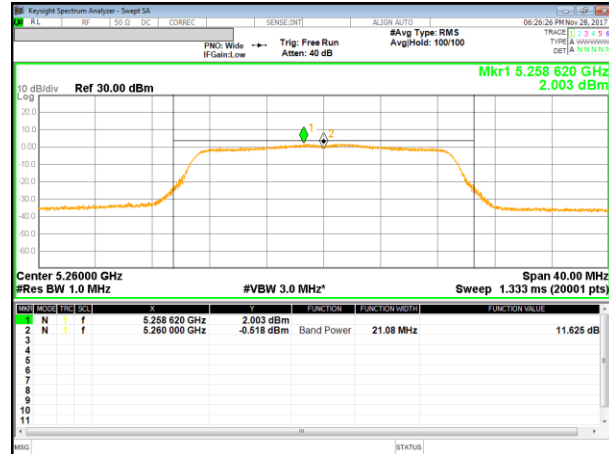
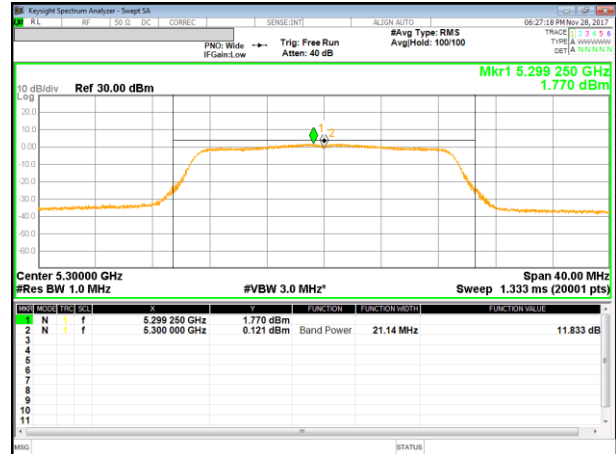


UNII 5.3 GHz IEEE 802.11n HT20 mode

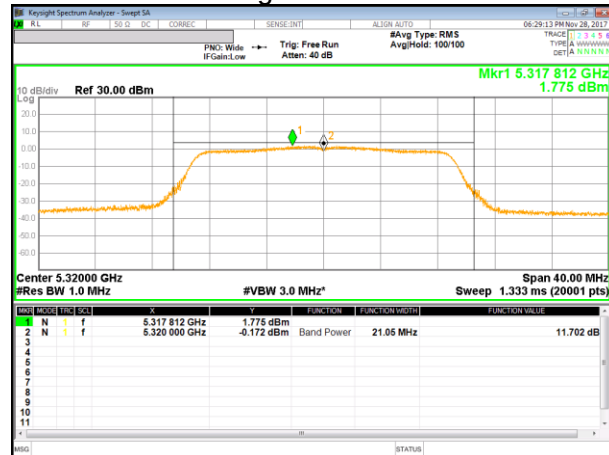
11n HT20 Mode Low Channel



11n HT20 Mode Middle Channel

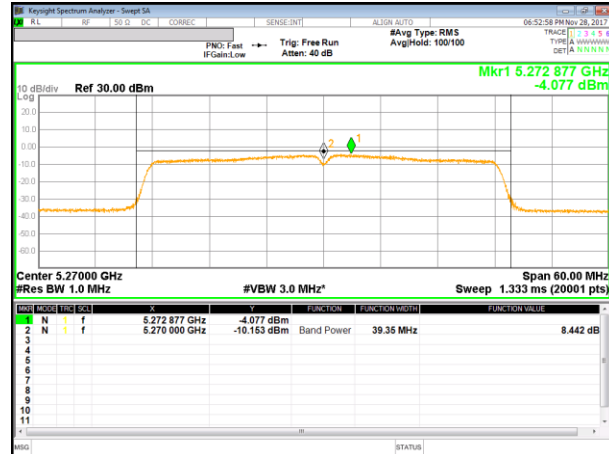


11n HT20 Mode High Channel

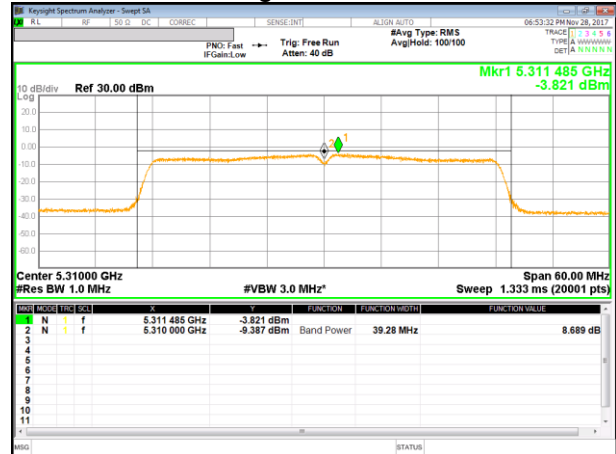


UNII 5.3 GHz IEEE 802.11n HT40 mode

11n HT40 Mode Low Channel

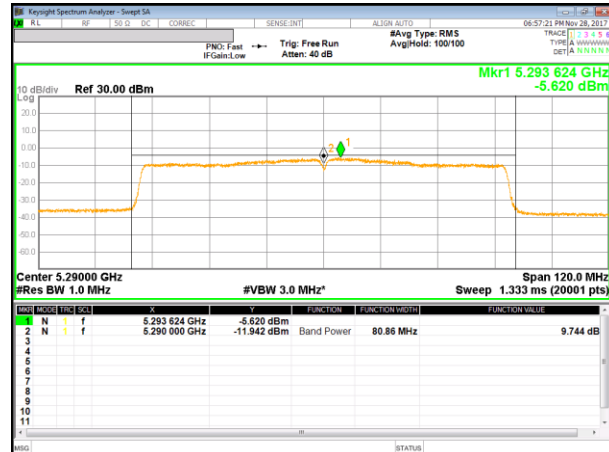


11n HT40 Mode High Channel



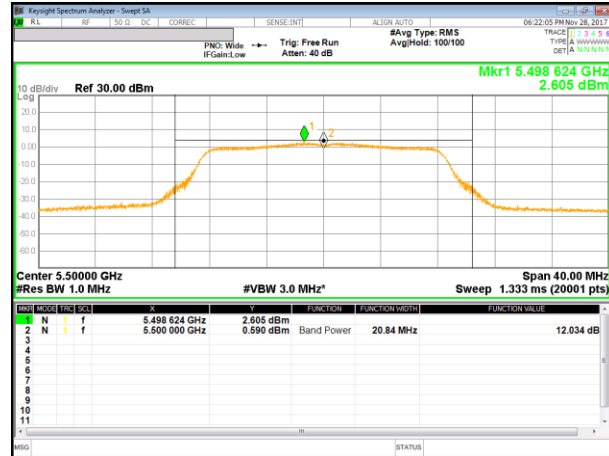
UNII 5.3 GHz IEEE 802.11ac VHT80 mode

11ac VHT80 Mode Middle Channel

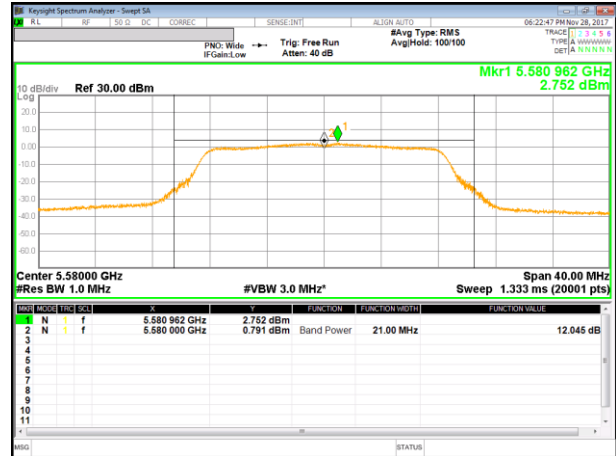


UNII 5.5 GHz IEEE 802.11a mode

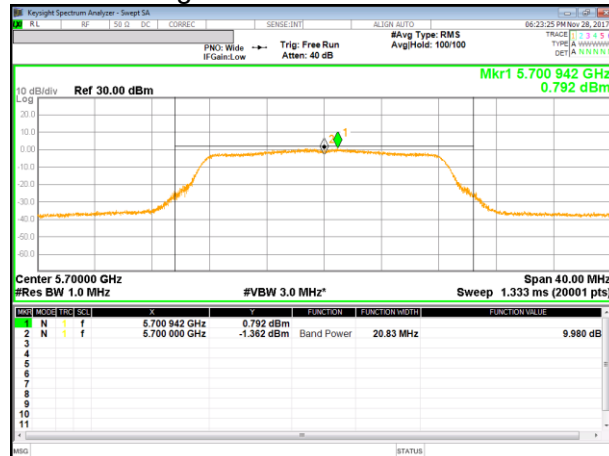
11a Mode Low Channel



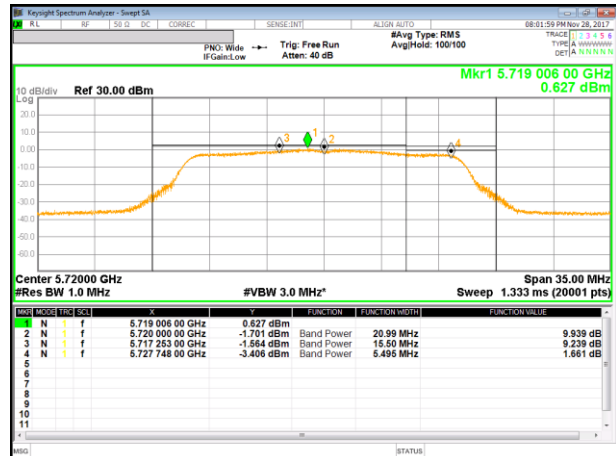
11a Mode Middle Channel



11a Mode High Channel

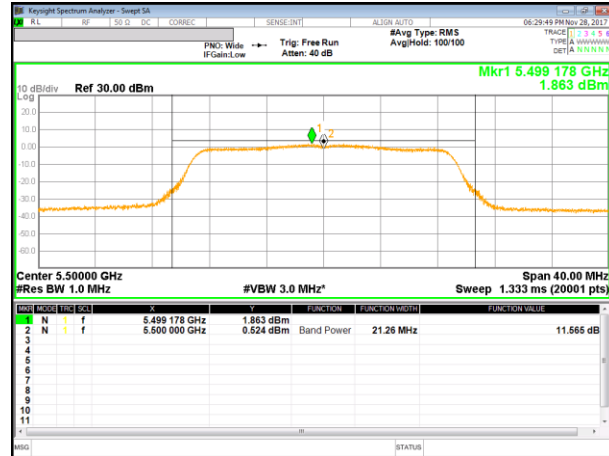


11a Mode Straddle Channel

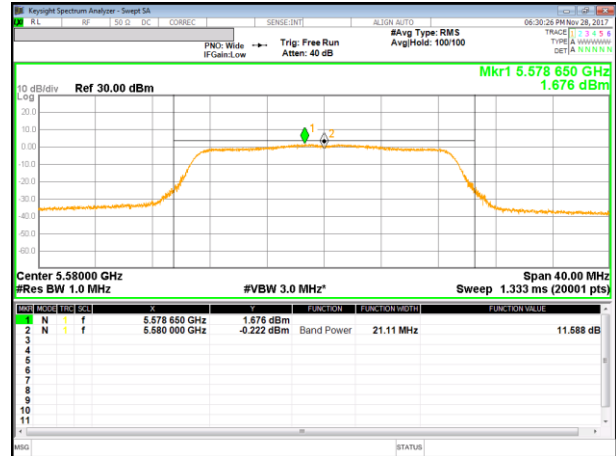


UNII 5.5 GHz IEEE 802.11n HT20 mode

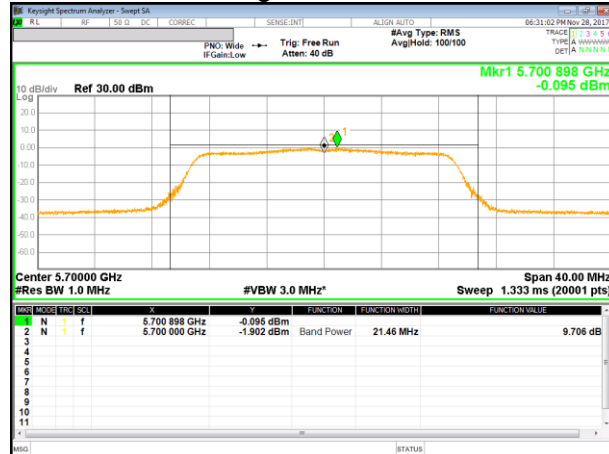
11n HT20 Mode Low Channel



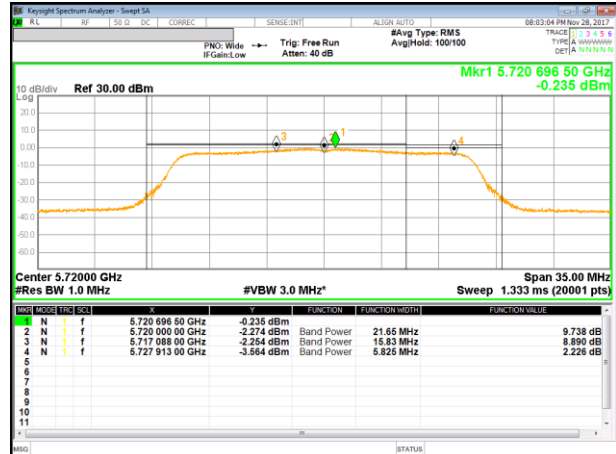
11n HT20 Mode Middle Channel



11n HT20 Mode High Channel

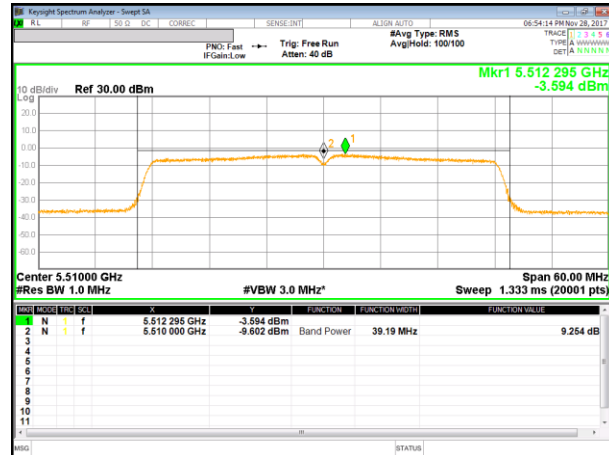


11n HT20 Mode Straddle Channel

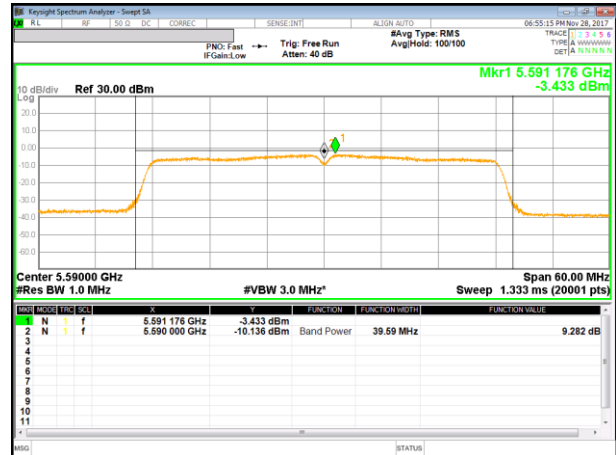


UNII 5.5 GHz IEEE 802.11n HT40 mode

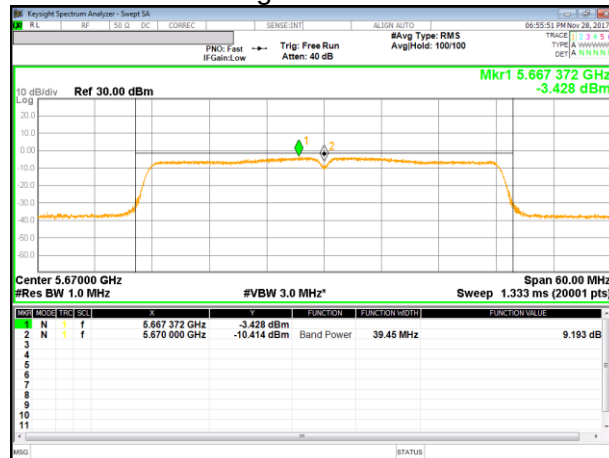
11n HT40 Mode Low Channel



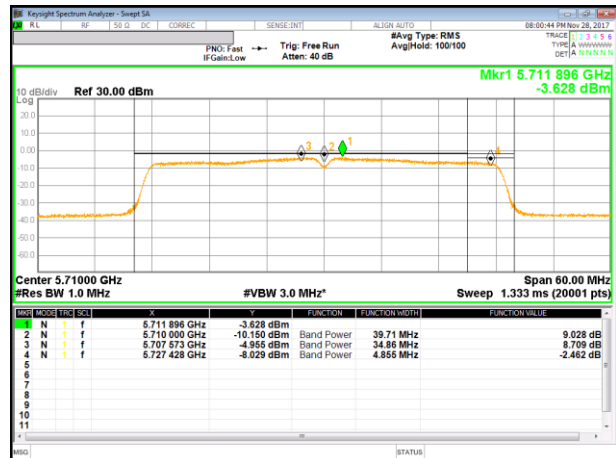
11n HT40 Mode Middle Channel



11n HT40 Mode High Channel

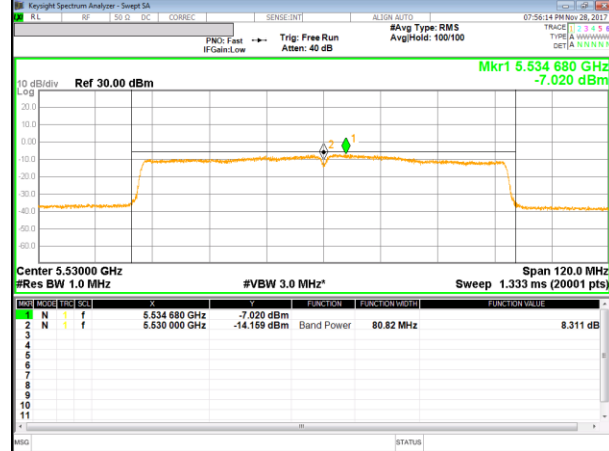


11n HT40 Mode Straddle Channel

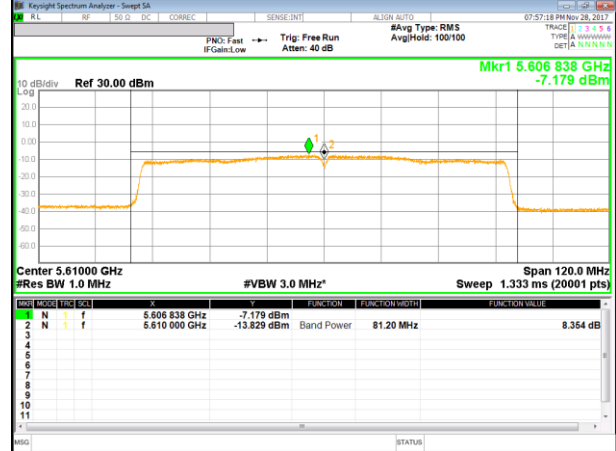


UNII 5.5 GHz IEEE 802.11ac VHT80 mode

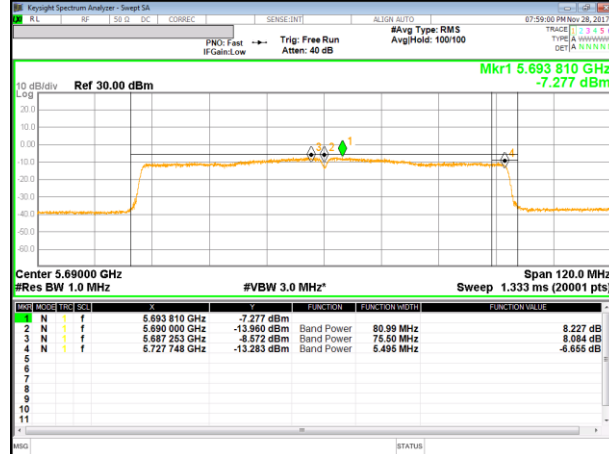
11ac VHT80 Mode Low Channel



11ac VHT80 Mode High Channel

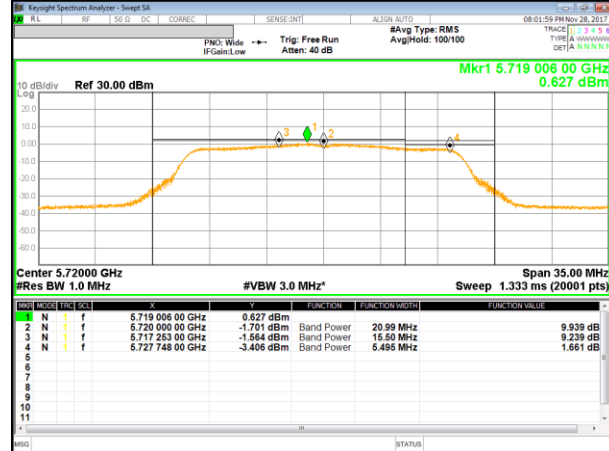


11ac VHT80 Mode Straddle Channel



UNII 5.8 GHz IEEE 802.11a mode for POWER

11a Mode Straddle Channel



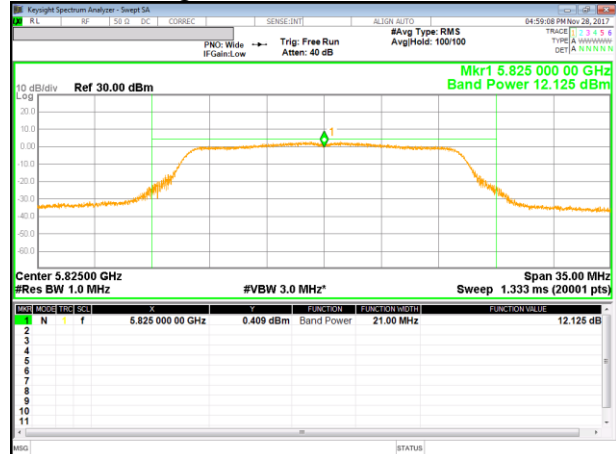
11a Mode Low Channel



11a Mode Middle Channel

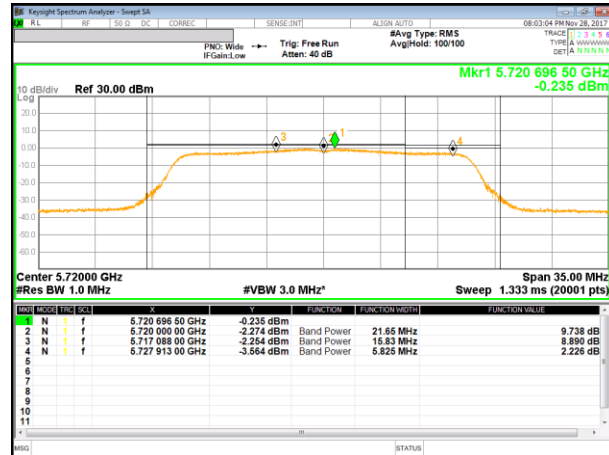


11a Mode High Channel

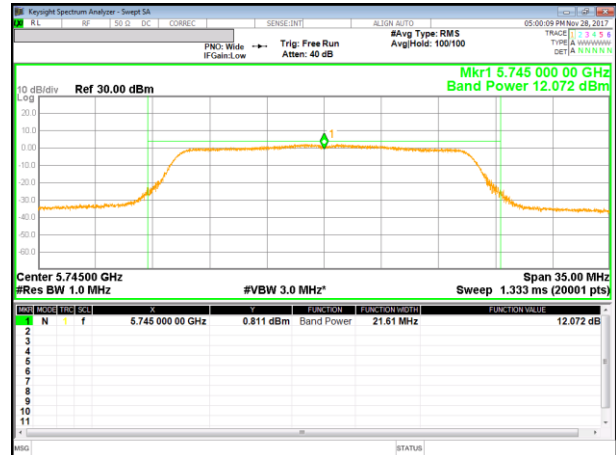


UNII 5.8 GHz IEEE 802.11n HT20 mode for POWER

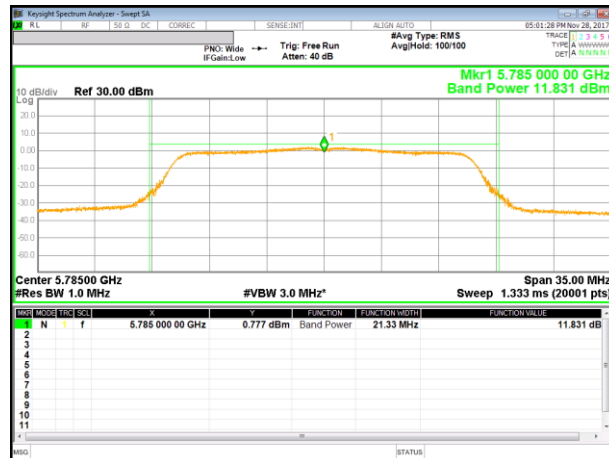
11n HT20 Mode Straddle Channel



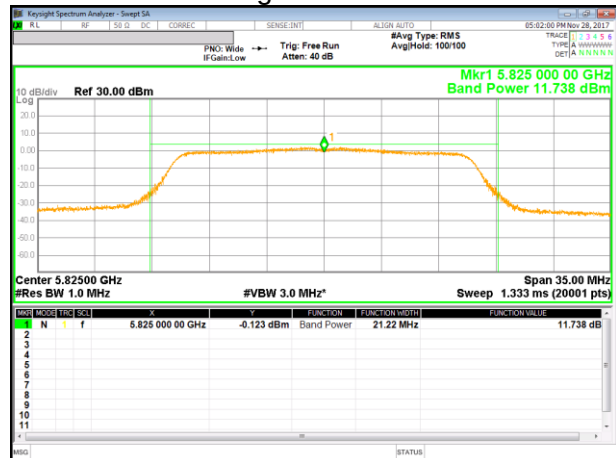
11n HT20 Mode Low Channel



11n HT20 Mode Middle Channel

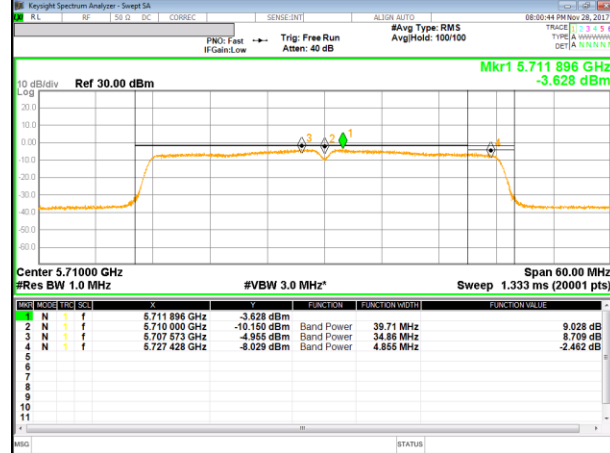


11n HT20 Mode High Channel



UNII 5.8 GHz IEEE 802.11n HT40 mode for POWER

11n HT40 Mode Straddle Channel



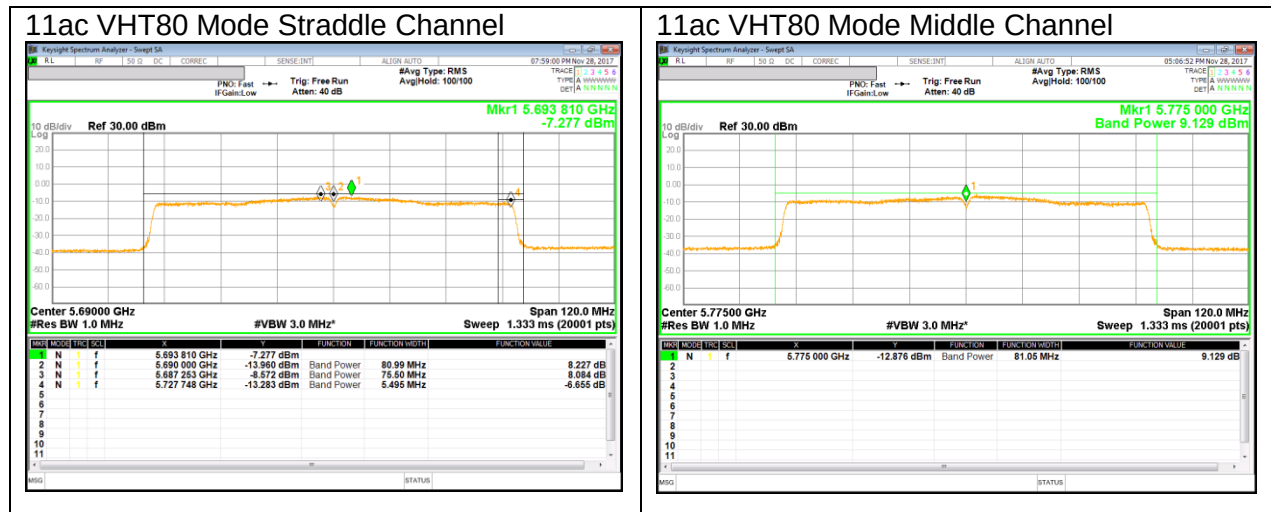
11n HT40 Mode Low Channel



11n HT40 Mode High Channel

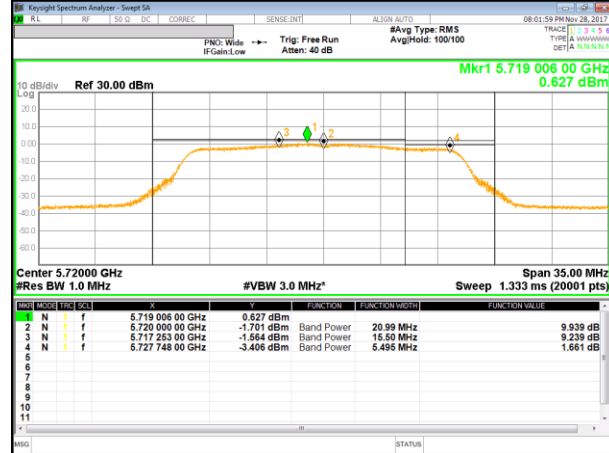


UNII 5.8 GHz IEEE 802.11ac VHT80 mode for POWER

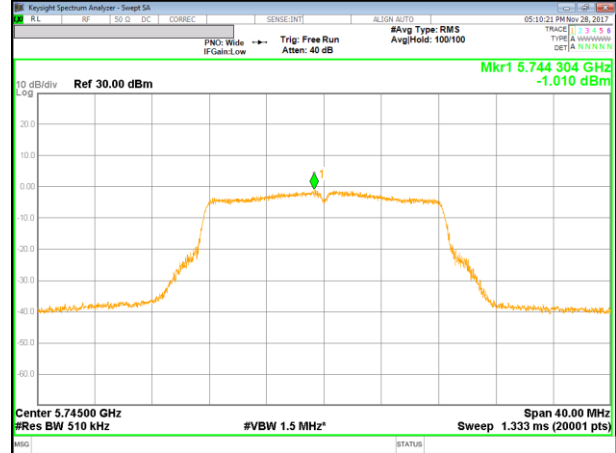


UNII 5.8 GHz IEEE 802.11a mode for PSD

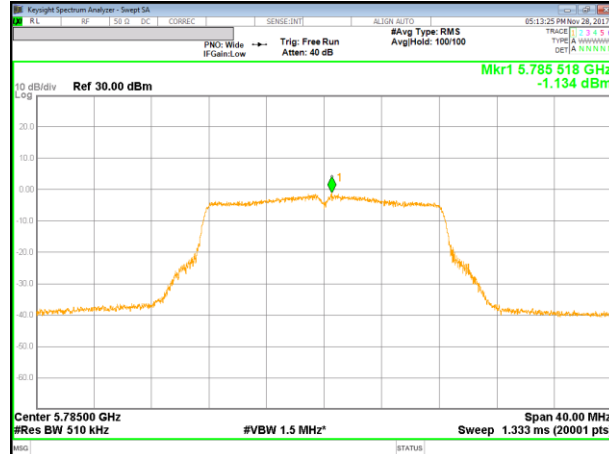
11a Mode Straddle Channel



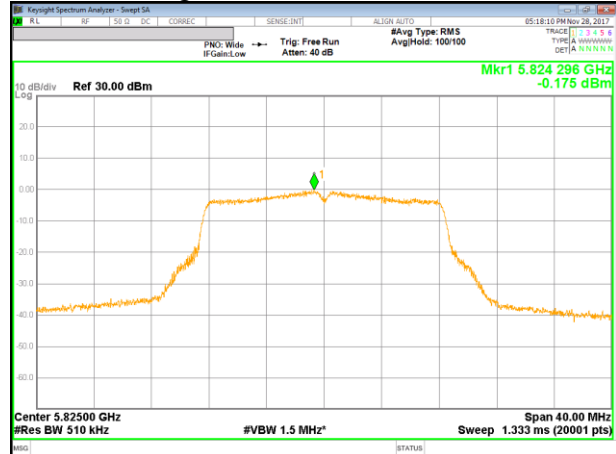
11a Mode Low Channel



11a Mode Middle Channel

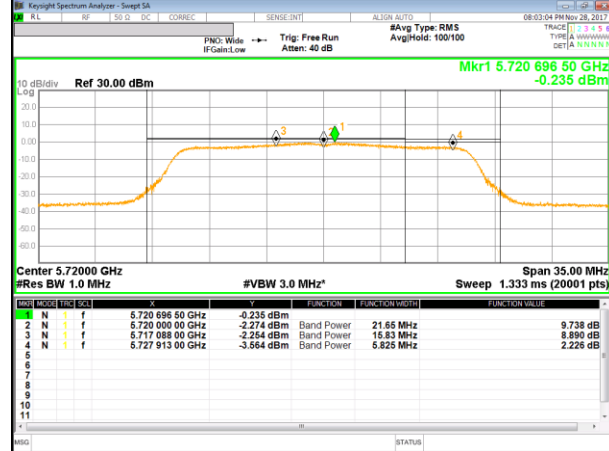


11a Mode High Channel

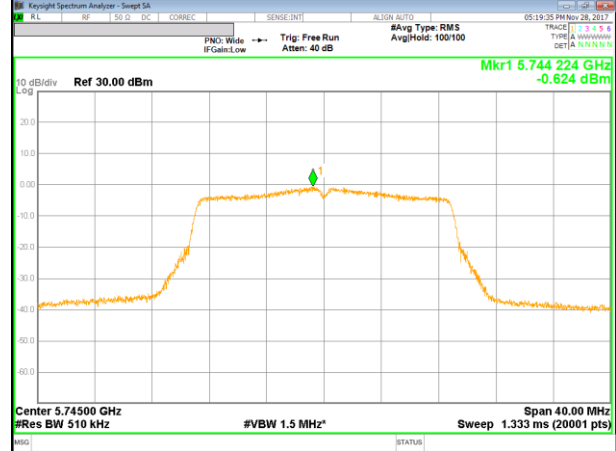


UNII 5.8 GHz IEEE 802.11n HT20 mode for PSD

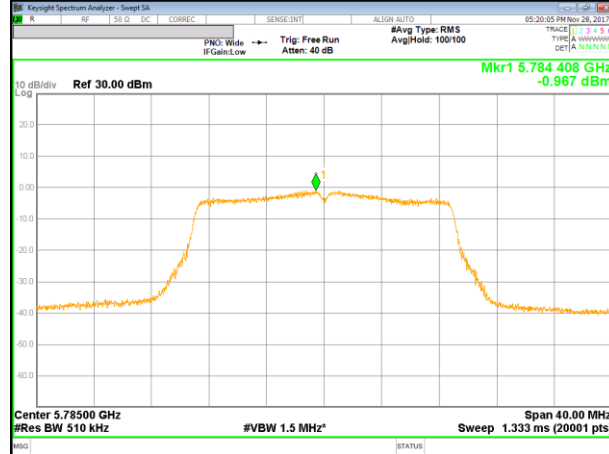
11n HT20 Mode Straddle Channel



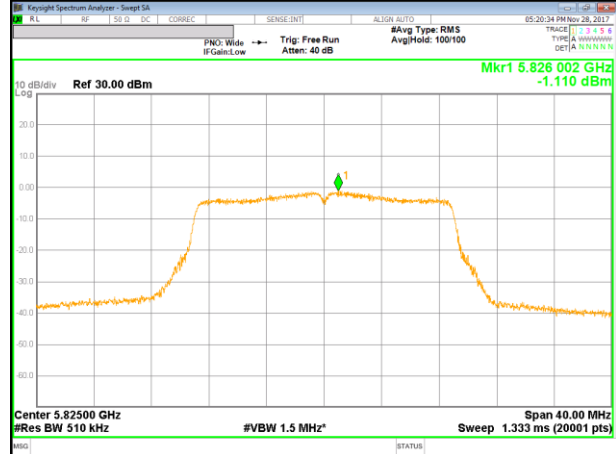
11n HT20 Mode Low Channel



11n HT20 Mode Middle Channel

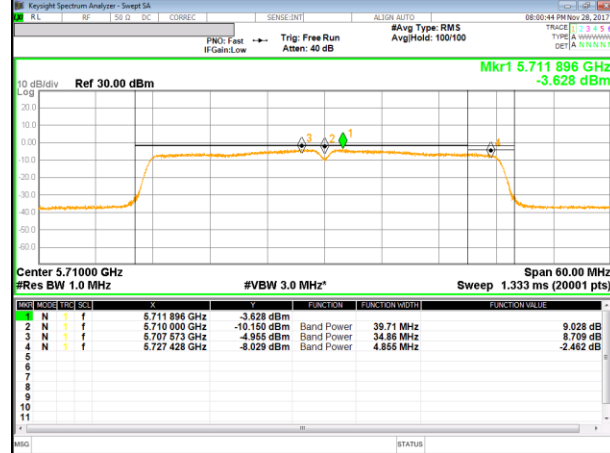


11n HT20 Mode High Channel

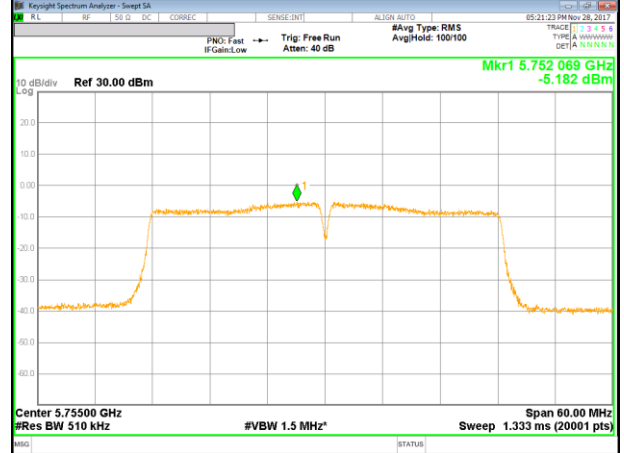


UNII 5.8 GHz IEEE 802.11n HT40 mode for PSD

11n HT40 Mode Straddle Channel



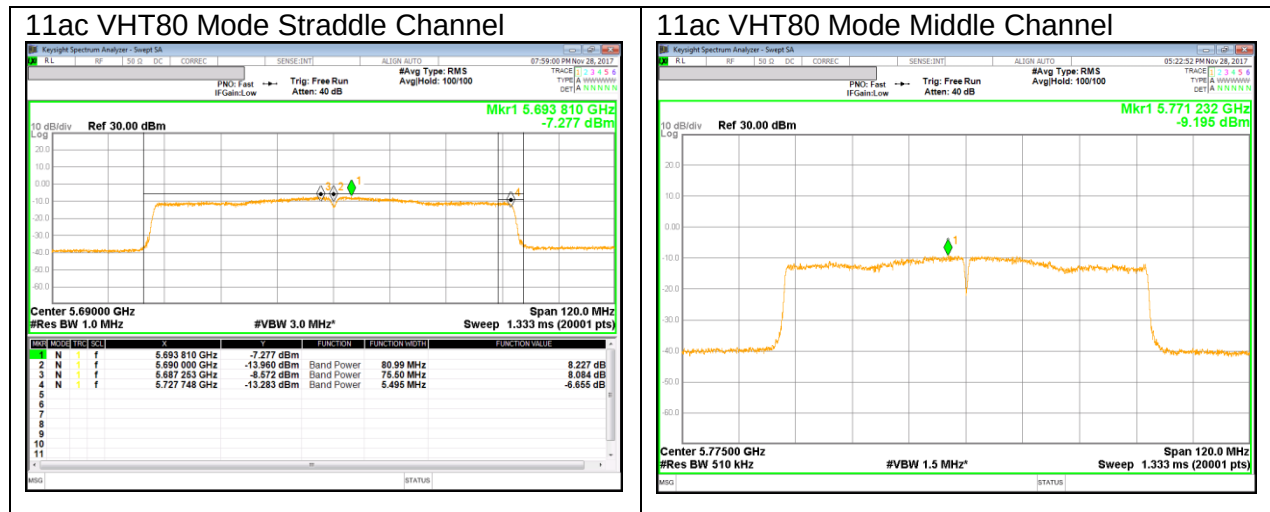
11n HT40 Mode Low Channel



11n HT40 Mode High Channel



UNII 5.8 GHz IEEE 802.11ac VHT80 mode for PSD



10. TRANSMITTER ABOVE 1 GHz

LIMITS

FCC §15.205 and §15.209

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

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

FCC §15.407 (b)

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

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
 - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
- (5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.
- (6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth

in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

(7) The provisions of §15.205 apply to intentional radiators operating under this section.

(8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

Note

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

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

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

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz and 150 cm for above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

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

Reference to KDB 789033 D02 v01r03 UNII part G) 6) c) Method AD:

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

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

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

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

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

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

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

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open area test site.

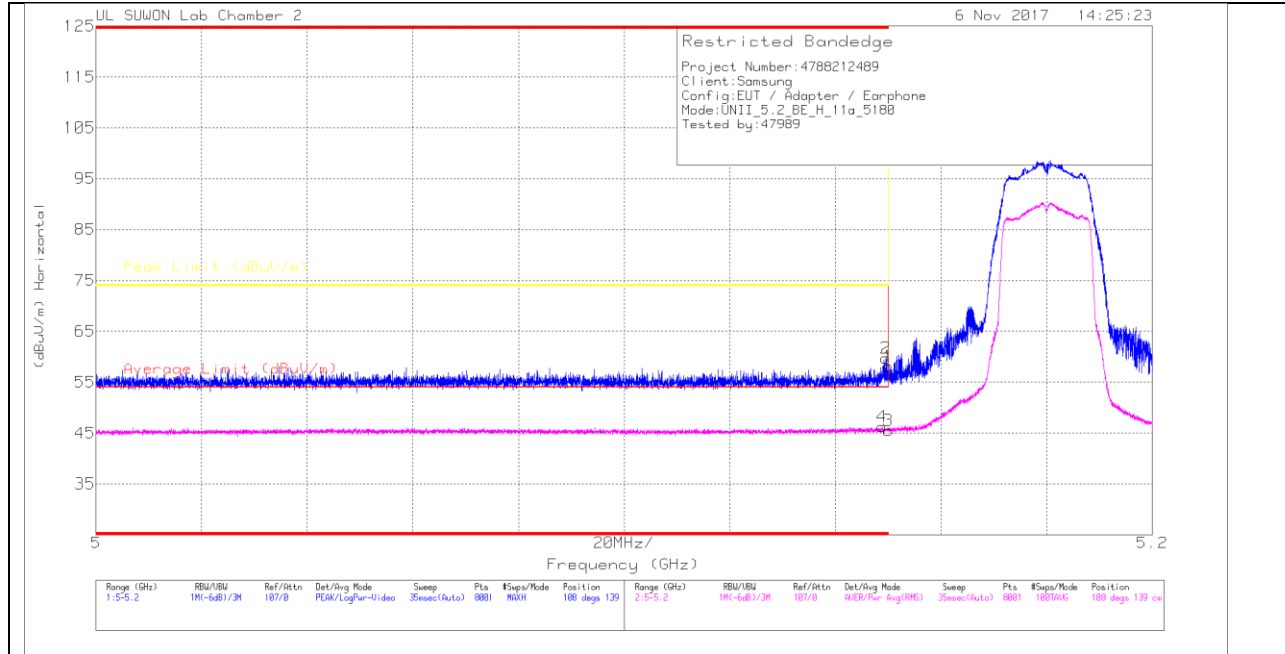
Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the one of tests made in an open field based on KDB 414788.

10.1. 5.2 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

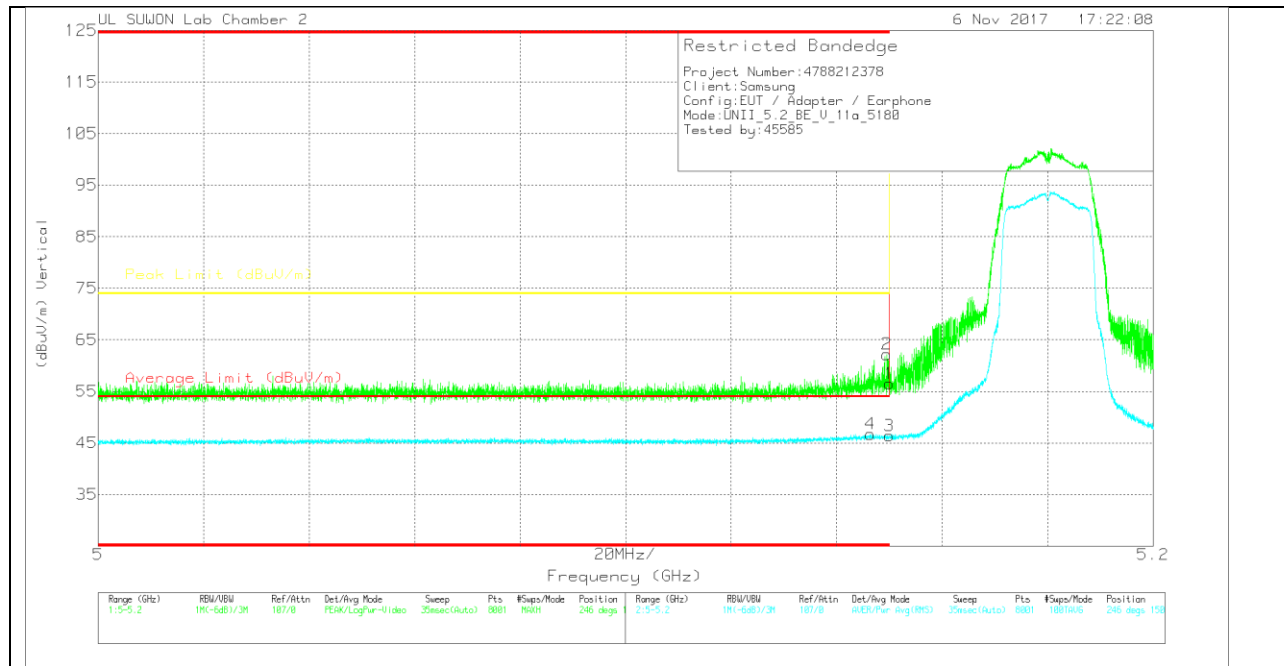
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	170531_3117 [00168724]	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.15	39.37	PK	34	-15.3	0	58.07	-	-	74	-15.93	108	139	H
2	* 5.15	40.98	PK	34	-15.3	0	59.68	-	-	74	-14.32	108	139	H
3	5.15	26.47	RMS	34	-15.3	.31	45.48	54	-8.52	-	-	108	139	H
4	* 5.149	27.22	RMS	34	-15.3	.31	46.23	54	-7.77	-	-	108	139	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	170531_3117 [00168724]	10dB[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	37.81	Pk	34	-15.3	0	56.51	-	-	74	-17.49	246	150	V
2	* 5.15	43.49	Pk	34	-15.3	0	62.19	-	-	74	-11.81	246	150	V
3	5.15	27.4	RMS	34	-15.3	.31	46.41	54	-7.59	-	-	246	150	V
4	* 5.146	27.71	RMS	34	-15.3	.31	46.72	54	-7.28	-	-	246	150	V

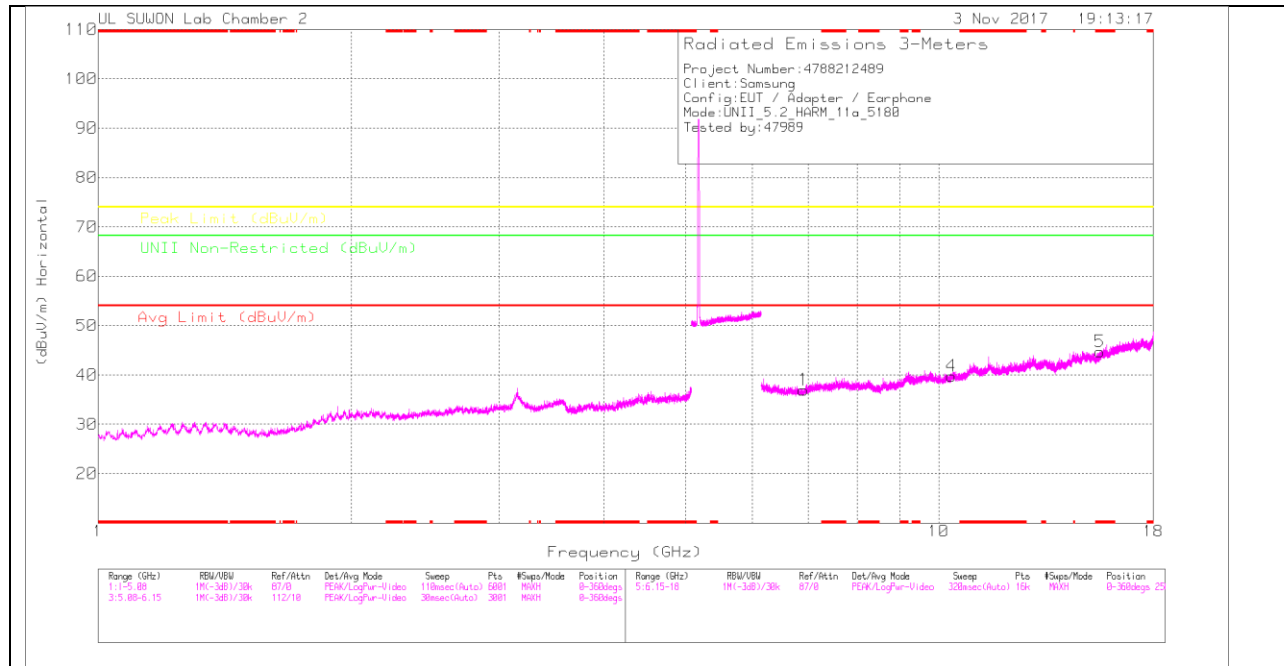
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

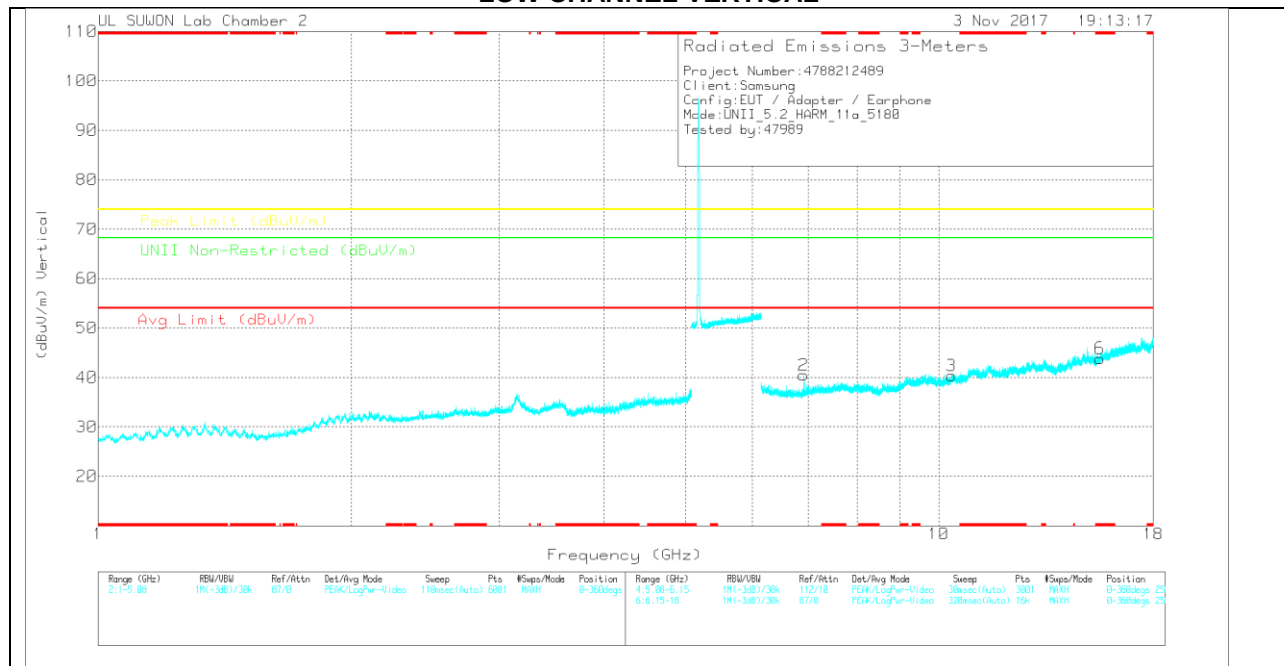
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	170531_31 17[001687 24]	6GHz_HP[d 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	6.906	23.25	PK	35.5	-21.8	0	36.95	-	-	-	-	68.2	-31.25	0-360	150	H
4	10.351	19.06	PK	37.5	-16.8	0	39.76	-	-	-	-	68.2	-28.44	0-360	150	H
5	* 15.538	19.31	PK	39.8	-14.4	0	44.71	-	-	74	-29.29	-	-	0-360	250	H
2	6.906	26.76	PK	35.5	-21.8	0	40.46	-	-	-	-	68.2	-27.74	0-360	250	V
3	10.356	19.63	PK	37.5	-16.8	0	40.33	-	-	-	-	68.2	-27.87	0-360	150	V
6	* 15.54	18.42	PK	39.8	-14.4	0	43.82	-	-	74	-30.18	-	-	0-360	250	V

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

PK – Peak Detector

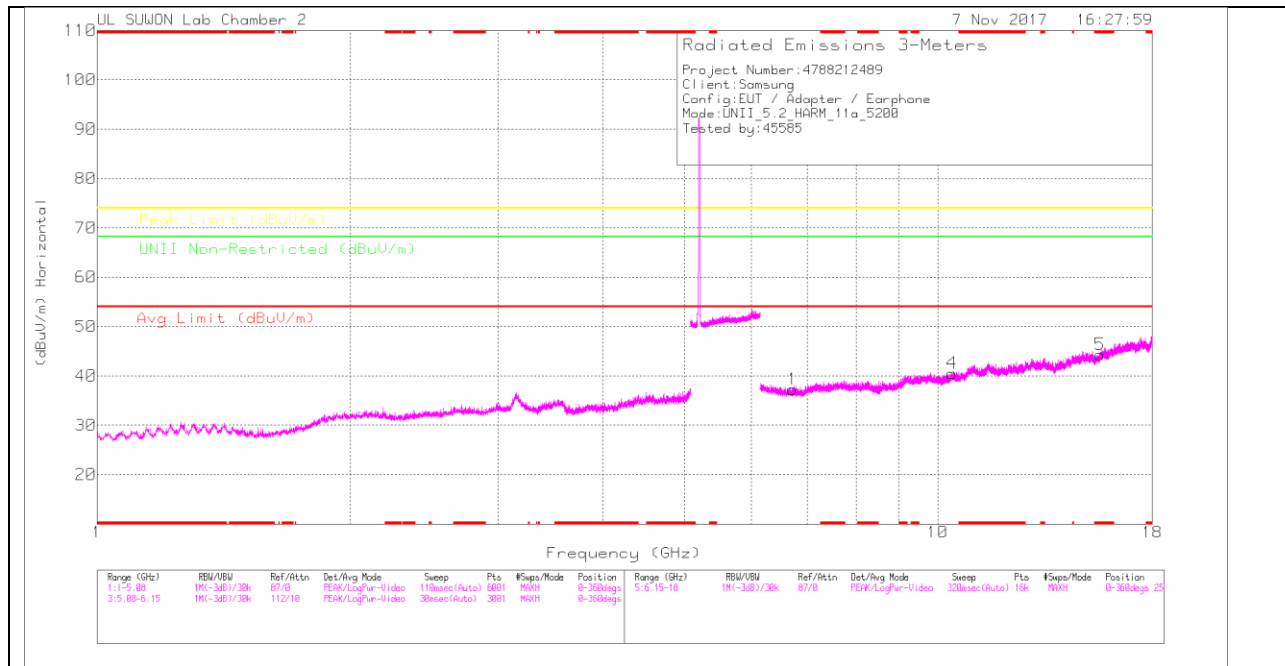
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	170531_3117 [00168724]	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
6.907	36.1	PK-U	35.5	-21.8	0	49.8	-	-	-	-	68.2	-18.4	277	210	V
6.906	34.71	PK-U	35.5	-21.8	0	48.41	-	-	-	-	68.2	-19.79	88	386	H

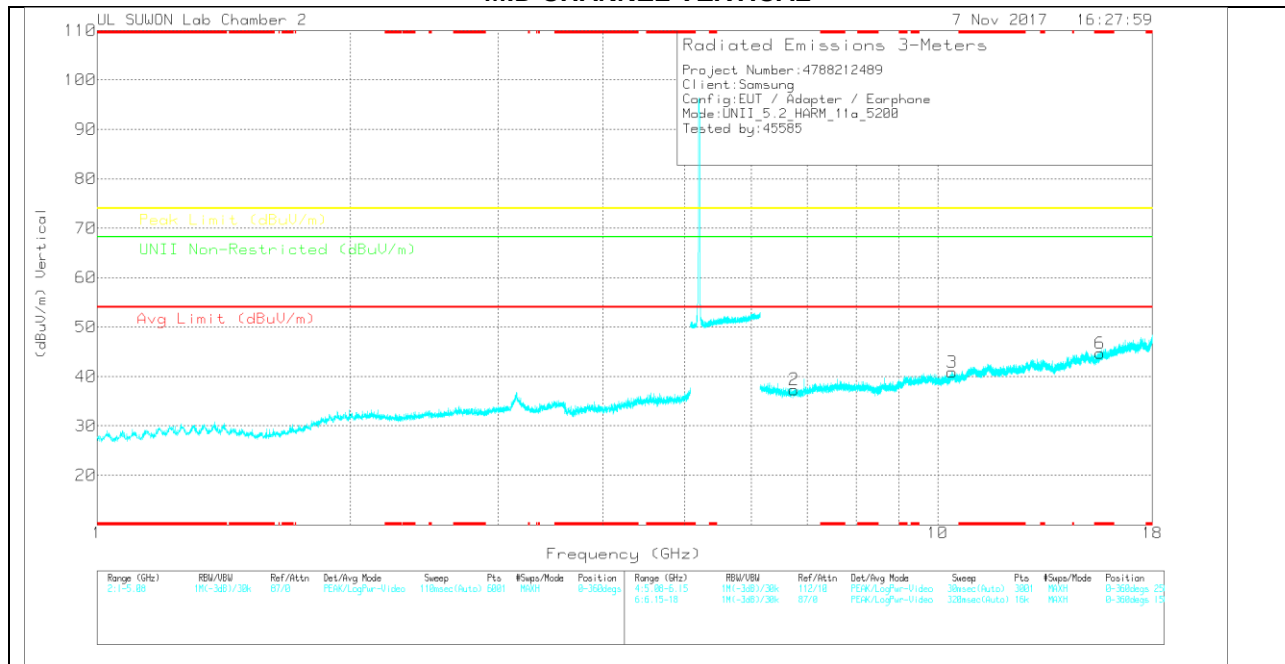
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

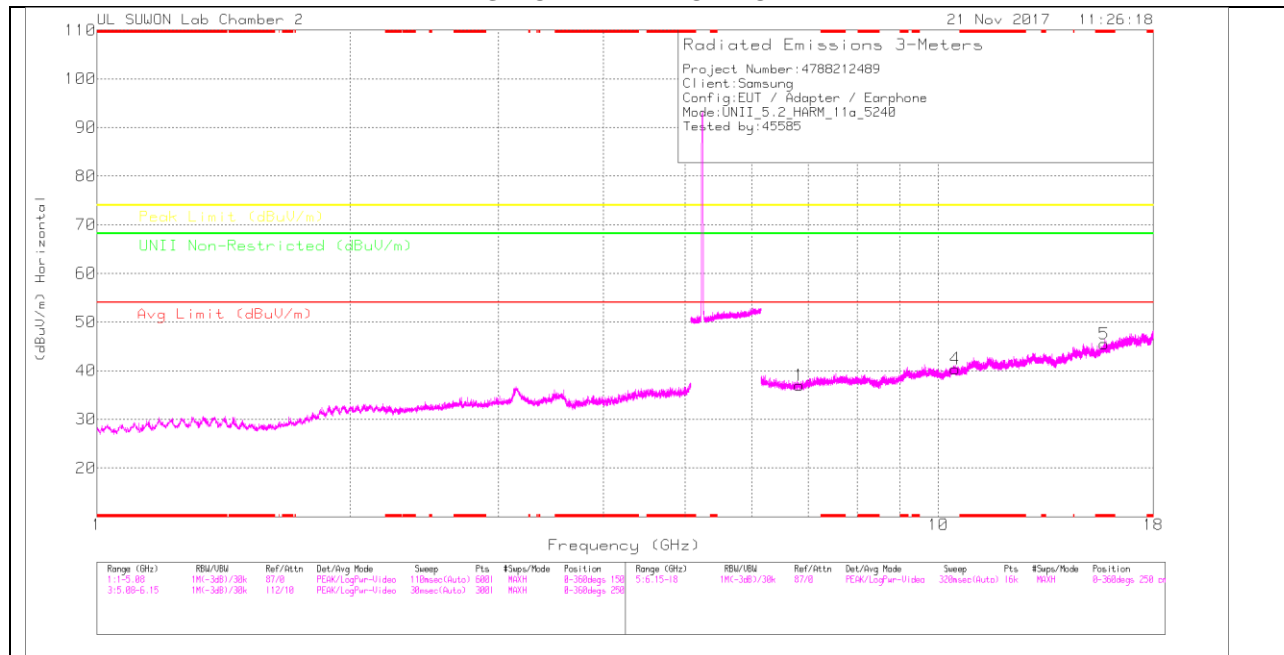
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	170531_31 171001687 24]	6GHz_HP[d 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	6.72	23.26	PK	35.2	-21.2	0	37.26	-	-	-	-	68.2	-30.94	0-360	250	H
4	10.401	19.44	PK	37.5	-16.4	0	40.54	-	-	-	-	68.2	-27.66	0-360	150	H
5	* 15.608	19.03	PK	39.8	-14.5	0	44.33	-	-	74	-29.67	-	-	0-360	250	H
2	6.746	23.42	PK	35.3	-21.4	0	37.32	-	-	-	-	68.2	-30.88	0-360	150	V
3	10.403	19.68	PK	37.5	-16.3	0	40.88	-	-	-	-	68.2	-27.32	0-360	250	V
6	* 15.604	19.39	PK	39.8	-14.5	0	44.69	-	-	74	-29.31	-	-	0-360	250	V

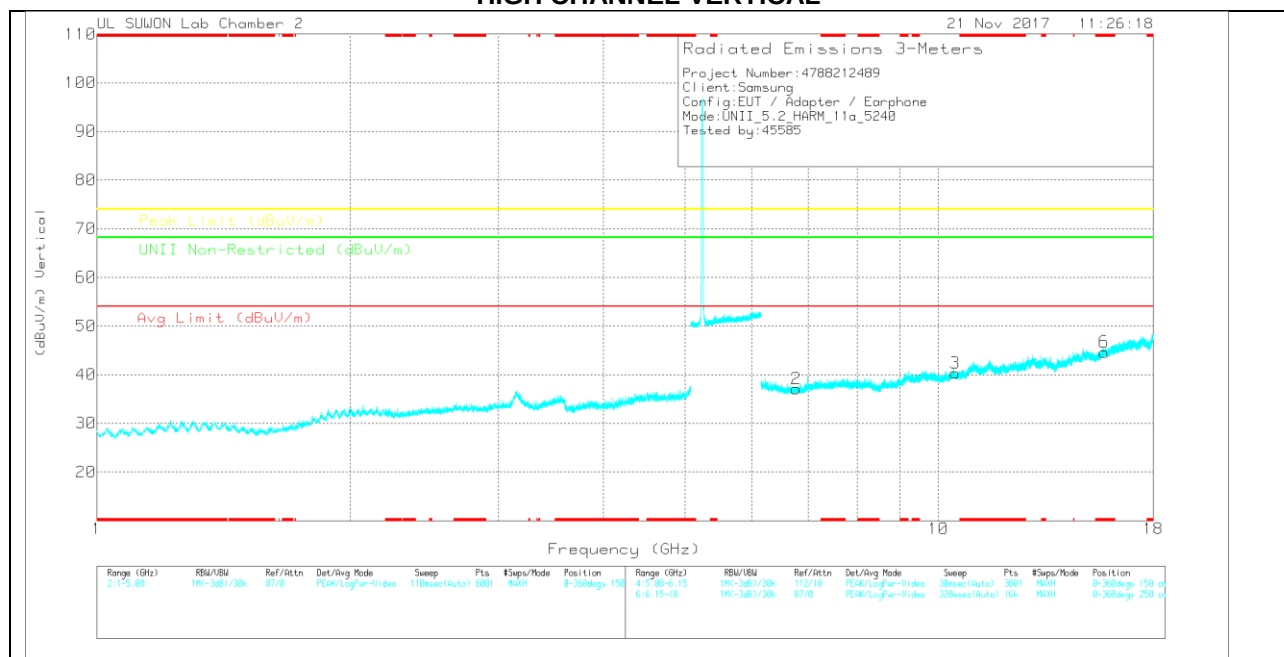
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak Detector

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

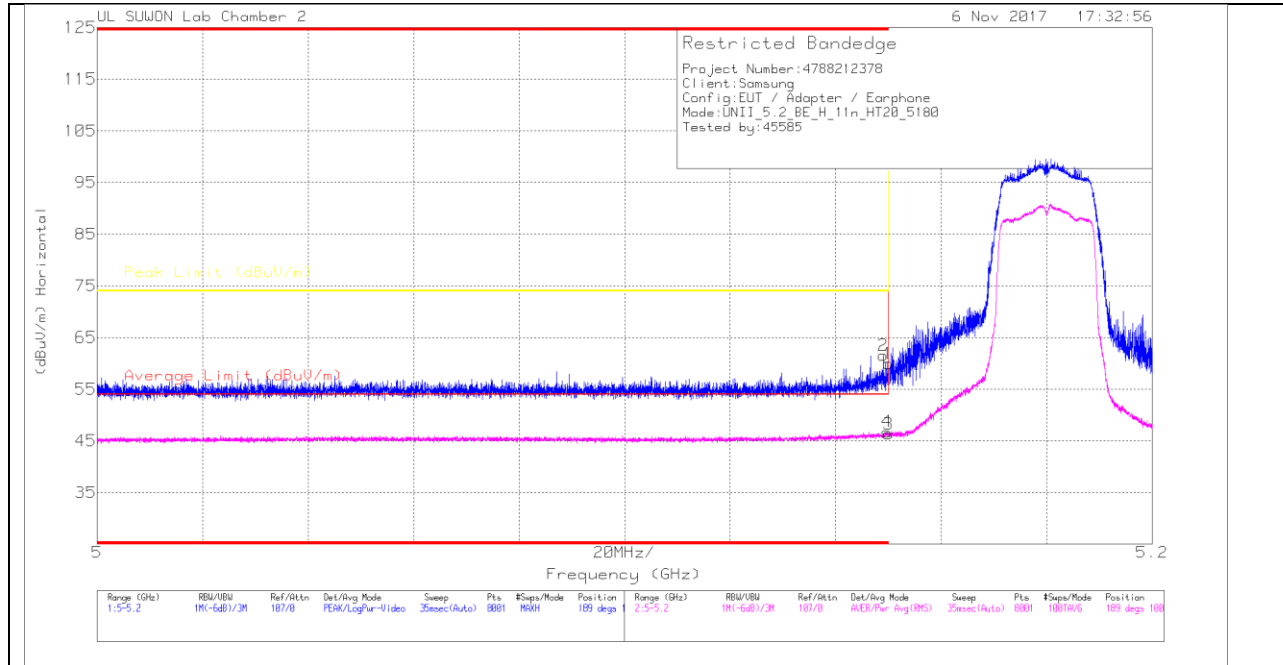
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	170531_31 1710011687 24]	6GHz_HP[d B]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	6.832	23.33	PK	35.4	-21.8	0	36.93	-	-	-	-	68.2	-31.27	0-360	150	H
4	10.474	19.29	PK	37.5	-16.4	0	40.39	-	-	-	-	68.2	-27.81	0-360	150	H
5	* 15.728	20.41	PK	40	-14.9	0	45.51	-	-	74	-28.49	-	-	0-360	250	H
2	6.774	23.35	PK	35.3	-21.5	0	37.15	-	-	-	-	68.2	-31.05	0-360	250	V
3	10.474	19.23	PK	37.5	-16.4	0	40.33	-	-	-	-	68.2	-27.87	0-360	250	V
6	* 15.726	19.46	PK	40	-14.8	0	44.66	-	-	74	-29.34	-	-	0-360	150	V

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

PK – Peak Detector

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

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

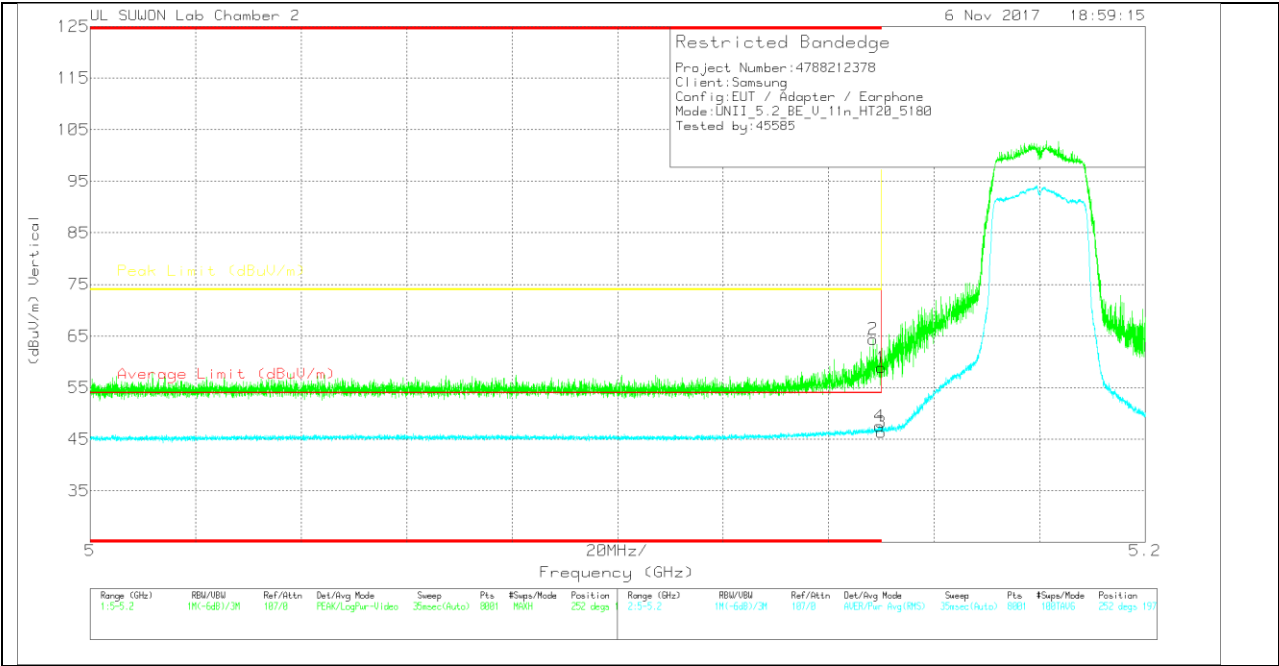
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	170531_3117 [00168724]	10dB(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.15	41.28	Pk	34	-15.3	0	59.98	-	-	74	-14.02	189	100	H
2	* 5.149	42.85	Pk	34	-15.3	0	61.55	-	-	74	-12.45	189	100	H
3	5.15	27.31	RMS	34	-15.3	.32	46.33	54	-7.67	-	-	189	100	H
4	* 5.15	27.75	RMS	34	-15.3	.32	46.77	54	-7.23	-	-	189	100	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	170531_3117 [00168724]	10dB[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	40.15	Pk	34	-15.3	0	58.85	-	-	74	-15.15	252	197	V
2	* 5.148	45.7	Pk	34	-15.3	0	64.4	-	-	74	-9.6	252	197	V
3	5.15	27.32	RMS	34	-15.3	.32	46.34	54	-7.66	-	-	252	197	V
4	* 5.15	28.53	RMS	34	-15.3	.32	47.55	54	-6.45	-	-	252	197	V

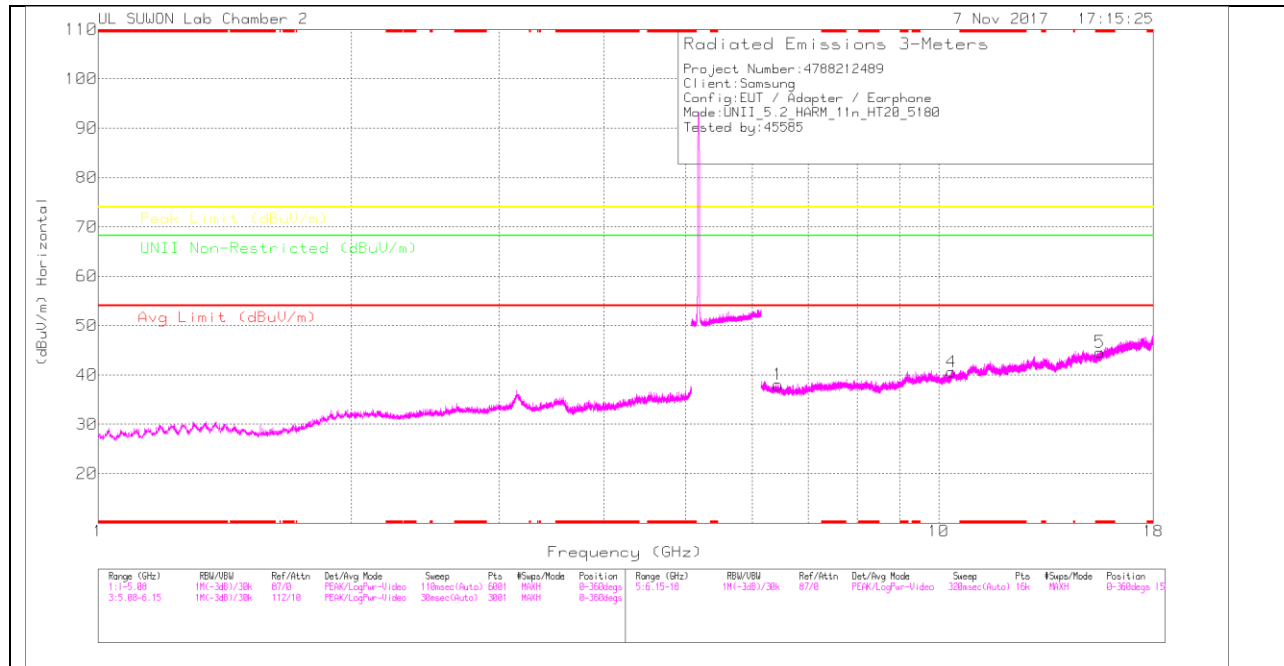
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

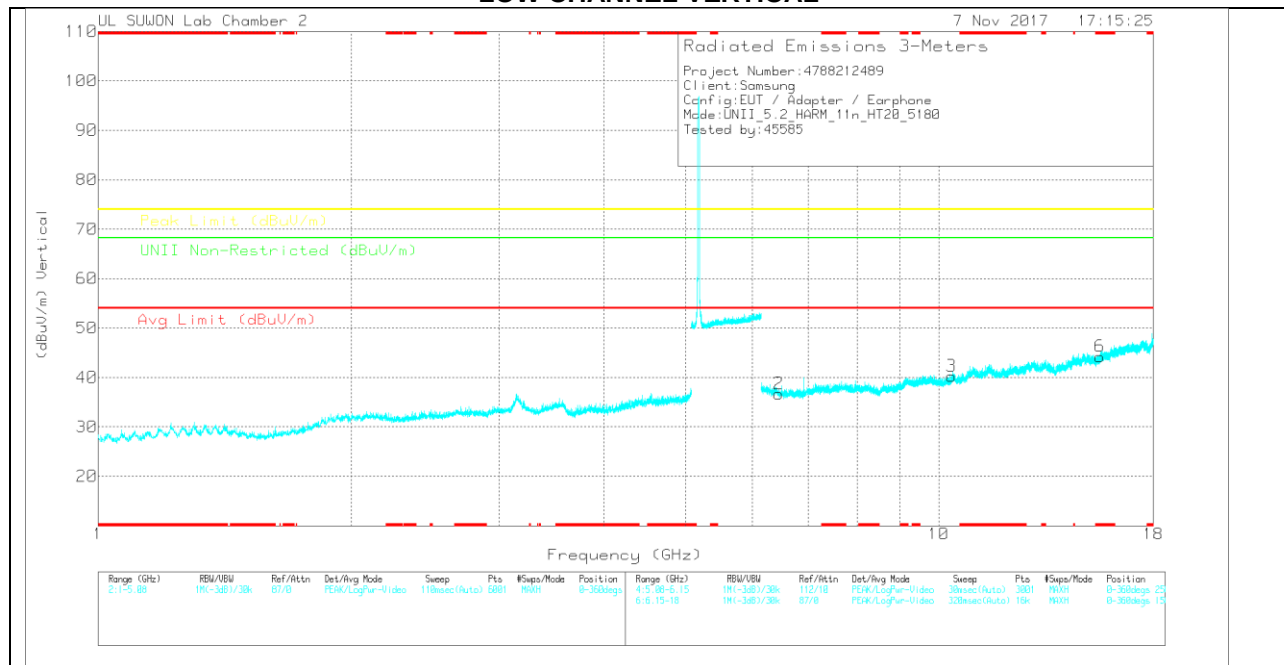
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

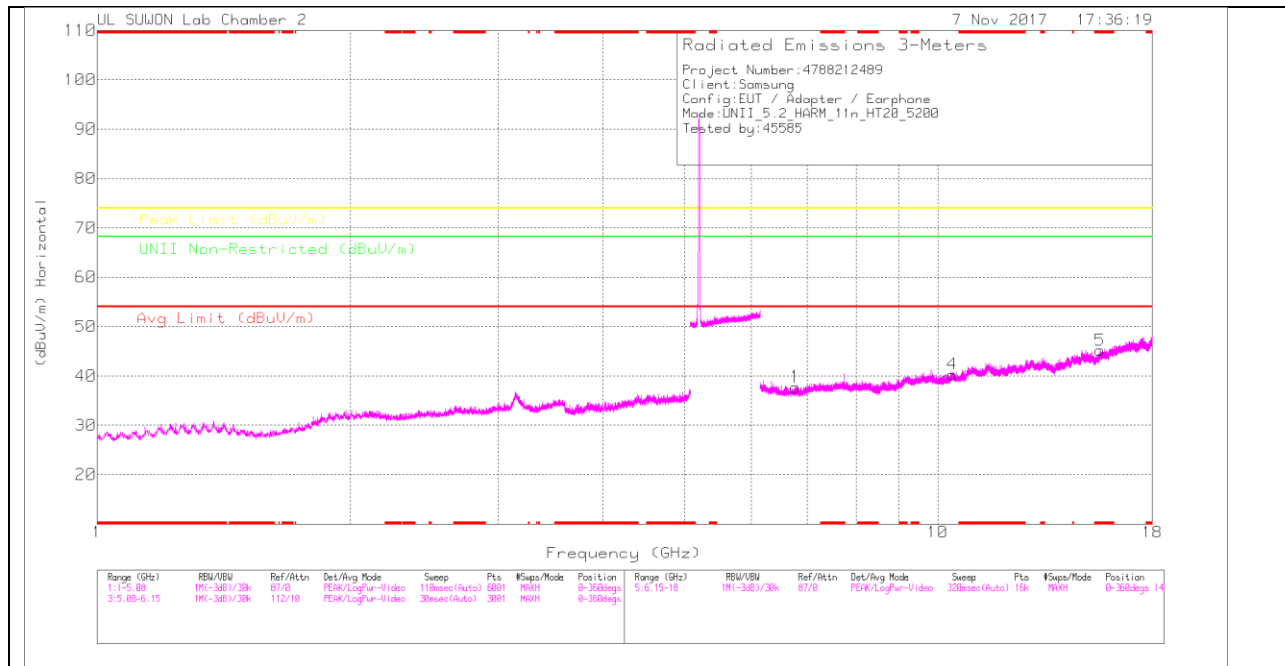
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	170531_31 171001687 24]	6GHz_HP[d 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	6.441	24.52	PK	35.1	-21.6	0	38.02	-	-	-	-	68.2	-30.18	0-360	150	H
4	10.356	19.9	PK	37.5	-16.8	0	40.6	-	-	-	-	68.2	-27.6	0-360	250	H
5	* 15.54	19.19	PK	39.8	-14.4	0	44.59	-	-	74	-29.41	-	-	0-360	150	H
2	6.456	23.41	PK	35.1	-21.8	0	36.71	-	-	-	-	68.2	-31.49	0-360	150	V
3	10.36	19.48	PK	37.5	-16.7	0	40.28	-	-	-	-	68.2	-27.92	0-360	250	V
6	* 15.538	18.84	PK	39.8	-14.4	0	44.24	-	-	74	-29.76	-	-	0-360	250	V

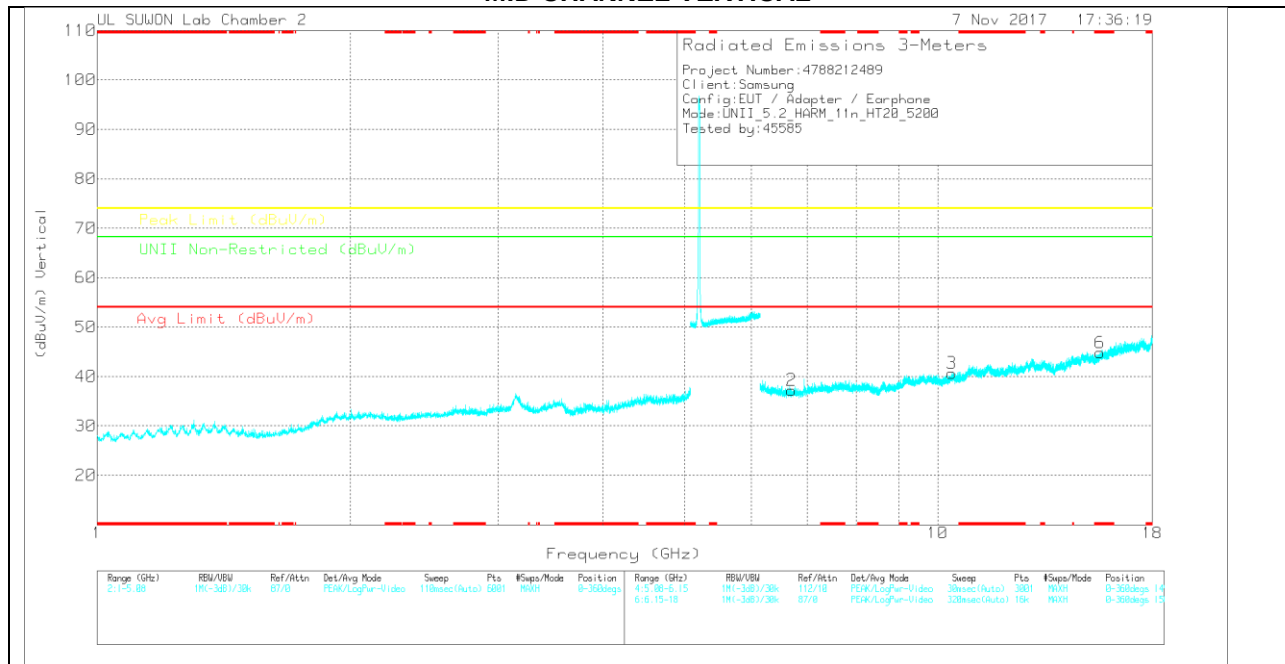
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak Detector

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

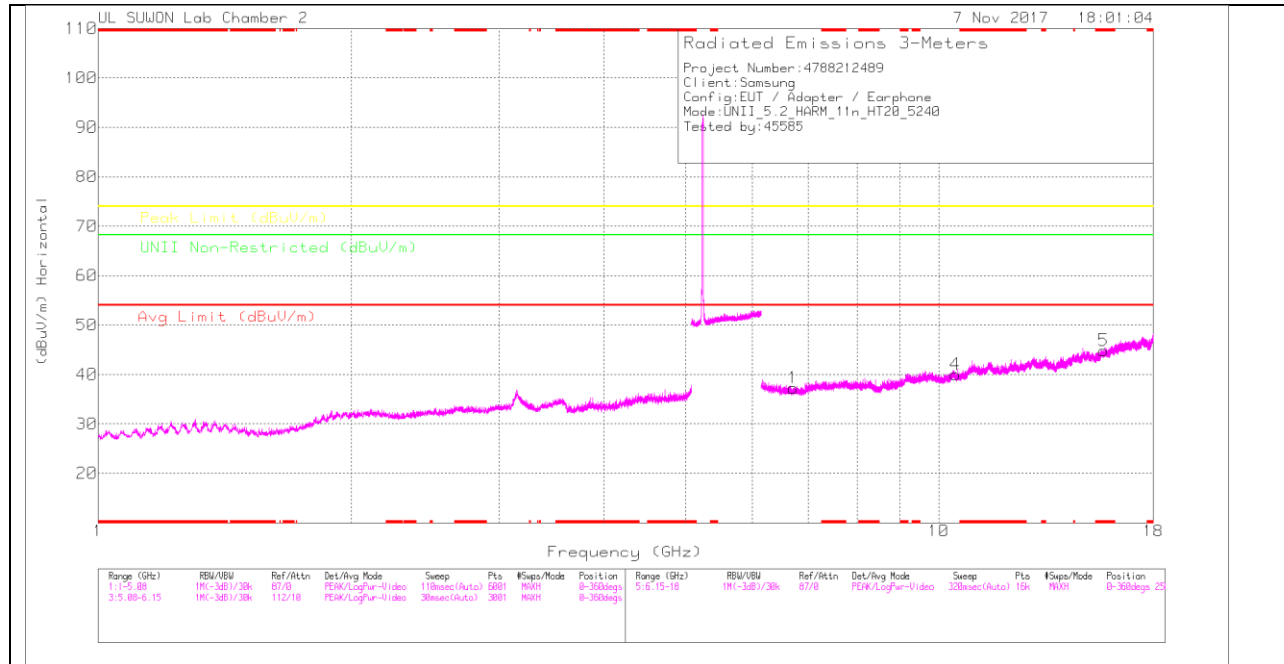
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	170531_31 17[001687 24]	6GHz_HP[d 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	6.771	23.92	PK	35.3	-21.5	0	37.72	-	-	-	-	68.2	-30.48	0-360	149	H
4	10.405	19.09	PK	37.5	-16.3	0	40.29	-	-	-	-	68.2	-27.91	0-360	149	H
5	* 15.609	19.97	PK	39.8	-14.6	0	45.17	-	-	74	-28.83	-	-	0-360	250	H
2	6.701	23.2	PK	35.2	-21.2	0	37.2	-	-	-	-	68.2	-31	0-360	150	V
3	10.393	19.55	PK	37.5	-16.4	0	40.65	-	-	-	-	68.2	-27.55	0-360	250	V
6	* 15.607	19.48	PK	39.8	-14.5	0	44.78	-	-	74	-29.22	-	-	0-360	150	V

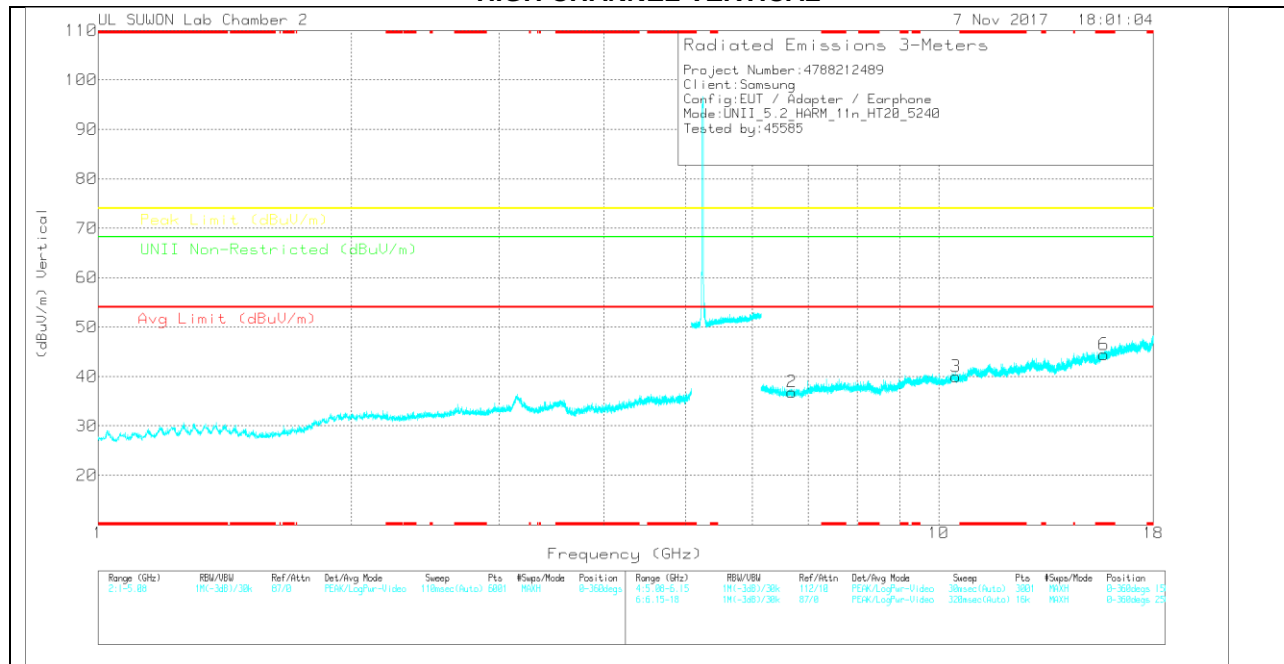
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak Detector

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

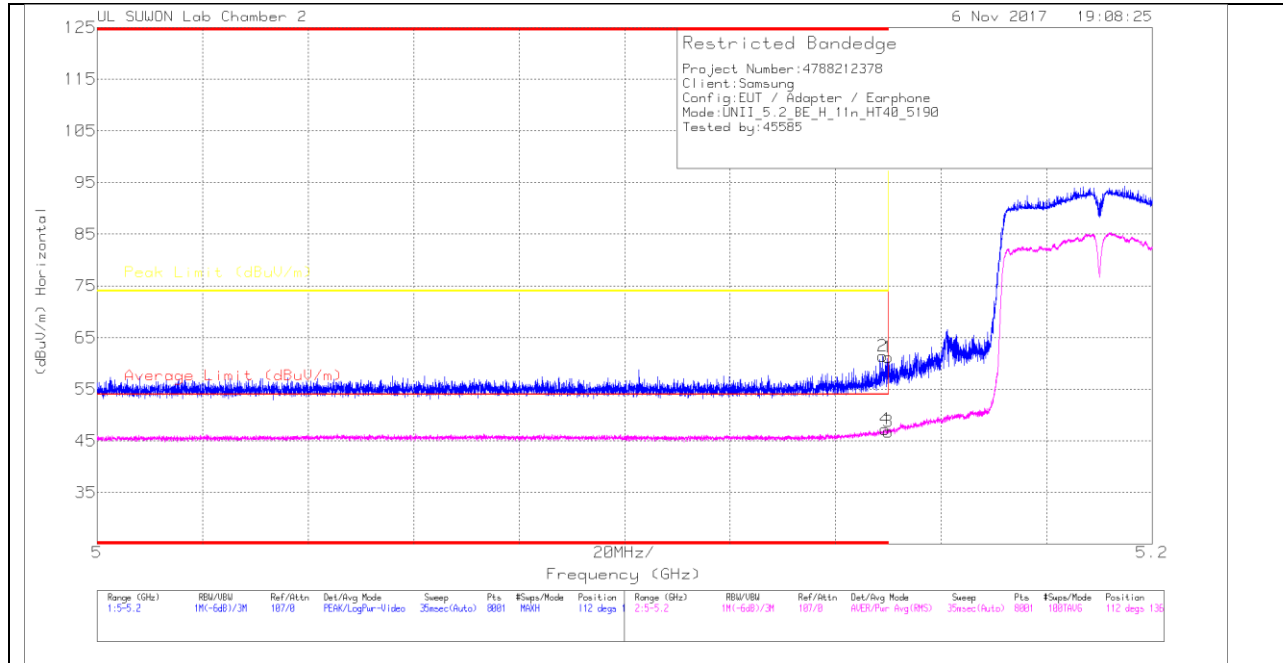
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	170531_31 171001687 24]	6GHz_HPI[d B]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	6.709	23.25	PK	35.2	-21.2	0	37.25	-	-	-	-	68.2	-30.95	0-360	250	H
4	10.472	18.9	PK	37.5	-16.4	0	40	-	-	-	-	68.2	-28.2	0-360	150	H
5	* 15.718	19.84	PK	39.9	-14.9	0	44.84	-	-	74	-29.16	-	-	0-360	250	H
2	6.685	23.06	PK	35.2	-21.4	0	36.86	-	-	-	-	68.2	-31.34	0-360	250	V
3	10.476	18.9	PK	37.5	-16.4	0	40	-	-	-	-	68.2	-28.2	0-360	150	V
6	* 15.724	19.35	PK	39.9	-14.8	0	44.45	-	-	74	-29.55	-	-	0-360	250	V

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

PK – Peak Detector

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

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

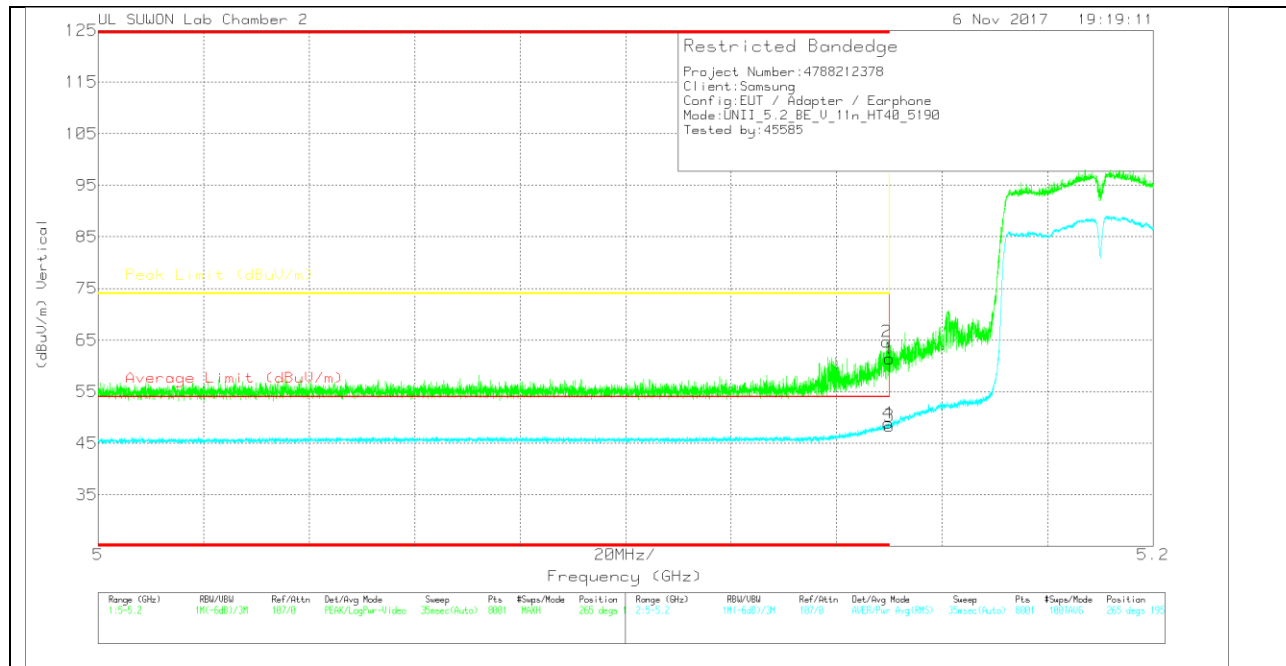
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB_ATT(d B)_170809	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.15	42.47	Pk	34	-15.3	0	61.17	-	-	74	-12.83	112	136	H
2	* 5.149	42.7	Pk	34	-15.3	0	61.4	-	-	74	-12.6	112	136	H
3	5.15	27.46	RMS	34	-15.3	.62	46.78	54	-7.22	-	-	112	136	H
4	* 5.149	27.96	RMS	34	-15.3	.62	47.28	54	-6.72	-	-	112	136	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB_ATT(d B)_170809	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.15	42.69	Pk	34	-15.3	0	61.39	-	-	74	-12.61	265	195	V
2	* 5.149	45.98	Pk	34	-15.3	0	64.68	-	-	74	-9.32	265	195	V
3	5.15	29.01	RMS	34	-15.3	.62	48.33	54	-5.67	-	-	265	195	V
4	* 5.15	29.57	RMS	34	-15.3	.62	48.89	54	-5.11	-	-	265	195	V

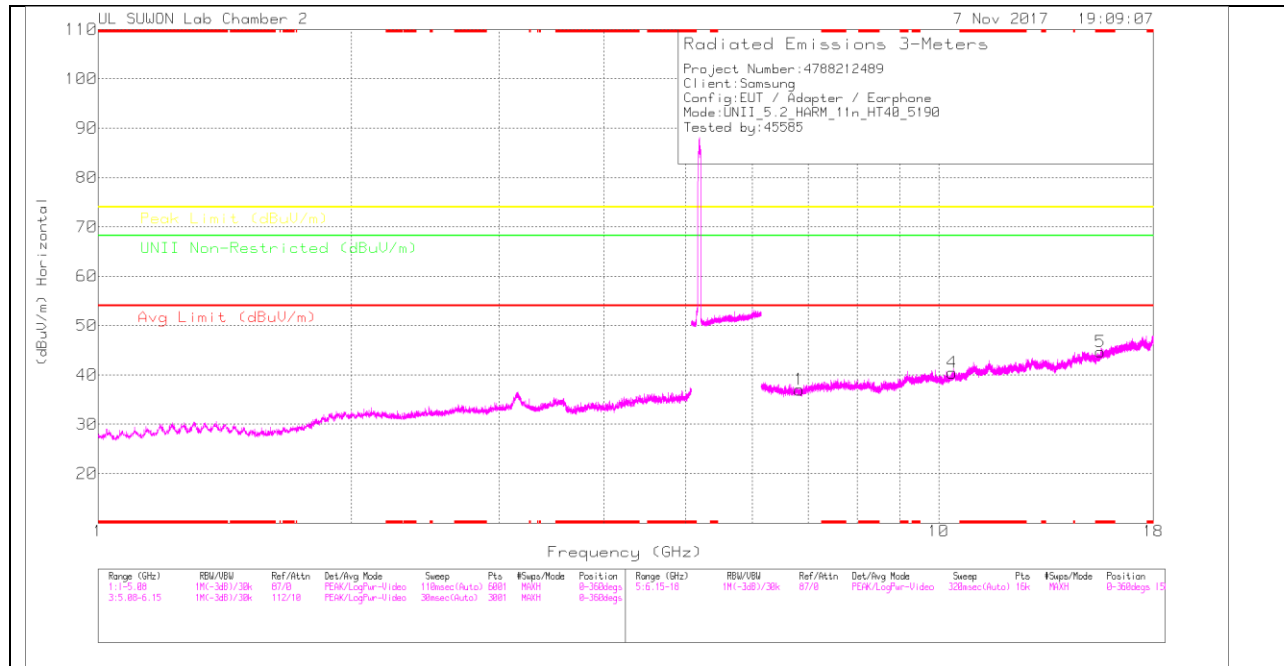
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

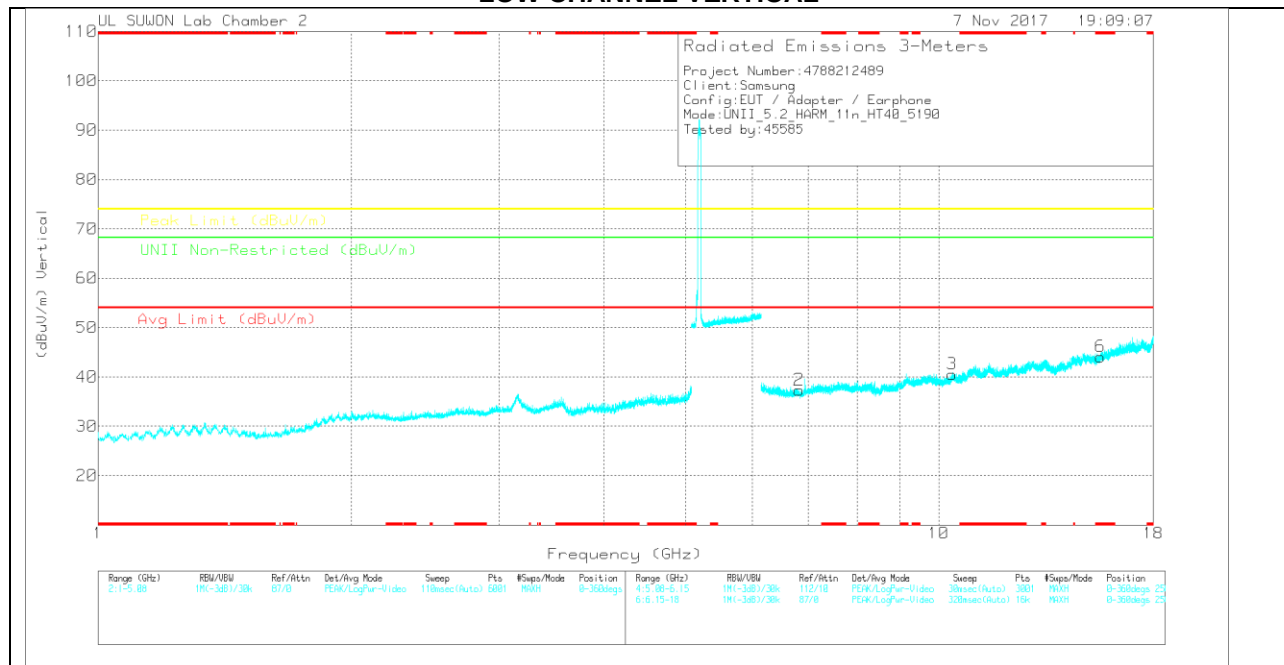
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

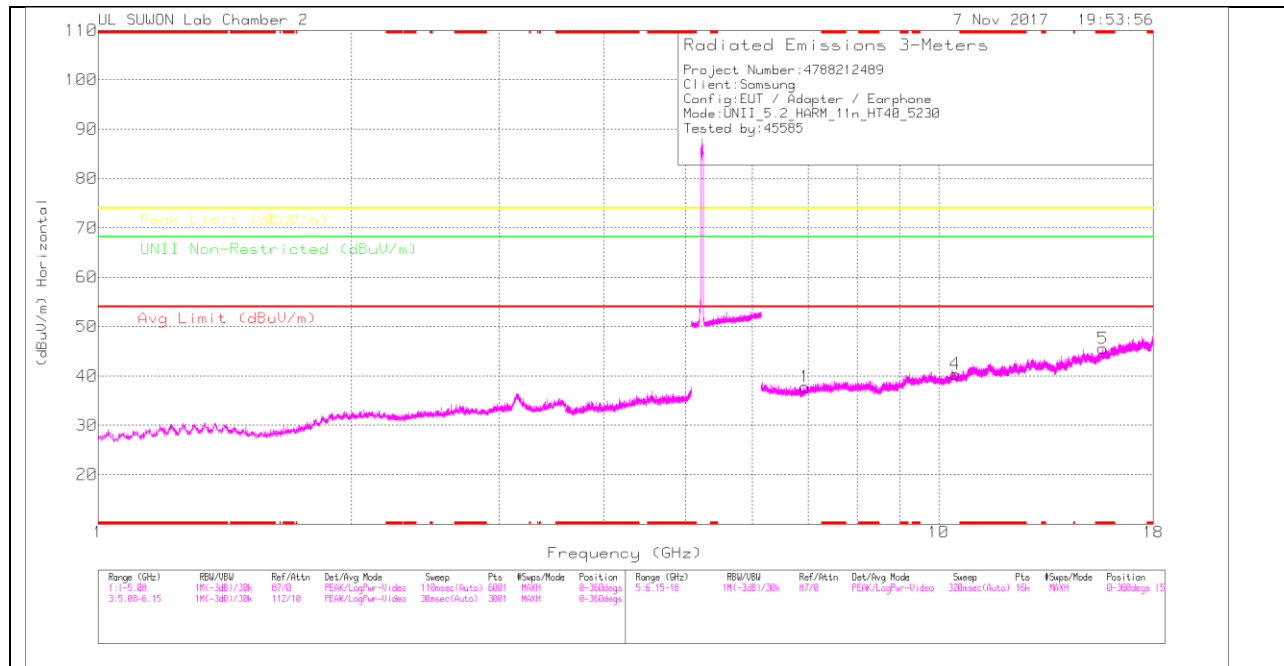
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	170531_31 171001687 24]	6GHz_HP[d 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	6.826	23.41	PK	35.4	-21.8	0	37.01	-	-	-	-	68.2	-31.19	0-360	150	H
4	10.371	19.54	PK	37.5	-16.6	0	40.44	-	-	-	-	68.2	-27.76	0-360	150	H
5	* 15.57	19.49	PK	39.8	-14.6	0	44.69	-	-	74	-29.31	-	-	0-360	250	H
2	6.823	23.86	PK	35.3	-21.8	0	37.36	-	-	-	-	68.2	-30.84	0-360	150	V
3	10.374	19.65	PK	37.5	-16.6	0	40.55	-	-	-	-	68.2	-27.65	0-360	250	V
6	* 15.573	18.91	PK	39.8	-14.6	0	44.11	-	-	74	-29.89	-	-	0-360	250	V

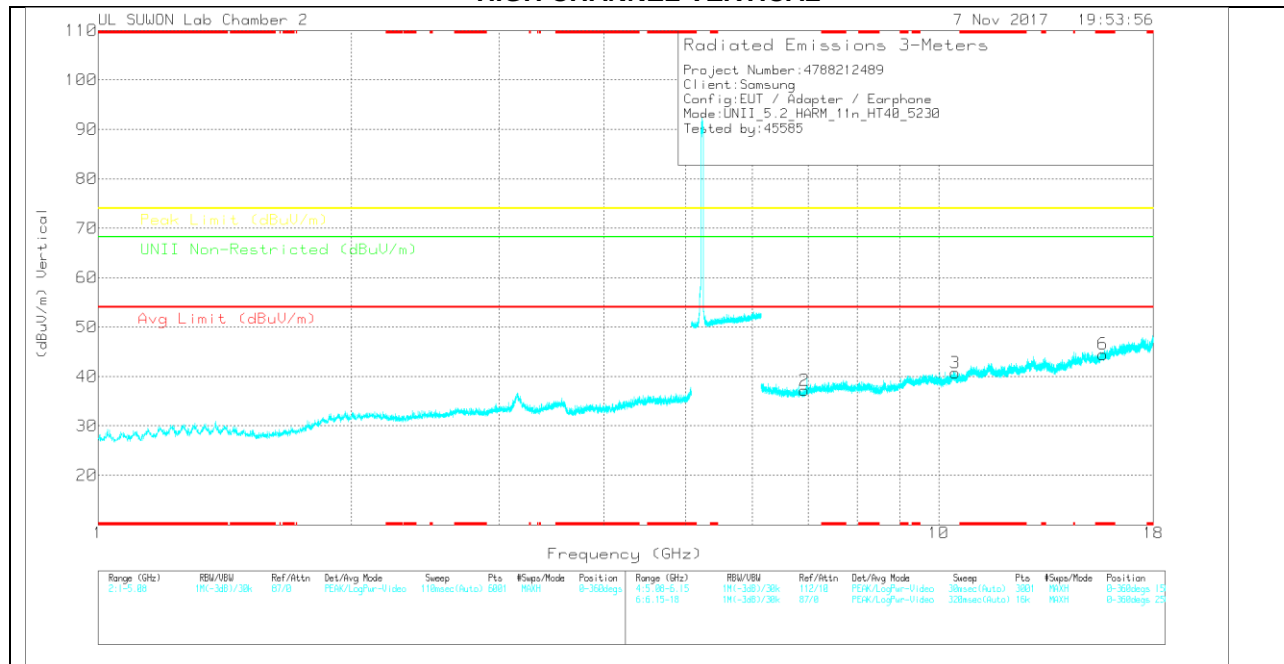
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak Detector

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

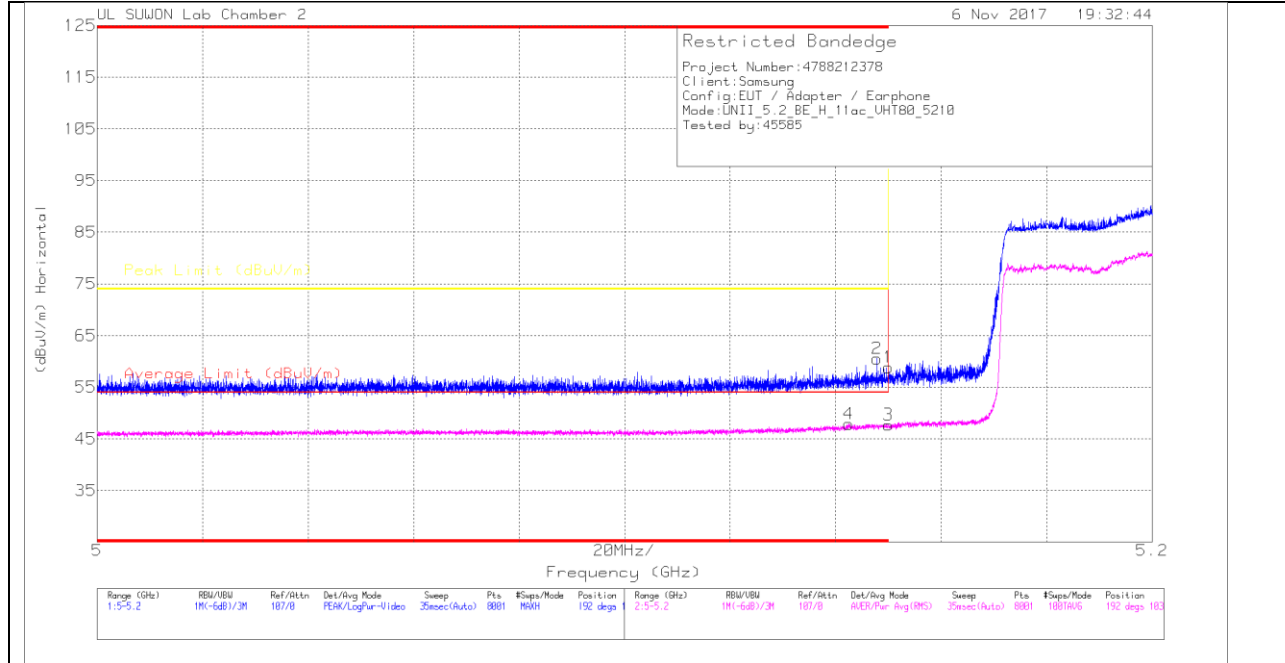
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	170531_31 171001687 241	6GHz_HPI[d B]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	6.934	23.57	PK	35.5	-21.3	0	37.77	-	-	-	-	68.2	-30.43	0-360	150	H
4	10.461	19.2	PK	37.5	-16.3	0	40.4	-	-	-	-	68.2	-27.8	0-360	150	H
5	* 15.687	20.38	PK	39.9	-14.7	0	45.58	-	-	74	-28.42	-	-	0-360	250	H
2	6.924	23.16	PK	35.5	-21.5	0	37.16	-	-	-	-	68.2	-31.04	0-360	250	V
3	10.465	19.51	PK	37.5	-16.3	0	40.71	-	-	-	-	68.2	-27.49	0-360	250	V
6	* 15.689	19.29	PK	39.9	-14.7	0	44.49	-	-	74	-29.51	-	-	0-360	250	V

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

PK – Peak Detector

10.1.4.TX ABOVE 1GHz 802.11ac VHT80 MODE IN THE 5.2GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

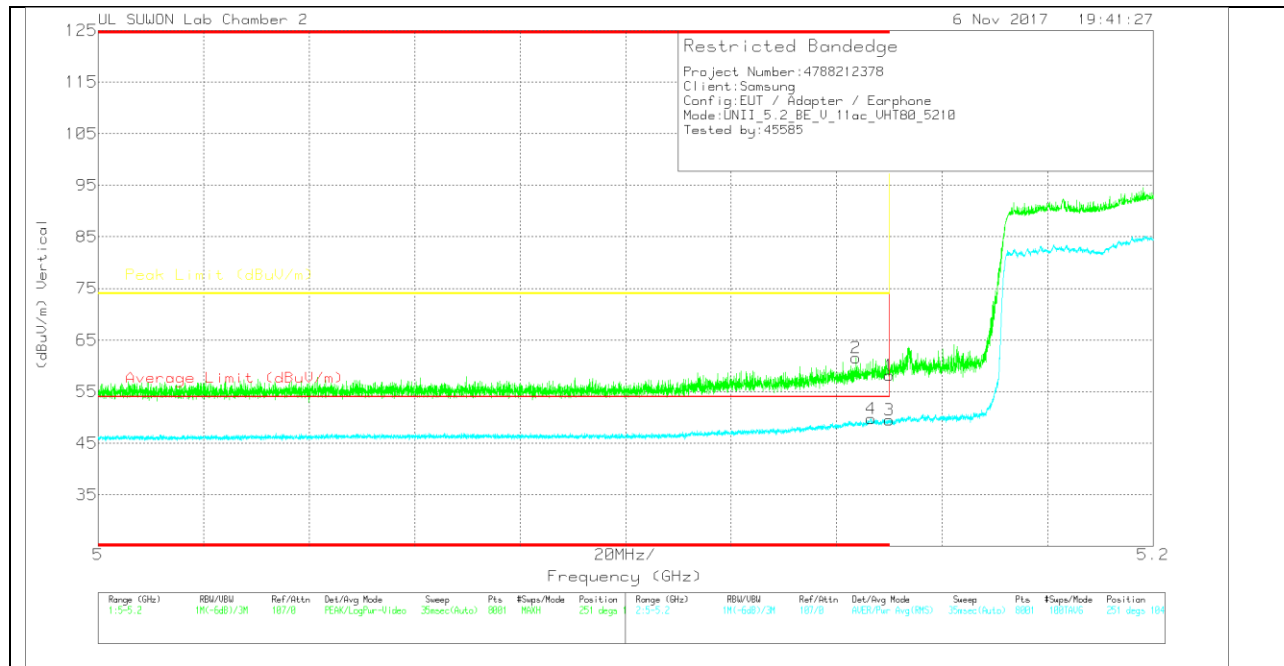
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB_ATT(d B)_170809	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.15	40.13	Pk	34	-15.3	0	58.83	-	-	74	-15.17	192	103	H
2	* 5.148	41.84	Pk	34	-15.3	0	60.54	-	-	74	-13.46	192	103	H
3	5.15	27.85	RMS	34	-15.3	1.16	47.71	54	-6.29	-	-	192	103	H
4	* 5.142	28.03	RMS	34	-15.3	1.16	47.89	54	-6.11	-	-	192	103	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB_ATT(dB)_170809	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	39.43	Pk	34	-15.3	0	58.13	-	-	74	-15.87	251	104	V
2	* 5.144	42.87	Pk	34	-15.3	0	61.57	-	-	74	-12.43	251	104	V
3	5.15	29.66	RMS	34	-15.3	1.16	49.52	54	-4.48	-	-	251	104	V
4	* 5.147	29.89	RMS	34	-15.3	1.16	49.75	54	-4.25	-	-	251	104	V

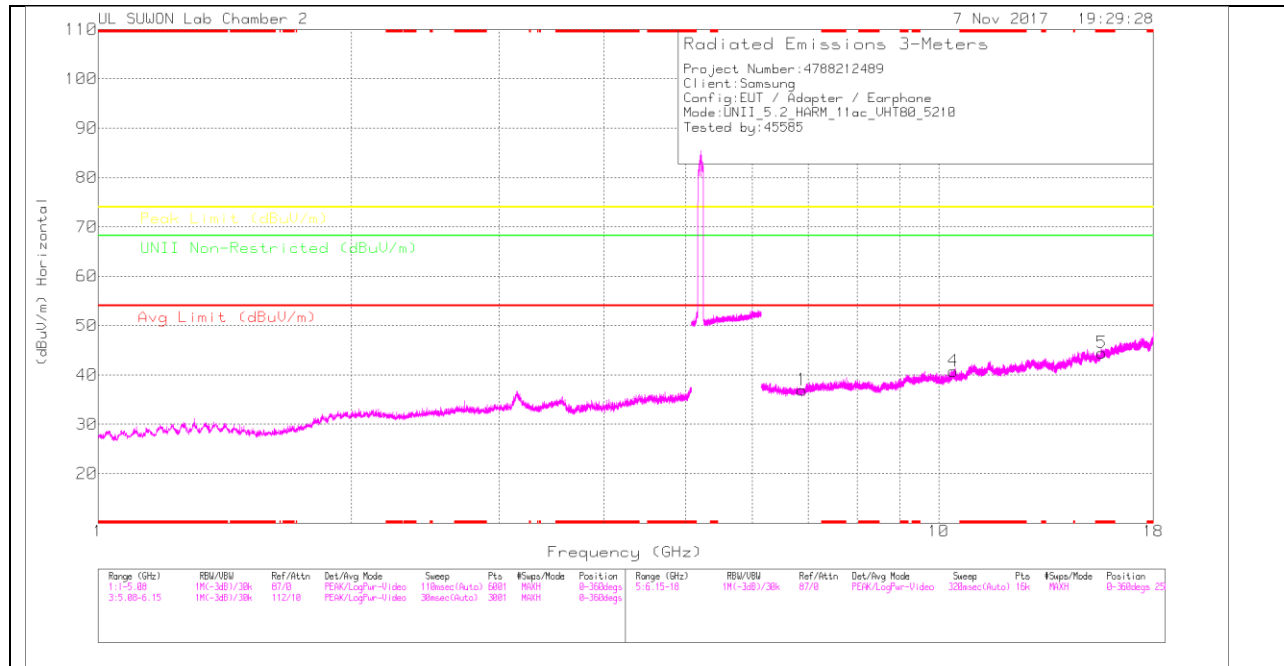
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

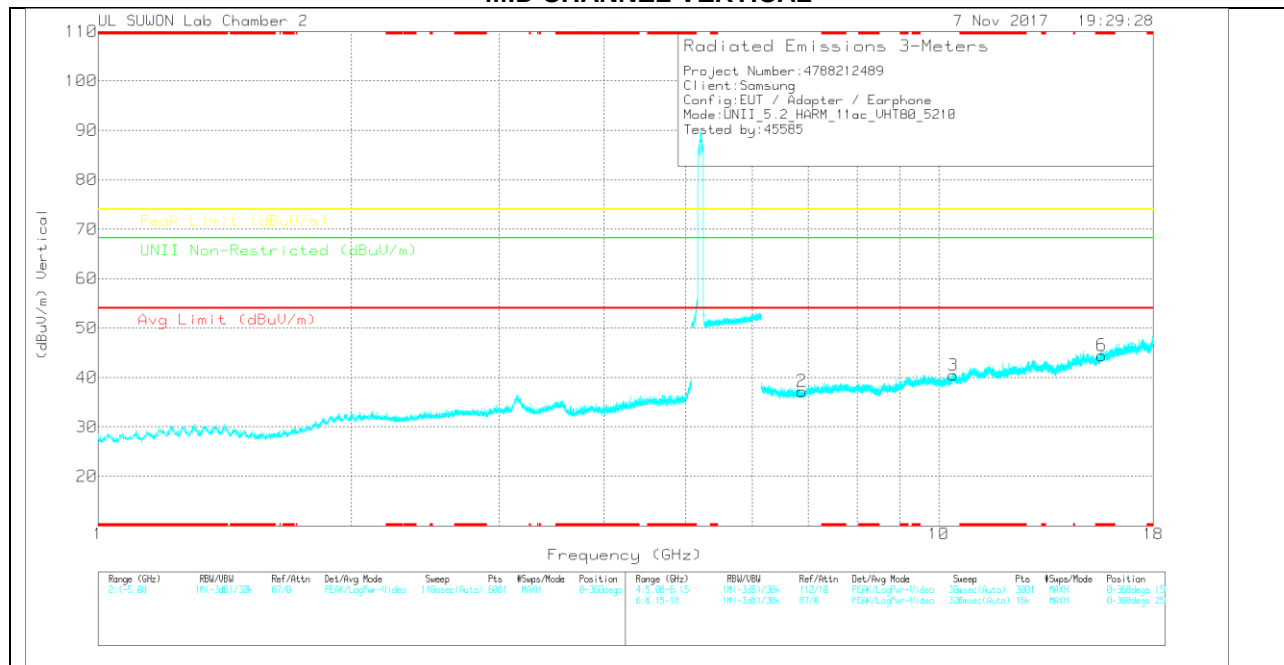
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	170531_31 1710011687 24]	6GHz_HP[d 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	6.879	23.45	PK	35.5	-22	0	36.95	-	-	-	-	68.2	-31.25	0-360	250	H
4	10.416	19.49	PK	37.5	-16.2	0	40.79	-	-	-	-	68.2	-27.41	0-360	150	H
5	* 15.638	19.39	PK	39.8	-14.7	0	44.49	-	-	74	-29.51	-	-	0-360	250	H
2	6.874	23.83	PK	35.4	-22	0	37.23	-	-	-	-	68.2	-30.97	0-360	250	V
3	10.414	19.18	PK	37.5	-16.2	0	40.48	-	-	-	-	68.2	-27.72	0-360	150	V
6	* 15.629	19.37	PK	39.8	-14.7	0	44.47	-	-	74	-29.53	-	-	0-360	250	V

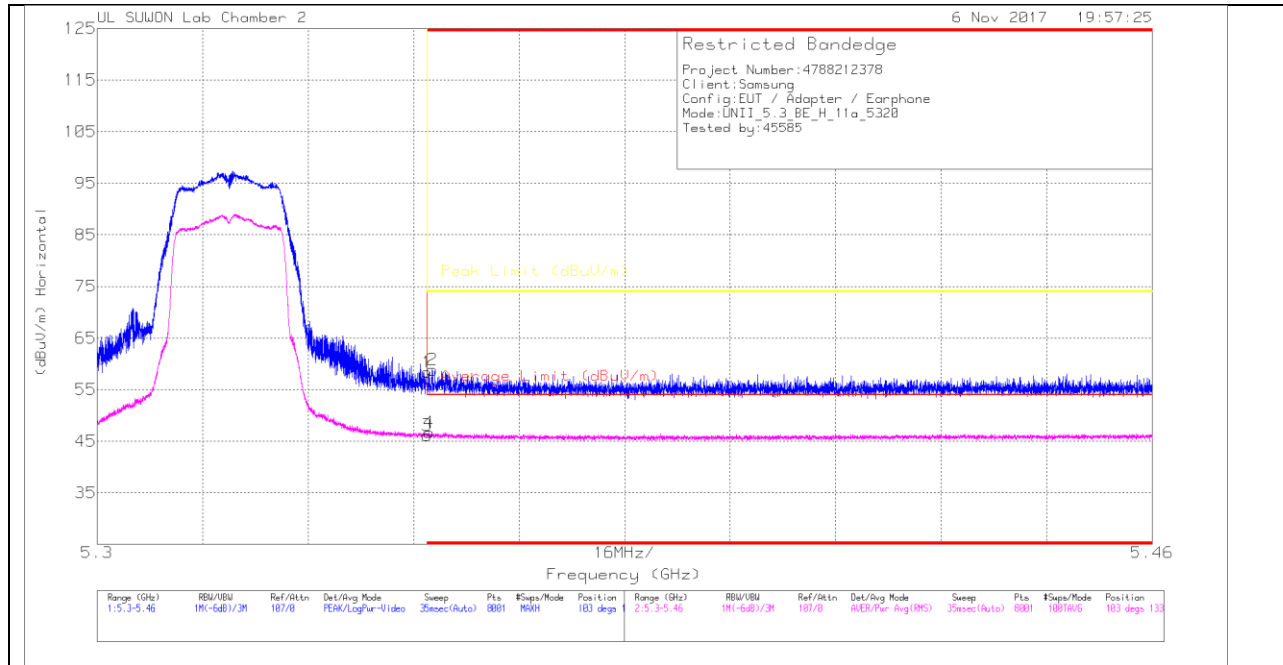
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak Detector

10.2. 5.3 GHz

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

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

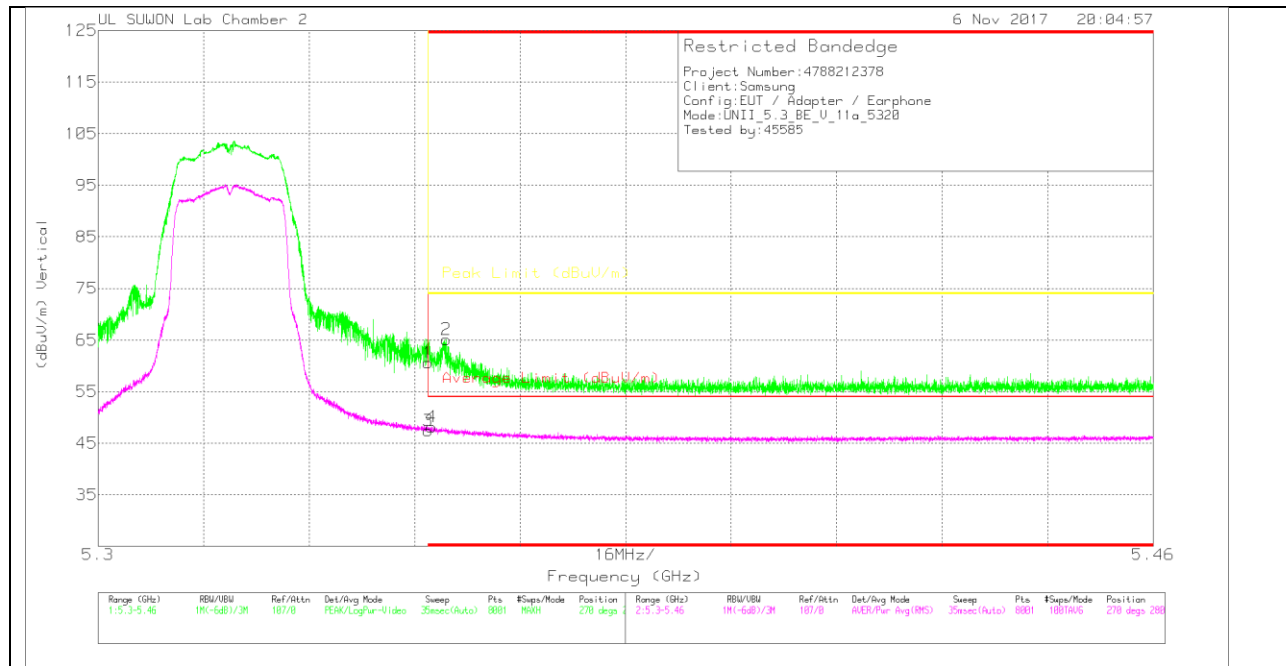
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB_ATT(d B)_170809	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	39.38	Pk		-15.2	0	58.38	-	-	74	-15.62	103	133	H
2	* 5.351	39.84	Pk		-15.2	0	58.84	-	-	74	-15.16	103	133	H
3	* 5.35	26.83	RMS		-15.2	.31	46.14	54	-7.86	-	-	103	133	H
4	* 5.35	27.37	RMS		-15.2	.31	46.68	54	-7.32	-	-	103	133	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	20170531_3 117_001687 17	10dB_ATT(dB)_170809	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	41.56	Pk	34.2	-15.2	0	60.56	-	-	74	-13.44	270	280	V
2	* 5.353	46.11	Pk	34.2	-15.2	0	65.11	-	-	74	-8.89	270	280	V
3	* 5.35	28.11	RMS	34.2	-15.2	.31	47.42	54	-6.58	-	-	270	280	V
4	* 5.351	28.83	RMS	34.2	-15.2	.31	48.14	54	-5.86	-	-	270	280	V

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

Pk - Peak detector

RMS - RMS detection