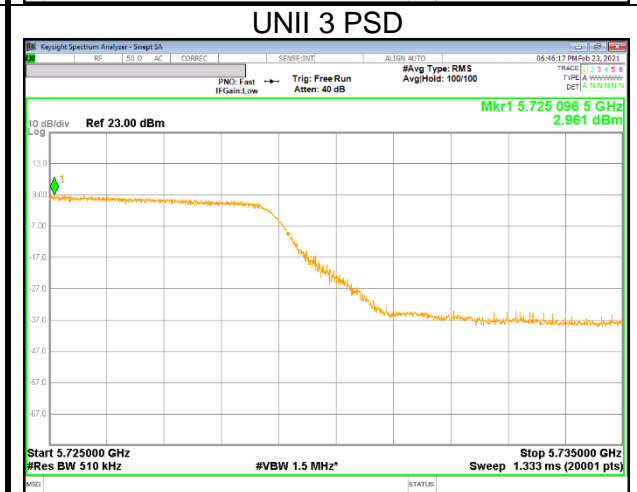
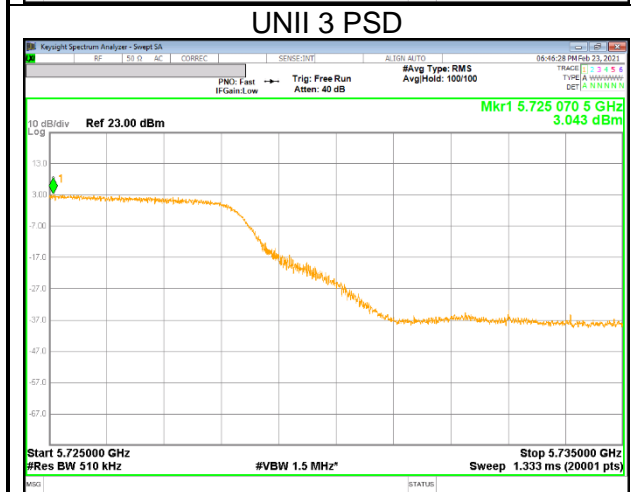
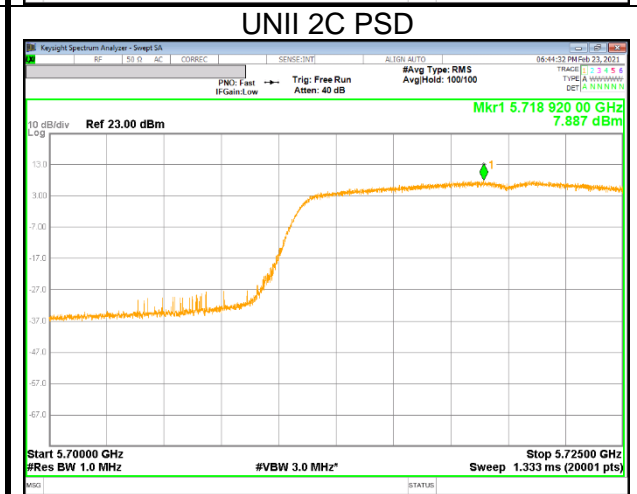
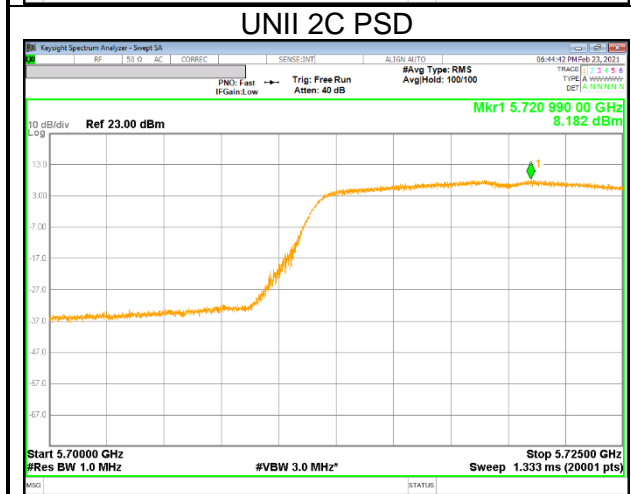
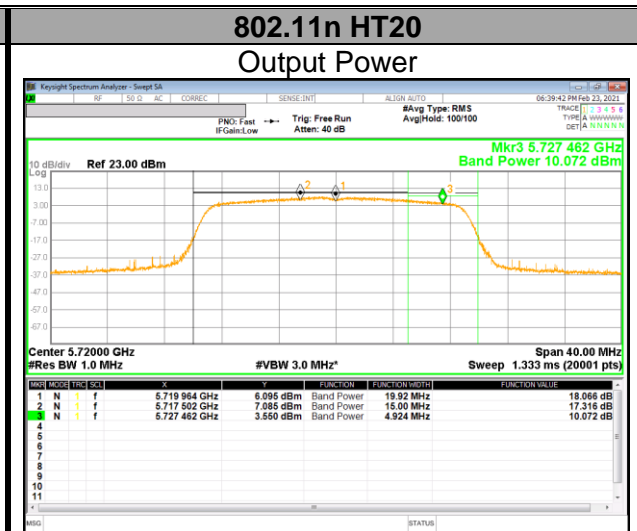
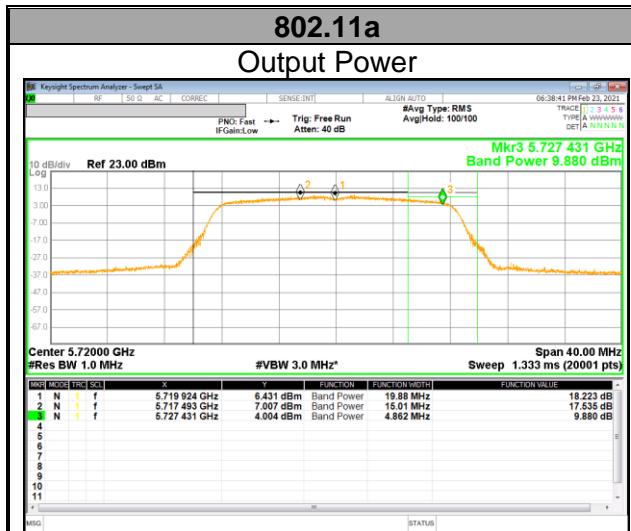


UNII Straddle Ch. Output Power and PSD





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.

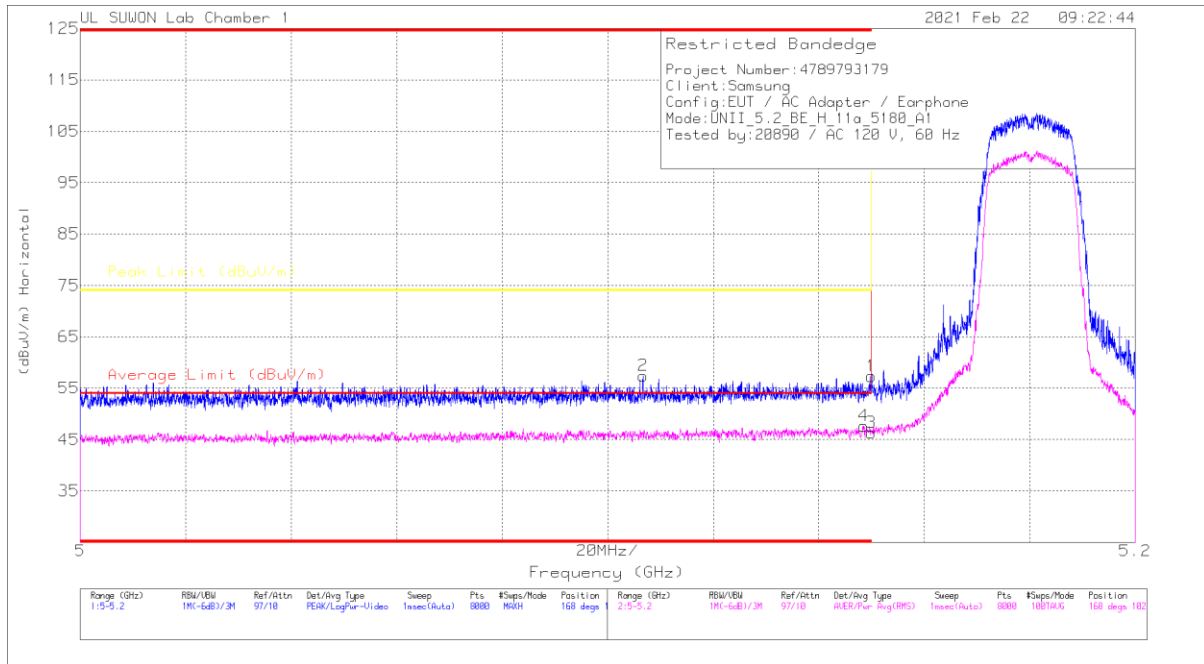
Although these tests were performed other than open field test site, adequate comparison measurements were confirmed against 30 m open are test site.
Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the one of tests made in an open field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

11.1. 5.2 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

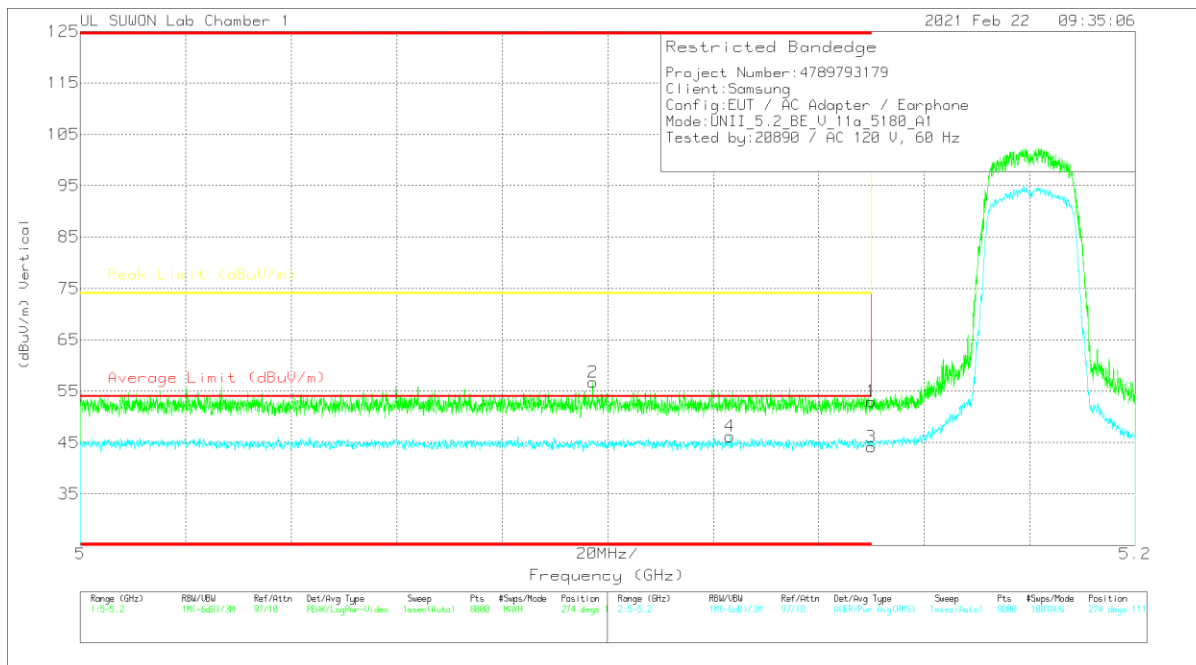
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.14999	44.83	Pk	34.3	-21.6	0	57.33	-	-	74	-16.67	168	102	H
2	* 5.10669	44.93	Pk	34.2	-21.7	0	57.43	-	-	74	-16.57	168	102	H
3	* 5.14999	33.62	RMS	34.3	-21.6	0	46.32	54	-7.68	-	-	168	102	H
4	* 5.14857	35.06	RMS	34.3	-21.7	0	47.66	54	-6.34	-	-	168	102	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_00168717	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	* 5.14999	40.32	PK	34.3	-21.6	0	53.02	-	-	74	-20.98	274	111	V
2	* 5.09716	44.25	PK	34.2	-21.7	0	56.75	-	-	74	-17.25	274	111	V
3	* 5.14999	31.47	RMS	34.3	-21.6	0	44.17	54	-9.83	-	-	274	111	V
4	* 5.12319	33.5	RMS	34.3	-21.6	0	46.2	54	-7.8	-	-	274	111	V

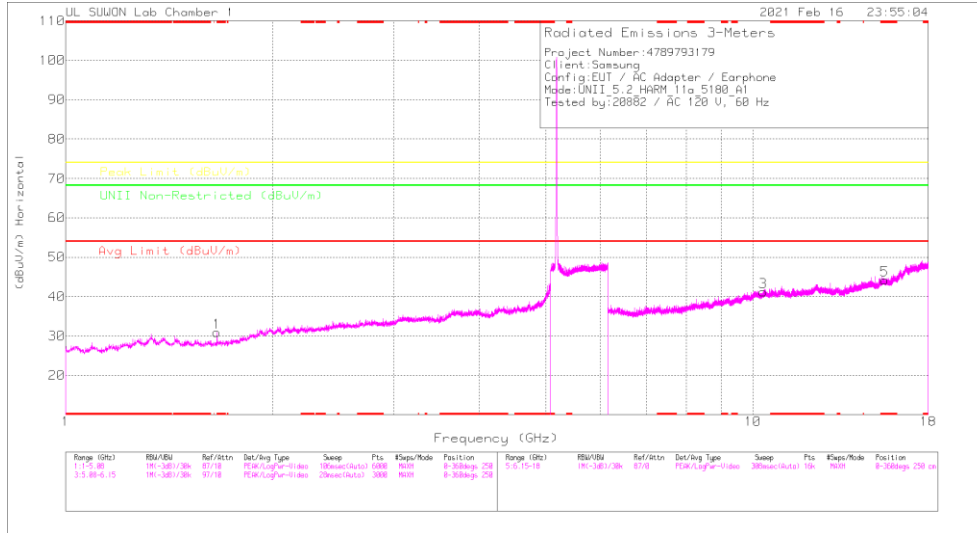
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK - Peak detector

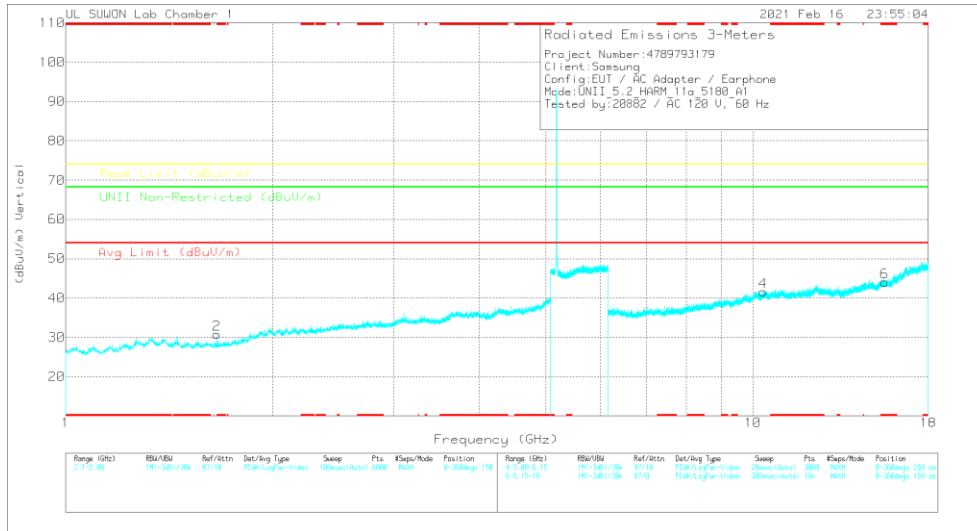
RMS - RMS detection

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.

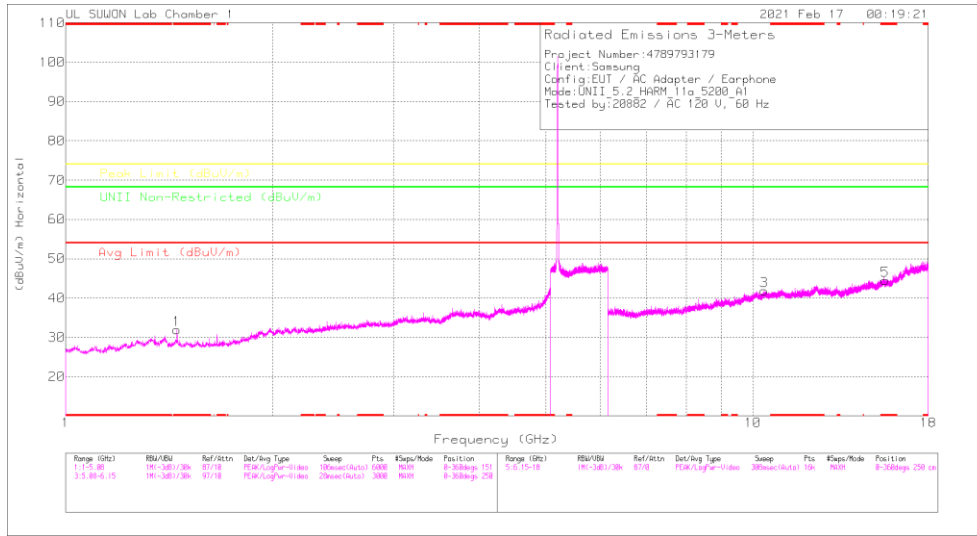
LOW CHANNEL DATA

Radiated Emissions

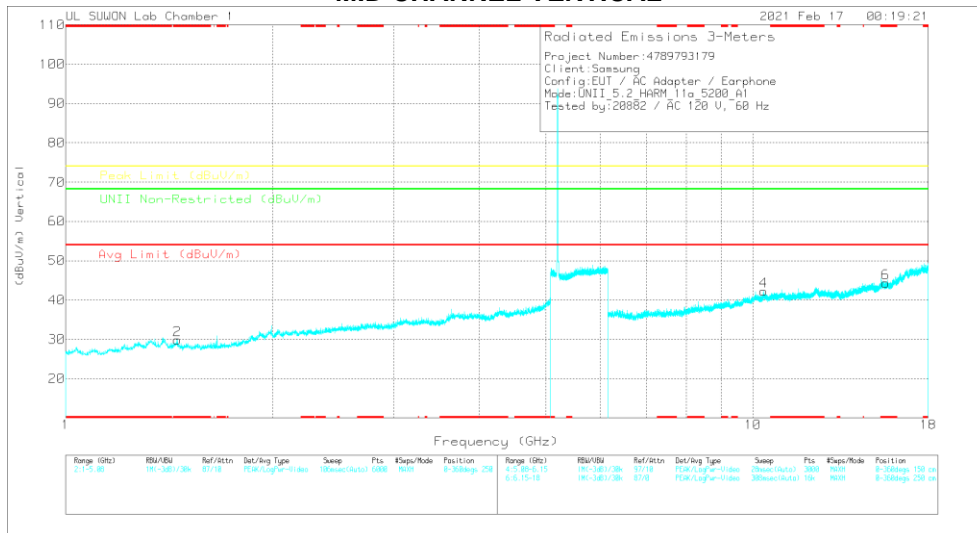
Frequency (GHz)	Meas Reading (dBuV)	Det	3117_0168717	5GHz_LF(SB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1.65868	45.78	PK-U	28.4	-35.7	0	38.48	-	-	-	-	68.2	-29.72	360	100	H
1.66	45.97	PK-U	28.4	-35.8	0	38.57	-	-	-	-	68.2	-29.63	360	100	V
10.36228	34.83	PK-U	37.8	-21.9	0	50.73	-	-	-	-	68.2	-17.47	360	100	H
10.36309	34.5	PK-U	37.8	-21.9	0	50.4	-	-	-	-	68.2	-17.8	360	100	V
* 15.54201	34.12	PK-U	40.1	-20.9	0	53.32	-	-	74	-20.68	-	-	360	100	H
* 15.54381	34.19	PK-U	40.1	-20.9	0	53.39	-	-	74	-20.61	-	-	360	100	V

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

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

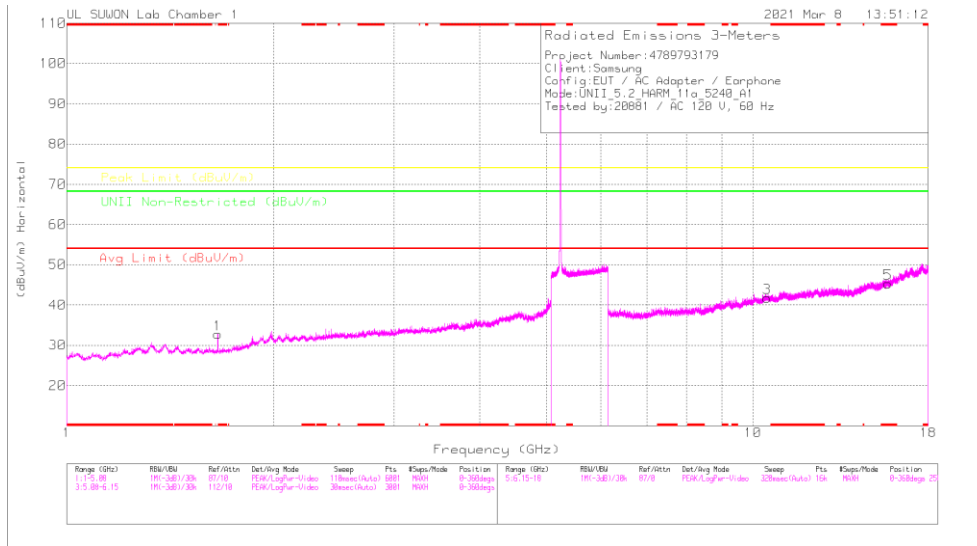
Radiated Emissions

Frequency (GHz)	Mask Reading (dBuV)	Det	317.00168717	5GHz_HF(SB)	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)	Asmuth (Degs)	Height (cm)	Polarity	
* 1.4508	46.81	PK-U	29.2	-36.6	0	36.41	-	-	74	-34.59	-	-	-	360	100	H
* 1.45465	46.4	PK-U	29.1	-36.6	0	35.9	-	-	74	-35.1	-	-	-	360	100	V

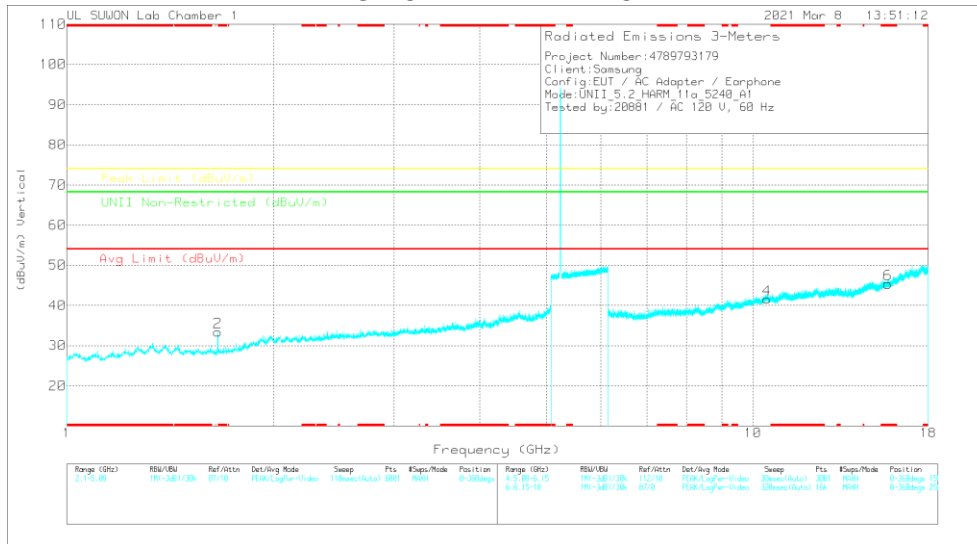
Frequency (GHz)	Mask Reading (dBuV)	Det	317.00168717	6GHz_HF(SB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Asmuth (Degs)	Height (cm)	Polarity
10.38255	34.37	PK-U	37.8	-21.7	0	50.47	-	-	-	-	68.2	-17.73	360	100	H
10.38099	34.35	PK-U	37.8	-21.7	0	50.45	-	-	-	-	68.2	-17.75	360	100	V
* 15.59297	34.63	PK-U	40.1	-21.3	0	53.43	-	-	74	-20.57	-	-	360	100	H
* 15.59423	34.74	PK-U	40.1	-21.2	0	53.64	-	-	74	-20.36	-	-	360	100	V

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

Radiated Emissions

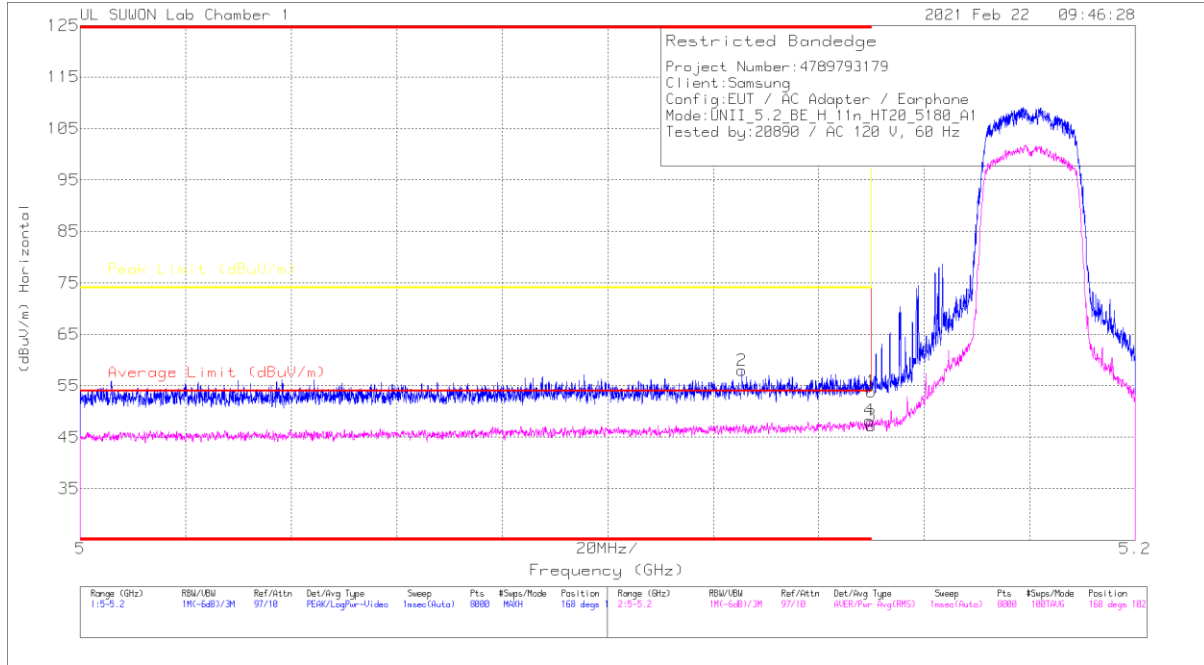
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	5GHz_HF(SB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (m)	Polarity
1.65989	48.91	PK-U	28.4	-35.8	0	39.54	-	-	-	-	68.2	-28.69	360	100	H
1.6564	46.65	PK-U	28.4	-35.7	0	39.35	-	-	-	-	68.2	-28.85	360	100	V
10.48066	36.45	PK-U	37.9	-22.3	0	52.05	-	-	-	-	68.2	-16.15	360	100	H
10.48077	36.59	PK-U	37.9	-22.3	0	52.19	-	-	-	-	68.2	-16.01	360	100	V
* 15.71855	36.78	PK-U	40.1	-21	0	55.88	-	-	74	-18.12	-	-	202	100	H
* 15.71802	24.72	ADR	40.1	-21	0	43.82	54	-10.18	-	-	-	-	202	100	H
* 15.71939	36.85	PK-U	40.1	-21	0	55.95	-	-	74	-18.05	-	-	120	100	V
* 15.72003	24.65	ADR	40.1	-21	0	43.75	54	-10.25	-	-	-	-	120	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 1Tx MODE IN THE 5.2GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

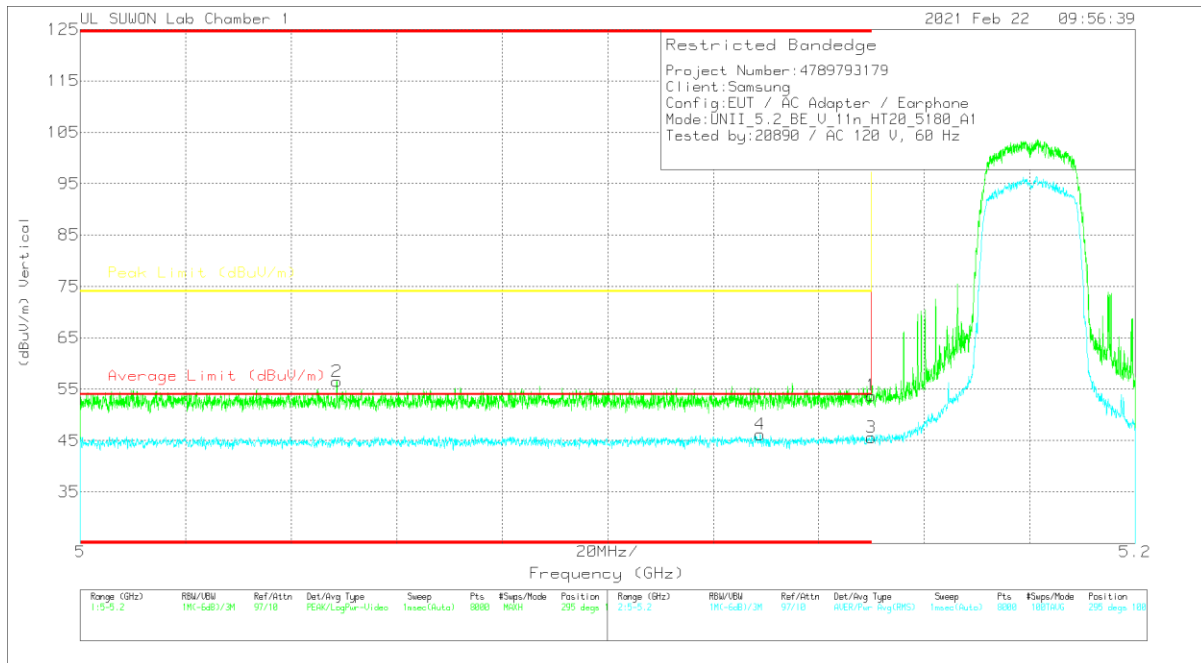
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	10dB_ATT[dB]	DC Cor (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.14999	41.2	Pk	34.3	-21.6	0	53.9	-	-	74	-20.1	168	102	H
2	* 5.12542	45.29	Pk	34.3	-21.6	0	57.99	-	-	74	-16.01	168	102	H
3	* 5.14999	34.56	RMS	34.3	-21.6	0	47.26	54	-6.74	-	-	168	102	H
4	* 5.14964	35.64	RMS	34.3	-21.7	0	48.24	54	-5.76	-	-	168	102	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_00168717	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	* 5.14999	41.07	Pk	34.3	-21.6	0	53.77	-	-	74	-20.23	295	100	V
2	* 5.04866	44.1	Pk	34.2	-21.8	0	56.5	-	-	74	-17.5	295	100	V
3	* 5.14999	32.9	RMS	34.3	-21.6	0	45.6	54	-8.4	-	-	295	100	V
4	* 5.12892	33.5	RMS	34.3	-21.6	0	46.2	54	-7.8	-	-	295	100	V

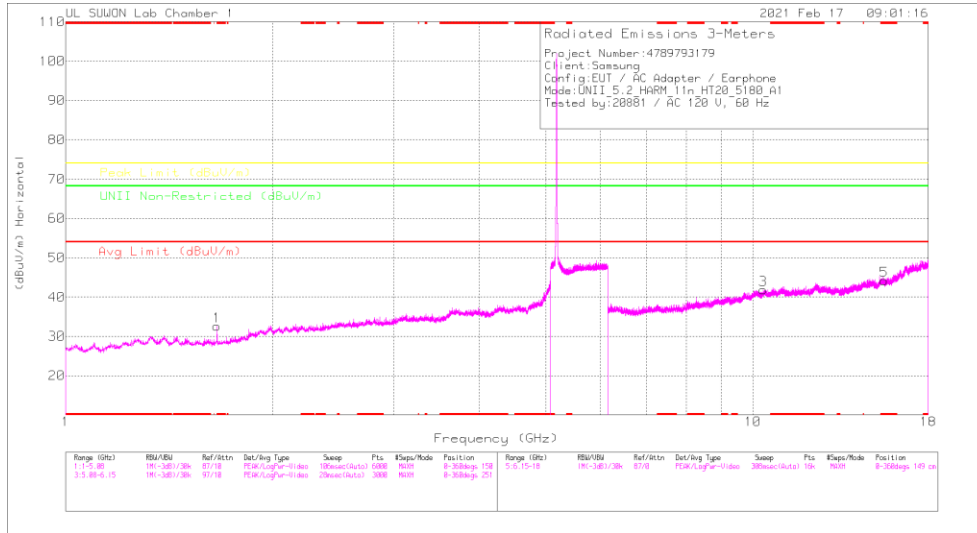
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

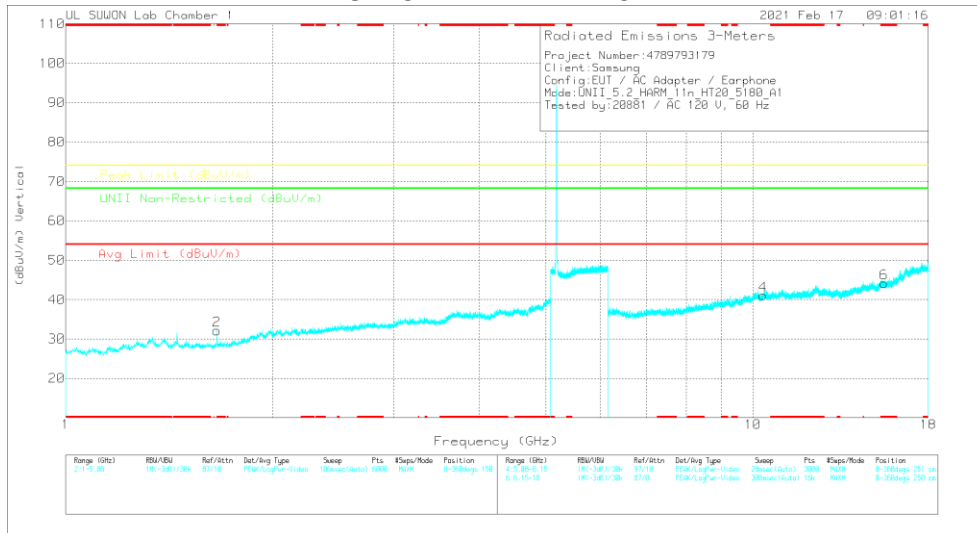
RMS - RMS detection

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.

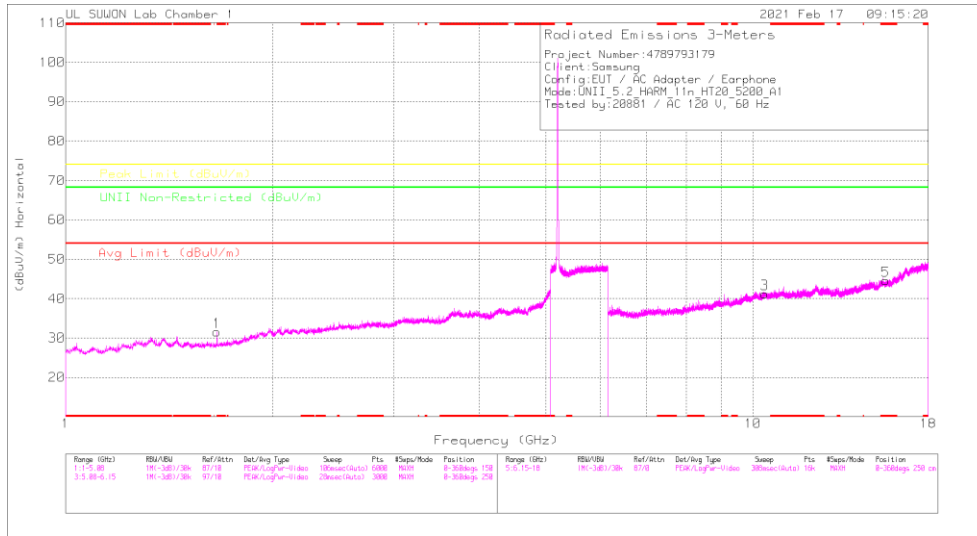
LOW CHANNEL DATA

Radiated Emissions

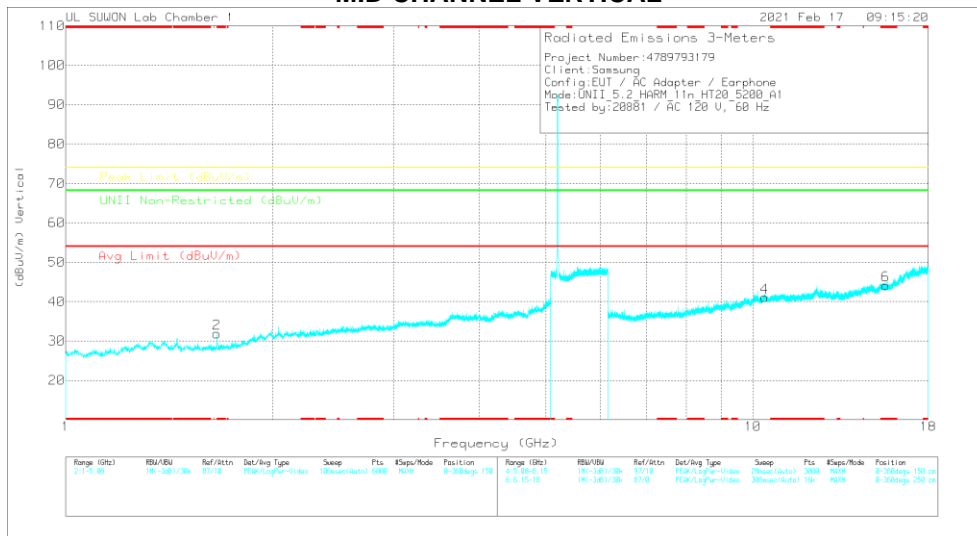
Frequency (GHz)	Max Reading (dBuV)	Det	317_0016B717	5GHz_LF(dB)	DC Corr (dB)	Corrected Reading (dBuV)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Asmuth (Degs)	Height (cm)	Polarity
1.65924	46.06	PK-U	28.4	-35.7	0	38.76	-	-	-	-	68.2	-29.44	0	100	H
1.65986	46.27	PK-U	28.4	-35.8	0	38.87	-	-	-	-	68.2	-29.33	0	100	V
10.35468	34.39	PK-U	37.8	-22	0	50.19	-	-	-	-	68.2	-18.01	0	100	H
10.35463	34.9	PK-U	37.8	-22.1	0	50.6	-	-	-	-	68.2	-17.6	0	100	V
*15.5398	34.56	PK-U	40.1	-20.8	0	53.86	-	74	-	-20.14	-	-	0	100	H
*15.53836	34.57	PK-U	40.1	-20.8	0	53.87	-	74	-	-20.13	-	-	0	100	V

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

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

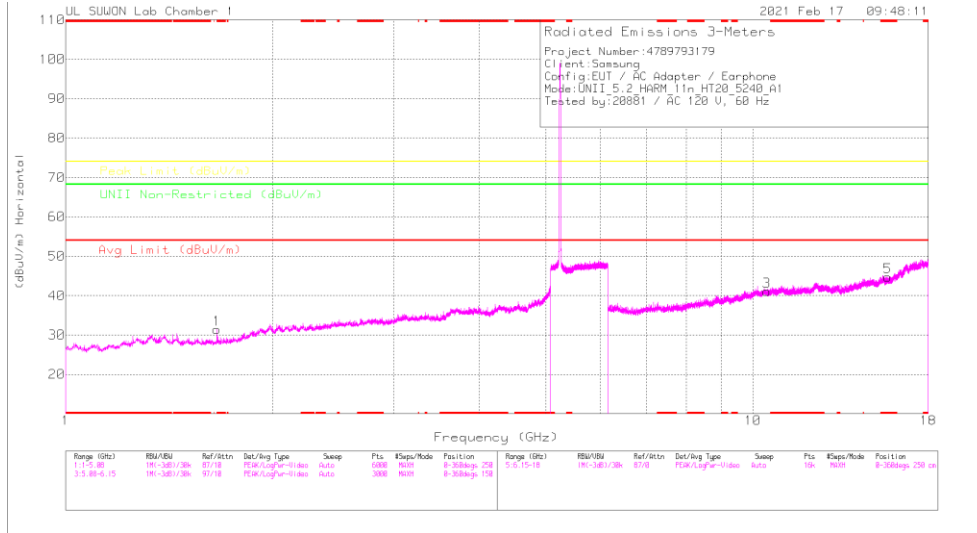
MID CHANNEL DATA

Radiated Emissions

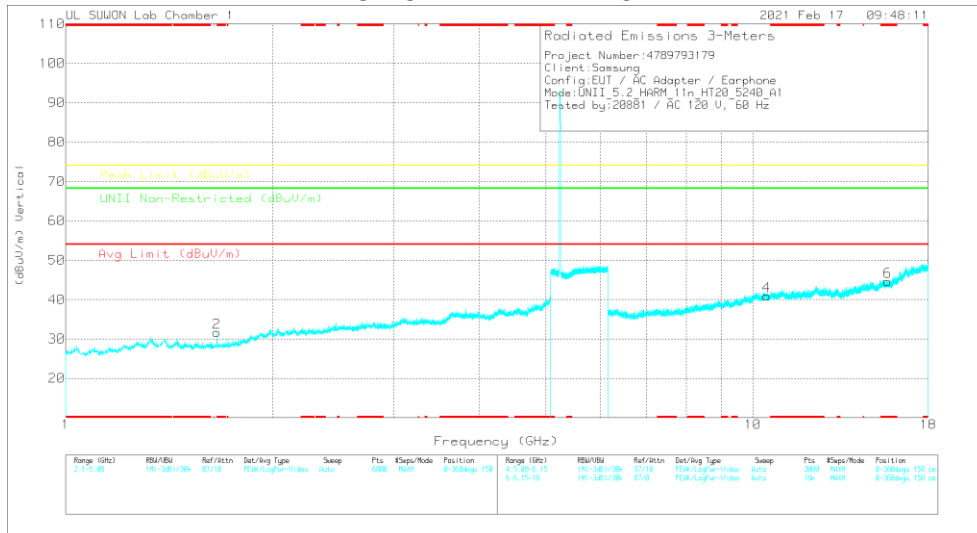
Frequency (GHz)	Mask Reading (dBuV)	Det	317_00168717	6GHz_HPSdB	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.65994	46	PK-U	28.4	-35.8	0	38.6	-	-	-	-	68.2	-29.6	0	100	H
1.65978	45.73	PK-U	28.4	-35.8	0	38.33	-	-	-	-	68.2	-29.87	0	100	V
Frequency (GHz)	Mask Reading (dBuV)	Det	317_00168717	6GHz_HPSdB	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
10.39899	34.29	PK-U	37.8	-21.6	0	50.49	-	-	-	-	68.2	-17.71	0	100	H
10.39693	34.41	PK-U	37.8	-21.6	0	50.61	-	-	-	-	68.2	-17.59	0	100	V
* 15.60247	34.45	PK-U	40.1	-21.3	0	53.25	-	-	74	-20.75	-	-	0	100	H
* 15.60508	34.73	PK-U	40.1	-21.3	0	53.53	-	-	74	-20.47	-	-	0	100	V

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

Radiated Emissions

Frequency (GHz)	Mean Reading (dBuV)	Det	3117_0016B717	5GHz_LF[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)	Asimuth (Degs)	Height (cm)	Polarity
1.65999	47.34	PK-U	28.4	-35.8	0	39.94	-	-	-	-	68.2	-28.26	0	100	H
1.65985	45.95	PK-U	28.4	-35.8	0	38.55	-	-	-	-	68.2	-29.65	0	100	V

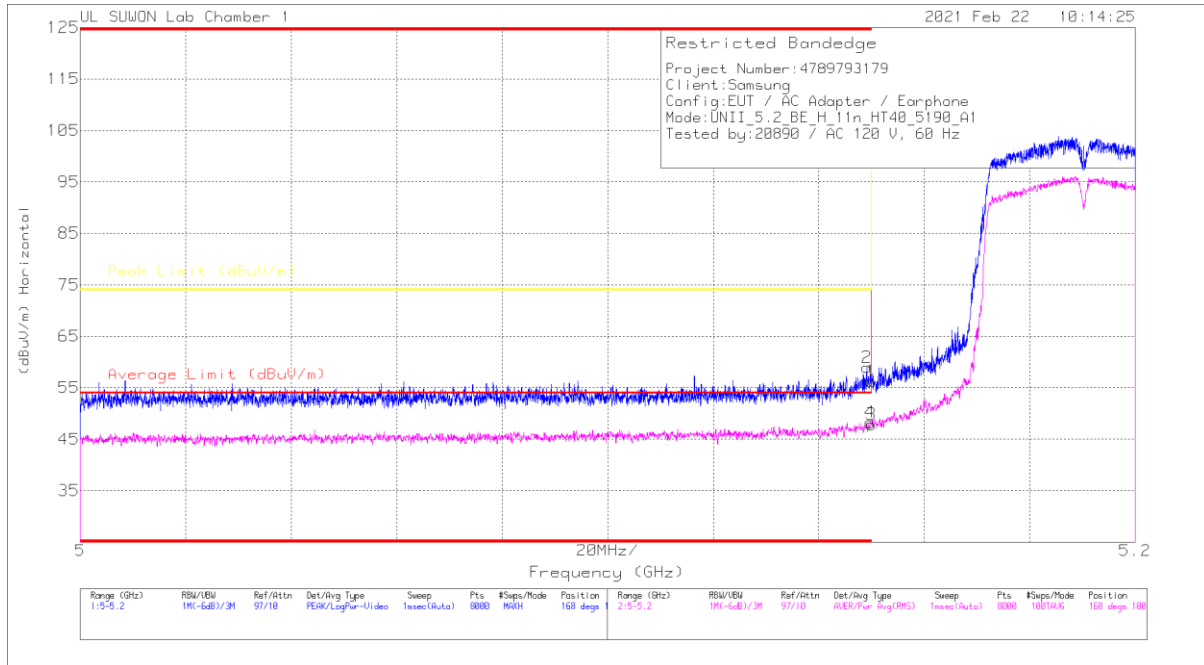
Frequency (GHz)	Mean Reading (dBuV)	Det	3117_0016B717	6GHz_HF[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Asimuth (Degs)	Height (cm)	Polarity
10.47379	34.44	PK-U	37.9	-22.2	0	50.14	-	-	-	-	68.2	-18.06	0	100	H
10.4736	35.1	PK-U	37.9	-22.2	0	50.8	-	-	-	-	68.2	-17.4	0	100	V
* 15.72554	34.8	PK-U	40.1	-21	0	53.9	-	-	74	-20.1	-	-	0	100	H
* 15.72476	34.6	PK-U	40.1	-21	0	53.7	-	-	74	-20.3	-	-	0	100	V

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

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

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

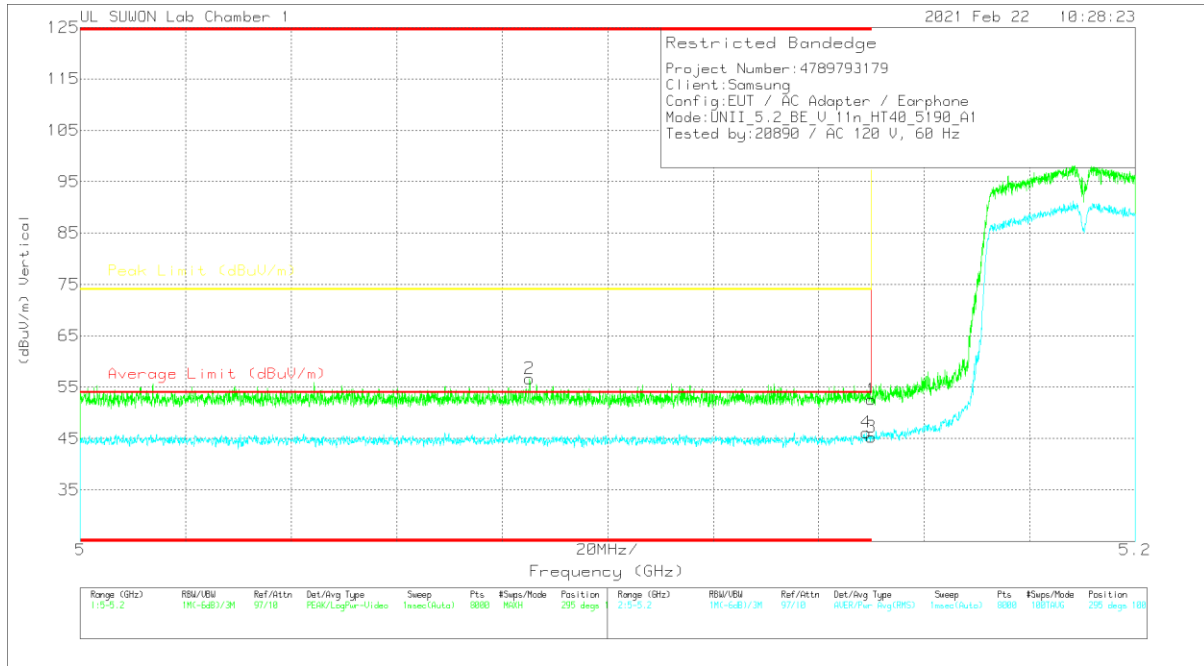
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.14999	43.57	Pk	34.3	-21.6	0	56.27	-	-	74	-17.73	168	100	H
2	* 5.14999	46.35	Pk	34.3	-21.7	0	58.95	-	-	74	-15.05	168	100	H
3	* 5.14999	35.15	RMS	34.3	-21.6	0	47.85	54	-6.15	-	-	168	100	H
4	* 5.14972	35.69	RMS	34.3	-21.7	0	48.29	54	-5.71	-	-	168	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_00168717	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	* 5.14999	39.88	Pk	34.3	-21.6	0	52.58	-	-	74	-21.42	295	100	V
2	* 5.08516	44.16	Pk	34.2	-21.7	0	56.66	-	-	74	-17.34	295	100	V
3	* 5.14999	32.6	RMS	34.3	-21.6	0	45.3	54	-8.7	-	-	295	100	V
4	* 5.14899	33.59	RMS	34.3	-21.7	0	46.19	54	-7.81	-	-	295	100	V

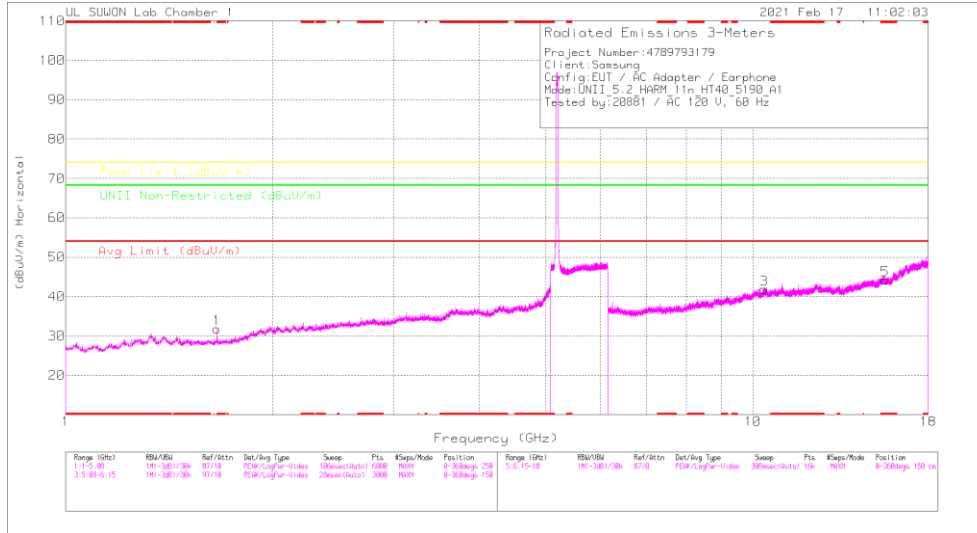
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

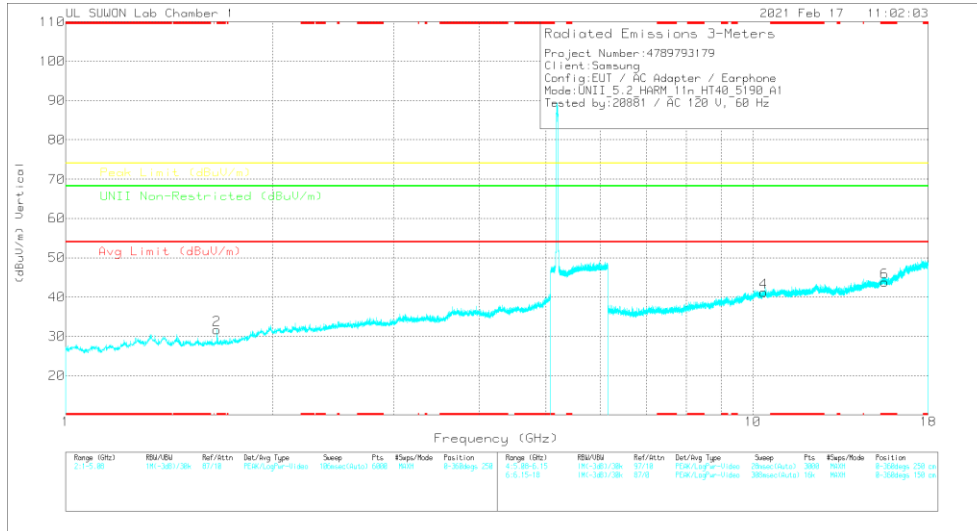
RMS - RMS detection

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

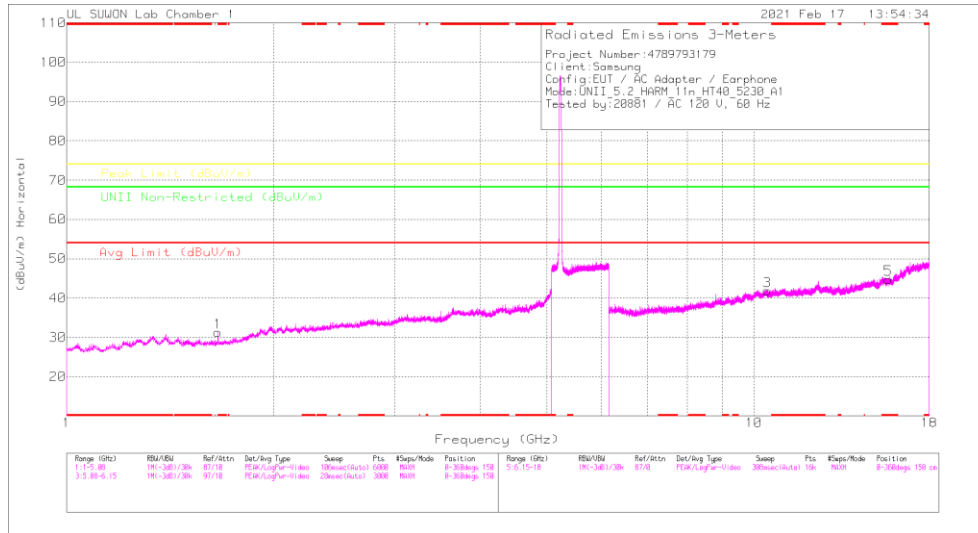
Radiated Emissions

Frequency (GHz)	Mask Reading (dBuV)	Det	3117_00168717	5GHz_HPS(SB)	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 (Deg)	Height (cm)	Polarity
1.65950	46.2	PK-U	28.4	-35.7	0	38.9	-	-	-	-	68.2	-29.3	0	100	H
1.65957	46.24	PK-U	28.4	-35.7	0	38.94	-	-	-	-	68.2	-29.26	0	100	V

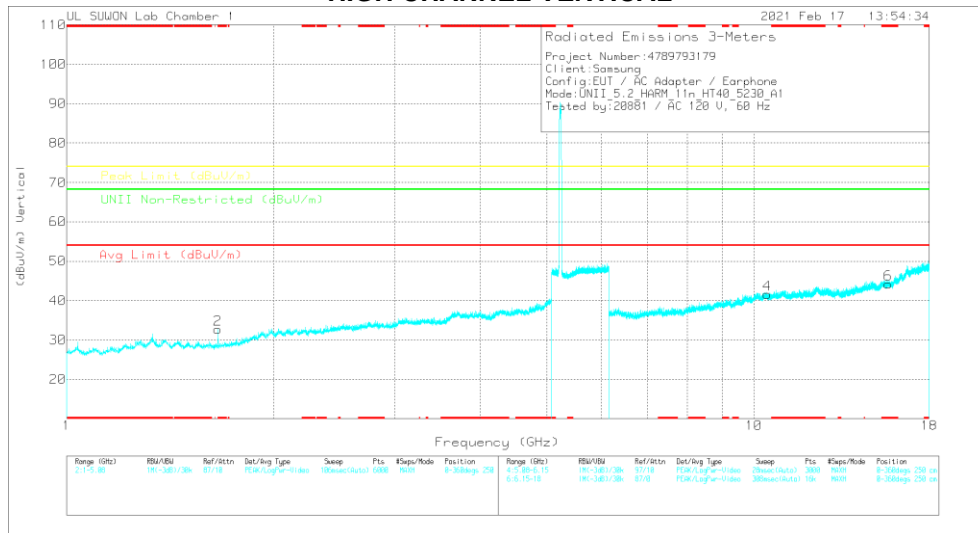
Frequency (GHz)	Mask Reading (dBuV)	Det	3117_00168717	6GHz_HPS(SB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Deg)	Height (cm)	Polarity
10.38182	35.11	PK-U	37.8	-21.7	0	51.21	-	-	-	-	68.2	-16.99	0	100	H
10.37969	34.57	PK-U	37.8	-21.7	0	50.67	-	-	-	-	68.2	-17.53	0	100	V
* 15.56779	34.79	PK-U	40.1	-21.1	0	53.79	-	-	74	-20.21	-	-	0	100	H
* 15.56793	34.98	PK-U	40.1	-21.1	0	53.98	-	-	74	-20.02	-	-	0	100	V

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

Radiated Emissions

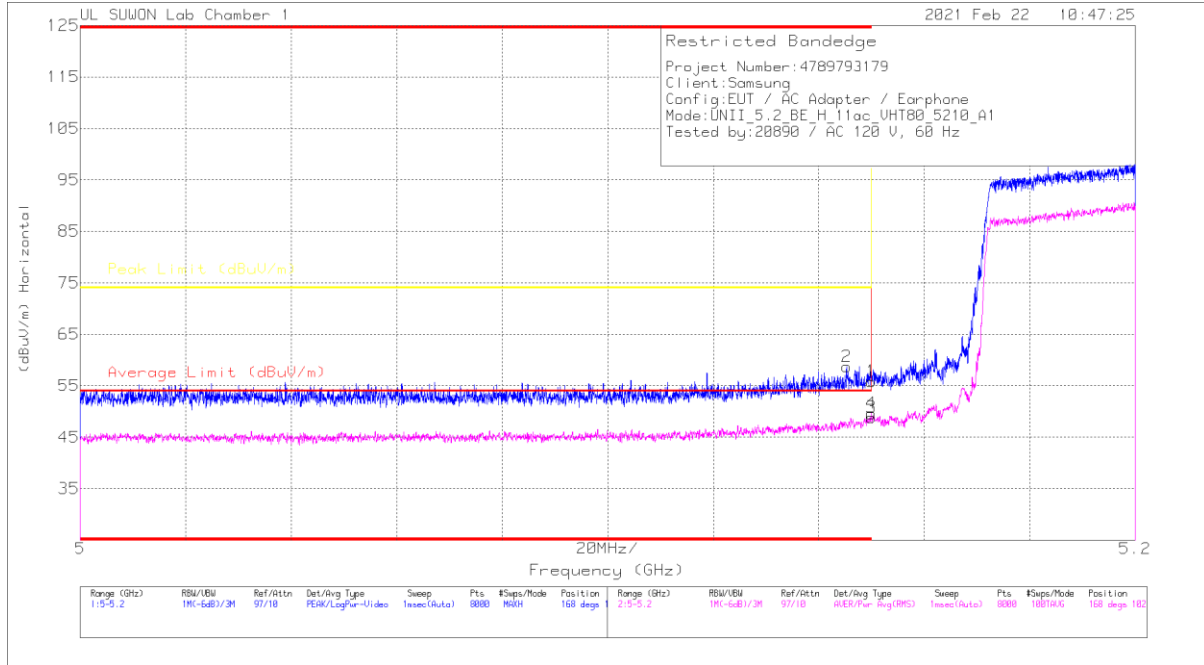
Frequency (GHz)	Max Reading (dBuV)	Det	3117_00168717	5GHz_HF(SB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Deg)	Height (cm)	Polarity
1.65811	47.01	PK-U	28.4	-35.7	0	38.74	-	-	-	-	68.2	-29.49	0	100	H
1.65999	46.27	PK-U	28.4	-35.5	0	38.87	-	-	-	-	68.2	-29.53	0	100	V
Frequency (GHz)	Max Reading (dBuV)	Det	3117_00168717	6GHz_HF(SB)	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 (Deg)	Height (cm)	Polarity
10.45598	35.19	PK-U	37.8	-21.9	0	51.09	-	-	-	-	68.2	-17.11	0	100	H
10.45753	35.55	PK-U	37.8	-21.9	0	51.45	-	-	-	-	68.2	-16.75	0	100	V
* 15.69575	34.48	PK-U	40.1	-21.1	0	53.48	-	-	74	-20.52	-	-	0	100	H
* 15.69523	34.49	PK-U	40.1	-21	0	53.59	-	-	74	-20.41	-	-	0	100	V

* - 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 1Tx MODE IN THE 5.2GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

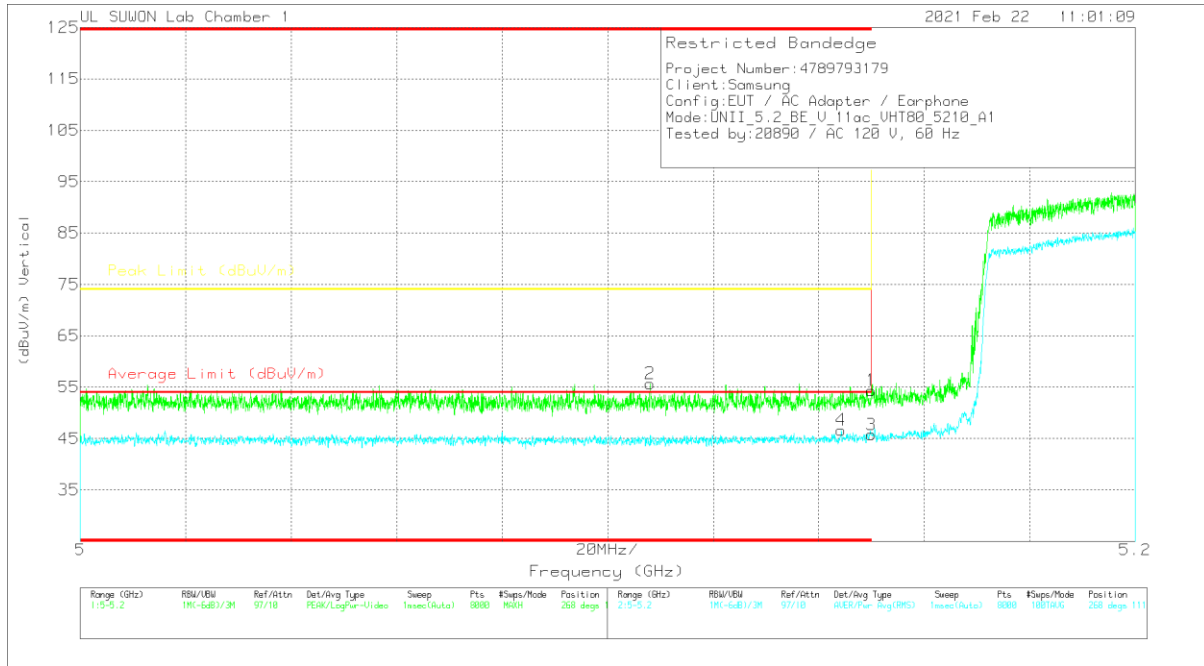
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.14999	43.11	Pk	34.3	-21.6	0	55.81	-	-	74	-18.19	168	102	H
2	* 5.14529	46.12	Pk	34.3	-21.7	0	58.72	-	-	74	-15.28	168	102	H
3	* 5.14999	36	RMS	34.3	-21.6	-16	48.86	54	-5.14	-	-	168	102	H
4	* 5.14994	36.88	RMS	34.3	-21.7	-16	49.64	54	-4.36	-	-	168	102	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_00168717	10dB_ATT[dB]	DC Cor (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.14999	41.65	Pk	34.3	-21.6	0	54.35	-	-	74	-19.65	268	111	V
2	* 5.10804	43.08	Pk	34.3	-21.7	0	55.68	-	-	74	-18.32	268	111	V
3	* 5.14999	32.89	RMS	34.3	-21.6	.16	45.75	54	-8.25	-	-	268	111	V
4	* 5.14427	33.89	RMS	34.3	-21.7	.16	46.65	54	-7.35	-	-	268	111	V

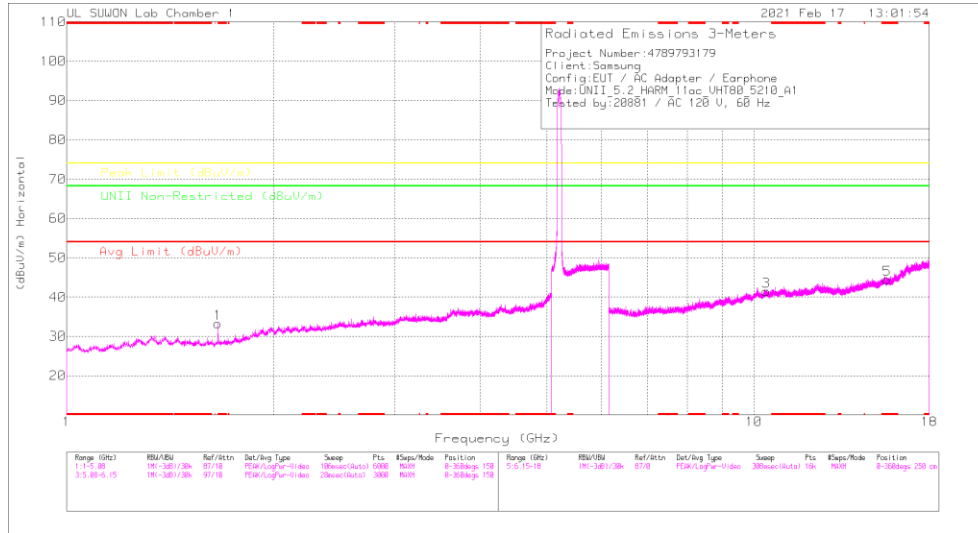
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

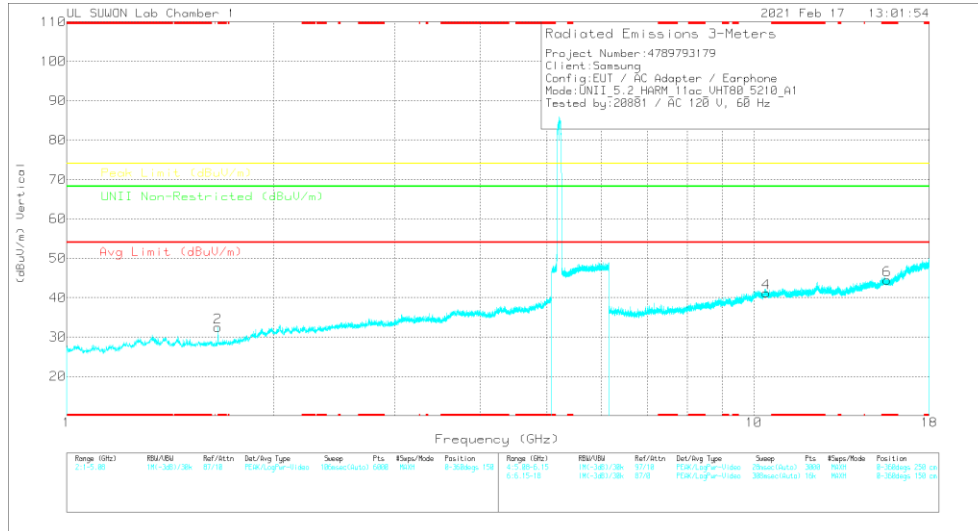
RMS - RMS detection

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

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	5GHz_LPF(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
1.55911	46.11	PK-U	28.4	-35.7	0	38.81	-	-	-	-	68.2	-29.39	0	100	H
1.69256	46.69	PK-U	28.4	-35.7	0	39.39	-	-	-	-	68.2	-28.81	0	100	V
10.42366	34.14	PK-U	37.8	-21.6	0	50.34	-	-	-	-	68.2	-17.86	0	100	H
10.42307	33.98	PK-U	37.8	-21.5	0	50.28	-	-	-	-	68.2	-17.92	0	100	V
* 15.63237	35	PK-U	40.1	-21.3	0	53.8	-	-	74	-20.2	-	-	0	100	H
* 15.63196	35.09	PK-U	40.1	-21.3	0	53.89	-	-	74	-20.11	-	-	0	100	V

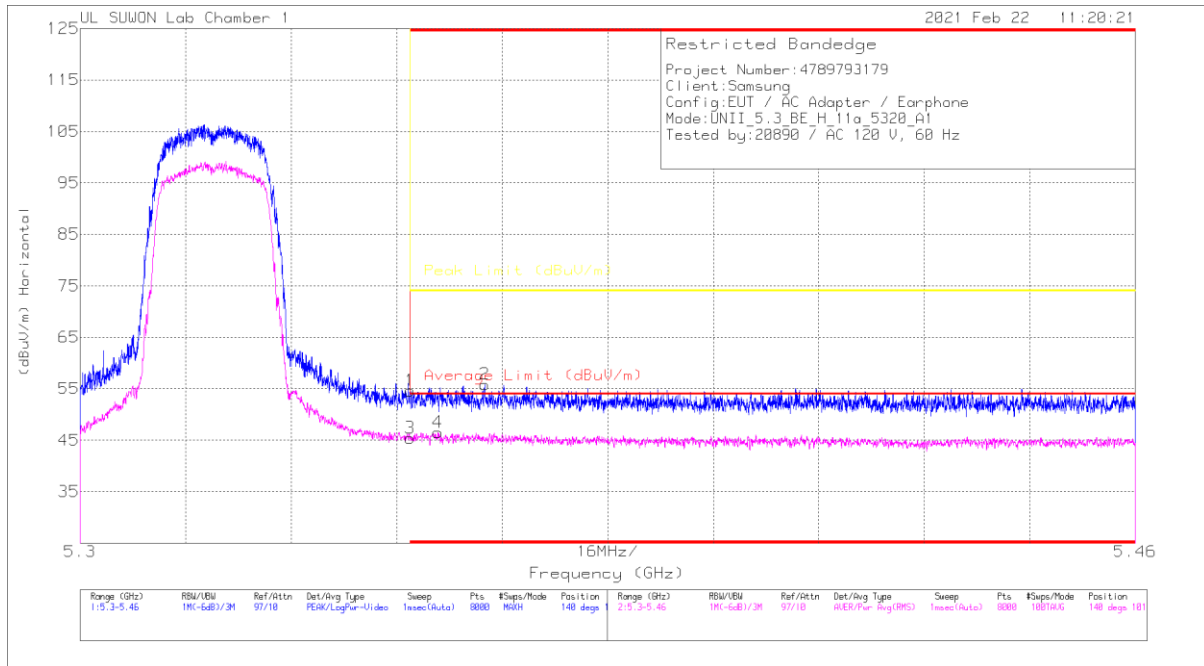
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak

11.2. 5.3 GHz

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

RESTRICTED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

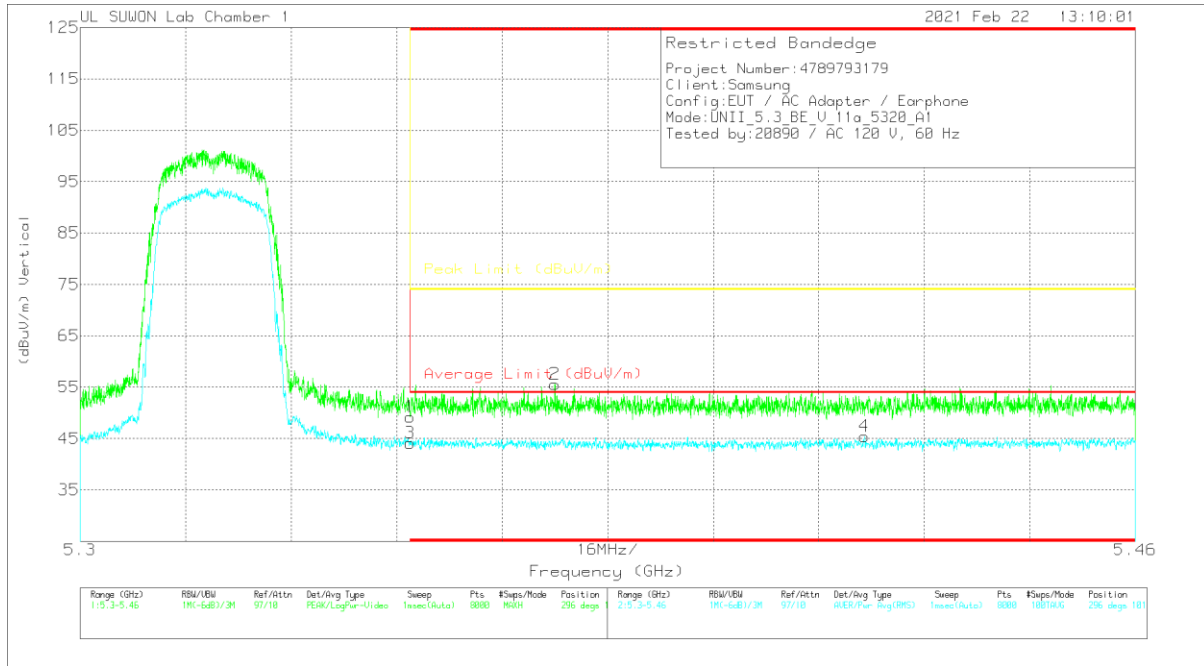
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35001	41.64	Pk	34.5	-21.5	0	54.64	-	-	74	-19.36	140	101	H
2	* 5.36133	42.84	Pk	34.5	-21.5	0	55.84	-	-	74	-18.16	140	101	H
3	* 5.35001	32.41	RMS	34.5	-21.5	0	45.41	54	-8.59	-	-	140	101	H
4	* 5.35425	33.51	RMS	34.5	-21.5	0	46.51	54	-7.49	-	-	140	101	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE DATA



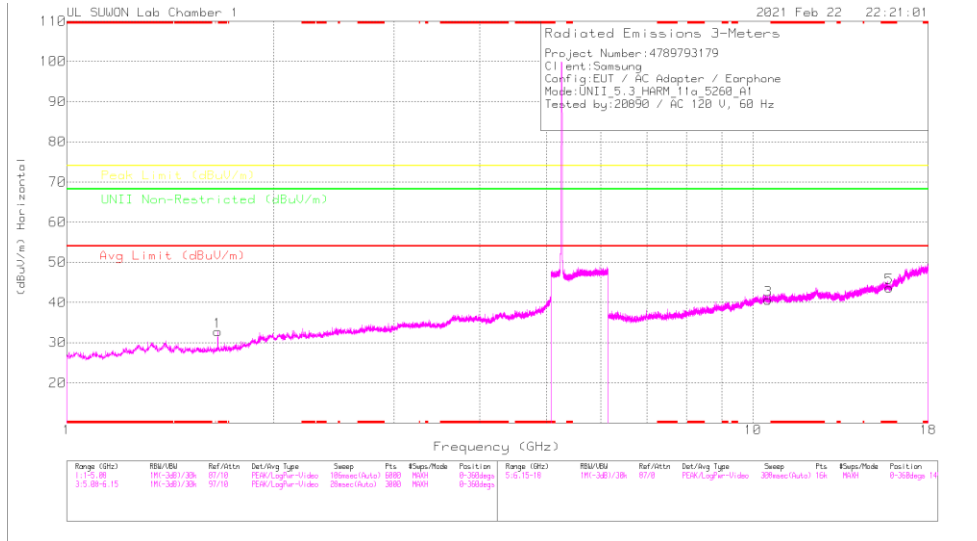
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	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	* 5.35001	38.2	Pk	34.5	-21.5	0	49.2	-	-	74	-24.8	296	101	V
2	* 5.37197	42.68	Pk	34.5	-21.6	0	55.68	-	-	74	-18.42	296	101	V
3	* 5.35001	31.13	RMS	34.5	-21.5	0	44.13	54	-9.87	-	-	296	101	V
4	* 5.41892	32.34	RMS	34.5	-21.4	0	45.44	54	-8.56	-	-	296	101	V

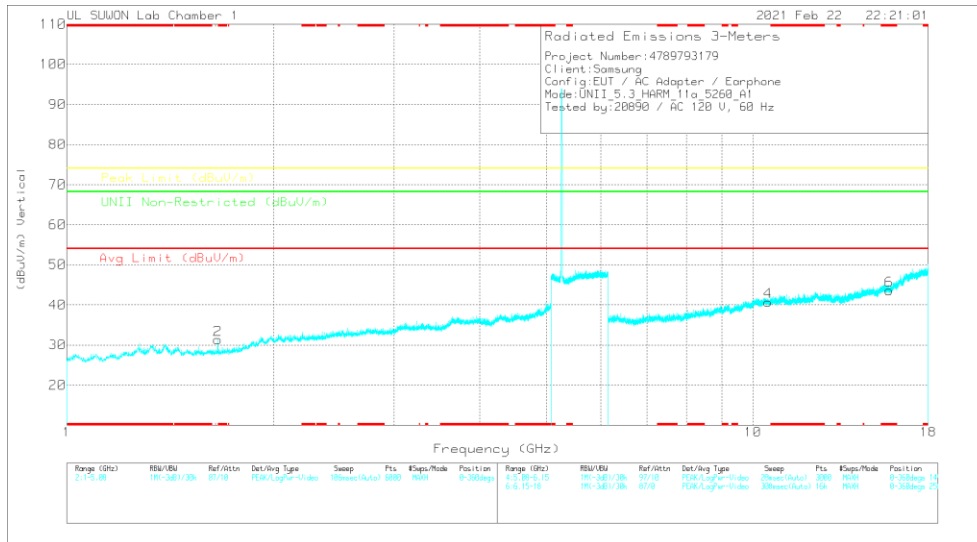
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 Pk - Peak detector
 RMS - RMS detection

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

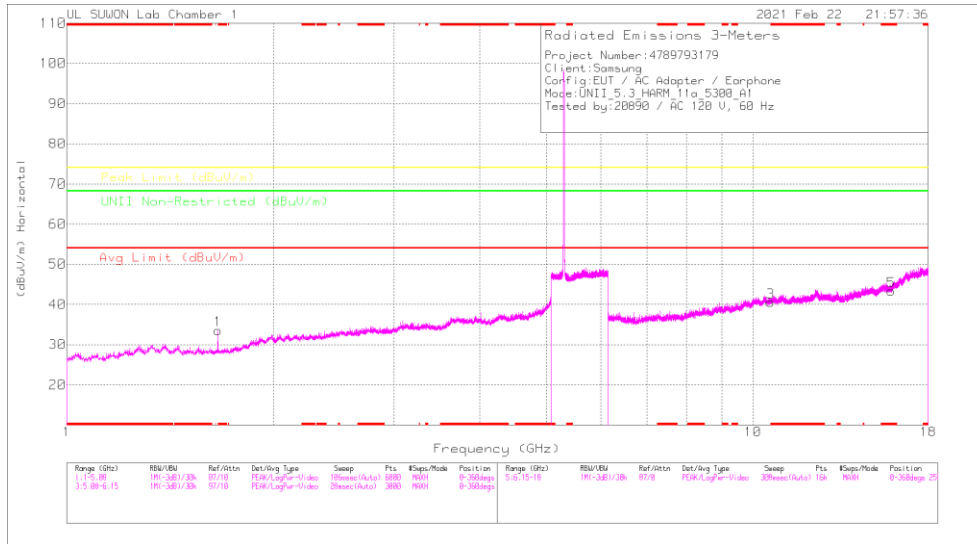
Radiated Emissions

Frequency (GHz)	Meas Reading (dBuV)	Det	3117_00168717	6GHz_HPS(B)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1.65642	45.37	PK-U	28.4	-35.7	0	38.07	-	-	-	-	68.2	-30.13	360	100	H
1.65601	46.43	PK-U	28.4	-35.8	0	39.03	-	-	-	-	68.2	-29.17	360	100	V

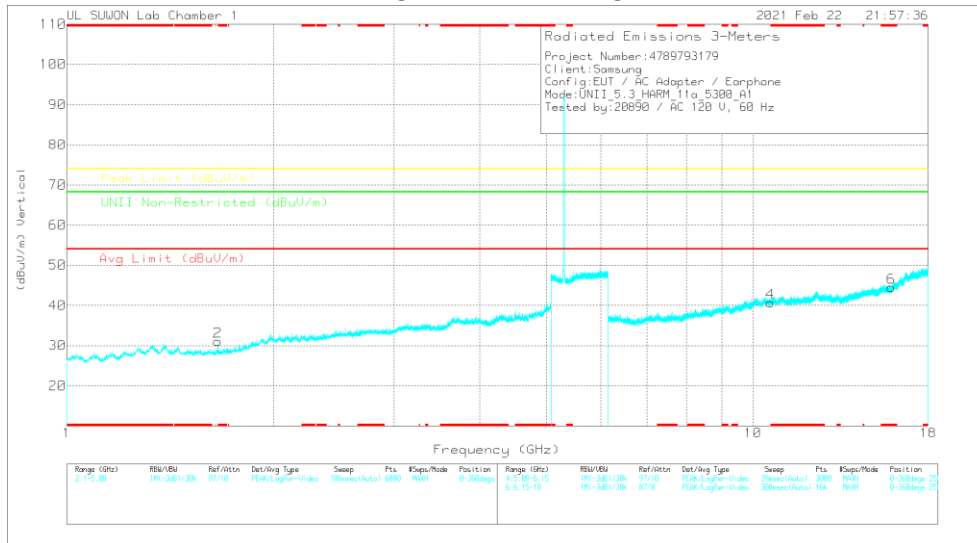
Frequency (GHz)	Meas Reading (dBuV)	Det	3117_00168717	6GHz_HPS(B)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
10.51923	35.18	PK-U	37.9	-22.6	0	50.48	-	-	-	-	68.2	-17.72	360	100	H
10.52045	35.31	PK-U	37.9	-22.6	0	50.61	-	-	-	-	68.2	-17.59	360	100	V
* 15.78101	34.63	PK-U	40.2	-21.1	0	53.73	-	-	74	-20.27	-	-	360	100	H
* 15.78139	34.43	PK-U	40.2	-21.1	0	53.53	-	-	74	-20.47	-	-	360	100	V

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

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

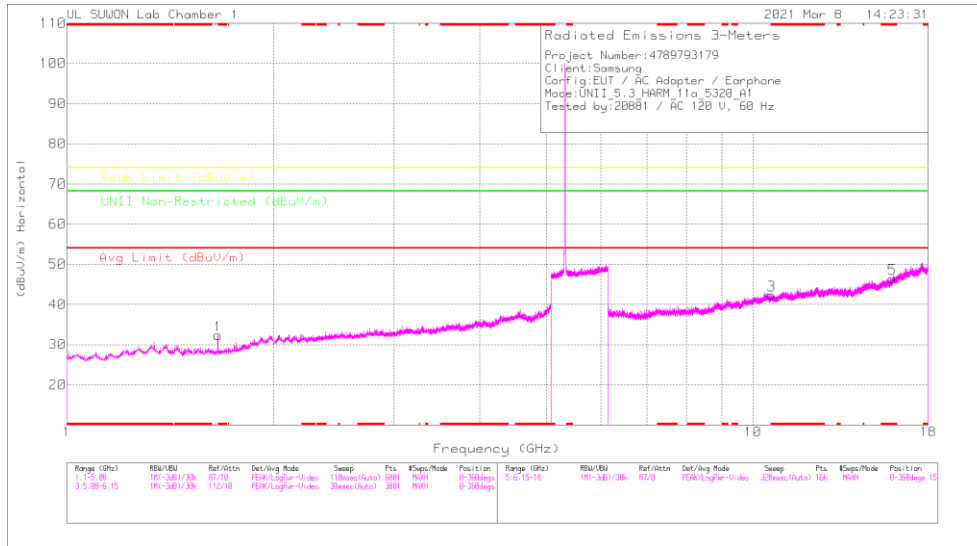
MID CHANNEL DATA

Radiated Emissions

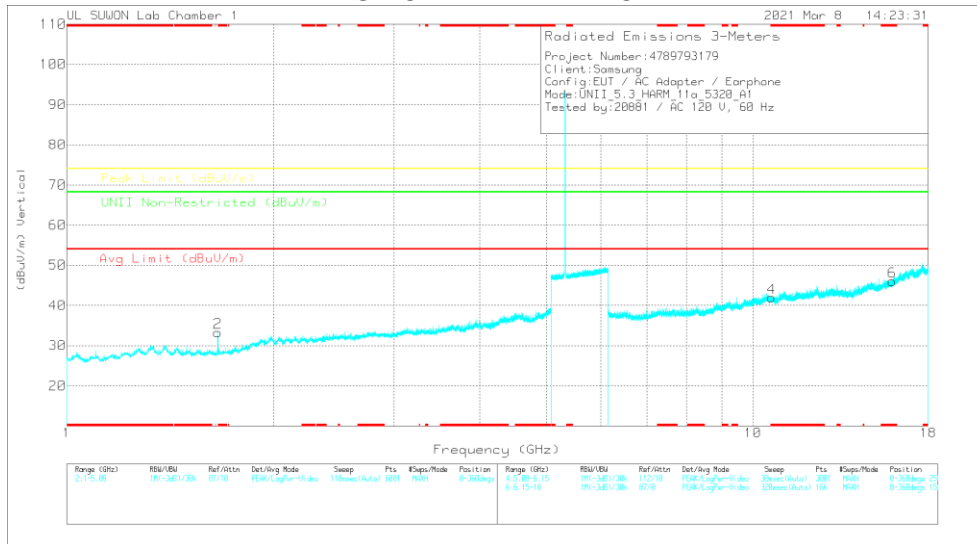
Frequency (GHz)	Max Reading (dBuV)	Det	317_00160717	6GHz_HPS[B]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restrictd (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1.6561	45.83	PK-U	28.4	-35.7	0	38.53	-	-	-	-	68.2	-29.67	360	100	H
1.65978	45.9	PK-U	28.4	-35.8	0	38.5	-	-	-	-	68.2	-29.7	360	100	V
10.60019	34.49	PK-U	38	-22.5	0	49.99	-	-	74	-24.01	-	-	360	100	H
10.60292	34.55	PK-U	38	-22.4	0	50.15	-	-	74	-23.85	-	-	360	100	V
15.90105	34.32	PK-U	40.3	-20.9	0	53.72	-	-	74	-20.28	-	-	360	100	H
15.89847	34.27	PK-U	40.3	-21	0	53.57	-	-	74	-20.43	-	-	360	100	V

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

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	5GHz_LPF(B)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Asimuth (Deg)	Height (m)	Polarity
1.65908	48.79	PK-U	28.4	-36.7	0	59.49	-	-	-	-	68.2	-29.71	360	100	H
1.65907	46.5	PK-U	28.4	-35.8	0	39.1	-	-	-	-	68.2	-29.1	360	100	V

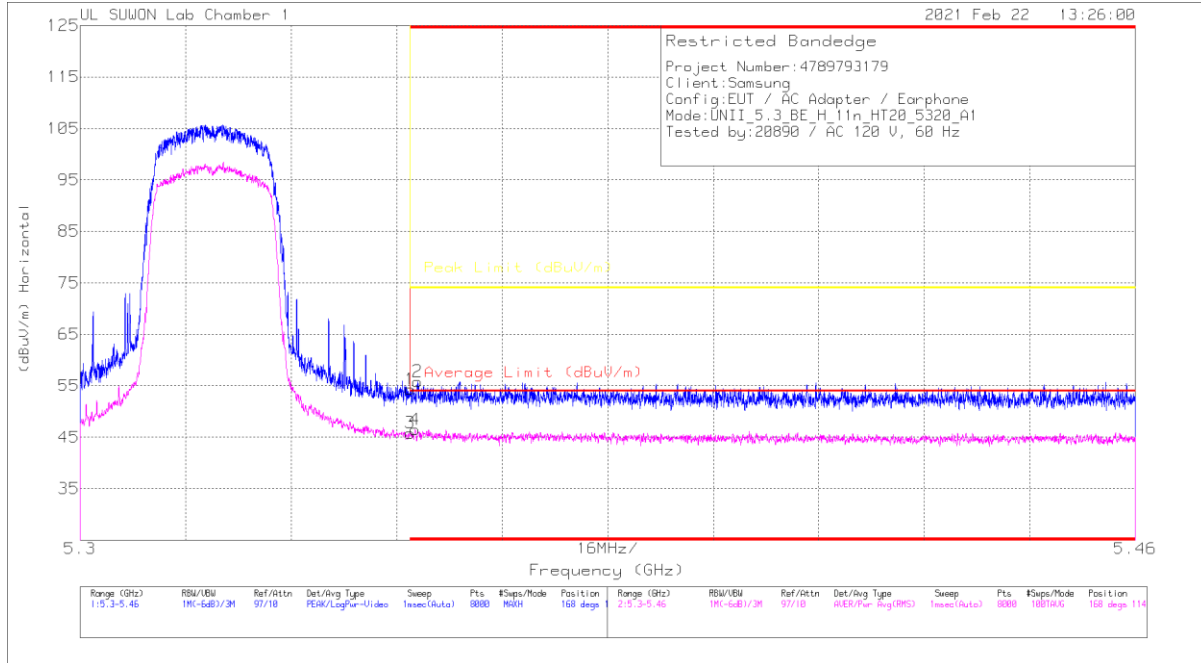
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	6GHz_HPS(B)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Asimuth (Deg)	Height (m)	Polarity
* 10.6394	36.73	PK-U	38	-22.2	0	52.53	-	-	74	-21.47	-	-	360	100	H
* 10.63828	36.1	PK-U	38	-22.1	0	52	-	-	74	-22	-	-	360	100	V
* 15.95848	36.47	PK-U	40.4	-20.8	0	56.07	-	-	74	-17.93	-	-	87	100	H
* 15.95808	24.76	ADR	40.4	-20.8	0	44.36	54	-9.64	-	-	-	-	87	100	H
* 15.95871	36.54	PK-U	40.4	-20.8	0	56.14	-	-	74	-17.86	-	-	158	100	V
* 15.96121	24.62	ADR	40.4	-20.8	0	44.22	54	-9.78	-	-	-	-	158	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

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

RESTRICTED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

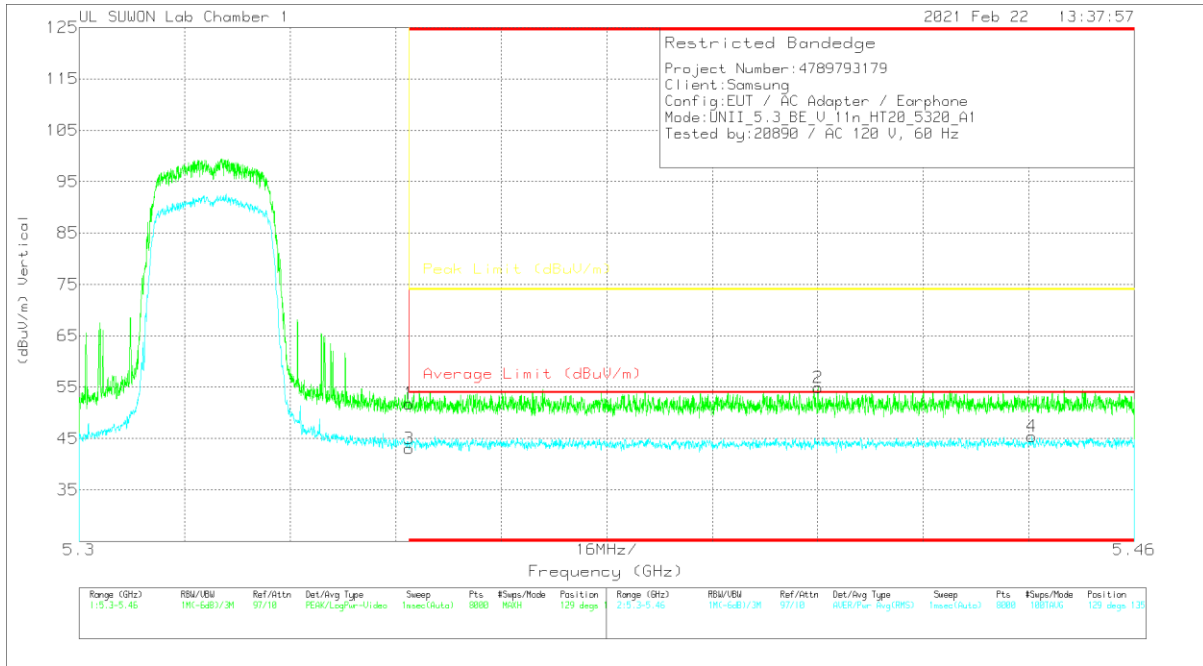
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	10dB_ATT[dB]	DC Cor (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Acimuh (Degs)	Height (cm)	Polarity
1	* 5.35001	41.29	Pk	34.5	-21.5	0	54.29	-	-	74	-19.71	168	114	H
2	* 5.35119	42.81	Pk	34.5	-21.5	0	55.81	-	-	74	-18.19	168	114	H
3	* 5.35001	32.82	RMS	34.5	-21.5	0	45.82	54	-8.18	-	-	168	114	H
4	* 5.35079	33.47	RMS	34.5	-21.5	0	46.47	54	-7.53	-	-	168	114	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_00168717	10dB_ATT[dB]	DC Cor (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35001	38.8	Pk	34.5	-21.5	0	51.8	-	-	74	-22.2	129	135	V
2	* 5.41204	41.81	Pk	34.5	-21.4	0	54.91	-	-	74	-19.09	129	135	V
3	* 5.35001	30.05	RMS	34.5	-21.5	0	43.05	54	-10.95	-	-	129	135	V
4	* 5.44446	32.32	RMS	34.5	-21.4	0	45.42	54	-8.58	-	-	129	135	V

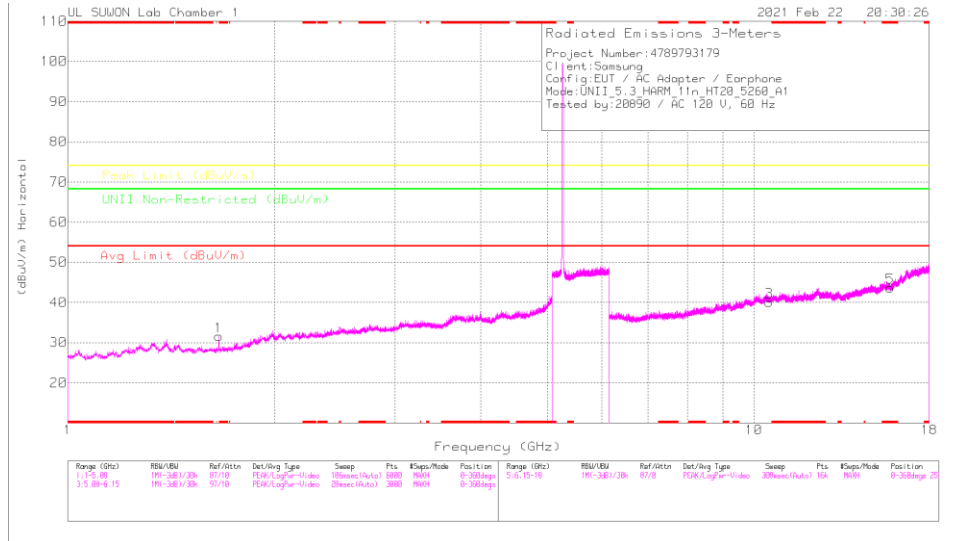
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

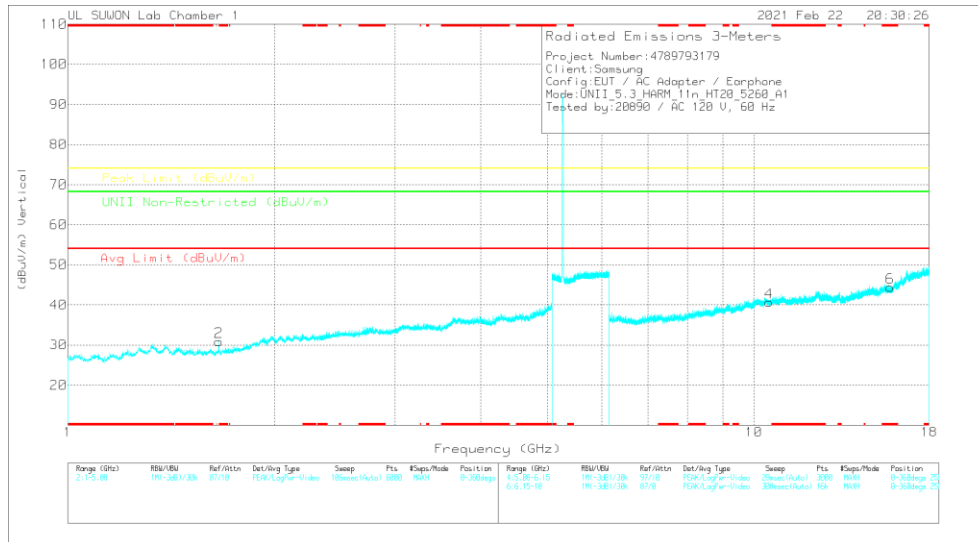
RMS - RMS detection

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

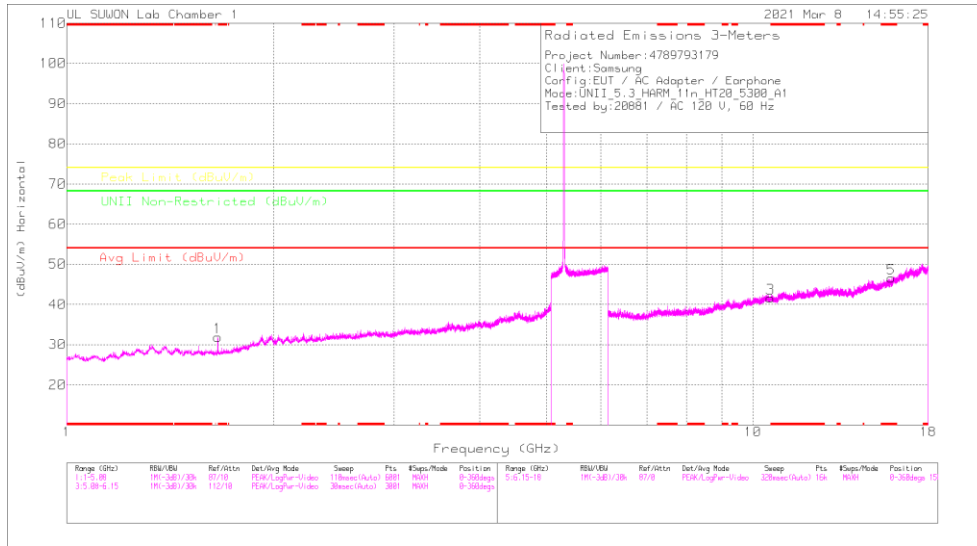
Radiated Emissions

Frequency (GHz)	Meas Reading (dBuV)	Det	317_00160717	6GHz_HPS(B)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.65962	46.2	PK-U	28.4	-35.7	0	38.9	-	-	-	-	68.2	-29.3	0	100	H
1.65724	46.24	PK-U	28.4	-35.7	0	38.94	-	-	-	-	68.2	-29.26	0	100	V

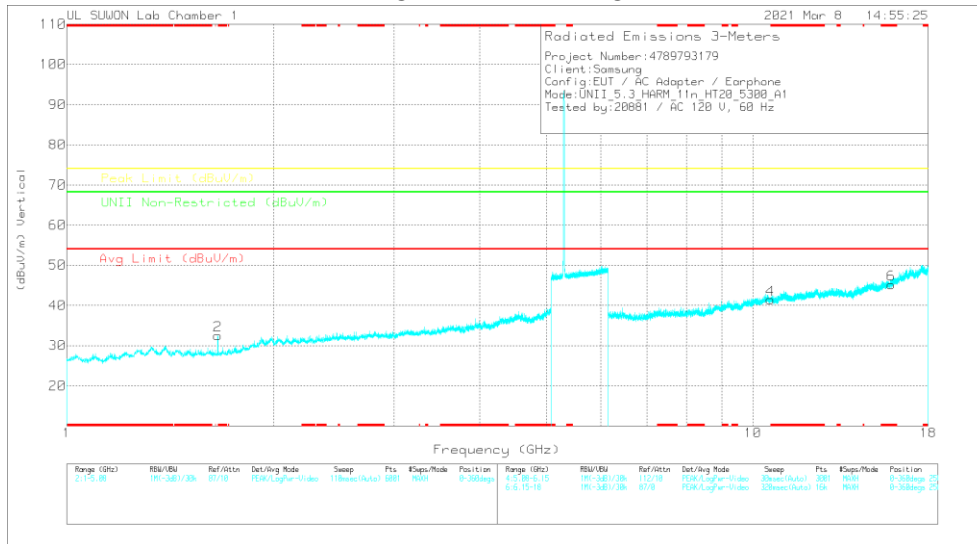
Frequency (GHz)	Meas Reading (dBuV)	Det	317_00160717	6GHz_HPS(B)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
10.52177	34.95	PK-U	37.9	-22.6	0	50.25	-	-	-	-	68.2	-17.95	0	100	H
10.51979	35.7	PK-U	37.9	-22.6	0	51	-	-	-	-	68.2	-17.2	0	100	V
* 15.78176	34.48	PK-U	40.2	-21.1	0	53.58	-	-	74	-20.42	-	-	0	100	H
* 15.78445	34.39	PK-U	40.2	-21.2	0	53.39	-	-	74	-20.61	-	-	0	100	V

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

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

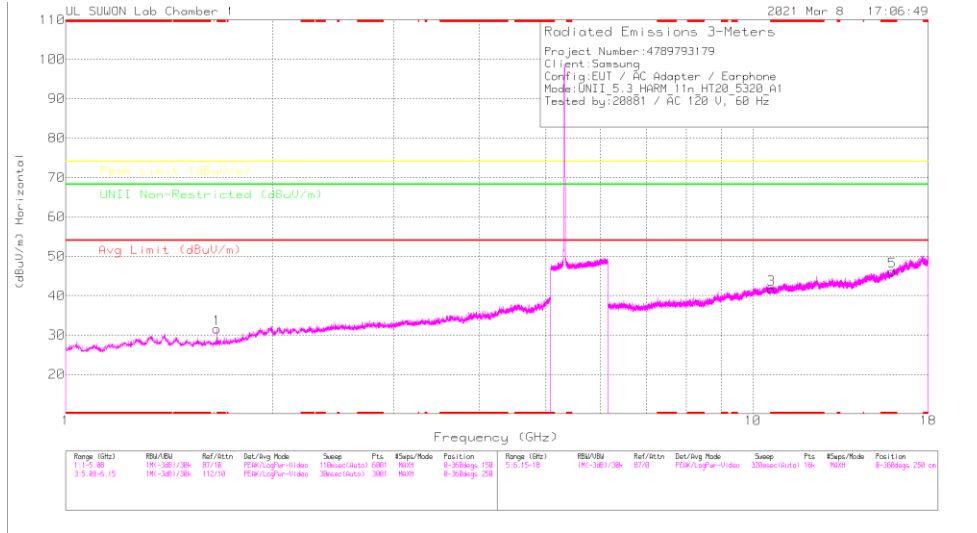
Radiated Emissions

Frequency (GHz)	Misc Reading (dBm)	Det	3117_00168717	5GHz_LPFdB	DC Corr (dB)	Corrected Reading (dBm)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1.65961	46.49	PK-U	28.4	-35.7	0	39.19	-	-	-	-	68.2	-29.01	360	100	H
1.65944	46.83	PK-U	28.4	-35.7	0	39.53	-	-	-	-	68.2	-28.67	360	100	V

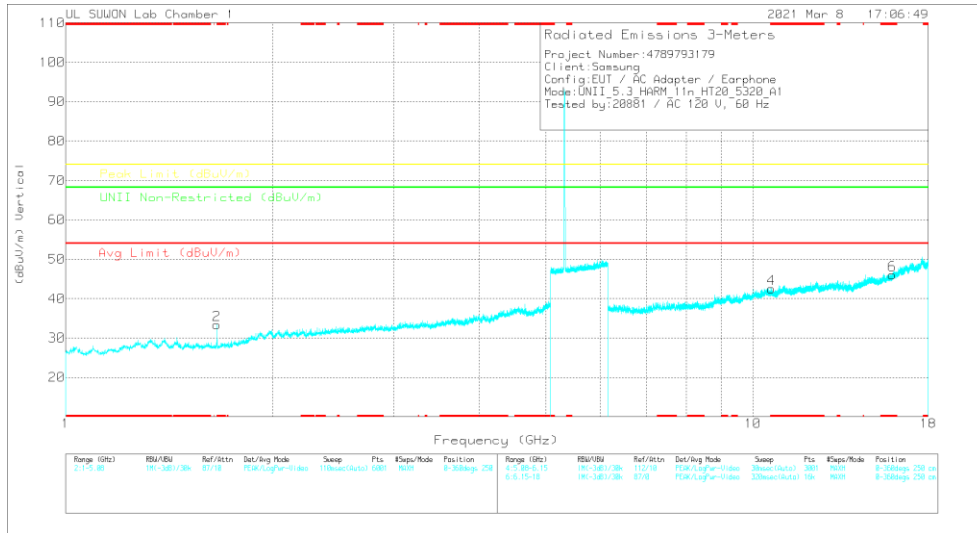
Frequency (GHz)	Misc Reading (dBm)	Det	3117_00168717	5GHz_LPFdB	DC Corr (dB)	Corrected Reading (dBm)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
10.59629	36.48	PK-U	38	-22.5	0	51.98	-	-	-	-	68.2	-16.22	360	100	H
10.59619	36.03	PK-U	38	-22.5	0	51.53	-	-	-	-	68.2	-16.67	360	100	V
*15.89192	36.8	PK-U	40.3	-21	0	56.1	-	-	74	-17.9	-	-	324	100	H
*15.89826	24.9	ADR	40.3	-21	0	44.2	54	-9.8	74	-17.5	-	-	324	100	H
*15.9002	37.2	PK-U	40.3	-21	0	56.5	-	-	74	-17.5	-	-	129	100	V
*15.89824	24.9	ADR	40.3	-21	0	44.2	54	-9.8	-	-	-	-	129	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

Radiated Emissions

Frequency (GHz)	Meas Reading (dBuV)	Det	317.00168717	6GHz_LF9dB	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
* 1.66025	47.6	PK-U	28.4	-35.8	0	40.2	-	-	74	-33.8	-	-	116	163	H
* 1.66005	39.05	ADR	28.4	-35.8	0	31.65	-	-22.35	-	-	-	-	116	163	H
* 1.66065	47.05	PK-U	28.4	-35.7	0	39.75	-	-	74	-34.25	-	-	17	277	V
* 1.66005	38.02	ADR	28.4	-35.8	0	30.62	-	-23.38	-	-	-	-	17	277	V

Frequency (GHz)	Meas Reading (dBuV)	Det	317.00168717	6GHz_LF9dB	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
* 10.63829	36.17	PK-U	38	-22.1	0	52.07	-	-	74	-21.93	-	-	0	100	H
* 10.63842	36.67	PK-U	38	-22.1	0	52.57	-	-	74	-21.43	-	-	0	100	V
* 15.95703	36.92	PK-U	40.4	-20.9	0	56.42	-	-	74	-17.58	-	-	98	100	H
* 15.95638	24.64	ADR	40.4	-20.9	0	44.14	54	-9.86	-	-	-	-	98	100	H
* 15.95573	36.34	PK-U	40.4	-20.9	0	55.84	-	-	74	-18.16	-	-	125	101	V
* 15.95625	24.56	ADR	40.4	-20.9	0	44.06	54	-9.94	-	-	-	-	125	101	V

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

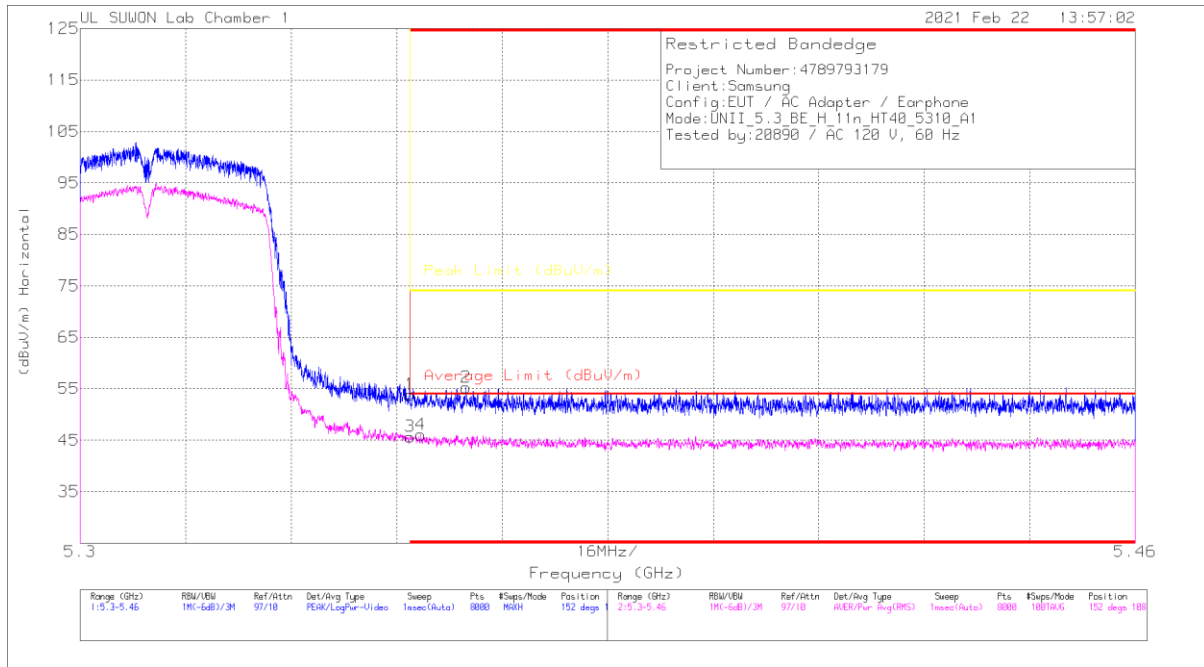
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

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

RESTRICTED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

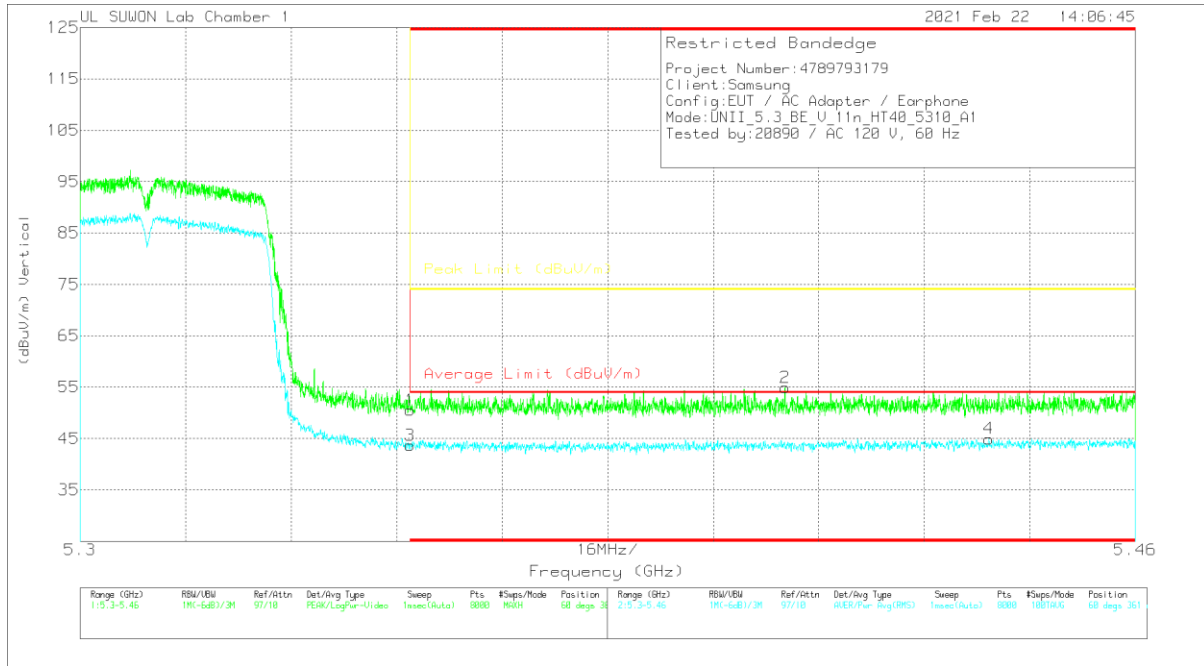
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	10dB_ATT[dB]	DC Cor (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35001	40.86	Pk	34.5	-21.5	0	53.96	-	-	74	-20.14	152	108	H
2	* 5.35851	42.25	Pk	34.5	-21.5	0	55.25	-	-	74	-18.75	152	108	H
3	* 5.35001	32.69	RMS	34.5	-21.5	0	45.69	54	-8.31	-	-	152	108	H
4	* 5.35163	33.08	RMS	34.5	-21.5	0	46.08	54	-7.92	-	-	152	108	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_00168717	10dB_ATT[dB]	DC Cor (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35001	37.5	Pk	34.5	-21.5	0	50.5	-	-	74	-23.5	60	361	V
2	* 5.40688	41.92	Pk	34.5	-21.5	0	54.92	-	-	74	-19.08	60	361	V
3	* 5.35001	30.65	RMS	34.5	-21.5	0	43.65	54	-10.35	-	-	60	361	V
4	* 5.4378	31.86	RMS	34.5	-21.4	0	44.96	54	-9.04	-	-	60	361	V

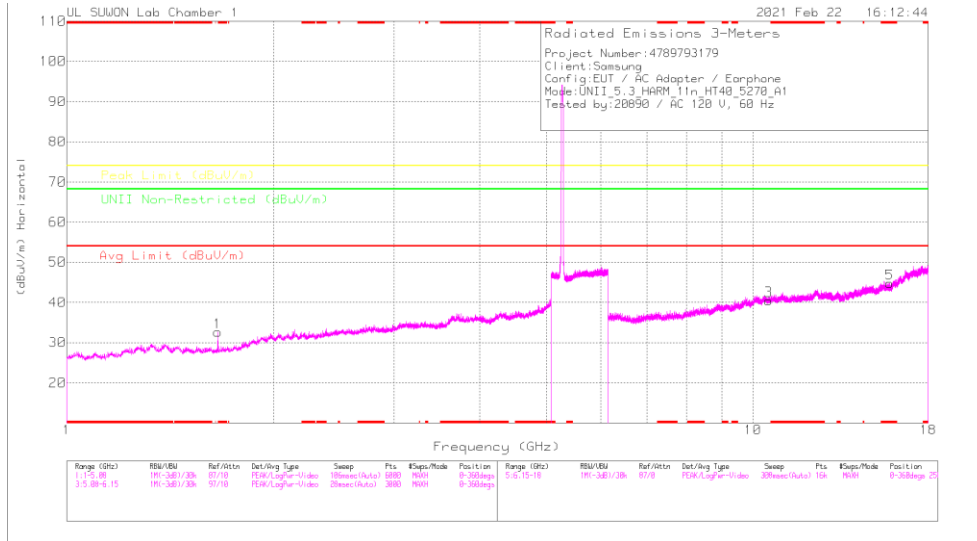
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

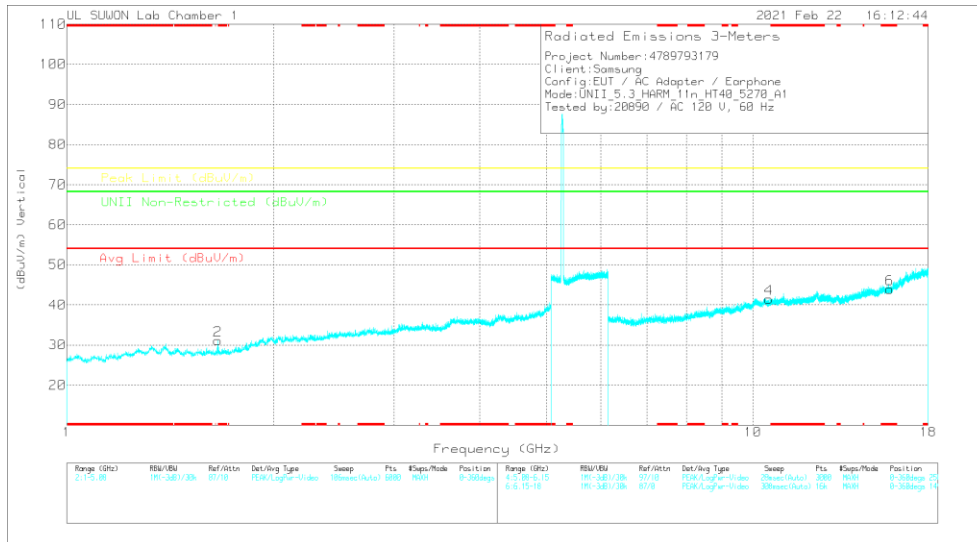
RMS - RMS detection

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

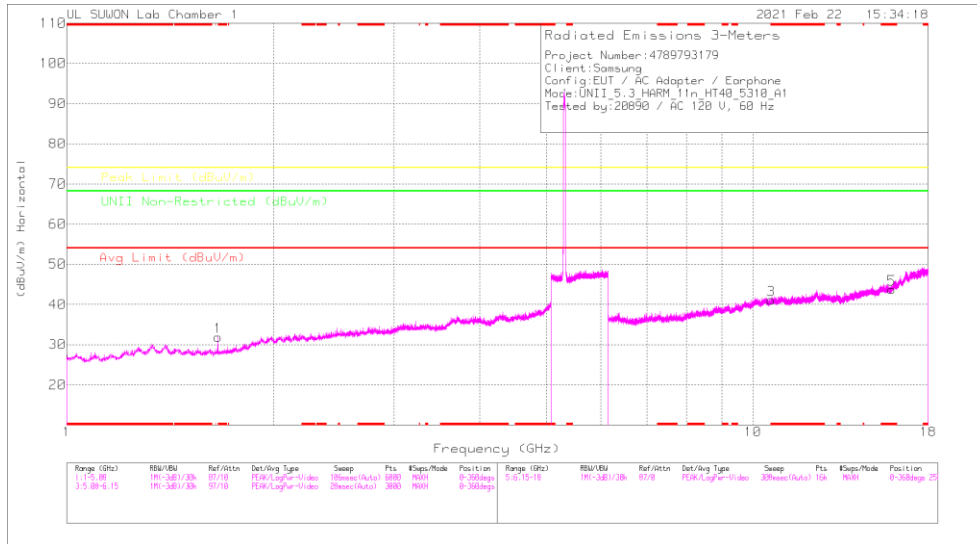
Radiated Emissions

Frequency (GHz)	Max Reading (dBuV)	Det	3117_00168717	5GHz_LFp(SB)	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)	Asimuth (Degs)	Height (cm)	Polarity
1.65438	45.63	PK-U	28.4	-35.8	0	38.43	-	-	-	-	68.2	-29.77	360	100	H
1.65887	45.57	PK-U	28.4	-35.7	0	38.27	-	-	-	-	68.2	-29.93	360	100	V

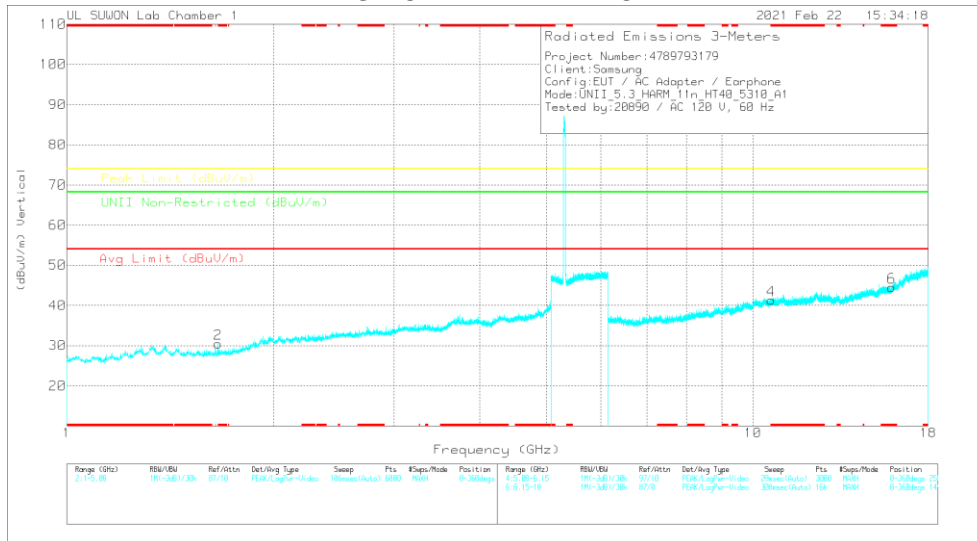
Frequency (GHz)	Max Reading (dBuV)	Det	3117_00168717	6GHz_HFp(SB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Asimuth (Degs)	Height (cm)	Polarity
10.54582	35.16	PK-U	37.9	-22.6	0	50.46	-	-	-	-	68.2	-17.74	360	100	H
10.53999	34.75	PK-U	37.9	-22.6	0	50.05	-	-	-	-	68.2	-18.15	360	100	V
* 15.80926	33.86	PK-U	40.2	-21.2	0	52.86	-	74	-21.14	-	-	-	360	100	H
* 15.81836	33.59	PK-U	40.2	-21.1	0	52.69	-	74	-21.31	-	-	-	360	100	V

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

Radiated Emissions

Frequency (GHz)	Max Reading (dBuV)	Det	317_0016R717	5GHz_LF(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)	Altitude (Degs)	Height (cm)	Polarity
1.65197	45.58	PK-U	28.4	-35.7	0	38.28	-	-	-	-	68.2	-29.92	360	100	H
1.6519	46.62	PK-U	28.4	-35.7	0	39.32	-	-	-	-	68.2	-28.88	360	100	V

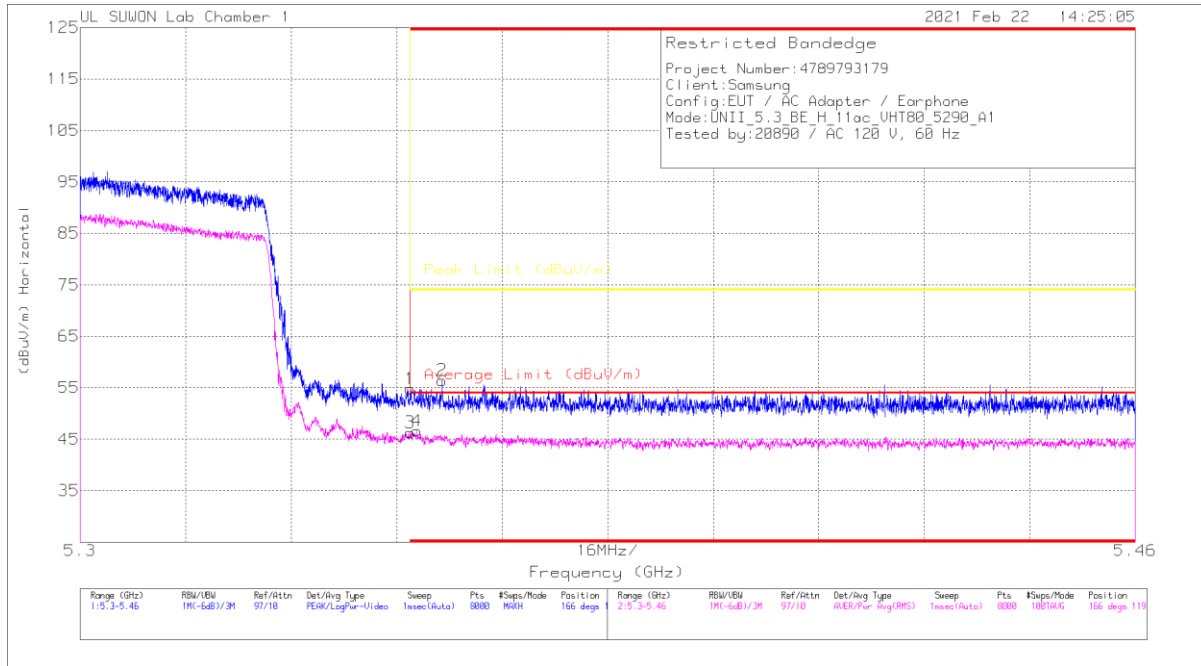
Frequency (GHz)	Max Reading (dBuV)	Det	317_0016R717	6GHz_HPS(B)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
* 10.63157	35.06	PK-U	38	-22.1	0	50.96	-	-	74	-23.04	-	-	360	100	H
* 10.61917	34.73	PK-U	38	-22.3	0	50.43	-	-	74	-23.57	-	-	360	100	V
* 15.92698	33.94	PK-U	40.3	-20.9	0	53.34	-	-	74	-20.66	-	-	360	100	H
* 15.93065	34.19	PK-U	40.3	-21	0	53.49	-	-	74	-20.51	-	-	360	100	V

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

11.2.4. TX ABOVE 1GHz 802.11ac VHT80 1Tx MODE IN THE 5.3GHz BAND

RESTRICTED BANDEDGE (High CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA

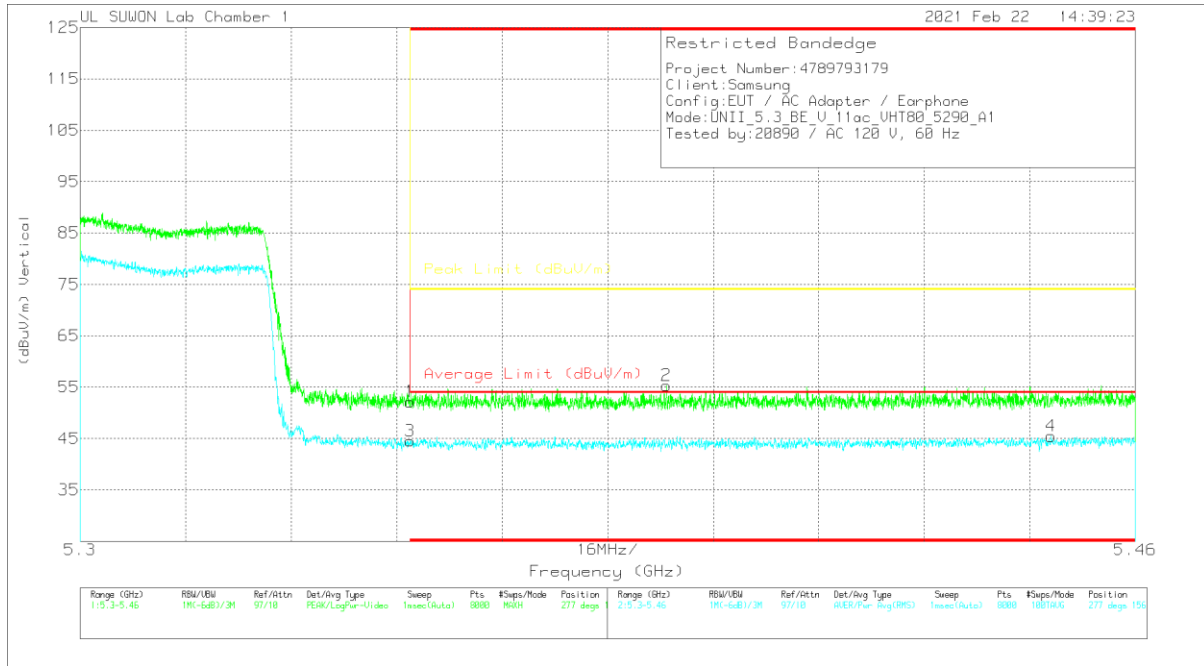


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	10dB_ATT(dB)	DC Cor (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35001	41.79	PK	34.5	-21.5	0	54.79	-	-	74	-19.21	166	119	H
2	* 5.35487	43.41	PK	34.5	-21.5	0	56.41	-	-	74	-17.59	166	119	H
3	* 5.35001	33.12	RMS	34.5	-21.5	-16	46.28	54	-7.72	-	-	166	119	H
4	* 5.35109	33.45	RMS	34.5	-21.5	-16	46.61	54	-7.39	-	-	166	119	H

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

VERTICAL PEAK AND AVERAGE DATA



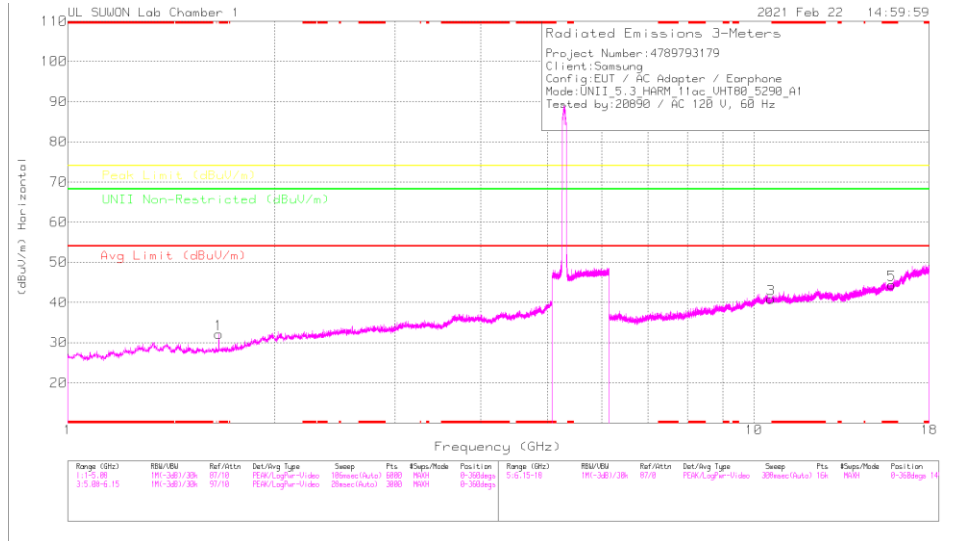
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	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	* 5.35001	39.15	Pk	34.5	-21.5	0	52.15	-	-	74	-21.85	277	156	V
2	* 5.38889	42.34	Pk	34.5	-21.5	0	55.34	-	-	74	-18.66	277	156	V
3	* 5.35001	31.36	RMS	34.5	-21.5	.16	44.62	54	-9.48	-	-	277	156	V
4	* 5.44722	32.31	RMS	34.5	-21.5	.16	45.47	54	-8.53	-	-	277	156	V

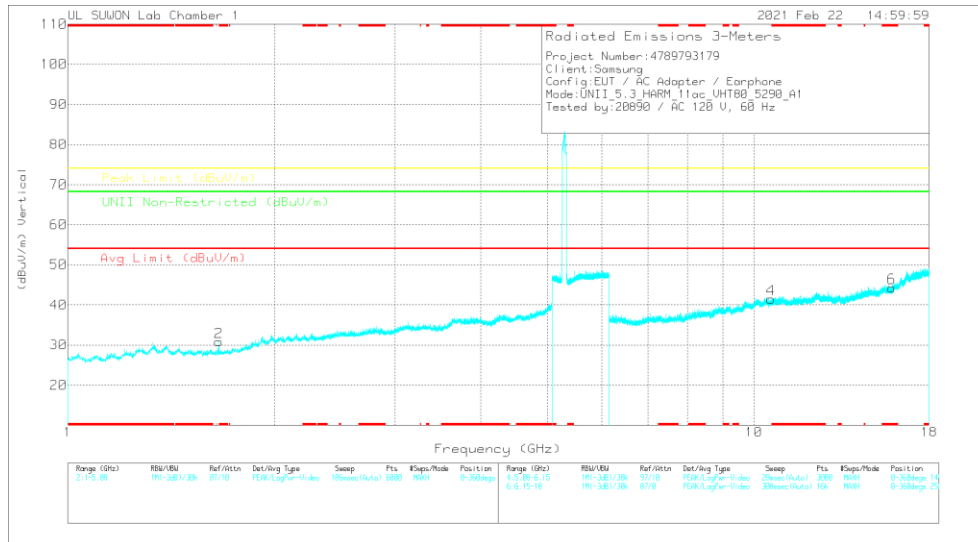
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 Pk - Peak detector
 RMS - RMS detection

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

Radiated Emissions

Frequency (GHz)	Meas Reading (dBuV)	Det	3117_00168717	5GHz_LF1dB	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)	Altitude (Meters)	Height (m)	Polarity
1.66	46.28	PK-U	28.4	-35.8	0	38.88	-	-	-	-	68.2	-29.32	360	100	H
1.65947	46.32	PK-U	28.4	-35.7	0	39.02	-	-	-	-	68.2	-29.18	360	100	V

Frequency (GHz)	Meas Reading (dBuV)	Det	3117_00168717	5GHz_VF1dB	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)	Altitude (Meters)	Height (m)	Polarity
10.58639	34.71	PK-U	37.9	-22.6	0	50.01	-	-	-	-	68.2	-18.19	360	100	H
10.57604	34.92	PK-U	37.9	-22.7	0	50.12	-	-	-	-	68.2	-18.08	360	100	V
*15.3809	33.69	PK-U	40.3	-21	0	52.59	-	74	-	-21.01	-	-	360	100	H
*15.86909	34.2	PK-U	40.3	-20.9	0	53.6	-	-	74	-20.4	-	-	360	100	V

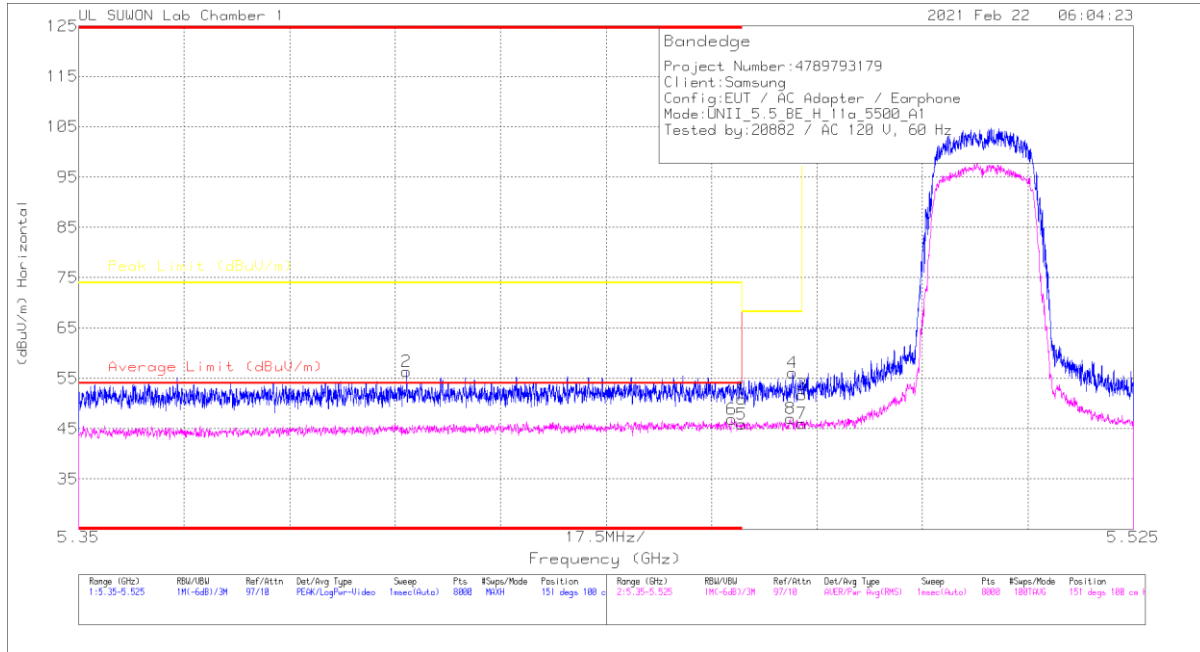
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak

11.3. 5.5-5.6 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

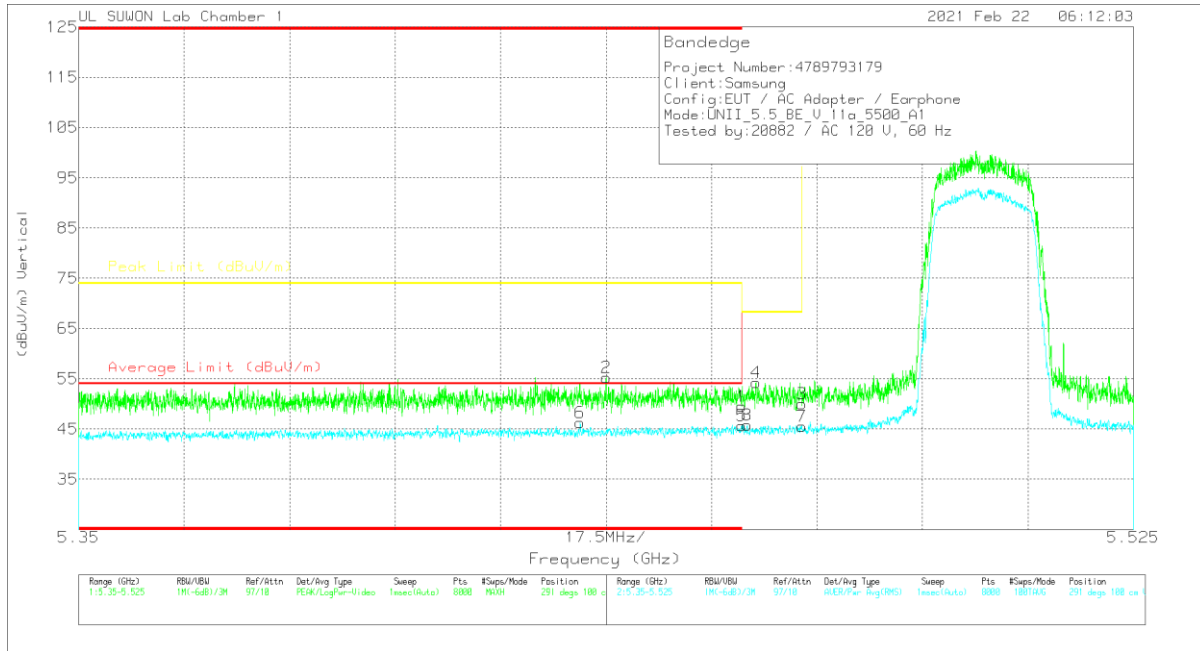
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.45998	37.65	Pk	34.5	-21.3	0	50.85	-	-	74	-23.15	151	100	H
2	* 5.40439	43.32	Pk	34.5	-21.5	0	56.32	-	-	74	-17.68	151	100	H
3	5.46998	38.5	Pk	34.5	-21.3	0	51.7	-	-	68.2	-16.5	151	100	H
4	5.46845	42.86	Pk	34.5	-21.3	0	56.06	-	-	68.2	-12.14	151	100	H
5	* 5.45998	32.68	RMS	34.5	-21.3	0	45.88	54	-8.12	-	-	151	100	H
6	* 5.45832	33.7	RMS	34.5	-21.3	0	46.9	54	-7.1	-	-	151	100	H
7	5.46998	32.81	RMS	34.5	-21.3	0	46.01	-	-	-	-	151	100	H
8	5.46812	33.76	RMS	34.5	-21.3	0	46.96	-	-	-	-	151	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_00168717	10dB_ATT[dB]	DC Cor (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degree)	Height (cm)	Polarity
1	* 5.45998	36.26	Pk	34.5	-21.3	0	49.46	-	-	74	-24.54	291	100	V
2	* 5.43751	42.21	Pk	34.5	-21.5	0	55.21	-	-	74	-18.79	291	100	V
3	5.46998	36.78	Pk	34.5	-21.3	0	49.98	-	-	68.2	-18.22	291	100	V
4	5.46237	41.15	Pk	34.5	-21.4	0	54.25	-	-	68.2	-13.95	291	100	V
5	* 5.45998	32.44	RMS	34.5	-21.3	0	45.64	54	-8.36	-	-	291	100	V
6	* 5.4332	33.18	RMS	34.5	-21.4	0	46.28	54	-7.72	-	-	291	100	V
7	5.46998	32.36	RMS	34.5	-21.3	0	45.56	-	-	-	-	291	100	V
8	5.46092	32.71	RMS	34.5	-21.4	0	45.81	-	-	-	-	291	100	V

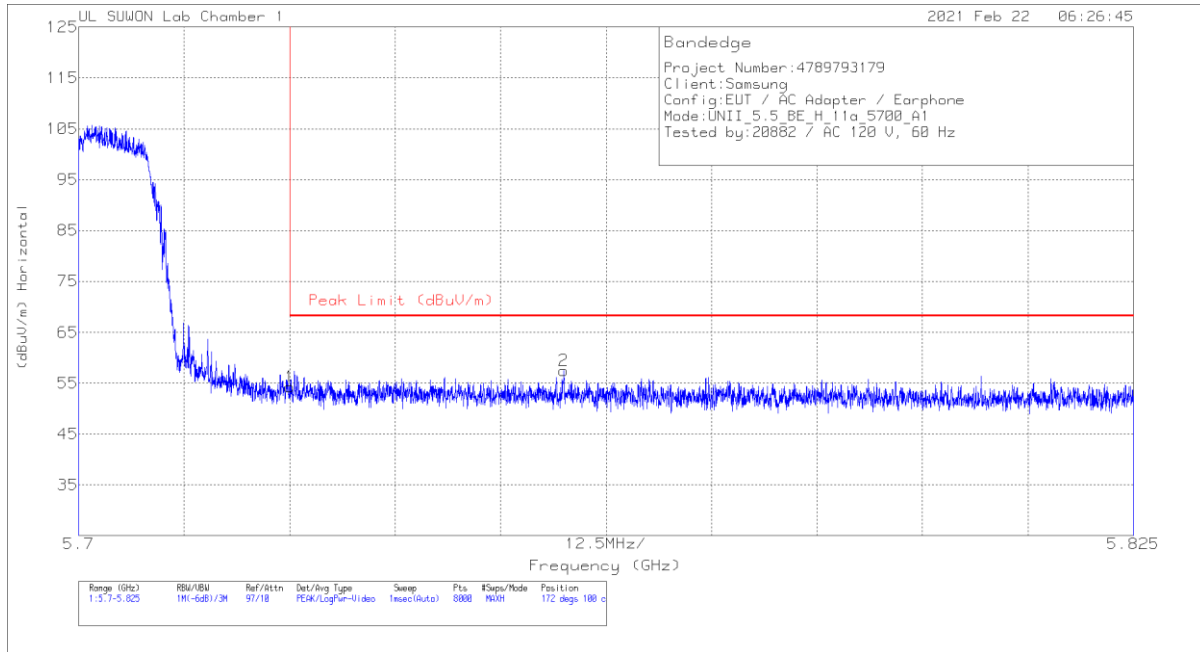
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168717	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	40.23	Pk	34.9	-20.9	0	54.23	68.2	-13.97	172	100	H
2	5.75749	43.53	Pk	34.9	-21	0	57.43	68.2	-10.77	172	100	H

Pk - Peak detector