

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

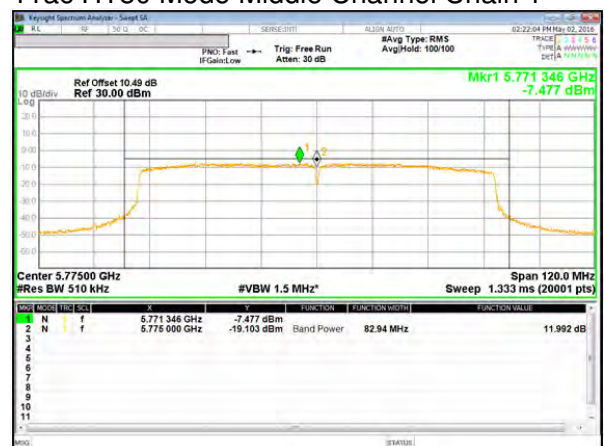


UNII 5.8 GHz IEEE 802.11ac VHT80 mode

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:
 - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
- (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)

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

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

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 v01r02 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.

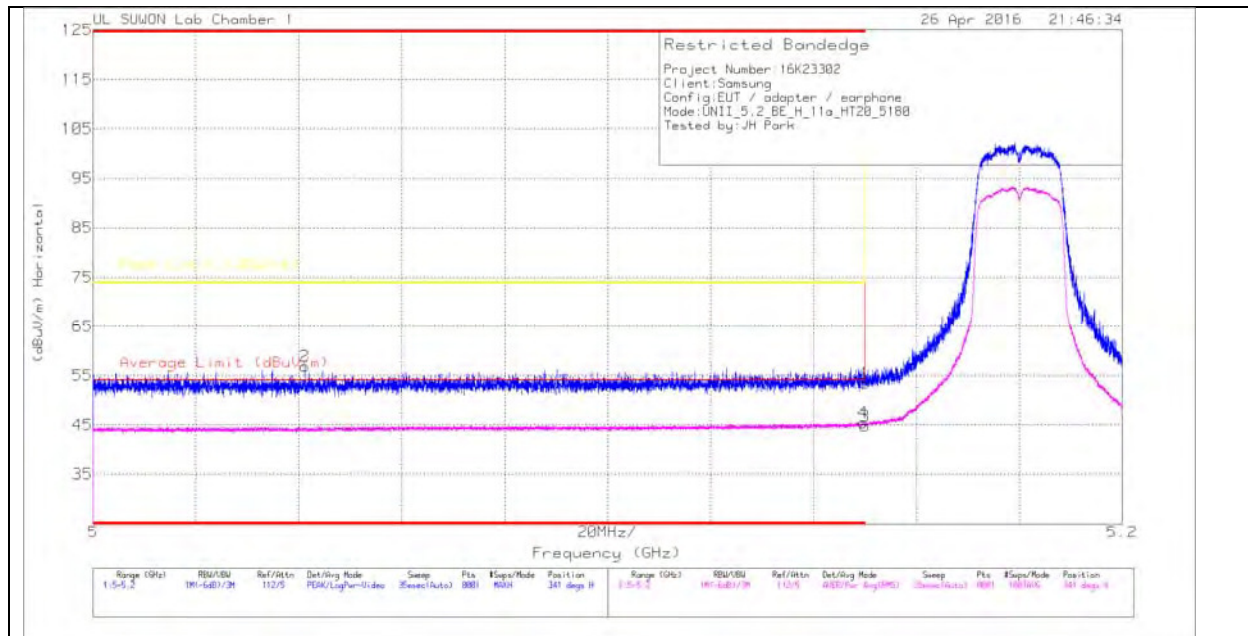
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

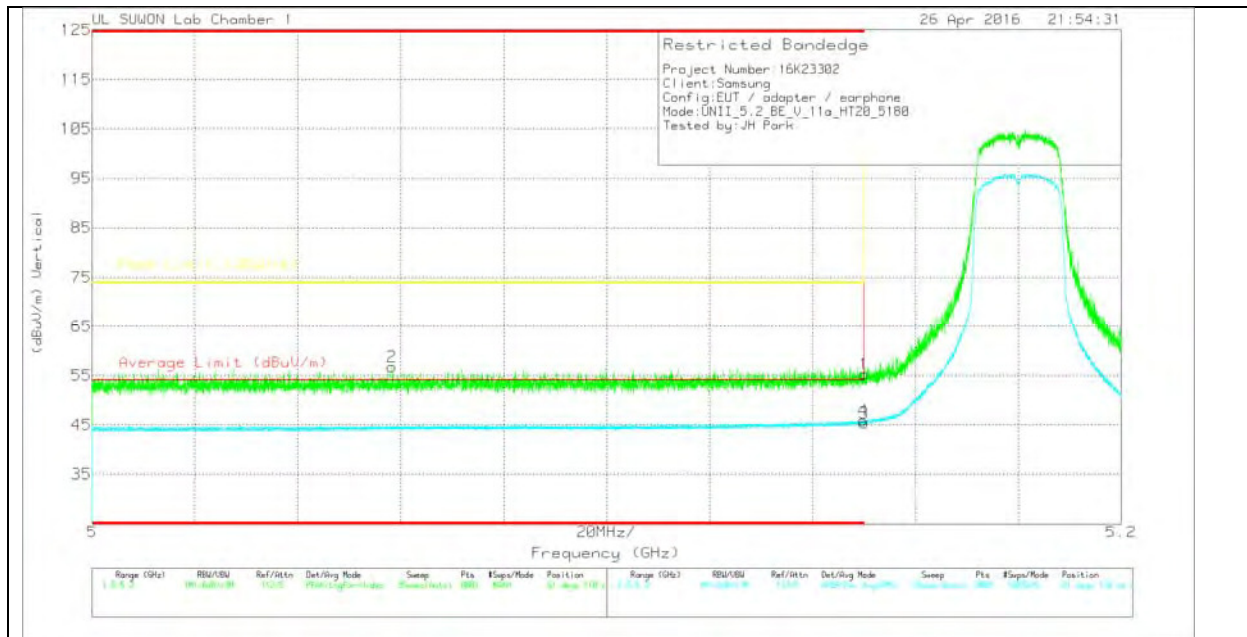
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	43.31	Pk	34.2	-24.1	0	53.41	-	-	74	-20.59	341	173	H
2	* 5.041	47.04	Pk	34.1	-24.3	0	56.84	-	-	74	-17.16	341	173	H
3	* 5.15	34.35	RMS	34.2	-24.1	.29	44.74	54	-9.26	-	-	341	173	H
4	* 5.15	35.05	RMS	34.2	-24.1	.29	45.44	54	-8.56	-	-	341	173	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	45.12	Pk	34.2	-24.1	0	55.22	-	-	74	-18.78	61	110	V
2	* 5.058	46.95	Pk	34.1	-24.3	0	56.75	-	-	74	-17.25	61	110	V
3	* 5.15	35.03	RMS	34.2	-24.1	.29	45.42	54	-8.58	-	-	61	110	V
4	* 5.15	35.48	RMS	34.2	-24.1	.29	45.87	54	-8.13	-	-	61	110	V

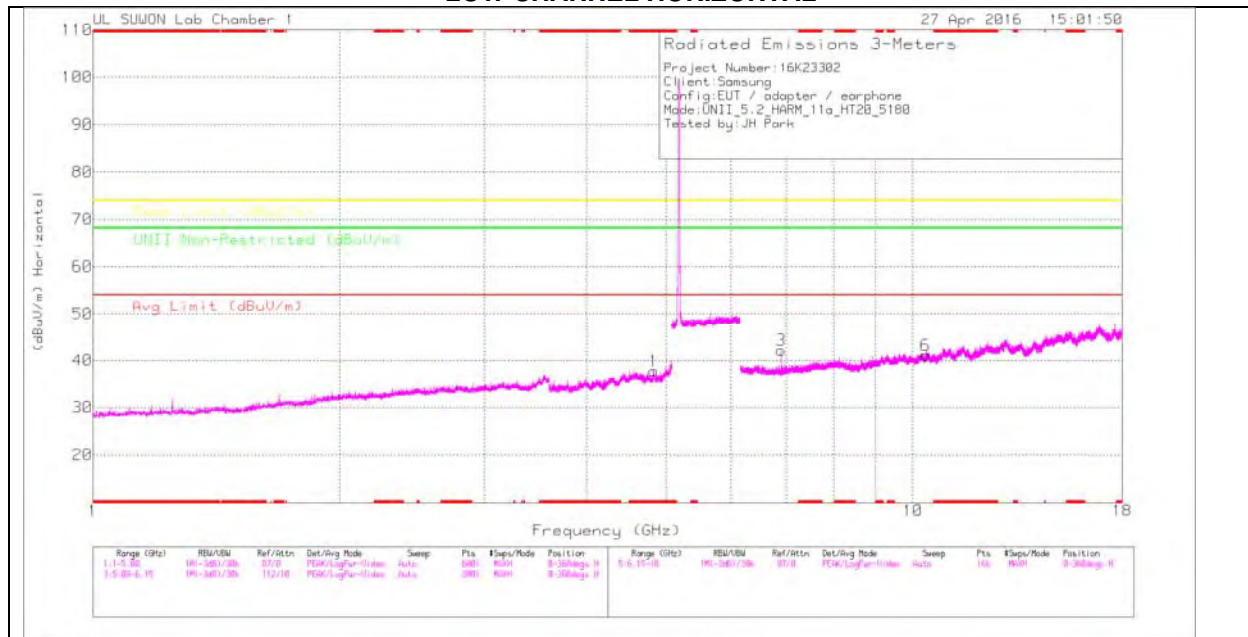
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

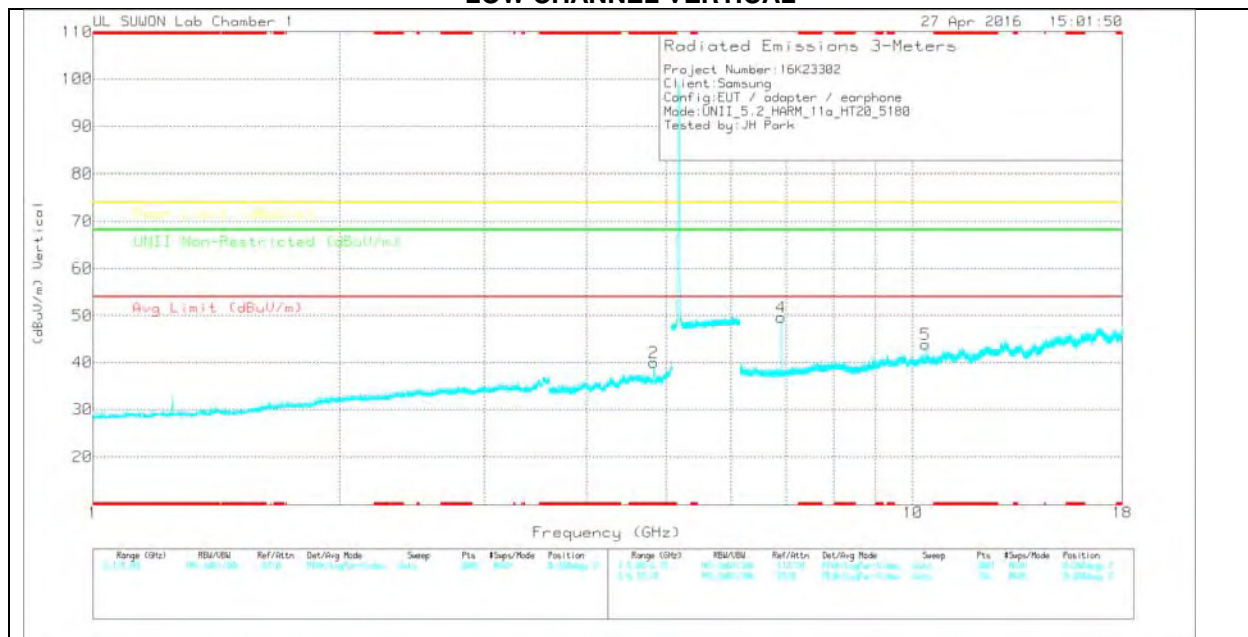
RMS - RMS detection

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	* 4.828	36.83	PK	34	-33.1	0	37.73	-	-	74	-36.27	-	-	0-360	100	H
2	* 4.828	39.02	PK	34	-33.1	0	39.92	-	-	74	-34.08	-	-	0-360	200	V
3	6.906	37.4	PK	35.6	-30.8	0	42.2	-	-	-	-	68.2	-26	0-360	200	H
6	10.356	30.75	PK	37.8	-27.4	0	41.15	-	-	-	-	68.2	-27.05	0-360	200	H
4	6.906	44.84	PK	35.6	-30.8	0	49.64	-	-	-	-	68.2	-18.56	0-360	100	V
5	10.36	33.35	PK	37.8	-27.3	0	43.85	-	-	-	-	68.2	-24.35	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

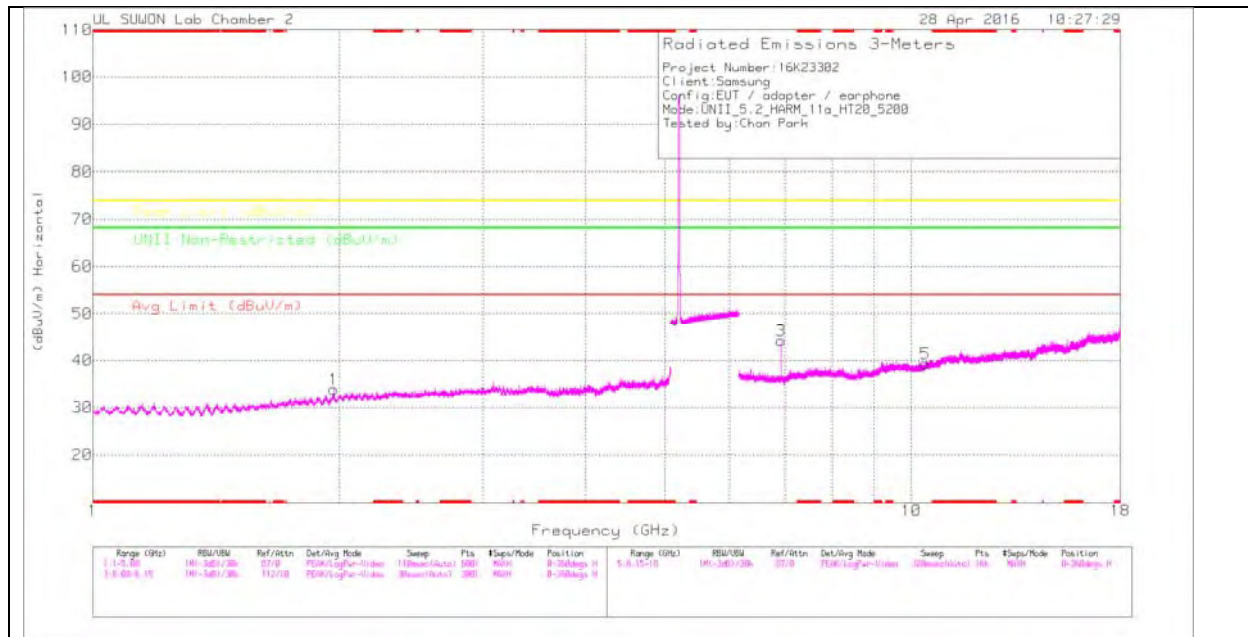
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.828	49.53	PK-U	34	-33.1	0	50.43	-	-	74	-23.57	-	-	167	108	H
* 4.828	38.02	ADR	34	-33.1	0	38.92	54	-15.08	-	-	-	-	167	108	H
* 4.829	50.72	PK-U	34	-33.1	0	51.62	-	-	74	-22.38	-	-	106	341	V
* 4.828	39.96	ADR	34	-33.1	0	40.86	54	-13.14	-	-	-	-	106	341	V
6.907	49.88	PK-U	35.6	-30.8	0	54.68	-	-	-	-	68.2	-13.52	305	379	V
6.907	48.06	PK-U	35.6	-30.8	0	52.86	-	-	-	-	68.2	-15.34	324	289	H
10.36	40.41	PK-U	37.8	-27.3	0	50.91	-	-	-	-	68.2	-17.29	78	329	H
10.365	42.01	PK-U	37.8	-27.3	0	52.51	-	-	-	-	68.2	-15.69	349	106	V

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

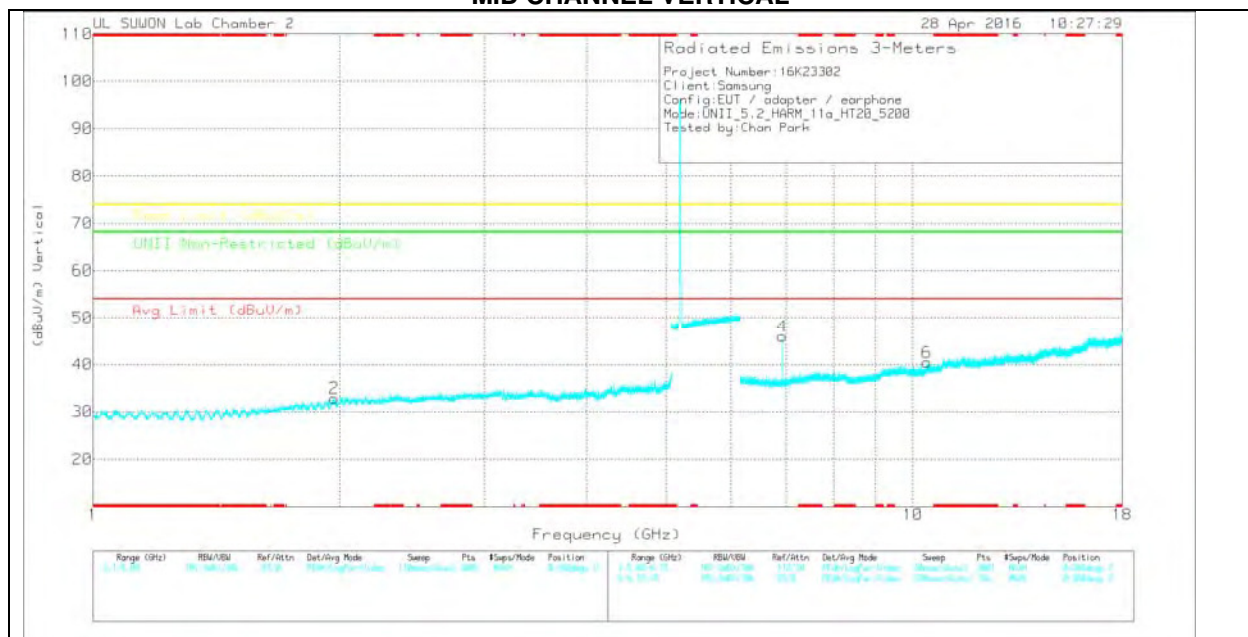
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	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	1.967	29.86	PK	31	-27	0	33.86	-	-	-	-	68.2	-34.34	0-360	100	H
2	1.968	28.89	PK	31	-27	0	32.89	-	-	-	-	68.2	-35.31	0-360	200	V
3	6.933	31.28	PK	35.5	-22.6	0	44.18	-	-	-	-	68.2	-24.02	0-360	200	H
5	10.396	19.65	PK	37.6	-17.9	0	39.35	-	-	-	-	68.2	-28.85	0-360	100	H
4	6.933	33.09	PK	35.5	-22.6	0	45.99	-	-	-	-	68.2	-22.21	0-360	200	V
6	10.399	20.77	PK	37.6	-17.9	0	40.47	-	-	-	-	68.2	-27.73	0-360	100	V

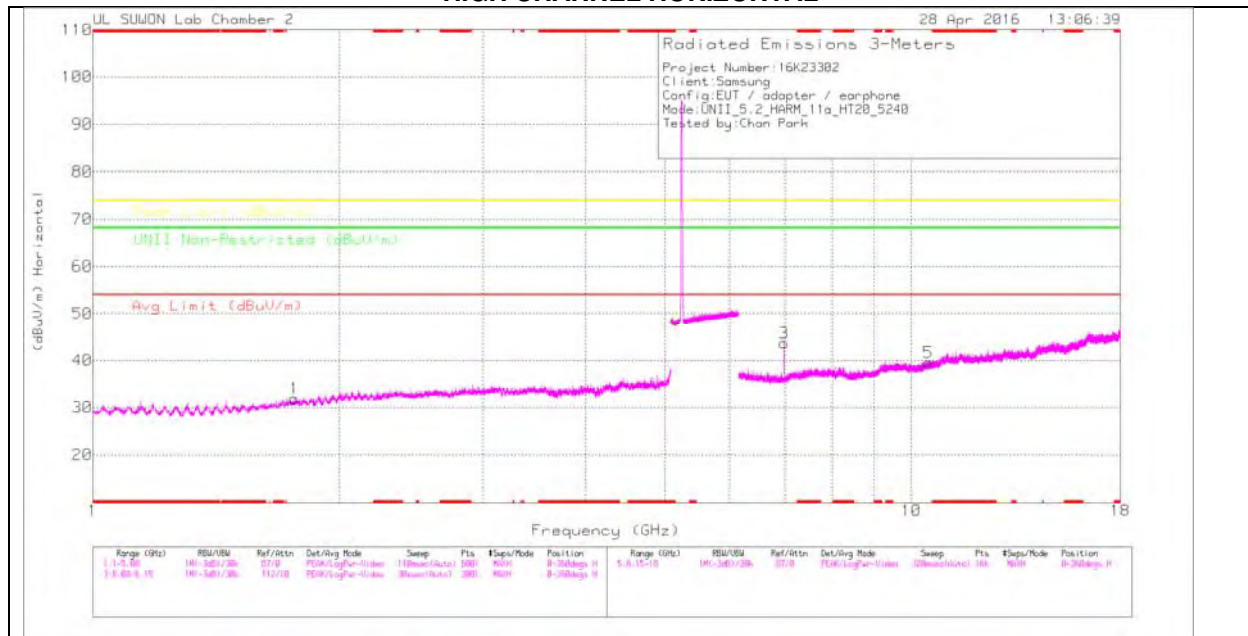
PK – Peak detector

Radiated Emissions

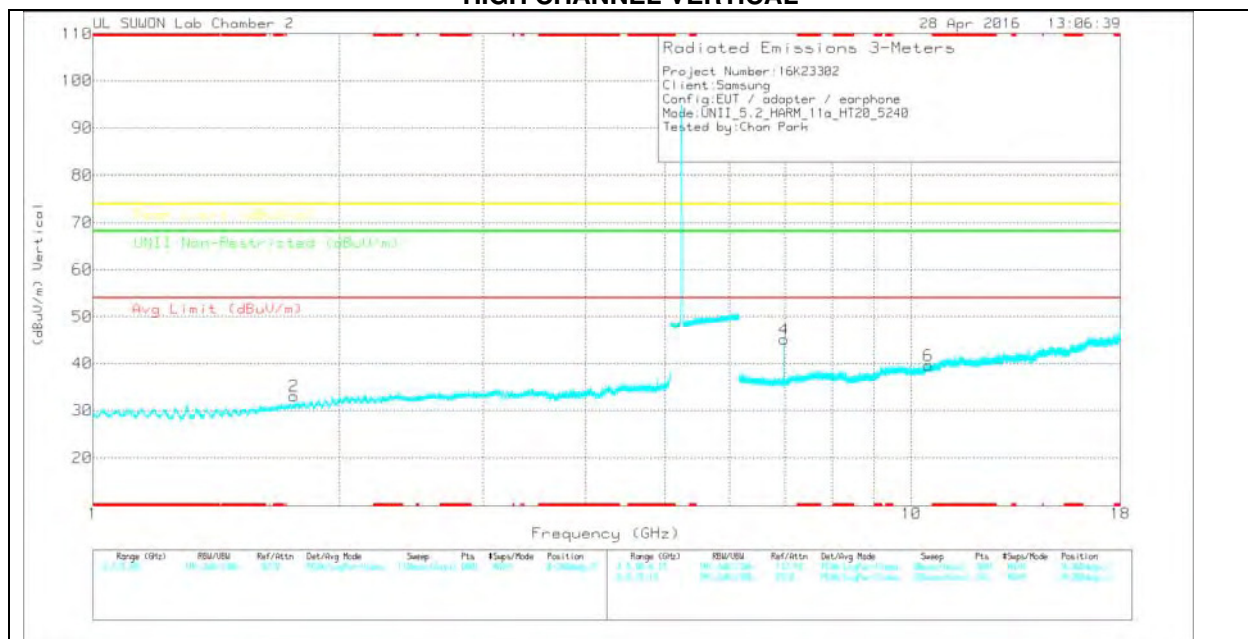
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016872 4_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6.934	36.92	PK-U	35.5	-22.6	0	49.82	-	-	-	-	68.2	-18.38	200	234	H
6.933	38.92	PK-U	35.5	-22.6	0	51.82	-	-	-	-	68.2	-16.38	147	246	V

PK-U - U-NII: Maximum Peak

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	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	1.764	29.48	PK	29.9	-27.4	0	31.98	-	-	-	-	68.2	-36.22	0-360	100	H
2	1.761	30.58	PK	29.9	-27.4	0	33.08	-	-	-	-	68.2	-35.12	0-360	100	V
3	6.986	30.23	PK	35.5	-22	0	43.73	-	-	-	-	68.2	-24.47	0-360	200	H
5	10.492	19.7	PK	37.7	-17.9	0	39.5	-	-	-	-	68.2	-28.7	0-360	100	H
4	6.986	31.66	PK	35.5	-22	0	45.16	-	-	-	-	68.2	-23.04	0-360	200	V
6	10.482	19.79	PK	37.7	-17.9	0	39.59	-	-	-	-	68.2	-28.61	0-360	200	V

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

PK – Peak detector

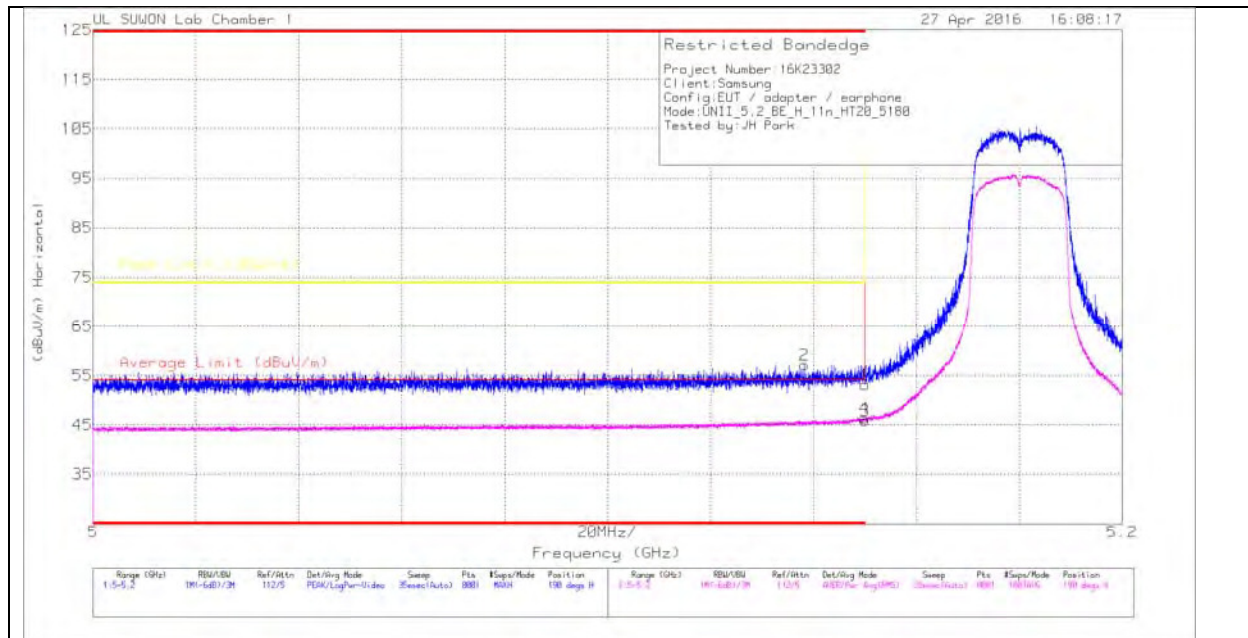
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016872 4)_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
6.986	35.31	PK-U	35.5	-22	0	48.81	-	-	-	-	68.2	-19.39	211	309	H
6.987	38.3	PK-U	35.5	-22	0	51.8	-	-	-	-	68.2	-16.4	299	271	V

PK-U - U-NII: Maximum Peak

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

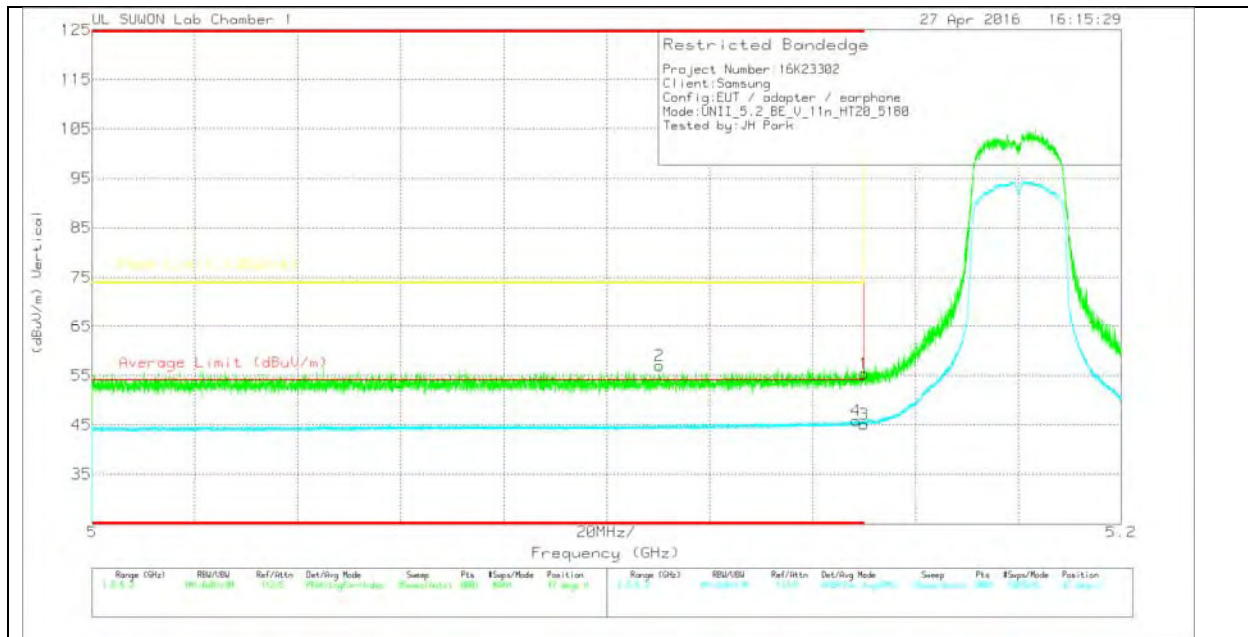
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	43.08	PK	34.2	-24.1	0	53.18	-	-	74	-20.82	190	100	H
2	* 5.138	46.99	PK	34.2	-24.1	0	57.09	-	-	74	-16.91	190	100	H
3	* 5.15	35.52	RMS	34.2	-24.1	.31	45.93	54	-8.07	-	-	190	100	H
4	* 5.15	36	RMS	34.2	-24.1	.31	46.41	54	-7.59	-	-	190	100	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	45.24	Pk	34.2	-24.1	0	55.34	-	-	74	-18.66	47	102	V
2	* 5.11	46.93	Pk	34.2	-24.1	0	57.03	-	-	74	-16.97	47	102	V
3	* 5.15	34.68	RMS	34.2	-24.1	.31	45.09	54	-8.91	-	-	47	102	V
4	* 5.148	35.47	RMS	34.2	-24.1	.31	45.88	54	-8.12	-	-	47	102	V

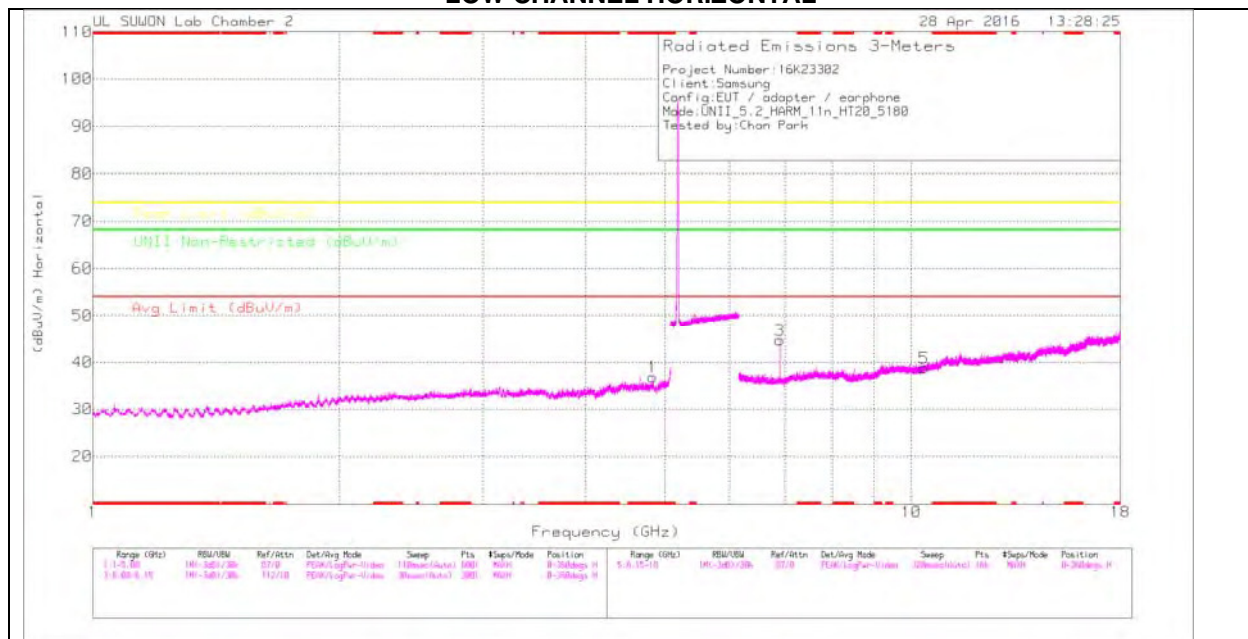
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

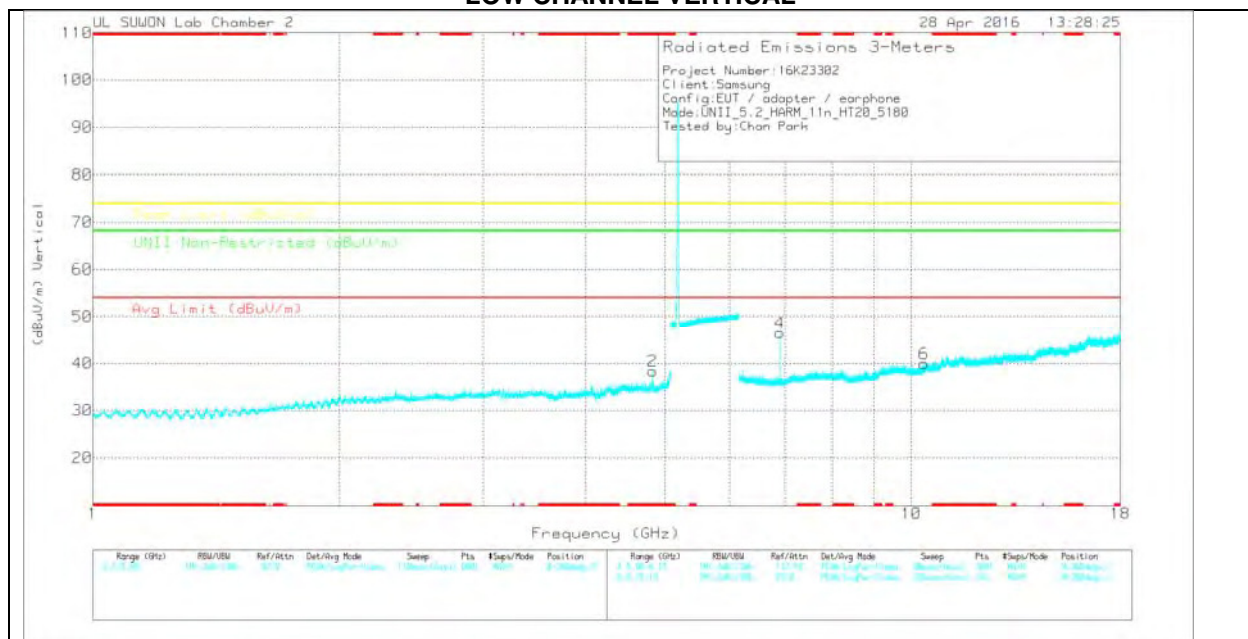
RMS - RMS detection

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 8724_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	* 4.832	27.68	PK	33.9	-24.7	0	36.88	-	-	74	-37.12	-	-	0-360	200	H
2	* 4.828	29.23	PK	33.9	-24.7	0	38.43	-	-	74	-35.57	-	-	0-360	200	V
3	6.906	32.26	PK	35.5	-23	0	44.76	-	-	-	-	68.2	-23.44	0-360	200	H
5	10.36	19.43	PK	37.6	-18.2	0	38.83	-	-	-	-	68.2	-29.37	0-360	200	H
4	6.906	34.09	PK	35.5	-23	0	46.59	-	-	-	-	68.2	-21.61	0-360	200	V
6	10.361	20.42	PK	37.6	-18.1	0	39.92	-	-	-	-	68.2	-28.28	0-360	100	V

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

PK – Peak detector

Radiated Emissions

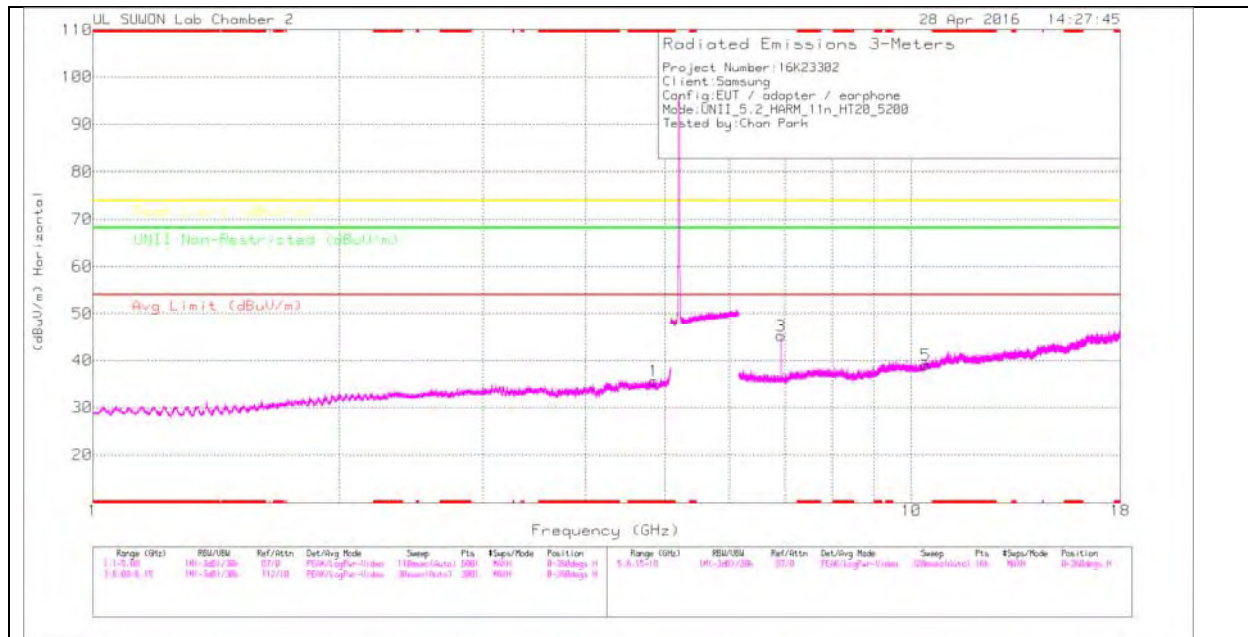
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 24_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.833	38.72	PK-U	33.9	-24.7	0	47.92	-	-	74	-26.08	-	-	174	337	H
* 4.831	25.04	ADR	33.9	-24.7	0	34.24	54	-19.76	-	-	-	-	174	337	H
* 4.829	40.29	PK-U	33.9	-24.7	0	49.49	-	-	74	-24.51	-	-	303	384	V
* 4.828	27.32	ADR	33.9	-24.7	0	36.52	54	-17.48	-	-	-	-	303	384	V
6.907	37.84	PK-U	35.5	-23	0	50.34	-	-	-	-	68.2	-17.86	326	174	H
6.907	37.99	PK-U	35.5	-23	0	50.49	-	-	-	-	68.2	-17.71	8	194	V

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

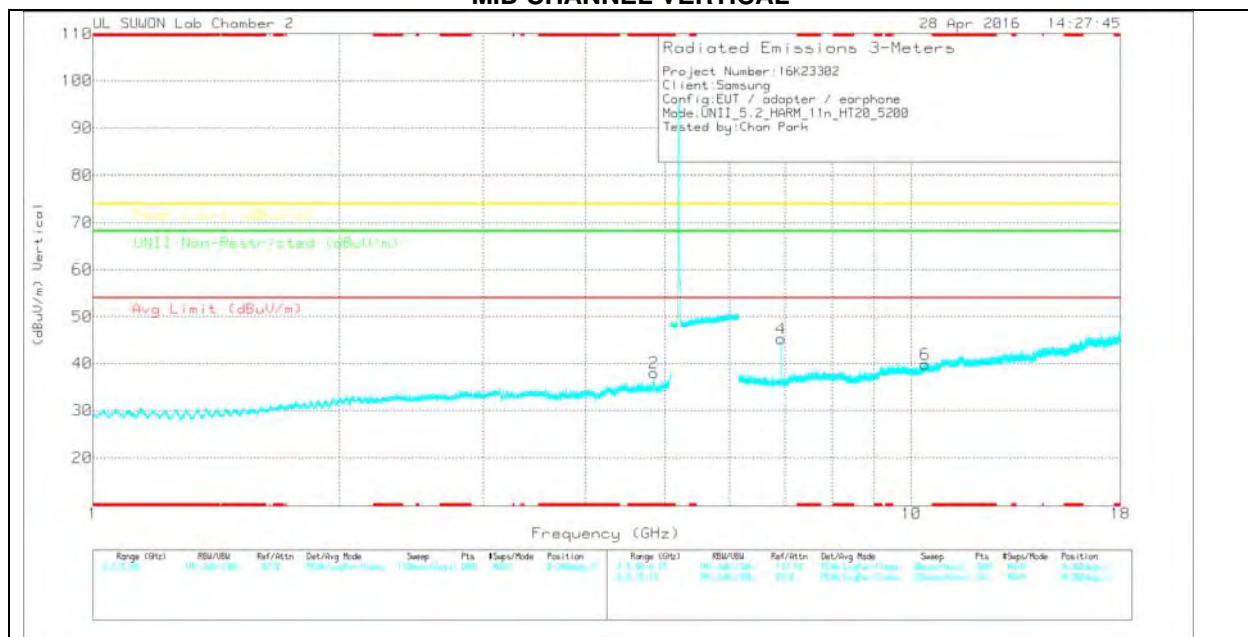
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	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	* 4.848	26.33	PK	33.9	-24.5	0	35.73	-	-	74	-38.27	-	-	0-360	100	H
2	* 4.848	28.65	PK	33.9	-24.5	0	38.05	-	-	74	-35.95	-	-	0-360	200	V
3	6.933	32.38	PK	35.5	-22.6	0	45.28	-	-	-	-	68.2	-22.92	0-360	200	H
5	10.413	19.28	PK	37.6	-17.8	0	39.08	-	-	-	-	68.2	-29.12	0-360	200	H
4	6.933	32.36	PK	35.5	-22.6	0	45.26	-	-	-	-	68.2	-22.94	0-360	200	V
6	10.402	20.14	PK	37.6	-17.9	0	39.84	-	-	-	-	68.2	-28.36	0-360	100	V

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

PK – Peak detector

Radiated Emissions

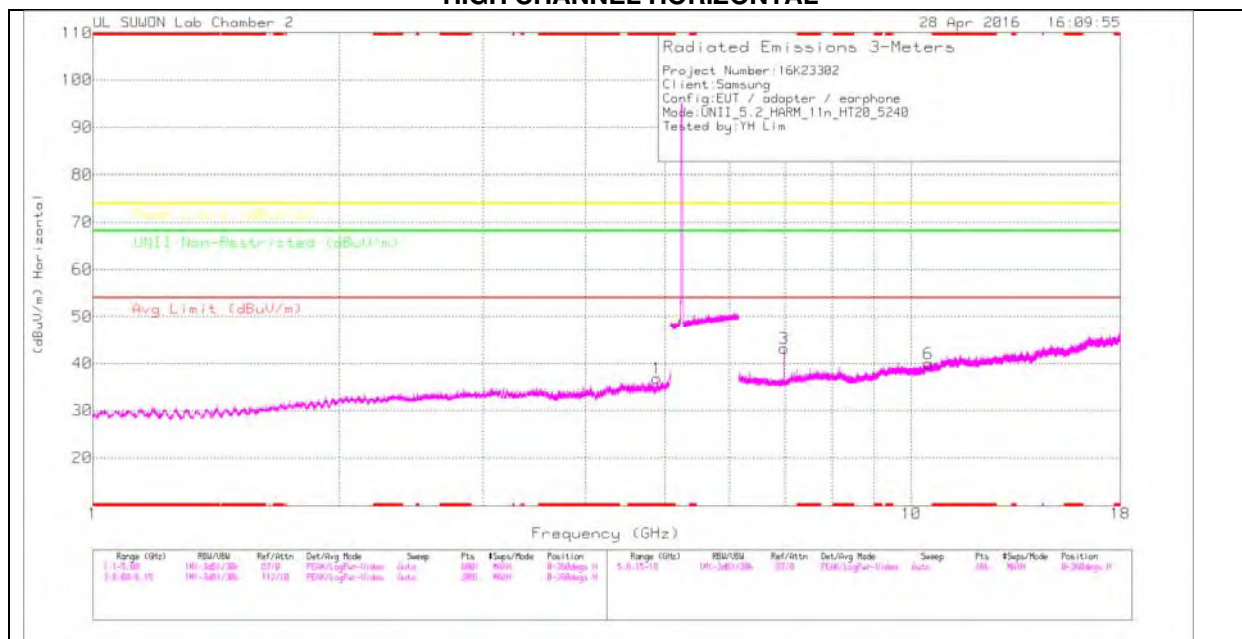
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016872 4_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.848	37.5	PK-U	33.9	-24.5	0	46.9	-	-	74	-27.1	-	-	126	305	V
* 4.848	26.2	ADR	33.9	-24.5	0	35.6	54	-18.4	-	-	-	-	126	305	V
6.933	37.05	PK-U	35.5	-22.6	0	49.95	-	-	-	-	68.2	-18.25	204	318	H
6.933	38.25	PK-U	35.5	-22.6	0	51.15	-	-	-	-	68.2	-17.05	145	361	V

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

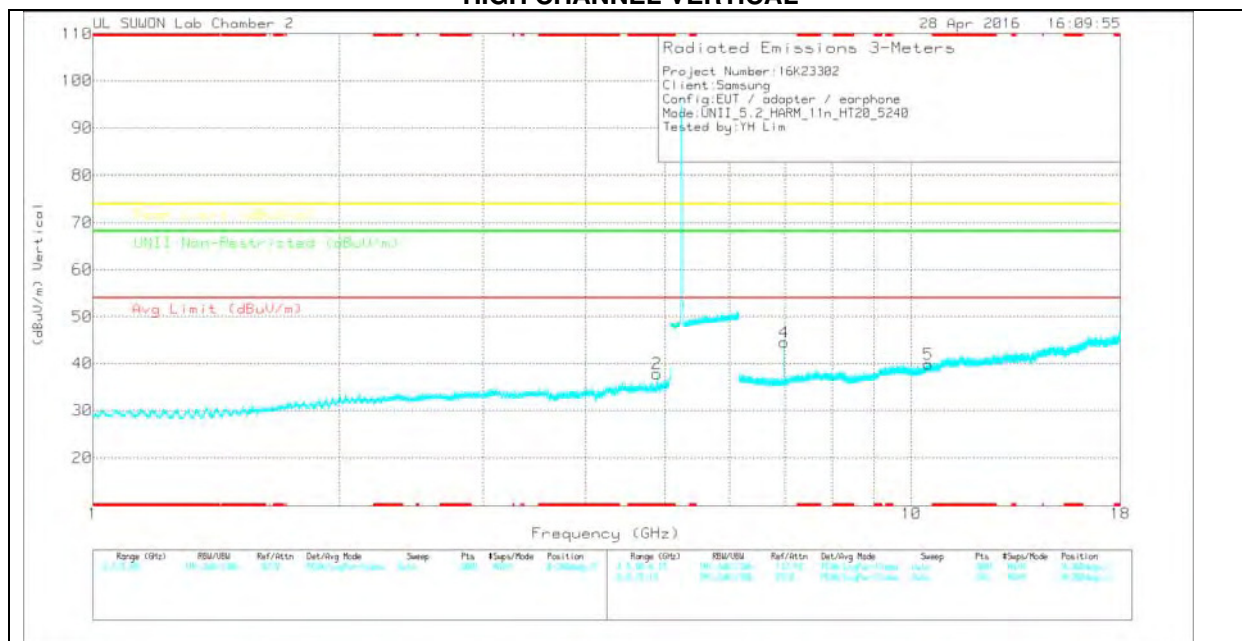
PK-U - U-NII: Maximum Peak

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	3117/00168724_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	* 4.888	27.16	Pk	33.9	-24.2	0	36.86	-	-	74	-37.14	-	-	0-360	100	H
2	* 4.888	28.11	Pk	33.9	-24.2	0	37.81	-	-	74	-36.19	-	-	0-360	200	V
3	6.986	29.73	Pk	35.5	-22	0	43.23	-	-	-	-	68.2	-24.97	0-360	200	H
6	10.48	20.15	Pk	37.7	-17.9	0	39.95	-	-	-	-	68.2	-28.25	0-360	100	H
4	6.986	30.97	Pk	35.5	-22	0	44.47	-	-	-	-	68.2	-23.73	0-360	200	V
5	10.481	20.07	Pk	37.7	-17.9	0	39.87	-	-	-	-	68.2	-28.33	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	3117/00168724_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
* 4.894	38.03	PK-U	33.9	-24.1	0	47.83	-	-	74	-26.17	-	-	132	100	H
* 4.888	26.29	ADR	33.9	-24.2	0	35.99	54	-18.01	-	-	-	-	132	100	H
* 4.888	39.39	PK-U	33.9	-24.2	0	49.09	-	-	74	-24.91	-	-	128	222	V
* 4.888	29.56	ADR	33.9	-24.2	0	39.26	54	-14.74	-	-	-	-	128	222	V
6.987	35.23	PK-U	35.5	-22	0	48.73	-	-	-	-	68.2	-19.47	209	220	V
6.987	35.5	PK-U	35.5	-22	0	49	-	-	-	-	68.2	-19.2	213	313	H

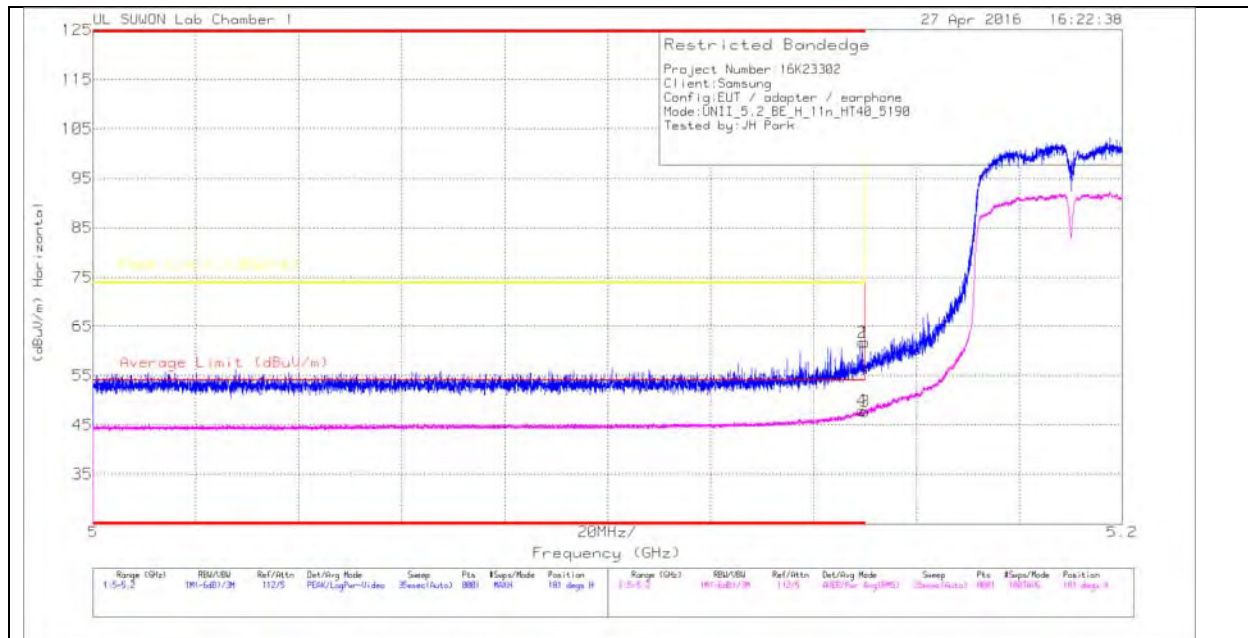
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.1.3. 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

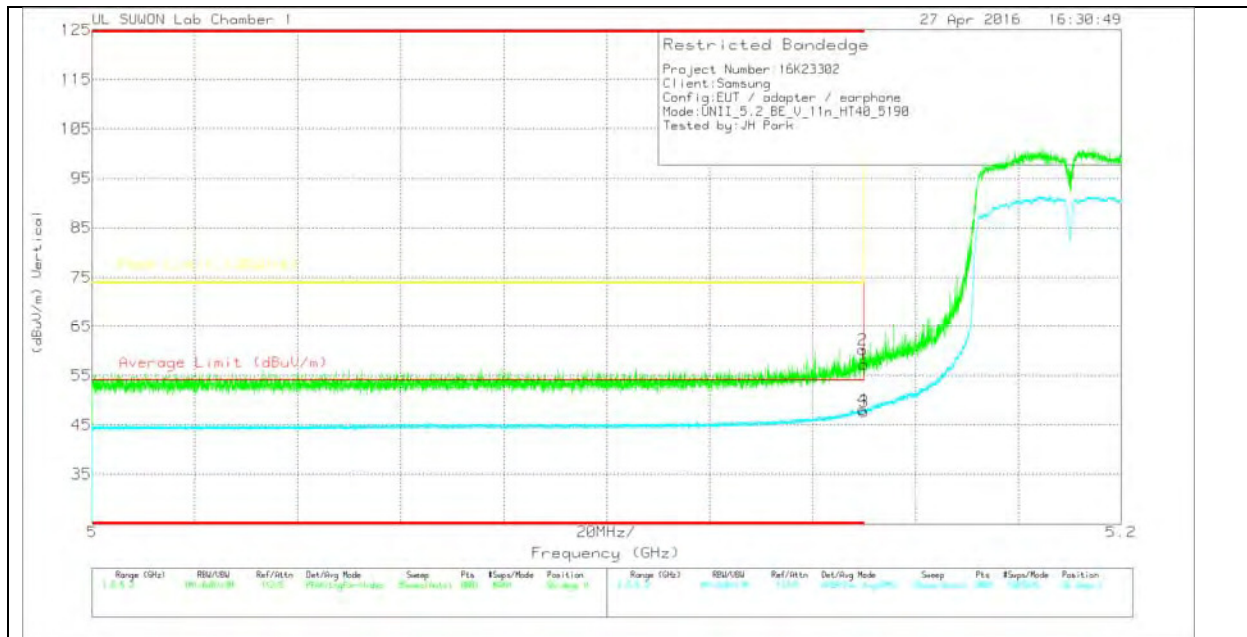
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	51.64	Pk	34.2	-24.1	0	61.74	-	-	74	-12.26	181	326	H
2	* 5.15	51.59	Pk	34.2	-24.1	0	61.69	-	-	74	-12.31	181	326	H
3	* 5.15	37.06	RMS	34.2	-24.1	.59	47.75	54	-6.25	-	-	181	326	H
4	* 5.149	37.22	RMS	34.2	-24.1	.59	47.91	54	-6.09	-	-	181	326	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	47.16	Pk	34.2	-24.1	0	57.26	-	-	74	-16.74	66	101	V
2	* 5.15	50.1	Pk	34.2	-24.1	0	60.2	-	-	74	-13.8	66	101	V
3	* 5.15	37	RMS	34.2	-24.1	.59	47.69	54	-6.31	-	-	66	101	V
4	* 5.15	37.36	RMS	34.2	-24.1	.59	48.05	54	-5.95	-	-	66	101	V

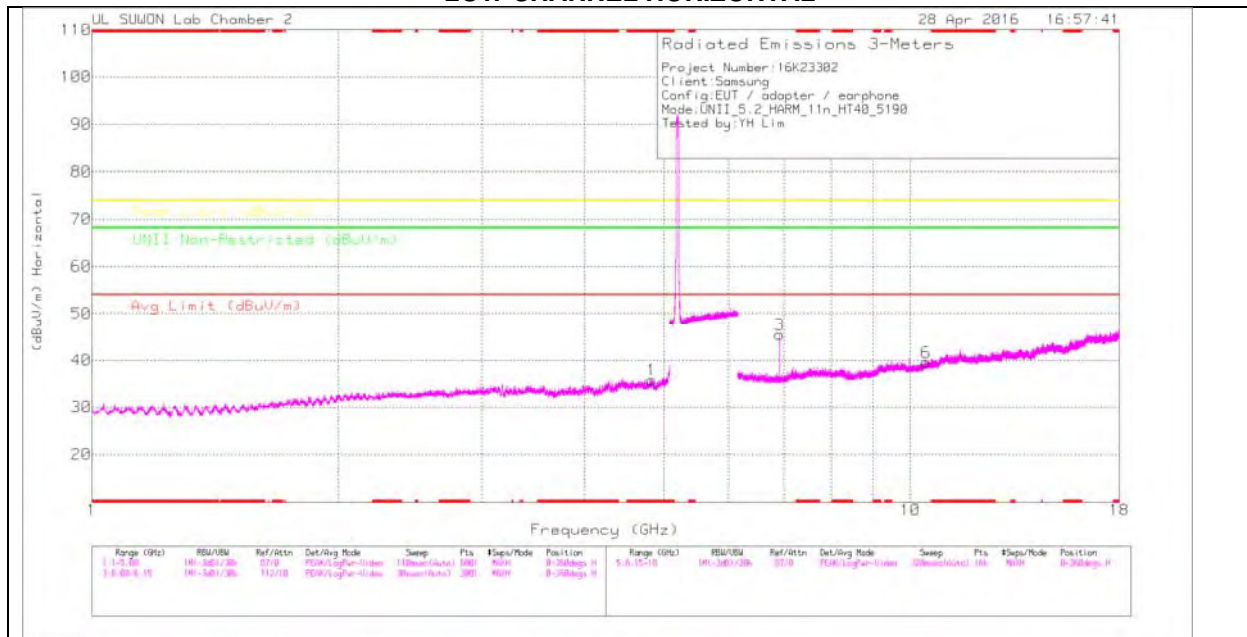
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

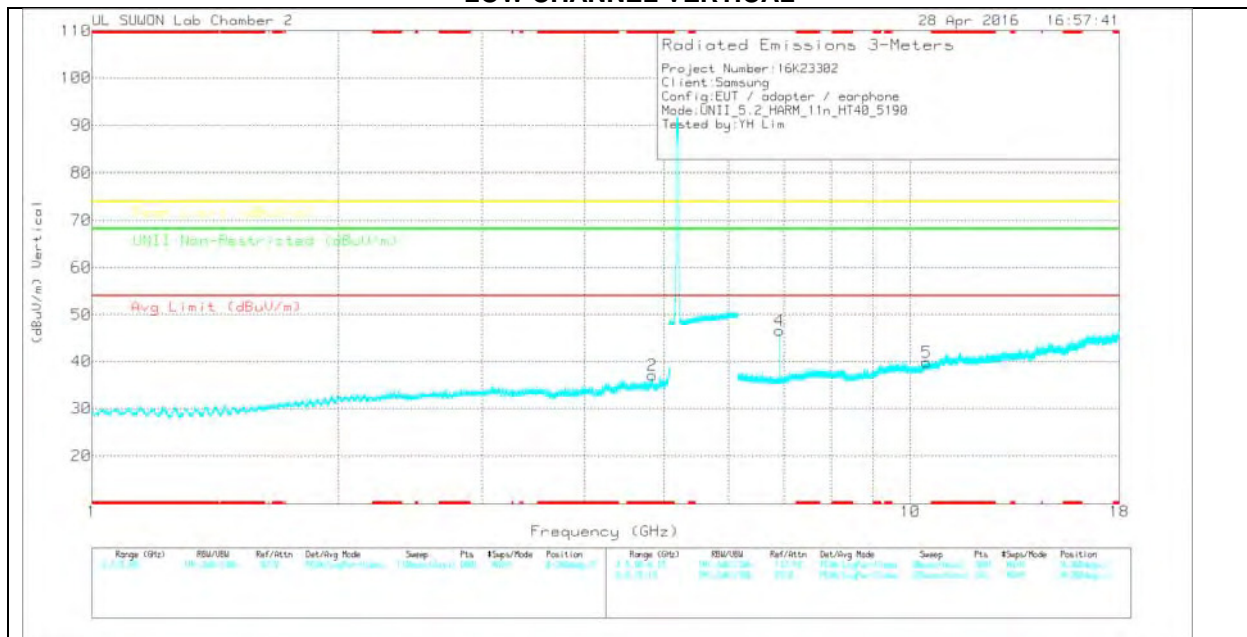
RMS - RMS detection

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 8724_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	* 4.826	26.69	Pk	33.9	-24.8	0	35.79	-	-	74	-38.21	-	-	0-360	200	H
2	* 4.838	27.8	Pk	33.9	-24.6	0	37.1	-	-	74	-36.9	-	-	0-360	200	V
3	6.919	32.79	Pk	35.5	-22.8	0	45.49	-	-	-	-	68.2	-22.71	0-360	200	H
6	10.46	19.66	Pk	37.7	-17.8	0	39.56	-	-	-	-	68.2	-28.64	0-360	100	H
4	6.919	33.9	Pk	35.5	-22.8	0	46.6	-	-	-	-	68.2	-21.6	0-360	200	V
5	10.464	19.96	Pk	37.7	-17.8	0	39.86	-	-	-	-	68.2	-28.34	0-360	100	V

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

Pk – Peak detector

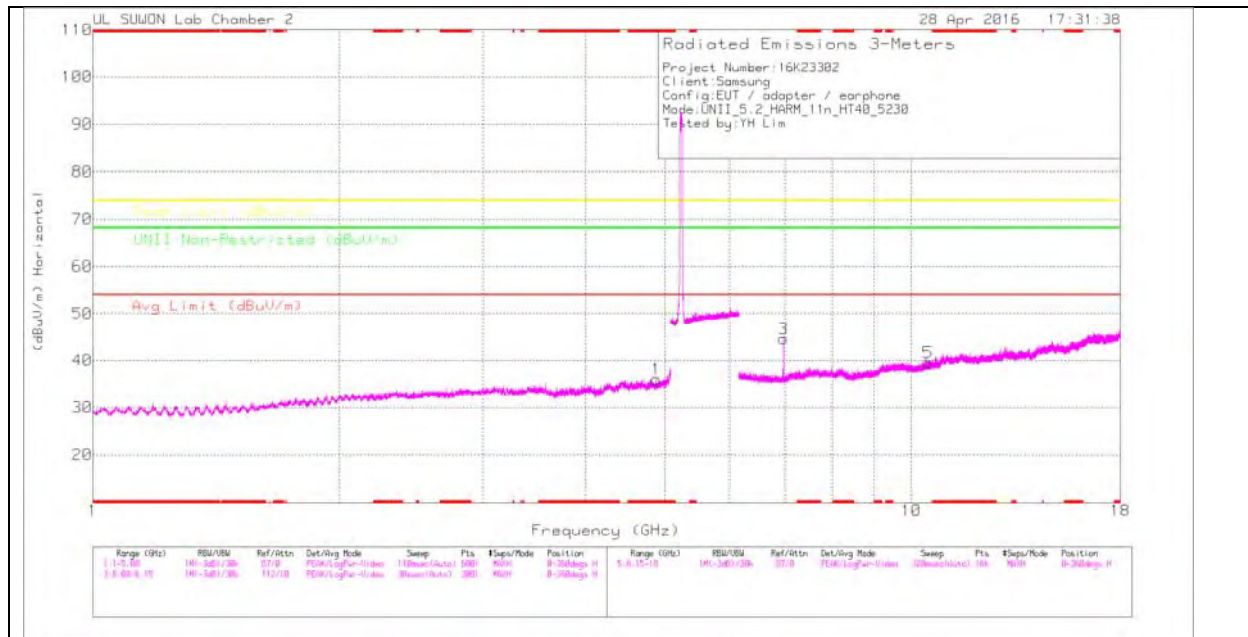
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016872 4_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	37.24	PK-U	35.5	-22.8	0	49.94	-	-	-	-	68.2	-18.26	324	181	H
6.92	39.3	PK-U	35.5	-22.8	0	52	-	-	-	-	68.2	-16.2	25	230	V

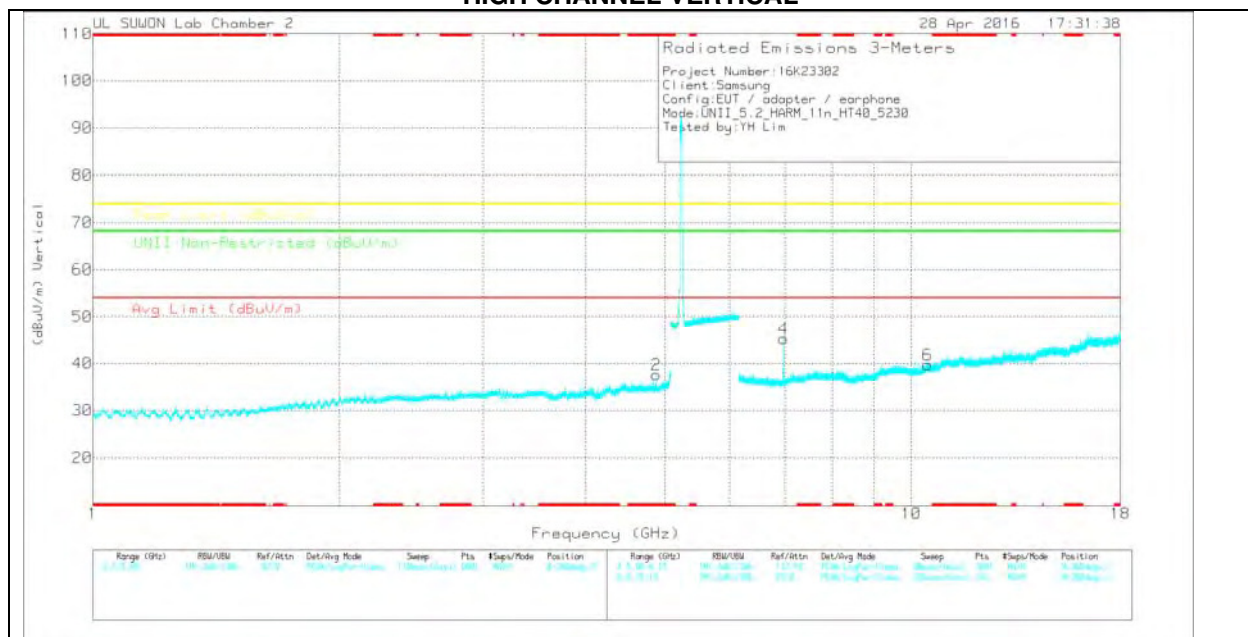
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	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	* 4.878	26.3	Pk	33.9	-24.2	0	36	-	-	74	-38	-	-	0-360	100	H
2	* 4.878	27.87	Pk	33.9	-24.2	0	37.57	-	-	74	-36.43	-	-	0-360	200	V
3	6.973	31.23	Pk	35.5	-22.1	0	44.63	-	-	-	-	68.2	-23.57	0-360	200	H
5	10.479	19.78	Pk	37.7	-17.9	0	39.58	-	-	-	-	68.2	-28.62	0-360	100	H
4	6.973	31.8	Pk	35.5	-22.1	0	45.2	-	-	-	-	68.2	-23	0-360	200	V
6	10.475	19.83	Pk	37.7	-17.9	0	39.63	-	-	-	-	68.2	-28.57	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	3117/0016872 4_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
* 4.878	40.9	PK-U	33.9	-24.2	0	50.6	-	-	74	-23.4	-	-	99	275	V
* 4.878	29.71	ADR	33.9	-24.2	0	39.41	54	-14.59	-	-	-	-	99	275	V
6.973	37.28	PK-U	35.5	-22.1	0	50.68	-	-	-	-	68.2	-17.52	158	246	V
6.974	37.91	PK-U	35.5	-22.1	0	51.31	-	-	-	-	68.2	-16.89	286	314	H

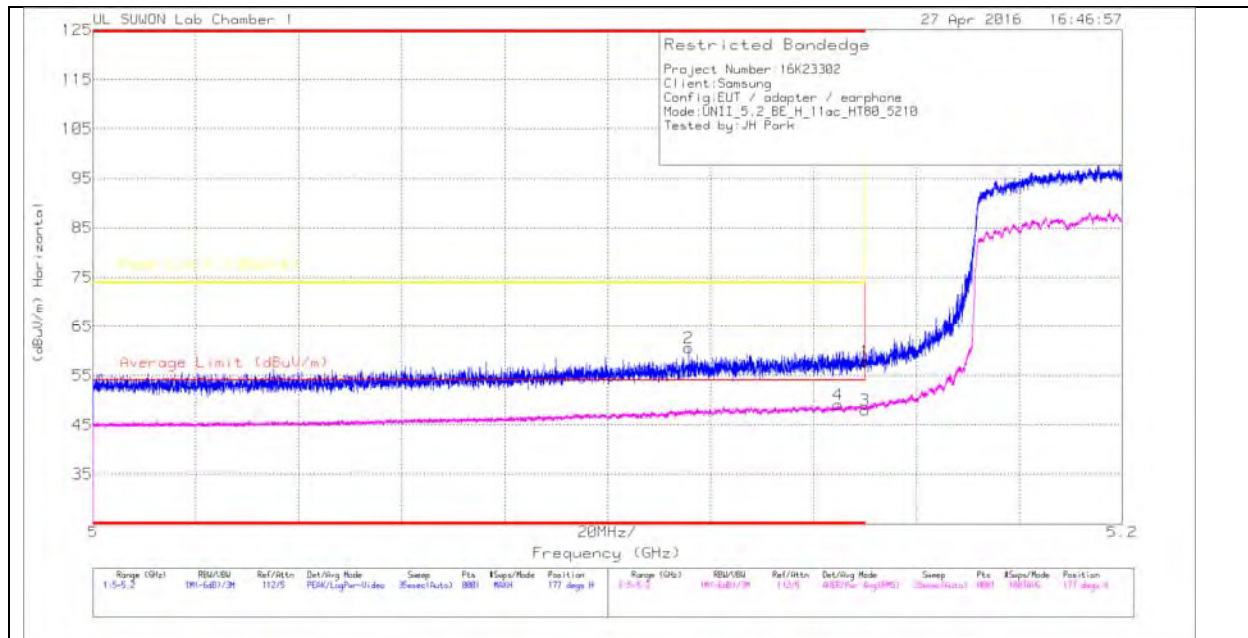
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.1.4. 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

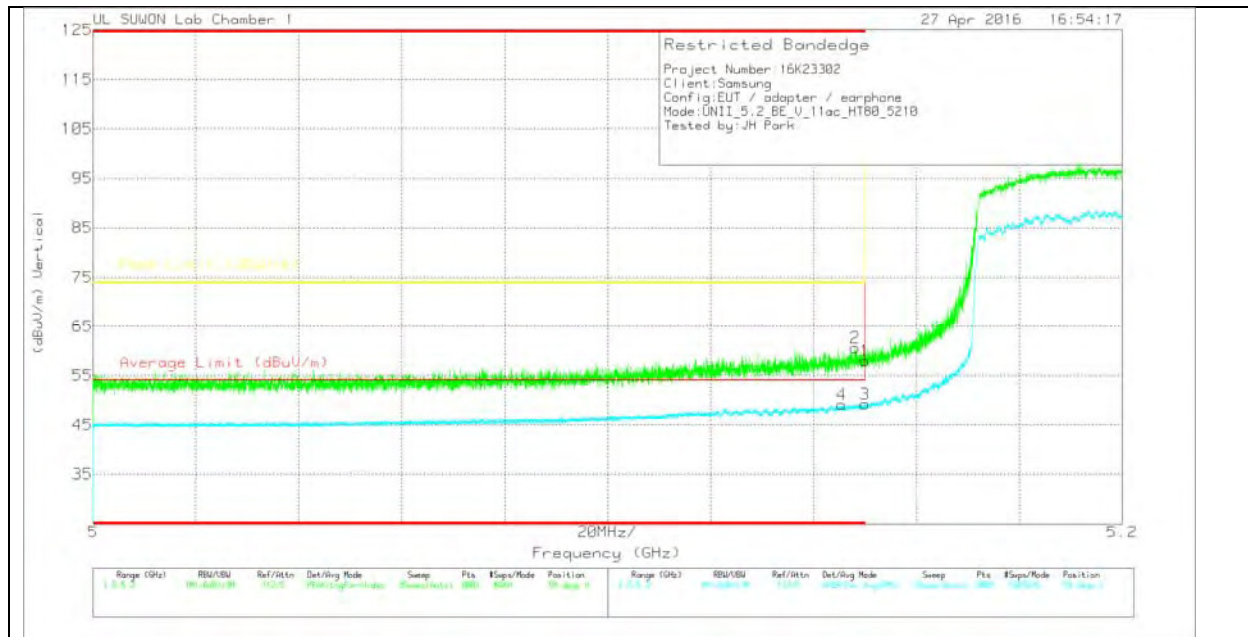
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	47.73	PK		34.2	-24.1	0	57.83	-	74	-16.17	177	100	H
2	* 5.116	50.5	PK		34.2	-24.1	0	60.6	-	74	-13.4	177	100	H
3	* 5.15	36.78	RMS		34.2	-24.1	1.12	48	54	-	-	177	100	H
4	* 5.145	37.84	RMS		34.2	-24.1	1.12	49.06	-4.94	-	-	177	100	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	47.91	Pk	34.2	-24.1	0	58.01	-	-	74	-15.99	59	101	V
2	* 5.148	50.55	Pk	34.2	-24.1	0	60.65	-	-	74	-13.35	59	101	V
3	* 5.15	37.95	RMS	34.2	-24.1	1.12	49.17	54	-4.83	-	-	59	101	V
4	* 5.146	37.91	RMS	34.2	-24.1	1.12	49.13	54	-4.87	-	-	59	101	V

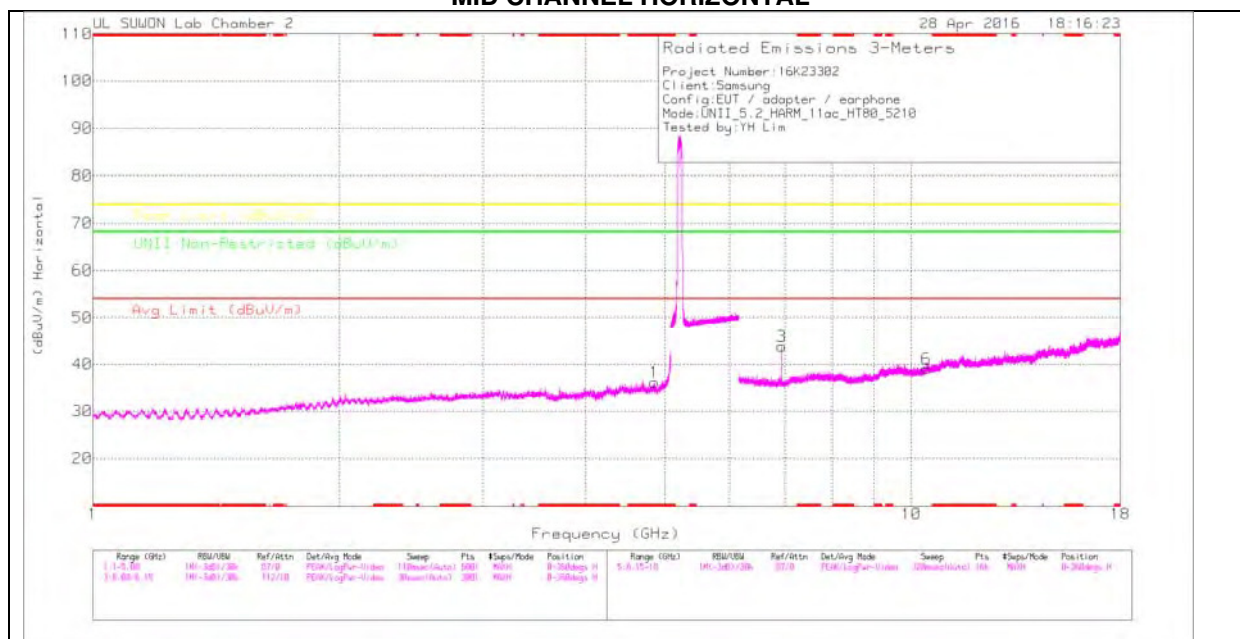
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

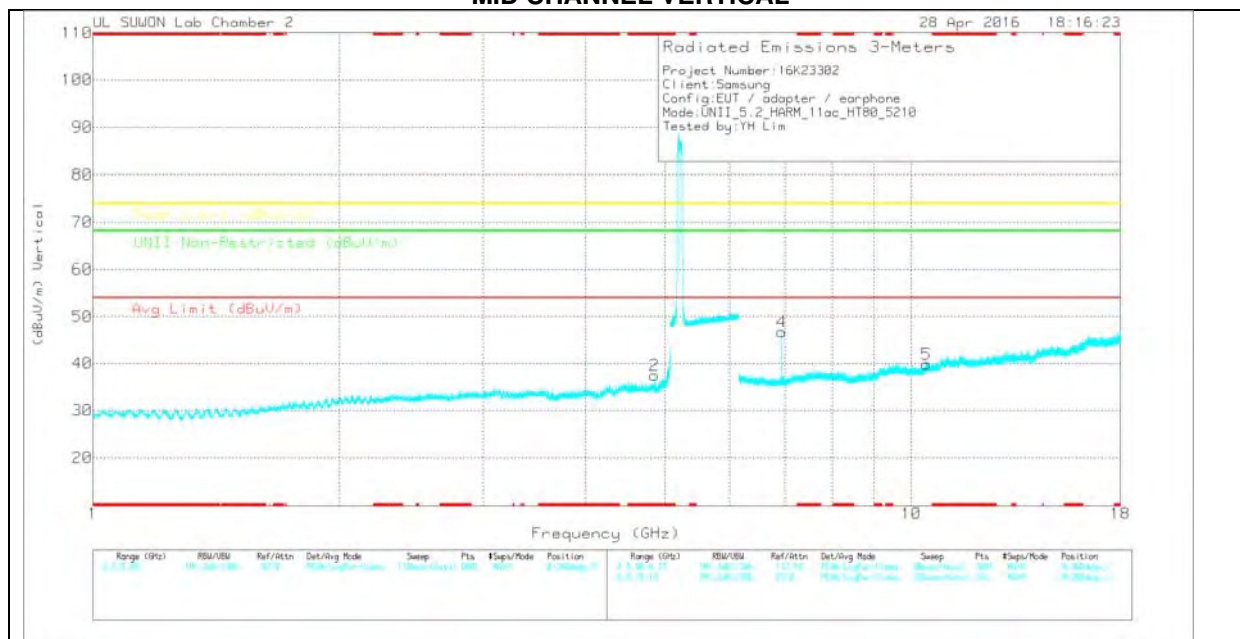
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	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	* 4.858	26.68	Pk	33.9	-24.4	0	36.18	-	-	74	-37.82	-	-	0-360	200	H
2	* 4.858	27.96	Pk	33.9	-24.4	0	37.46	-	-	74	-36.54	-	-	0-360	200	V
3	6.946	30.7	Pk	35.5	-22.4	0	43.8	-	-	-	-	68.2	-24.4	0-360	200	H
6	10.427	19.19	Pk	37.6	-17.8	0	38.99	-	-	-	-	68.2	-29.21	0-360	100	H
4	6.946	33.63	Pk	35.5	-22.4	0	46.73	-	-	-	-	68.2	-21.47	0-360	200	V
5	10.429	20.03	Pk	37.6	-17.8	0	39.83	-	-	-	-	68.2	-28.37	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 24_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
* 4.858	37.65	PK-U	33.9	-24.4	0	47.15	-	-	74	-26.85	-	-	151	242	V
* 4.858	25.87	ADR	33.9	-24.4	0	35.37	54	-18.63	-	-	-	-	151	242	V
6.946	37.1	PK-U	35.5	-22.4	0	50.2	-	-	-	-	68.2	-18	4	103	V
6.947	36.3	PK-U	35.5	-22.4	0	49.4	-	-	-	-	68.2	-18.8	322	183	H

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

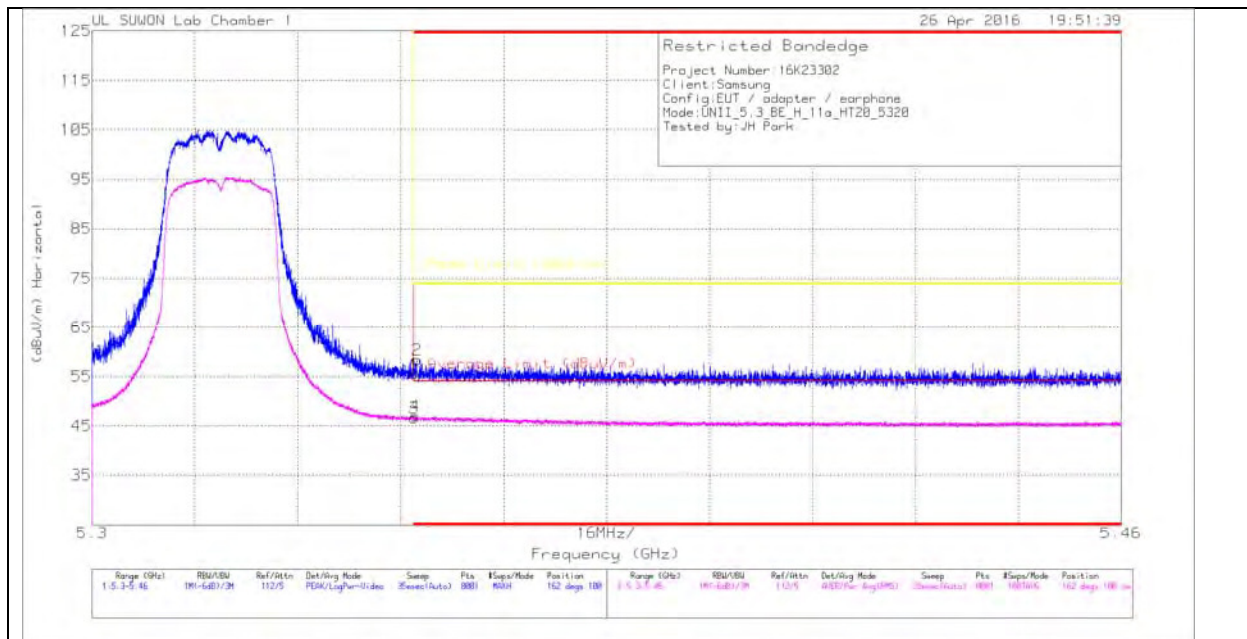
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.2. 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

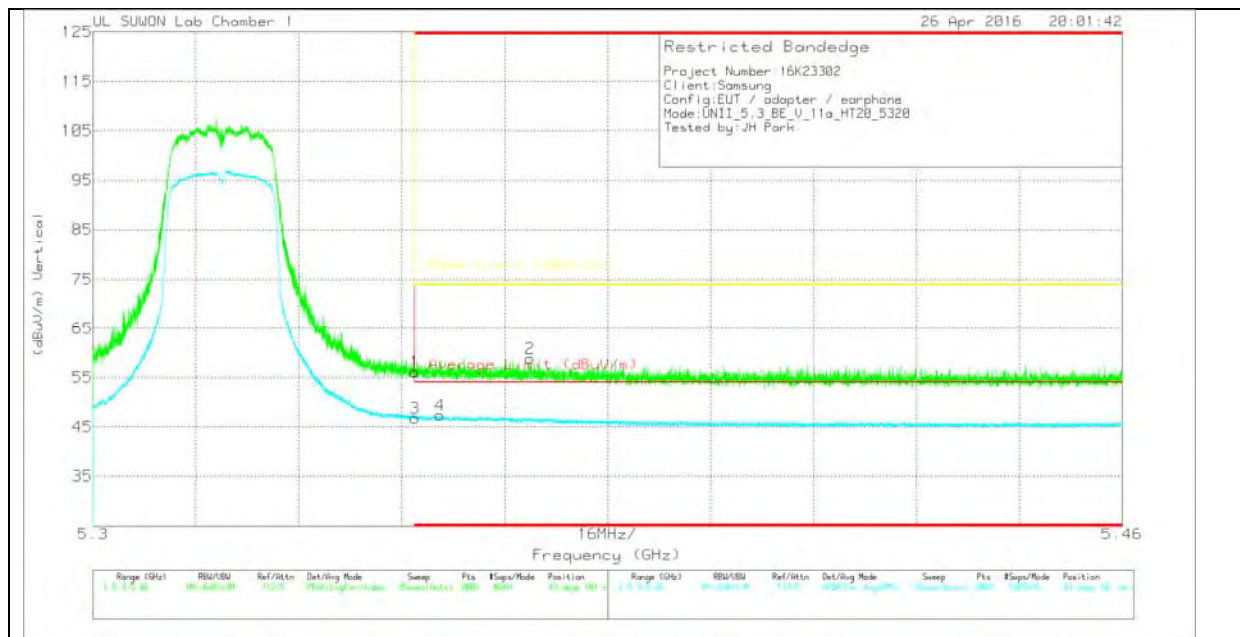
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	44.34	Pk	34.5	-23.3	0	55.54	-	-	74	-18.46	162	100	H
2	* 5.351	47.12	Pk	34.5	-23.3	0	58.32	-	-	74	-15.68	162	100	H
3	* 5.35	35.1	RMS	34.5	-23.3	.29	46.59	54	-7.41	-	-	162	100	H
4	* 5.35	35.51	RMS	34.5	-23.3	.29	47	54	-7	-	-	162	100	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	44.94	Pk	34.5	-23.3	0	56.14	-	-	74	-17.86	43	101	V
2	* 5.368	47.67	Pk	34.5	-23.3	0	58.87	-	-	74	-15.13	43	101	V
3	* 5.35	35.28	RMS	34.5	-23.3	.29	46.77	54	-7.23	-	-	43	101	V
4	* 5.354	35.85	RMS	34.5	-23.3	.29	47.34	54	-6.66	-	-	43	101	V

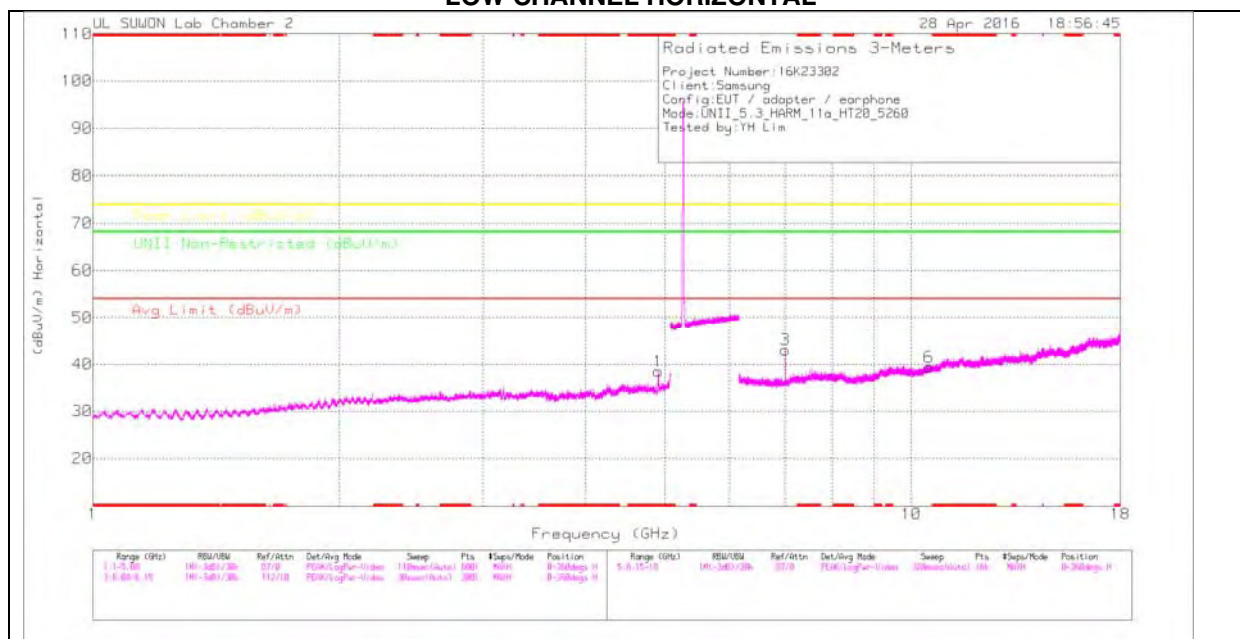
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

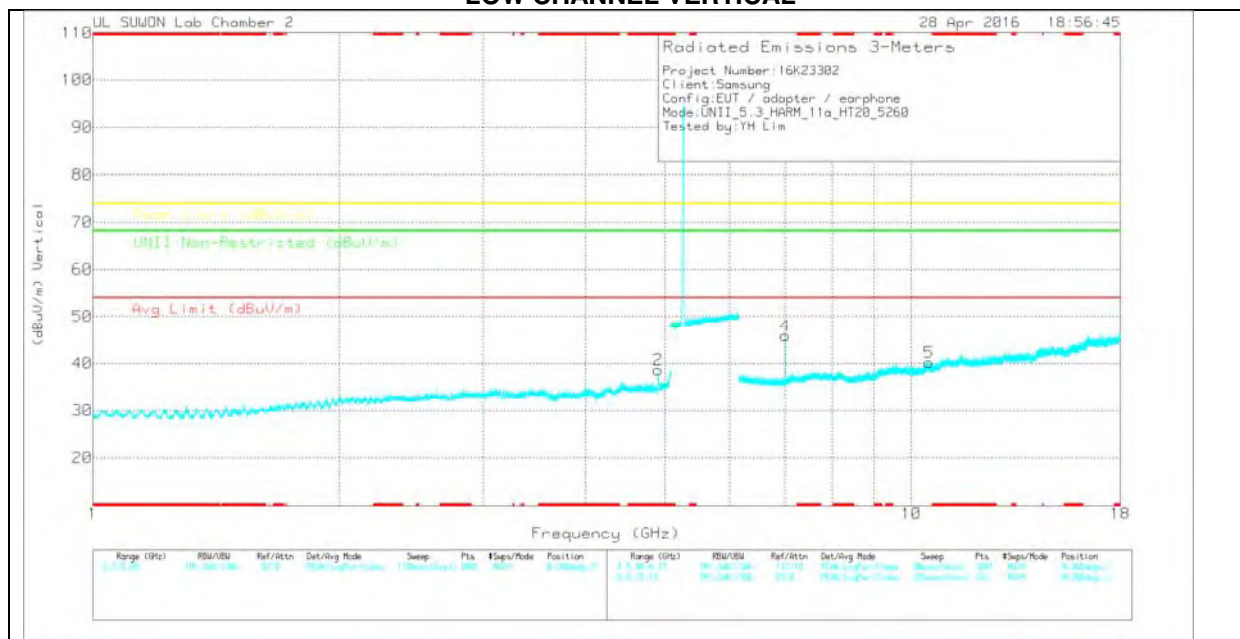
RMS - RMS detection

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 8724_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	* 4.909	28.76	Pk	33.9	-24.2	0	38.46	-	-	74	-35.54	-	-	0-360	200	H
2	* 4.909	28.99	Pk	33.9	-24.2	0	38.69	-	-	74	-35.31	-	-	0-360	200	V
3	7.013	29.31	Pk	35.6	-21.8	0	43.11	-	-	-	-	68.2	-25.09	0-360	200	H
6	10.506	19.71	Pk	37.7	-18	0	39.41	-	-	-	-	68.2	-28.79	0-360	200	H
4	7.013	32.06	Pk	35.6	-21.8	0	45.86	-	-	-	-	68.2	-22.34	0-360	200	V
5	10.503	20.52	Pk	37.7	-18	0	40.22	-	-	-	-	68.2	-27.98	0-360	200	V

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

Pk – Peak detector

Radiated Emissions

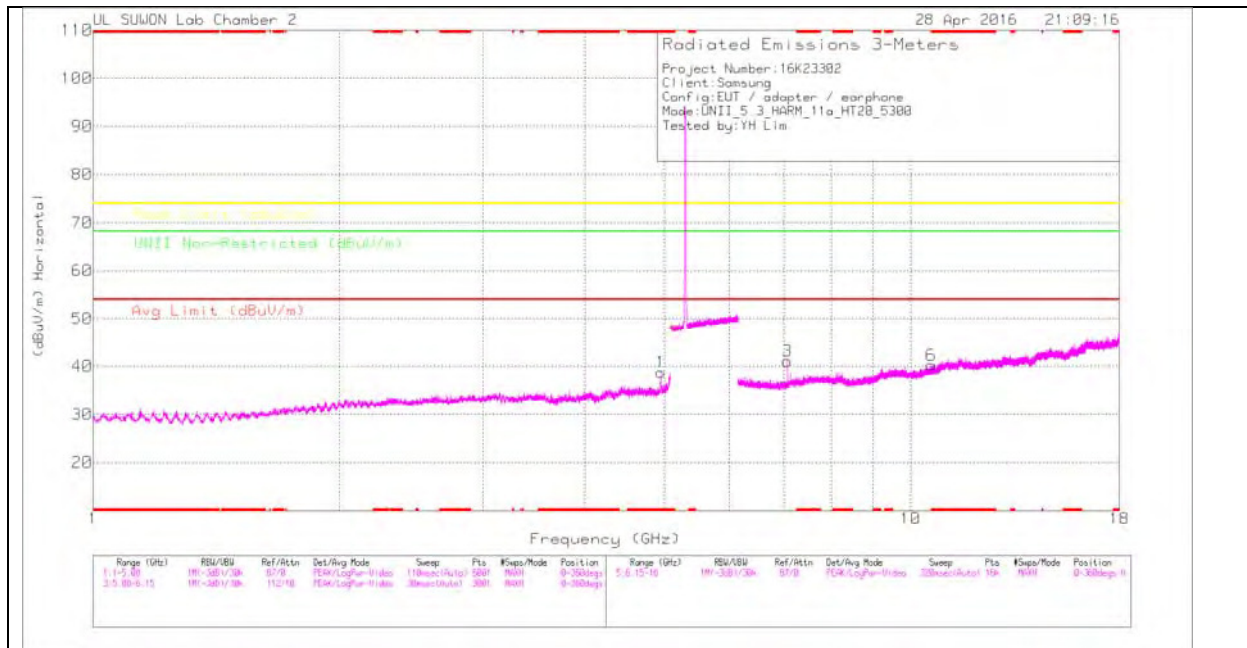
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 24_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.909	39.5	PK-U	33.9	-24.2	0	49.2	-	-	74	-24.8	-	-	173	368	H
* 4.908	27.76	ADR	33.9	-24.2	0	37.46	54	-16.54	-	-	-	-	173	368	H
* 4.908	39.38	PK-U	33.9	-24.2	0	49.08	-	-	74	-24.92	-	-	147	241	V
* 4.908	28.88	ADR	33.9	-24.2	0	38.58	54	-15.42	-	-	-	-	147	241	V
7.013	38.47	PK-U	35.6	-21.8	0	52.27	-	-	-	-	68.2	-15.93	303	309	V
7.014	36.42	PK-U	35.6	-21.8	0	50.22	-	-	-	-	68.2	-17.98	324	181	H

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

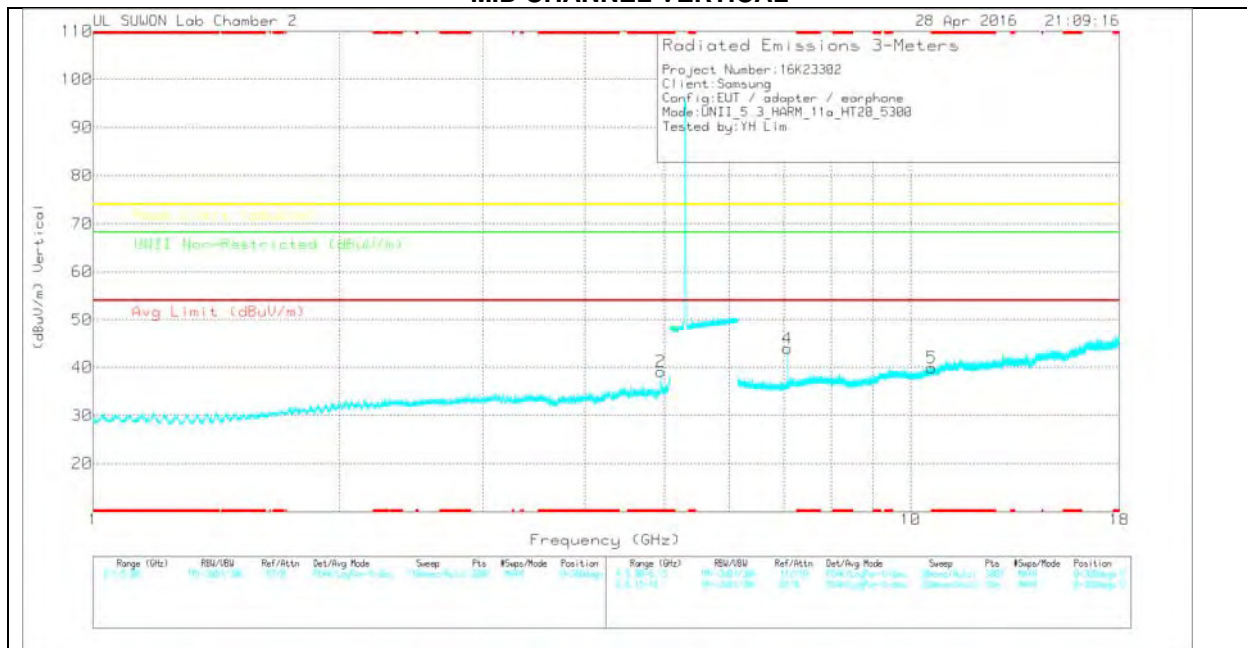
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	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	* 4.948	29.67	Pk	33.9	-24.8	0	38.77	-	-	74	-35.23	-	-	0-360	200	H
2	* 4.948	30.04	Pk	33.9	-24.8	0	39.14	-	-	74	-34.86	-	-	0-360	200	V
3	7.066	27.47	Pk	35.6	-22	0	41.07	-	-	-	-	68.2	-27.13	0-360	200	H
6	10.599	20.41	Pk	37.8	-18	0	40.21	-	-	-	-	68.2	-27.99	0-360	100	H
4	7.066	30.33	Pk	35.6	-22	0	43.93	-	-	-	-	68.2	-24.27	0-360	200	V
5	* 10.605	20.1	Pk	37.8	-18	0	39.9	-	-	74	-34.1	-	-	0-360	100	V

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

Pk – Peak detector

Radiated Emissions

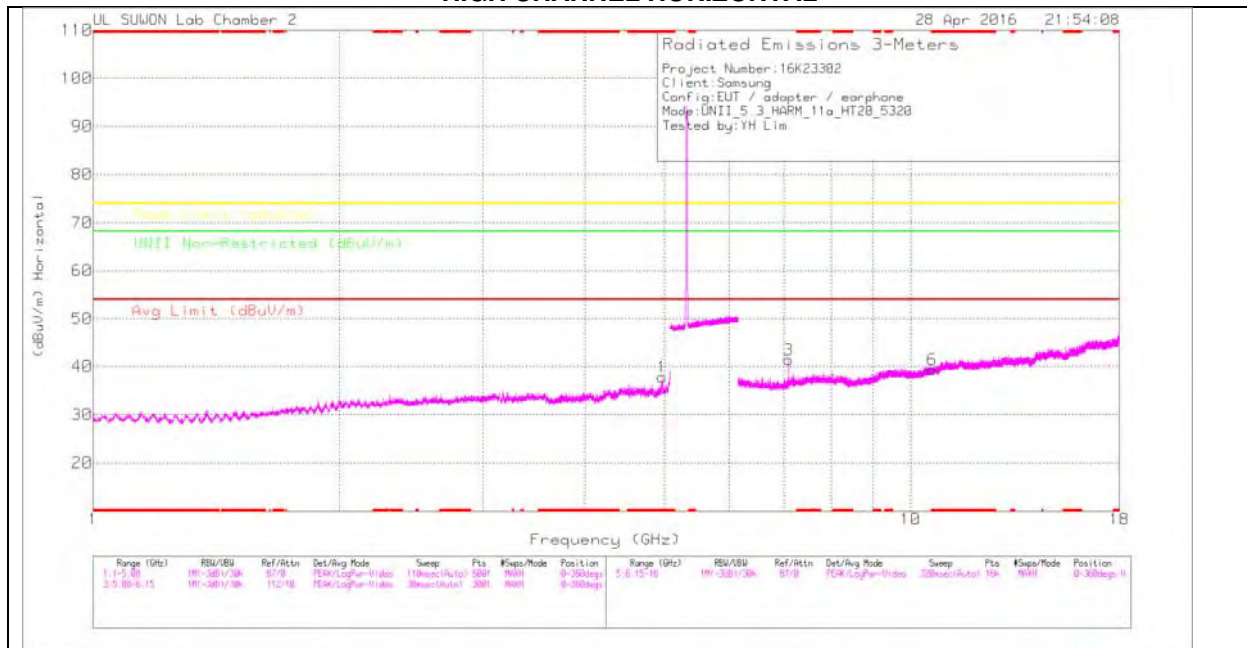
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016872 4)_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.948	40.85	PK-U	33.9	-24.8	0	49.95	-	-	74	-24.05	-	-	185	360	H
* 4.948	30.1	ADR	33.9	-24.8	0	39.2	54	-14.8	-	-	-	-	185	360	H
* 4.948	40.75	PK-U	33.9	-24.8	0	49.85	-	-	74	-24.15	-	-	142	329	V
* 4.948	32.5	ADR	33.9	-24.8	0	41.6	54	-12.4	-	-	-	-	142	329	V
7.067	37.53	PK-U	35.6	-22	0	51.13	-	-	-	-	68.2	-17.07	300	246	V
7.067	35.54	PK-U	35.6	-22	0	49.14	-	-	-	-	68.2	-19.06	324	371	H

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

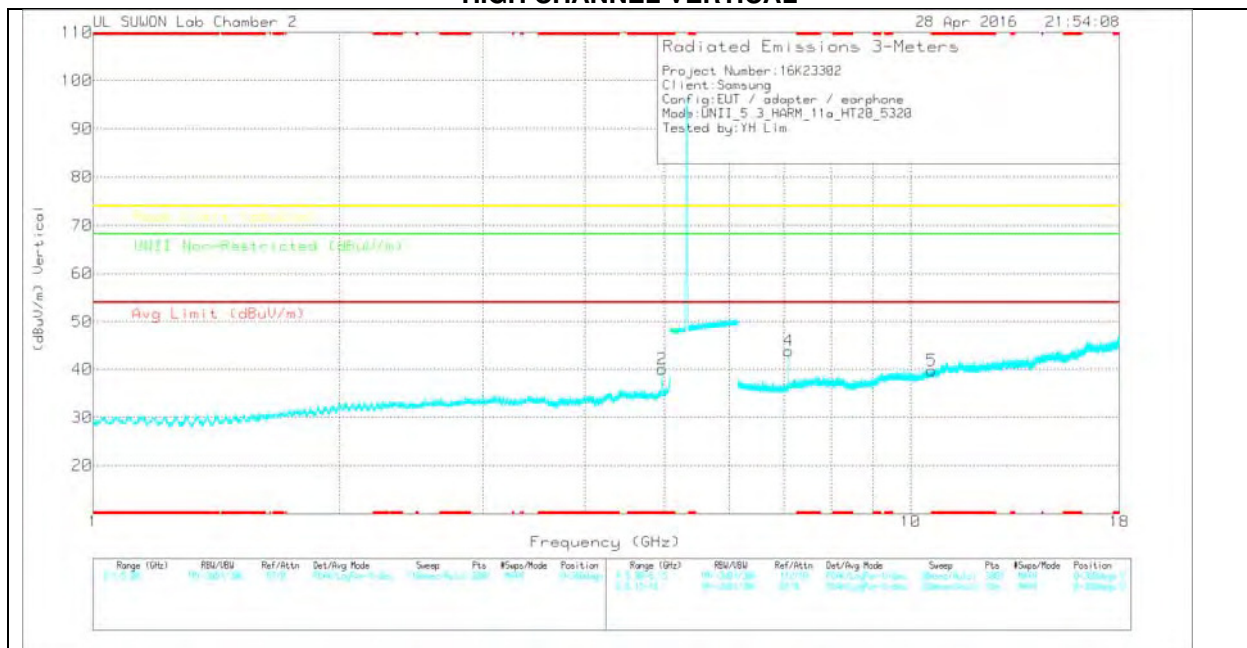
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	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	* 4.968	28.42	Pk	33.9	-24.5	0	37.82	-	-	74	-36.18	-	-	0-360	200	H
2	* 4.968	30.66	Pk	33.9	-24.5	0	40.06	-	-	74	-33.94	-	-	0-360	200	V
3	7.093	28.17	Pk	35.6	-22.4	0	41.37	-	-	-	-	68.2	-26.83	0-360	200	H
6	* 10.633	19.43	Pk	37.8	-17.9	0	39.33	-	-	74	-34.67	-	-	0-360	200	H
4	7.093	30.66	Pk	35.6	-22.4	0	43.86	-	-	-	-	68.2	-24.34	0-360	200	V
5	* 10.613	19.97	Pk	37.8	-18	0	39.77	-	-	74	-34.23	-	-	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 24_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	41.6	PK-U	33.9	-24.5	0	51	-	-	74	-23	-	-	181	360	H
* 4.968	30.65	ADR	33.9	-24.5	0	40.05	54	-13.95	-	-	-	-	181	360	H
* 4.968	40.78	PK-U	33.9	-24.5	0	50.18	-	-	74	-23.82	-	-	124	330	V
* 4.968	29.84	ADR	33.9	-24.5	0	39.24	54	-14.76	-	-	-	-	124	330	V
7.094	36.5	PK-U	35.6	-22.4	0	49.7	-	-	-	-	68.2	-18.5	173	183	V
7.093	37.23	PK-U	35.6	-22.4	0	50.43	-	-	-	-	68.2	-17.77	286	286	H

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

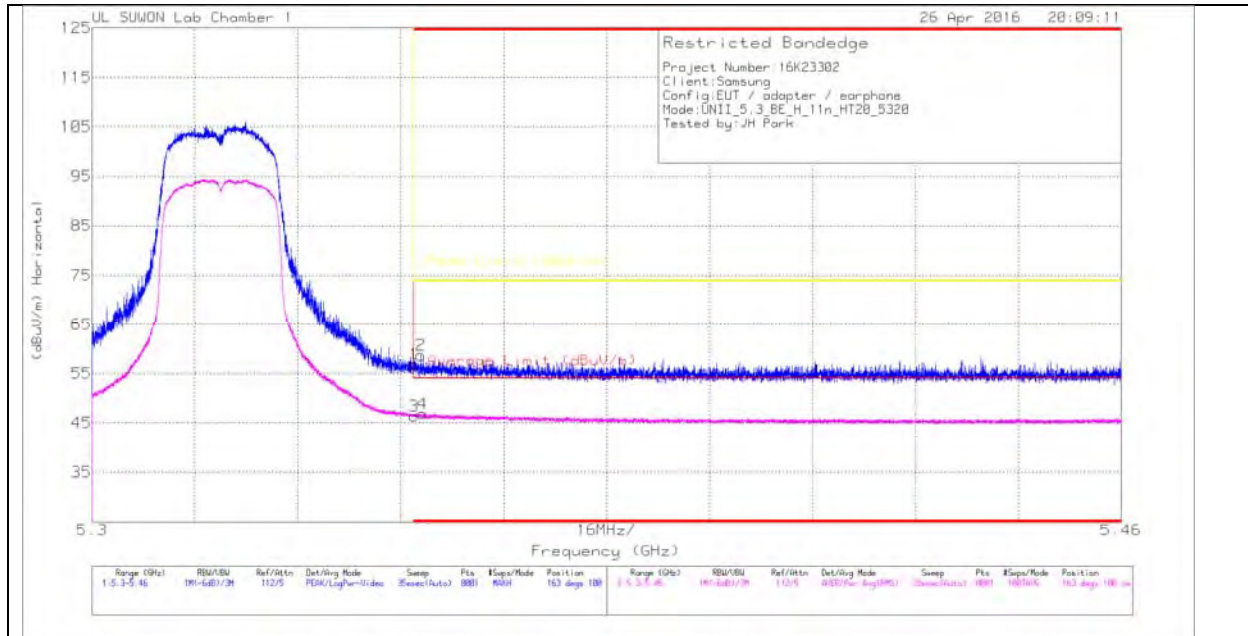
PK-U - U-NII: Maximum Peak

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

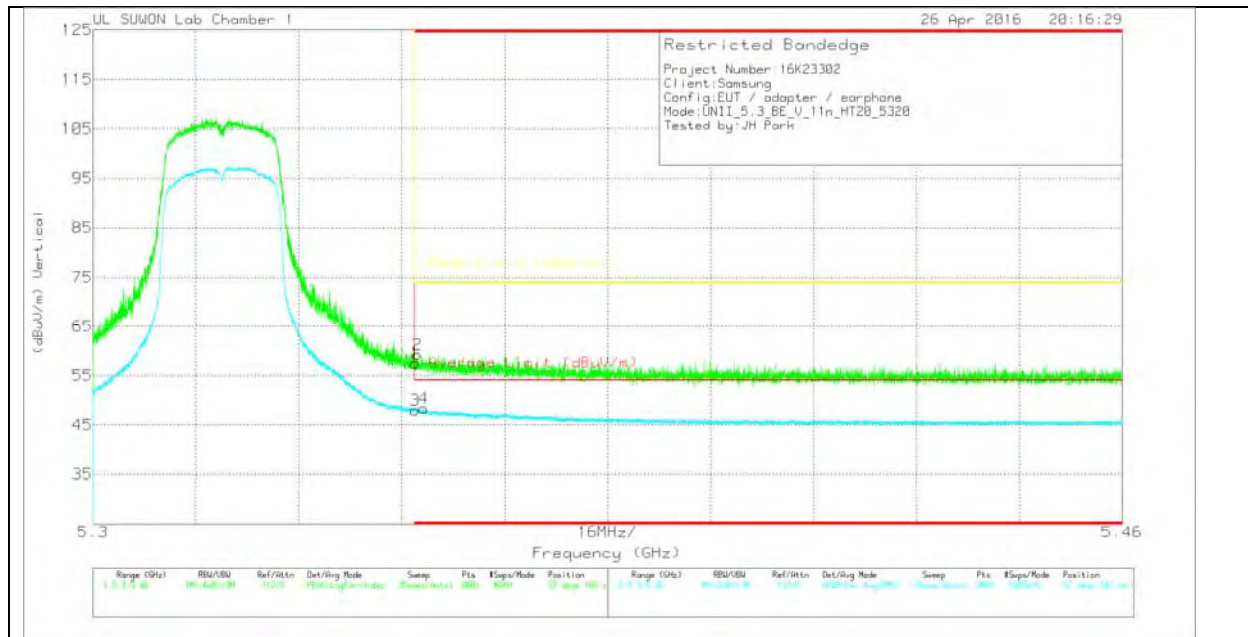
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	45.67	PK	34.5	-23.3	0	56.87	-	-	74	-17.13	163	100	H
2	* 5.351	47.48	PK	34.5	-23.3	0	58.68	-	-	74	-15.32	163	100	H
3	* 5.35	34.91	RMS	34.5	-23.3	.31	46.42	54	-7.58	-	-	163	100	H
4	* 5.351	35.4	RMS	34.5	-23.3	.31	46.91	54	-7.09	-	-	163	100	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	46.34	Pk	34.5	-23.3	0	57.54	-	-	74	-16.46	57	102	V
2	* 5.35	48.07	Pk	34.5	-23.3	0	59.27	-	-	74	-14.73	57	102	V
3	* 5.35	36.45	RMS	34.5	-23.3	.31	47.96	54	-6.04	-	-	57	102	V
4	* 5.351	36.79	RMS	34.5	-23.3	.31	48.3	54	-5.7	-	-	57	102	V

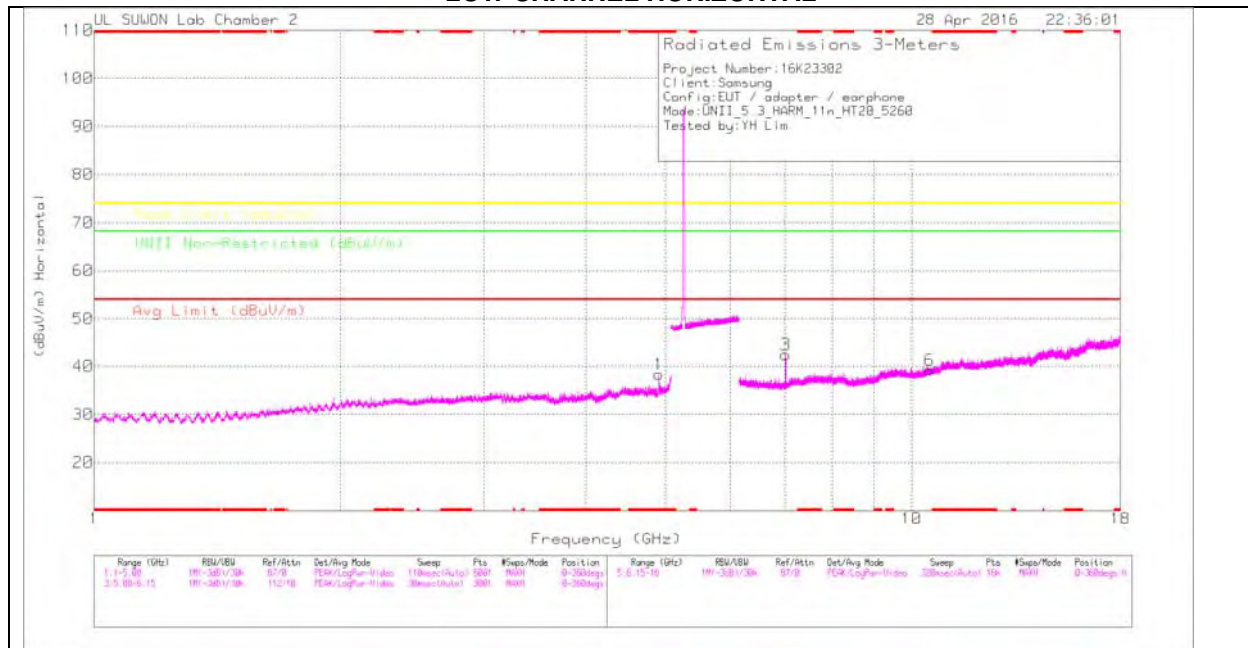
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

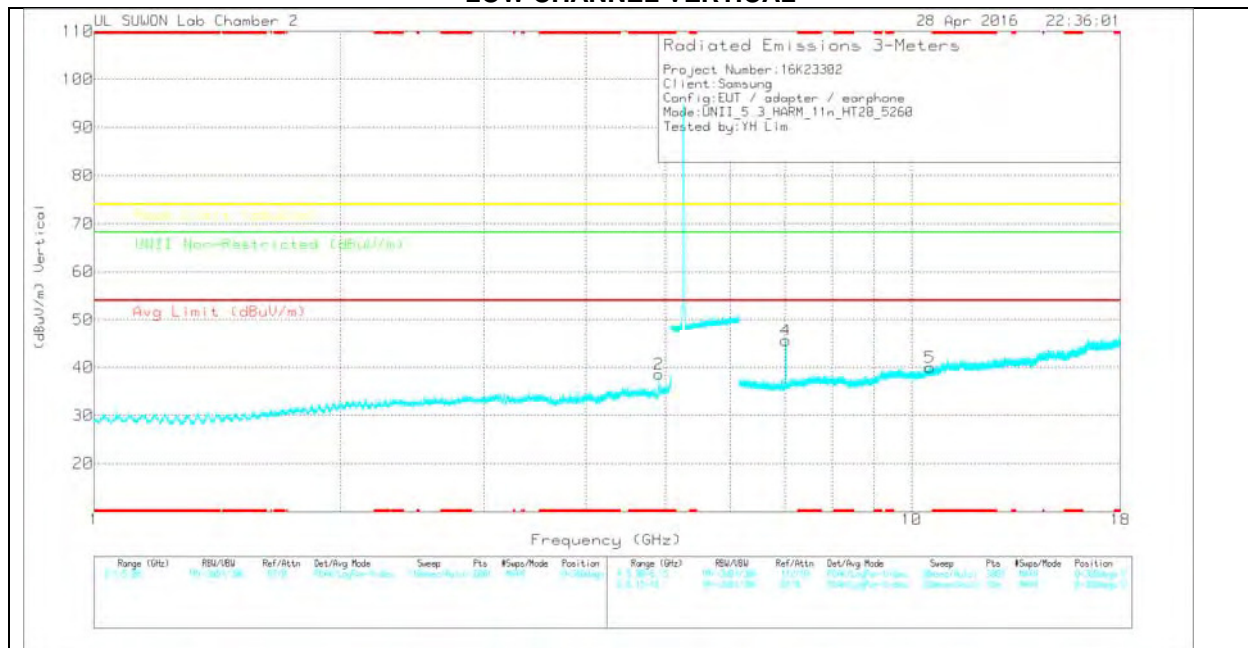
RMS - RMS detection

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 8724_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	* 4.908	28.62	Pk	33.9	-24.2	0	38.32	-	-	74	-35.68	-	-	0-360	100	H
2	* 4.908	28.86	Pk	33.9	-24.2	0	38.56	-	-	74	-35.44	-	-	0-360	200	V
3	7.013	28.64	Pk	35.6	-21.8	0	42.44	-	-	-	-	68.2	-25.76	0-360	100	H
6	10.525	19.49	Pk	37.7	-18	0	39.19	-	-	-	-	68.2	-29.01	0-360	100	H
4	7.013	31.84	Pk	35.6	-21.8	0	45.64	-	-	-	-	68.2	-22.56	0-360	200	V
5	10.527	20.25	Pk	37.7	-18	0	39.95	-	-	-	-	68.2	-28.25	0-360	100	V

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

Radiated Emissions

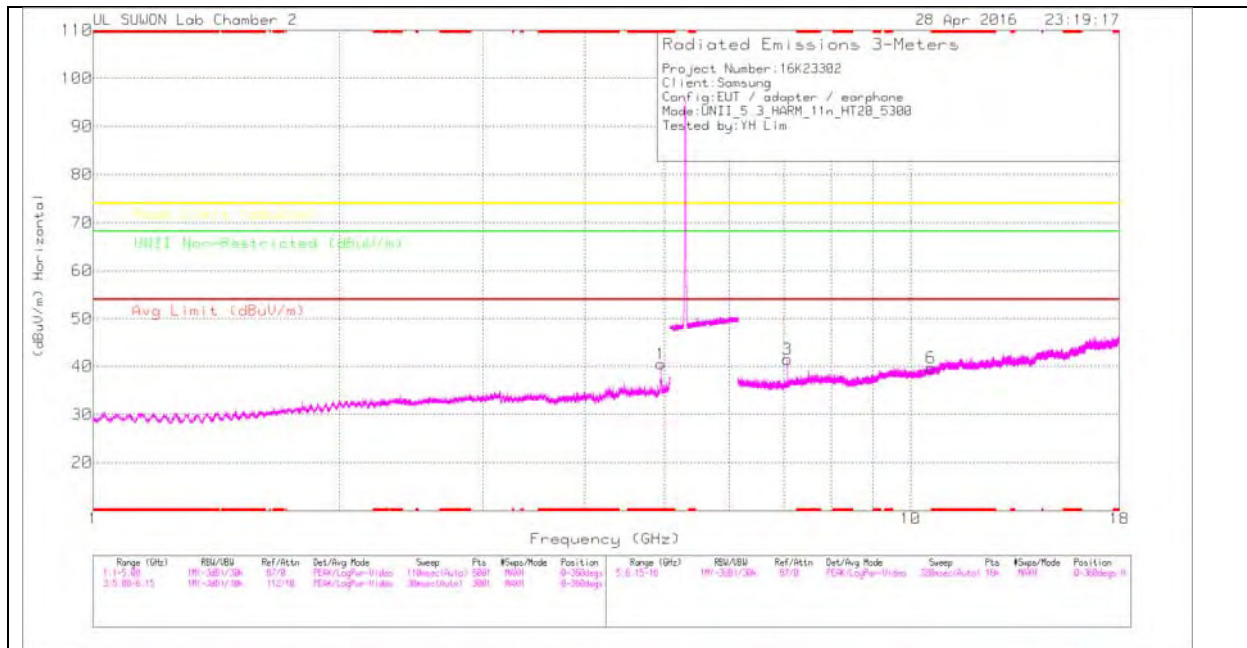
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 24_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.908	39.55	PK-U	33.9	-24.2	0	49.25	-	-	74	-24.75	-	-	184	328	H
* 4.908	29.09	ADR	33.9	-24.2	0	38.79	54	-15.21	-	-	-	-	184	328	H
* 4.908	39.3	PK-U	33.9	-24.2	0	49	-	-	74	-25	-	-	153	337	V
* 4.908	26.95	ADR	33.9	-24.2	0	36.65	54	-17.35	-	-	-	-	153	337	V
7.013	38.11	PK-U	35.6	-21.8	0	51.91	-	-	-	-	68.2	-16.29	301	267	V
7.013	36.48	PK-U	35.6	-21.8	0	50.28	-	-	-	-	68.2	-17.92	326	186	H

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

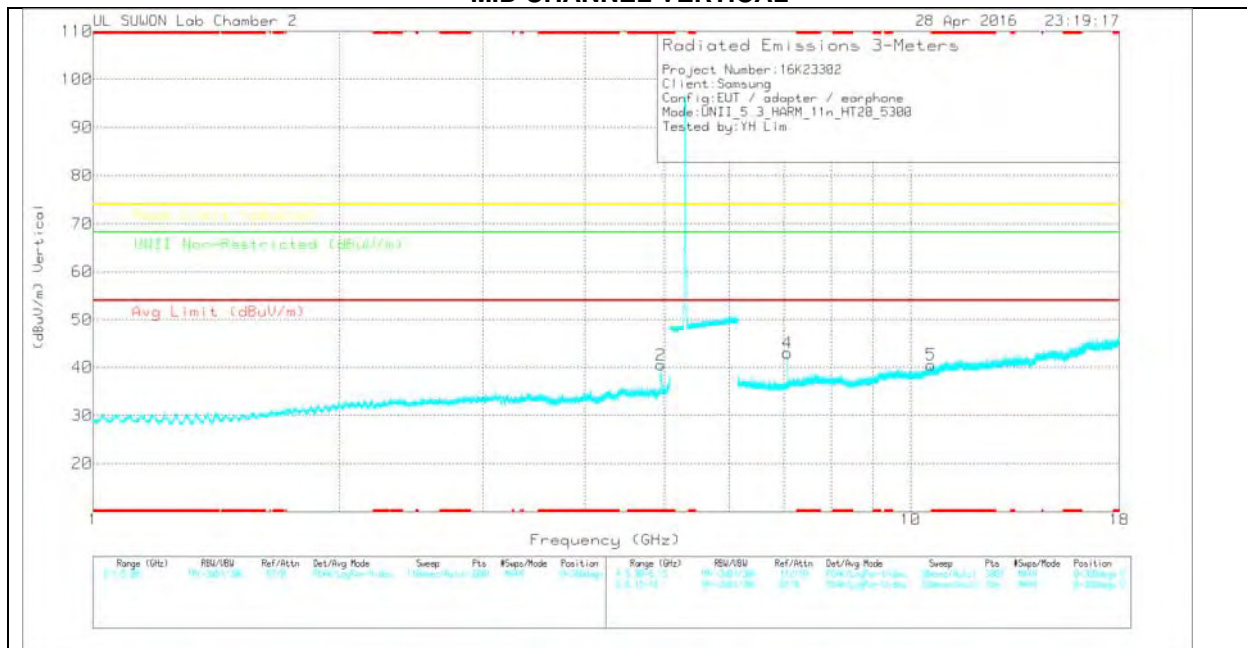
PK-U - U-NII: Maximum Peak

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	3117/00167 8724_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	* 4.948	31.36	Pk	33.9	-24.8	0	40.46	-	-	74	-33.54	-	-	0-360	100	H
2	* 4.948	31.37	Pk	33.9	-24.8	0	40.47	-	-	74	-33.53	-	-	0-360	200	V
3	7.067	27.85	Pk	35.6	-22	0	41.45	-	-	-	-	68.2	-26.75	0-360	200	H
6	10.59	19.9	Pk	37.8	-18	0	39.7	-	-	-	-	68.2	-28.5	0-360	200	H
4	7.067	29.38	Pk	35.6	-22	0	42.98	-	-	-	-	68.2	-25.22	0-360	200	V
5	10.596	20.74	Pk	37.8	-18	0	40.54	-	-	-	-	68.2	-27.66	0-360	100	V

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

Pk – Peak detector

Radiated Emissions

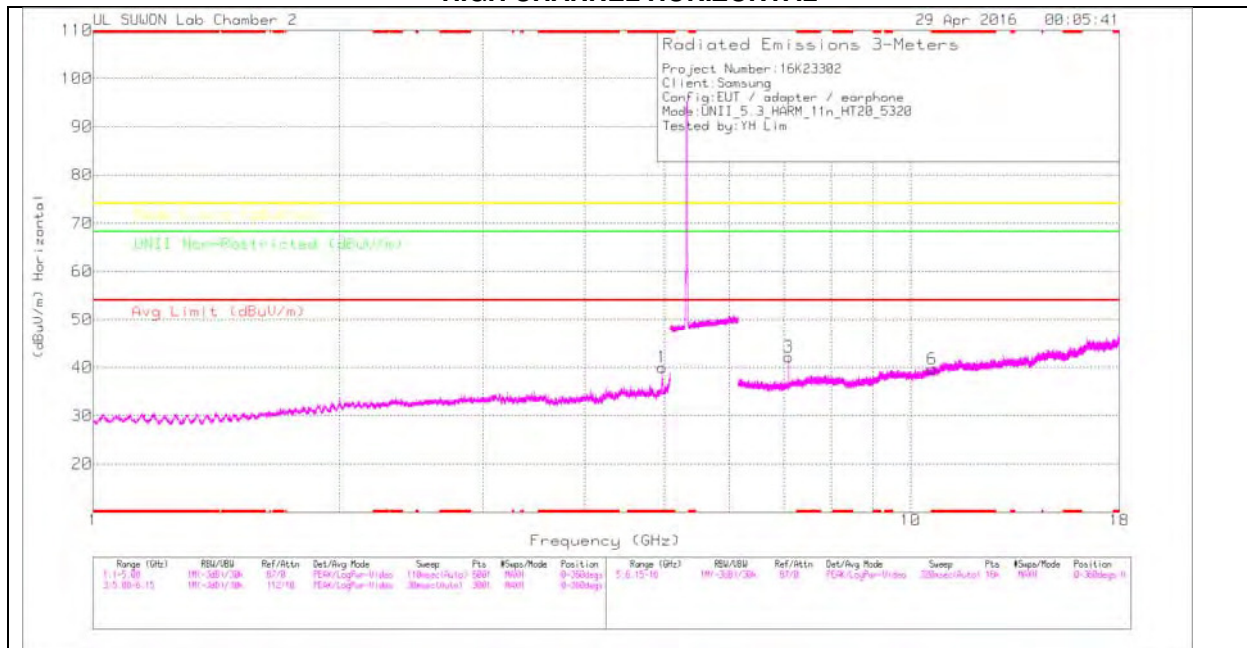
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 24_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.948	41.51	PK-U	33.9	-24.8	0	50.61	-	-	74	-23.39	-	-	178	322	H
* 4.948	30.12	ADR	33.9	-24.8	0	39.22	54	-14.78	-	-	-	-	178	322	H
* 4.948	41.24	PK-U	33.9	-24.8	0	50.34	-	-	74	-23.66	-	-	151	297	V
* 4.948	30.12	ADR	33.9	-24.8	0	39.22	54	-14.78	-	-	-	-	151	297	V
7.067	35.65	PK-U	35.6	-22	0	49.25	-	-	-	-	68.2	-18.95	154	220	V
7.067	35.9	PK-U	35.6	-22	0	49.5	-	-	-	-	68.2	-18.7	256	331	H

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

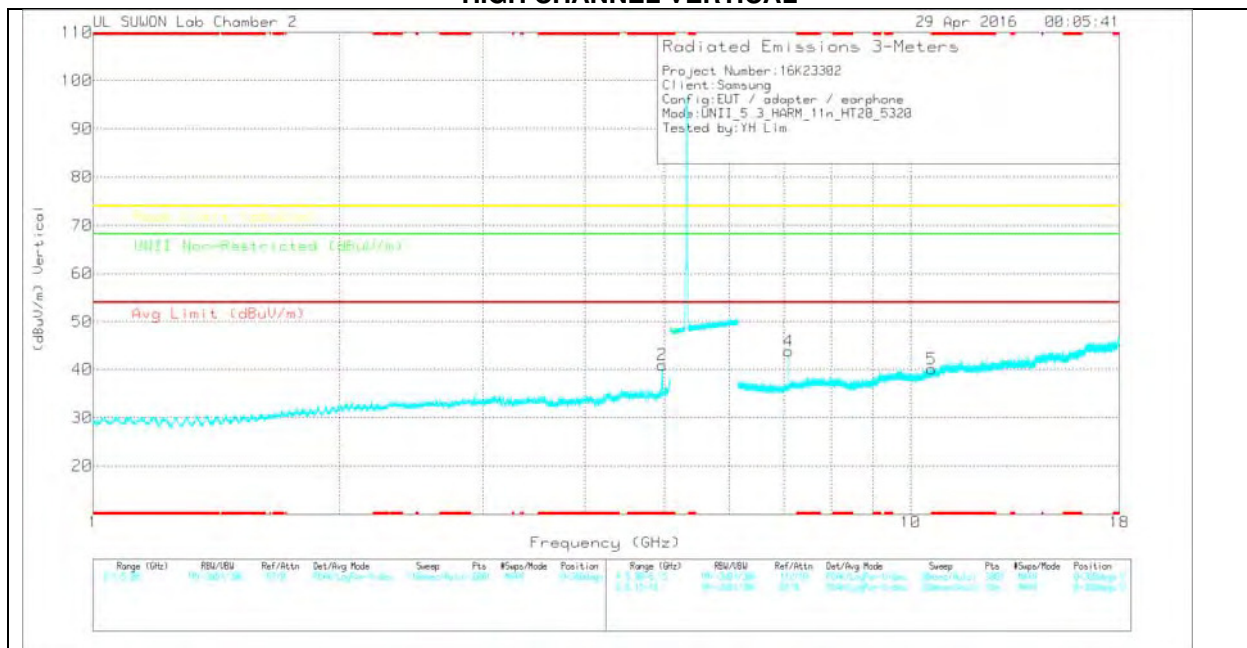
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	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	* 4.968	30.61	Pk	33.9	-24.5	0	40.01	-	-	74	-33.99	-	-	0-360	200	H
2	* 4.968	31.53	Pk	33.9	-24.5	0	40.93	-	-	74	-33.07	-	-	0-360	200	V
3	7.093	28.98	Pk	35.6	-22.4	0	42.18	-	-	-	-	68.2	-26.02	0-360	200	H
4	* 10.628	19.9	Pk	37.8	-18	0	39.7	-	-	74	-34.3	-	-	0-360	100	H
4	7.093	30.59	Pk	35.6	-22.4	0	43.79	-	-	-	-	68.2	-24.41	0-360	200	V
5	* 10.616	20.27	Pk	37.8	-18	0	40.07	-	-	74	-33.93	-	-	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 24_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	40.77	PK-U	33.9	-24.5	0	50.17	-	-	74	-23.83	-	-	185	356	H
* 4.968	29.24	ADR	33.9	-24.5	0	38.64	54	-15.36	-	-	-	-	185	356	H
* 4.966	41.69	PK-U	33.9	-24.6	0	50.99	-	-	74	-23.01	-	-	132	330	V
* 4.968	31.98	ADR	33.9	-24.5	0	41.38	54	-12.62	-	-	-	-	132	330	V
7.093	36.96	PK-U	35.6	-22.4	0	50.16	-	-	-	-	68.2	-18.04	4	132	V
7.093	38.1	PK-U	35.6	-22.4	0	51.3	-	-	-	-	68.2	-16.9	280	326	H

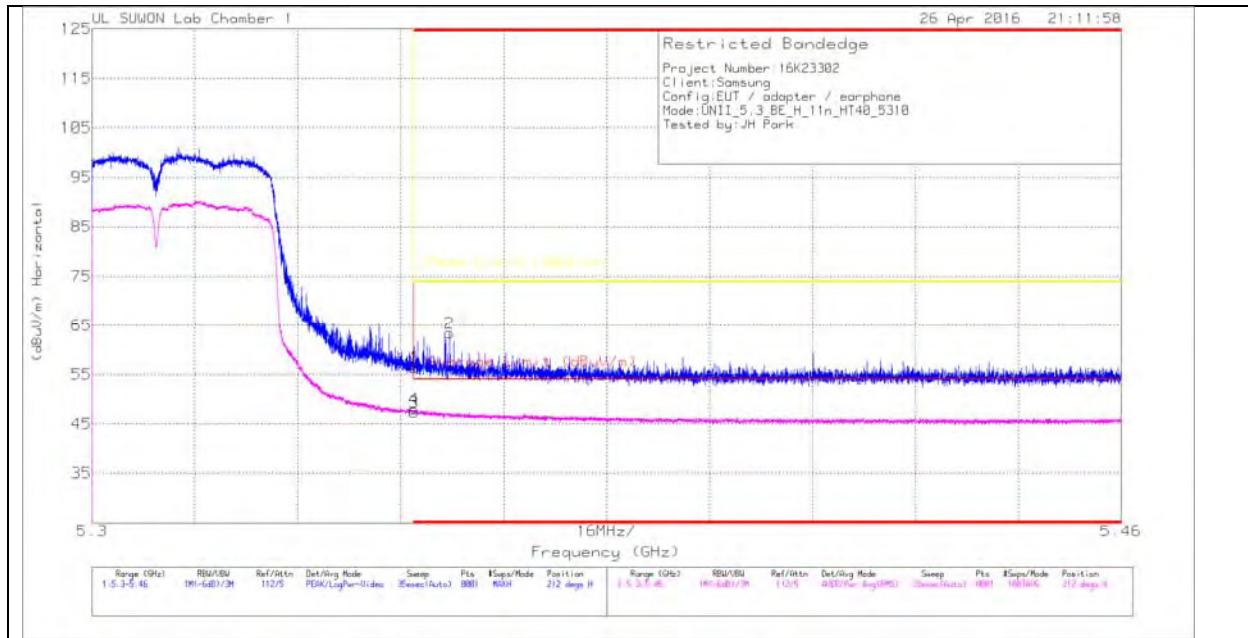
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

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

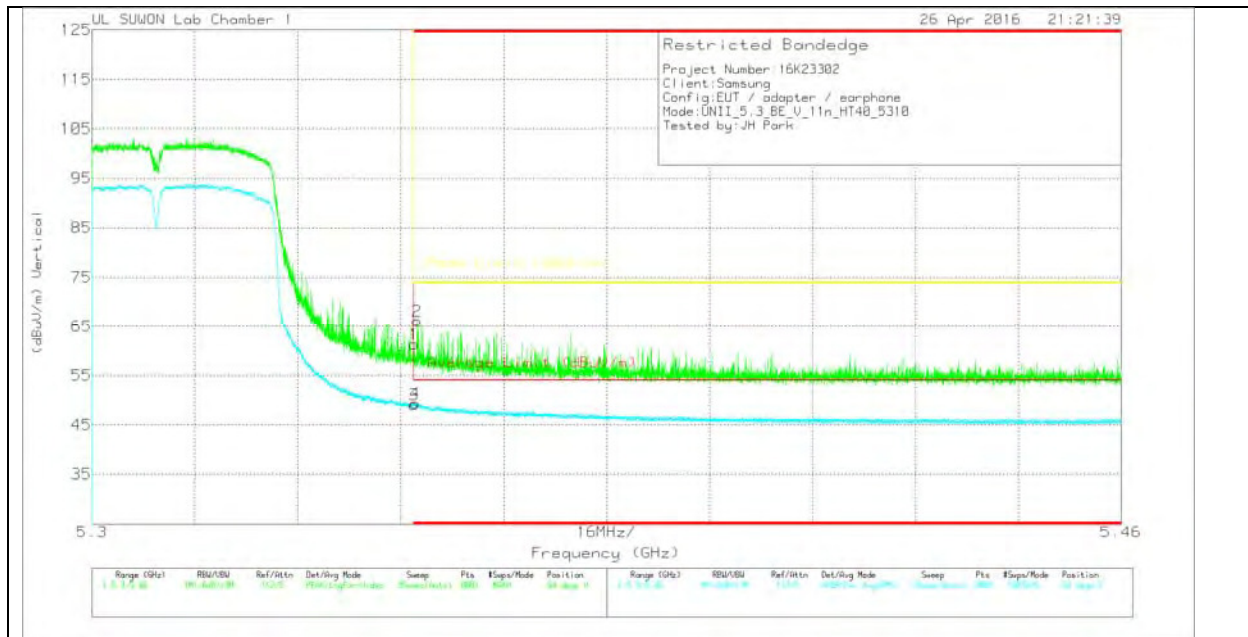
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	45.17	Pk	34.5	-23.3	0	56.37	-	-	74	-17.63	212	314	H
2	* 5.356	52.24	Pk	34.5	-23.3	0	63.44	-	-	74	-10.56	212	314	H
3	* 5.35	35.52	RMS	34.5	-23.3	.59	47.31	54	-6.69	-	-	212	314	H
4	* 5.35	36.13	RMS	34.5	-23.3	.59	47.92	54	-6.08	-	-	212	314	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	50.19	Pk	34.5	-23.3	0	61.39	-	-	74	-12.61	64	103	V
2	* 5.351	54.92	Pk	34.5	-23.3	0	66.12	-	-	74	-7.88	64	103	V
3	* 5.35	37.34	RMS	34.5	-23.3	.59	49.13	54	-4.87	-	-	64	103	V
4	* 5.35	37.59	RMS	34.5	-23.3	.59	49.38	54	-4.62	-	-	64	103	V

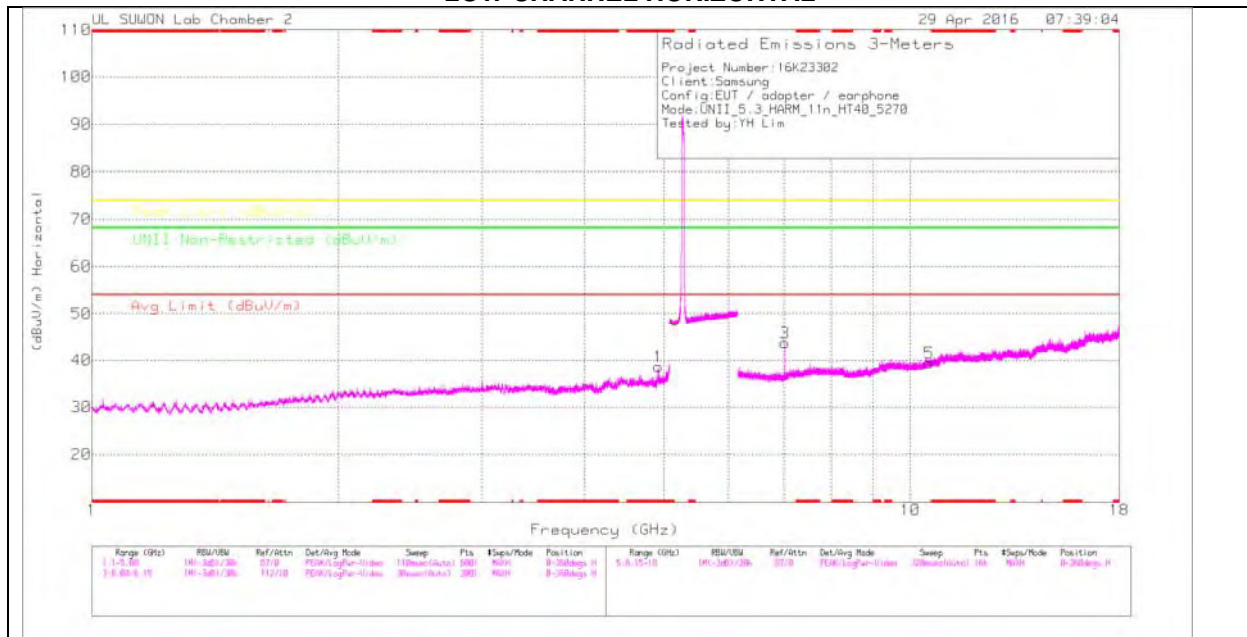
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

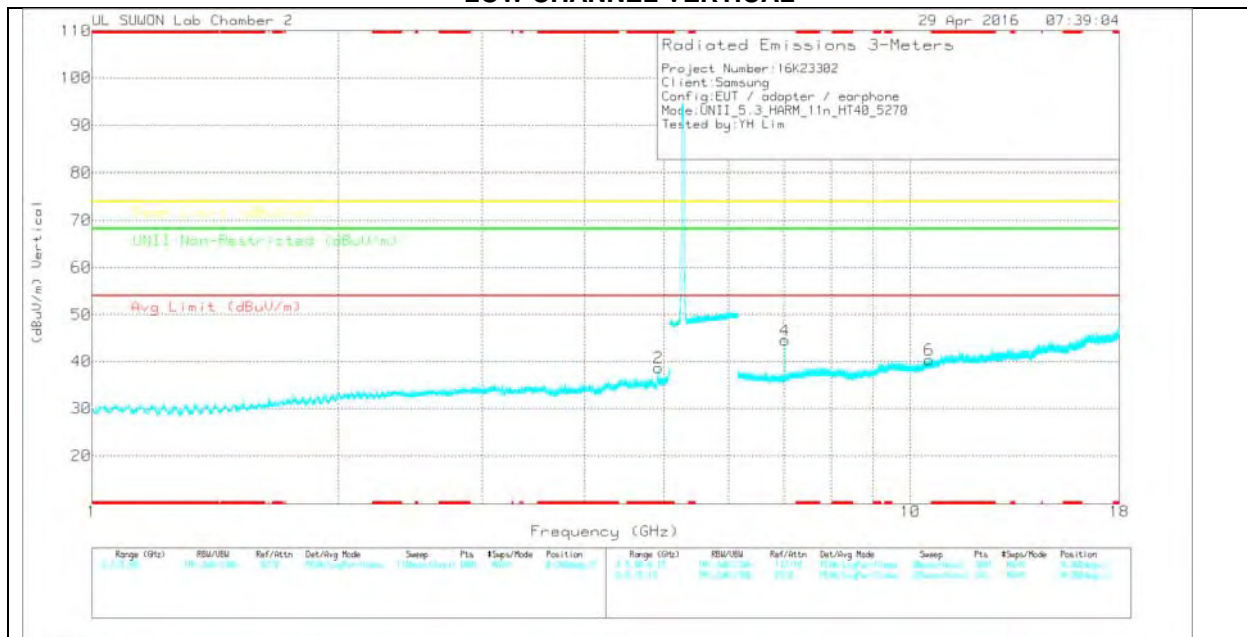
RMS - RMS detection

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 8724_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	* 4.918	29.15	PK	33.9	-24.4	0	38.65	-	-	74	-35.35	-	-	0-360	200	H
2	* 4.918	29.15	PK	33.9	-24.4	0	38.65	-	-	74	-35.35	-	-	0-360	200	V
3	7.026	29.85	PK	35.6	-21.8	0	43.65	-	-	-	-	68.2	-24.55	0-360	200	H
5	10.539	19.67	PK	37.7	-18	0	39.37	-	-	-	-	68.2	-28.83	0-360	100	H
4	7.026	30.69	PK	35.6	-21.8	0	44.49	-	-	-	-	68.2	-23.71	0-360	200	V
6	10.536	20.6	PK	37.7	-18	0	40.3	-	-	-	-	68.2	-27.9	0-360	200	V

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

PK – Peak detector

Radiated Emissions

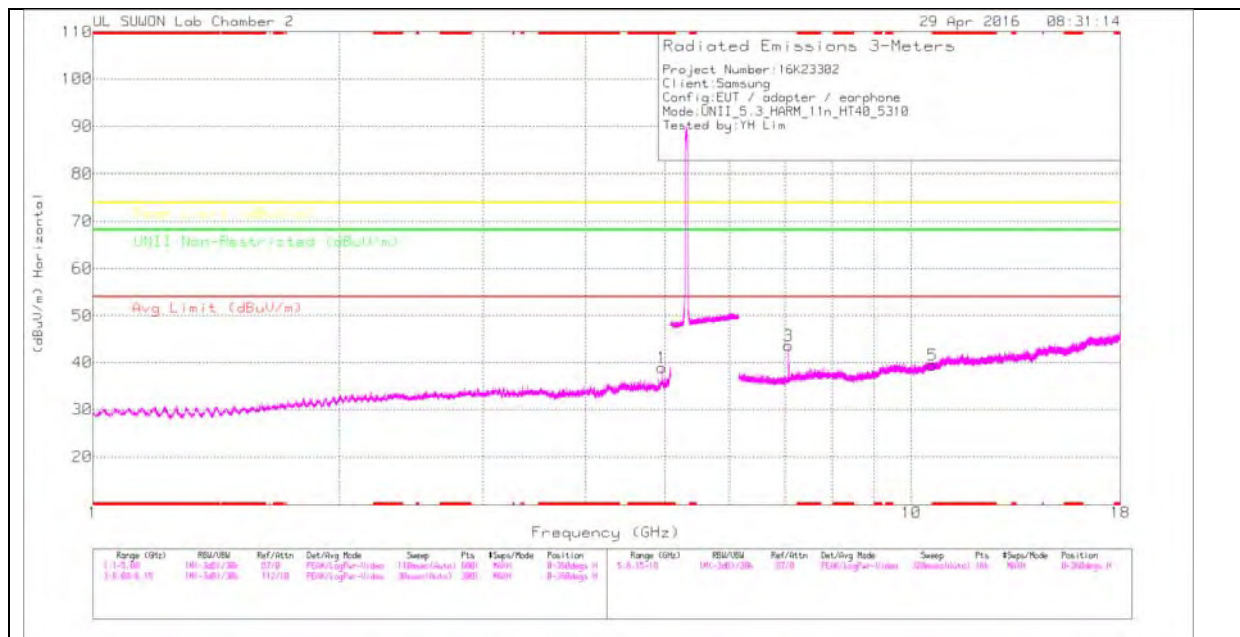
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 24_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.919	42.19	PK-U	33.9	-24.4	0	51.69	-	-	74	-22.31	-	-	194	336	H
* 4.918	30.38	ADR	33.9	-24.4	0	39.88	54	-14.12	-	-	-	-	194	336	H
* 4.92	38.9	PK-U	33.9	-24.4	0	48.4	-	-	74	-25.6	-	-	347	276	V
* 4.918	26.18	ADR	33.9	-24.4	0	35.68	54	-18.32	-	-	-	-	347	276	V
7.027	35.96	PK-U	35.6	-21.8	0	49.76	-	-	-	-	68.2	-18.44	322	396	H
7.027	37.07	PK-U	35.6	-21.8	0	50.87	-	-	-	-	68.2	-17.33	9	164	V

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

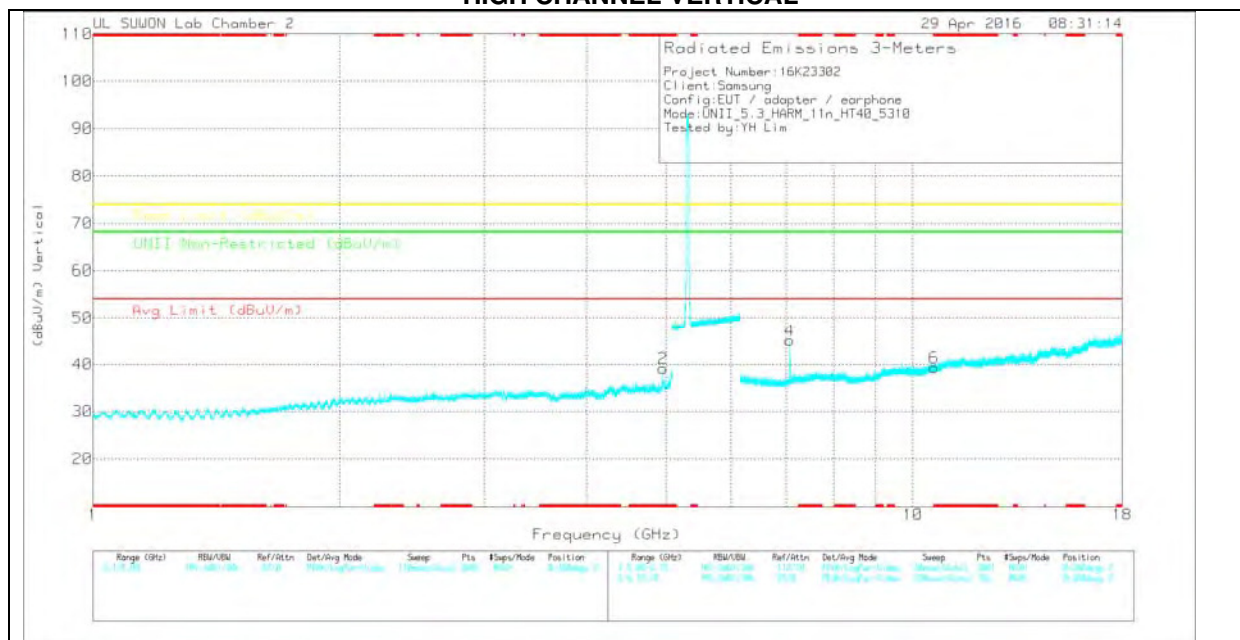
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	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	* 4.958	29.73	PK	33.9	-24.7	0	38.93	-	-	74	-35.07	-	-	0-360	200	H
2	* 4.958	29.93	PK	33.9	-24.7	0	39.13	-	-	74	-34.87	-	-	0-360	200	V
3	7.079	30.16	PK	35.6	-22.2	0	43.56	-	-	-	-	68.2	-24.64	0-360	200	H
5	* 10.62	19.61	PK	37.8	-18	0	39.41	-	-	74	-34.59	-	-	0-360	100	H
4	7.079	31.68	PK	35.6	-22.2	0	45.08	-	-	-	-	68.2	-23.12	0-360	200	V
6	* 10.618	19.54	PK	37.8	-18	0	39.34	-	-	74	-34.66	-	-	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 24_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
* 4.958	39.79	PK-U	33.9	-24.7	0	48.99	-	-	74	-25.01	-	-	269	370	H
* 4.958	28.58	ADR	33.9	-24.7	0	37.78	54	-16.22	-	-	-	-	269	370	H
* 4.958	42.22	PK-U	33.9	-24.7	0	51.42	-	-	74	-22.58	-	-	105	264	V
* 4.958	31.35	ADR	33.9	-24.7	0	40.55	54	-13.45	-	-	-	-	105	264	V
7.08	36.54	PK-U	35.6	-22.2	0	49.94	-	-	-	-	68.2	-18.26	312	357	H
7.08	36.85	PK-U	35.6	-22.2	0	50.25	-	-	-	-	68.2	-17.95	12	215	V

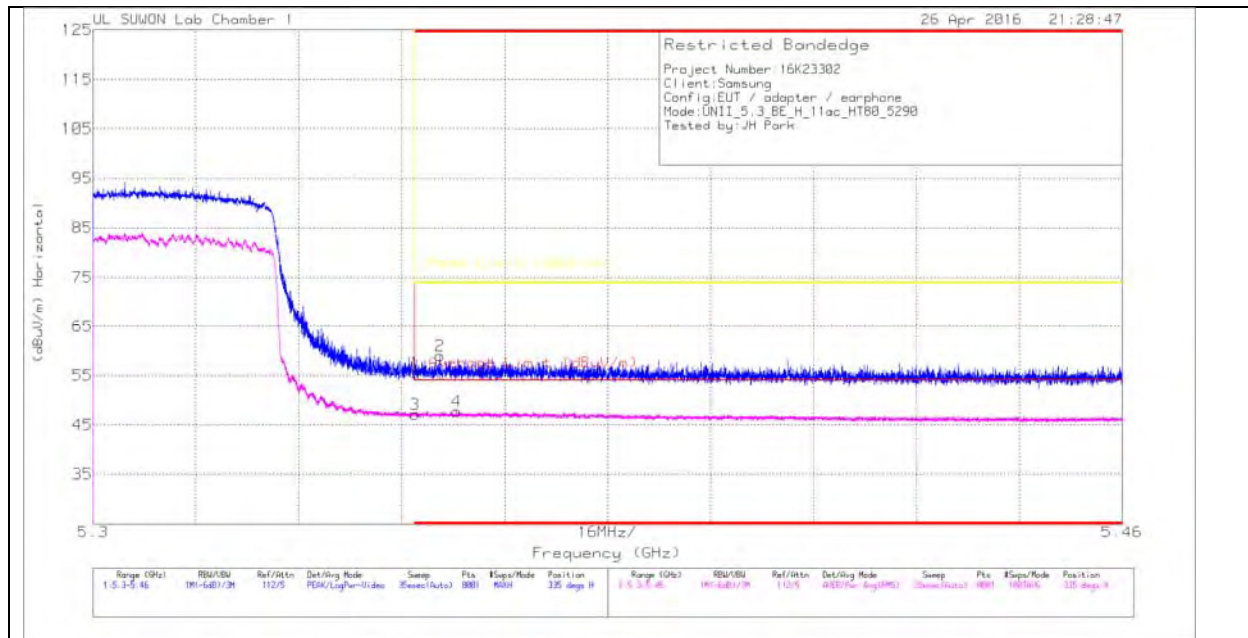
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.2.4. 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

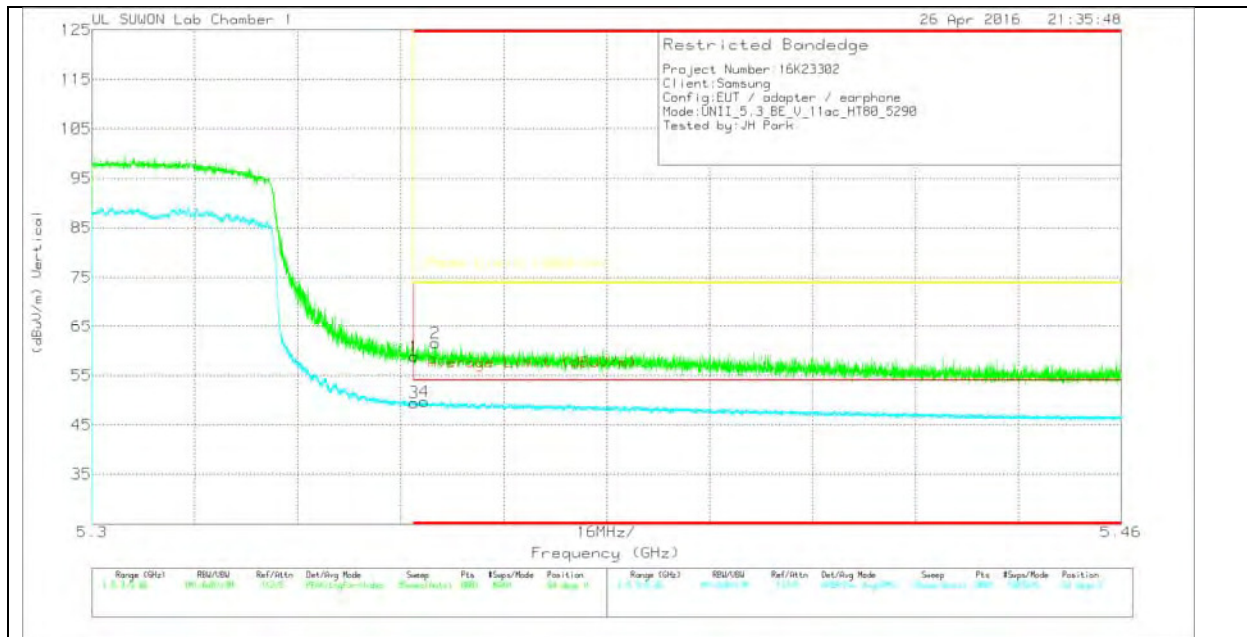
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	44.34	Pk	34.5	-23.3	0	55.54	-	-	74	-18.46	335	169	H
2	* 5.354	47.82	Pk	34.5	-23.3	0	59.02	-	-	74	-14.98	335	169	H
3	* 5.35	34.8	RMS	34.5	-23.3	1.12	47.12	54	-6.88	-	-	335	169	H
4	* 5.356	35.37	RMS	34.5	-23.3	1.12	47.69	54	-6.31	-	-	335	169	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	47.63	Pk	34.5	-23.3	0	58.83	-	-	74	-15.17	64	100	V
2	* 5.353	50.37	Pk	34.5	-23.3	0	61.57	-	-	74	-12.43	64	100	V
3	* 5.35	37.2	RMS	34.5	-23.3	1.12	49.52	54	-4.48	-	-	64	100	V
4	* 5.352	37.43	RMS	34.5	-23.3	1.12	49.75	54	-4.25	-	-	64	100	V

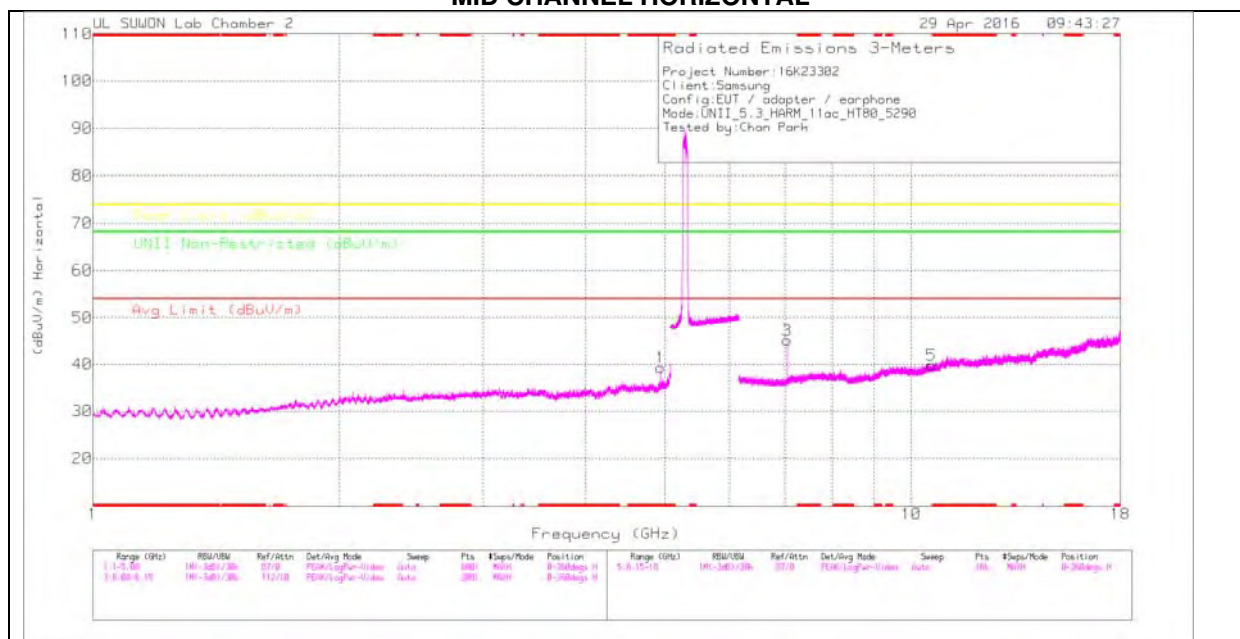
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

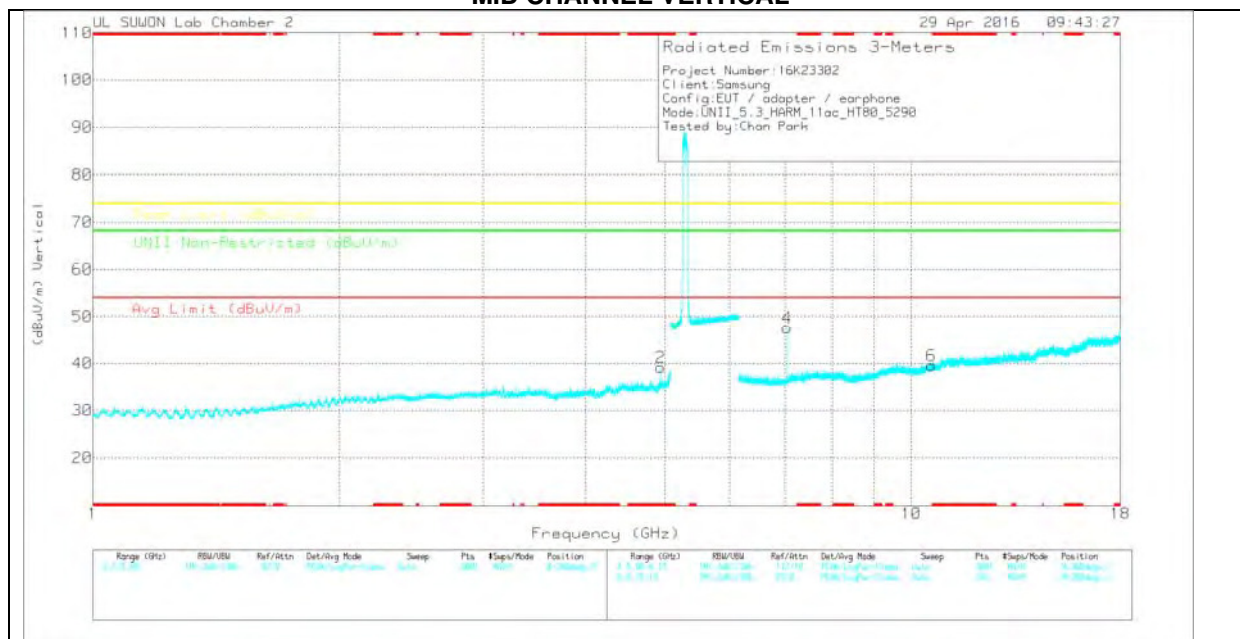
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	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	* 4.939	30.02	PK	33.9	-24.6	0	39.32	-	-	74	-34.68	-	-	0-360	100	H
2	* 4.939	29.86	PK	33.9	-24.6	0	39.16	-	-	74	-34.84	-	-	0-360	200	V
3	7.053	31.29	PK	35.6	-21.8	0	45.09	-	-	-	-	68.2	-23.11	0-360	200	H
5	10.583	20.06	PK	37.8	-18	0	39.86	-	-	-	-	68.2	-28.34	0-360	100	H
4	7.053	33.83	PK	35.6	-21.8	0	47.63	-	-	-	-	68.2	-20.57	0-360	200	V
6	10.582	19.72	PK	37.8	-18	0	39.52	-	-	-	-	68.2	-28.68	0-360	200	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 24_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
* 4.938	40.17	PK-U	33.9	-24.6	0	49.47	-	-	74	-24.53	-	-	189	372	H
* 4.938	27.8	ADR	33.9	-24.6	0	37.1	54	-16.9	-	-	-	-	189	372	H
* 4.938	39.7	PK-U	33.9	-24.6	0	49	-	-	74	-25	-	-	107	188	V
* 4.938	28.85	ADR	33.9	-24.6	0	38.15	54	-15.85	-	-	-	-	107	188	V
7.053	37.05	PK-U	35.6	-21.8	0	50.85	-	-	-	-	68.2	-17.35	311	178	H
7.053	37.28	PK-U	35.6	-21.8	0	51.08	-	-	-	-	68.2	-17.12	8	163	V

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

PK-U - U-NII: Maximum Peak

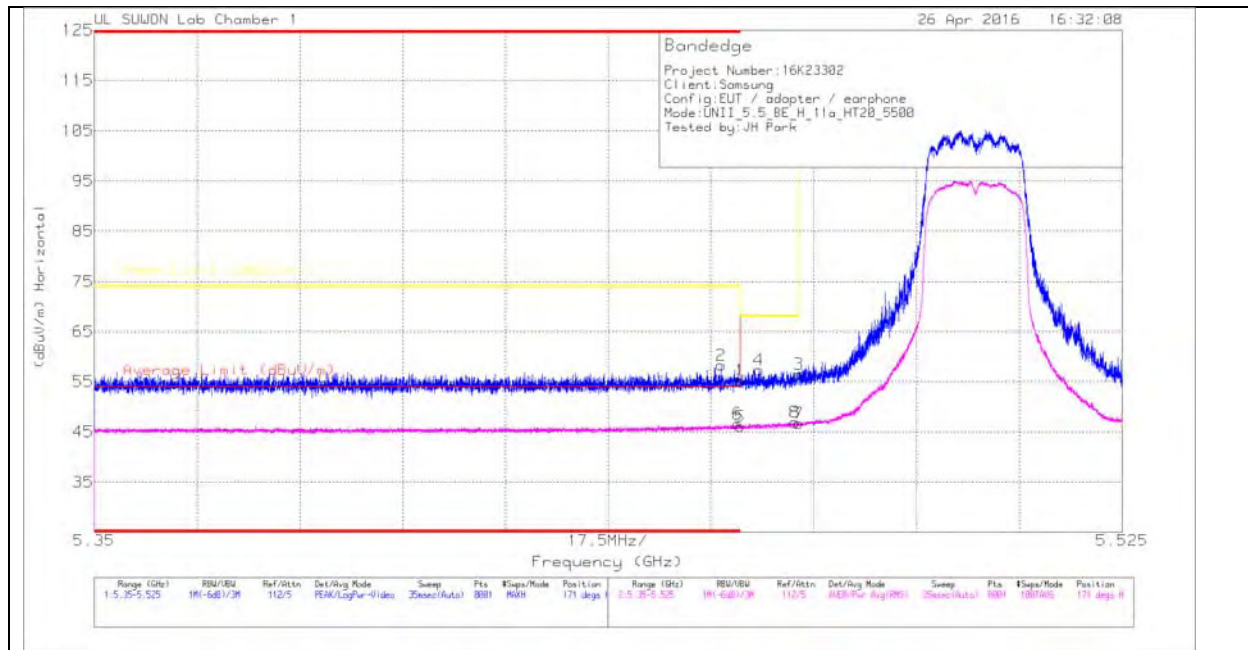
ADR - U-NII AD primary method, RMS average

11.3. 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

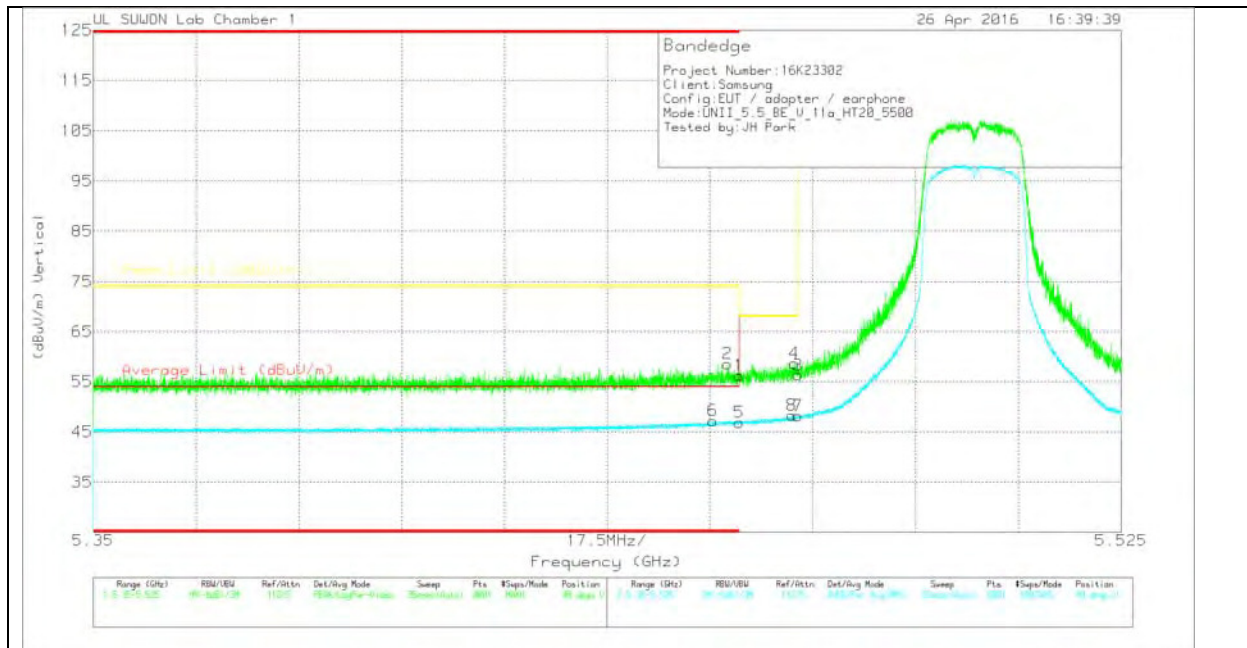
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	43.85	Pk	34.6	-23.2	0	55.25	-	-	74	-18.75	171	101	H
2	* 5.457	46.87	Pk	34.6	-23.2	0	58.27	-	-	74	-15.73	171	101	H
3	5.47	44.98	Pk	34.6	-23.1	0	56.48	-	-	68.2	-11.72	171	101	H
4	5.463	45.83	Pk	34.6	-23.1	0	57.33	-	-	68.2	-10.87	171	101	H
5	* 5.46	34.39	RMS	34.6	-23.2	.29	46.08	54	-7.92	-	-	171	101	H
6	* 5.46	34.93	RMS	34.6	-23.2	.29	46.62	54	-7.38	-	-	171	101	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	44.83	Pk	34.6	-23.2	0	56.23	-	-	74	-17.77	48	100	V
2	* 5.458	47.18	Pk	34.6	-23.2	0	58.58	-	-	74	-15.42	48	100	V
3	5.47	44.83	Pk	34.6	-23.1	0	56.33	-	-	68.2	-11.87	48	100	V
4	5.469	47.17	Pk	34.6	-23.1	0	58.67	-	-	68.2	-9.53	48	100	V
5	* 5.46	35.2	RMS	34.6	-23.2	.29	46.89	54	-7.11	-	-	48	100	V
6	* 5.455	35.57	RMS	34.6	-23.2	.29	47.26	54	-6.74	-	-	48	100	V

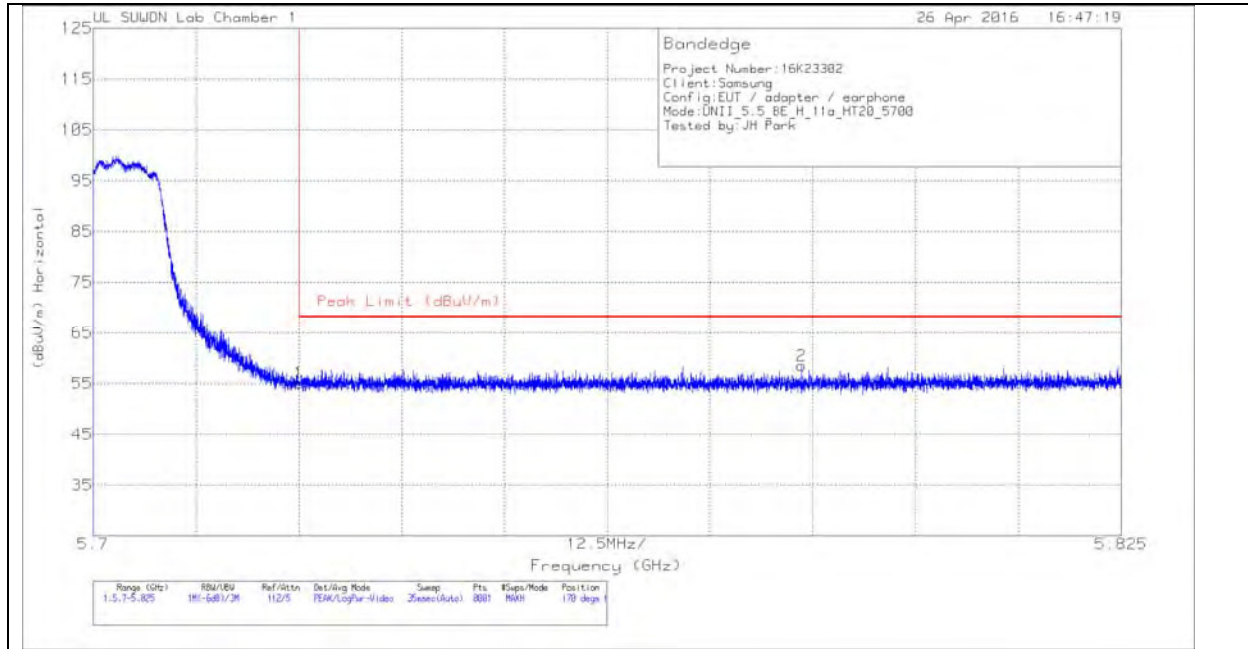
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



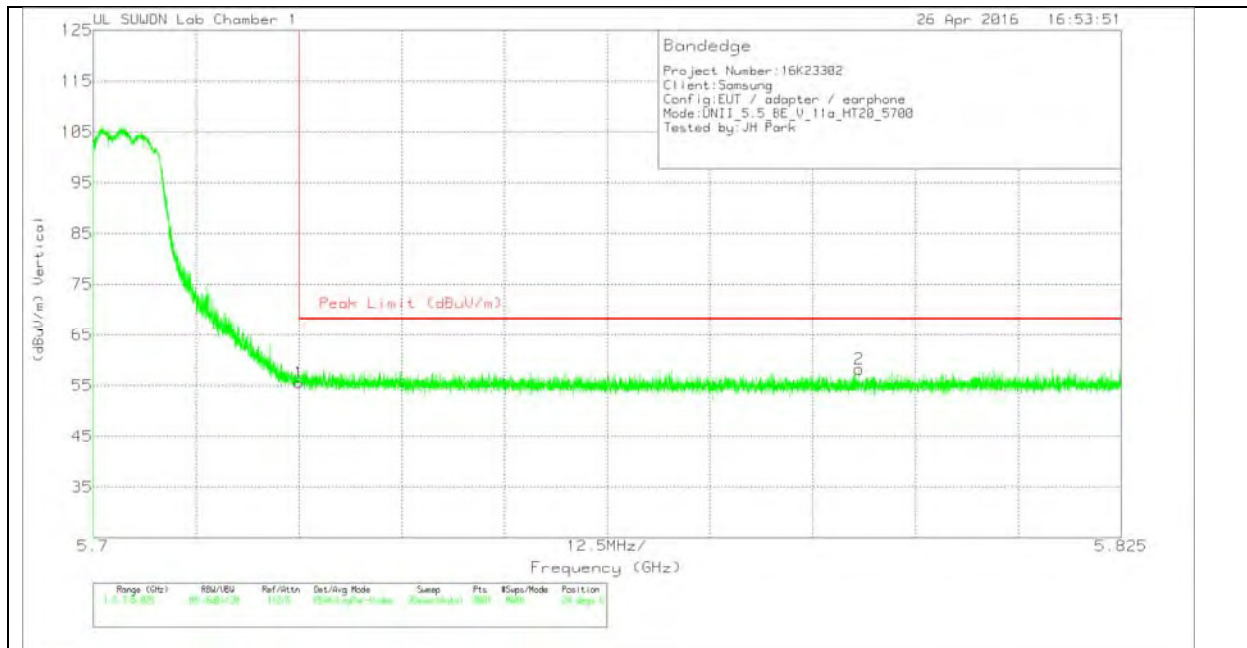
HORIZONTAL DATA

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	43.04	Pk	34.8	-22.8	0	55.04	68.2	-13.16	170	190	H
2	5.786	46.28	Pk	34.8	-22.6	0	58.48	68.2	-9.72	170	190	H

Pk - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

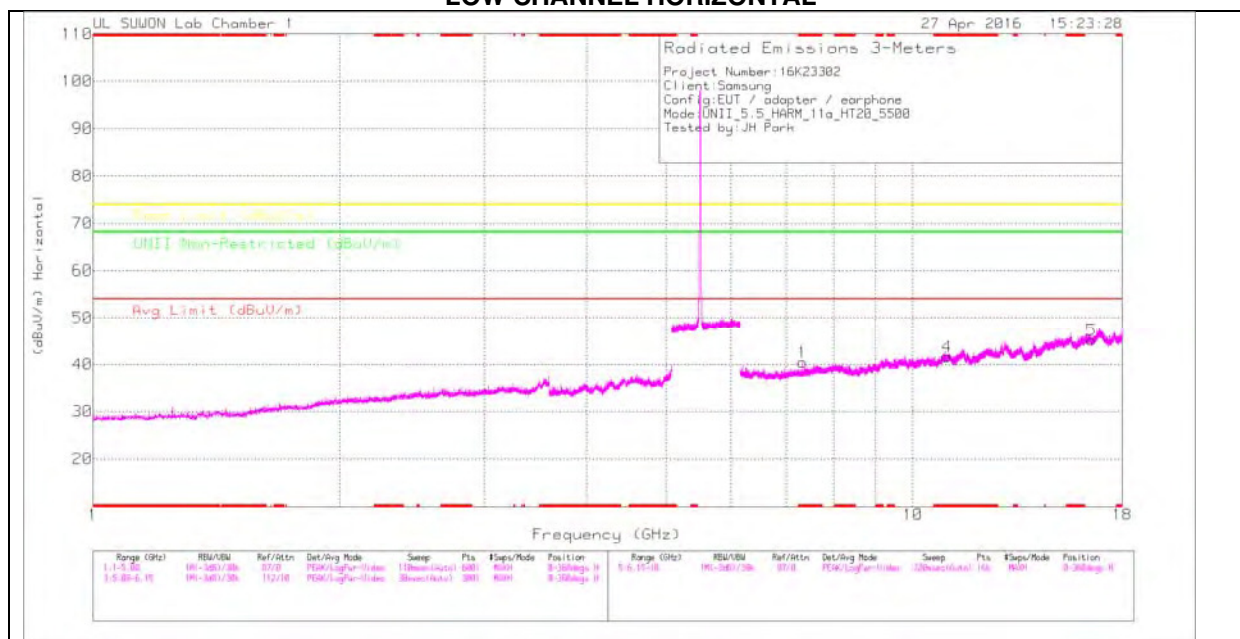
Trace Markers

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	43.54	Pk	34.8	-22.8	0	55.54	68.2	-12.66	24	106	V
2	5.793	46.02	Pk	34.8	-22.6	0	58.22	68.2	-9.98	24	106	V

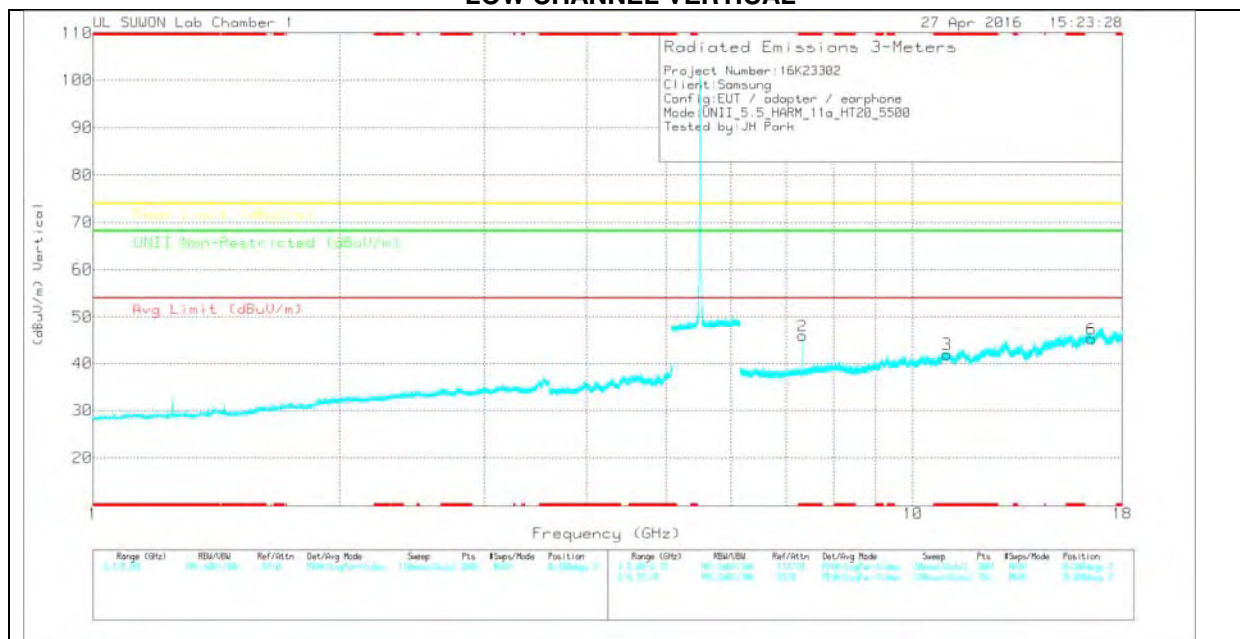
Pk - Peak detector

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_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
1	* 7.333	35.17	PK	35.8	-30.5	0	40.47	-	-	74	-33.53	-	-	0-360	200	H
4	* 10.999	30.78	PK	38.2	-27.4	0	41.58	-	-	74	-32.42	-	-	0-360	200	H
5	16.503	26.31	PK	41.1	-22.2	0	45.21	-	-	-	-	68.2	-22.99	0-360	100	H
2	* 7.333	40.54	PK	35.8	-30.5	0	45.84	-	-	74	-28.16	-	-	0-360	100	V
3	* 11.002	31.14	PK	38.2	-27.4	0	41.94	-	-	74	-32.06	-	-	0-360	200	V
6	16.503	26.4	PK	41.1	-22.2	0	45.3	-	-	-	-	68.2	-22.9	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

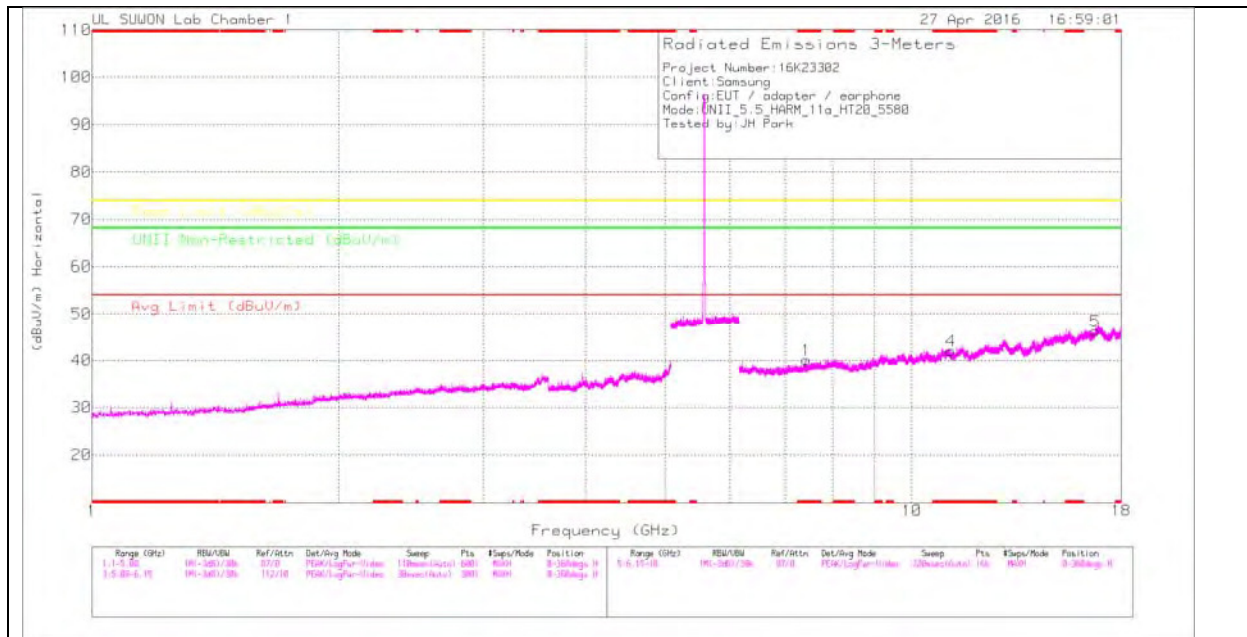
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.334	45.08	PK-U	35.8	-30.5	0	50.38	-	-	74	-23.62	-	-	191	308	H
* 7.333	32.91	ADR	35.8	-30.5	0	38.21	54	-15.79	-	-	-	-	191	308	H
* 7.333	47.89	PK-U	35.8	-30.5	0	53.19	-	-	74	-20.81	-	-	85	101	V
* 7.333	41.17	ADR	35.8	-30.5	0	46.47	54	-7.53	-	-	-	-	85	101	V

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

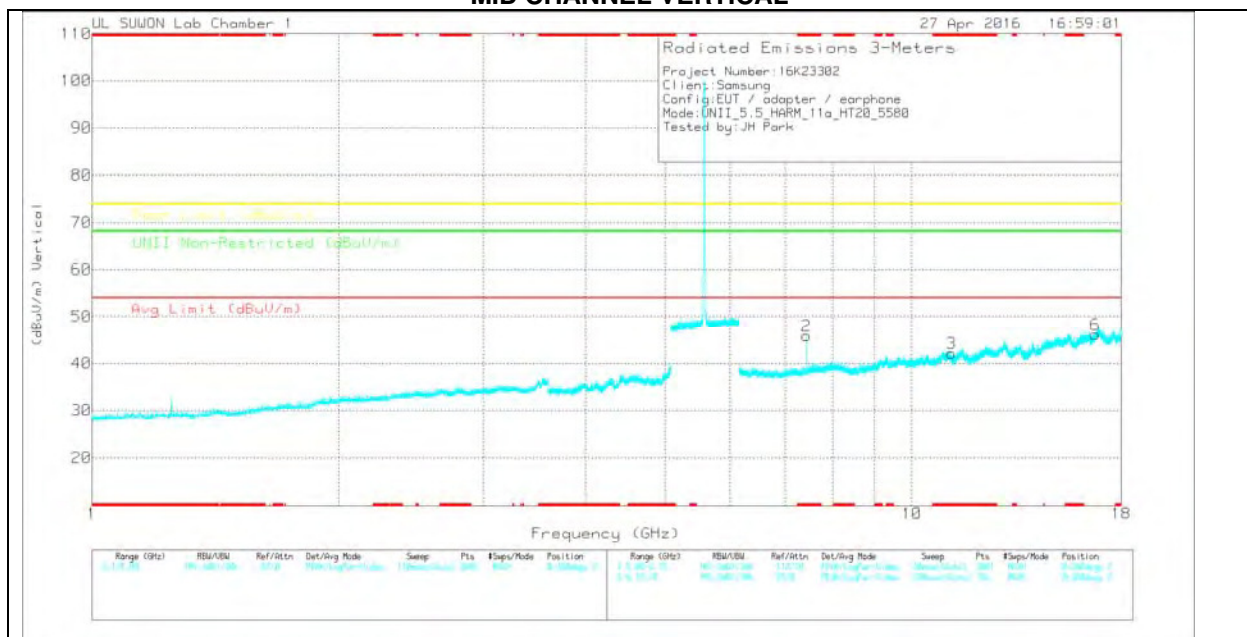
PK-U - U-NII: Maximum Peak

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_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
1	* 7.439	34.91	PK	35.8	-30.6	0	40.11	-	-	74	-33.89	-	-	0-360	200	H
4	* 11.159	30.79	PK	38.3	-27.1	0	41.99	-	-	74	-32.01	-	-	0-360	100	H
5	16.74	26.23	PK	41.3	-21.2	0	46.33	-	-	-	-	68.2	-21.87	0-360	200	H
2	* 7.439	40.7	PK	35.8	-30.6	0	45.9	-	-	74	-28.1	-	-	0-360	100	V
3	* 11.168	30.85	PK	38.3	-27	0	42.15	-	-	74	-31.85	-	-	0-360	100	V
6	16.738	26.09	PK	41.2	-21.1	0	46.19	-	-	-	-	68.2	-22.01	0-360	200	V

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

PK – Peak Detector

Radiated Emissions

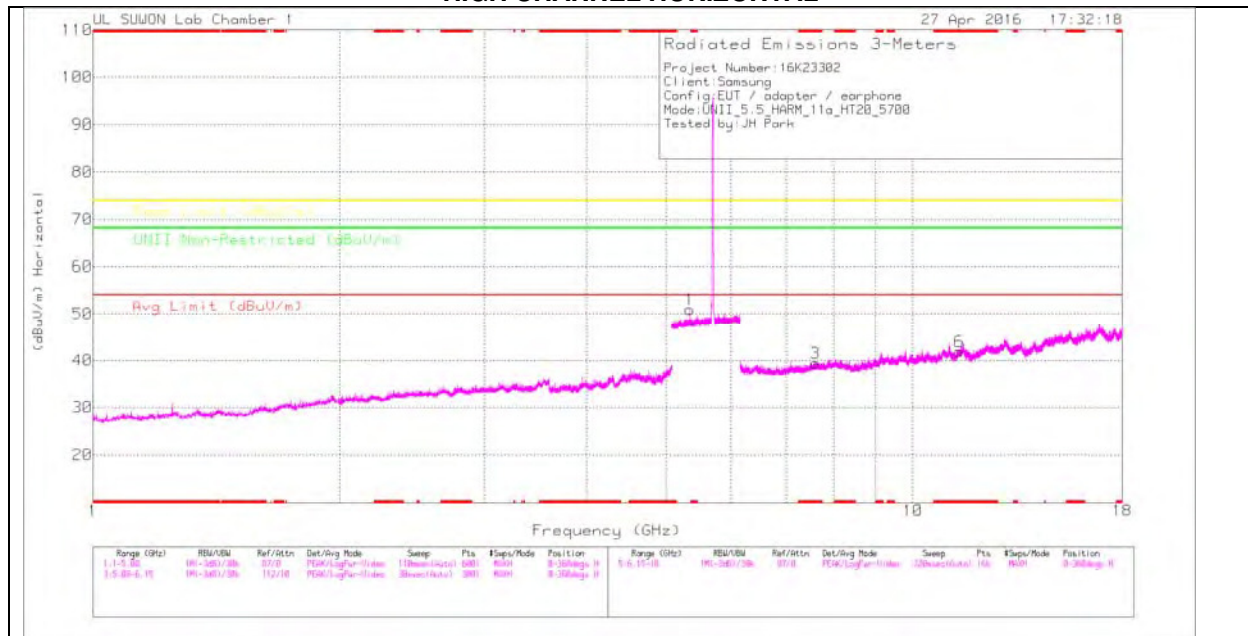
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.44	45.58	PK-U	35.8	-30.5	0	50.88	-	-	74	-23.12	-	-	143	284	H
* 7.44	35.6	ADR	35.8	-30.5	0	40.9	54	-13.1	-	-	-	-	143	284	H
* 7.44	47.73	PK-U	35.8	-30.5	0	53.03	-	-	74	-20.97	-	-	171	100	V
* 7.44	40.04	ADR	35.8	-30.5	0	45.34	54	-8.66	-	-	-	-	171	100	V

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

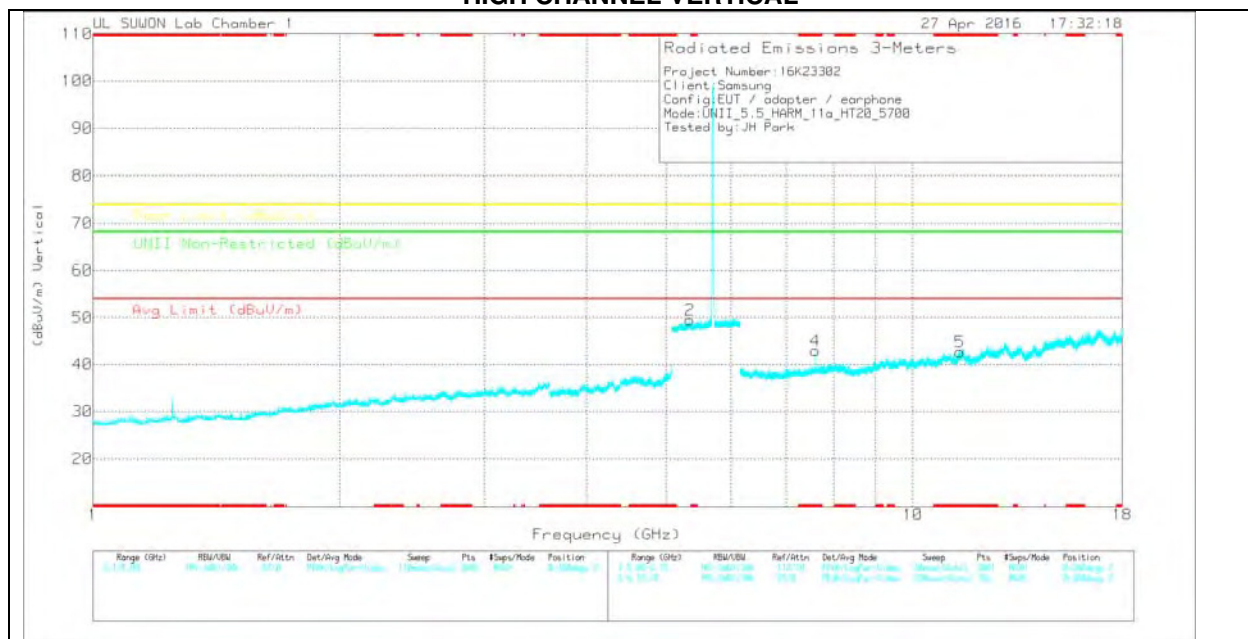
PK-U - U-NII: Maximum Peak

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_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
1	5.348	39.68	PK	34.5	-23.3	0	50.88	-	-	-	-	68.2	-17.32	0-360	100	H
2	5.348	38.29	PK	34.5	-23.3	0	49.49	-	-	-	-	68.2	-18.71	0-360	100	V
3	* 7.601	33.82	PK	35.9	-30.3	0	39.42	-	-	74	-34.58	-	-	0-360	200	H
6	* 11.398	30.71	PK	38.5	-27.3	0	41.91	-	-	74	-32.09	-	-	0-360	200	H
4	* 7.6	37.27	PK	35.9	-30.3	0	42.87	-	-	74	-31.13	-	-	0-360	100	V
5	* 11.401	31.45	PK	38.5	-27.3	0	42.65	-	-	74	-31.35	-	-	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_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
* 5.35	49.9	PK-U	34.5	-23.3	0	61.1	-	-	74	-12.9	-	-	175	210	H
* 5.35	36.67	ADR	34.5	-23.3	0	47.87	54	-6.13	-	-	-	-	175	210	H
* 5.35	49.36	PK-U	34.5	-23.3	0	60.56	-	-	74	-13.44	-	-	53	105	V
* 5.35	37.32	ADR	34.5	-23.3	0	48.52	54	-5.48	-	-	-	-	53	105	V
* 7.6	36.75	ADR	35.9	-30.3	0	42.35	54	-11.65	-	-	-	-	169	110	V
* 7.6	31.42	ADR	35.9	-30.3	0	37.02	54	-16.98	-	-	-	-	156	314	H
* 7.6	45.8	PK-U	35.9	-30.3	0	51.4	-	-	74	-22.6	-	-	169	110	V
* 7.6	43.87	PK-U	35.9	-30.3	0	49.47	-	-	74	-24.53	-	-	156	314	H

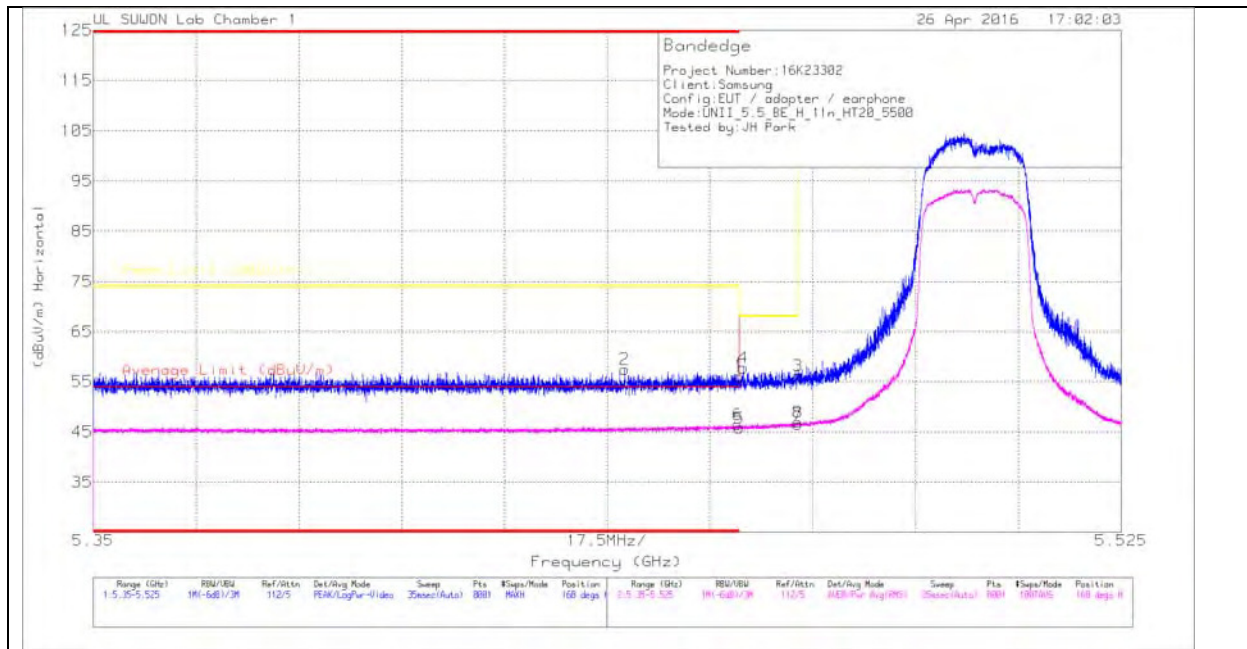
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.3.2. 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

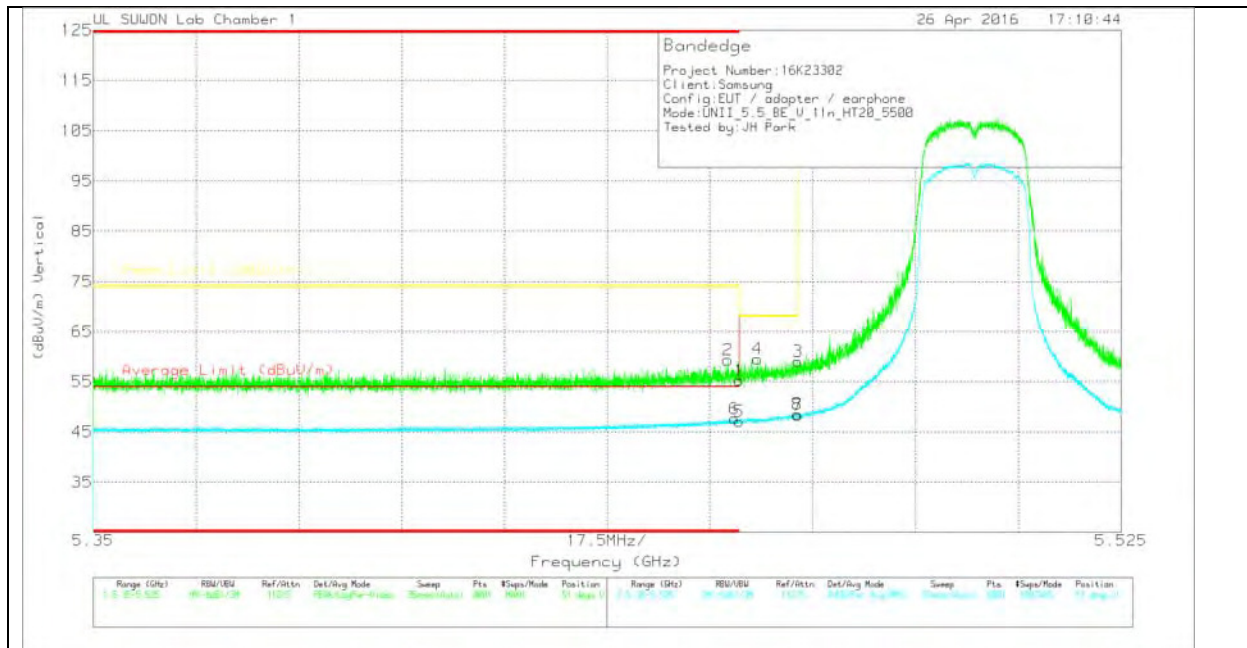
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	44.74	Pk	34.6	-23.2	0	56.14	-	-	74	-17.86	168	104	H
2	* 5.44	46.05	Pk	34.6	-23.2	0	57.45	-	-	74	-16.55	168	104	H
3	5.47	44.7	Pk	34.6	-23.1	0	56.2	-	-	68.2	-12	168	104	H
4	5.461	46.34	Pk	34.6	-23.2	0	57.74	-	-	68.2	-10.46	168	104	H
5	* 5.46	34.05	RMS	34.6	-23.2	.31	45.76	54	-8.24	-	-	168	104	H
6	* 5.46	34.75	RMS	34.6	-23.2	.31	46.46	54	-7.54	-	-	168	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	43.84	Pk	34.6	-23.2	0	55.24	-	-	74	-18.76	51	101	V
2	* 5.458	47.92	Pk	34.6	-23.2	0	59.32	-	-	74	-14.68	51	101	V
3	5.47	47.54	Pk	34.6	-23.1	0	59.04	-	-	68.2	-9.16	51	101	V
4	5.463	48.04	Pk	34.6	-23.1	0	59.54	-	-	68.2	-8.66	51	101	V
5	* 5.46	35.39	RMS	34.6	-23.2	.31	47.1	54	-6.9	-	-	51	101	V
6	* 5.459	35.95	RMS	34.6	-23.2	.31	47.66	54	-6.34	-	-	51	101	V

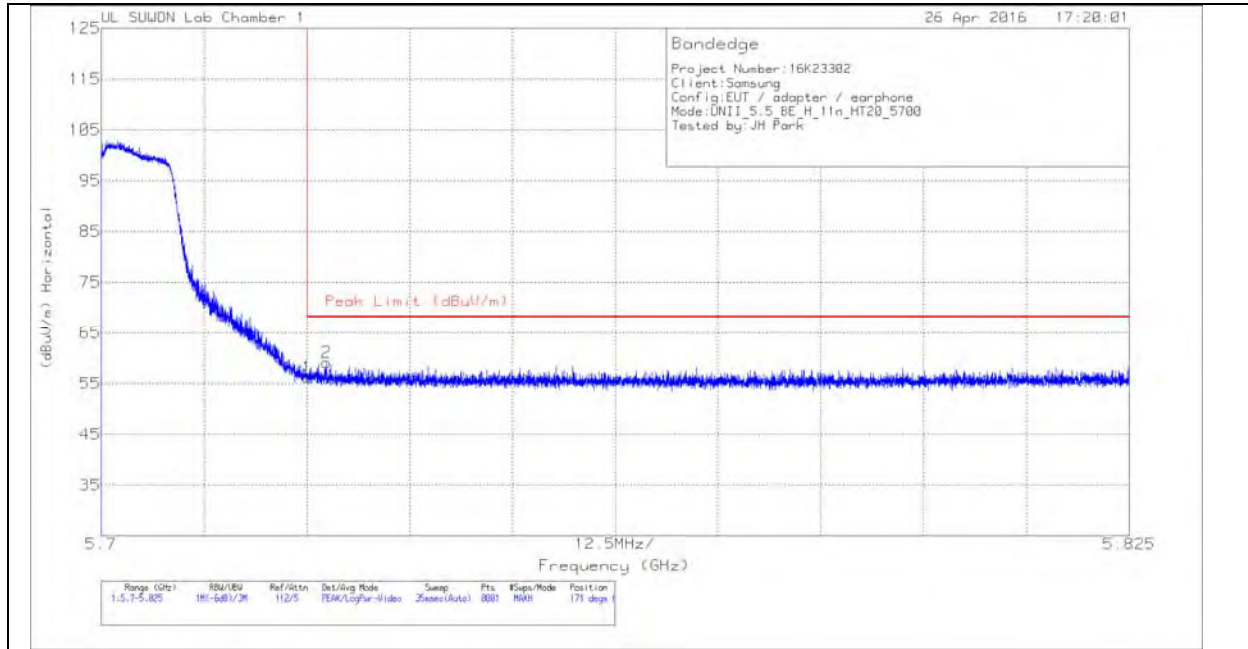
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



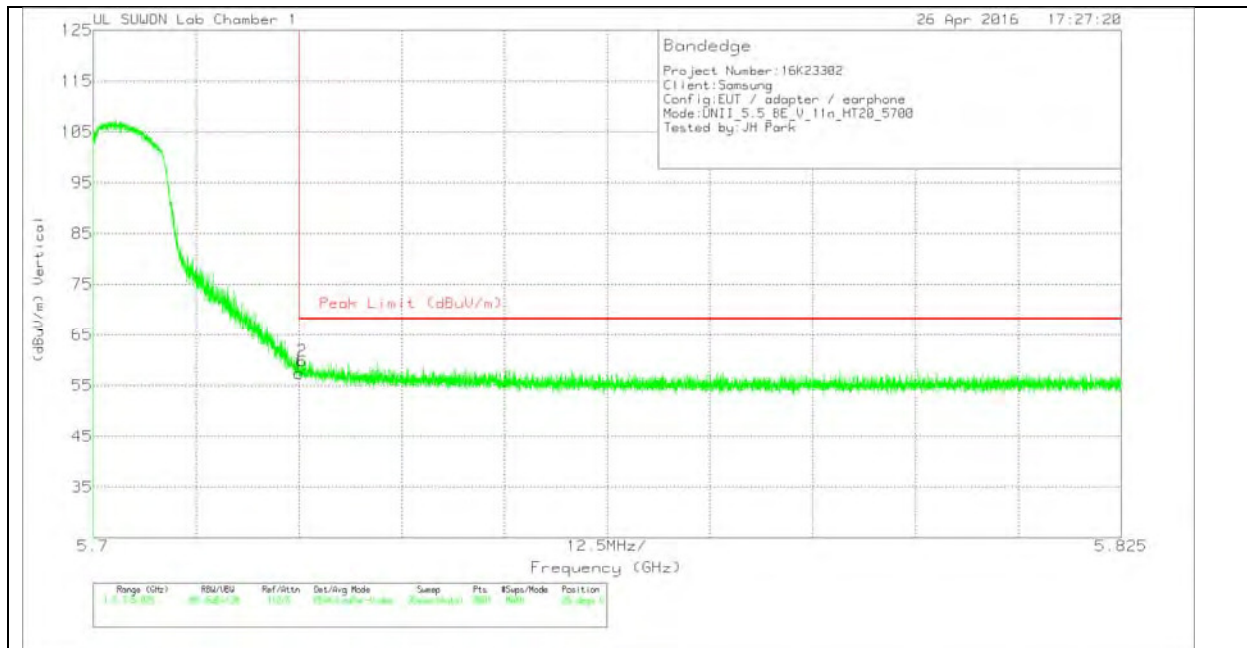
HORIZONTAL DATA

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	44.2	Pk	34.8	-22.8	0	56.2	68.2	-12	171	100	H
2	5.727	47.14	Pk	34.8	-22.8	0	59.14	68.2	-9.06	171	100	H

Pk - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

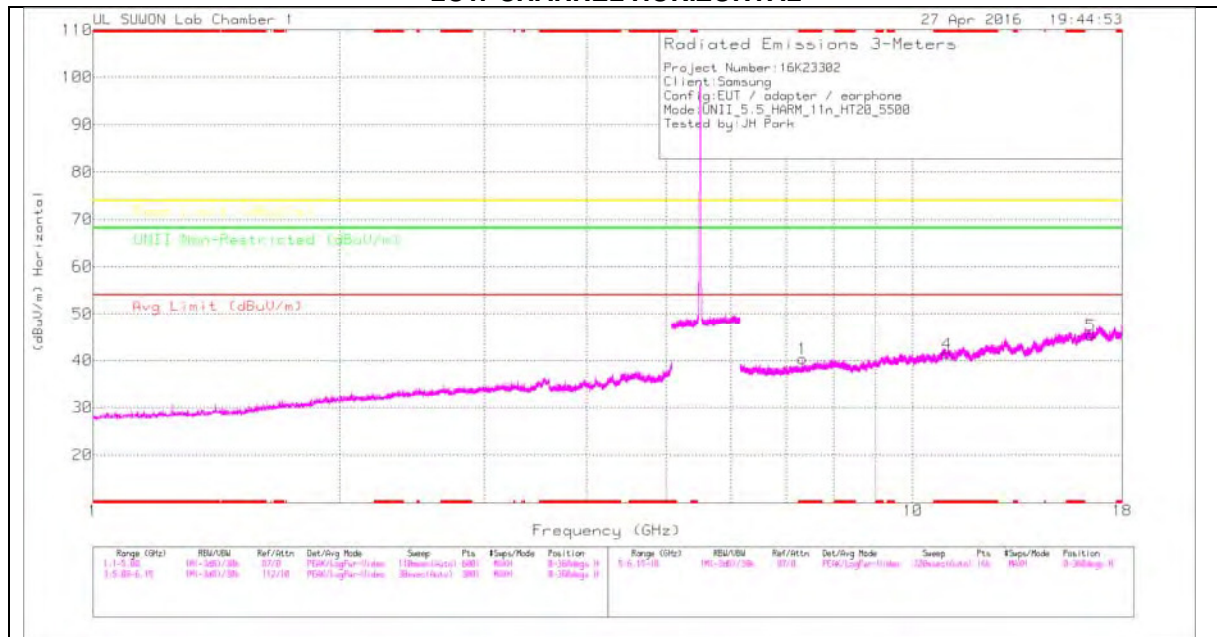
Trace Markers

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	45.39	Pk	34.8	-22.8	0	57.39	68.2	-10.81	26	103	V
2	5.725	47.85	Pk	34.8	-22.8	0	59.85	68.2	-8.35	26	103	V

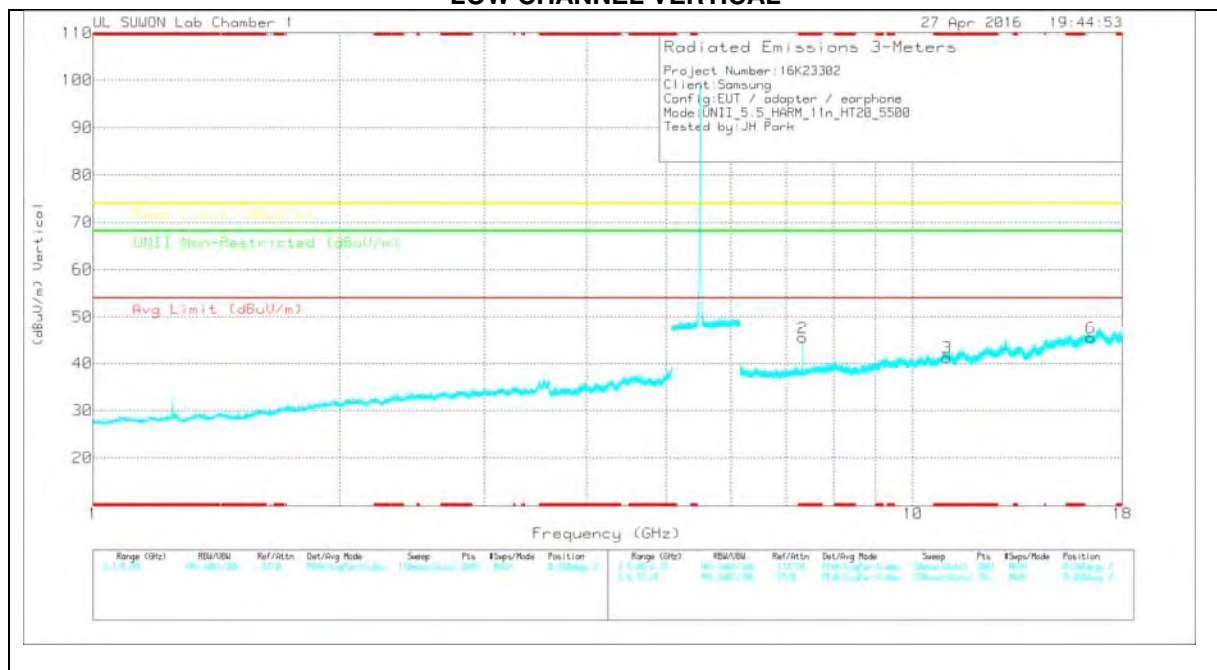
Pk - Peak detector

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_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
1	* 7.333	35.04	PK	35.8	-30.5	0	40.34	-	-	74	-33.66	-	-	0-360	200	H
4	* 10.999	30.51	PK	38.2	-27.4	0	41.31	-	-	74	-32.69	-	-	0-360	100	H
5	16.492	26.46	PK	41.1	-22.2	0	45.36	-	-	-	-	68.2	-22.84	0-360	200	H
2	* 7.333	40.17	PK	35.8	-30.5	0	45.47	-	-	74	-28.53	-	-	0-360	100	V
3	* 11.002	30.46	PK	38.2	-27.4	0	41.26	-	-	74	-32.74	-	-	0-360	200	V
6	16.493	26.6	PK	41.1	-22.2	0	45.5	-	-	-	-	68.2	-22.7	0-360	200	V

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

PK – Peak Detector

Radiated Emissions

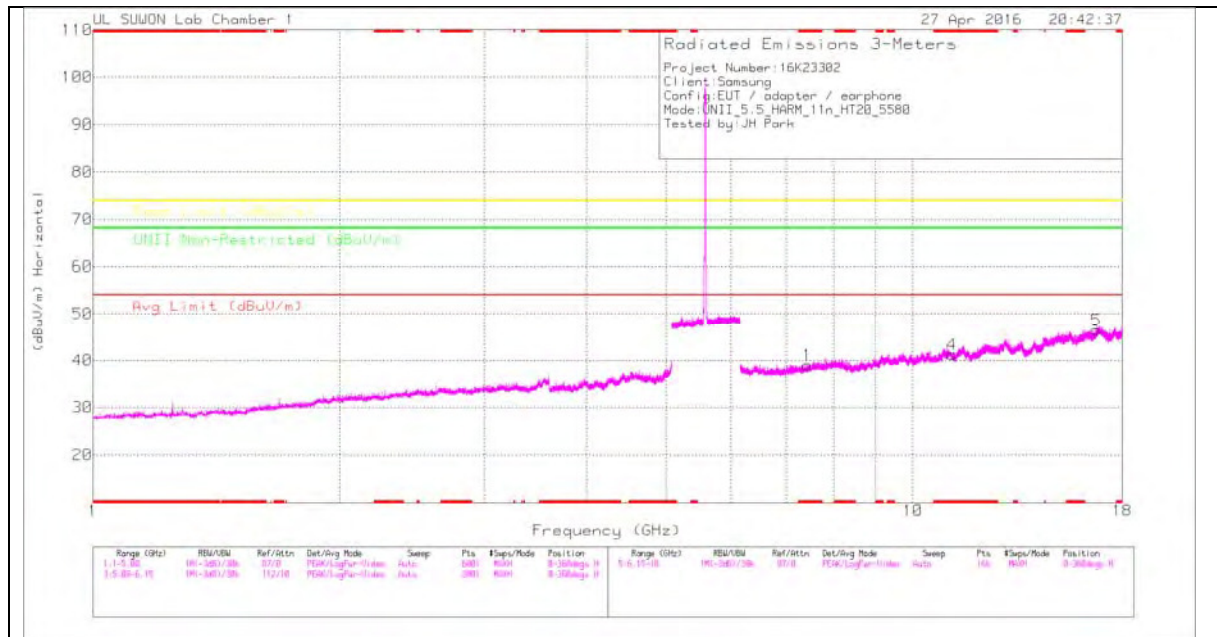
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.333	46.02	PK-U	35.8	-30.5	0	51.32	-	-	74	-22.68	-	-	15	279	H
* 7.333	34.41	ADR	35.8	-30.5	0	39.71	54	-14.29	-	-	-	-	15	279	H
* 7.333	47.92	PK-U	35.8	-30.5	0	53.22	-	-	74	-20.78	-	-	78	101	V
* 7.333	40.5	ADR	35.8	-30.5	0	45.8	54	-8.2	-	-	-	-	78	101	V

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

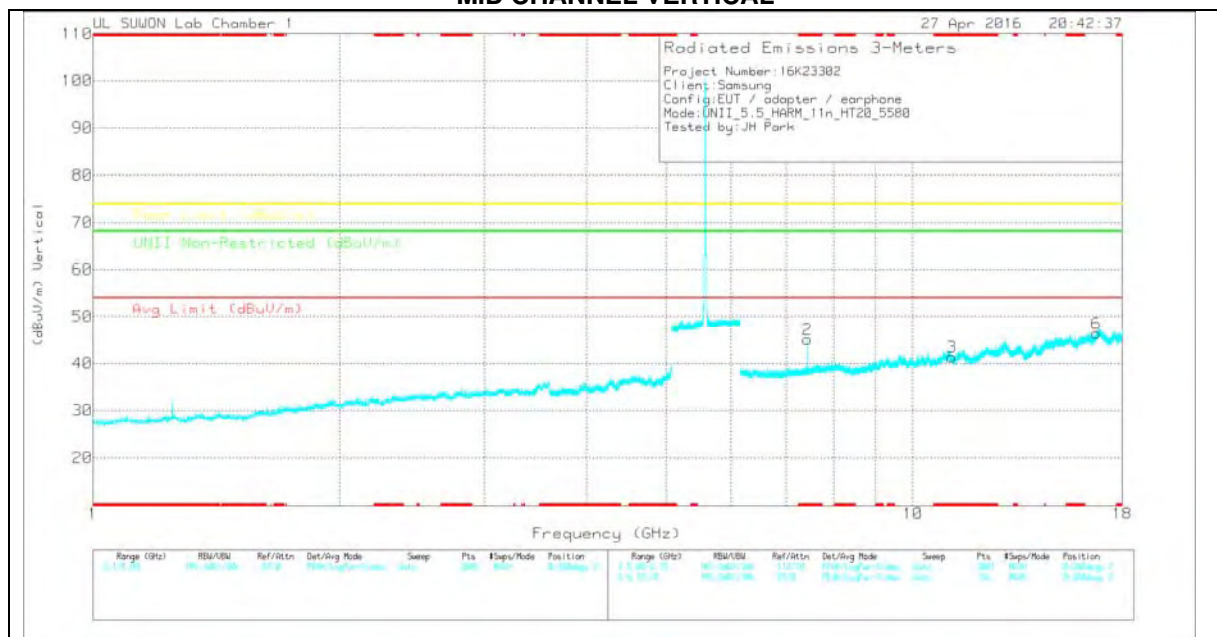
PK-U - U-NII: Maximum Peak

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_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
1	* 7.439	33.89	PK	35.8	-30.6	0	39.09	-	-	74	-34.91	-	-	0-360	200	H
4	* 11.161	30.05	PK	38.3	-27.1	0	41.25	-	-	74	-32.75	-	-	0-360	100	H
5	16.74	26.4	PK	41.3	-21.2	0	46.5	-	-	-	-	68.2	-21.7	0-360	100	H
2	* 7.439	39.92	PK	35.8	-30.6	0	45.12	-	-	74	-28.88	-	-	0-360	100	V
3	* 11.16	30.18	PK	38.3	-27.1	0	41.38	-	-	74	-32.62	-	-	0-360	200	V
6	16.744	26.28	PK	41.3	-21.2	0	46.38	-	-	-	-	68.2	-21.82	0-360	200	V

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

PK – Peak Detector

Radiated Emissions

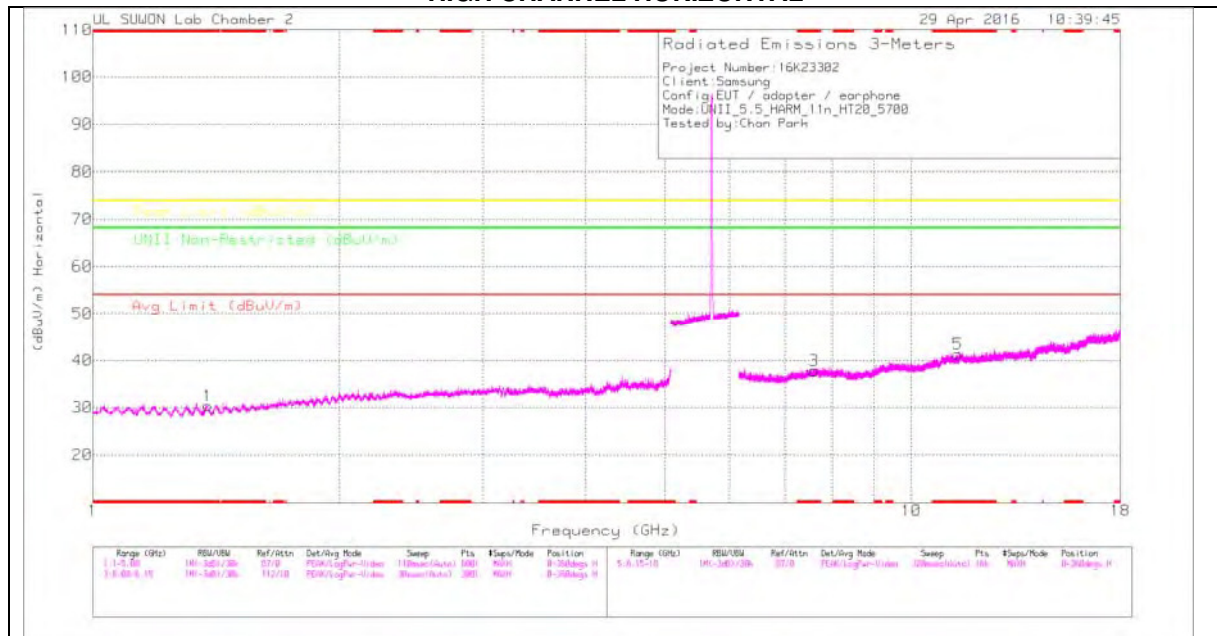
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.44	46.44	PK-U	35.8	-30.6	0	51.64	-	-	74	-22.36	-	-	175	110	V
* 7.44	38.31	ADR	35.8	-30.5	0	43.61	54	-10.39	-	-	-	-	175	110	V

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

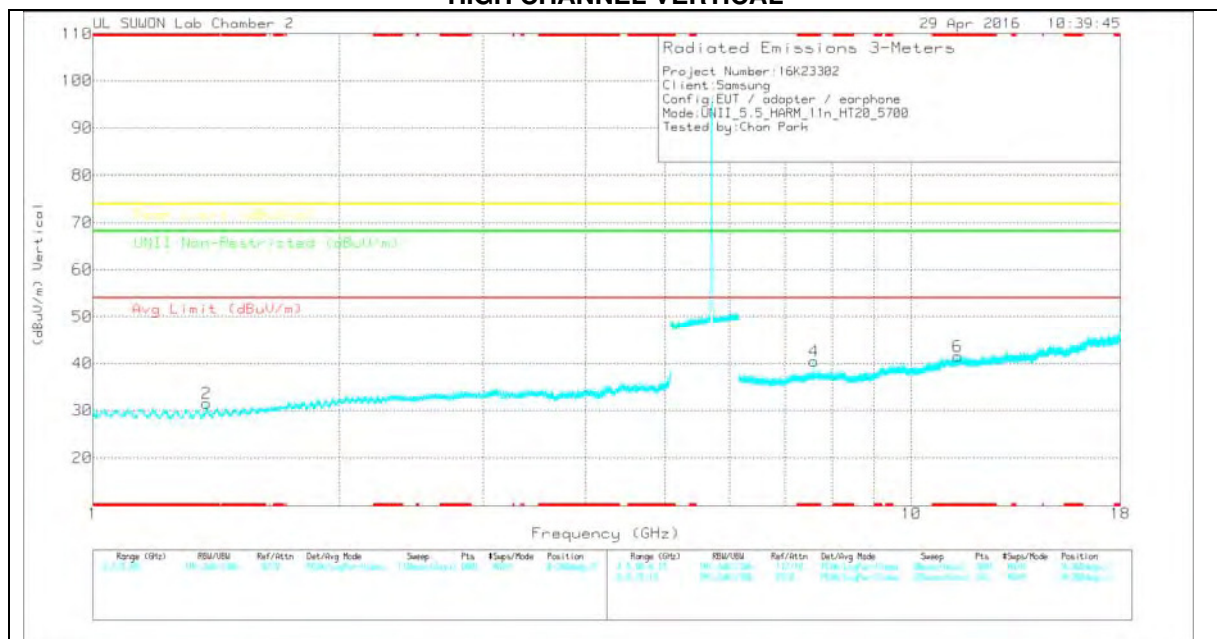
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	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	* 1.381	29.52	PK	28.4	-27.6	0	30.32	-	-	74	-43.68	-	-	0-360	200	H
2	* 1.377	30.74	PK	28.4	-27.6	0	31.54	-	-	74	-42.46	-	-	0-360	100	V
3	* 7.599	23.41	PK	36.1	-21.7	0	37.81	-	-	74	-36.19	-	-	0-360	100	H
5	* 11.396	20.21	PK	38.3	-17.2	0	41.31	-	-	74	-32.69	-	-	0-360	100	H
4	* 7.6	26.11	PK	36.1	-21.7	0	40.51	-	-	74	-33.49	-	-	0-360	100	V
6	* 11.399	20.34	PK	38.3	-17.2	0	41.44	-	-	74	-32.56	-	-	0-360	100	V

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

PK – Peak detector

Radiated Emissions

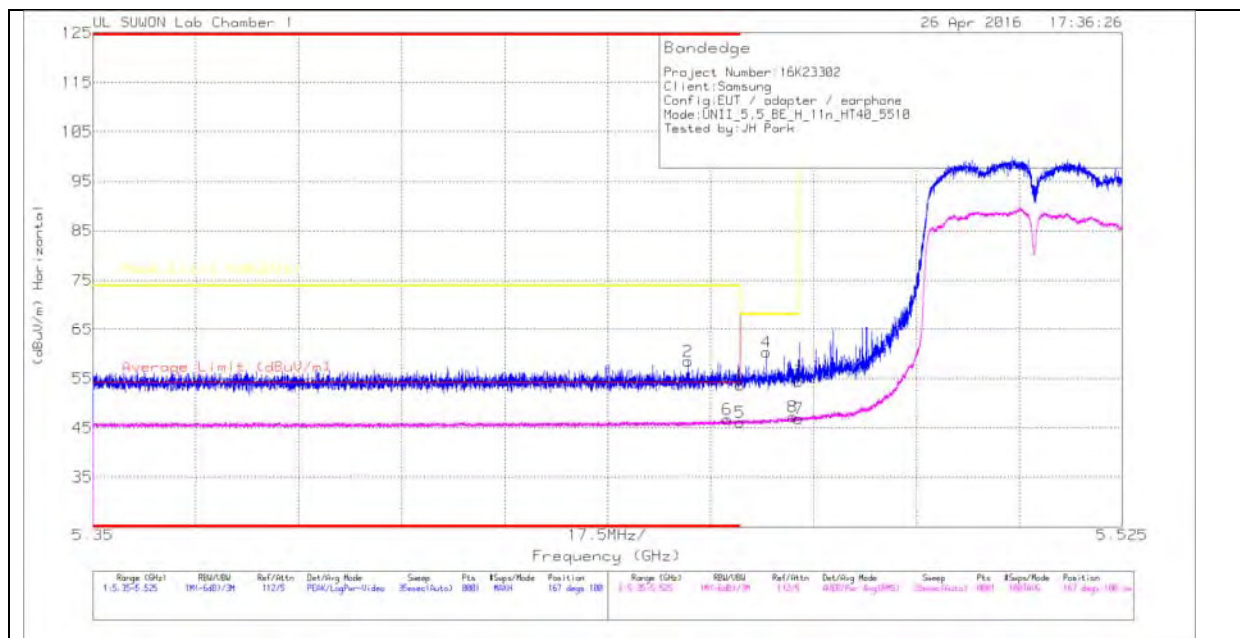
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016872 4_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.6	34.64	PK-U	36.1	-21.7	0	49.04	-	-	74	-24.96	-	-	175	297	V

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

PK-U - U-NII: Maximum Peak

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

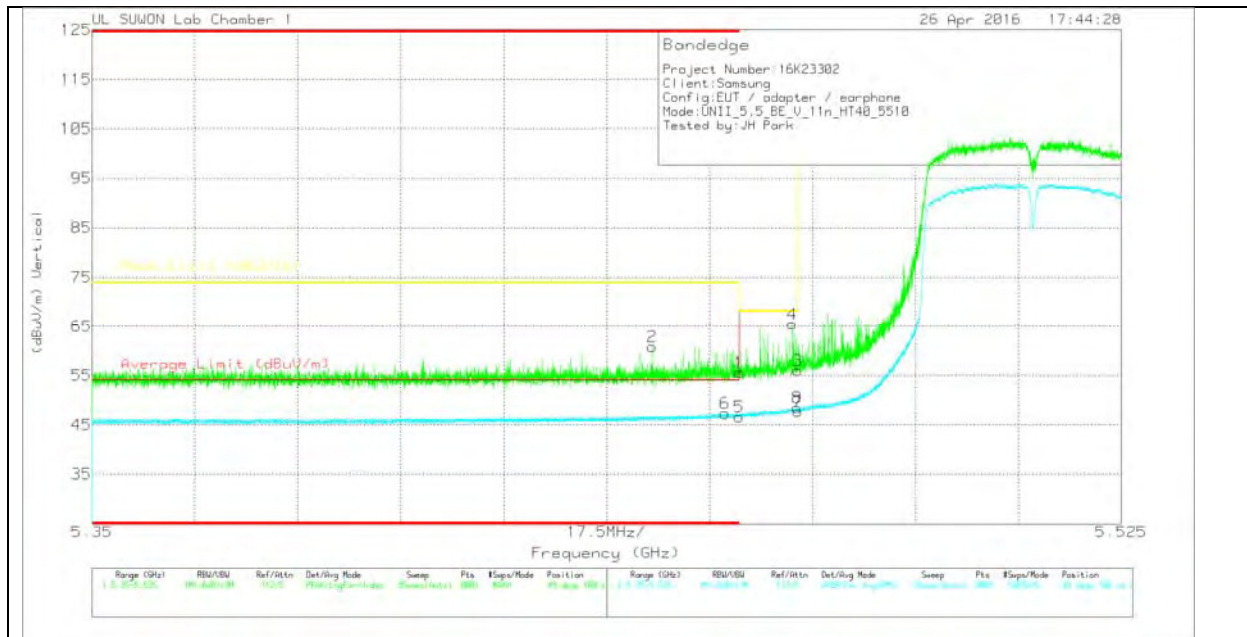
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	42.31	Pk	34.6	-23.2	0	53.71	-	-	74	-20.29	167	100	H
2	* 5.451	47.1	Pk	34.6	-23.2	0	58.5	-	-	74	-15.5	167	100	H
3	5.47	42.93	Pk	34.6	-23.1	0	54.43	-	-	68.2	-13.77	167	100	H
4	5.464	48.81	Pk	34.6	-23.1	0	60.31	-	-	68.2	-7.89	167	100	H
5	* 5.46	34.14	RMS	34.6	-23.2	.59	46.13	54	-7.87	-	-	167	100	H
6	* 5.458	34.72	RMS	34.6	-23.2	.59	46.71	54	-7.29	-	-	167	100	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	44.22	Pk	34.6	-23.2	0	55.62	-	-	74	-18.38	49	100	V
2	* 5.445	49.45	Pk	34.6	-23.2	0	60.85	-	-	74	-13.15	49	100	V
3	5.47	44.56	Pk	34.6	-23.1	0	56.06	-	-	68.2	-12.14	49	100	V
4	5.469	54.01	Pk	34.6	-23.1	0	65.51	-	-	68.2	-2.69	49	100	V
5	* 5.46	34.62	RMS	34.6	-23.2	.59	46.61	54	-7.39	-	-	49	100	V
6	* 5.458	35.31	RMS	34.6	-23.2	.59	47.3	54	-6.7	-	-	49	100	V

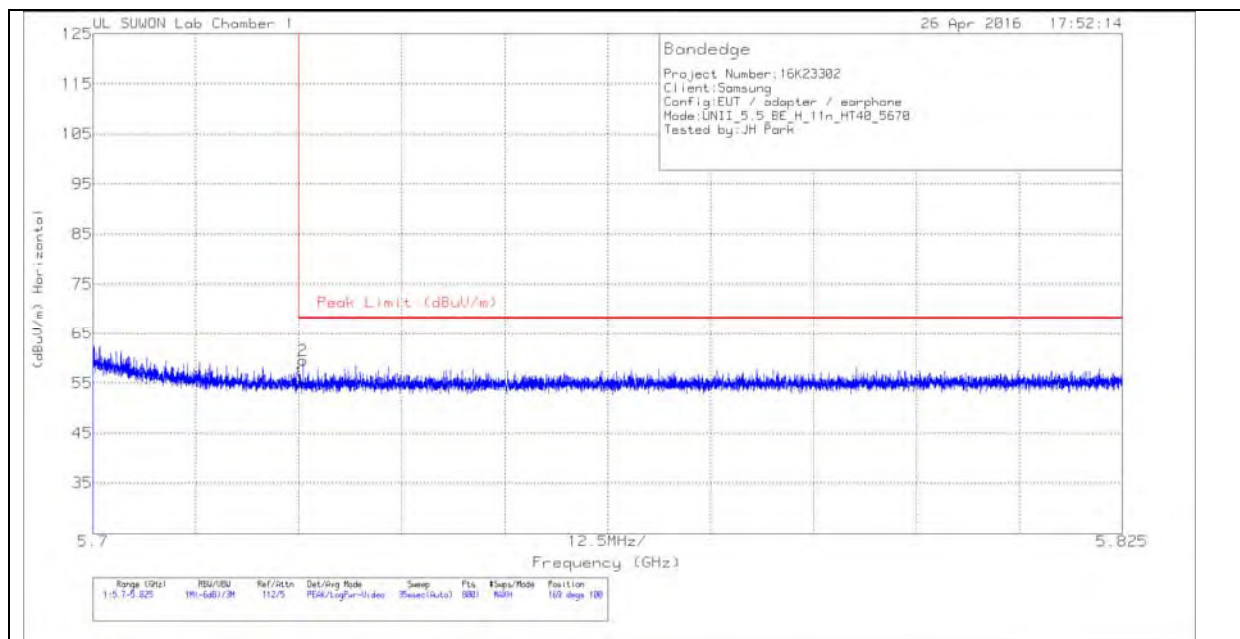
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



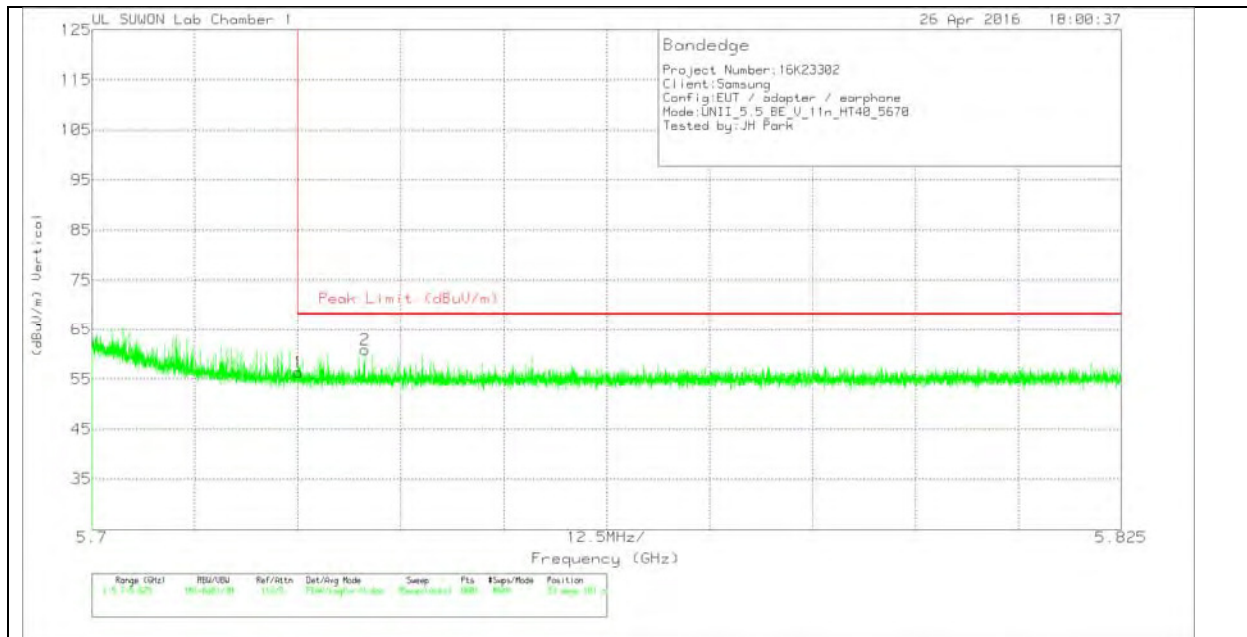
HORIZONTAL DATA

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	43.21	Pk	34.8	-22.8	0	55.21	68.2	-12.99	169	100	H
2	5.725	47.56	Pk	34.8	-22.8	0	59.56	68.2	-8.64	169	100	H

Pk - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

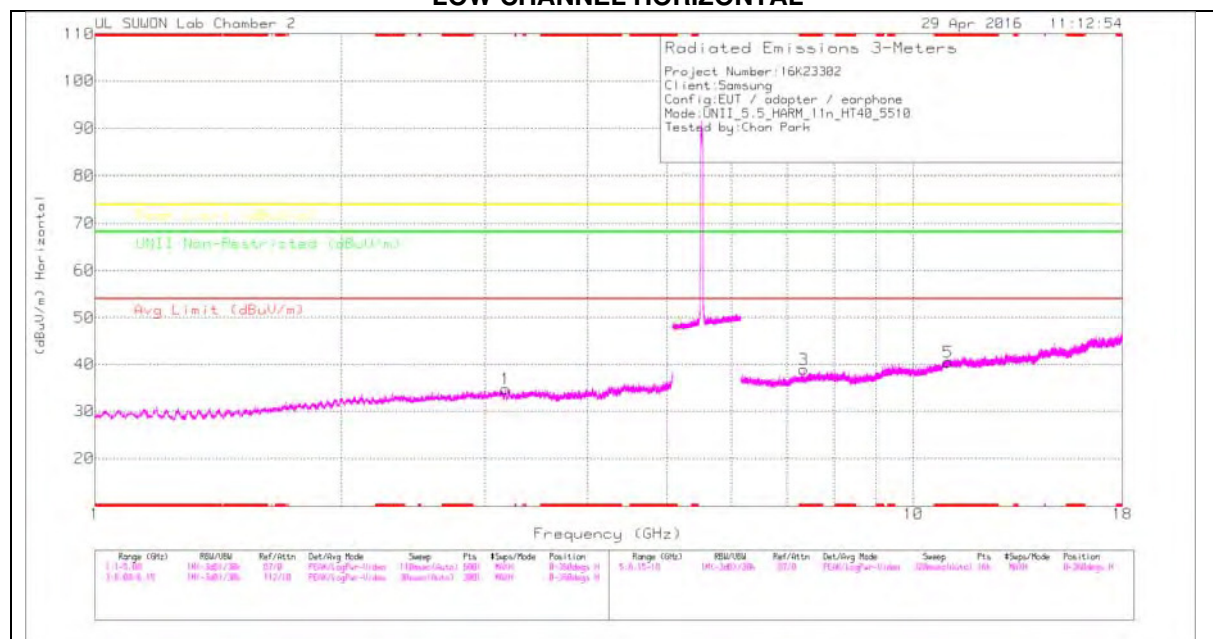
Trace Markers

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	44.41	Pk	34.8	-22.8	0	56.41	68.2	-11.79	33	101	V
2	5.733	48.97	Pk	34.8	-22.8	0	60.97	68.2	-7.23	33	101	V

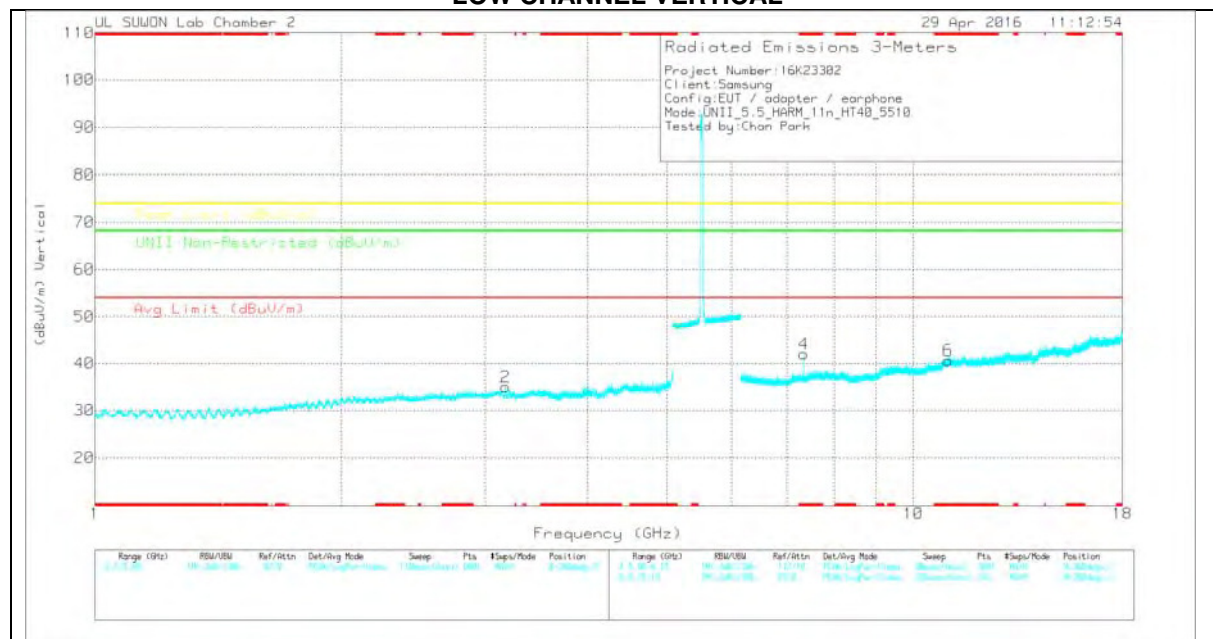
Pk - Peak detector

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	3117/00168724_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	3.174	28.21	PK	32.6	-26.1	0	34.71	-	-	-	-	68.2	-33.49	0-360	200	H
2	3.173	28.58	PK	32.5	-26.1	0	34.98	-	-	-	-	68.2	-33.22	0-360	200	V
3	* 7.346	25.09	PK	35.9	-22.1	0	38.89	-	-	74	-35.11	-	-	0-360	200	H
5	* 11.022	20.06	PK	38	-17.6	0	40.46	-	-	74	-33.54	-	-	0-360	200	H
4	* 7.346	28.25	PK	35.9	-22.1	0	42.05	-	-	74	-31.95	-	-	0-360	100	V
6	* 11.025	20.25	PK	38	-17.6	0	40.65	-	-	74	-33.35	-	-	0-360	100	V

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

PK – Peak detector

Radiated Emissions

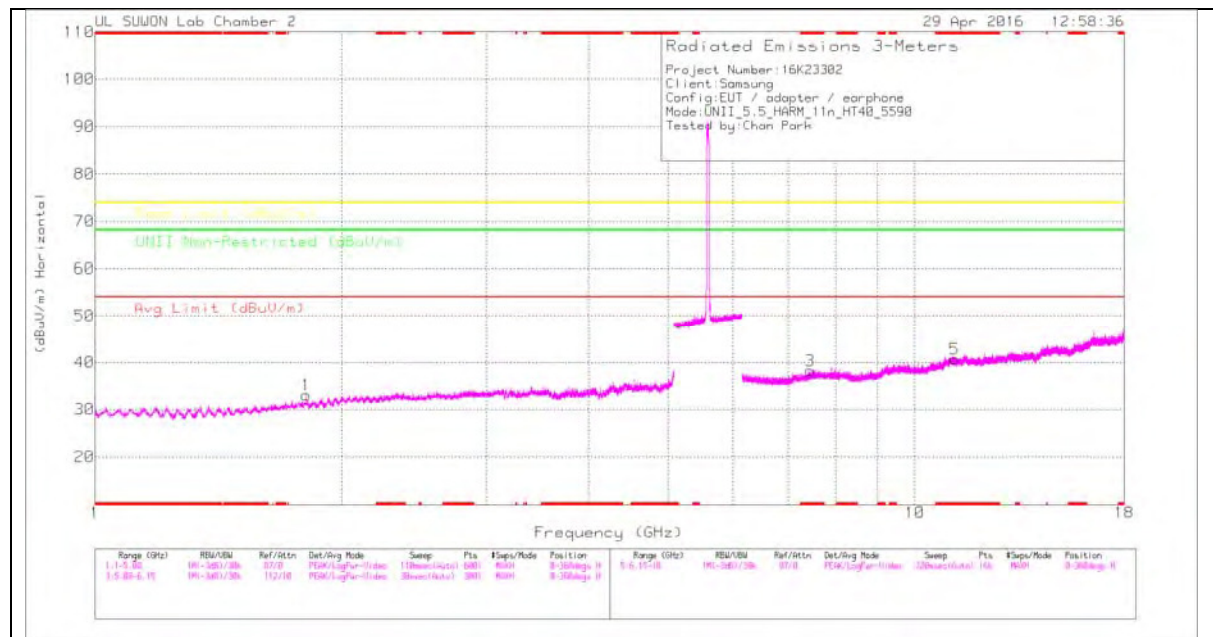
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/00168724_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.347	35.88	PK-U	35.9	-22.1	0	49.68	-	-	74	-24.32	-	-	257	327	H
* 7.347	26.55	ADR	35.9	-22.1	0	40.35	54	-13.65	-	-	-	-	257	327	H
* 7.347	36.44	PK-U	35.9	-22.1	0	50.24	-	-	74	-23.76	-	-	178	322	V
* 7.347	28.98	ADR	35.9	-22.1	0	42.78	54	-11.22	-	-	-	-	178	322	V

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

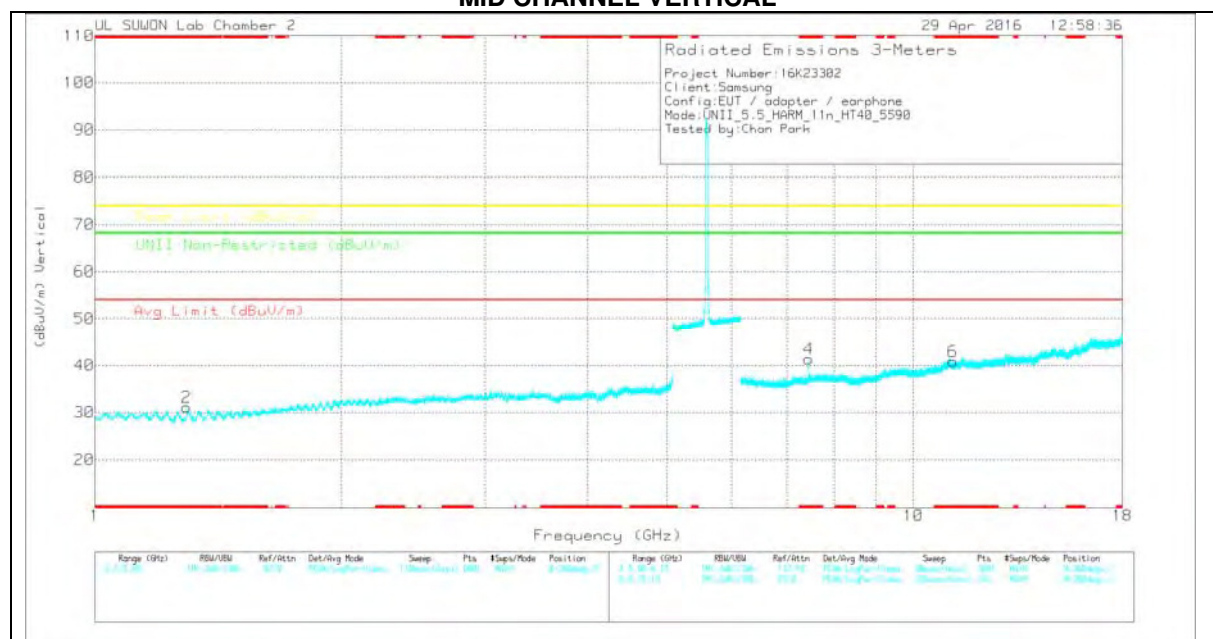
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	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	1.809	30.04	PK	30.2	-27.2	0	33.04	-	-	-	-	68.2	-35.16	0-360	100	H
2	* 1.294	30.42	PK	28.4	-27.7	0	31.12	-	-	74	-42.88	-	-	0-360	200	V
3	* 7.453	24.61	PK	36	-22.4	0	38.21	-	-	74	-35.79	-	-	0-360	100	H
5	* 11.183	20.36	PK	38.1	-17.7	0	40.76	-	-	74	-33.24	-	-	0-360	100	H
4	* 7.453	27.78	PK	36	-22.4	0	41.38	-	-	74	-32.62	-	-	0-360	200	V
6	* 11.181	20.48	PK	38.1	-17.7	0	40.88	-	-	74	-33.12	-	-	0-360	100	V

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

PK – Peak detector

Radiated Emissions

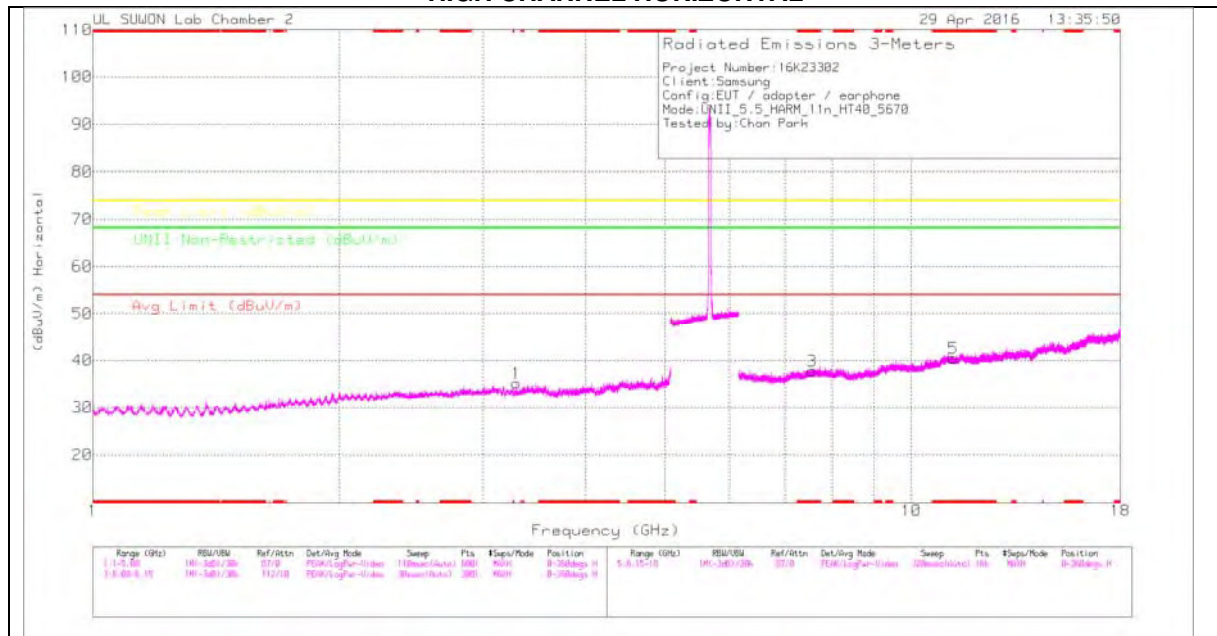
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 24_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.453	37.25	PK-U	36	-22.4	0	50.85	-	-	74	-23.15	-	-	178	291	V
* 7.453	26.36	ADR	36	-22.4	0	39.96	54	-14.04	-	-	-	-	178	291	V

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

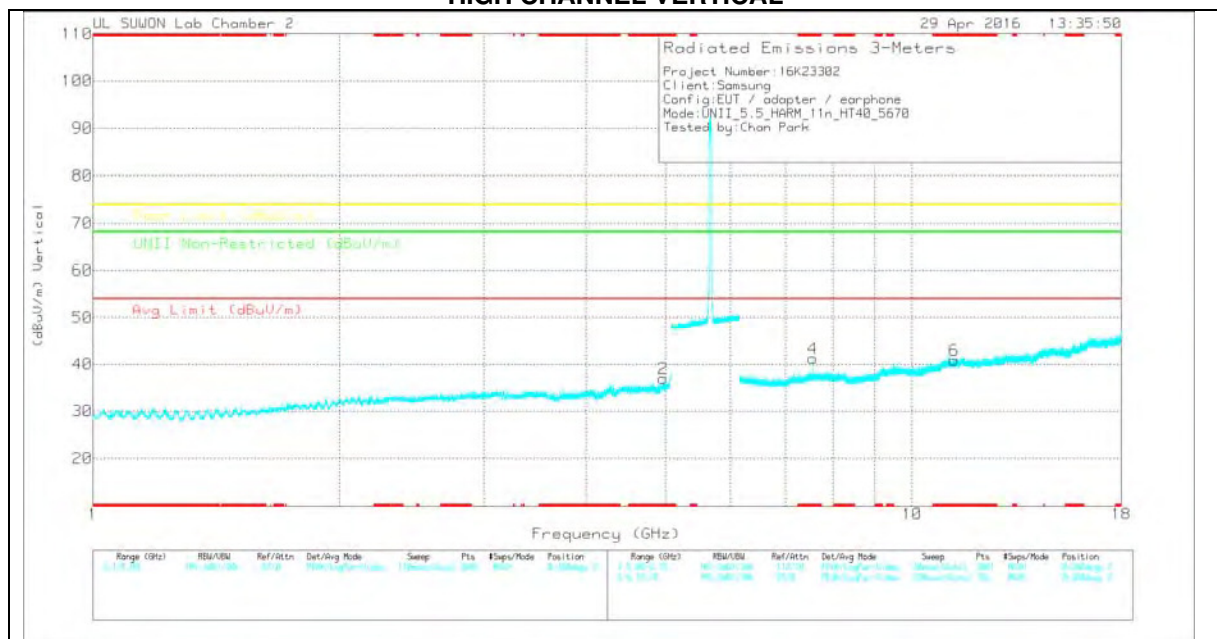
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	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	3.29	28.63	PK	32.6	-26.1	0	35.13	-	-	-	-	68.2	-33.07	0-360	200	H
2	* 4.966	27.69	PK	33.9	-24.6	0	36.99	-	-	74	-37.01	-	-	0-360	200	V
3	* 7.559	23.35	PK	36.1	-21.7	0	37.75	-	-	74	-36.25	-	-	0-360	100	H
5	* 11.259	19.71	PK	38.2	-17.4	0	40.51	-	-	74	-33.49	-	-	0-360	100	H
4	* 7.559	26.84	PK	36.1	-21.7	0	41.24	-	-	74	-32.76	-	-	0-360	100	V
6	* 11.25	20.13	PK	38.2	-17.5	0	40.83	-	-	74	-33.17	-	-	0-360	200	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016872 4)_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
* 7.56	36.41	PK-U	36.1	-21.7	0	50.81	-	-	74	-23.19	-	-	173	378	V
* 7.56	25.1	ADR	36.1	-21.7	0	39.5	54	-14.5	-	-	-	-	173	378	V

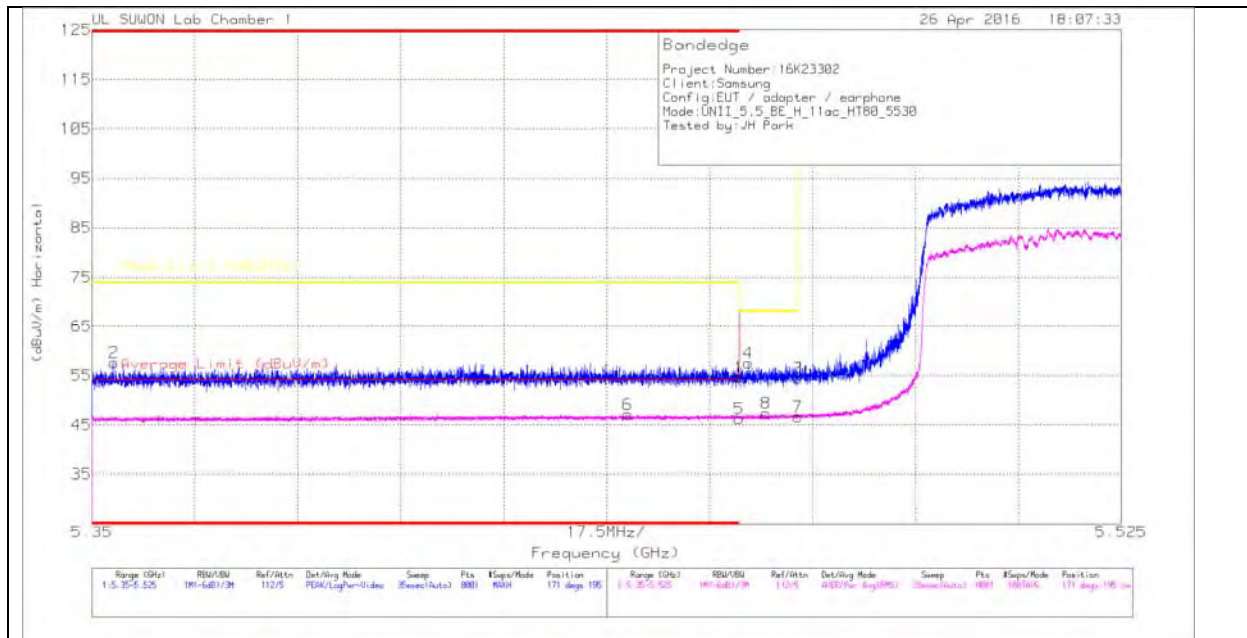
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

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

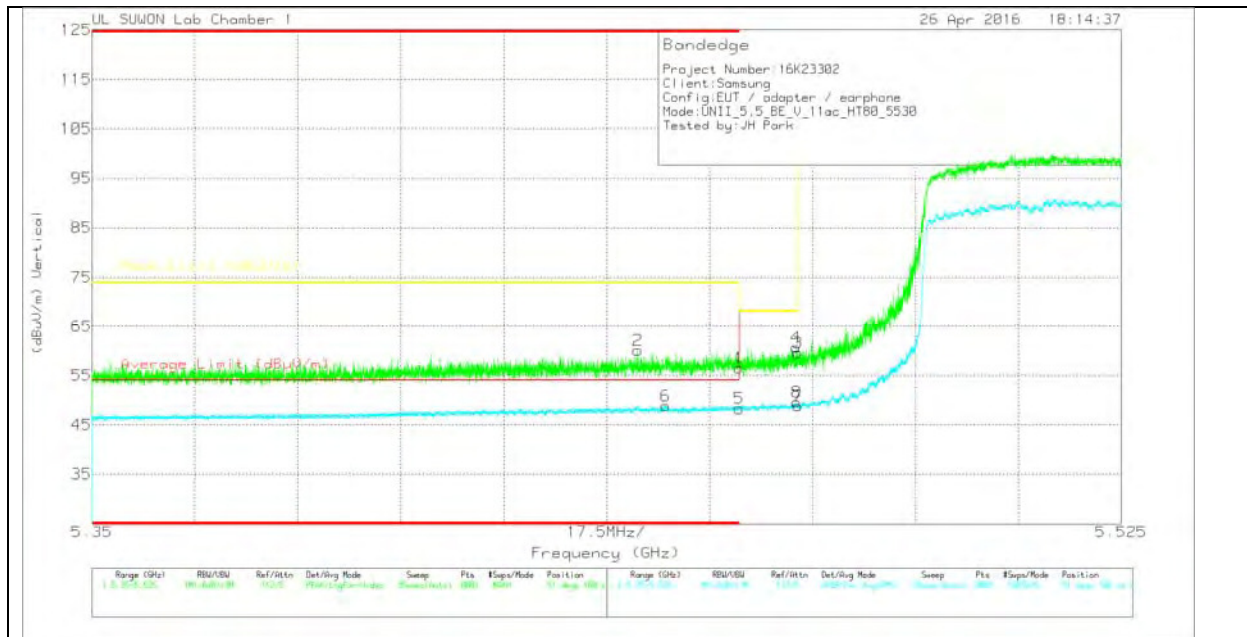
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	43.3	Pk	34.6	-23.2	0	54.7	-	-	74	-19.3	171	195	H
2	* 5.354	46.48	Pk	34.5	-23.3	0	57.68	-	-	74	-16.32	171	195	H
3	5.47	42.86	Pk	34.6	-23.1	0	54.36	-	-	68.2	-13.84	171	195	H
4	5.462	46.08	Pk	34.6	-23.2	0	57.48	-	-	68.2	-10.72	171	195	H
5	* 5.46	33.77	RMS	34.6	-23.2	1.12	46.29	54	-7.71	-	-	171	195	H
6	* 5.441	34.61	RMS	34.6	-23.2	1.12	47.13	54	-6.87	-	-	171	195	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	45.13	Pk	34.6	-23.2	0	56.53	-	-	74	-17.47	51	100	V
2	* 5.443	48.66	Pk	34.6	-23.2	0	60.06	-	-	74	-13.94	51	100	V
3	5.47	48.06	Pk	34.6	-23.1	0	59.56	-	-	68.2	-8.64	51	100	V
4	5.47	49.19	Pk	34.6	-23.1	0	60.69	-	-	68.2	-7.51	51	100	V
5	* 5.46	35.77	RMS	34.6	-23.2	1.12	48.29	54	-5.71	-	-	51	100	V
6	* 5.448	36.31	RMS	34.6	-23.2	1.12	48.83	54	-5.17	-	-	51	100	V

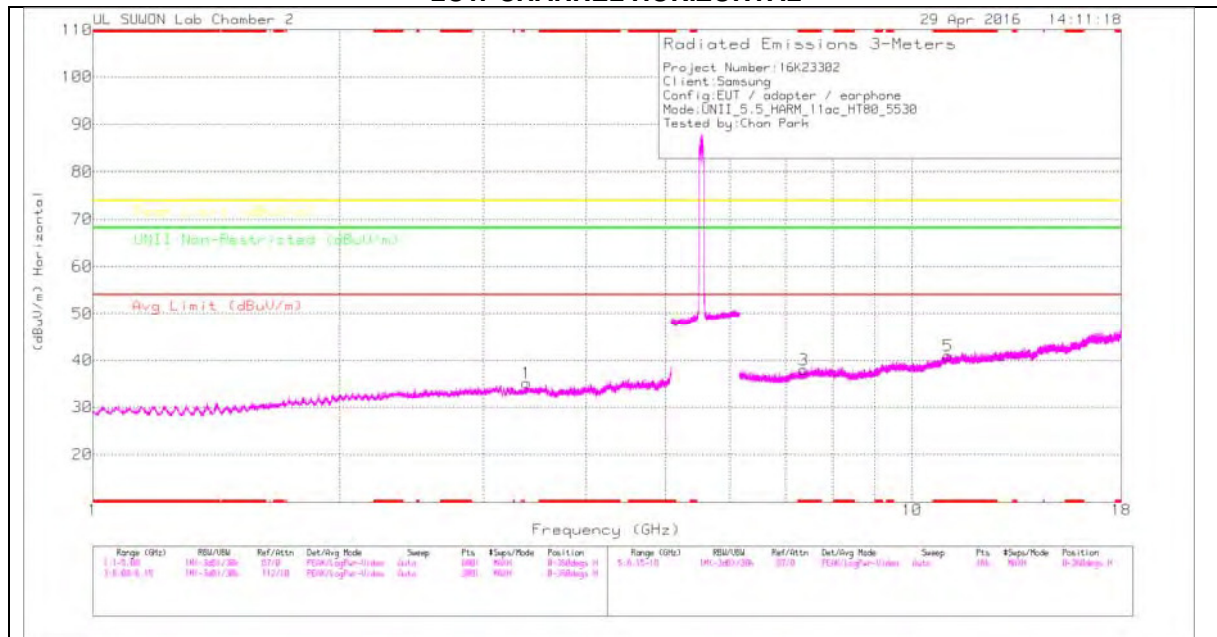
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

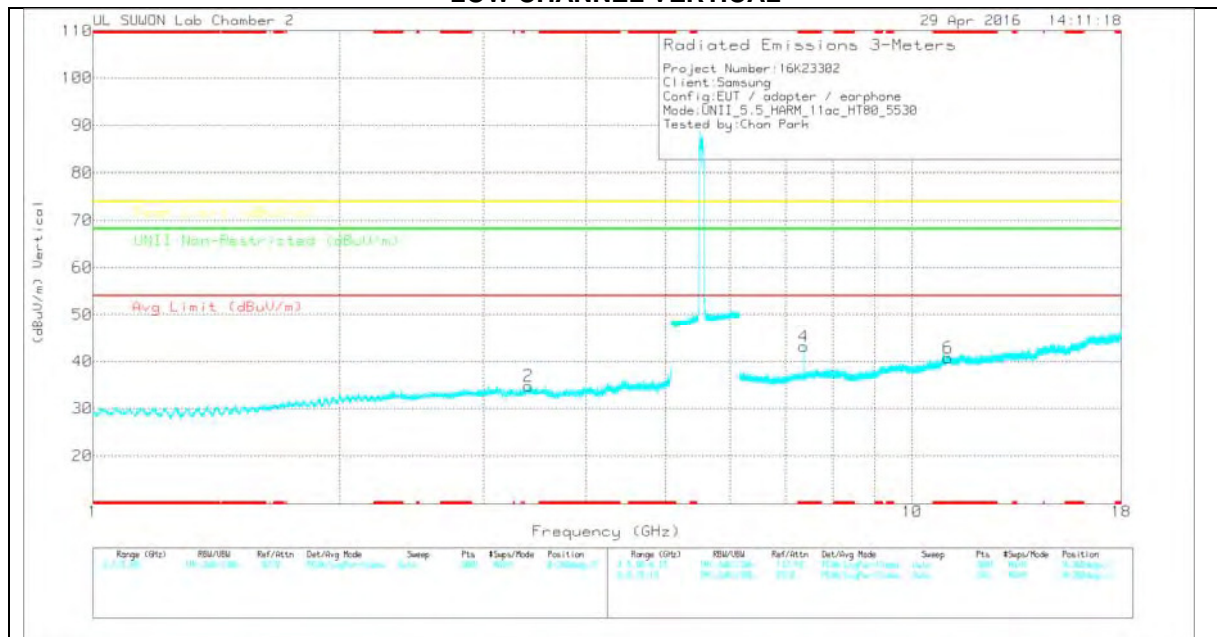
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	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	3.383	28.66	PK	32.7	-26.2	0	35.16	-	-	-	-	68.2	-33.04	0-360	200	H
2	3.4	28.33	PK	32.7	-26.2	0	34.83	-	-	-	-	68.2	-33.37	0-360	200	V
3	* 7.373	24.45	PK	35.9	-22.3	0	38.05	-	-	74	-35.95	-	-	0-360	200	H
5	* 11.062	20.62	PK	38.1	-17.7	0	41.02	-	-	74	-32.98	-	-	0-360	100	H
4	* 7.373	29.59	PK	35.9	-22.3	0	43.19	-	-	74	-30.81	-	-	0-360	200	V
6	* 11.058	20.38	PK	38.1	-17.7	0	40.78	-	-	74	-33.22	-	-	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

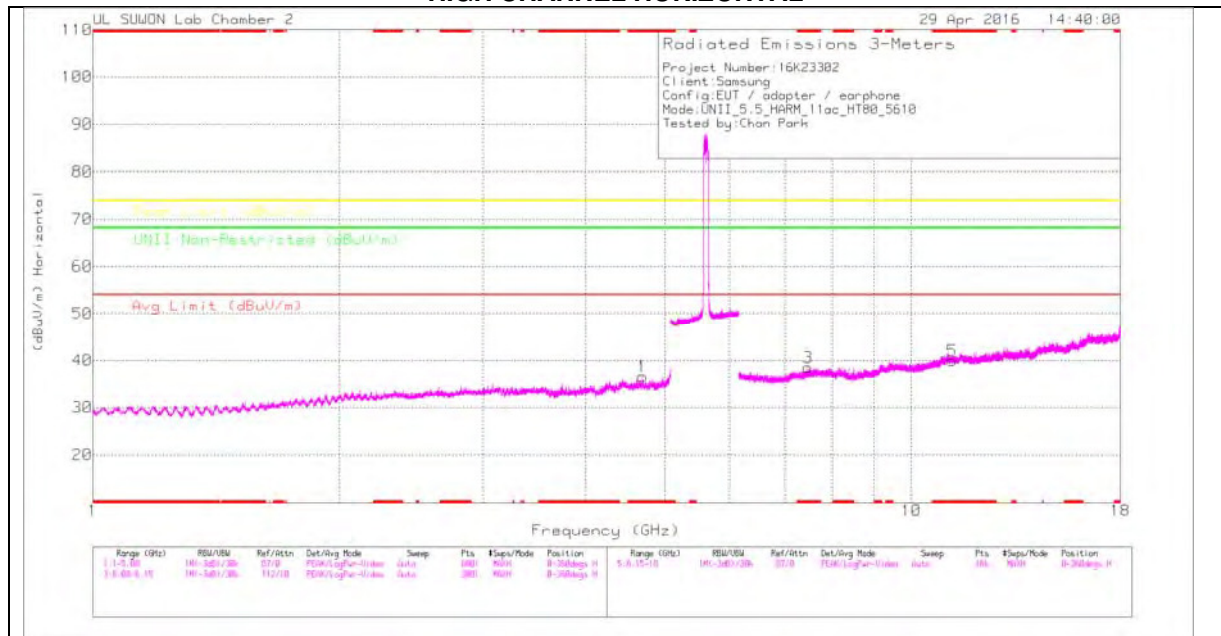
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016872 4_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.373	25.04	ADR	35.9	-22.3	0	38.64	54	-15.36	-	-	-	-	175	394	V
* 7.373	36.89	PK-U	35.9	-22.3	0	50.49	-	-	74	-23.51	-	-	175	394	V

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

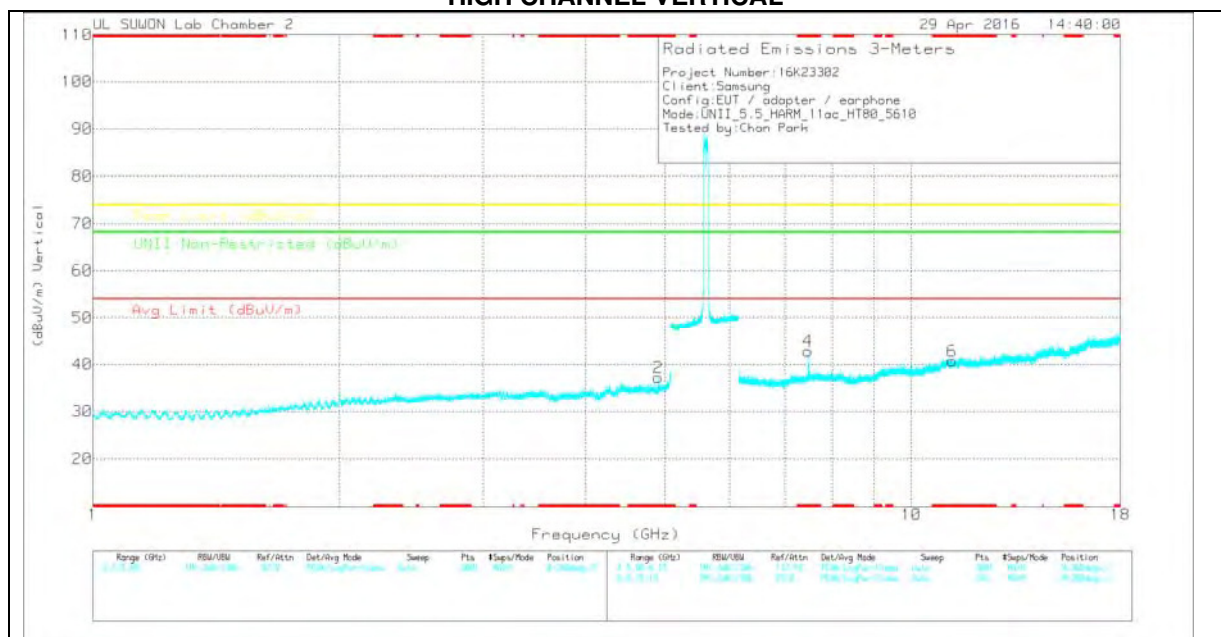
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	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	* 4.694	27.99	PK	33.8	-25.2	0	36.59	-	-	74	-37.41	-	-	0-360	100	H
2	* 4.906	27.52	PK	33.9	-24.2	0	37.22	-	-	74	-36.78	-	-	0-360	100	V
3	* 7.479	24.77	PK	36	-22.2	0	38.57	-	-	74	-35.43	-	-	0-360	100	H
5	* 11.219	19.33	PK	38.2	-17.6	0	39.93	-	-	74	-34.07	-	-	0-360	200	H
4	* 7.48	29.05	PK	36	-22.2	0	42.85	-	-	74	-31.15	-	-	0-360	100	V
6	* 11.217	20.06	PK	38.2	-17.6	0	40.66	-	-	74	-33.34	-	-	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 24_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
* 7.48	36.35	PK-U	36	-22.2	0	50.15	-	-	74	-23.85	-	-	188	324	V
* 7.48	25.96	ADR	36	-22.2	0	39.76	54	-14.24	-	-	-	-	188	324	V

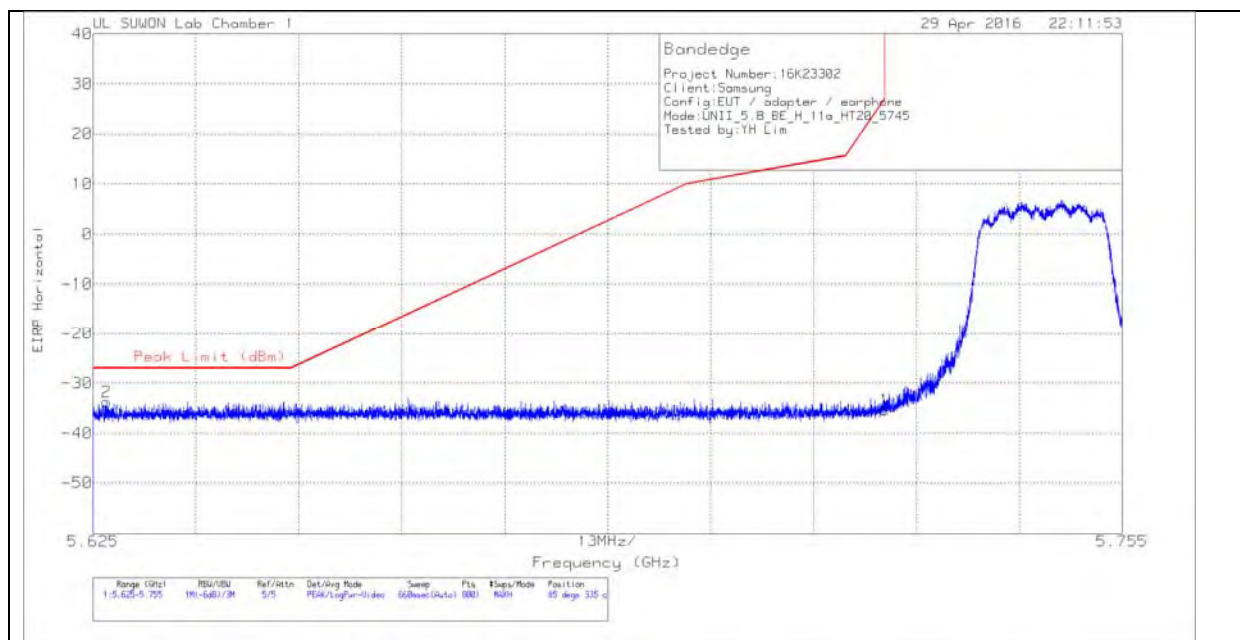
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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



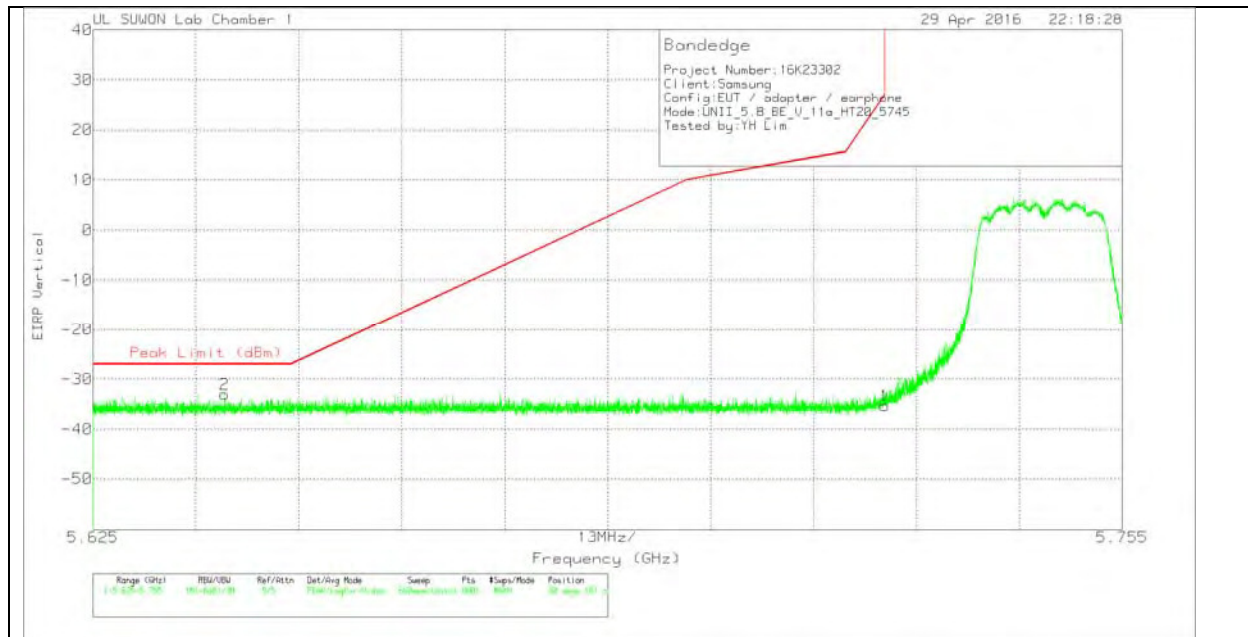
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-66.22	Pk	34.7	-15.6	11.8	0	-35.32	26.97	-62.29	85	335	H
2	5.627	-64.4	Pk	34.6	-15.7	11.8	0	-33.7	-27	-6.7	85	335	H

Pk - Peak detector

VERTICAL PEAK PLOT



VERTICAL DATA

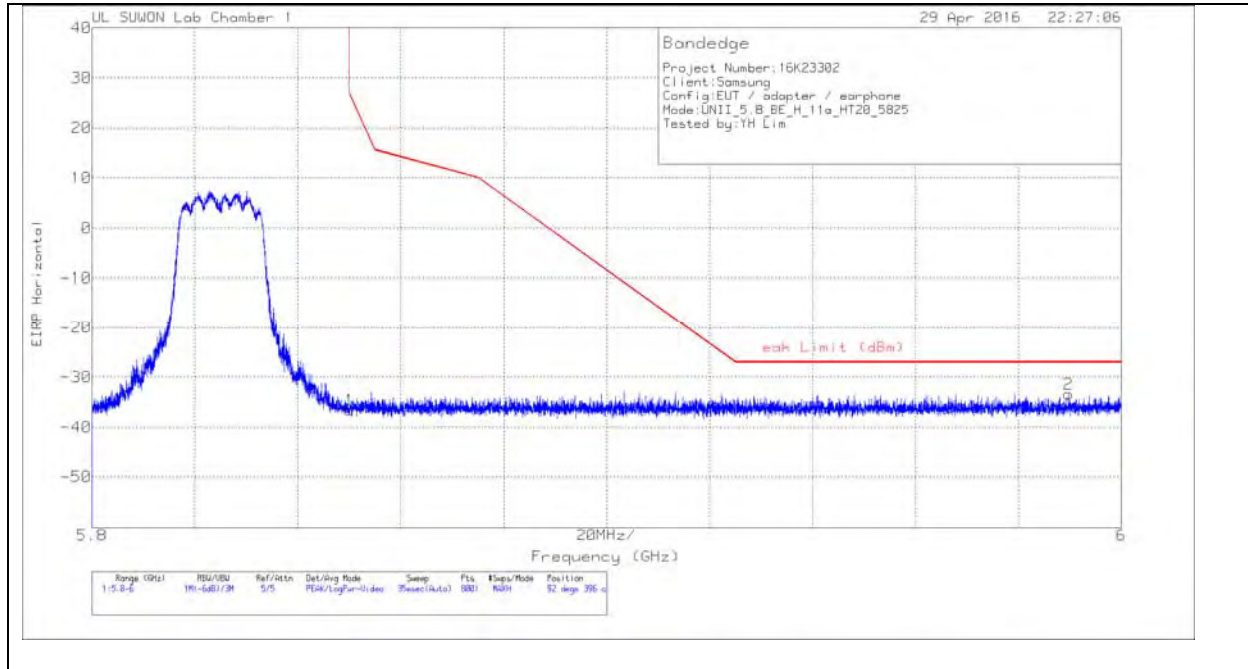
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-66.22	Pk	34.7	-15.6	11.8	0	-35.32	26.97	-62.29	30	181	V
2	5.642	-63.75	Pk	34.6	-15.7	11.8	0	-33.05	-27	-6.05	30	181	V

Pk - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK PLOT



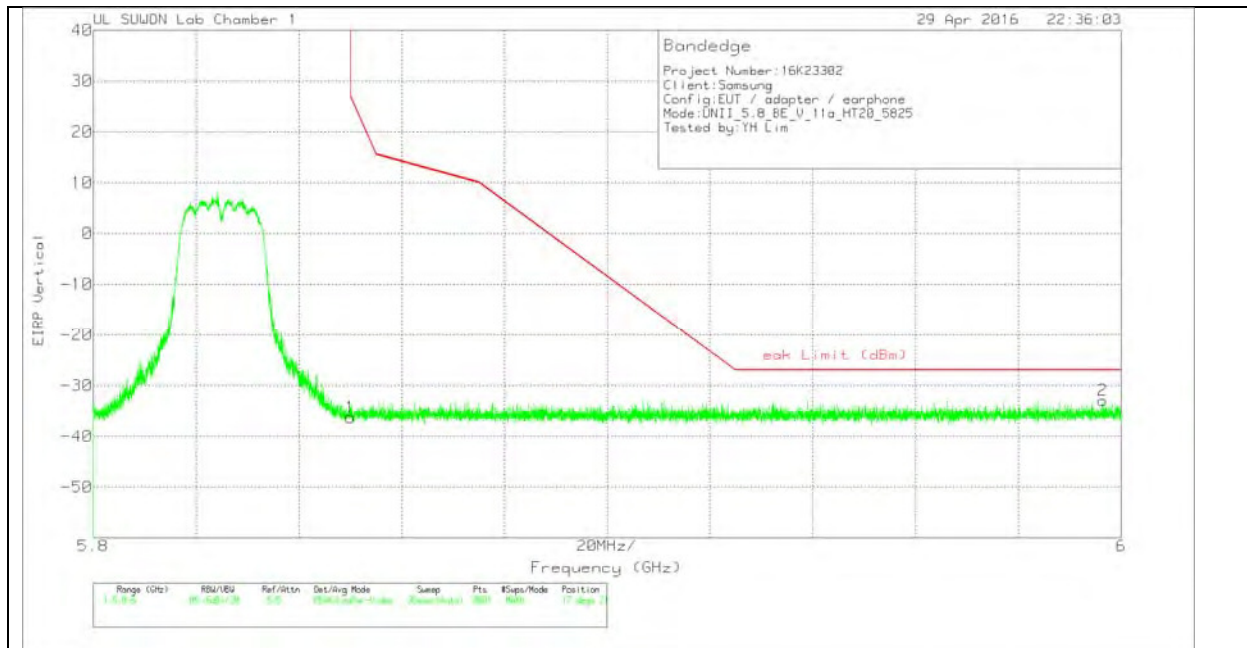
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-67.51	Pk	34.7	-15.5	11.8	0	-36.51	26.94	-63.45	92	396	H
2	5.99	-64.61	Pk	34.8	-15.4	11.8	0	-33.41	-27	-6.41	92	396	H

Pk - Peak detector

VERTICAL PEAK PLOT



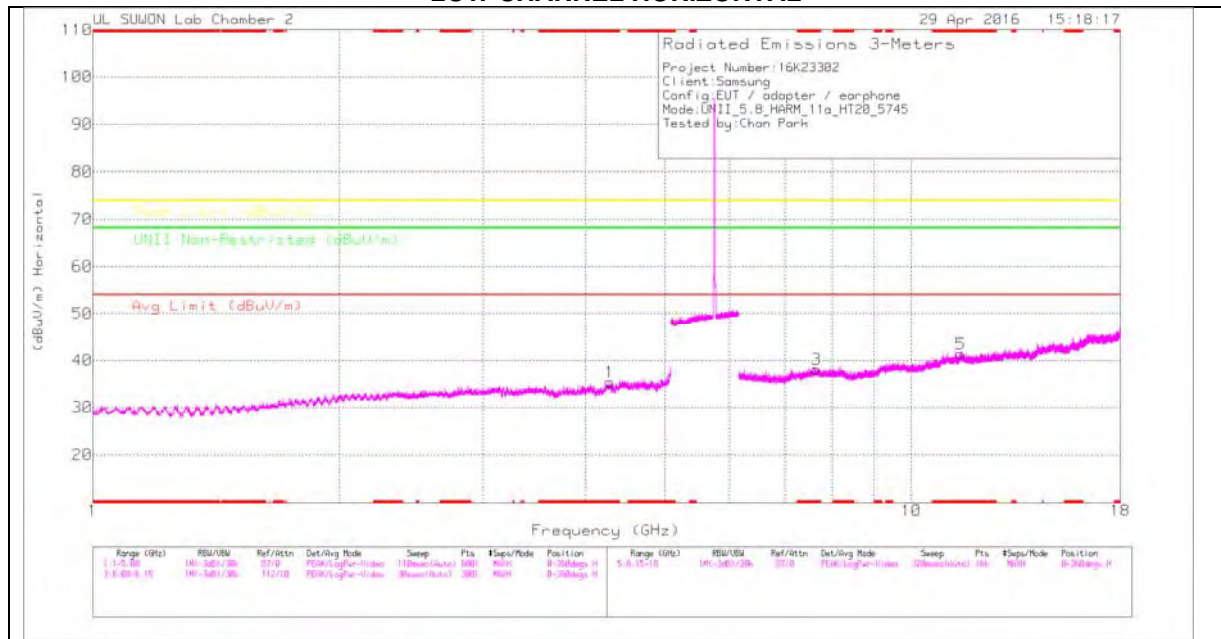
VERTICAL DATA

Trace Markers

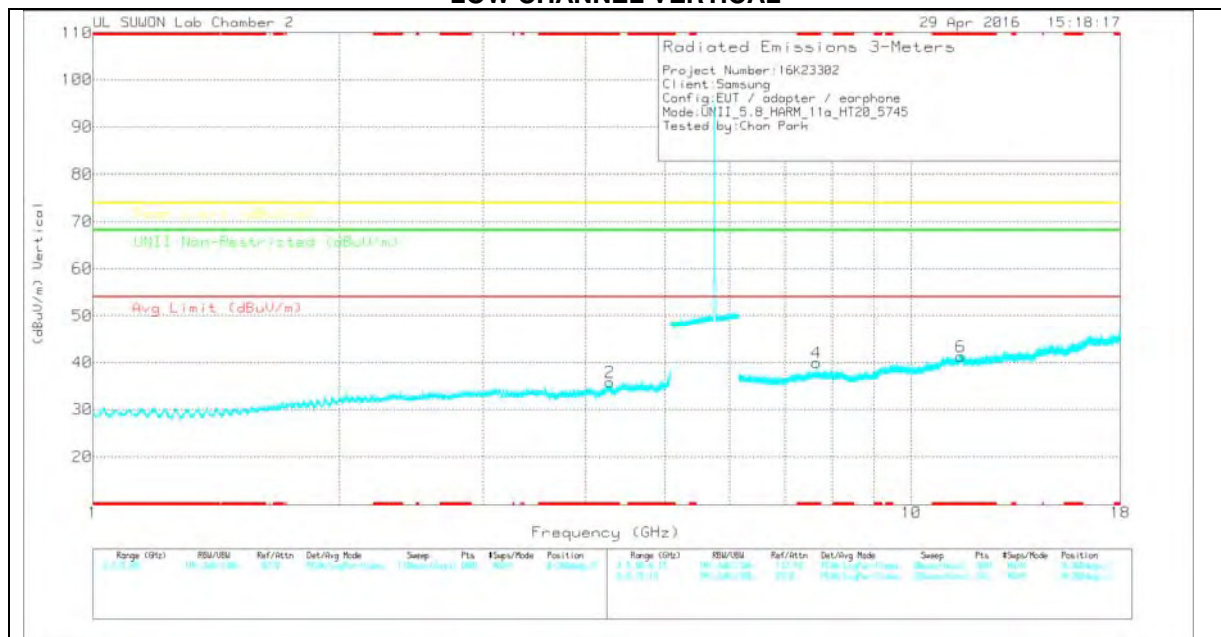
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-67.29	Pk	34.7	-15.5	11.8	0	-36.29	26.94	-63.23	17	219	V
2	5.996	-64.13	Pk	34.8	-15.4	11.8	0	-32.93	-27	-5.93	17	219	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(00168724)_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	* 4.284	27.3	PK	33.5	-25.4	0	35.4	-	-	74	-38.6	-	-	0-360	100	H
2	* 4.282	27.7	PK	33.5	-25.4	0	35.8	-	-	74	-38.2	-	-	0-360	100	V
3	* 7.659	23.37	PK	36.1	-21.3	0	38.17	-	-	74	-35.83	-	-	0-360	100	H
5	* 11.493	20.58	PK	38.3	-17.5	0	41.38	-	-	74	-32.62	-	-	0-360	100	H
4	* 7.66	25.17	PK	36.1	-21.3	0	39.97	-	-	74	-34.03	-	-	0-360	100	V
6	* 11.489	20.47	PK	38.3	-17.5	0	41.27	-	-	74	-32.73	-	-	0-360	200	V

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

PK – Peak detector

Radiated Emissions

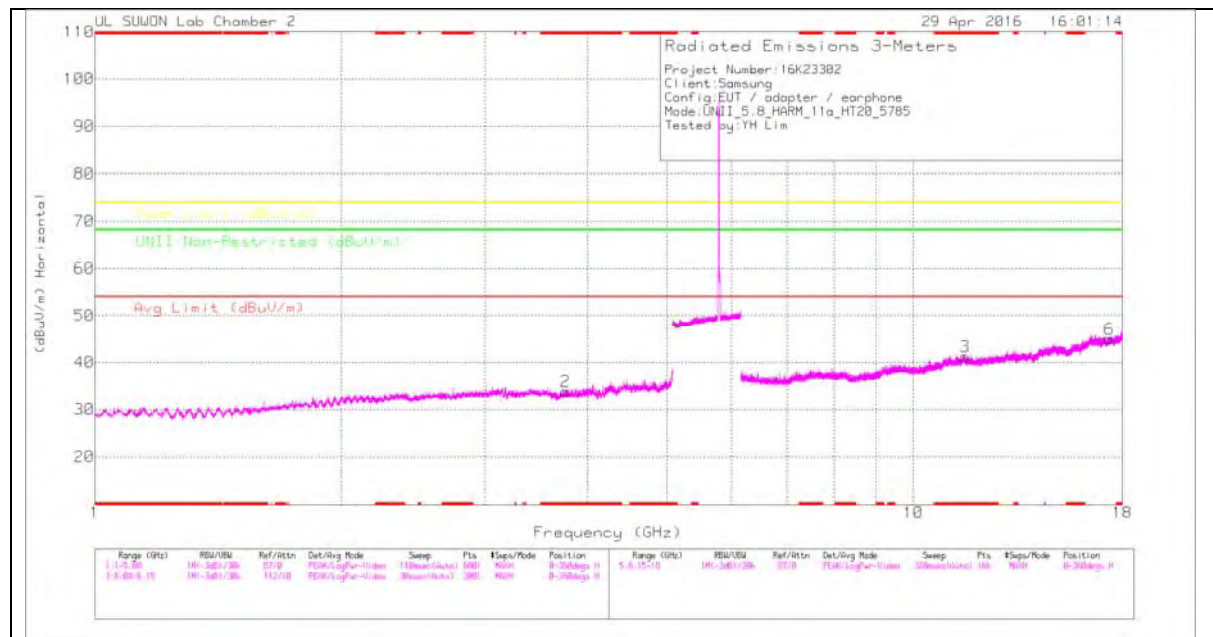
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168724)_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.66	35.25	PK-U	36.1	-21.3	0	50.05	-	-	74	-23.95	-	-	181	313	V
* 7.66	24.69	ADR	36.1	-21.3	0	39.49	54	-14.51	-	-	-	-	181	313	V

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

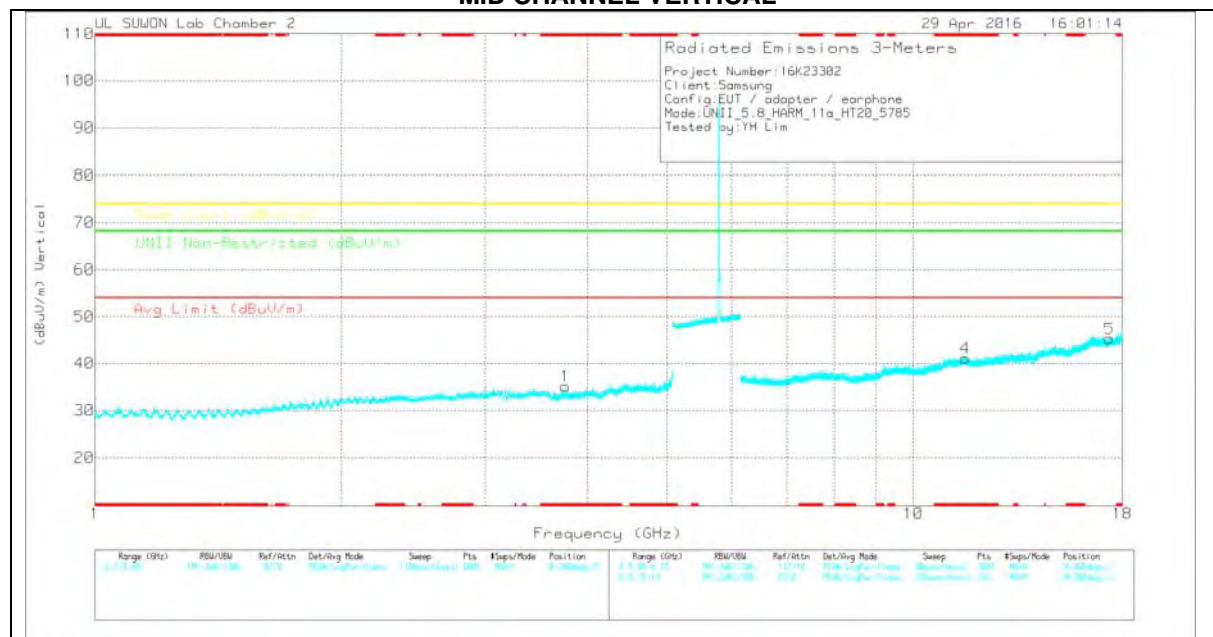
PK-U - U-NII: Maximum Peak

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

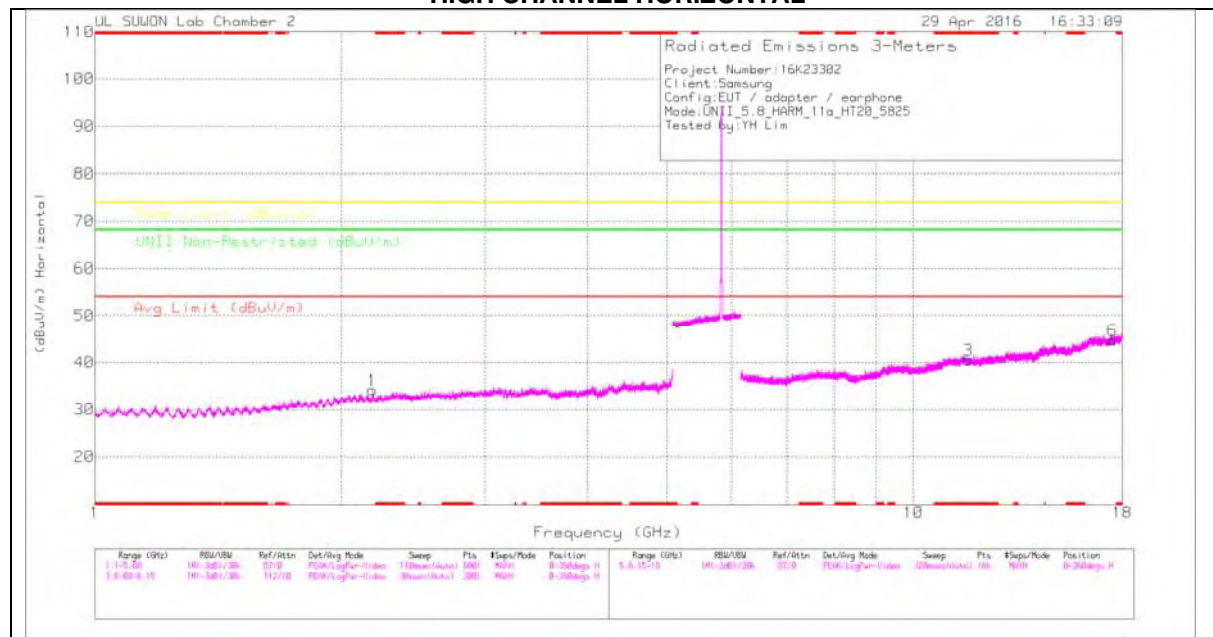
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168 724)_15061 9	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.759	26.9	Pk	33	-26	0	33.9	-	-	74	-40.1	-	-	0-360	200	H
1	* 3.757	28.1	Pk	33	-26	0	35.1	-	-	74	-38.9	-	-	0-360	200	V
3	* 11.571	20.32	Pk	38.4	-17.5	0	41.22	-	-	74	-32.78	-	-	0-360	100	H
6	17.369	18.76	Pk	41.2	-15	0	44.96	-	-	-	-	68.2	-23.24	0-360	200	H
4	* 11.57	20.24	Pk	38.4	-17.5	0	41.14	-	-	74	-32.86	-	-	0-360	100	V
5	17.347	19.1	Pk	41.2	-15.1	0	45.2	-	-	-	-	68.2	-23	0-360	100	V

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

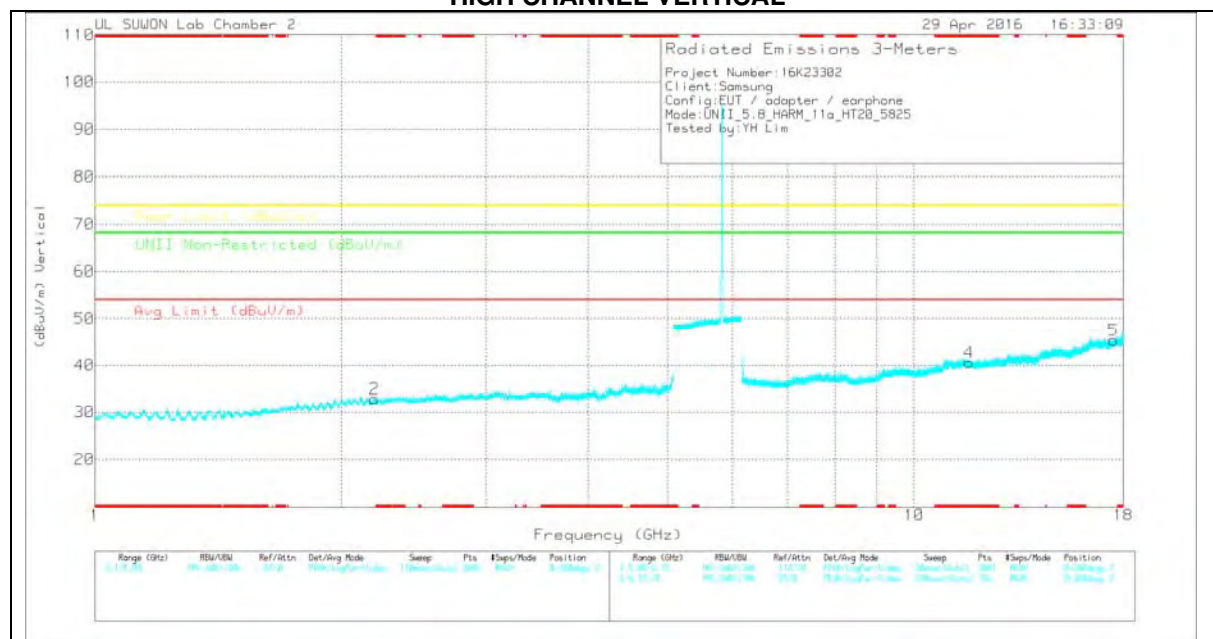
Pk – Peak detector

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

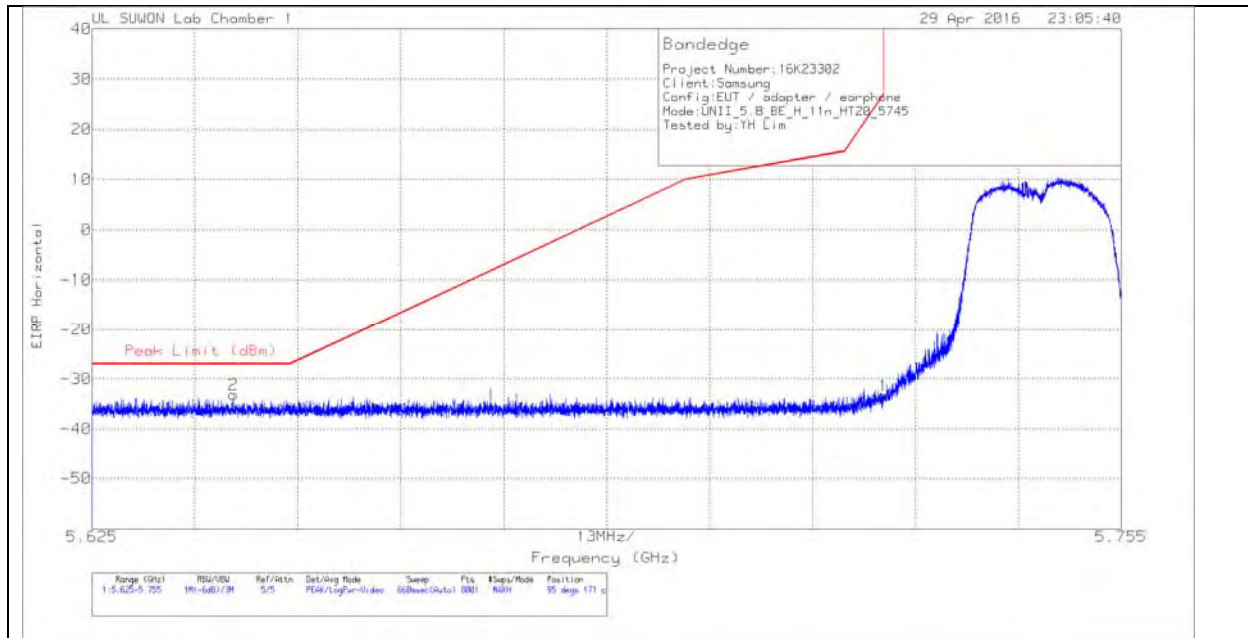
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_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	2.184	29.5	PK	31.4	-26.8	0	34.1	-	-	-	-	68.2	-34.1	0-360	200	H
2	2.194	28.19	PK	31.4	-26.7	0	32.89	-	-	-	-	68.2	-35.31	0-360	100	V
3	* 11.659	19.41	PK	38.5	-17.4	0	40.51	-	-	74	-33.49	-	-	0-360	200	H
6	17.508	17.67	PK	41.3	-14.2	0	44.77	-	-	-	-	68.2	-23.43	0-360	200	H
4	* 11.664	19.53	PK	38.5	-17.4	0	40.63	-	-	74	-33.37	-	-	0-360	100	V
5	17.506	18.35	PK	41.3	-14.3	0	45.35	-	-	-	-	68.2	-22.85	0-360	100	V

PK – Peak detector

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

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



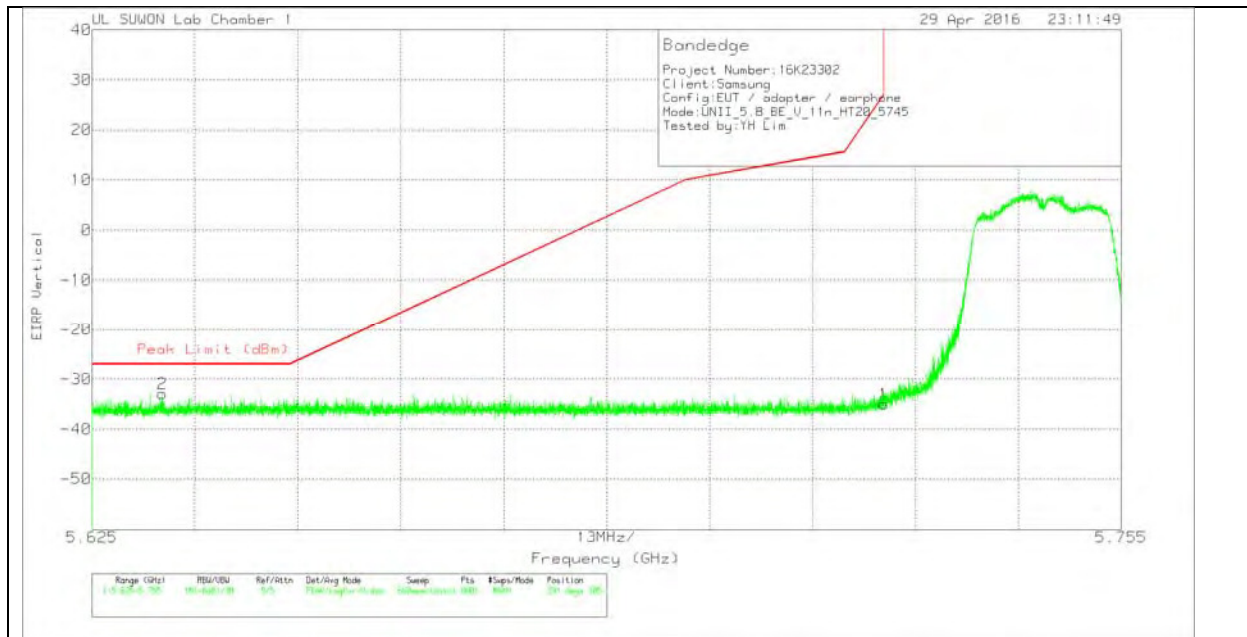
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-64.32	Pk	34.7	-15.6	11.8	0	-33.42	26.97	-60.39	95	171	H
2	5.643	-63.79	Pk	34.6	-15.7	11.8	0	-33.09	-27	-6.09	95	171	H

Pk - Peak detector

VERTICAL PEAK PLOT



VERTICAL DATA

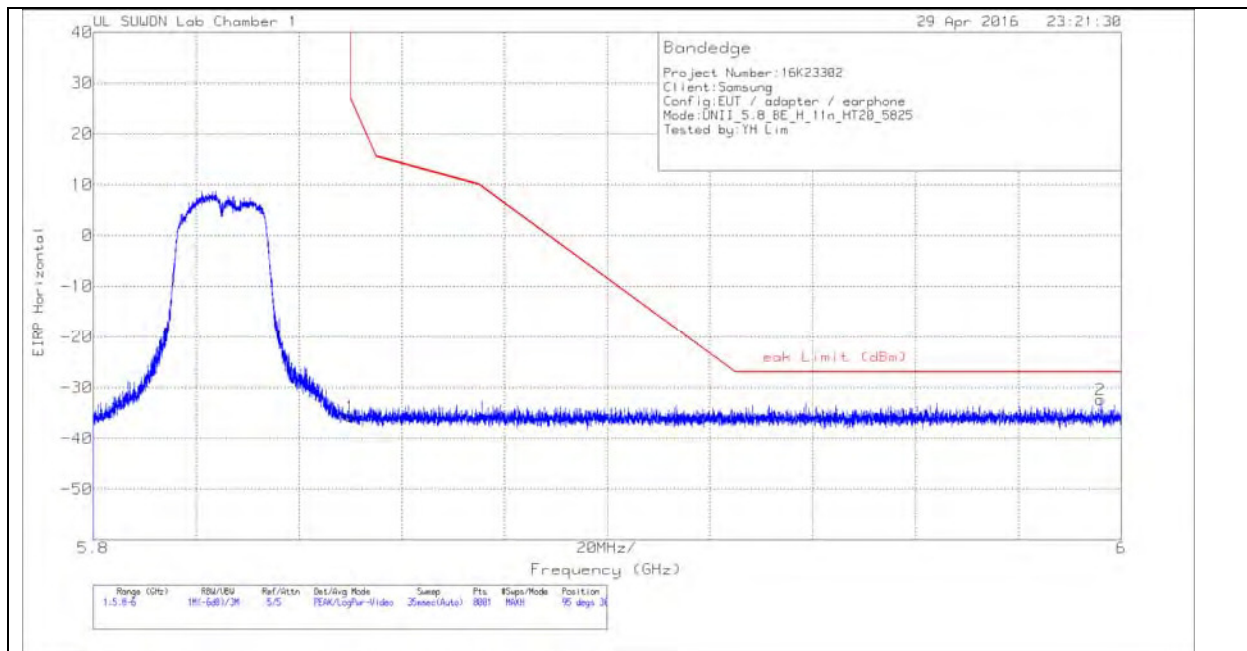
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-65.82	Pk	34.7	-15.6	11.8	0	-34.92	26.97	-61.89	291	305	V
2	5.634	-63.57	Pk	34.6	-15.7	11.8	0	-32.87	-27	-5.87	291	305	V

Pk - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



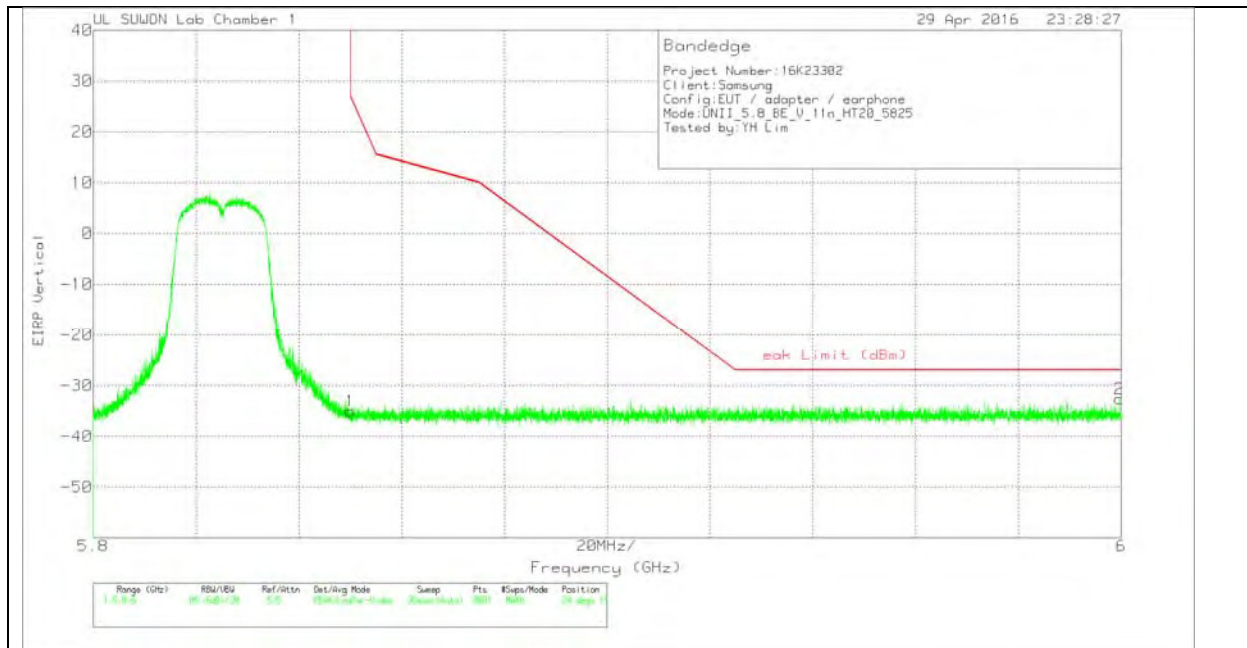
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	mask Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.79	Pk	34.7	-15.5	11.8	0	-35.79	26.94	-62.73	95	300	H
2	5.996	-63.59	Pk	34.8	-15.4	11.8	0	-32.39	-27	-5.39	95	300	H

Pk - Peak detector

VERTICAL PEAK PLOT



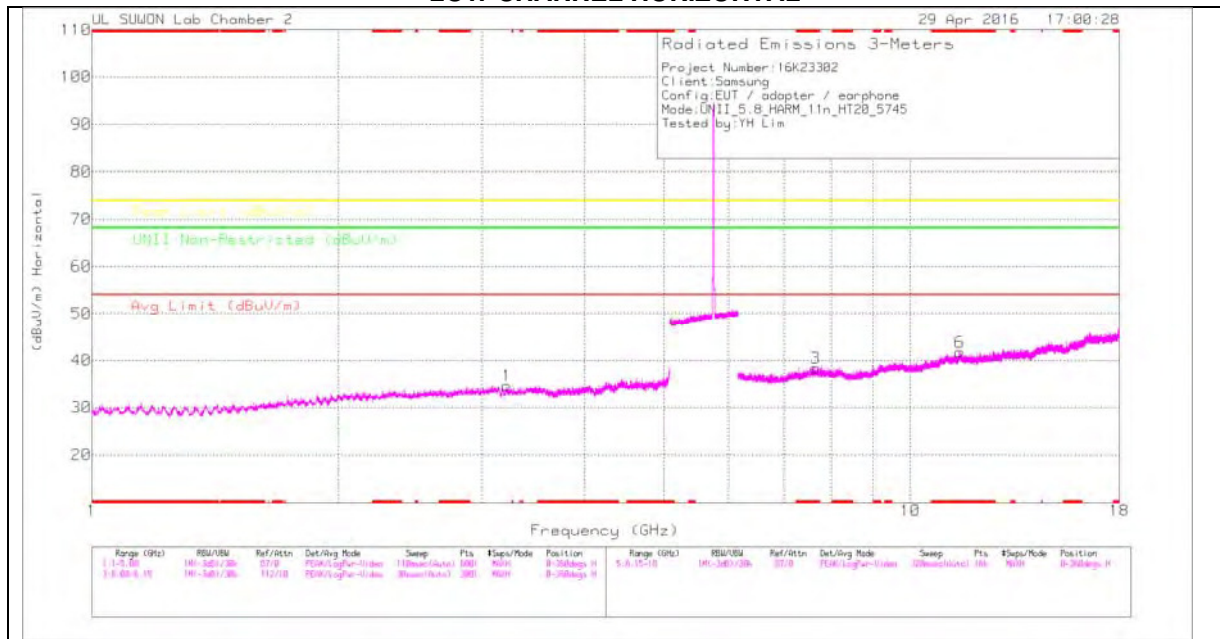
VERTICAL DATA

Trace Markers

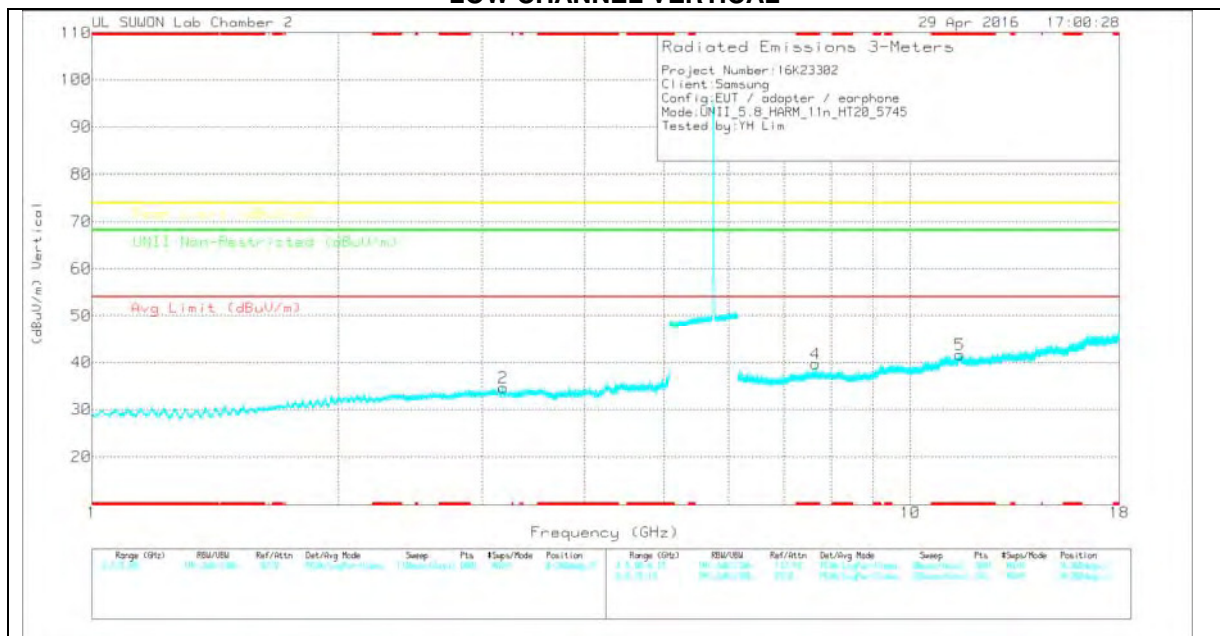
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.05	Pk	34.7	-15.5	11.8	0	-35.05	26.94	-61.99	24	198	V
2	6	-63.84	Pk	34.8	-15.4	11.8	0	-32.64	-27	-5.64	24	198	V

Pk - Peak detector

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	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	3.211	28.07	Pk	32.6	-26	0	34.67	-	-	-	-	68.2	-33.53	0-360	200	H
2	3.179	28.17	Pk	32.6	-26.1	0	34.67	-	-	-	-	68.2	-33.53	0-360	100	V
3	* 7.653	23.54	Pk	36.1	-21.3	0	38.34	-	-	74	-35.66	-	-	0-360	100	H
6	* 11.496	20.91	Pk	38.3	-17.5	0	41.71	-	-	74	-32.29	-	-	0-360	200	H
4	* 7.659	24.84	Pk	36.1	-21.3	0	39.64	-	-	74	-34.36	-	-	0-360	100	V
5	* 11.495	20.77	Pk	38.3	-17.5	0	41.57	-	-	74	-32.43	-	-	0-360	200	V

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

Pk – Peak detector

Radiated Emissions

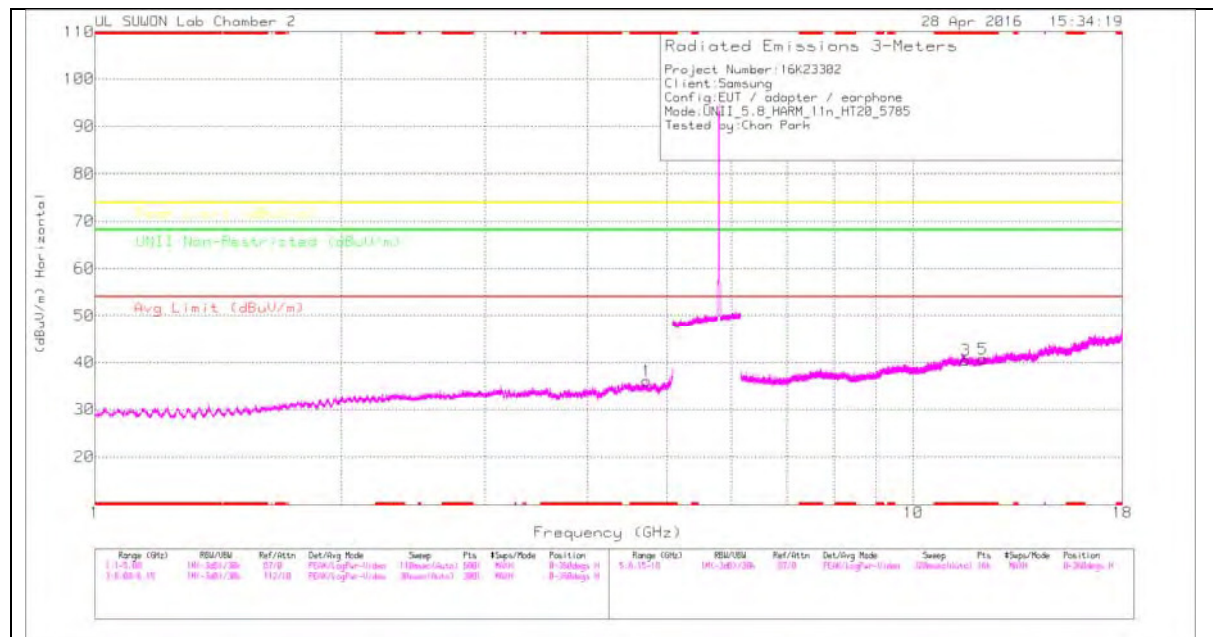
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 24_150619	Path_5	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.66	34.24	PK-U	36.1	-21.3	0	49.04	-	-	74	-24.96	-	-	150	302	V
* 7.66	22.95	ADR	36.1	-21.3	0	37.75	54	-16.25	-	-	-	-	150	302	V

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

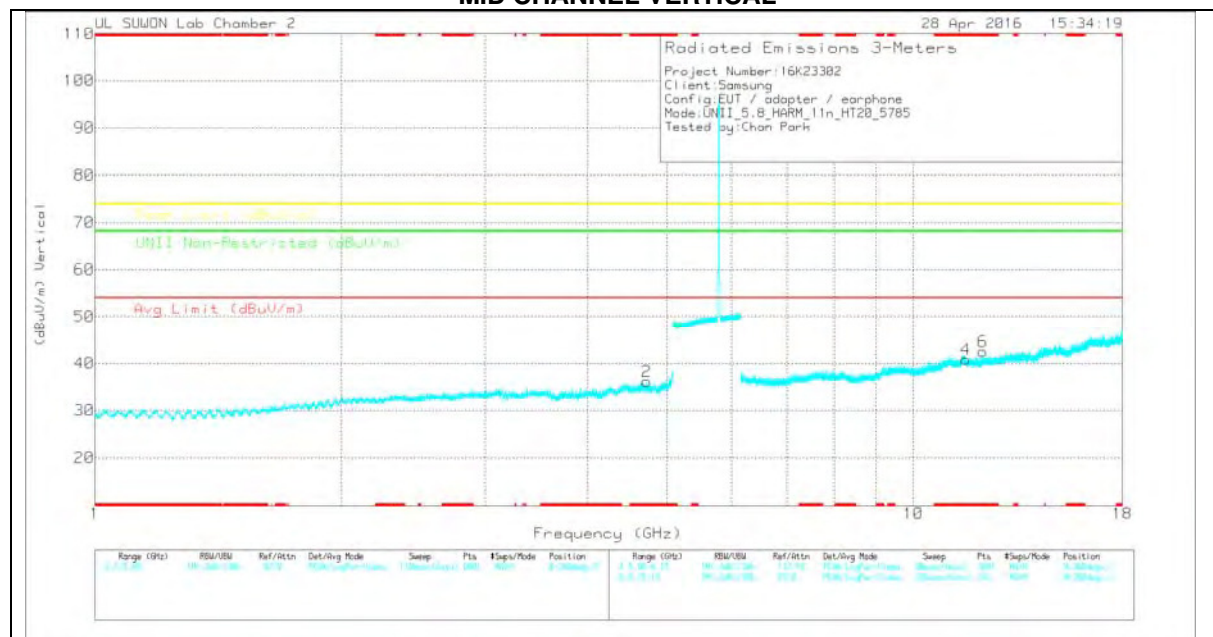
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

Trace Markers

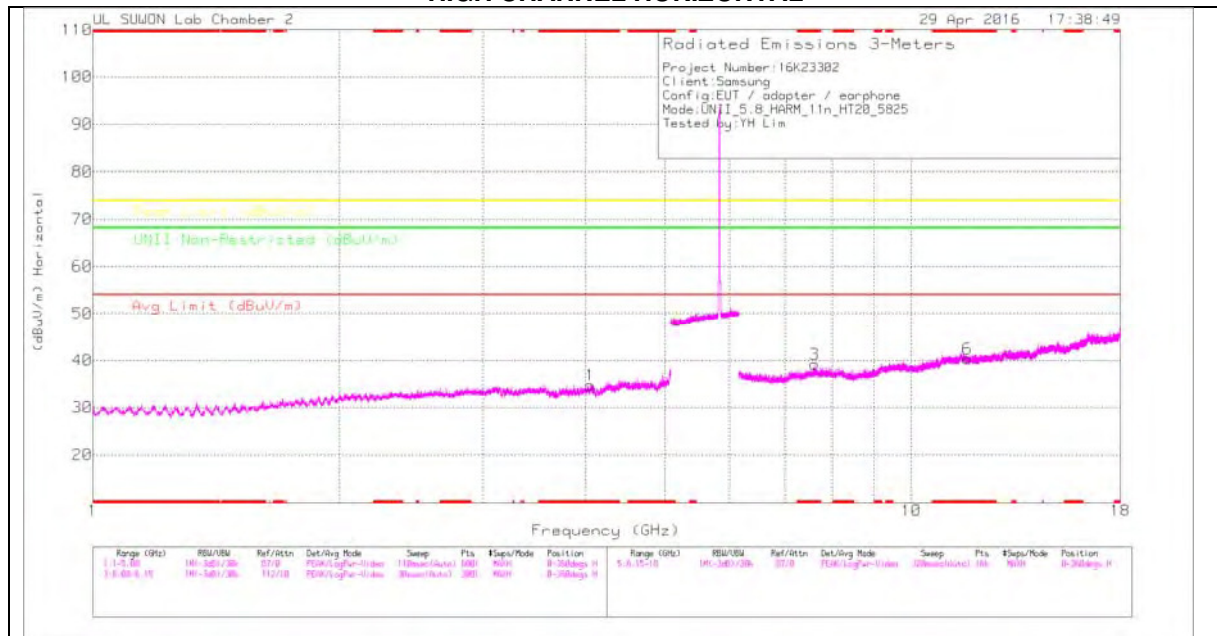
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.724	27.24	PK	33.8	-25	0	36.04	-	-	74	-37.96	-	-	0-360	100	H
2	* 4.725	27.31	PK	33.8	-24.9	0	36.21	-	-	74	-37.79	-	-	0-360	200	V
3	* 11.582	19.59	PK	38.4	-17.5	0	40.49	-	-	74	-33.51	-	-	0-360	200	H
5	* 12.164	19.02	PK	38.8	-17.1	0	40.72	-	-	74	-33.28	-	-	0-360	100	H
4	* 11.587	19.89	PK	38.4	-17.4	0	40.89	-	-	74	-33.11	-	-	0-360	100	V
6	* 12.166	20.77	PK	38.8	-17.1	0	42.47	-	-	74	-31.53	-	-	0-360	100	V

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

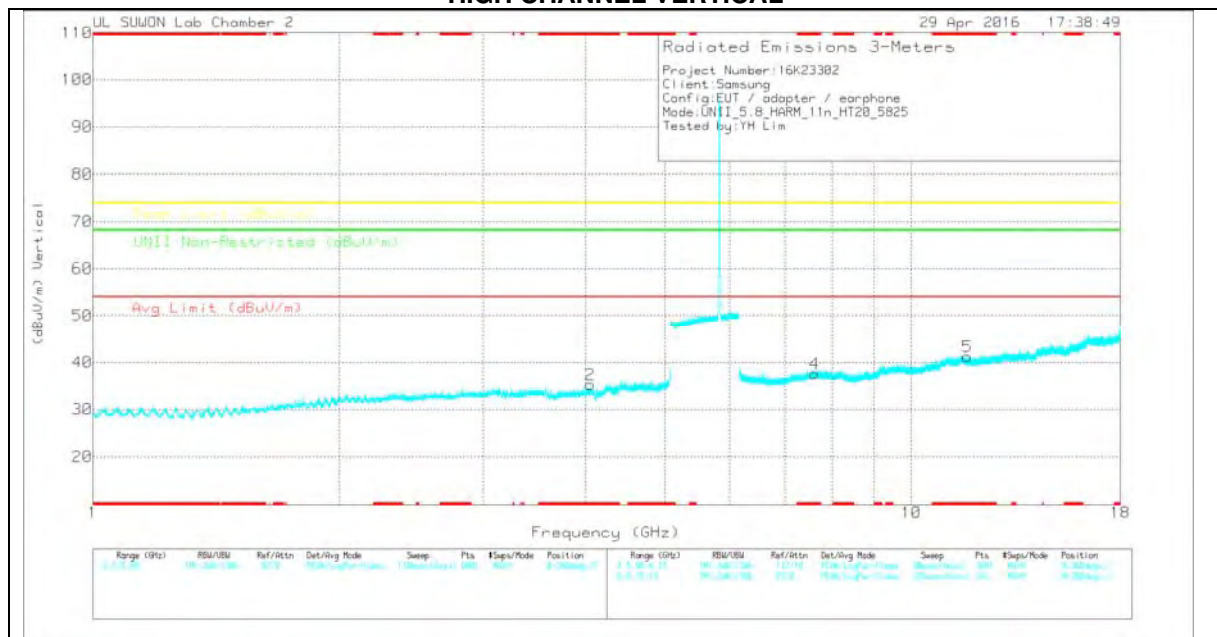
PK – Peak detector

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

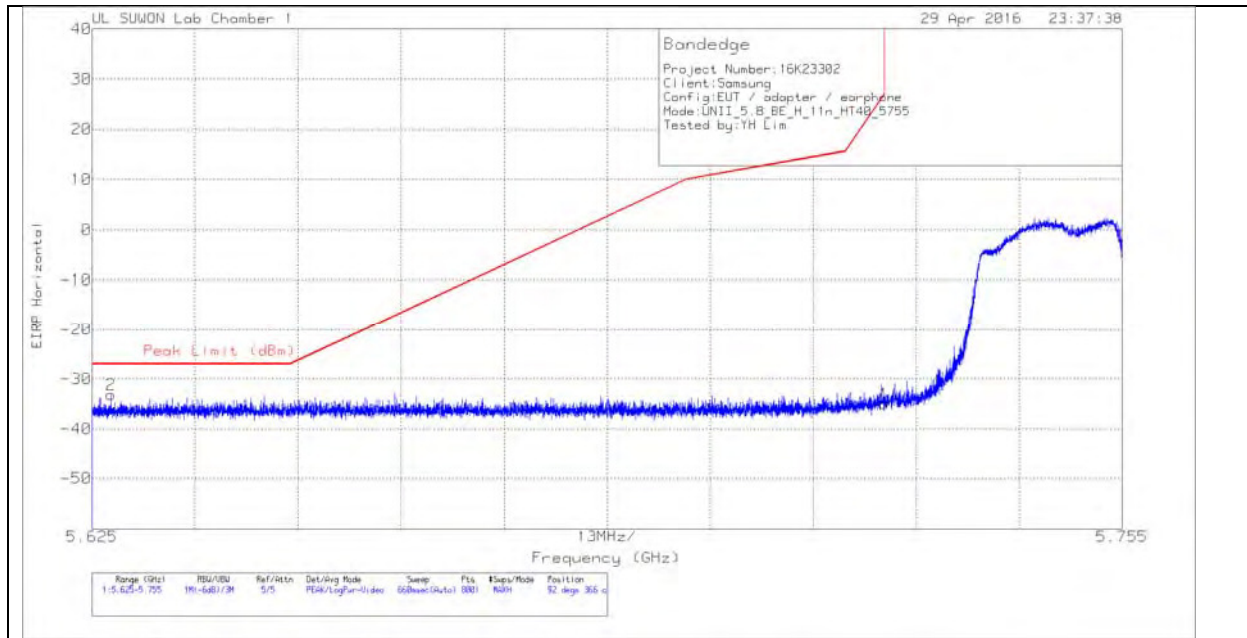
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.053	26.99	Pk	33.3	-25.5	0	34.79	-	-	74	-39.21	-	-	0-360	200	H
2	* 4.051	27.48	Pk	33.3	-25.5	0	35.28	-	-	74	-38.72	-	-	0-360	200	V
3	* 7.616	24.69	Pk	36.1	-21.6	0	39.19	-	-	74	-34.81	-	-	0-360	100	H
6	* 11.703	19.25	Pk	38.5	-17.4	0	40.35	-	-	74	-33.65	-	-	0-360	100	H
4	* 7.612	23.1	Pk	36.1	-21.6	0	37.6	-	-	74	-36.4	-	-	0-360	200	V
5	* 11.7	20.15	Pk	38.5	-17.4	0	41.25	-	-	74	-32.75	-	-	0-360	99	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).

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



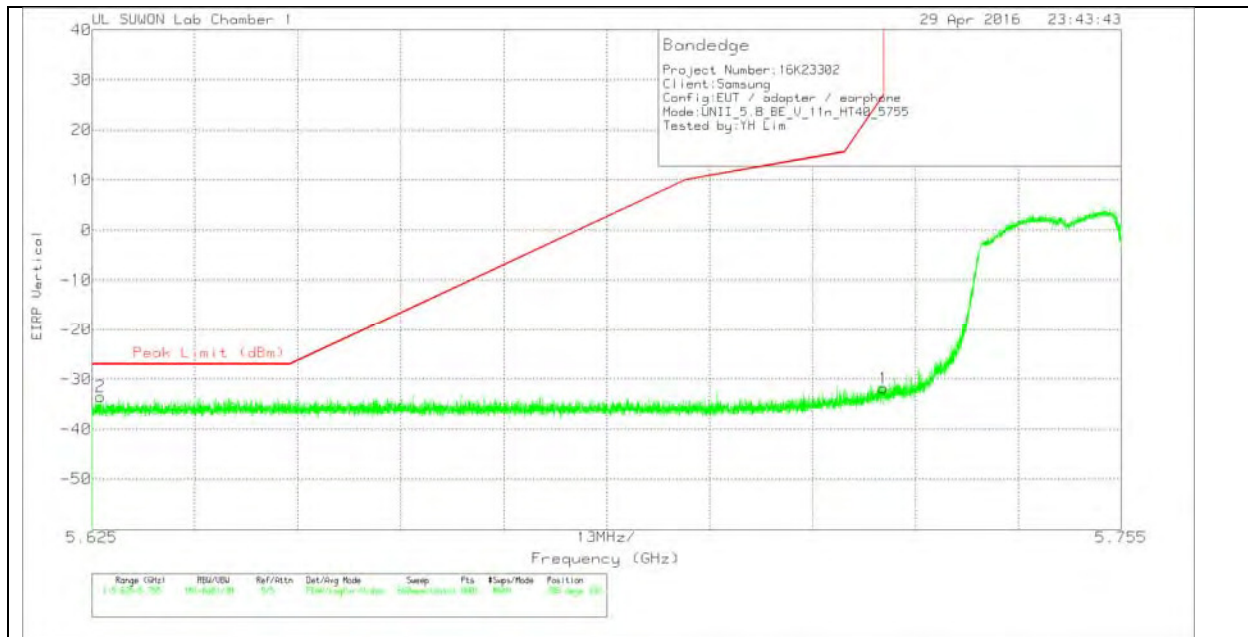
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-65.87	Pk	34.7	-15.6	11.8	0	-34.97	26.97	-61.94	92	366	H
2	5.627	-63.8	Pk	34.6	-15.7	11.8	0	-33.1	-27	-6.1	92	366	H

Pk - Peak detector

VERTICAL PEAK PLOT



VERTICAL DATA

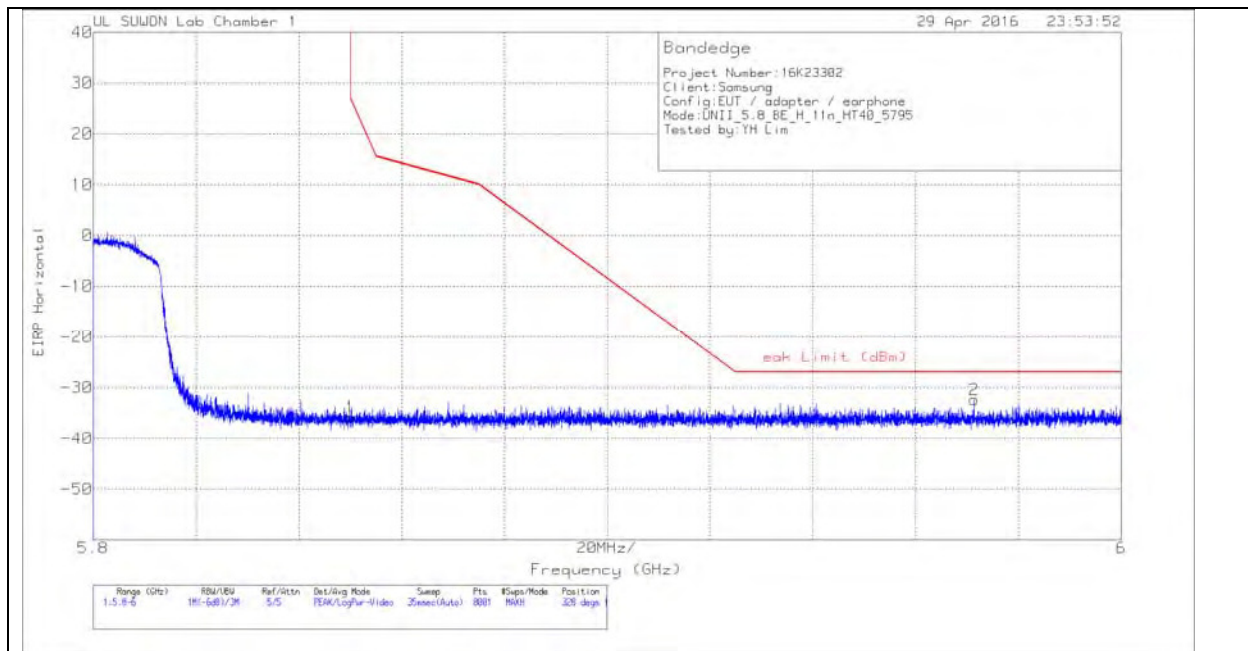
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-62.64	Pk	34.7	-15.6	11.8	0	-31.74	26.97	-58.71	288	332	V
2	5.626	-64.14	Pk	34.6	-15.7	11.8	0	-33.44	-27	-6.44	288	332	V

Pk - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK PLOT



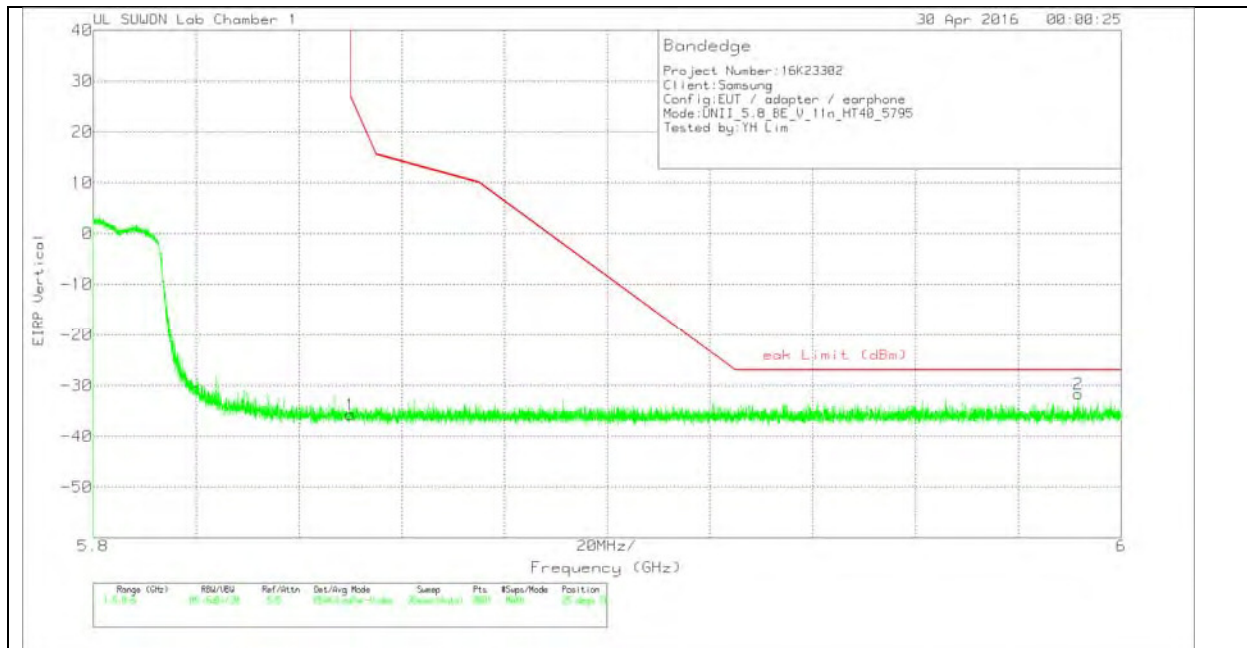
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	eak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.86	Pk	34.7	-15.5	11.8	0	-35.86	26.94	-62.8	328	103	H
2	5.971	-63.61	Pk	34.8	-15.4	11.8	0	-32.41	-27	-5.41	328	103	H

Pk - Peak detector

VERTICAL PEAK PLOT



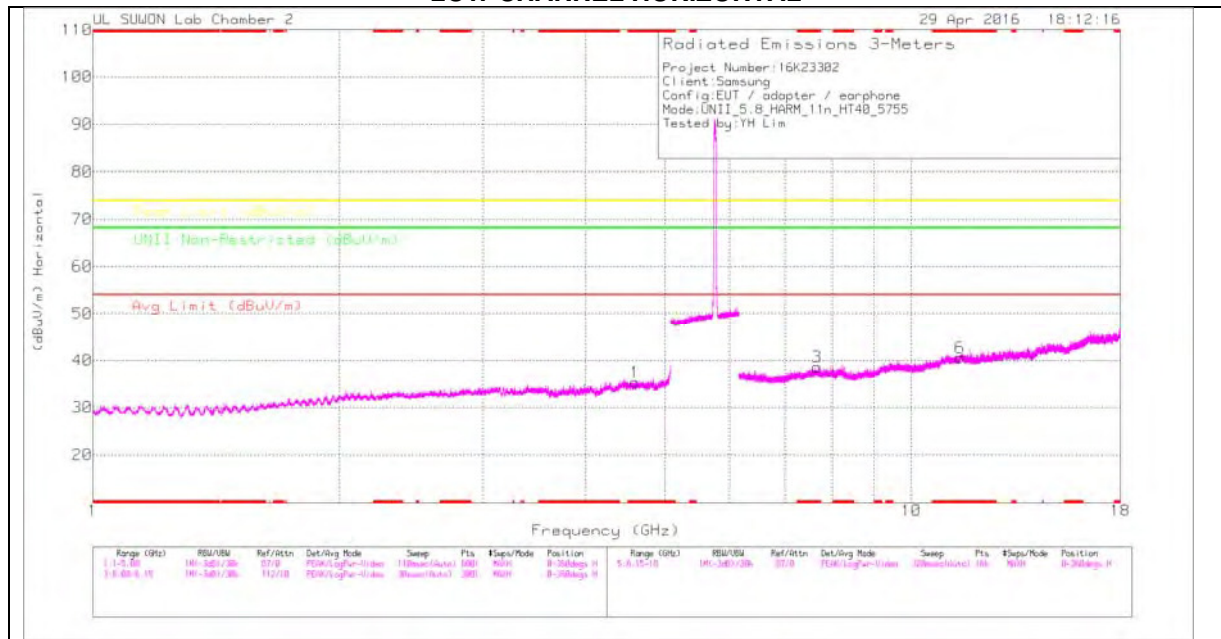
VERTICAL DATA

Trace Markers

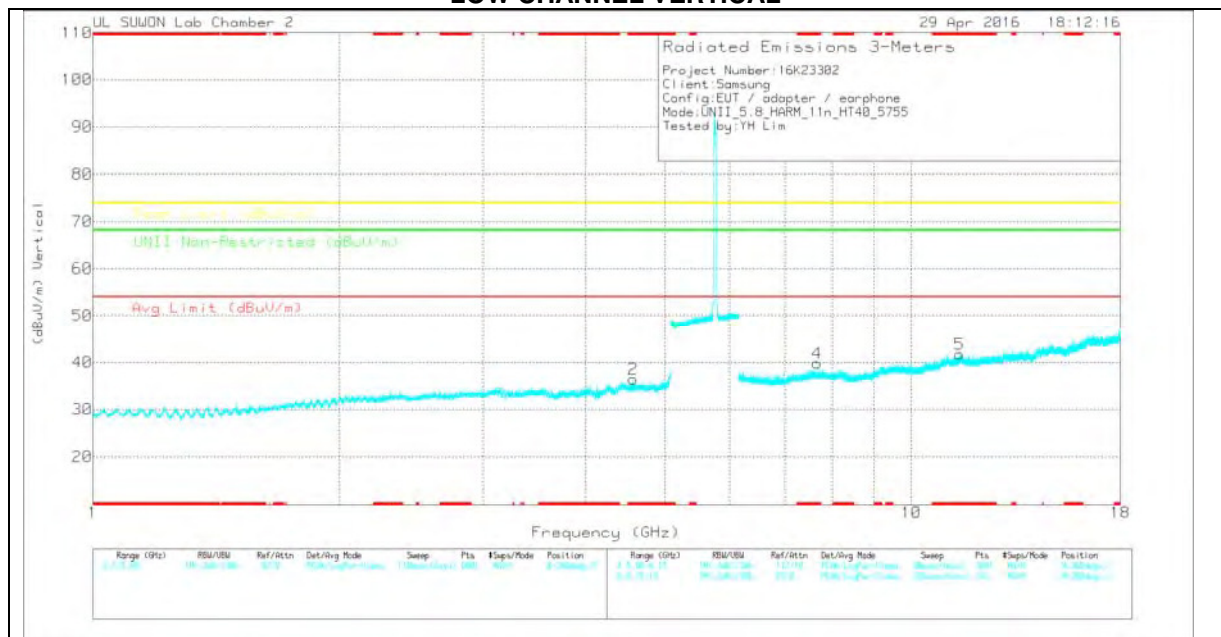
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.75	Pk	34.7	-15.5	11.8	0	-35.75	26.94	-62.69	25	202	V
2	5.992	-62.89	Pk	34.8	-15.4	11.8	0	-31.69	-27	-4.69	25	202	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	3117/001687 241_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	* 4.592	26.87	Pk	33.8	-25.2	0	35.47	-	-	74	-38.53	-	-	0-360	200	H
2	* 4.567	27.61	Pk	33.8	-25	0	36.41	-	-	74	-37.59	-	-	0-360	100	V
3	* 7.673	23.92	Pk	36	-21.3	0	38.62	-	-	74	-35.38	-	-	0-360	200	H
4	* 11.461	19.78	Pk	38.3	-17.5	0	40.58	-	-	74	-33.42	-	-	0-360	100	H
6	* 7.673	25.06	Pk	36	-21.3	0	39.76	-	-	74	-34.24	-	-	0-360	100	V
5	* 11.454	21	Pk	38.3	-17.5	0	41.8	-	-	74	-32.2	-	-	0-360	200	V

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

Avg - Video bandwidth < Resolution bandwidth

Radiated Emissions

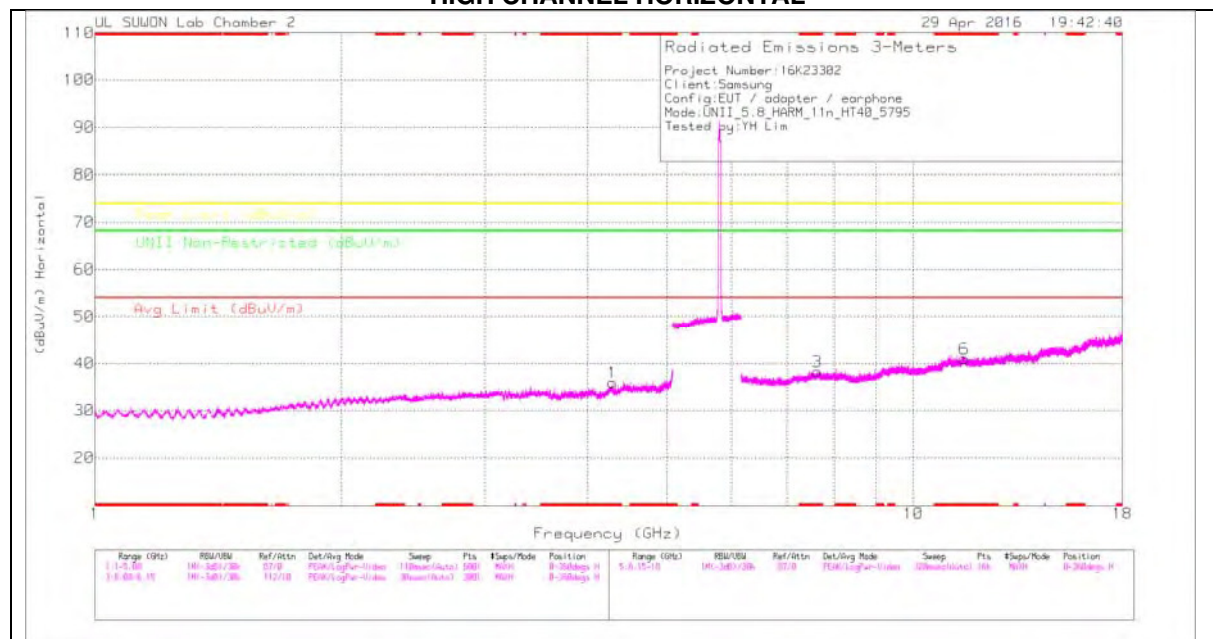
Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 241_150619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.59	38.71	PK-U	33.8	-25.2	0	47.31	-	-	74	-26.69	-	-	181	267	H
* 4.589	24.39	ADR	33.8	-25.2	0	32.99	54	-21.01	-	-	-	-	181	267	H
* 4.59	37.5	PK-U	33.8	-25.2	0	46.1	-	-	74	-27.9	-	-	288	147	V
* 4.589	24.18	ADR	33.8	-25.2	0	32.78	54	-21.22	-	-	-	-	288	147	V
* 7.673	24.48	ADR	36	-21.3	0	39.18	54	-14.82	-	-	-	-	172	274	V
* 7.673	21.37	ADR	36	-21.3	0	36.07	54	-17.93	-	-	-	-	120	279	H
* 7.673	34.32	PK-U	36	-21.3	0	49.02	-	-	74	-24.98	-	-	172	274	V
* 7.673	34.86	PK-U	36	-21.3	0	49.56	-	-	74	-24.44	-	-	120	279	H

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

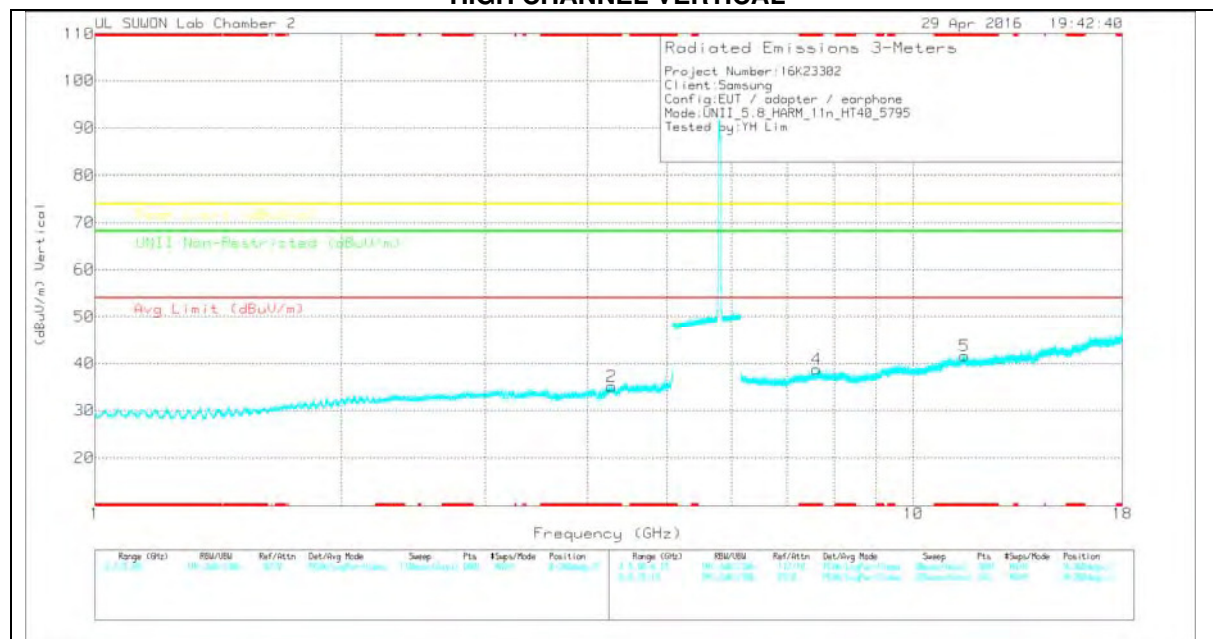
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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

HIGH CHANNEL DATA

Trace Markers

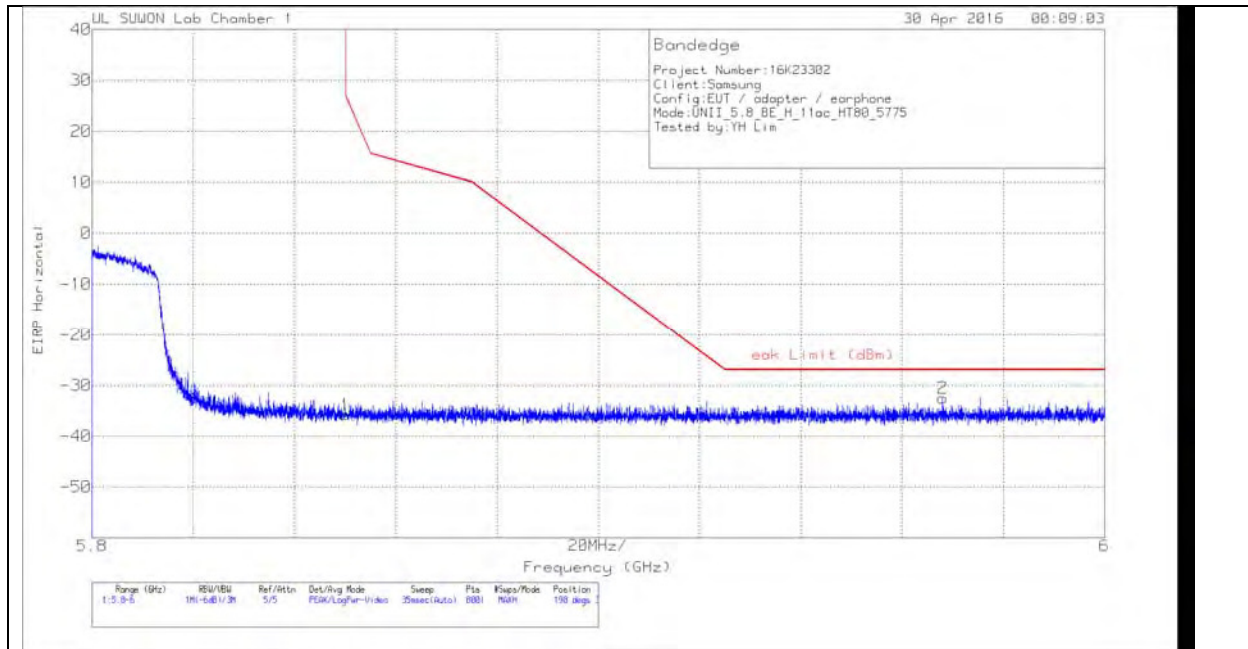
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.289	27.63	Pk	33.6	-25.3	0	35.93	-	-	74	-38.07	-	-	0-360	200	H
2	* 4.278	27.02	Pk	33.5	-25.4	0	35.12	-	-	74	-38.88	-	-	0-360	100	V
3	* 7.63	23.61	Pk	36.1	-21.5	0	38.21	-	-	74	-35.79	-	-	0-360	200	H
6	* 11.538	20.1	Pk	38.4	-17.5	0	41	-	-	74	-33	-	-	0-360	100	H
4	* 7.617	24.25	Pk	36.1	-21.6	0	38.75	-	-	74	-35.25	-	-	0-360	100	V
5	* 11.554	20.68	Pk	38.4	-17.5	0	41.58	-	-	74	-32.42	-	-	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



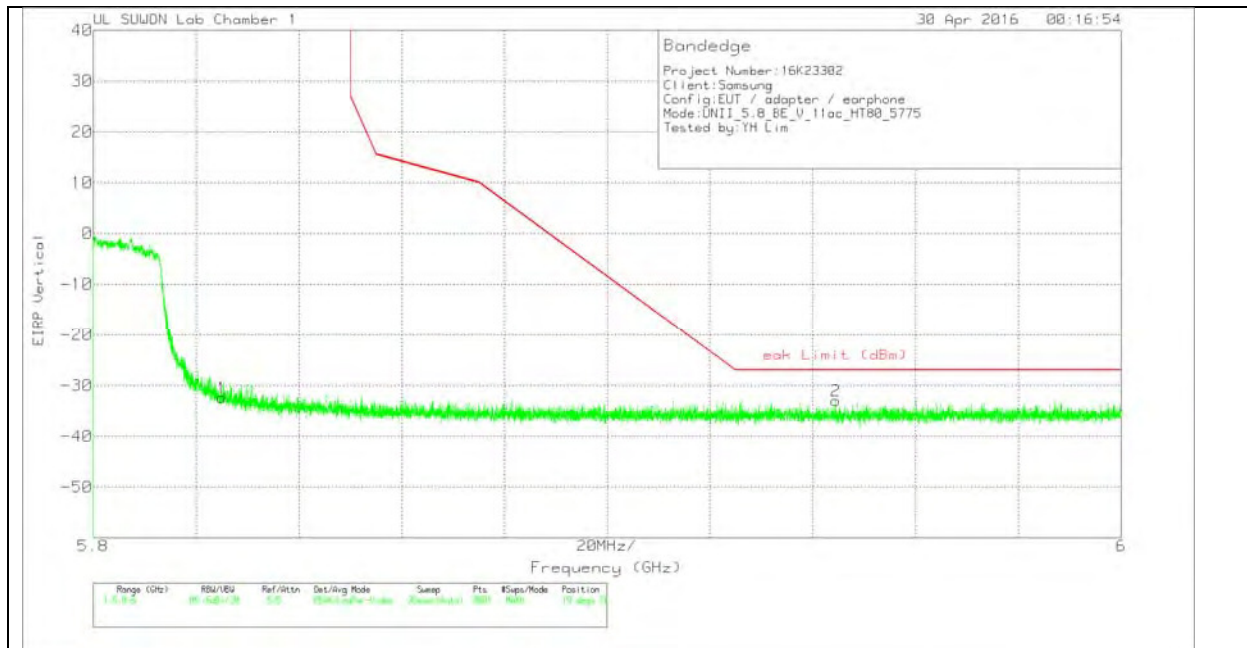
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.84	Pk	34.7	-15.5	11.8	0	-35.84	26.94	-62.78	198	387	H
2	5.968	-63.72	Pk	34.8	-15.4	11.8	0	-32.52	-27	-5.52	198	387	H

Pk - Peak detector

VERTICAL PEAK PLOT



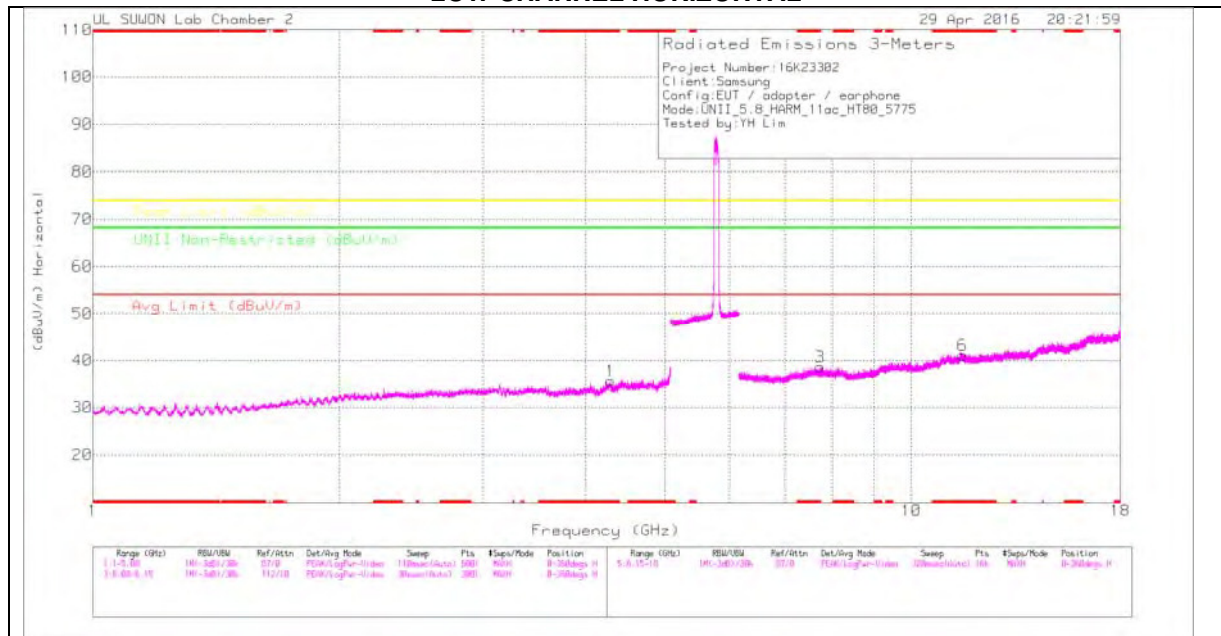
VERTICAL DATA

Trace Markers

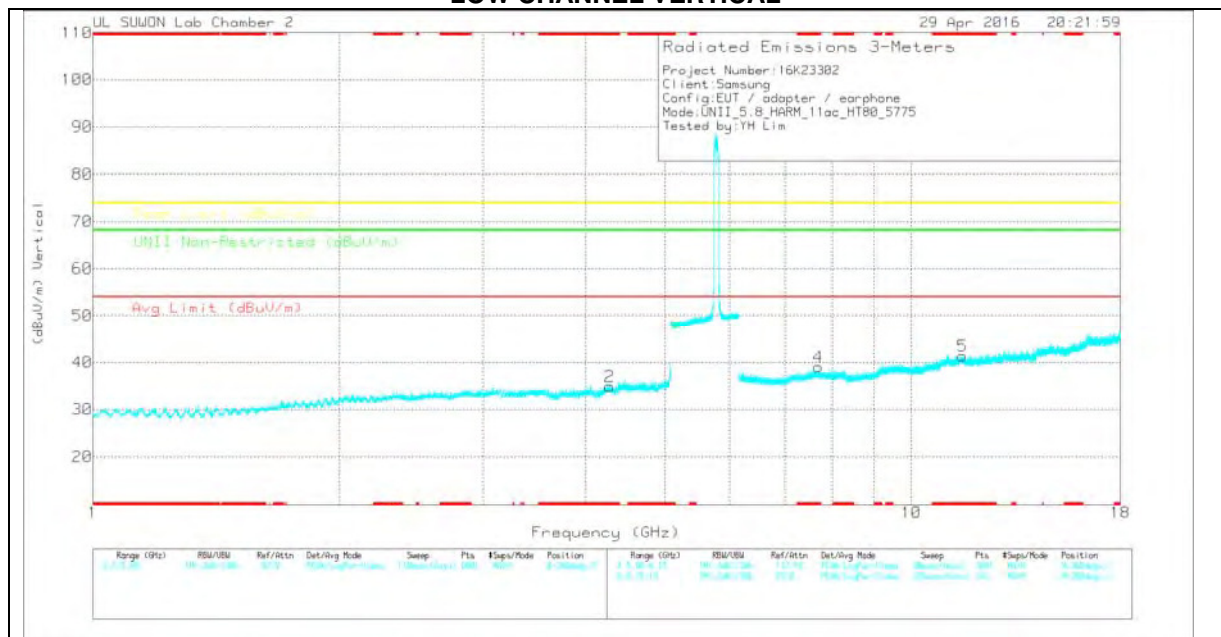
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	eak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.825	-63.41	Pk	34.7	-15.5	11.8	0	-32.41	-	-	19	204	V
2	5.945	-64.09	Pk	34.8	-15.5	11.8	0	-32.99	-27	-5.99	19	204	V

Pk - Peak detector

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	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	* 4.286	27.47	Pk	33.6	-25.4	0	35.67	-	-	74	-38.33	-	-	0-360	100	H
2	* 4.278	26.79	Pk	33.5	-25.4	0	34.89	-	-	74	-39.11	-	-	0-360	200	V
3	* 7.738	23.99	Pk	36	-21.4	0	38.59	-	-	74	-35.41	-	-	0-360	100	H
6	* 11.557	20.15	Pk	38.4	-17.5	0	41.05	-	-	74	-32.95	-	-	0-360	200	H
4	* 7.699	24.27	Pk	36	-21.2	0	39.07	-	-	74	-34.93	-	-	0-360	100	V
5	* 11.553	20.44	Pk	38.4	-17.5	0	41.34	-	-	74	-32.66	-	-	0-360	100	V

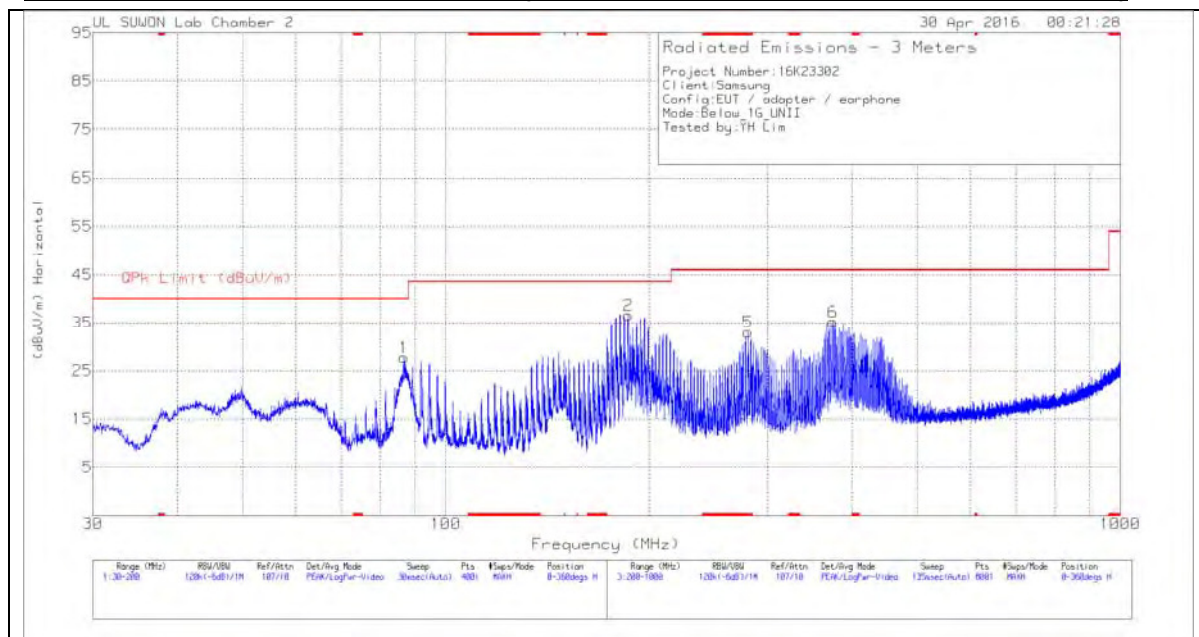
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk – Peak detector

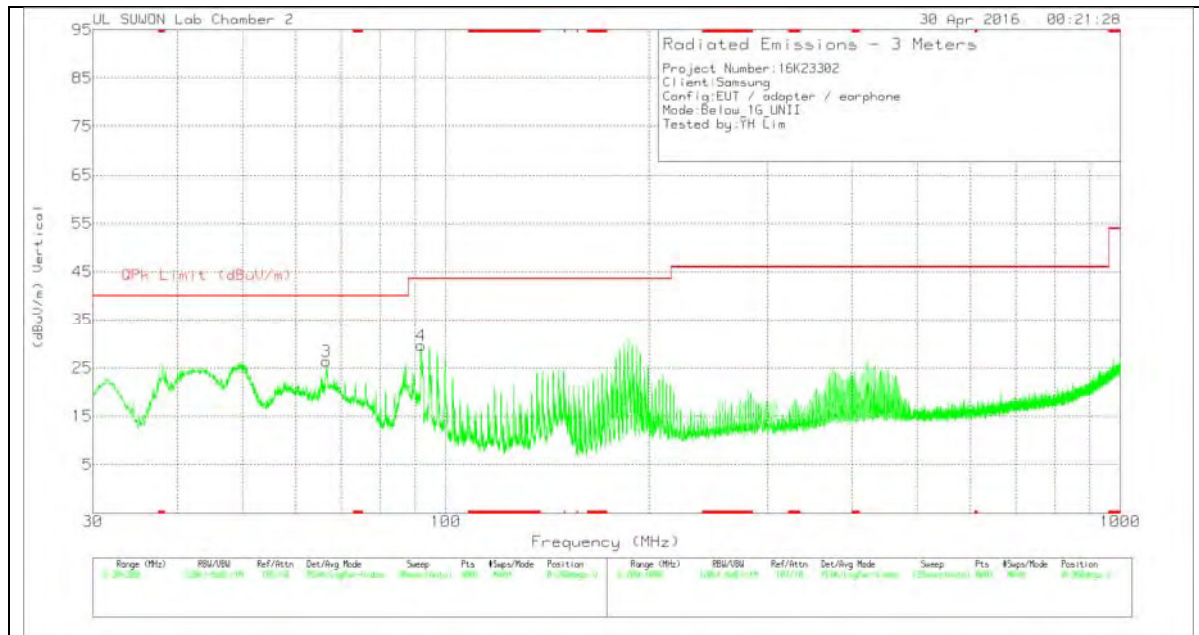
Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

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	VULB9163-749	Below_1G	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	86.6525	49.67	Pk	8.7	-30.6	27.77	40	-12.23	0-360	200	H
2	186.57	56.81	Pk	10.1	-30.3	36.61	43.52	-6.91	0-360	200	H
3	66.55	46.32	Pk	10.7	-30.7	26.32	40	-13.68	0-360	100	V
4	91.88	50.16	Pk	10	-30.5	29.66	43.52	-13.86	0-360	100	V
5	* 280.8	50.2	Pk	13	-30.1	33.1	46.02	-12.92	0-360	100	H
6	375.3	50.24	Pk	14.8	-29.8	35.24	46.02	-10.78	0-360	100	H

* - 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.

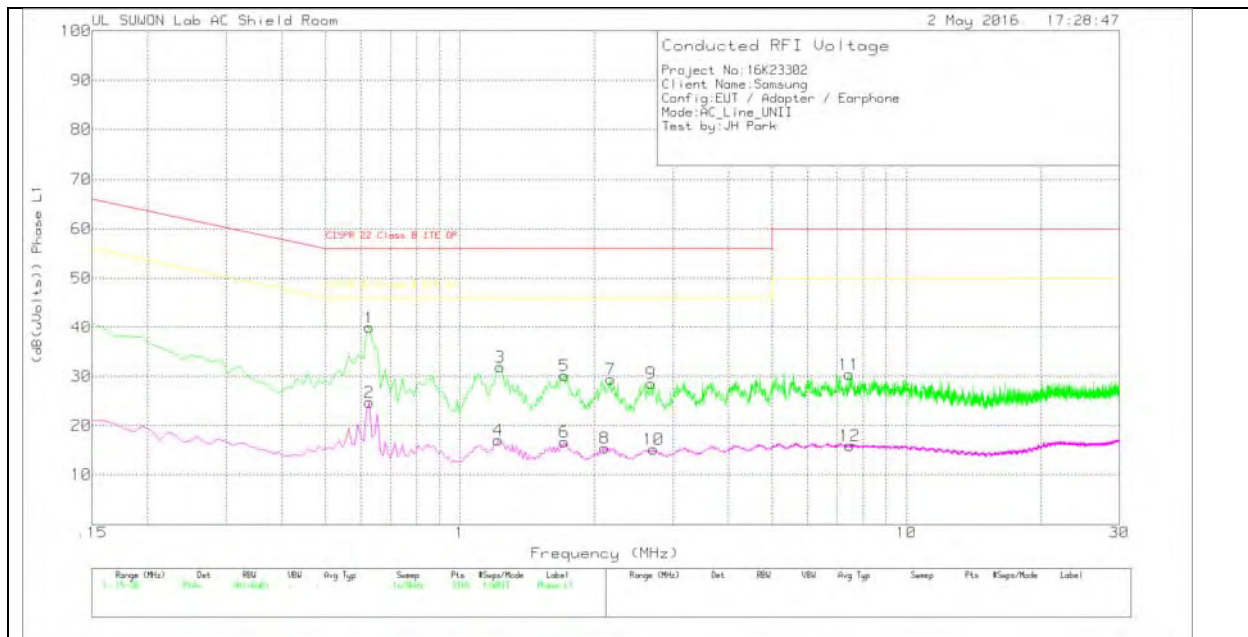
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

Trace Markers

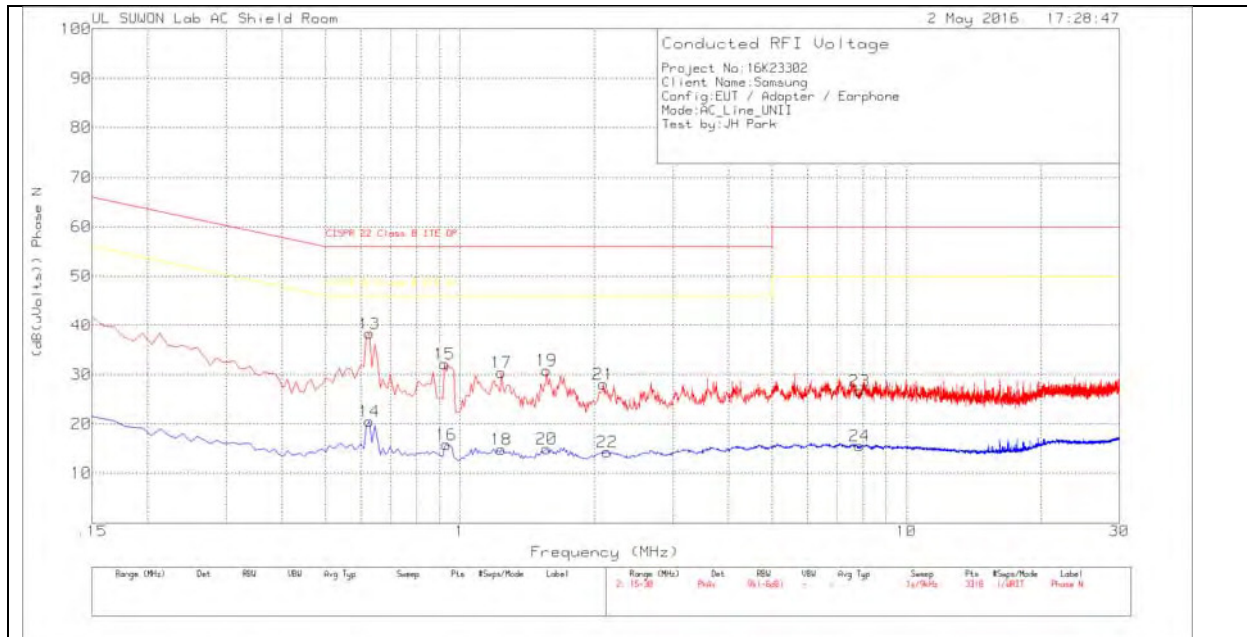
Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_w ith 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	.627	29.84	Pk	10.1	0	39.94	56	-16.06	-	-
2	.627	14.64	Av	10.1	0	24.74	-	-	46	-21.26
3	1.23	21.86	Pk	9.9	.1	31.86	56	-24.14	-	-
4	1.221	7.09	Av	9.9	.1	17.09	-	-	46	-28.91
5	1.716	20.28	Pk	9.8	.1	30.18	56	-25.82	-	-
6	1.716	6.79	Av	9.8	.1	16.69	-	-	46	-29.31
7	2.175	19.52	Pk	9.8	.1	29.42	56	-26.58	-	-
8	2.112	5.55	Av	9.8	.1	15.45	-	-	46	-30.55
9	2.679	18.7	Pk	9.8	.1	28.6	56	-27.4	-	-
10	2.715	5.26	Av	9.8	.1	15.16	-	-	46	-30.84
11	7.449	20.36	Pk	9.9	.1	30.36	60	-29.64	-	-
12	7.476	5.9	Av	9.9	.1	15.9	-	-	50	-34.1

Pk - Peak detector

Av - Average detection

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	.627	28.17	Pk	10.1	0	38.27	56	-17.73	-	-
14	.627	10.39	Av	10.1	0	20.49	-	-	46	-25.51
15	.924	22.27	Pk	9.9	0	32.17	56	-23.83	-	-
16	.933	5.92	Av	9.9	0	15.82	-	-	46	-30.18
17	1.239	20.49	Pk	9.8	.1	30.39	56	-25.61	-	-
18	1.239	4.96	Av	9.8	.1	14.86	-	-	46	-31.14
19	1.563	20.93	Pk	9.8	.1	30.83	56	-25.17	-	-
20	1.563	5.04	Av	9.8	.1	14.94	-	-	46	-31.06
21	2.094	18.12	Pk	9.8	.1	28.02	56	-27.98	-	-
22	2.139	4.42	Av	9.8	.1	14.32	-	-	46	-31.68
23	7.854	16.74	Pk	9.9	.1	26.74	60	-33.26	-	-
24	7.854	5.53	Av	9.9	.1	15.53	-	-	50	-34.47

Pk - Peak detector

Av - Average detection

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

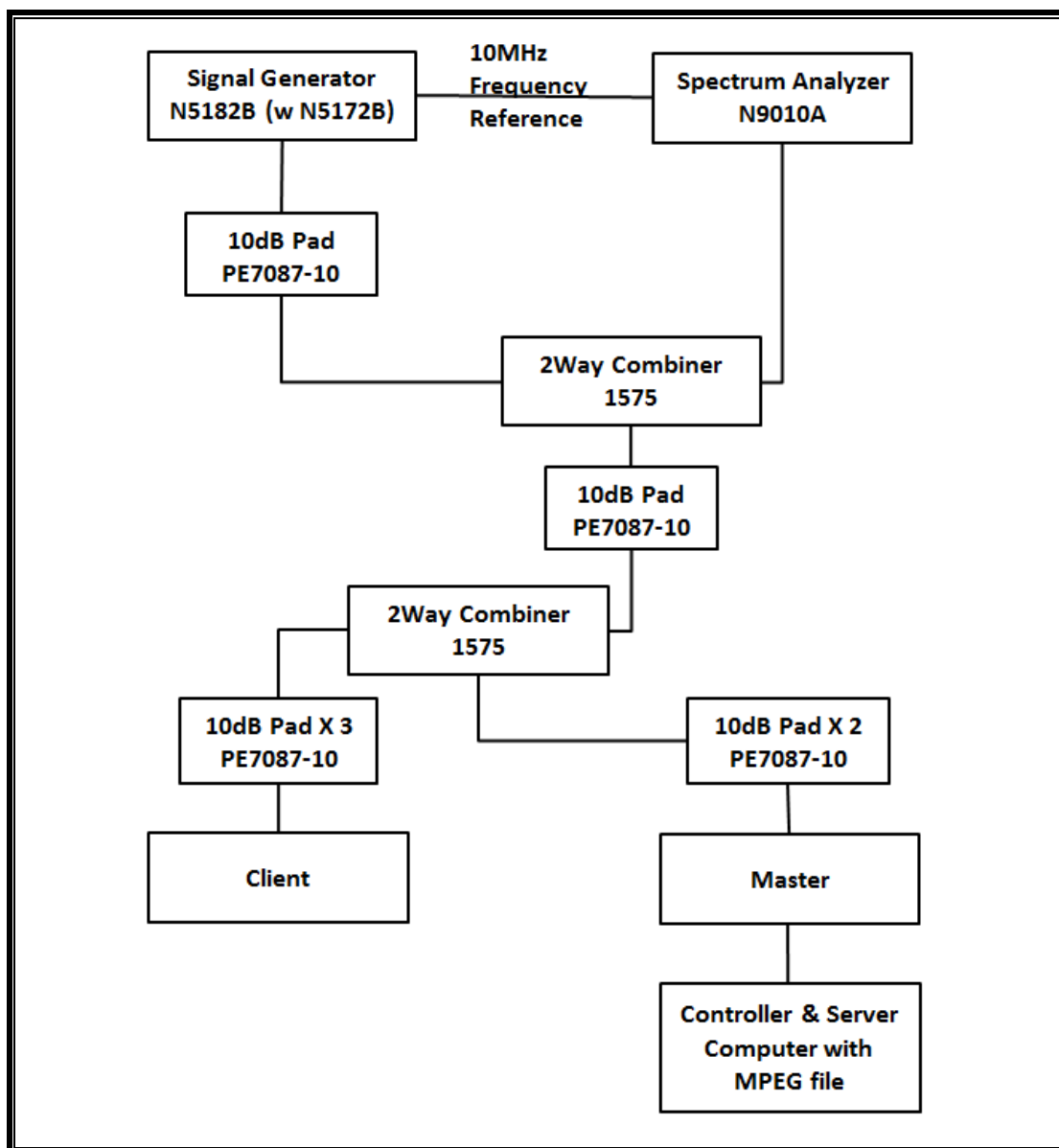
Radar Waveform Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

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.

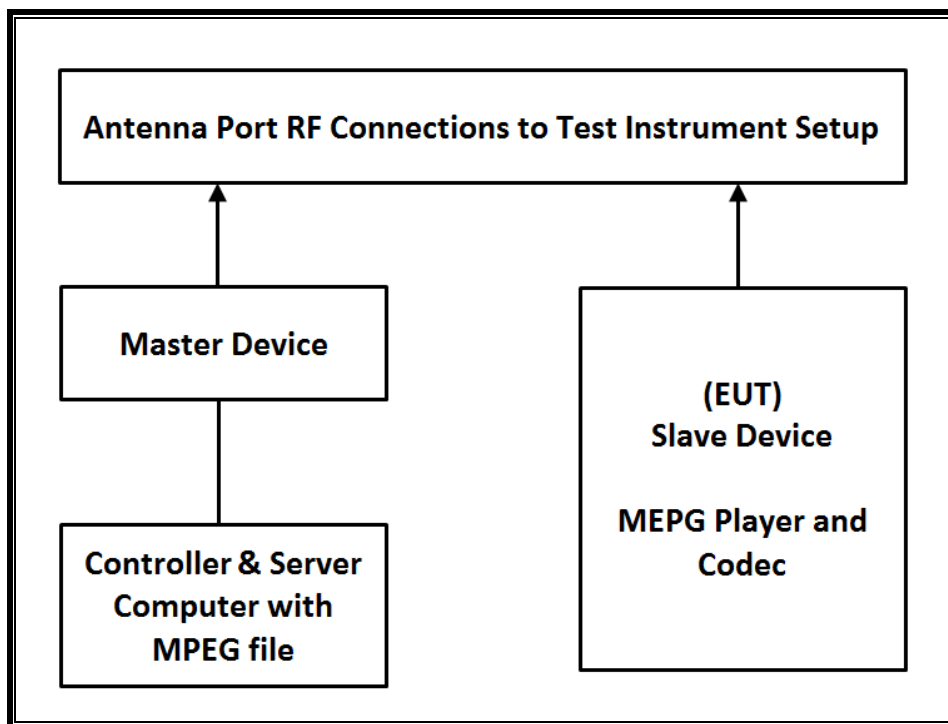
TEST AND MEASUREMENT EQUIPMENT

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 18.32 dBm in the 5250-5350 MHz band and 18.12 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.

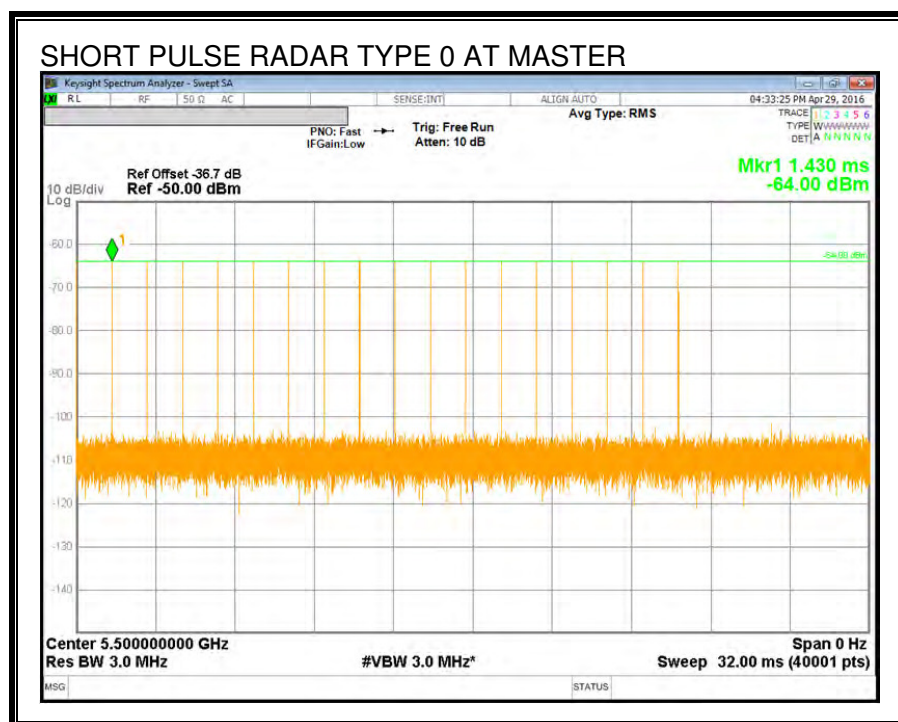
14.2. RESULTS FOR 20 MHz BANDWIDTH

14.2.1. TEST CHANNEL

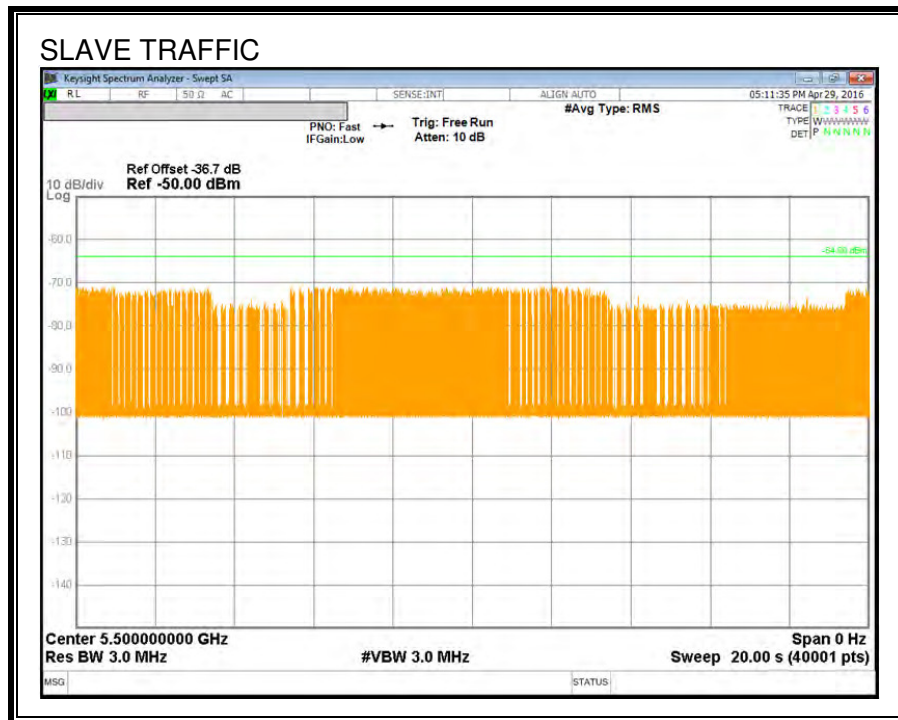
All tests were performed at a channel center frequency of 5500 MHz.

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

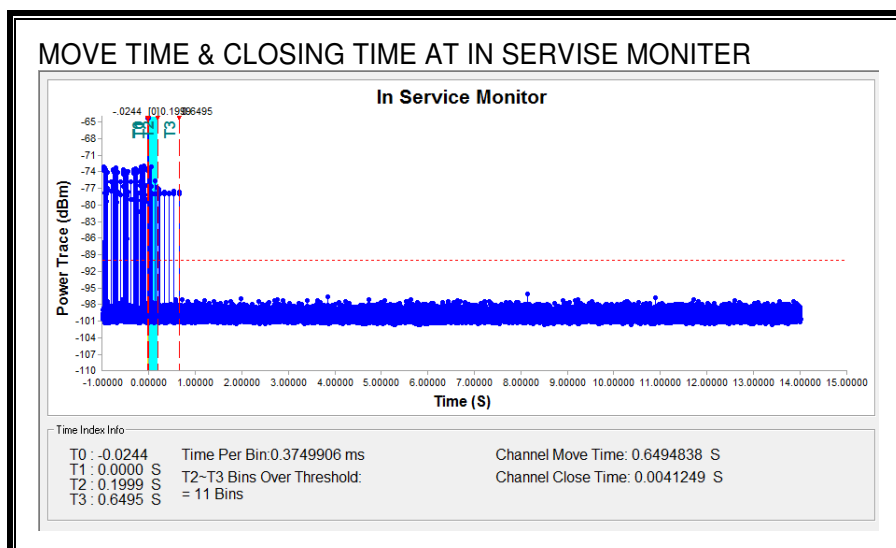
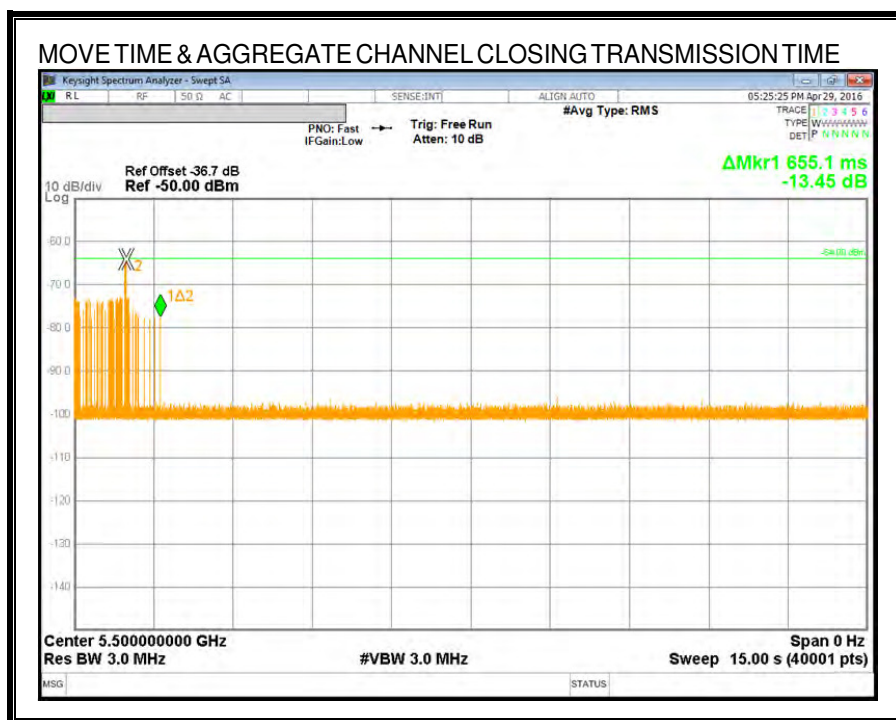
Channel Move Time (sec)	Limit (sec)
0.649	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
4.125	60

MOVE TIME & CHANNEL CLOSING TIME

AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

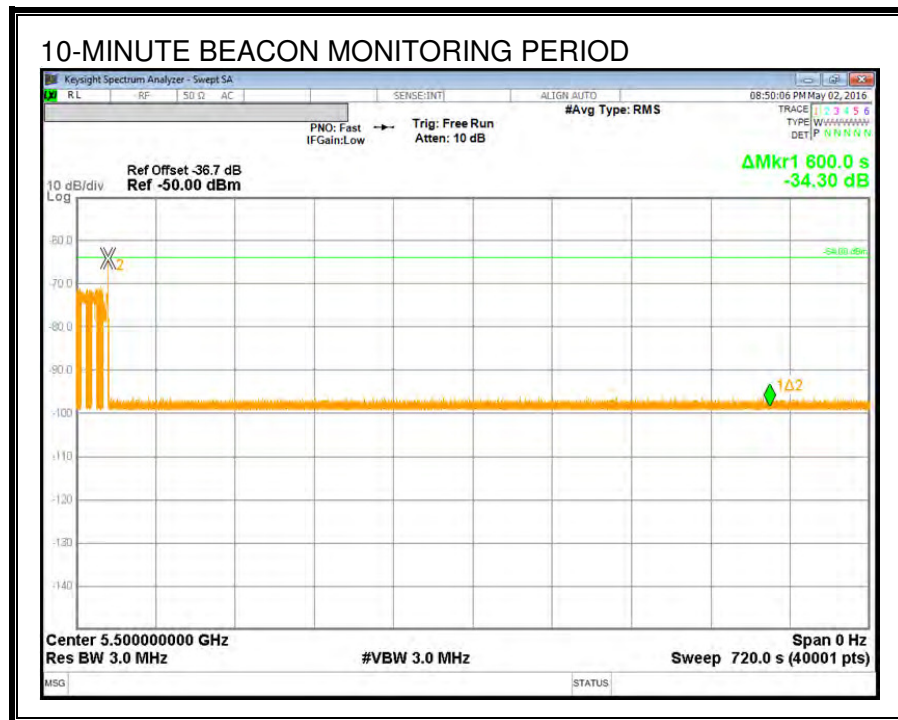
No transmissions are observed during the aggregate monitoring period.



NON-OCCUPANCY PERIOD

RESULTS

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



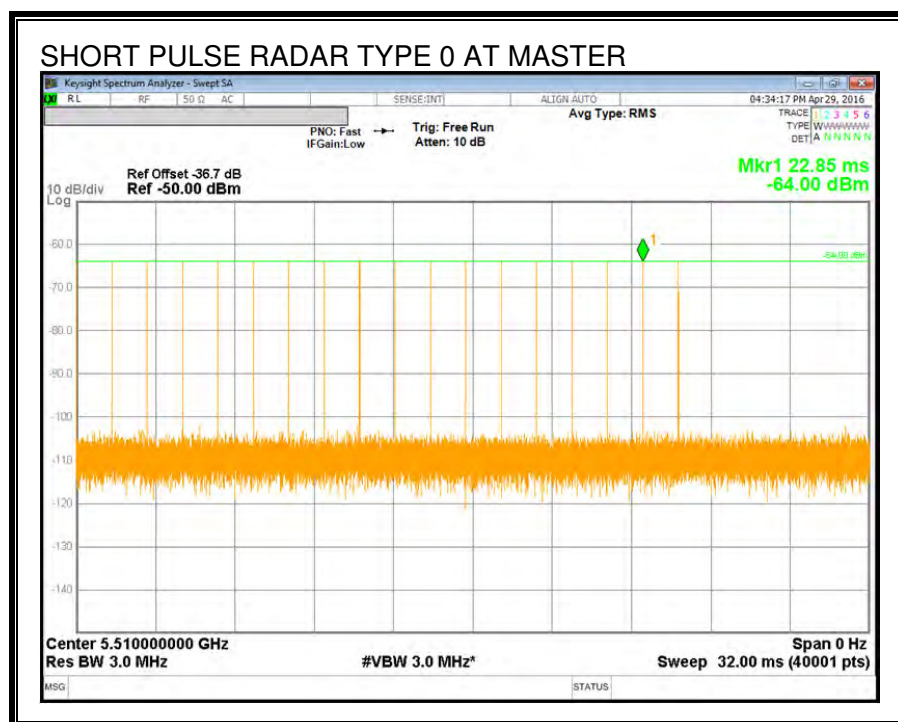
14.3. RESULTS FOR 40 MHz BANDWIDTH

14.3.1. TEST CHANNEL

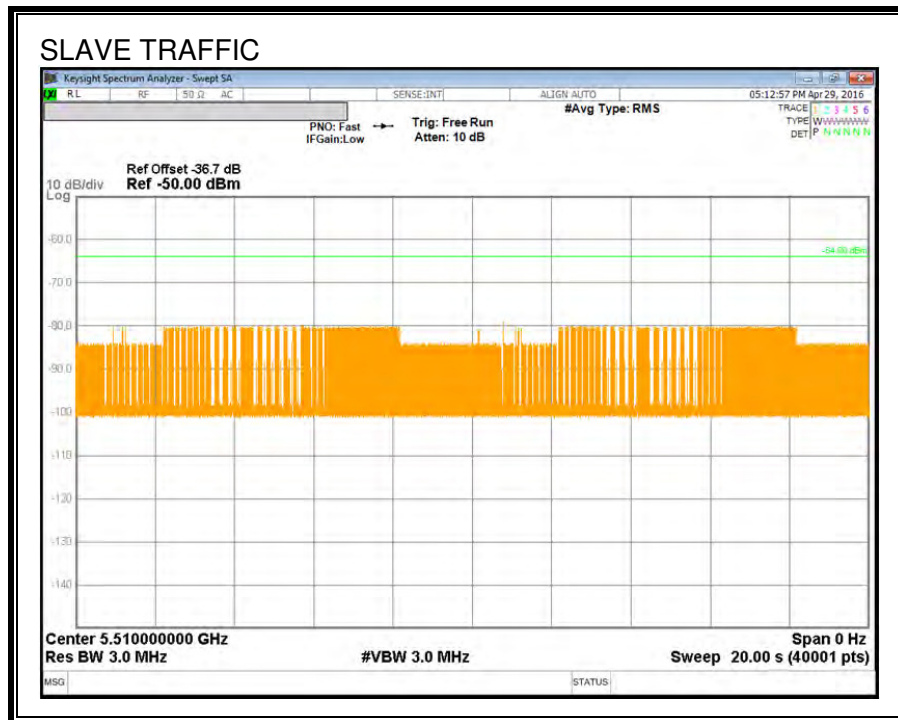
All tests were performed at a channel center frequency of 5510 MHz.

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

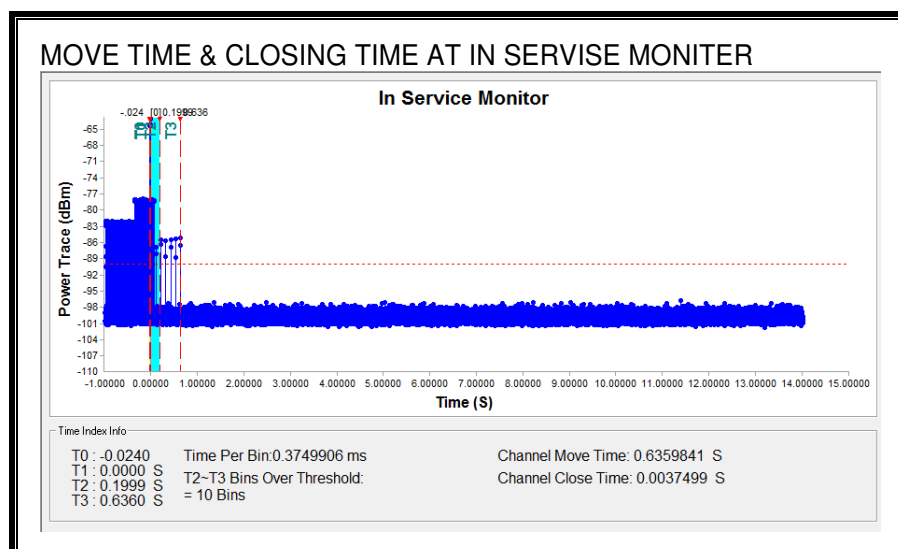
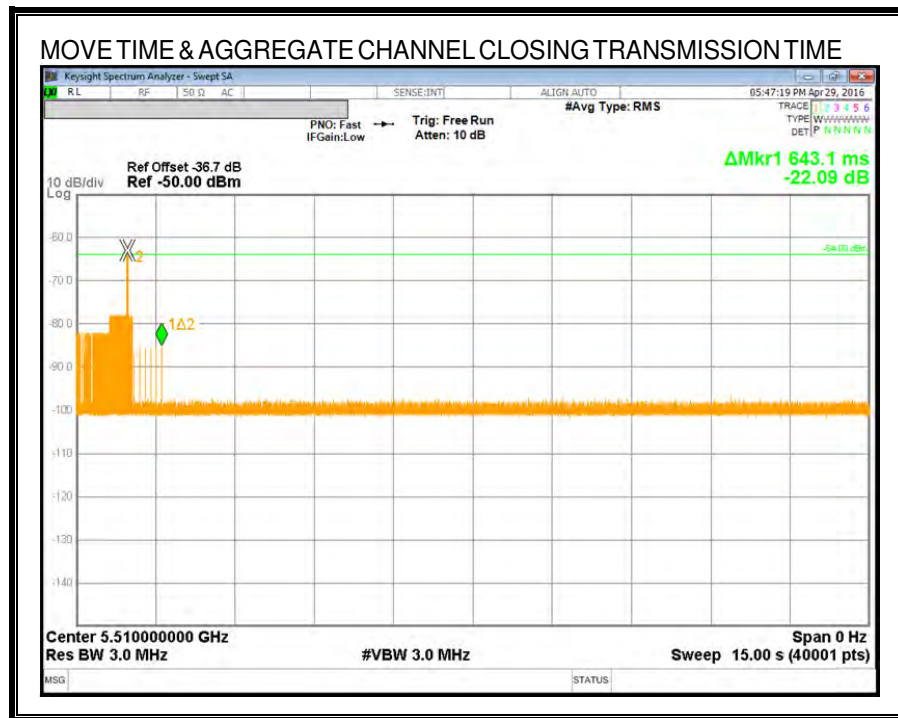
Channel Move Time (sec)	Limit (sec)
0.636	10

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

MOVE TIME & CHANNEL CLOSING TIME

AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

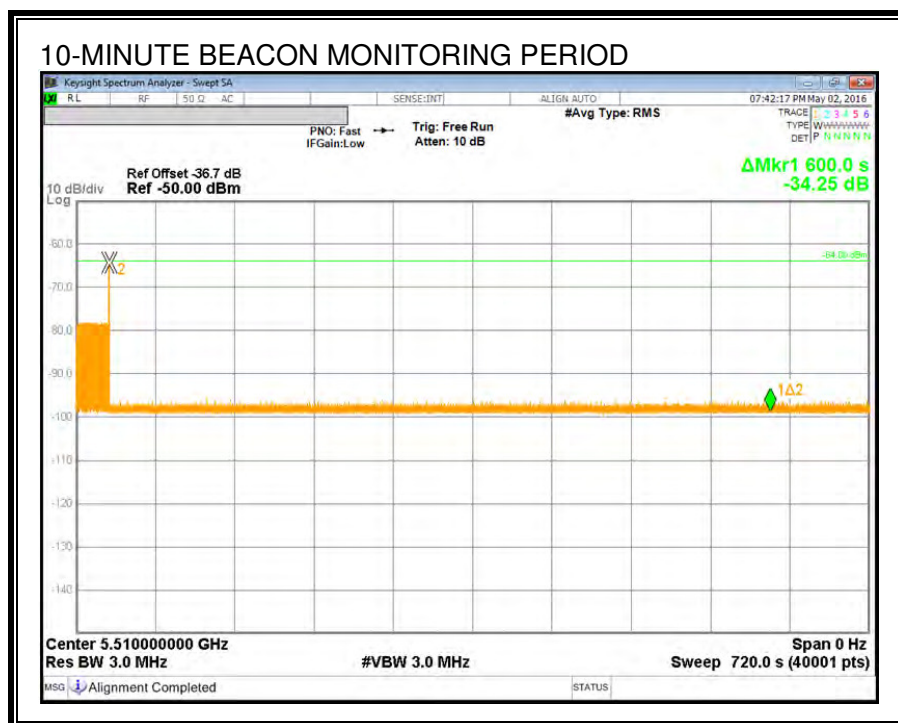
No transmissions are observed during the aggregate monitoring period.



NON-OCCUPANCY PERIOD

RESULTS

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



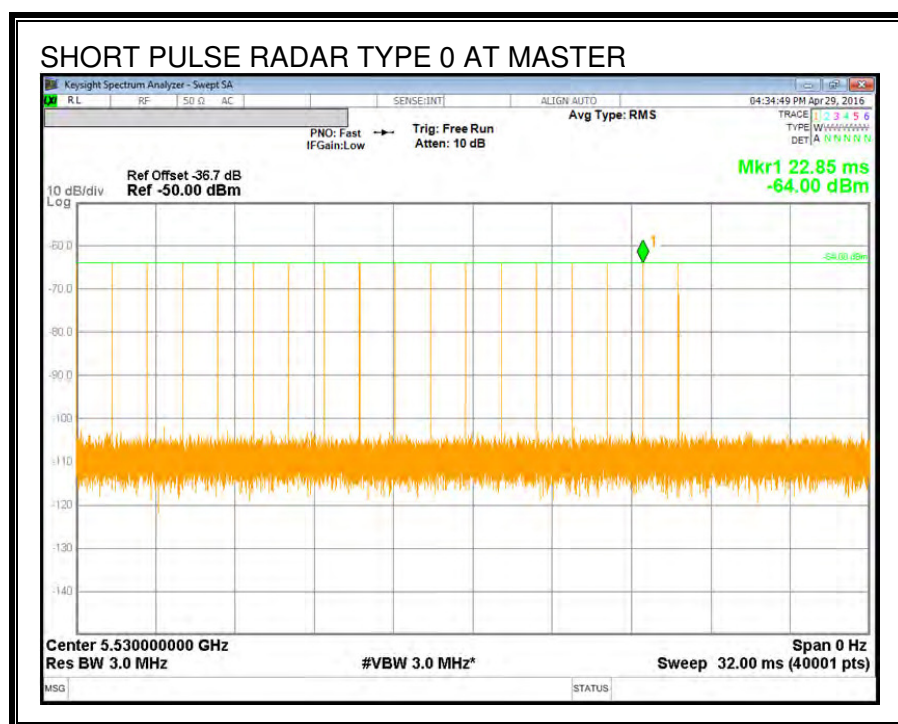
14.4. RESULTS FOR 80 MHz BANDWIDTH

14.4.1. TEST CHANNEL

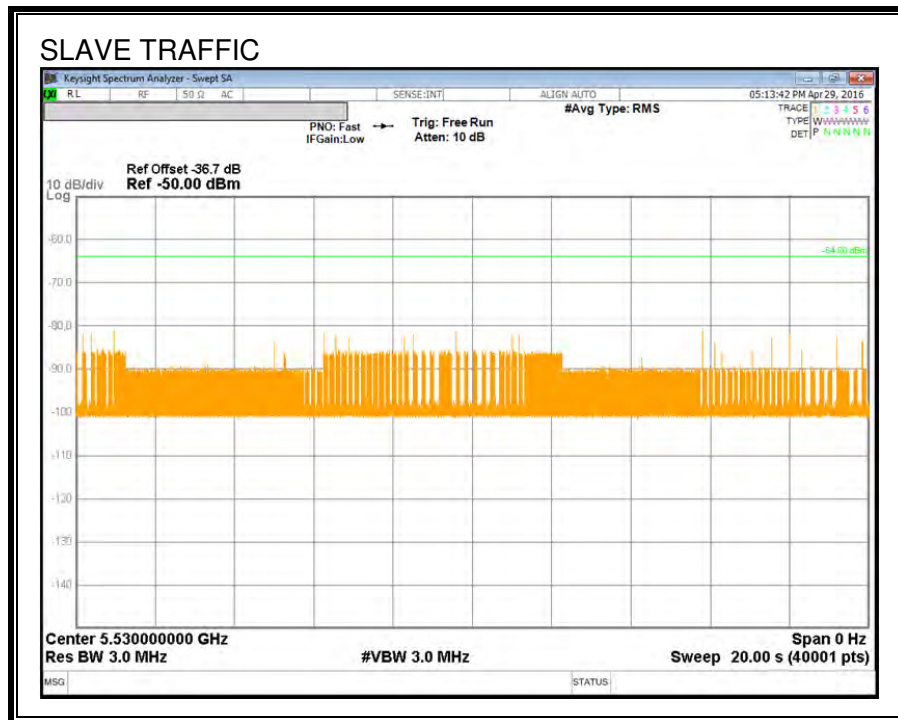
All tests were performed at a channel center frequency of 5530 MHz.

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

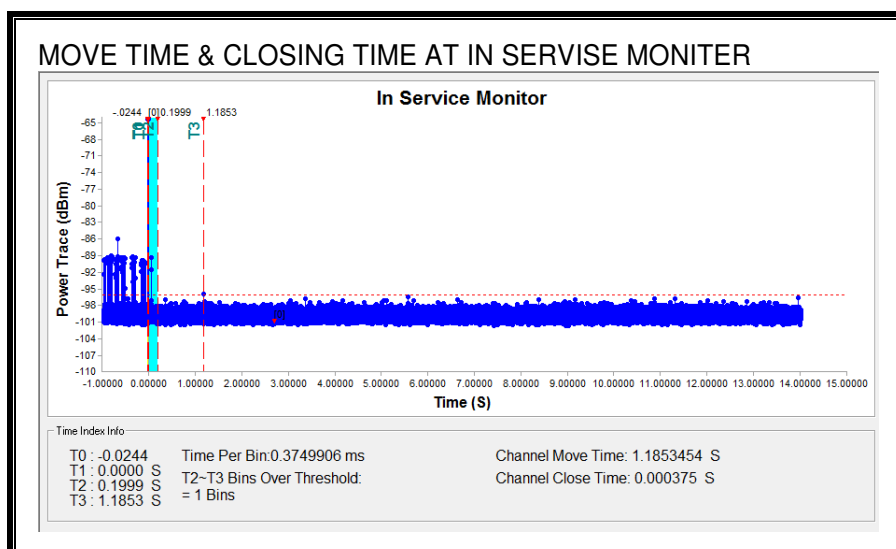
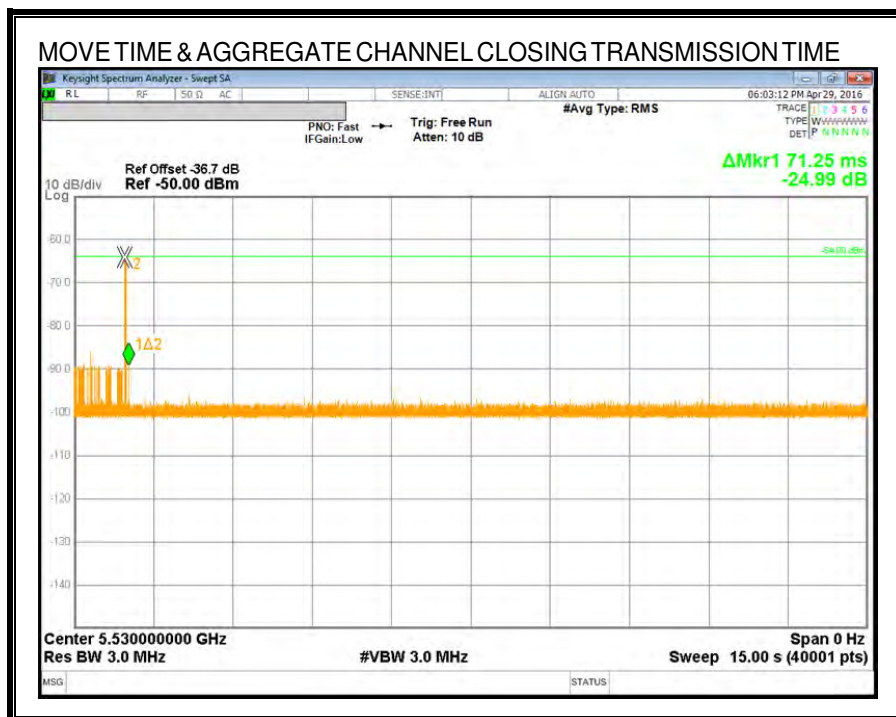
Channel Move Time (sec)	Limit (sec)
1.185	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.375	60

MOVE TIME & CHANNEL CLOSING TIME

AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



NON-OCCUPANCY PERIOD

RESULTS

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

