

10.5.21. OUTPUT POWER AND PPSD PLOTS

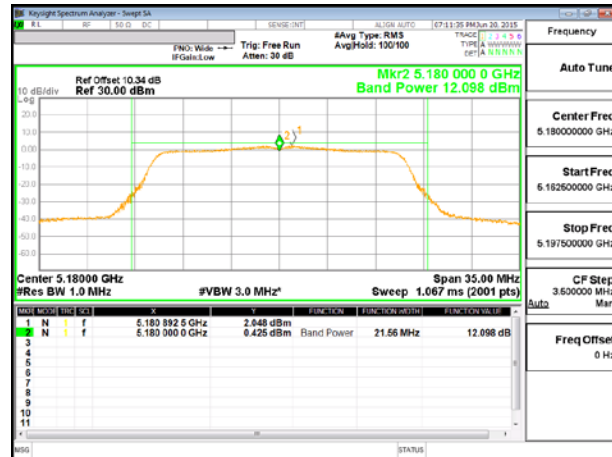
UNII 5.2 GHz

IEEE 802.11a mode

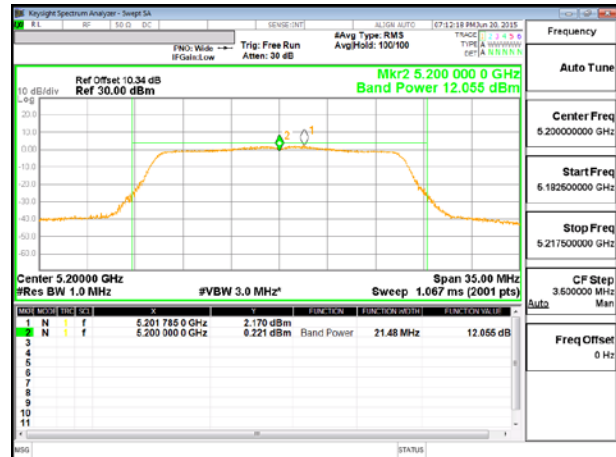


IEEE 802.11n HT20 mode

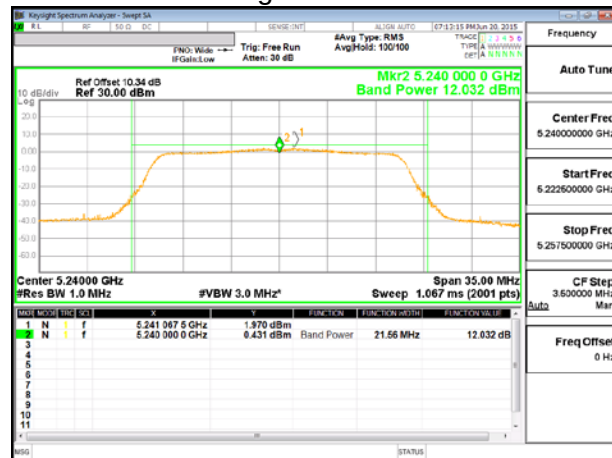
11n HT20 Mode Low Channel



11n HT20 Mode Middle Channel

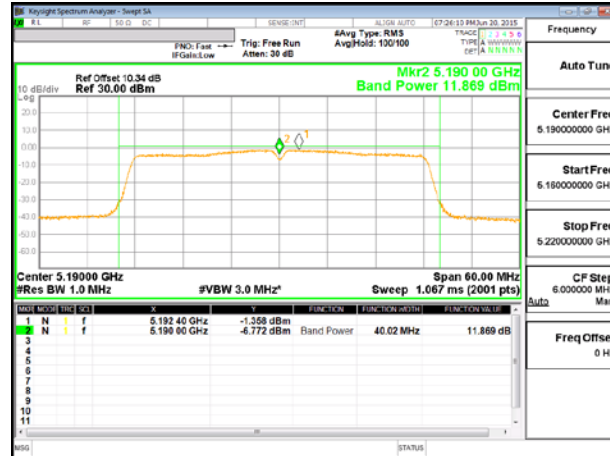


11n HT20 Mode High Channel

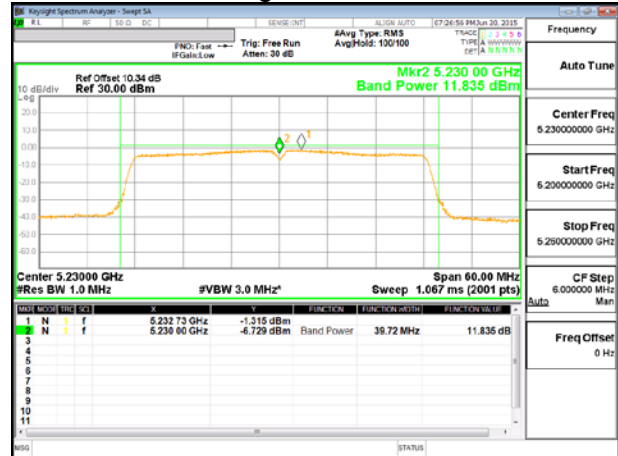


IEEE 802.11n HT40 mode

11n HT40 Mode Low Channel

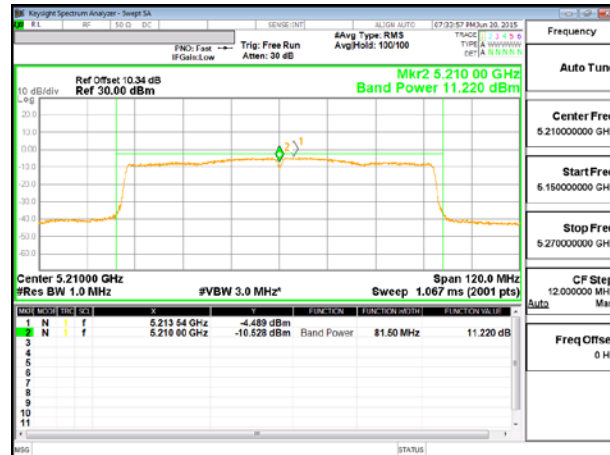


11n HT40 Mode High Channel



IEEE 802.11ac VHT80 mode

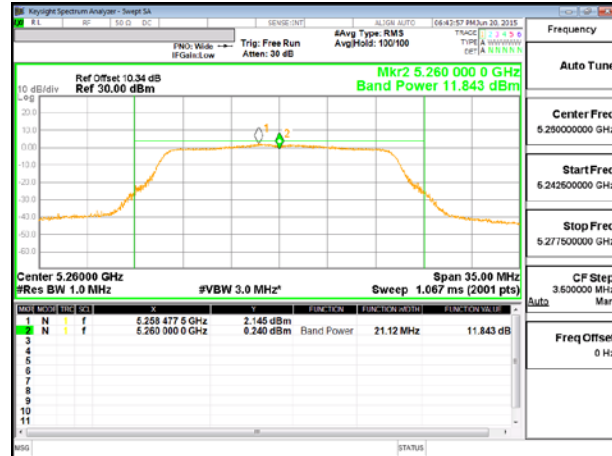
11ac HT80 Mode Middle Channel



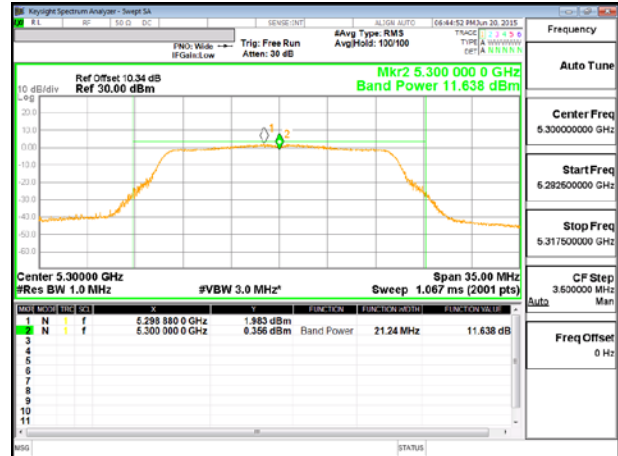
UNII 5.3 GHz

IEEE 802.11a mode

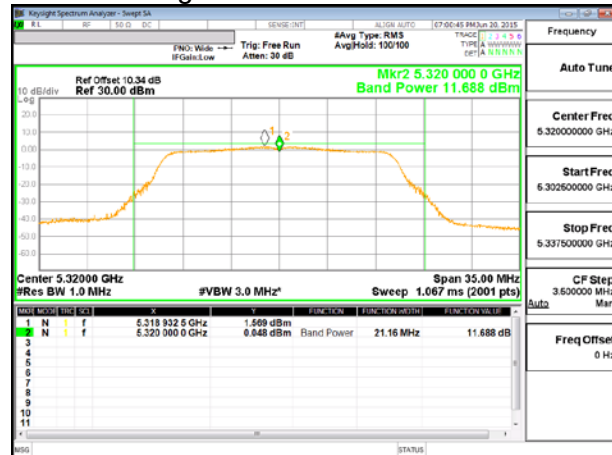
11a Mode Low Channel



11a Mode Middle Channel

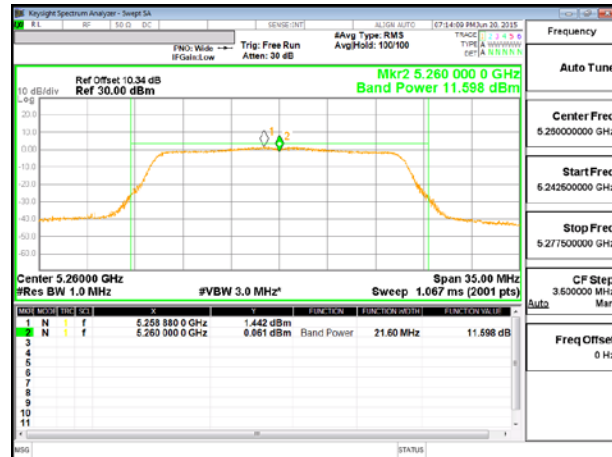


11a Mode High Channel



IEEE 802.11n HT20 mode

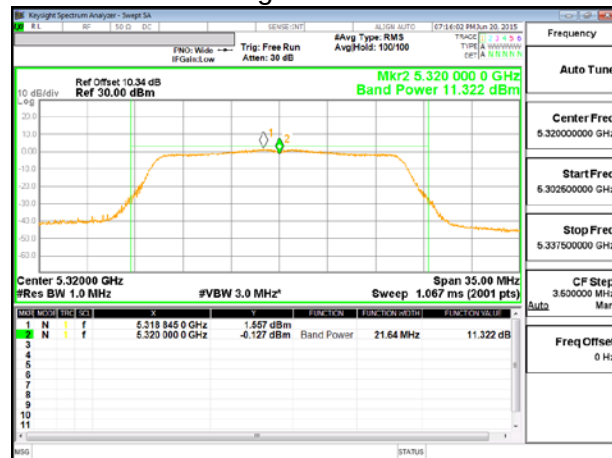
11n HT20 Mode Low Channel



11n HT20 Mode Middle Channel

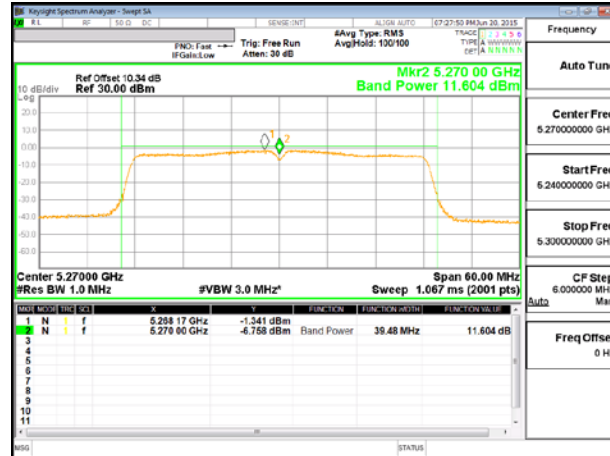


11n HT20 Mode High Channel

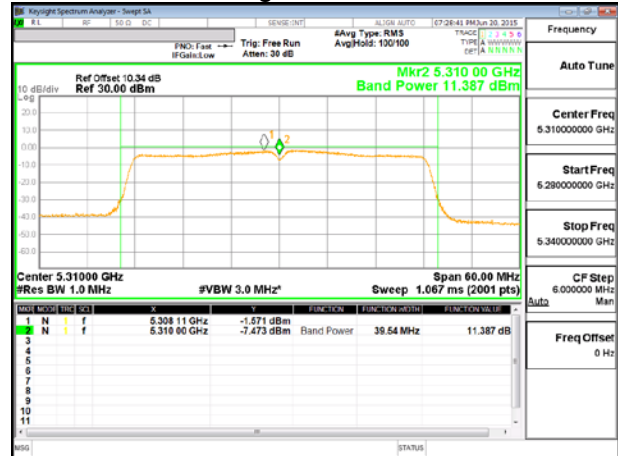


IEEE 802.11n HT40 mode

11n HT40 Mode Low Channel

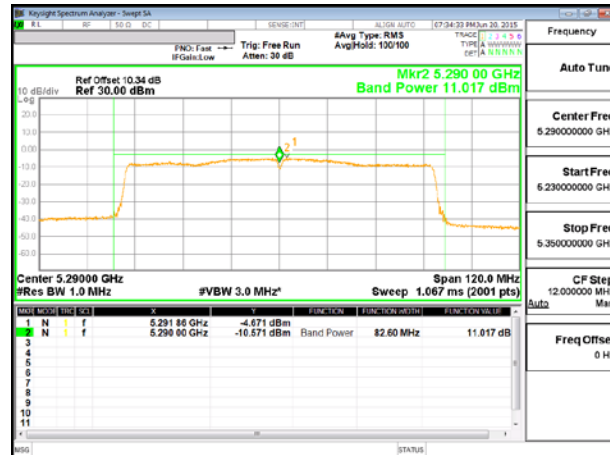


11n HT40 Mode High Channel



IEEE 802.11ac VHT80 mode

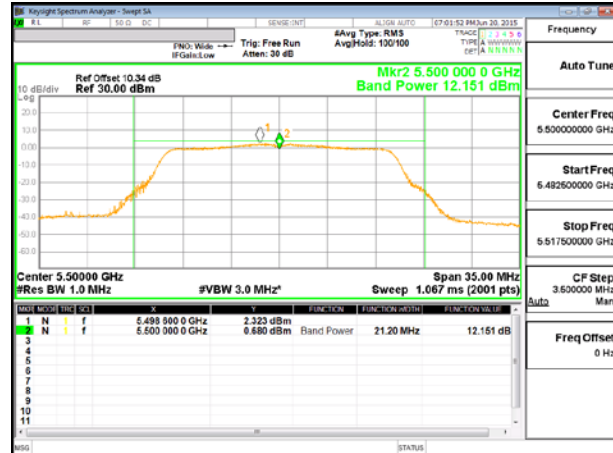
11ac HT80 Mode Middle Channel



UNII 5.5 GHz

IEEE 802.11a mode

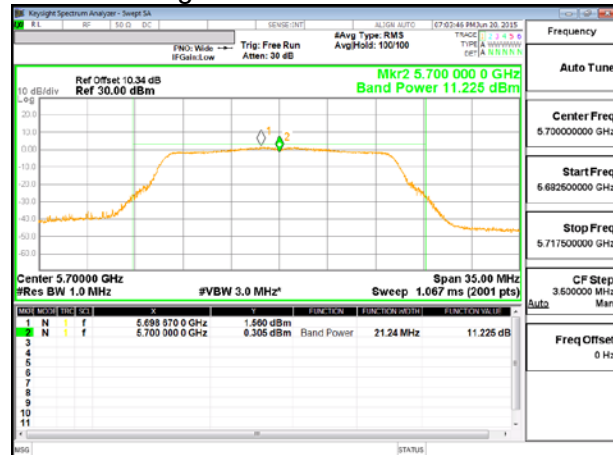
11a Mode Low Channel



11a Mode Middle Channel

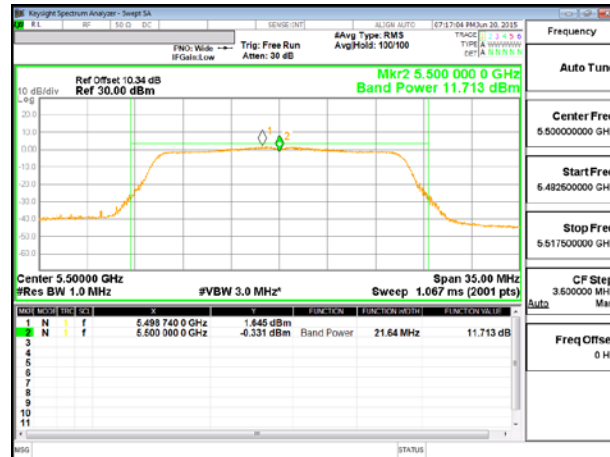


11a Mode High Channel

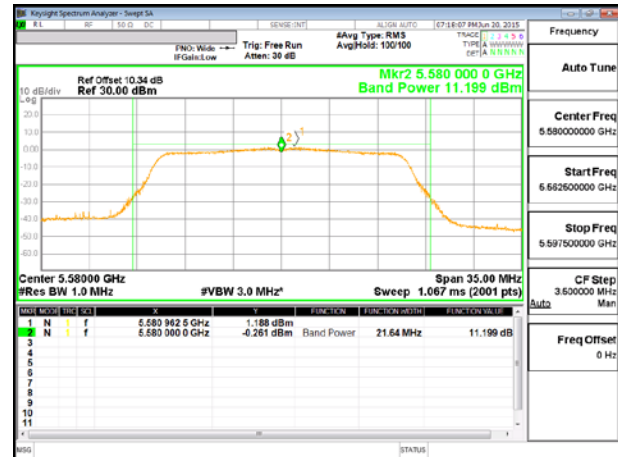


IEEE 802.11n HT20 mode

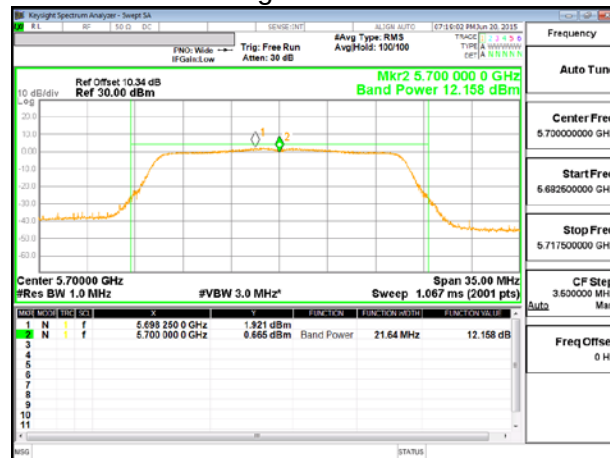
11n HT20 Mode Low Channel



11n HT20 Mode Middle Channel

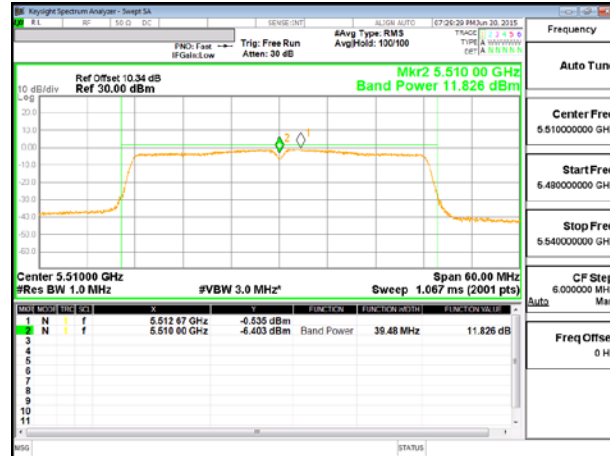


11n HT20 Mode High Channel

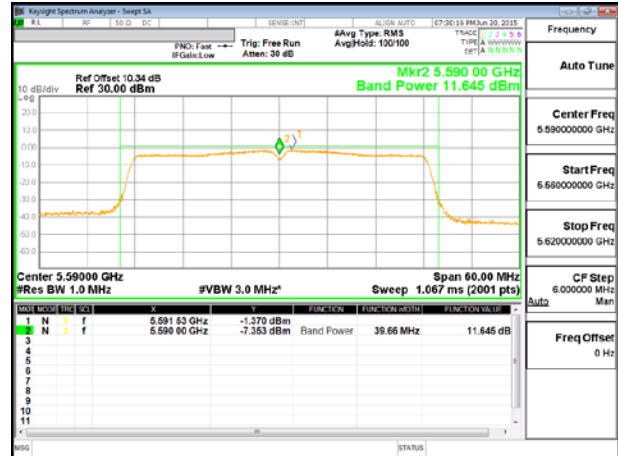


IEEE 802.11n HT40 mode

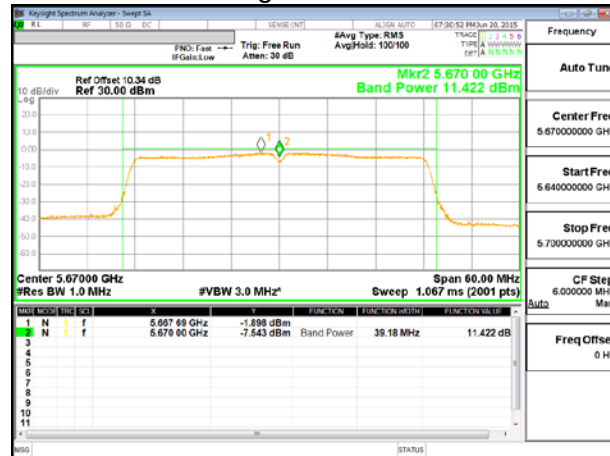
11n HT40 Mode Low Channel



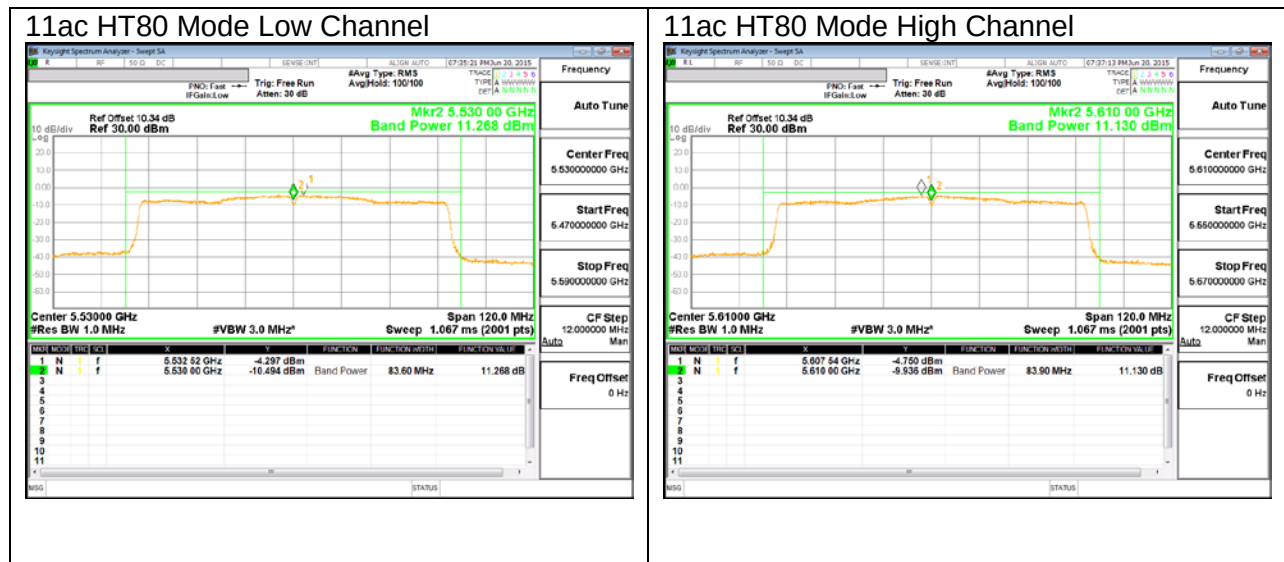
11n HT40 Mode Middle Channel



11n HT40 Mode High Channel



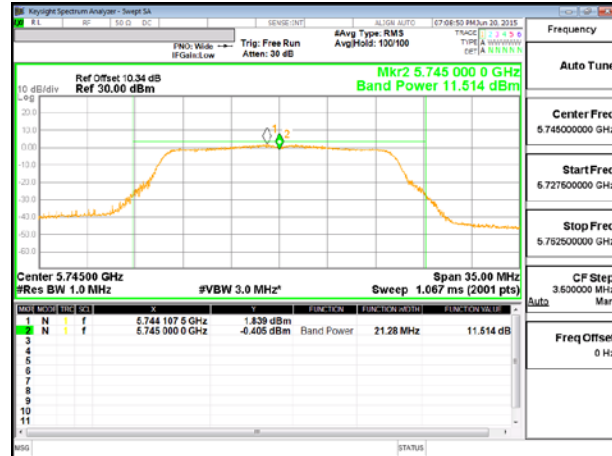
IEEE 802.11ac VHT80 mode



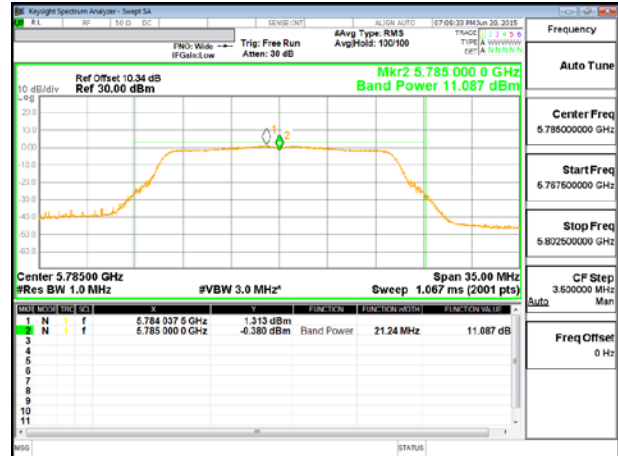
UNII 5.8 GHz

IEEE 802.11a mode

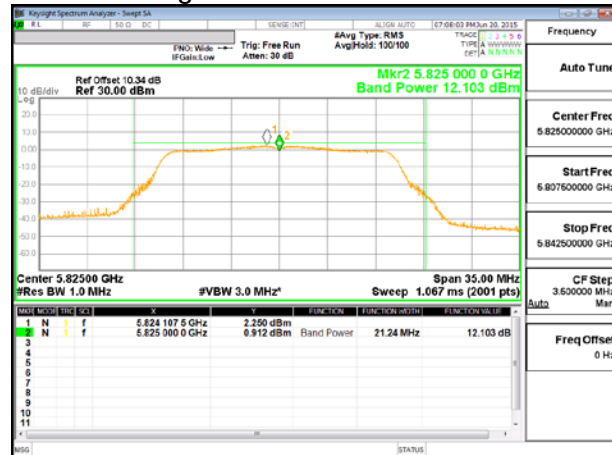
11a Mode Low Channel



11a Mode Middle Channel

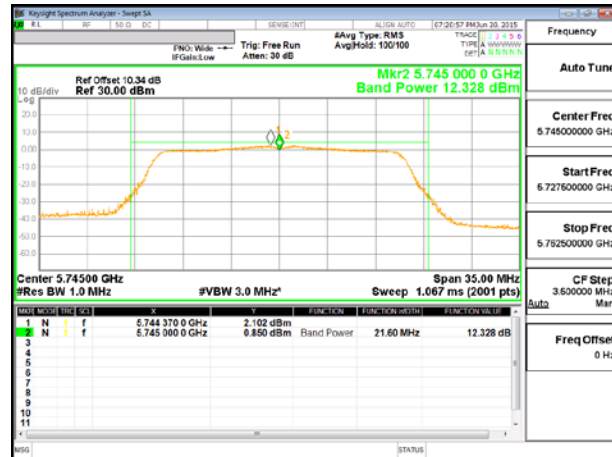


11a Mode High Channel

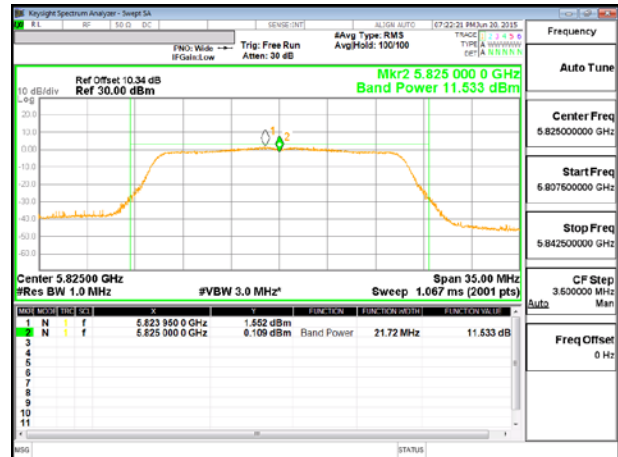


IEEE 802.11n HT20 mode

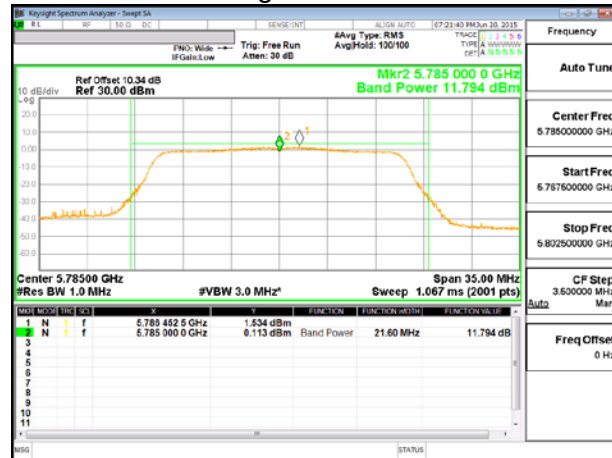
11n HT20 Mode Low Channel



11n HT20 Mode Middle Channel

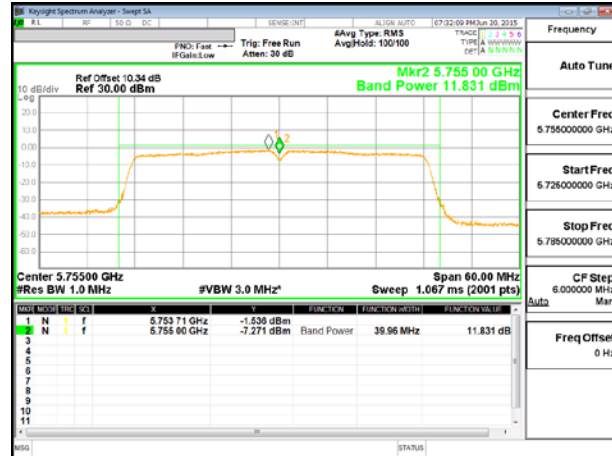


11n HT20 Mode High Channel

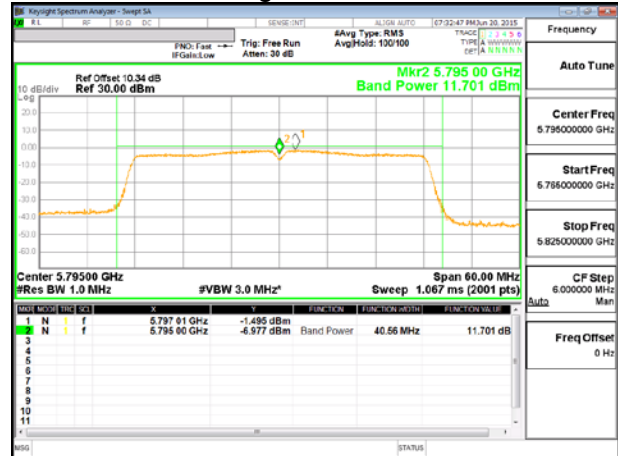


IEEE 802.11n HT40 mode

11n HT40 Mode Low Channel

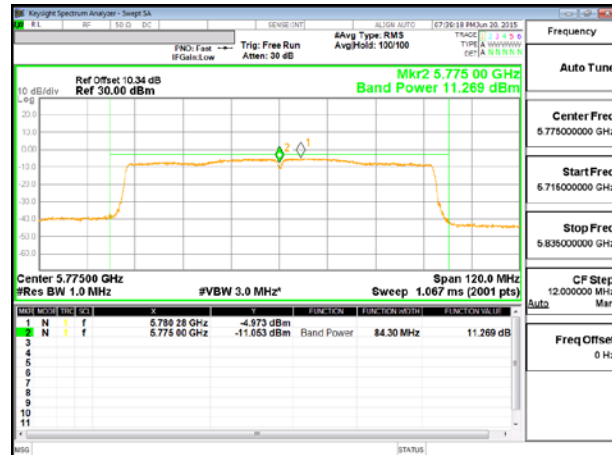


11n HT40 Mode High Channel



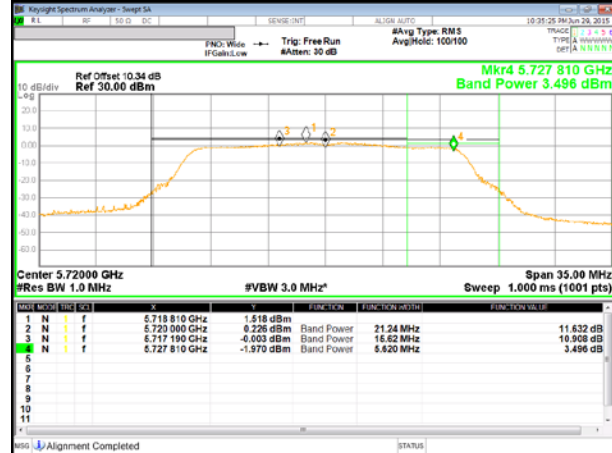
IEEE 802.11ac VHT80 mode

11ac HT80 Mode Middle Channel

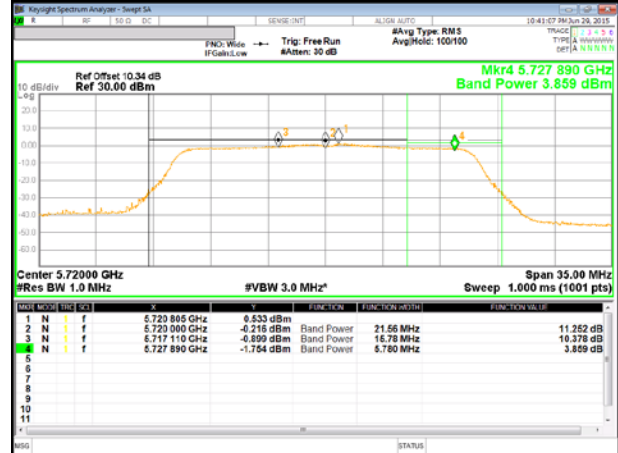


Straddle Channel

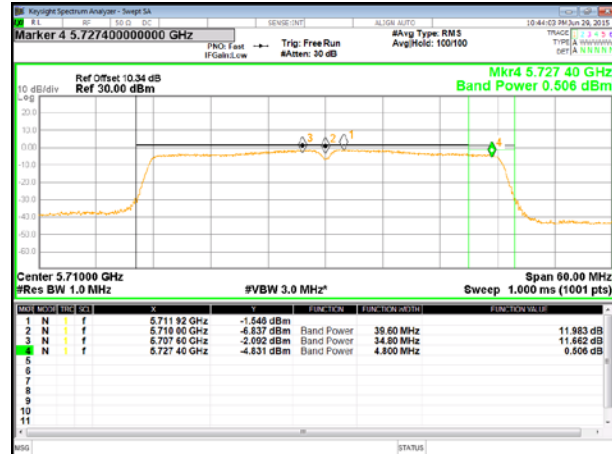
11a Mode Channel 144



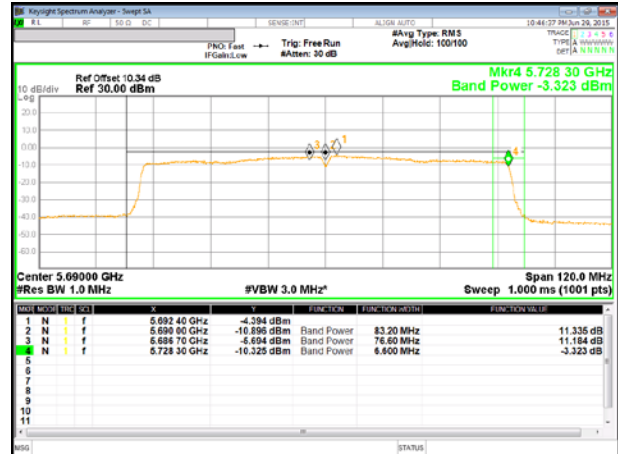
11n HT20 Mode Channel 144



11n HT40 Mode Channel 142



11ac VHT80 Mode Channel 138



11. TRANSMITTER ABOVE 1 GHz

LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters.

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

Reference to KDB 789033 UNII part H) 6) d) Method AD:

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

The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

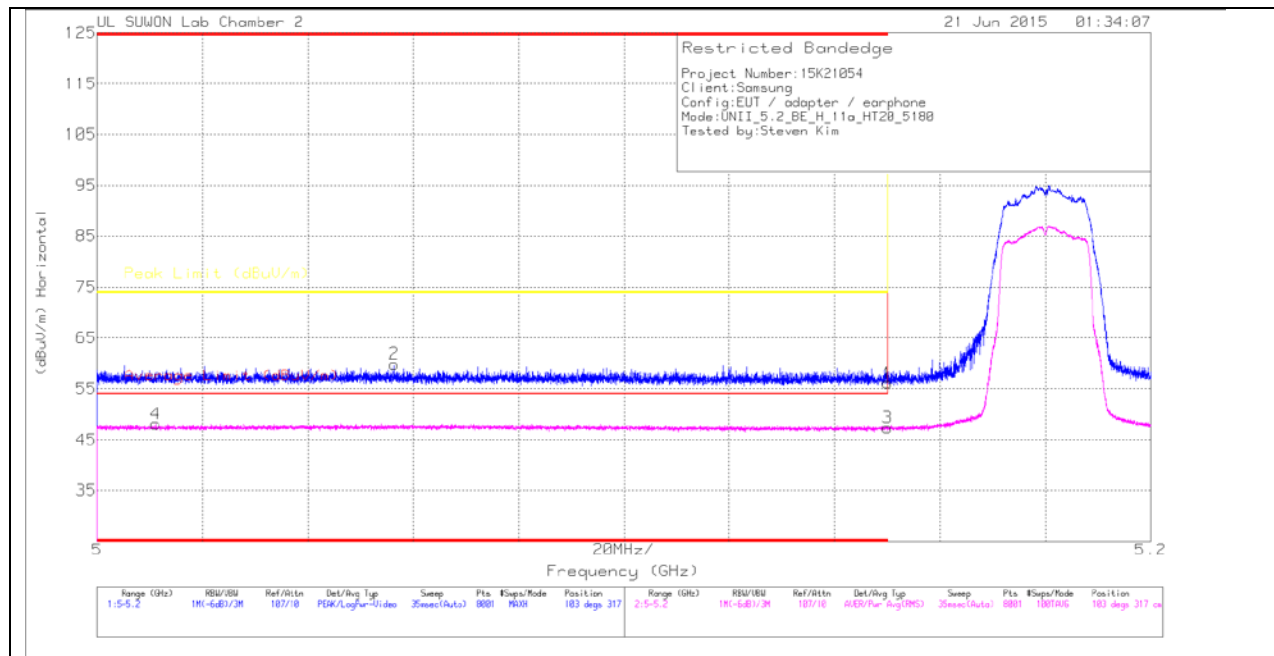
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

11.1. 5.2 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

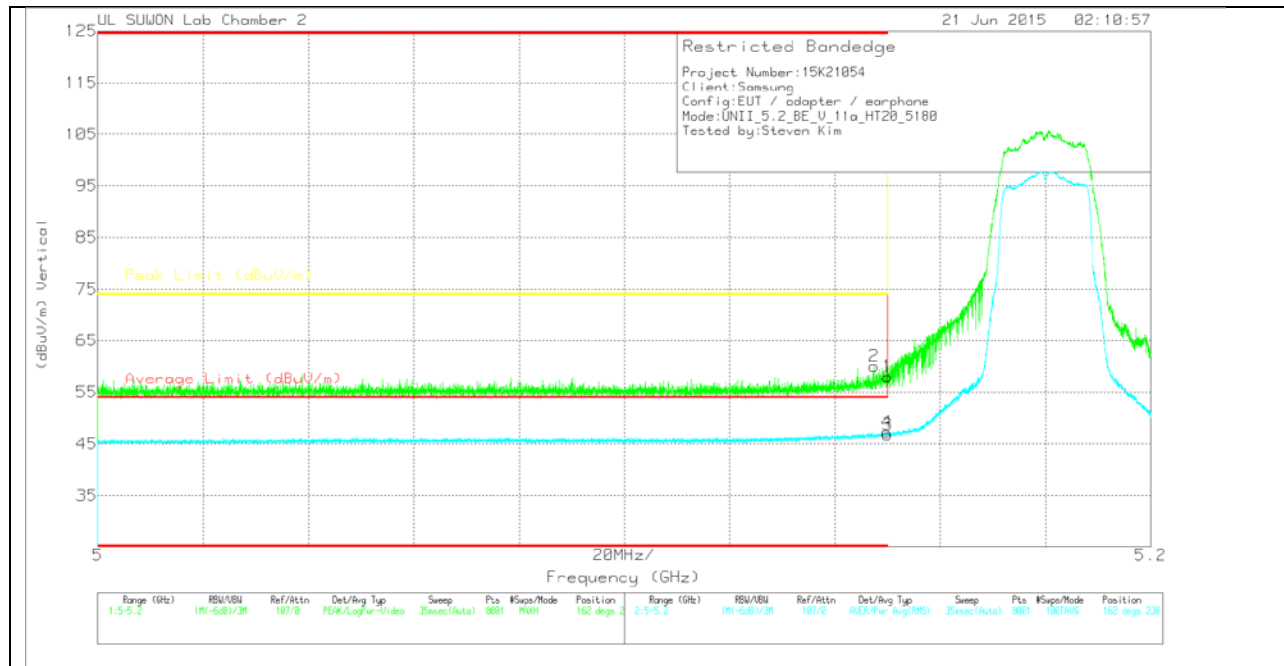
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	38.17	Pk	34.1	-16.4	0	55.87	-	-	74	-18.13	103	317	H
2	* 5.056	41.91	Pk	34	-16.3	0	59.61	-	-	74	-14.39	103	317	H
3	* 5.15	29.33	RMS	34.1	-16.4	.3	47.33	54	-6.67	-	-	103	317	H
4	* 5.011	30.14	RMS	34	-16.3	.3	48.14	54	-5.86	-	-	103	317	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_2_10dB	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	40.33	PK	34.1	-16.4	0	58.03	-	-	74	-15.97	162	230	V
2	* 5.147	42.39	PK	34.1	-16.4	0	60.09	-	-	74	-13.91	162	230	V
3	* 5.15	28.79	RMS	34.1	-16.4	.3	46.79	54	-7.21	-	-	162	230	V
4	* 5.15	29.27	RMS	34.1	-16.4	.3	47.27	54	-6.73	-	-	162	230	V

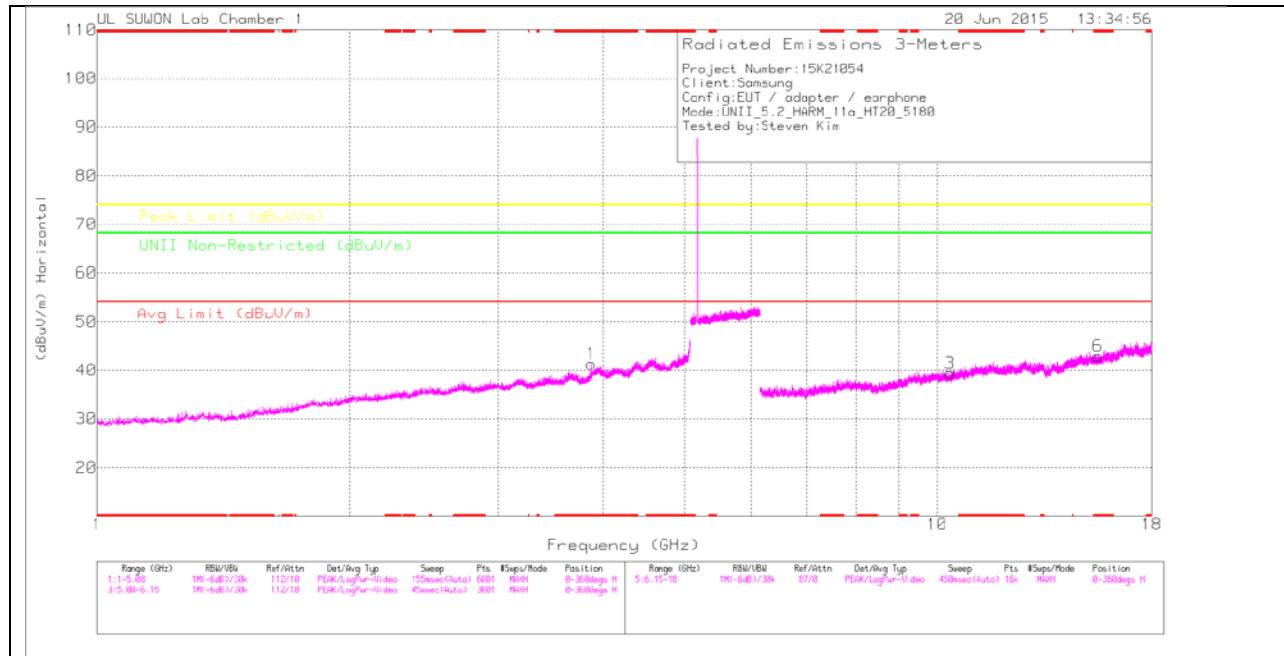
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

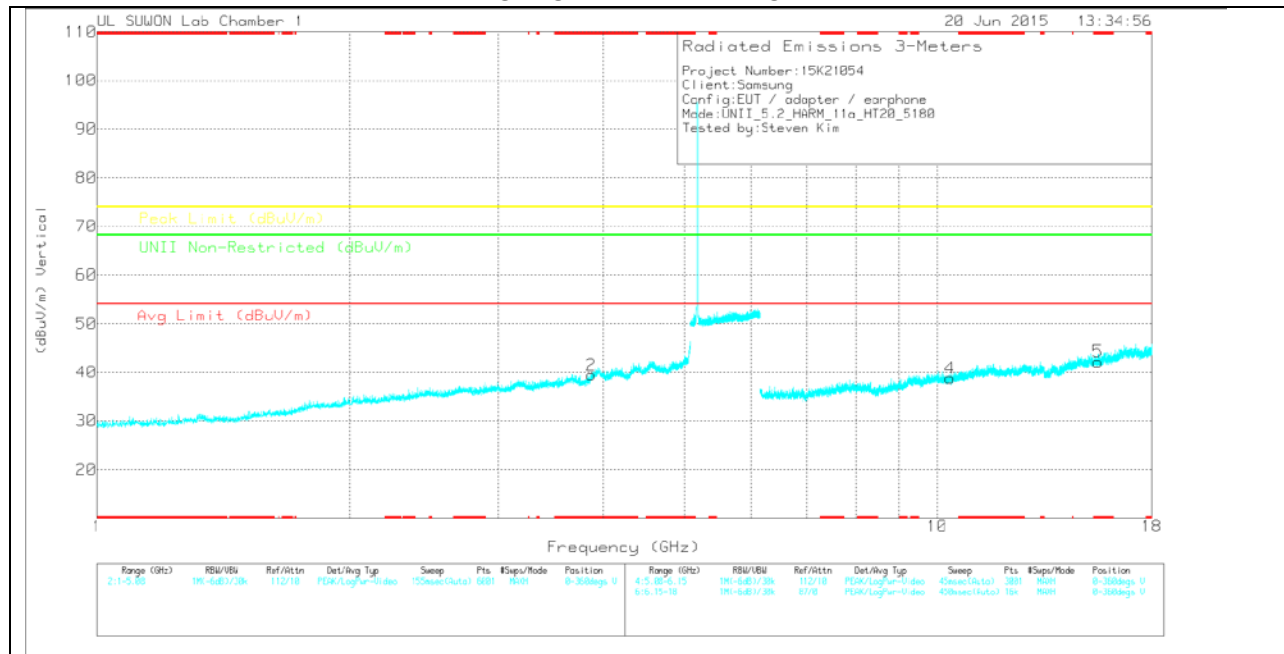
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

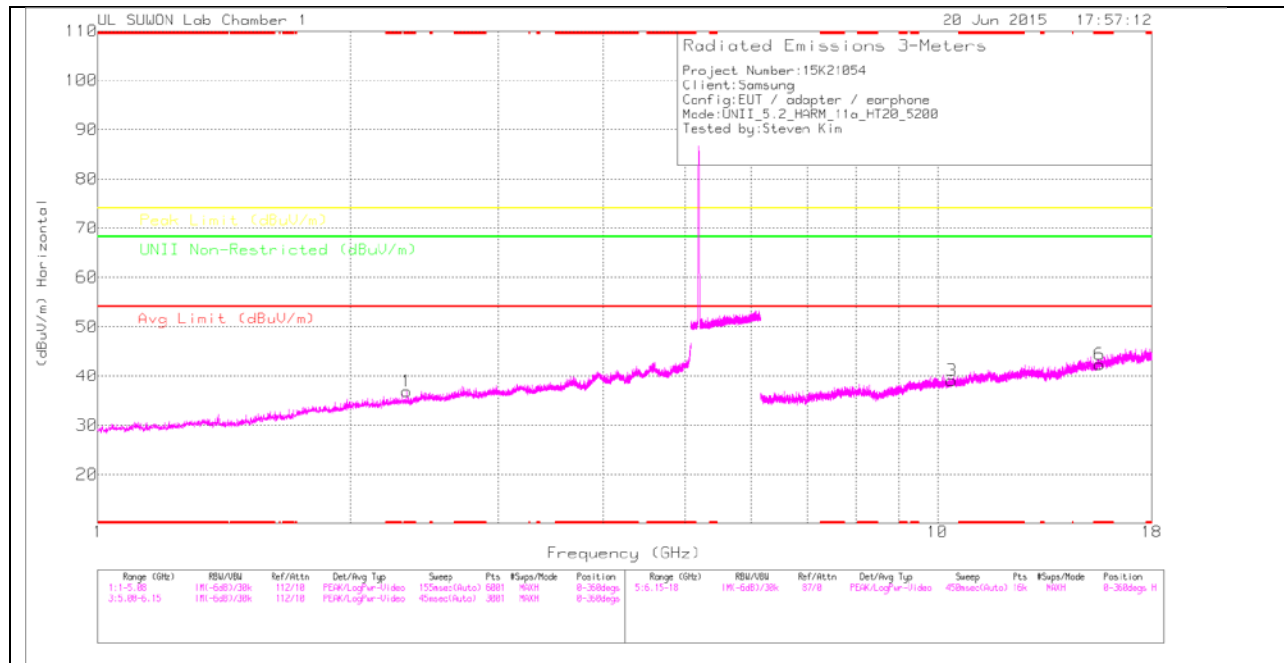
TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_4_5G LP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UMI Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.876	37.78	PK	33.2	-29.6	0	41.38	-	-	74	-32.62	-	-	0-360	200	H
2	* 3.873	35.97	PK	33.2	-29.7	0	39.47	-	-	74	-34.53	-	-	0-360	200	V
3	10.359	22.62	PK	37.8	-21	0	39.42	-	-	-	-	68.2	-28.78	0-360	200	H
6	* 15.542	22.39	PK	40.3	-19.8	0	42.89	-	-	74	-31.11	-	-	0-360	100	H
4	10.364	21.89	PK	37.8	-20.9	0	38.79	-	-	-	-	68.2	-29.41	0-360	200	V
5	* 15.542	21.7	PK	40.3	-19.8	0	42.2	-	-	74	-31.8	-	-	0-360	100	V

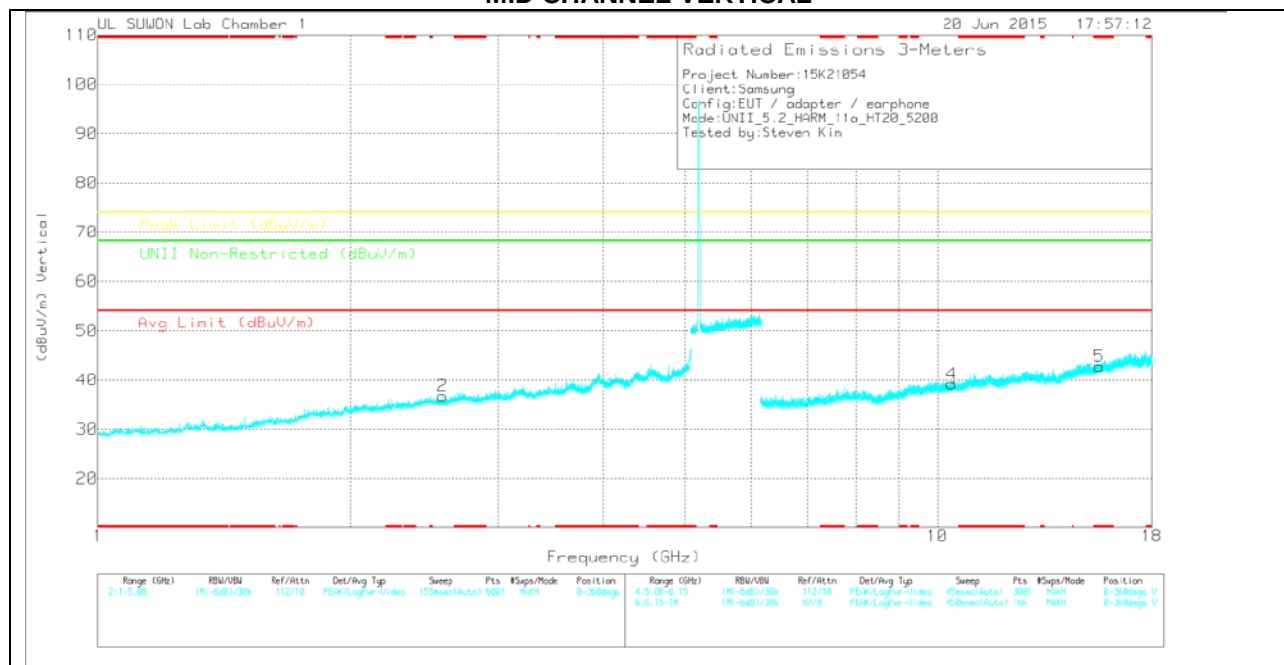
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

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

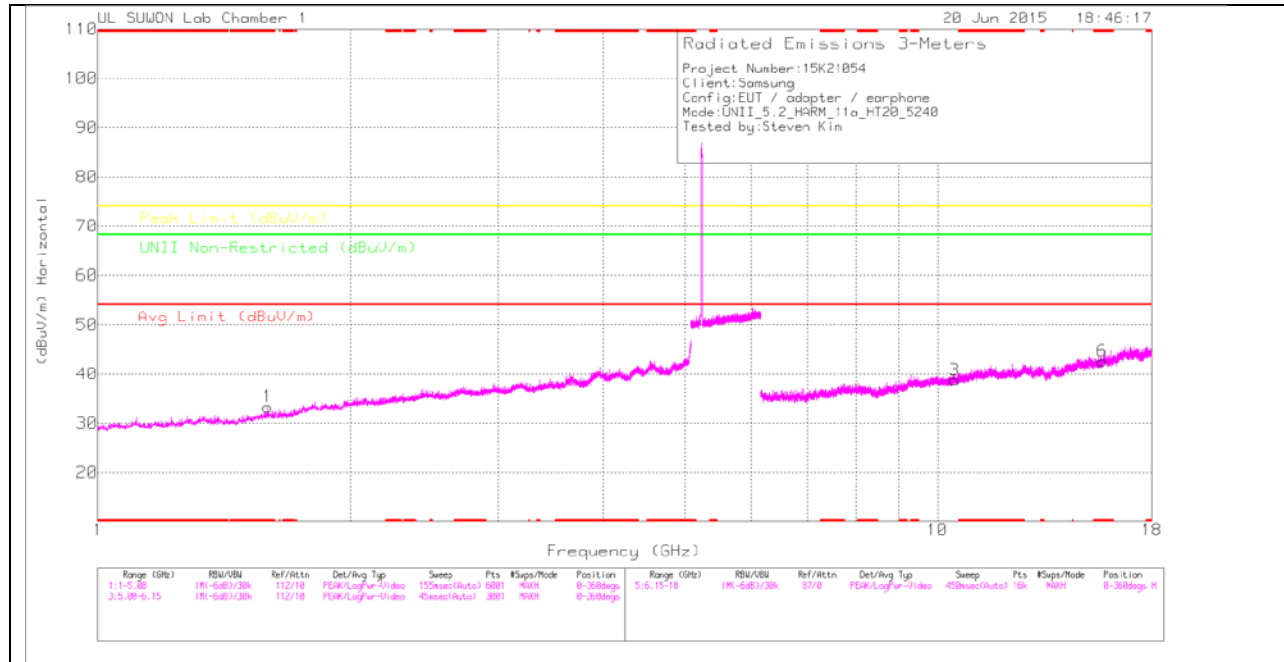
TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_4_5G LP	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	* 2.329	37.39	PK	31.7	-32.2	0	36.89	-	-	74	-37.11	-	-	0-360	200	H
2	2.573	36.53	PK	32.1	-31.9	0	36.73	-	-	-	-	68.2	-31.47	0-360	200	V
3	10.405	21.87	PK	37.8	-20.6	0	39.07	-	-	-	-	68.2	-29.13	0-360	200	H
6	* 15.601	21.88	PK	40.3	-19.8	0	42.38	-	-	74	-31.62	-	-	0-360	100	H
4	10.405	22.07	PK	37.8	-20.7	0	39.17	-	-	-	-	68.2	-29.03	0-360	100	V
5	* 15.601	22.21	PK	40.3	-19.8	0	42.71	-	-	74	-31.29	-	-	0-360	200	V

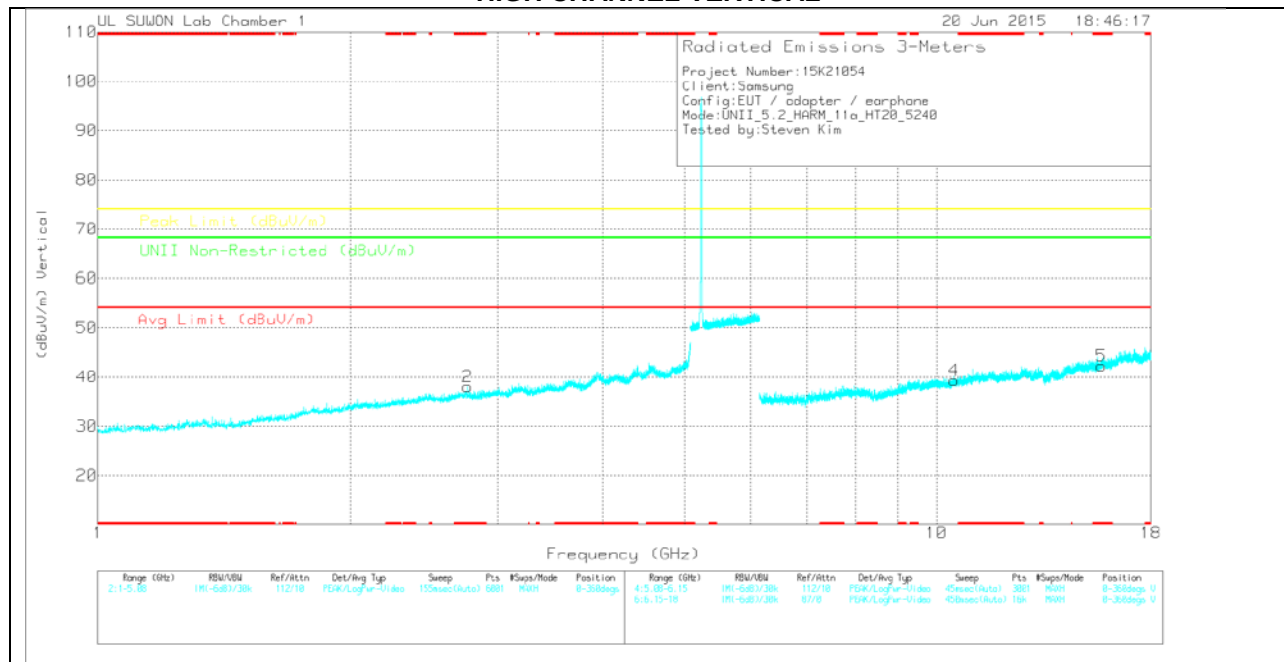
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – 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

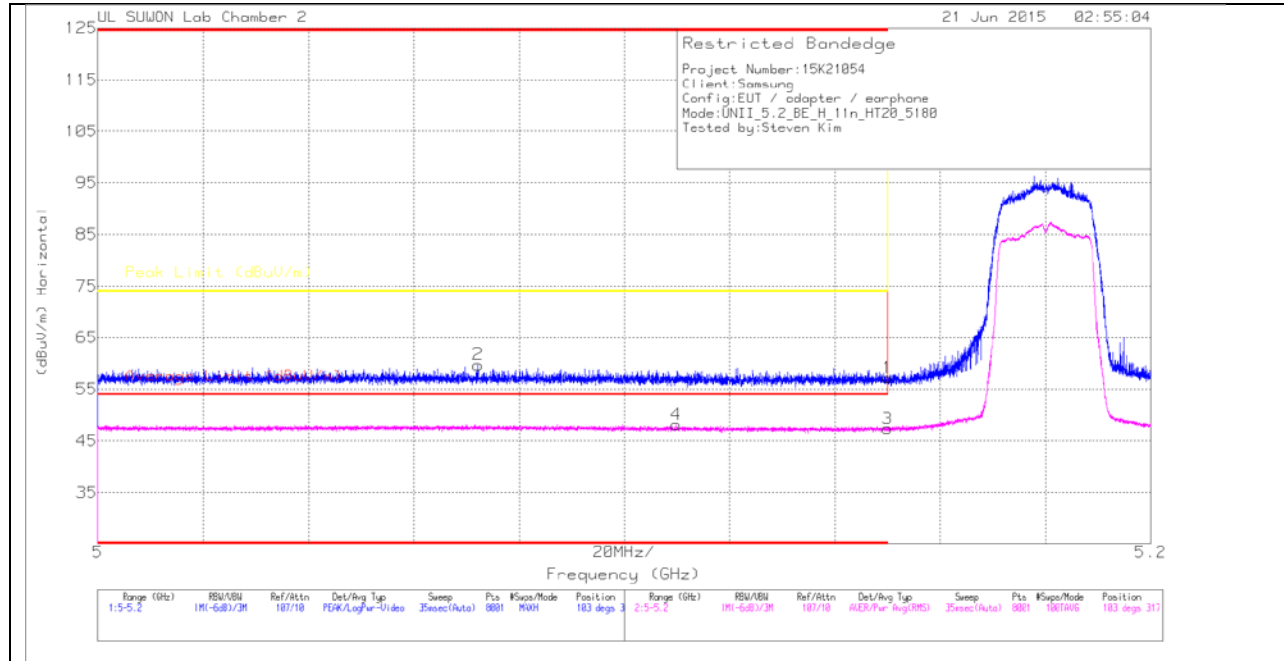
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_4_5G LP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.592	37.35	PK	29.1	-33.1	0	33.35	-	-	74	-40.65	-	-	0-360	100	H
2	* 2.758	36.93	PK	32.2	-31.1	0	38.03	-	-	74	-35.97	-	-	0-360	100	V
3	10.48	22.28	PK	37.8	-21.3	0	38.78	-	-	-	-	68.2	-29.42	0-360	100	H
6	* 15.72	22.03	PK	40.4	-19.8	0	42.63	-	-	74	-31.37	-	-	0-360	200	H
4	10.481	22.79	PK	37.8	-21.3	0	39.29	-	-	-	-	68.2	-28.91	0-360	200	V
5	* 15.72	21.66	PK	40.4	-19.8	0	42.26	-	-	74	-31.74	-	-	0-360	200	V

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

PK – Peak detector

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

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

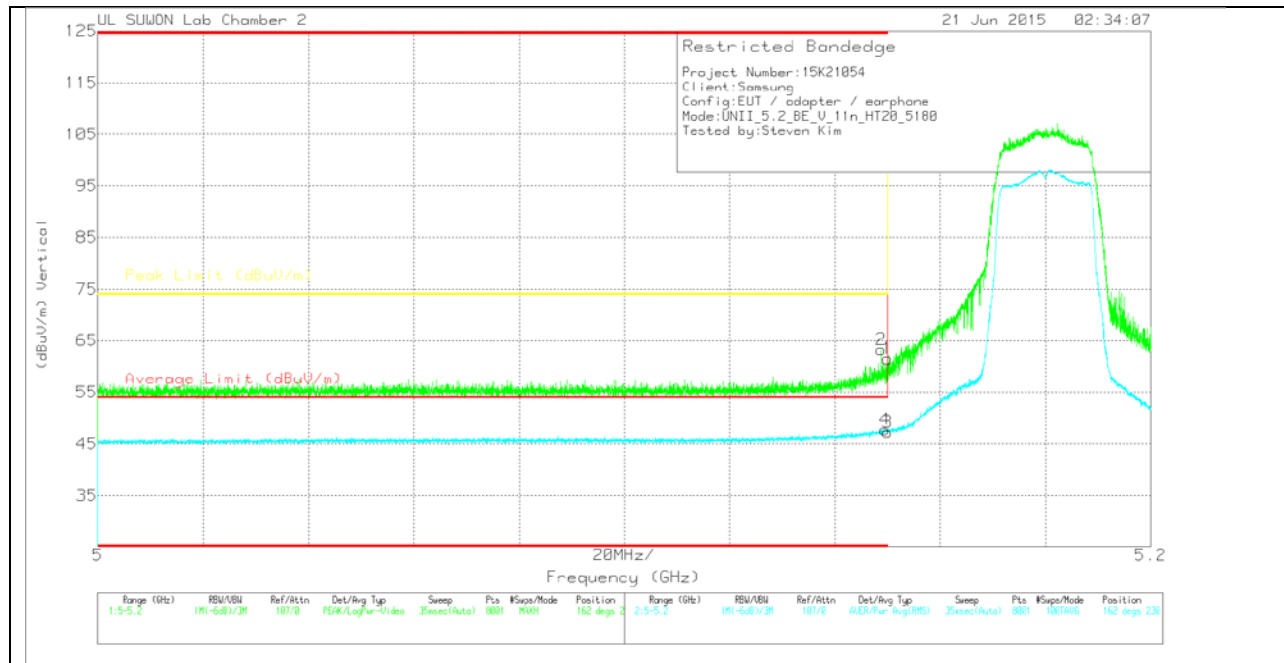
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	39.56	PK	34.1	-16.4	0	57.26	-	-	74	-16.74	103	317	H
2	* 5.072	42.06	PK	34	-16.3	0	59.76	-	-	74	-14.24	103	317	H
3	* 5.15	29.34	RMS	34.1	-16.4	.32	47.36	54	-6.64	-	-	103	317	H
4	* 5.11	30.12	RMS	34.1	-16.4	.32	48.14	54	-5.86	-	-	103	317	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	43.79	PK	34.1	-16.4	0	61.49	-	-	74	-12.51	162	230	V
2	* 5.149	45.57	PK	34.1	-16.4	0	63.27	-	-	74	-10.73	162	230	V
3	* 5.15	29.26	RMS	34.1	-16.4	.32	47.28	54	-6.72	-	-	162	230	V
4	* 5.15	29.77	RMS	34.1	-16.4	.32	47.79	54	-6.21	-	-	162	230	V

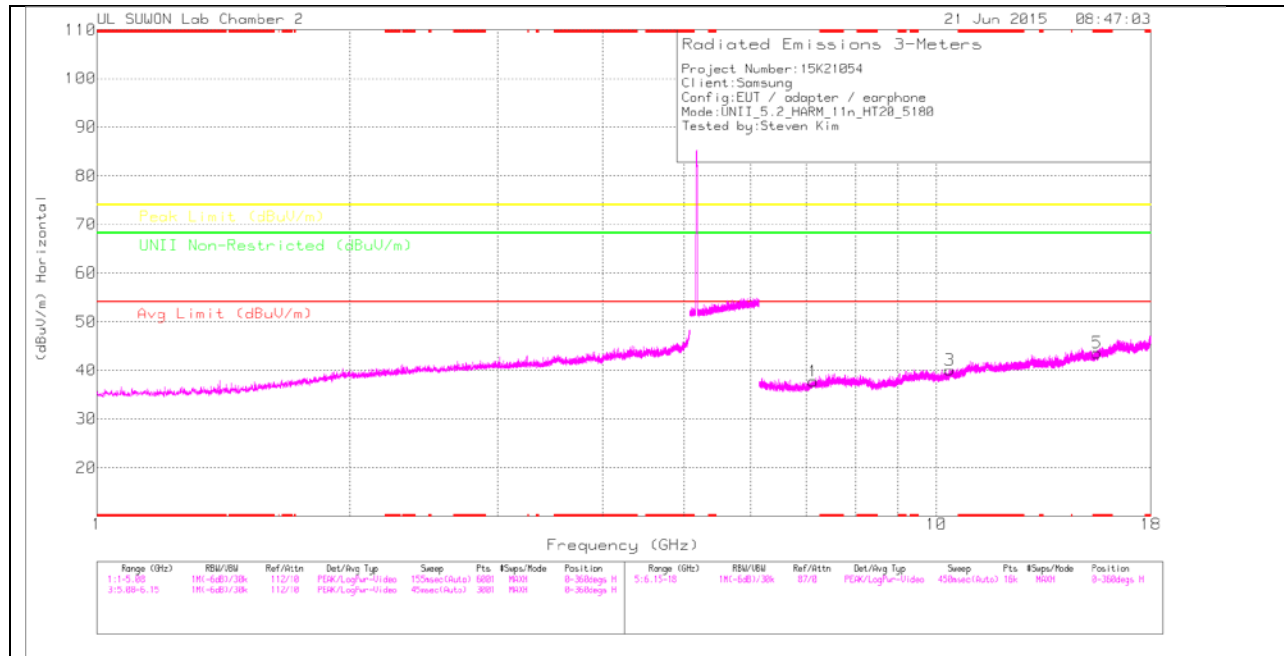
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

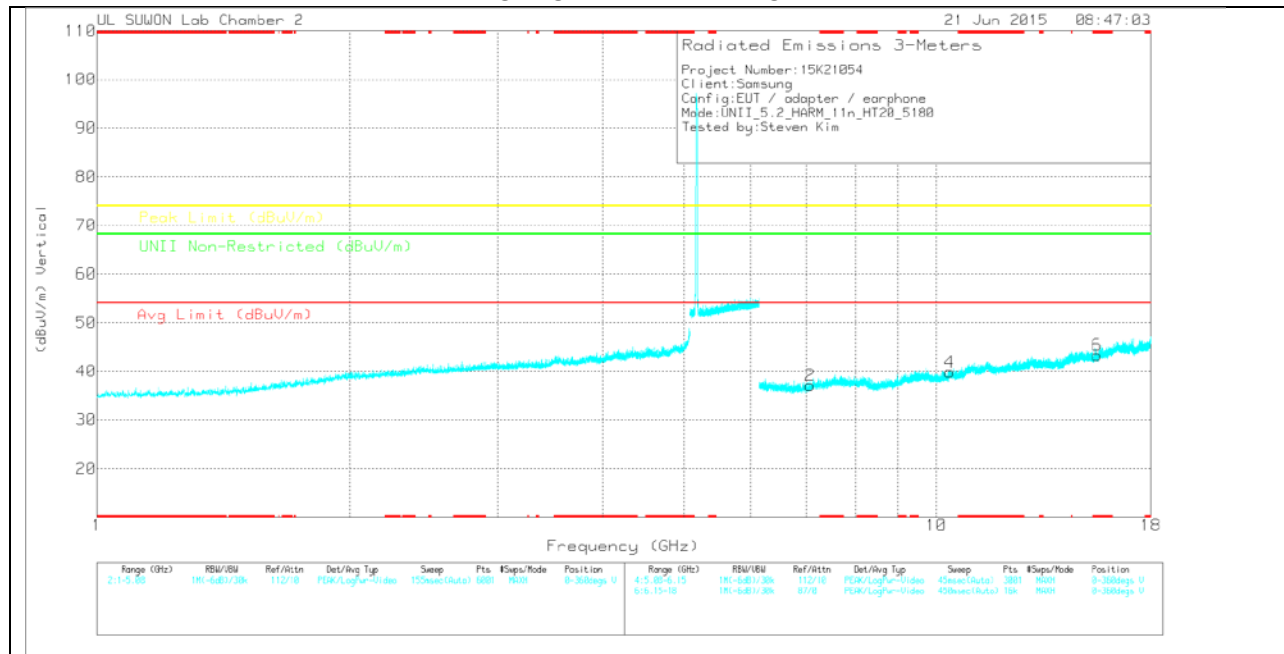
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

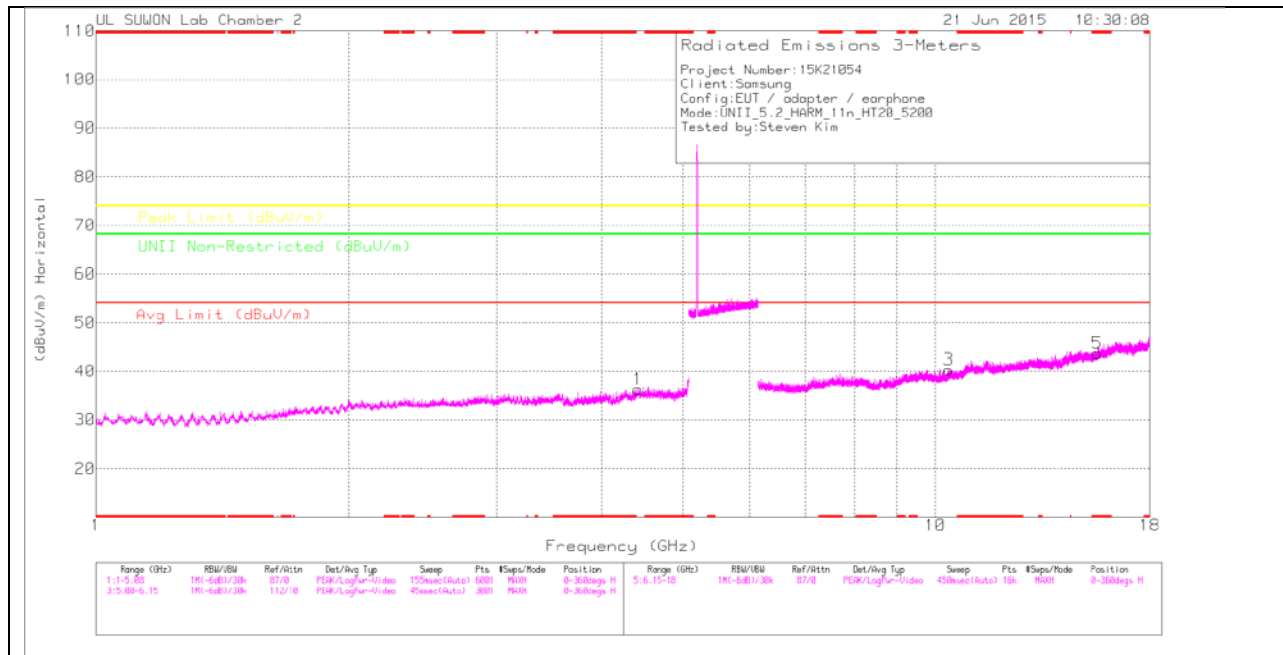
TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	Path_5	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	7.127	24.69	PK	35.7	-22.7	0	37.69	-	-	-	-	68.2	-30.51	0-360	200	H
3	10.368	20.62	PK	37.6	-18.1	0	40.12	-	-	-	-	68.2	-28.08	0-360	100	H
5	* 15.548	19.78	PK	39.9	-16.1	0	43.58	-	-	74	-30.42	-	-	0-360	200	H
2	7.07	23.5	PK	35.6	-22	0	37.1	-	-	-	-	68.2	-31.1	0-360	200	V
4	10.365	20.28	PK	37.6	-18.1	0	39.78	-	-	-	-	68.2	-28.42	0-360	200	V
6	* 15.548	19.5	PK	39.9	-16.1	0	43.3	-	-	74	-30.7	-	-	0-360	100	V

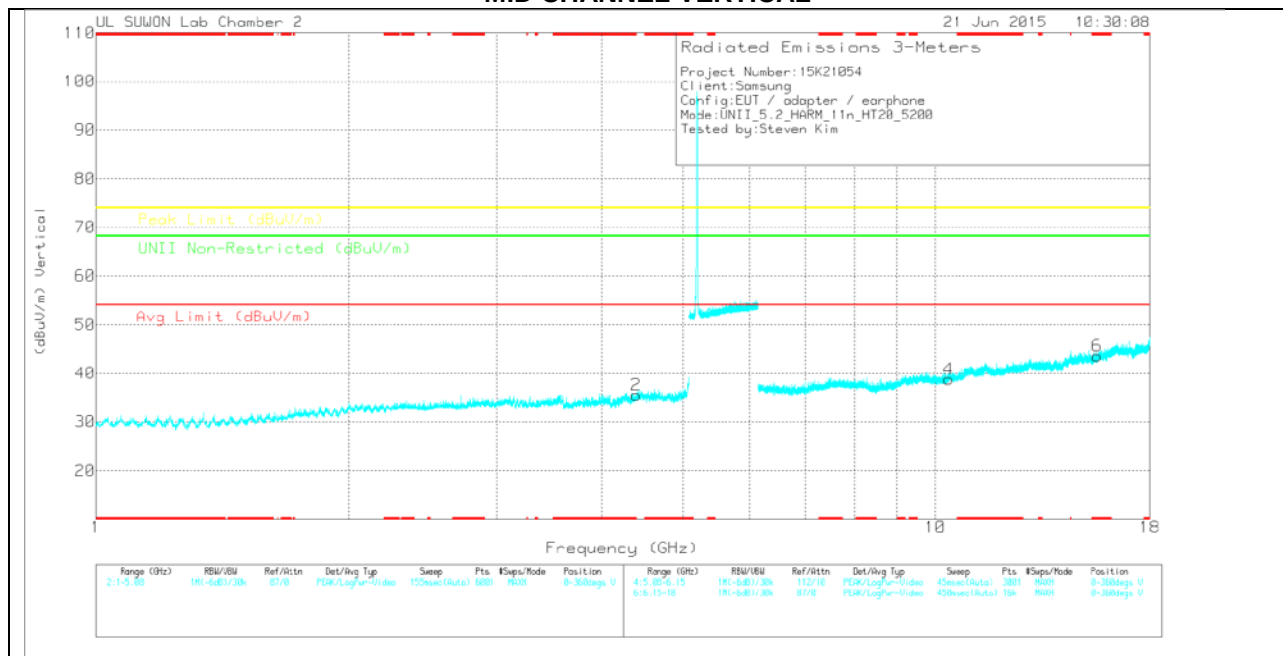
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

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

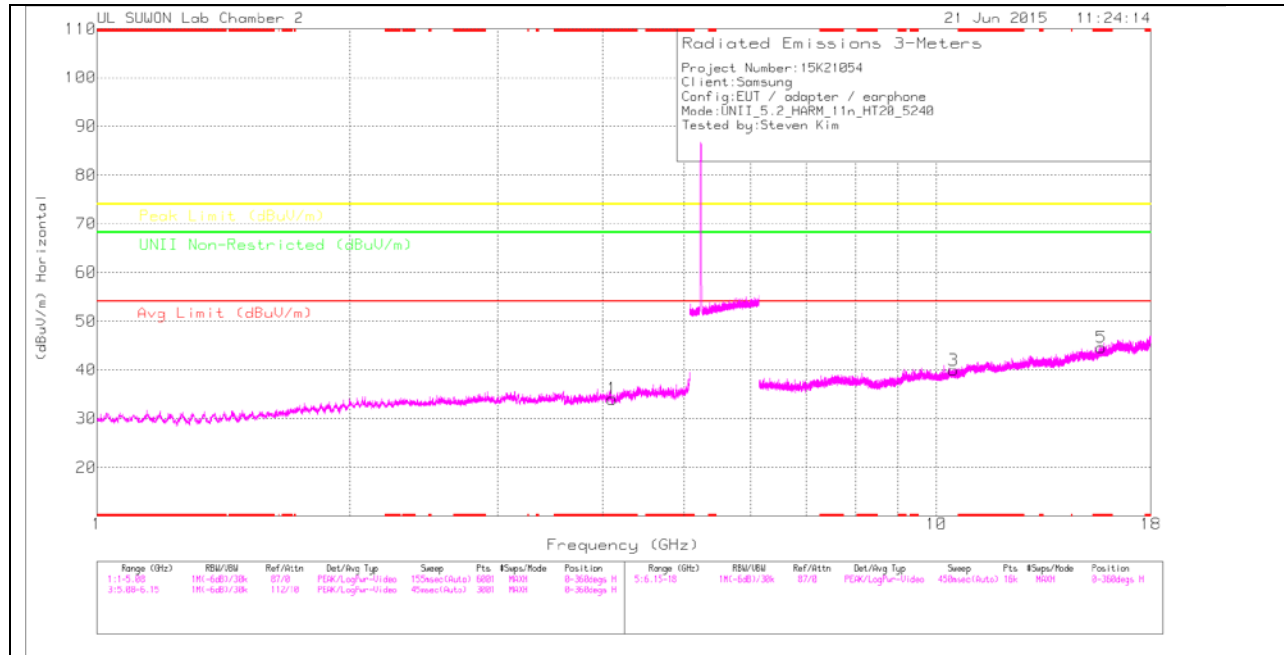
TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	4.424	28.09	PK	33.7	-25.5	0	36.29	-	-	-	-	68.2	-31.91	0-360	200	H
2	* 4.397	27.29	PK	33.7	-25.4	0	35.59	-	-	74	-38.41	-	-	0-360	200	V
3	10.358	20.99	PK	37.6	-18.2	0	40.39	-	-	-	-	68.2	-27.81	0-360	200	H
5	* 15.603	20.04	PK	40	-16.3	0	43.74	-	-	74	-30.26	-	-	0-360	100	H
4	10.356	19.42	PK	37.6	-18.2	0	38.82	-	-	-	-	68.2	-29.38	0-360	100	V
6	* 15.594	19.91	PK	40	-16.3	0	43.61	-	-	74	-30.39	-	-	0-360	100	V

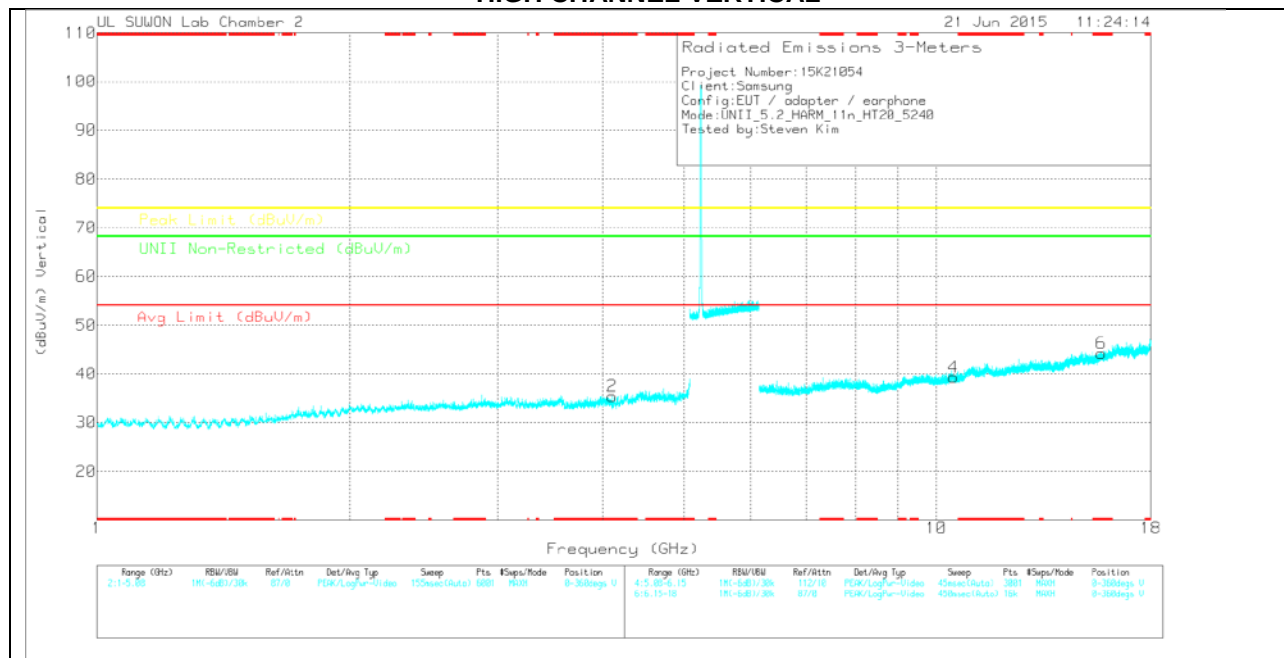
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

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

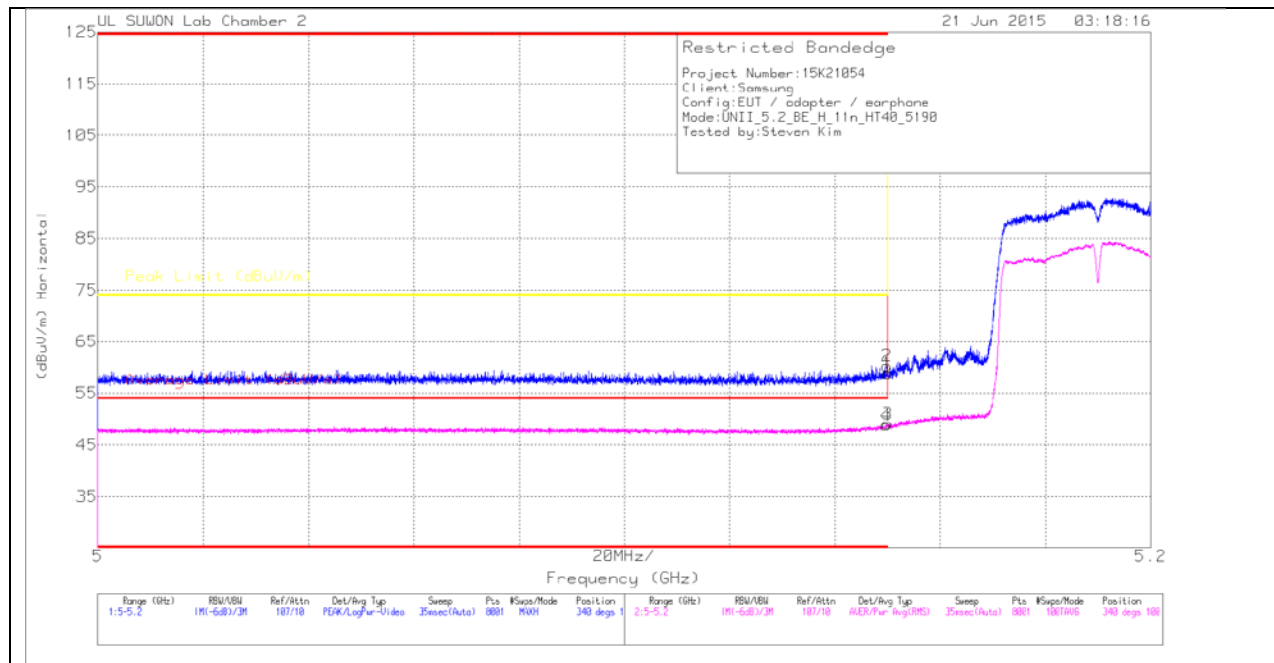
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724) 150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Asimuth (Degs)	Height (cm)	Polarity
1	* 4.111	25.96	PK	33.4	-25.3	0	34.06	-	-	74	-39.94	-	-	0-360	100	H
2	* 4.11	27.27	PK	33.4	-25.3	0	35.37	-	-	74	-38.63	-	-	0-360	100	V
3	10.467	20.02	PK	37.7	-17.8	0	39.92	-	-	-	-	68.2	-28.28	0-360	100	H
5	* 15.725	21.03	PK	40.2	-16.6	0	44.63	-	-	74	-29.37	-	-	0-360	200	H
4	10.467	19.41	PK	37.7	-17.8	0	39.31	-	-	-	-	68.2	-28.89	0-360	100	V
6	* 15.726	20.57	PK	40.2	-16.6	0	44.17	-	-	74	-29.83	-	-	0-360	100	V

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

PK – Peak Detector

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

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

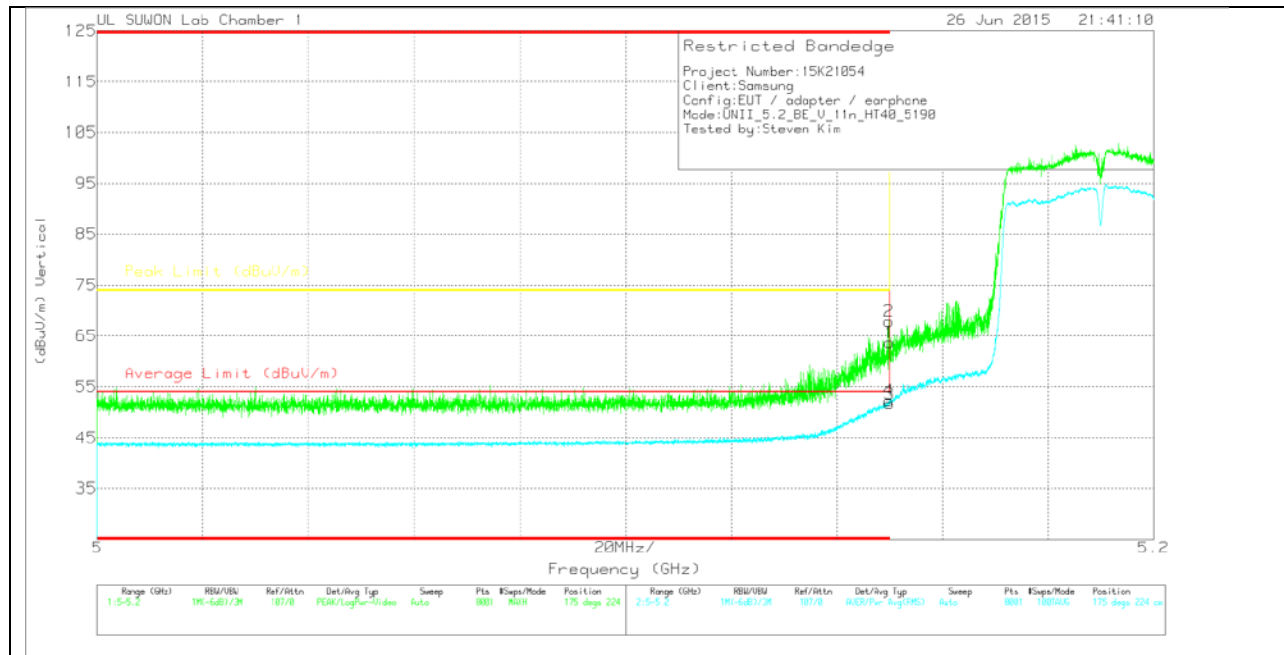
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	41.15	Pk	34.1	-16.4	0	58.85	-	-	74	-15.15	340	100	H
2	* 5.15	42.58	Pk	34.1	-16.4	0	60.28	-	-	74	-13.72	340	100	H
3	* 5.15	30.7	RMS	34.1	-16.4	.63	49.03	54	-4.97	-	-	340	100	H
4	* 5.15	30.51	RMS	34.1	-16.4	.63	48.84	54	-5.16	-	-	340	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

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 171_150619	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	48.87	Pk	34.2	-19.4	0	63.67	-	-	74	-10.33	175	224	V
2	* 5.15	53.07	Pk	34.2	-19.4	0	67.87	-	-	74	-6.13	175	224	V
3	* 5.15	36.31	RMS	34.2	-19.4	.63	51.74	54	-2.26	-	-	175	224	V
4	* 5.15	36.82	RMS	34.2	-19.4	.63	52.25	54	-1.75	-	-	175	224	V

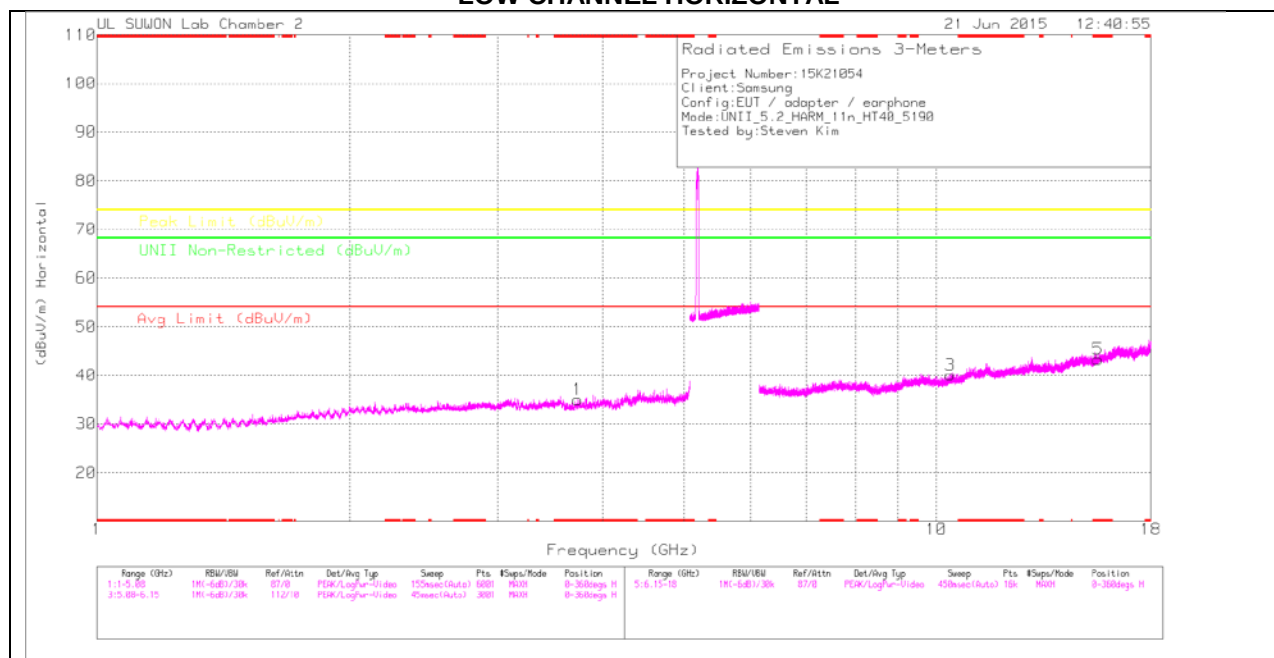
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

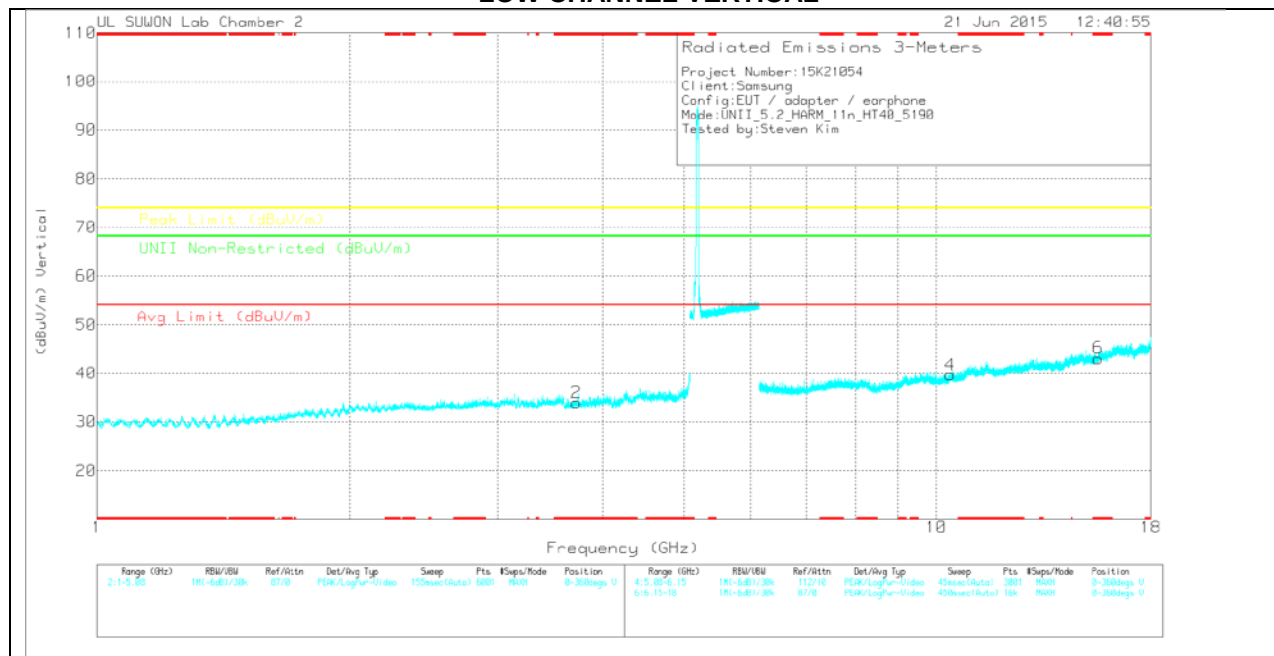
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

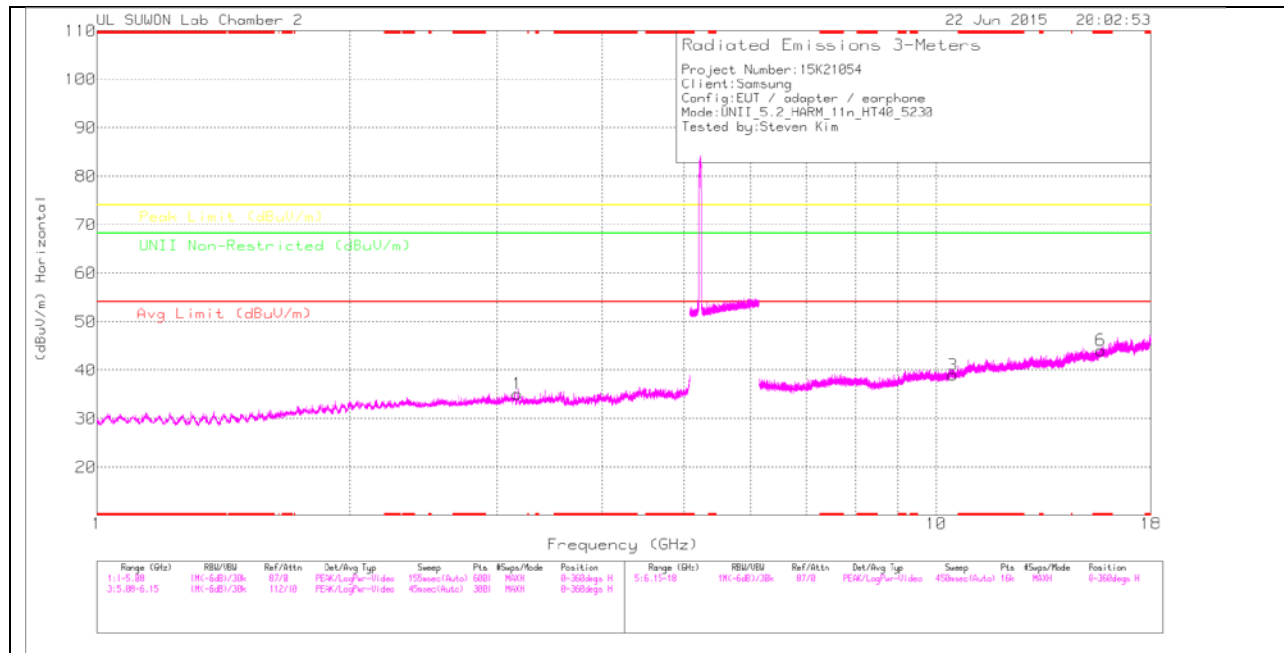
TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 87241_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.735	27.97	PK	33	-26	0	34.97	-	-	74	-39.03	-	-	0-360	100	H
2	* 3.723	27.05	PK	33	-26	0	34.05	-	-	74	-39.95	-	-	0-360	100	V
3	10.383	20.48	PK	37.6	-18	0	40.08	-	-	-	-	68.2	-28.12	0-360	100	H
5	* 15.577	19.53	PK	40	-16.2	0	43.33	-	-	74	-30.67	-	-	0-360	200	H
4	10.379	20.1	PK	37.6	-18	0	39.7	-	-	-	-	68.2	-28.5	0-360	100	V
6	* 15.58	19.31	PK	40	-16.2	0	43.11	-	-	74	-30.89	-	-	0-360	200	V

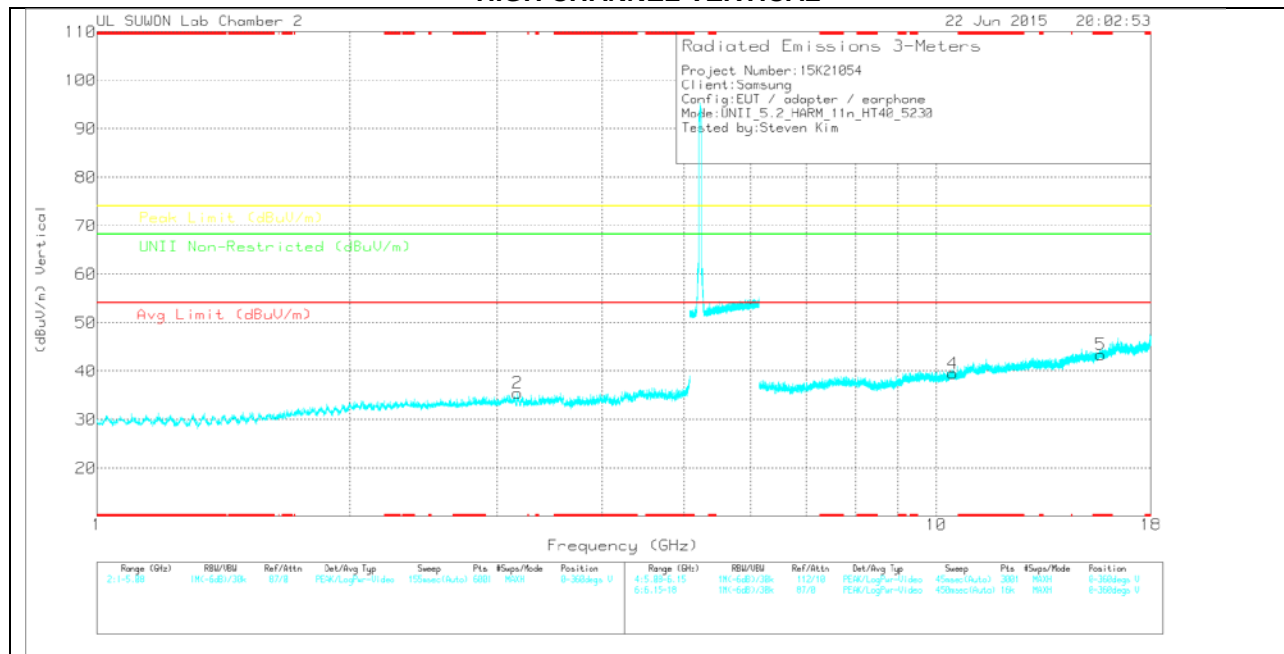
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

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

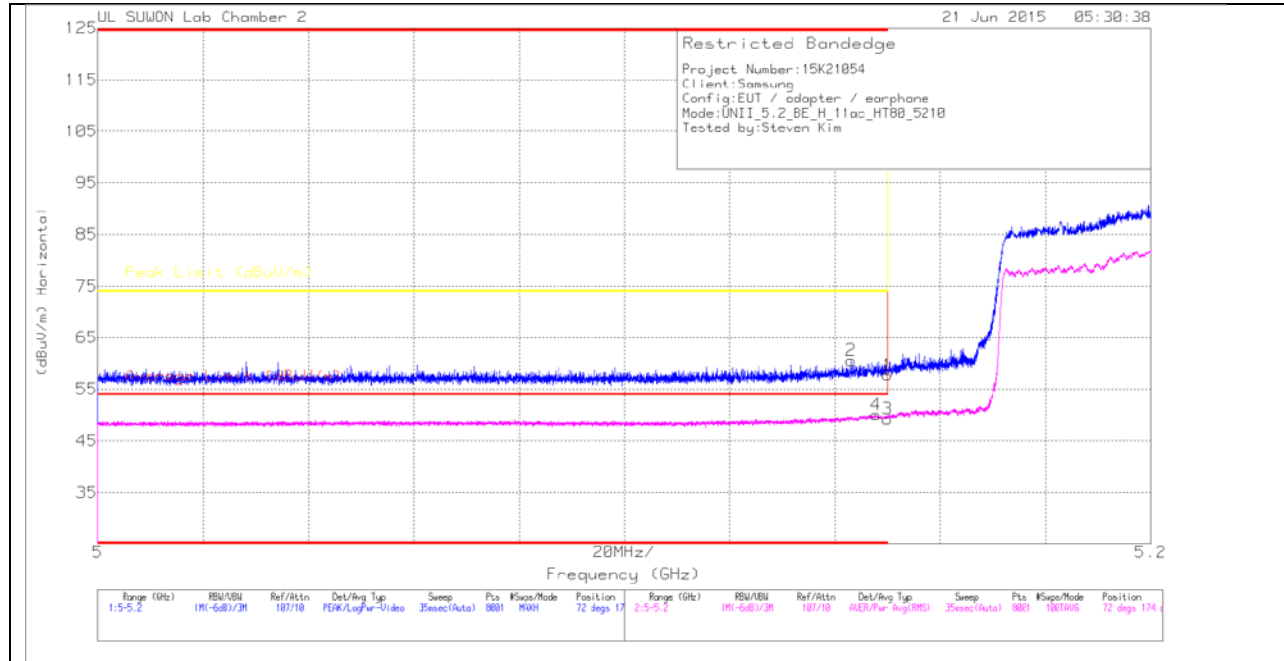
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0015 8724)_150 619	Path_4	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.169	28.71	PK	32.5	-26.1	0	35.11	-	-	-	-	68.2	-33.09	0-360	200	H
2	3.166	29.18	PK	32.5	-26.2	0	35.48	-	-	-	-	68.2	-32.72	0-360	100	V
3	10.462	19.11	PK	37.7	-17.8	0	39.01	-	-	-	-	68.2	-29.19	0-360	200	H
6	* 15.688	20.41	PK	40.1	-16.5	0	44.01	-	-	74	-29.99	-	-	0-360	100	H
4	10.461	19.64	PK	37.7	-17.8	0	39.54	-	-	-	-	68.2	-28.66	0-360	200	V
5	* 15.689	19.85	PK	40.1	-16.5	0	43.45	-	-	74	-30.55	-	-	0-360	100	V

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

PK – Peak detector

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

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

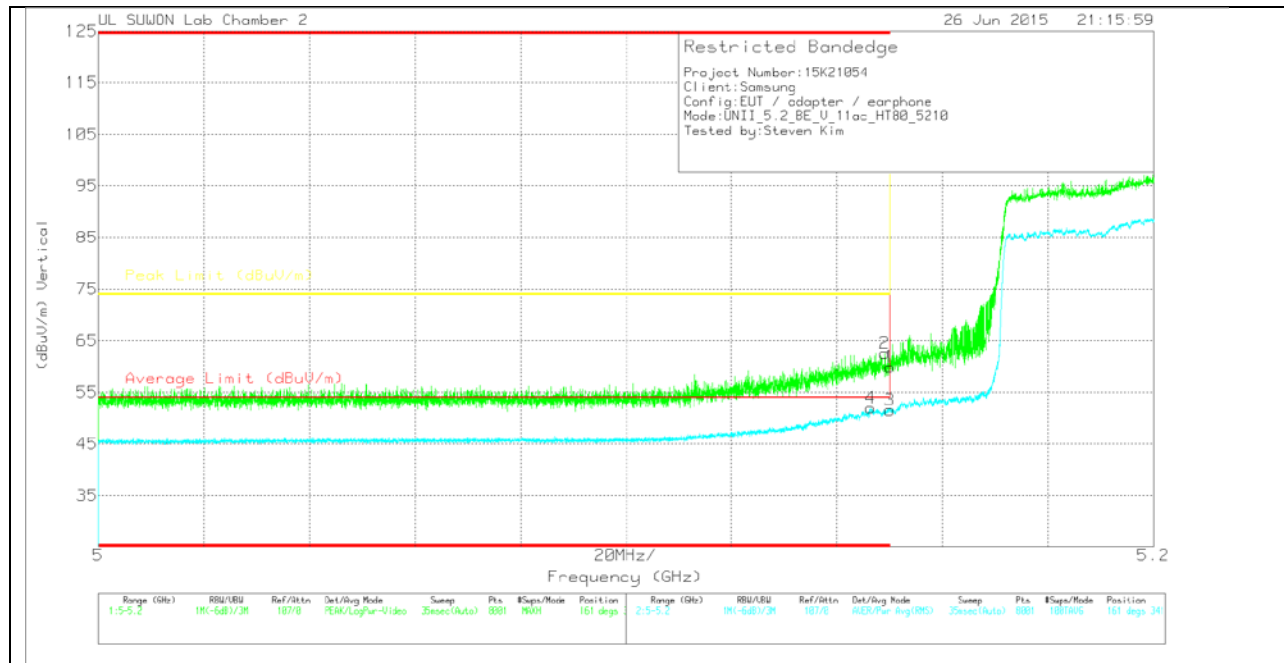
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	40.01	Pk	34.1	-16.4	0	57.71	-	-	74	-16.29	72	174	H
2	* 5.143	42.89	Pk	34.1	-16.4	0	60.59	-	-	74	-13.41	72	174	H
3	* 5.15	30.37	RMS	34.1	-16.4	1.18	49.25	54	-4.75	-	-	72	174	H
4	* 5.148	31.2	RMS	34.1	-16.4	1.18	50.08	54	-3.92	-	-	72	174	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_2_10dB	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	42.19	PK	34.1	-16.4	0	59.89	-	-	74	-14.11	161	341	V
2	* 5.149	44.88	PK	34.1	-16.4	0	62.58	-	-	74	-11.42	161	341	V
3	* 5.15	32.65	RMS	34.1	-16.4	1.18	51.53	54	-2.47	-	-	161	341	V
4	* 5.146	33.08	RMS	34.1	-16.4	1.18	51.96	54	-2.04	-	-	161	341	V

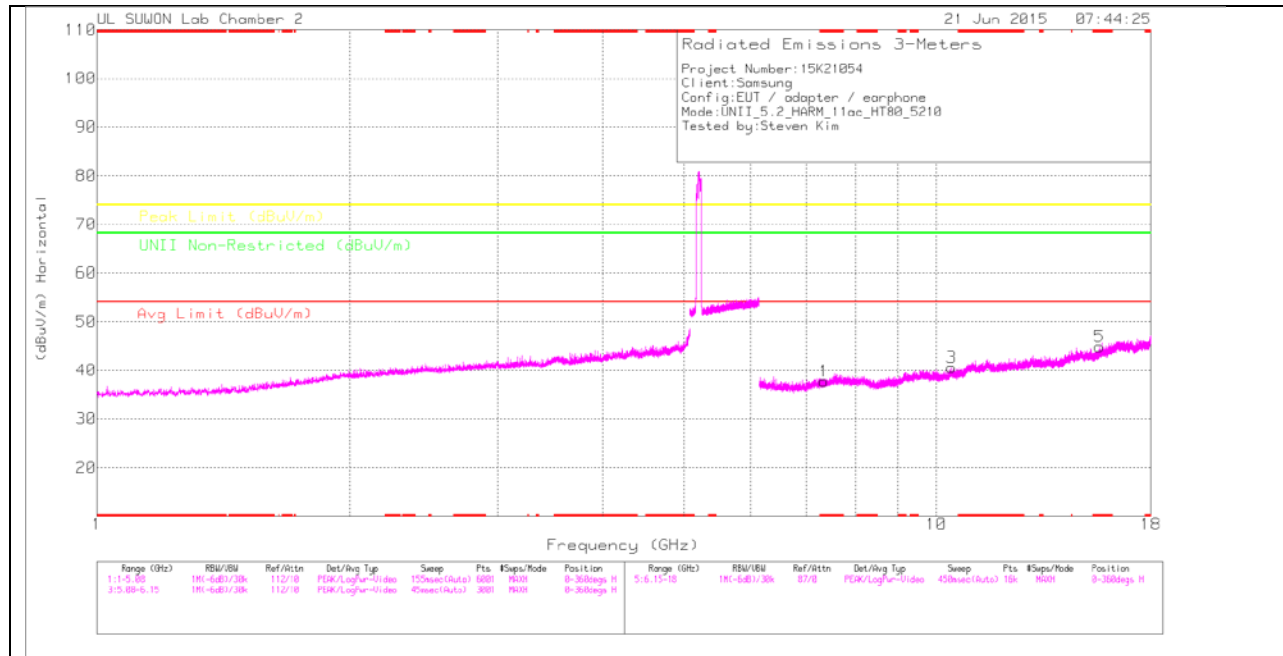
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

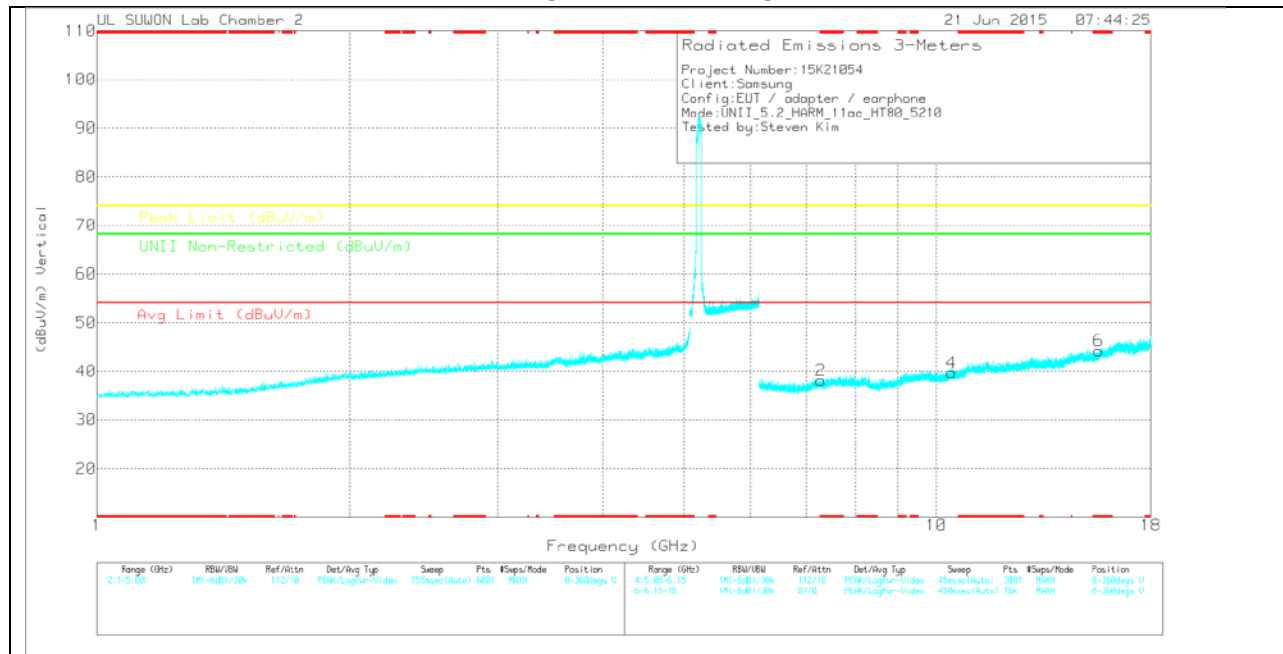
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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

MID CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	Path_5	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	* 7.34	23.94	PK	35.9	-22.1	0	37.74	-	-	74	-36.26	-	-	0-360	100	H
3	10.424	20.73	PK	37.6	-17.8	0	40.53	-	-	-	-	68.2	-27.67	0-360	100	H
5	* 15.632	21.28	PK	40	-16.4	0	44.88	-	-	74	-29.12	-	-	0-360	100	H
2	* 7.278	24.52	PK	35.8	-22.2	0	38.12	-	-	74	-35.88	-	-	0-360	200	V
4	10.416	19.85	PK	37.6	-17.8	0	39.65	-	-	-	-	68.2	-28.55	0-360	200	V
6	* 15.629	20.56	PK	40	-16.4	0	44.16	-	-	74	-29.84	-	-	0-360	200	V

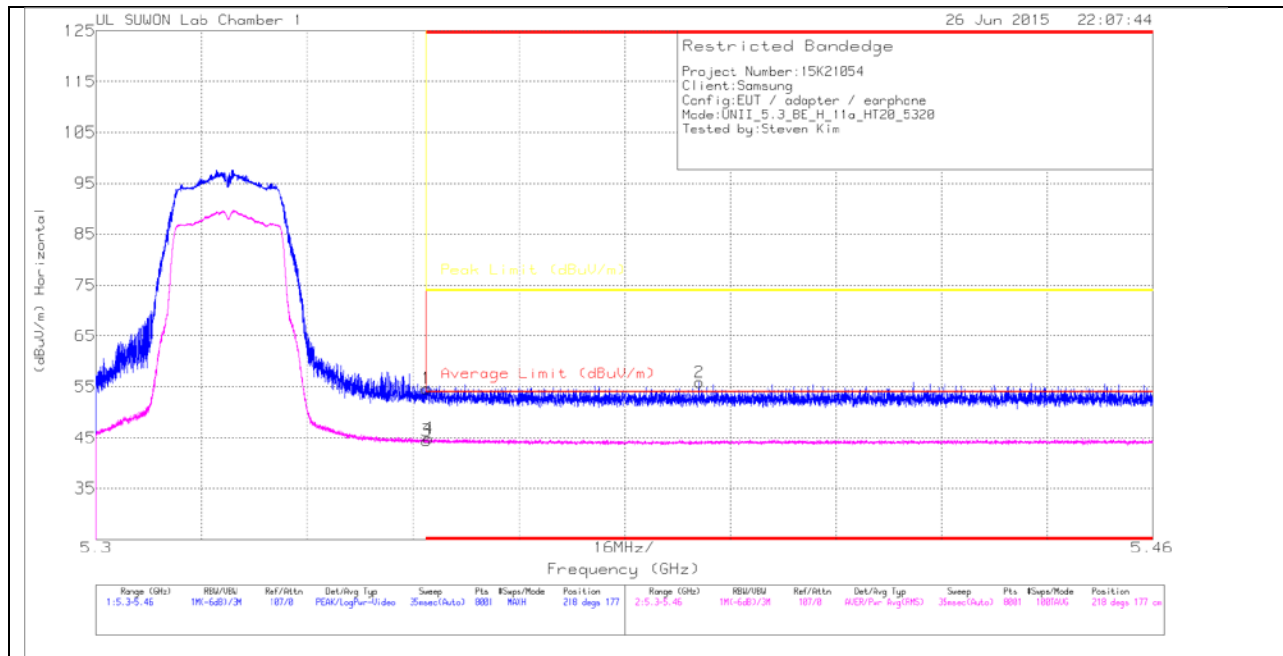
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak Detector

11.2. 5.3 GHz

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

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

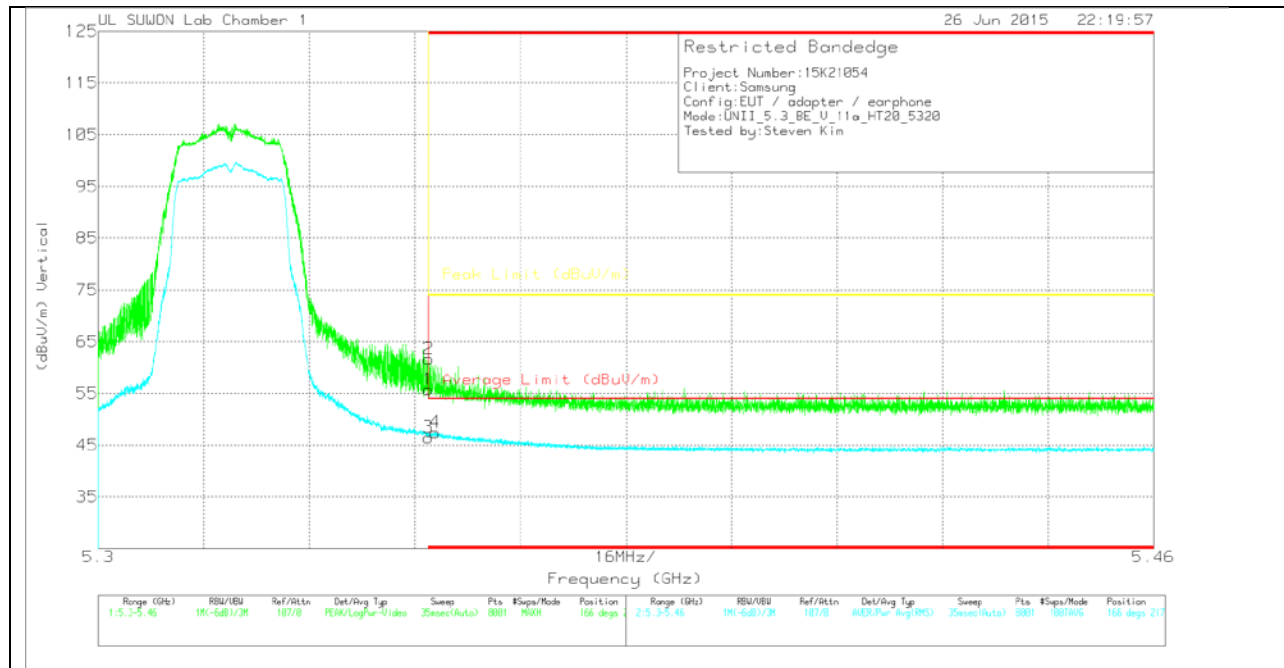
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	39.8	Pk	34.5	-19.6	0	54.7	-	-	74	-19.3	218	177	H
2	* 5.391	40.8	Pk	34.5	-19.4	0	55.9	-	-	74	-18.1	218	177	H
3	* 5.35	29.25	RMS	34.5	-19.6	.3	44.45	54	-9.55	-	-	218	177	H
4	* 5.35	29.7	RMS	34.5	-19.6	.3	44.9	54	-9.1	-	-	218	177	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2_10d B	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	40.88	Pk	34.5	-19.6	0	55.78	-	-	74	-18.22	166	217	V
2	* 5.35	46.75	Pk	34.5	-19.6	0	61.65	-	-	74	-12.35	166	217	V
3	* 5.35	31.31	RMS	34.5	-19.6	.3	46.51	54	-7.49	-	-	166	217	V
4	* 5.351	32.26	RMS	34.5	-19.6	.3	47.46	54	-6.54	-	-	166	217	V

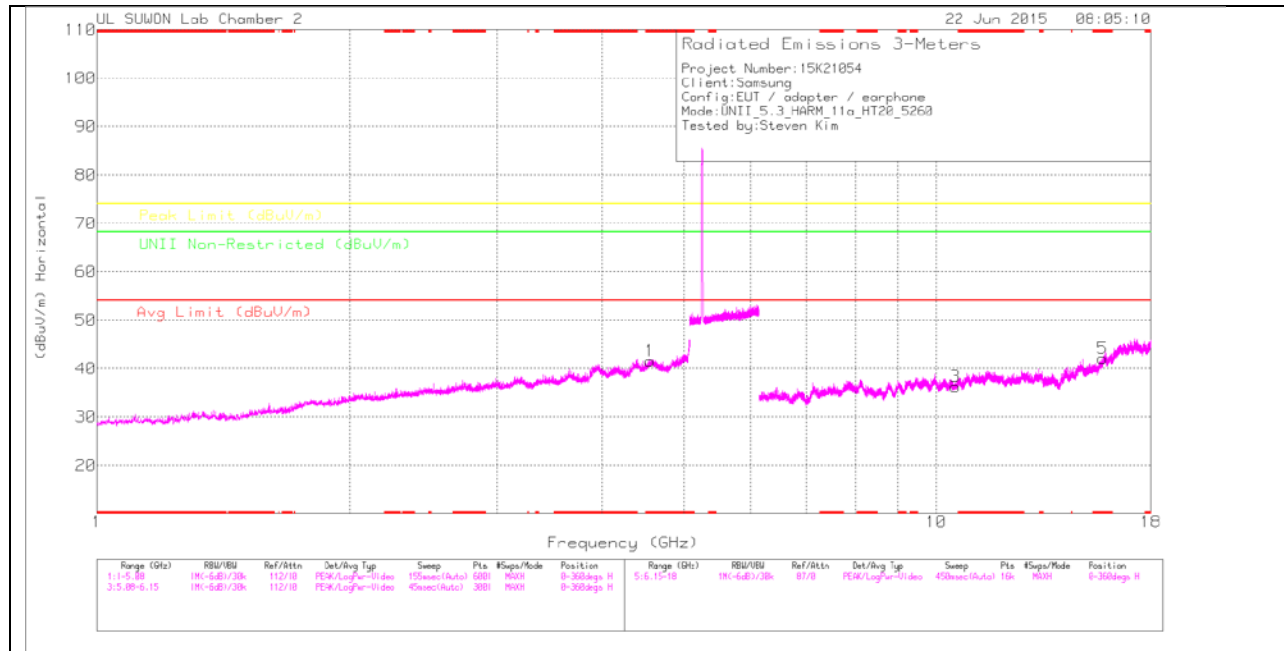
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

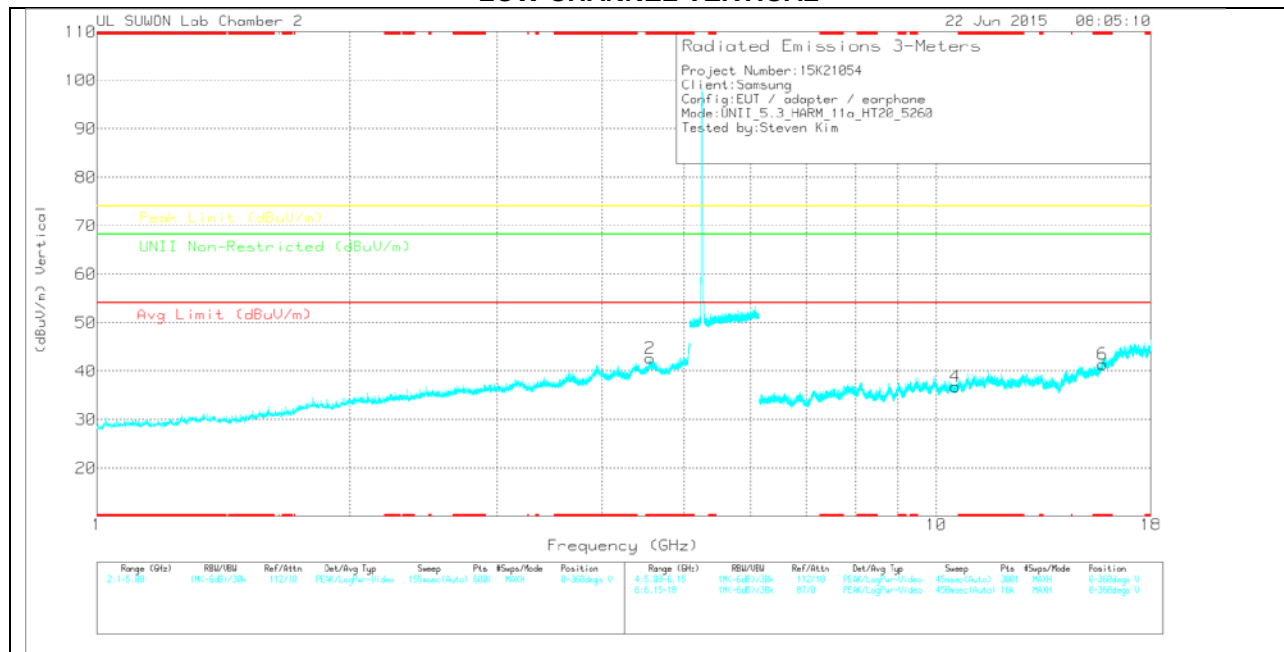
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

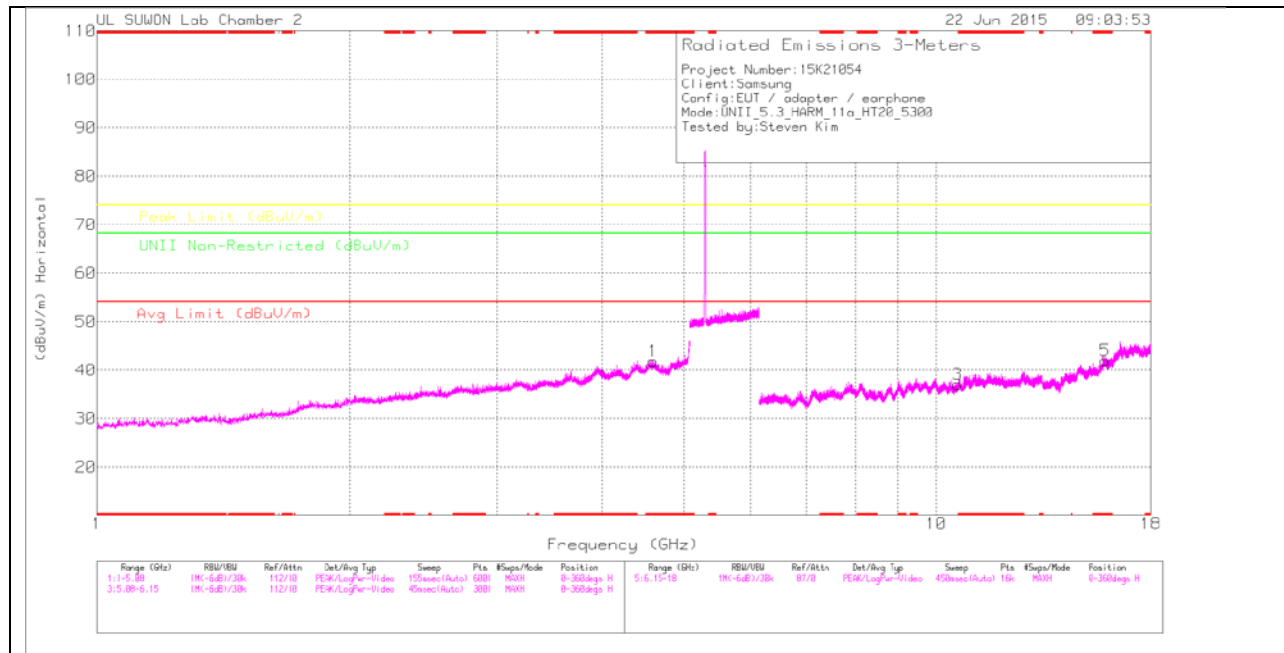
TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_4_5G LP	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	* 4.56	35.53	Avg	33.9	-27.8	0	41.63	-	-	74	-32.37	-	-	0-360	100	H
2	* 4.559	36.59	Avg	33.9	-27.8	0	42.69	-	-	74	-31.31	-	-	0-360	100	V
3	10.522	19.64	Avg	37.9	-21.3	0	36.24	-	-	-	-	68.2	-31.96	0-360	200	H
5	* 15.781	20.85	Avg	40.4	-19.2	0	42.05	-	-	74	-31.95	-	-	0-360	100	H
4	10.52	20.2	Avg	37.9	-21.3	0	36.8	-	-	-	-	68.2	-31.4	0-360	100	V
6	* 15.78	20.3	Avg	40.4	-19.2	0	41.5	-	-	74	-32.5	-	-	0-360	200	V

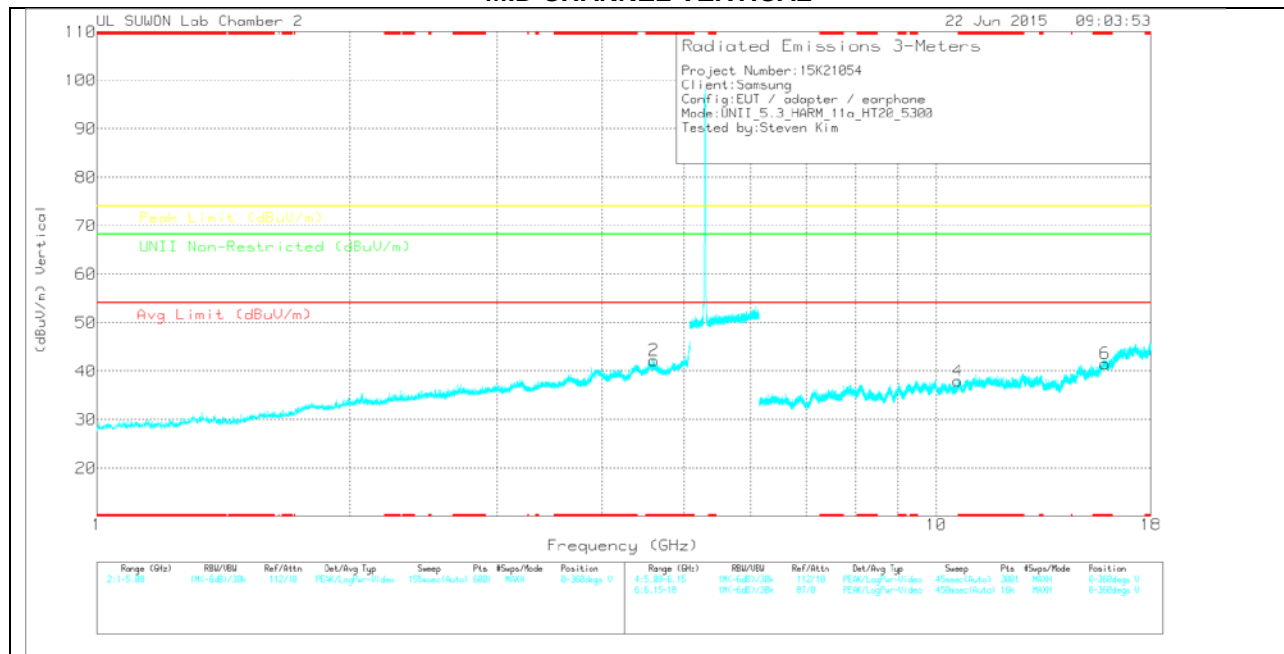
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

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

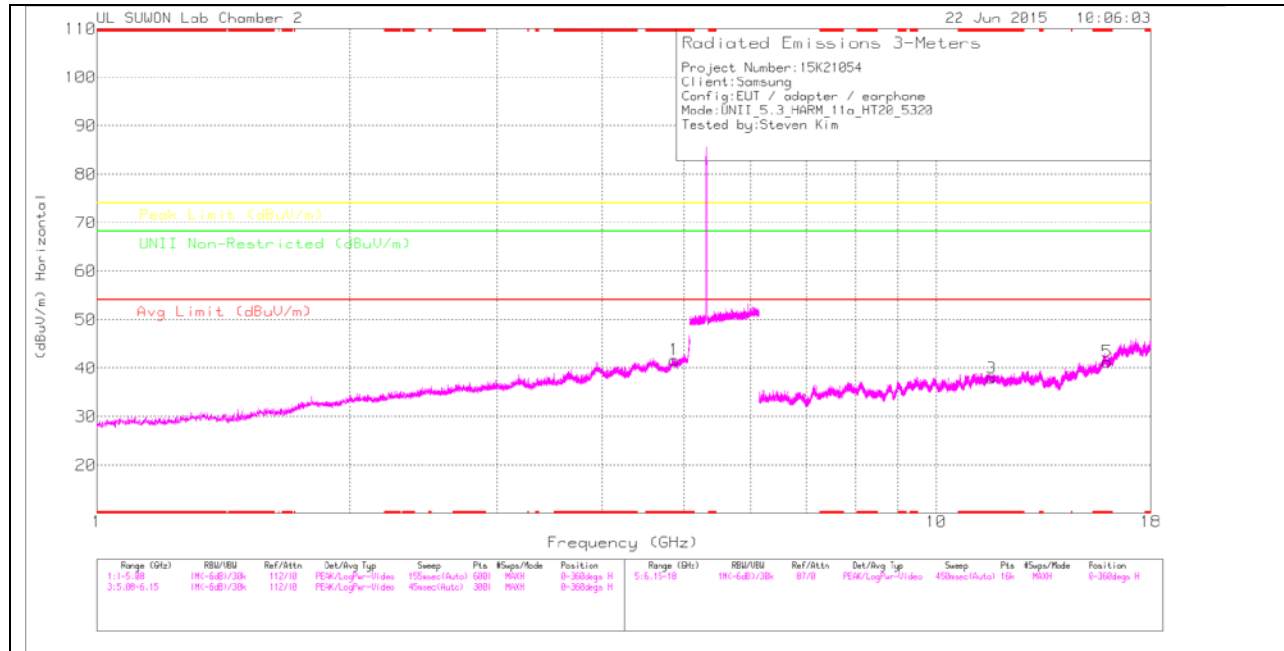
TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0015 8717)_150 619	Path_4_5G LP	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	* 4.599	35.8	Avg	33.9	-27.9	0	41.8	-	-	74	-32.2	-	-	0-360	100	H
2	* 4.601	36.2	Avg	33.9	-27.9	0	42.2	-	-	74	-31.8	-	-	0-360	100	V
3	* 10.602	19.94	Avg	37.9	-20.8	0	37.04	-	-	74	-36.96	-	-	0-360	200	H
5	* 15.902	19.81	Avg	40.5	-18.3	0	42.01	-	-	74	-31.99	-	-	0-360	200	H
4	* 10.6	20.97	Avg	37.9	-20.9	0	37.97	-	-	74	-36.03	-	-	0-360	100	V
6	* 15.902	19.41	Avg	40.5	-18.3	0	41.61	-	-	74	-32.39	-	-	0-360	100	V

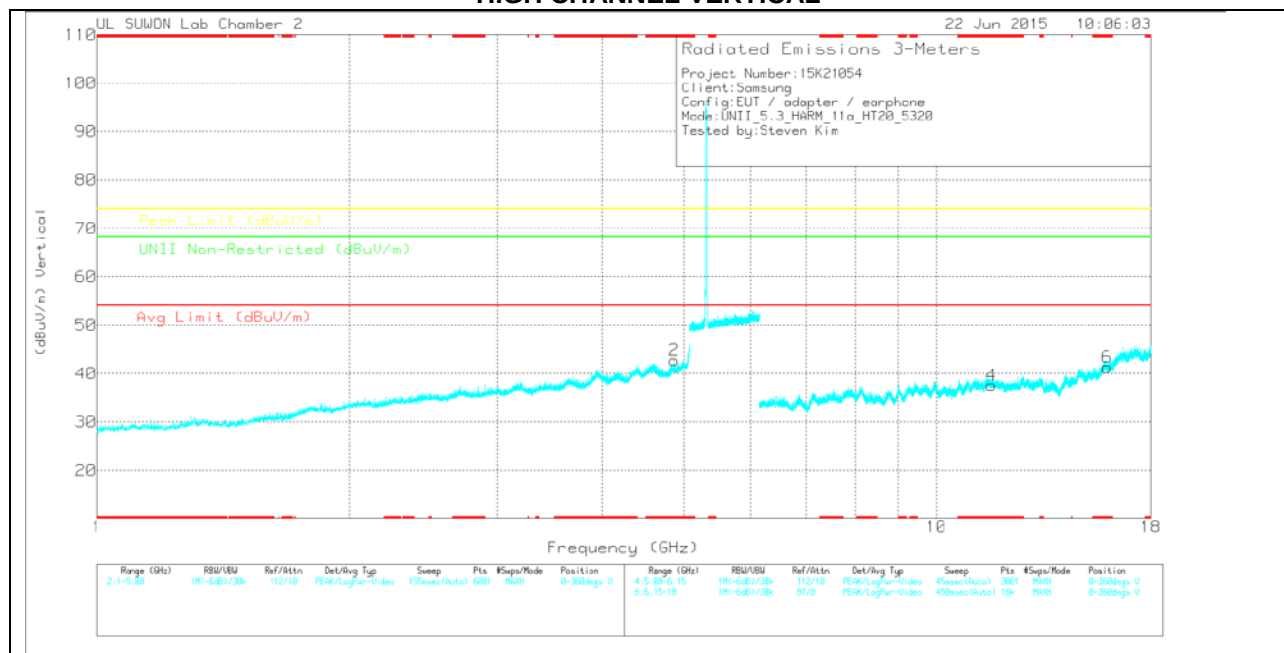
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

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	3117(0016 8717)_150 619	Path_4_5G LP	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	* 4.872	35.6	Avg	34	-27.9	0	41.7	-	-	74	-32.3	-	-	0-360	100	H
2	* 4.874	36.61	Avg	34	-27.9	0	42.71	-	-	74	-31.29	-	-	0-360	100	V
3	* 11.641	19.81	Avg	38.7	-20.6	0	37.91	-	-	74	-36.09	-	-	0-360	100	H
5	* 15.962	19.41	Avg	40.6	-18.7	0	41.31	-	-	74	-32.69	-	-	0-360	100	H
4	* 11.64	19.47	Avg	38.7	-20.6	0	37.57	-	-	74	-36.43	-	-	0-360	100	V
6	* 15.96	19.47	Avg	40.6	-18.7	0	41.37	-	-	74	-32.63	-	-	0-360	100	V

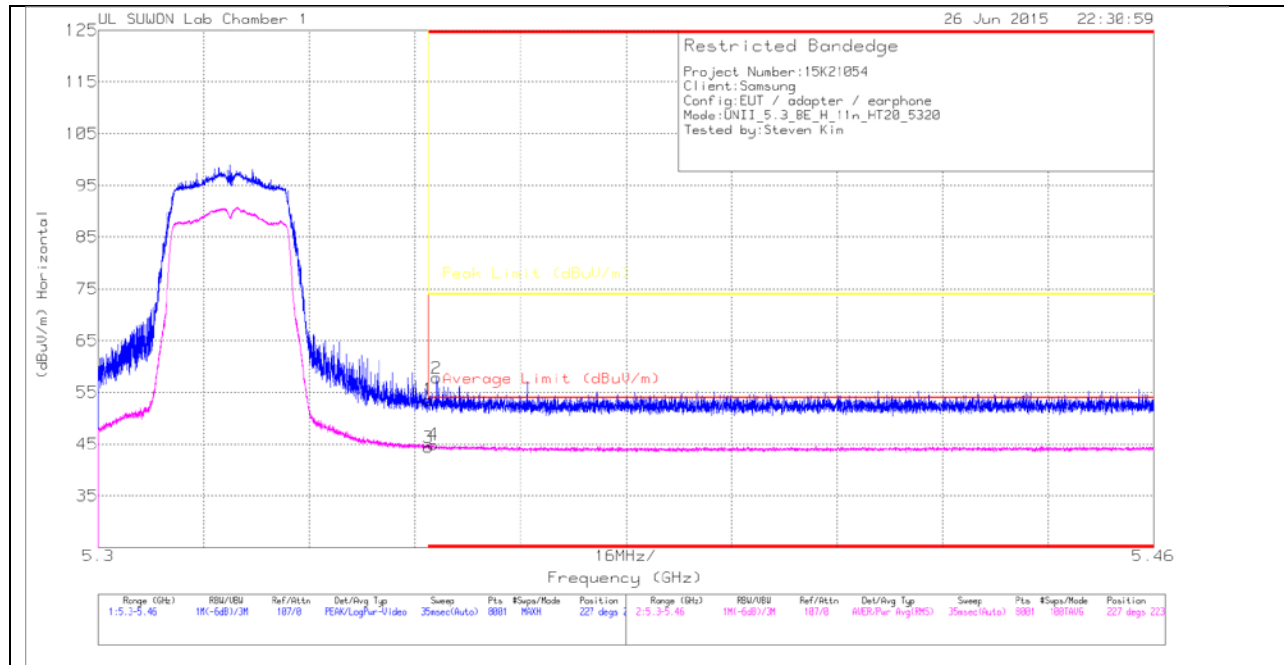
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

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

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

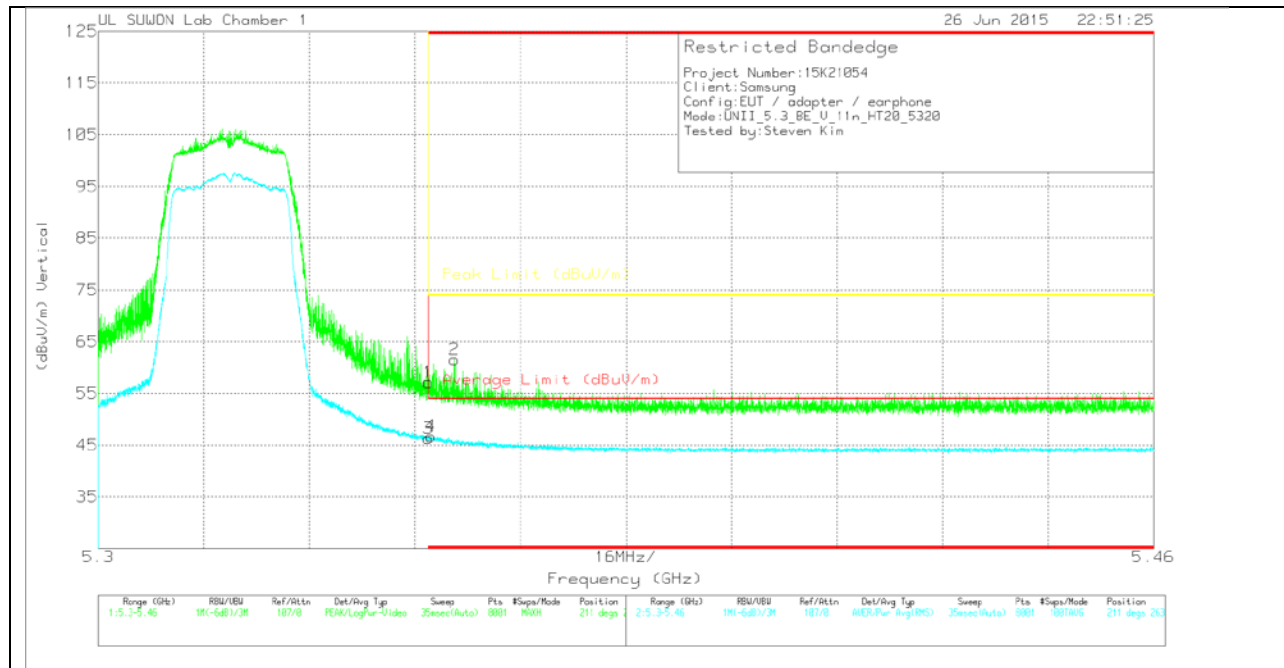
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	38.68	Pk	34.5	-19.6	0	53.58	-	-	74	-20.42	227	223	H
2	* 5.351	42.86	Pk	34.5	-19.6	0	57.76	-	-	74	-16.24	227	223	H
3	* 5.35	29.17	RMS	34.5	-19.6	.32	44.39	54	-9.61	-	-	227	223	H
4	* 5.351	29.69	RMS	34.5	-19.6	.32	44.91	54	-9.09	-	-	227	223	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2_10d B	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	42.23	Pk	34.5	-19.6	0	57.13	-	-	74	-16.87	211	263	V
2	* 5.354	46.63	Pk	34.5	-19.6	0	61.53	-	-	74	-12.47	211	263	V
3	* 5.35	31.11	RMS	34.5	-19.6	.32	46.33	54	-7.67	-	-	211	263	V
4	* 5.35	31.48	RMS	34.5	-19.6	.32	46.7	54	-7.3	-	-	211	263	V

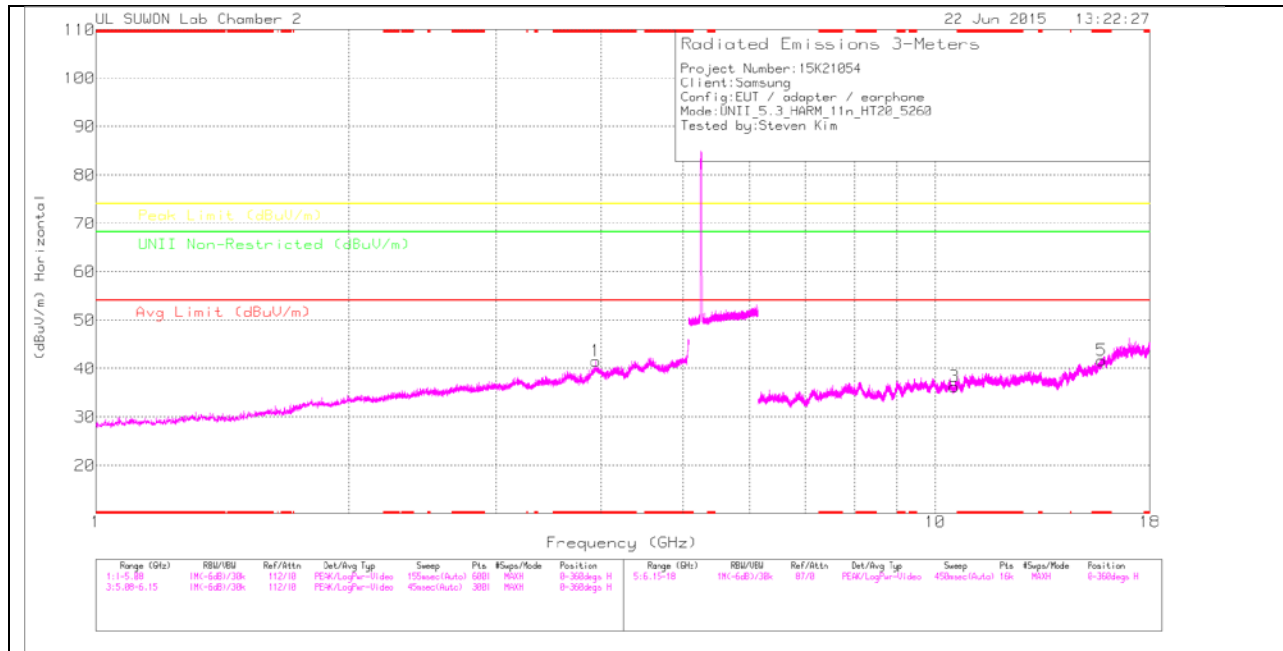
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

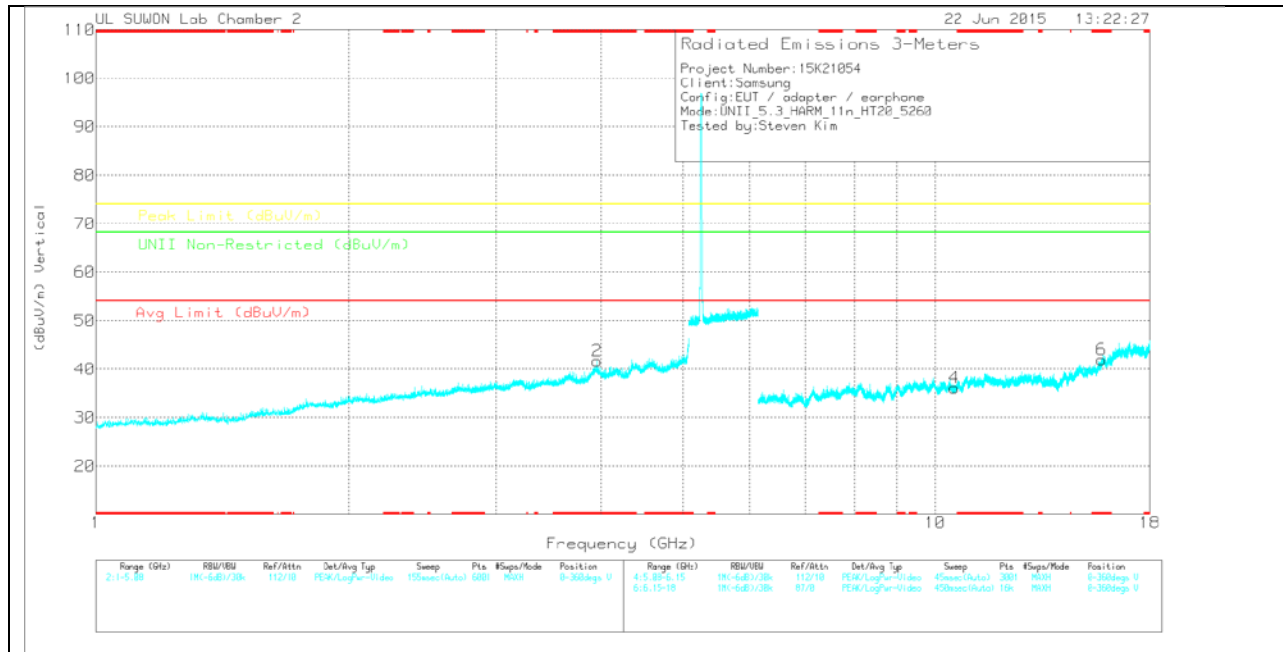
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

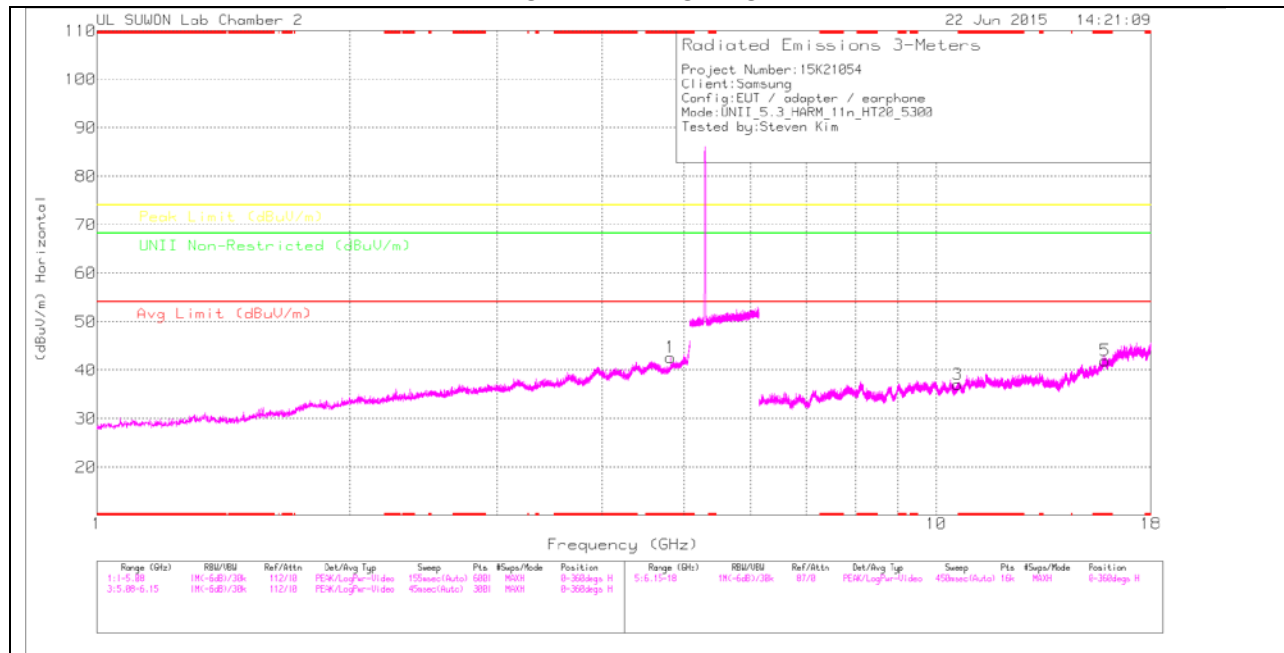
TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_4_5G LP	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	* 3.942	36.81	Avg	33.3	-28.5	0	41.61	-	-	74	-32.39	-	-	0-360	100	H
2	* 3.957	36.97	Avg	33.3	-28.5	0	41.77	-	-	74	-32.23	-	-	0-360	100	V
3	10.521	19.62	Avg	37.9	-21.3	0	36.22	-	-	-	-	68.2	-31.98	0-360	200	H
5	* 15.78	20.52	Avg	40.4	-19.2	0	41.72	-	-	74	-32.28	-	-	0-360	200	H
4	10.522	19.58	Avg	37.9	-21.3	0	36.18	-	-	-	-	68.2	-32.02	0-360	200	V
6	* 15.782	20.77	Avg	40.4	-19.2	0	41.97	-	-	74	-32.03	-	-	0-360	200	V

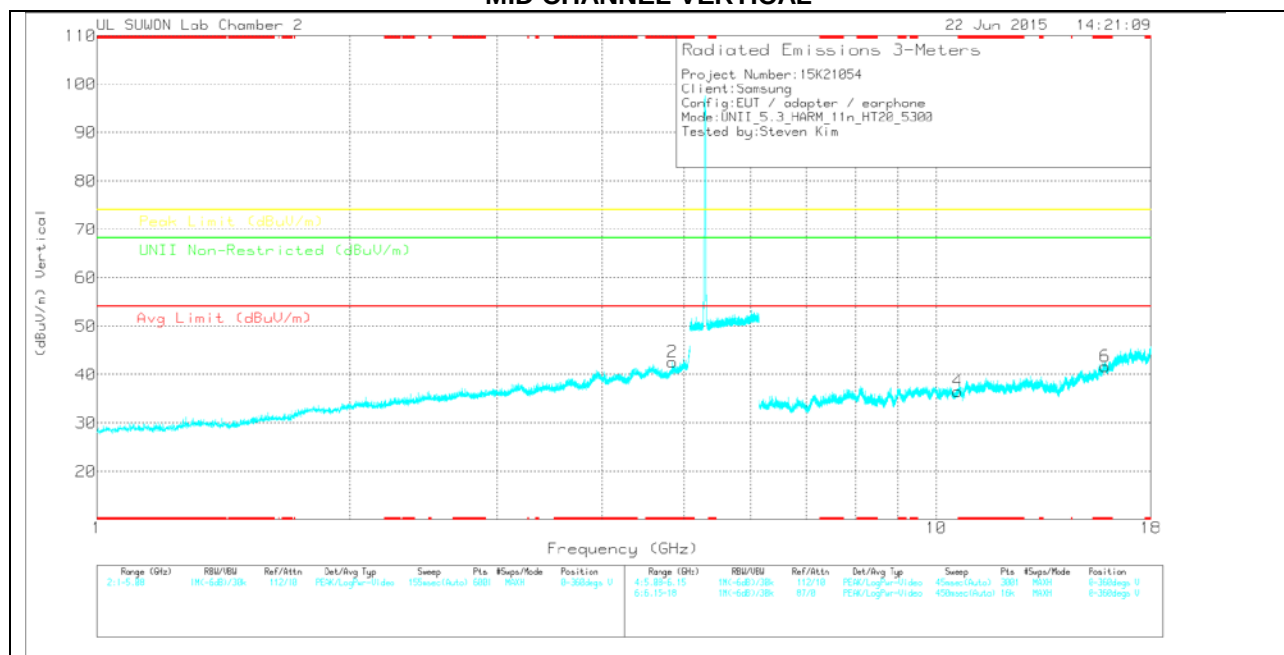
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

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

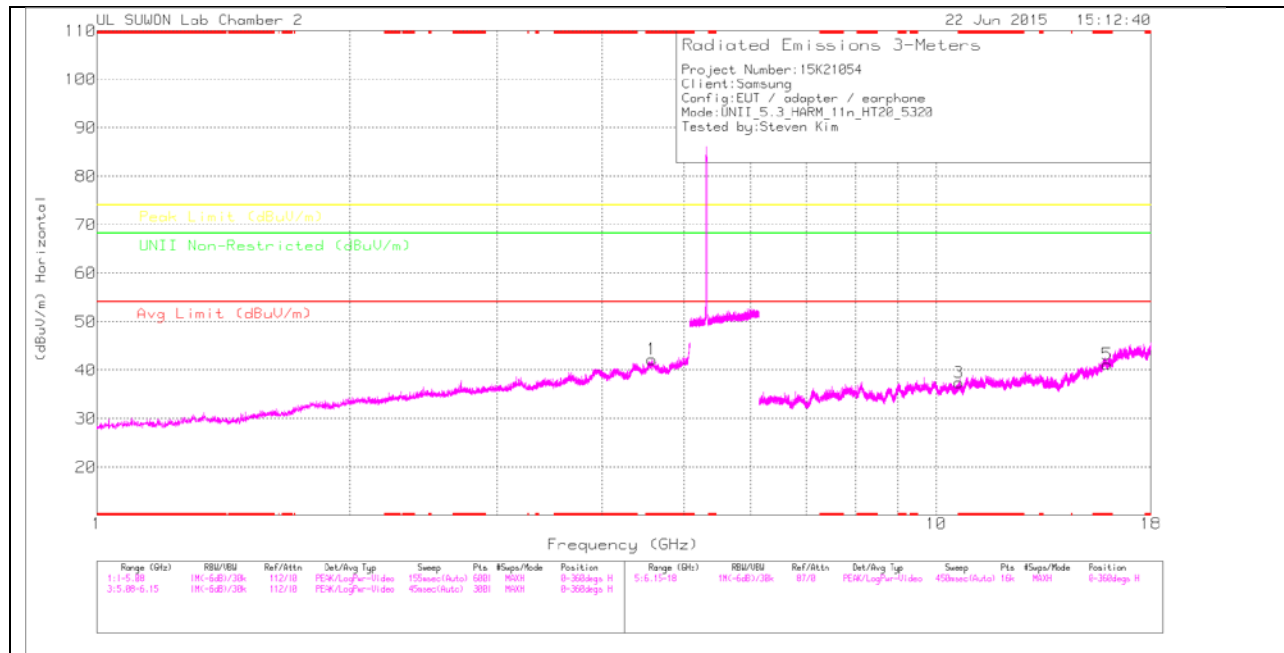
TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_4_5G LP	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	* 4.824	37.07	Avg	34	-28.5	0	42.57	-	-	74	-31.43	-	-	0-360	200	H
2	* 4.85	36.48	Avg	34	-27.8	0	42.68	-	-	74	-31.32	-	-	0-360	200	V
3	* 10.602	19.93	Avg	37.9	-20.8	0	37.03	-	-	74	-36.97	-	-	0-360	100	H
5	* 15.899	19.78	Avg	40.5	-18.3	0	41.98	-	-	74	-32.02	-	-	0-360	100	H
4	* 10.6	19.53	Avg	37.9	-20.9	0	36.53	-	-	74	-37.47	-	-	0-360	200	V
6	* 15.899	19.49	Avg	40.5	-18.3	0	41.69	-	-	74	-32.31	-	-	0-360	200	V

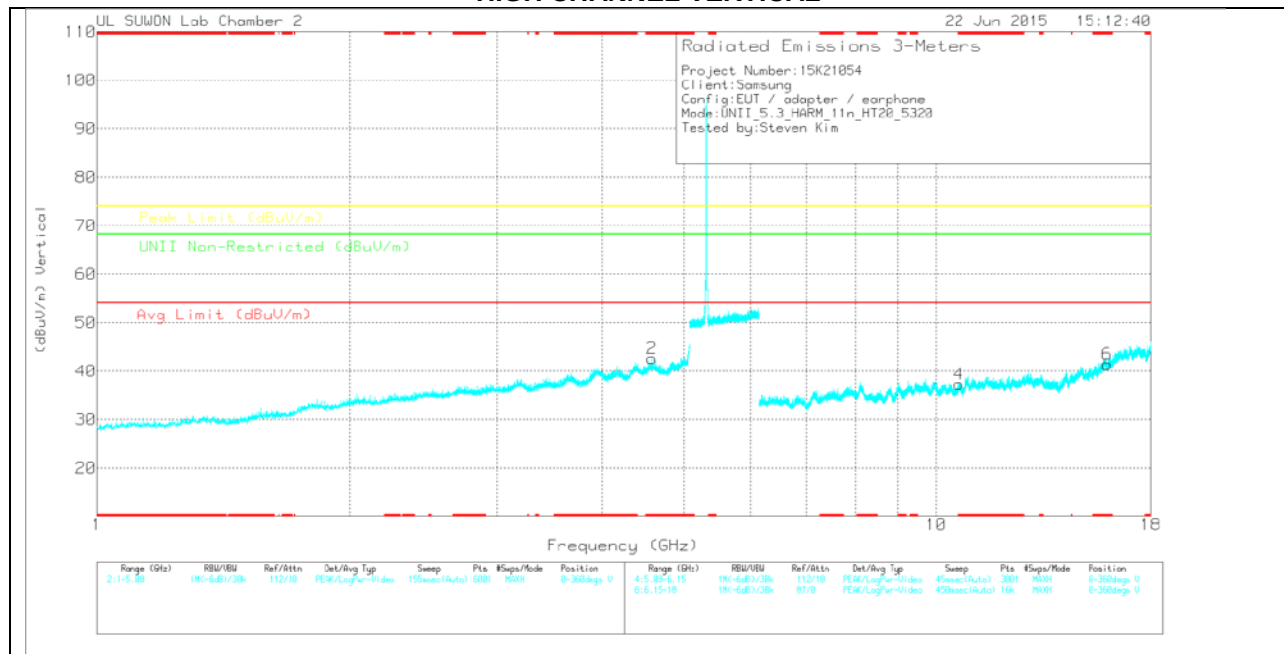
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

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

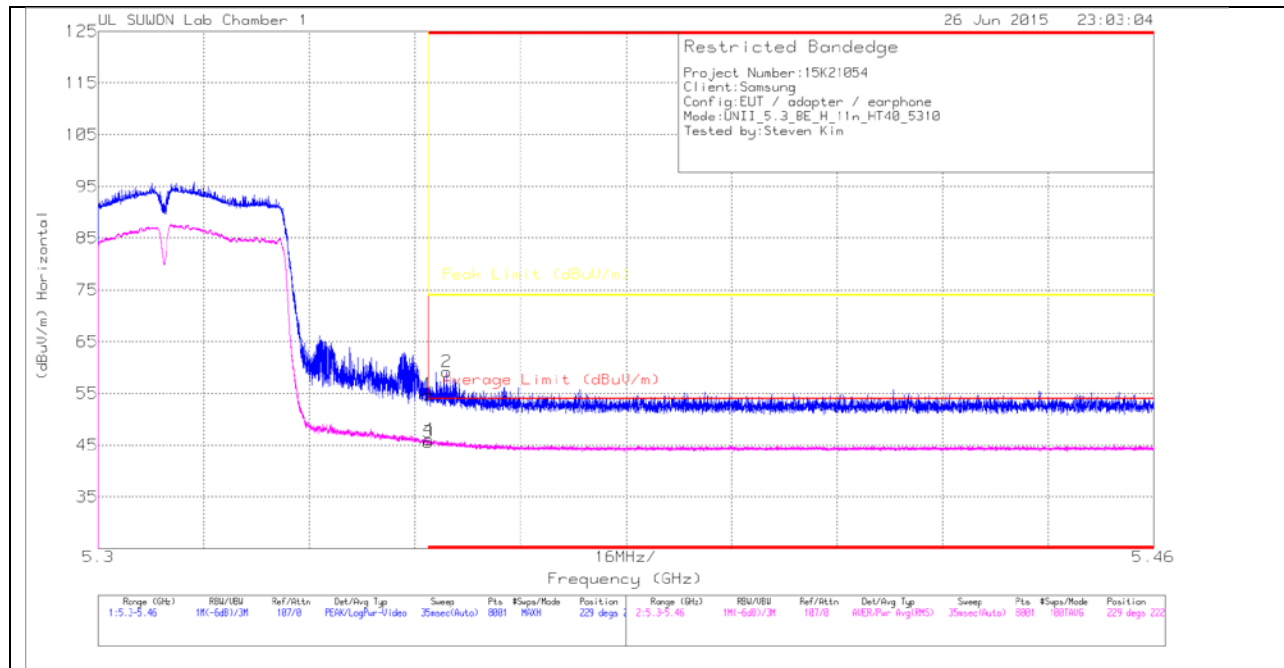
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_4_5G LP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.577	36.22	Avg	33.9	-27.9	0	42.22	-	-	74	-31.78	-	-	0-360	200	H
2	* 4.578	36.64	Avg	33.9	-27.9	0	42.64	-	-	74	-31.36	-	-	0-360	200	V
3	* 10.639	19.81	Avg	37.9	-20.3	0	37.41	-	-	74	-36.59	-	-	0-360	200	H
5	* 15.96	19.26	Avg	40.6	-18.7	0	41.16	-	-	74	-32.84	-	-	0-360	100	H
4	* 10.64	19.57	Avg	37.9	-20.2	0	37.27	-	-	74	-36.73	-	-	0-360	200	V
6	* 15.963	19.52	Avg	40.6	-18.7	0	41.42	-	-	74	-32.58	-	-	0-360	100	V

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

PK – Peak detector

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

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

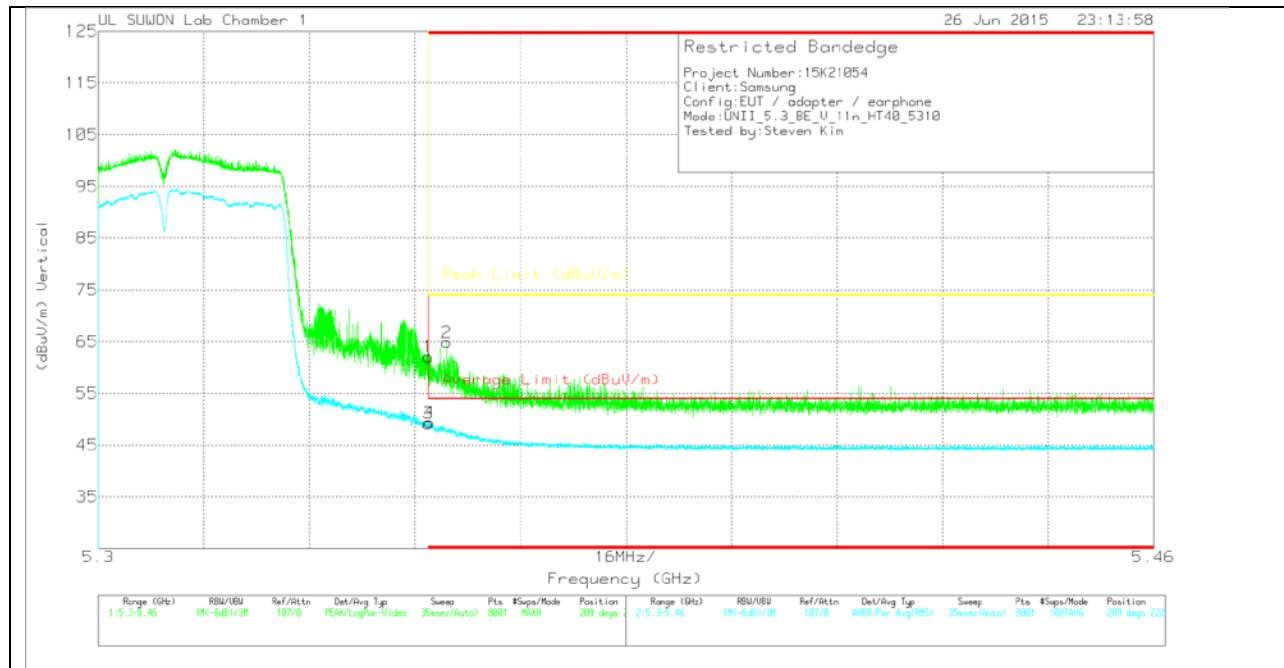
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	39.89	PK			0	54.79	-	-	74	-19.21	229	222	H
2	* 5.353	44.31	PK			0	59.21	-	-	74	-14.79	229	222	H
3	* 5.35	30.07	RMS			.63	45.6	54	-8.4	-	-	229	222	H
4	* 5.35	30.56	RMS			.63	46.09	54	-7.91	-	-	229	222	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	47.13	Pk	34.5	-19.6	0	62.03	-	-	74	-11.97	209	222	V
2	* 5.353	49.93	Pk	34.5	-19.6	0	64.83	-	-	74	-9.17	209	222	V
3	* 5.35	33.69	RMS	34.5	-19.6	.63	49.22	54	-4.78	-	-	209	222	V
4	* 5.35	33.86	RMS	34.5	-19.6	.63	49.39	54	-4.61	-	-	209	222	V

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

PK - Peak detector

RMS - RMS detection