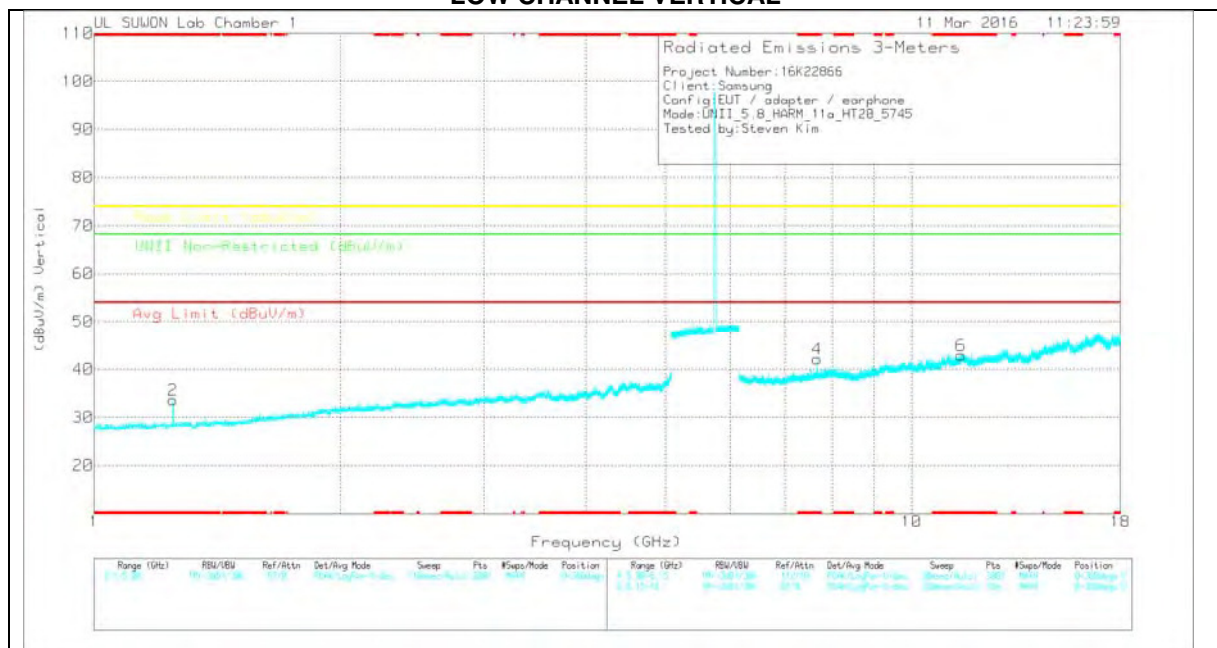
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8717)_150 619	Path_2	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-63.19	Pk	34.9	-22.2	11.8	0	-38.69	-17	-21.69	49	100	V
2	5.874	-60.74	Pk	34.9	-22.3	11.8	0	-36.34	-27	-9.34	49	100	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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.1	PK	28.3	-40.2	0	31.2	-	-	74	-42.8	-	-	0-360	200	H
2	* 1.25	45.49	PK	28.3	-40.2	0	33.59	-	-	74	-40.41	-	-	0-360	200	V
3	* 7.66	33.74	PK	36	-30.3	0	39.44	-	-	74	-34.56	-	-	0-360	100	H
5	* 11.49	30.85	PK	38.6	-27	0	42.45	-	-	74	-31.55	-	-	0-360	100	H
4	* 7.659	36.43	PK	36	-30.3	0	42.13	-	-	74	-31.87	-	-	0-360	100	V
6	* 11.494	31.17	PK	38.6	-26.9	0	42.87	-	-	74	-31.13	-	-	0-360	100	V

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

PK – Peak detector

Radiated Emissions

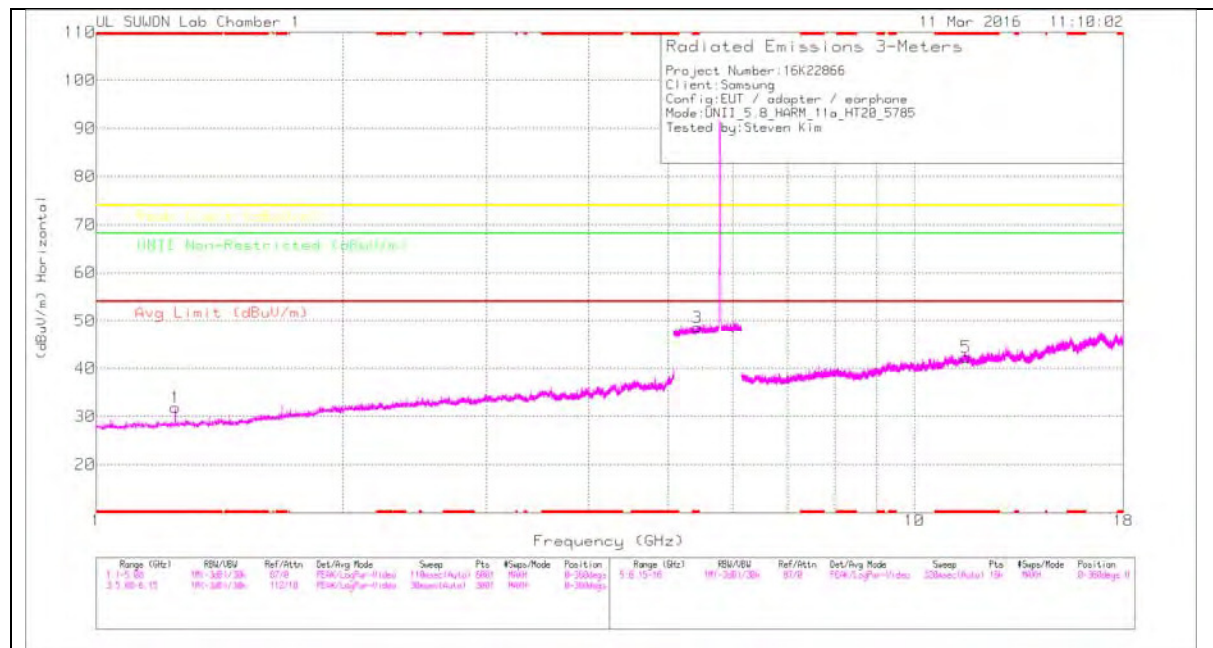
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.661	44.46	PK-U	36	-30.3	0	50.16	-	-	74	-23.84	-	-	124	101	V
* 7.66	34.41	ADR	36	-30.3	0	40.11	54	-13.89	-	-	-	-	124	101	V

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

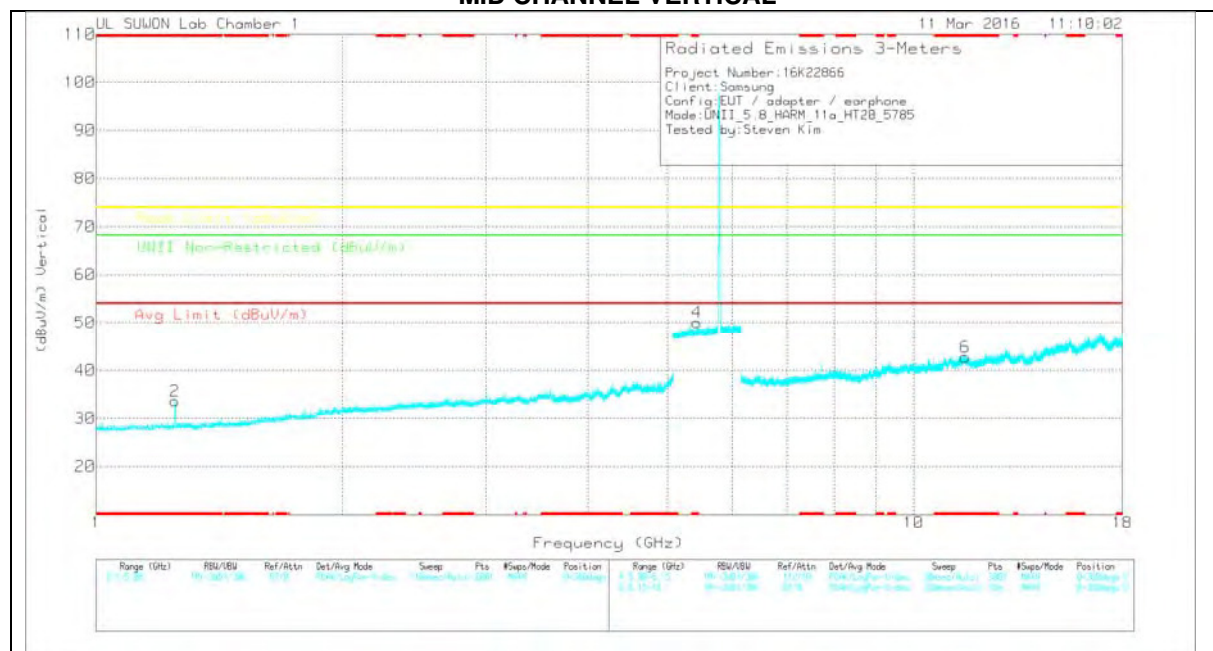
PK-U - U-NII: Maximum Peak

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 8717)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.7	PK	28.3	-40.2	0	31.8	-	-	74	-42.2	-	-	0-360	200	H
2	* 1.25	45.51	PK	28.3	-40.2	0	33.61	-	-	74	-40.39	-	-	0-360	200	V
3	* 5.434	37.22	PK	34.6	-23.2	0	48.62	-	-	74	-25.38	-	-	0-360	100	H
4	* 5.433	38.69	PK	34.6	-23.2	0	50.09	-	-	74	-23.91	-	-	0-360	100	V
5	* 11.57	30.81	PK	38.7	-27.2	0	42.31	-	-	74	-31.69	-	-	0-360	100	H
6	* 11.57	31.24	PK	38.7	-27.2	0	42.74	-	-	74	-31.26	-	-	0-360	200	V

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

PK – Peak detector

Radiated Emissions

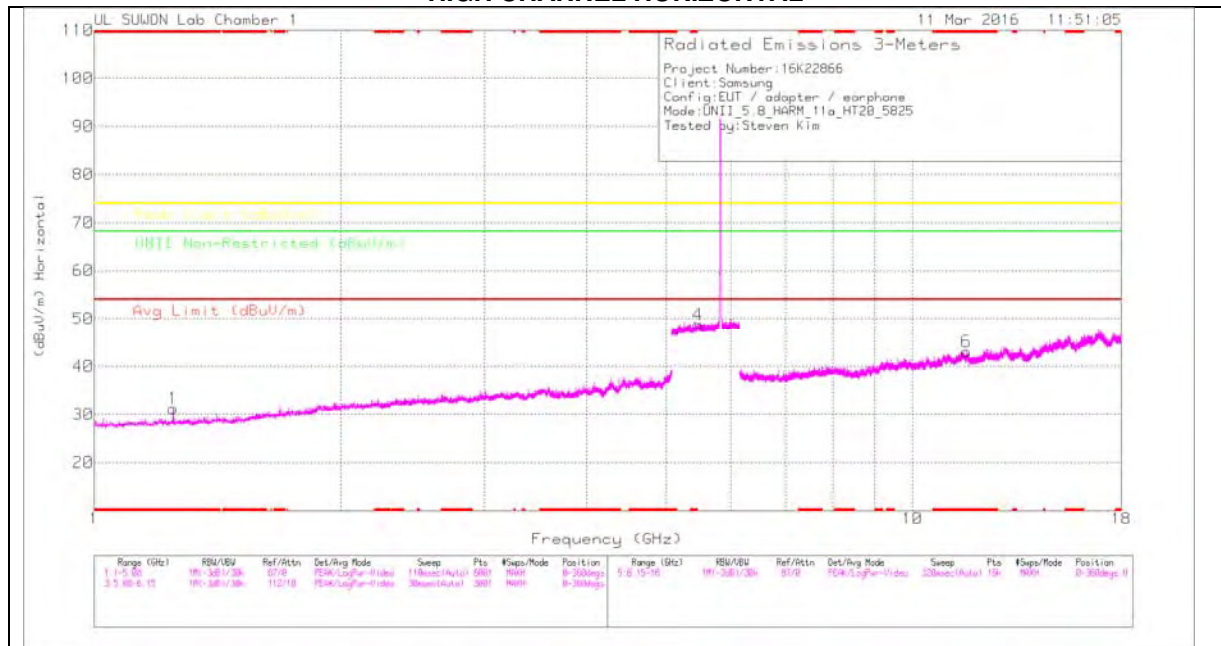
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.661	44.46	PK-U	36	-30.3	0	50.16	-	-	74	-23.84	-	-	124	101	V
* 7.66	34.41	ADR	36	-30.3	0	40.11	54	-13.89	-	-	-	-	124	101	V

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

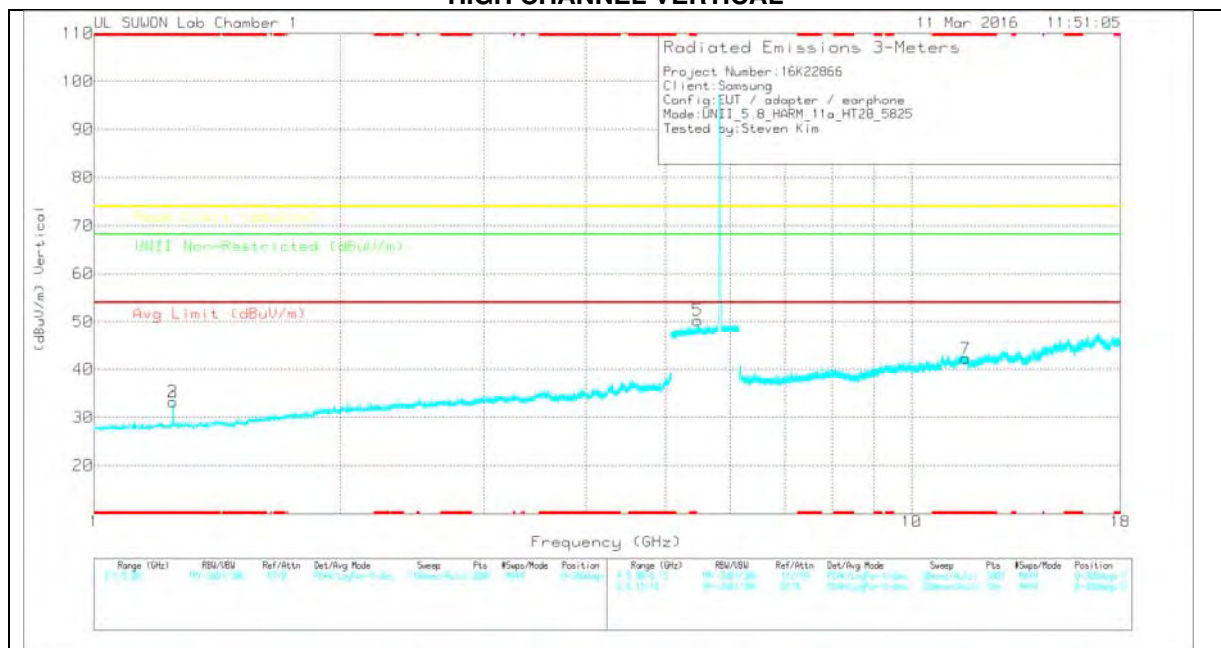
PK-U - U-NII: Maximum Peak

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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.13	PK	28.3	-40.2	0	31.23	-	-	74	-42.77	-	-	0-360	200	H
2	* 1.25	45.16	PK	28.3	-40.2	0	33.26	-	-	74	-40.74	-	-	0-360	200	V
3	5.473	37.28	PK	34.6	-23.1	0	48.78	-	-	-	-	68.2	-19.42	0-360	100	H
4	5.473	38.84	PK	34.6	-23.1	0	50.34	-	-	-	-	68.2	-17.86	0-360	100	V
5	* 11.65	31.98	PK	38.7	-27.6	0	43.08	-	-	74	-30.92	-	-	0-360	200	H
6	* 11.65	31.15	PK	38.7	-27.6	0	42.25	-	-	74	-31.75	-	-	0-360	100	V

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

PK – Peak detector

Radiated Emissions

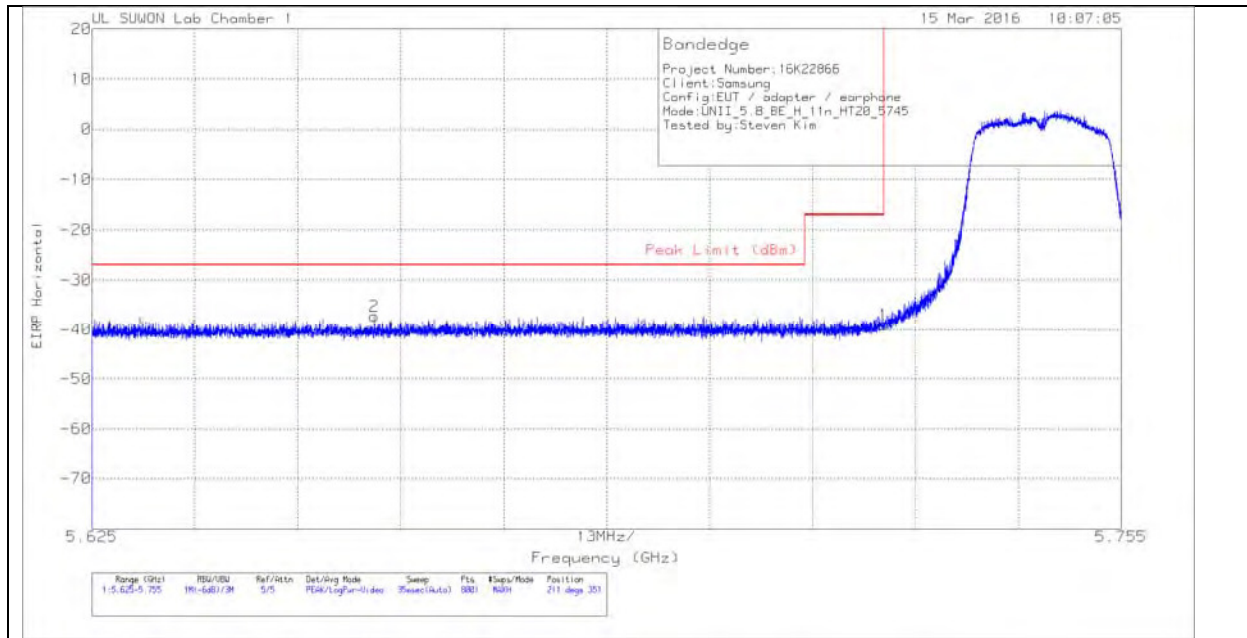
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.661	44.46	PK-U	36	-30.3	0	50.16	-	-	74	-23.84	-	-	124	101	V
* 7.66	34.41	ADR	36	-30.3	0	40.11	54	-13.89	-	-	-	-	124	101	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

11.4.2. TX ABOVE 1GHz 802.11n HT20 2TX CDD MODE IN THE 5.8GHz BAND HARMONICS AND SPURIOUS EMISSIONS HORIZONTAL PEAK PLOT



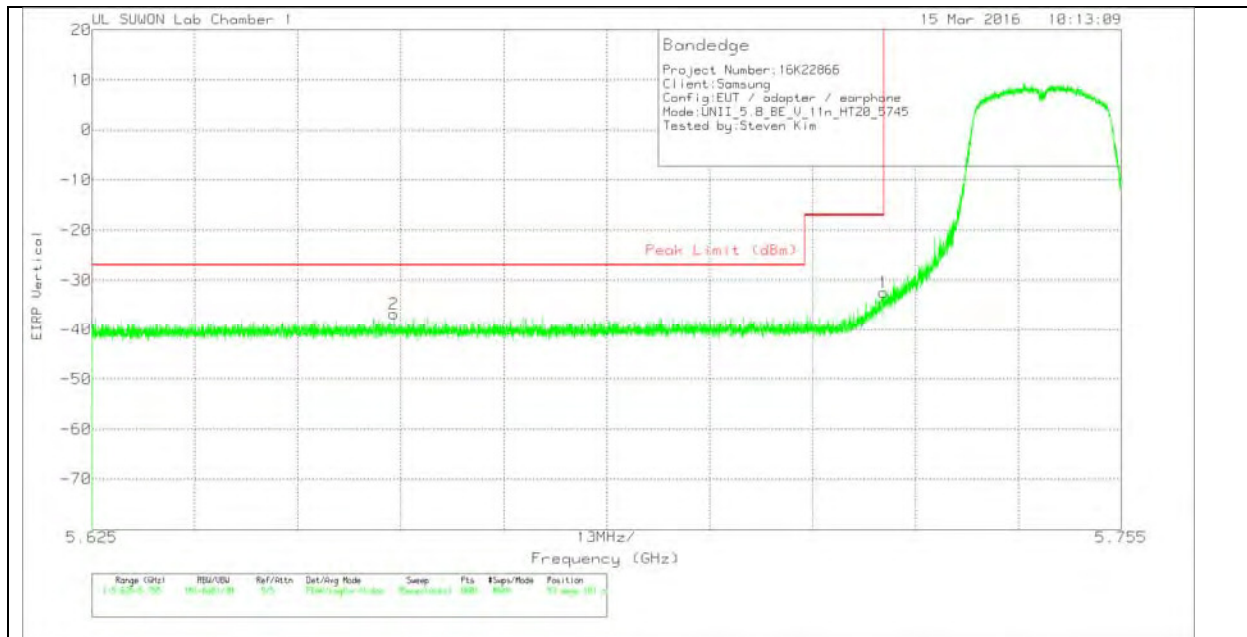
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8717)_150 619	Path_2	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-62.8	Pk	34.8	-22.8	11.8	0	-39	-17	-22	211	351	H
2	5.661	-60.84	Pk	34.8	-23	11.8	0	-37.24	-27	-10.24	211	351	H

Pk - Peak detector

VERTICAL PEAK PLOT



VERTICAL DATA

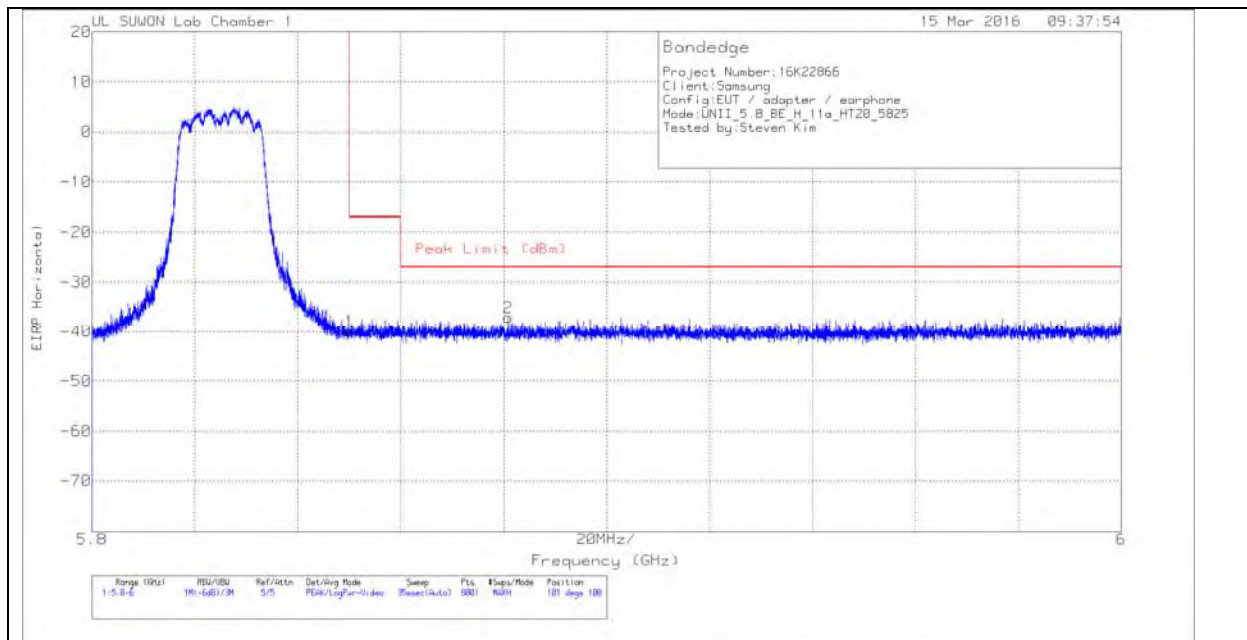
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8717)_150 619	Path_2	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-56.3	Pk	34.8	-22.8	11.8	0	-32.5	-17	-15.5	53	101	V
2	5.663	-60.38	Pk	34.8	-23	11.8	0	-36.78	-27	-9.78	53	101	V

Pk - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



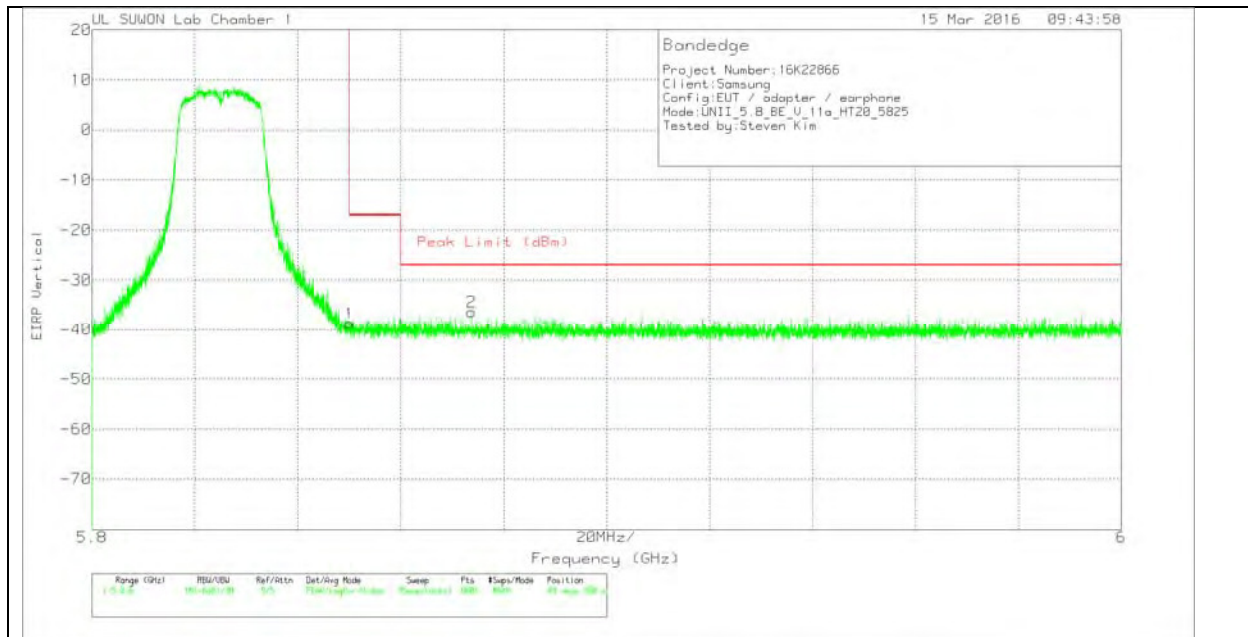
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8717)_150 619	Path_2	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-64.43	Pk	34.9	-22.2	11.8	0	-39.93	-17	-22.93	101	100	H
2	5.881	-61.48	Pk	34.9	-22.3	11.8	0	-37.08	-27	-10.08	101	100	H

Pk - Peak detector

VERTICAL PEAK PLOT



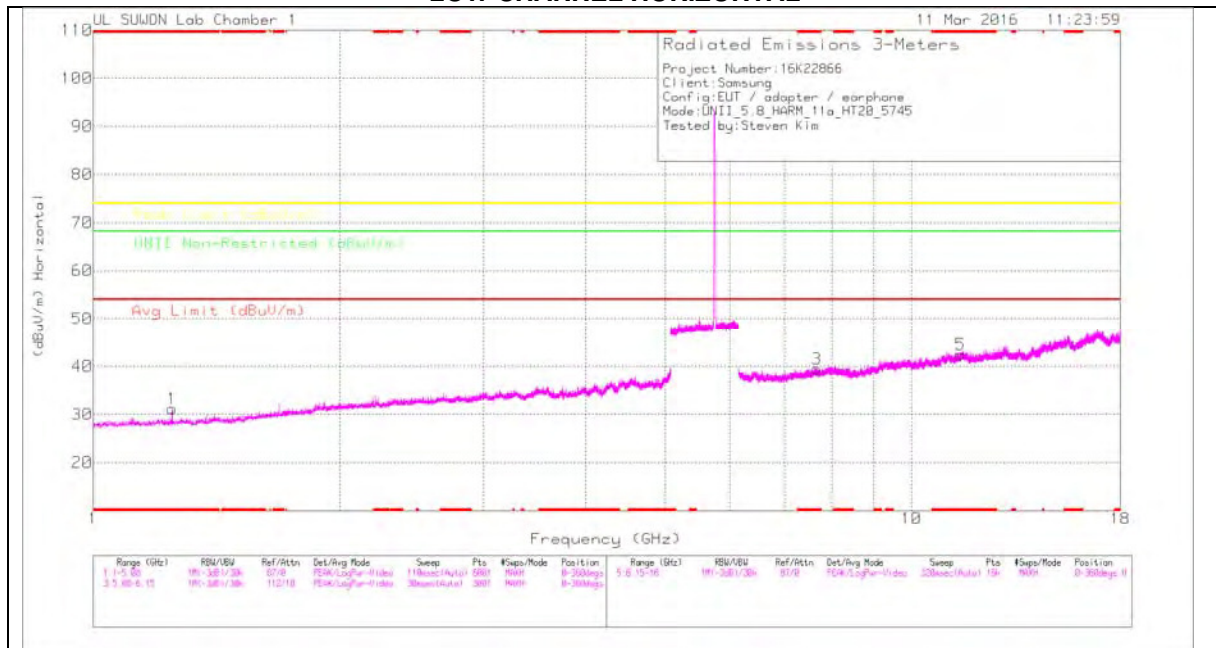
VERTICAL DATA

Trace Markers

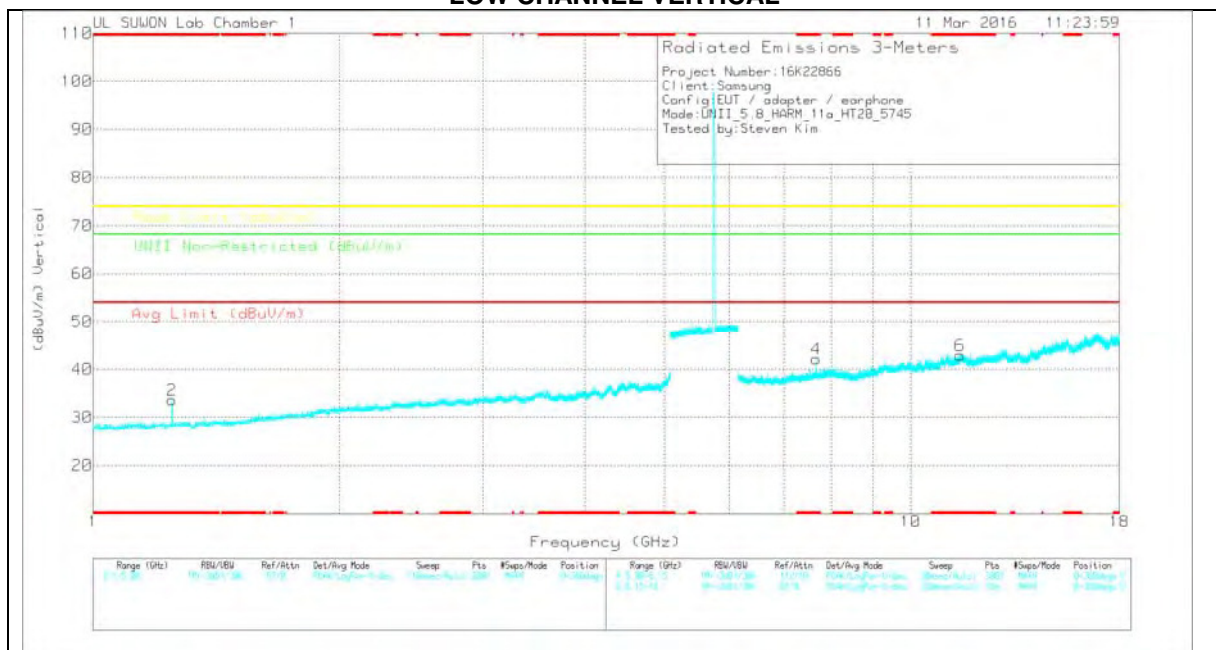
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8717)_150 619	Path_2	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-63.19	Pk	34.9	-22.2	11.8	0	-38.69	-17	-21.69	49	100	V
2	5.874	-60.74	Pk	34.9	-22.3	11.8	0	-36.34	-27	-9.34	49	100	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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.1	PK	28.3	-40.2	0	31.2	-	-	74	-42.8	-	-	0-360	200	H
2	* 1.25	45.49	PK	28.3	-40.2	0	33.59	-	-	74	-40.41	-	-	0-360	200	V
3	* 7.66	33.74	PK	36	-30.3	0	39.44	-	-	74	-34.56	-	-	0-360	100	H
5	* 11.49	30.85	PK	38.6	-27	0	42.45	-	-	74	-31.55	-	-	0-360	100	H
4	* 7.659	36.43	PK	36	-30.3	0	42.13	-	-	74	-31.87	-	-	0-360	100	V
6	* 11.494	31.17	PK	38.6	-26.9	0	42.87	-	-	74	-31.13	-	-	0-360	100	V

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

PK – Peak detector

Radiated Emissions

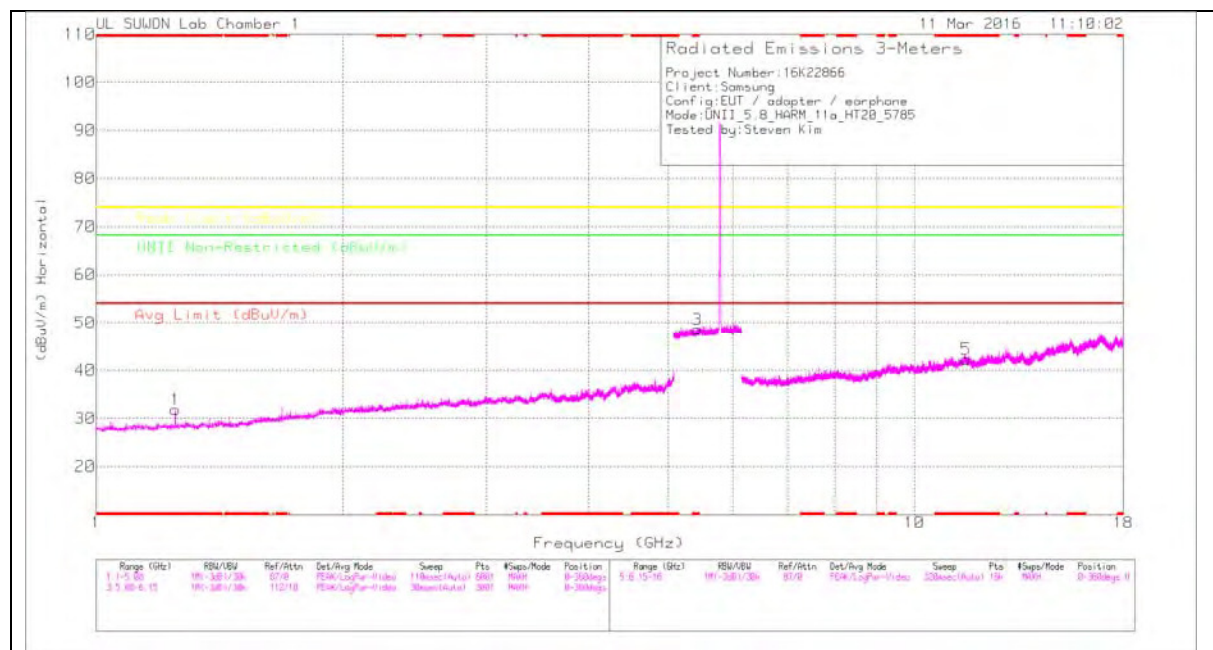
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.661	44.46	PK-U	36	-30.3	0	50.16	-	-	74	-23.84	-	-	124	101	V
* 7.66	34.41	ADR	36	-30.3	0	40.11	54	-13.89	-	-	-	-	124	101	V

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

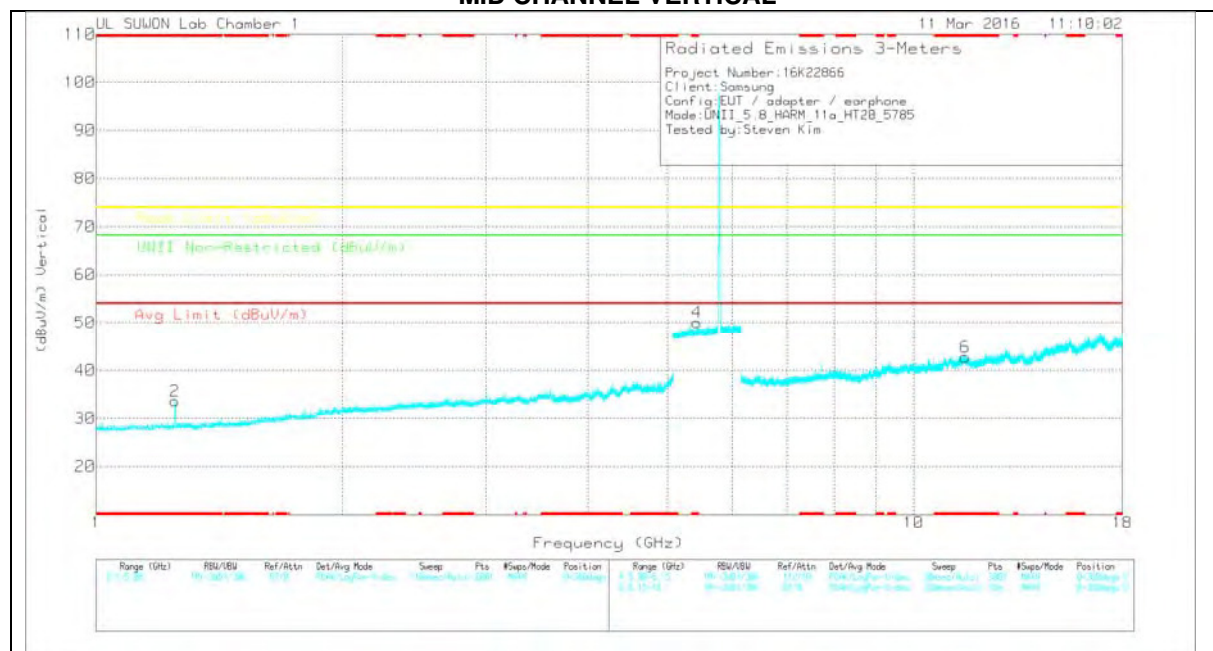
PK-U - U-NII: Maximum Peak

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 8717)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.7	PK	28.3	-40.2	0	31.8	-	-	74	-42.2	-	-	0-360	200	H
2	* 1.25	45.51	PK	28.3	-40.2	0	33.61	-	-	74	-40.39	-	-	0-360	200	V
3	* 5.434	37.22	PK	34.6	-23.2	0	48.62	-	-	74	-25.38	-	-	0-360	100	H
4	* 5.433	38.69	PK	34.6	-23.2	0	50.09	-	-	74	-23.91	-	-	0-360	100	V
5	* 11.57	30.81	PK	38.7	-27.2	0	42.31	-	-	74	-31.69	-	-	0-360	100	H
6	* 11.57	31.24	PK	38.7	-27.2	0	42.74	-	-	74	-31.26	-	-	0-360	200	V

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

PK – Peak detector

Radiated Emissions

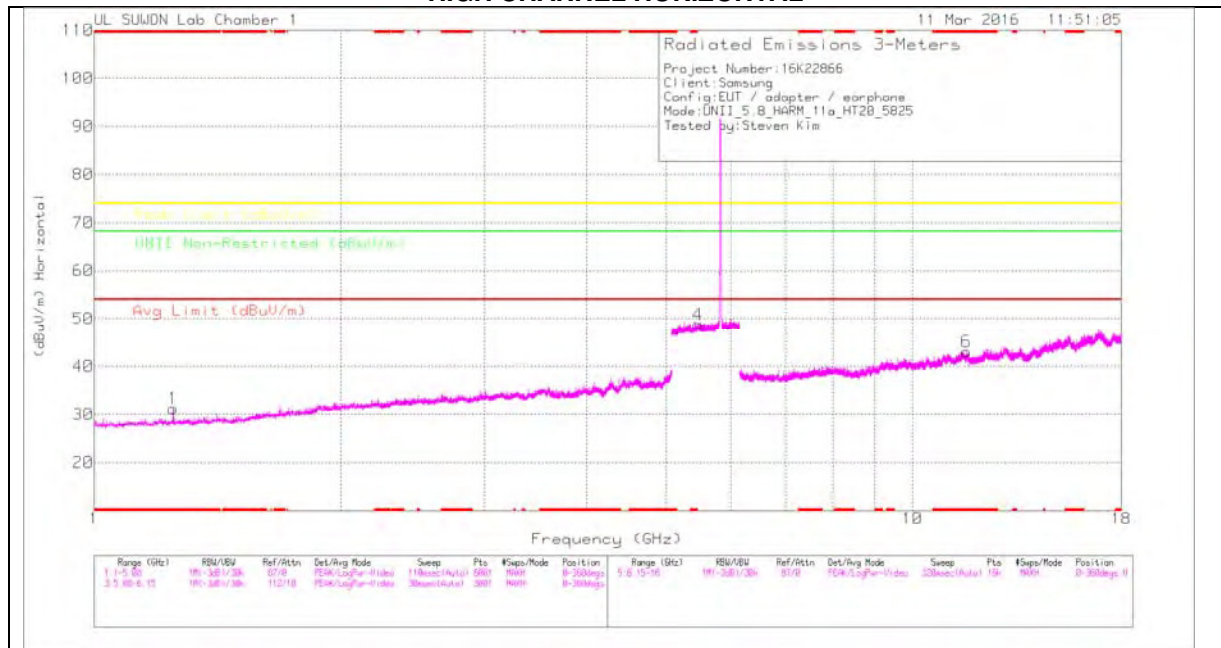
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.661	44.46	PK-U	36	-30.3	0	50.16	-	-	74	-23.84	-	-	124	101	V
* 7.66	34.41	ADR	36	-30.3	0	40.11	54	-13.89	-	-	-	-	124	101	V

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

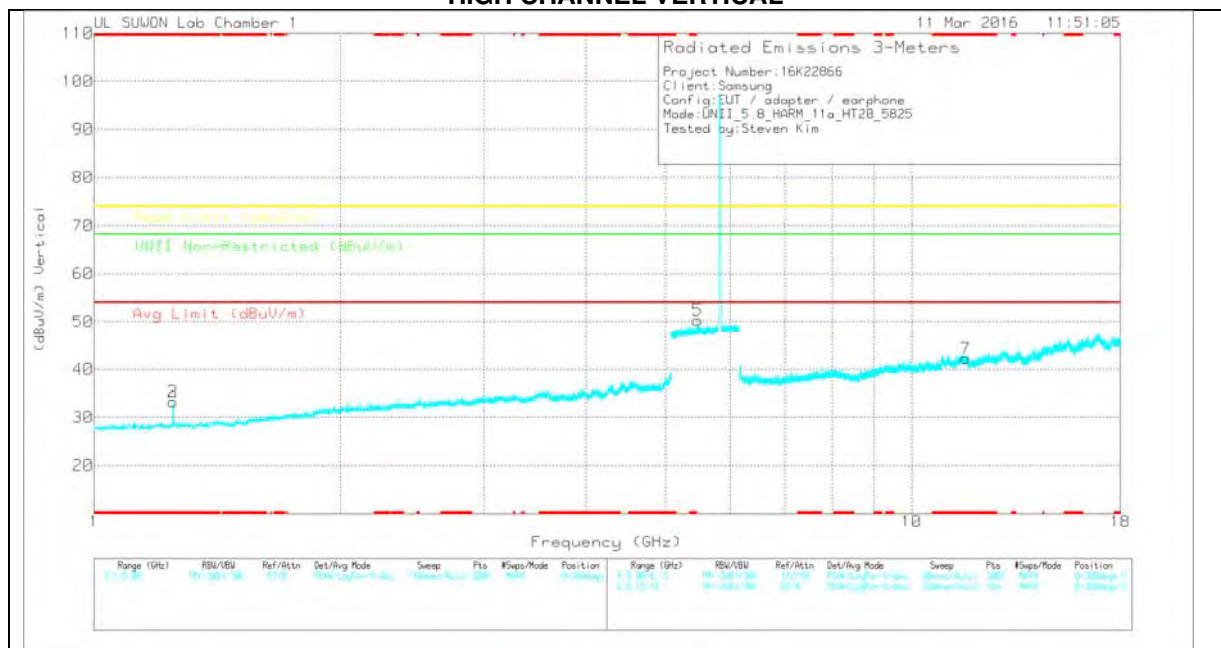
PK-U - U-NII: Maximum Peak

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	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.13	PK	28.3	-40.2	0	31.23	-	-	74	-42.77	-	-	0-360	200	H
2	* 1.25	45.16	PK	28.3	-40.2	0	33.26	-	-	74	-40.74	-	-	0-360	200	V
3	5.473	37.28	PK	34.6	-23.1	0	48.78	-	-	-	-	68.2	-19.42	0-360	100	H
4	5.473	38.84	PK	34.6	-23.1	0	50.34	-	-	-	-	68.2	-17.86	0-360	100	V
5	* 11.65	31.98	PK	38.7	-27.6	0	43.08	-	-	74	-30.92	-	-	0-360	200	H
6	* 11.65	31.15	PK	38.7	-27.6	0	42.25	-	-	74	-31.75	-	-	0-360	100	V

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

PK – Peak detector

Radiated Emissions

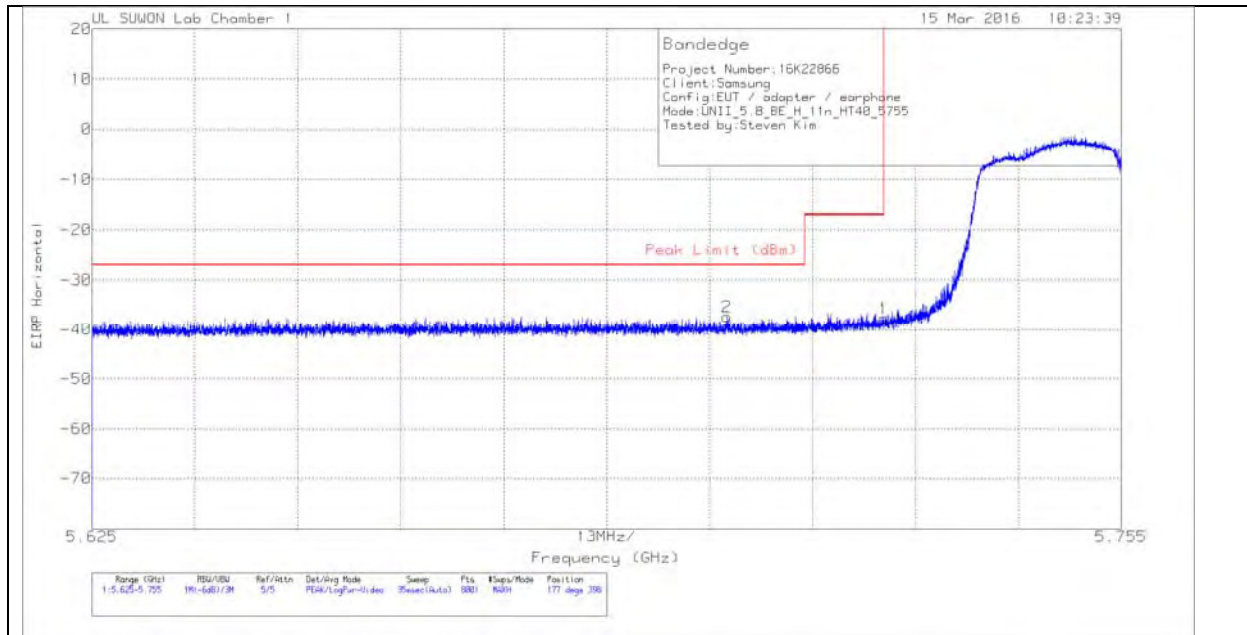
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.661	44.46	PK-U	36	-30.3	0	50.16	-	-	74	-23.84	-	-	124	101	V
* 7.66	34.41	ADR	36	-30.3	0	40.11	54	-13.89	-	-	-	-	124	101	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

11.4.3. TX ABOVE 1GHz 802.11n HT40 2TX CDD MODE IN THE 5.8GHz BAND HARMONICS AND SPURIOUS EMISSIONS HORIZONTAL PEAK PLOT



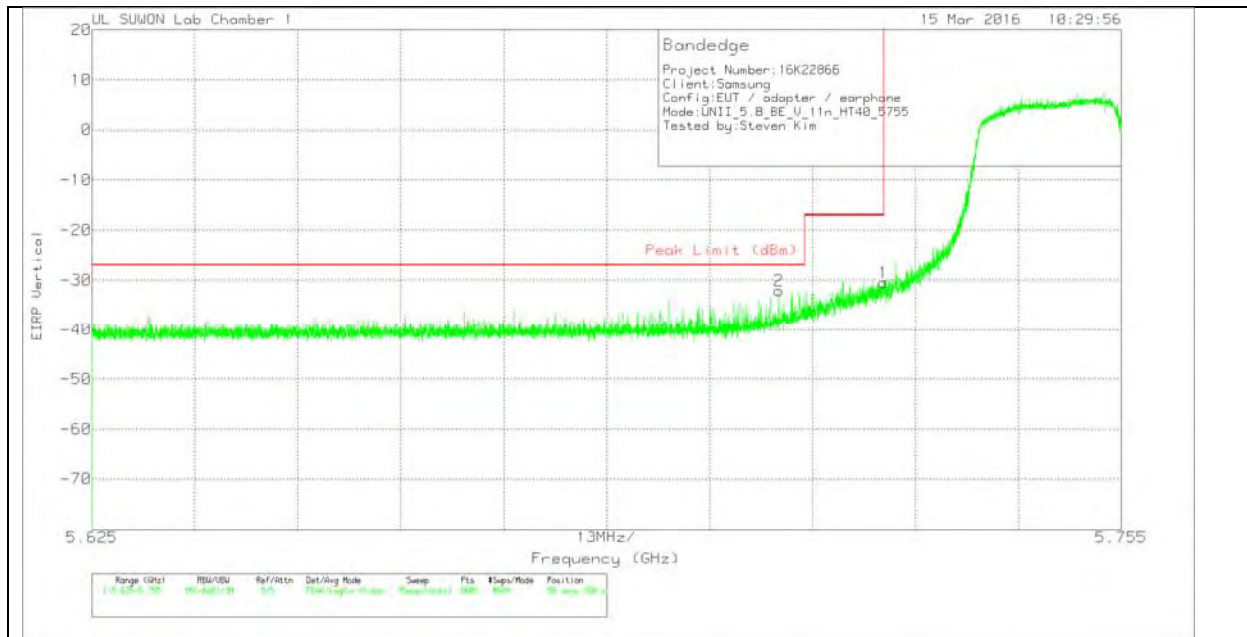
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8717)_150 619	Path_2	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-61.47	Pk	34.8	-22.8	11.8	0	-37.67	-17	-20.67	177	398	H
2	5.705	-61.11	Pk	34.8	-22.8	11.8	0	-37.31	-27	-10.31	177	398	H

Pk - Peak detector

VERTICAL PEAK PLOT



VERTICAL DATA

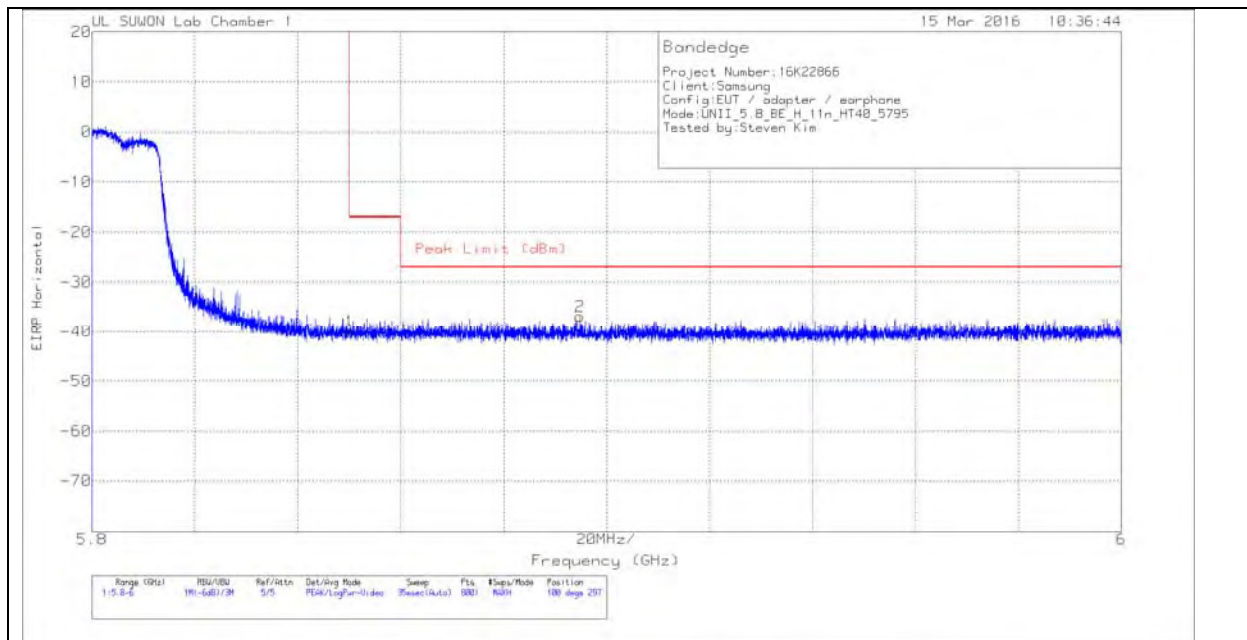
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8717)_150 619	Path_2	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-54.34	Pk	34.8	-22.8	11.8	0	-30.54	-17	-13.54	58	100	V
2	5.712	-55.92	Pk	34.8	-22.8	11.8	0	-32.12	-27	-5.12	58	100	V

Pk - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK PLOT



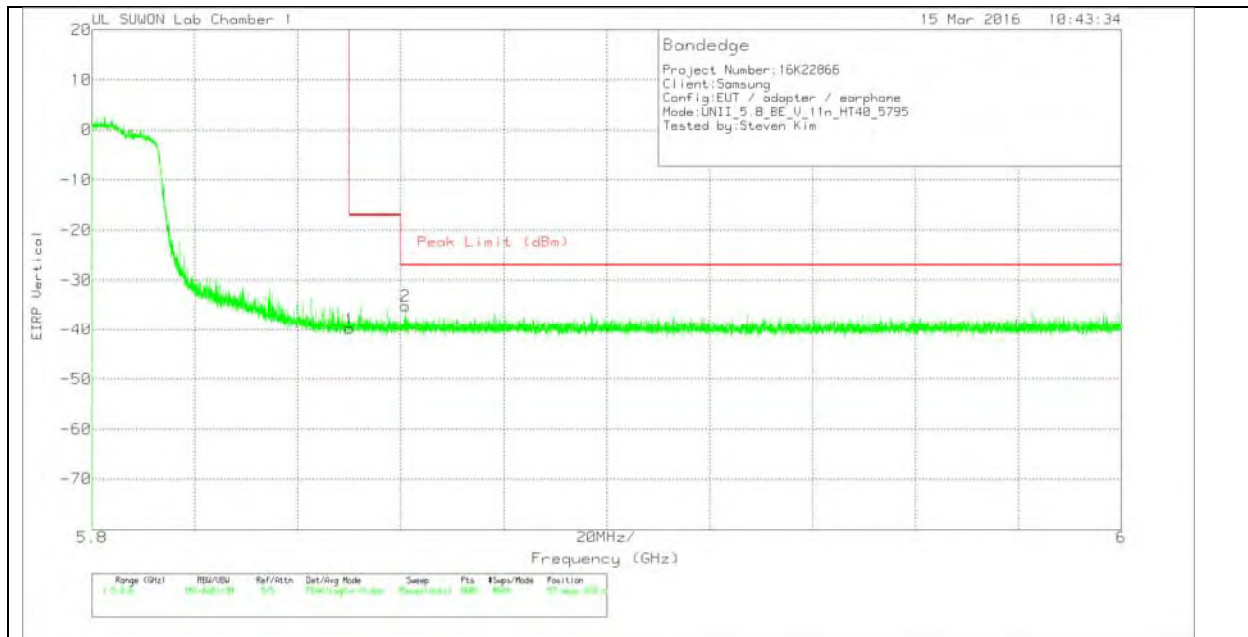
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8717)_150 619	Path_2	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-64.44	Pk	34.9	-22.2	11.8	0	-39.94	-17	-22.94	100	297	H
2	5.895	-61.23	Pk	34.9	-22.3	11.8	0	-36.83	-27	-9.83	100	297	H

Pk - Peak detector

VERTICAL PEAK PLOT



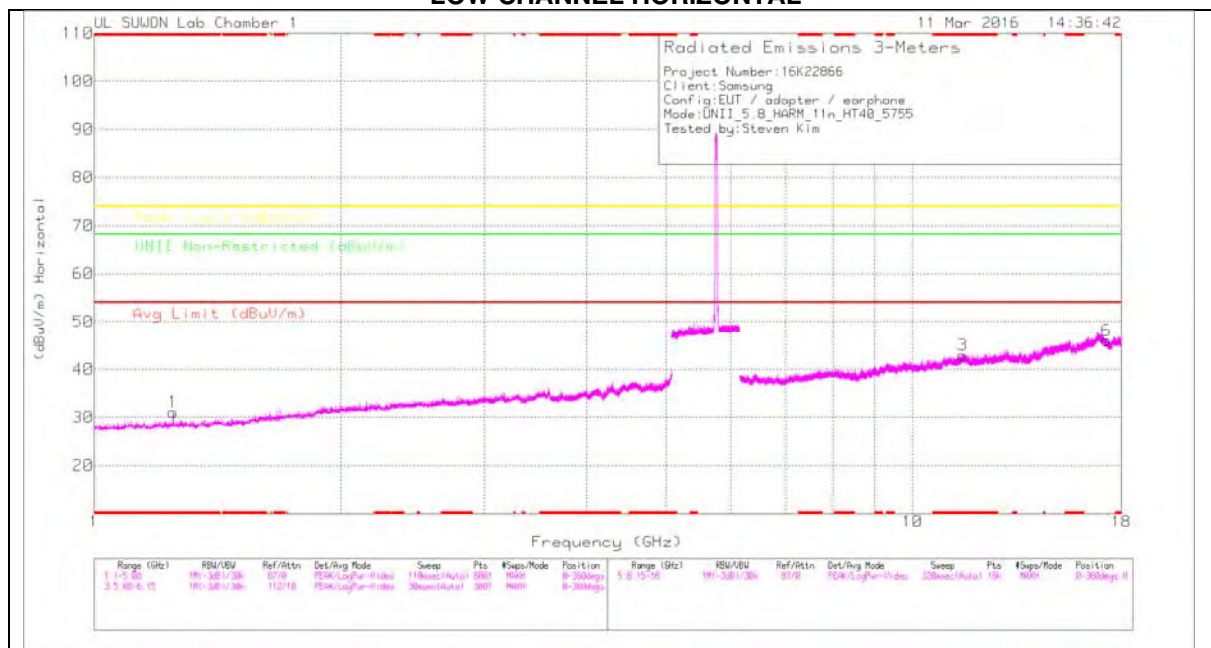
VERTICAL DATA

Trace Markers

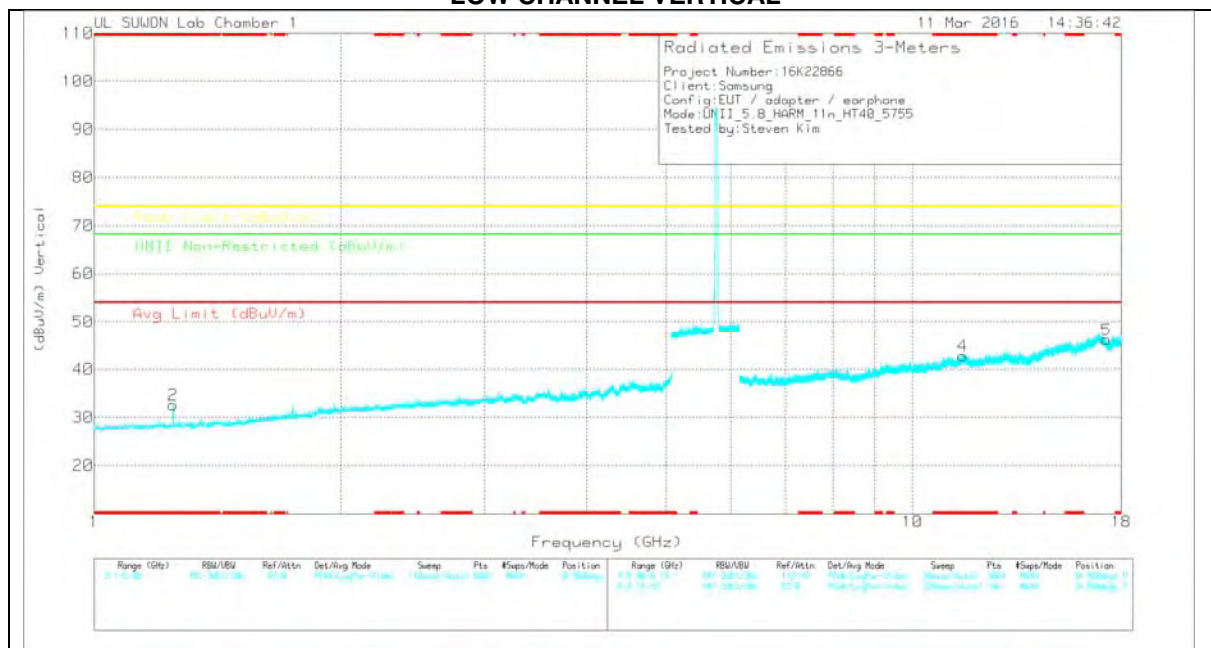
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8717)_150 619	Path_2	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-64.26	Pk	34.9	-22.2	11.8	0	-39.76	-17	-22.76	57	229	V
2	5.861	-59.67	Pk	34.9	-22.2	11.8	0	-35.17	-27	-8.17	57	229	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

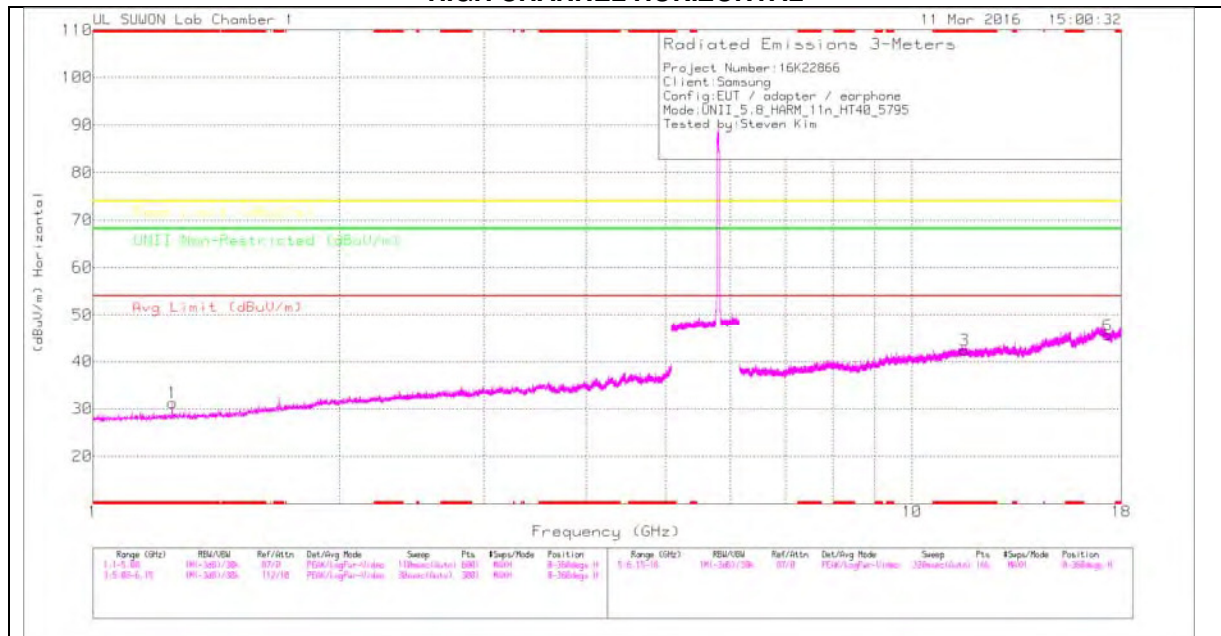
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.02	PK	28.3	-40.2	0	31.12	-	-	74	-42.88	-	-	0-360	200	H
2	* 1.25	44.5	PK	28.3	-40.2	0	32.6	-	-	74	-41.4	-	-	0-360	200	V
3	* 11.516	31.17	PK	38.6	-26.8	0	42.97	-	-	74	-31.03	-	-	0-360	200	H
6	17.268	26.35	PK	41.2	-21.5	0	46.05	-	-	-	-	68.2	-22.15	0-360	200	H
4	* 11.52	30.95	PK	38.6	-26.8	0	42.75	-	-	74	-31.25	-	-	0-360	200	V
5	17.276	26.6	PK	41.2	-21.6	0	46.2	-	-	-	-	68.2	-22	0-360	200	V

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

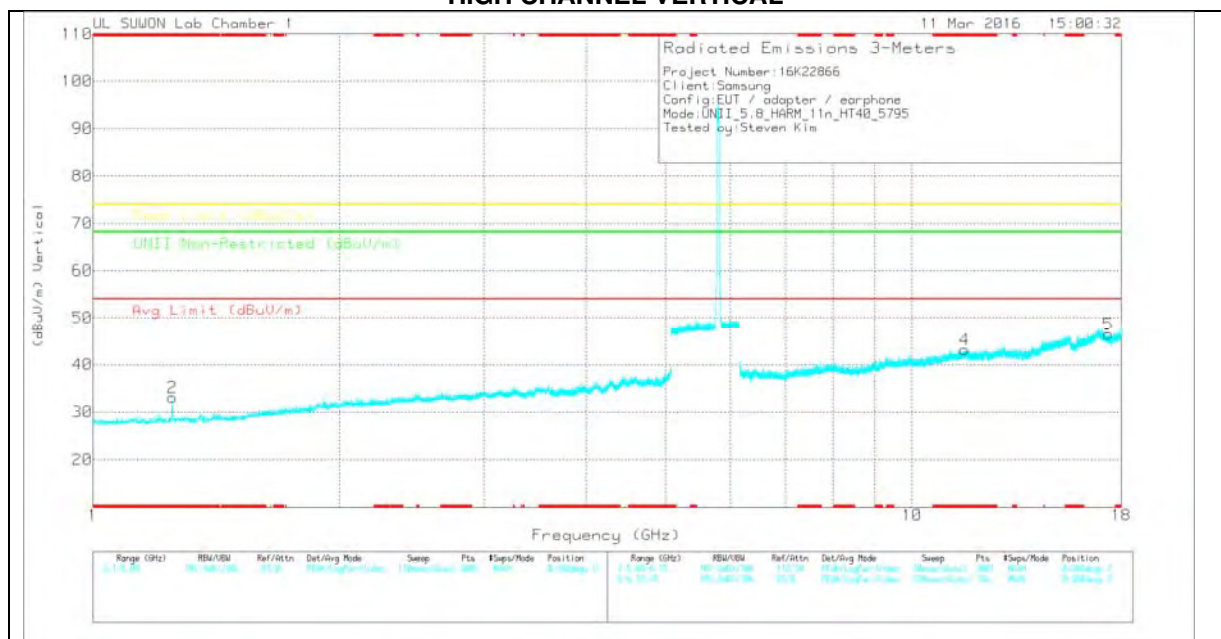
PK – Peak Detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

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

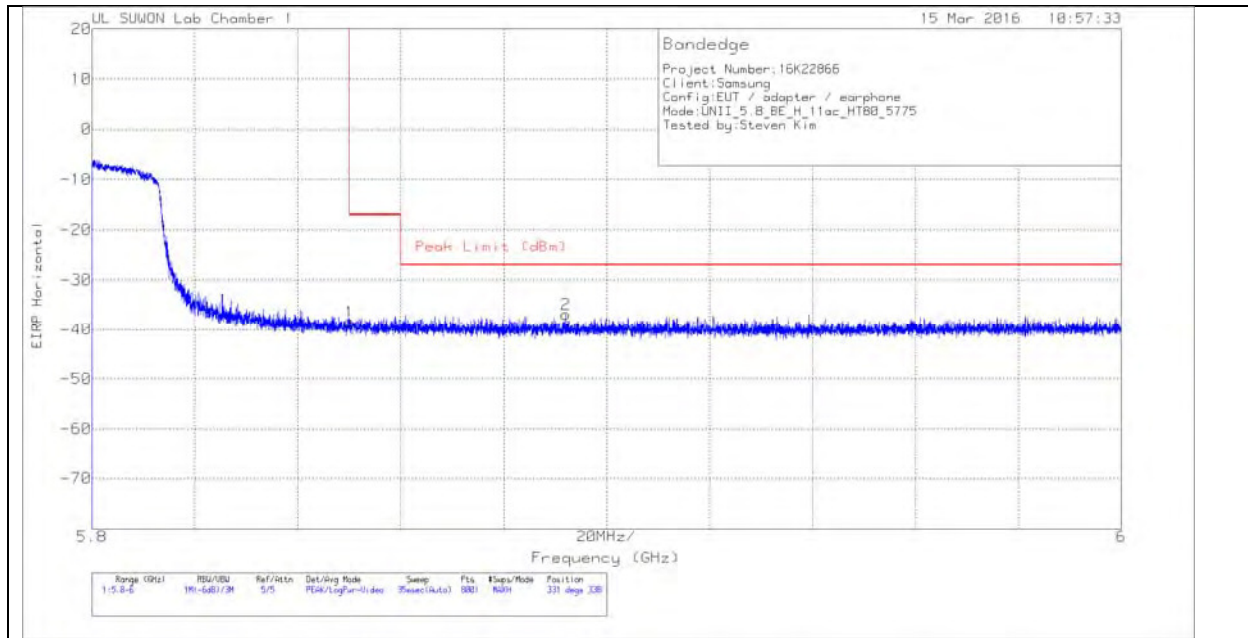
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.14	PK	28.3	-40.2	0	31.24	-	-	74	-42.76	-	-	0-360	200	H
2	* 1.25	44.96	PK	28.3	-40.2	0	33.06	-	-	74	-40.94	-	-	0-360	200	V
3	* 11.587	31.19	PK	38.7	-27.5	0	42.39	-	-	74	-31.61	-	-	0-360	100	H
6	17.338	26.3	PK	41.2	-21.9	0	45.6	-	-	-	-	68.2	-22.6	0-360	100	H
4	* 11.584	31.93	PK	38.7	-27.4	0	43.23	-	-	74	-30.77	-	-	0-360	200	V
5	17.345	27.22	PK	41.2	-21.9	0	46.52	-	-	-	-	68.2	-21.68	0-360	200	V

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

PK – Peak Detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

11.4.4. TX ABOVE 1GHz 802.11ac HT80 2TX CDD MODE IN THE 5.8GHz BAND HARMONICS AND SPURIOUS EMISSIONS HORIZONTAL PEAK PLOT



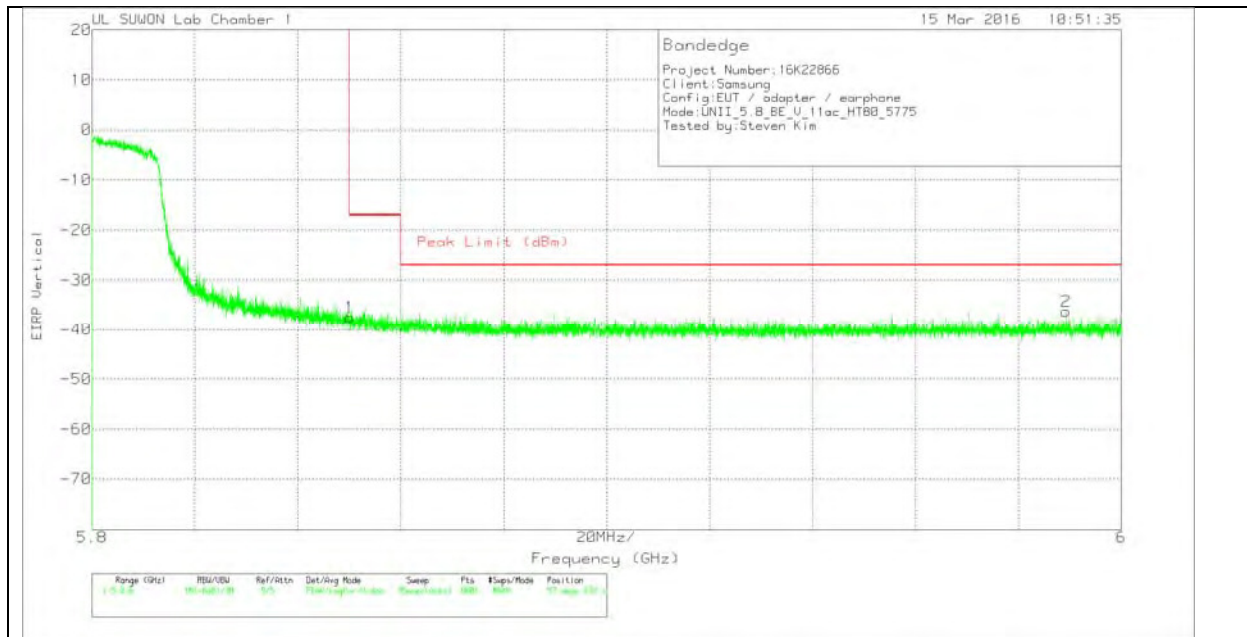
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8717)_150 619	Path_2	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-62.79	Pk	34.9	-22.2	11.8	0	-38.29	-17	-21.29	331	338	H
2	5.892	-61.27	Pk	34.9	-22.3	11.8	0	-36.87	-27	-9.87	331	338	H

Pk - Peak detector

VERTICAL PEAK PLOT



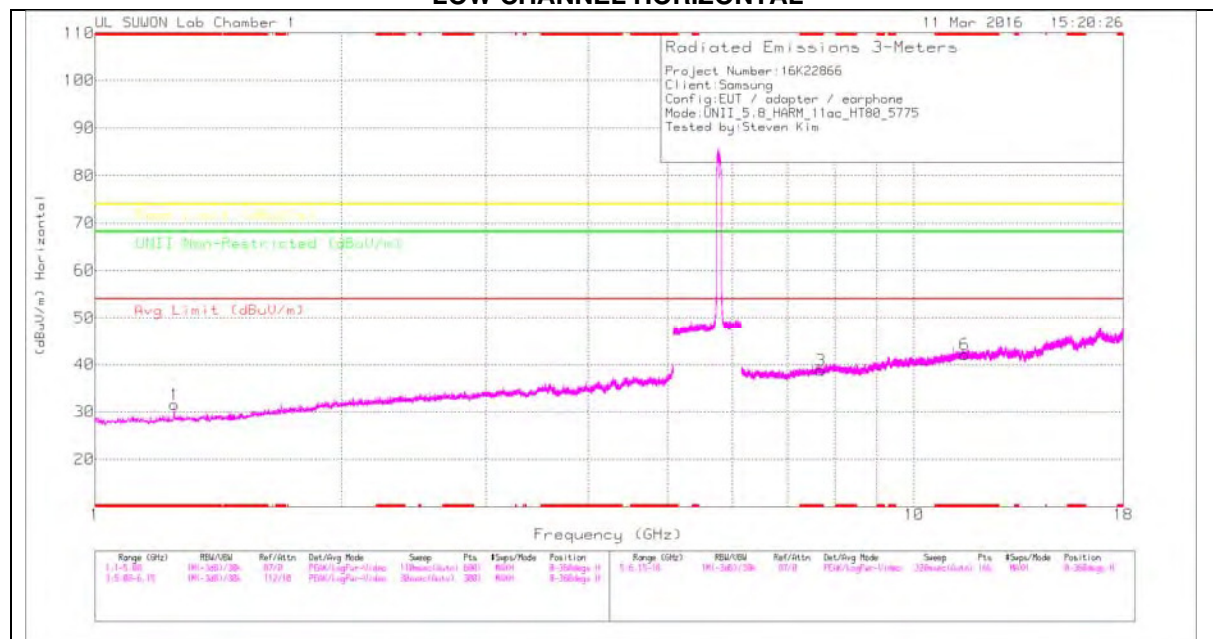
VERTICAL DATA

Trace Markers

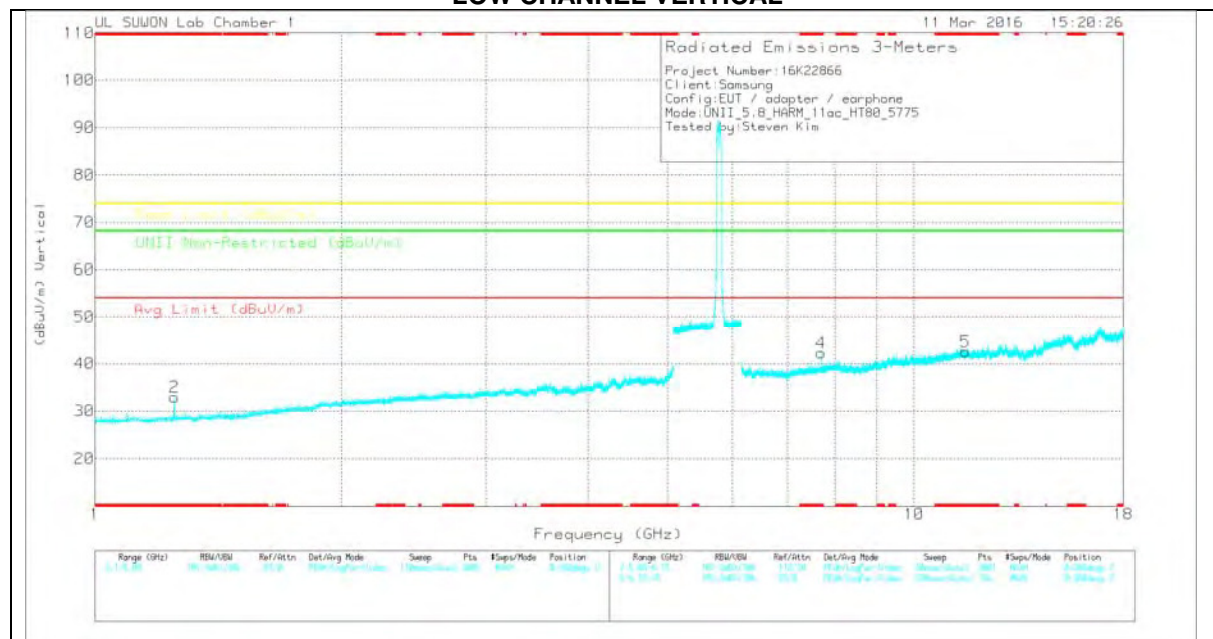
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8717)_150 619	Path_2	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-61.99	Pk	34.9	-22.2	11.8	0	-37.49	-17	-20.49	57	232	V
2	5.989	-60.75	Pk	34.9	-22.2	11.8	0	-36.25	-27	-9.25	57	232	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(00168717)_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.44	PK	28.3	-40.2	0	31.54	-	-	74	-42.46	-	-	0-360	200	H
2	* 1.25	44.89	PK	28.3	-40.2	0	32.99	-	-	74	-41.01	-	-	0-360	200	V
3	* 7.701	33.03	PK	36.1	-30.3	0	38.83	-	-	74	-35.17	-	-	0-360	200	H
6	* 11.529	30.38	PK	38.6	-26.8	0	42.18	-	-	74	-31.82	-	-	0-360	100	H
4	* 7.699	36.43	PK	36.1	-30.3	0	42.23	-	-	74	-31.77	-	-	0-360	100	V
5	* 11.538	30.78	PK	38.6	-26.8	0	42.58	-	-	74	-31.42	-	-	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unii non-restricted limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.7	45.2	PK-U	36.1	-30.3	0	51	-	-	74	-23	-	-	345	121	V
* 7.7	32.35	ADR	36.1	-30.3	0	38.15	54	-15.85	-	-	-	-	345	121	V

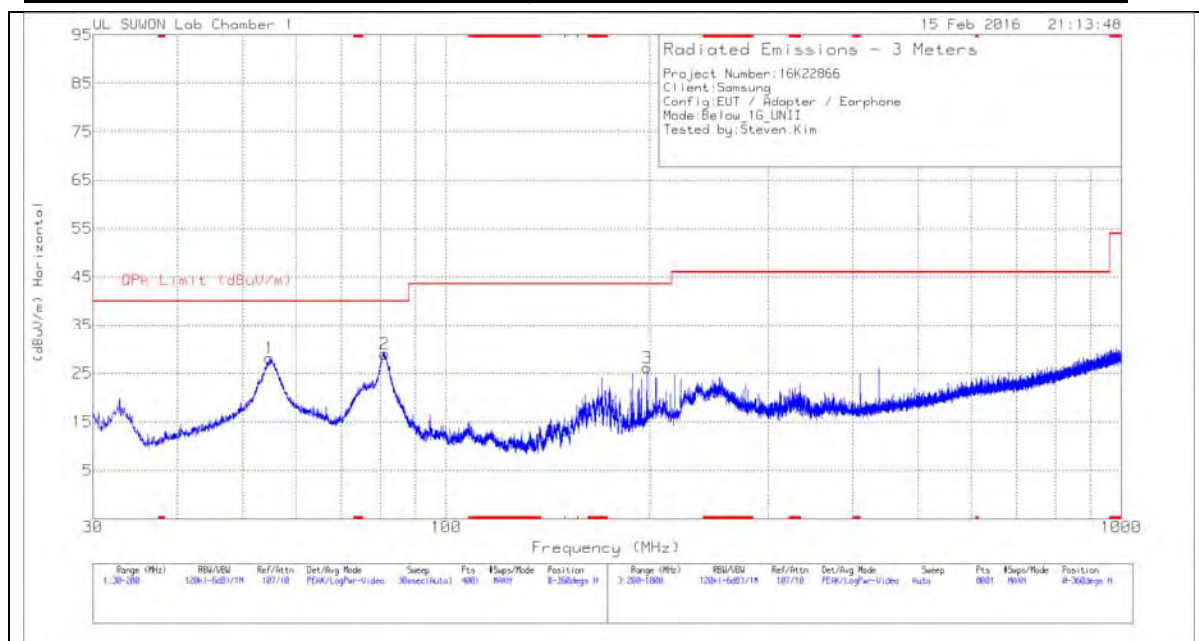
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

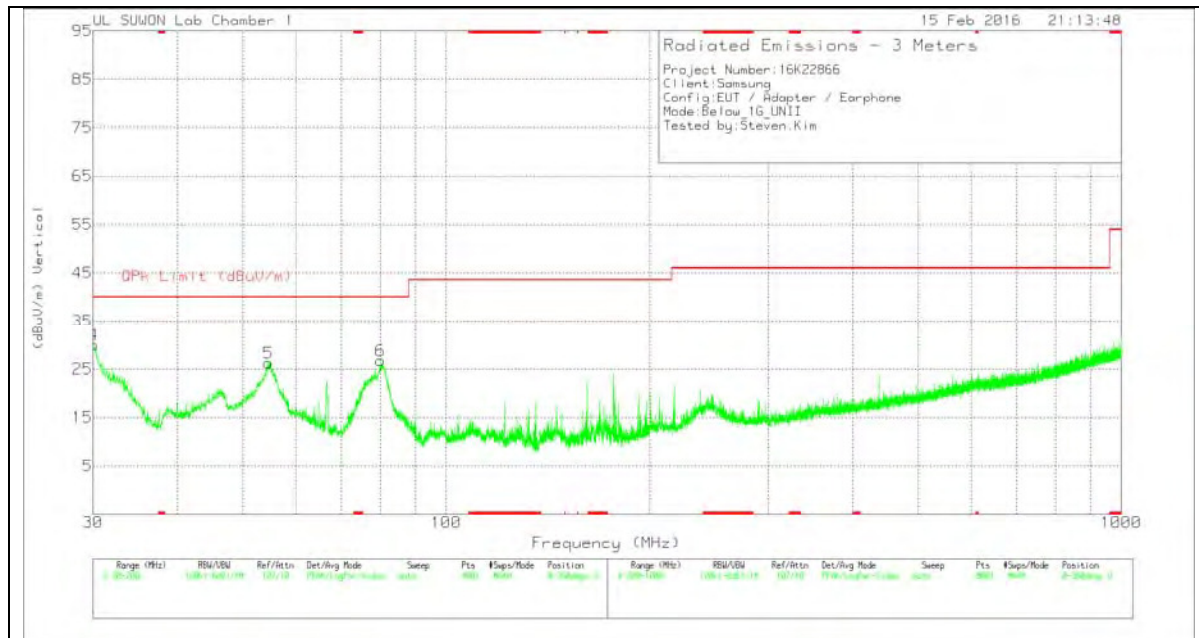
ADR - U-NII AD primary method, RMS average

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

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



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



Below 1G Data

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163-750	Bi-Log	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	54.82	44.84	Pk	13.3	-30	28.14	40	-11.86	0-360	400	H
2	81.085	51.37	Pk	7.2	-29.6	28.97	40	-11.03	0-360	200	H
3	198.3425	43.11	Pk	11.2	-28.2	26.11	43.52	-17.41	0-360	300	H
4	30.0425	50.26	Pk	10.3	-30.5	30.06	40	-9.94	0-360	100	V
5	54.6075	43	Pk	13.3	-30	26.3	40	-13.7	0-360	100	V
6	79.98	49.43	Pk	6.9	-29.6	26.73	40	-13.27	0-360	100	V

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

Pk - Peak detector

13. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

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

^{*} Decreases with the logarithm of the frequency.

TEST PROCEDURE

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

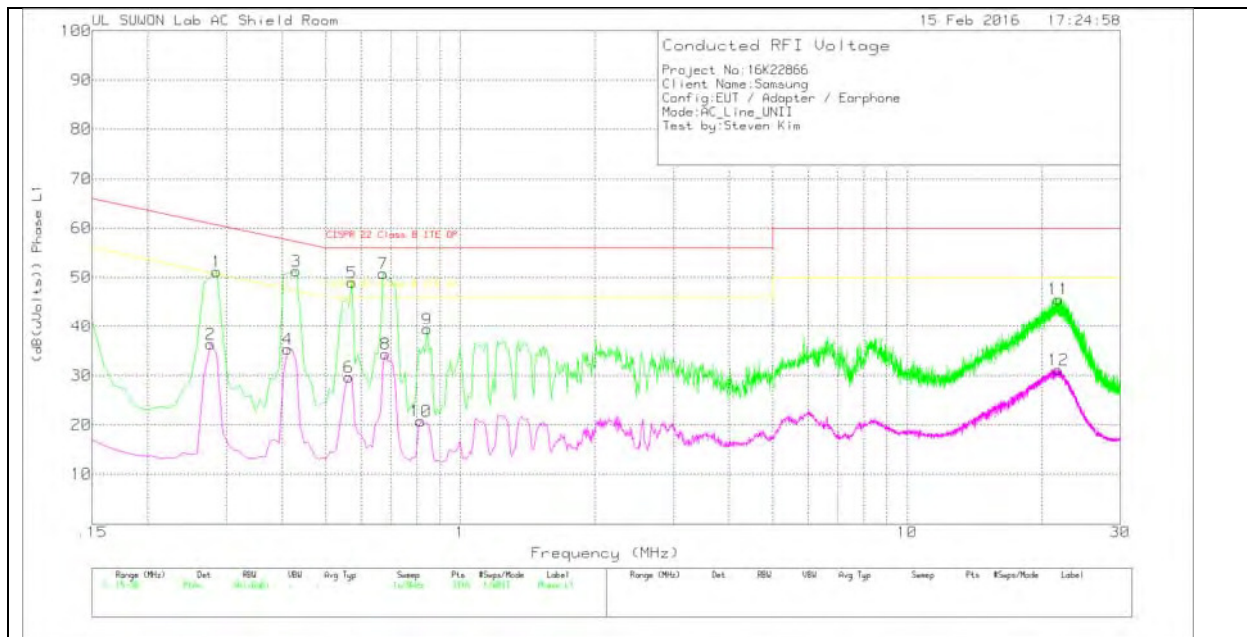
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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_wit h ex-cord_L1	CE Shield Room	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
1	.285	41.32	Pk	9.9	0	51.22	60.67	-9.45	-	-
2	.276	26.5	Av	9.8	0	36.3	-	-	50.94	-14.64
3	.429	41.2	Pk	10.1	0	51.3	57.27	-5.97	-	-
4	.411	25.3	Av	10.1	0	35.4	-	-	47.63	-12.23
5	.573	38.84	Pk	10.1	0	48.94	56	-7.06	-	-
6	.564	19.59	Av	10.1	0	29.69	-	-	46	-16.31
7	.672	40.66	Pk	10.1	0	50.76	56	-5.24	-	-
8	.681	24.24	Av	10.1	0	34.34	-	-	46	-11.66
9	.843	29.38	Pk	10	0	39.38	56	-16.62	-	-
10	.816	10.77	Av	10	0	20.77	-	-	46	-25.23
11	21.822	34.85	Pk	10.5	.2	45.55	60	-14.45	-	-
12	21.804	20.45	Av	10.5	.2	31.15	-	-	50	-18.85

Pk - Peak detector

Av - Average detection

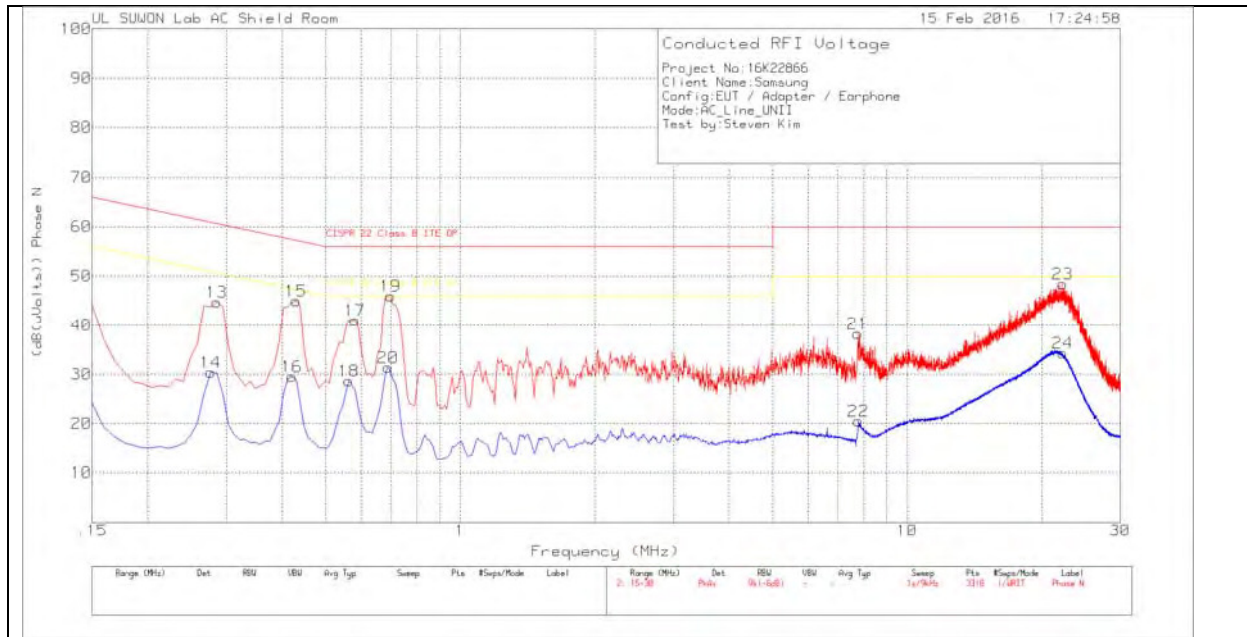
Quasi-Peak Emissions

Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_wit h ex-cord_L1	CE Shield Room	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
.2805	38.38	Qp	9.8	0	48.18	60.8	-12.62	-	-
.4245	34.07	Qp	10.1	0	44.17	57.36	-13.19	-	-
.5685	36.58	Qp	10.1	0	46.68	56	-9.32	-	-
.672	34.03	Qp	10.1	0	44.13	56	-11.87	-	-

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	CE Shield Room	Corrected Reading (dB(uVolts)	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
13	.285	34.89	Pk	9.8	0	44.69	60.67	-15.98	-	-
14	.276	20.61	Av	9.8	0	30.41	-	-	50.94	-20.53
15	.429	34.84	Pk	10.1	0	44.94	57.27	-12.33	-	-
16	.42	19.43	Av	10.1	0	29.53	-	-	47.45	-17.92
17	.582	30.97	Pk	10.1	0	41.07	56	-14.93	-	-
18	.564	18.61	Av	10.1	0	28.71	-	-	46	-17.29
19	.699	35.94	Pk	10	0	45.94	56	-10.06	-	-
20	.69	21.36	Av	10	0	31.36	-	-	46	-14.64
21	7.764	28.31	Pk	9.9	.1	38.31	60	-21.69	-	-
22	7.791	10.46	Av	9.9	.1	20.46	-	-	50	-29.54
23	22.272	37.53	Pk	10.7	.2	48.43	60	-11.57	-	-
24	22.272	23.4	Av	10.7	.2	34.3	-	-	50	-15.7

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	CE Shield Room	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
.6972	32.16	Qp	10	0	42.16	56	-13.84	-	-

Qp - Quasi-Peak detector

14. DYNAMIC FREQUENCY SELECTION

14.1. OVERVIEW

14.1.1. LIMITS

INDUSTRY CANADA

IC RSS-247 is closely harmonized with FCC Part 15 DFS rules. The deviations are as follows:

RSS-247 Issue §6.3

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

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

FCC

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

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

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

Table 2: Applicability of DFS requirements during normal operation

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

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar DFS	Client (without DFS)
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required

Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in all 20 MHz channel blocks and a null frequency between the bonded 20 MHz channel blocks.

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

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

Table 4: DFS Response requirement values

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

Table 5 – Short Pulse Radar Test Waveforms

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

Table 6 – Long Pulse Radar Test Signal

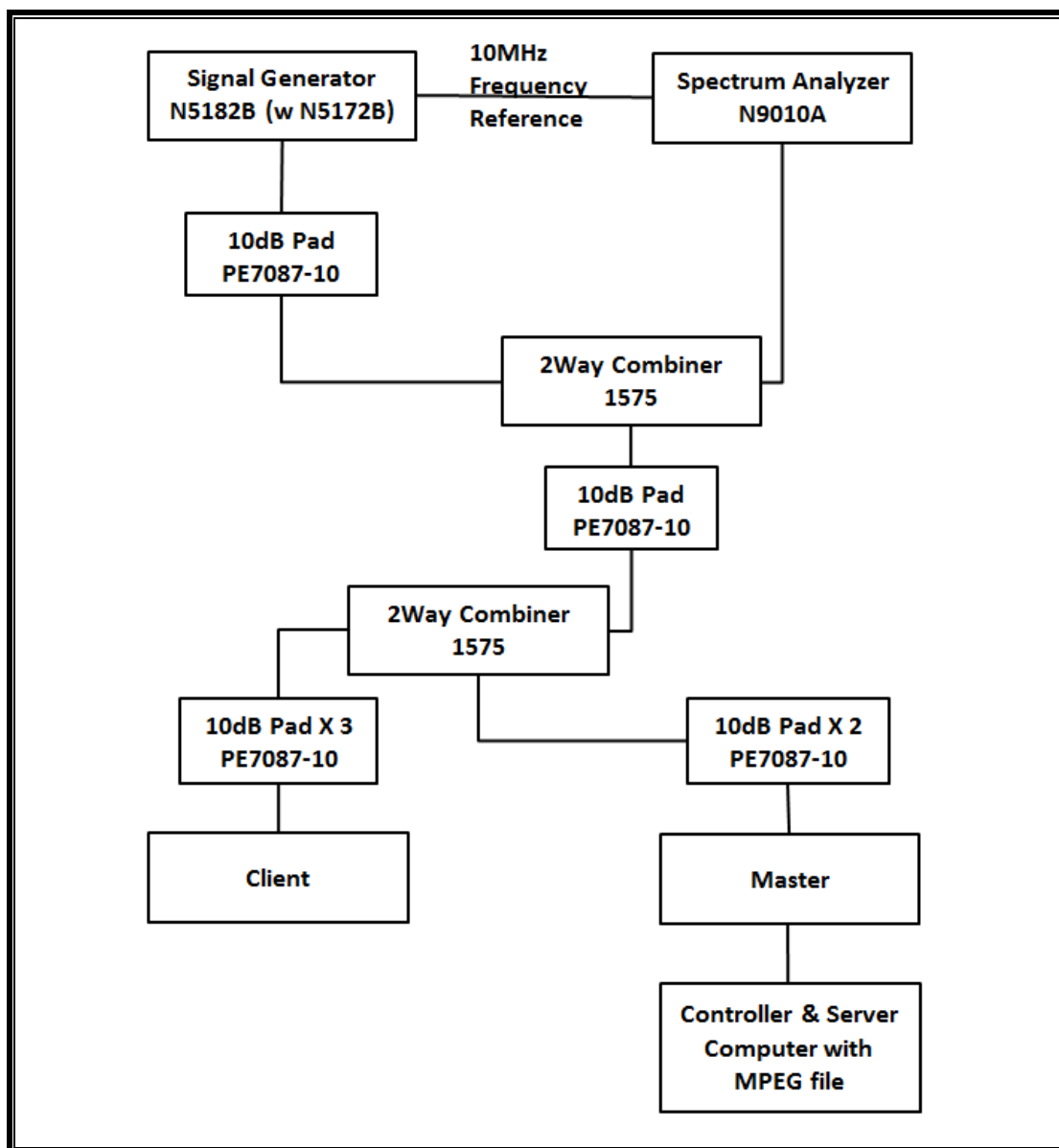
Radar Waveform Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

Table 7 – Frequency Hopping Radar Test Signal

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

14.1.1. TEST AND MEASUREMENT SYSTEM

CONDUCTED METHOD SYSTEM BLOCK DIAGRAM



SYSTEM OVERVIEW

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

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

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

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

SYSTEM CALIBRATION

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

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

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

ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL

A link is established between the Master and Slave and the distance between the units is adjusted as needed to provide a suitable received level at the Master and Slave devices. The video test file is streamed to generate WLAN traffic. The monitoring antenna is adjusted so that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold.

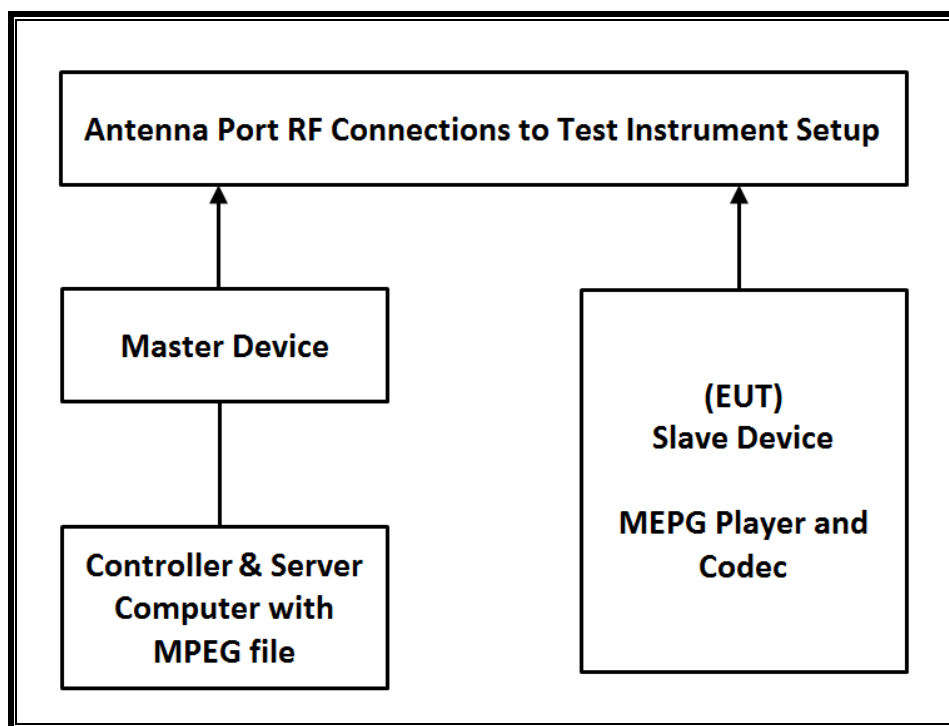
TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	S/N	Cal Due
Spectrum Analyzer, 7 GHz	Agilent / HP	N9010A	MY54200580	08-19-16
Vector Signal Generator, 6GHz	Agilent / HP	N5182B	MY53051241	08-19-16

14.1.2. SETUP OF EUT

CONDUCTED METHOD EUT TEST SETUP



SUPPORT EQUIPMENT

The following support equipment was utilized for the DFS tests documented in this report:

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
Wireless Access Point	Cisco	AIR-CAP3702E-A-K9	FTX182276QX	LDK102087
Notebook PC (Controller/Server)	HP	HP EliteDesk 800 G1 TWR	CZC4125J25	DoC

14.1.3. DESCRIPTION OF EUT

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

The EUT is a Slave Device without Radar Detection.

The highest power level within these bands is 18.01 dBm in the 5250-5350 MHz band and 17.82 dBm in the 5470-5725 MHz band.

The antenna assembly utilized two antenna with the EUT one is -0.57 dBi, and the other is -1.93 dBi.

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

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

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

WLAN traffic that meets or exceeds the minimum required loading was generated by transferring a data stream from the controller/server PC to the EUT using iPerf version 2.0.5 software package.

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

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

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

UNIFORM CHANNEL SPREADING

This requirement is not applicable to Slave radio devices.

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

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

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

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

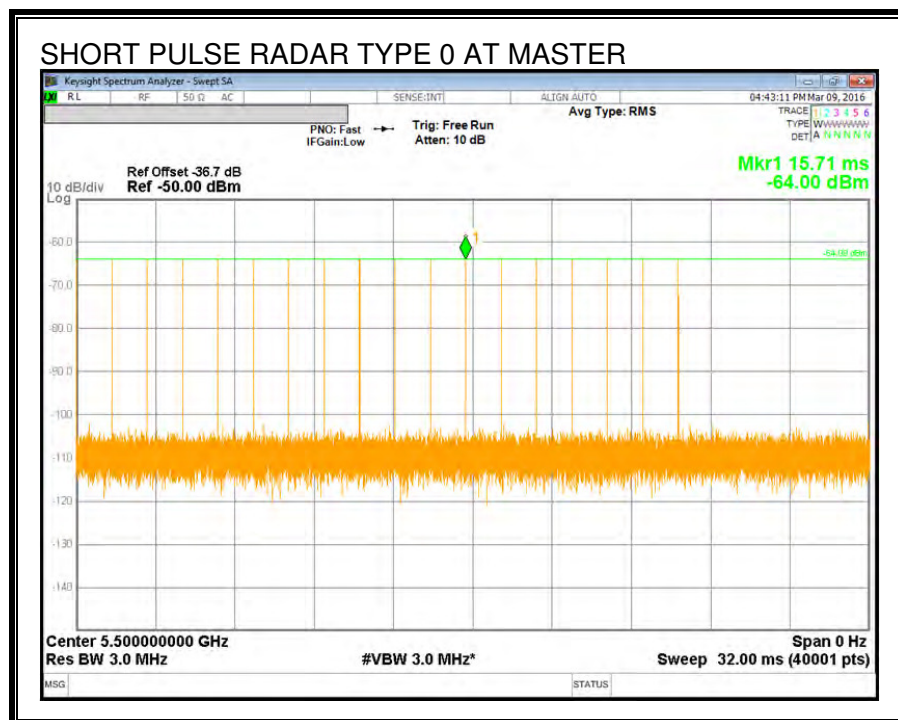
14.2. RESULTS FOR 20 MHz BANDWIDTH

14.2.1. TEST CHANNEL

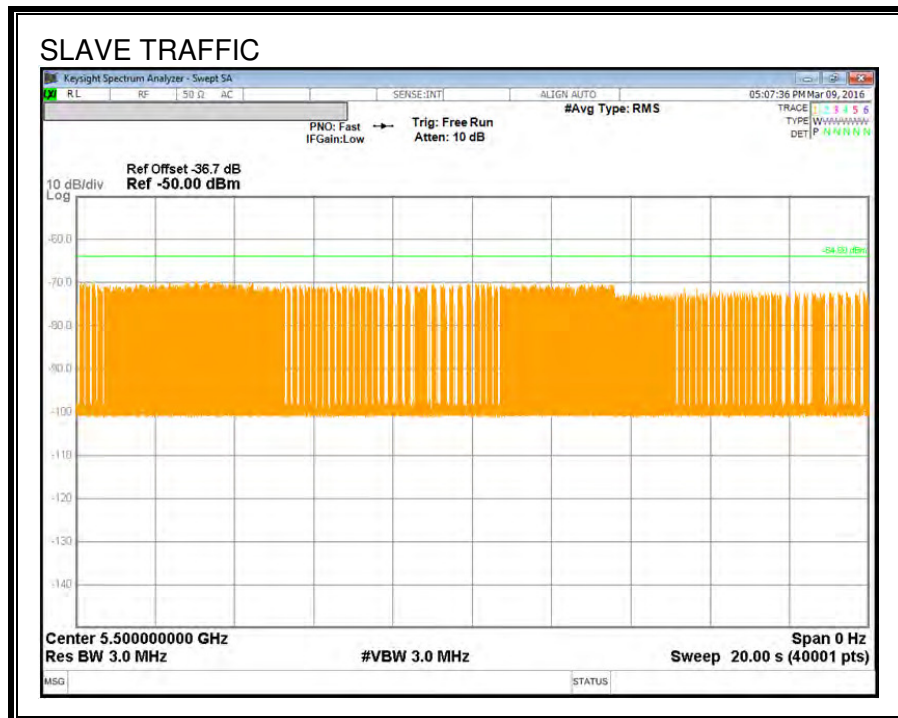
All tests were performed at a channel center frequency of 5500 MHz.

14.2.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



14.2.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

14.2.4. MOVE AND CLOSING TIME

REPORTING NOTES

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

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

The aggregate channel closing transmission time is calculated as follows:

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

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

RESULTS

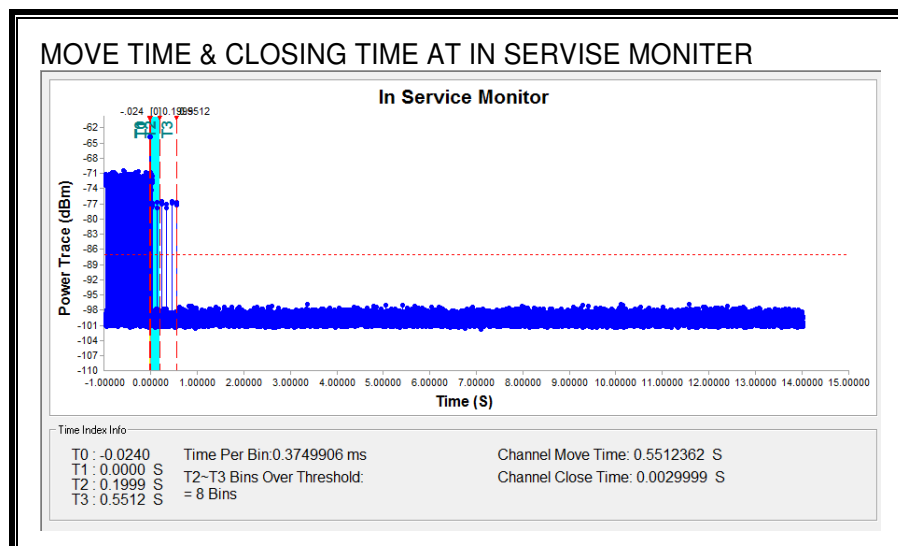
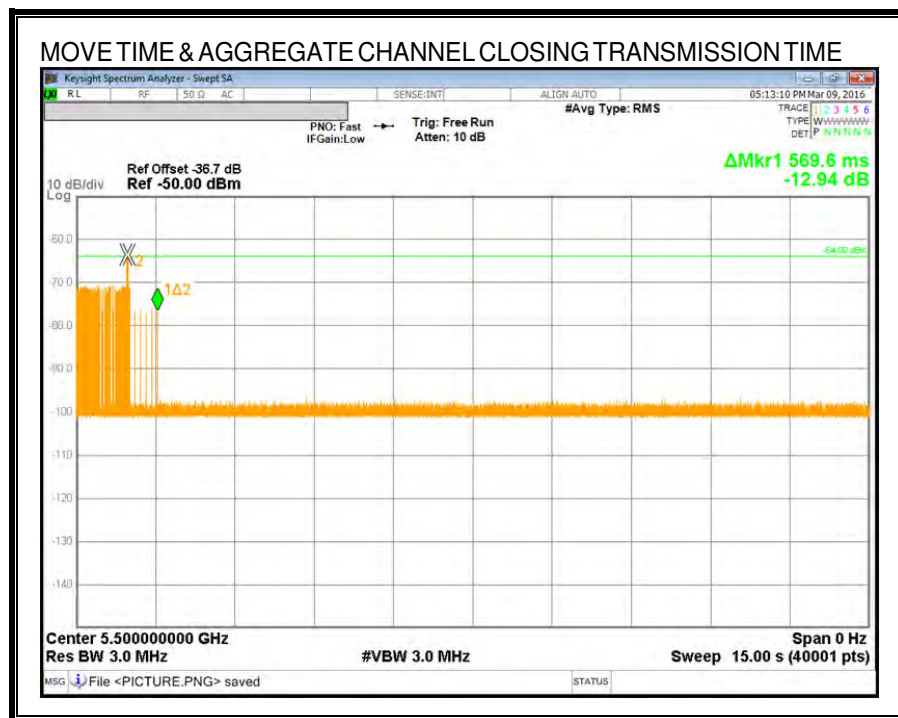
Channel Move Time (sec)	Limit (sec)
0.551	10

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

MOVE TIME & CHANNEL CLOSING TIME

AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

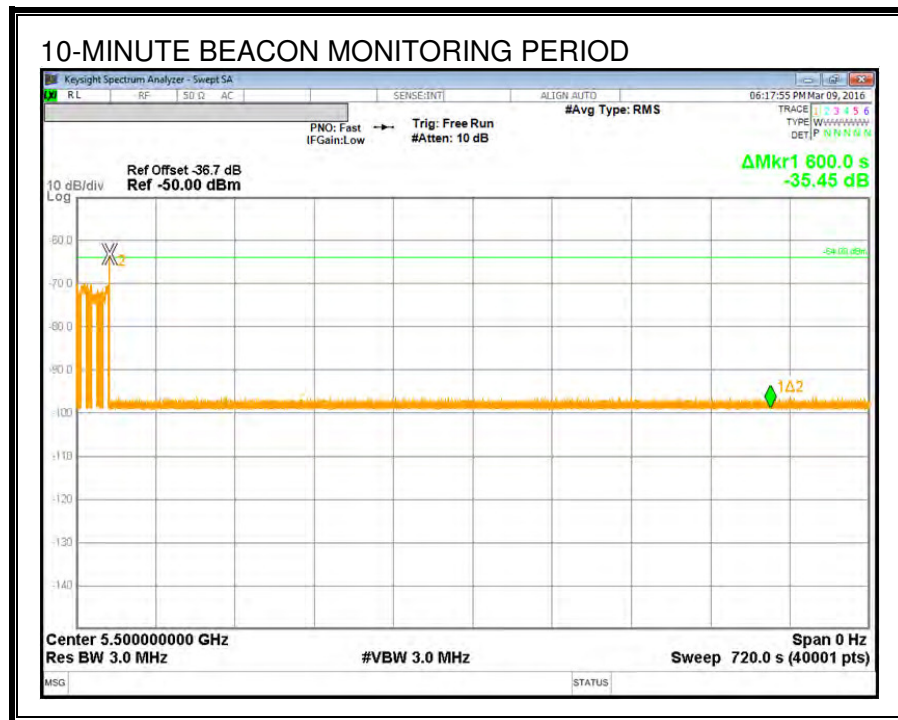
No transmissions are observed during the aggregate monitoring period.



NON-OCCUPANCY PERIOD

RESULTS

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



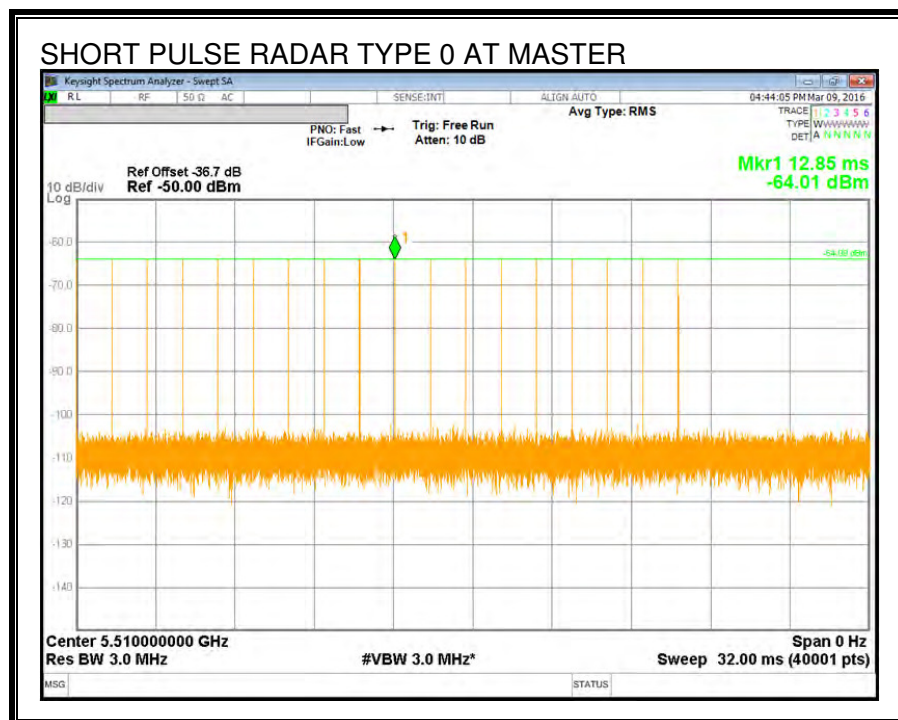
14.3. RESULTS FOR 40 MHz BANDWIDTH

14.3.1. TEST CHANNEL

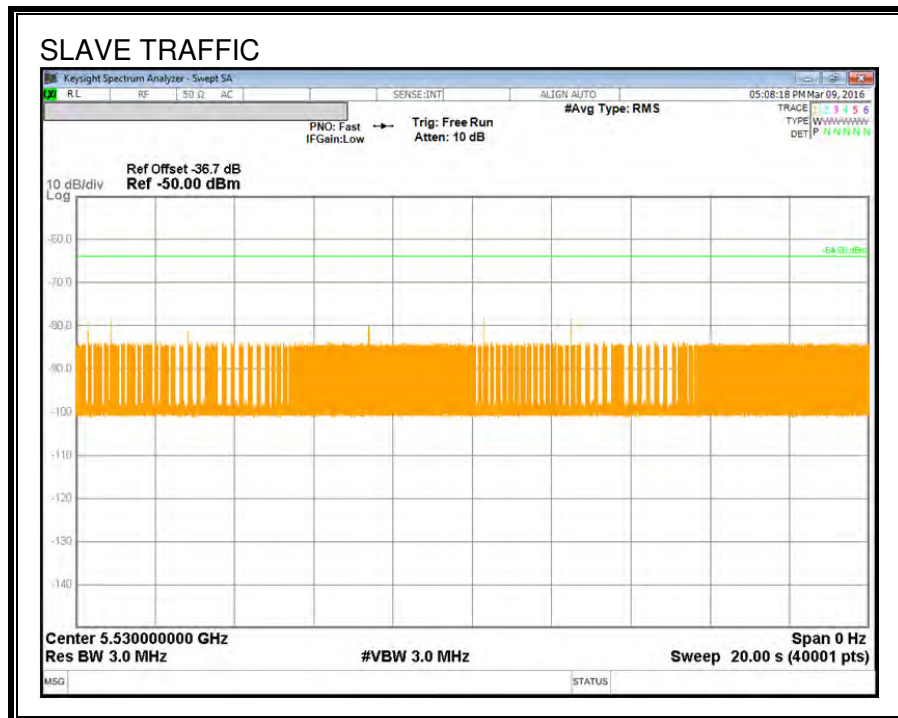
All tests were performed at a channel center frequency of 5510 MHz.

14.3.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



14.3.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

14.3.4. MOVE AND CLOSING TIME

REPORTING NOTES

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

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

The aggregate channel closing transmission time is calculated as follows:

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

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

RESULTS

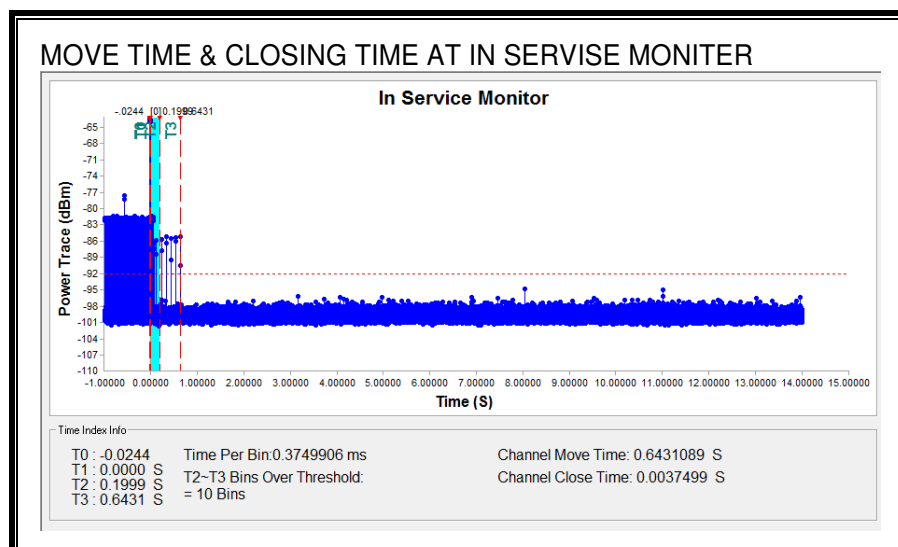
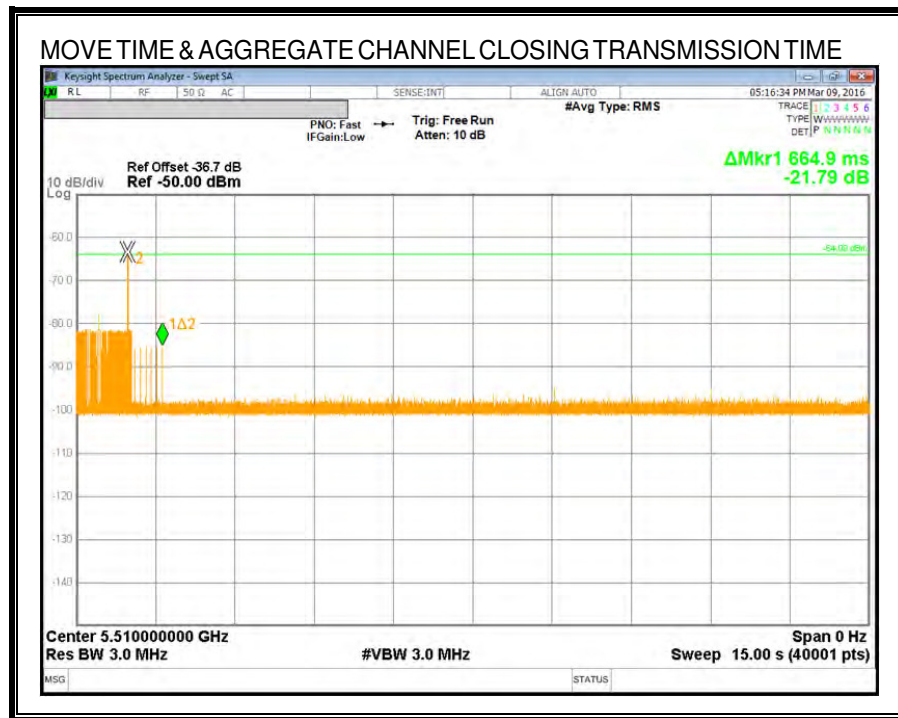
Channel Move Time (sec)	Limit (sec)
0.643	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
3.750	60

MOVE TIME & CHANNEL CLOSING TIME

AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

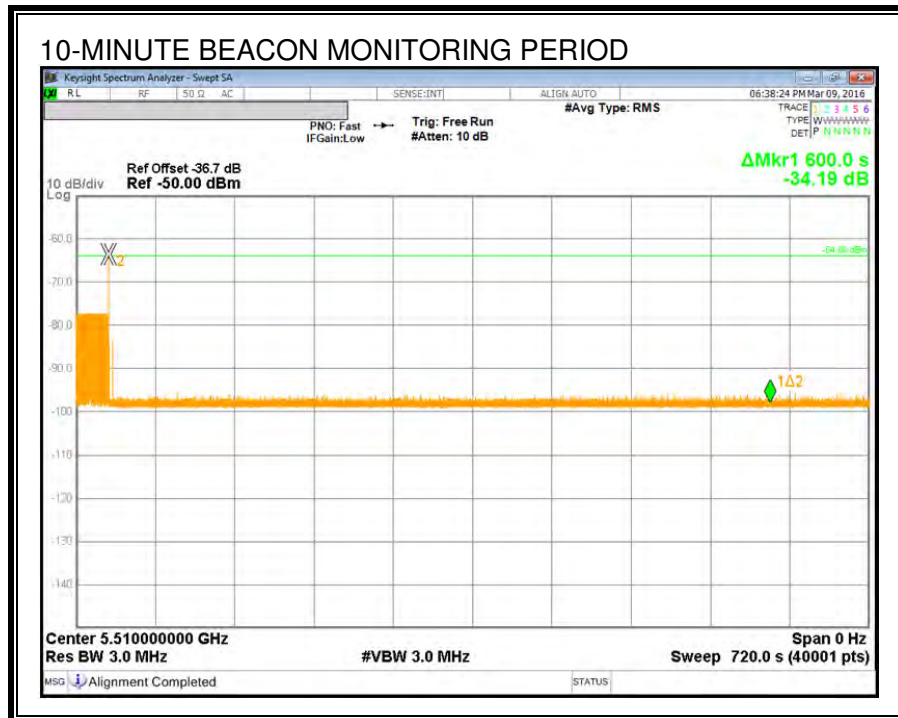
No transmissions are observed during the aggregate monitoring period.



NON-OCCUPANCY PERIOD

RESULTS

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



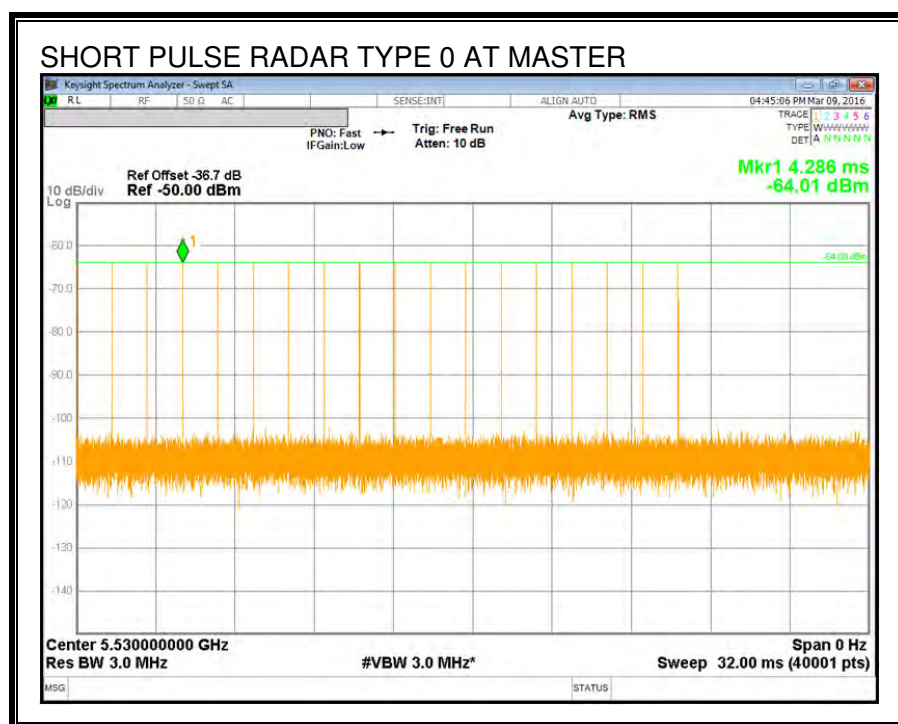
14.4. RESULTS FOR 80 MHz BANDWIDTH

14.4.1. TEST CHANNEL

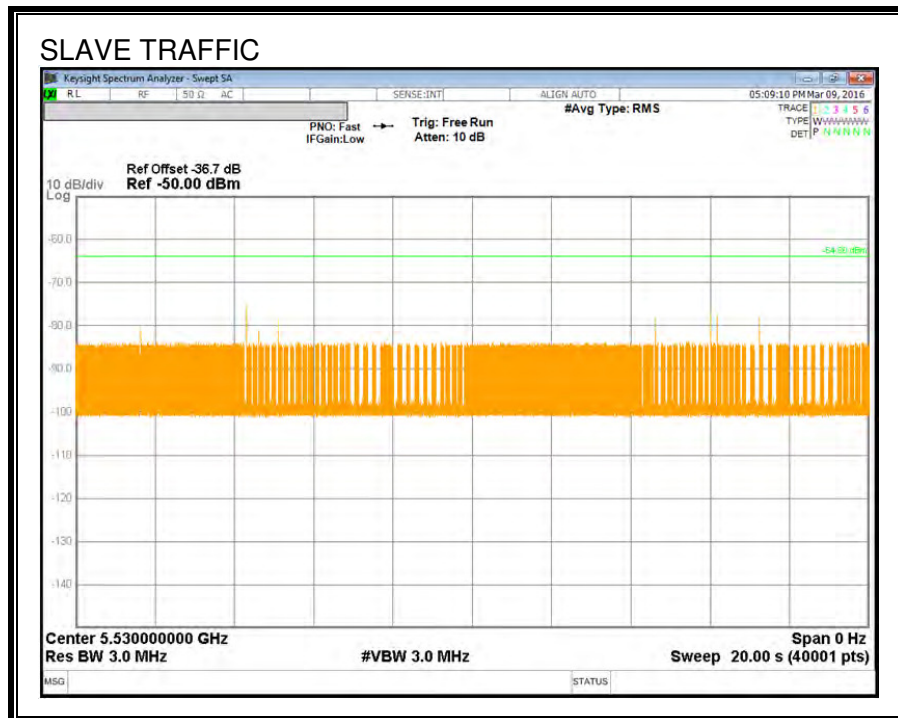
All tests were performed at a channel center frequency of 5530 MHz.

14.4.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



14.4.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

14.4.4. MOVE AND CLOSING TIME

REPORTING NOTES

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

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

The aggregate channel closing transmission time is calculated as follows:

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

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

RESULTS

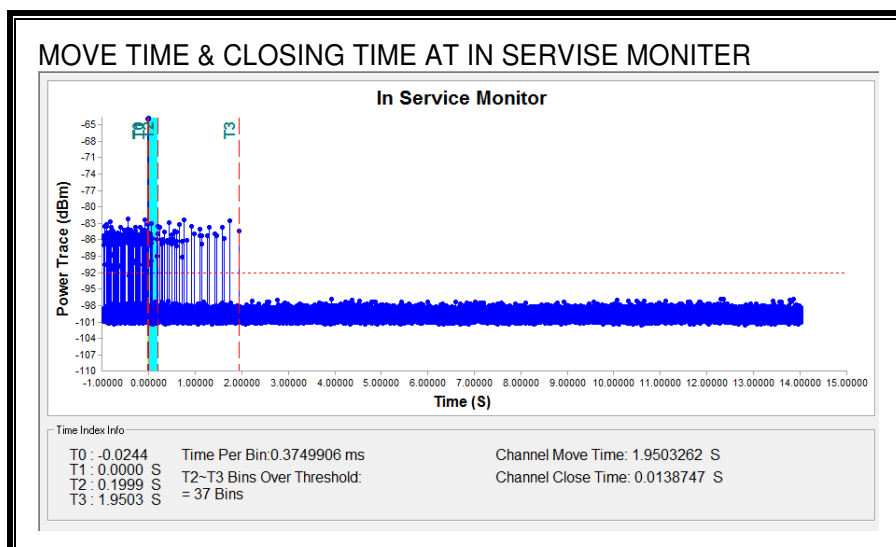
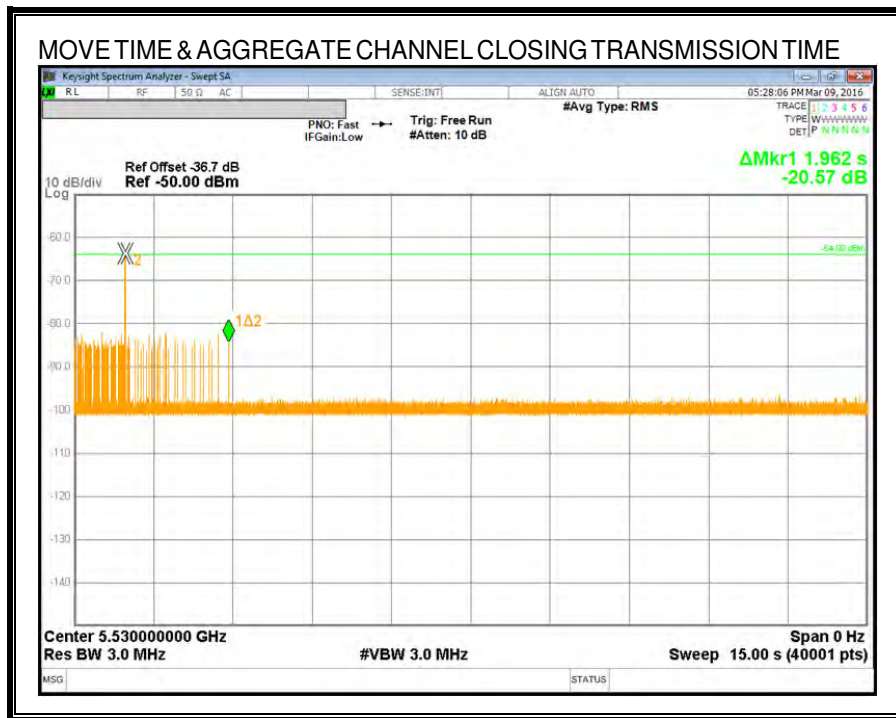
Channel Move Time (sec)	Limit (sec)
1.950	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
13.875	60

MOVE TIME & CHANNEL CLOSING TIME

AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



NON-OCCUPANCY PERIOD

RESULTS

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

