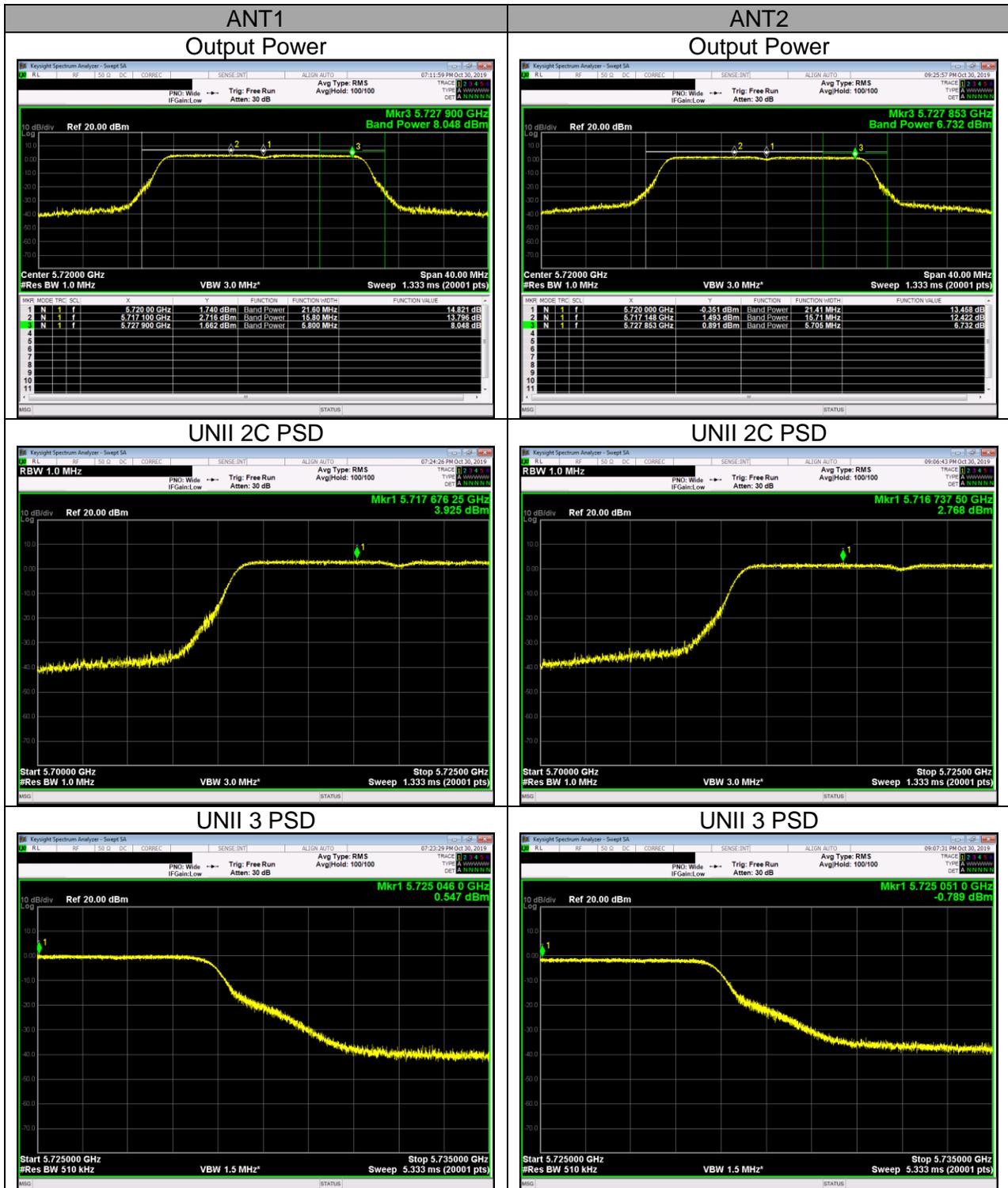
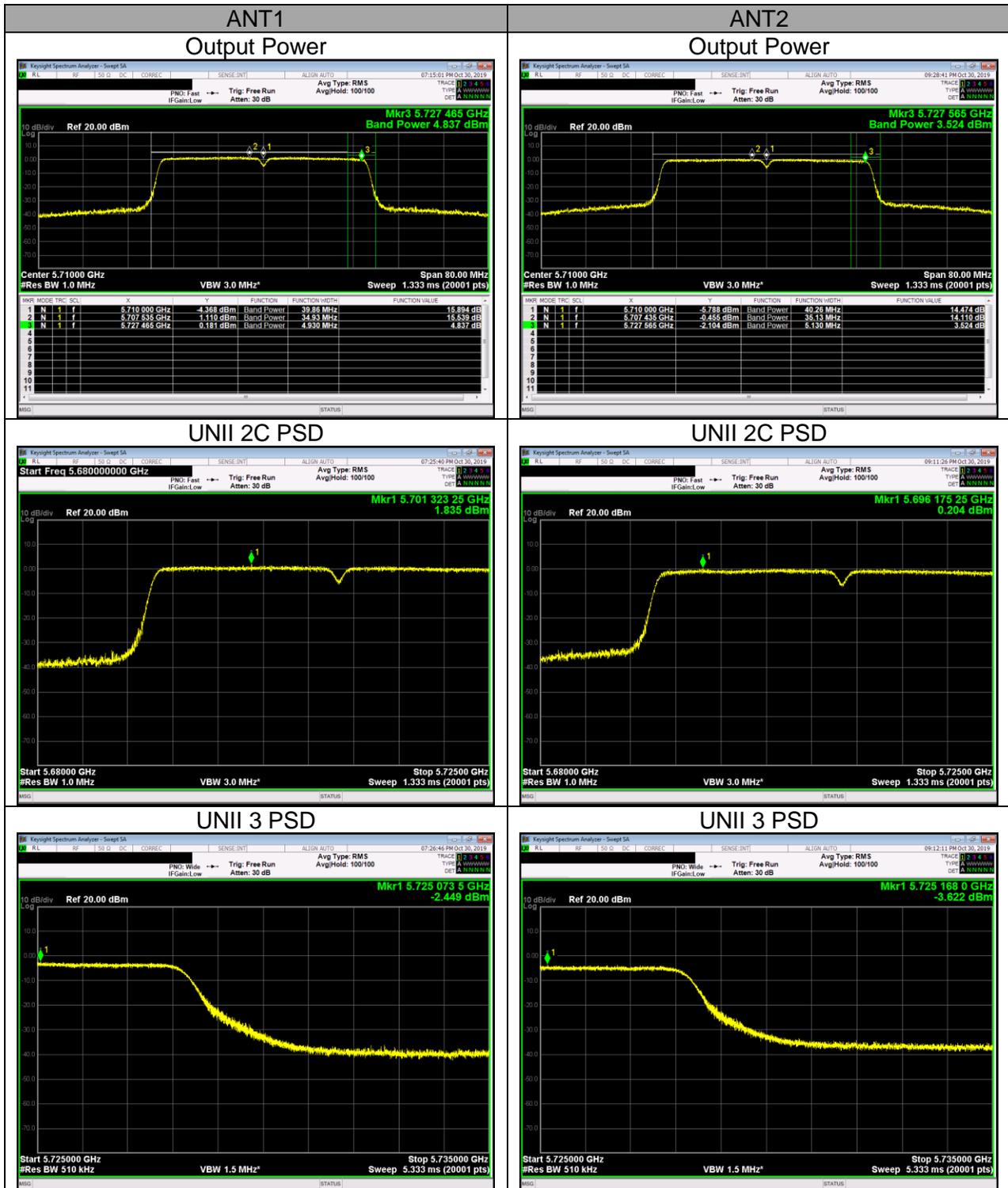


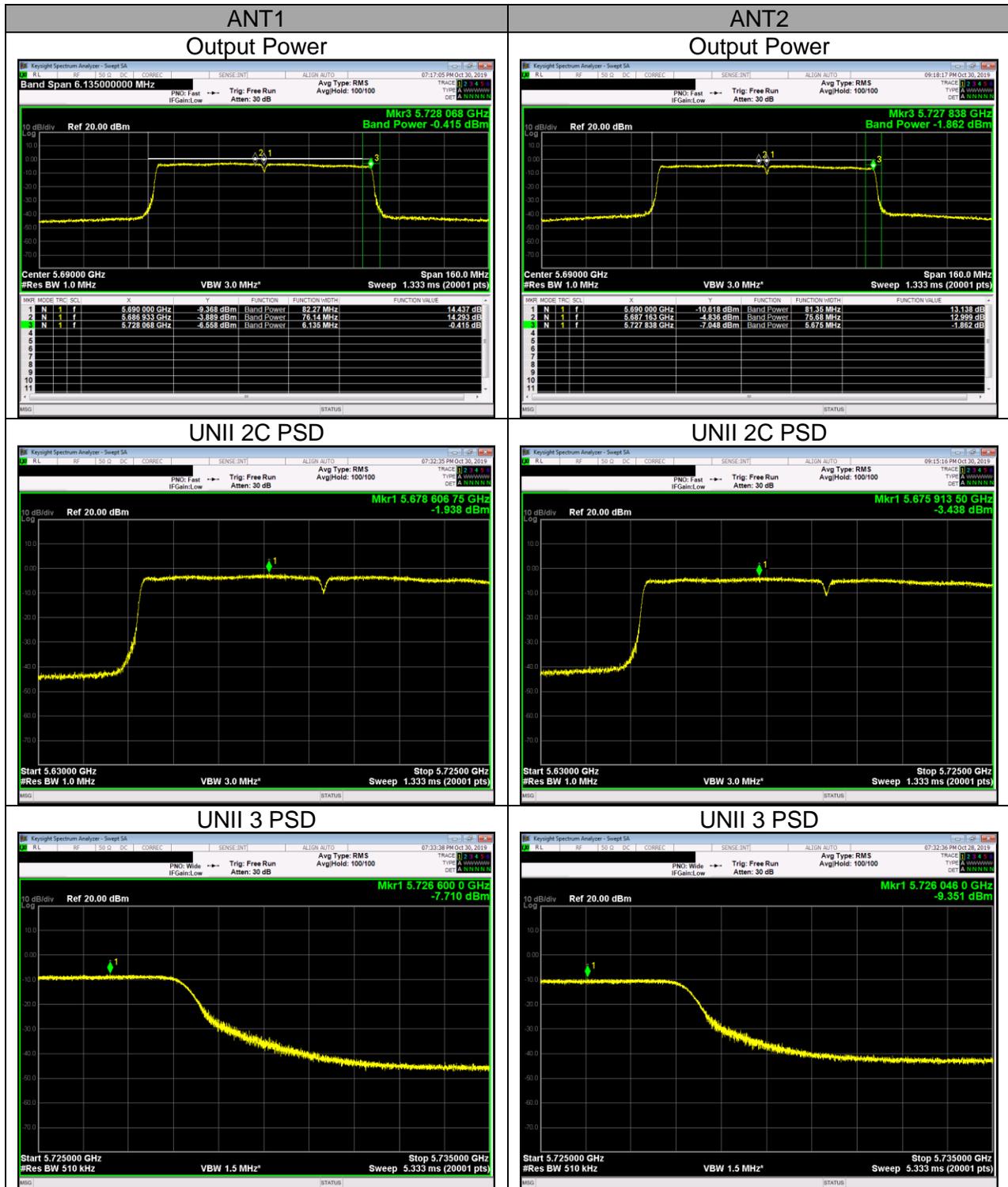
UNII Straddle Ch. IEEE 802.11n HT20 mode Ourput Power and PSD



UNII Straddle Ch. IEEE 802.11n HT40 mode Ourput Power and PSD



UNII Straddle Ch. IEEE 802.11ac VHT80 mode Ourput Power and PSD



11. 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 Part 15.205 (a) : Only spurious emissions are permitted in any of the frequency bands listed below :

MHz	MHz	MHz	MHz	GHz	GHz
0.009 ~ 0.110	8.41425 ~ 8.41475	108 ~ 121.94	1300 ~ 1427	4.5 ~ 5.15	14.47 ~ 14.5
0.495 ~ 0.505	12.29 ~ 12.293	123 ~ 138	1435 ~ 1626.5	5.35 ~ 5.46	15.35 ~ 16.2
2.1735 ~ 2.1905	12.51975 ~ 12.52025	149.9 ~ 150.05	1645.5 ~ 1646.5	7.25 ~ 7.75	17.7 ~ 21.4
4.125 ~ 4.128	12.57675 ~ 12.57725	156.52475 ~ 156.52525	1660 ~ 1710	8.025 ~ 8.5	22.01 ~ 23.12
4.17725 ~ 4.17775	13.36 ~ 13.41	156.7 ~ 156.9	1718.8 ~ 1722.2	9.0 ~ 9.2	23.6 ~ 24.0
4.20725 ~ 4.20775	16.42 ~ 16.423	162.0125 ~ 167.17	2200 ~ 2300	9.3 ~ 9.5	31.2 ~ 31.8
6.215 ~ 6.218	16.69475 ~ 16.69525	167.72 ~ 173.2	2310 ~ 2390	10.6 ~ 12.7	36.43 ~ 36.5
6.26775 ~ 6.26825	16.80425 ~ 16.80475	240 ~ 285	2483.5 ~ 2500	13.25 ~ 13.4	Above 38.6
6.31175 ~ 6.31225	25.5 ~ 25.67	322 ~ 335.4	2655 ~ 2900		
8.291 ~ 8.294	37.5 ~ 38.25	399.90 ~ 410	3260 ~ 3267		
8.362 ~ 8.366	73 ~ 74.6	608 ~ 614	3332 ~ 3339		
8.37625 ~ 8.38675	74.8 ~ 75.2	960 ~ 1240	3345.8 ~ 3358 3600 ~ 4400		

▪ FCC Part 15.205(b) : The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

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 100 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 v02r01 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 1GHz 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.

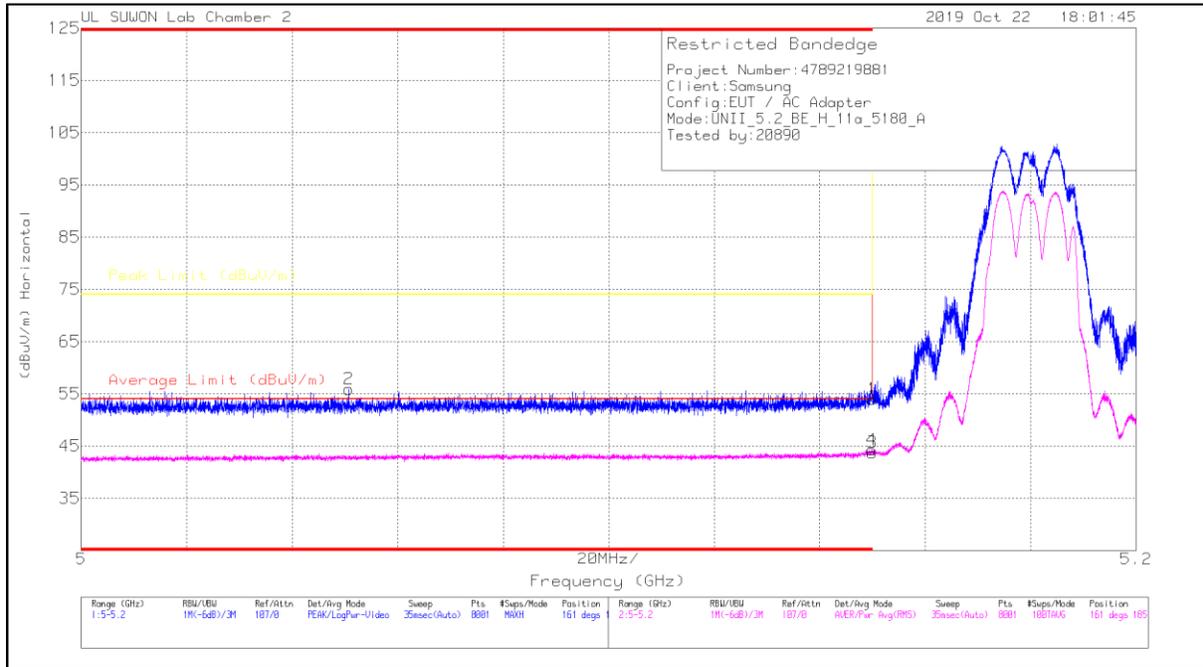
Although these tests were performed other than open field test site, adequate comparison measurements were confirmed against 30 m open are test site.
Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the one of tests made in an open field based on KDB 414788.

11.1. 5.2 GHz

11.1.1. TX ABOVE 1GHz 802.11a 2Tx MODE IN THE 5.2GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

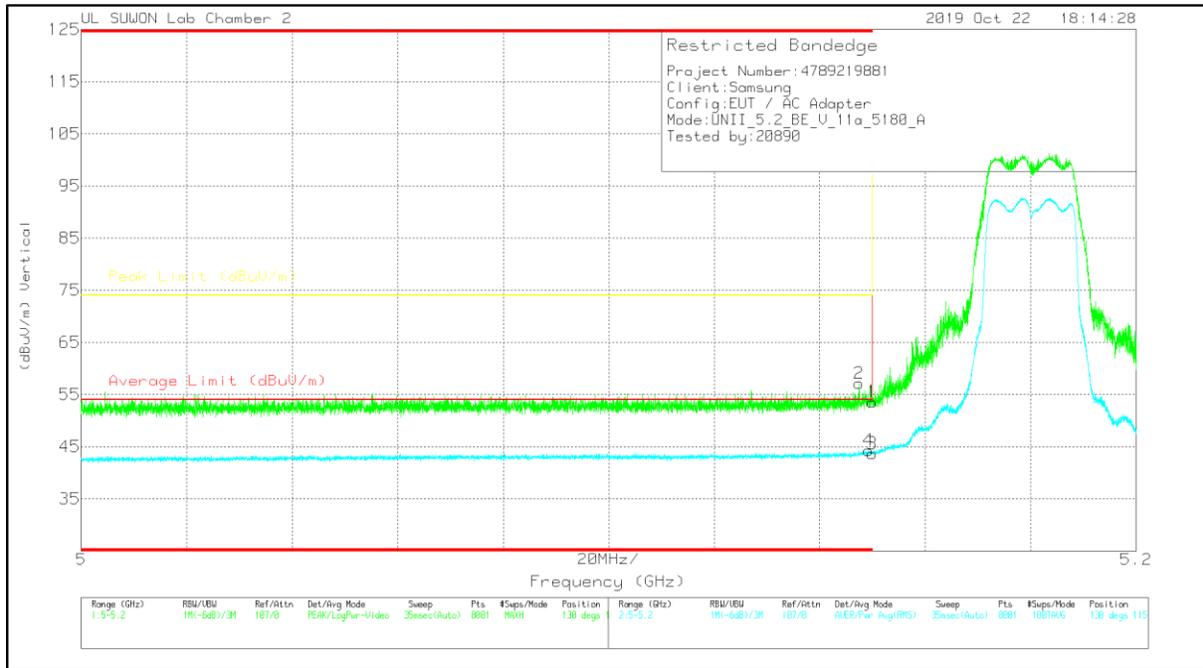
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.15	37.77	Pk	34.3	-18.1	0	53.97	-	-	74	-20.03	161	185	H
2	* 5.0507	39.91	Pk	34.2	-18.2	0	55.91	-	-	74	-18.09	161	185	H
3	5.15	27.54	RMS	34.3	-18.1	0	43.74	54	-10.26	-	-	161	185	H
4	* 5.14988	28.06	RMS	34.3	-18.1	0	44.26	54	-9.74	-	-	161	185	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE DATA



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	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	37.37	Pk	34.3	-18.1	0	53.57	-	-	74	-20.43	130	115	V
2	* 5.14748	40.95	Pk	34.3	-18.1	0	57.15	-	-	74	-16.85	130	115	V
3	5.15	27.49	RMS	34.3	-18.1	0	43.69	54	-10.31	-	-	130	115	V
4	* 5.14923	28.09	RMS	34.3	-18.1	0	44.29	54	-9.71	-	-	130	115	V

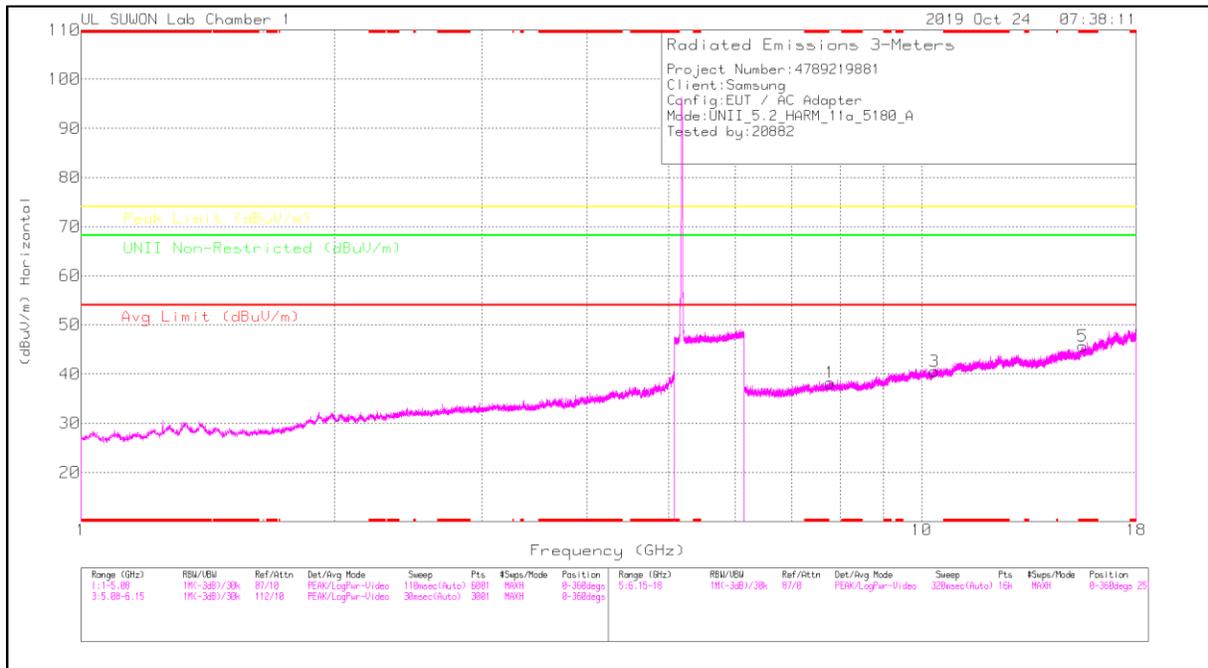
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

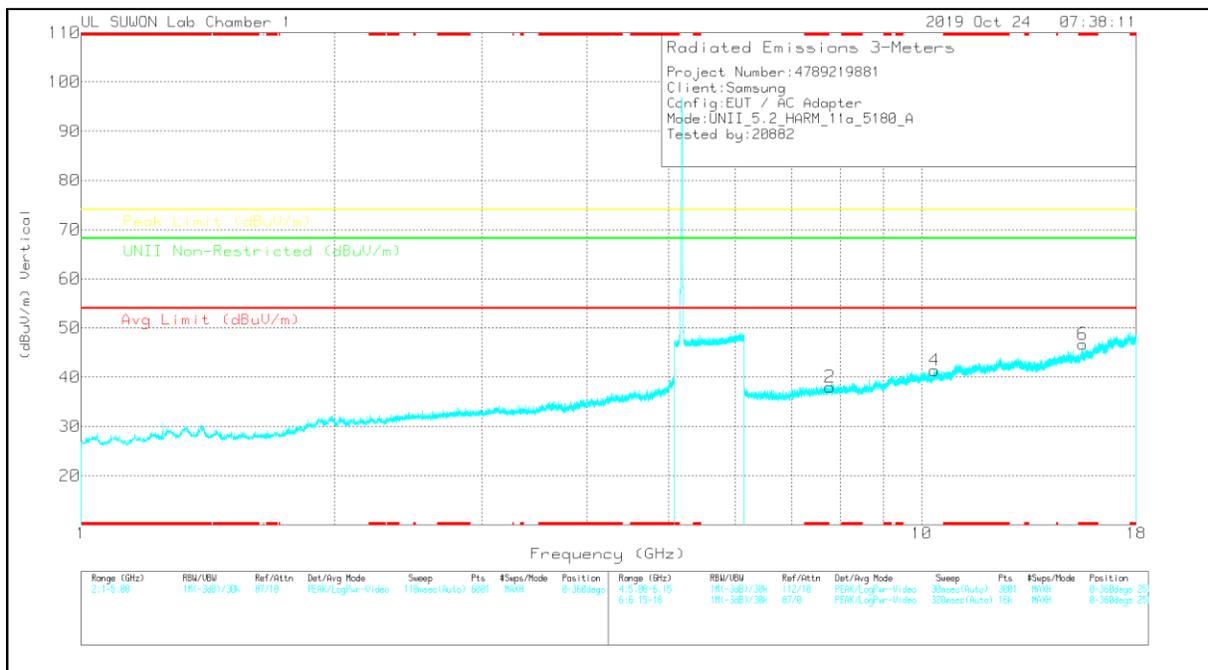
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_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	7.77853	28.91	PK	35.9	-26.6	0	38.21	-	-	-	-	68.2	-29.99	0-360	250	H
3	10.35971	25.24	PK	37.6	-22.3	0	40.54	-	-	-	-	68.2	-27.66	0-360	250	H
5	* 15.5398	26.36	PK	40.2	-20.9	0	45.66	-	-	74	-28.34	-	-	0-360	250	H
2	7.77557	28.81	PK	35.9	-26.7	0	38.01	-	-	-	-	68.2	-30.19	0-360	250	V
4	10.36019	28.11	PK	37.6	-22.3	0	41.41	-	-	-	-	68.2	-26.79	0-360	250	V
6	* 15.54054	27.41	PK	40.2	-20.9	0	46.71	-	-	74	-27.29	-	-	0-360	250	V

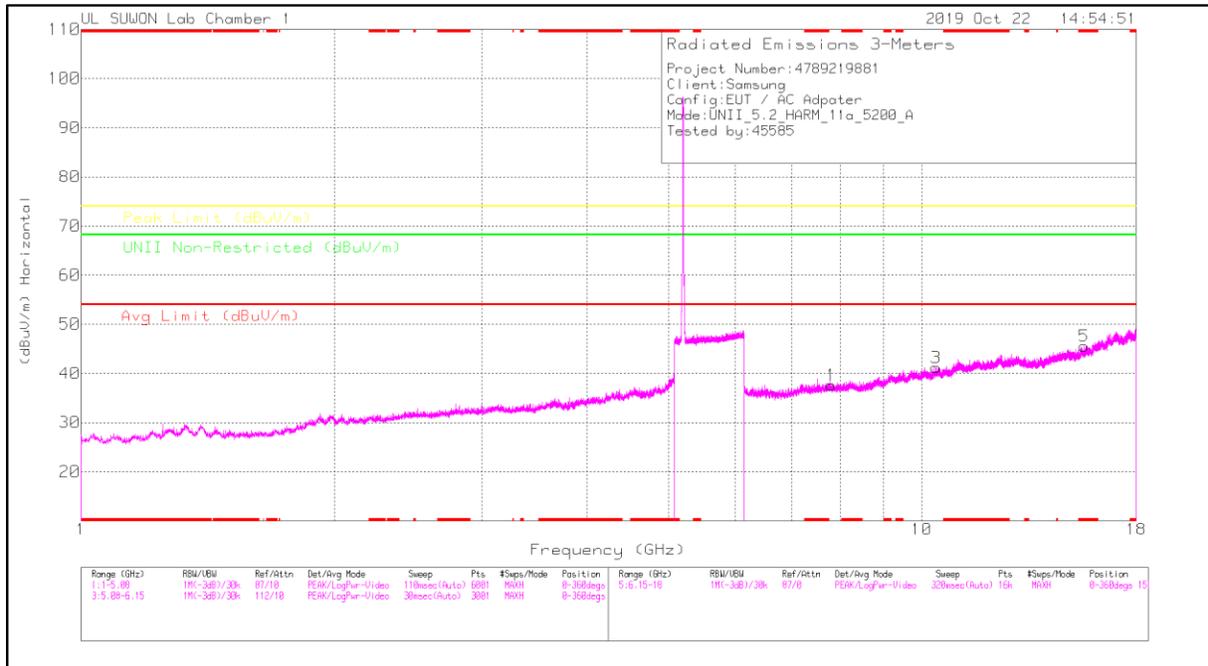
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

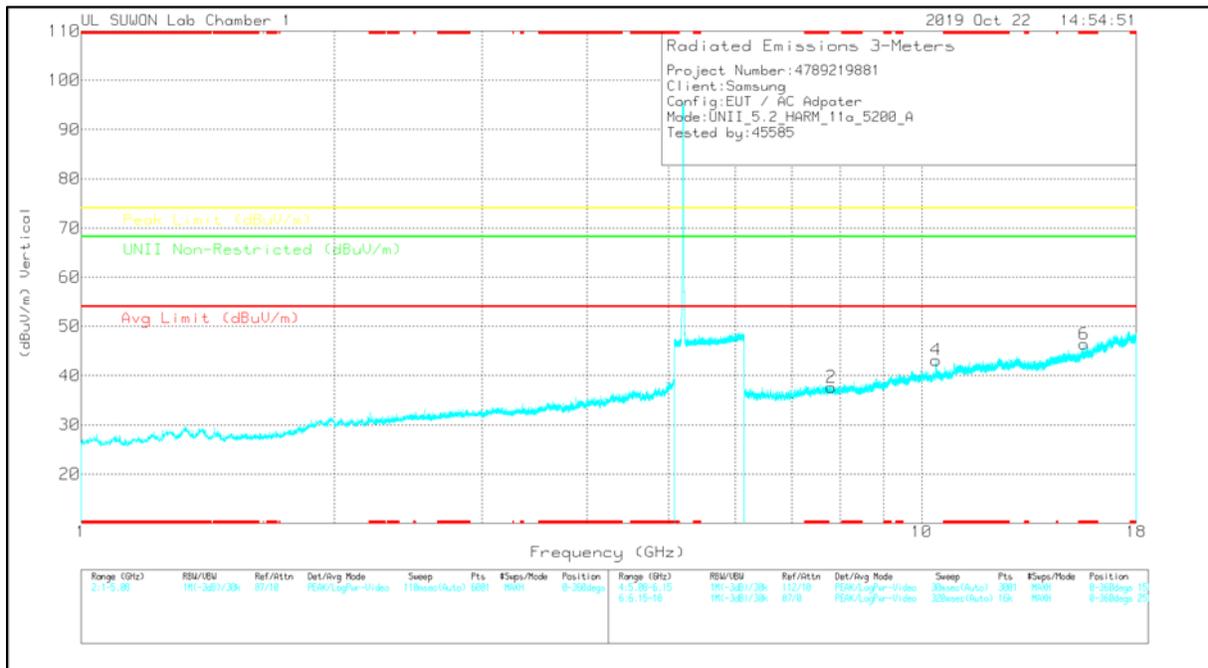
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.77827	39	PK-U	35.9	-26.6	0	48.3	-	-	-	-	68.2	-19.9	0	100	H
7.77727	38.93	PK-U	35.9	-26.6	0	48.23	-	-	-	-	68.2	-19.97	0	100	V
10.36019	35.27	PK-U	37.6	-22.3	0	50.57	-	-	-	-	68.2	-17.63	0	100	H
10.3578	35.2	PK-U	37.6	-22.3	0	50.5	-	-	-	-	68.2	-17.7	0	100	V
* 15.53474	39.56	PK-U	40.2	-21.1	0	58.66	-	-	74	-15.34	-	-	166	104	H
* 15.53942	25.99	ADR	40.2	-20.9	0	45.29	54	-8.71	-	-	-	-	166	104	H
* 15.53428	41.86	PK-U	40.2	-21	0	61.06	-	-	74	-12.94	-	-	185	100	V
* 15.53944	28.67	ADR	40.2	-20.9	0	47.97	54	-6.03	-	-	-	-	185	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_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	7.80519	28.18	PK	35.9	-26.5	0	37.58	-	-	-	-	68.2	-30.62	0-360	150	H
3	10.3987	25.19	PK	37.6	-21.6	0	41.19	-	-	-	-	68.2	-27.01	0-360	250	H
5	*15.59979	28.64	PK	40.2	-21.3	0	45.54	-	-	74	-28.46	-	-	0-360	250	H
2	7.80519	28.24	PK	35.9	-26.5	0	37.64	-	-	-	-	68.2	-30.56	0-360	250	V
4	10.40018	27.16	PK	37.6	-21.6	0	43.16	-	-	-	-	68.2	-25.04	0-360	250	V
6	*15.5946	27.71	PK	40.2	-21.5	0	46.41	-	-	74	-27.59	-	-	0-360	250	V

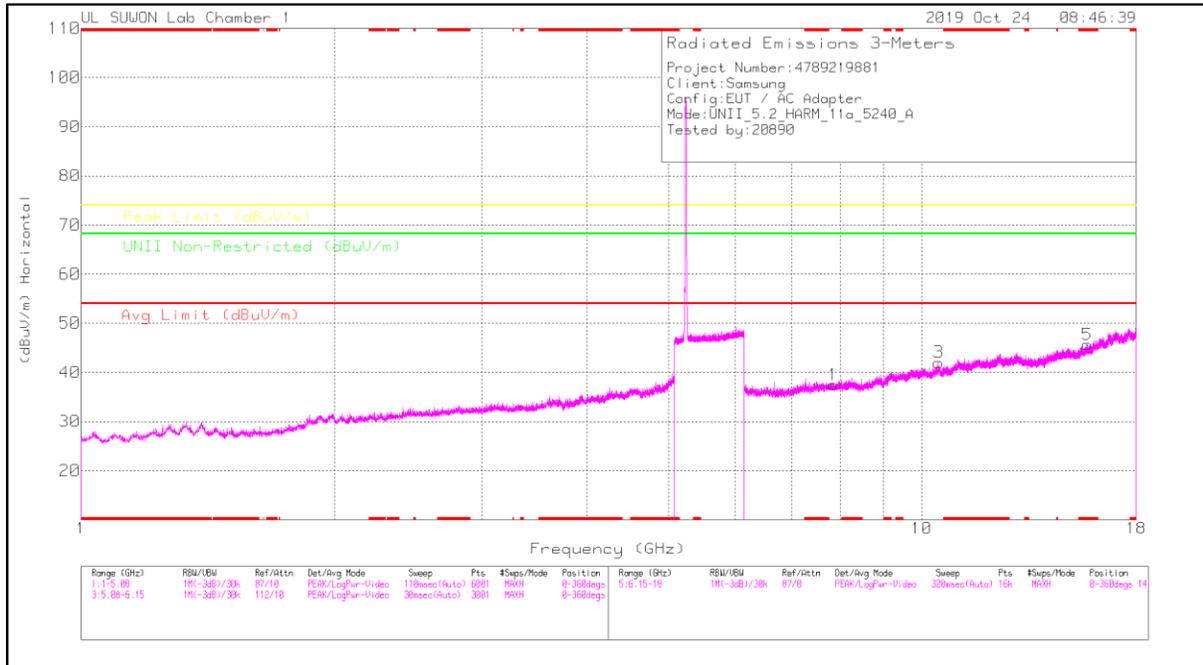
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

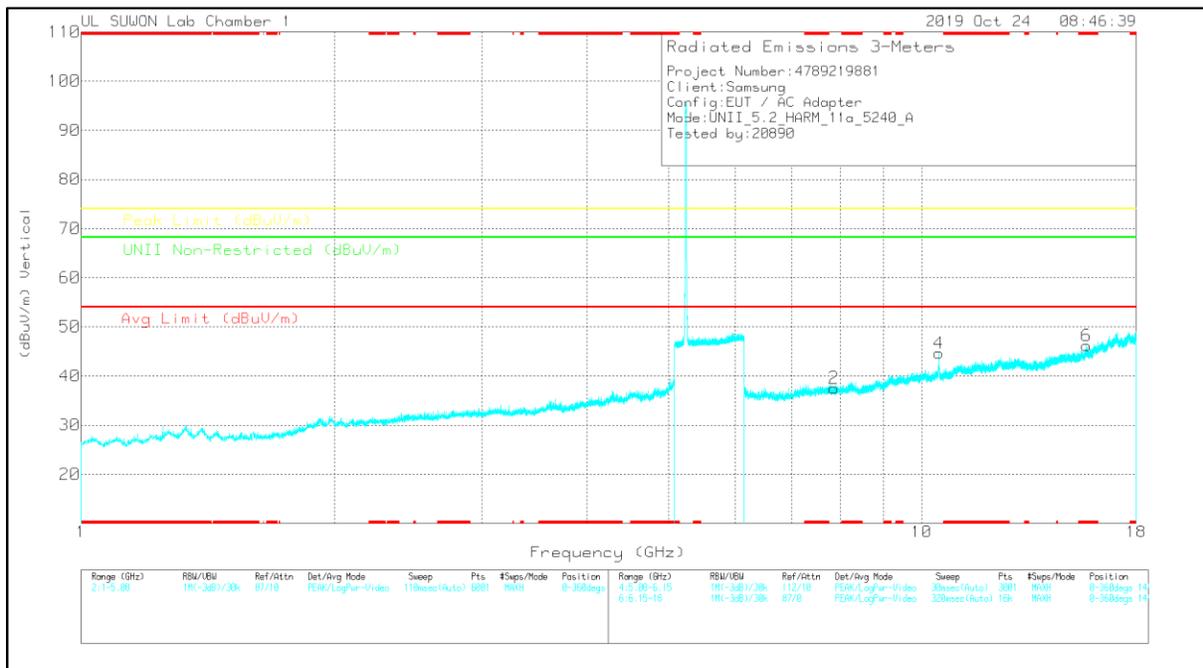
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.80196	38.82	PK-U	35.9	-26.6	0	48.12	-	-	-	-	68.2	-20.08	360	100	H
7.79899	38.07	PK-U	35.9	-26.6	0	47.37	-	-	-	-	68.2	-20.83	360	100	V
10.40215	35.92	PK-U	37.6	-21.6	0	51.92	-	-	-	-	68.2	-16.28	133	240	H
10.41025	37.5	PK-U	37.6	-21.7	0	53.4	-	-	-	-	68.2	-14.8	194	101	V
*15.5899	42.08	PK-U	40.2	-21.4	0	60.88	-	-	74	-13.12	-	-	207	101	V
*15.5994	28.32	ADR	40.2	-21.3	0	47.22	54	-6.78	-	-	-	-	207	101	V
*15.59455	37.85	PK-U	40.2	-21.5	0	56.55	-	-	74	-17.45	-	-	146	101	H
*15.5991	25.15	ADR	40.2	-21.3	0	44.05	54	-9.95	-	-	-	-	146	101	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_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	7.85259	28.28	PK	35.9	-26.7	0	37.48	-	-	-	-	68.2	-30.72	0-360	149	H
3	10.47202	26.72	PK	37.7	-22.4	0	42.02	-	-	-	-	68.2	-26.18	0-360	259	H
5	*15.72791	26.26	PK	40.4	-21	0	45.66	-	-	74	-28.34	-	-	0-360	259	H
2	7.86296	28.41	PK	35.9	-26.8	0	37.51	-	-	-	-	68.2	-30.69	0-360	259	V
4	10.48017	29.34	PK	37.7	-22.4	0	44.64	-	-	-	-	68.2	-23.56	0-360	259	V
6	*15.71532	26.97	PK	40.4	-21.2	0	46.17	-	-	74	-27.83	-	-	0-360	259	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

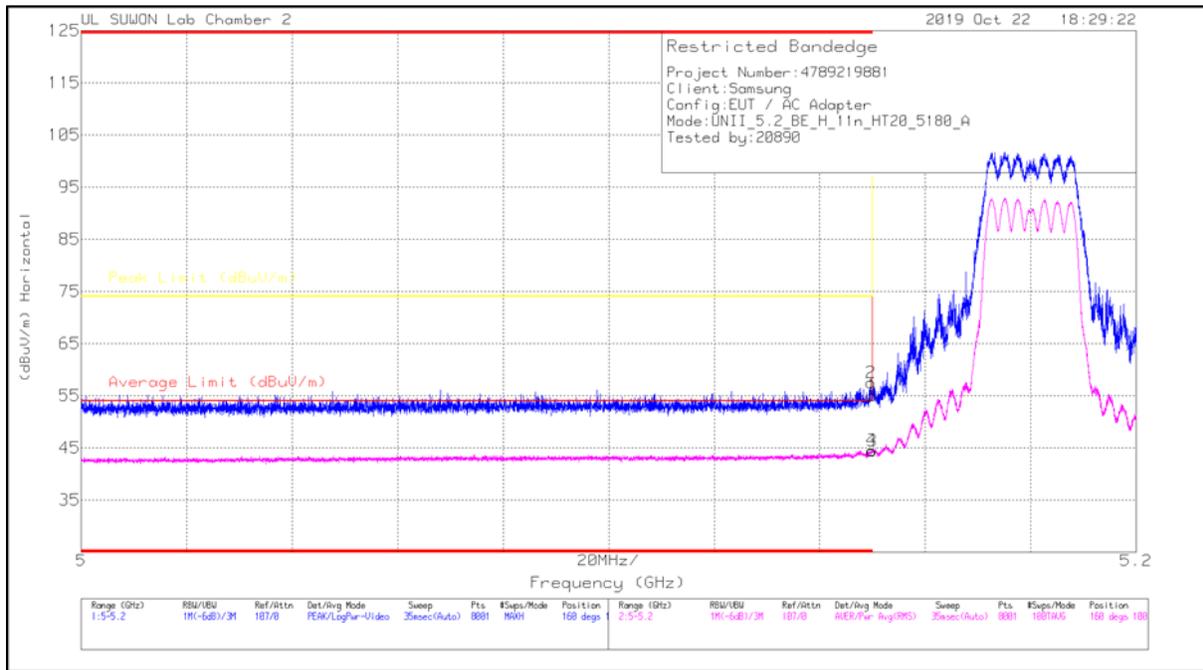
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.85153	38.55	PK-U	35.9	-26.7	0	47.75	-	-	-	-	68.2	-20.45	360	100	H
7.85164	39.2	PK-U	35.9	-26.7	0	48.4	-	-	-	-	68.2	-19.8	360	100	V
10.47908	38.72	PK-U	37.7	-22.4	0	54.02	-	-	-	-	68.2	-14.18	140	105	H
10.47522	39.5	PK-U	37.7	-22.4	0	54.8	-	-	-	-	68.2	-13.4	208	101	V
*15.72529	36.04	PK-U	40.4	-21	0	55.44	-	-	74	-18.56	-	-	360	100	H
*15.72464	36.19	PK-U	40.4	-21.1	0	55.49	-	-	74	-18.51	-	-	360	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

11.1.2. TX ABOVE 1GHz 802.11n HT20 2Tx MODE IN THE 5.2GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

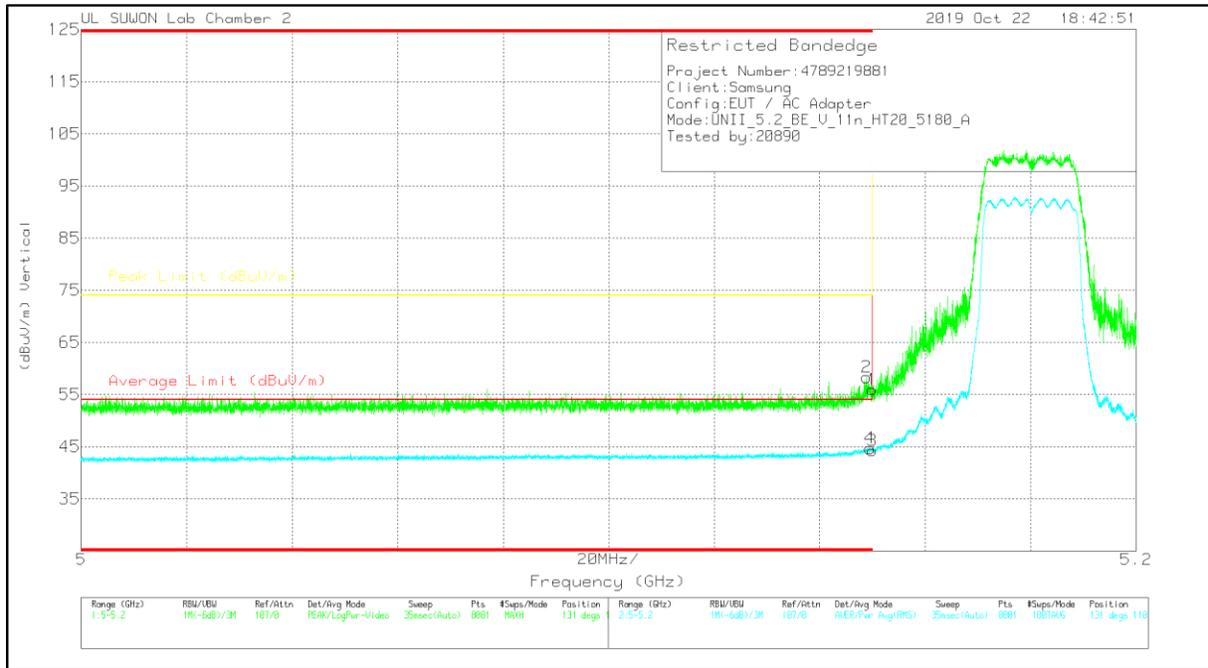
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1	5.15	38.85	Pk	34.3	-18.1	0	55.05	-	-	74	-18.95	160	100	H
2	* 5.1497	41.33	Pk	34.3	-18.1	0	57.53	-	-	74	-16.47	160	100	H
3	5.15	28.21	RMS	34.3	-18.1	0	44.41	54	-9.59	-	-	160	100	H
4	* 5.14983	28.3	RMS	34.3	-18.1	0	44.5	54	-9.5	-	-	160	100	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE DATA



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	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	39.74	Pk	34.3	-18.1	0	55.94	-	-	74	-18.06	131	110	V
2	* 5.14893	42.14	Pk	34.3	-18.1	0	58.34	-	-	74	-15.66	131	110	V
3	5.15	28.06	RMS	34.3	-18.1	0	44.26	54	-9.74	-	-	131	110	V
4	* 5.14953	28.52	RMS	34.3	-18.1	0	44.72	54	-9.28	-	-	131	110	V

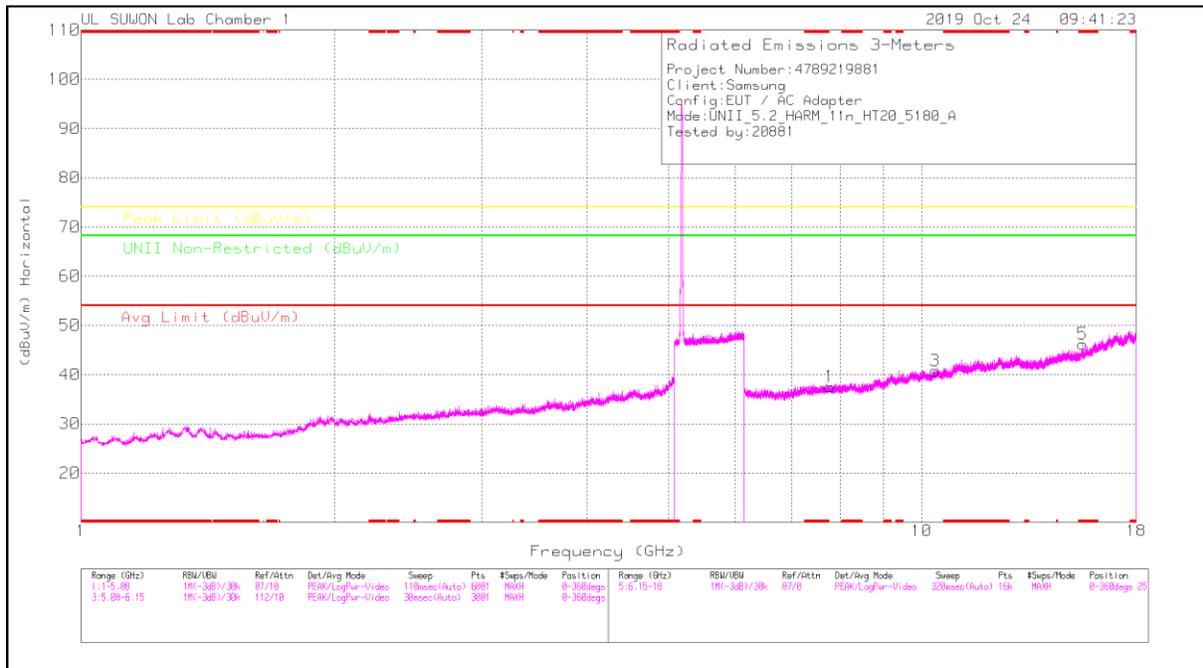
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

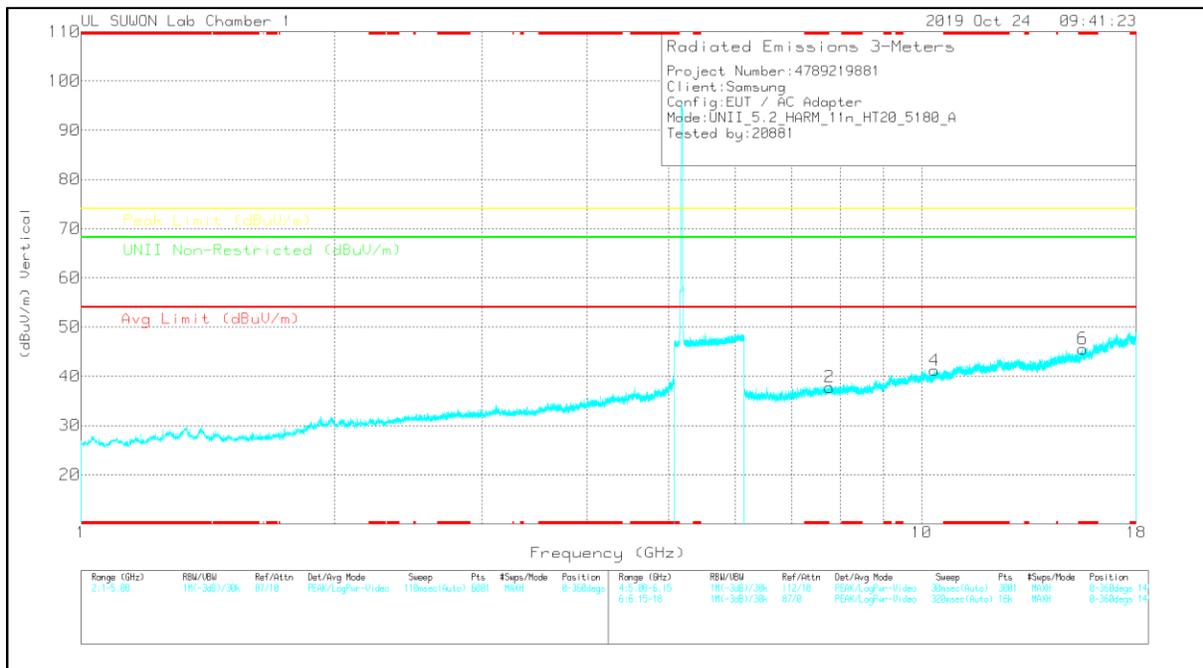
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_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	7.77483	28.33	PK	35.9	-26.7	0	37.53	-	-	-	-	68.2	-30.67	0-360	149	H
3	10.38019	24.96	PK	37.6	-21.8	0	40.76	-	-	-	-	68.2	-27.44	0-360	250	H
5	* 15.5398	26.89	PK	40.2	-20.9	0	46.19	-	-	74	-27.81	-	-	0-360	250	H
2	7.76668	28.5	PK	35.9	-26.6	0	37.8	-	-	-	-	68.2	-30.4	0-360	250	V
4	10.36019	25.88	PK	37.6	-22.3	0	41.18	-	-	-	-	68.2	-27.02	0-360	250	V
6	* 15.53758	26.38	PK	40.2	-21	0	45.58	-	-	74	-28.42	-	-	0-360	149	V

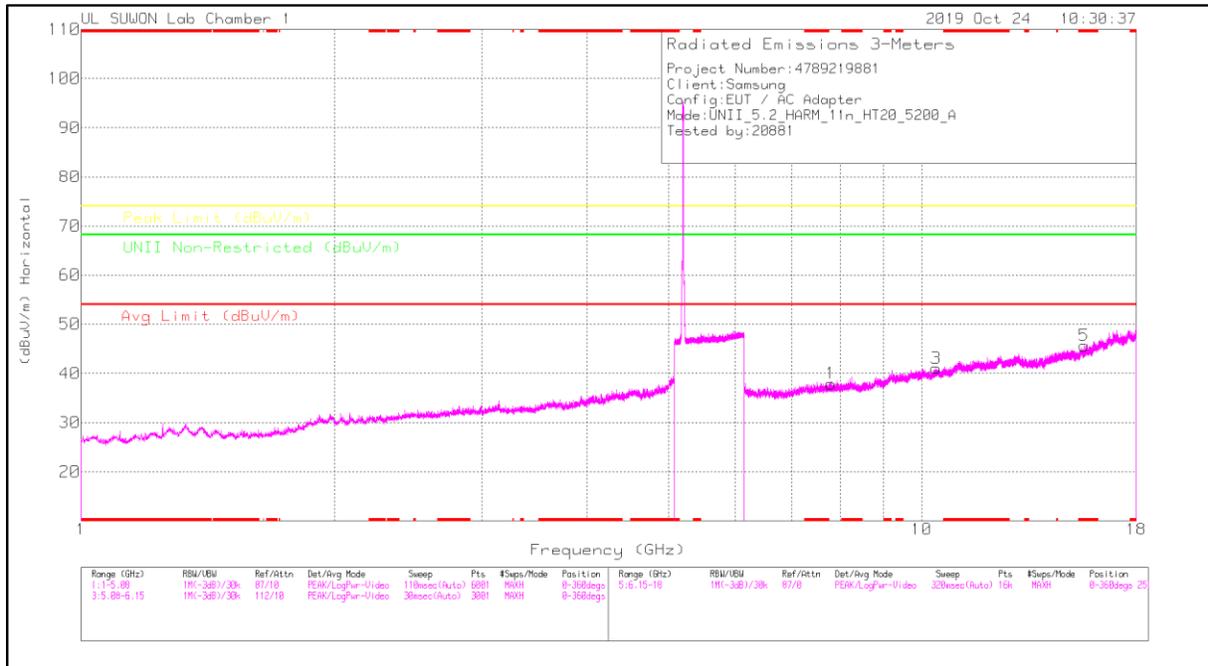
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

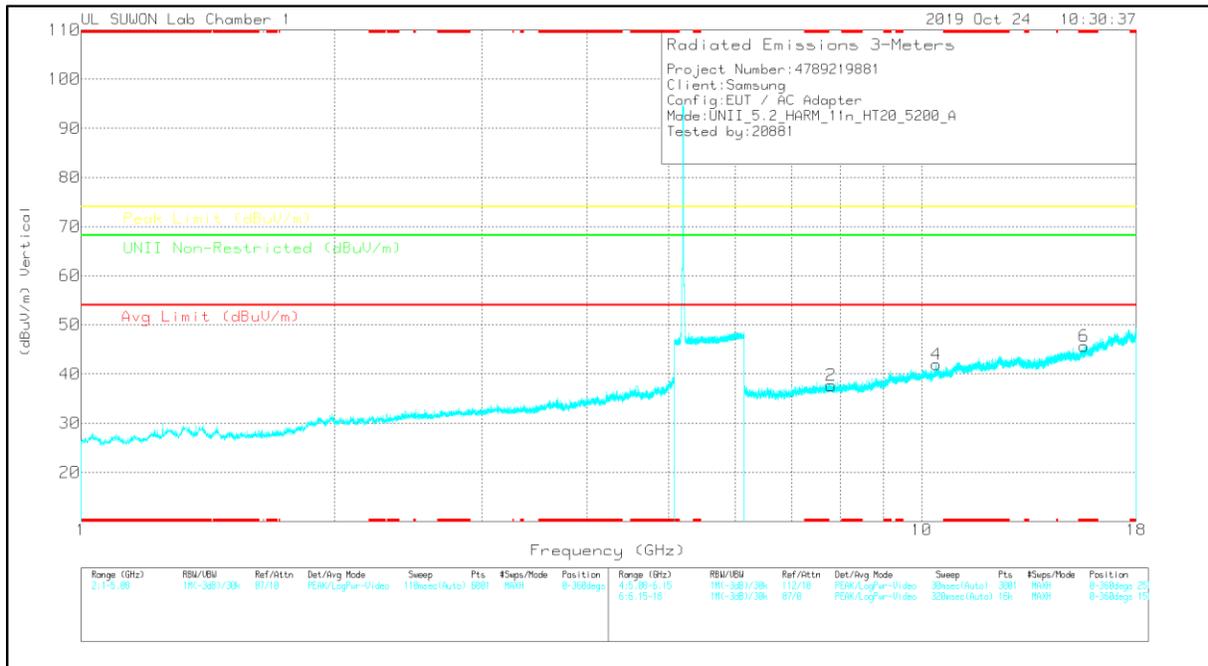
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.77574	38.36	PK-U	35.9	-26.6	0	47.66	-	-	-	-	68.2	-20.54	360	100	H
7.77536	38.18	PK-U	35.9	-26.7	0	47.38	-	-	-	-	68.2	-20.82	360	100	V
10.38207	35.13	PK-U	37.6	-21.9	0	50.83	-	-	-	-	68.2	-17.37	360	100	H
10.37917	35.21	PK-U	37.6	-21.9	0	50.91	-	-	-	-	68.2	-17.29	360	100	V
* 15.5394	38.06	PK-U	40.2	-20.9	0	57.36	-	-	74	-16.64	-	-	150	104	H
* 15.53972	24.87	ADR	40.2	-20.9	0	44.17	54	-9.83	-	-	-	-	150	104	H
* 15.54456	41.96	PK-U	40.2	-21	0	61.16	-	-	74	-12.84	-	-	184	104	V
* 15.53984	27.7	ADR	40.2	-20.9	0	47	54	-7	-	-	-	-	184	104	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_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	7.80075	28.63	PK	35.9	-26.6	0	37.93	-	-	-	-	68.2	-30.27	0-360	150	H
3	10.39944	25.05	PK	37.6	-21.6	0	41.05	-	-	-	-	68.2	-27.15	0-360	150	H
5	* 15.59979	26.73	PK	40.2	-21.3	0	45.63	-	-	74	-28.37	-	-	0-360	250	H
2	7.80223	28.38	PK	35.9	-26.6	0	37.68	-	-	-	-	68.2	-30.52	0-360	150	V
4	10.40759	26.04	PK	37.6	-21.7	0	41.94	-	-	-	-	68.2	-26.26	0-360	150	V
6	* 15.59979	26.75	PK	40.2	-21.3	0	45.65	-	-	74	-28.35	-	-	0-360	150	V

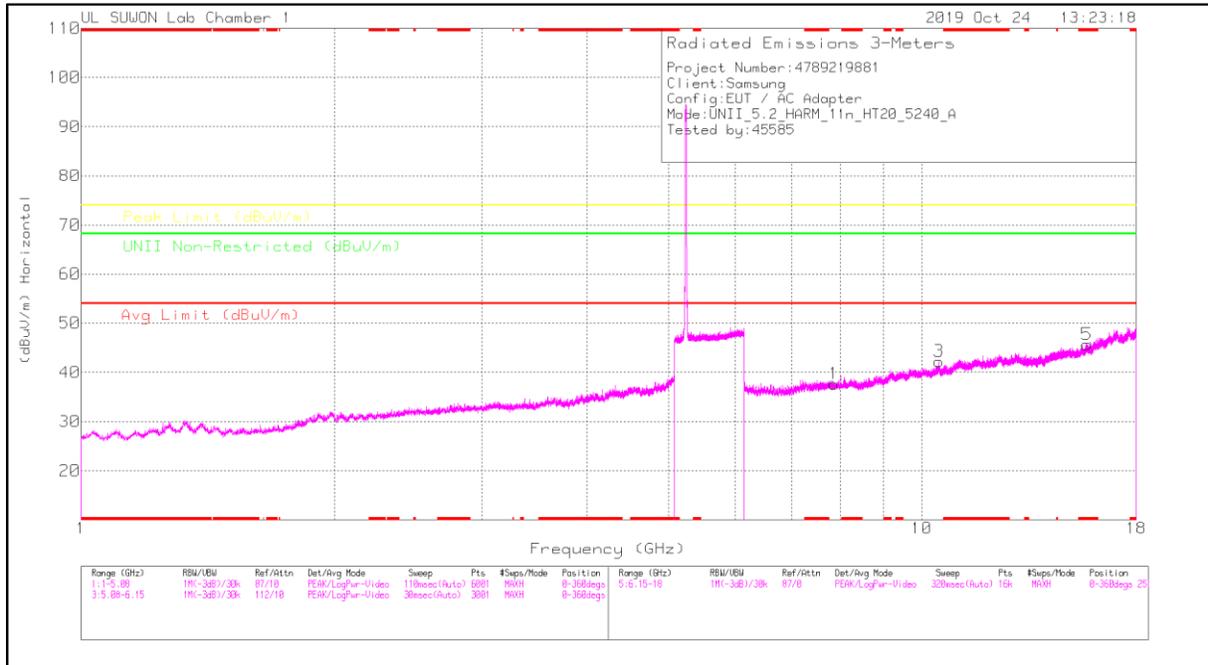
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

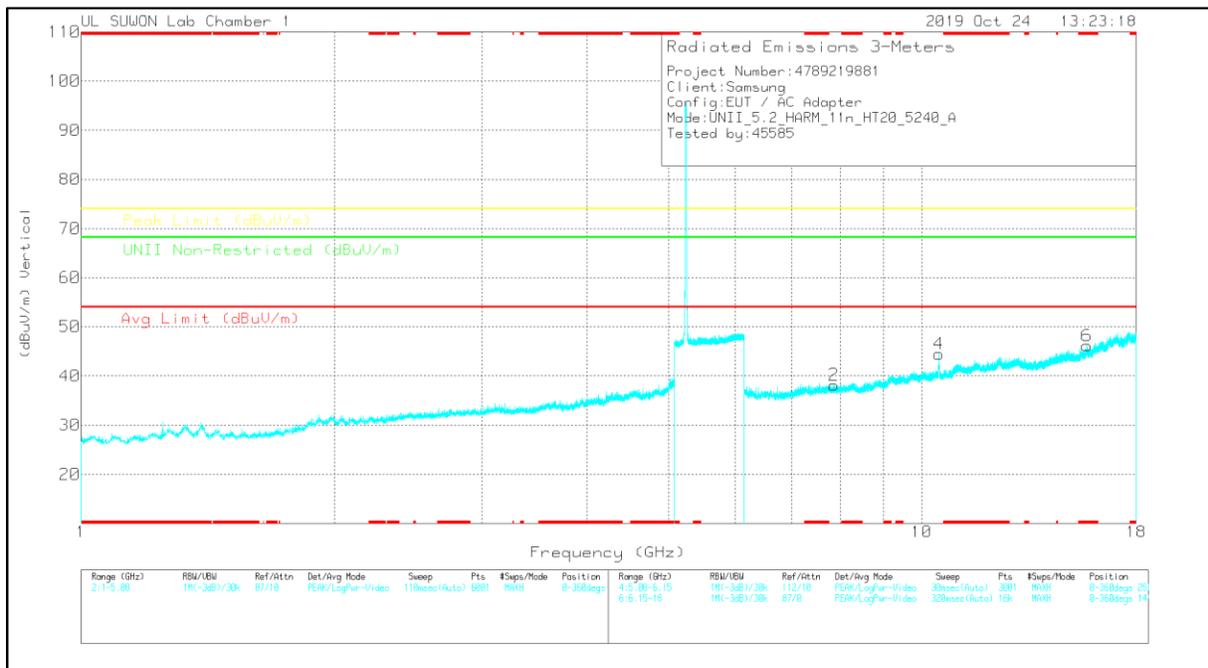
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.80174	38.13	PK-U	35.9	-26.6	0	47.43	-	-	-	-	68.2	-20.77	0	100	H
7.80008	38.8	PK-U	35.9	-26.6	0	48.1	-	-	-	-	68.2	-20.1	0	100	V
10.39942	34.69	PK-U	37.6	-21.6	0	50.69	-	-	-	-	68.2	-17.51	0	100	H
10.40072	35.13	PK-U	37.6	-21.6	0	51.13	-	-	-	-	68.2	-17.07	0	100	V
* 15.59935	39.16	PK-U	40.2	-21.3	0	58.06	-	-	74	-15.94	-	-	149	102	H
* 15.60199	25.76	ADR	40.2	-21.3	0	44.66	54	-9.34	-	-	-	-	149	102	H
* 15.60475	42.22	PK-U	40.2	-21.3	0	61.12	-	-	74	-12.88	-	-	184	100	V
* 15.60195	28.06	ADR	40.2	-21.3	0	46.96	54	-7.04	-	-	-	-	184	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-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 (dBu)	Det	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	7.86074	28.57	PK	35.9	-26.8	0	37.67	-	-	-	-	68.2	-30.53	0-360	150	H
3	10.48017	28.96	PK	37.7	-22.4	0	42.26	-	-	-	-	68.2	-25.94	0-360	150	H
5	* 15.72198	28.27	PK	40.4	-21	0	45.67	-	-	74	-28.33	-	-	0-360	150	H
2	7.86	29.05	PK	35.9	-26.8	0	38.15	-	-	-	-	68.2	-30.05	0-360	250	V
4	10.47794	29.16	PK	37.7	-22.4	0	44.46	-	-	-	-	68.2	-23.74	0-360	250	V
6	* 15.72495	26.86	PK	40.4	-21.1	0	46.16	-	-	74	-27.84	-	-	0-360	250	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

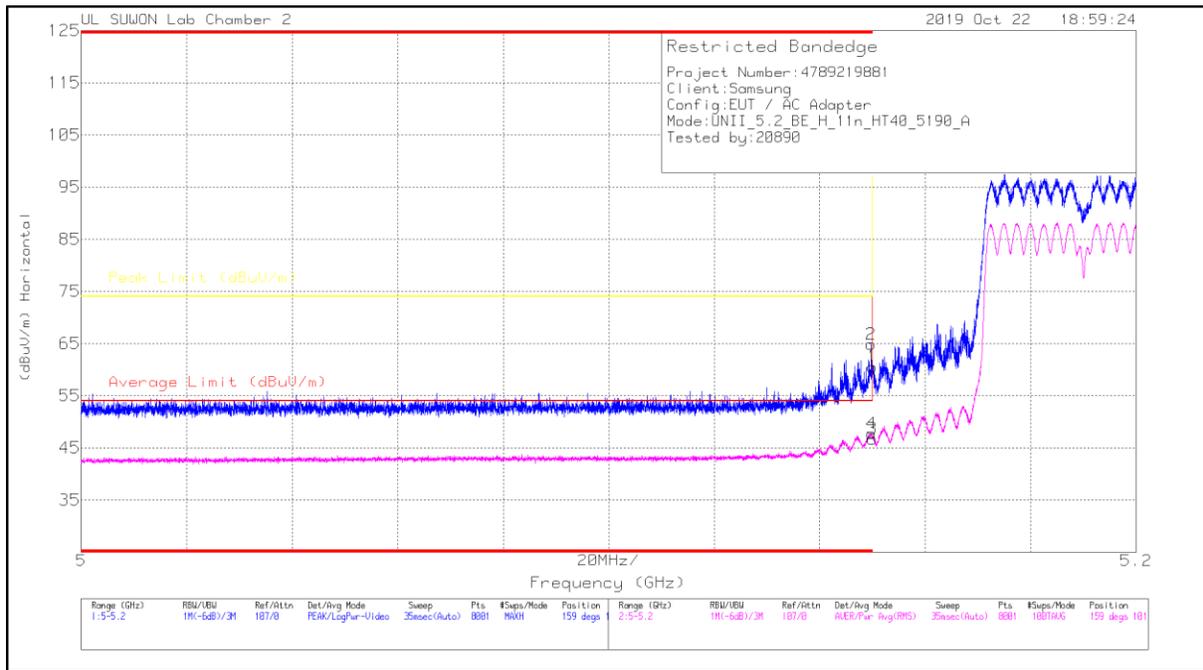
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.86215	38.71	PK-U	35.9	-26.7	0	47.91	-	-	-	-	68.2	-20.29	0	100	H
7.85891	38.83	PK-U	35.9	-26.8	0	47.93	-	-	-	-	68.2	-20.27	0	100	V
10.4818	37.95	PK-U	37.7	-22.4	0	53.25	-	-	-	-	68.2	-14.95	137	102	H
10.48495	39.49	PK-U	37.7	-22.5	0	54.69	-	-	-	-	68.2	-13.51	208	100	V
* 15.7302	39.29	PK-U	40.4	-20.9	0	58.79	-	-	74	-15.21	-	-	172	106	H
* 15.72	25.95	ADR	40.4	-21.2	0	45.15	54	-8.85	-	-	-	-	172	106	H
* 15.7123	42.19	PK-U	40.4	-21.3	0	61.29	-	-	74	-12.71	-	-	193	103	V
* 15.7175	28.07	ADR	40.4	-21.1	0	47.37	54	-6.63	-	-	-	-	193	103	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

11.1.3. TX ABOVE 1GHz 802.11n HT40 2Tx MODE IN THE 5.2GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

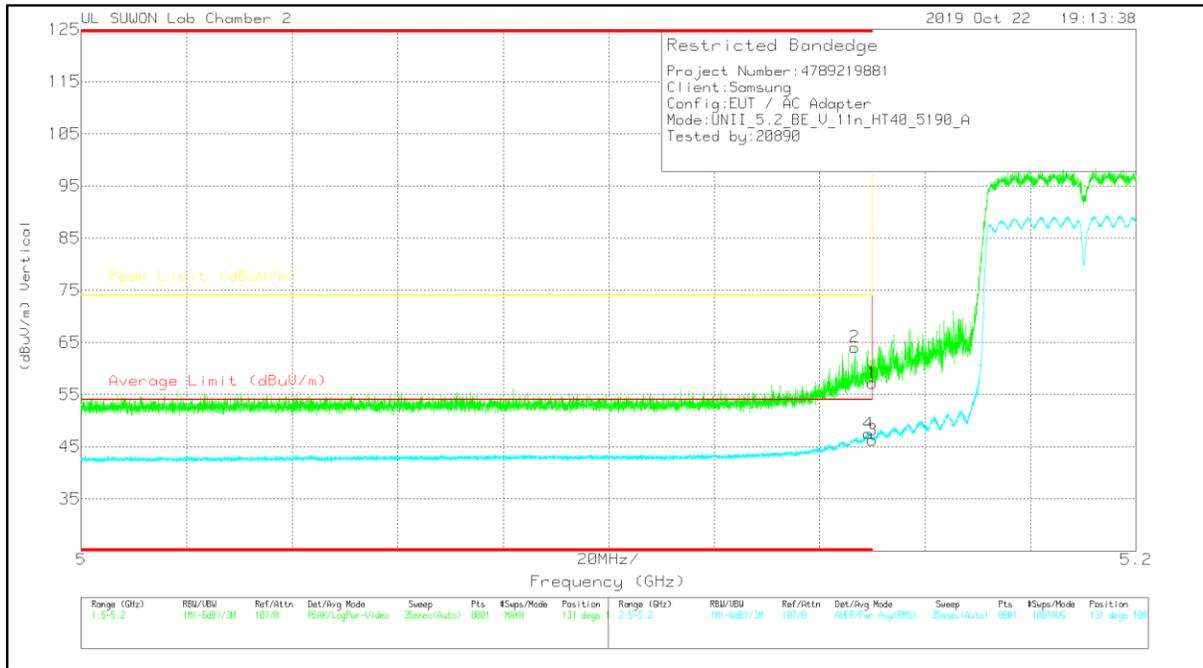
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.15	44.36	Pk	34.3	-18.1	0	60.56	-	-	74	-13.44	159	101	H
2	* 5.14973	48.66	Pk	34.3	-18.1	0	64.86	-	-	74	-9.14	159	101	H
3	5.15	30.56	RMS	34.3	-18.1	0	46.76	54	-7.24	-	-	159	101	H
4	* 5.14983	31.57	RMS	34.3	-18.1	0	47.77	54	-6.23	-	-	159	101	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE DATA



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	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	41.04	Pk	34.3	-18.1	0	57.24	-	-	74	-16.76	131	108	V
2	* 5.14665	47.89	Pk	34.3	-18.1	0	64.09	-	-	74	-9.91	131	108	V
3	5.15	30.09	RMS	34.3	-18.1	0	46.29	54	-7.71	-	-	131	108	V
4	* 5.14923	31.32	RMS	34.3	-18.1	0	47.52	54	-6.48	-	-	131	108	V

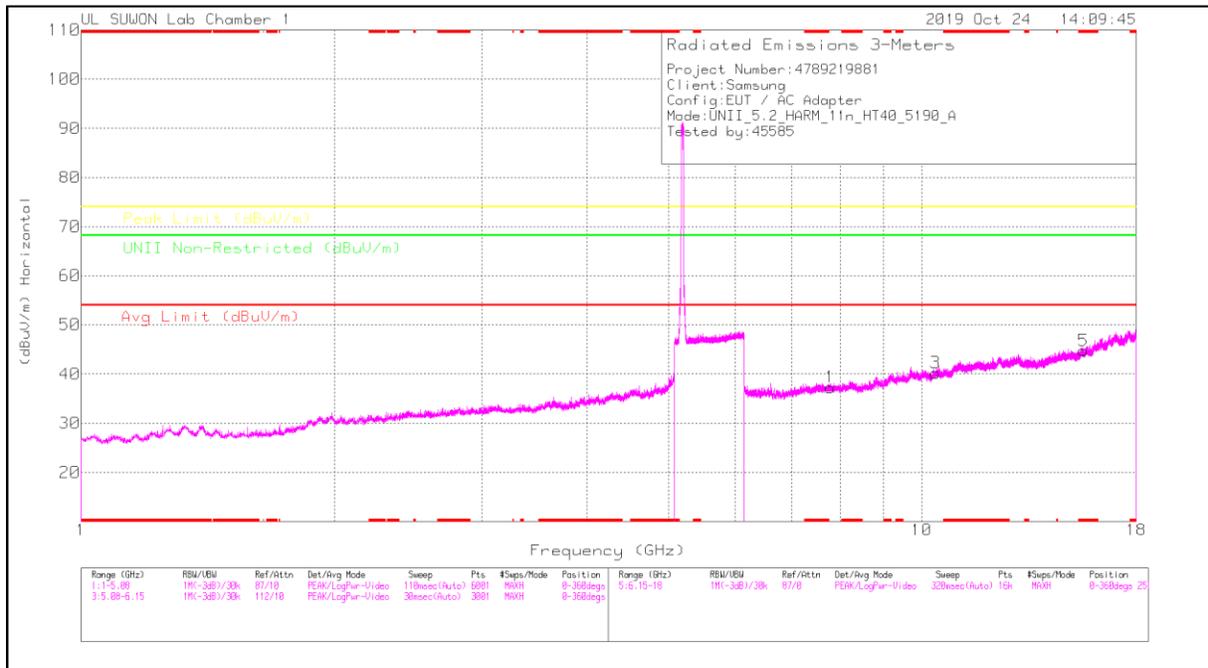
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

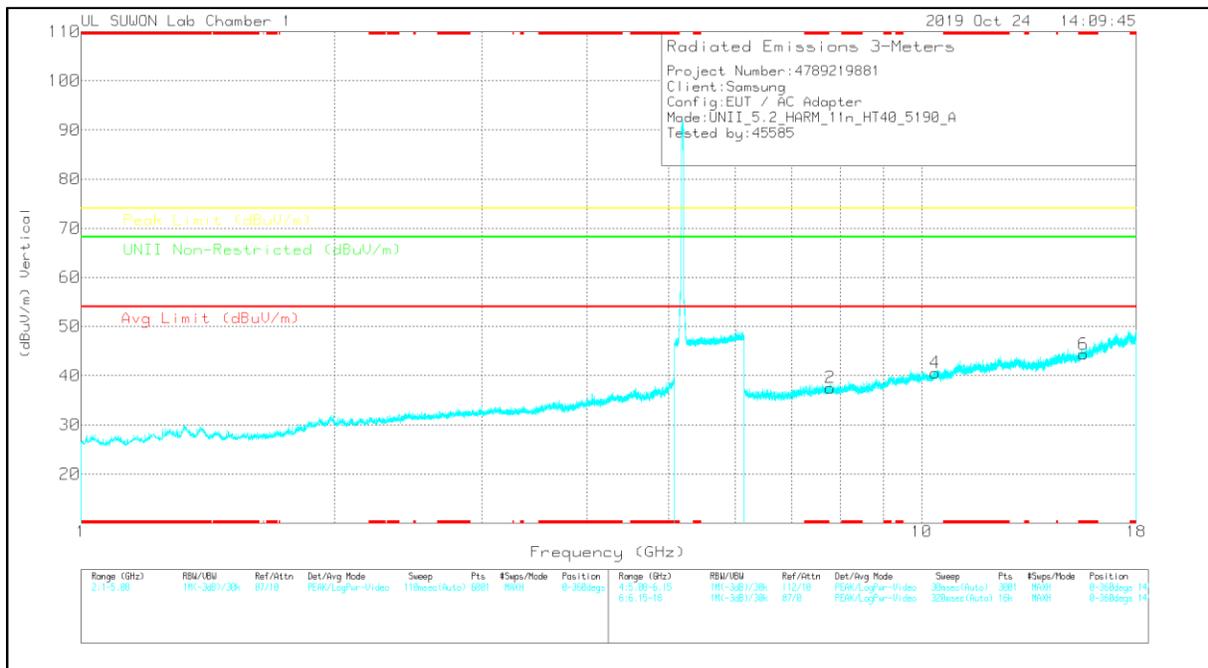
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_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	7.78446	27.88	PK	35.9	-26.5	0	37.28	-	-	-	-	68.2	-30.92	0-360	149	H
3	10.38167	24.52	PK	37.6	-21.9	0	40.22	-	-	-	-	68.2	-27.98	0-360	250	H
5	*15.57016	25.77	PK	40.2	-21.2	0	44.77	-	-	74	-29.23	-	-	0-360	250	H
2	7.78594	28.24	PK	35.9	-26.6	0	37.54	-	-	-	-	68.2	-30.66	0-360	149	V
4	10.38019	24.77	PK	37.6	-21.8	0	40.57	-	-	-	-	68.2	-27.63	0-360	250	V
6	*15.57016	25.38	PK	40.2	-21.2	0	44.38	-	-	74	-29.62	-	-	0-360	149	V

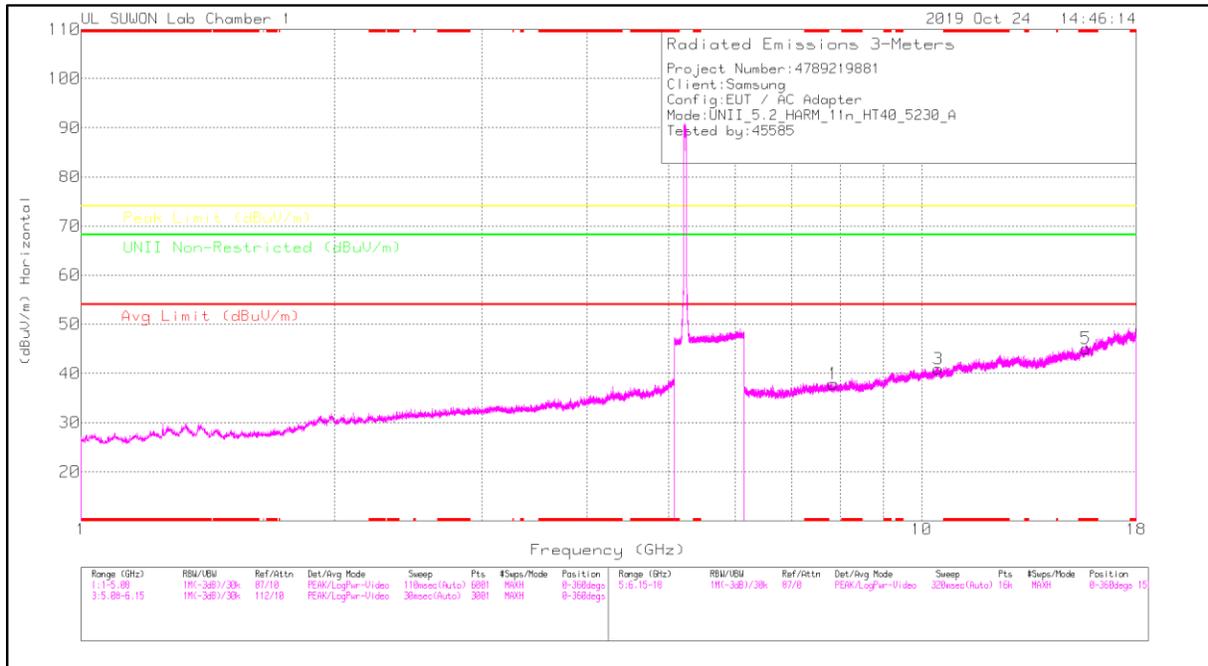
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

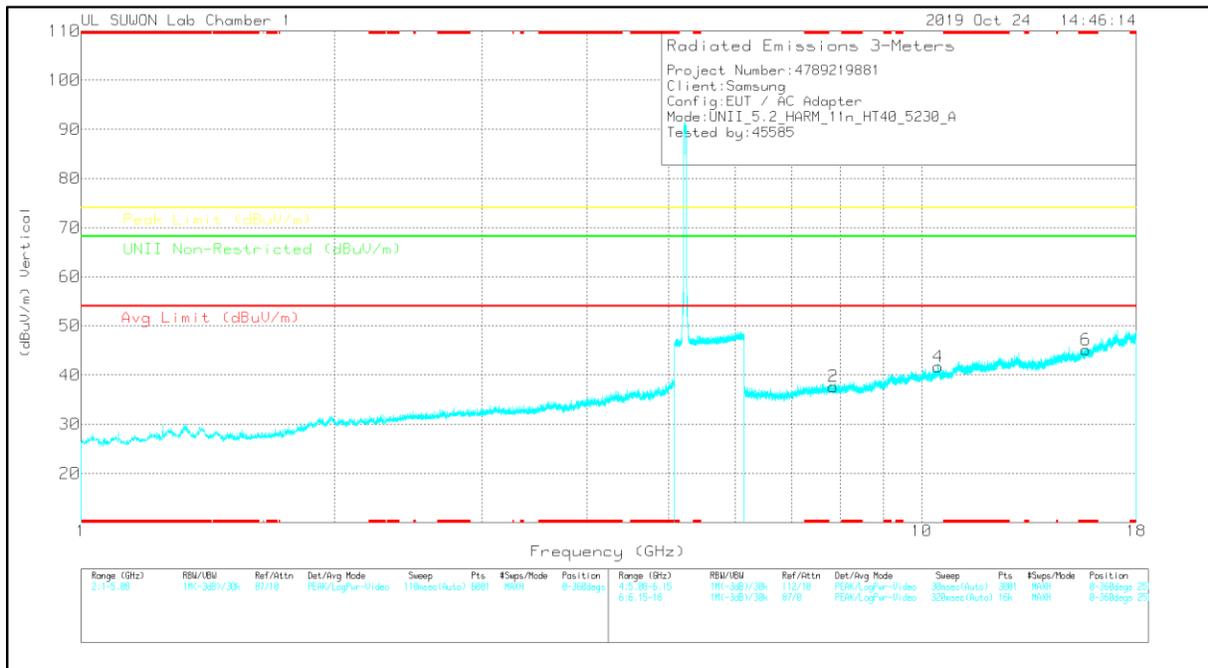
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.78481	38.63	PK-U	35.9	-26.5	0	48.03	-	-	-	-	68.2	-20.17	0	100	H
7.78319	38.81	PK-U	35.9	-26.6	0	48.11	-	-	-	-	68.2	-20.09	0	100	V
10.38233	35.28	PK-U	37.6	-21.9	0	50.98	-	-	-	-	68.2	-17.22	0	100	H
10.38178	35.24	PK-U	37.6	-21.9	0	50.94	-	-	-	-	68.2	-17.26	0	100	V
*15.57105	35.13	PK-U	40.2	-21.3	0	54.03	-	-	74	-19.97	-	-	0	100	H
*15.57169	35.45	PK-U	40.2	-21.2	0	54.45	-	-	74	-19.55	-	-	0	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_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	7.84444	28.57	PK	35.9	-26.6	0	37.87	-	-	-	-	68.2	-30.33	0-360	250	H
3	10.45869	25.33	PK	37.7	-22.1	0	40.93	-	-	-	-	68.2	-27.27	0-360	150	H
5	*15.69088	25.97	PK	40.4	-21.3	0	45.07	-	-	74	-28.93	-	-	0-360	150	H
2	7.84593	28.36	PK	35.9	-26.6	0	37.66	-	-	-	-	68.2	-30.54	0-360	149	V
4	10.45795	26.08	PK	37.7	-22.1	0	41.68	-	-	-	-	68.2	-26.52	0-360	250	V
6	*15.69088	26.02	PK	40.4	-21.3	0	45.12	-	-	74	-28.88	-	-	0-360	149	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

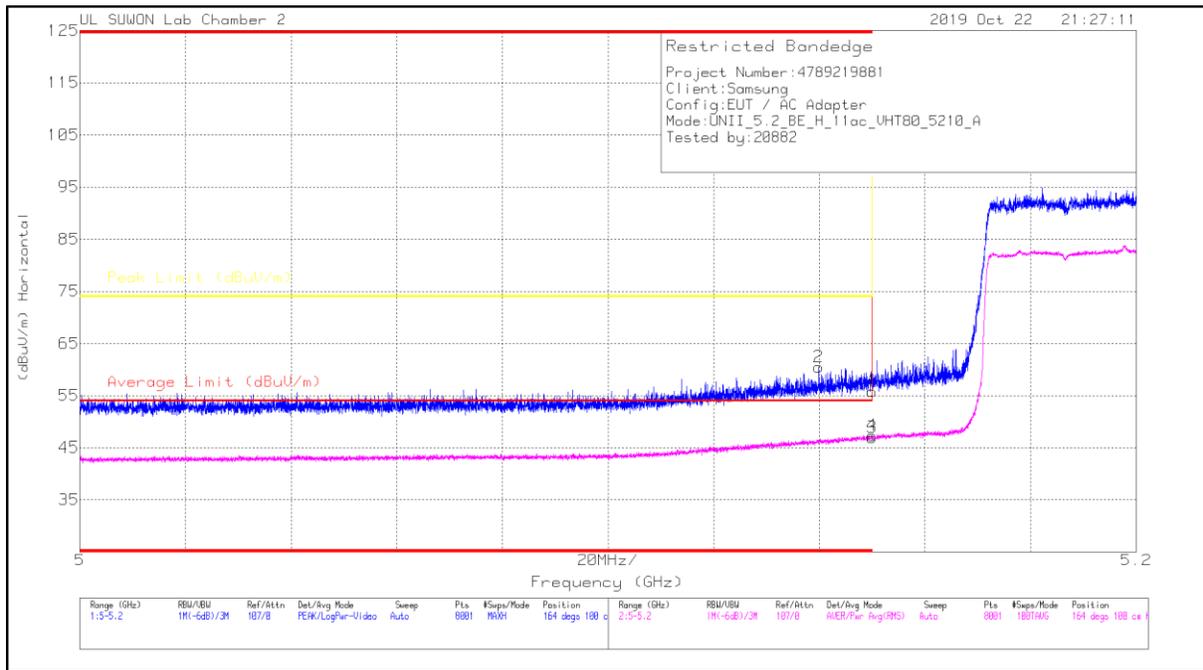
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.84491	39	PK-U	35.9	-26.6	0	48.3	-	-	-	-	68.2	-19.9	0	100	H
7.84602	38.6	PK-U	35.9	-26.6	0	47.9	-	-	-	-	68.2	-20.3	0	100	V
10.46255	36.24	PK-U	37.7	-22.2	0	51.74	-	-	-	-	68.2	-16.46	136	100	H
10.46035	37.2	PK-U	37.7	-22.1	0	52.8	-	-	-	-	68.2	-15.4	208	100	V
*15.68935	36.34	PK-U	40.4	-21.3	0	55.44	-	-	74	-18.56	-	-	360	100	V
*15.68983	35.88	PK-U	40.4	-21.3	0	54.98	-	-	74	-19.02	-	-	360	100	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak

11.1.4. TX ABOVE 1GHz 802.11ac VHT80 2Tx MODE IN THE 5.2GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

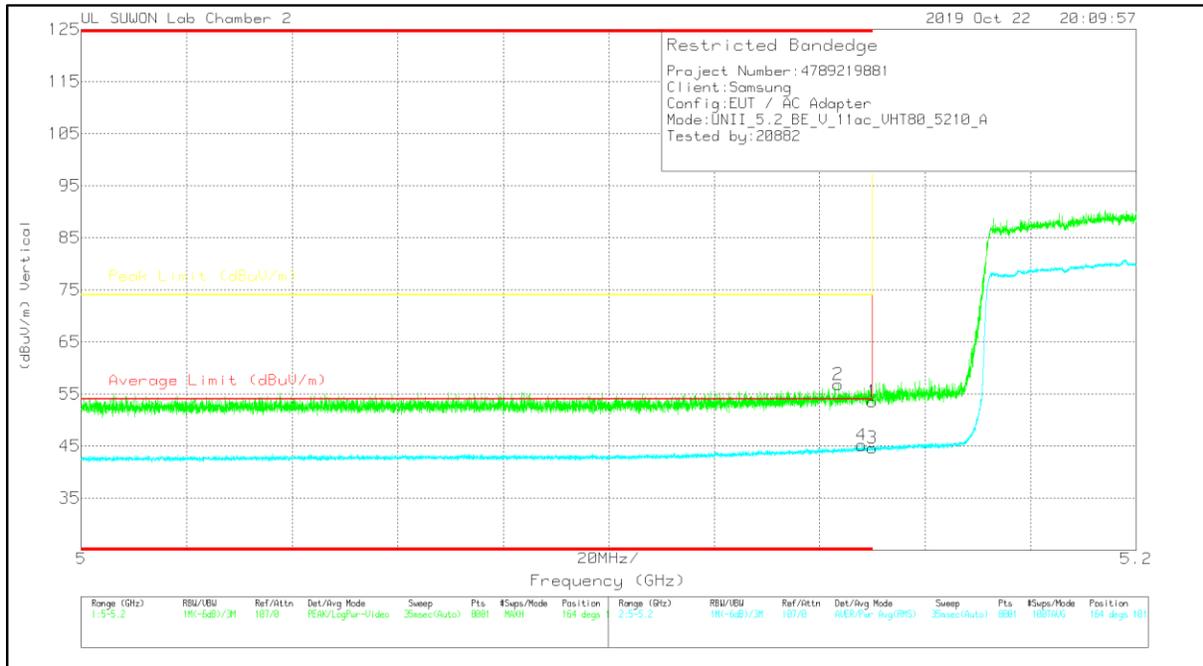
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.15	39.64	Pk	34.3	-18.1	0	55.84	-	-	74	-18.16	164	100	H
2	* 5.1399	44.31	Pk	34.3	-18.1	0	60.51	-	-	74	-13.49	164	100	H
3	5.15	30.81	RMS	34.3	-18.1	0	47.01	54	-6.99	-	-	164	100	H
4	* 5.14995	31.13	RMS	34.3	-18.1	0	47.33	54	-6.67	-	-	164	100	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE DATA



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	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	37.39	Pk	34.3	-18.1	0	53.59	-	-	74	-20.41	164	101	V
2	* 5.14348	40.65	Pk	34.3	-18.1	0	56.85	-	-	74	-17.15	164	101	V
3	5.15	28.46	RMS	34.3	-18.1	0	44.66	54	-9.34	-	-	164	101	V
4	* 5.14795	29	RMS	34.3	-18.1	0	45.2	54	-8.8	-	-	164	101	V

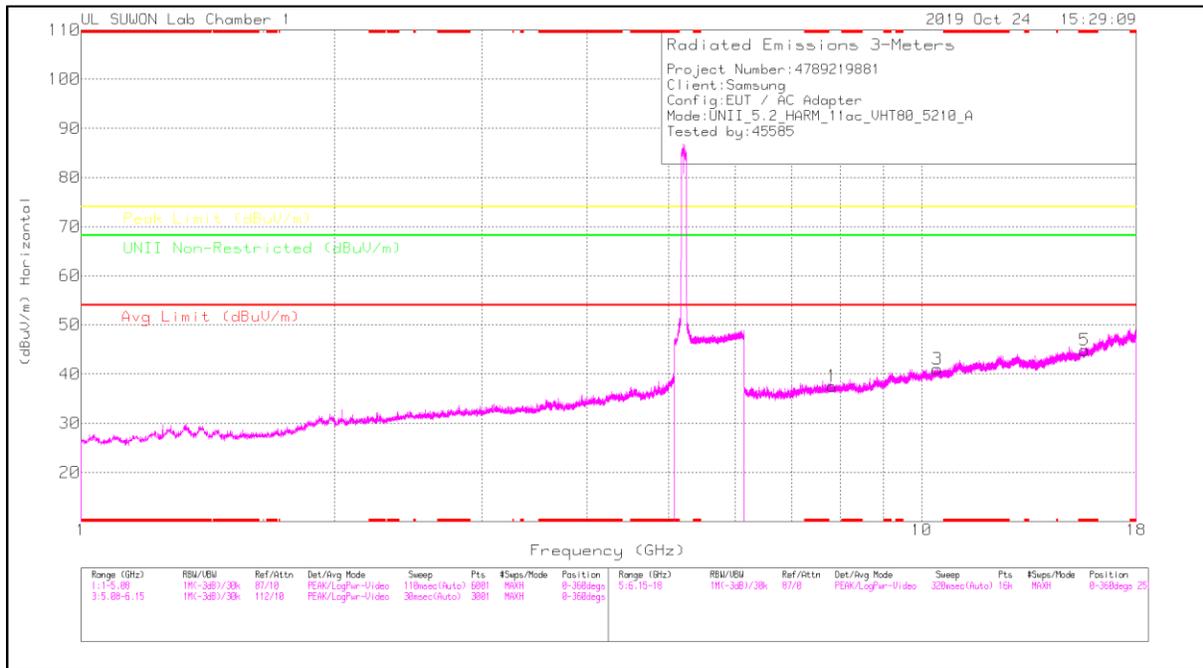
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

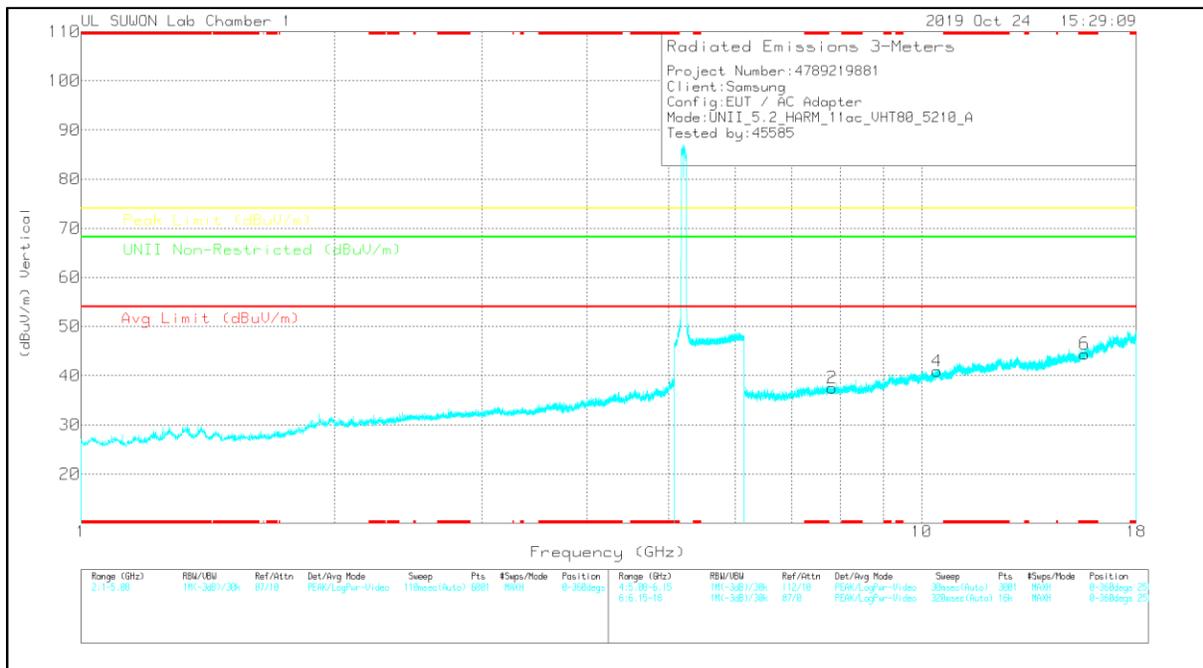
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_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	7.82075	28.11	PK	35.9	-26.5	0	37.51	-	-	-	-	68.2	-30.69	0-360	150	H
3	10.43795	25.33	PK	37.7	-22	0	41.03	-	-	-	-	68.2	-27.17	0-360	150	H
5	*15.62571	25.95	PK	40.3	-21.4	0	44.85	-	-	74	-29.15	-	-	0-360	150	H
2	7.81852	28.12	PK	35.9	-26.5	0	37.52	-	-	-	-	68.2	-30.68	0-360	150	V
4	10.4224	25.21	PK	37.6	-21.9	0	40.91	-	-	-	-	68.2	-27.29	0-360	250	V
6	*15.62719	25.53	PK	40.3	-21.4	0	44.43	-	-	74	-29.57	-	-	0-360	250	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	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
7.82037	38.34	PK-U	35.9	-26.5	0	47.74	-	-	-	-	68.2	-20.46	360	100	H
7.82063	38.07	PK-U	35.9	-26.5	0	47.47	-	-	-	-	68.2	-20.73	360	100	V
10.39979	34.98	PK-U	37.6	-21.6	0	50.98	-	-	-	-	68.2	-17.22	360	100	H
10.44075	35.11	PK-U	37.7	-22.1	0	50.71	-	-	-	-	68.2	-17.49	360	100	V
*15.63263	35.99	PK-U	40.3	-21.4	0	54.89	-	-	74	-19.11	-	-	360	100	H
*15.62808	35.88	PK-U	40.3	-21.4	0	54.78	-	-	74	-19.22	-	-	360	100	V

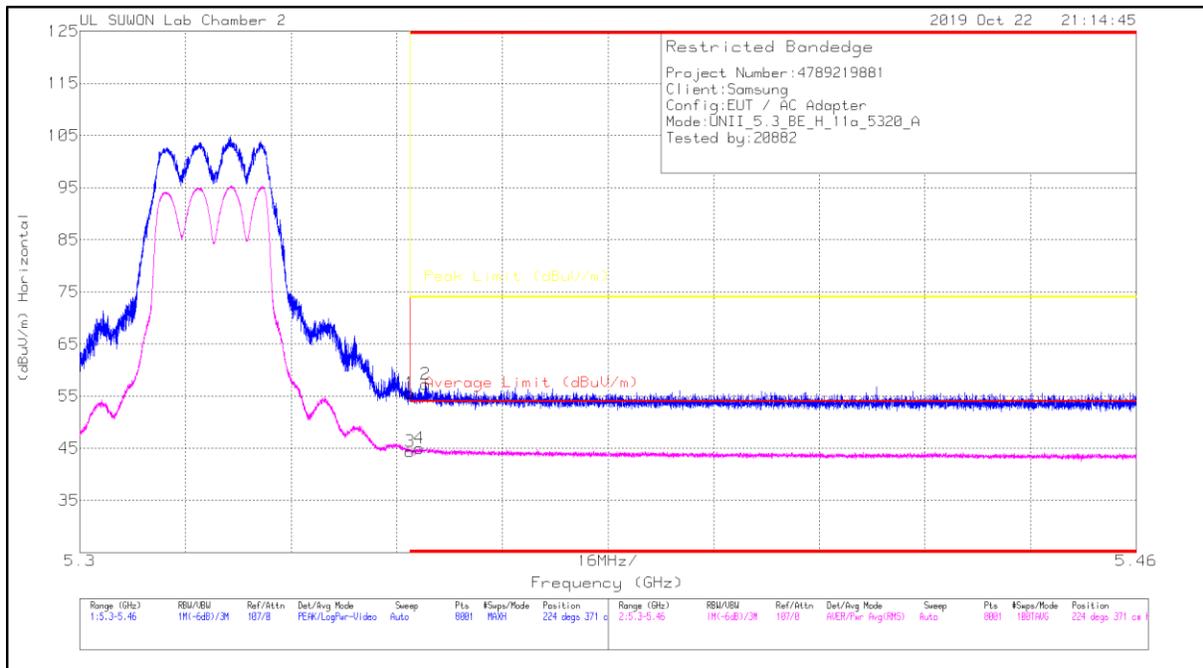
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak

11.2. 5.3 GHz

11.2.1. TX ABOVE 1 GHz 802.11a 2Tx MODE IN THE 5.3 GHz BAND

RESTRICTED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

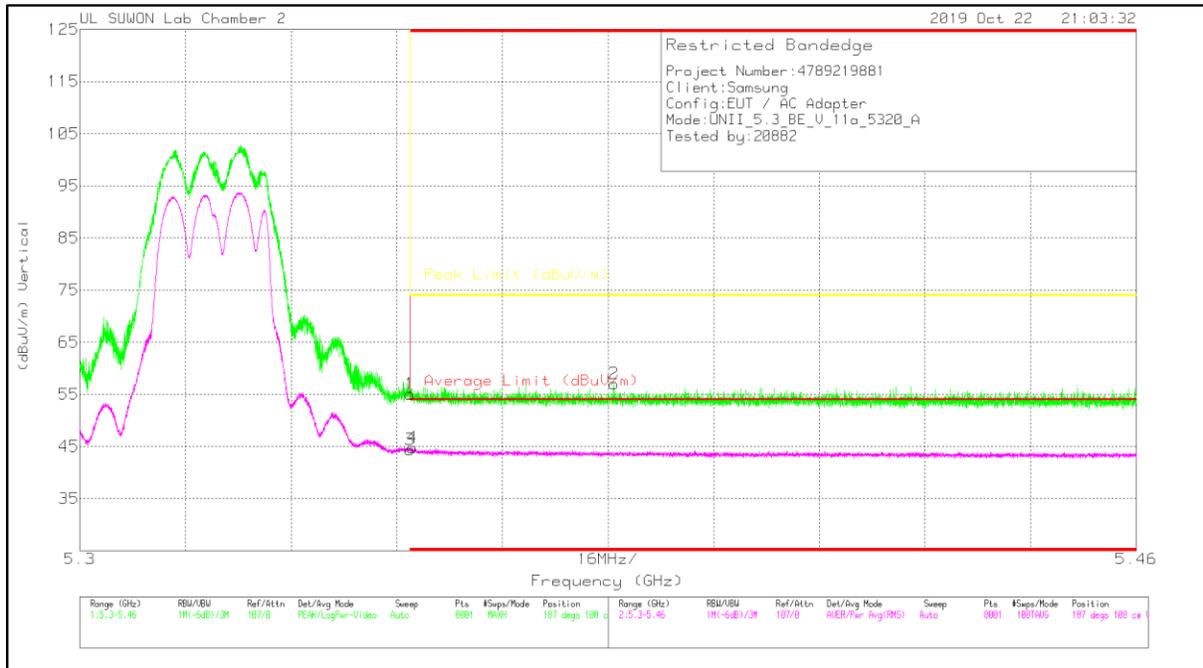
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35002	39.14	Pk		-18.1	0	55.54	-	-	74	-18.46	224	371	H
2	* 5.35242	40.83	Pk		-18.1	0	57.23	-	-	74	-16.77	224	371	H
3	* 5.35002	27.95	RMS		-18.1	0	44.35	54	-9.65	-	-	224	371	H
4	* 5.35146	28.54	RMS		-18.1	0	44.94	54	-9.06	-	-	224	371	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE DATA



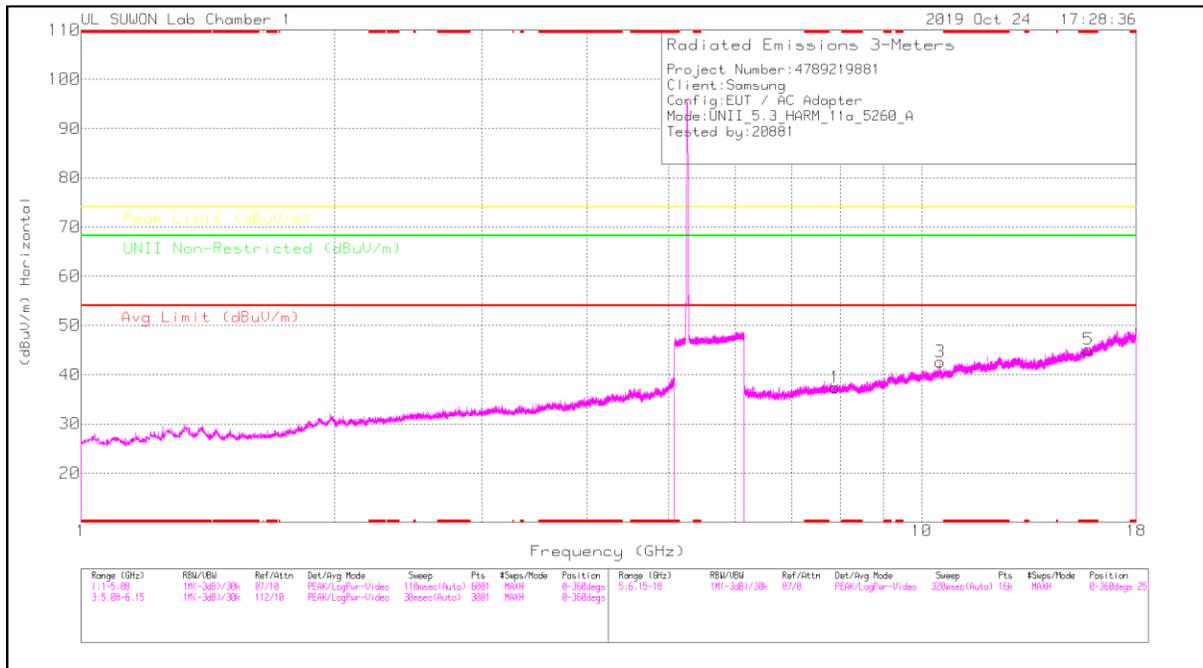
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	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	* 5.35002	38.63	Pk	34.5	-18.1	0	55.03	-	-	74	-18.97	187	108	V
2	* 5.38086	40.72	Pk	34.5	-18.2	0	57.02	-	-	74	-16.98	187	108	V
3	* 5.35002	27.98	RMS	34.5	-18.1	0	44.38	54	-9.62	-	-	187	108	V
4	* 5.35034	28.3	RMS	34.5	-18.1	0	44.7	54	-9.3	-	-	187	108	V

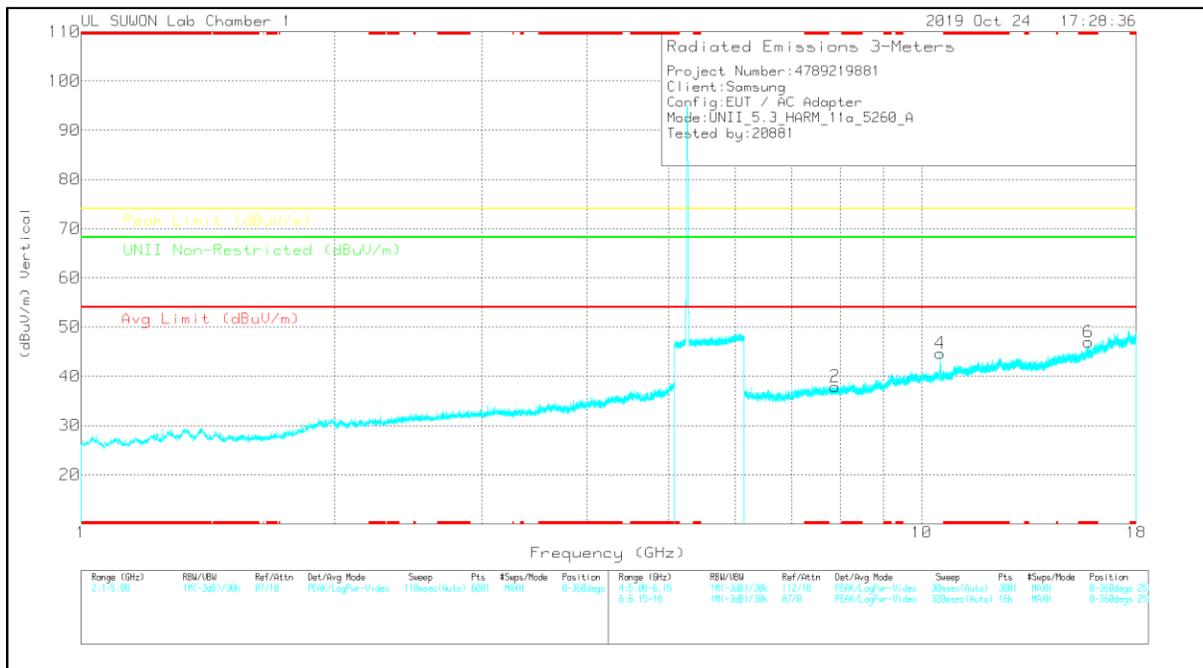
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 Pk - Peak detector
 RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_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	7.88814	27.98	PK	36	-26.6	0	37.38	-	-	-	-	68.2	-30.82	0-360	150	H
3	10.51793	27.51	PK	37.7	-22.6	0	42.61	-	-	-	-	68.2	-25.59	0-360	150	H
5	*15.78049	25.9	PK	40.5	-21.3	0	45.1	-	-	74	-28.9	-	-	0-360	250	H
2	7.89036	28.5	PK	36	-26.6	0	37.9	-	-	-	-	68.2	-30.3	0-360	150	V
4	10.52016	29.56	PK	37.7	-22.6	0	44.68	-	-	-	-	68.2	-23.54	0-360	250	V
6	*15.78419	27.71	PK	40.5	-21.3	0	46.91	-	-	74	-27.09	-	-	0-360	150	V

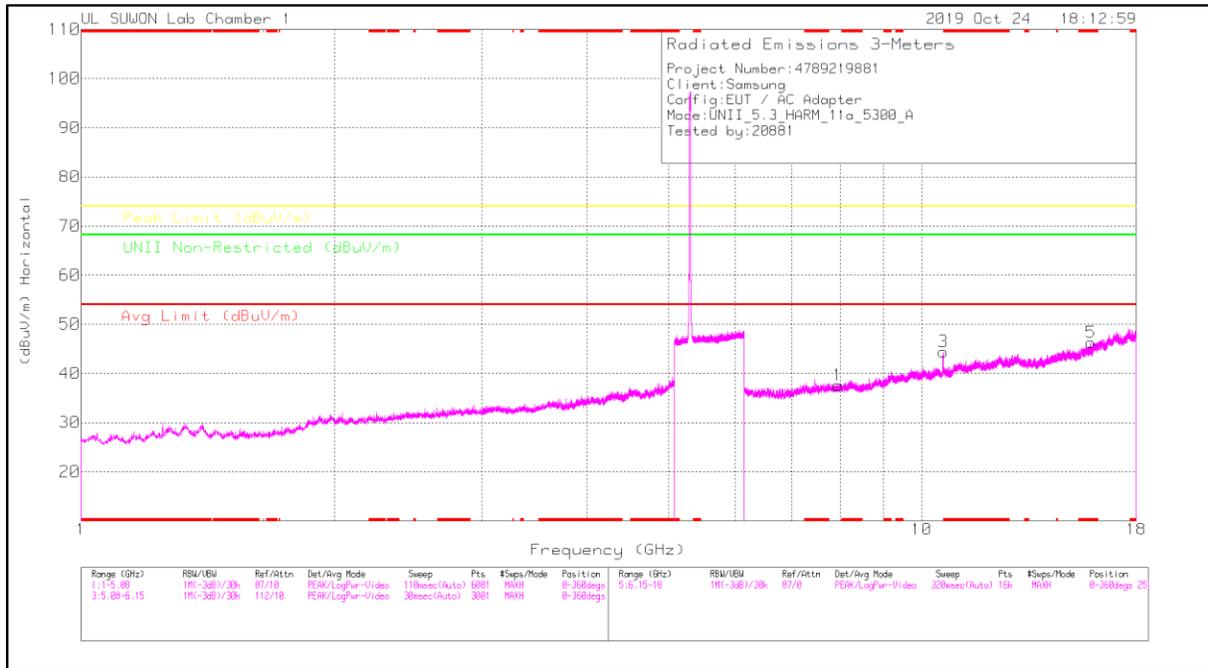
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

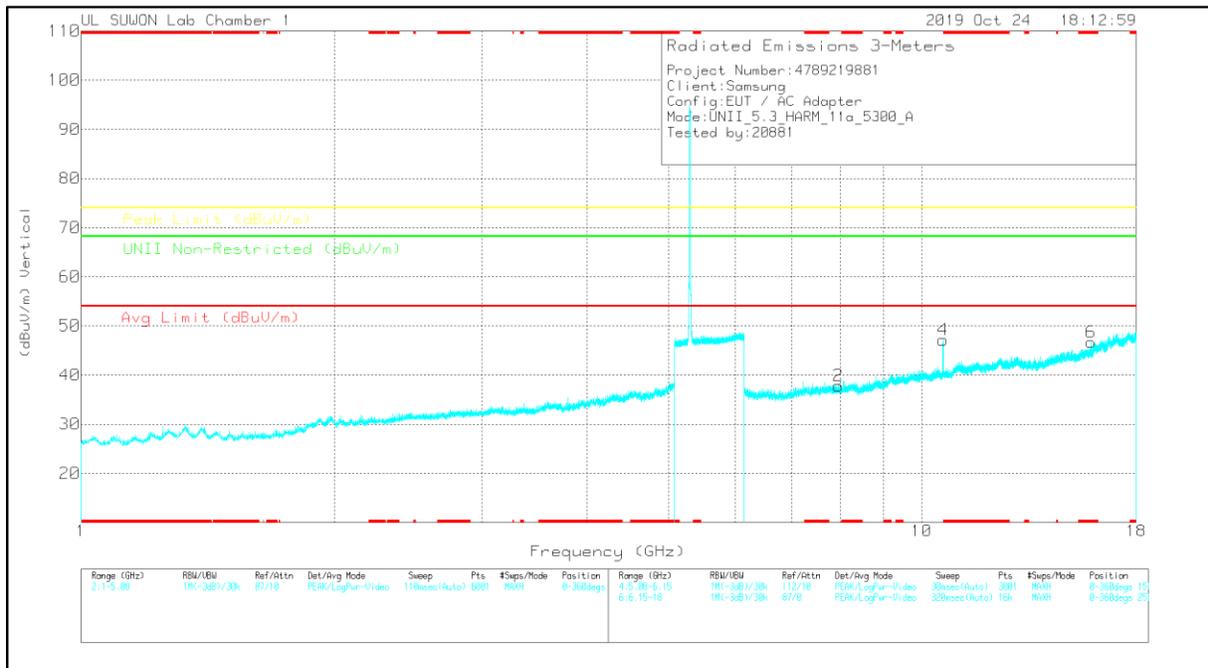
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.88788	38.4	PK-U	36	-26.6	0	47.8	-	-	-	-	68.2	-20.4	360	100	H
7.88739	38.14	PK-U	36	-26.5	0	47.64	-	-	-	-	68.2	-20.56	360	100	V
10.51887	39.1	PK-U	37.7	-22.6	0	54.2	-	-	-	-	68.2	-14	137	100	H
10.52602	40.76	PK-U	37.7	-22.7	0	55.76	-	-	-	-	68.2	-12.44	208	112	V
*15.77497	40.36	PK-U	40.5	-21.2	0	59.66	-	-	74	-14.34	-	-	177	100	H
*15.77965	26.85	ADR	40.5	-21.2	0	46.15	54	-7.85	-	-	-	-	177	100	H
*15.77061	43.05	PK-U	40.5	-21.2	0	62.35	-	-	74	-11.65	-	-	193	100	V
*15.77965	29.5	ADR	40.5	-21.2	0	48.8	54	-5.2	-	-	-	-	193	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_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	7.94961	27.97	PK	36	-26.4	0	37.57	-	-	-	-	68.2	-30.63	0-360	250	H
3	*10.60236	29.39	PK	37.8	-22.8	0	44.39	-	-	74	-29.61	-	-	0-360	250	H
5	*15.89528	28.79	PK	40.6	-21.1	0	46.29	-	-	74	-27.71	-	-	0-360	250	H
2	7.95627	28.32	PK	36	-26.5	0	37.82	-	-	-	-	68.2	-30.38	0-360	250	V
4	*10.60014	32.16	PK	37.8	-22.8	0	47.16	-	-	74	-26.84	-	-	0-360	250	V
6	*15.90046	27.28	PK	40.6	-21.2	0	46.68	-	-	74	-27.32	-	-	0-360	250	V

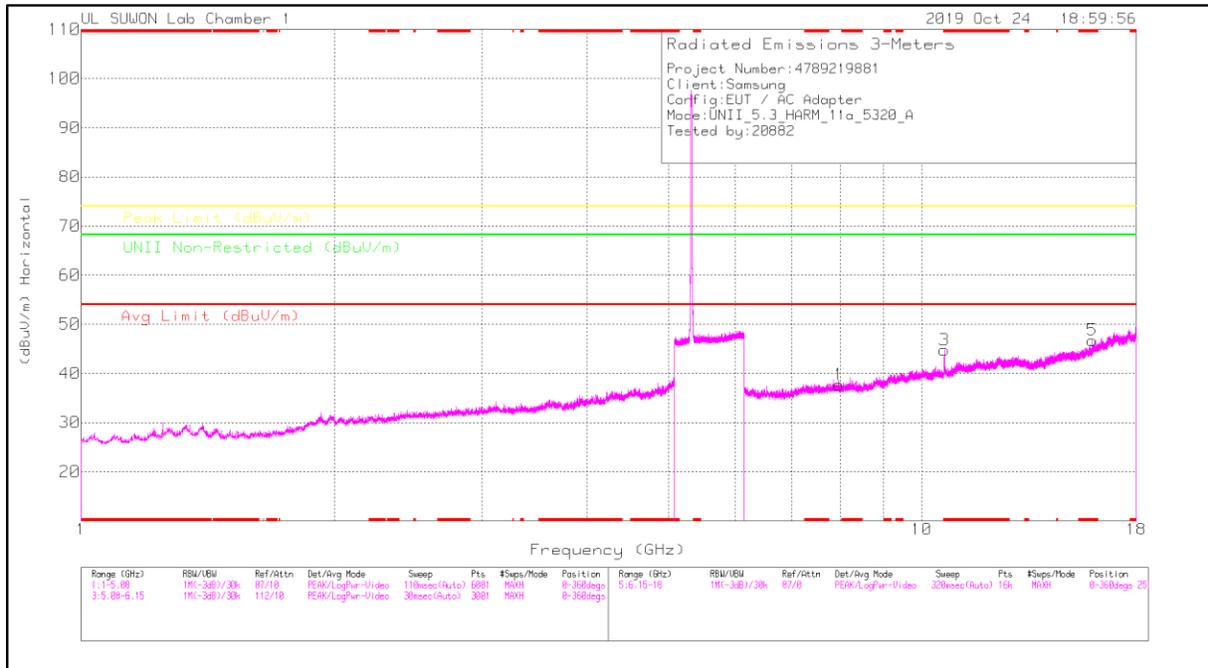
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

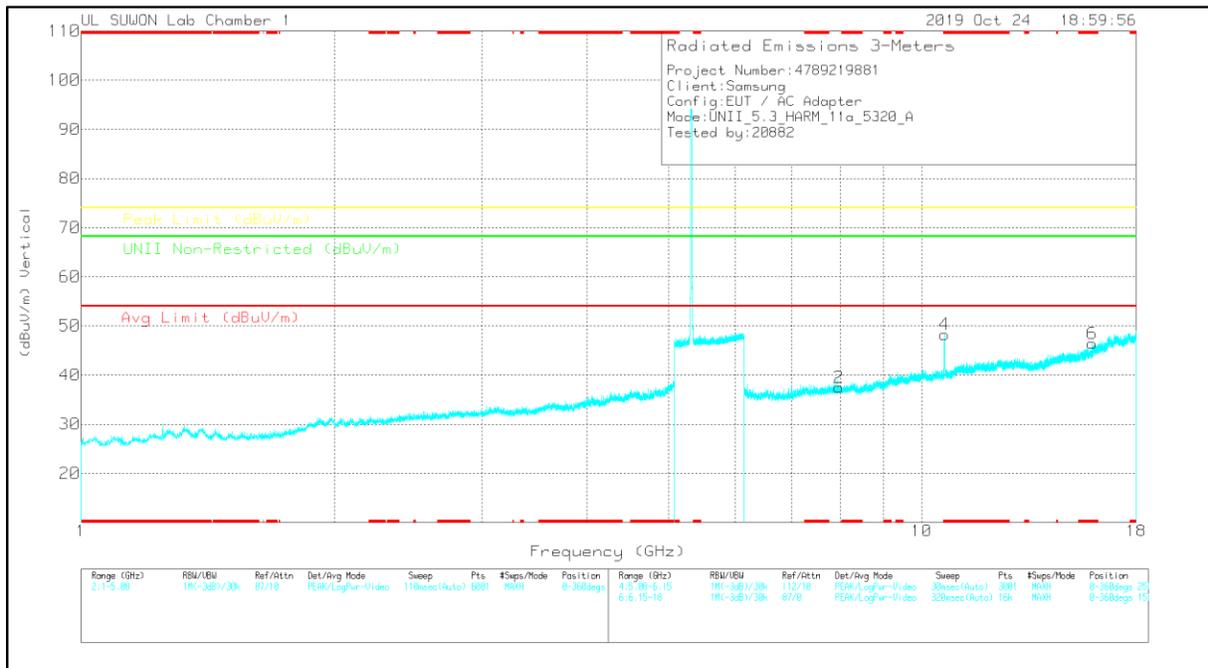
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.95004	38.03	PK-U	36	-26.4	0	47.63	-	-	-	-	68.2	-20.57	360	100	H
7.94965	38.06	PK-U	36	-26.4	0	47.66	-	-	-	-	68.2	-20.54	360	100	V
* 10.60352	40.22	PK-U	37.8	-22.8	0	55.22	-	-	74	-18.78	-	-	138	100	H
* 10.60008	27.63	ADR	37.8	-22.8	0	42.63	54	-11.37	-	-	-	-	138	100	H
* 10.60556	42.69	PK-U	37.8	-22.7	0	57.79	-	-	74	-16.21	-	-	208	108	V
* 10.60046	30.15	ADR	37.8	-22.8	0	45.15	54	-8.85	-	-	-	-	208	108	V
* 15.89988	40.03	PK-U	40.6	-21	0	59.63	-	-	74	-14.37	-	-	172	215	H
* 15.90002	26.54	ADR	40.6	-21.2	0	45.94	54	-8.06	-	-	-	-	172	215	H
* 15.89034	43.31	PK-U	40.6	-21.1	0	62.81	-	-	74	-11.19	-	-	192	100	V
* 15.89998	29.54	ADR	40.6	-21.2	0	48.94	54	-5.06	-	-	-	-	192	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_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	7.97256	27.99	PK	36	-26.3	0	37.69	-	-	-	-	68.2	-30.51	0-360	150	H
3	*10.63717	29.14	PK	37.8	-22.2	0	44.74	-	-	74	-29.26	-	-	0-360	250	H
5	*15.95378	28.94	PK	40.7	-20.9	0	46.74	-	-	74	-27.26	-	-	0-360	250	H
2	7.97627	27.68	PK	36	-26.2	0	37.48	-	-	-	-	68.2	-30.72	0-360	250	V
4	*10.63939	32.53	PK	37.8	-22.1	0	48.23	-	-	74	-25.77	-	-	0-360	250	V
6	*15.95378	26.62	PK	40.7	-20.9	0	46.42	-	-	74	-27.58	-	-	0-360	250	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

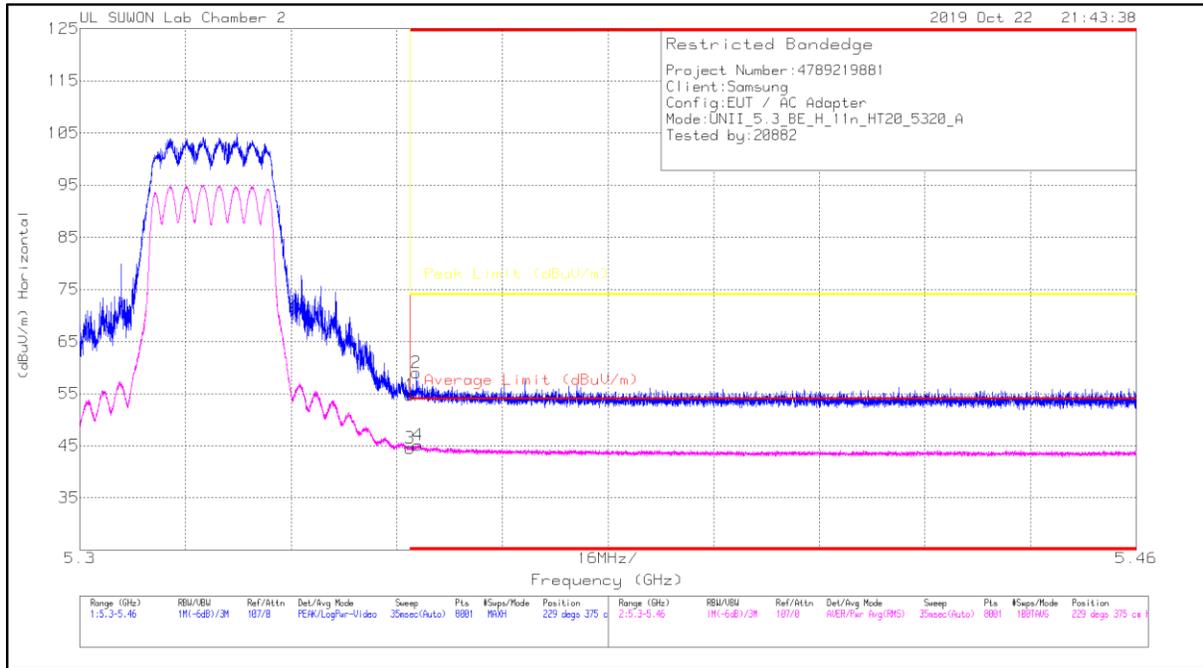
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.97253	38.35	PK-U	36	-26.3	0	48.05	-	-	-	-	68.2	-20.15	360	100	H
7.97282	38.52	PK-U	36	-26.2	0	48.32	-	-	-	-	68.2	-19.88	360	100	V
*10.63941	40.6	PK-U	37.8	-22.1	0	56.3	-	-	74	-17.7	-	-	137	110	H
*10.63845	27.54	ADR	37.8	-22.2	0	43.14	54	-10.86	-	-	-	-	137	110	H
*10.63841	43.21	PK-U	37.8	-22.2	0	58.81	-	-	74	-15.19	-	-	209	103	V
*10.63997	30.32	ADR	37.8	-22.1	0	46.02	54	-7.98	-	-	-	-	209	103	V
*15.95451	40.2	PK-U	40.7	-20.9	0	60	-	-	74	-14	-	-	177	101	H
*15.95911	26.92	ADR	40.7	-20.9	0	46.72	54	-7.28	-	-	-	-	177	101	H
*15.96455	42.76	PK-U	40.7	-20.8	0	62.66	-	-	74	-11.34	-	-	193	101	V
*15.95883	29.8	ADR	40.7	-20.9	0	49.6	54	-4.4	-	-	-	-	193	101	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

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

RESTRICTED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

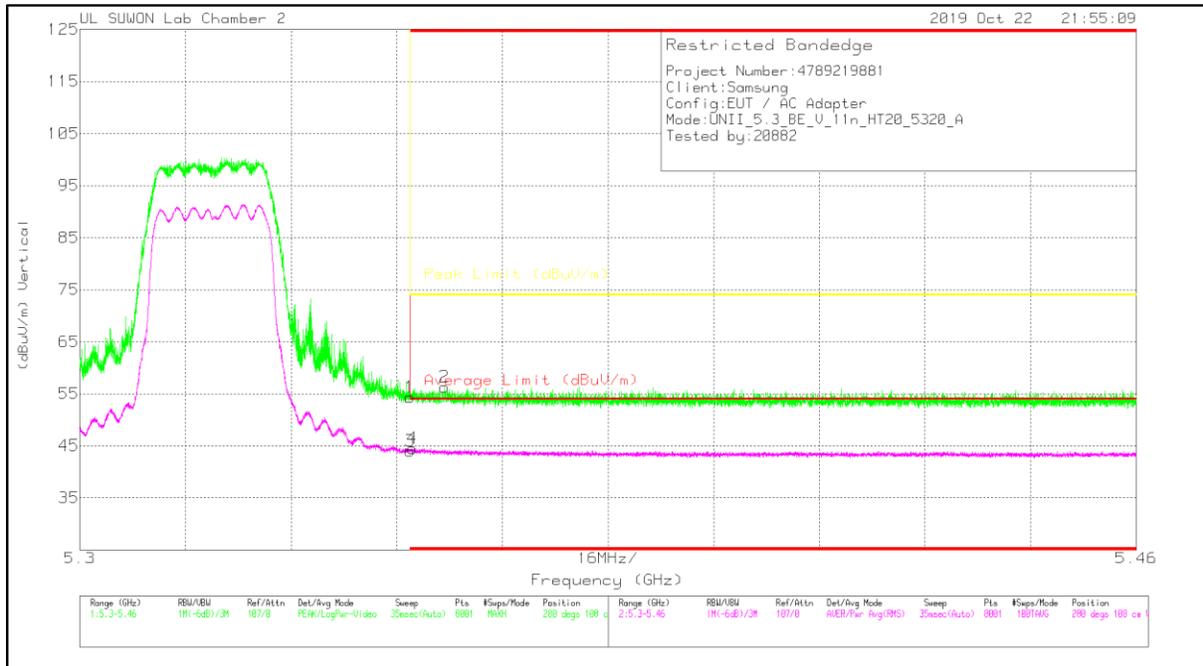
	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35002	38.33	Pk	34.5	-18.1	0	54.73	-	-	74	-19.27	229	375	H
2	* 5.35098	42.57	Pk	34.5	-18.1	0	58.97	-	-	74	-15.03	229	375	H
3	* 5.35002	28.07	RMS	34.5	-18.1	0	44.47	54	-9.53	-	-	229	375	H
4	* 5.3512	28.67	RMS	34.5	-18.1	0	45.07	54	-8.93	-	-	229	375	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE DATA



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	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	* 5.35002	37.98	Pk	34.5	-18.1	0	54.38	-	-	74	-19.62	280	108	V
2	* 5.3552	40.04	Pk	34.5	-18.2	0	56.34	-	-	74	-17.66	280	108	V
3	* 5.35002	27.61	RMS	34.5	-18.1	0	44.01	54	-9.99	-	-	280	108	V
4	* 5.35034	28.08	RMS	34.5	-18.1	0	44.48	54	-9.52	-	-	280	108	V

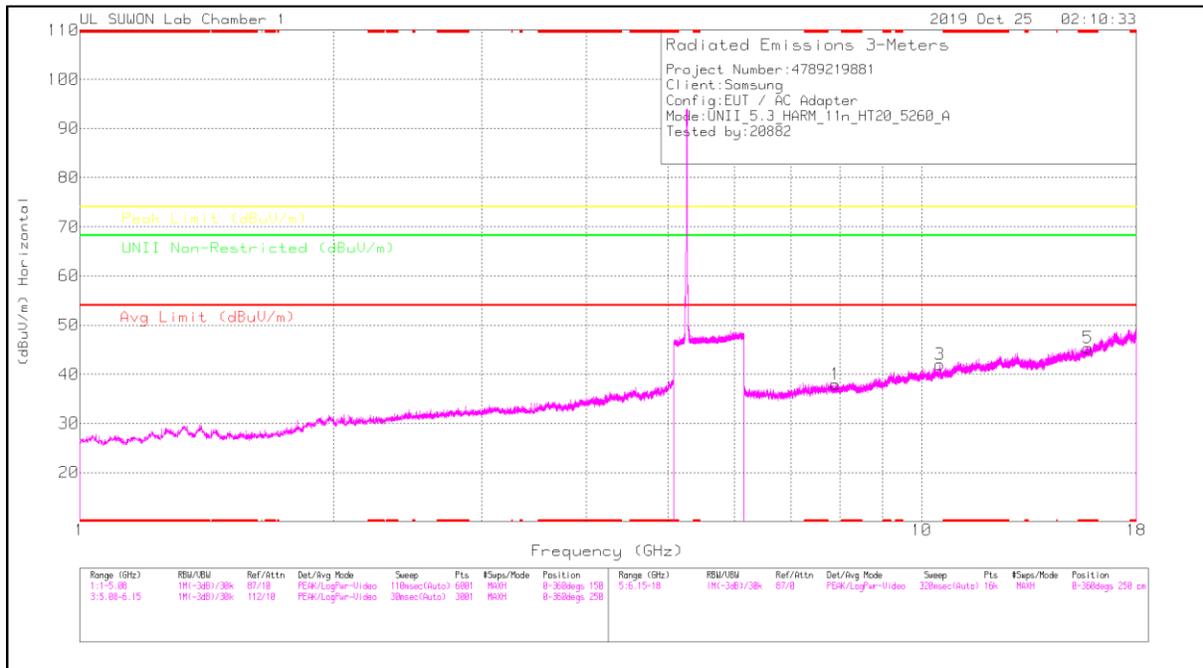
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

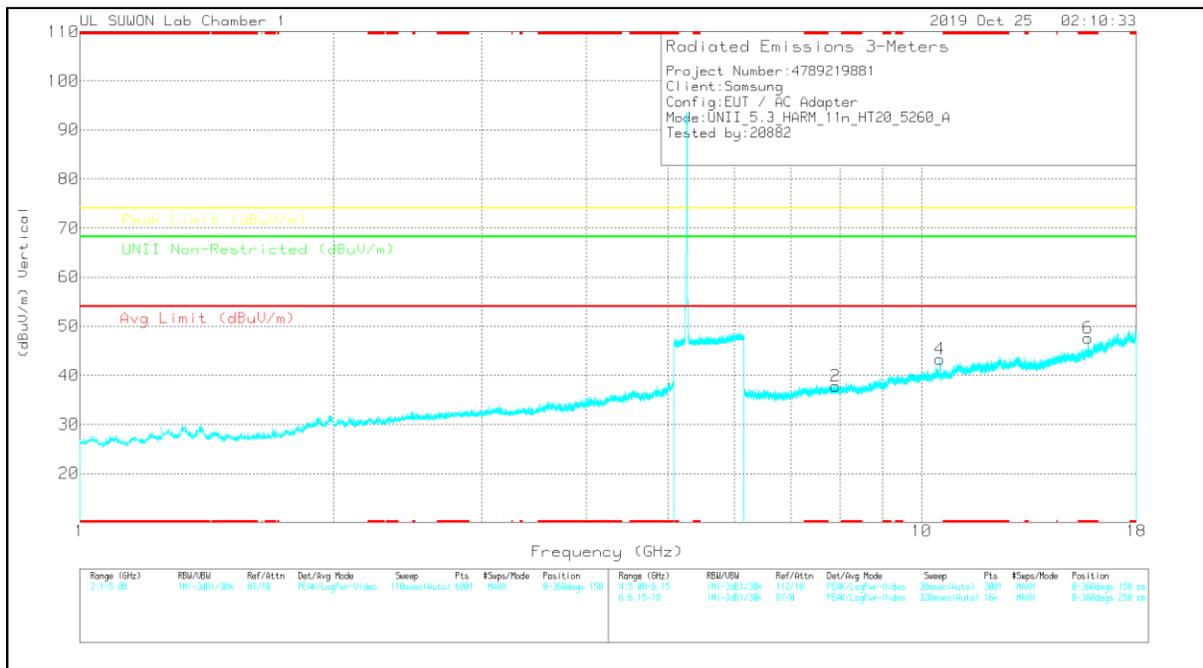
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_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	7.90888	28.41	PK	36	-26.5	0	37.91	-	-	-	-	68.2	-30.29	0-360	150	H
3	10.51942	28.84	PK	37.7	-22.6	0	41.94	-	-	-	-	68.2	-26.26	0-360	150	H
5	* 15.77679	28.08	PK	40.5	-21.2	0	45.38	-	-	74	-28.62	-	-	0-360	250	H
2	7.90962	28.36	PK	36	-26.5	0	37.86	-	-	-	-	68.2	-30.34	0-360	150	V
4	10.51868	28.22	PK	37.7	-22.6	0	43.32	-	-	-	-	68.2	-24.88	0-360	250	V
6	* 15.77753	28.31	PK	40.5	-21.2	0	47.61	-	-	74	-26.39	-	-	0-360	250	V

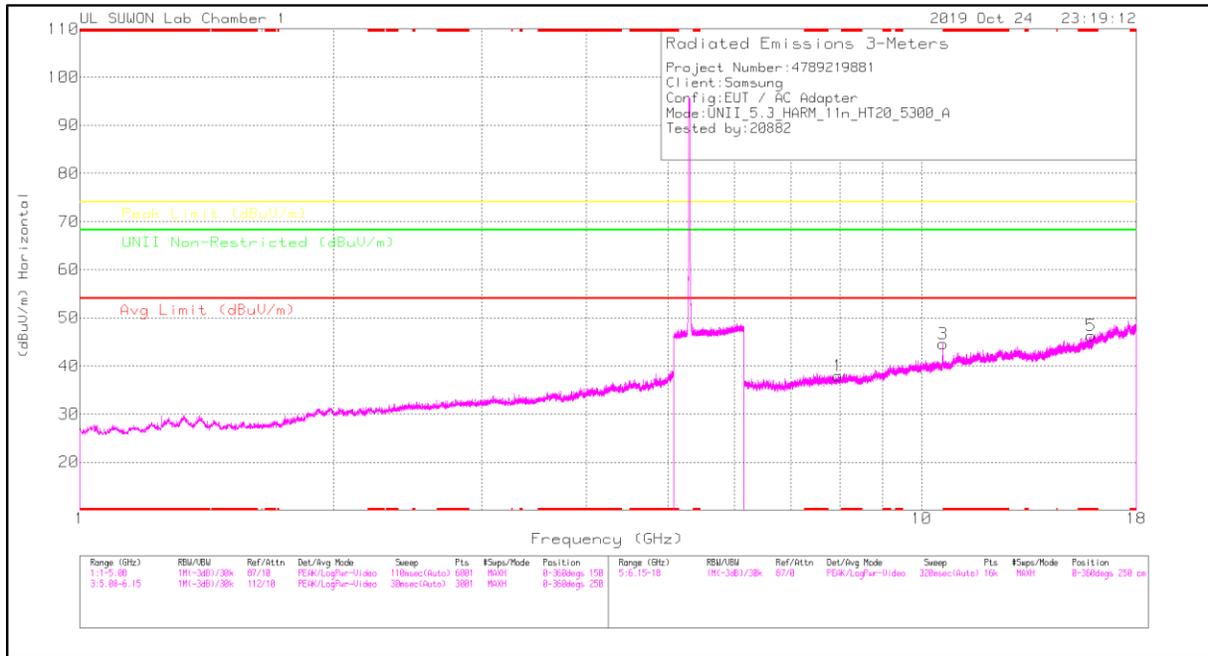
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

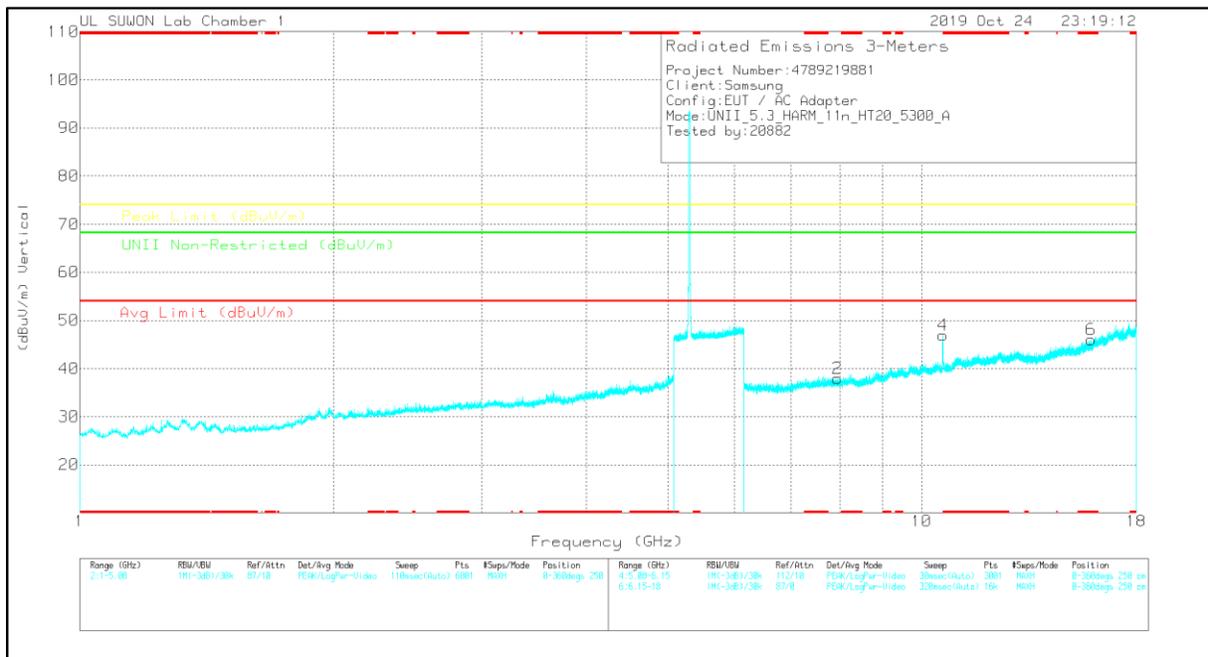
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.90889	38.92	PK-U	36	-26.5	0	48.42	-	-	-	-	68.2	-19.78	0	100	H
7.90727	38.46	PK-U	36	-26.6	0	47.86	-	-	-	-	68.2	-20.34	0	100	V
10.52078	38.27	PK-U	37.7	-22.6	0	53.37	-	-	-	-	68.2	-14.83	144	100	H
10.52478	41.07	PK-U	37.7	-22.7	0	56.07	-	-	-	-	68.2	-12.13	210	101	V
* 15.77447	38.08	PK-U	40.5	-21.1	0	57.48	-	-	74	-16.52	-	-	171	114	H
* 15.77955	25.43	ADR	40.5	-21.2	0	44.73	54	-9.27	-	-	-	-	171	114	H
* 15.78479	41.85	PK-U	40.5	-21.3	0	61.05	-	-	74	-12.95	-	-	194	113	V
* 15.77963	28.11	ADR	40.5	-21.2	0	47.41	54	-6.59	-	-	-	-	194	113	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_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	7.95849	28.44	PK	36	-26.5	0	37.94	-	-	-	-	68.2	-30.26	0-360	150	H
3	10.59866	29.65	PK	37.8	-22.9	0	44.55	-	-	-	-	68.2	-23.65	0-360	250	H
5	*15.89528	26.74	PK	40.6	-21.1	0	46.24	-	-	74	-27.76	-	-	0-360	150	H
2	7.95183	28.22	PK	36	-26.3	0	37.92	-	-	-	-	68.2	-30.28	0-360	250	V
4	10.5994	31.99	PK	37.8	-22.8	0	46.99	-	-	-	-	68.2	-21.21	0-360	250	V
6	*15.89454	26.65	PK	40.6	-21.2	0	46.05	-	-	74	-27.95	-	-	0-360	250	V

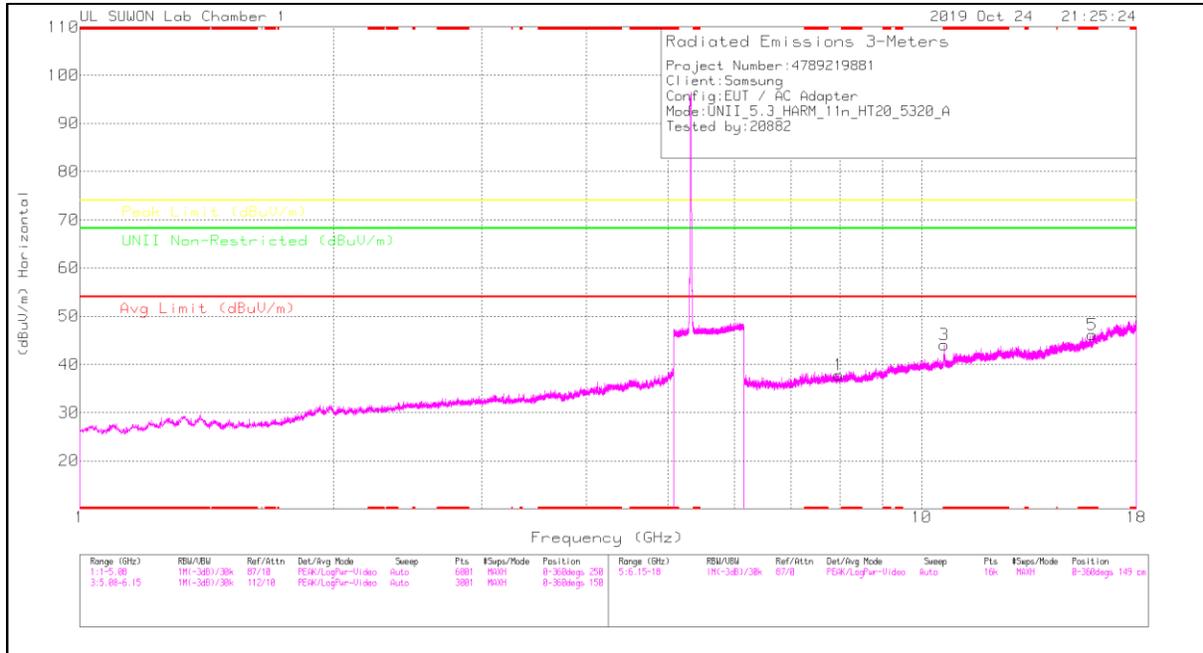
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

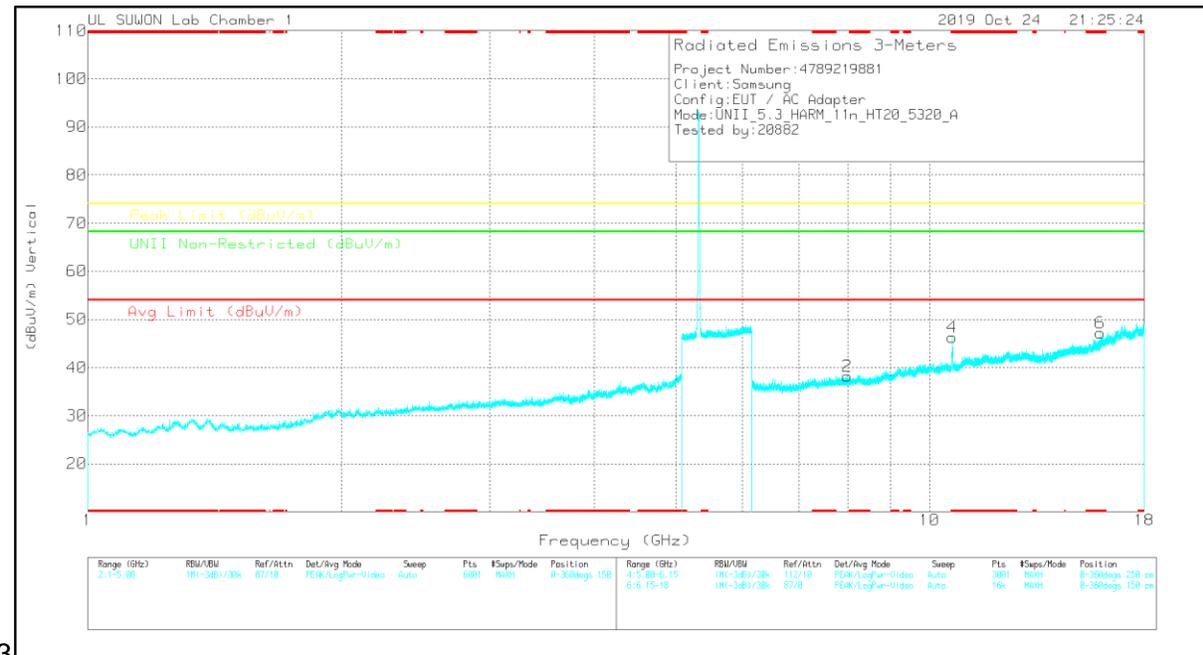
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.95756	38.47	PK-U	36	-26.5	0	47.97	-	-	-	-	68.2	-20.23	360	100	H
7.95993	38.48	PK-U	36	-26.5	0	47.98	-	-	-	-	68.2	-20.22	360	100	V
10.59492	41.65	PK-U	37.8	-22.9	0	56.55	-	-	-	-	68.2	-11.65	122	221	H
10.59516	40.84	PK-U	37.8	-22.8	0	55.84	-	-	-	-	68.2	-12.36	147	259	V
*15.89471	36.33	PK-U	40.6	-21.1	0	55.83	-	-	74	-18.17	-	-	0	100	H
*15.89517	37.34	PK-U	40.6	-21.1	0	56.84	-	-	74	-17.16	-	-	0	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



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

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_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	7.97701	27.97	PK	36	-26.2	0	37.77	-	-	-	-	68.2	-30.43	0-360	250	H
3	*10.63939	28.33	PK	37.8	-22.1	0	44.03	-	-	74	-29.97	-	-	0-360	250	H
5	*15.96193	28.26	PK	40.7	-20.8	0	46.16	-	-	74	-27.84	-	-	0-360	250	H
2	7.98367	28.52	PK	36	-26.3	0	38.22	-	-	-	-	68.2	-29.98	0-360	250	V
4	*10.63717	30.72	PK	37.8	-22.2	0	46.32	-	-	74	-27.68	-	-	0-360	250	V
6	*15.95453	27.45	PK	40.7	-20.9	0	47.25	-	-	74	-26.75	-	-	0-360	250	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

Radiated Emissions

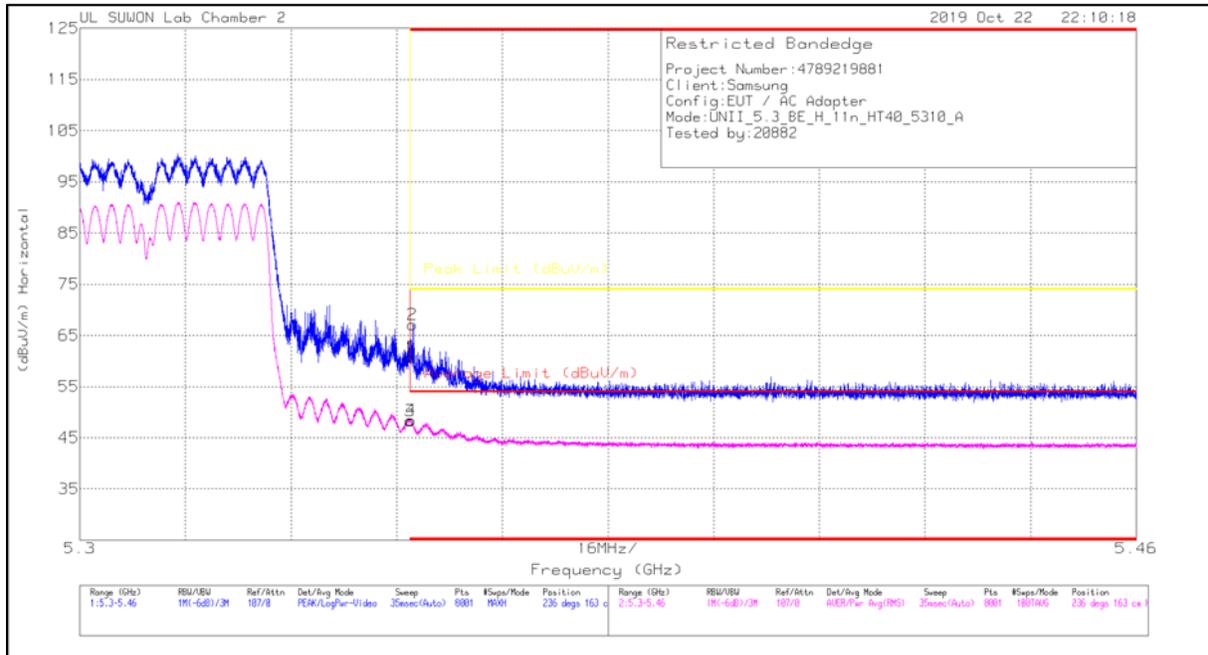
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.97659	38.24	PK-U	36	-26.2	0	48.04	-	-	-	-	68.2	-20.16	360	100	H
7.97756	38.07	PK-U	36	-26.1	0	47.97	-	-	-	-	68.2	-20.23	360	100	V
* 10.63391	40.61	PK-U	37.8	-22.3	0	56.11	-	-	74	-17.89	-	-	146	109	H
* 10.63951	27.36	ADR	37.8	-22.1	0	43.06	54	-10.94	-	-	-	-	146	109	H
* 10.63495	43.01	PK-U	37.8	-22.2	0	58.61	-	-	74	-15.39	-	-	209	105	V
* 10.63943	29.85	ADR	37.8	-22.1	0	45.55	54	-8.45	-	-	-	-	209	105	V
* 15.96469	38.5	PK-U	40.7	-20.8	0	58.4	-	-	74	-15.6	-	-	177	101	H
* 15.95973	25.5	ADR	40.7	-20.8	0	45.4	54	-8.6	-	-	-	-	177	101	H
* 15.96181	42.07	PK-U	40.7	-20.8	0	61.97	-	-	74	-12.03	-	-	209	101	V
* 15.95957	28.08	ADR	40.7	-20.9	0	47.88	54	-6.12	-	-	-	-	209	101	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

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

RESTRICTED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

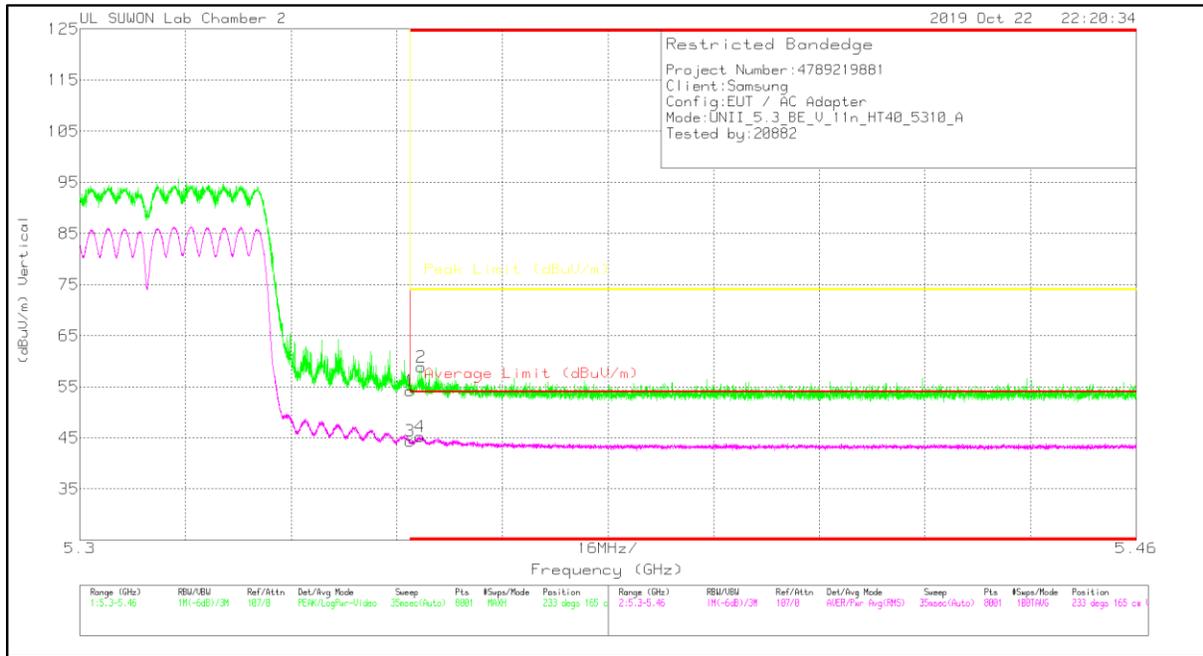
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35002	44.3	Pk	34.5	-18.1	0	60.7	-	-	74	-13.3	236	163	H
2	* 5.35038	50.66	Pk	34.5	-18.1	0	67.06	-	-	74	-6.94	236	163	H
3	* 5.35002	31.96	RMS	34.5	-18.1	0	48.36	54	-5.64	-	-	236	163	H
4	* 5.3502	31.99	RMS	34.5	-18.1	0	48.39	54	-5.61	-	-	236	163	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE DATA



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	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	* 5.35002	37.77	Pk	34.5	-18.1	0	54.17	-	-	74	-19.83	233	165	V
2	* 5.3517	42.43	Pk	34.5	-18.1	0	58.83	-	-	74	-15.17	233	165	V
3	* 5.35002	27.93	RMS	34.5	-18.1	0	44.33	54	-9.67	-	-	233	165	V
4	* 5.35156	28.88	RMS	34.5	-18.1	0	45.28	54	-8.72	-	-	233	165	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection