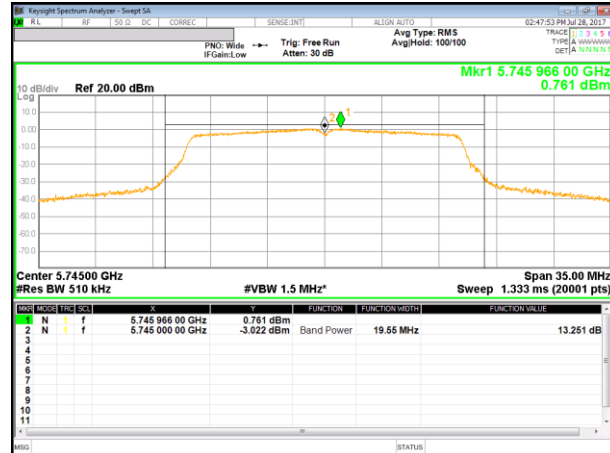
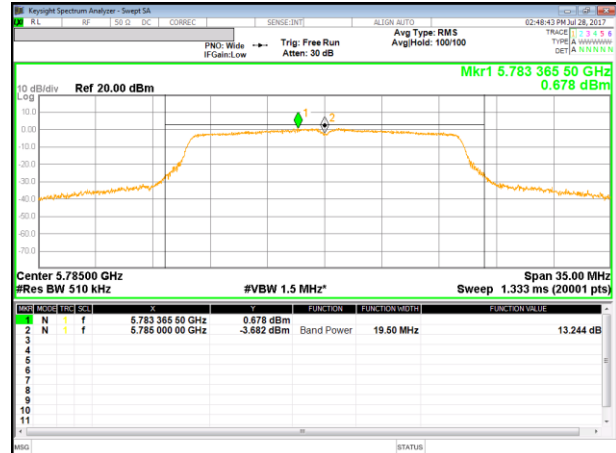


UNII 5.8 GHz IEEE 802.11a mode

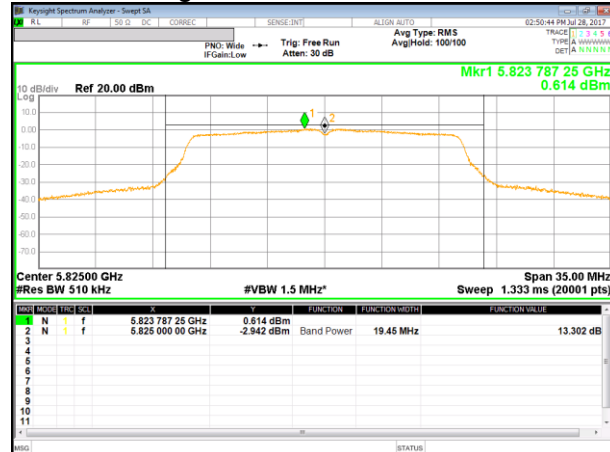
11a Mode Low Channel



11a Mode Middle Channel

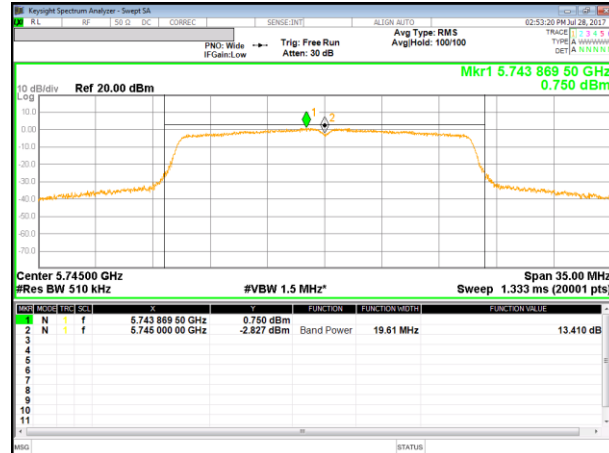


11a Mode High Channel

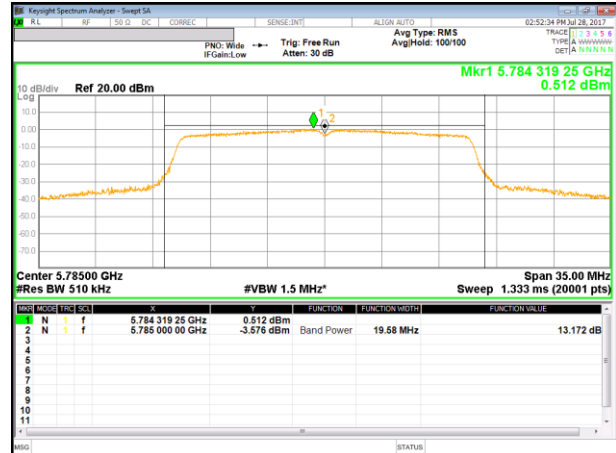


UNII 5.8 GHz IEEE 802.11n HT20 mode

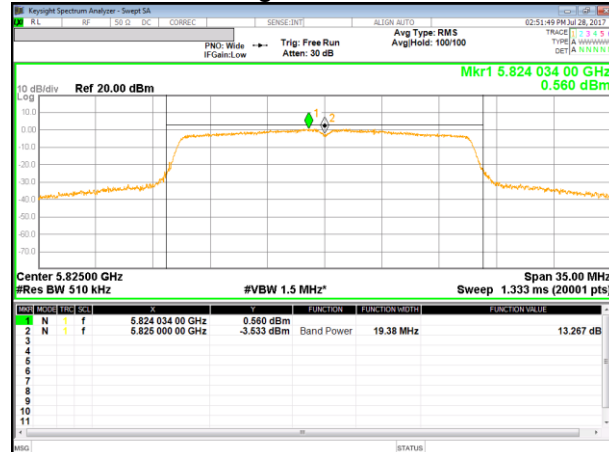
11n HT20 Mode Low Channel



11n HT20 Mode Middle Channel

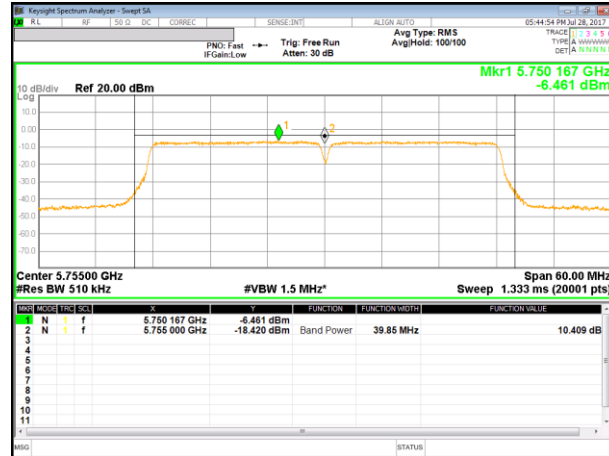


11n HT20 Mode High Channel

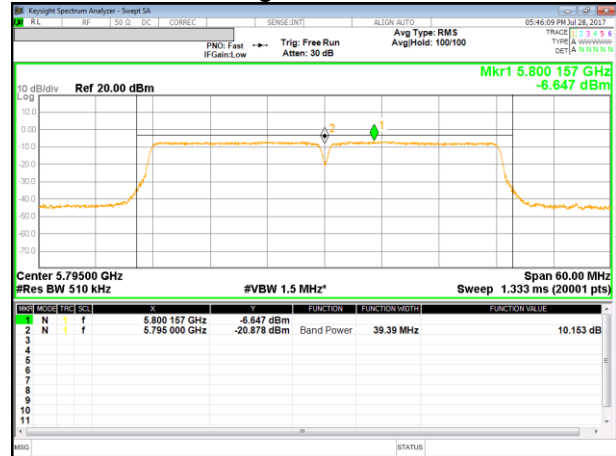


UNII 5.8 GHz IEEE 802.11n HT40 mode

11n HT40 Mode Low Channel



11n HT40 Mode High Channel



10. TRANSMITTER ABOVE 1 GHz

LIMITS

FCC §15.205 and §15.209

Limits for radiated disturbance of an intentional radiator		
Frequency range (MHz)	Limits (µV/m)	Measurement Distance (m)
0.009 – 0.490	2400 / F (kHz)	300
0.490 – 1.705	24000 / F (kHz)	30
1.705 – 30.0	30	30
30 – 88	100**	3
88 - 216	150**	3
216 – 960	200**	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g. §§ 15.231 and 15.241.

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 for below 1GHz and 150 cm for above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

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 v01r03 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.

Pre-scans to detect harmonic and spurious emissions, the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

The spectrum from 1 GHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

(From 30MHz to 1GHz, test was performed with the EUT set to transmit at the channel with highest output power)

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.

Note : Emission was pre-scanned from 9KHz to 30MHz; No emissions were detected which was at least 20dB below the specification limit (consider distance correction factor).

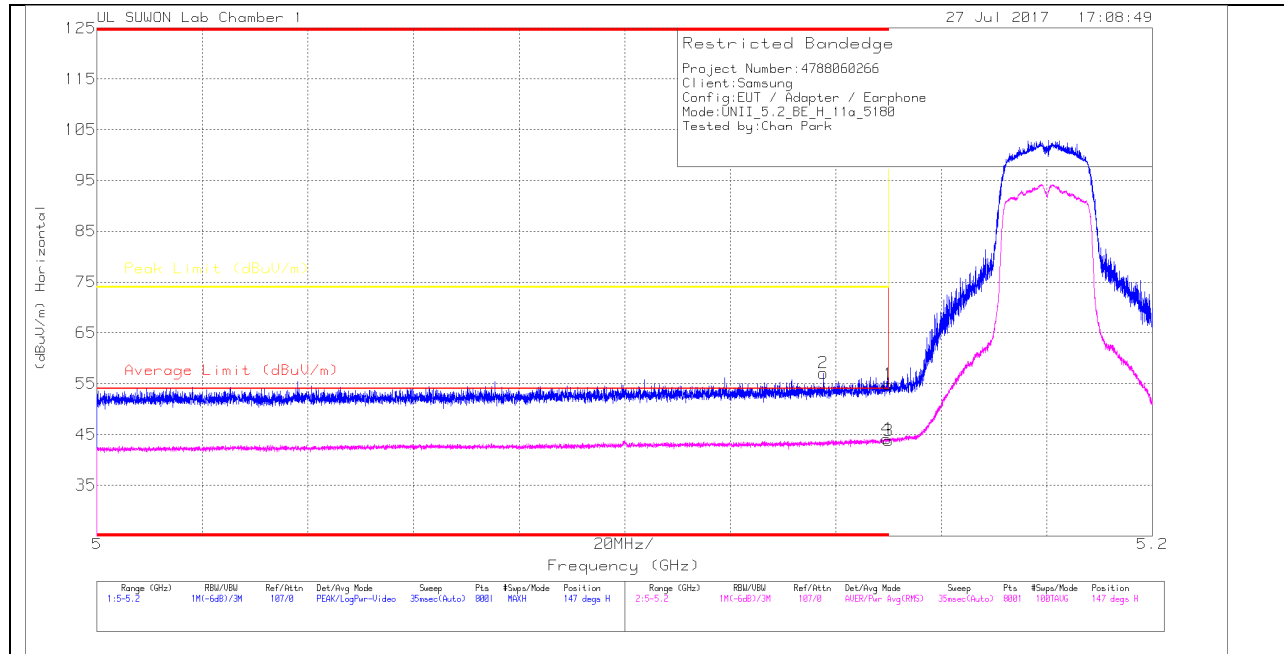
Per FCC part 15.31(o), test results were not reported.

10.1. 5.2 GHz

10.1.1. TX Above 1GHz 802.11a MODE IN THE 5.2GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

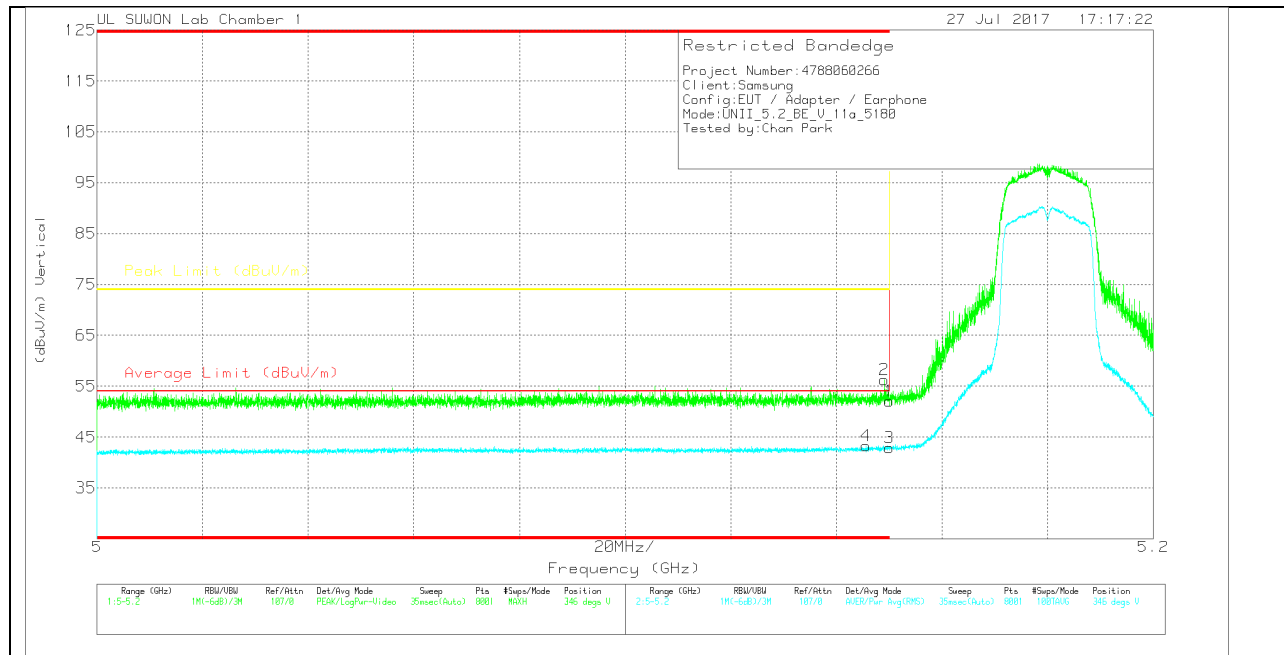
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	45.04	Pk	34	-24.2	0	54.84	-	-	74	-19.16	147	140	H
2	* 5.138	47.27	Pk	34	-24.2	0	57.07	-	-	74	-16.93	147	140	H
3	* 5.15	33.56	RMS	34	-24.1	.32	43.78	54	-10.22	-	-	147	140	H
4	* 5.15	33.91	RMS	34	-24.1	.32	44.13	54	-9.87	-	-	147	140	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	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	42.21	Pk	34	-24.2	0	52.01	-	-	74	-21.99	346	100	V
2	* 5.149	46.31	Pk	34	-24.1	0	56.21	-	-	74	-17.79	346	100	V
3	* 5.15	32.7	RMS	34	-24.1	.32	42.92	54	-11.08	-	-	346	100	V
4	* 5.146	33.07	RMS	34	-24.1	.32	43.29	54	-10.71	-	-	346	100	V

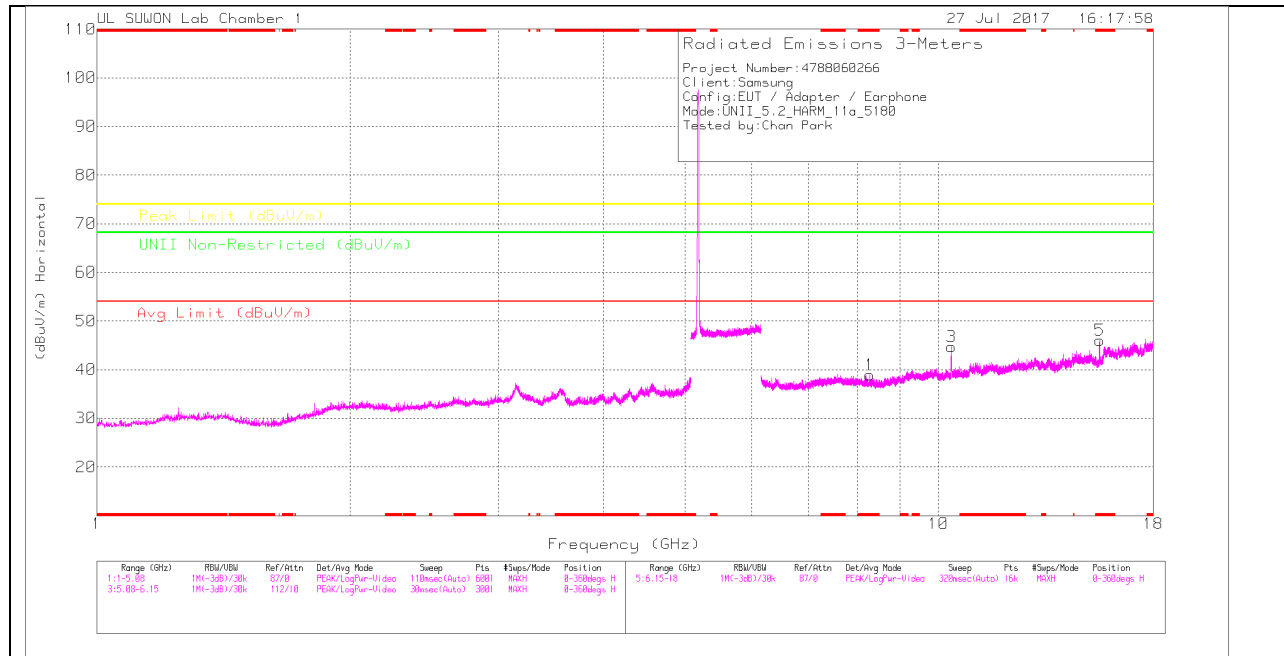
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

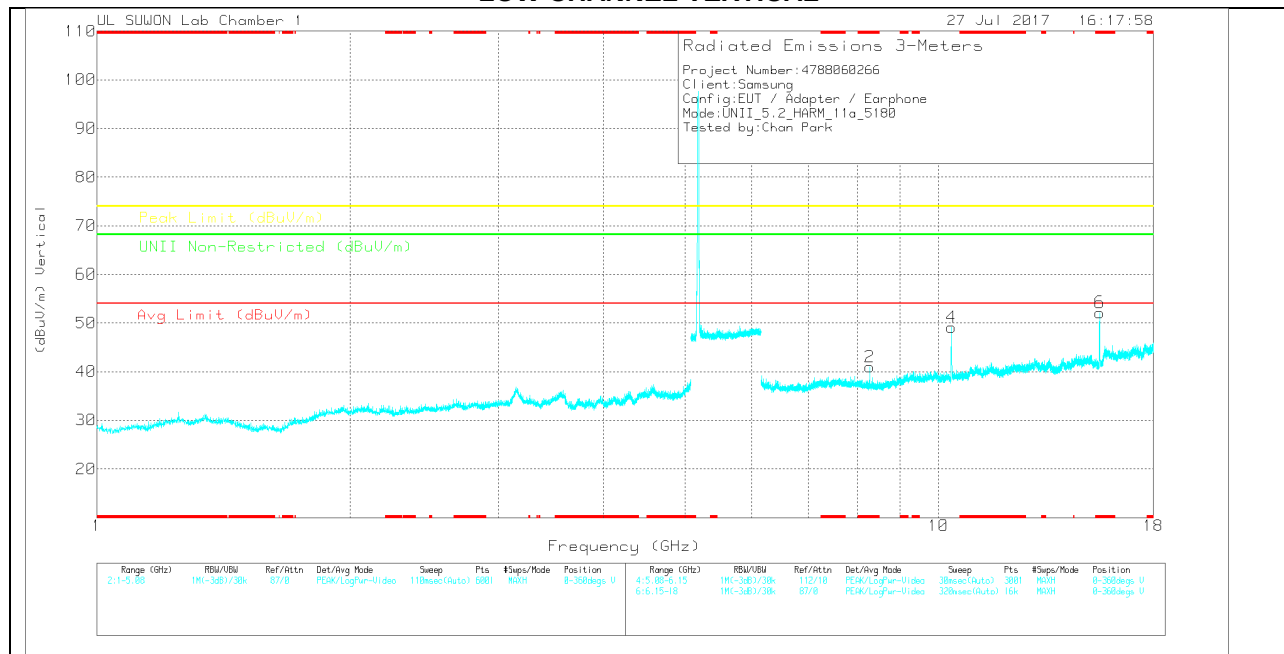
RMS - RMS detection

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	20170531_3 117_001687 8717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 8.288	33.45	PK	35.7	-30.2	0	38.95	-	-	74	-35.05	-	-	0-360	250	H
3	10.363	35.38	PK	37.5	-28.2	0	44.68	-	-	-	-	68.2	-23.52	0-360	250	H
5	* 15.542	26.41	PK	39.8	-20.2	0	46.01	-	-	74	-27.99	-	-	0-360	250	H
2	* 8.288	35.47	PK	35.7	-30.2	0	40.97	-	-	74	-33.03	-	-	0-360	250	V
4	10.359	39.88	PK	37.5	-28.3	0	49.08	-	-	-	-	68.2	-19.12	0-360	250	V
6	* 15.543	32.46	PK	39.8	-20.1	0	52.16	-	-	74	-21.84	-	-	0-360	250	V

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

PK – Peak detector

Radiated Emissions

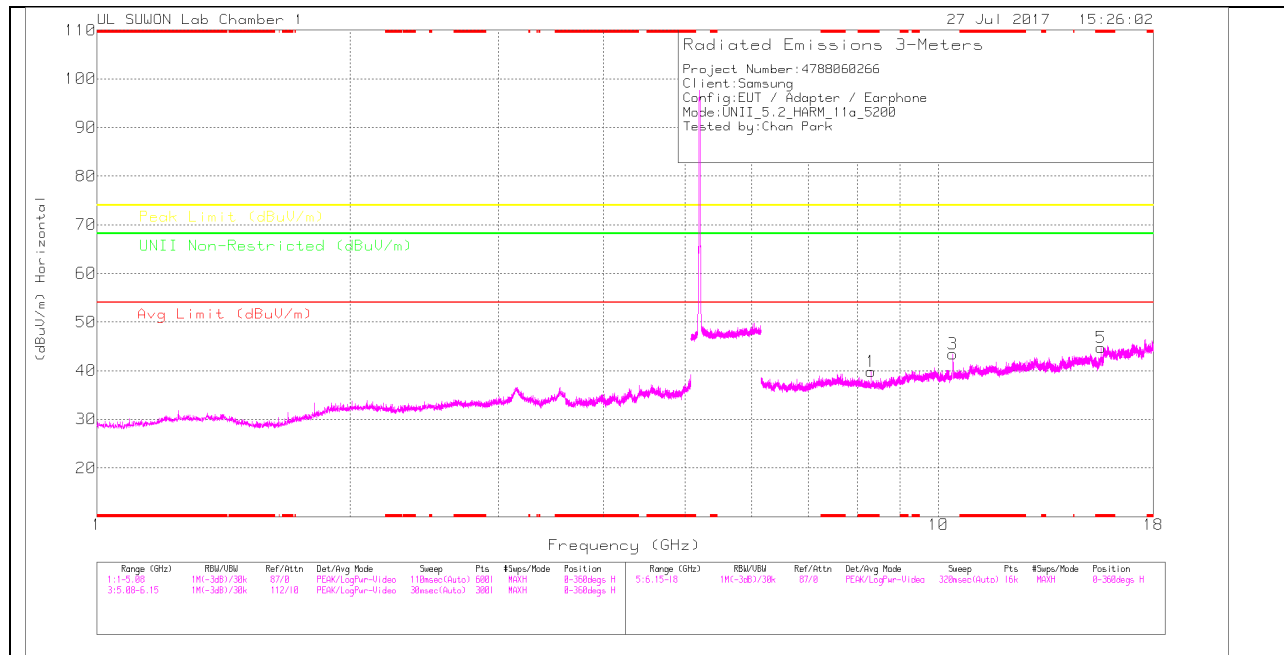
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
10.359	45.26	PK-U	37.5	-28.3	0	54.46	-	-	-	-	68.2	-13.74	156	314	H
* 8.288	43.97	PK-U	35.7	-30.2	0	49.47	-	-	74	-24.53	-	-	215	400	V
* 8.288	34.88	ADR	35.7	-30.2	0	40.38	54	-13.62	-	-	-	-	215	400	V
10.362	50.05	PK-U	37.5	-28.3	0	59.25	-	-	-	-	68.2	-8.95	183	238	V
* 15.54	45.48	PK-U	39.8	-20.3	0	64.98	-	-	74	-9.02	-	-	300	278	V
* 15.54	30.81	ADR	39.8	-20.3	.32	50.63	54	-3.37	-	-	-	-	300	278	V

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

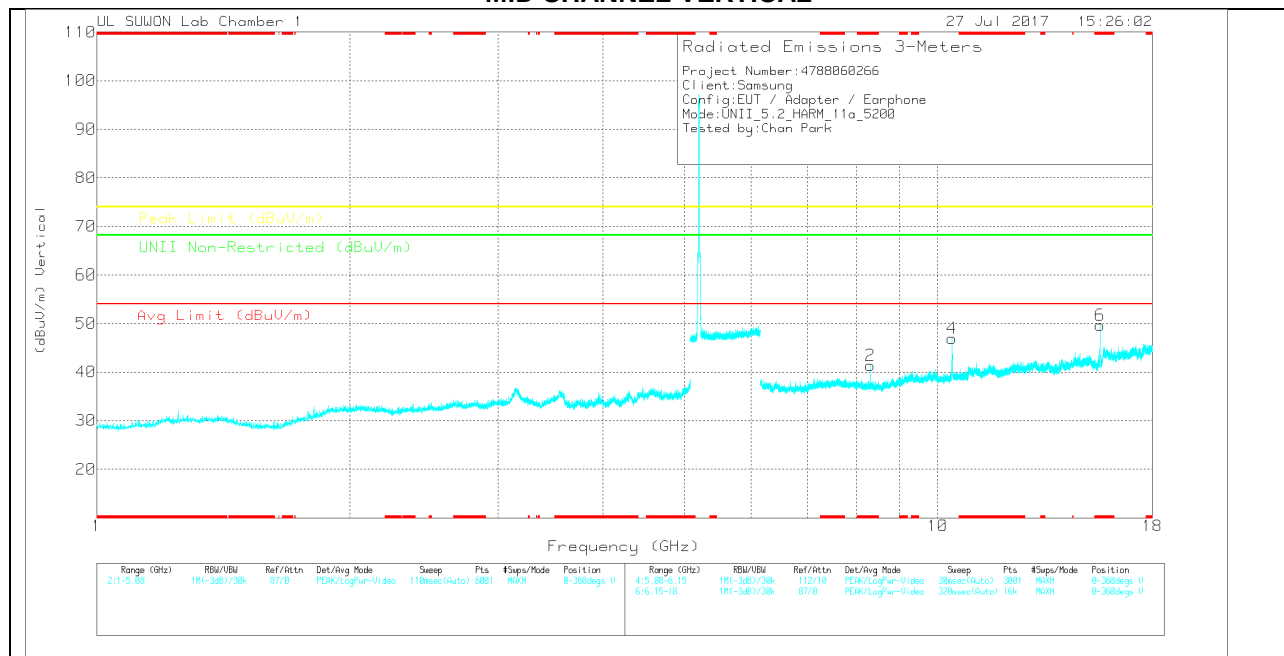
PK-U - U-NII: Maximum Peak

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	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 8.319	34.37	PK	35.7	-30.2	0	39.87	-	-	74	-34.13	-	-	0-360	150	H
3	10.401	33.75	PK	37.5	-27.8	0	43.45	-	-	-	-	68.2	-24.75	0-360	250	H
5	* 15.595	23.26	PK	39.8	-18.3	0	44.76	-	-	74	-29.24	-	-	0-360	250	H
2	* 8.32	35.72	PK	35.7	-30.1	0	41.32	-	-	74	-32.68	-	-	0-360	250	V
4	10.4	37.18	PK	37.5	-27.8	0	46.88	-	-	-	-	68.2	-21.32	0-360	250	V
6	* 15.598	28.36	PK	39.8	-18.5	0	49.66	-	-	74	-24.34	-	-	0-360	250	V

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

PK – Peak detector

Radiated Emissions

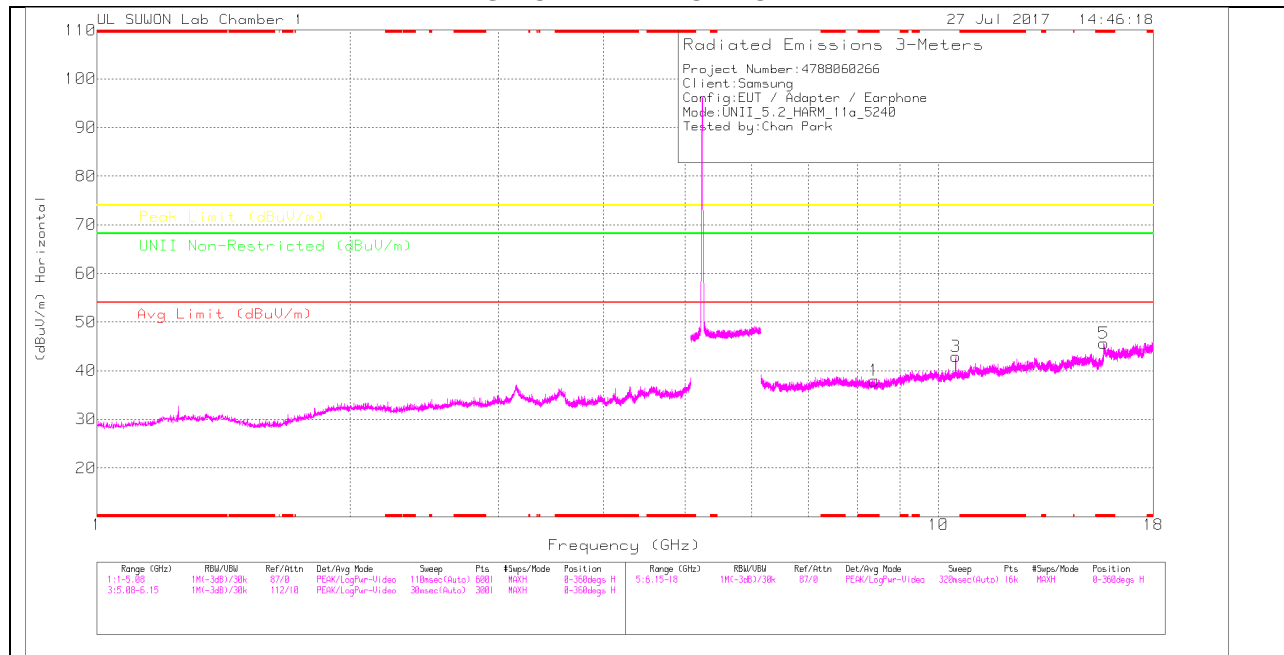
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
10.406	43.93	PK-U	37.5	-27.8	0	53.63	-	-	-	-	68.2	-14.57	156	330	H
* 15.605	35.12	PK-U	39.8	-18.4	0	56.52	-	-	74	-17.48	-	-	92	356	H
* 15.599	20.78	ADR	39.8	-18.5	.32	42.4	54	-11.6	-	-	-	-	92	356	H
* 8.32	44.29	PK-U	35.7	-30.1	0	49.89	-	-	74	-24.11	-	-	209	245	V
* 8.32	35.15	ADR	35.7	-30.1	0	40.75	54	-13.25	-	-	-	-	209	245	V
10.402	48.53	PK-U	37.5	-27.8	0	58.23	-	-	-	-	68.2	-9.97	186	229	V
* 15.6	42.84	PK-U	39.8	-18.4	0	64.24	-	-	74	-9.76	-	-	300	293	V
* 15.599	28.8	ADR	39.8	-18.5	.32	50.42	54	-3.58	-	-	-	-	300	293	V

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

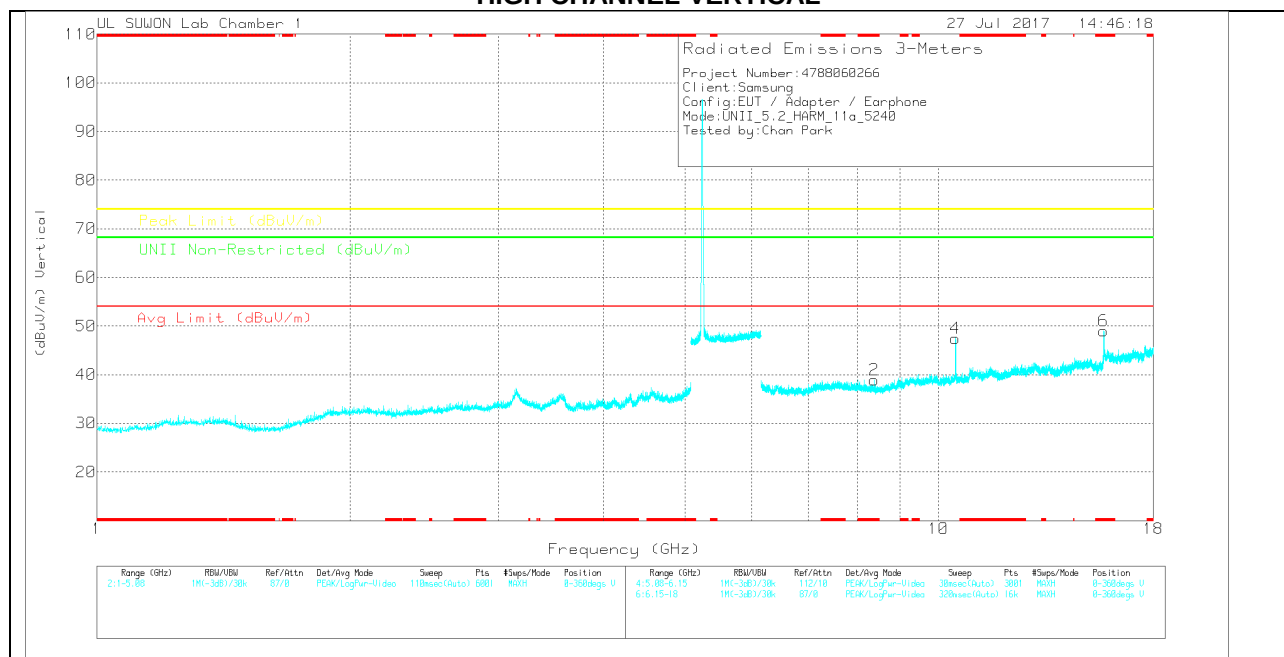
PK-U - U-NII: Maximum Peak

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	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 8.384	32.04	PK	35.7	-29.8	0	37.94	-	-	74	-36.06	-	-	0-360	150	H
3	10.48	34.19	PK	37.5	-28.8	0	42.89	-	-	-	-	68.2	-25.31	0-360	250	H
5	* 15.723	23.42	PK	39.9	-17.7	0	45.62	-	-	74	-28.38	-	-	0-360	250	H
2	* 8.384	33.04	PK	35.7	-29.8	0	38.94	-	-	74	-35.06	-	-	0-360	250	V
4	10.476	38.63	PK	37.5	-28.7	0	47.43	-	-	-	-	68.2	-20.77	0-360	250	V
6	* 15.719	27.01	PK	39.9	-17.9	0	49.01	-	-	74	-24.99	-	-	0-360	250	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
10.48	45.65	PK-U	37.5	-28.8	0	54.35	-	-	-	-	68.2	-13.85	156	117	H
10.479	49.13	PK-U	37.5	-28.8	0	57.83	-	-	-	-	68.2	-10.37	189	247	V
* 15.717	38.02	PK-U	39.9	-18	0	59.92	-	-	74	-14.08	-	-	330	395	V
* 15.718	24.52	ADR	39.9	-18	.32	46.74	54	-7.26	-	-	-	-	330	395	V

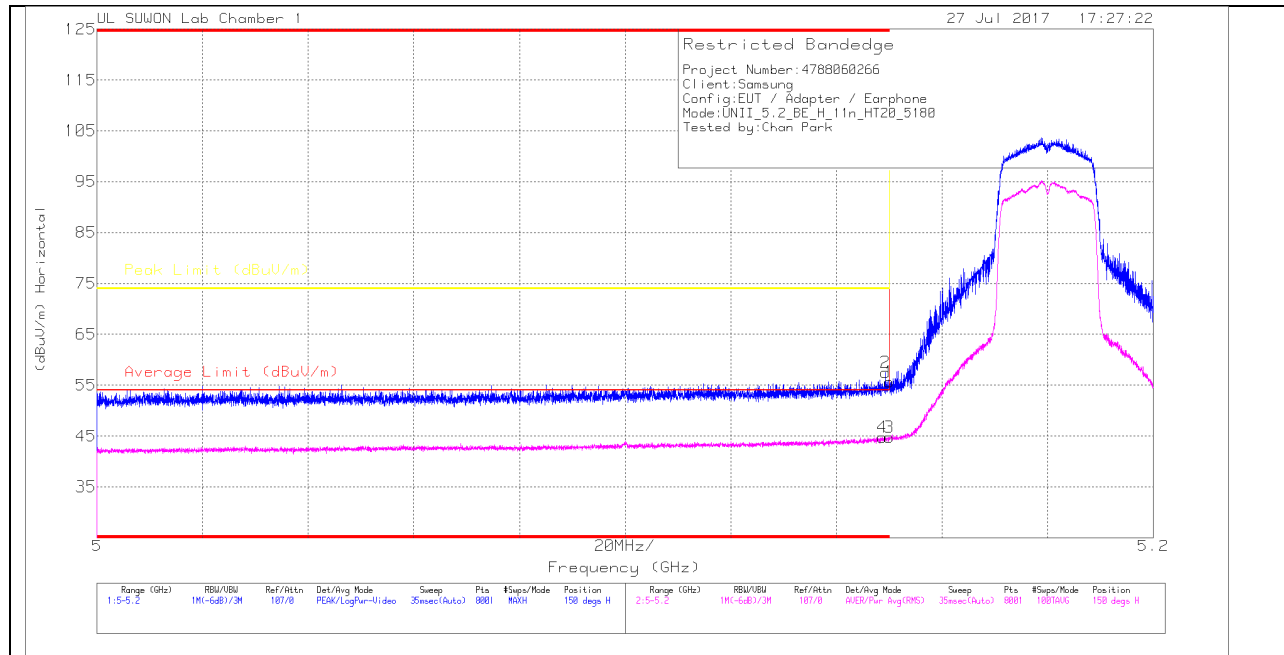
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

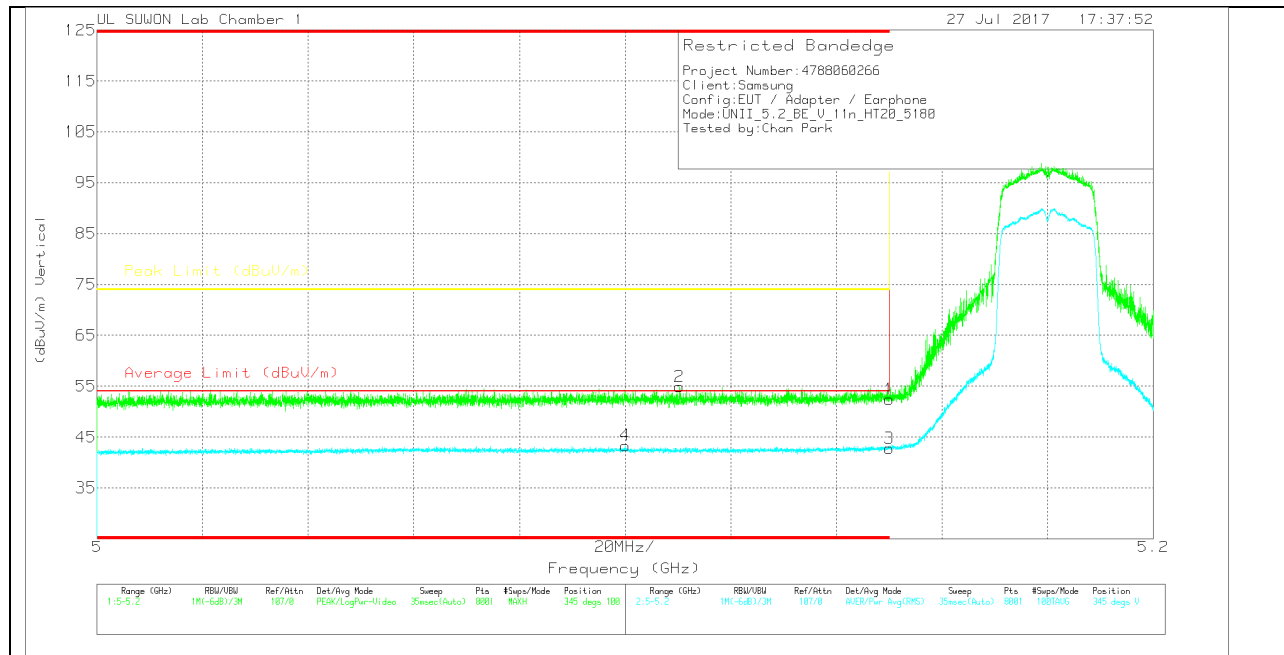
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	45.82	Pk	34	-24.2	0	55.62	-	-	74	-18.38	150	142	H
2	* 5.149	47.69	Pk	34	-24.2	0	57.49	-	-	74	-16.51	150	142	H
3	* 5.15	34.48	RMS	34	-24.1	.35	44.73	54	-9.27	-	-	150	142	H
4	* 5.149	34.55	RMS	34	-24.1	.35	44.8	54	-9.2	-	-	150	142	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	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	42.66	Pk	34	-24.2	0	52.46	-	-	74	-21.54	345	100	V
2	* 5.11	45.16	Pk	33.9	-24.2	0	54.86	-	-	74	-19.14	345	100	V
3	* 5.15	32.51	RMS	34	-24.1	.35	42.76	54	-11.24	-	-	345	100	V
4	* 5.1	33.19	RMS	33.9	-24.1	.35	43.34	54	-10.66	-	-	345	100	V

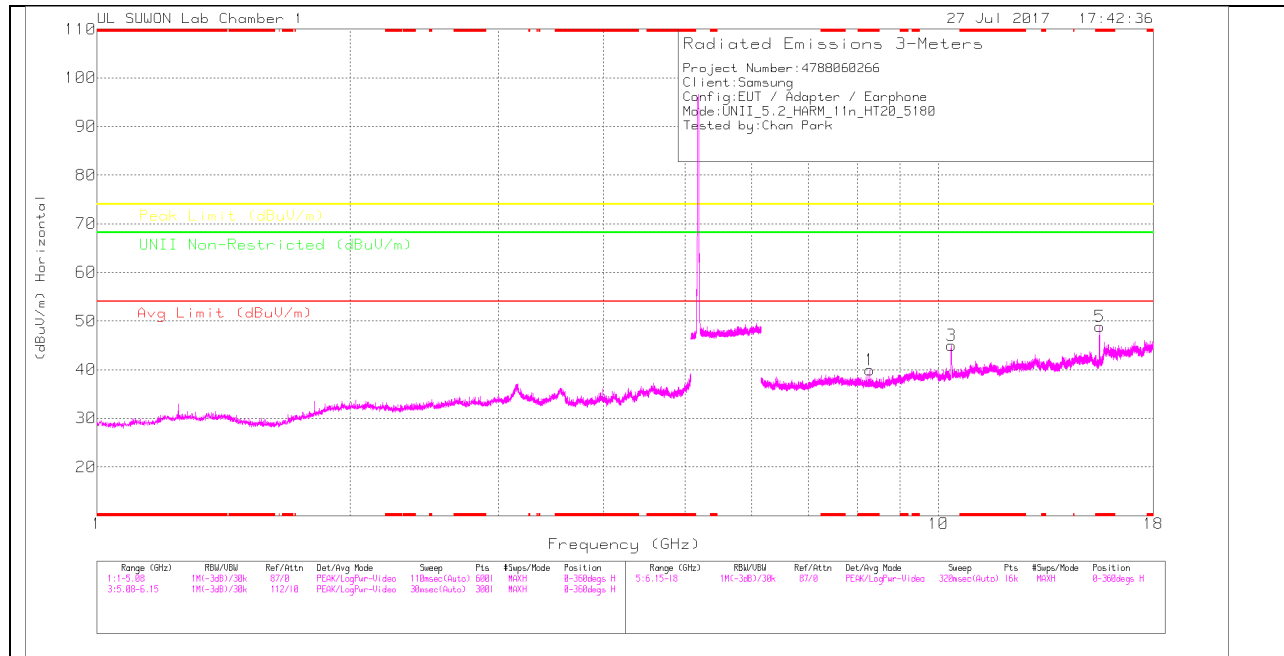
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

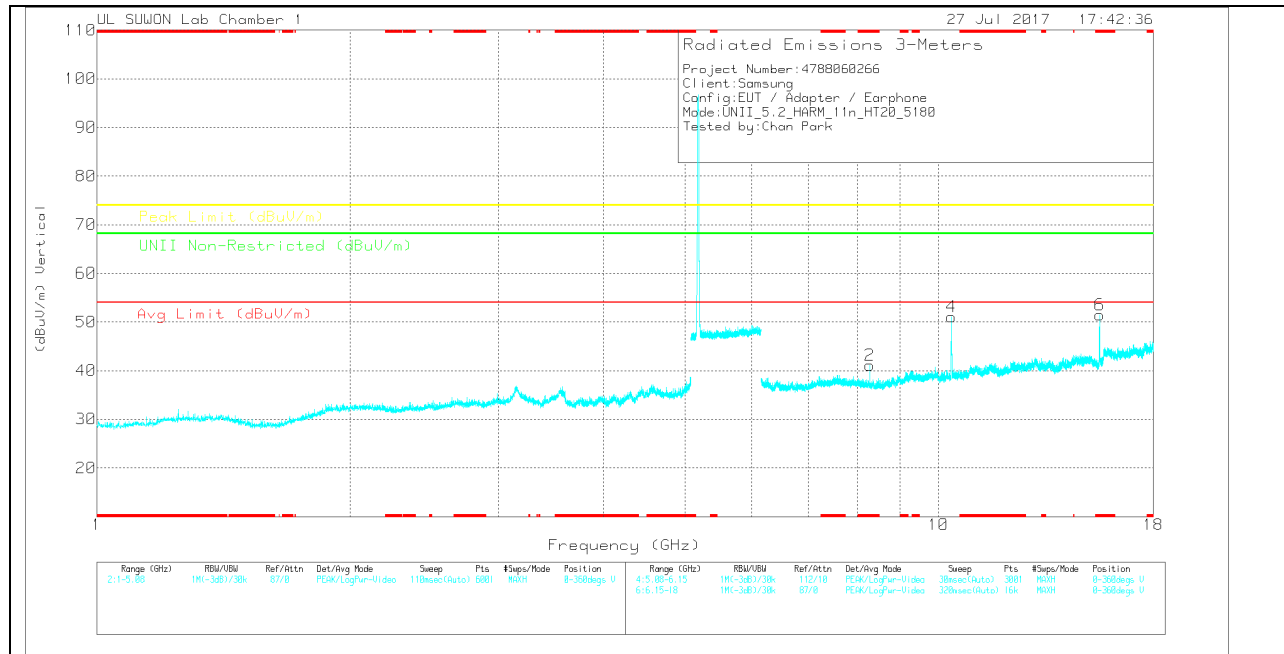
RMS - RMS detection

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	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 8.287	34.44	PK	35.7	-30.2	0	39.94	-	-	74	-34.06	-	-	0-360	150	H
3	10.359	35.79	PK	37.5	-28.3	0	44.99	-	-	-	-	68.2	-23.21	0-360	250	H
5	* 15.541	29.16	PK	39.8	-20.1	0	48.86	-	-	74	-25.14	-	-	0-360	250	H
2	* 8.287	35.63	PK	35.7	-30.2	0	41.13	-	-	74	-32.87	-	-	0-360	250	V
4	10.359	41.82	PK	37.5	-28.3	0	51.02	-	-	-	-	68.2	-17.18	0-360	250	V
6	* 15.541	31.85	PK	39.8	-20.2	0	51.45	-	-	74	-22.55	-	-	0-360	250	V

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

PK – Peak detector

Radiated Emissions

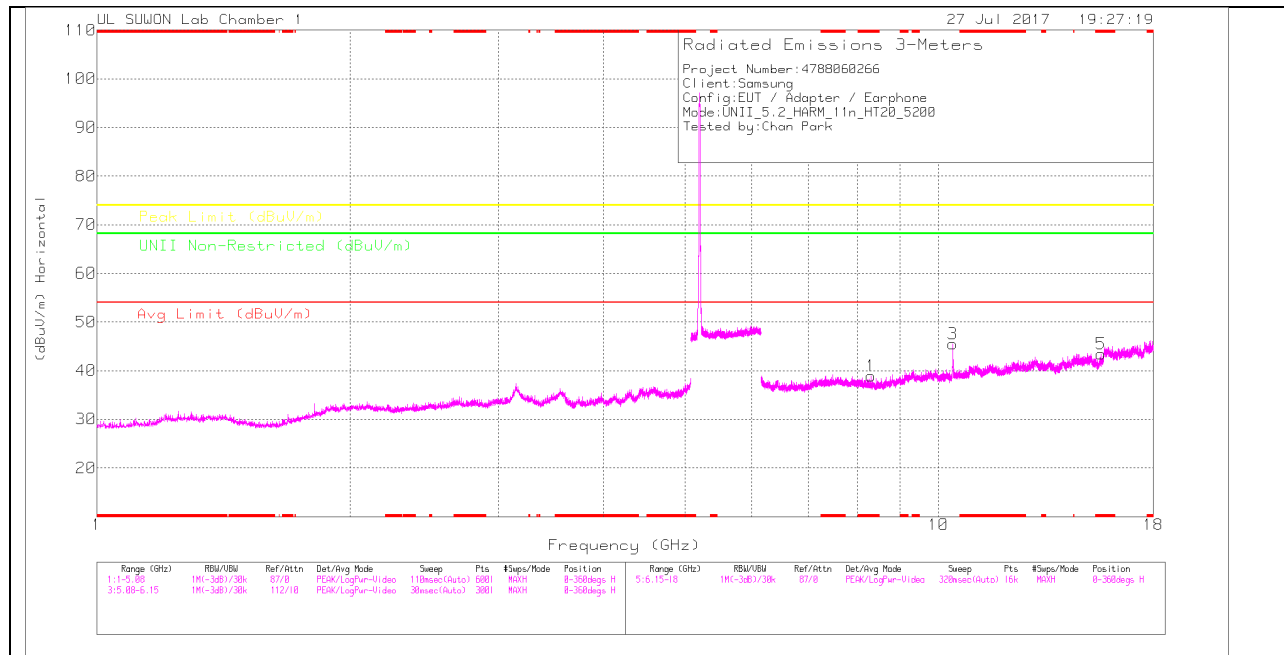
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
10.354	46.45	PK-U	37.5	-28.5	0	55.45	-	-	-	-	68.2	-12.75	153	316	H
* 15.534	36.61	PK-U	39.7	-20.6	0	55.71	-	-	74	-18.29	-	-	165	107	H
* 15.536	22.3	ADR	39.7	-20.5	.35	41.85	54	-12.15	-	-	-	-	165	107	H
* 8.288	44.61	PK-U	35.7	-30.2	0	50.11	-	-	74	-23.89	-	-	210	247	V
* 8.288	35.32	ADR	35.7	-30.2	0	40.82	54	-13.18	-	-	-	-	210	247	V
10.358	51.79	PK-U	37.5	-28.4	0	60.89	-	-	-	-	68.2	-7.31	187	238	V
* 15.534	42.67	PK-U	39.7	-20.6	0	61.77	-	-	74	-12.23	-	-	302	289	V
* 15.539	27.35	ADR	39.8	-20.3	.35	47.2	54	-6.8	-	-	-	-	302	289	V

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

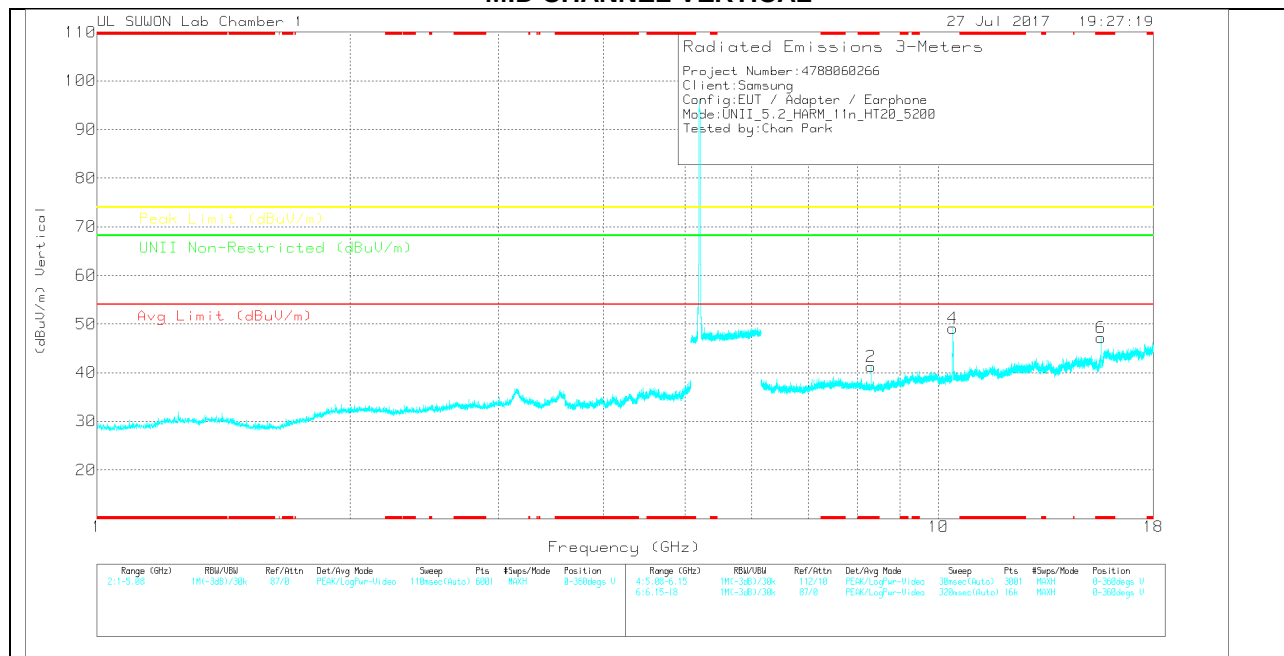
PK-U - U-NII: Maximum Peak

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	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 8.32	33.27	PK	35.7	-30.1	0	38.87	-	-	74	-35.13	-	-	0-360	150	H
3	10.401	35.85	PK	37.5	-27.8	0	45.55	-	-	-	-	68.2	-22.65	0-360	250	H
5	* 15.595	22.06	PK	39.8	-18.4	0	43.46	-	-	74	-30.54	-	-	0-360	250	H
2	* 8.319	35.71	PK	35.7	-30.2	0	41.21	-	-	74	-32.79	-	-	0-360	250	V
4	10.399	39.46	PK	37.5	-27.8	0	49.16	-	-	-	-	68.2	-19.04	0-360	250	V
6	* 15.598	25.87	PK	39.8	-18.5	0	47.17	-	-	74	-26.83	-	-	0-360	250	V

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

PK – Peak detector

Radiated Emissions

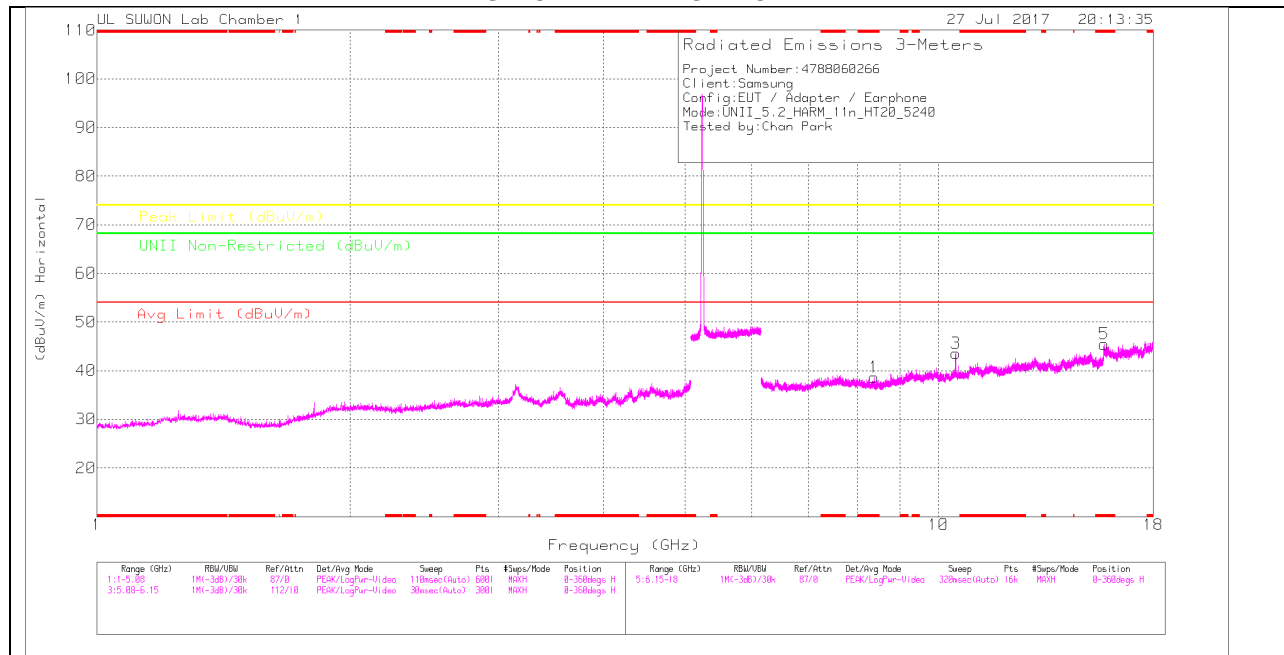
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
10.404	47.47	PK-U	37.5	-27.8	0	57.17	-	-	-	-	68.2	-11.03	131	363	H
* 8.32	43.72	PK-U	35.7	-30.1	0	49.32	-	-	74	-24.68	-	-	216	394	V
* 8.32	33.33	ADR	35.7	-30.1	0	38.93	54	-15.07	-	-	-	-	216	394	V
10.397	49.4	PK-U	37.5	-27.8	0	59.1	-	-	-	-	68.2	-9.1	192	228	V
* 15.6	40.05	PK-U	39.8	-18.5	0	61.35	-	-	74	-12.65	-	-	300	294	V
* 15.6	25.33	ADR	39.8	-18.5	.35	46.98	54	-7.02	-	-	-	-	300	294	V

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

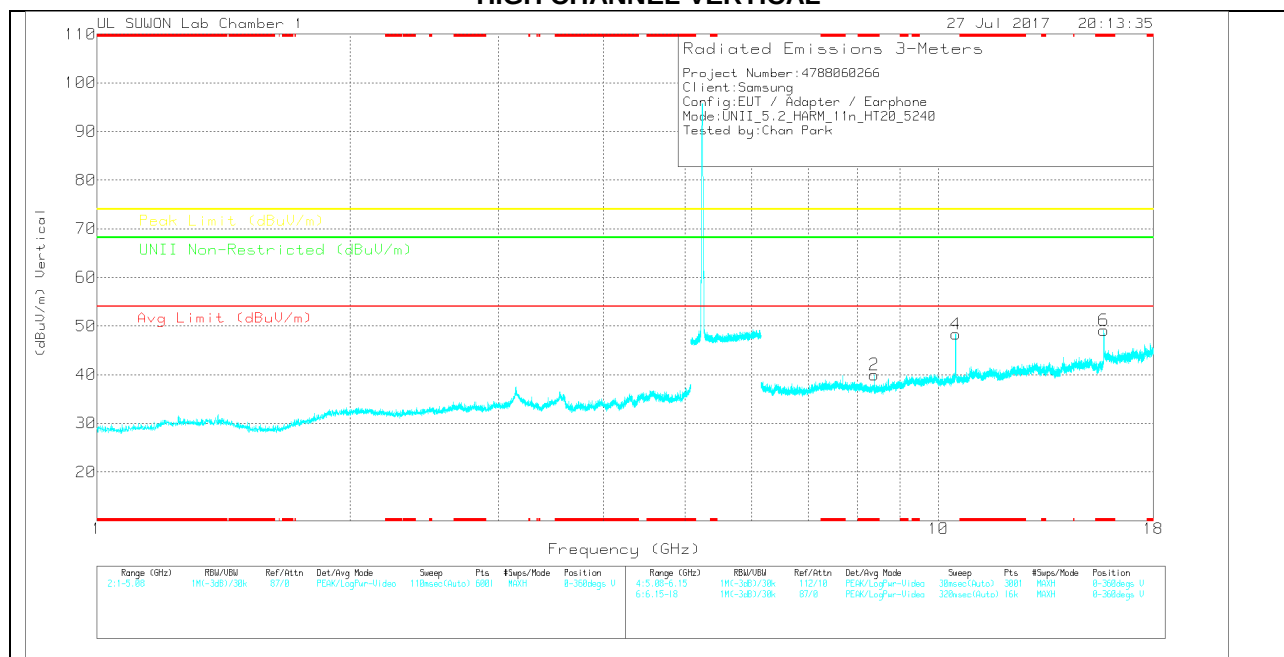
PK-U - U-NII: Maximum Peak

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	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 8.384	32.74	PK	35.7	-29.8	0	38.64	-	-	74	-35.36	-	-	0-360	150	H
3	10.483	34.79	PK	37.5	-28.7	0	43.59	-	-	-	-	68.2	-24.61	0-360	250	H
5	* 15.725	23.14	PK	39.9	-17.6	0	45.44	-	-	74	-28.56	-	-	0-360	250	H
2	* 8.384	34.1	PK	35.7	-29.8	0	40	-	-	74	-34	-	-	0-360	250	V
4	10.482	39.43	PK	37.5	-28.6	0	48.33	-	-	-	-	68.2	-19.87	0-360	250	V
6	* 15.723	26.91	PK	39.9	-17.7	0	49.11	-	-	74	-24.89	-	-	0-360	250	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
10.478	44.89	PK-U	37.5	-28.7	0	53.69	-	-	-	-	68.2	-14.51	156	343	H
* 8.384	43.66	PK-U	35.7	-29.8	0	49.56	-	-	74	-24.44	-	-	215	389	V
* 8.384	34.09	ADR	35.7	-29.8	0	39.99	54	-14.01	-	-	-	-	215	389	V
10.482	49.9	PK-U	37.5	-28.6	0	58.8	-	-	-	-	68.2	-9.4	192	225	V
* 15.716	39.74	PK-U	39.9	-18.1	0	61.54	-	-	74	-12.46	-	-	300	309	V
* 15.718	25.21	ADR	39.9	-18	.35	47.46	54	-6.54	-	-	-	-	300	309	V

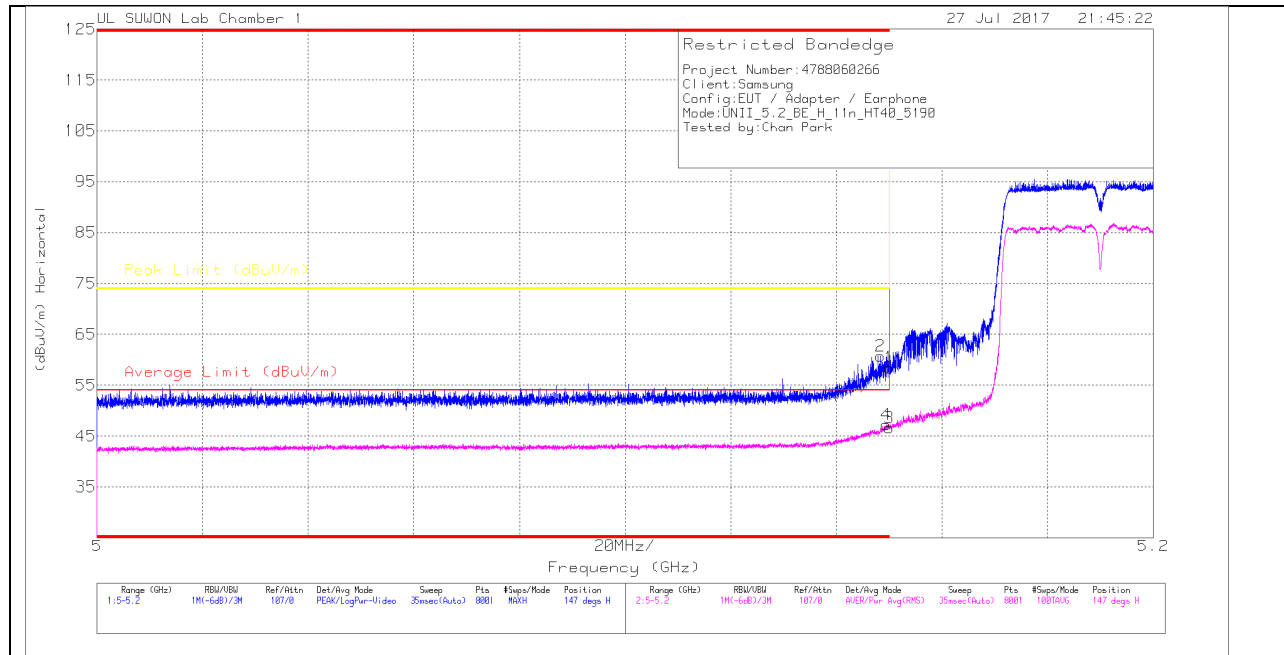
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

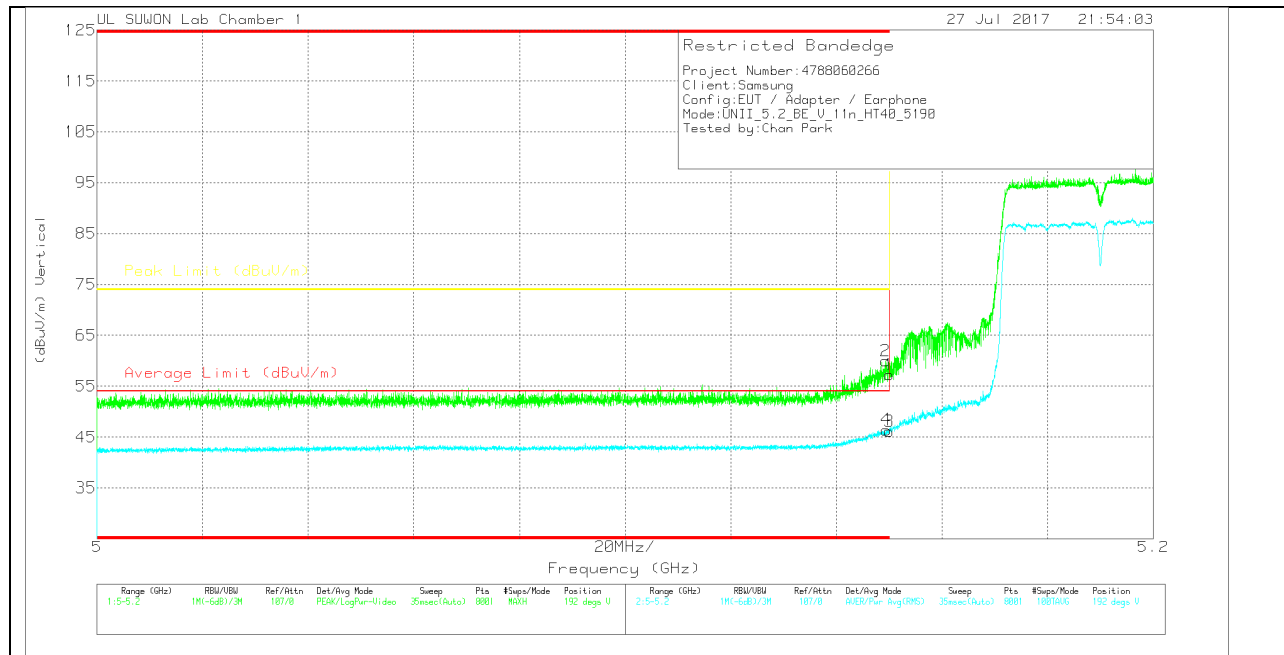
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	48.63	Pk	34	-24.2	0	58.43	-	-	74	-15.57	147	140	H
2	* 5.148	50.82	Pk	34	-24.1	0	60.72	-	-	74	-13.28	147	140	H
3	* 5.15	36.09	RMS	34	-24.1	.67	46.66	54	-7.34	-	-	147	140	H
4	* 5.149	36.69	RMS	34	-24.1	.67	47.26	54	-6.74	-	-	147	140	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	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	47.42	Pk	34	-24.2	0	57.22	-	-	74	-16.78	192	260	V
2	* 5.149	50.19	Pk	34	-24.2	0	59.99	-	-	74	-14.01	192	260	V
3	* 5.15	35.58	RMS	34	-24.1	.67	46.15	54	-7.85	-	-	192	260	V
4	* 5.149	35.86	RMS	34	-24.1	.67	46.43	54	-7.57	-	-	192	260	V

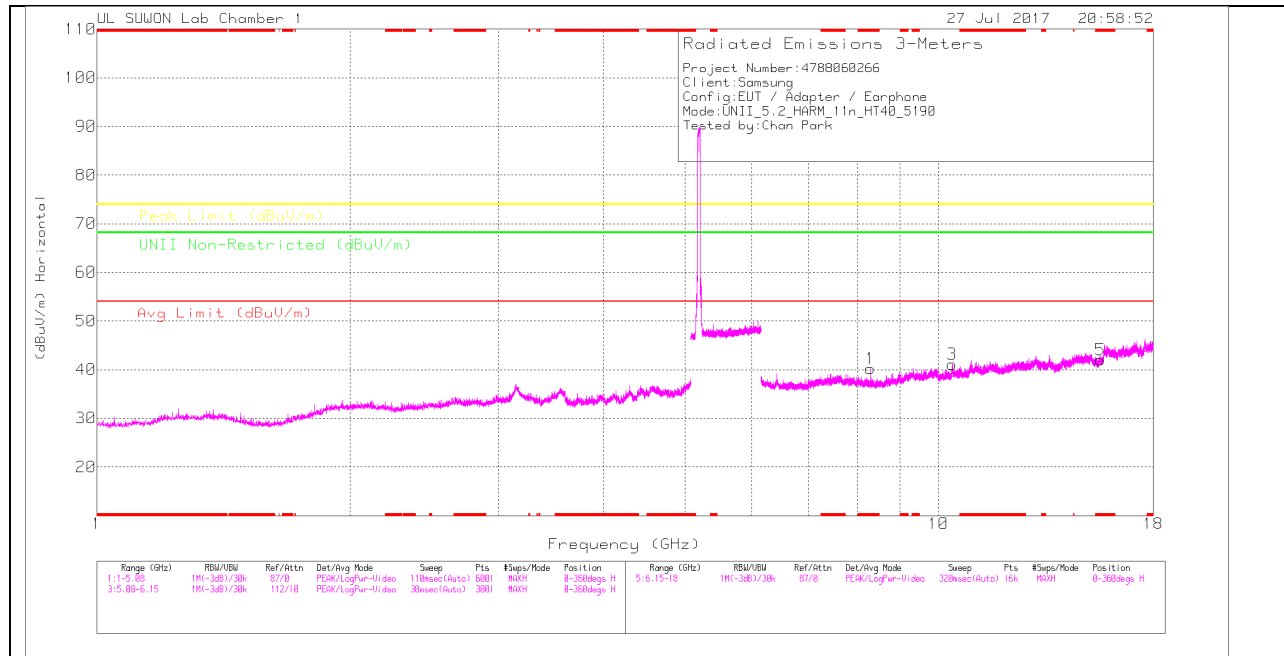
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

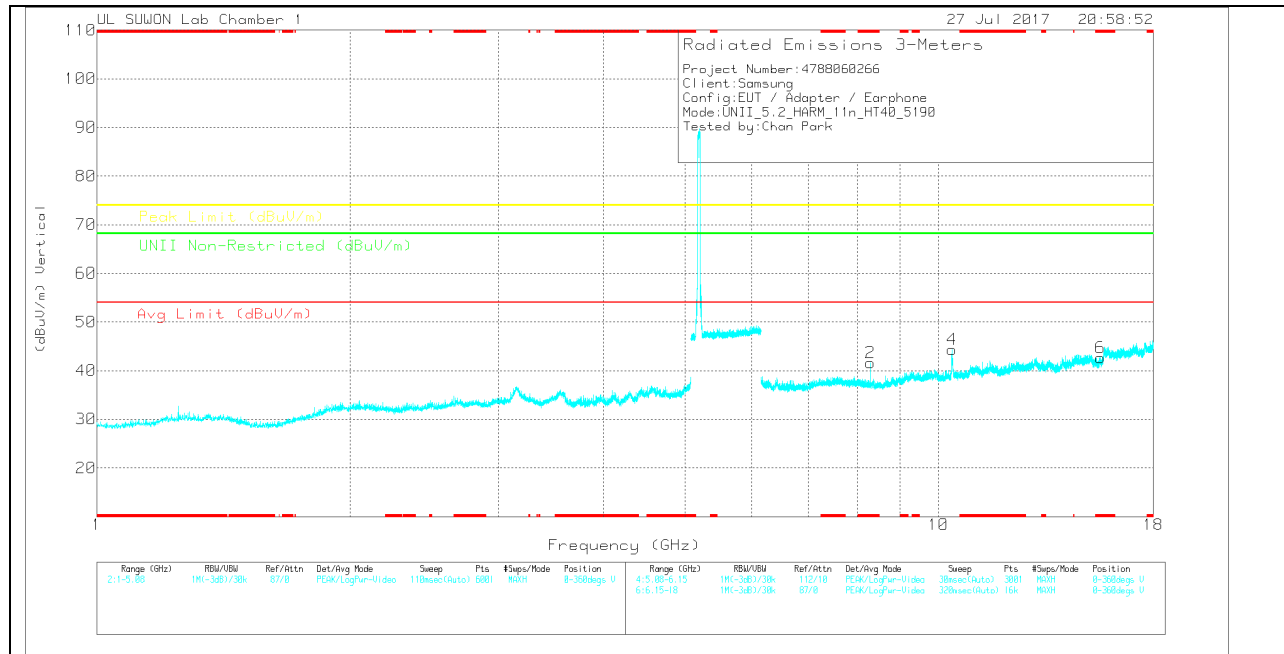
RMS - RMS detection

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	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 8.304	34.74	PK	35.7	-30.2	0	40.24	-	-	74	-33.76	-	-	0-360	150	H
3	10.384	31.35	PK	37.5	-27.8	0	41.05	-	-	-	-	68.2	-27.15	0-360	250	H
5	* 15.571	21.36	PK	39.8	-19.1	0	42.06	-	-	74	-31.94	-	-	0-360	150	H
2	* 8.304	36.12	PK	35.7	-30.2	0	41.62	-	-	74	-32.38	-	-	0-360	250	V
4	10.375	34.79	PK	37.5	-28	0	44.29	-	-	-	-	68.2	-23.91	0-360	250	V
6	* 15.571	22	PK	39.8	-19.1	0	42.7	-	-	74	-31.3	-	-	0-360	250	V

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

PK – Peak detector

Radiated Emissions

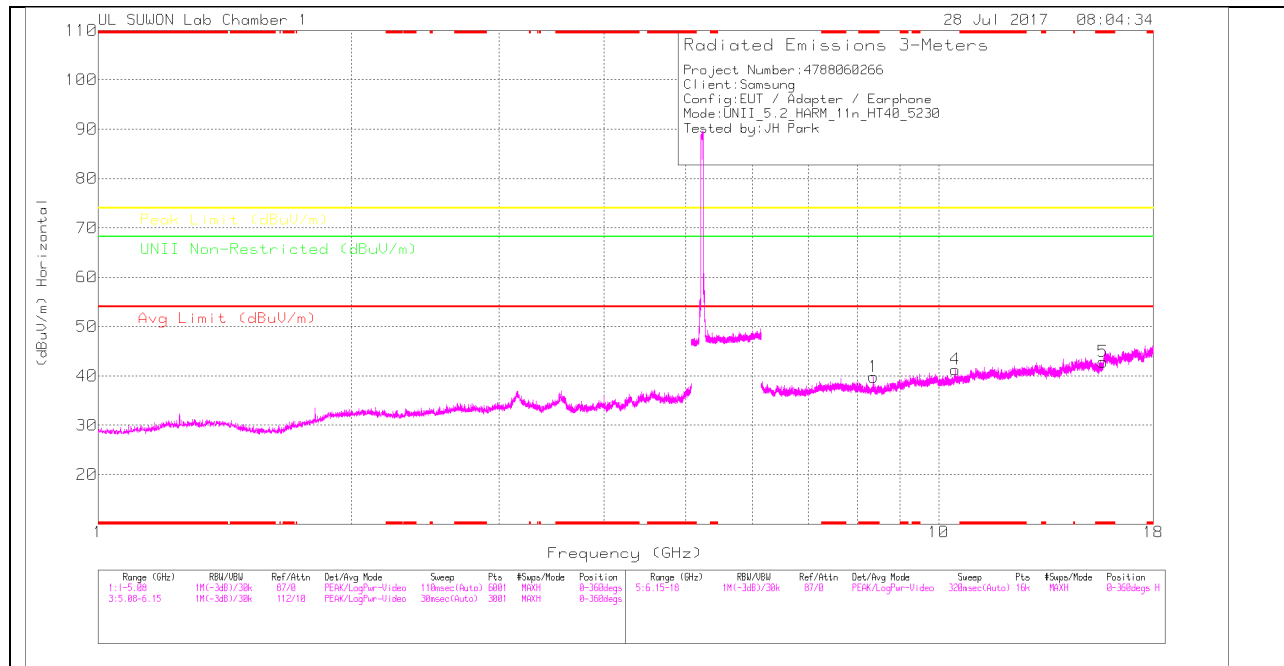
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 8.304	44.15	PK-U	35.7	-30.2	0	49.65	-	-	74	-24.35	-	-	161	115	H
* 8.304	35.16	ADR	35.7	-30.2	0	40.66	54	-13.34	-	-	-	-	161	115	H
10.387	41.17	PK-U	37.5	-27.8	0	50.87	-	-	-	-	68.2	-17.33	152	379	H
* 8.304	45.06	PK-U	35.7	-30.2	0	50.56	-	-	74	-23.44	-	-	215	400	V
* 8.304	35.54	ADR	35.7	-30.2	0	41.04	54	-12.96	-	-	-	-	215	400	V
10.378	44.68	PK-U	37.5	-27.9	0	54.28	-	-	-	-	68.2	-13.92	186	223	V

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

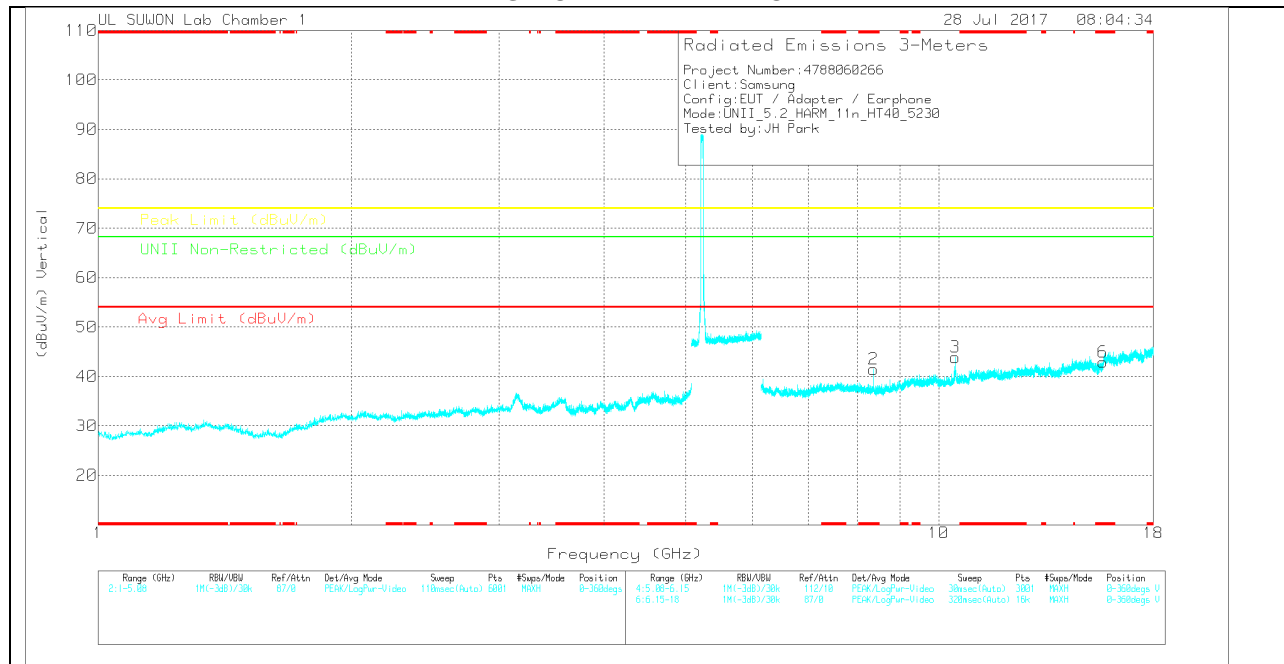
PK-U - U-NII: Maximum Peak

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	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 8.368	33.81	PK	35.7	-29.7	0	39.81	-	-	74	-34.19	-	-	0-360	150	H
4	10.458	32.31	PK	37.5	-28.5	0	41.31	-	-	-	-	68.2	-26.89	0-360	250	H
5	* 15.69	21.85	PK	39.9	-18.9	0	42.85	-	-	74	-31.15	-	-	0-360	250	H
2	* 8.367	35.56	PK	35.7	-29.8	0	41.46	-	-	74	-32.54	-	-	0-360	250	V
3	10.459	34.97	PK	37.5	-28.6	0	43.87	-	-	-	-	68.2	-24.33	0-360	250	V
6	* 15.687	21.97	PK	39.9	-19	0	42.87	-	-	74	-31.13	-	-	0-360	250	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 8.368	43.14	PK-U	35.7	-29.8	0	49.04	-	-	74	-24.96	-	-	170	267	H
* 8.368	32.8	ADR	35.7	-29.7	0	38.8	54	-15.2	-	-	-	-	170	267	H
* 8.368	44.17	PK-U	35.7	-29.8	0	50.07	-	-	74	-23.93	-	-	209	272	V
* 8.368	33.02	ADR	35.7	-29.7	0	39.02	54	-14.98	-	-	-	-	209	272	V
10.46	44.74	PK-U	37.5	-28.6	0	53.64	-	-	-	-	68.2	-14.56	194	241	V
10.461	41.37	PK-U	37.5	-28.6	0	50.27	-	-	-	-	68.2	-17.93	181	336	H

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

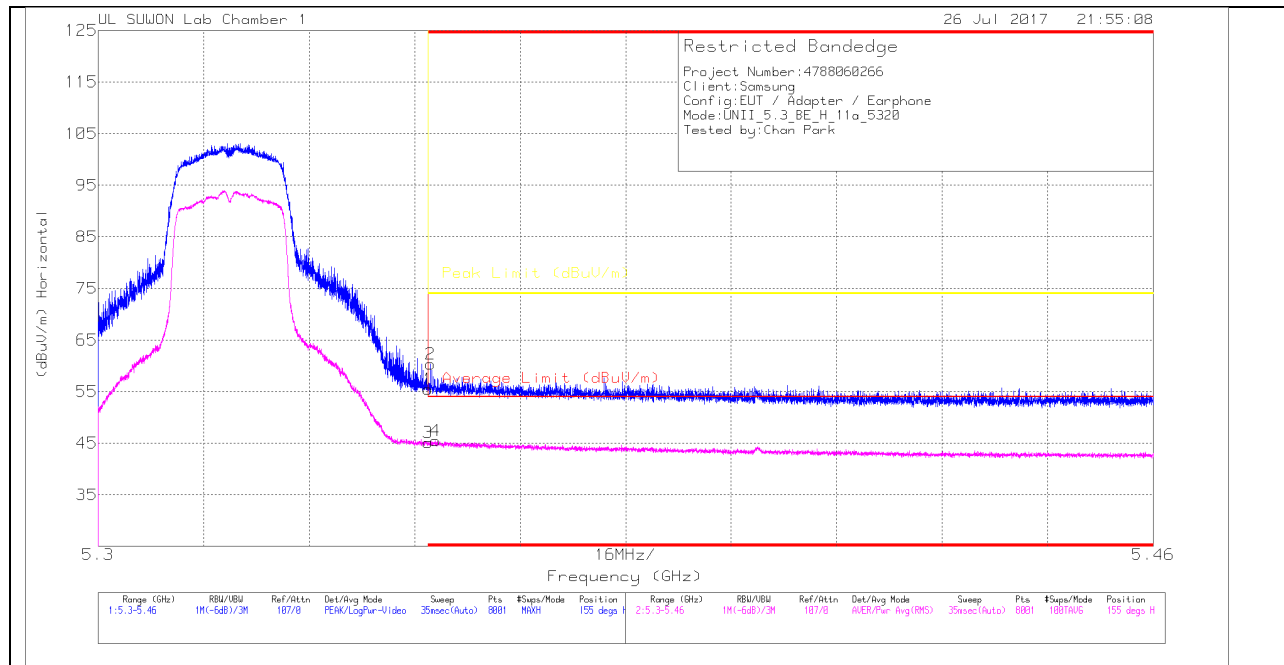
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.2. 5.3 GHz

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

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

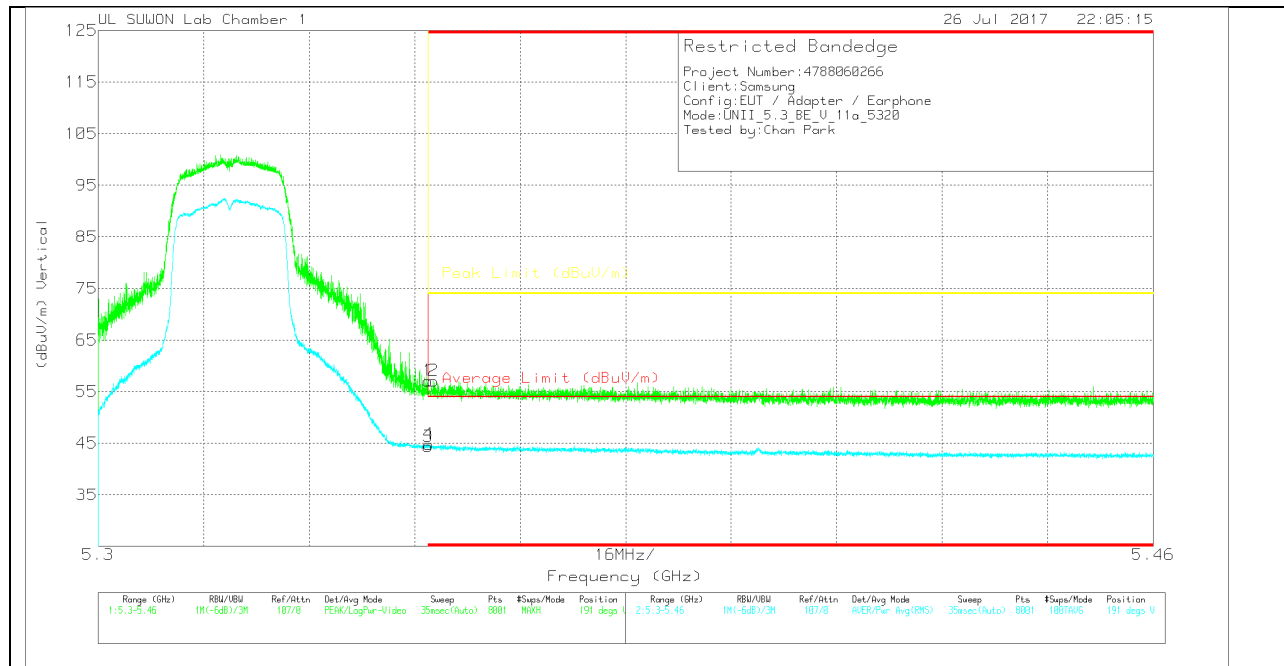
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	44.74	Pk		-23.5	0	55.44	-	-	74	-18.56	155	286	H
2	* 5.35	49.55	Pk		-23.4	0	60.35	-	-	74	-13.65	155	286	H
3	* 5.35	34.38	RMS		-23.8	.32	45.1	54	-8.9	-	-	155	286	H
4	* 5.351	34.75	RMS		-23.8	.32	45.47	54	-8.53	-	-	155	286	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	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	46.41	Pk		-23.5	0	57.11	-	-	74	-16.89	191	279	V
2	* 5.351	46.31	Pk		-23.4	0	57.11	-	-	74	-16.89	191	279	V
3	* 5.35	33.66	RMS		-23.8	.32	44.38	54	-9.62	-	-	191	279	V
4	* 5.35	34.1	RMS		-23.8	.32	44.82	54	-9.18	-	-	191	279	V

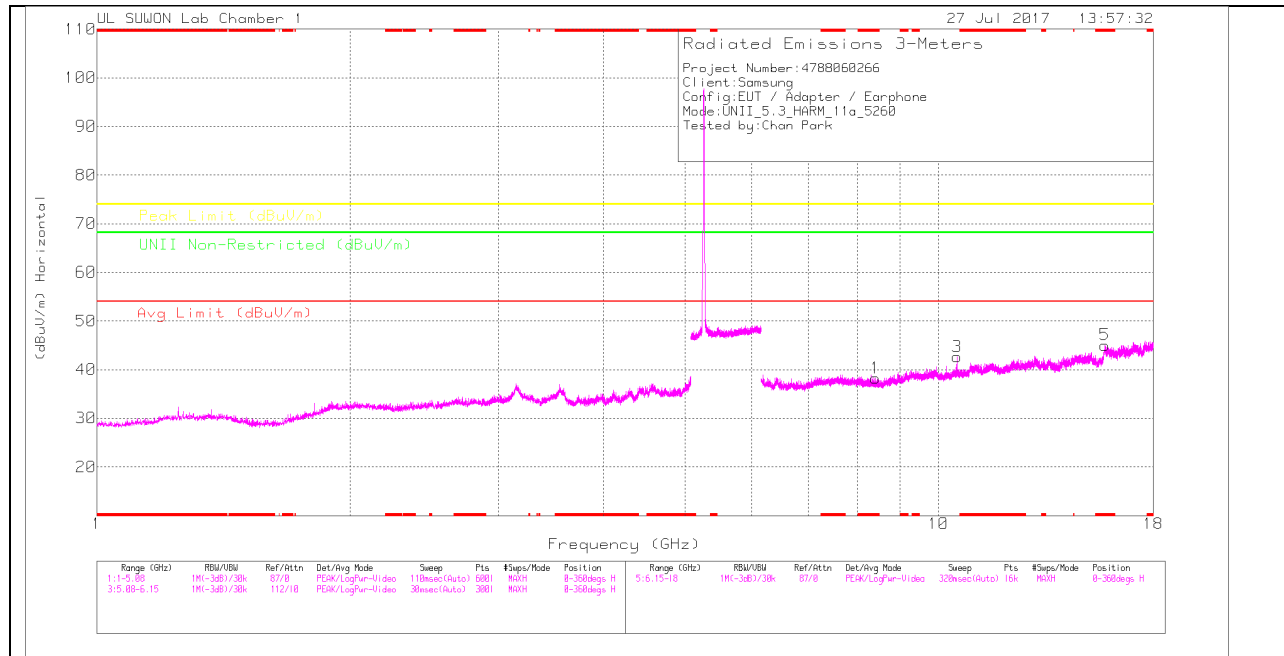
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

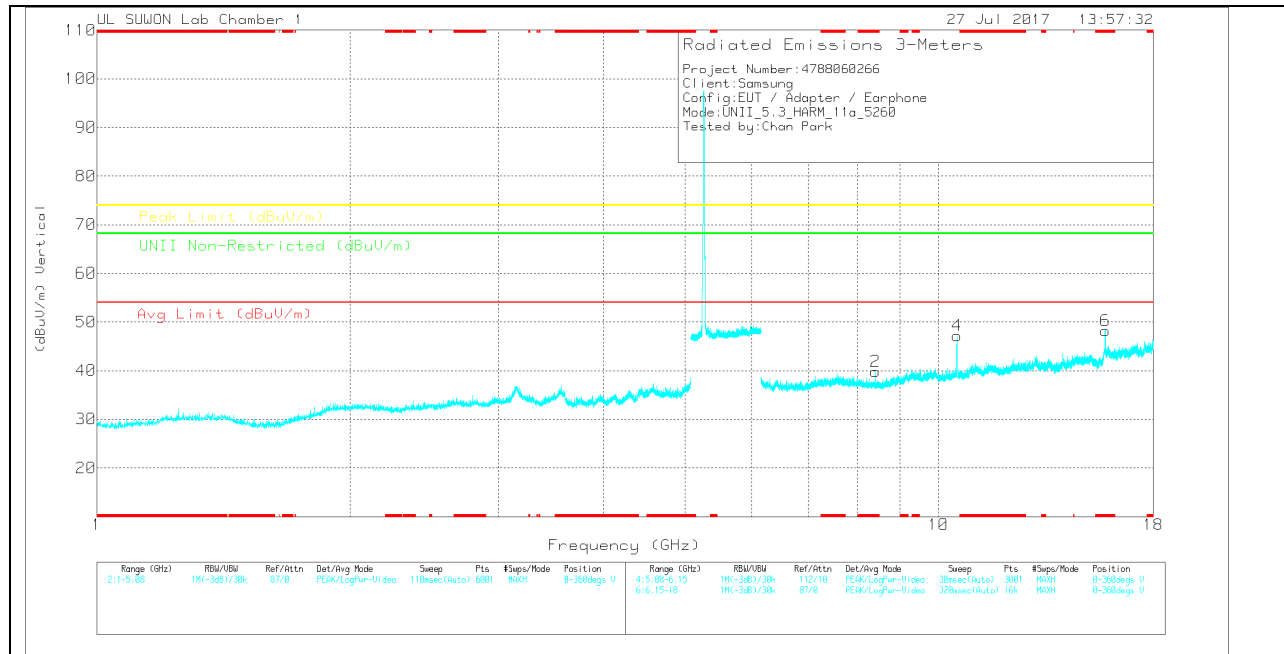
RMS - RMS detection

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	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 8.415	32.52	PK	35.7	-30	0	38.22	-	-	74	-35.78	-	-	0-360	250	H
3	10.519	33.44	PK	37.5	-28.3	0	42.64	-	-	-	-	68.2	-25.56	0-360	250	H
5	* 15.766	21.65	PK	40	-16.6	0	45.05	-	-	74	-28.95	-	-	0-360	150	H
2	* 8.415	34.14	PK	35.7	-30	0	39.84	-	-	74	-34.16	-	-	0-360	250	V
4	10.52	38.01	PK	37.5	-28.3	0	47.21	-	-	-	-	68.2	-20.99	0-360	250	V
6	* 15.78	24.95	PK	40.1	-16.8	0	48.25	-	-	74	-25.75	-	-	0-360	250	V

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

PK – Peak detector

Radiated Emissions

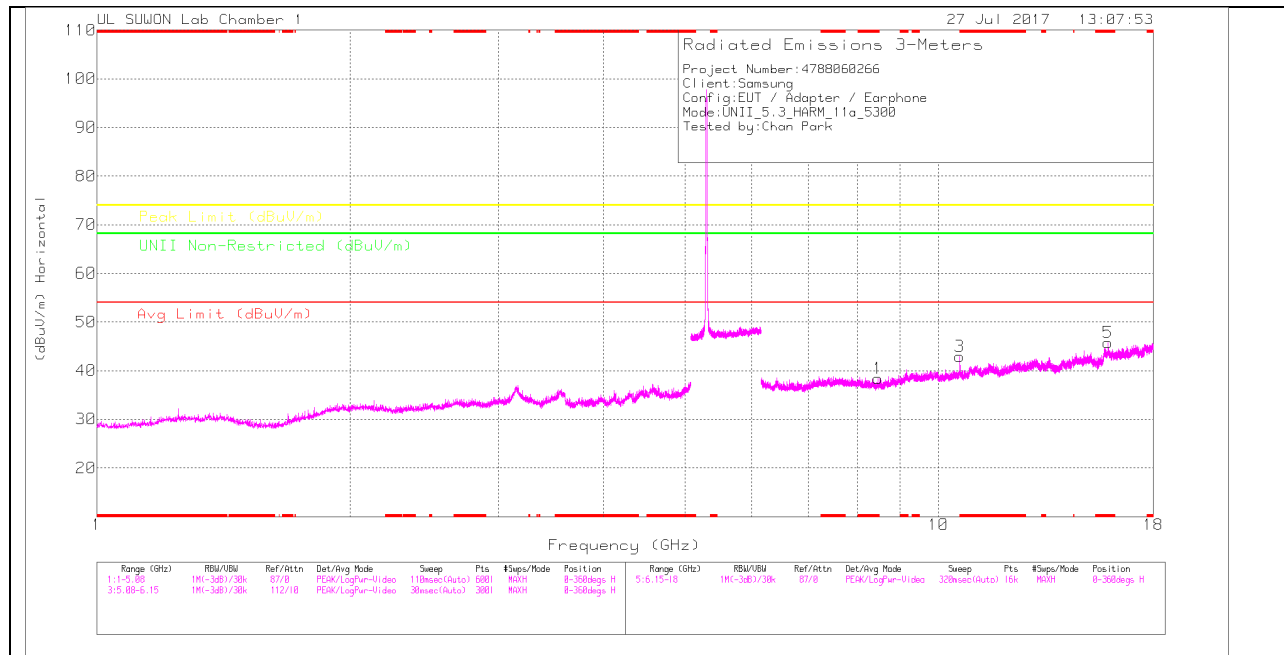
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
10.518	45.11	PK-U	37.5	-28.3	0	54.31	-	-	-	-	68.2	-13.89	156	128	H
* 8.416	43.26	PK-U	35.7	-30.1	0	48.86	-	-	74	-25.14	-	-	215	385	V
* 8.416	32.95	ADR	35.7	-30.1	0	38.55	54	-15.45	-	-	-	-	215	385	V
10.521	48.19	PK-U	37.5	-28.3	0	57.39	-	-	-	-	68.2	-10.81	192	239	V
* 15.787	38.03	PK-U	40.1	-16.8	0	61.33	-	-	74	-12.67	-	-	328	273	V
* 15.78	24.51	ADR	40.1	-16.8	.32	48.13	54	-5.87	-	-	-	-	328	273	V

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

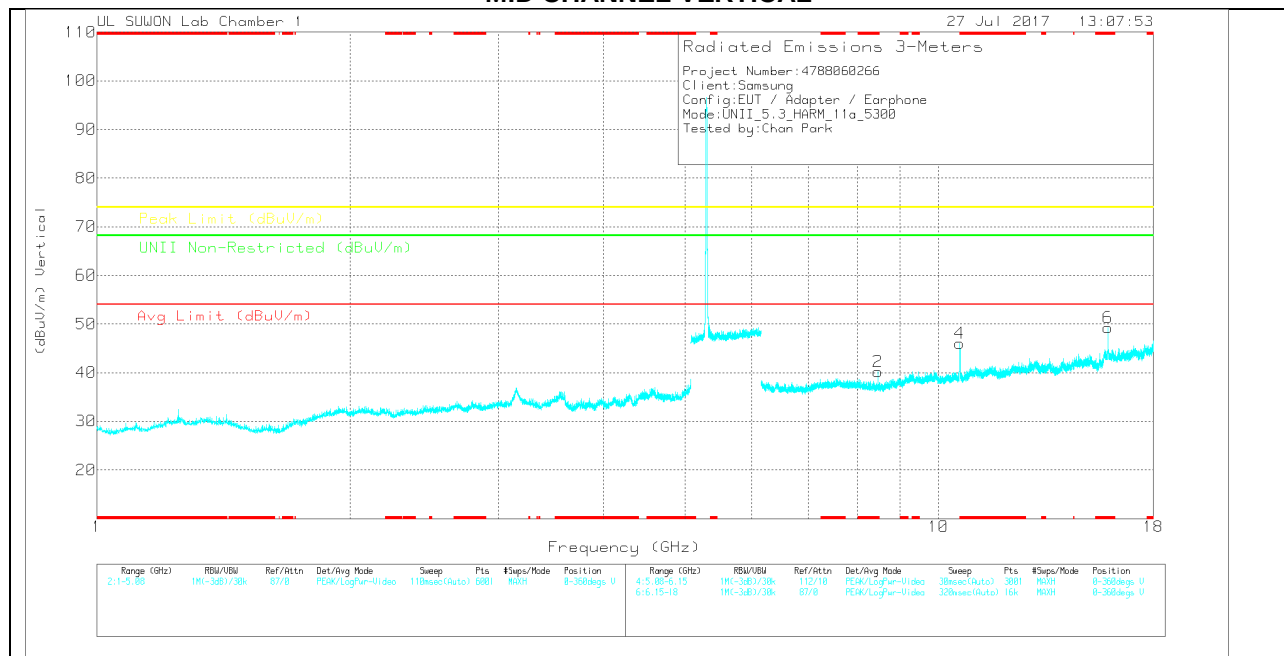
PK-U - U-NII: Maximum Peak

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	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 8.48	32.44	PK	35.8	-29.8	0	38.44	-	-	74	-35.56	-	-	0-360	250	H
3	* 10.601	33.26	PK	37.6	-27.9	0	42.96	-	-	74	-31.04	-	-	0-360	250	H
5	* 15.9	24.61	PK	40.3	-19.2	0	45.71	-	-	74	-28.29	-	-	0-360	250	H
2	* 8.48	34.19	PK	35.8	-29.8	0	40.19	-	-	74	-33.81	-	-	0-360	250	V
4	* 10.604	36.22	PK	37.6	-27.8	0	46.02	-	-	74	-27.98	-	-	0-360	250	V
6	* 15.898	28.28	PK	40.3	-19.3	0	49.28	-	-	74	-24.72	-	-	0-360	250	V

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

PK – Peak detector

Radiated Emissions

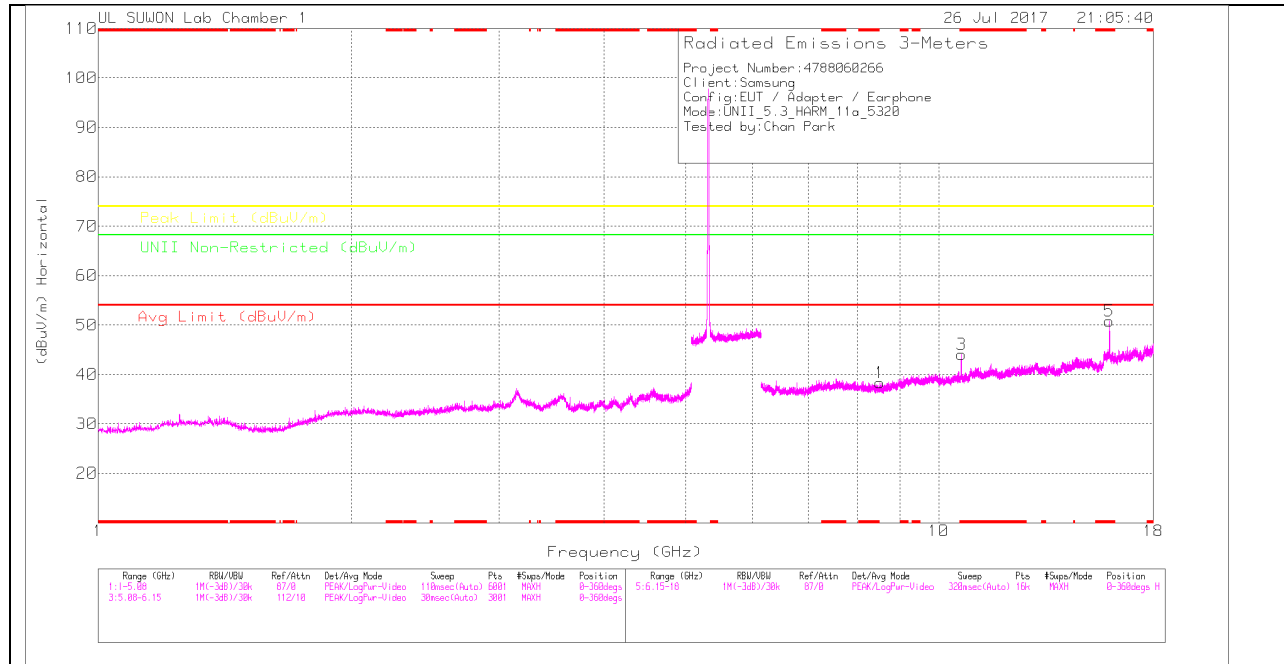
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 10.603	42.94	PK-U	37.6	-27.9	0	52.64	-	-	74	-21.36	-	-	152	354	H
* 10.602	30.27	ADR	37.6	-27.8	.32	40.39	54	-13.61	-	-	-	-	152	354	H
* 8.479	42.98	PK-U	35.8	-29.8	0	48.98	-	-	74	-25.02	-	-	231	242	V
* 8.48	32.29	ADR	35.8	-29.8	0	38.29	54	-15.71	-	-	-	-	231	242	V
* 10.603	46.97	PK-U	37.6	-27.9	0	56.67	-	-	74	-17.33	-	-	194	249	V
* 10.602	34.98	ADR	37.6	-27.8	.32	45.1	54	-8.9	-	-	-	-	194	249	V
* 15.906	41.98	PK-U	40.3	-19.3	0	62.98	-	-	74	-11.02	-	-	329	277	V
* 15.903	27.18	ADR	40.3	-19.2	.32	48.6	54	-5.4	-	-	-	-	329	277	V

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

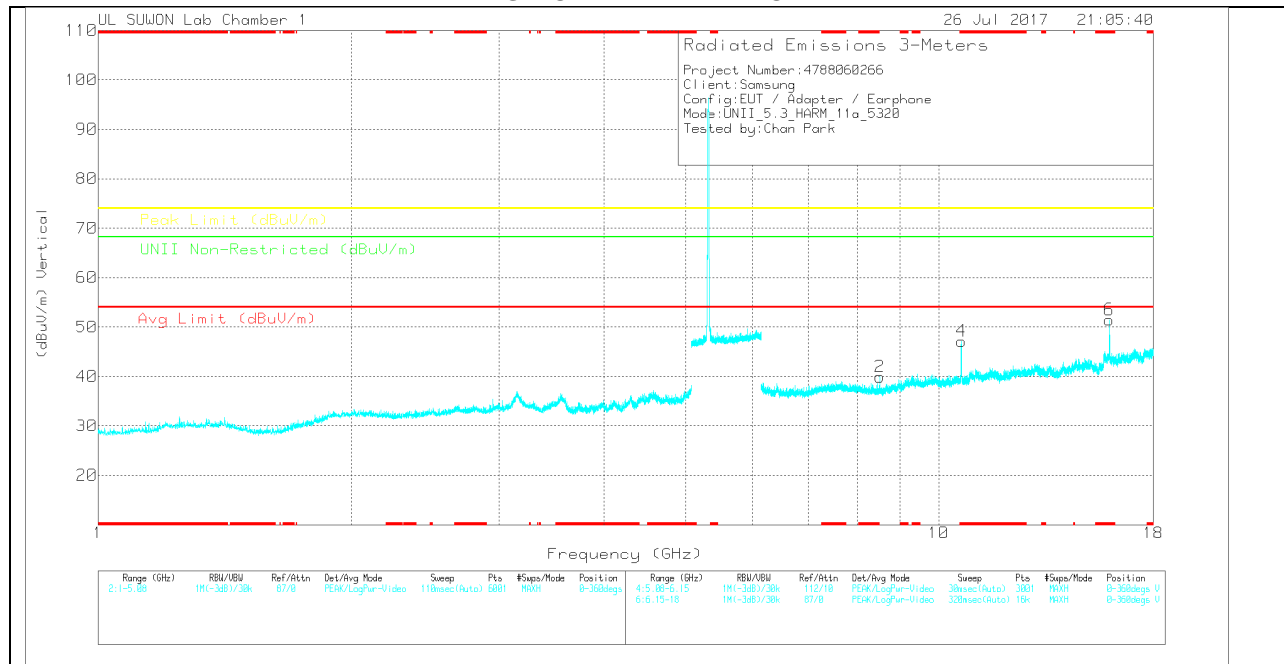
PK-U - U-NII: Maximum Peak

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	20170531_3117_0016 8717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	8.512	32.13	PK	35.8	-29.6	0	38.33	-	-	-	-	68.2	-29.87	0-360	250	H
3	* 10.64	34.96	PK	37.7	-28.6	0	44.06	-	-	74	-29.94	-	-	0-360	250	H
5	* 15.957	30.3	PK	40.4	-19.9	0	50.8	-	-	74	-23.2	-	-	0-360	250	H
2	8.512	33.74	PK	35.8	-29.6	0	39.94	-	-	-	-	68.2	-28.26	0-360	250	V
4	* 10.64	38.05	PK	37.7	-28.6	0	47.15	-	-	74	-26.85	-	-	0-360	250	V
6	* 15.962	30.96	PK	40.4	-19.9	0	51.46	-	-	74	-22.54	-	-	0-360	250	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_001687 17	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 10.633	45.13	PK-U	37.7	-28.5	0	54.33	-	-	74	-19.67	-	-	156	254	H
* 10.641	33.06	ADR	37.7	-28.6	.32	42.48	54	-11.52	-	-	-	-	156	254	H
* 15.964	41.57	PK-U	40.4	-19.9	0	62.07	-	-	74	-11.93	-	-	162	114	H
* 15.963	26.72	ADR	40.4	-19.9	.32	47.54	54	-6.46	-	-	-	-	162	114	H
* 10.644	50.11	PK-U	37.7	-28.6	0	59.21	-	-	74	-14.79	-	-	191	226	V
* 10.64	38.03	ADR	37.7	-28.6	.32	47.45	54	-6.55	-	-	-	-	191	226	V
* 15.963	39.93	PK-U	40.4	-19.9	0	60.43	-	-	74	-13.57	-	-	166	358	V
* 15.962	25.87	ADR	40.4	-19.9	.32	46.69	54	-7.31	-	-	-	-	166	358	V

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

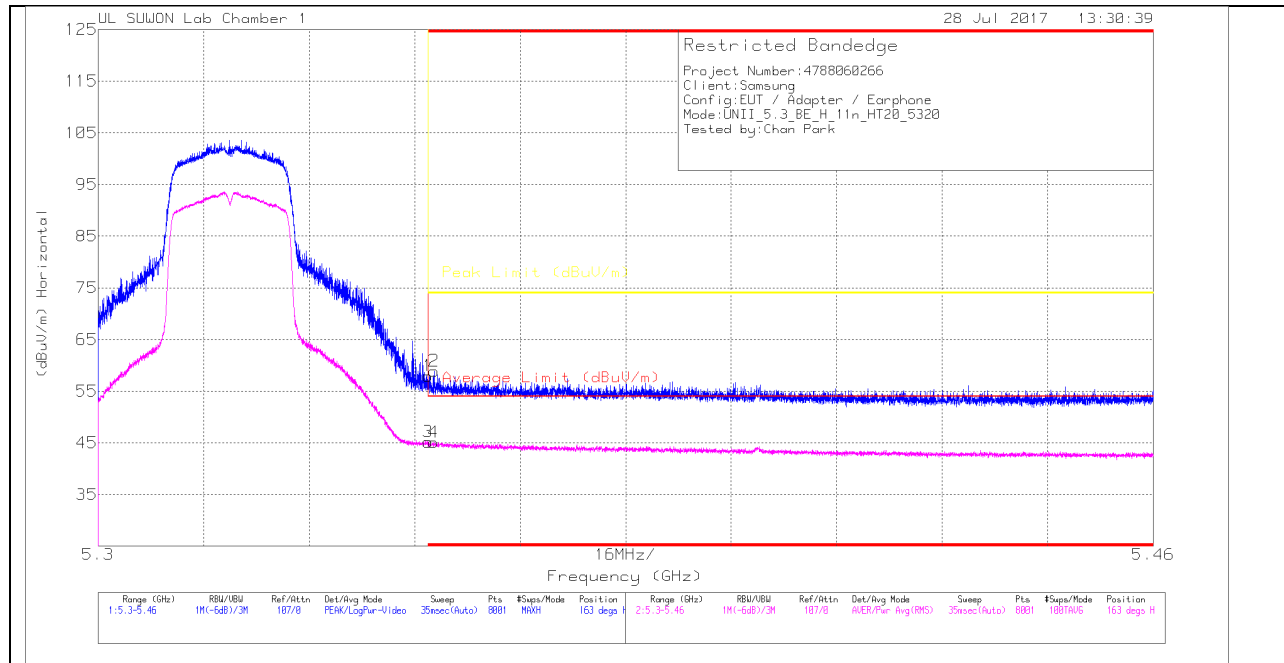
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.2.2. TX ABOVE 1GHz 802.11n HT20 MODE IN THE 5.3GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

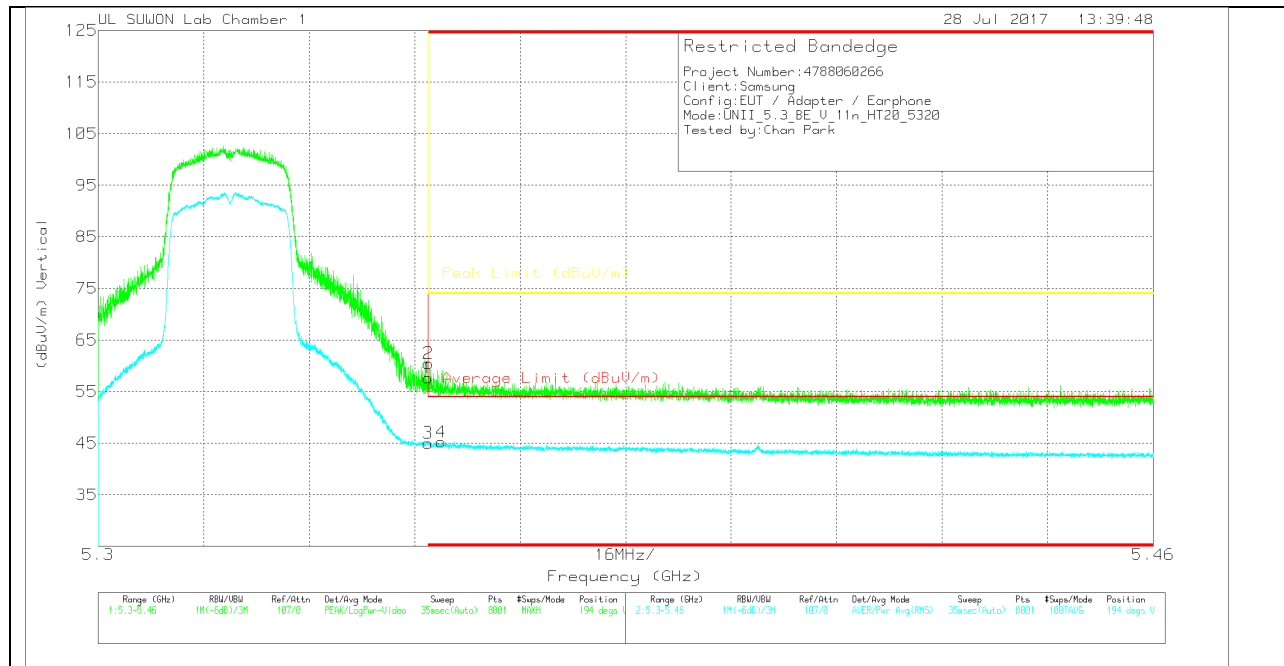
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	47.26	Pk		-23.5	0	57.96	-	-	74	-16.04	163	270	H
2	* 5.351	48.2	Pk		-23.5	0	58.9	-	-	74	-15.1	163	270	H
3	* 5.35	34.45	RMS		-23.8	.35	45.2	54	-8.8	-	-	163	270	H
4	* 5.351	34.36	RMS		-23.8	.35	45.11	54	-8.89	-	-	163	270	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	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	46.93	Pk	34.2	-23.5	0	57.63	-	-	74	-16.37	194	252	V
2	* 5.35	49.68	Pk	34.2	-23.4	0	60.48	-	-	74	-13.52	194	252	V
3	* 5.35	34.29	RMS	34.2	-23.8	.35	45.04	54	-8.96	-	-	194	252	V
4	* 5.352	34.49	RMS	34.2	-23.8	.35	45.24	54	-8.76	-	-	194	252	V

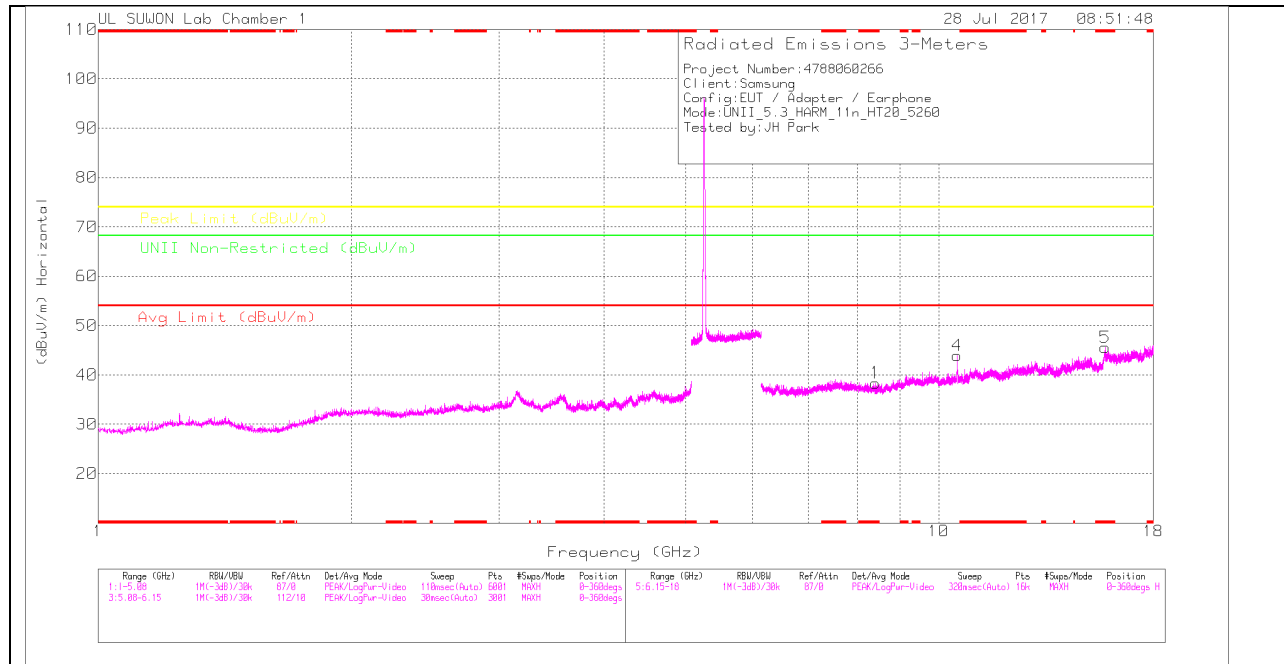
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

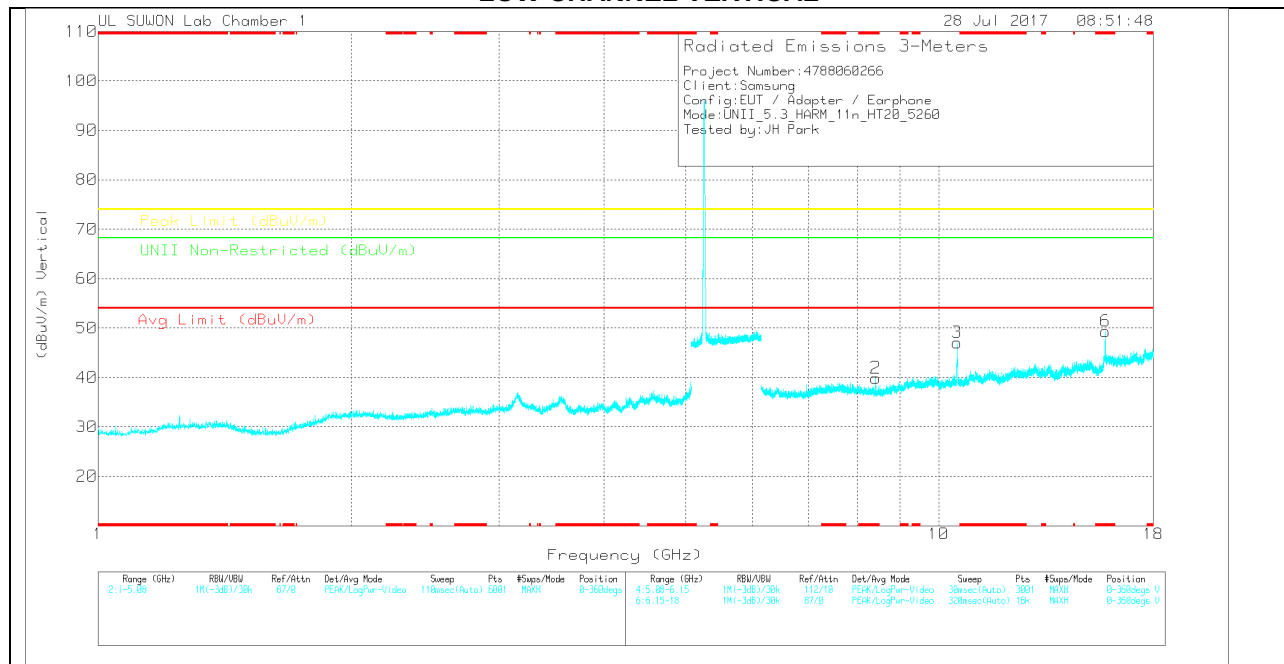
RMS - RMS detection

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	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 8.415	32.65	PK	35.7	-30	0	38.35	-	-	74	-35.65	-	-	0-360	250	H
4	10.521	34.71	PK	37.5	-28.3	0	43.91	-	-	-	-	68.2	-24.29	0-360	250	H
5	* 15.776	22.25	PK	40.1	-16.8	0	45.55	-	-	74	-28.45	-	-	0-360	250	H
2	* 8.416	34.27	PK	35.7	-30.1	0	39.87	-	-	74	-34.13	-	-	0-360	250	V
3	10.519	37.75	PK	37.5	-28.2	0	47.05	-	-	-	-	68.2	-21.15	0-360	250	V
6	* 15.78	26.04	PK	40.1	-16.8	0	49.34	-	-	74	-24.66	-	-	0-360	250	V

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

PK – Peak Detector

Radiated Emissions

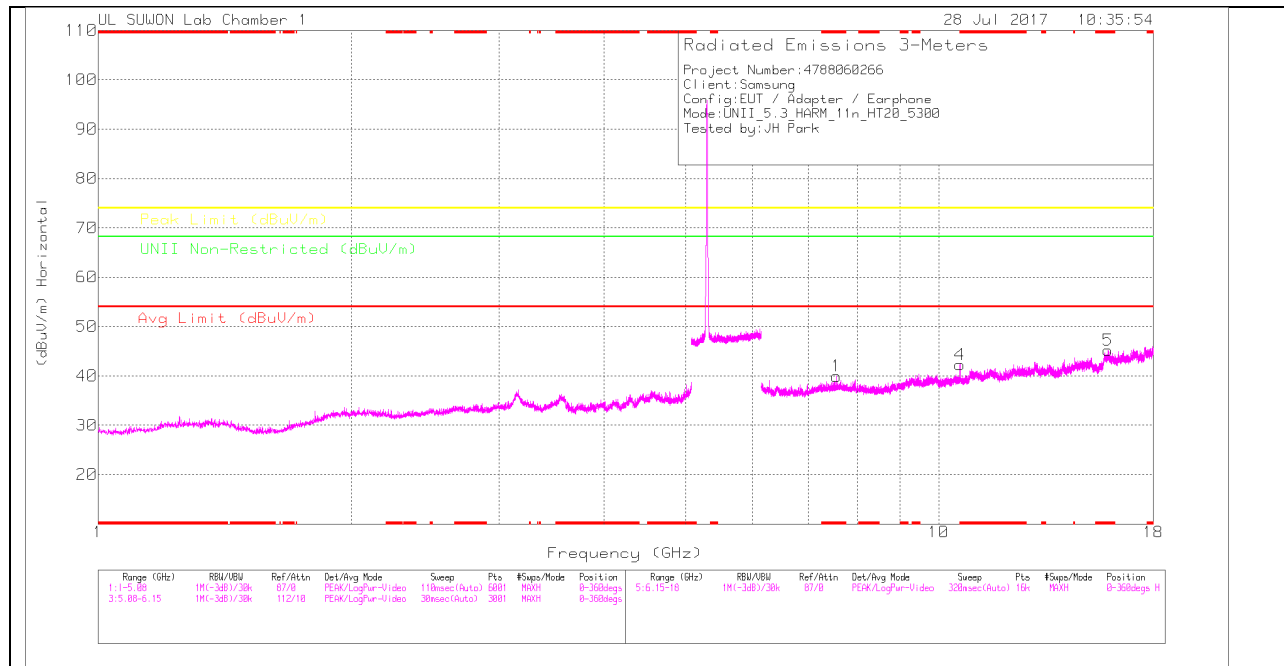
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 8.416	43.18	PK-U	35.7	-30.1	0	48.78	-	-	74	-25.22	-	-	165	258	H
* 8.416	31.84	ADR	35.7	-30.1	0	37.44	54	-16.56	-	-	-	-	165	258	H
* 8.416	43.52	PK-U	35.7	-30.1	0	49.12	-	-	74	-24.88	-	-	209	241	V
* 8.416	32.82	ADR	35.7	-30.1	0	38.42	54	-15.58	-	-	-	-	209	241	V
10.517	47.19	PK-U	37.5	-28.3	0	56.39	-	-	-	-	68.2	-11.81	122	293	V
10.516	43.77	PK-U	37.5	-28.4	0	52.87	-	-	-	-	68.2	-15.33	167	349	H
* 15.784	33.48	PK-U	40.1	-16.8	0	56.78	-	-	74	-17.22	-	-	173	135	H
* 15.781	20.45	ADR	40.1	-16.8	.35	44.1	54	-9.9	-	-	-	-	173	135	H
* 15.787	38.21	PK-U	40.1	-16.9	0	61.41	-	-	74	-12.59	-	-	324	337	V
* 15.781	22.52	ADR	40.1	-16.8	.35	46.17	54	-7.83	-	-	-	-	324	337	V

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

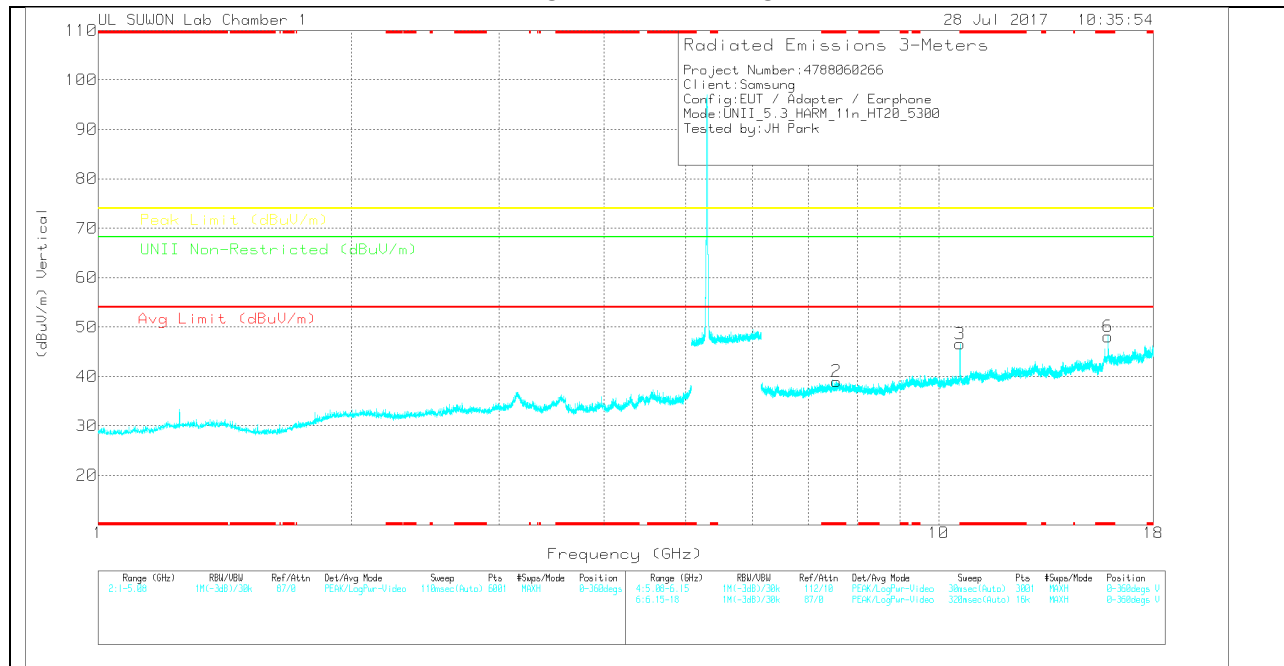
PK-U - U-NII: Maximum Peak

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	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 7.562	34.53	PK	35.8	-30.4	0	39.93	-	-	74	-34.07	-	-	0-360	150	H
4	10.599	32.56	PK	37.6	-27.9	0	42.26	-	-	-	-	68.2	-25.94	0-360	250	H
5	* 15.898	24.06	PK	40.3	-19.2	0	45.16	-	-	74	-28.84	-	-	0-360	250	H
2	* 7.559	33.7	PK	35.8	-30.5	0	39	-	-	74	-35	-	-	0-360	250	V
3	* 10.602	36.77	PK	37.6	-27.8	0	46.57	-	-	74	-27.43	-	-	0-360	250	V
6	* 15.901	26.97	PK	40.3	-19.2	0	48.07	-	-	74	-25.93	-	-	0-360	250	V

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

PK – Peak Detector

Radiated Emissions

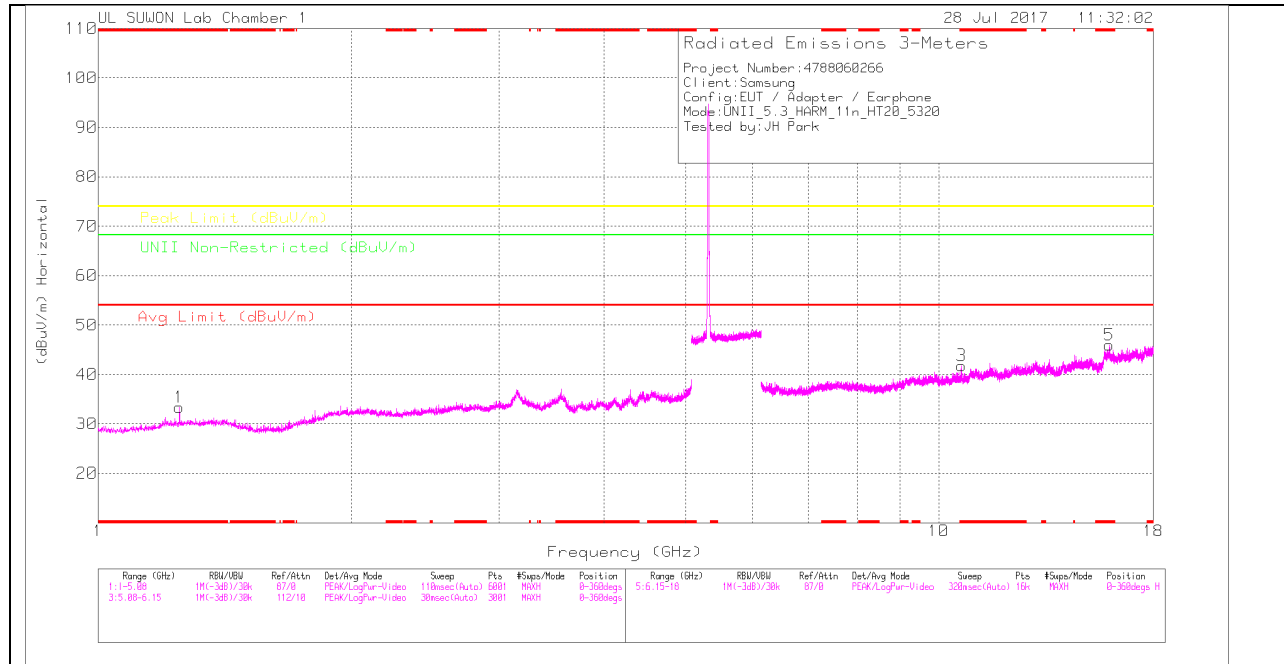
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 10.6	43.42	PK-U	37.6	-27.9	0	53.12	-	-	74	-20.88	-	-	168	317	H
* 10.602	30.8	ADR	37.6	-27.8	.35	40.95	54	-13.05	-	-	-	-	168	317	H
* 10.602	47.74	PK-U	37.6	-27.9	0	57.44	-	-	74	-16.56	-	-	191	225	V
* 10.601	34.47	ADR	37.6	-27.9	.35	44.52	54	-9.48	-	-	-	-	191	225	V
* 15.904	37.85	PK-U	40.3	-19.2	0	58.95	-	-	74	-15.05	-	-	346	377	V
* 15.9	22.66	ADR	40.3	-19.2	.35	44.11	54	-9.89	-	-	-	-	346	377	V
* 15.904	36.04	PK-U	40.3	-19.2	0	57.14	-	-	74	-16.86	-	-	166	126	H
* 15.901	23.04	ADR	40.3	-19.2	.35	44.49	54	-9.51	-	-	-	-	166	126	H

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

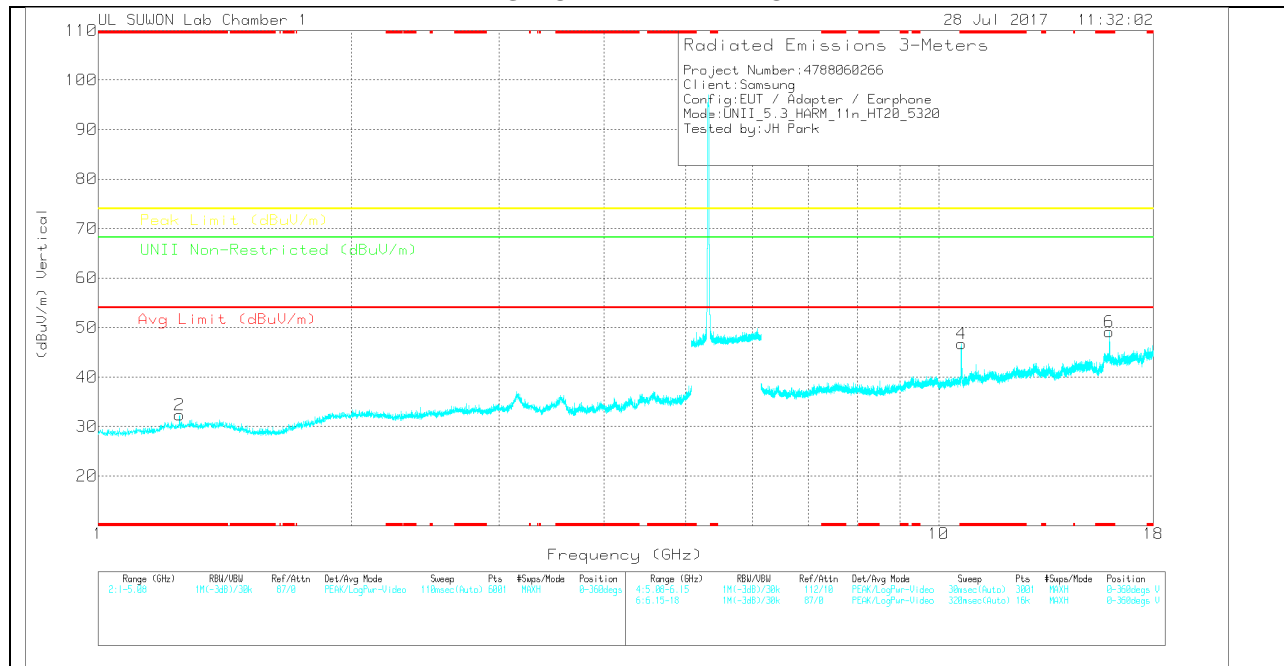
PK-U - U-NII: Maximum Peak

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	20170531_3117_00168717	5Ghz_LP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	43.67	PK	29.3	-39.6	0	33.37	-	-	74	-40.63	-	-	0-360	150	H
2	* 1.25	42.61	PK	29.3	-39.6	0	32.31	-	-	74	-41.69	-	-	0-360	250	V
3	* 10.639	32.68	PK	37.7	-28.6	0	41.78	-	-	74	-32.22	-	-	0-360	250	H
5	* 15.96	25.43	PK	40.4	-19.9	0	45.93	-	-	74	-28.07	-	-	0-360	250	H
4	* 10.641	37.61	PK	37.7	-28.6	0	46.71	-	-	74	-27.29	-	-	0-360	250	V
6	* 15.963	28.65	PK	40.4	-19.9	0	49.15	-	-	74	-24.85	-	-	0-360	250	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	5Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 10.641	45.12	PK-U	37.7	-28.6	0	54.22	-	-	74	-19.78	-	-	154	380	H
* 10.641	32.69	ADR	37.7	-28.6	.35	42.14	54	-11.86	-	-	-	-	154	380	H
* 15.96	43.34	PK-U	40.4	-20	0	63.74	-	-	74	-10.26	-	-	165	116	H
* 15.961	28.9	ADR	40.4	-19.9	.35	49.75	54	-4.25	-	-	-	-	165	116	H
* 10.643	48.11	PK-U	37.7	-28.6	0	57.21	-	-	74	-16.79	-	-	194	232	V
* 10.641	35.67	ADR	37.7	-28.6	.35	45.12	54	-8.88	-	-	-	-	194	232	V
* 15.966	41.63	PK-U	40.4	-20	0	62.03	-	-	74	-11.97	-	-	168	274	V
* 15.963	27.44	ADR	40.4	-19.9	.35	48.29	54	-5.71	-	-	-	-	168	274	V

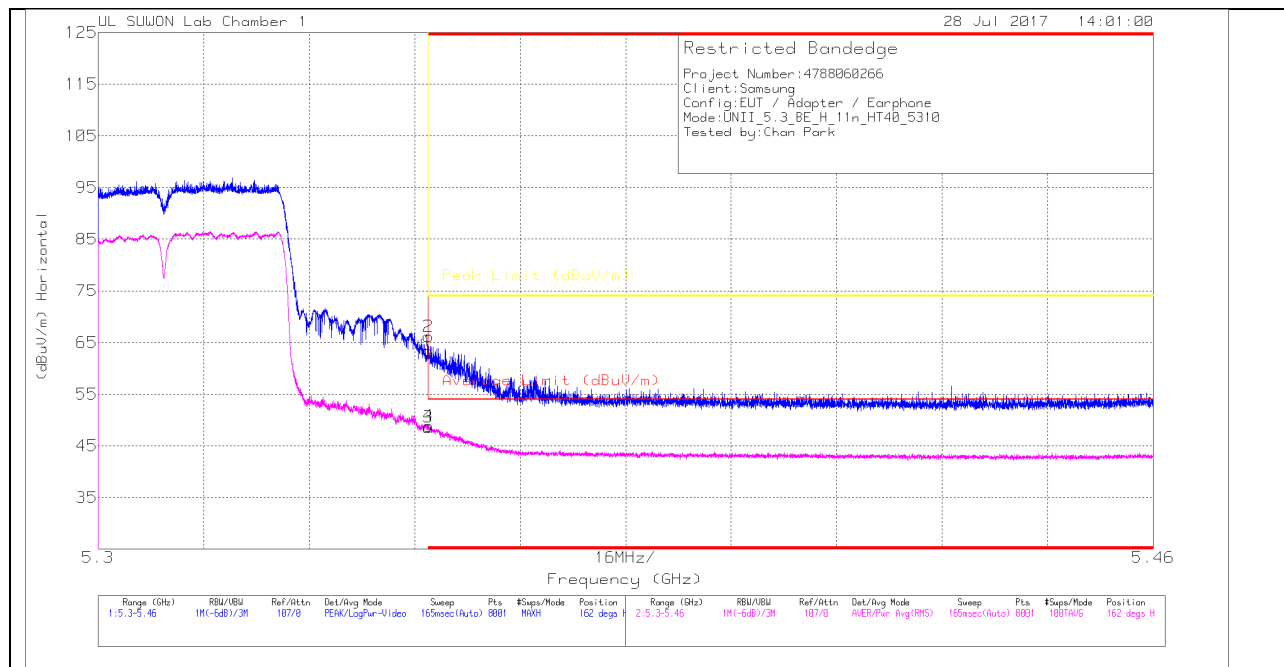
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.2.3. TX ABOVE 1GHz 802.11n HT40 MODE IN THE 5.3GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

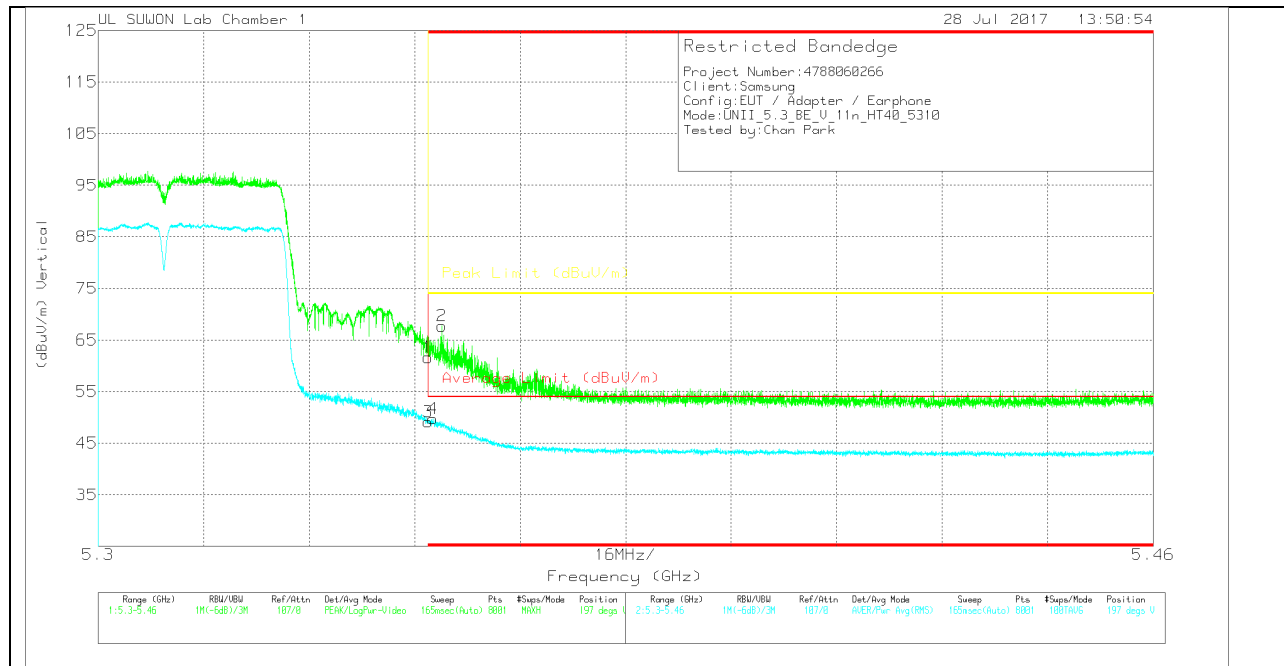
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	52.67	Pk	34.2	-23.5	0	63.37	-	-	74	-10.63	162	269	H
2	* 5.35	55.39	Pk	34.2	-23.4	0	66.19	-	-	74	-7.81	162	269	H
3	* 5.35	37.55	RMS	34.2	-23.8	.67	48.62	54	-5.38	-	-	162	269	H
4	* 5.35	37.79	RMS	34.2	-23.8	.67	48.86	54	-5.14	-	-	162	269	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	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	50.93	Pk	34.2	-23.5	0	61.63	-	-	74	-12.37	197	304	V
2	* 5.352	56.93	Pk	34.2	-23.4	0	67.73	-	-	74	-6.27	197	304	V
3	* 5.35	38.06	RMS	34.2	-23.8	.67	49.13	54	-4.87	-	-	197	304	V
4	* 5.351	38.68	RMS	34.2	-23.8	.67	49.75	54	-4.25	-	-	197	304	V

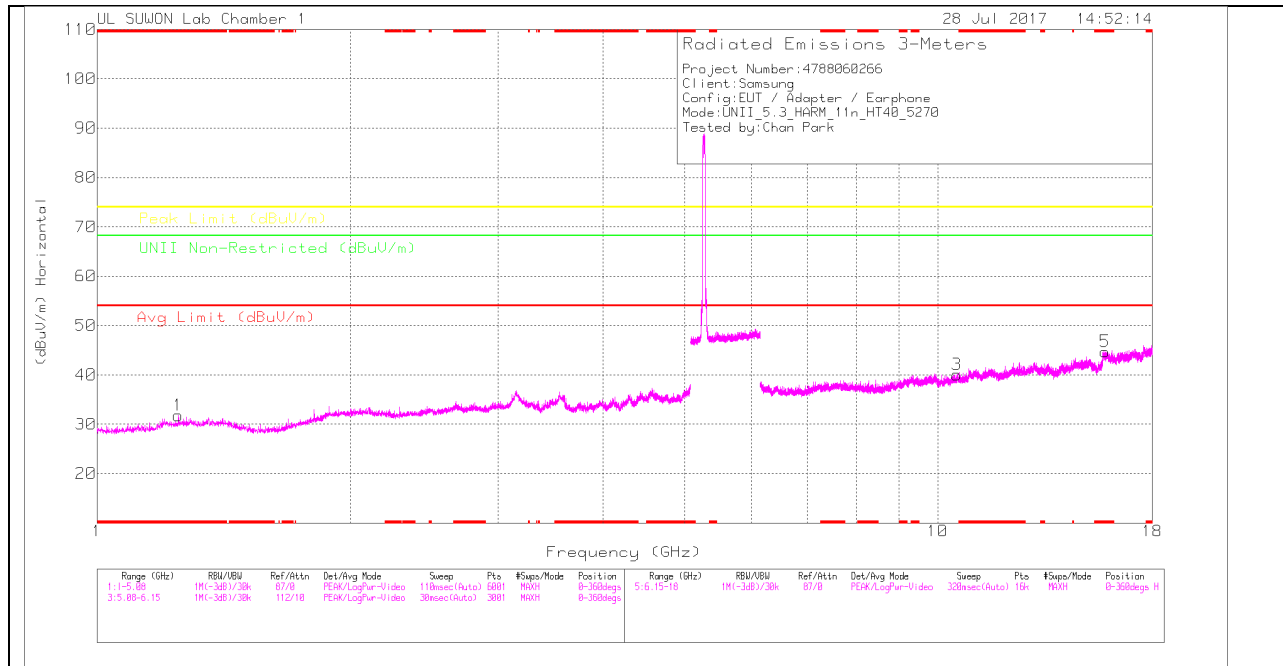
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

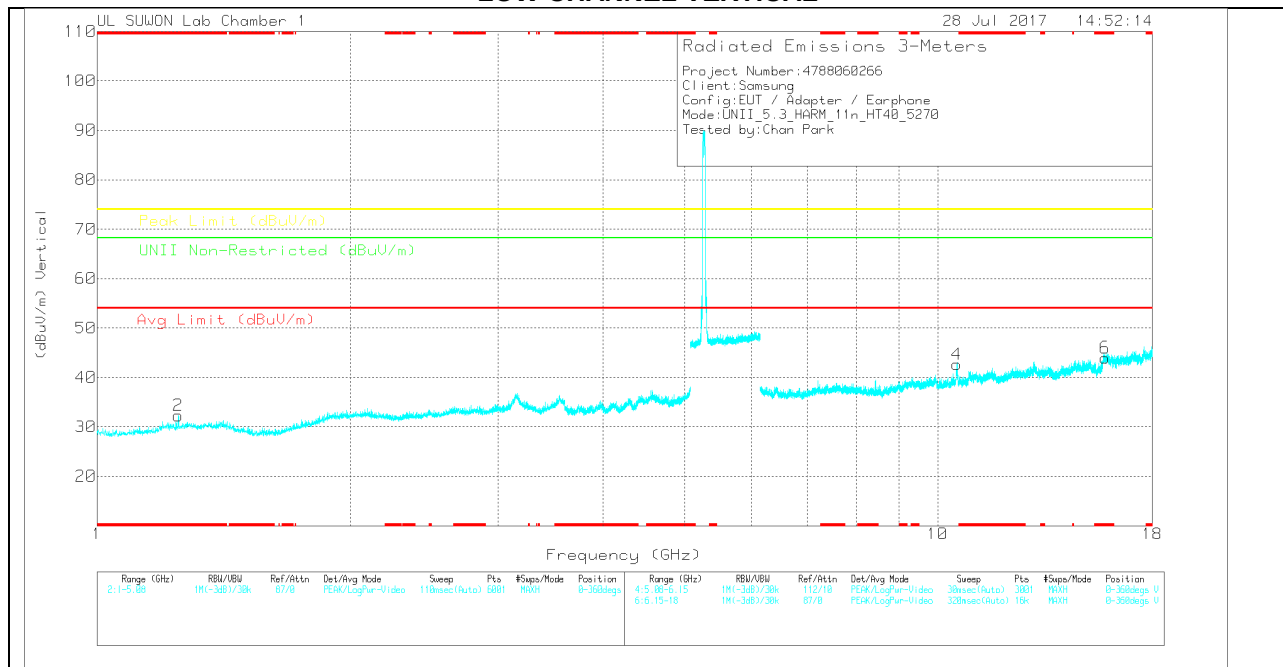
RMS - RMS detection

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	20170531_3117_0016 8717	5Ghz_LP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.09	PK	29.3	-39.6	0	31.79	-	-	74	-42.21	-	-	0-360	250	H
2	* 1.25	42.59	PK	29.3	-39.6	0	32.29	-	-	74	-41.71	-	-	0-360	250	V
3	10.539	30.55	PK	37.6	-28.1	0	40.05	-	-	-	-	68.2	-28.15	0-360	250	H
5	* 15.808	22.11	PK	40.1	-17.5	0	44.71	-	-	74	-29.29	-	-	0-360	250	H
4	10.542	33.26	PK	37.6	-28.2	0	42.66	-	-	-	-	68.2	-25.54	0-360	250	V
6	* 15.812	21.55	PK	40.1	-17.7	0	43.95	-	-	74	-30.05	-	-	0-360	250	V

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

PK – Peak detector

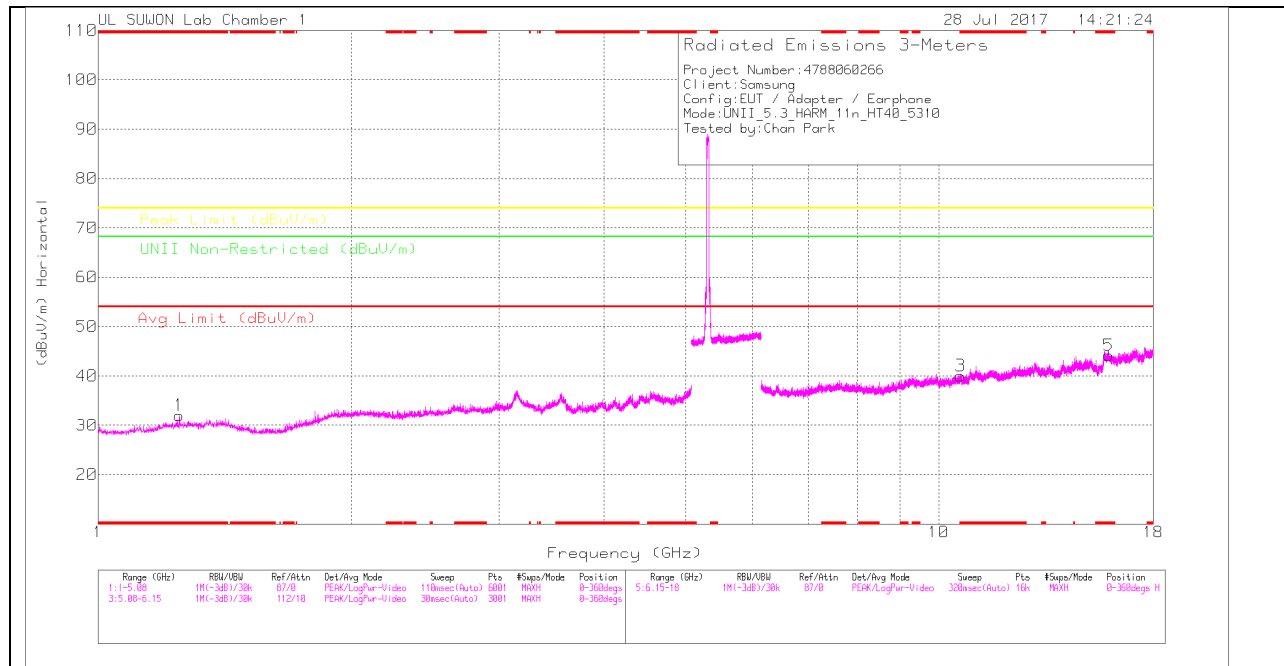
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_0016 8717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
10.539	44.67	PK-U	37.6	-28.1	0	54.17	-	-	-	-	68.2	-14.03	194	228	V

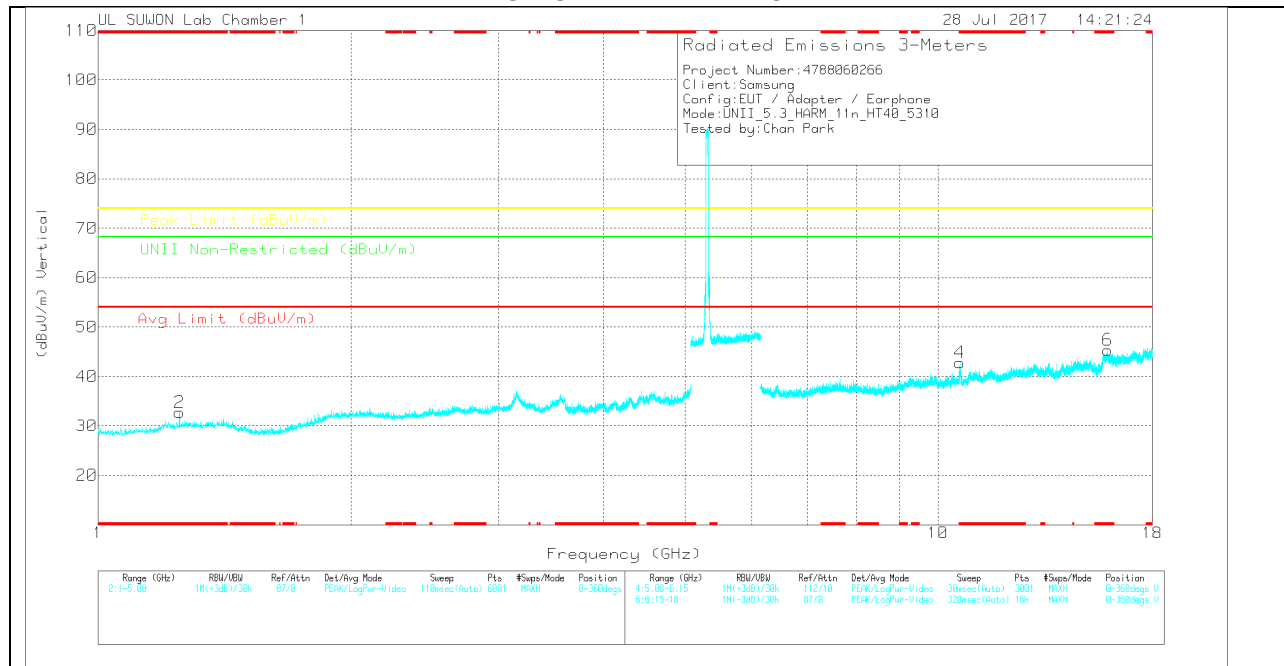
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

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	20170531_3117_00168717	5Ghz_LP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.31	PK	29.3	-39.6	0	32.01	-	-	74	-41.99	-	-	0-360	150	H
2	* 1.25	43.04	PK	29.3	-39.6	0	32.74	-	-	74	-41.26	-	-	0-360	250	V
3	* 10.617	30.62	PK	37.6	-28.2	0	40.02	-	-	74	-33.98	-	-	0-360	250	H
5	* 15.932	23.15	PK	40.4	-19.4	0	44.15	-	-	74	-29.85	-	-	0-360	150	H
4	* 10.619	33.31	PK	37.6	-28.1	0	42.81	-	-	74	-31.19	-	-	0-360	250	V
6	* 15.935	24.34	PK	40.4	-19.4	0	45.34	-	-	74	-28.66	-	-	0-360	250	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 10.62	43.66	PK-U	37.6	-28.2	0	53.06	-	-	74	-20.94	-	-	190	233	V
* 10.621	31.13	ADR	37.6	-28.2	.67	41.2	54	-12.8	-	-	-	-	190	233	V

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

PK-U - U-NII: Maximum Peak

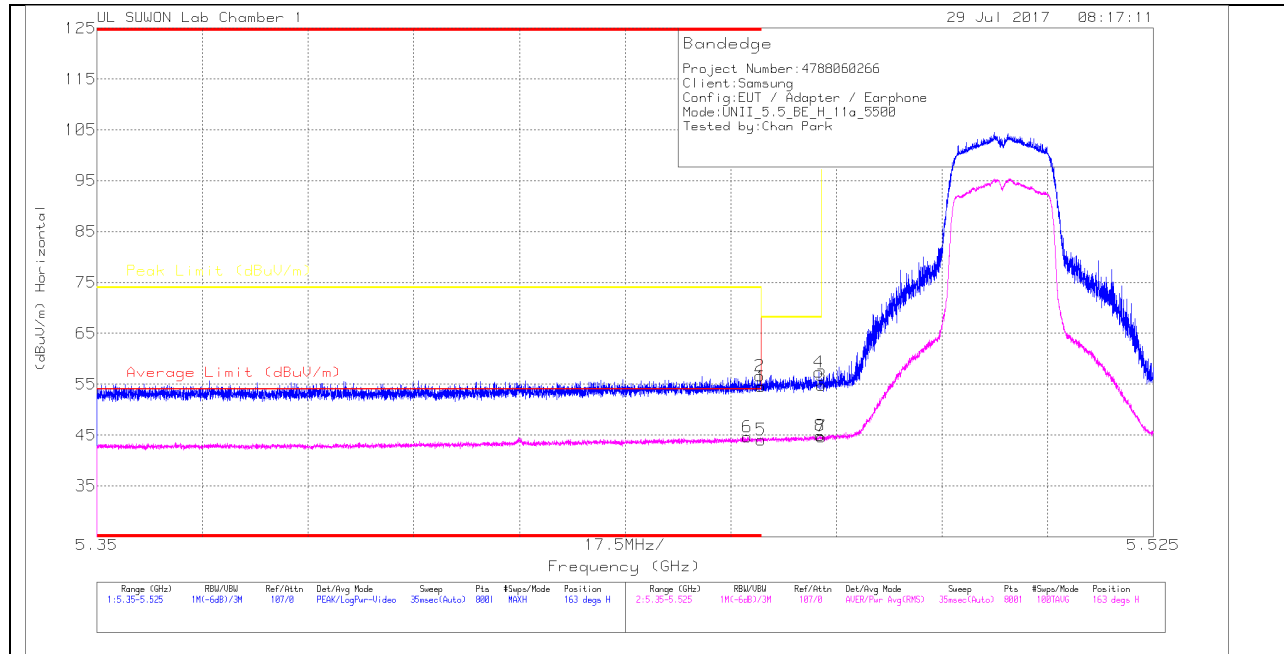
ADR - U-NII AD primary method, RMS average

10.3. 5.5-5.6 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

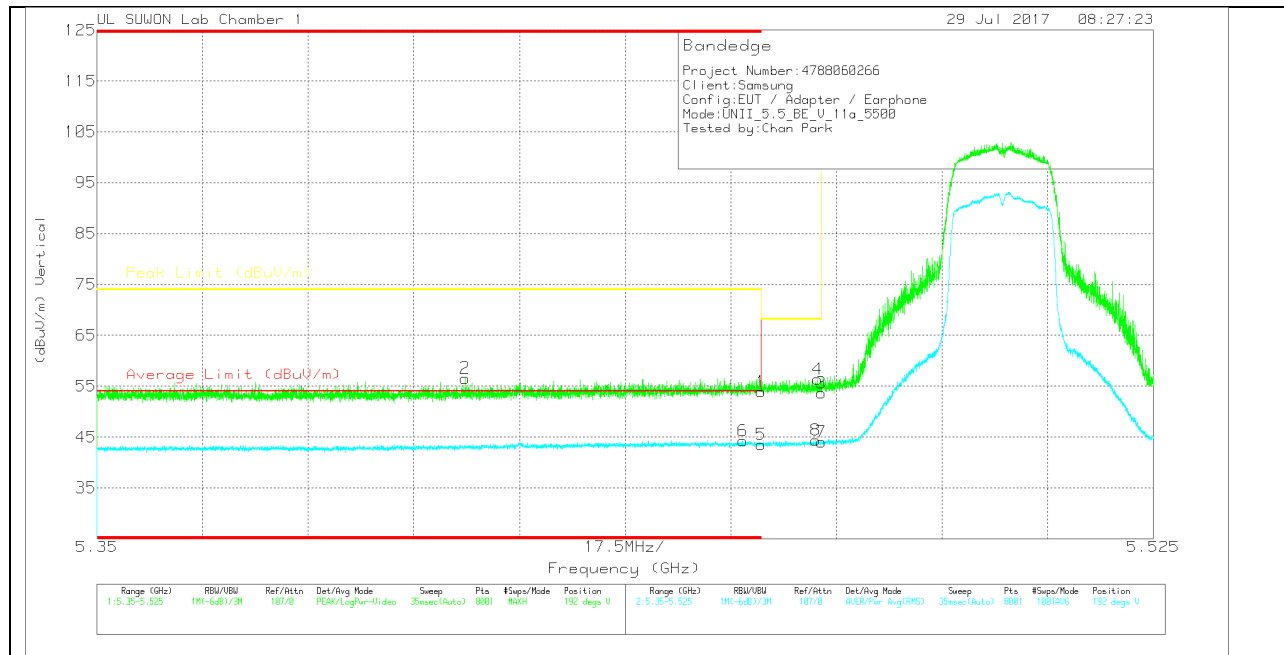
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	43.29	Pk	34.3	-23.1	0	54.49	-	-	74	-19.51	163	101	H
2	* 5.46	45.38	Pk	34.3	-23.1	0	56.58	-	-	74	-17.42	163	101	H
3	5.47	43.53	Pk	34.3	-23.1	0	54.73	-	-	68.2	-13.47	163	101	H
4	5.47	46.23	Pk	34.3	-23.1	0	57.43	-	-	68.2	-10.77	163	101	H
5	* 5.46	33.16	RMS	34.3	-23.7	.32	44.08	54	-9.92	-	-	163	101	H
6	* 5.458	33.69	RMS	34.3	-23.7	.32	44.61	54	-9.39	-	-	163	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	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	42.66	Pk	34.3	-23.1	0	53.86	-	-	74	-20.14	192	271	V
2	* 5.411	45.87	Pk	34.2	-23.5	0	56.57	-	-	74	-17.43	192	271	V
3	5.47	42.44	Pk	34.3	-23.1	0	53.64	-	-	68.2	-14.56	192	271	V
4	5.469	45.21	Pk	34.3	-23.1	0	56.41	-	-	68.2	-11.79	192	271	V
5	* 5.46	32.63	RMS	34.3	-23.7	.32	43.55	54	-10.45	-	-	192	271	V
6	* 5.457	33.35	RMS	34.3	-23.7	.32	44.27	54	-9.73	-	-	192	271	V

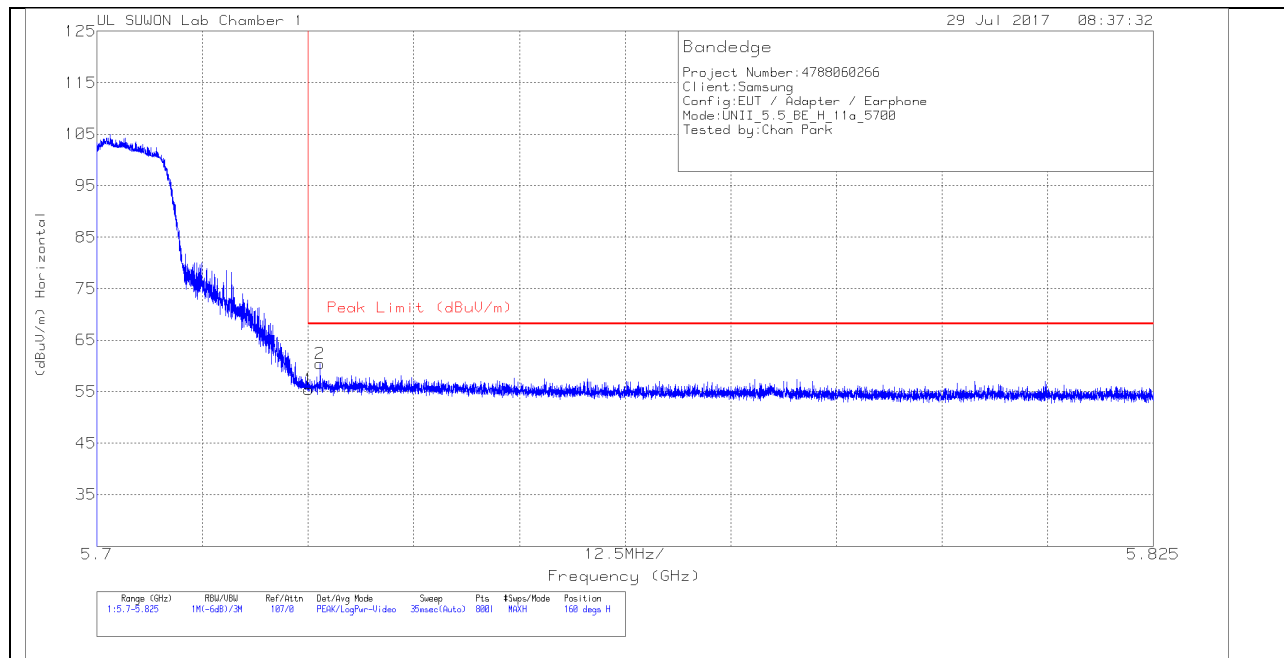
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



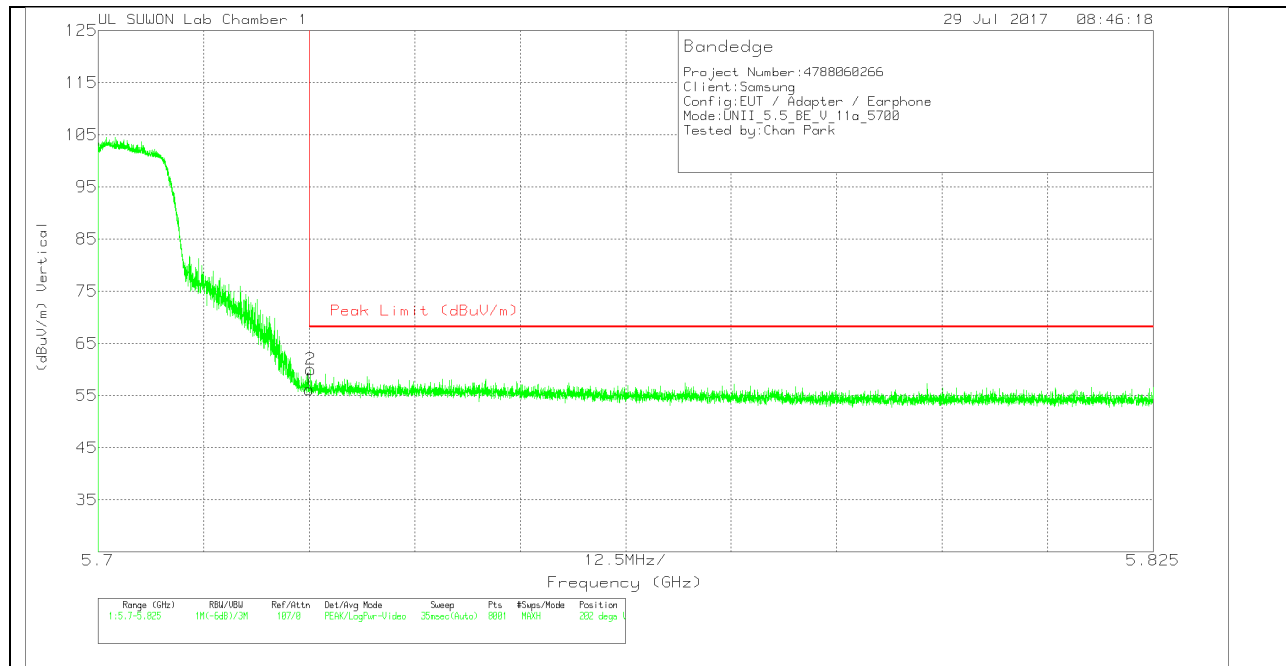
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_0016 8717	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	43.94	Pk	34.4	-22.9	0	55.44	68.2	-12.76	160	100	H
2	5.726	48.84	Pk	34.4	-22.8	0	60.44	68.2	-7.76	160	100	H

Pk - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

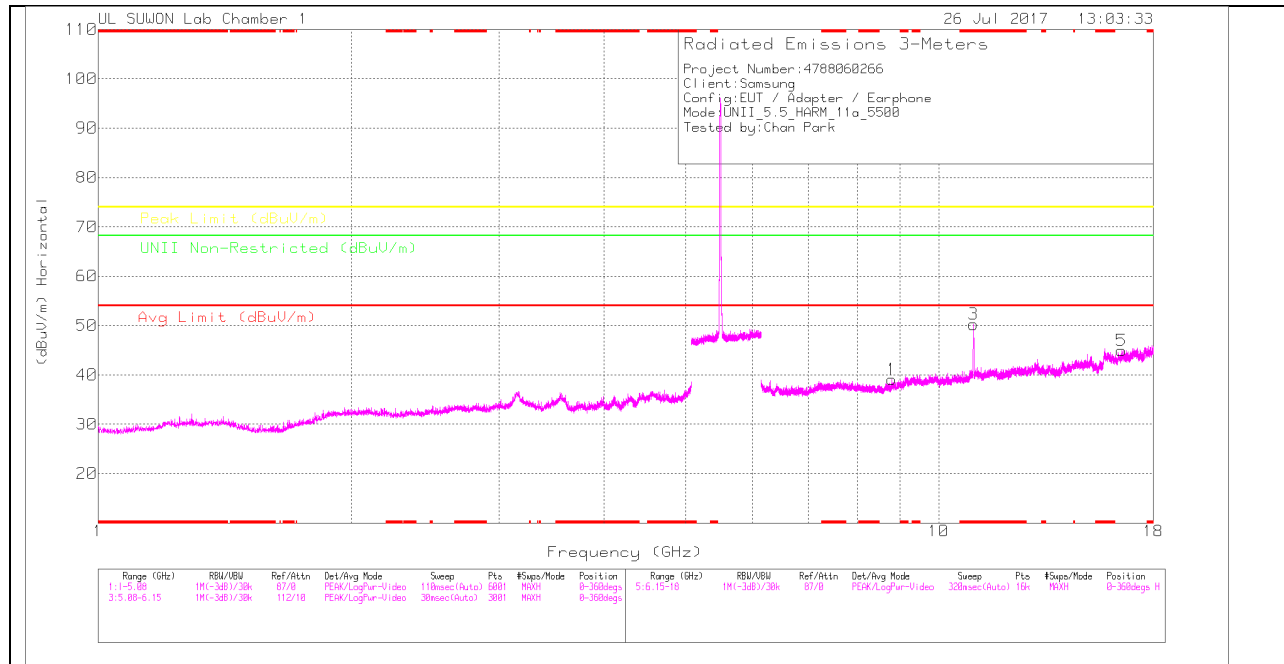
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_0016 8717	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	44.67	Pk	34.4	-22.9	0	56.17	68.2	-12.03	202	291	V
2	5.725	48.52	Pk	34.4	-22.9	0	60.02	68.2	-8.18	202	291	V

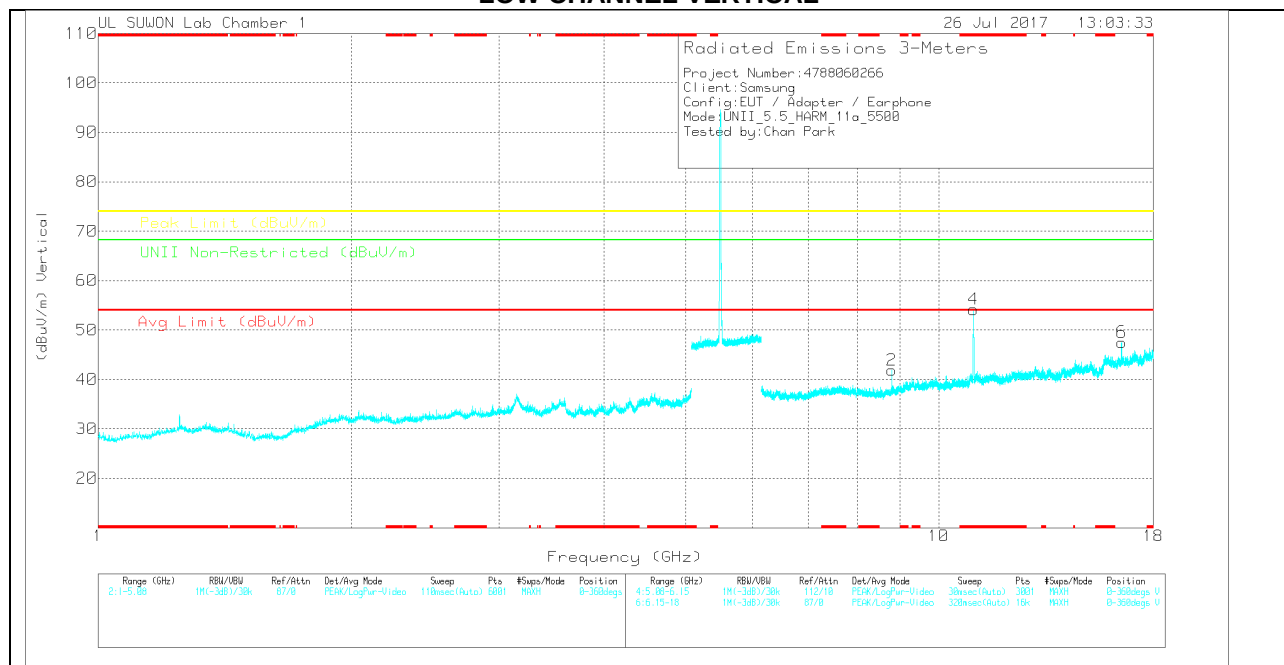
Pk - Peak detector

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	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	8.8	32.58	PK	35.9	-29.4	0	39.08	-	-	-	-	68.2	-29.12	0-360	250	H
3	* 10.999	40.25	PK	38	-28	0	50.25	-	-	74	-23.75	-	-	0-360	250	H
5	16.499	27.81	PK	40.7	-23.6	0	44.91	-	-	-	-	68.2	-23.29	0-360	150	H
2	8.8	35.4	PK	35.9	-29.4	0	41.9	-	-	-	-	68.2	-26.3	0-360	250	V
4	* 10.999	44.18	PK	38	-28	0	54.18	-	-	74	-19.82	-	-	0-360	250	V
6	16.502	30.42	PK	40.7	-23.6	0	47.52	-	-	-	-	68.2	-20.68	0-360	250	V

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

PK – Peak detector

Radiated Emissions

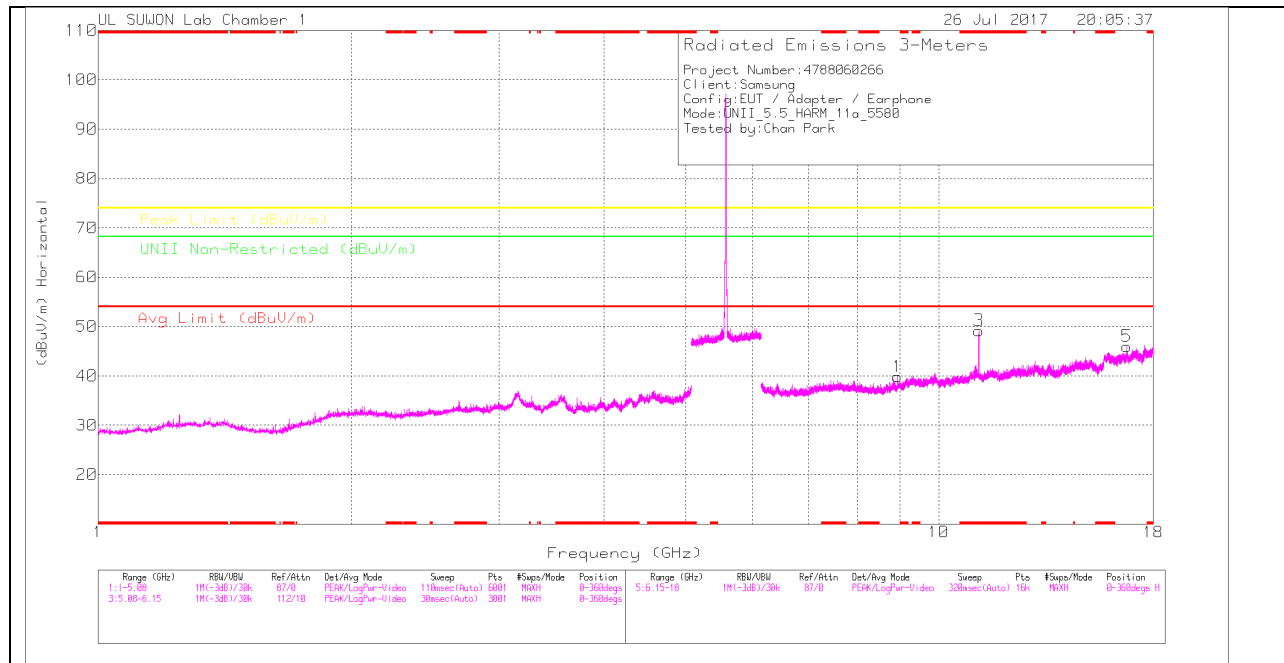
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.002	53.04	PK-U	38	-28	0	63.04	-	-	74	-10.96	-	-	162	114	H
* 11	39.7	ADR	38	-28	.32	50.02	54	-3.98	-	-	-	-	162	114	H
8.8	43.95	PK-U	35.9	-29.4	0	50.45	-	-	-	-	68.2	-17.75	263	256	V
* 11.002	52.84	PK-U	38	-27.9	0	62.94	-	-	74	-11.06	-	-	202	216	V
* 11	39.13	ADR	38	-28	.32	49.45	54	-4.55	-	-	-	-	202	216	V
16.5	43.68	PK-U	40.7	-23.6	0	60.78	-	-	-	-	68.2	-7.42	331	268	V

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

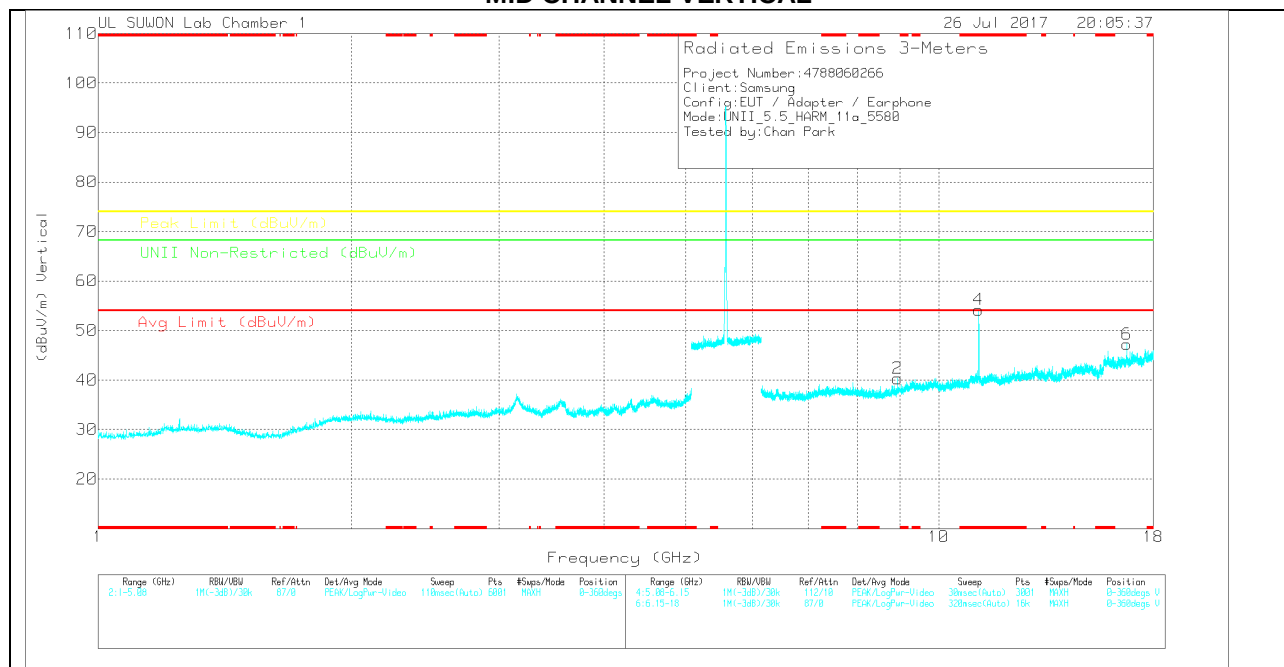
PK-U - U-NII: Maximum Peak

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	20170531_3117_0016 8717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	8.928	33.04	PK	36.1	-29.3	0	39.84	-	-	-	-	68.2	-28.36	0-360	250	H
3	* 11.163	38.87	PK	37.9	-27.6	0	49.17	-	-	74	-24.83	-	-	0-360	250	H
5	16.739	28.28	PK	40.9	-23.2	0	45.98	-	-	-	-	68.2	-22.22	0-360	250	H
2	8.928	33.51	PK	36.1	-29.3	0	40.31	-	-	-	-	68.2	-27.89	0-360	250	V
4	* 11.16	43.99	PK	37.9	-27.7	0	54.19	-	-	74	-19.81	-	-	0-360	250	V
6	16.746	29.44	PK	40.9	-23.1	0	47.24	-	-	-	-	68.2	-20.96	0-360	250	V

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

PK – Peak detector

Radiated Emissions

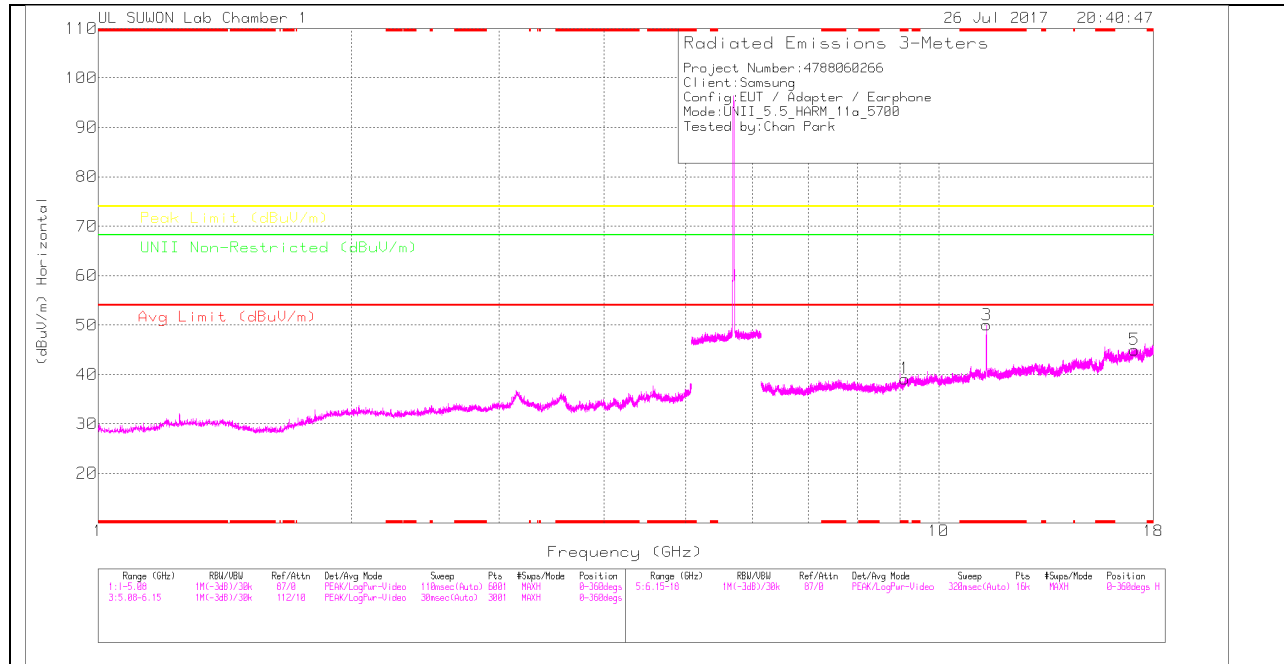
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.156	53.45	PK-U	37.9	-27.7	0	63.65	-	-	74	-10.35	-	-	170	100	H
* 11.161	39.68	ADR	37.9	-27.7	.32	50.2	54	-3.8	-	-	-	-	170	100	H
* 11.159	52.75	PK-U	37.9	-27.7	0	62.95	-	-	74	-11.05	-	-	197	221	V
* 11.161	39.4	ADR	37.9	-27.7	.32	49.92	54	-4.08	-	-	-	-	197	221	V
16.743	42.22	PK-U	40.9	-23.1	0	60.02	-	-	-	-	68.2	-8.18	280	388	V

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

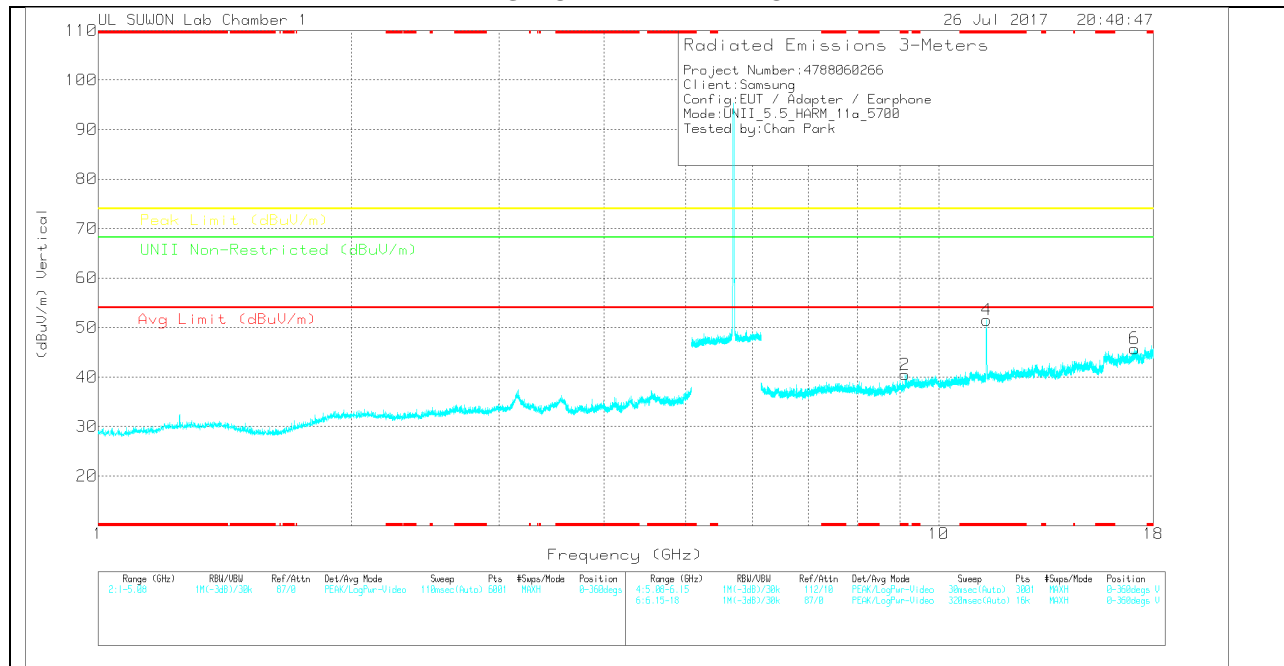
PK-U - U-NII: Maximum Peak

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	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 9.12	31.45	PK	36.4	-28.7	0	39.15	-	-	74	-34.85	-	-	0-360	250	H
3	* 11.401	40	PK	38.1	-28.1	0	50	-	-	74	-24	-	-	0-360	250	H
5	17.101	26.8	PK	41.3	-23.1	0	45	-	-	-	-	68.2	-23.2	0-360	250	H
2	* 9.12	32.79	PK	36.4	-28.7	0	40.49	-	-	74	-33.51	-	-	0-360	250	V
4	* 11.404	41.52	PK	38.1	-28.1	0	51.52	-	-	74	-22.48	-	-	0-360	250	V
6	17.103	27.74	PK	41.3	-23.3	0	45.74	-	-	-	-	68.2	-22.46	0-360	250	V

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

PK – Peak detector

Radiated Emissions

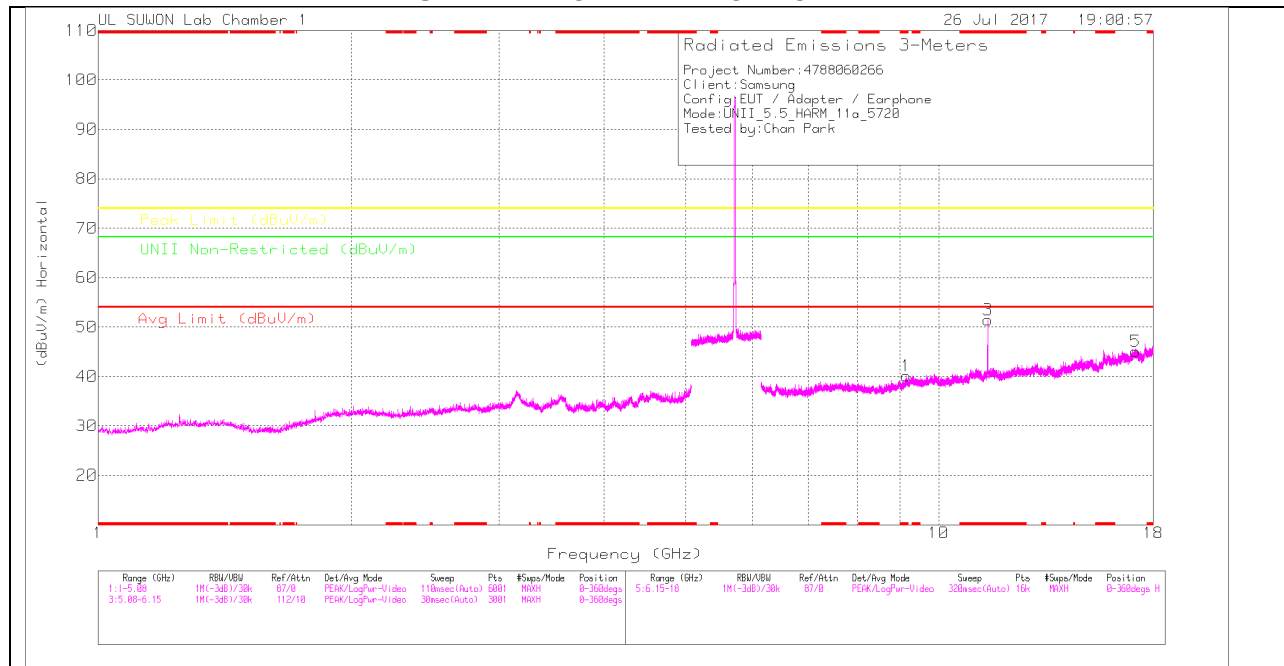
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.4	52.72	PK-U	38.1	-28.2	0	62.62	-	-	74	-11.38	-	-	168	108	H
* 11.402	39.12	ADR	38.1	-28.1	.32	49.44	54	-4.56	-	-	-	-	168	108	H
* 11.402	53.69	PK-U	38.1	-28.1	0	63.69	-	-	74	-10.31	-	-	185	220	V
* 11.401	40.55	ADR	38.1	-28.1	.32	50.87	54	-3.13	-	-	-	-	185	220	V

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

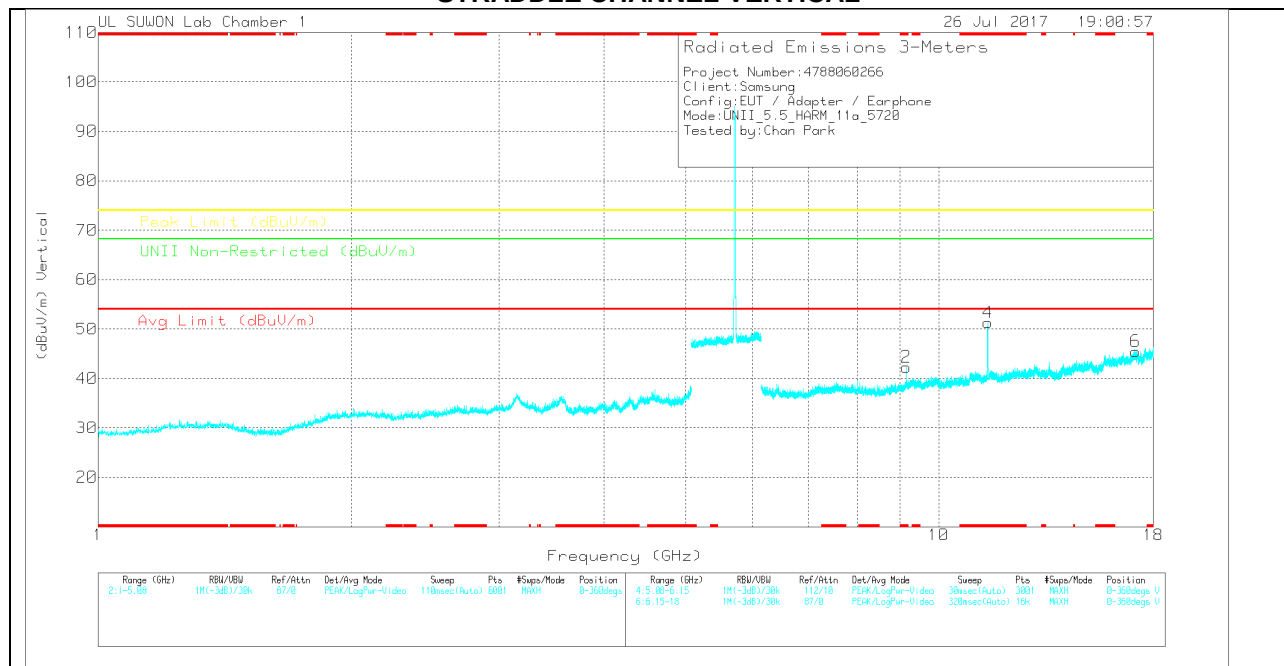
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

STRADDLE CHANNEL HORIZONTAL



STRADDLE 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.

STRADDLE CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 9.152	31.9	PK	36.4	-28.2	0	40.1	-	-	74	-33.9	-	-	0-360	250	H
3	* 11.444	41.6	PK	38.1	-28.3	0	51.4	-	-	74	-22.6	-	-	0-360	250	H
5	17.159	26.55	PK	41.4	-22.9	0	45.05	-	-	-	-	68.2	-23.15	0-360	250	H
2	* 9.152	34.1	PK	36.4	-28.2	0	42.3	-	-	74	-31.7	-	-	0-360	250	V
4	* 11.441	41.51	PK	38.1	-28.3	0	51.31	-	-	74	-22.69	-	-	0-360	250	V
6	17.157	26.98	PK	41.4	-22.9	0	45.48	-	-	-	-	68.2	-22.72	0-360	250	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.441	52.67	PK-U	38.1	-28.3	0	62.47	-	-	74	-11.53	-	-	165	252	H
* 11.44	38.99	ADR	38.1	-28.3	0	48.79	54	-5.21	-	-	-	-	165	252	H
* 9.151	42.75	PK-U	36.4	-28.2	0	50.95	-	-	74	-23.05	-	-	57	292	V
* 9.152	32.05	ADR	36.4	-28.2	0	40.25	54	-13.75	-	-	-	-	57	292	V
* 11.435	53.22	PK-U	38.1	-28.4	0	62.92	-	-	74	-11.08	-	-	189	221	V
* 11.44	39.2	ADR	38.1	-28.3	0	49	54	-5	-	-	-	-	189	221	V
* 11.44	39.76	ADR	38.1	-28.4	0	49.46	54	-4.54	-	-	-	-	189	221	V

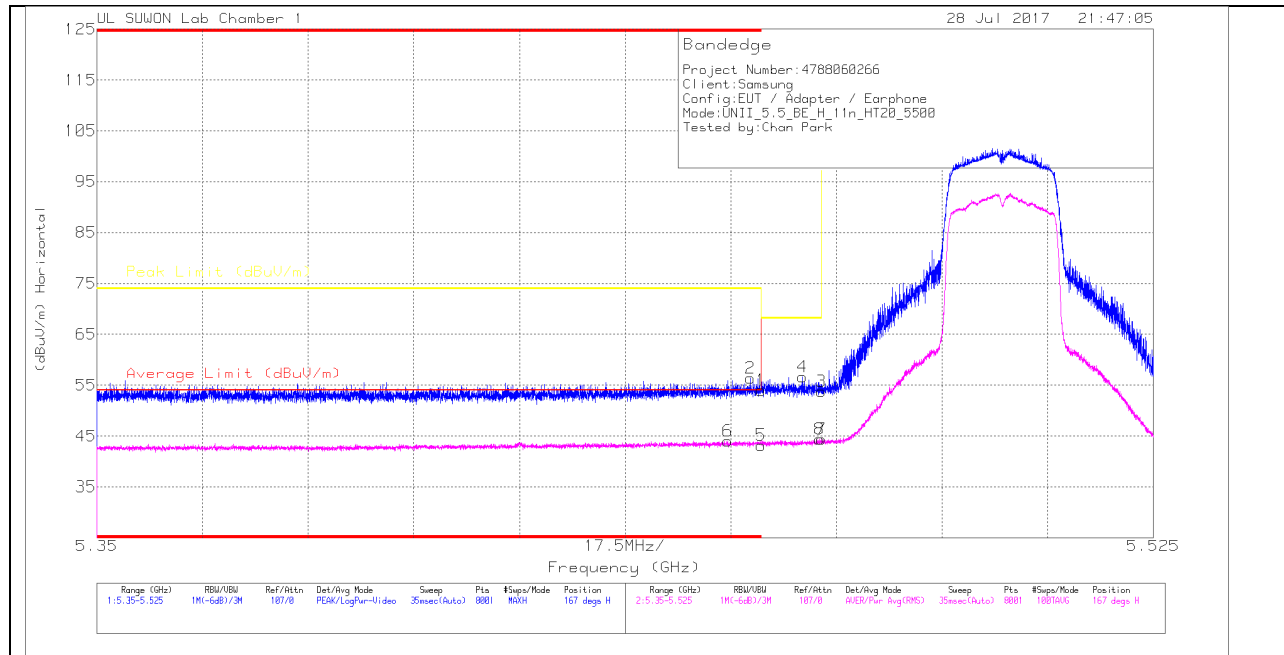
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

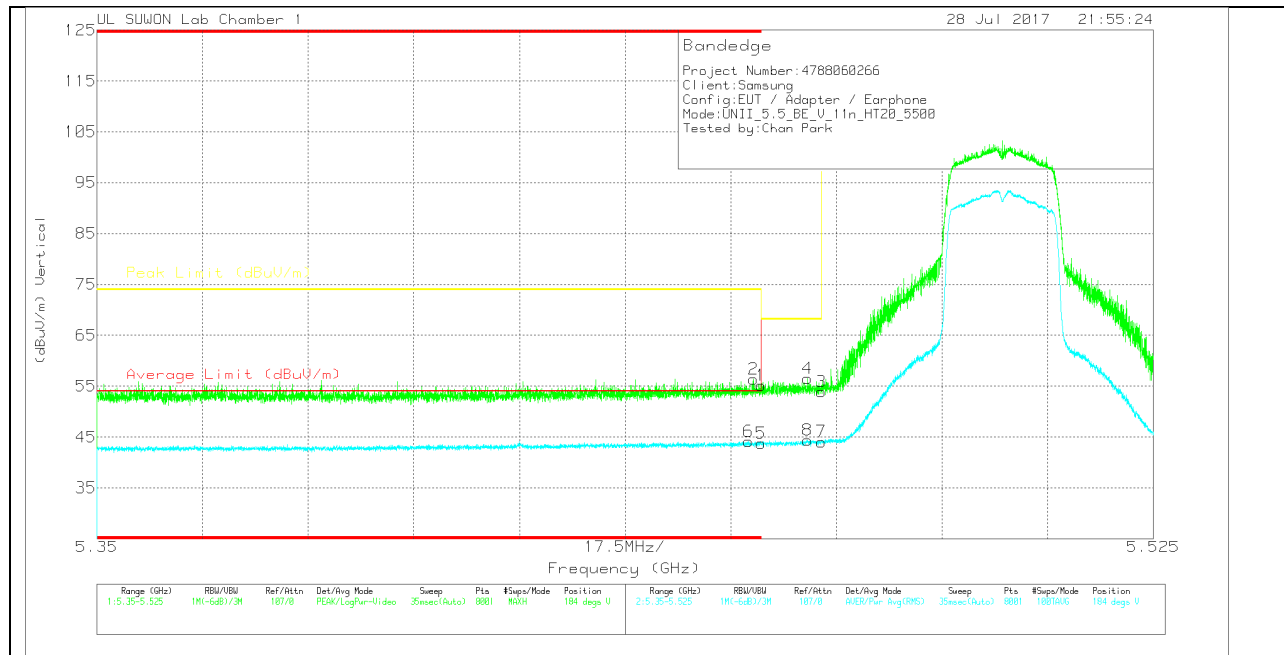
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	42.78	Pk		-23.1	0	53.98	-	-	74	-20.02	167	118	H
2	* 5.458	45.25	Pk		-23.2	0	56.35	-	-	74	-17.65	167	118	H
3	5.47	42.56	Pk		-23.1	0	53.76	-	-	68.2	-14.44	167	118	H
4	5.467	45.29	Pk		-23	0	56.59	-	-	68.2	-11.61	167	118	H
5	* 5.46	32.26	RMS		-23.7	.35	43.21	54	-10.79	-	-	167	118	H
6	* 5.455	33.06	RMS		-23.7	.35	44.01	54	-9.99	-	-	167	118	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	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	43.99	Pk	34.3	-23.1	0	55.19	-	-	74	-18.81	184	308	V
2	* 5.459	45.24	Pk	34.3	-23.1	0	56.44	-	-	74	-17.56	184	308	V
3	5.47	42.77	Pk	34.3	-23.1	0	53.97	-	-	68.2	-14.23	184	308	V
4	5.468	45.33	Pk	34.3	-23.1	0	56.53	-	-	68.2	-11.67	184	308	V
5	* 5.46	32.86	RMS	34.3	-23.7	.35	43.81	54	-10.19	-	-	184	308	V
6	* 5.458	33.19	RMS	34.3	-23.7	.35	44.14	54	-9.86	-	-	184	308	V

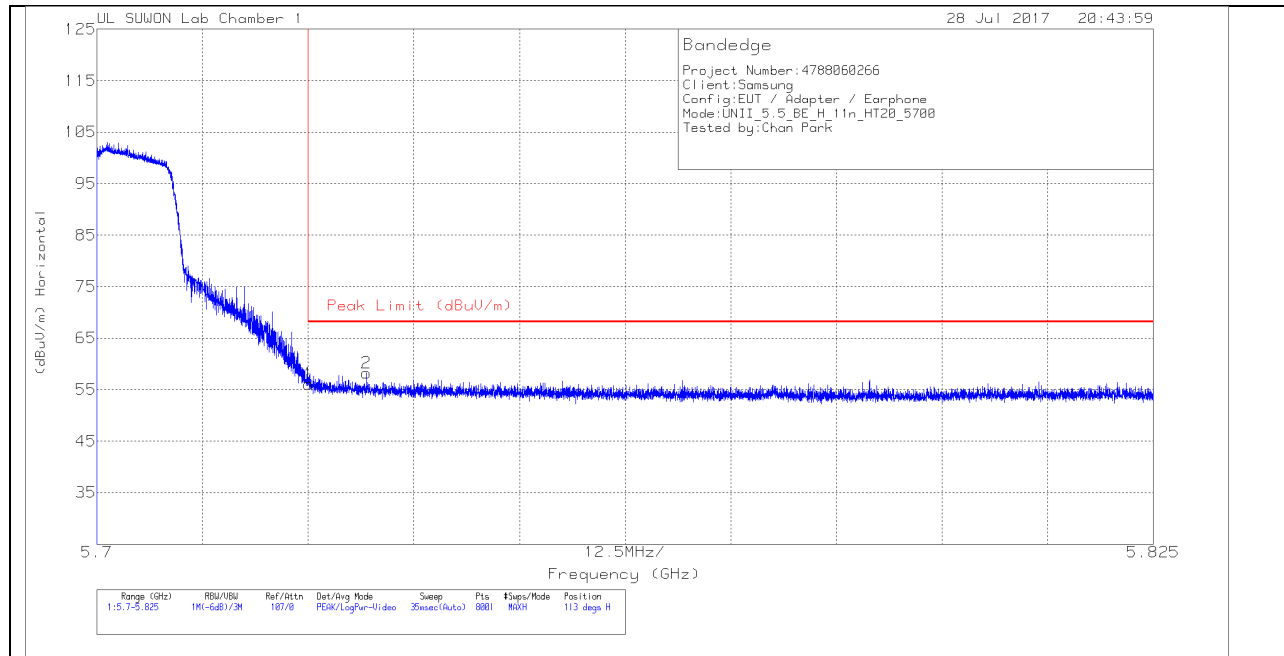
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



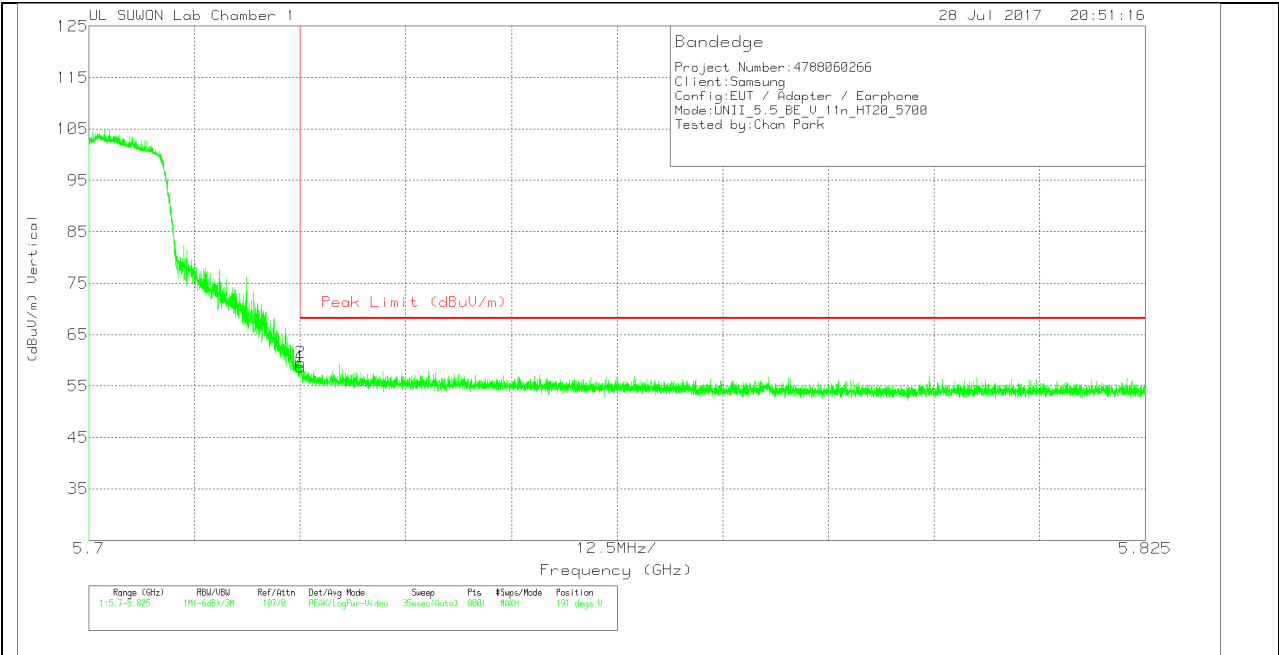
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_0016 8717	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	44.59	Pk	34.4	-22.9	0	56.09	68.2	-12.11	113	154	H
2	5.732	46.63	Pk	34.4	-22.8	0	58.23	68.2	-9.97	113	154	H

Pk - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

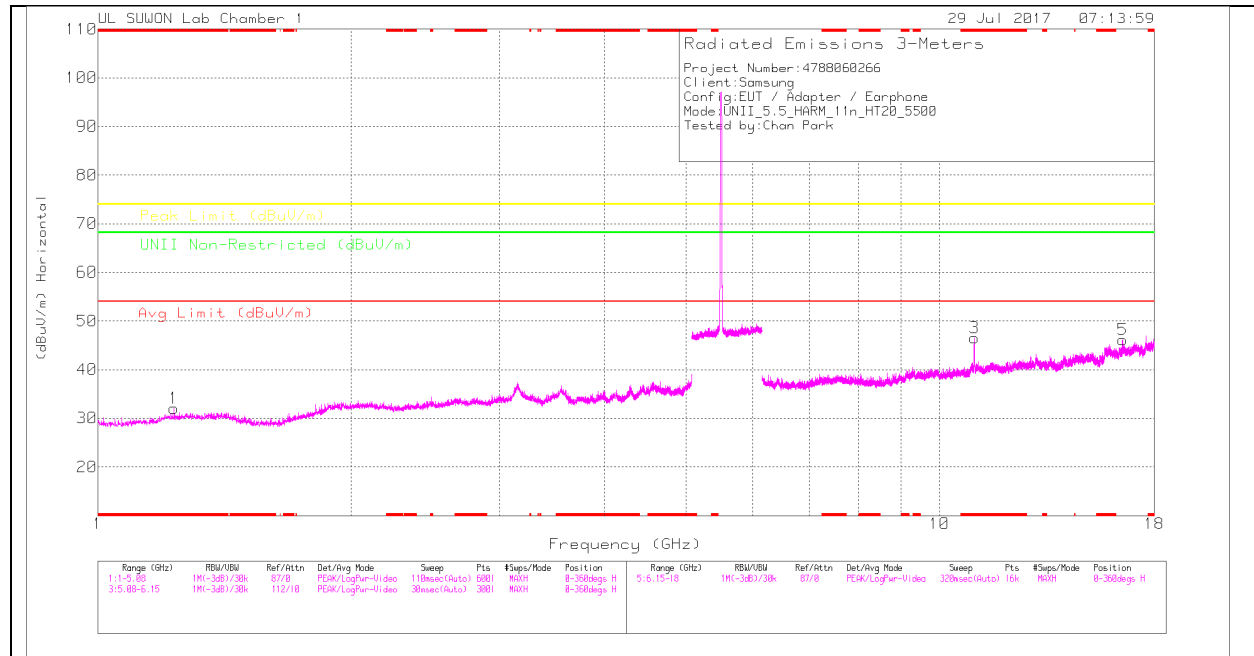
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_0016 8717	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	47.18	Pk	34.4	-22.9	0	58.68	68.2	-9.52	191	372	V
2	5.725	48.08	Pk	34.4	-22.9	0	59.58	68.2	-8.62	191	372	V

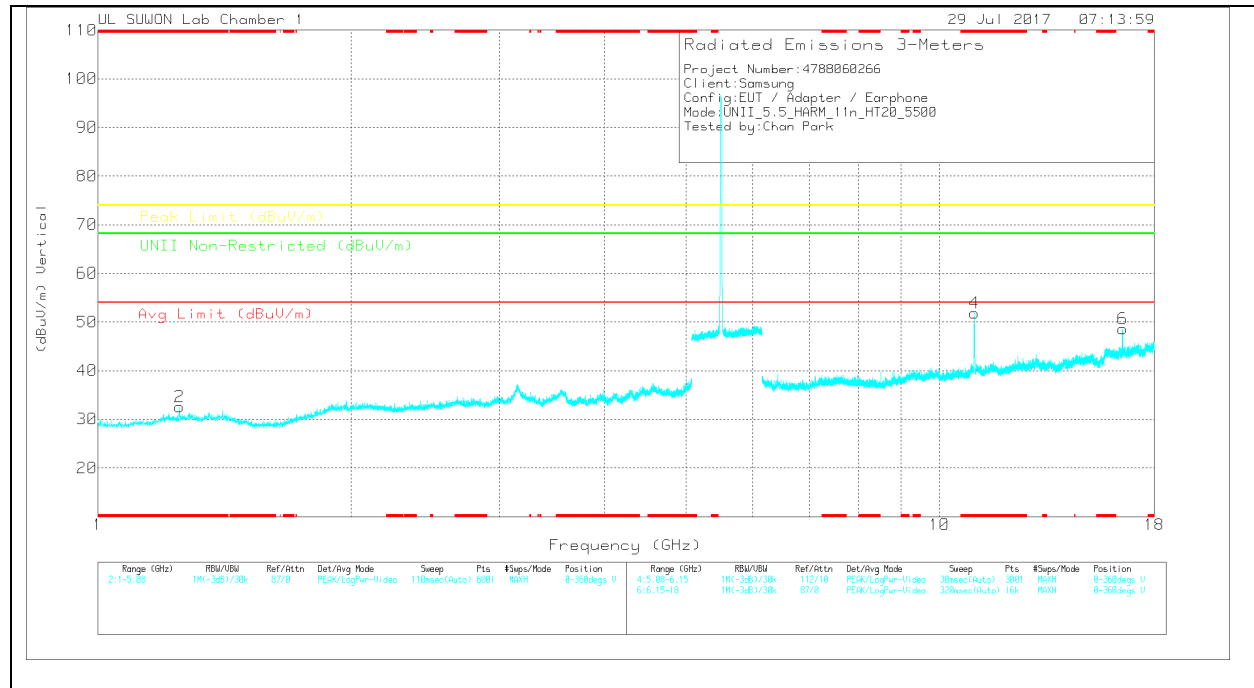
Pk - Peak detector

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	20170531_3117_0016 8717	5Ghz_LP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.232	42.31	PK	29.3	-39.6	0	32.01	-	-	74	-41.99	-	-	0-360	250	H
2	* 1.25	42.85	PK	29.3	-39.6	0	32.55	-	-	74	-41.45	-	-	0-360	250	V
3	* 11.002	36.41	PK	38	-27.9	0	46.51	-	-	74	-27.49	-	-	0-360	250	H
5	16.504	28.98	PK	40.7	-23.5	0	46.18	-	-	-	-	68.2	-22.02	0-360	250	H
4	* 10.999	41.79	PK	38	-28	0	51.79	-	-	74	-22.21	-	-	0-360	250	V
6	16.503	31.36	PK	40.7	-23.5	0	48.56	-	-	-	-	68.2	-19.64	0-360	250	V

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

PK – Peak detector

Radiated Emissions

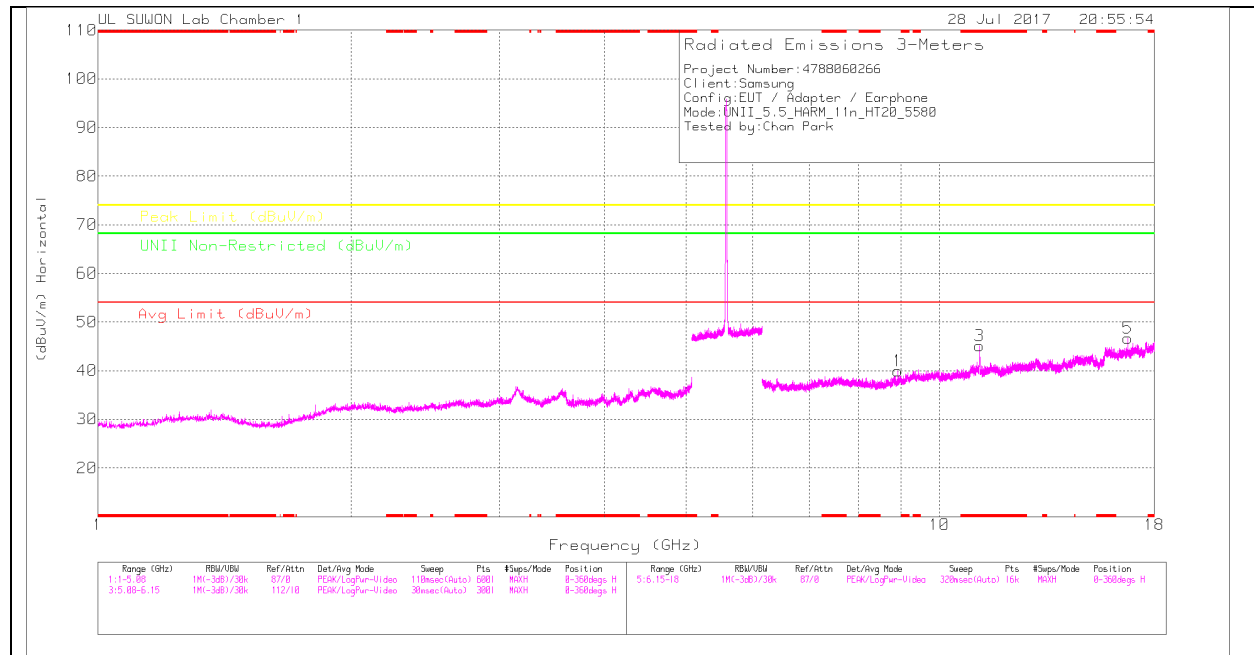
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_001687 17	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 10.999	50.88	PK-U	38	-28	0	60.88	-	-	74	-13.12	-	-	163	100	H
* 10.999	37.39	ADR	38	-28	.35	47.74	54	-6.26	-	-	-	-	163	100	H
16.502	40.87	PK-U	40.7	-23.6	0	57.97	-	-	-	-	68.2	-10.23	167	114	H
* 10.998	52.06	PK-U	38	-28	0	62.06	-	-	74	-11.94	-	-	199	228	V
* 11	39.53	ADR	38	-28	.35	49.88	54	-4.12	-	-	-	-	199	228	V
16.502	46.9	PK-U	40.7	-23.6	0	64	-	-	-	-	68.2	-4.2	320	282	V

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

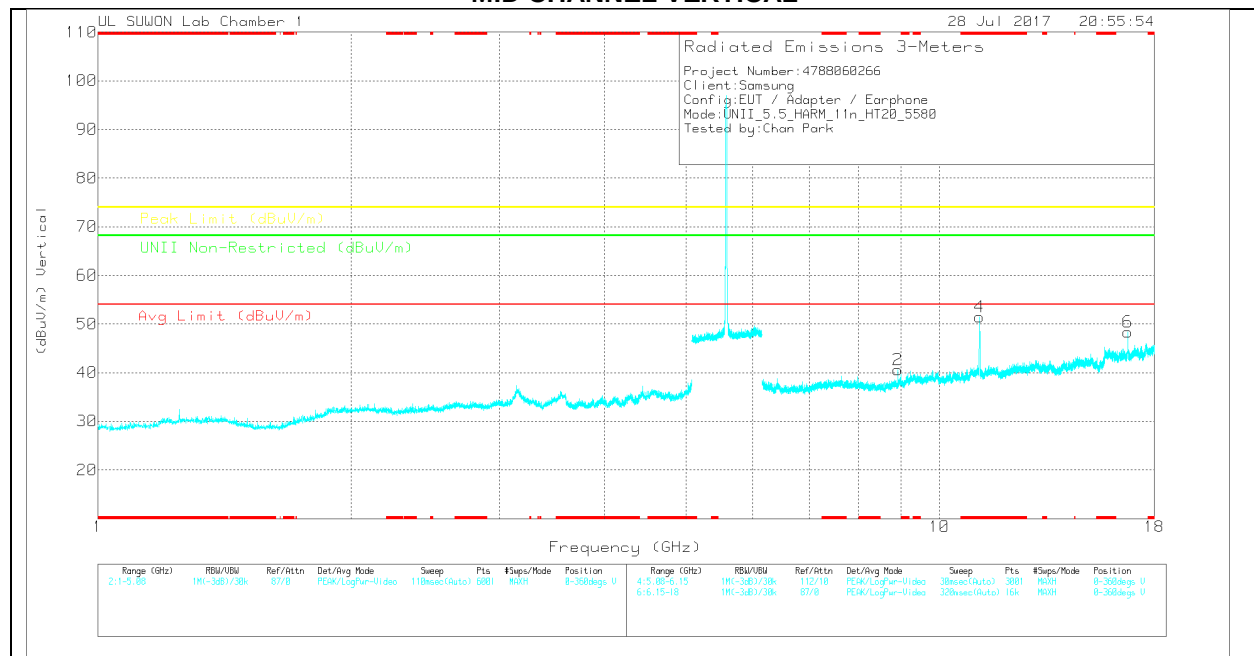
PK-U - U-NII: Maximum Peak

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	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	8.928	33.11	PK	36.1	-29.3	0	39.91	-	-	-	-	68.2	-28.29	0-360	250	H
3	* 11.158	35.01	PK	37.9	-27.8	0	45.11	-	-	74	-28.89	-	-	0-360	250	H
5	16.742	28.94	PK	40.9	-23.2	0	46.64	-	-	-	-	68.2	-21.56	0-360	250	H
2	8.928	33.8	PK	36.1	-29.3	0	40.6	-	-	-	-	68.2	-27.6	0-360	250	V
4	* 11.159	41.24	PK	37.9	-27.7	0	51.44	-	-	74	-22.56	-	-	0-360	250	V
6	16.745	30.62	PK	40.9	-23.2	0	48.32	-	-	-	-	68.2	-19.88	0-360	250	V

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

PK – Peak detector

Radiated Emissions

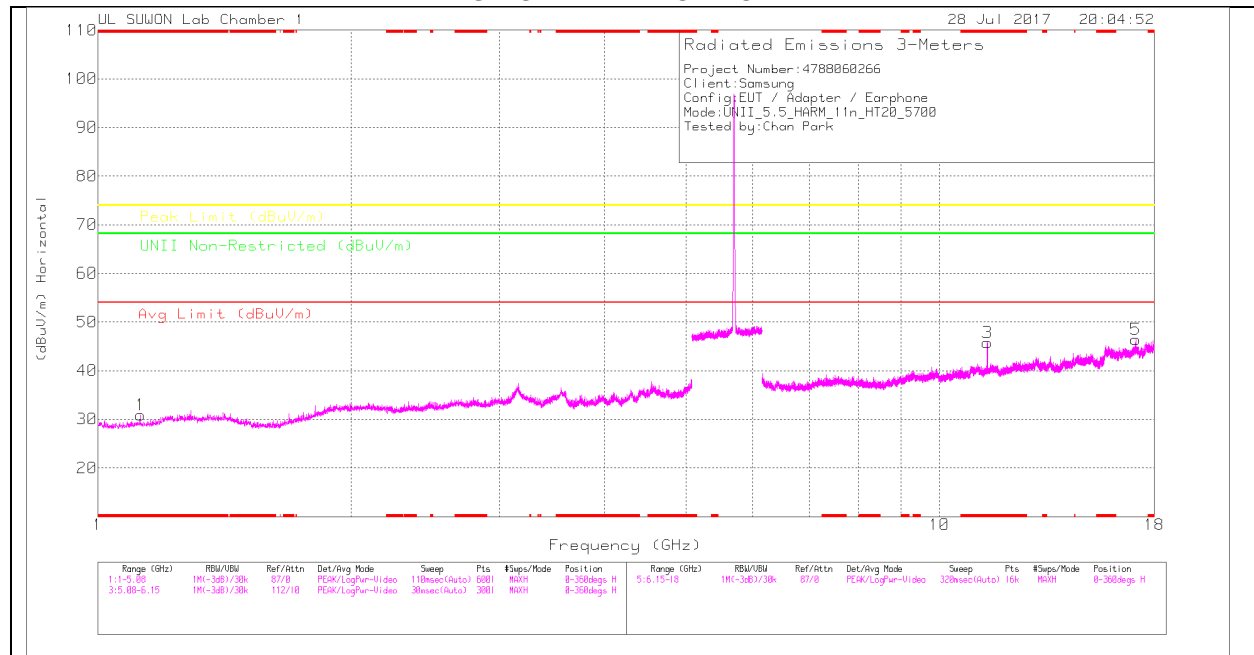
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.156	49.34	PK-U	37.9	-27.7	0	59.54	-	-	74	-14.46	-	-	165	109	H
* 11.161	35.99	ADR	37.9	-27.7	.35	46.54	54	-7.46	-	-	-	-	165	109	H
16.742	41.5	PK-U	40.9	-23.1	0	59.3	-	-	-	-	68.2	-8.9	169	102	H
* 11.163	54.62	PK-U	37.9	-27.6	0	64.92	-	-	74	-9.08	-	-	194	220	V
* 11.161	40.15	ADR	37.9	-27.7	.35	50.7	54	-3.3	-	-	-	-	194	220	V
16.741	41.84	PK-U	40.9	-23.2	0	59.54	-	-	-	-	68.2	-8.66	282	103	V

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

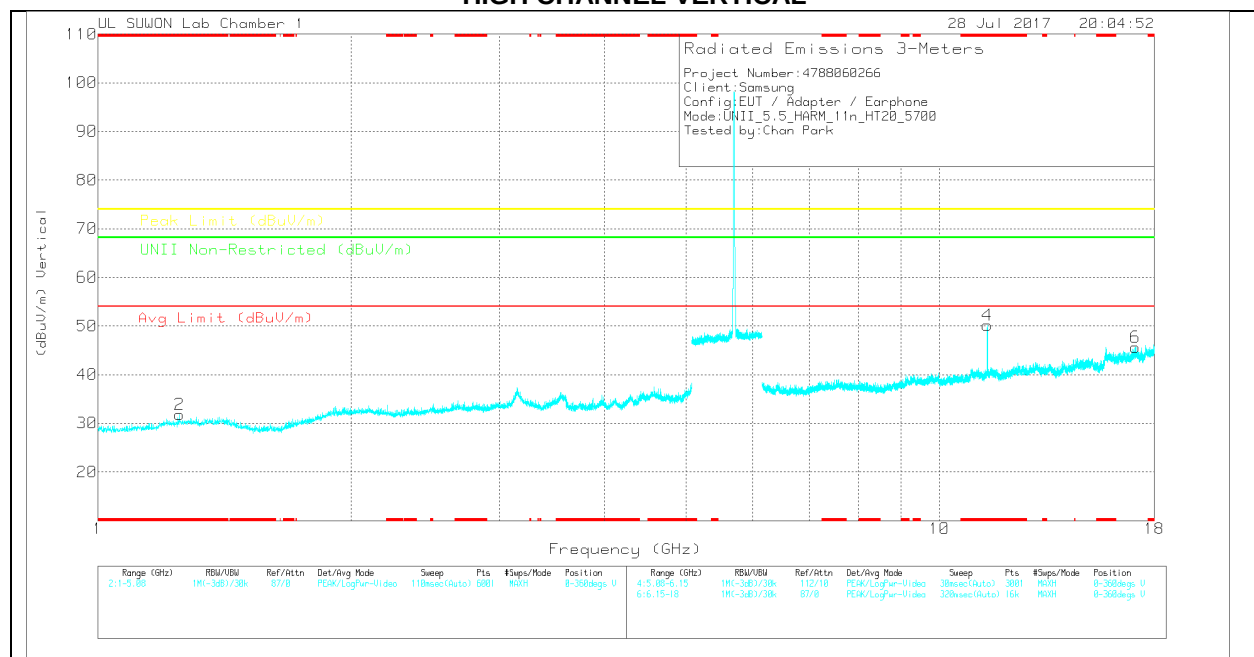
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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	20170531_3117_00168717	5Ghz_LP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.124	42.29	PK	28.3	-39.7	0	30.89	-	-	74	-43.11	-	-	0-360	250	H
2	* 1.25	42.15	PK	29.3	-39.6	0	31.85	-	-	74	-42.15	-	-	0-360	250	V
3	* 11.4	35.81	PK	38.1	-28.1	0	45.81	-	-	74	-28.19	-	-	0-360	150	H
5	17.105	28.36	PK	41.3	-23.3	0	46.36	-	-	-	-	68.2	-21.84	0-360	250	H
4	* 11.4	40.21	PK	38.1	-28.1	0	50.21	-	-	74	-23.79	-	-	0-360	250	V
6	17.103	27.67	PK	41.3	-23.3	0	45.67	-	-	-	-	68.2	-22.53	0-360	250	V

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

PK – Peak detector

Radiated Emissions

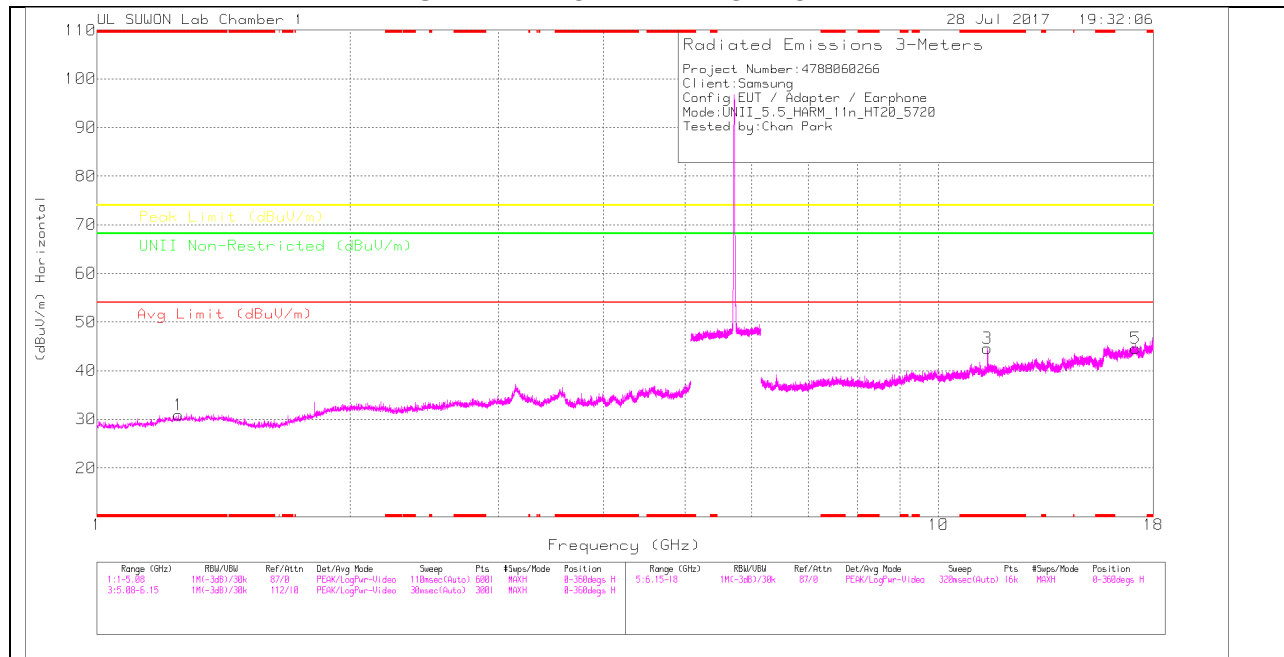
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.399	50.45	PK-U	38.1	-28.2	0	60.35	-	-	74	-13.65	-	-	165	109	H
* 11.399	36.46	ADR	38.1	-28.2	.35	46.71	54	-7.29	-	-	-	-	165	109	H
* 11.401	52.89	PK-U	38.1	-28.1	0	62.89	-	-	74	-11.11	-	-	197	230	V
* 11.401	39.15	ADR	38.1	-28.1	.35	49.5	54	-4.5	-	-	-	-	197	230	V

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

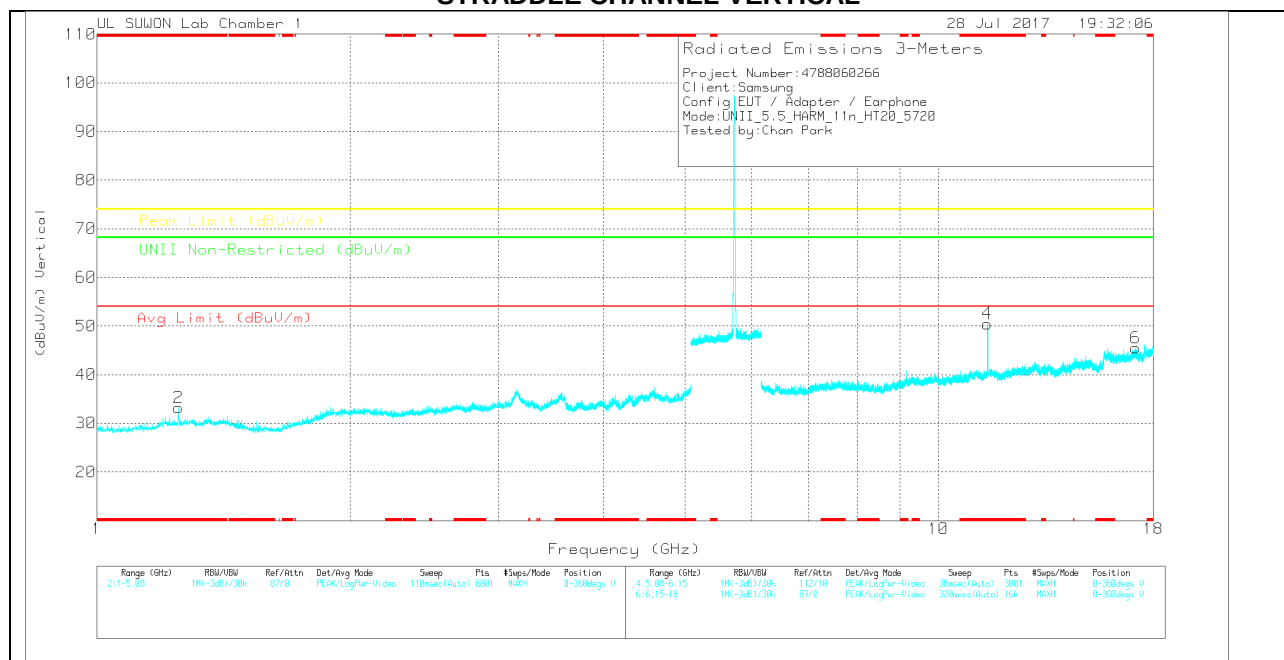
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

STRADDLE CHANNEL HORIZONTAL



STRADDLE 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.

STRADDLE CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_0016 8717	5Ghz_LP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	41.13	PK	29.3	-39.6	0	30.83	-	-	74	-43.17	-	-	0-360	250	H
2	* 1.25	43.54	PK	29.3	-39.6	0	33.24	-	-	74	-40.76	-	-	0-360	250	V
3	* 11.438	34.83	PK	38.1	-28.3	0	44.63	-	-	74	-29.37	-	-	0-360	150	H
5	17.162	25.93	PK	41.4	-22.7	0	44.63	-	-	-	-	68.2	-23.57	0-360	150	H
4	* 11.438	40.68	PK	38.1	-28.3	0	50.48	-	-	74	-23.52	-	-	0-360	250	V
6	17.158	27.01	PK	41.4	-22.9	0	45.51	-	-	-	-	68.2	-22.69	0-360	250	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.441	50.78	PK-U	38.1	-28.3	0	60.58	-	-	74	-13.42	-	-	170	102	H
* 11.439	37.19	ADR	38.1	-28.3	.35	47.34	54	-6.66	-	-	-	-	170	102	H
* 11.438	53.91	PK-U	38.1	-28.3	0	63.71	-	-	74	-10.29	-	-	193	223	V
* 11.441	40.02	ADR	38.1	-28.3	.35	50.17	54	-3.83	-	-	-	-	193	223	V

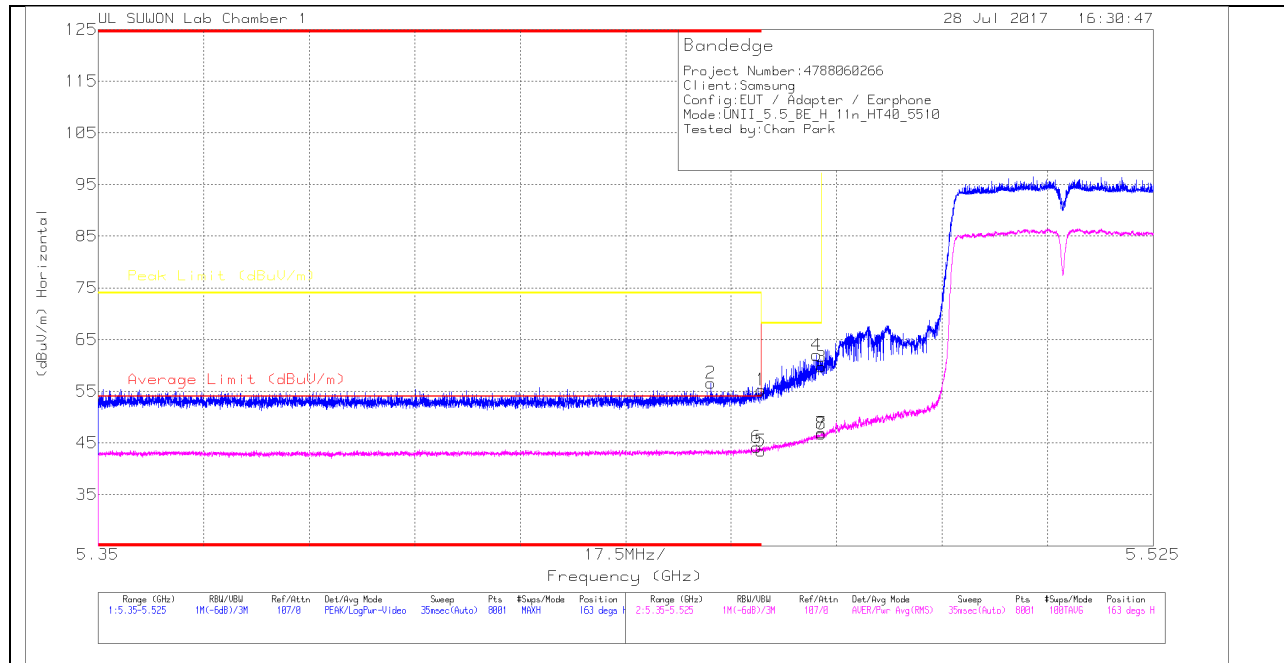
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

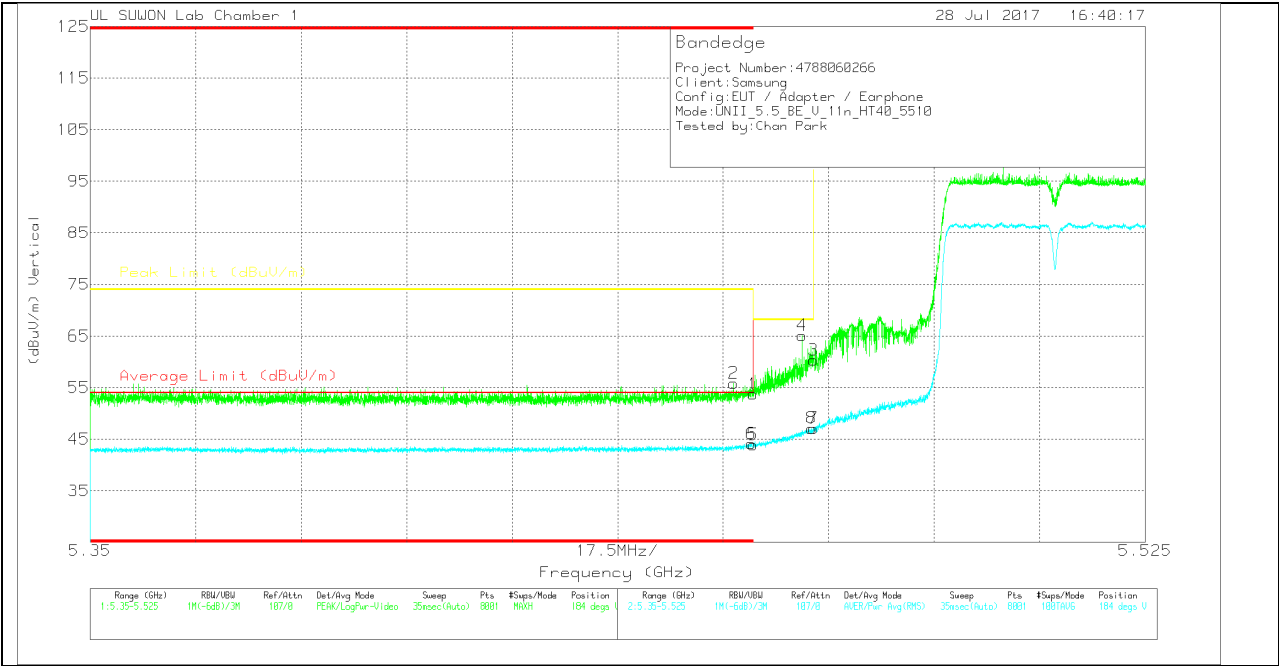
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	44.08	Pk	34.3	-23.1	0	55.28	-	-	74	-18.72	163	100	H
2	* 5.452	45.49	Pk	34.3	-23.2	0	56.59	-	-	74	-17.41	163	100	H
3	5.47	48.52	Pk	34.3	-23.1	0	59.72	-	-	68.2	-8.48	163	100	H
4	5.469	50.81	Pk	34.3	-23.1	0	62.01	-	-	68.2	-6.19	163	100	H
5	* 5.46	32.2	RMS	34.3	-23.7	.67	43.47	54	-10.53	-	-	163	100	H
6	* 5.459	32.93	RMS	34.3	-23.7	.67	44.2	54	-9.8	-	-	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	20170531_3 117_001687 17	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	42.57	Pk	34.3	-23.1	0	53.77	-	-	74	-20.23	184	308	V
2	* 5.457	44.76	Pk	34.3	-23.2	0	55.86	-	-	74	-18.14	184	308	V
3	5.47	49.15	Pk	34.3	-23.1	0	60.35	-	-	68.2	-7.85	184	308	V
4	5.468	53.92	Pk	34.3	-23.1	0	65.12	-	-	68.2	-3.08	184	308	V
5	* 5.46	32.68	RMS	34.3	-23.7	.67	43.95	54	-10.05	-	-	184	308	V
6	* 5.46	32.87	RMS	34.3	-23.7	.67	44.14	54	-9.86	-	-	184	308	V

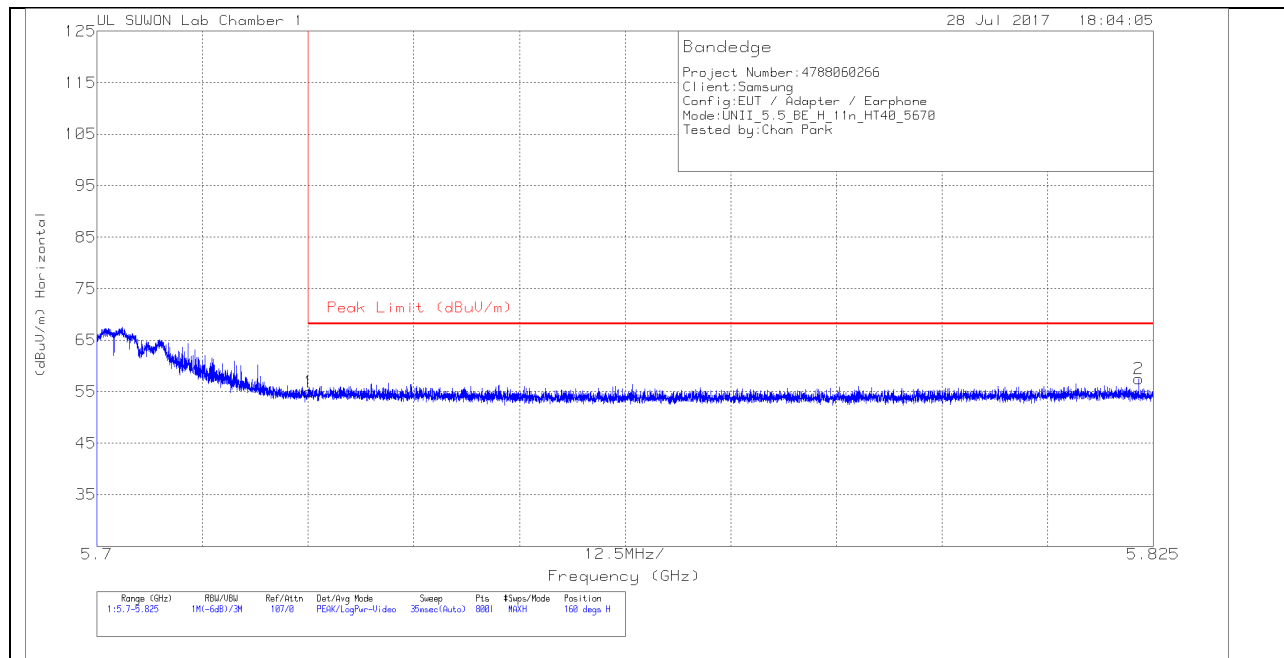
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



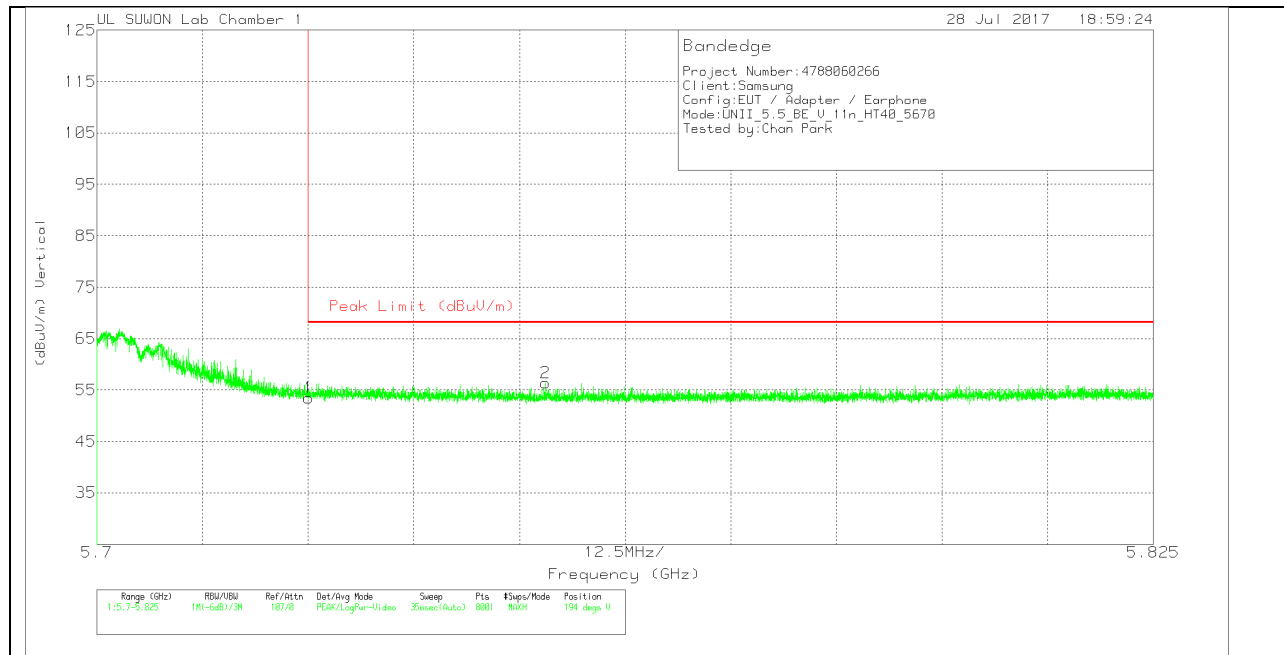
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_0016 8717	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	43.43	Pk	34.4	-22.9	0	54.93	68.2	-13.27	160	100	H
2	5.823	45.38	Pk	34.5	-22.4	0	57.48	68.2	-10.72	160	100	H

Pk - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

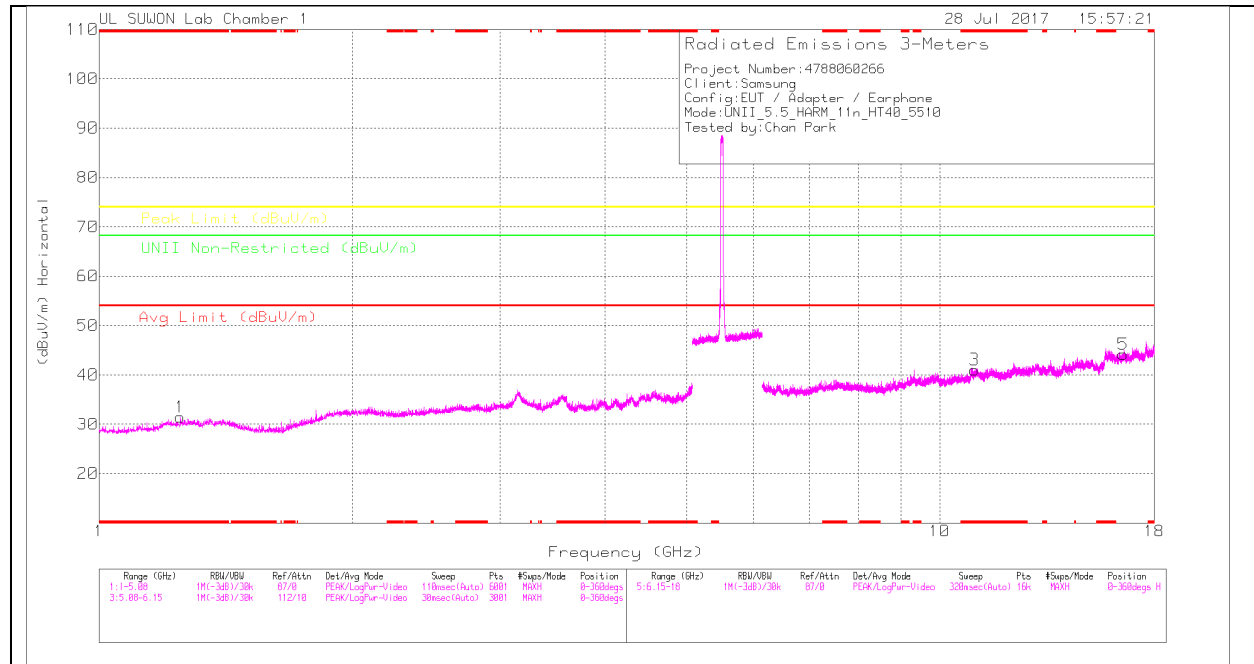
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_0016 8717	10dB_Att(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	41.99	Pk	34.4	-22.9	0	53.49	68.2	-14.71	194	288	V
2	5.753	44.99	Pk	34.4	-23	0	56.39	68.2	-11.81	194	288	V

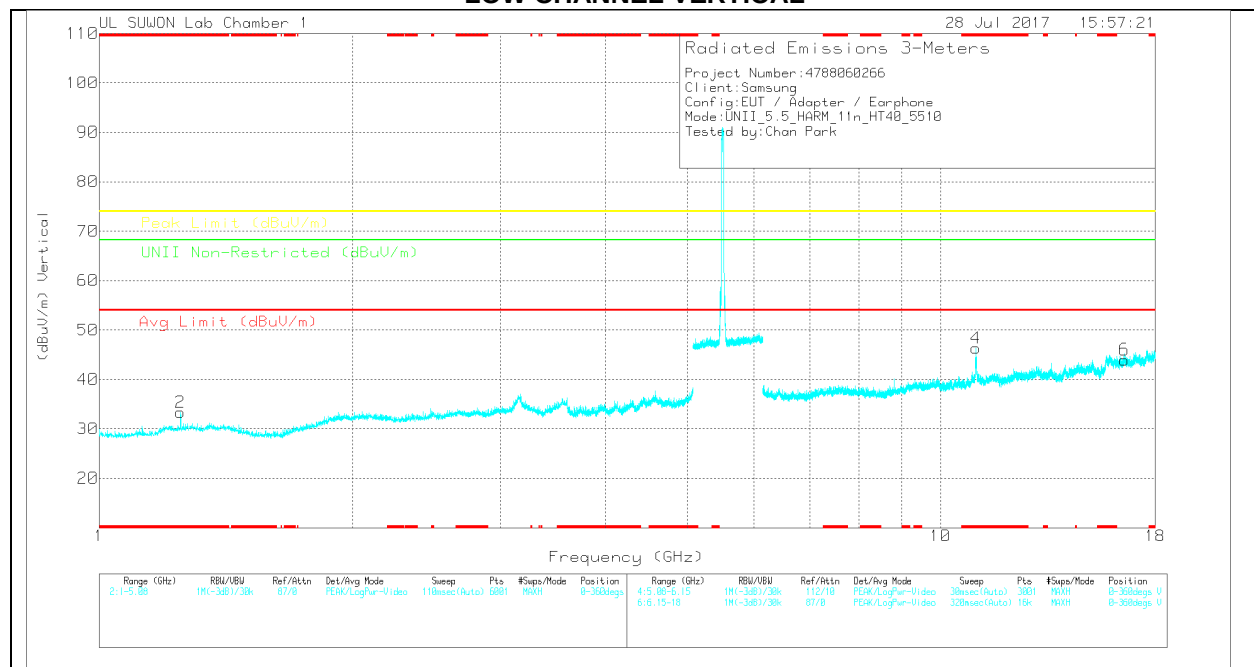
Pk - Peak detector

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	20170531_3117_0016 8717	5Ghz_LP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	41.73	PK	29.3	-39.6	0	31.43	-	-	74	-42.57	-	-	0-360	150	H
2	* 1.25	43.64	PK	29.3	-39.6	0	33.34	-	-	74	-40.66	-	-	0-360	250	V
3	* 11.006	31.02	PK	38	-28	0	41.02	-	-	74	-32.98	-	-	0-360	250	H
5	16.53	26.67	PK	40.7	-23.2	0	44.17	-	-	-	-	68.2	-24.03	0-360	150	H
4	* 11.023	36.62	PK	38	-28.3	0	46.32	-	-	74	-27.68	-	-	0-360	250	V
6	16.533	26.57	PK	40.7	-23.3	0	43.97	-	-	-	-	68.2	-24.23	0-360	250	V

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

PK – Peak detector

Radiated Emissions

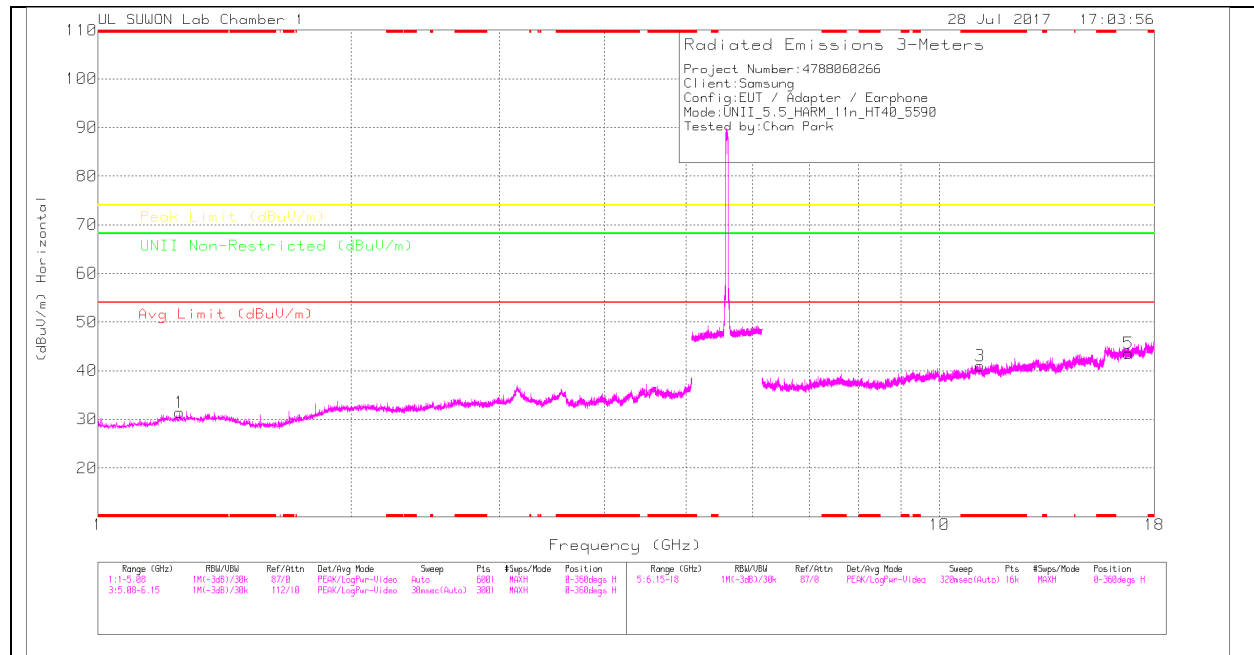
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.02	47.14	PK-U	38	-28.2	0	56.94	-	-	74	-17.06	-	-	194	231	V
* 11.02	34.57	ADR	38	-28.2	.67	45.04	54	-8.96	-	-	-	-	194	231	V

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

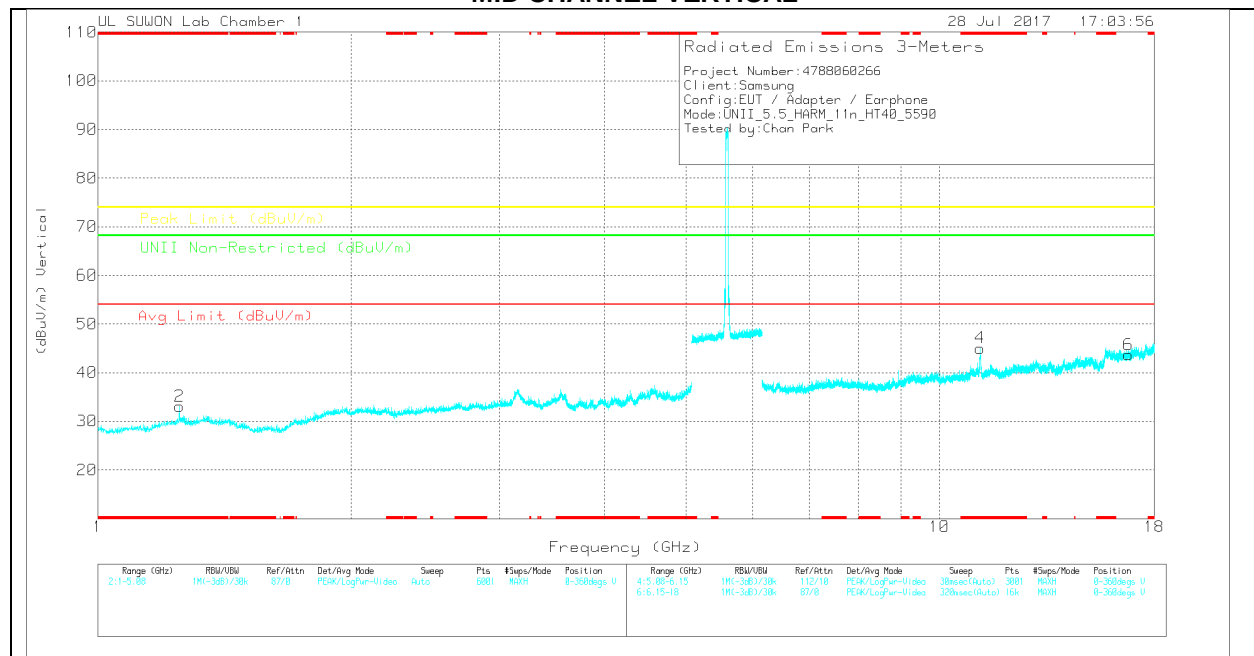
PK-U - U-NII: Maximum Peak

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	20170531_3117_00168717	5Ghz_LP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	41.71	PK	29.3	-39.6	0	31.41	-	-	74	-42.59	-	-	0-360	250	H
2	* 1.25	43.37	PK	29.3	-39.6	0	33.07	-	-	74	-40.93	-	-	0-360	250	V
3	* 11.167	30.68	PK	37.9	-27.6	0	40.98	-	-	74	-33.02	-	-	0-360	150	H
5	16.774	25.71	PK	40.9	-23.1	0	43.51	-	-	-	-	68.2	-24.69	0-360	150	H
4	* 11.179	34.85	PK	37.9	-27.7	0	45.05	-	-	74	-28.95	-	-	0-360	250	V
6	16.777	25.69	PK	40.9	-22.9	0	43.69	-	-	-	-	68.2	-24.51	0-360	250	V

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

PK – Peak detector

Radiated Emissions

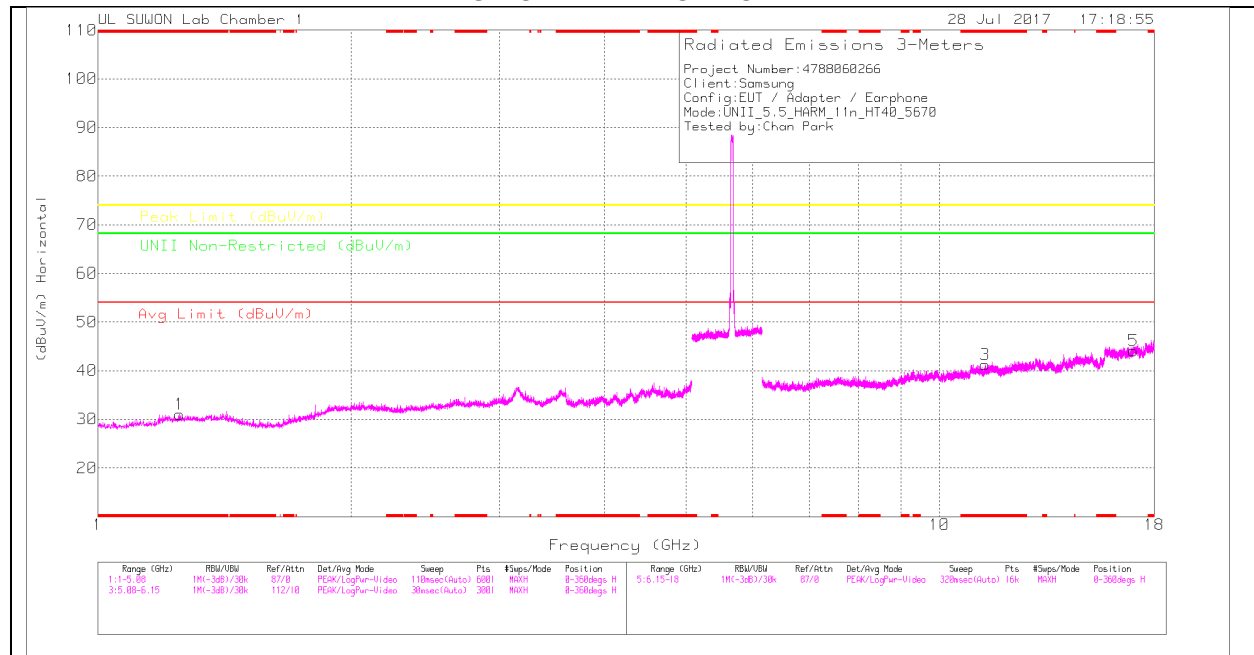
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.18	47.31	PK-U	37.9	-27.7	0	57.51	-	-	74	-16.49	-	-	194	225	V
* 11.181	33.76	ADR	37.9	-27.8	.67	44.53	54	-9.47	-	-	-	-	194	225	V

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

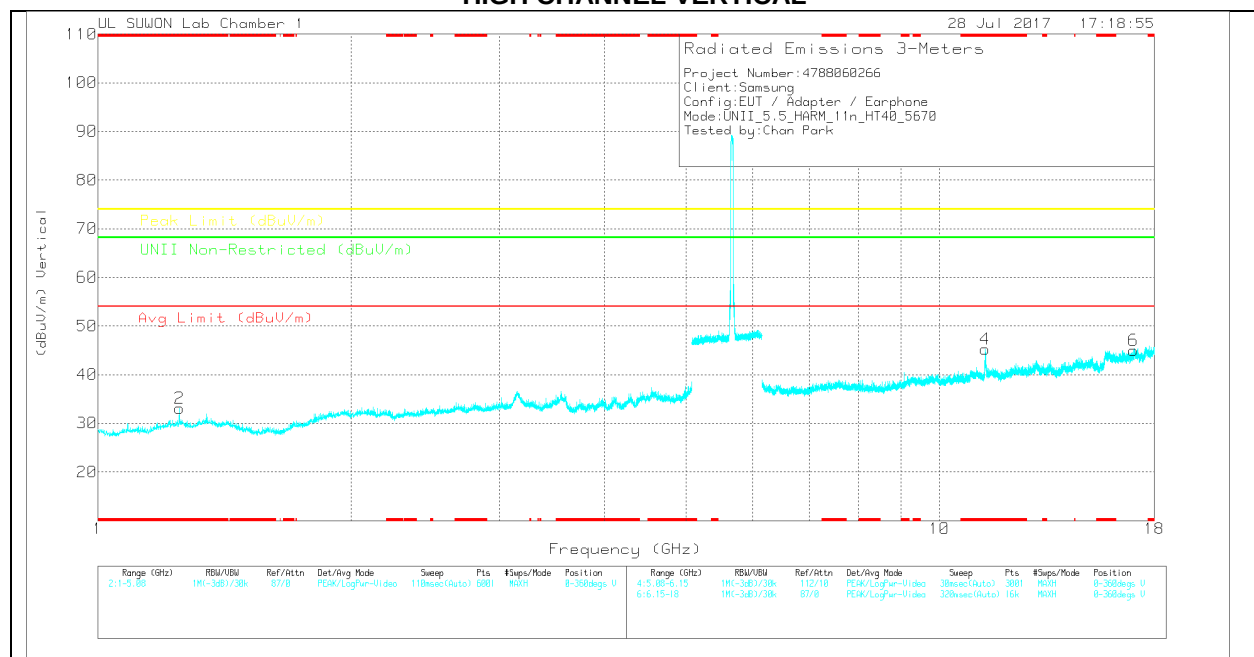
PK-U - U-NII: Maximum Peak

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	20170531_3117_0016 8717	5Ghz_LP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	41.37	PK	29.3	-39.6	0	31.07	-	-	74	-42.93	-	-	0-360	150	H
2	* 1.25	43.37	PK	29.3	-39.6	0	33.07	-	-	74	-40.93	-	-	0-360	250	V
3	* 11.336	30.59	PK	38	-27.4	0	41.19	-	-	74	-32.81	-	-	0-360	150	H
5	17.011	25.96	PK	41.2	-23.1	0	44.06	-	-	-	-	68.2	-24.14	0-360	150	H
4	* 11.34	34.61	PK	38	-27.4	0	45.21	-	-	74	-28.79	-	-	0-360	250	V
6	17.008	26.93	PK	41.2	-23.2	0	44.93	-	-	-	-	68.2	-23.27	0-360	150	V

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

PK – Peak detector

Radiated Emissions

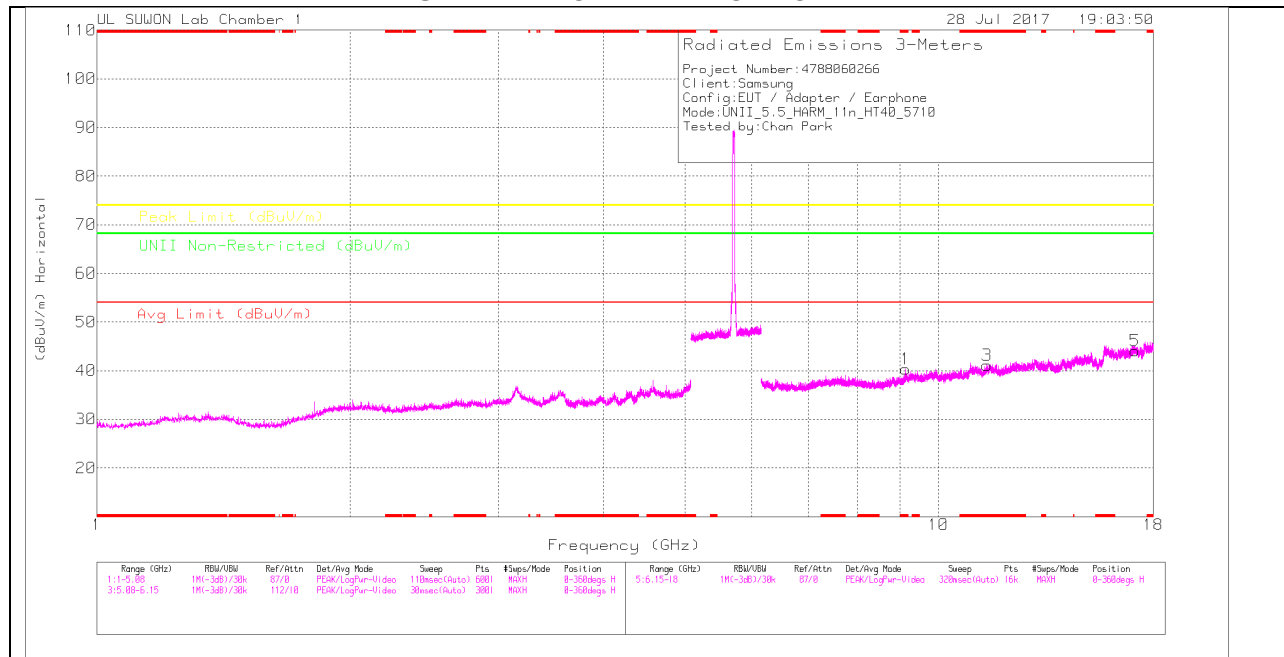
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	5Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.34	46.17	PK-U	38	-27.4	0	56.77	-	-	74	-17.23	-	-	197	225	V
* 11.34	33.21	ADR	38	-27.4	.67	44.48	54	-9.52	-	-	-	-	197	225	V

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

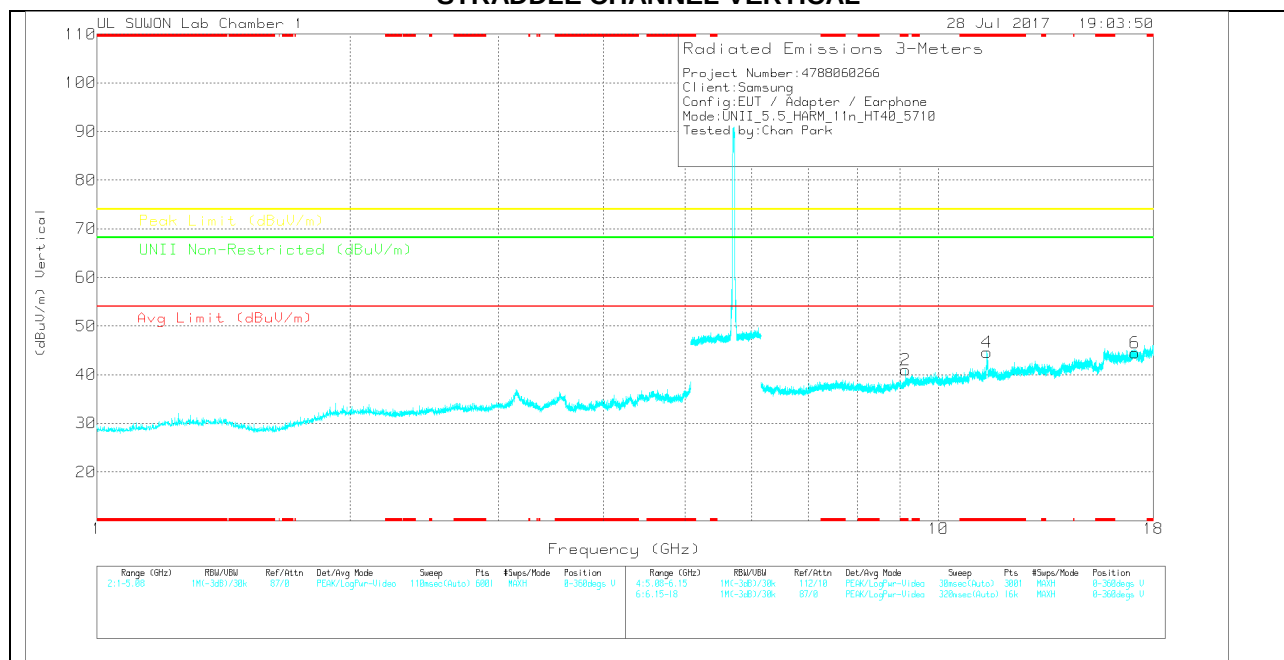
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

STRADDLE CHANNEL HORIZONTAL



STRADDLE 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.

STRADDLE CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_0016 8717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 9.136	32.4	PK	36.4	-28.5	0	40.3	-	-	74	-33.7	-	-	0-360	250	H
3	* 11.419	31.3	PK	38.1	-28.3	0	41.1	-	-	74	-32.9	-	-	0-360	250	H
5	17.128	25.89	PK	41.4	-23.2	0	44.09	-	-	-	-	68.2	-24.11	0-360	150	H
2	* 9.136	33.09	PK	36.4	-28.5	0	40.99	-	-	74	-33.01	-	-	0-360	250	V
4	* 11.419	34.84	PK	38.1	-28.3	0	44.64	-	-	74	-29.36	-	-	0-360	250	V
6	17.125	26.45	PK	41.3	-23.3	0	44.45	-	-	-	-	68.2	-23.75	0-360	150	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_001687 17	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.423	46.93	PK-U	38.1	-28.3	0	56.73	-	-	74	-17.27	-	-	197	225	V
* 11.42	33.28	ADR	38.1	-28.3	.67	43.75	54	-10.25	-	-	-	-	197	225	V

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

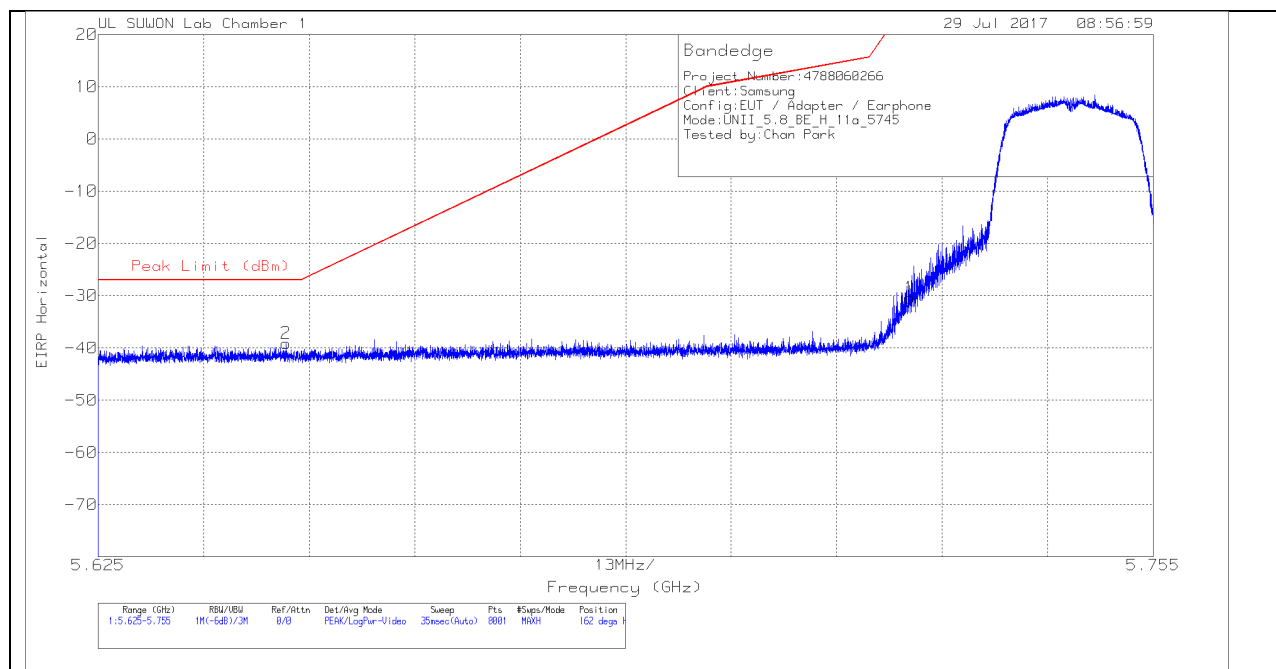
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.4. 5.8 GHz

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

HORIZONTAL PEAK PLOT



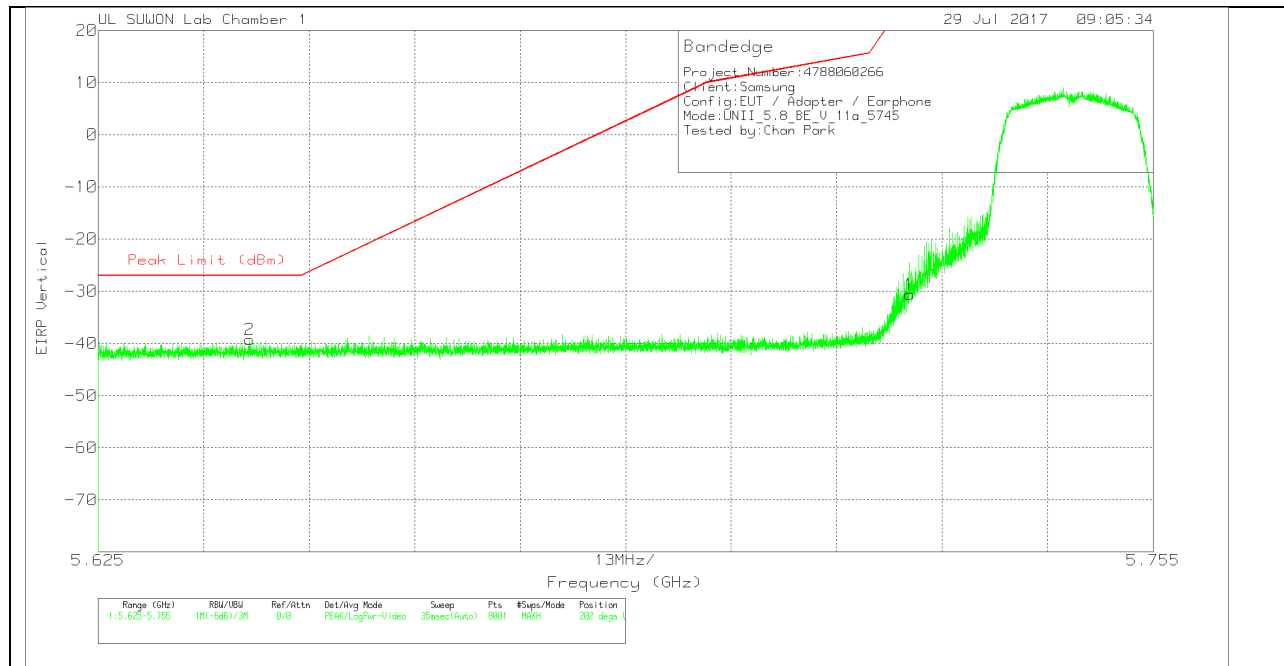
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	20170531_3117_00 168717	10dB_Att(dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-53.8	Pk	34.5	-22.9	11.8	0	-30.4	26.97	-57.37	162	105	H
2	5.648	-62.31	Pk	34.4	-23	11.8	0	-39.11	-27	-12.11	162	105	H

Pk - Peak detector

VERTICAL PEAK PLOT



VERTICAL DATA

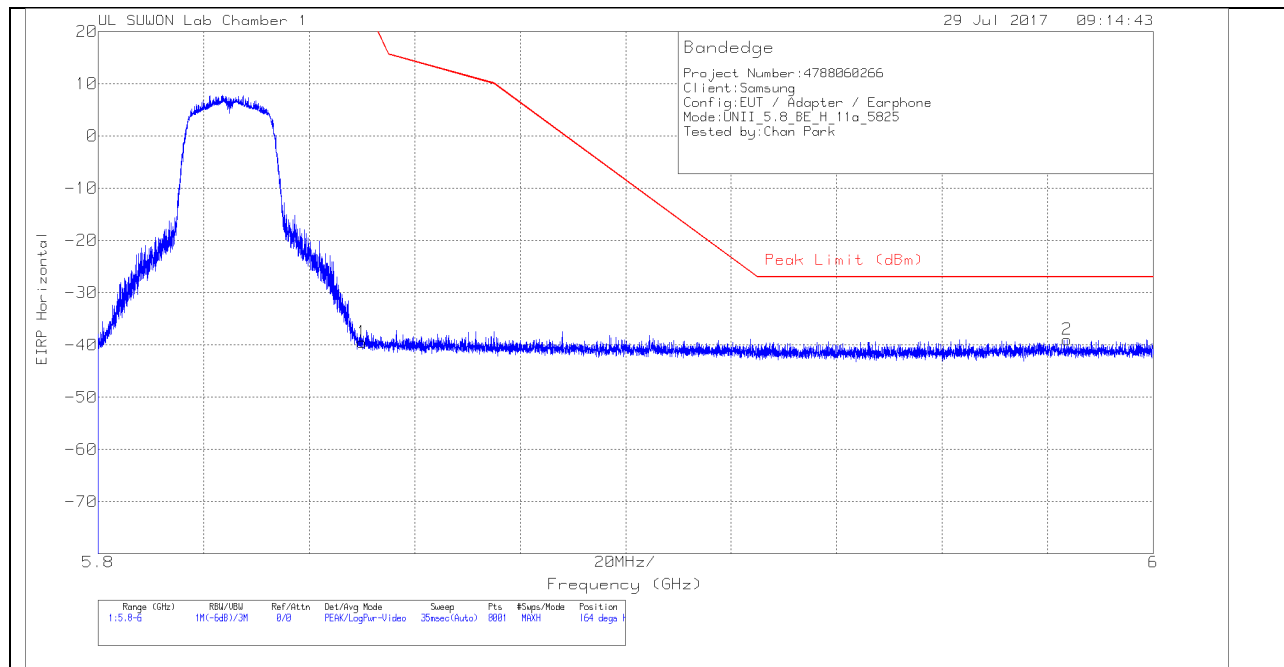
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	20170531_3117_00 168717	10dB_Att(dB)	Conversio n Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-53.99	Pk		-22.9	11.8	0	-30.59	26.97	-57.56	202	320	V
2	5.644	-62.36	Pk		-23.1	11.8	0	-39.26	-27	-12.26	202	320	V

Pk - Peak detector

BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK PLOT



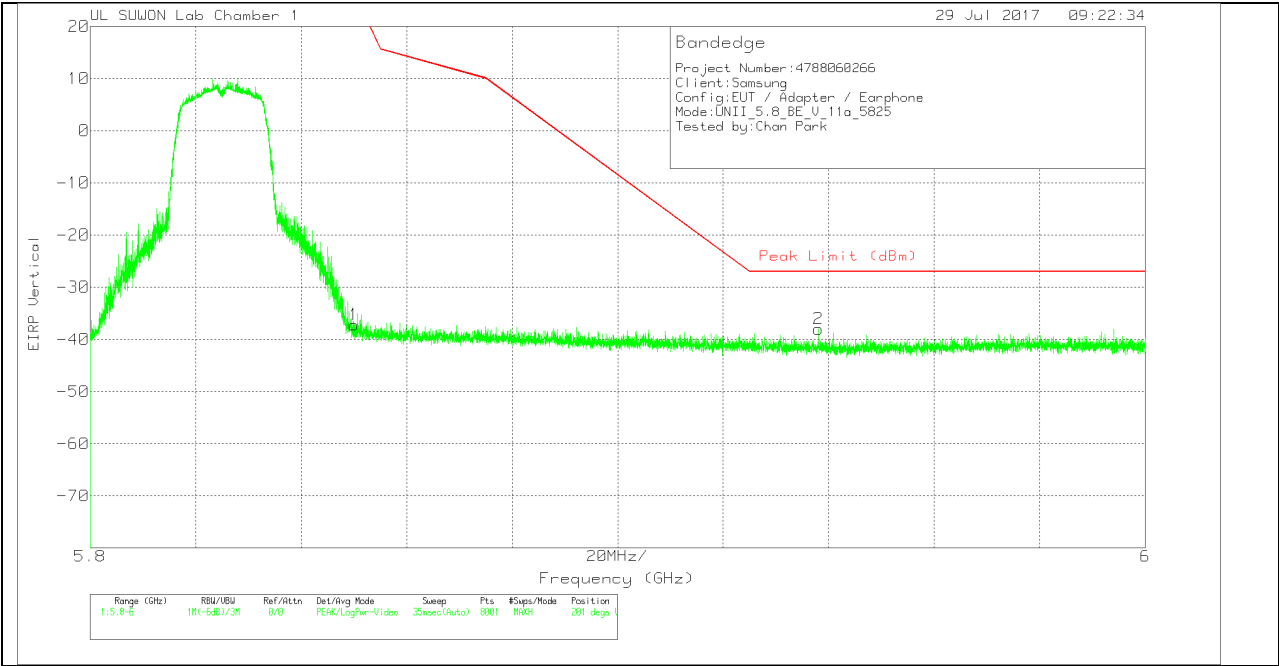
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	20170531_3117_00_168717	10dB_Att(dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-63.46	Pk		-22.3	11.8	0	-39.46	26.94	-66.4	164	100	H
2	5.984	-63.17	Pk		-22.3	11.8	0	-38.97	-27	-11.97	164	100	H

Pk - Peak detector

VERTICAL PEAK PLOT



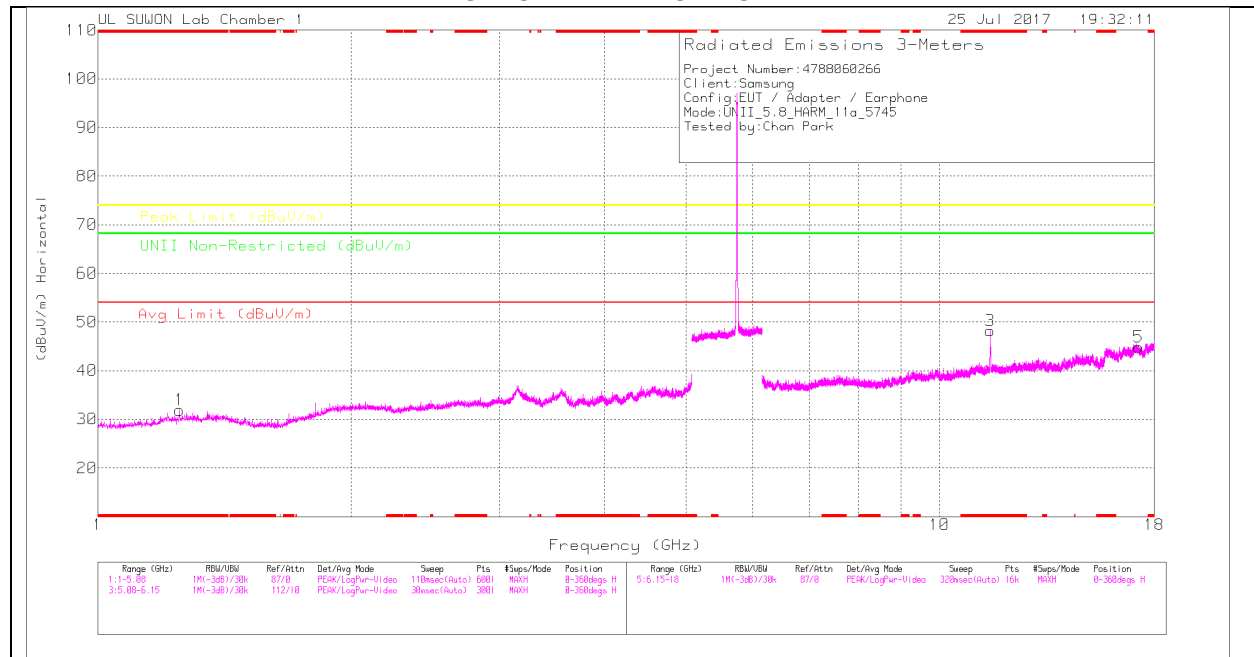
VERTICAL DATA

Trace Markers

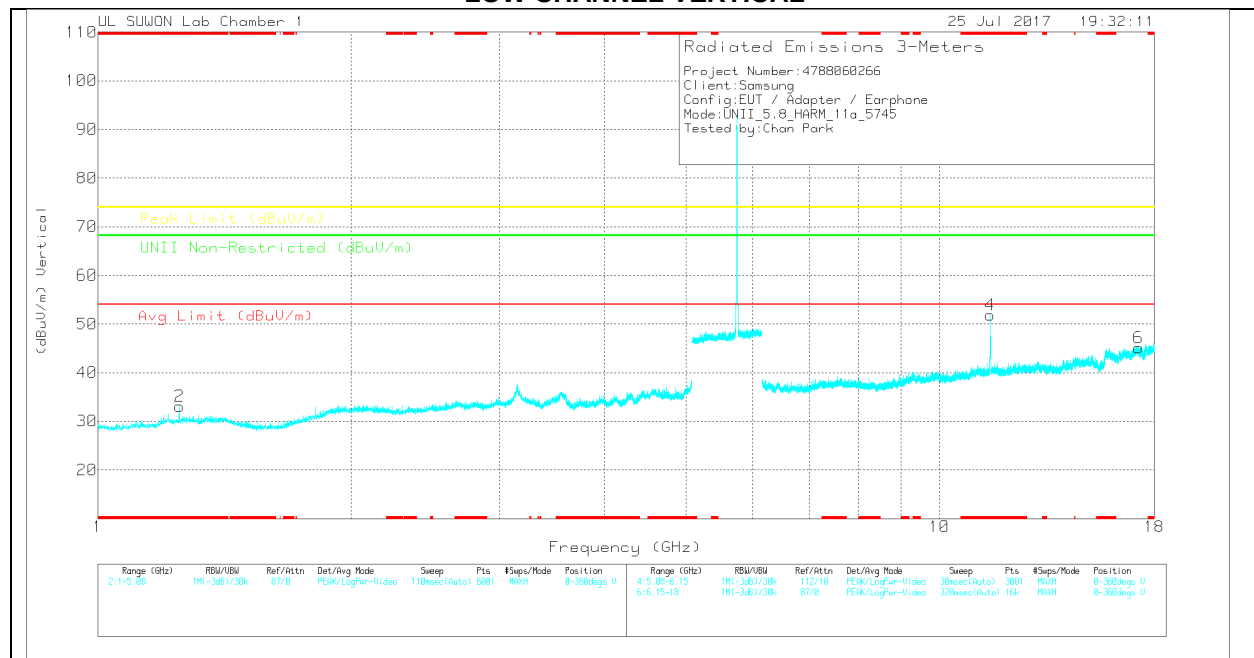
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	20170531_3117_00 168717	10dB_Att(dB)	Conversio n Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-61.2	Pk	34.5	-22.3	11.8	0	-37.2	26.94	-64.14	201	309	V
2	5.938	-61.79	Pk	34.6	-22.6	11.8	0	-37.99	-27	-10.99	201	309	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	20170531_3117_00168717	5Ghz_LP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.16	PK	29.3	-39.6	0	31.86	-	-	74	-42.14	-	-	0-360	150	H
2	* 1.25	43.37	PK	29.3	-39.6	0	33.07	-	-	74	-40.93	-	-	0-360	250	V
3	* 11.49	38.07	PK	38.2	-28.1	0	48.17	-	-	74	-25.83	-	-	0-360	250	H
5	17.237	25.87	PK	41.6	-22.6	0	44.87	-	-	-	-	68.2	-23.33	0-360	250	H
4	* 11.49	41.8	PK	38.2	-28.2	0	51.8	-	-	74	-22.2	-	-	0-360	250	V
6	17.235	25.99	PK	41.6	-22.5	0	45.09	-	-	-	-	68.2	-23.11	0-360	250	V

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

PK – Peak detector

Radiated Emissions

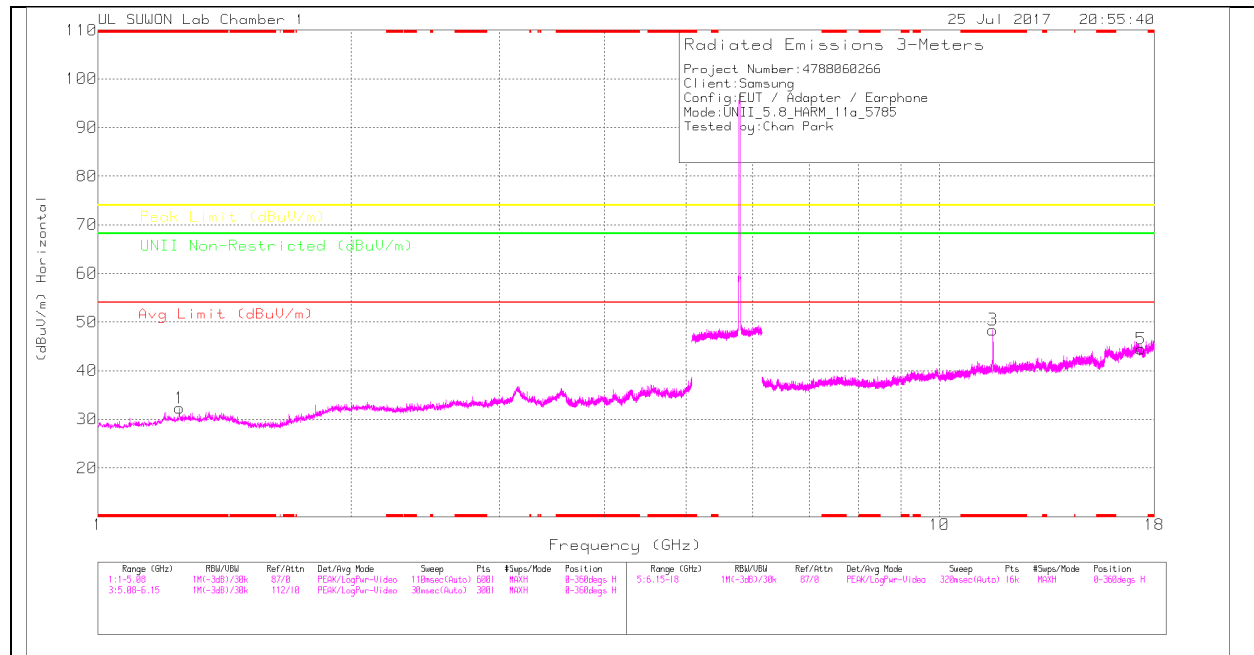
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.492	50.03	PK-U	38.2	-28.1	0	60.13	-	-	74	-13.87	-	-	164	248	H
* 11.491	37.66	ADR	38.2	-28.1	.32	48.08	54	-5.92	-	-	-	-	164	248	H
* 11.489	53.29	PK-U	38.2	-28.2	0	63.29	-	-	74	-10.71	-	-	186	227	V
* 11.49	40.01	ADR	38.2	-28.1	.32	50.43	54	-3.57	-	-	-	-	186	227	V

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

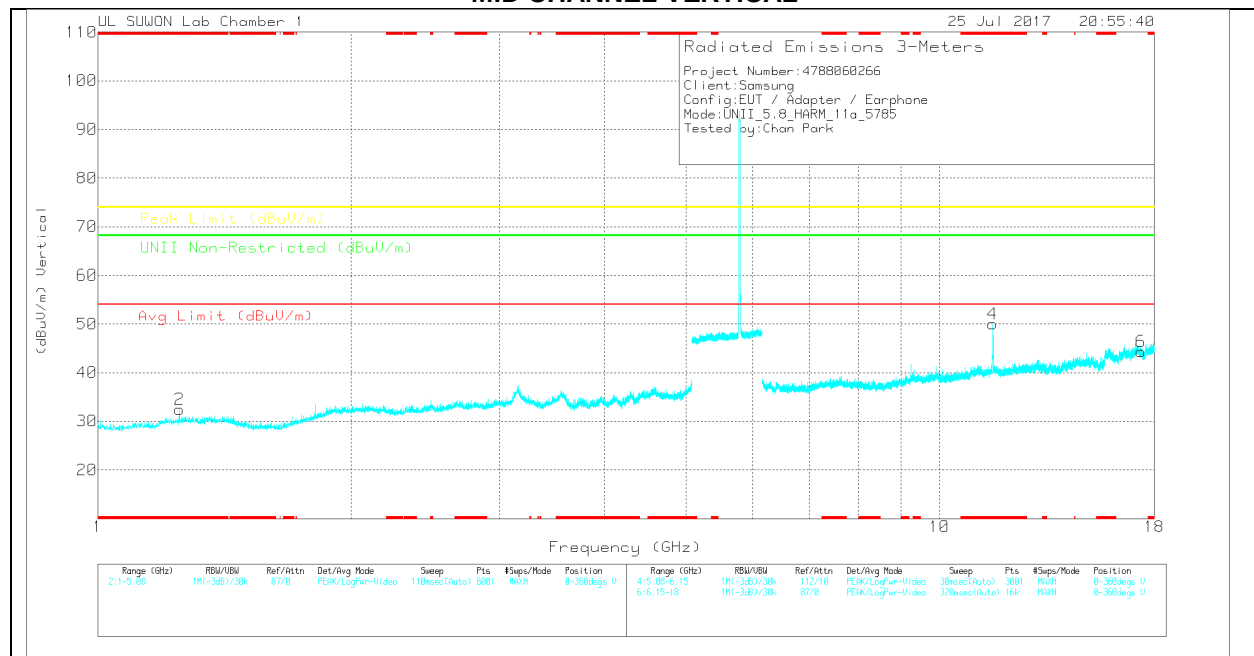
PK-U - U-NII: Maximum Peak

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	20170531_3117_00168717	5Ghz_LP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.25	42.61	PK	29.3	-39.6	0	32.31	-	-	74	-41.69	-	-	0-360	250	H
2	* 1.25	42.68	PK	29.3	-39.6	0	32.38	-	-	74	-41.62	-	-	0-360	250	V
3	* 11.572	38.11	PK	38.2	-27.9	0	48.41	-	-	74	-25.59	-	-	0-360	250	H
5	17.356	25.74	PK	41.4	-22.7	0	44.44	-	-	-	-	68.2	-23.76	0-360	150	H
4	* 11.57	39.7	PK	38.2	-27.9	0	50	-	-	74	-24	-	-	0-360	250	V
6	17.358	25.51	PK	41.4	-22.6	0	44.31	-	-	-	-	68.2	-23.89	0-360	250	V

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

PK – Peak detector

Radiated Emissions

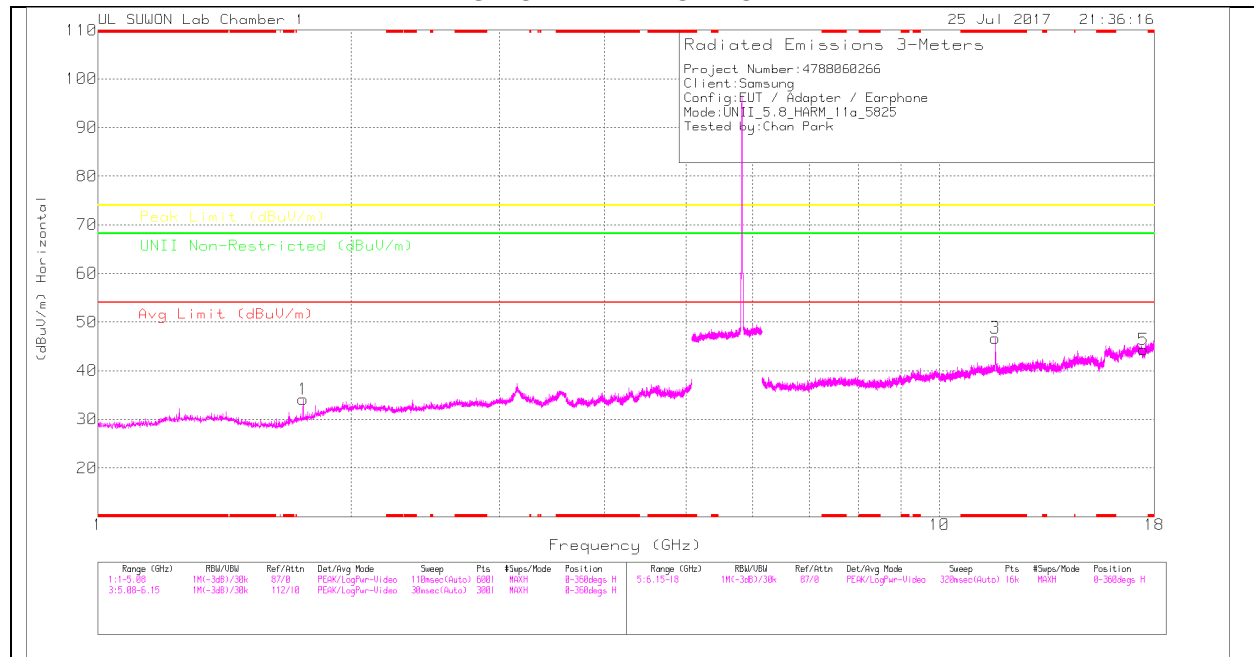
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.48	41.29	PK-U	38.2	-28.3	0	51.19	-	-	74	-22.81	-	-	259	161	H
* 11.48	29.31	ADR	38.2	-28.3	0	39.21	54	-14.79	-	-	-	-	259	161	H
* 11.573	48.19	PK-U	38.2	-28	0	58.39	-	-	74	-15.61	-	-	165	108	H
* 11.571	35.02	ADR	38.2	-27.9	.32	45.64	54	-8.36	-	-	-	-	165	108	H
* 11.571	51.13	PK-U	38.2	-27.9	0	61.43	-	-	74	-12.57	-	-	186	244	V
* 11.571	38.31	ADR	38.2	-27.9	.32	48.93	54	-5.07	-	-	-	-	186	244	V

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

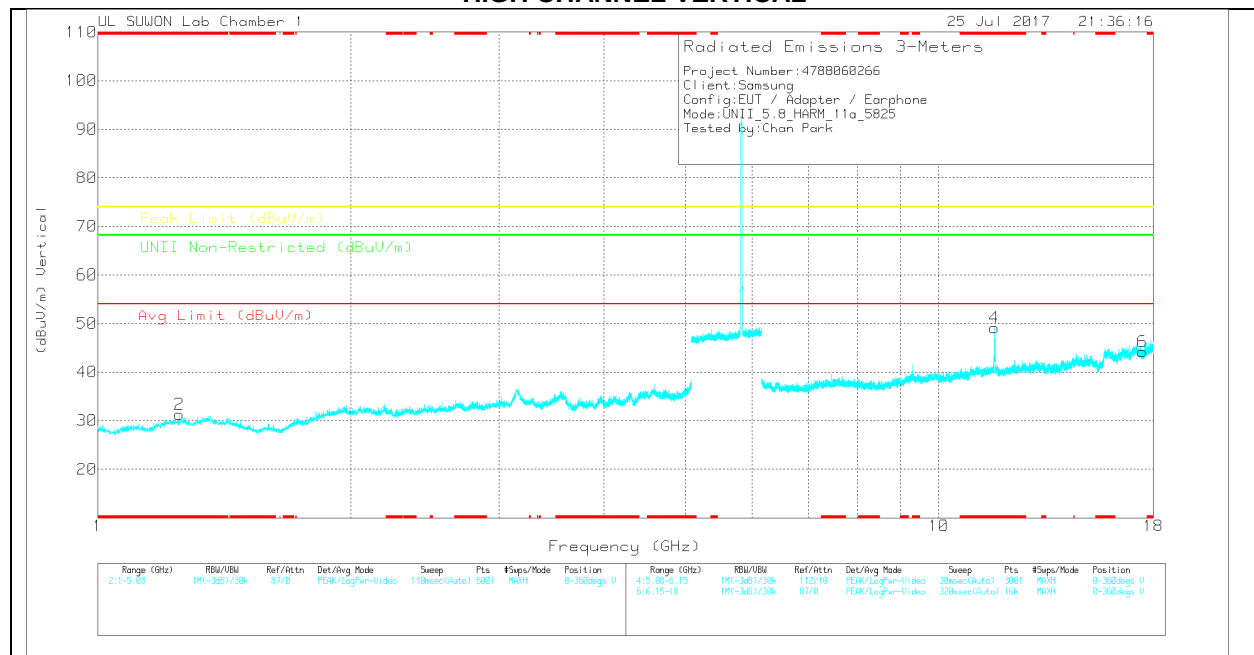
PK-U - U-NII: Maximum Peak

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	20170531_3117_0016 8717	5Ghz_LP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.753	43.72	PK	29.2	-38.8	0	34.12	-	-	-	-	68.2	-34.08	0-360	250	H
2	* 1.25	41.52	PK	29.3	-39.6	0	31.22	-	-	74	-42.78	-	-	0-360	250	V
3	* 11.653	37.13	PK	38.1	-28.5	0	46.73	-	-	74	-27.27	-	-	0-360	250	H
5	17.478	26.12	PK	41.2	-23	0	44.32	-	-	-	-	68.2	-23.88	0-360	250	H
4	* 11.653	39.53	PK	38.1	-28.5	0	49.13	-	-	74	-24.87	-	-	0-360	250	V
6	17.476	26.05	PK	41.2	-23	0	44.25	-	-	-	-	68.2	-23.95	0-360	150	V

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

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.65	47.41	PK-U	38.1	-28.5	0	57.01	-	-	74	-16.99	-	-	163	103	H
* 11.65	34.52	ADR	38.1	-28.6	.32	44.34	54	-9.66	-	-	-	-	163	103	H
* 11.652	50.05	PK-U	38.1	-28.6	0	59.55	-	-	74	-14.45	-	-	220	105	V
* 11.649	37.12	ADR	38.1	-28.6	.32	46.94	54	-7.06	-	-	-	-	220	105	V

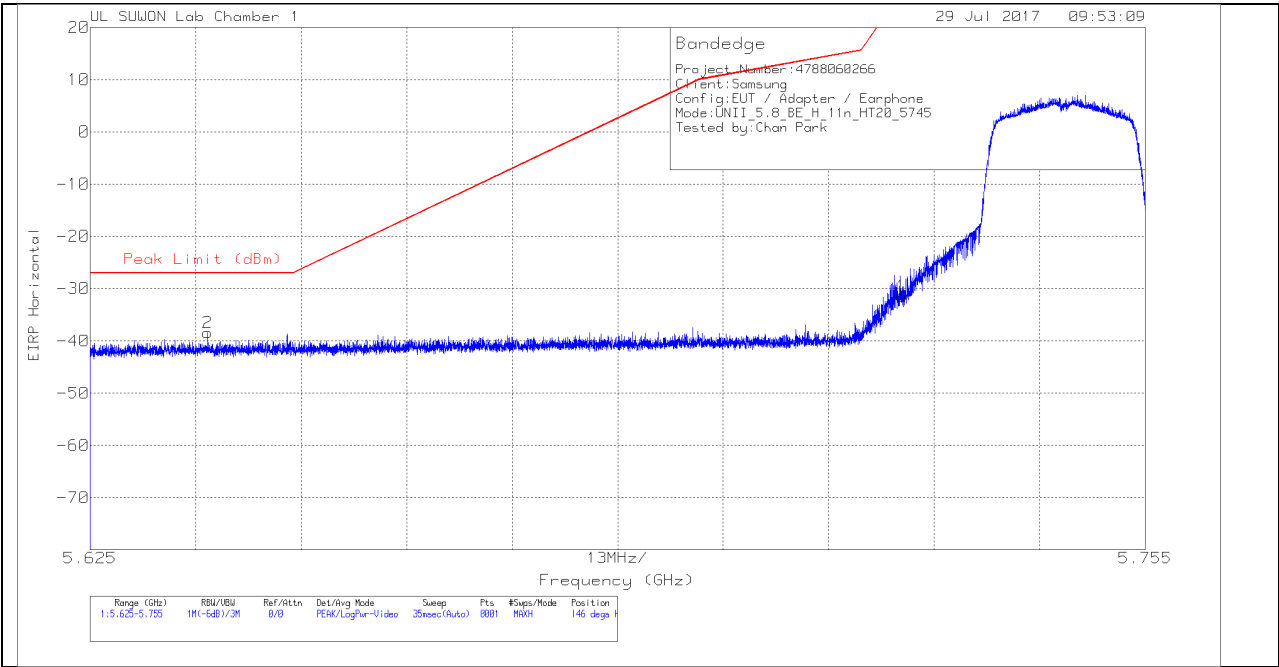
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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

HORIZONTAL PEAK PLOT



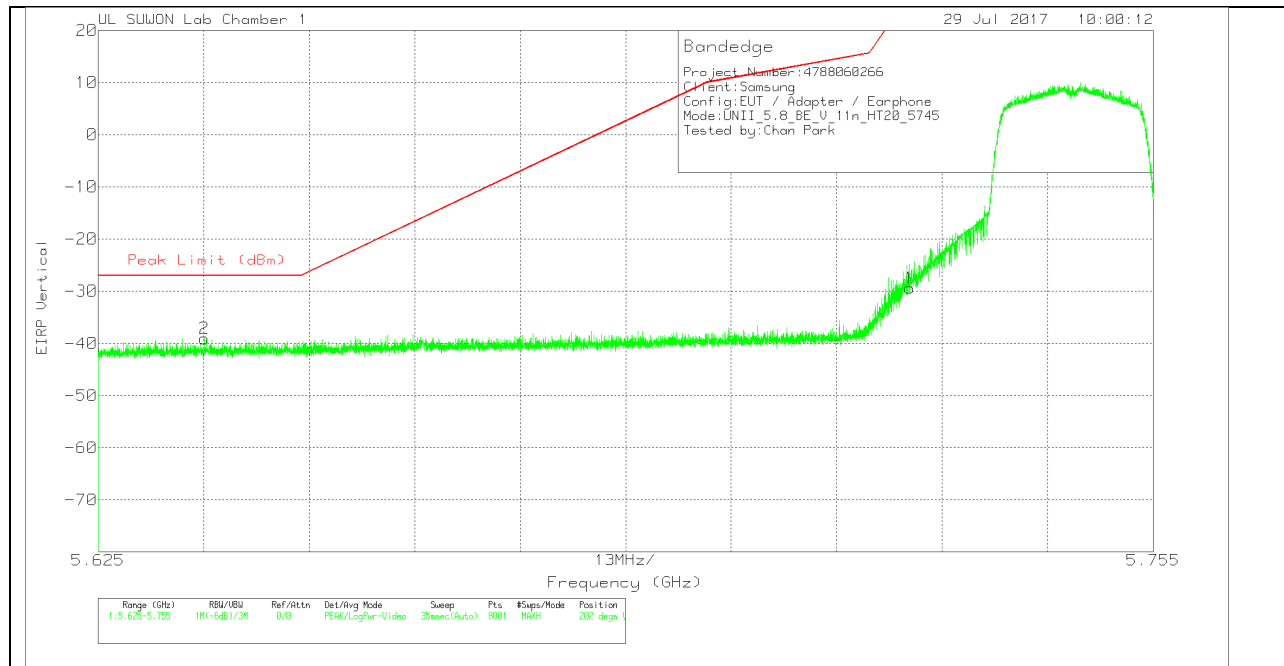
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	20170531_3117_00 168717	10dB_Att(dB)	Conversio n Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-54.87	Pk	34.5	-22.9	11.8	0	-31.47	26.97	-58.44	146	130	H
2	5.64	-61.61	Pk	34.4	-23	11.8	0	-38.41	-27	-11.41	146	130	H

Pk - Peak detector

VERTICAL PEAK PLOT



VERTICAL DATA

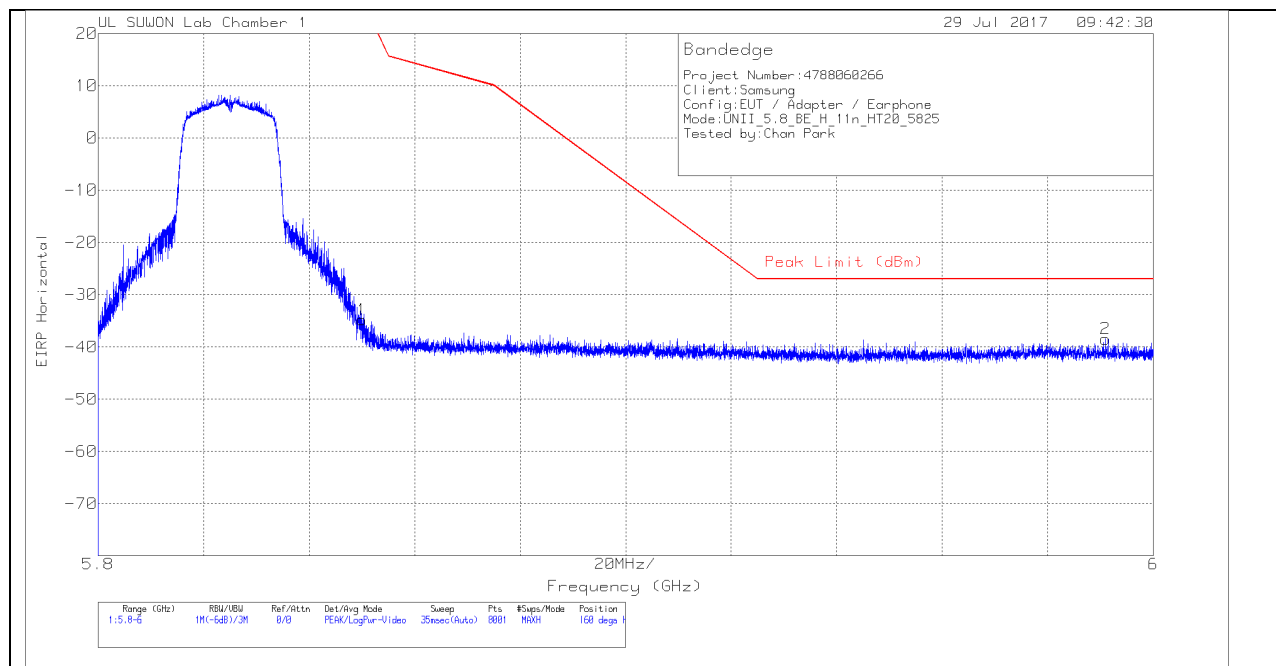
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	20170531_3117_00 168717	10dB_Att(dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-52.81	Pk	34.5	-22.9	11.8	0	-29.41	26.97	-56.38	202	337	V
2	5.638	-62.27	Pk	34.4	-23	11.8	0	-39.07	-27	-12.07	202	337	V

Pk - Peak detector

BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



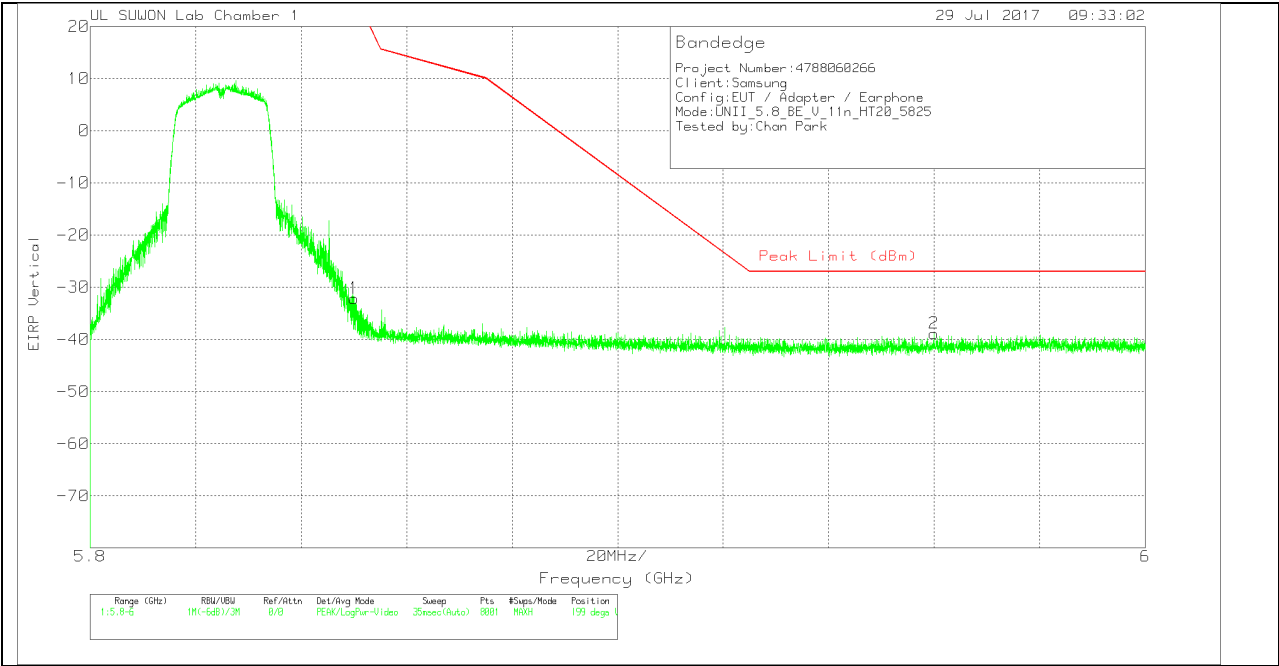
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	20170531_3117_00 168717	10dB_Att(dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-58.8	Pk	34.5	-22.3	11.8	0	-34.8	26.94	-61.74	160	101	H
2	5.991	-62.77	Pk	34.8	-22.3	11.8	0	-38.47	-27	-11.47	160	101	H

Pk - Peak detector

VERTICAL PEAK PLOT



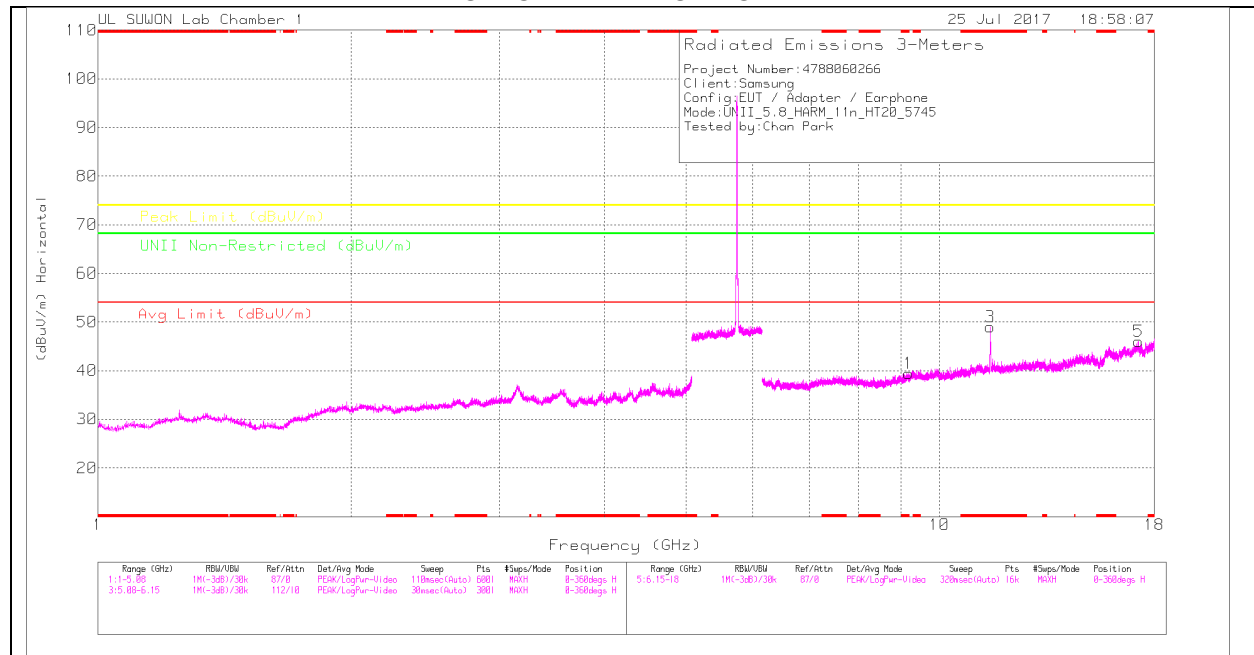
VERTICAL DATA

Trace Markers

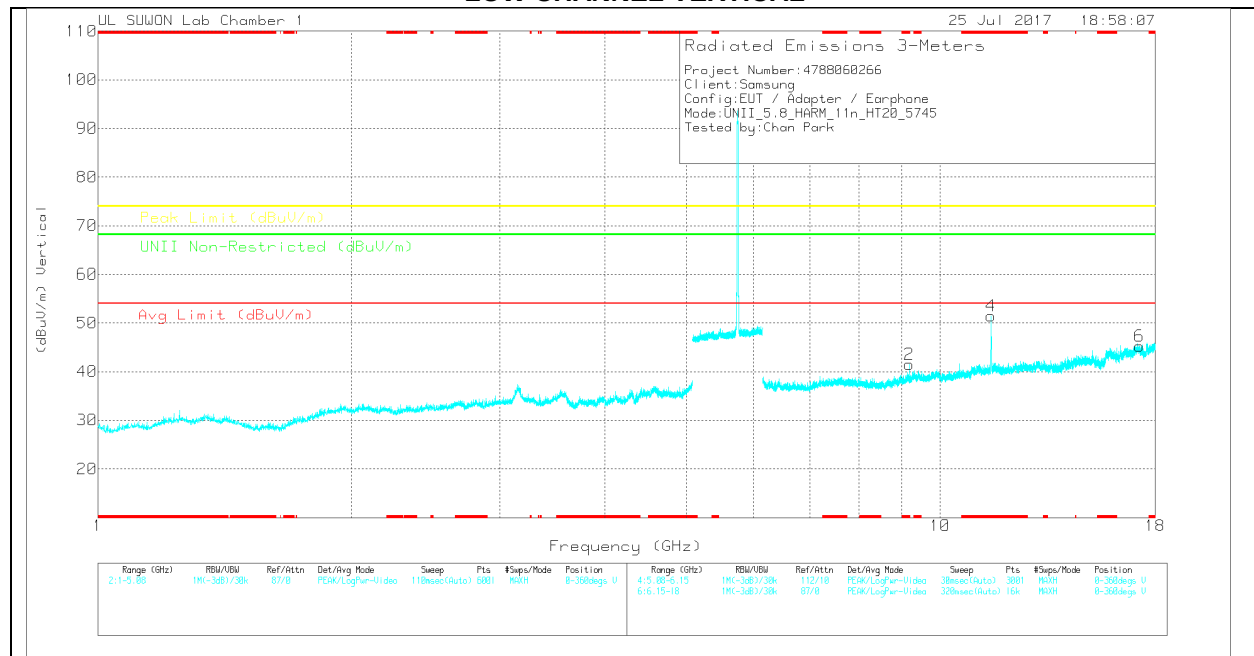
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	20170531_3117_00 168717	10dB_Att(dB)	Conversio n Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-56.13	Pk		-22.3	11.8	0	-32.13	26.94	-59.07	199	360	V
2	5.96	-62.55	Pk		-22.7	11.8	0	-38.85	-27	-11.85	199	360	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	20170531_3117_0016 8717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 9.192	31.83	PK	36.4	-28.8	0	39.43	-	-	74	-34.57	-	-	0-360	250	H
3	* 11.49	38.85	PK	38.2	-28.1	0	48.95	-	-	74	-25.05	-	-	0-360	250	H
5	17.234	26.78	PK	41.6	-22.4	0	45.98	-	-	-	-	68.2	-22.22	0-360	150	H
2	* 9.192	33.9	PK	36.4	-28.8	0	41.5	-	-	74	-32.5	-	-	0-360	250	V
4	* 11.493	41.29	PK	38.2	-28	0	51.49	-	-	74	-22.51	-	-	0-360	250	V
6	17.231	26.08	PK	41.6	-22.4	0	45.28	-	-	-	-	68.2	-22.92	0-360	150	V

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

PK – Peak detector

Radiated Emissions

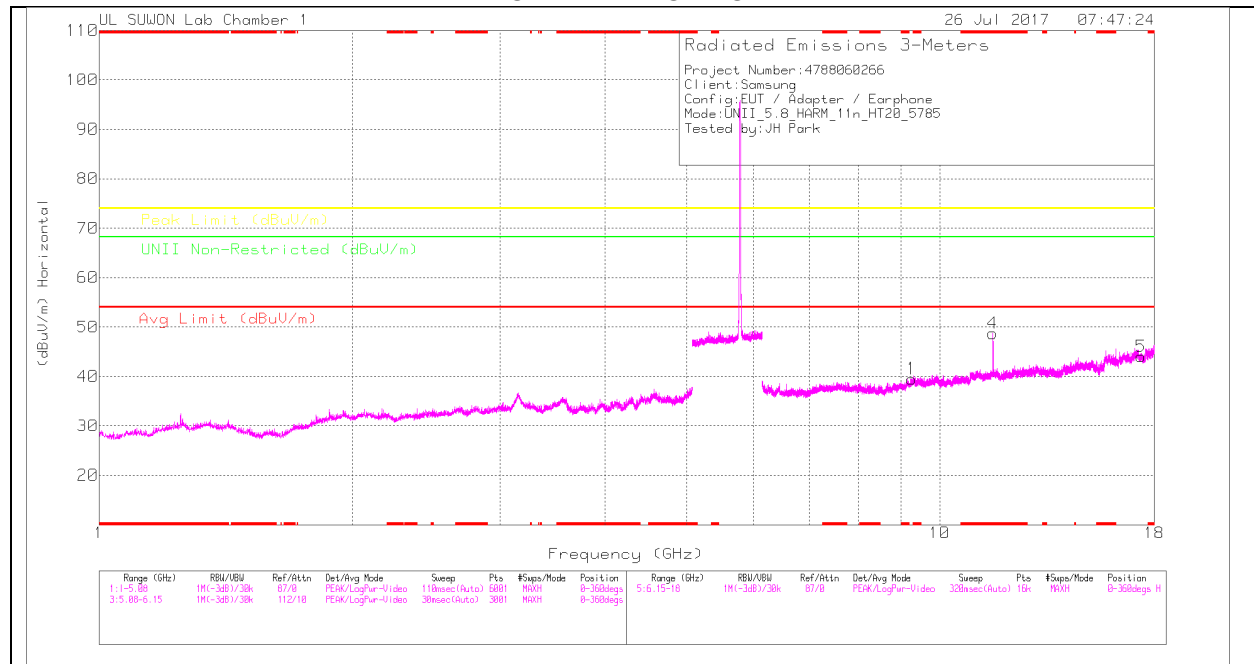
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.488	50.15	PK-U	38.2	-28.2	0	60.15	-	-	74	-13.85	-	-	160	108	H
* 11.491	36.84	ADR	38.2	-28.1	.35	47.29	54	-6.71	-	-	-	-	160	108	H
* 11.488	52.34	PK-U	38.2	-28.2	0	62.34	-	-	74	-11.66	-	-	186	234	V
* 11.491	38.62	ADR	38.2	-28.1	.35	49.07	54	-4.93	-	-	-	-	186	234	V

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

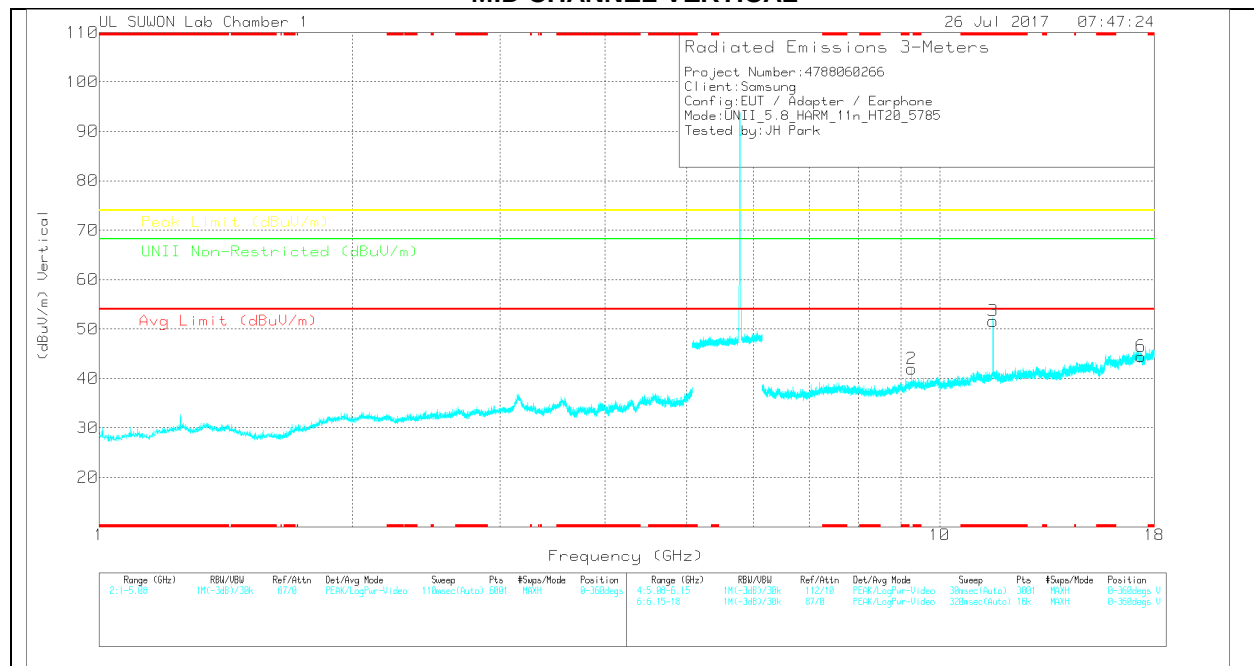
PK-U - U-NII: Maximum Peak

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	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	9.259	31.91	PK	36.4	-28.8	0	39.51	-	-	-	-	68.2	-28.69	0-360	250	H
4	* 11.57	38.42	PK	38.2	-27.9	0	48.72	-	-	74	-25.28	-	-	0-360	250	H
5	17.355	25.33	PK	41.4	-22.7	0	44.03	-	-	-	-	68.2	-24.17	0-360	250	H
2	9.256	34.46	PK	36.4	-28.9	0	41.96	-	-	-	-	68.2	-26.24	0-360	250	V
3	* 11.574	41.33	PK	38.2	-27.9	0	51.63	-	-	74	-22.37	-	-	0-360	250	V
6	17.351	25.77	PK	41.4	-22.7	0	44.47	-	-	-	-	68.2	-23.73	0-360	150	V

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

PK – Peak Detector

Radiated Emissions

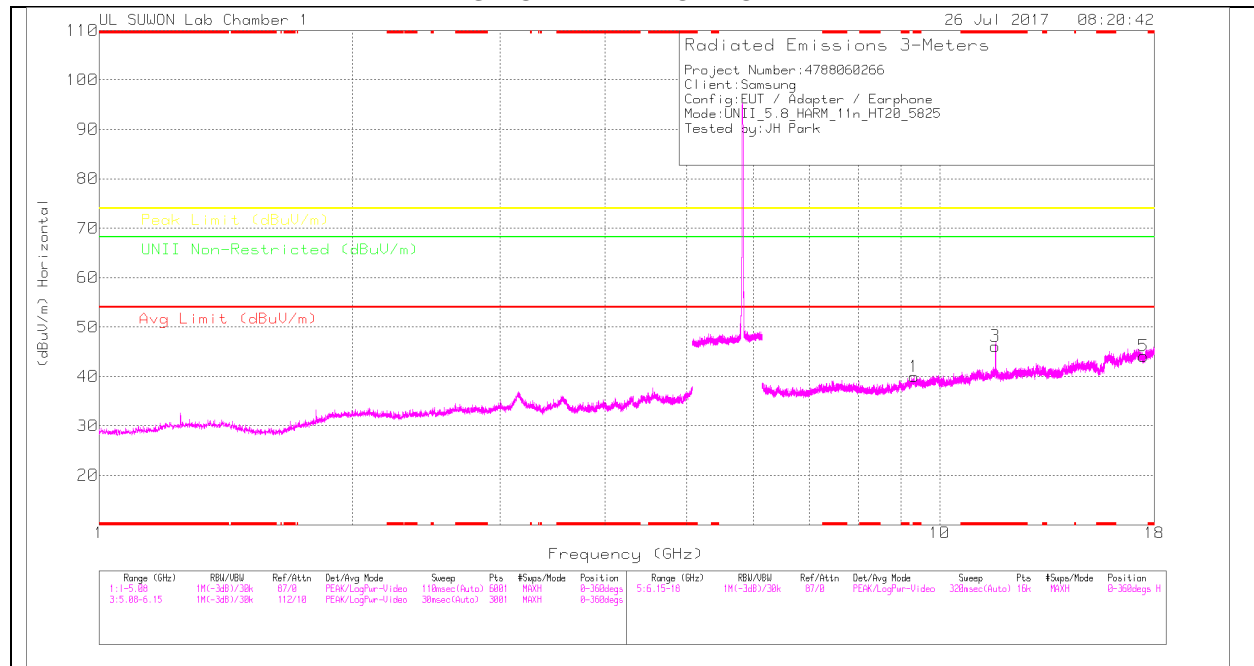
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_00168717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.573	47.69	PK-U	38.2	-28	0	57.89	-	-	74	-16.11	-	-	162	109	H
* 11.569	35.3	ADR	38.2	-27.9	.35	45.95	54	-8.05	-	-	-	-	162	109	H
* 11.574	48.96	PK-U	38.2	-27.9	0	59.26	-	-	74	-14.74	-	-	194	384	V
* 11.572	35.51	ADR	38.2	-27.9	.35	46.16	54	-7.84	-	-	-	-	194	384	V

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

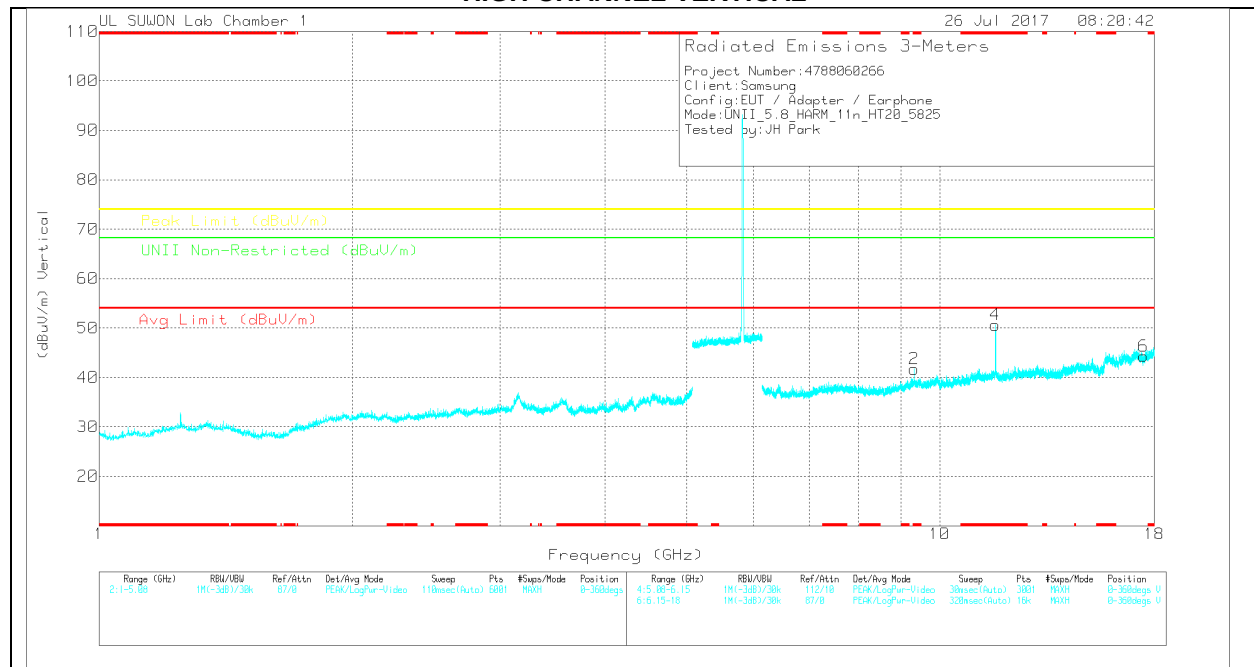
PK-U - U-NII: Maximum Peak

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	20170531_3117_0016 8717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 9.32	31.67	PK	36.4	-28.1	0	39.97	-	-	74	-34.03	-	-	0-360	250	H
3	* 11.65	36.53	PK	38.1	-28.5	0	46.13	-	-	74	-27.87	-	-	0-360	250	H
5	17.475	25.82	PK	41.3	-23	0	44.12	-	-	-	-	68.2	-24.08	0-360	150	H
2	* 9.32	33.42	PK	36.4	-28.1	0	41.72	-	-	74	-32.28	-	-	0-360	250	V
4	* 11.648	41.13	PK	38.1	-28.6	0	50.63	-	-	74	-23.37	-	-	0-360	250	V
6	17.473	25.89	PK	41.3	-22.9	0	44.29	-	-	-	-	68.2	-23.91	0-360	250	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_001687 17	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 9.32	41.46	PK-U	36.4	-28.1	0	49.76	-	-	74	-24.24	-	-	167	233	H
* 9.32	31.3	ADR	36.4	-28	0	39.7	54	-14.3	-	-	-	-	167	233	H
* 9.32	42.66	PK-U	36.4	-28	0	51.06	-	-	74	-22.94	-	-	313	245	V
* 9.32	30.96	ADR	36.4	-28	0	39.36	54	-14.64	-	-	-	-	313	245	V
* 11.652	49.68	PK-U	38.1	-28.6	0	59.18	-	-	74	-14.82	-	-	197	400	V
* 11.65	36.32	ADR	38.1	-28.5	.35	46.27	54	-7.73	-	-	-	-	197	400	V
* 11.654	49.24	PK-U	38.1	-28.5	0	58.84	-	-	74	-15.16	-	-	197	398	V
* 11.65	36.28	ADR	38.1	-28.5	.35	46.23	54	-7.77	-	-	-	-	197	398	V

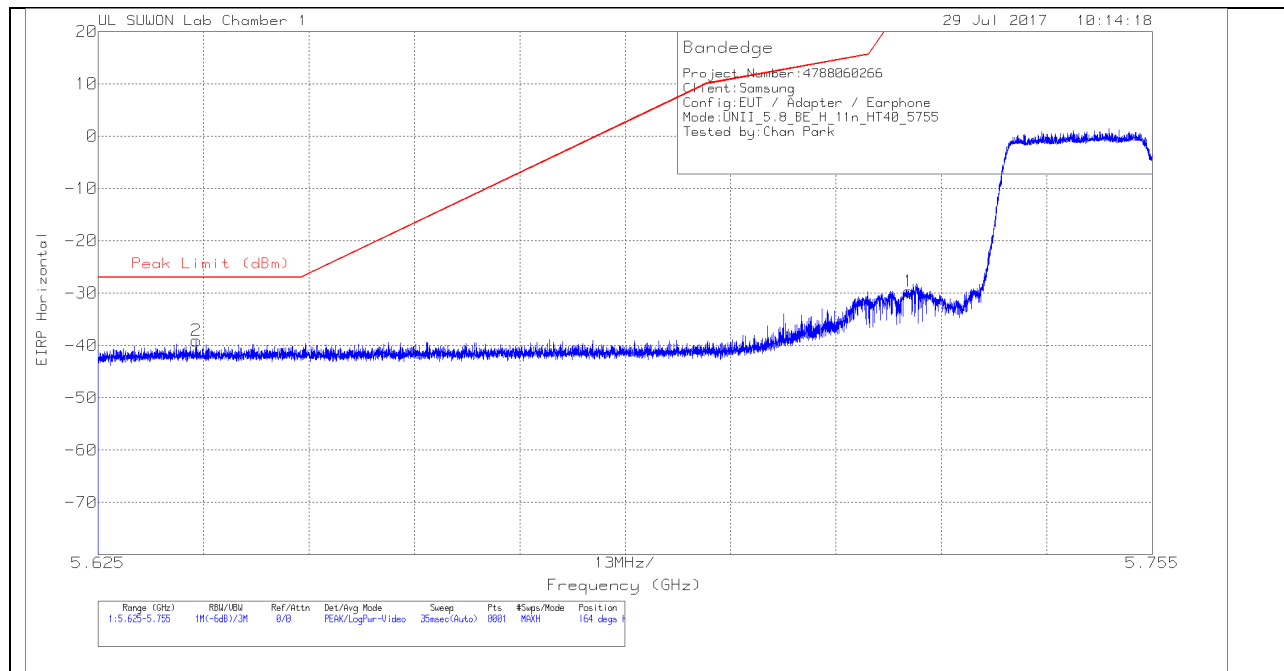
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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

HORIZONTAL PEAK PLOT



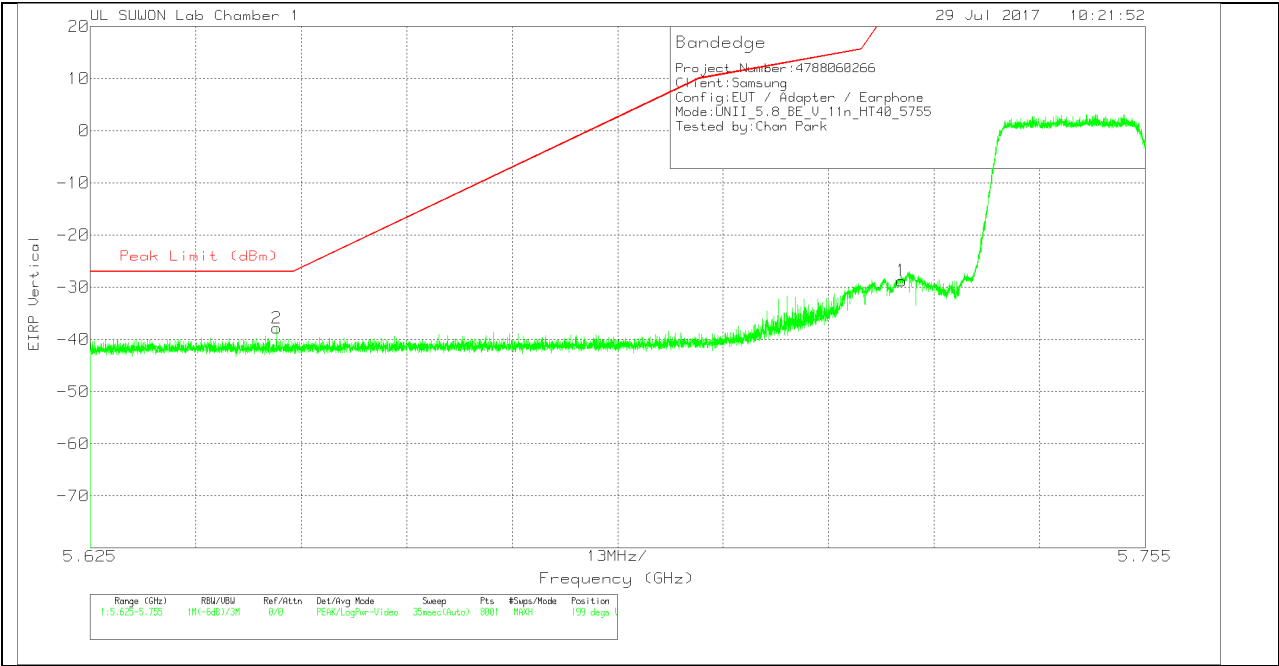
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	20170531_3117_00 168717	10dB_Att (dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-53.03	Pk		-22.9	11.8	0	-29.63	26.97	-56.6	164	109	H
2	5.637	-62.27	Pk		-23	11.8	0	-39.07	-27	-12.07	164	109	H

Pk - Peak detector

VERTICAL PEAK PLOT



VERTICAL DATA

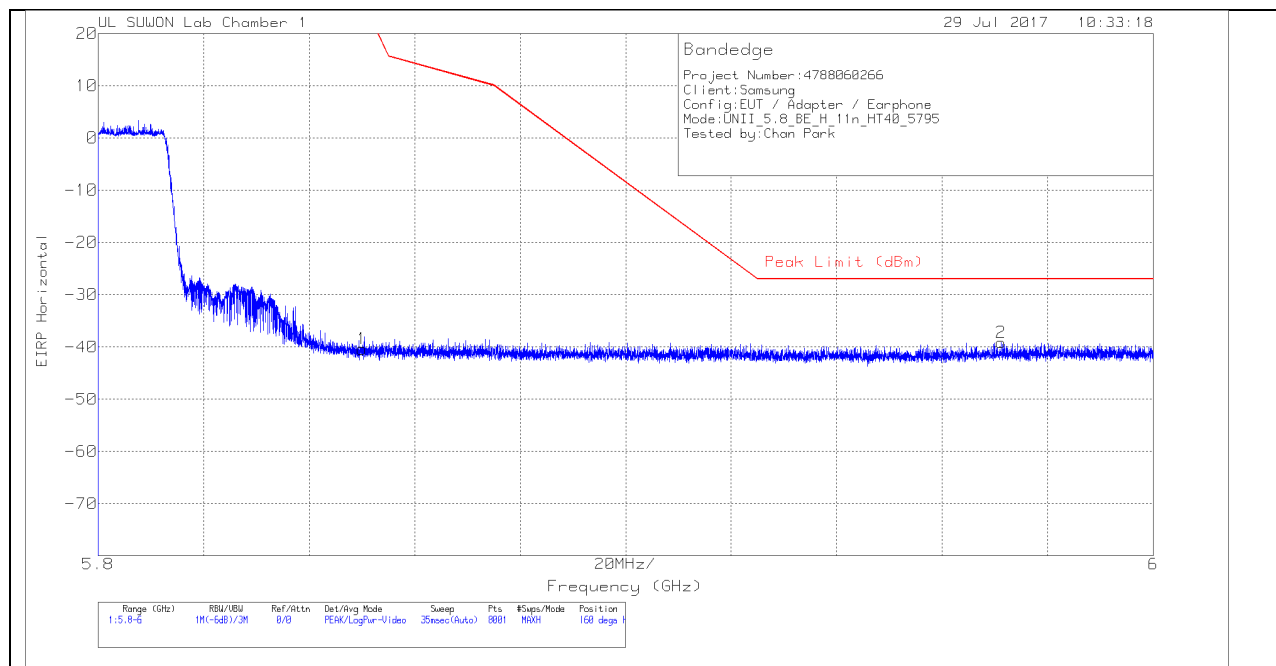
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	20170531_3117_00 168717	10dB_Att(dB)	Conversio n Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-52.16	Pk	34.5	-22.9	11.8	0	-28.76	26.97	-55.73	199	338	V
2	5.648	-61.05	Pk	34.4	-23	11.8	0	-37.85	-27	-10.85	199	338	V

Pk - Peak detector

BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK PLOT



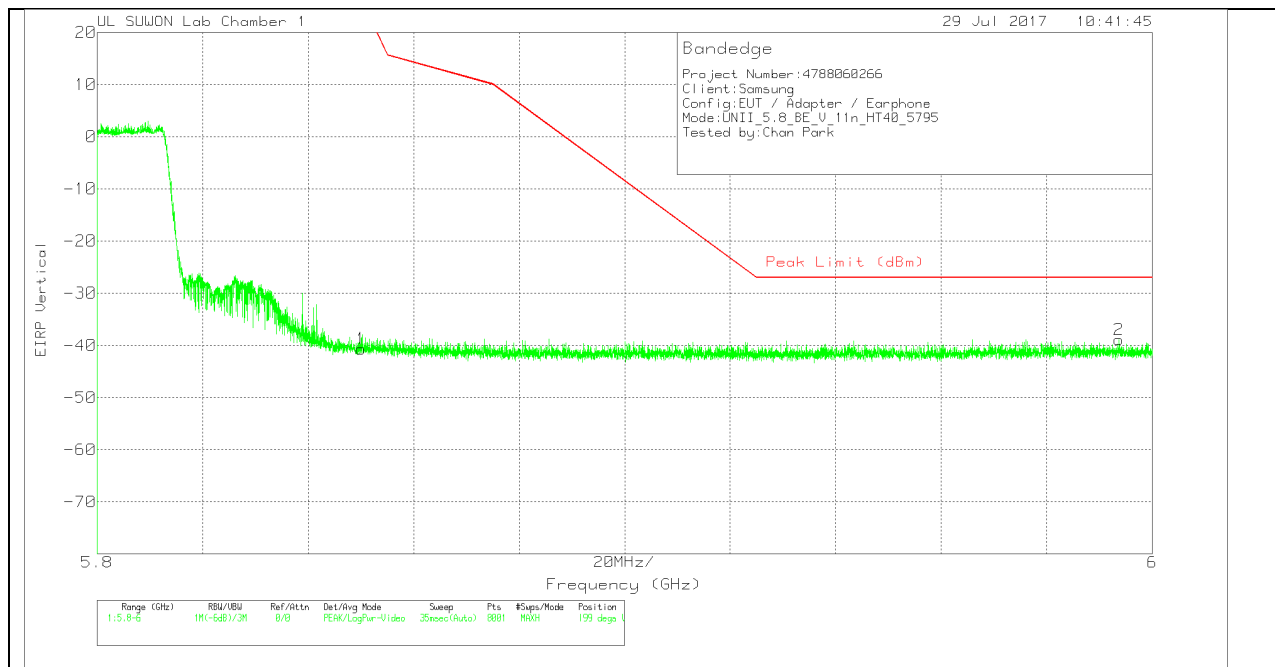
HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	20170531_3117_00 168717	10dB_Att(dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-64.4	Pk	34.5	-22.3	11.8	0	-40.4	26.94	-67.34	160	100	H
2	5.971	-63.17	Pk	34.7	-22.5	11.8	0	-39.17	-27	-12.17	160	100	H

Pk - Peak detector

VERTICAL PEAK PLOT



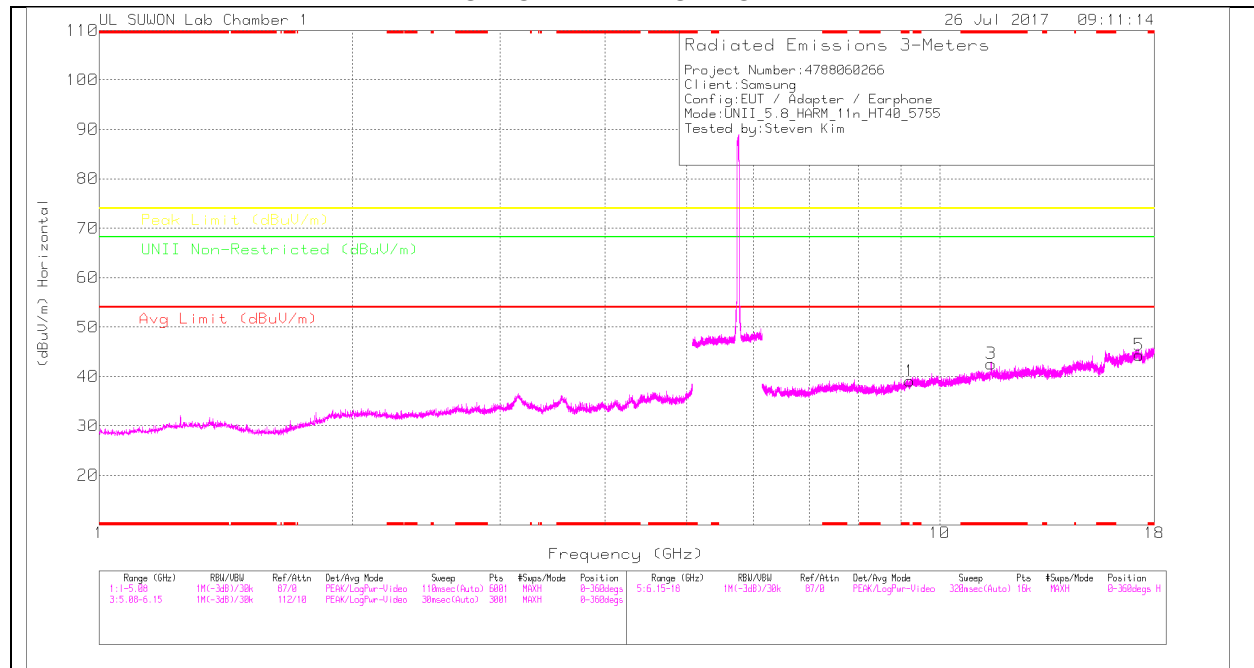
VERTICAL DATA

Trace Markers

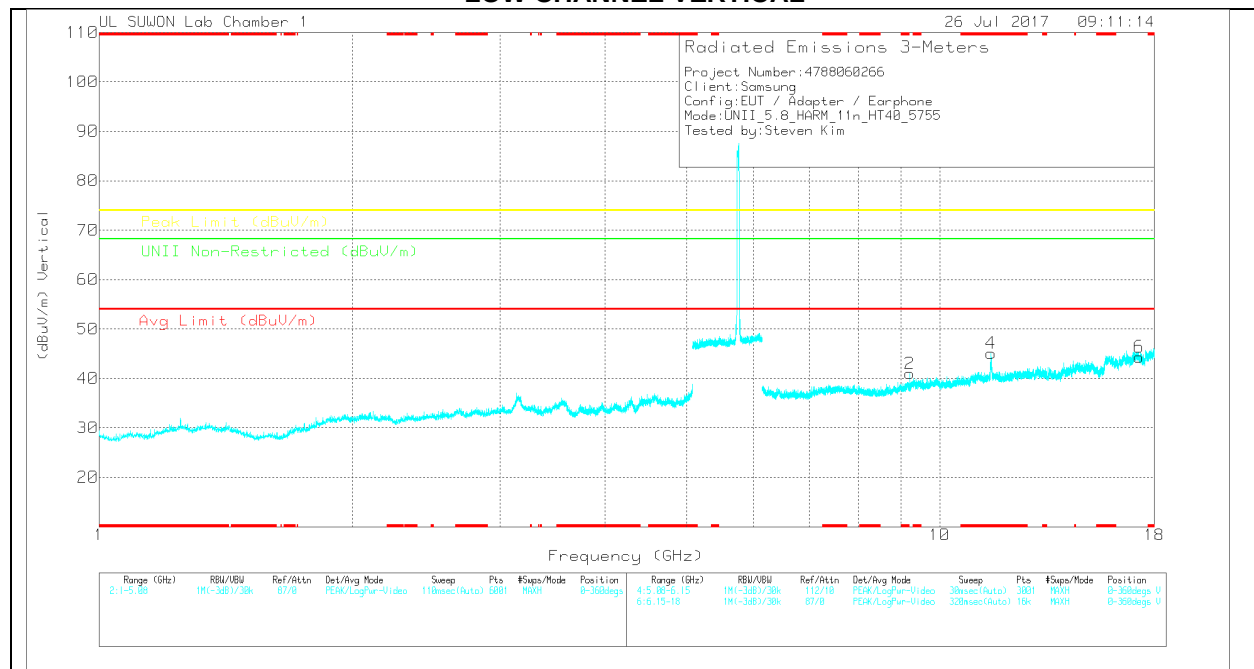
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	20170531_3117_00 168717	10dB_Att (dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-64.69	Pk	34.5	-22.3	11.8	0	-40.69	26.94	-67.63	199	363	V
2	5.994	-63.22	Pk	34.8	-22.3	11.8	0	-38.92	-27	-11.92	199	363	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	20170531_3117_0016 8717	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	9.208	31.68	PK	36.4	-29	0	39.08	-	-	-	-	68.2	-29.12	0-360	250	H
3	* 11.512	32.08	PK	38.2	-27.7	0	42.58	-	-	74	-31.42	-	-	0-360	250	H
5	17.262	25.83	PK	41.6	-23.1	0	44.33	-	-	-	-	68.2	-23.87	0-360	150	H
2	9.208	33.56	PK	36.4	-29	0	40.96	-	-	-	-	68.2	-27.24	0-360	250	V
4	* 11.512	34.6	PK	38.2	-27.7	0	45.1	-	-	74	-28.9	-	-	0-360	250	V
6	17.259	25.85	PK	41.6	-23.1	0	44.35	-	-	-	-	68.2	-23.85	0-360	250	V

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

PK – Peak Detector

Radiated Emissions

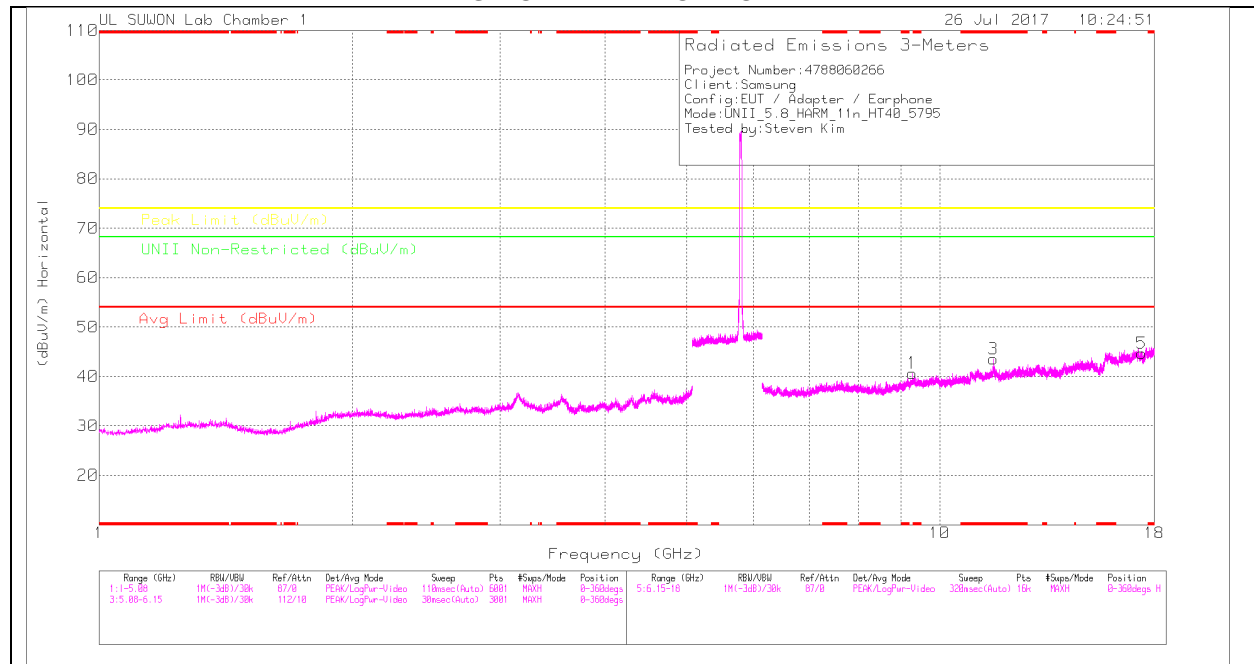
Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_001687 17	6Ghz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9.208	41.28	PK-U	36.4	-29	0	48.68	-	-	-	-	68.2	-19.52	166	128	H
9.208	42.08	PK-U	36.4	-29	0	49.48	-	-	-	-	68.2	-18.72	60	330	V
* 11.505	44.12	PK-U	38.2	-27.8	0	54.52	-	-	74	-19.48	-	-	165	114	H
* 11.509	31.12	ADR	38.2	-27.7	.67	42.29	54	-11.71	-	-	-	-	165	114	H
* 11.511	45.87	PK-U	38.2	-27.7	0	56.37	-	-	74	-17.63	-	-	188	236	V
* 11.508	31.8	ADR	38.2	-27.7	.67	42.97	54	-11.03	-	-	-	-	188	236	V

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

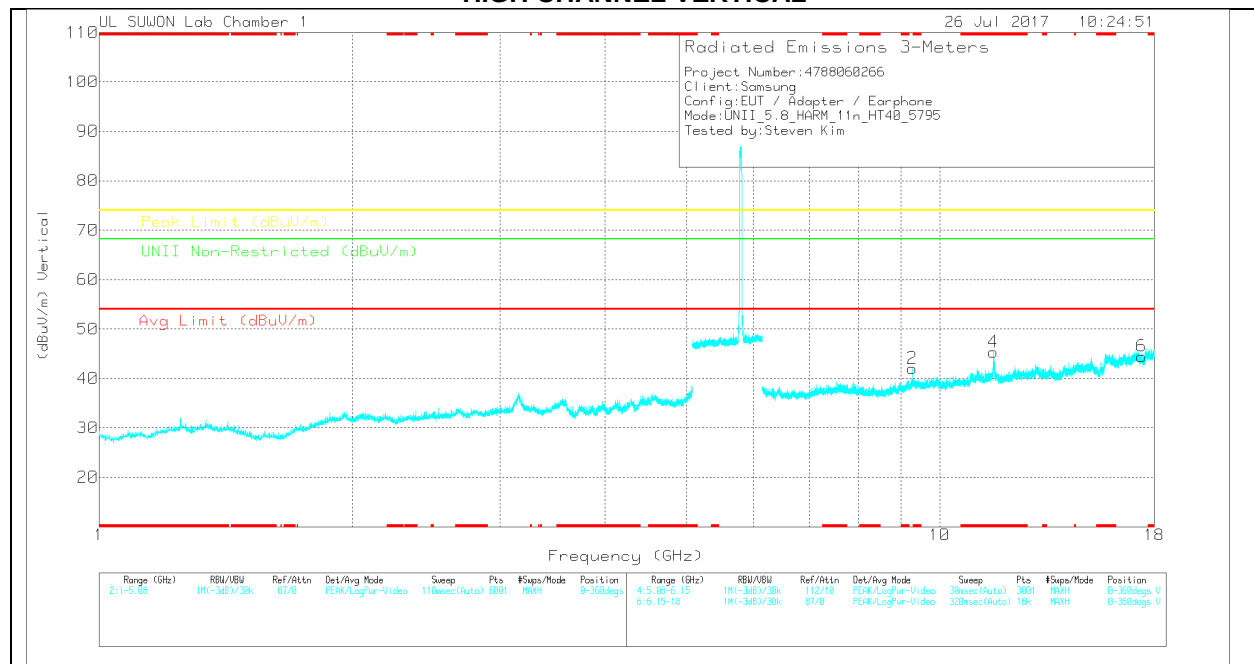
PK-U - U-NII: Maximum Peak

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	20170531_3117_0016 8717	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	9.272	32.95	PK	36.4	-28.7	0	40.65	-	-	-	-	68.2	-27.55	0-360	250	H
3	* 11.591	33.34	PK	38.2	-28	0	43.54	-	-	74	-30.46	-	-	0-360	250	H
5	17.385	25.37	PK	41.3	-22	0	44.67	-	-	-	-	68.2	-23.53	0-360	150	H
2	9.272	34.34	PK	36.4	-28.7	0	42.04	-	-	-	-	68.2	-26.16	0-360	250	V
4	* 11.585	35.15	PK	38.2	-28	0	45.35	-	-	74	-28.65	-	-	0-360	250	V
6	17.382	25.19	PK	41.3	-22	0	44.49	-	-	-	-	68.2	-23.71	0-360	250	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3117_001687 17	6GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9.28	42.36	PK-U	36.4	-28.6	0	50.16	-	-	-	-	68.2	-18.04	163	373	H
9.272	42.48	PK-U	36.4	-28.7	0	50.18	-	-	-	-	68.2	-18.02	61	347	V
* 11.59	44.16	PK-U	38.2	-28	0	54.36	-	-	74	-19.64	-	-	169	104	H
* 11.591	31.04	ADR	38.2	-28	.67	41.91	54	-12.09	-	-	-	-	169	104	H
* 11.587	44.96	PK-U	38.2	-28	0	55.16	-	-	74	-18.84	-	-	189	238	V
* 11.591	32.14	ADR	38.2	-28	.67	43.01	54	-10.99	-	-	-	-	189	238	V

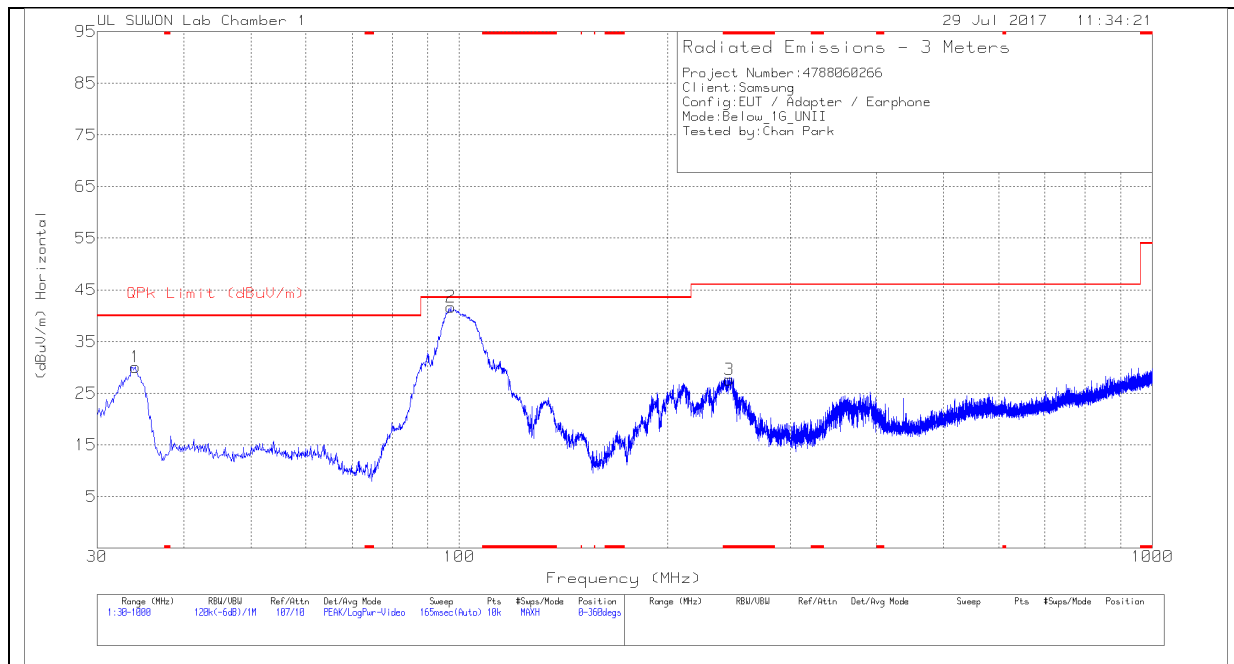
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

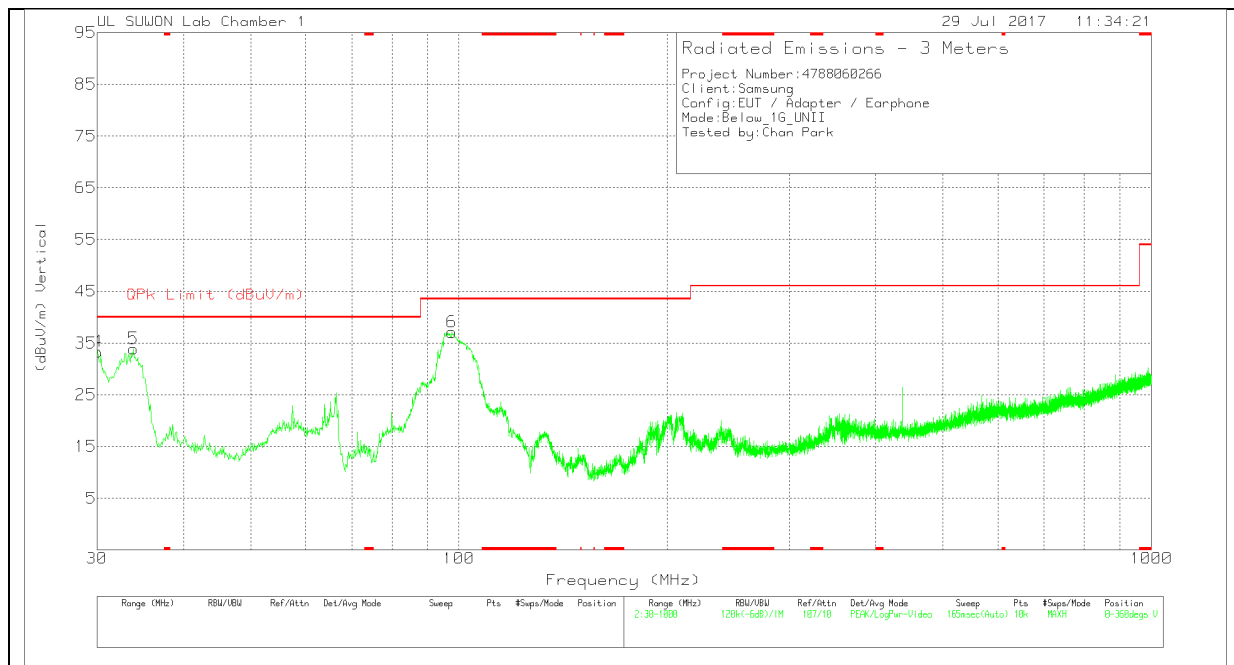
ADR - U-NII AD primary method, RMS average

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

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



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



Below 1G Data

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750(dB)	30-1000MHz[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	34.074	48.96	Pk	10.6	-29.5	30.06	40	-9.94	0-360	300	H
2	97.221	59.11	Pk	11.1	-28.5	41.71	43.52	-1.81	0-360	300	H
3	* 245.146	42.92	Pk	12.2	-27.5	27.62	46.02	-18.4	0-360	100	H
4	30.097	52.63	Pk	10.3	-29.6	33.33	40	-6.67	0-360	100	V
5	33.88	52.8	Pk	10.6	-29.5	33.9	40	-6.1	0-360	100	V
6	97.609	54.51	Pk	11.1	-28.5	37.11	43.52	-6.41	0-360	100	V

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

Pk - Peak detector

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750(dB)	30-1000MHz[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
97.23144	56.06	Qp	11.1	-28.5	38.66	43.52	-4.86	194	296	H
30.06255	45.84	Qp	10.3	-29.6	26.54	40	-13.46	268	100	V
33.8757	49.23	Qp	10.6	-29.5	30.33	40	-9.67	336	101	V
97.42718	52.07	Qp	11.1	-28.5	34.67	43.52	-8.85	43	101	V

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

Qp - Quasi-Peak detector

12. 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.

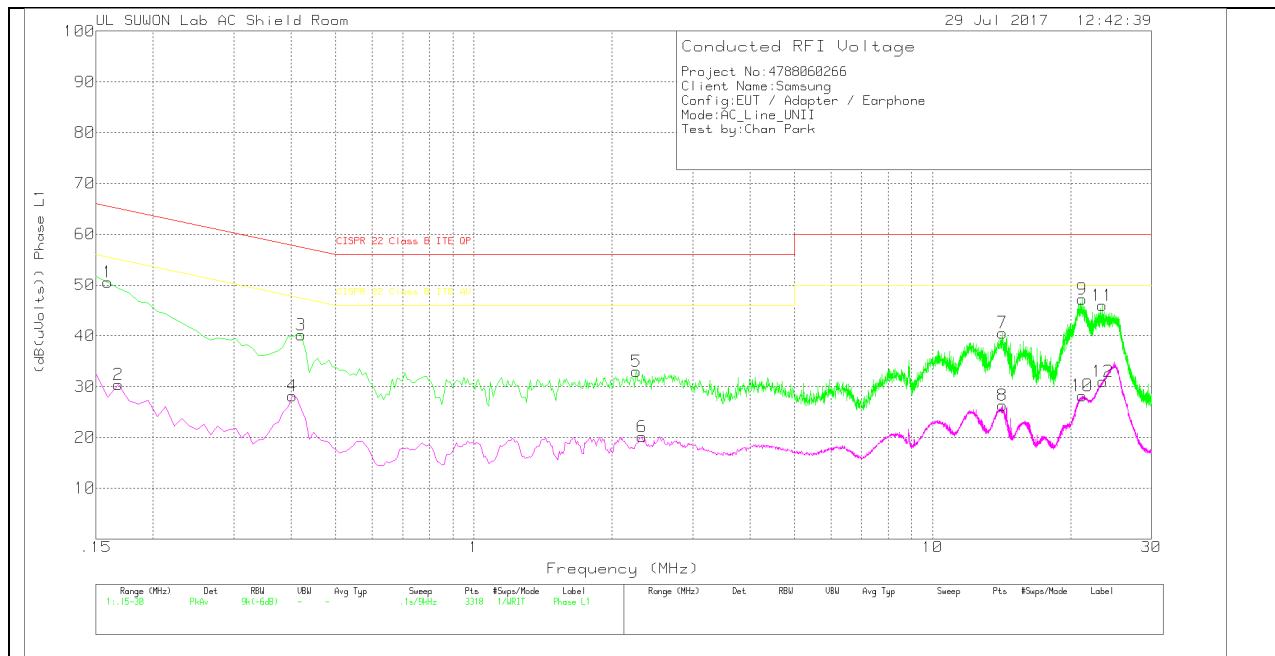
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

Trace Markers

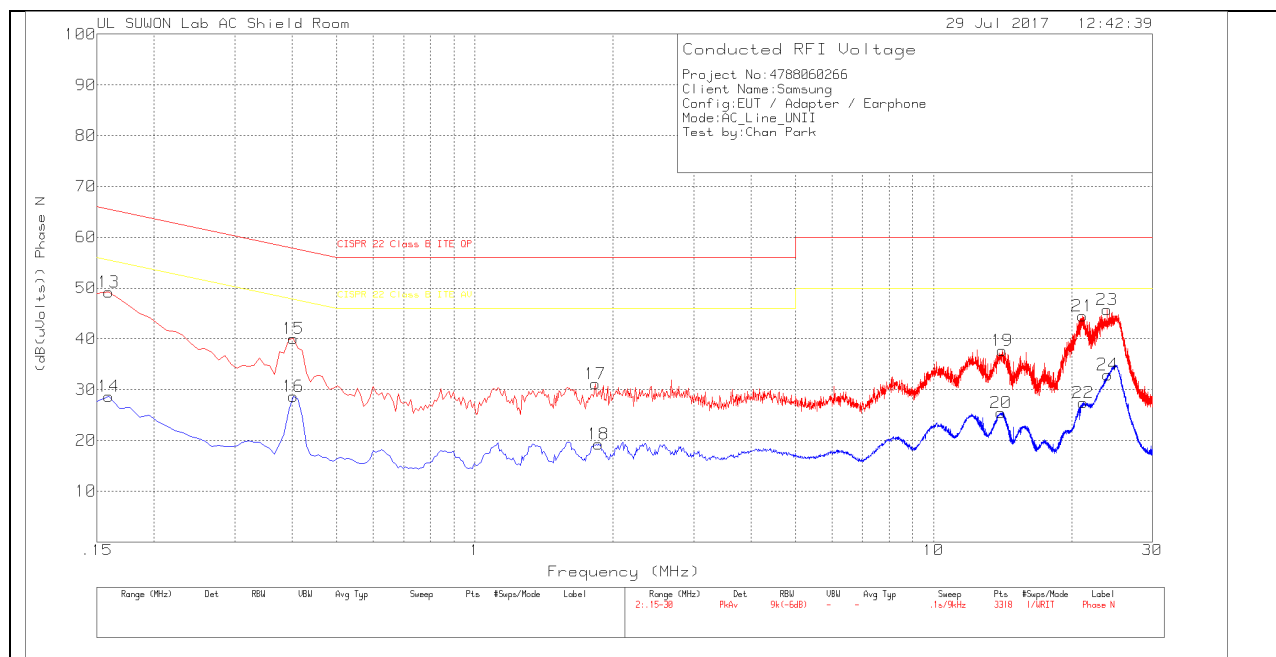
Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_w ith ex- cord_L1	CABLELOS S(dB)	Corrected Reading (dB(uVolts)	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
1	.159	40.51	Pk	9.9	.1	50.51	65.52	-15.01	-	-
2	.168	20.32	Av	10	.1	30.42	-	-	55.06	-24.64
3	.42	30.12	Pk	9.9	.2	40.22	57.45	-17.23	-	-
4	.402	18.11	Av	9.9	.2	28.21	-	-	47.81	-19.6
5	2.265	23.01	Pk	9.7	.3	33.01	56	-22.99	-	-
6	2.328	10.16	Av	9.7	.3	20.16	-	-	46	-25.84
7	14.19	30.1	Pk	10.1	.4	40.6	60	-19.4	-	-
8	14.19	15.82	Av	10.1	.4	26.32	-	-	50	-23.68
9	21.192	36.45	Pk	10.4	.4	47.25	60	-12.75	-	-
10	21.192	17.43	Av	10.4	.4	28.23	-	-	50	-21.77
11	23.46	35.05	Pk	10.5	.4	45.95	60	-14.05	-	-
12	23.541	20.07	Av	10.5	.4	30.97	-	-	50	-19.03

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	CABLELOS S(dB)	Corrected Reading (dB(uVolts)	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
13	.159	39.21	Pk	9.9	.1	49.21	65.52	-16.31	-	-
14	.159	18.64	Av	9.9	.1	28.64	-	-	55.52	-26.88
15	.402	29.93	Pk	9.9	.2	40.03	57.81	-17.78	-	-
16	.402	18.61	Av	9.9	.2	28.71	-	-	47.81	-19.1
17	1.833	21.09	Pk	9.7	.3	31.09	56	-24.91	-	-
18	1.86	9.29	Av	9.7	.3	19.29	-	-	46	-26.71
19	14.118	27.05	Pk	10.3	.4	37.75	60	-22.25	-	-
20	14.028	14.76	Av	10.3	.4	25.46	-	-	50	-24.54
21	21.102	33.44	Pk	10.7	.4	44.54	60	-15.46	-	-
22	21.219	16.36	Av	10.7	.4	27.46	-	-	50	-22.54
23	23.919	34.58	Pk	10.8	.4	45.78	60	-14.22	-	-
24	23.964	21.73	Av	10.8	.4	32.93	-	-	50	-17.07

Pk - Peak detector

Av - Average detection

13. DYNAMIC FREQUENCY SELECTION

13.1. OVERVIEW

13.1.1. LIMITS

FCC

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

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

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

Table 2: Applicability of DFS requirements during normal operation

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

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

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

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

Table 4: DFS Response requirement values

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

Table 5 – Short Pulse Radar Test Waveforms

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

Table 6 – Long Pulse Radar Test Signal

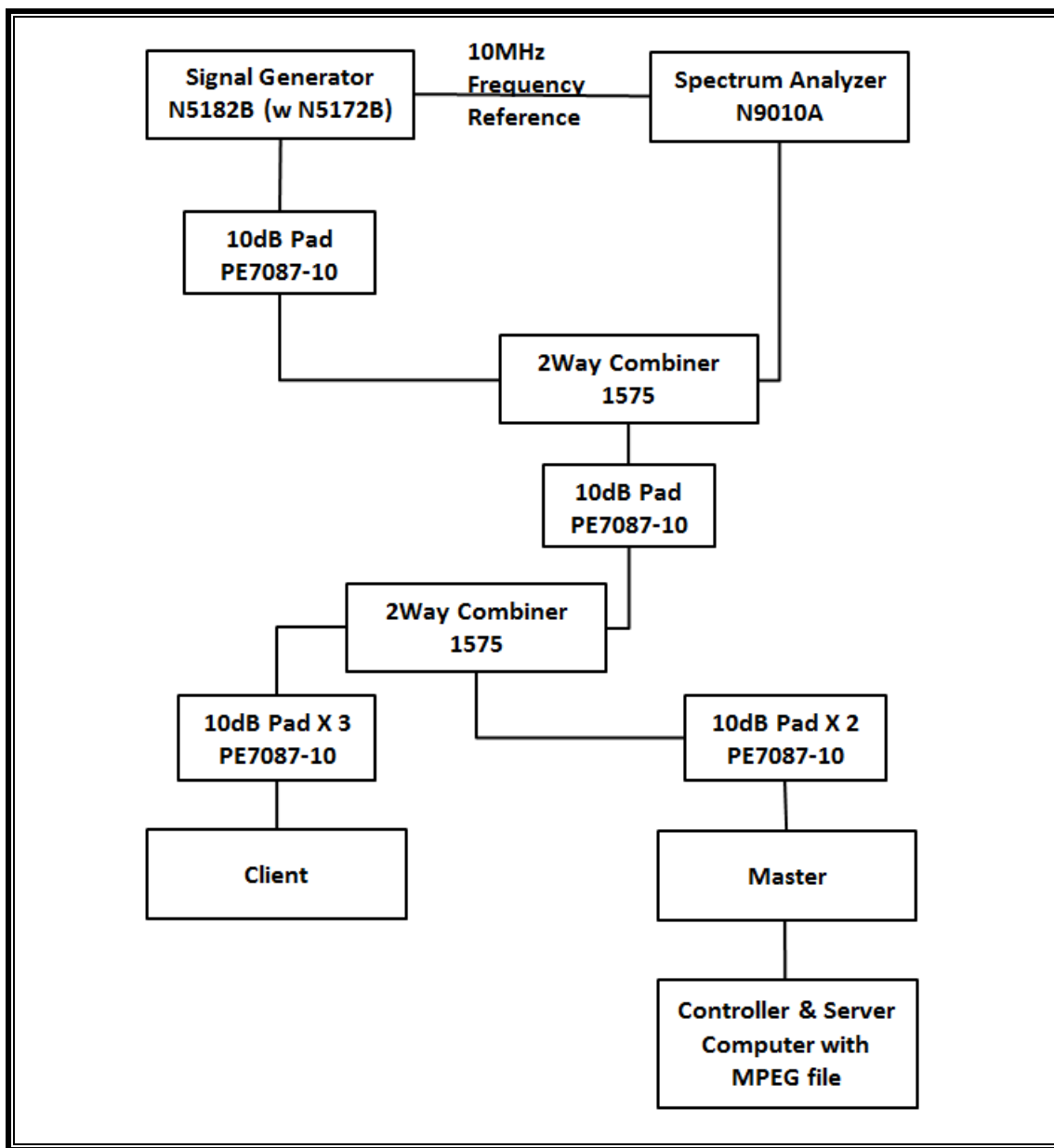
Radar Waveform Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

Table 7 – Frequency Hopping Radar Test Signal

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

13.1.1. TEST AND MEASUREMENT SYSTEM

CONDUCTED METHOD SYSTEM BLOCK DIAGRAM



SYSTEM OVERVIEW

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

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

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

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

SYSTEM CALIBRATION

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

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

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

ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL

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

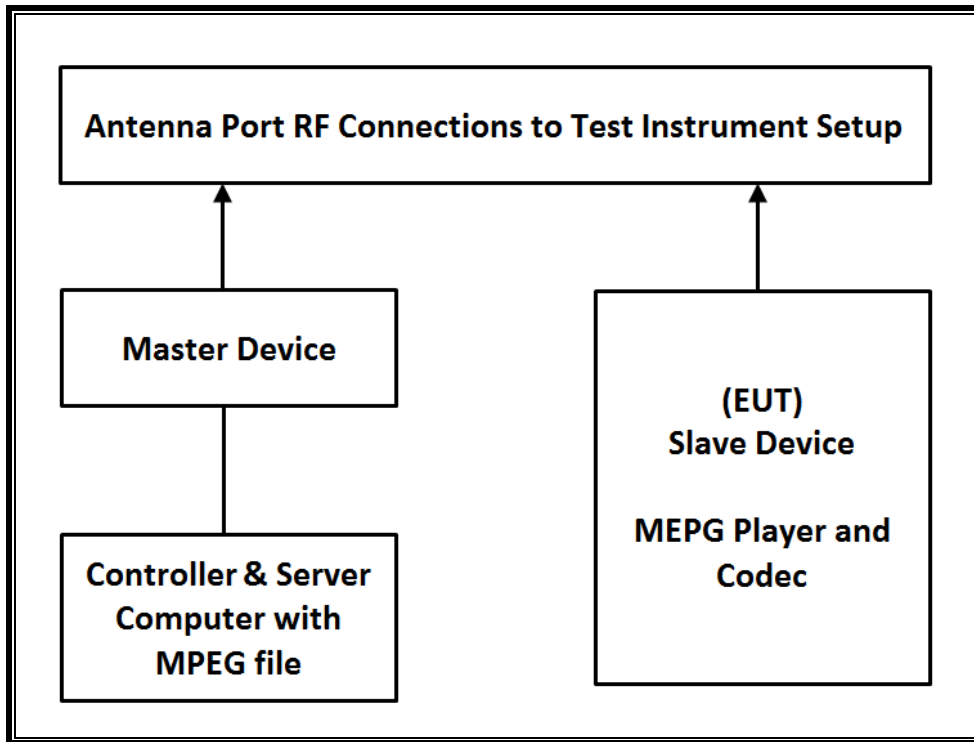
TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	S/N	Cal Due
Spectrum Analyzer, 7 GHz	Agilent / HP	N9010A	MY54200580	08-17-17
Vector Signal Generator, 6GHz	Agilent / HP	N5182B	MY53051241	08-16-17

13.1.2. SETUP OF EUT

CONDUCTED METHOD EUT TEST SETUP



SUPPORT EQUIPMENT

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

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

13.1.3. 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 14.314 dBm in the 5250-5350 MHz band and 14.141 dBm in the 5470-5725 MHz band.

The antenna gain assembly utilized with the EUT are -7.7 dBi(5.3GHz) and -6.8 dBi(5.5GHz).

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

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

UNIFORM CHANNEL SPREADING

This requirement is not applicable to Slave radio devices.

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

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

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

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

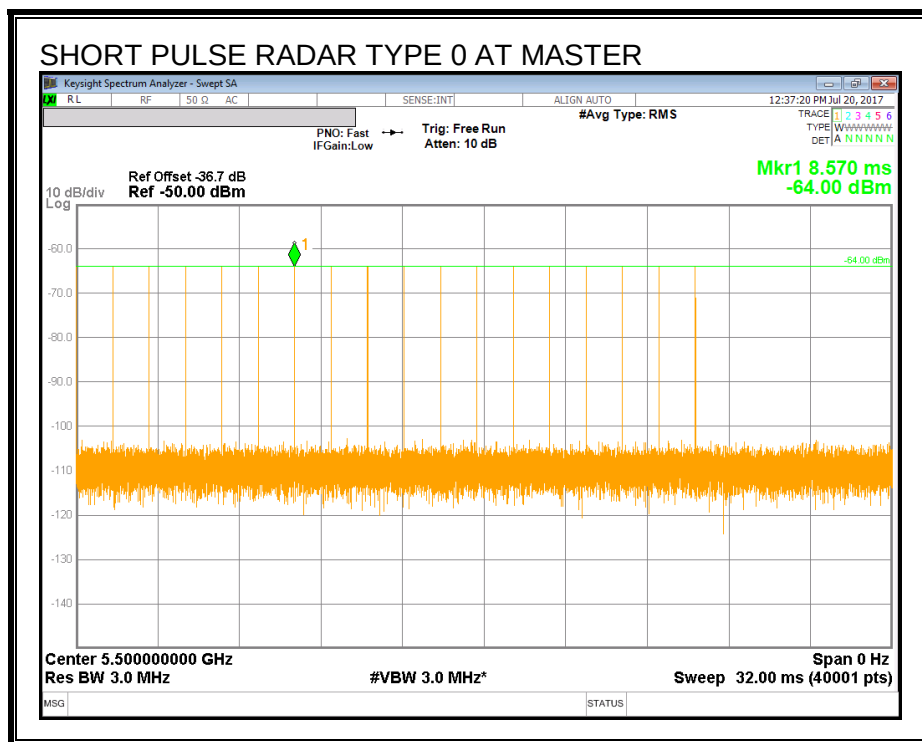
13.1. RESULTS FOR 20 MHz BANDWIDTH

13.1.1. TEST CHANNEL

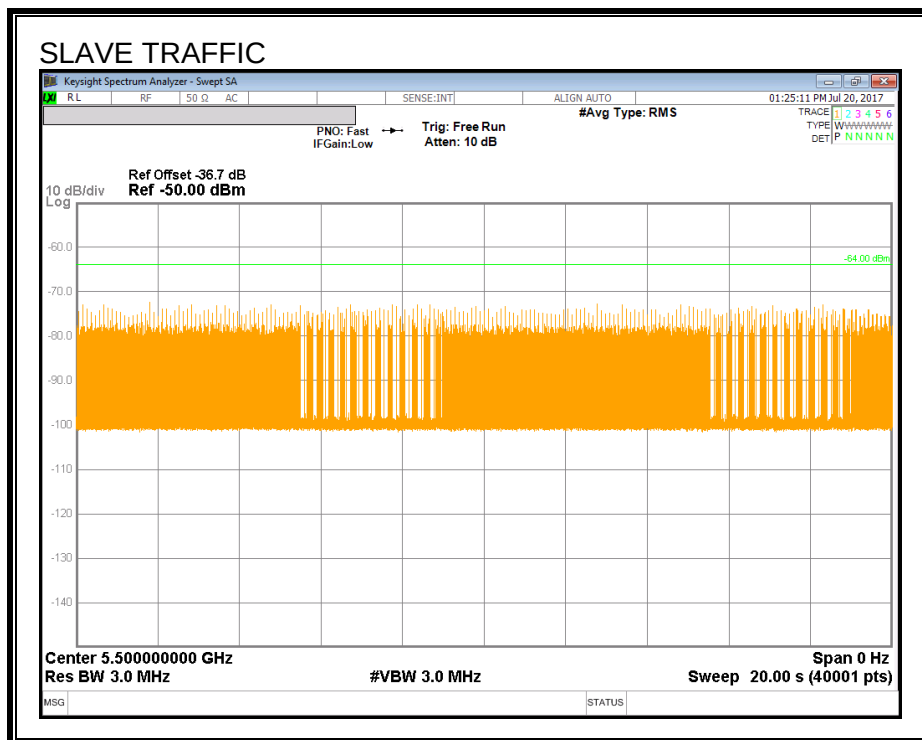
All tests were performed at a channel center frequency of 5500 MHz.

13.1.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



13.1.3.OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

13.1.4.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

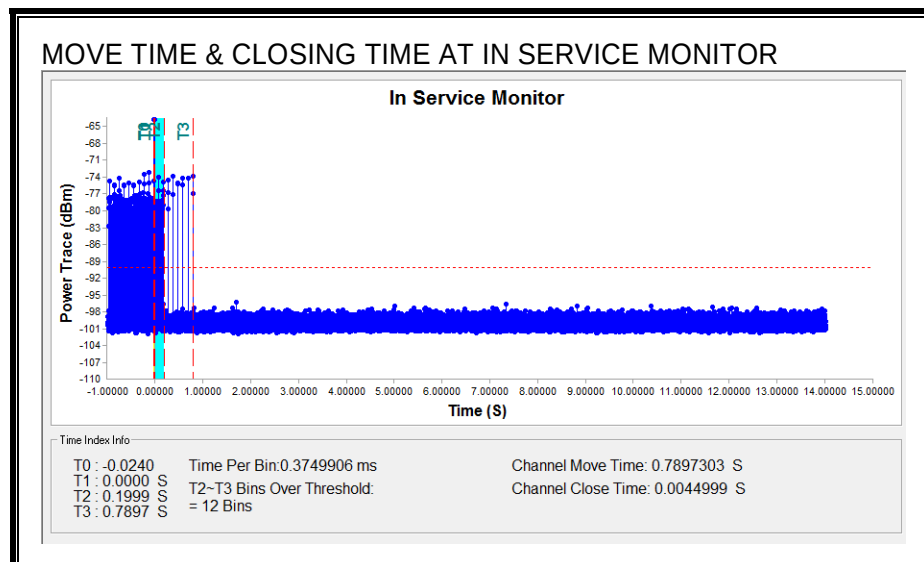
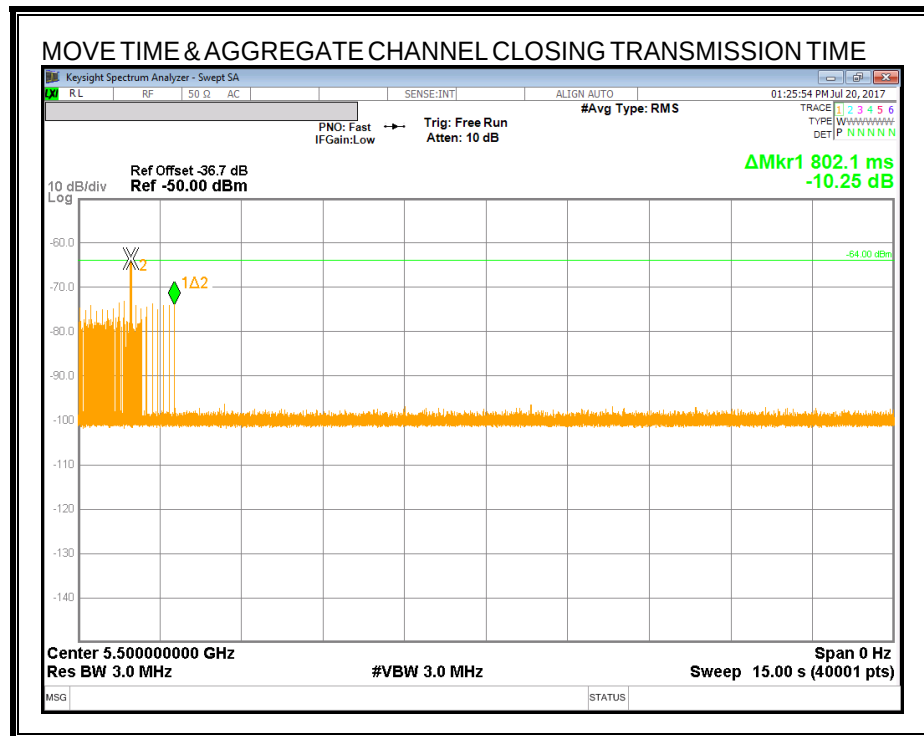
Channel Move Time (sec)	Limit (sec)
0.790	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
4.500	60

MOVE TIME & CHANNEL CLOSING TIME

AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

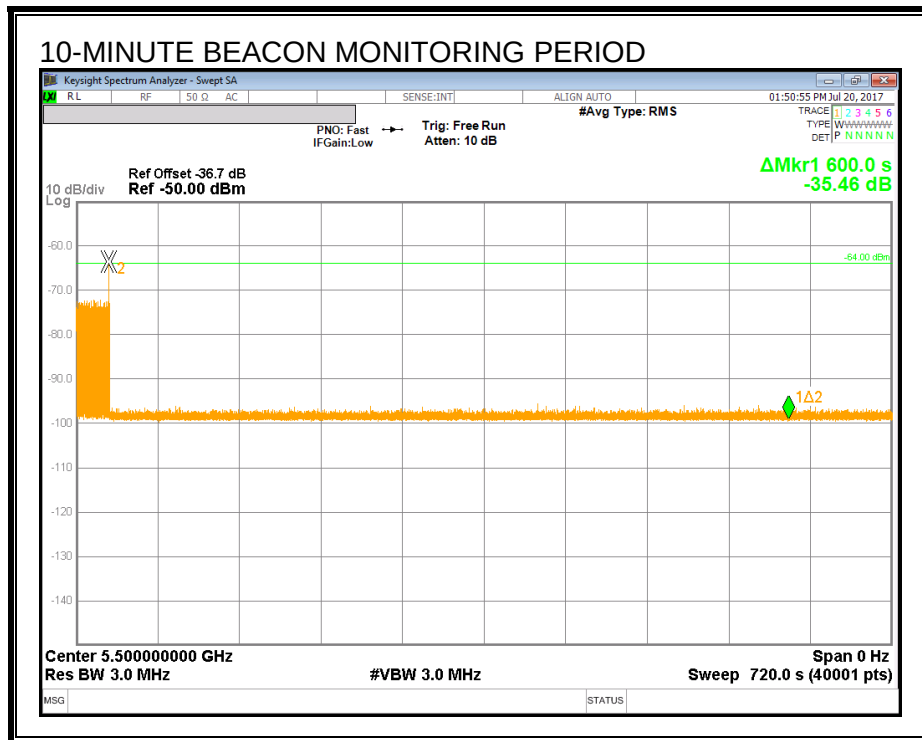
No transmissions are observed during the aggregate monitoring period.



NON-OCCUPANCY PERIOD

RESULTS

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



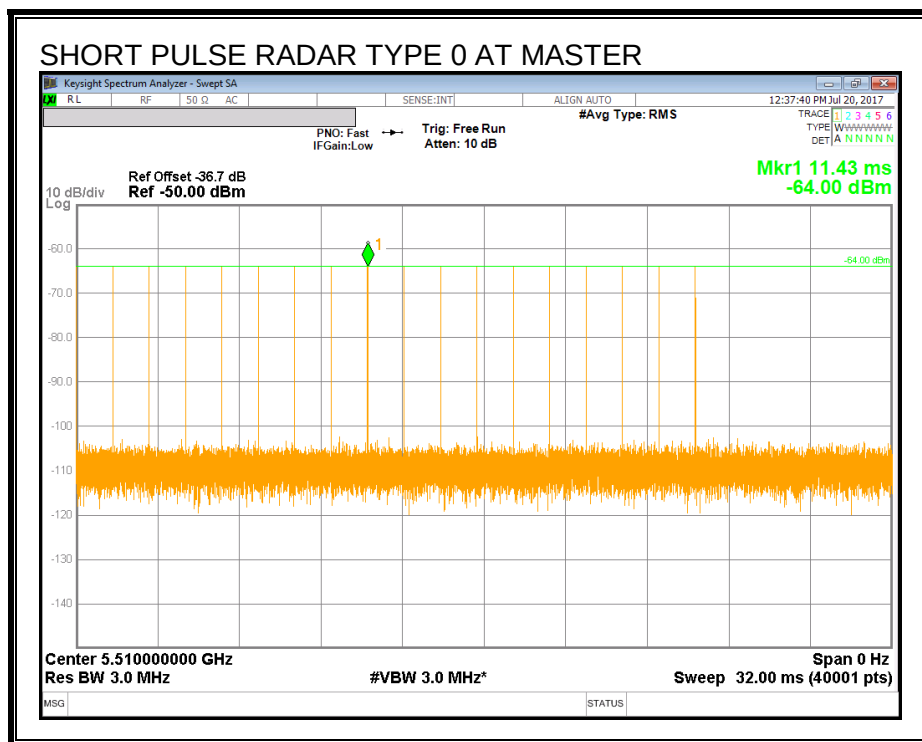
13.2. RESULTS FOR 40 MHz BANDWIDTH

13.2.1. TEST CHANNEL

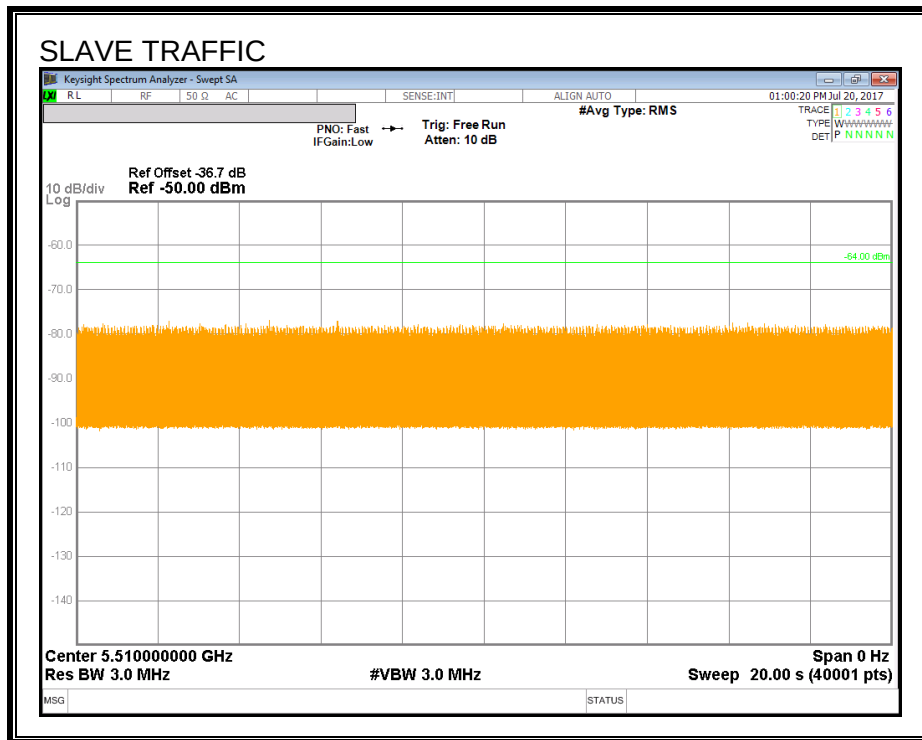
All tests were performed at a channel center frequency of 5510 MHz.

13.2.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



13.2.3.OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

13.2.4.MOVE AND CLOSING TIME

REPORTING NOTES

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

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

The aggregate channel closing transmission time is calculated as follows:

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

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

RESULTS

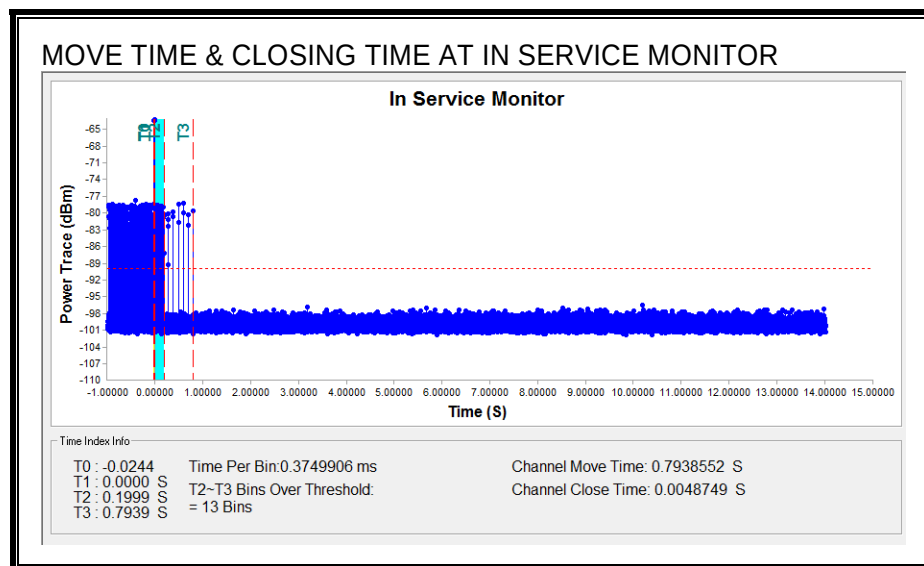
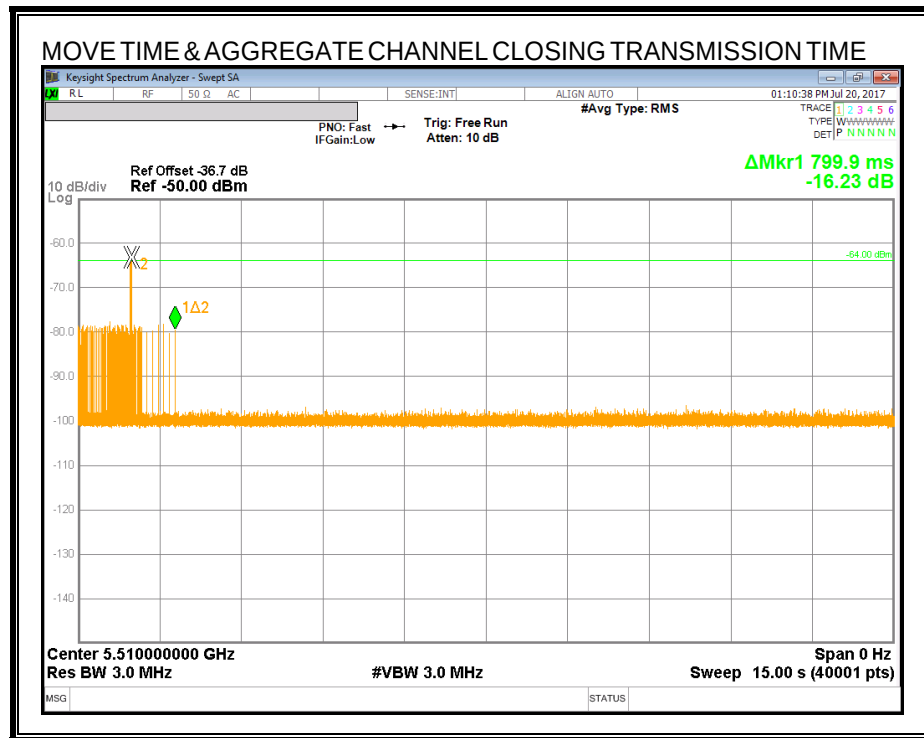
Channel Move Time (sec)	Limit (sec)
0.794	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
4.875	60

MOVE TIME & CHANNEL CLOSING TIME

AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



NON-OCCUPANCY PERIOD

RESULTS

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

