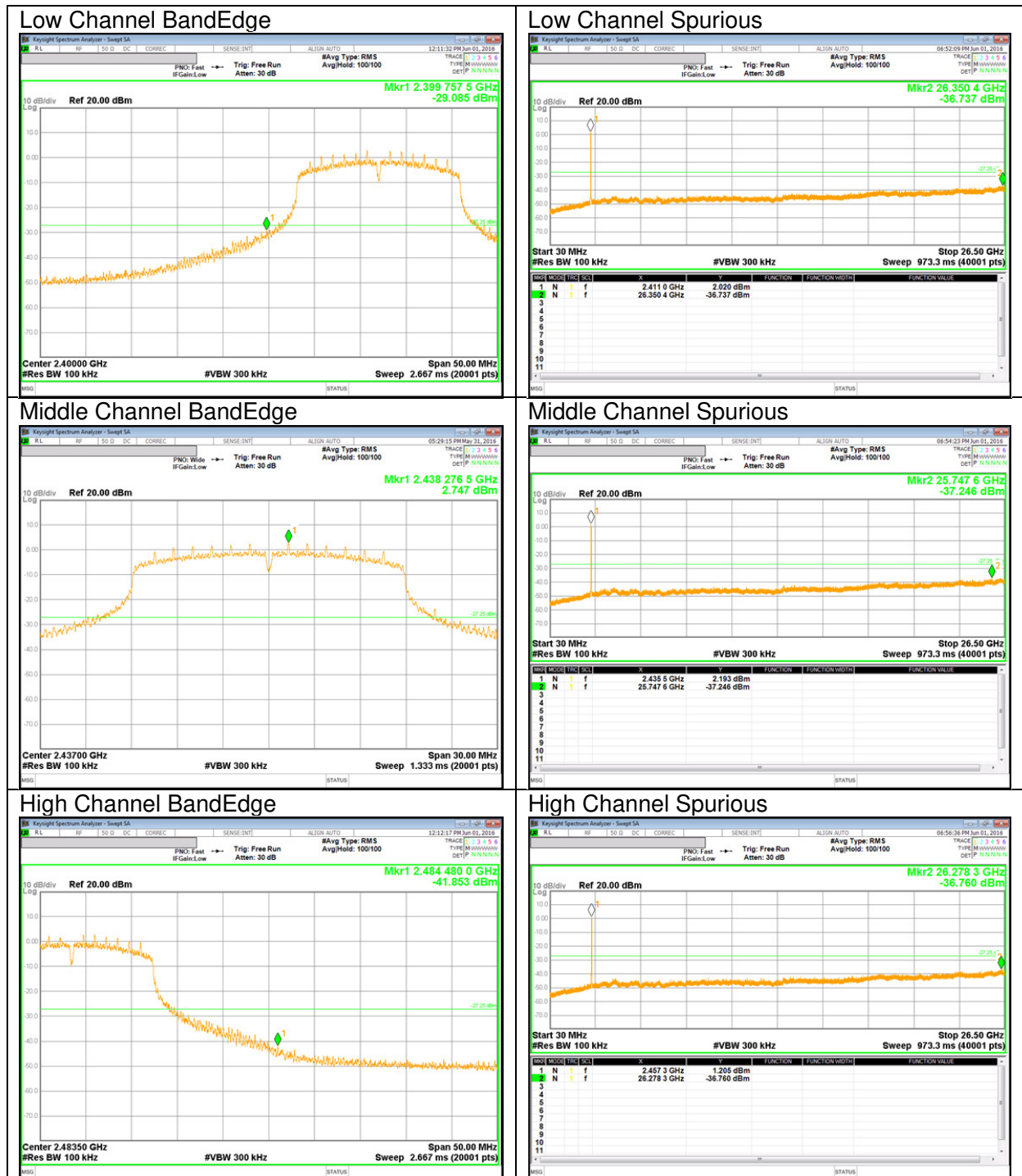
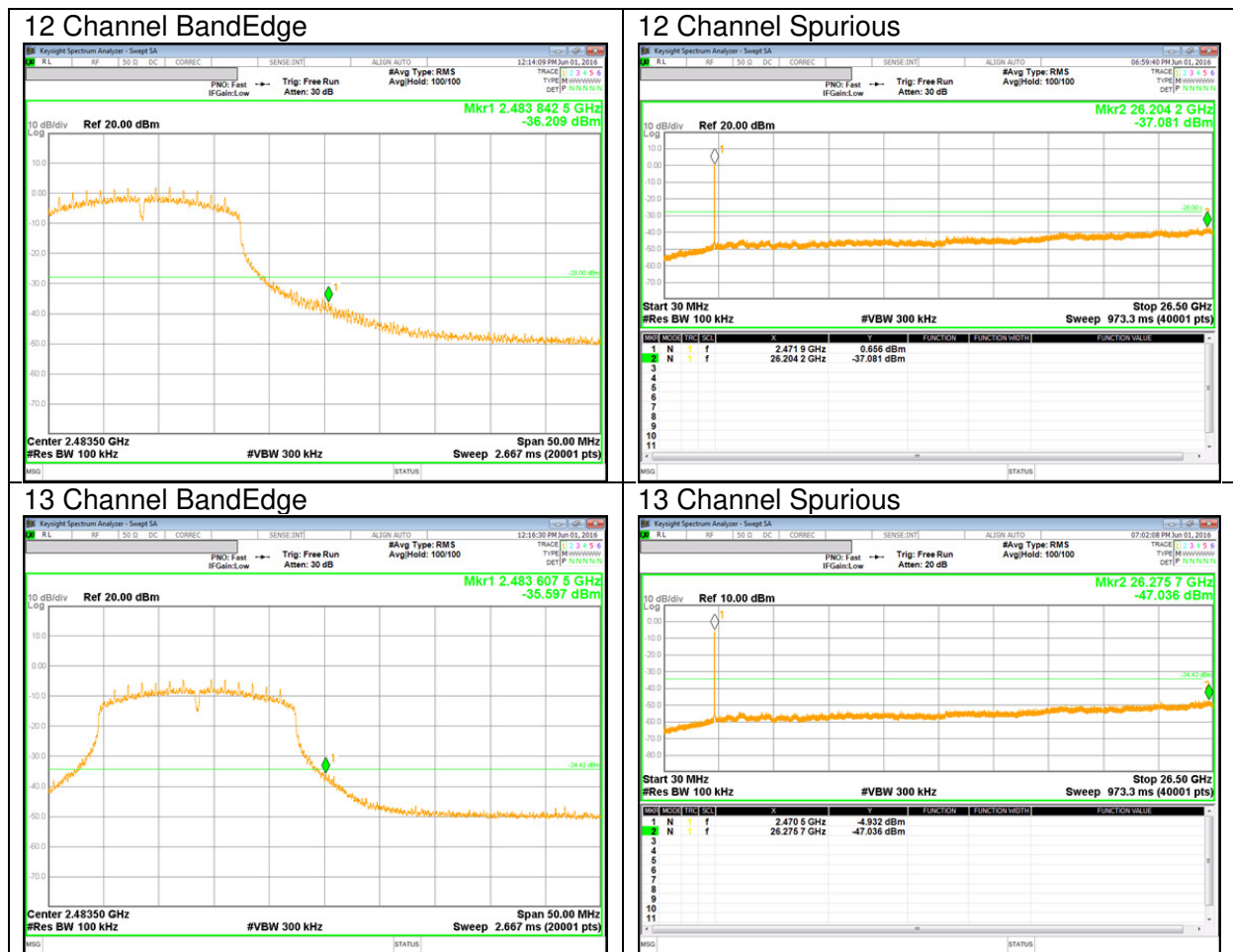


10.5.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND





11. RADIATED TEST RESULTS

11.1. LIMITS AND PROCEDURE

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.

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.

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 for average measurements. Duty cycle factor = $10\log(1/x)$ For this sample B mode = 0dB (duty cycle >98%); G mode = 0.30dB; N mode = 0.32dB.

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.

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.

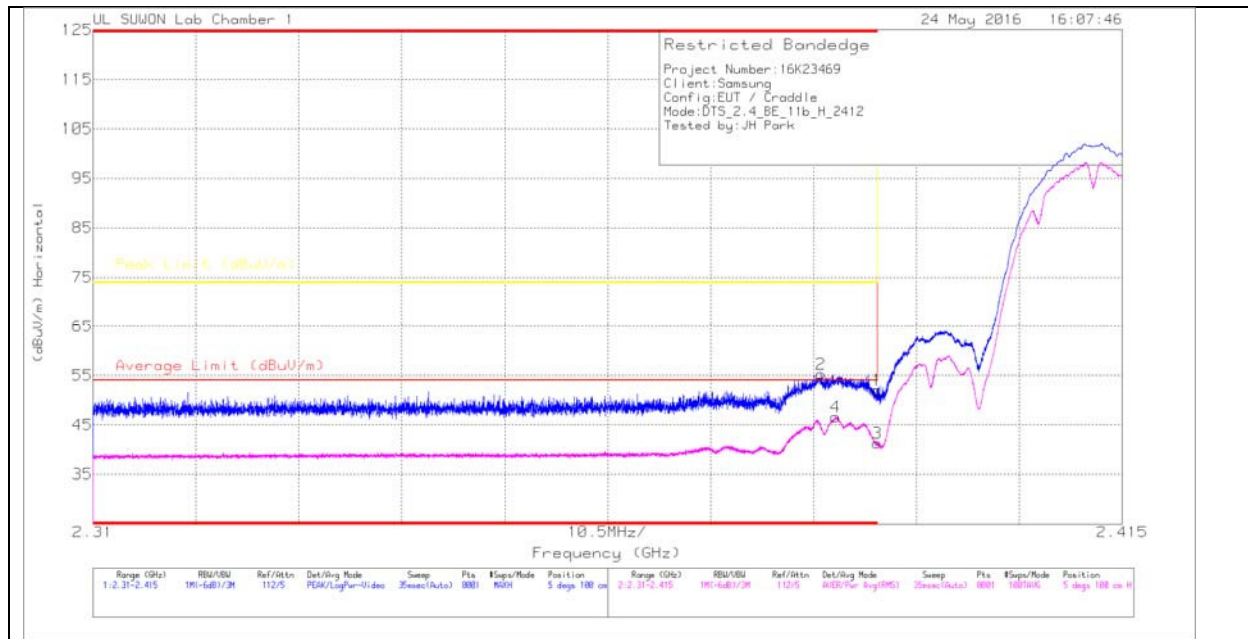
Formula for converting the filed strength from uV/m to dBuV/m is:
 $\text{Limit (dBuV/m)} = 20 \log \text{limit (uV/m)}$

11.2. TRANSMITTER ABOVE 1 GHz

11.2.1. TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (1 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

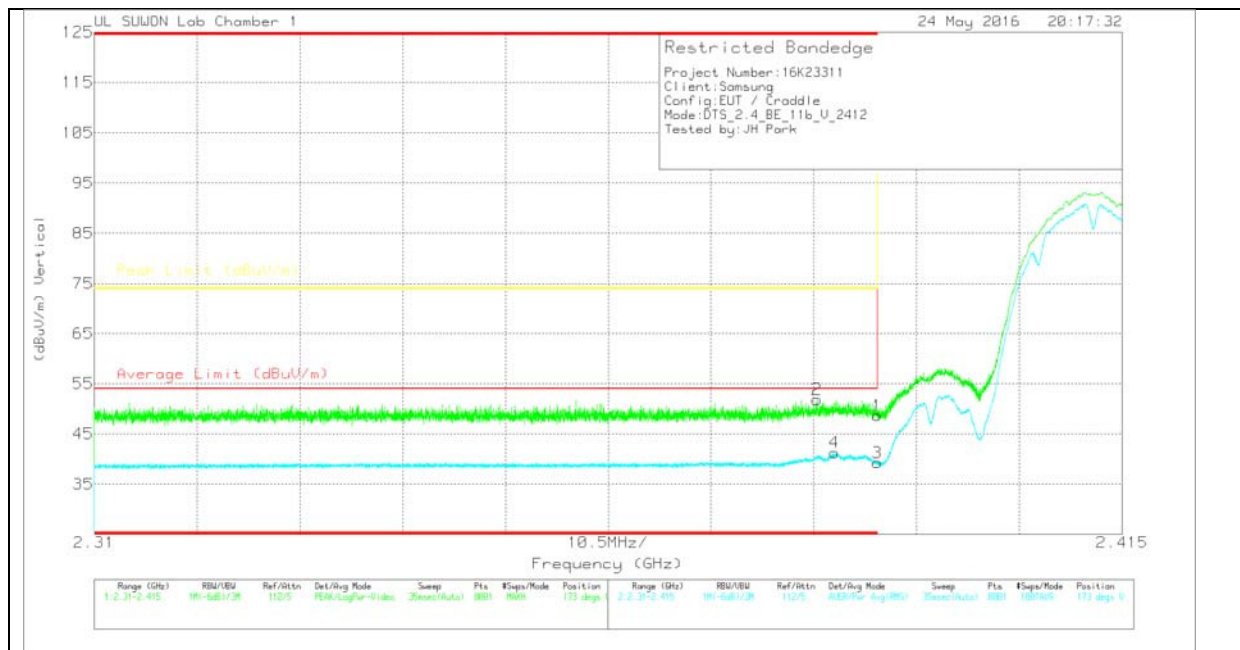
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	49.2	Pk	31.8	-29	0	52	-	-	74	-22	5	100	H
2	* 2.384	52.47	Pk	31.8	-29	0	55.27	-	-	74	-18.73	5	100	H
3	* 2.39	38.48	RMS	31.8	-29	0	41.28	54	-12.72	-	-	5	100	H
4	* 2.386	43.81	RMS	31.8	-29	0	46.61	54	-7.39	-	-	5	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	3117/001687 17_150619	Path_2	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	* 2.39	45.87	Pk	31.8	-29	0	48.67	-	-	74	-25.33	173	165	V
2	* 2.384	49.07	Pk	31.8	-29	0	51.87	-	-	74	-22.13	173	165	V
3	* 2.39	36.49	RMS	31.8	-29	0	39.29	54	-14.71	-	-	173	165	V
4	* 2.386	38.49	RMS	31.8	-29	0	41.29	54	-12.71	-	-	173	165	V

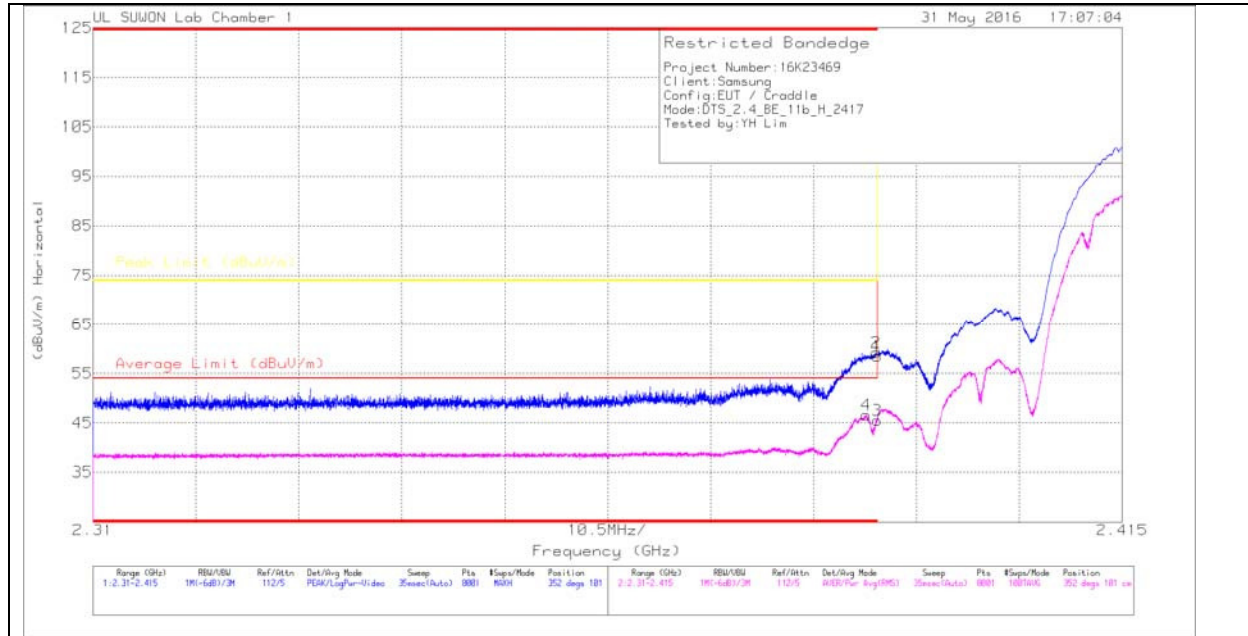
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (2 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

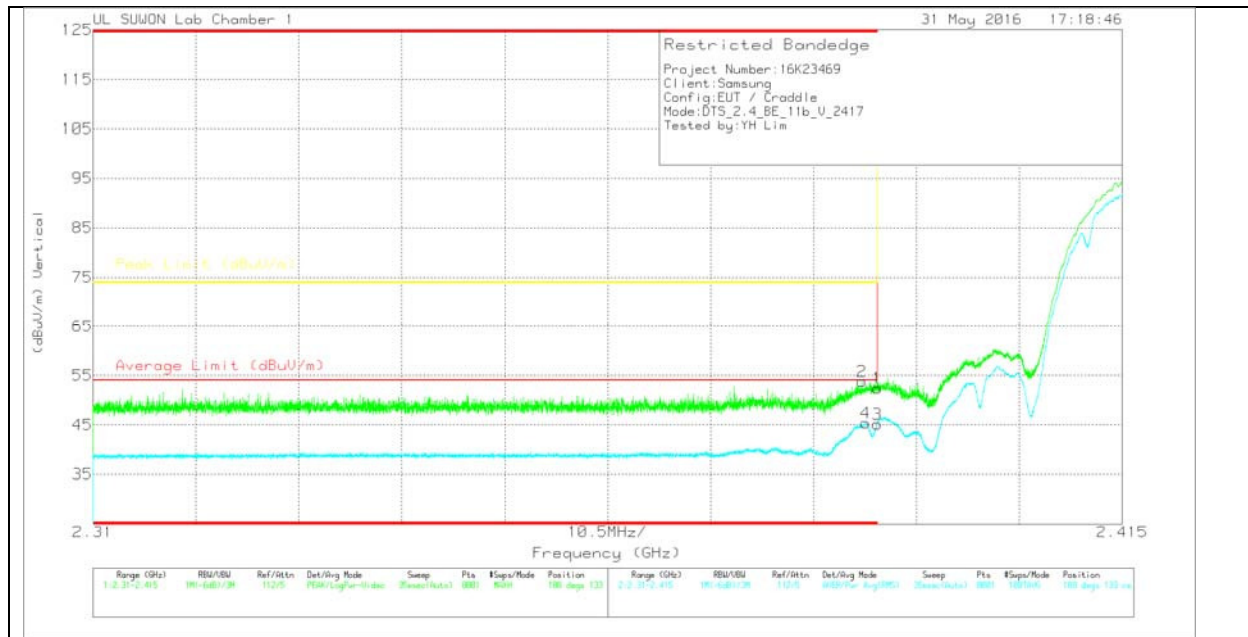
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.39	55.7	Pk	31.8	-29	0	58.5	-	-	74	-15.5	352	101	H
2	* 2.39	56.38	Pk	31.8	-29	0	59.18	-	-	74	-14.82	352	101	H
3	* 2.39	42.75	RMS	31.8	-29	0	45.55	54	-8.45	-	-	352	101	H
4	* 2.389	43.81	RMS	31.8	-29	0	46.61	54	-7.39	-	-	352	101	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	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	* 2.39	49.65	Pk	31.8	-29	0	52.45	-	-	74	-21.55	188	133	V
2	* 2.388	51.01	Pk	31.8	-29	0	53.81	-	-	74	-20.19	188	133	V
3	* 2.39	42.33	RMS	31.8	-29	0	45.13	54	-8.87	-	-	188	133	V
4	* 2.389	42.55	RMS	31.8	-29	0	45.35	54	-8.65	-	-	188	133	V

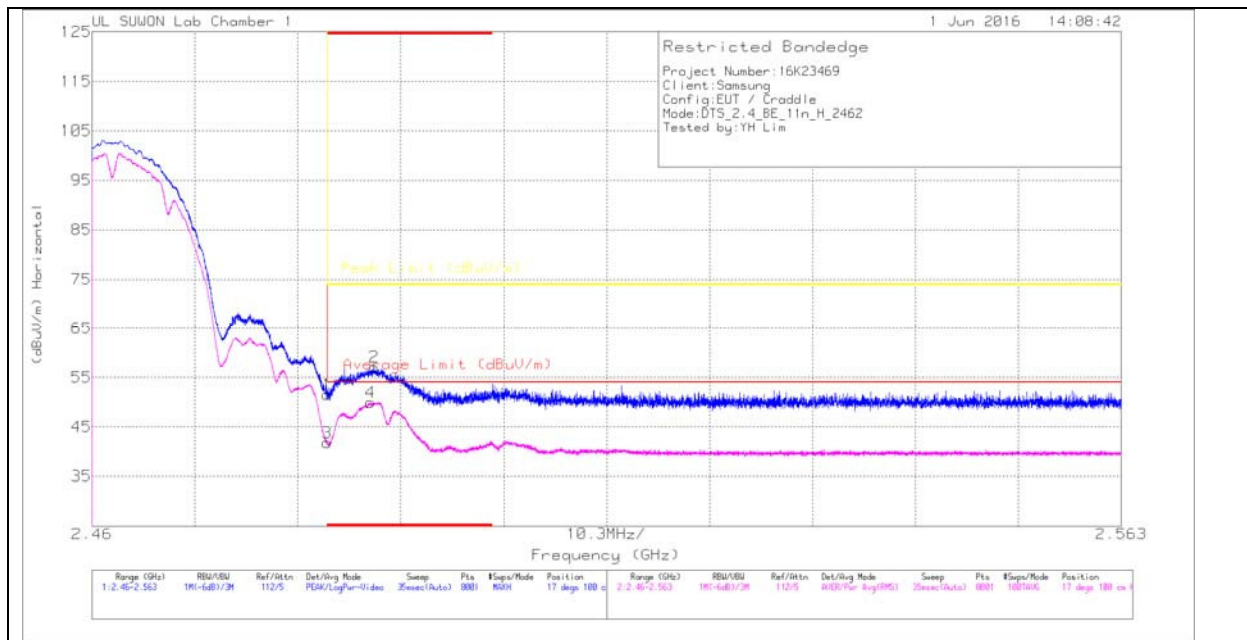
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS – RMS detection

AUTHORIZED BANDEDGE (11 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

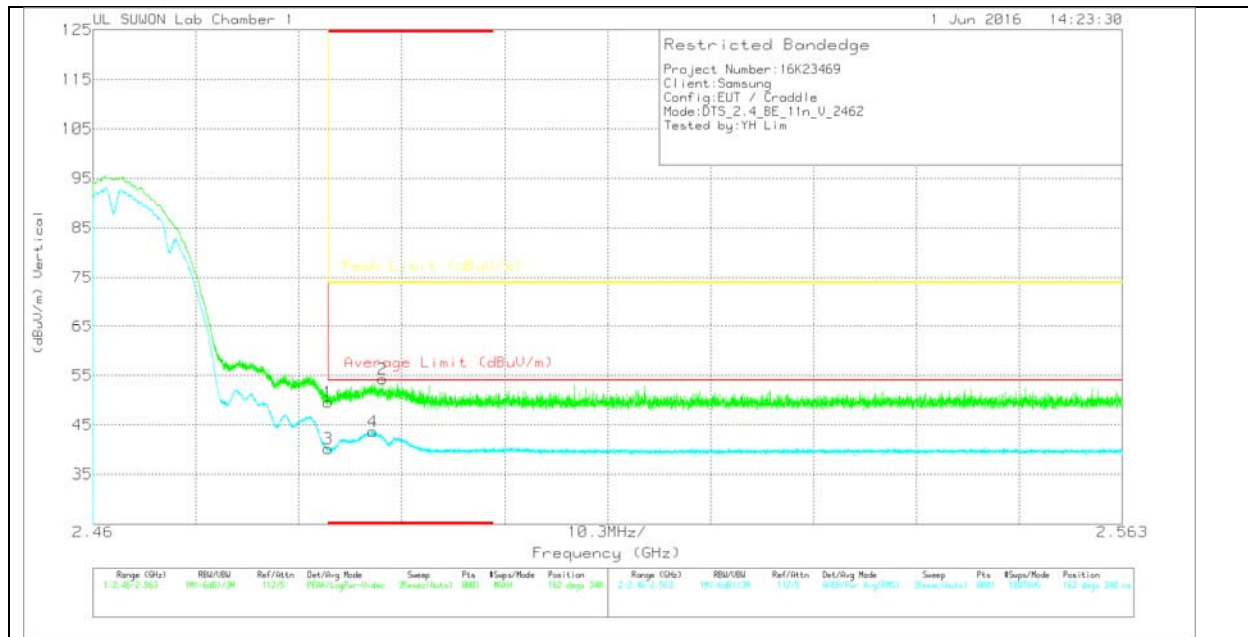
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	47.82	Pk	32	-28.3	0	51.52	-	-	74	-22.48	17	100	H
2	* 2.488	53.44	Pk	32	-28.3	0	57.14	-	-	74	-16.86	17	100	H
3	* 2.484	38.06	RMS	32	-28.3	0	41.76	54	-12.24	-	-	17	100	H
4	* 2.488	46.27	RMS	32	-28.3	0	49.97	54	-4.03	-	-	17	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	3117(001687 17)_150619	Path_2	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	* 2.484	45.94	Pk	32	-28.3	0	49.64	-	-	74	-24.36	162	340	V
2	* 2.489	50.58	Pk	32	-28.3	0	54.28	-	-	74	-19.72	162	340	V
3	* 2.484	36.43	RMS	32	-28.3	0	40.13	54	-13.87	-	-	162	340	V
4	* 2.488	39.91	RMS	32	-28.3	0	43.61	54	-10.39	-	-	162	340	V

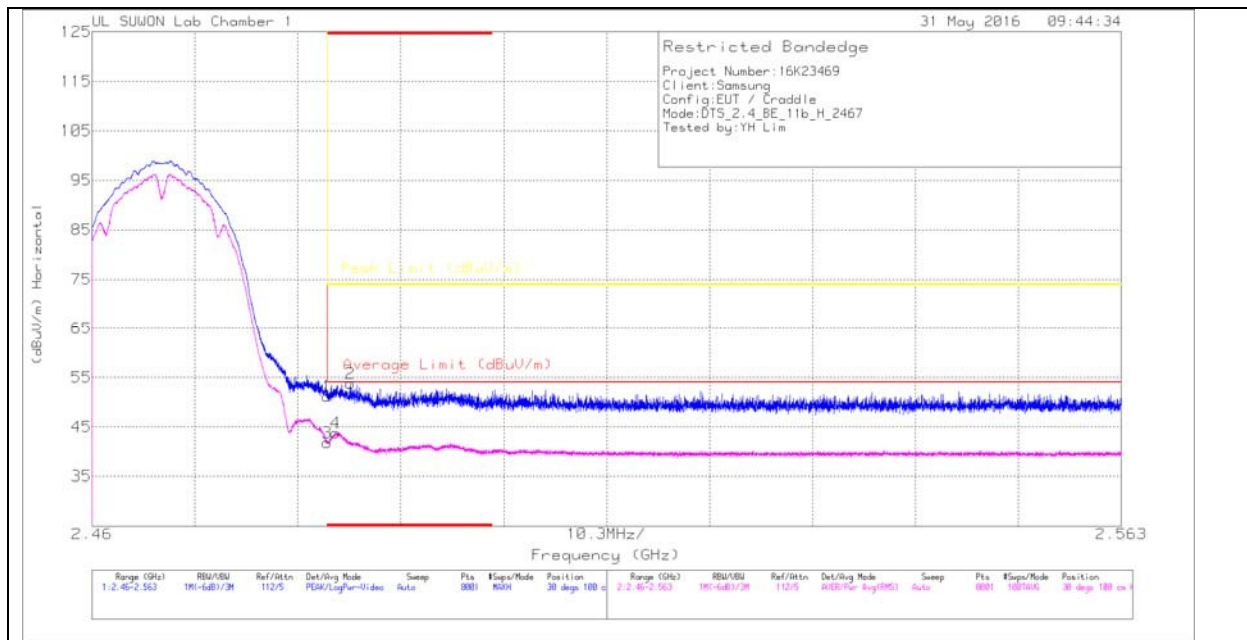
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (12 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

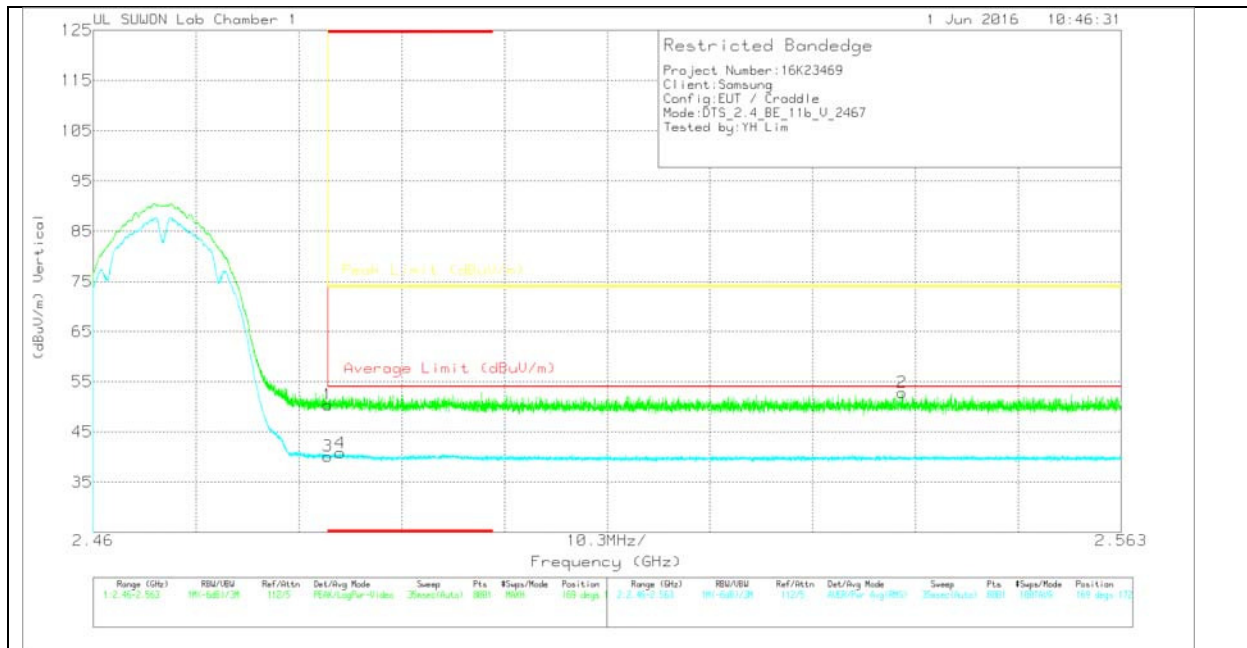
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	47.49	Pk	32	-28.3	0	51.19	-	-	74	-22.81	30	100	H
2	* 2.486	50.05	Pk	32	-28.3	0	53.75	-	-	74	-20.25	30	100	H
3	* 2.484	38.09	RMS	32	-28.3	0	41.79	54	-12.21	-	-	30	100	H
4	* 2.484	40.11	RMS	32	-28.3	0	43.81	54	-10.19	-	-	30	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	3117(001687 17)_150619	Path_2	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	* 2.484	46.72	Pk	32	-28.3	0	50.42	-	-	74	-23.58	169	172	V
2	2.541	49.05	Pk	32	-28.2	0	52.85	-	-	74	-21.15	169	172	V
3	* 2.484	36.49	RMS	32	-28.3	0	40.19	54	-13.81	-	-	169	172	V
4	* 2.485	37.14	RMS	32	-28.3	0	40.84	54	-13.16	-	-	169	172	V

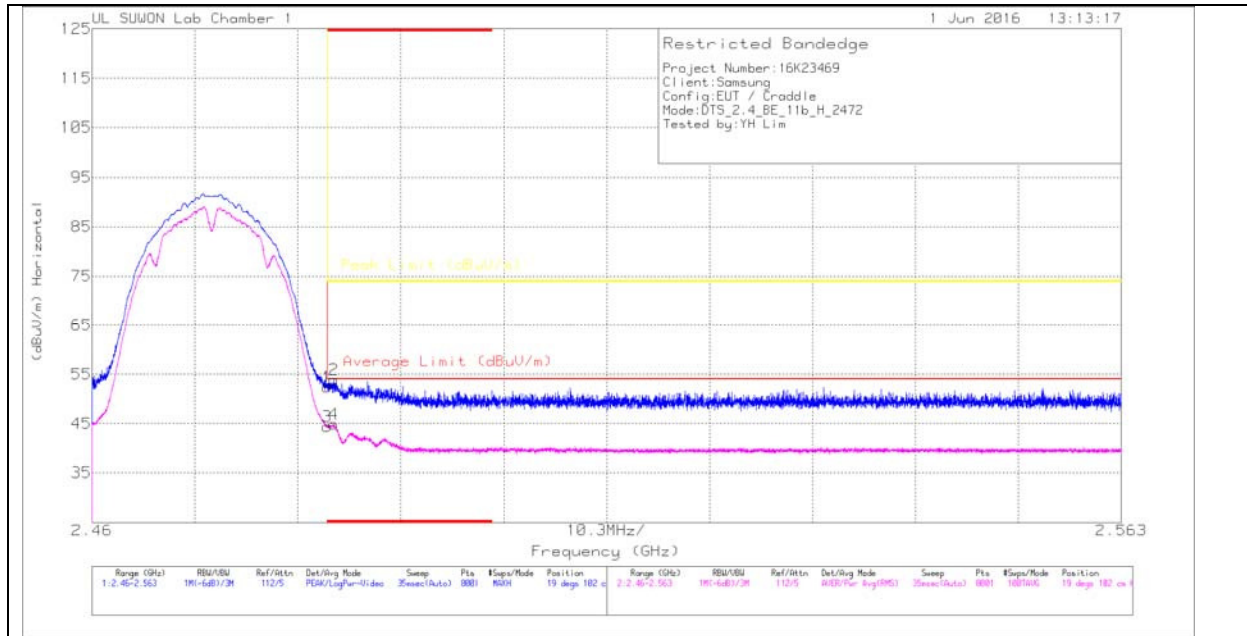
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (13 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

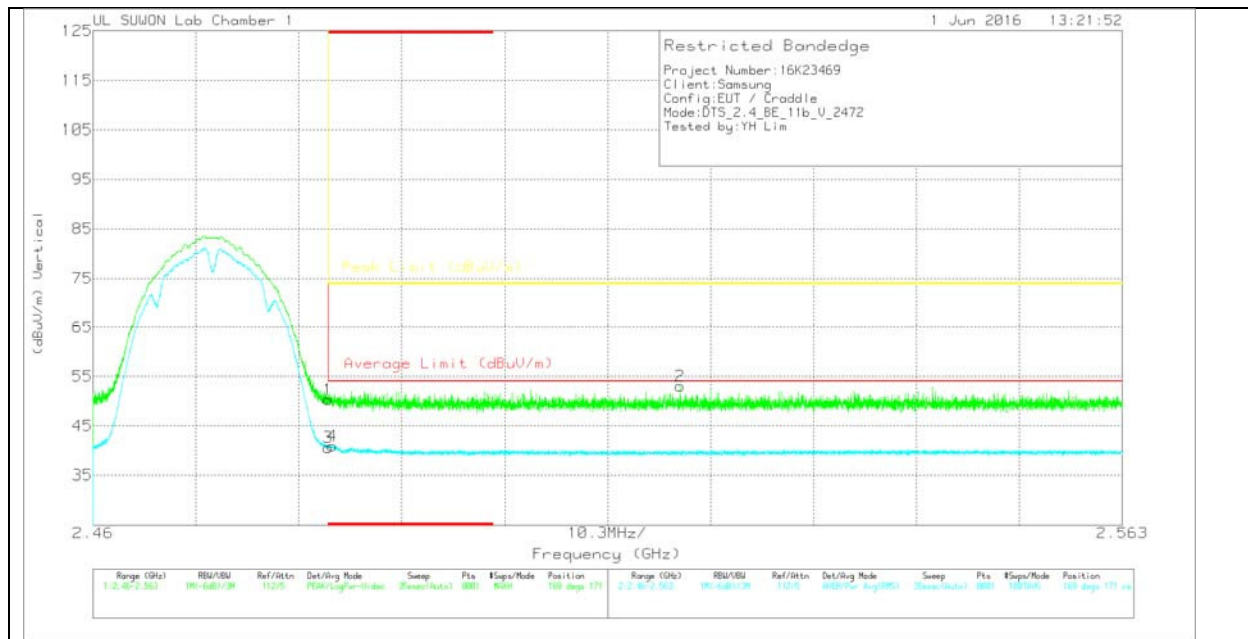
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	48.75	Pk	32	-28.3	0	52.45	-	-	74	-21.55	19	102	H
2	* 2.484	50.19	Pk	32	-28.3	0	53.89	-	-	74	-20.11	19	102	H
3	* 2.484	40.67	RMS	32	-28.3	0	44.37	54	-9.63	-	-	19	102	H
4	* 2.484	41.2	RMS	32	-28.3	0	44.9	54	-9.1	-	-	19	102	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	3117(001687 17)_150619	Path_2	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	* 2.484	46.58	Pk	32	-28.3	0	50.28	-	-	74	-23.72	169	171	V
2	2.519	49.36	Pk	32	-28.3	0	53.06	-	-	74	-20.94	169	171	V
3	* 2.484	36.92	RMS	32	-28.3	0	40.62	54	-13.38	-	-	169	171	V
4	* 2.484	37.26	RMS	32	-28.3	0	40.96	54	-13.04	-	-	169	171	V

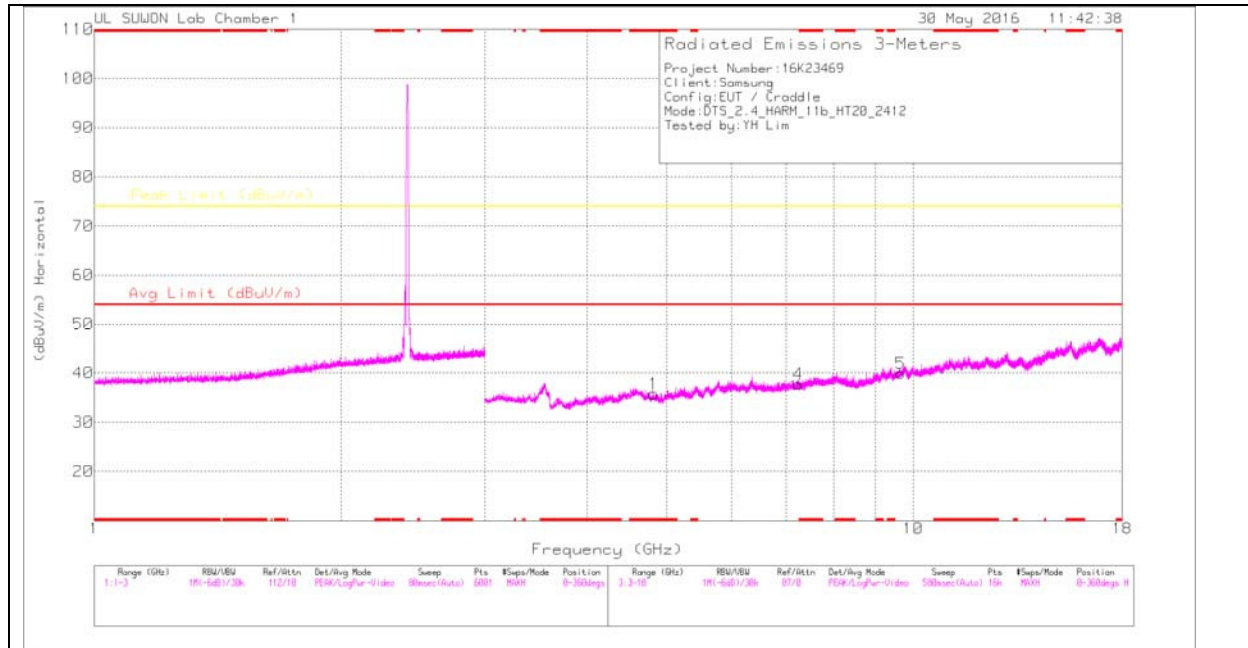
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

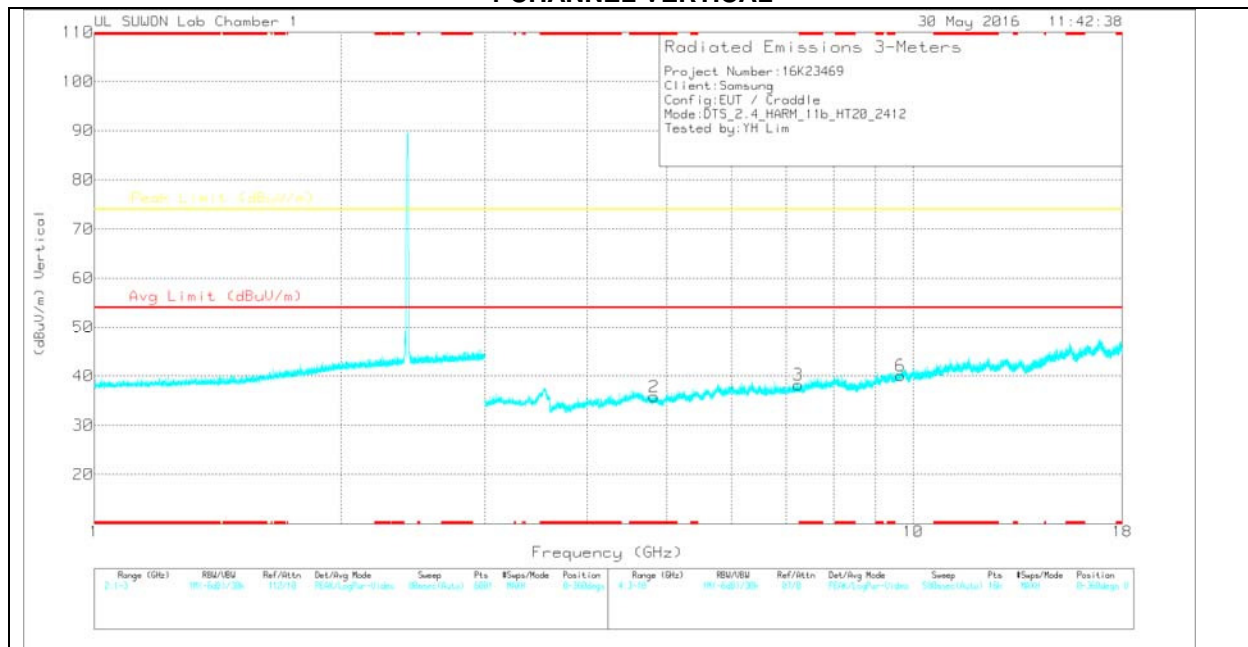
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

1 CHANNEL HORIZONTAL



1 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

1 CHANNEL DATA

Trace Markers

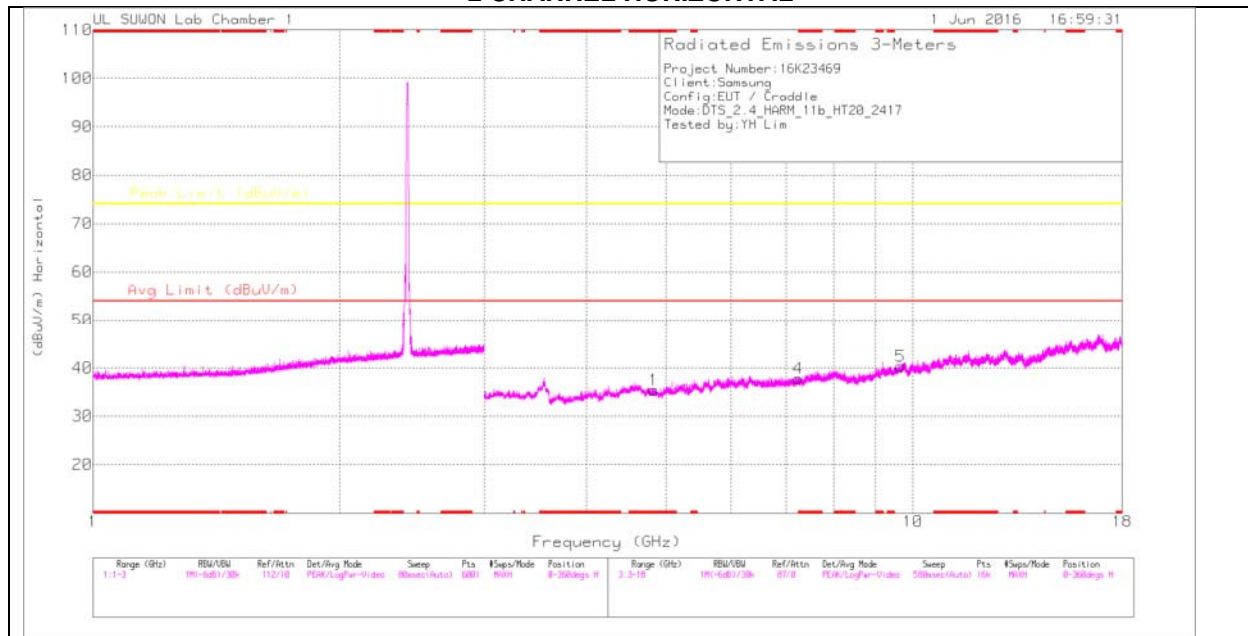
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.824	35.56	Pk	34	-33.8	0	35.76	-	-	74	-38.24	0-360	200	H
4	7.243	32.91	Pk	35.7	-30.9	0	37.71	-	-	74	-36.29	0-360	100	H
5	9.651	30.21	Pk	37.1	-27.4	0	39.91	-	-	74	-34.09	0-360	100	H
2	* 4.828	35.59	Pk	34	-33.8	0	35.79	-	-	74	-38.21	0-360	100	V
3	7.242	33.43	Pk	35.7	-30.9	0	38.23	-	-	74	-35.77	0-360	100	V
6	9.654	30.46	Pk	37.1	-27.5	0	40.06	-	-	74	-33.94	0-360	100	V

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

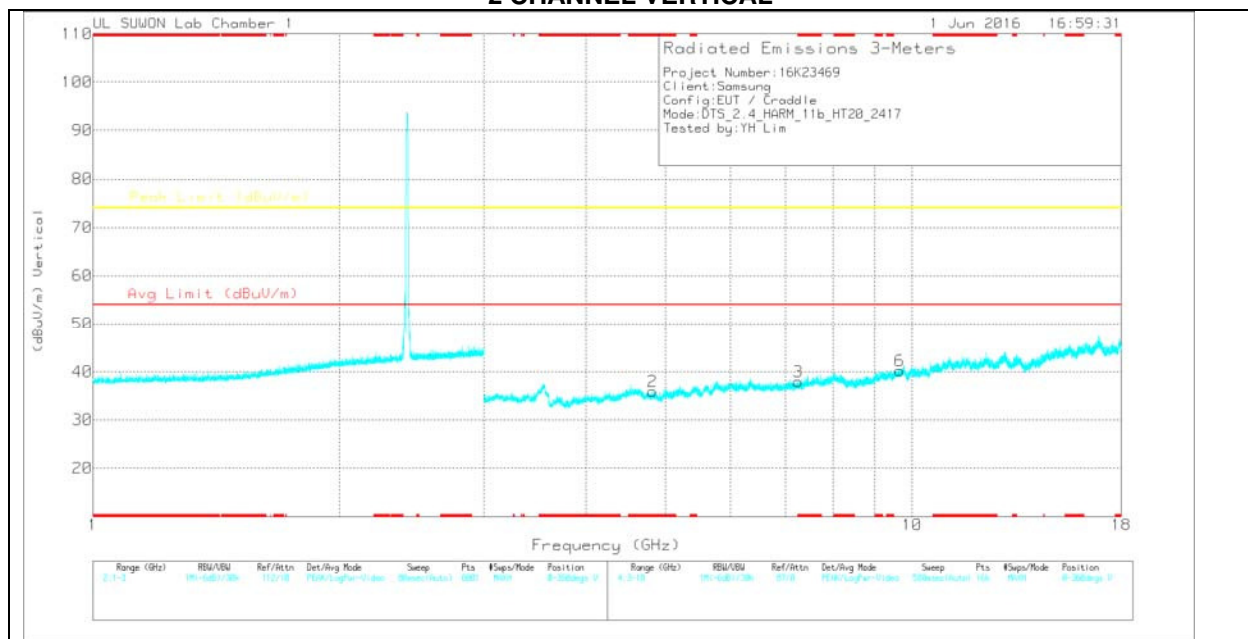
Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

2 CHANNEL HORIZONTAL



2 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

2 CHANNEL DATA

Trace Markers

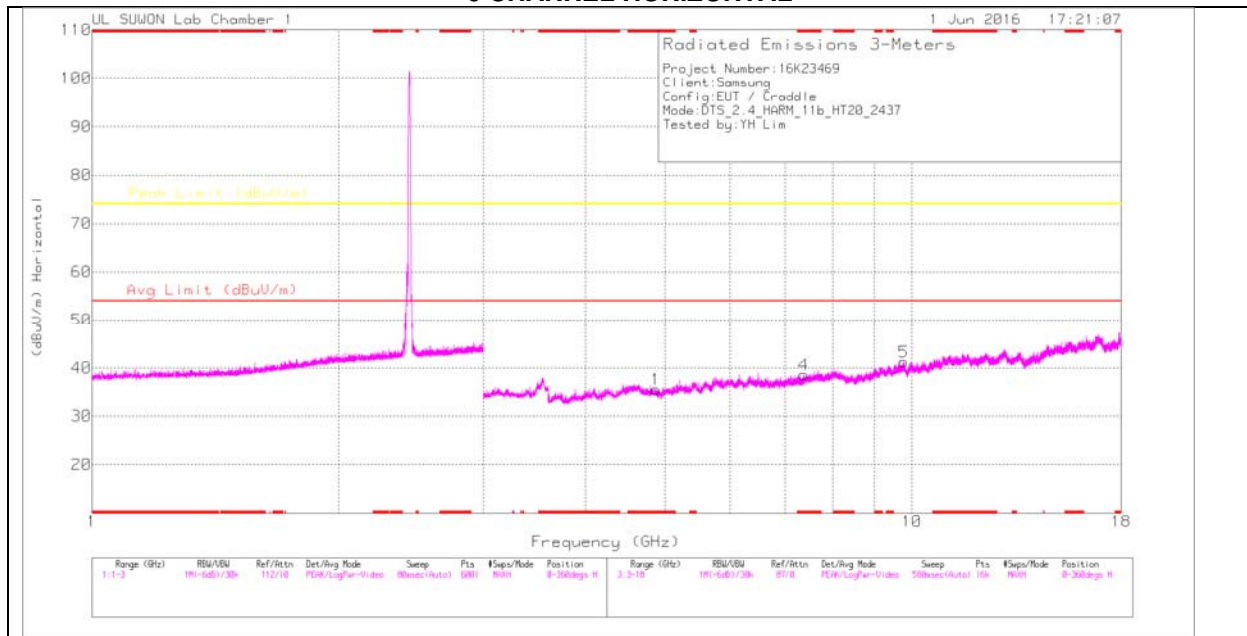
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.828	35.22	Pk	34	-33.8	0	35.42	-	-	74	-38.58	0-360	100	H
4	* 7.25	32.98	Pk	35.7	-30.8	0	37.88	-	-	74	-36.12	0-360	200	H
5	9.655	30.77	Pk	37.1	-27.5	0	40.37	-	-	74	-33.63	0-360	200	H
2	* 4.824	35.71	Pk	34	-33.8	0	35.91	-	-	74	-38.09	0-360	100	V
3	* 7.253	33.04	Pk	35.7	-30.8	0	37.94	-	-	74	-36.06	0-360	100	V
6	9.657	30.63	Pk	37.1	-27.5	0	40.23	-	-	74	-33.77	0-360	200	V

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

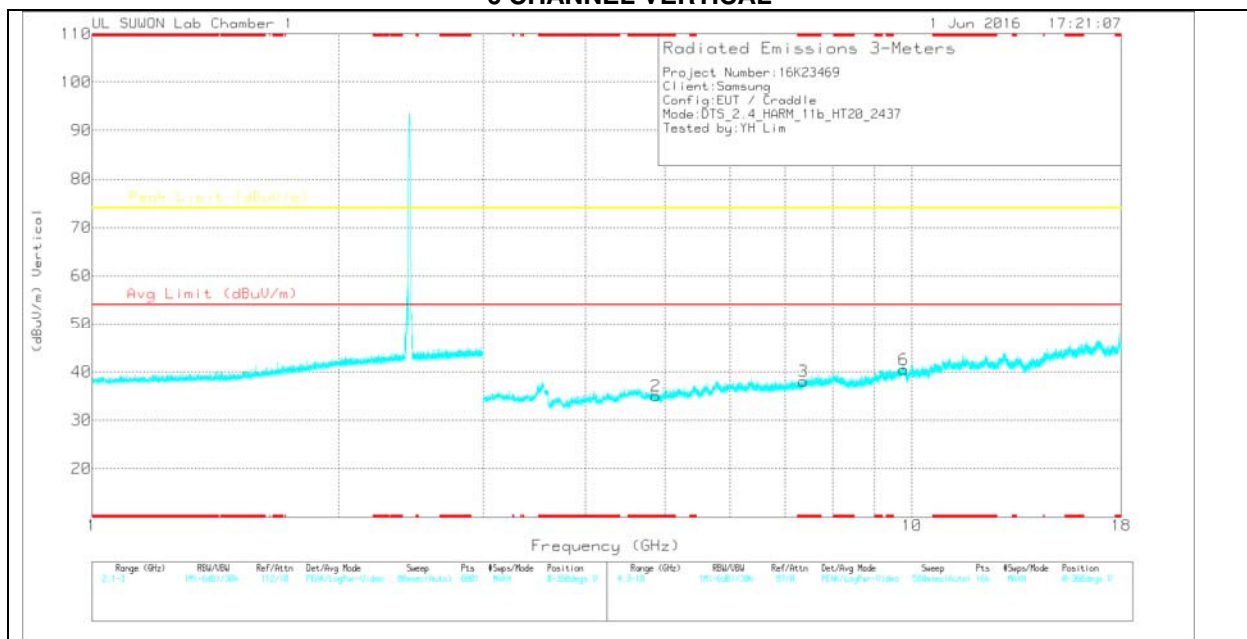
Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

6 CHANNEL HORIZONTAL



6 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

6 CHANNEL DATA

Trace Markers

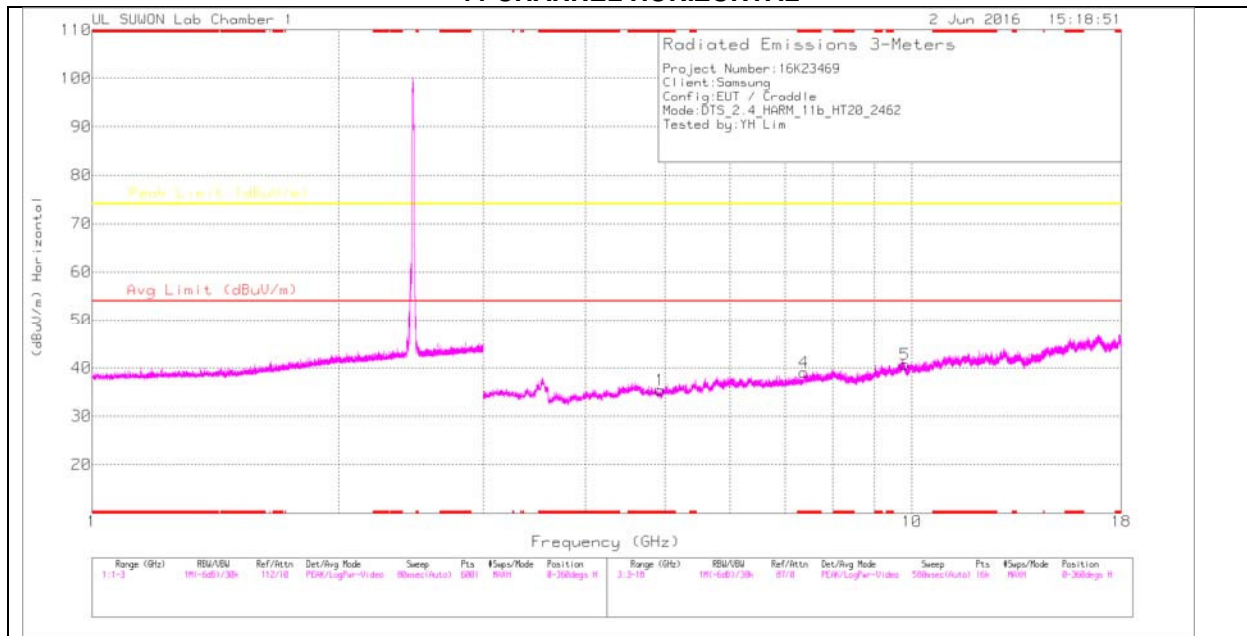
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.875	35.57	Pk	34	-34	0	35.57	-	-	74	-38.43	0-360	200	H
4	* 7.379	33.57	Pk	35.8	-30.8	0	38.57	-	-	74	-35.43	0-360	100	H
5	9.766	30.5	Pk	37.2	-26.5	0	41.2	-	-	74	-32.8	0-360	100	H
2	* 4.87	35.11	Pk	34	-34	0	35.11	-	-	74	-38.89	0-360	200	V
3	* 7.369	33.1	Pk	35.8	-30.8	0	38.1	-	-	74	-35.9	0-360	200	V
6	9.772	29.8	Pk	37.2	-26.5	0	40.5	-	-	74	-33.5	0-360	100	V

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

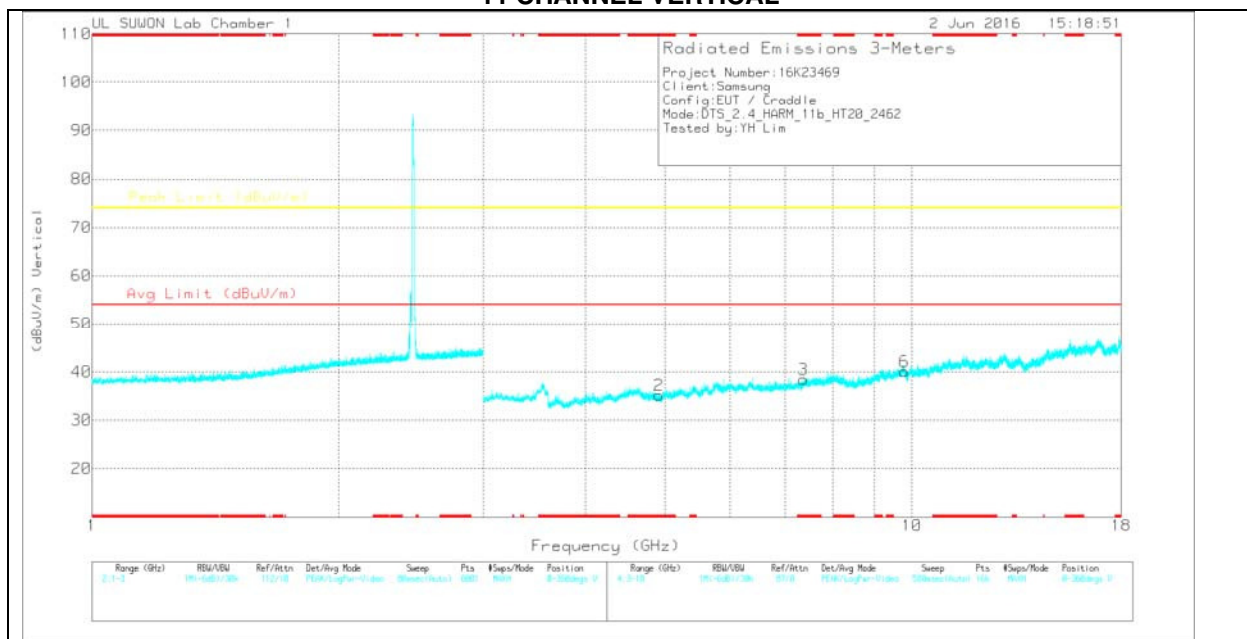
Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

11 CHANNEL HORIZONTAL



11 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

11 CHANNEL DATA

Trace Markers

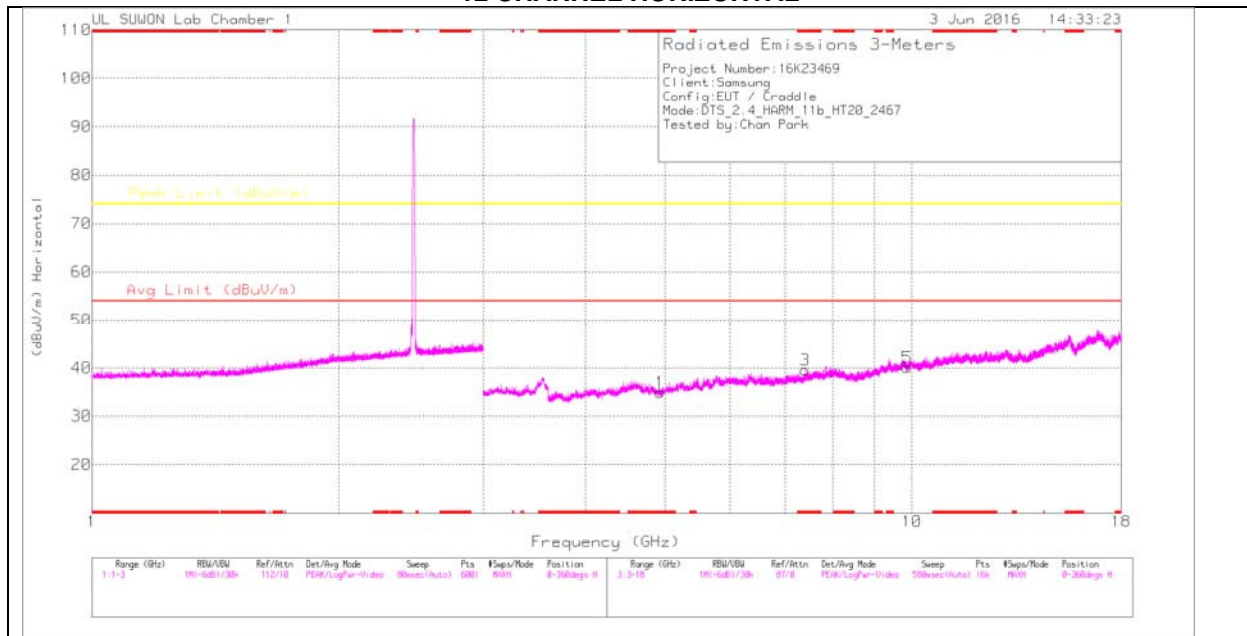
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.928	35.4	Pk	34	-34	0	35.4	-	-	74	-38.6	0-360	100	H
4	* 7.388	33.99	Pk	35.8	-30.7	0	39.09	-	-	74	-34.91	0-360	100	H
5	9.808	30.28	Pk	37.2	-26.7	0	40.78	-	-	74	-33.22	0-360	100	H
2	* 4.917	35.18	Pk	34	-34	0	35.18	-	-	74	-38.82	0-360	100	V
3	* 7.374	33.49	Pk	35.8	-30.8	0	38.49	-	-	74	-35.51	0-360	200	V
6	9.798	29.41	Pk	37.2	-26.5	0	40.11	-	-	74	-33.89	0-360	200	V

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

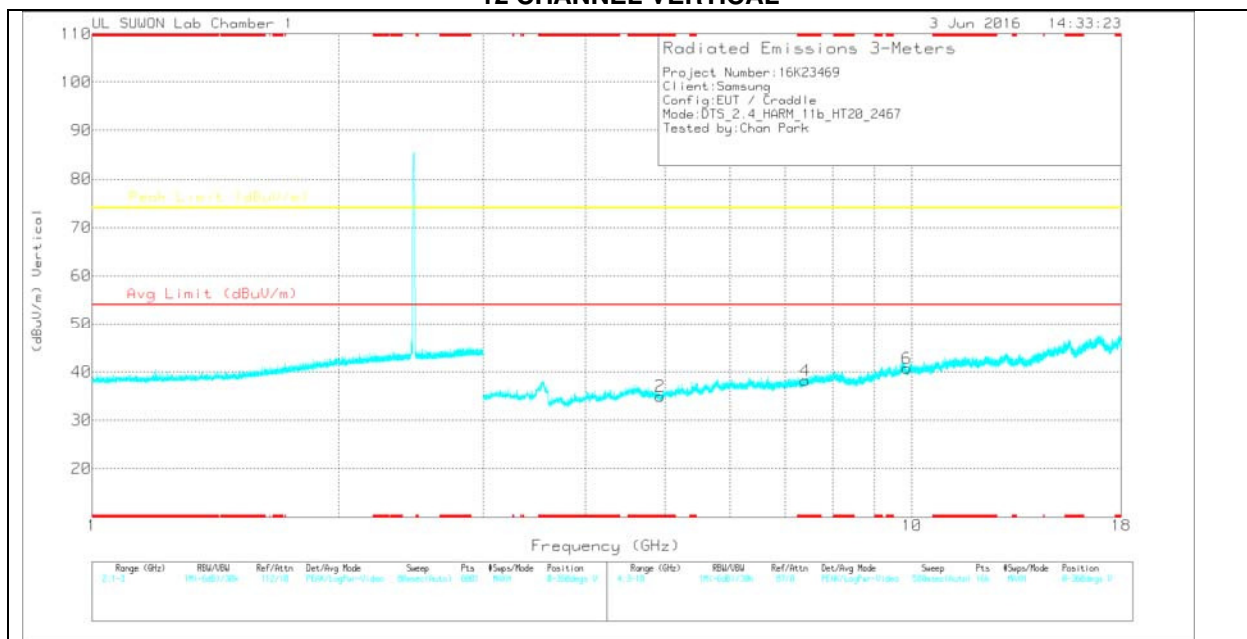
Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

12 CHANNEL HORIZONTAL



12 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

12 CHANNEL DATA

Trace Markers

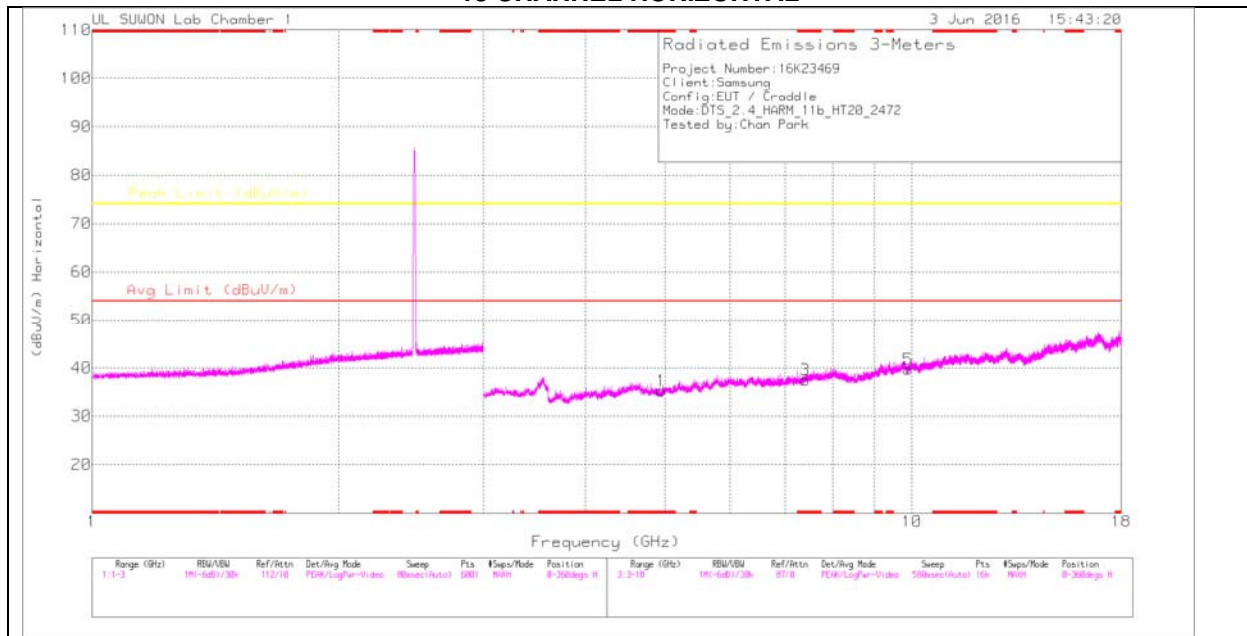
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.932	34.91	PK	34	-34	0	34.91	-	-	74	-39.09	0-360	100	H
3	* 7.41	34.4	PK	35.8	-30.6	0	39.6	-	-	74	-34.4	0-360	100	H
5	9.867	30.69	PK	37.3	-27.9	0	40.09	-	-	74	-33.91	0-360	100	H
2	* 4.929	34.99	PK	34	-34	0	34.99	-	-	74	-39.01	0-360	100	V
4	* 7.407	32.97	PK	35.8	-30.6	0	38.17	-	-	74	-35.83	0-360	100	V
6	9.866	31.37	PK	37.3	-27.9	0	40.77	-	-	74	-33.23	0-360	200	V

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

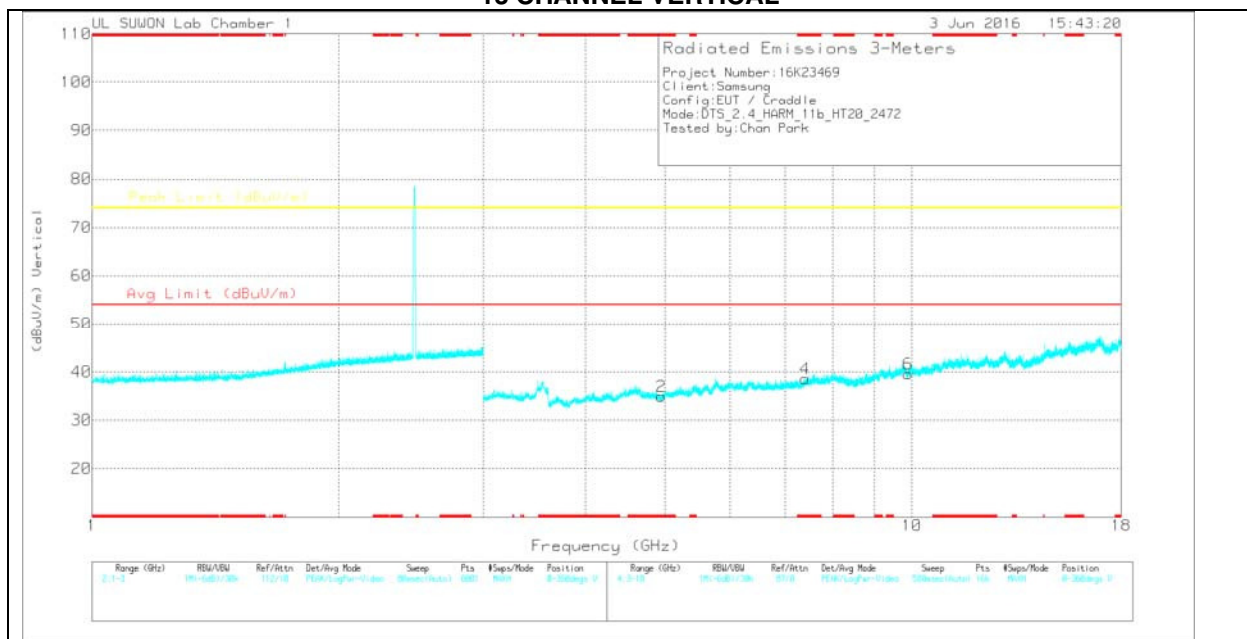
PK – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

13 CHANNEL HORIZONTAL



13 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

13 CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.945	35.31	PK	34	-34	0	35.31	-	-	74	-38.69	0-360	200	H
3	* 7.416	32.42	PK	35.8	-30.7	0	37.52	-	-	74	-36.48	0-360	100	H
5	9.889	30.23	PK	37.3	-27.8	0	39.73	-	-	74	-34.27	0-360	100	H
2	* 4.947	34.92	PK	34	-34	0	34.92	-	-	74	-39.08	0-360	100	V
4	* 7.416	33.55	PK	35.8	-30.7	0	38.65	-	-	74	-35.35	0-360	100	V
6	9.891	30.08	PK	37.3	-27.8	0	39.58	-	-	74	-34.42	0-360	100	V

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

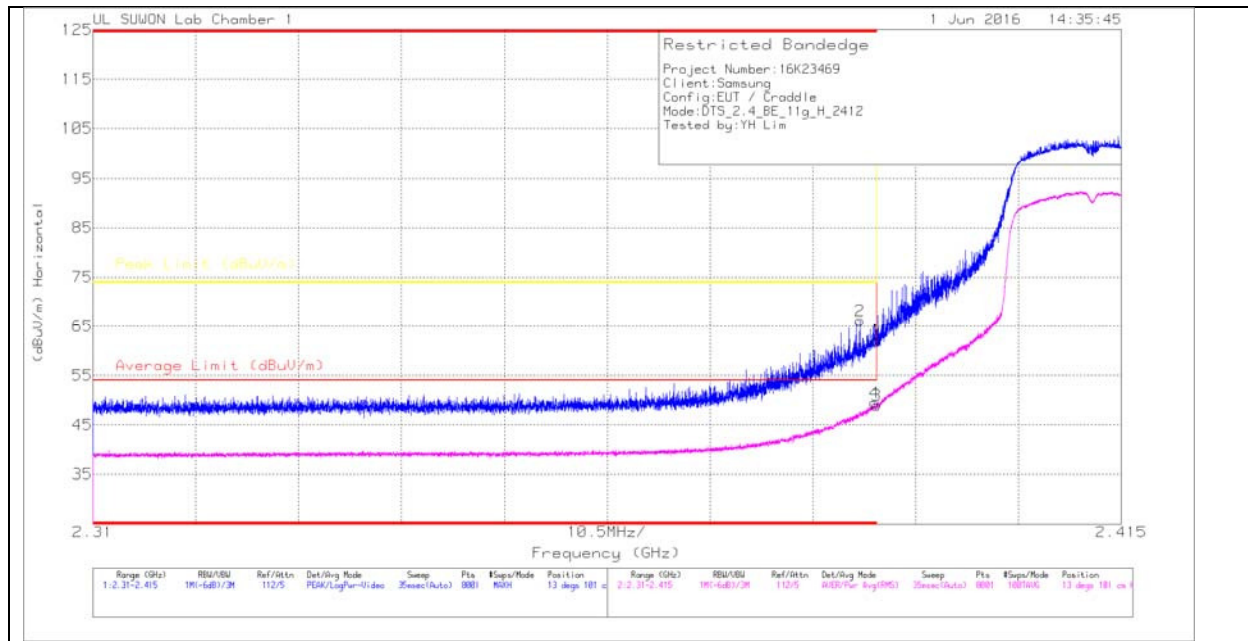
PK – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

11.2.2. TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

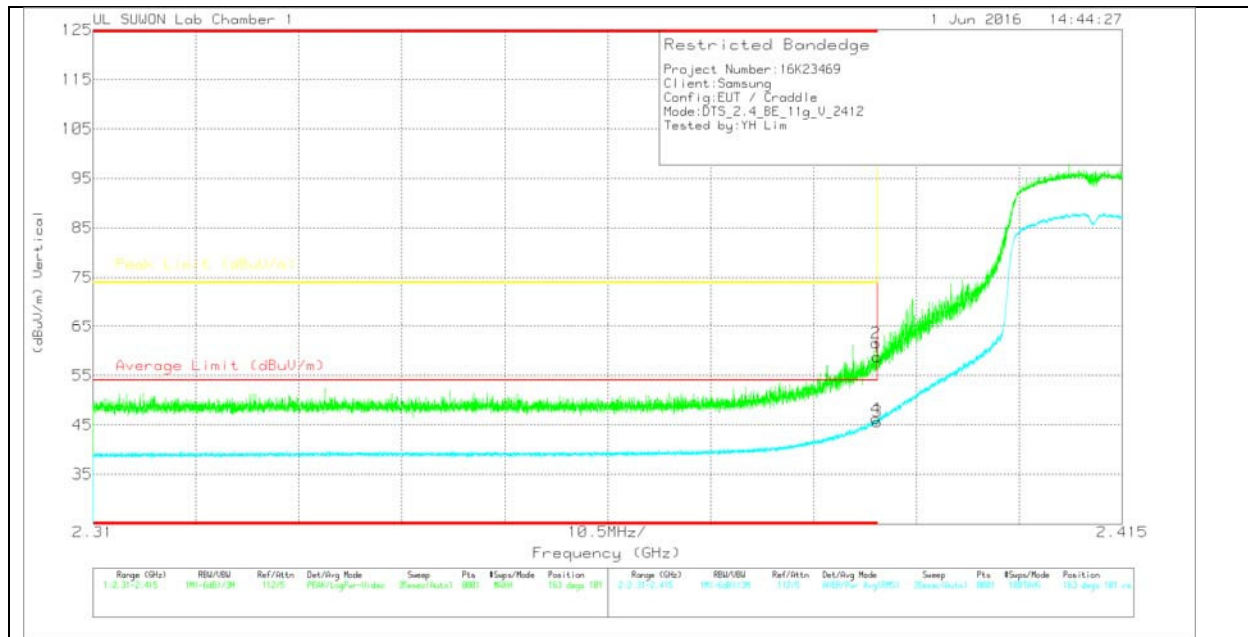
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	59.4	PK	31.8	-29	0	62.2	-	-	74	-11.8	13	101	H
2	* 2.388	63.36	PK	31.8	-29	0	66.16	-	-	74	-7.84	13	101	H
3	* 2.39	45.84	RMS	31.8	-29	.3	48.94	54	-5.06	-	-	13	101	H
4	* 2.39	46.35	RMS	31.8	-29	.3	49.45	54	-4.55	-	-	13	101	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	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	* 2.39	55.95	Pk	31.8	-29	0	58.75	-	-	74	-15.25	163	101	V
2	* 2.39	58.79	Pk	31.8	-29	0	61.59	-	-	74	-12.41	163	101	V
3	* 2.39	42.59	RMS	31.8	-29	.3	45.69	54	-8.31	-	-	163	101	V
4	* 2.39	43.16	RMS	31.8	-29	.3	46.26	54	-7.74	-	-	163	101	V

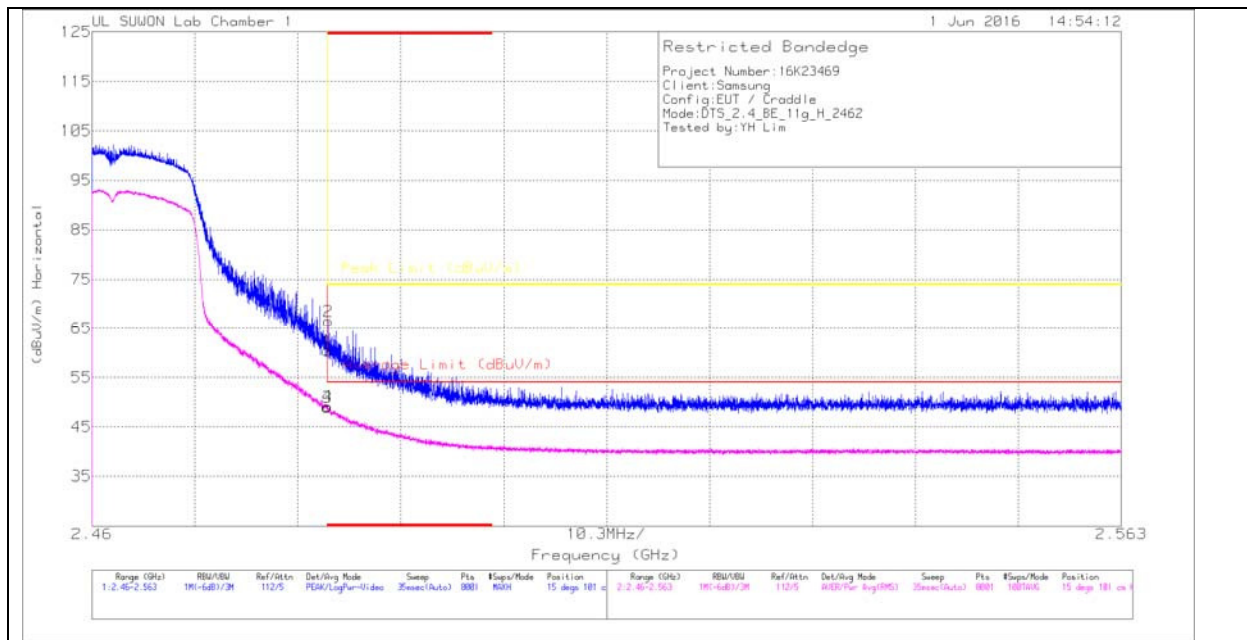
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

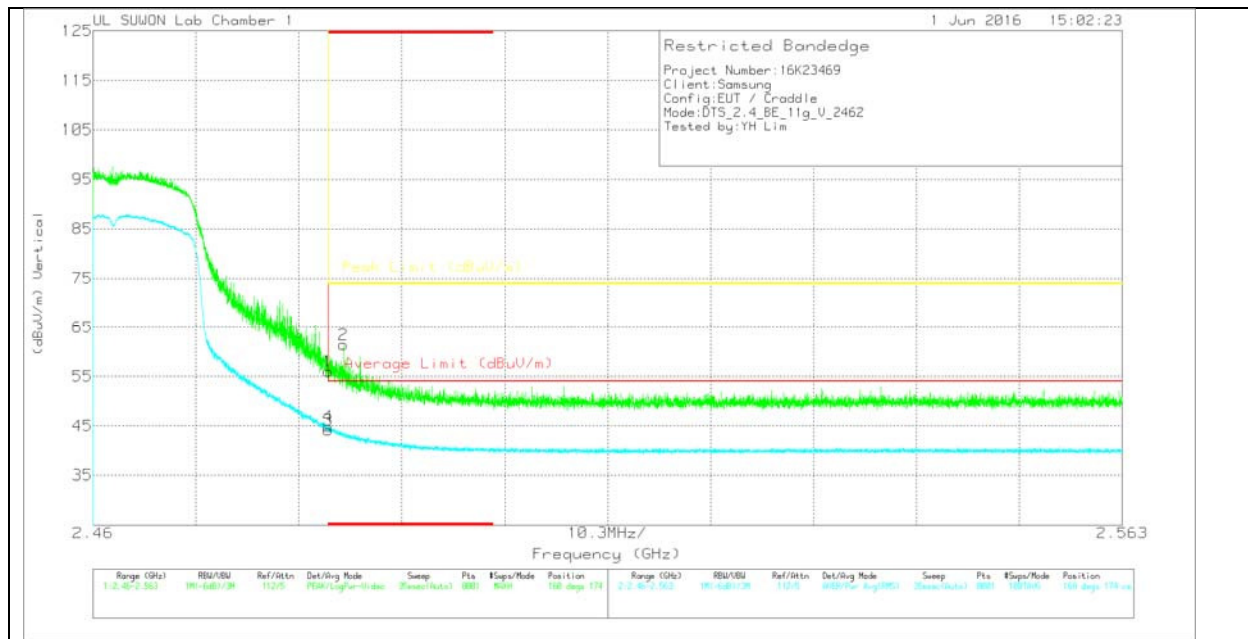
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.484	56.81	Pk	32	-28.3	0	60.51	-	-	74	-13.49	15	101	H
2	* 2.484	62.81	Pk	32	-28.3	0	66.51	-	-	74	-7.49	15	101	H
3	* 2.484	45	RMS	32	-28.3	.3	49	54	-5	-	-	15	101	H
4	* 2.484	45.15	RMS	32	-28.3	.3	49.15	54	-4.85	-	-	15	101	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	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	* 2.484	52.3	Pk	32	-28.3	0	56	-	-	74	-18	168	174	V
2	* 2.485	57.76	Pk	32	-28.3	0	61.46	-	-	74	-12.54	168	174	V
3	* 2.484	40.17	RMS	32	-28.3	.3	44.17	54	-9.83	-	-	168	174	V
4	* 2.484	40.9	RMS	32	-28.3	.3	44.9	54	-9.1	-	-	168	174	V

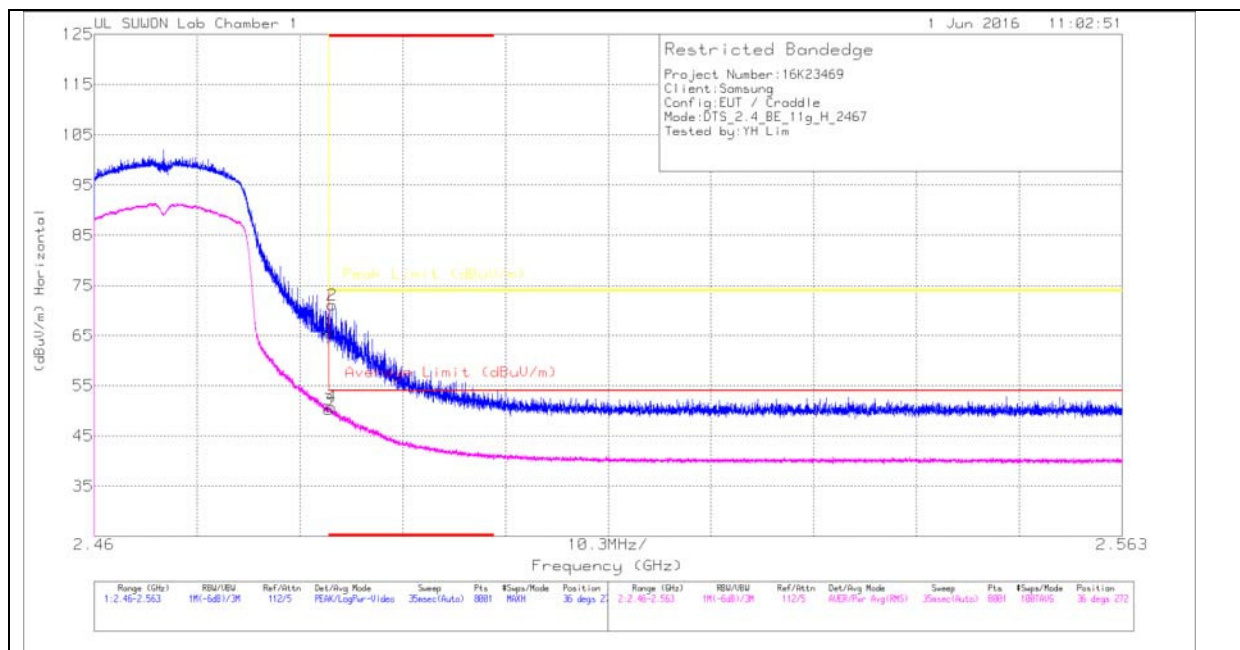
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (12 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

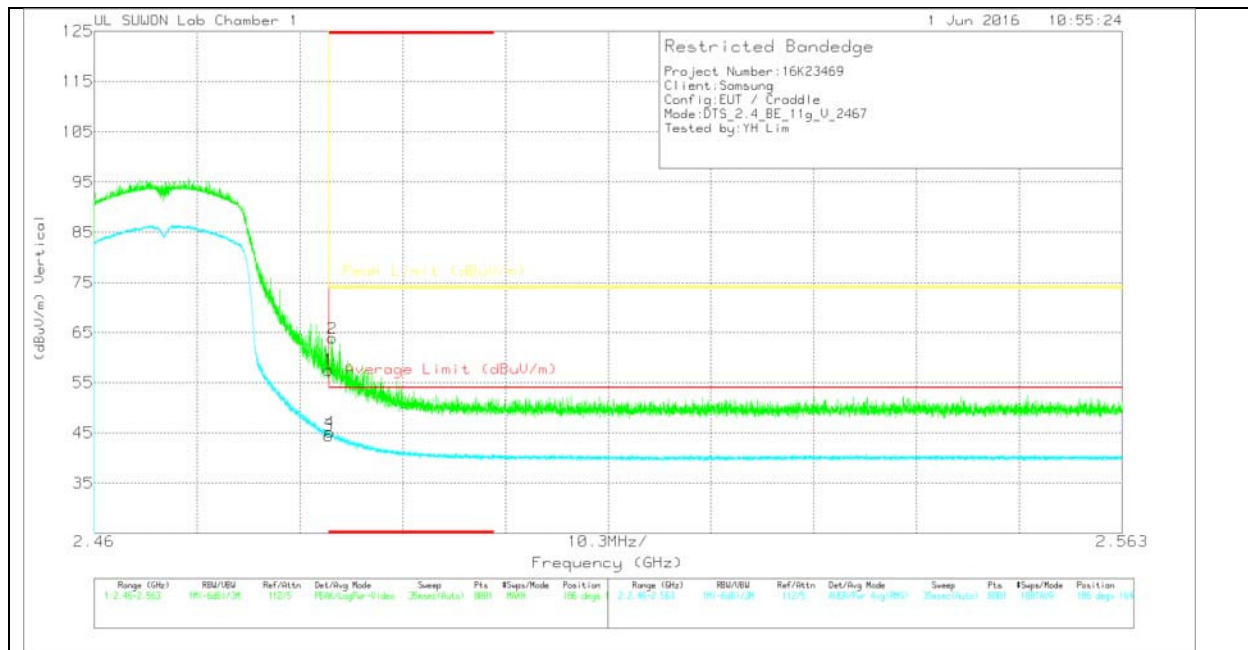
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	61.8	Pk	32	-28.3	0	65.5	-	-	74	-8.5	36	272	H
2	* 2.484	67.46	Pk	32	-28.3	0	71.16	-	-	74	-2.84	36	272	H
3	* 2.484	46.22	RMS	32	-28.3	.3	50.22	54	-3.78	-	-	36	272	H
4	* 2.484	46.78	RMS	32	-28.3	.3	50.78	54	-3.22	-	-	36	272	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	3117(001687 17)_150619	Path_2	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	* 2.484	53.8	Pk	32	-28.3	0	57.5	-	-	74	-16.5	186	164	V
2	* 2.484	60.17	Pk	32	-28.3	0	63.87	-	-	74	-10.13	186	164	V
3	* 2.484	40.47	RMS	32	-28.3	.3	44.47	54	-9.53	-	-	186	164	V
4	* 2.484	41.12	RMS	32	-28.3	.3	45.12	54	-8.88	-	-	186	164	V

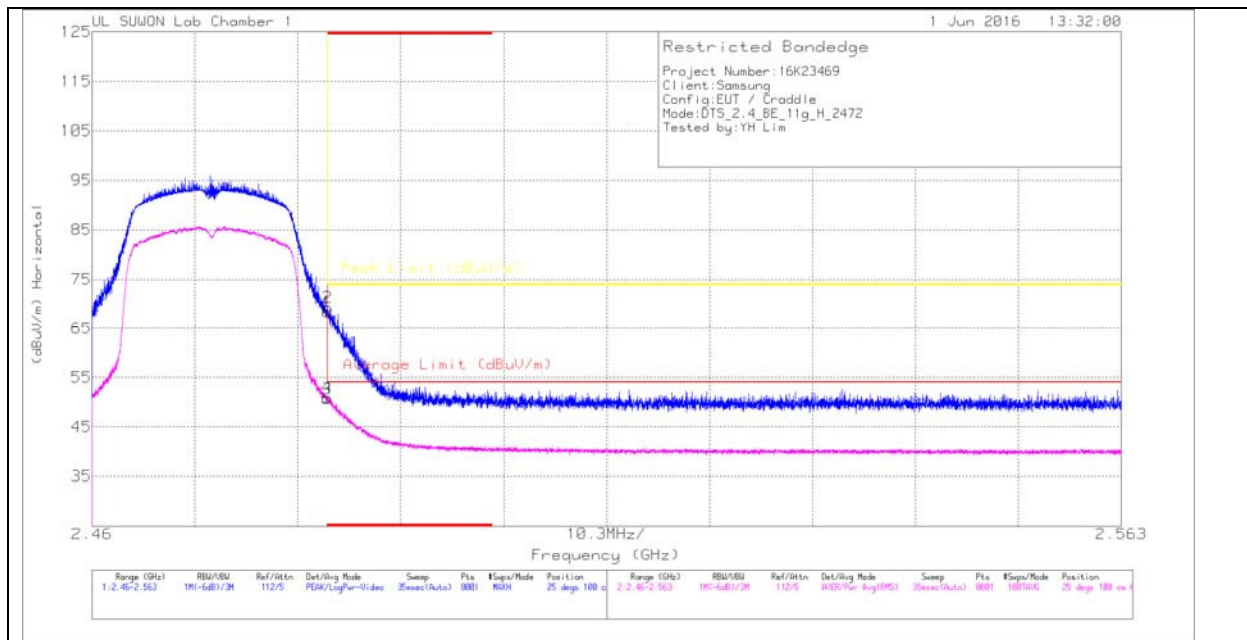
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (13 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

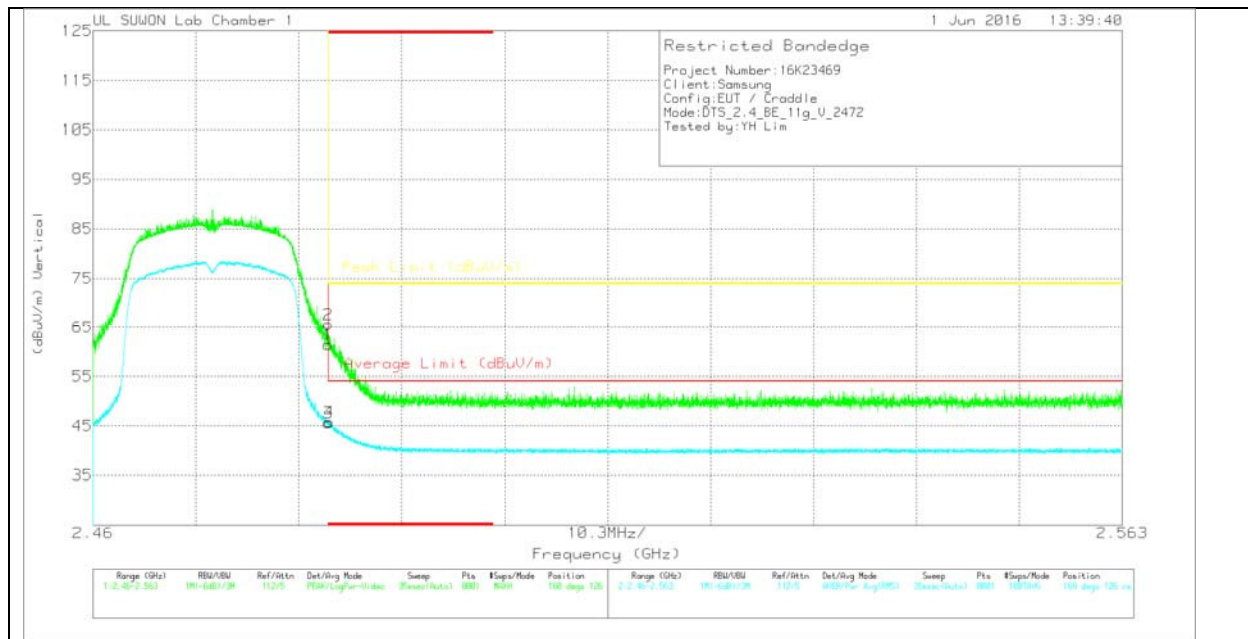
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.484	64.86	Pk	32	-28.3	0	68.56	-	-	74	-5.44	25	100	H
2	* 2.484	65.67	Pk	32	-28.3	0	69.37	-	-	74	-4.63	25	100	H
3	* 2.484	46.68	RMS	32	-28.3	.3	50.68	54	-3.32	-	-	25	100	H
4	* 2.484	46.91	RMS	32	-28.3	.3	50.91	54	-3.09	-	-	25	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	3117(001687 17)_150619	Path_2	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	* 2.484	57.73	Pk	32	-28.3	0	61.43	-	-	74	-12.57	168	126	V
2	* 2.484	61.95	Pk	32	-28.3	0	65.65	-	-	74	-8.35	168	126	V
3	* 2.484	41.6	RMS	32	-28.3	.3	45.6	54	-8.4	-	-	168	126	V
4	* 2.484	41.78	RMS	32	-28.3	.3	45.78	54	-8.22	-	-	168	126	V

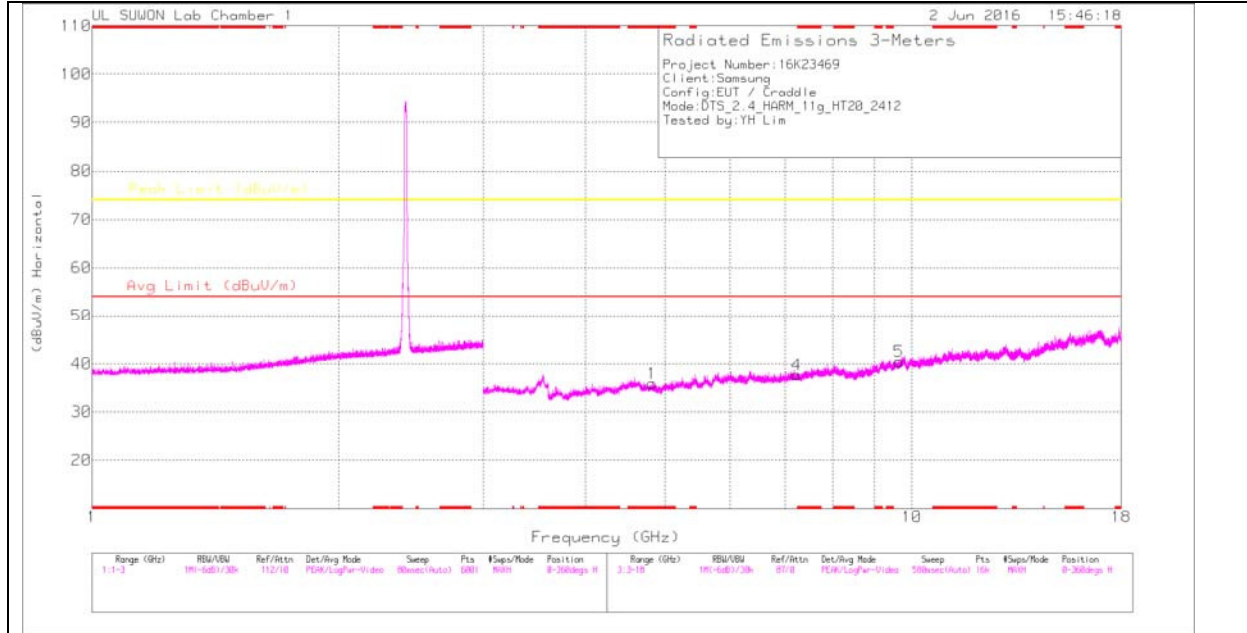
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

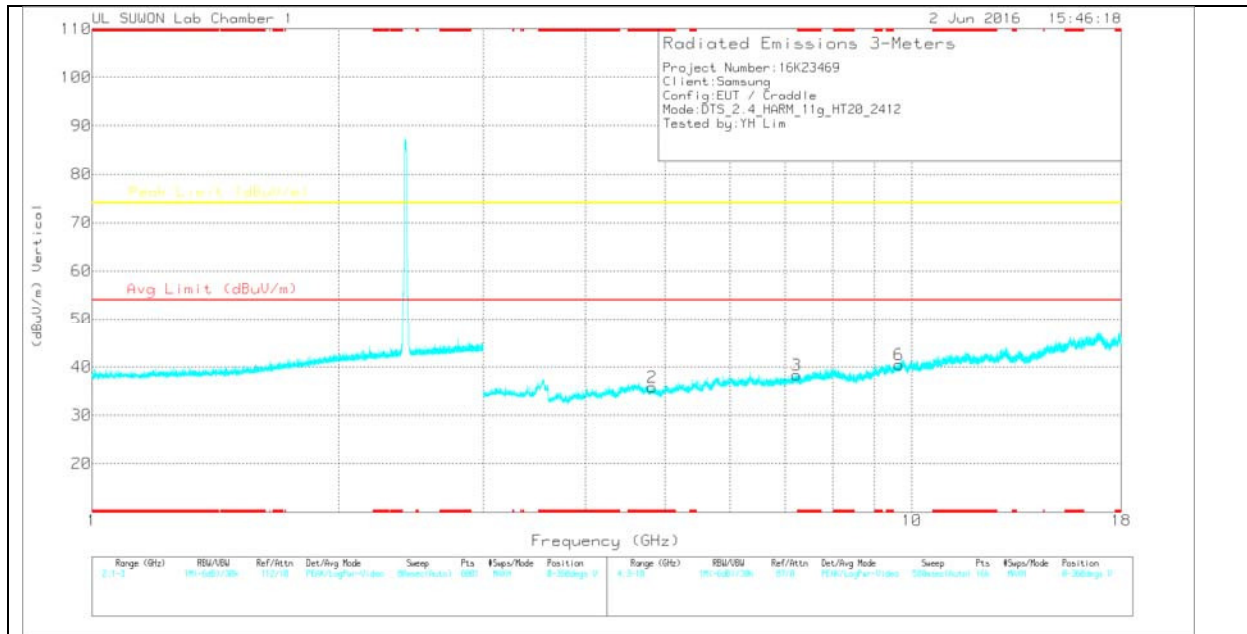
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Trace Markers

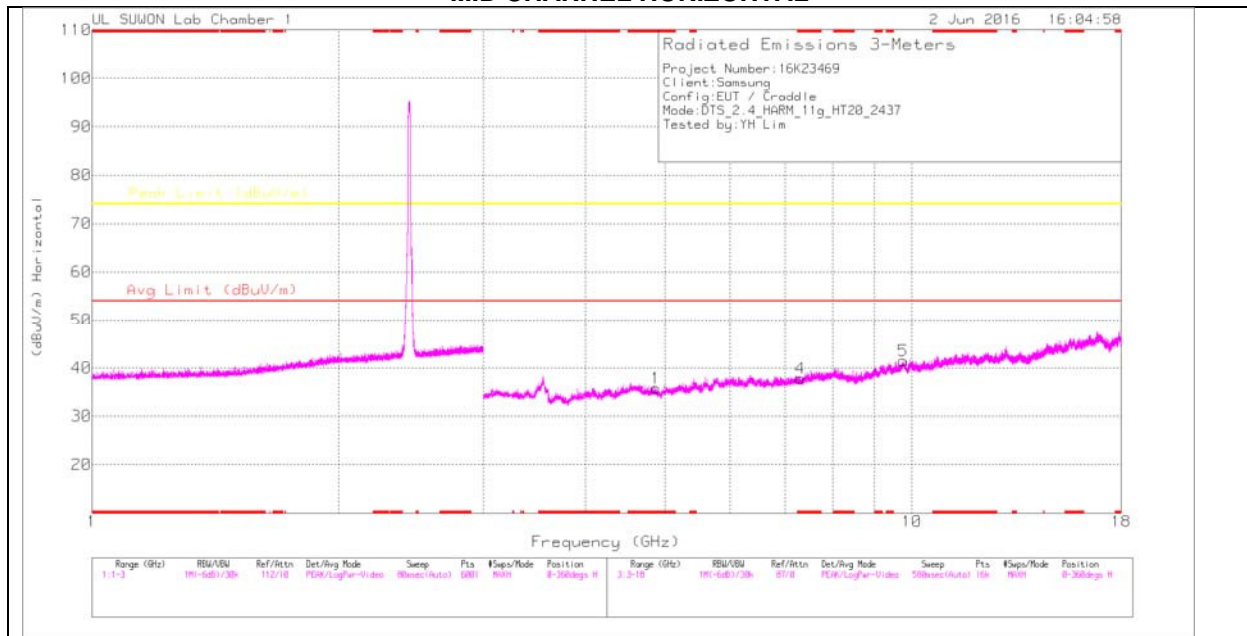
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.821	35.79	Pk	34	-33.8	0	35.99	-	-	74	-38.01	0-360	100	H
4	7.233	32.95	Pk	35.7	-30.9	0	37.75	-	-	74	-36.25	0-360	200	H
5	9.635	30.73	Pk	37	-27.3	0	40.43	-	-	74	-33.57	0-360	100	H
2	* 4.822	35.61	Pk	34	-33.8	0	35.81	-	-	74	-38.19	0-360	200	V
3	7.229	33.68	Pk	35.7	-31	0	38.38	-	-	74	-35.62	0-360	200	V
6	9.647	30.77	Pk	37.1	-27.4	0	40.47	-	-	74	-33.53	0-360	100	V

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

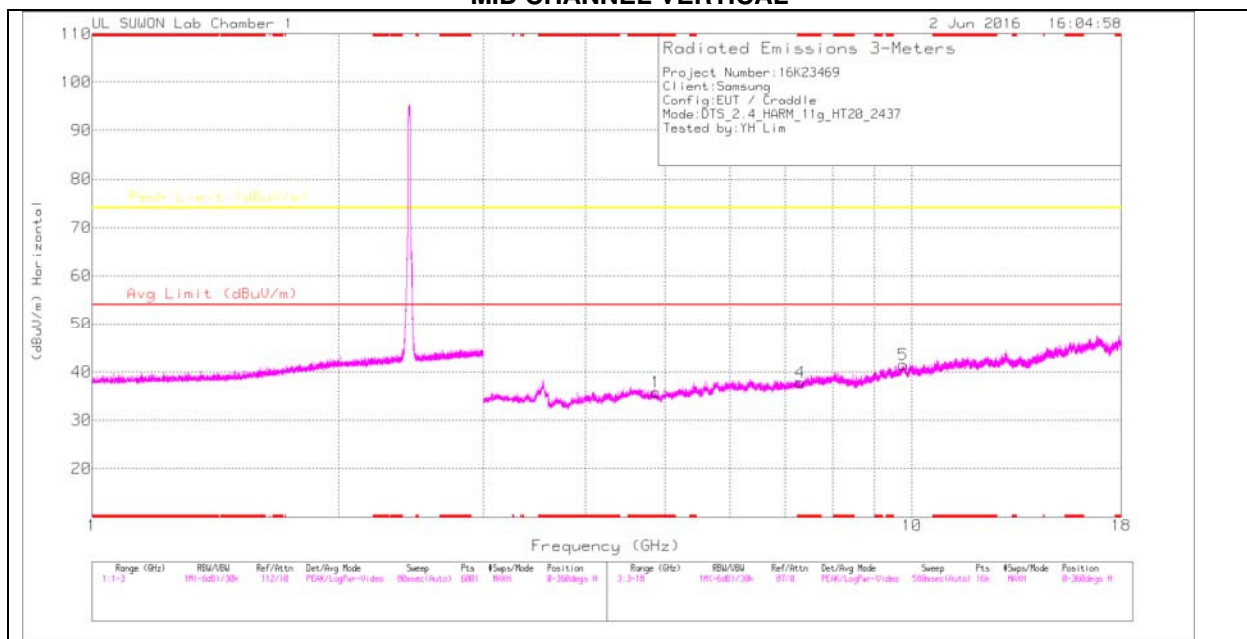
Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Trace Markers

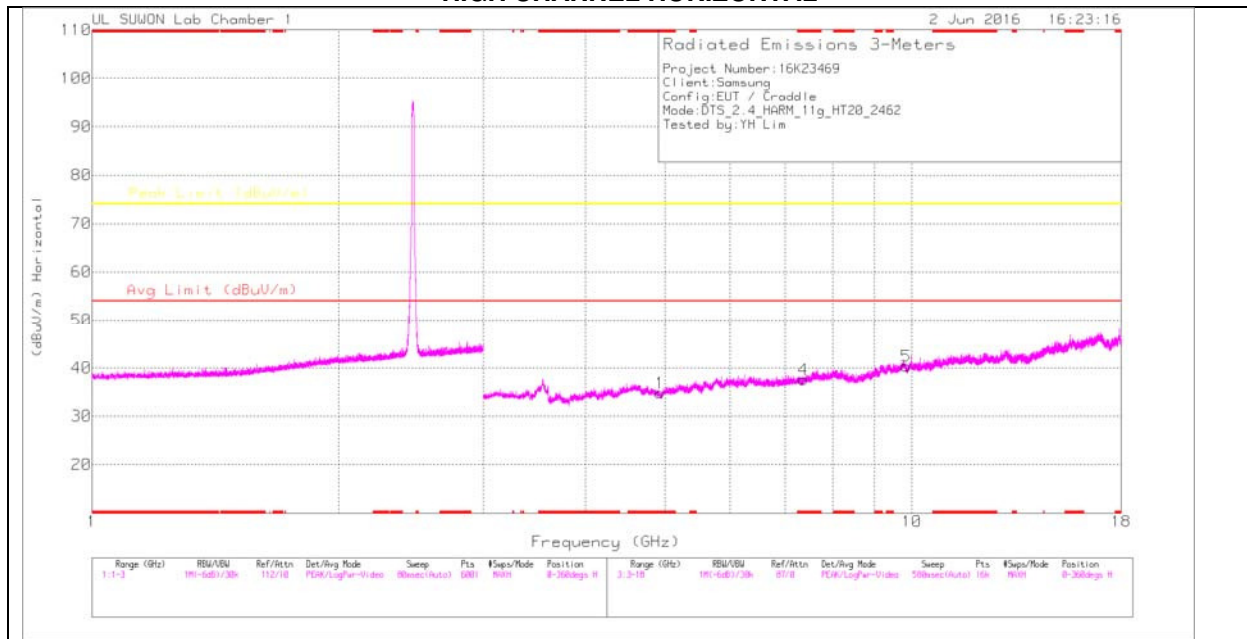
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.875	35.83	Pk	34	-34	0	35.83	-	-	74	-38.17	0-360	100	H
4	* 7.306	33.08	Pk	35.7	-30.9	0	37.88	-	-	74	-36.12	0-360	100	H
5	9.751	31.1	Pk	37.2	-26.8	0	41.5	-	-	74	-32.5	0-360	100	H
2	* 4.867	36.29	Pk	34	-34	0	36.29	-	-	74	-37.71	0-360	200	V
3	* 7.301	33.45	Pk	35.7	-30.9	0	38.25	-	-	74	-35.75	0-360	100	V
6	9.746	30.65	Pk	37.2	-26.9	0	40.95	-	-	74	-33.05	0-360	100	V

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

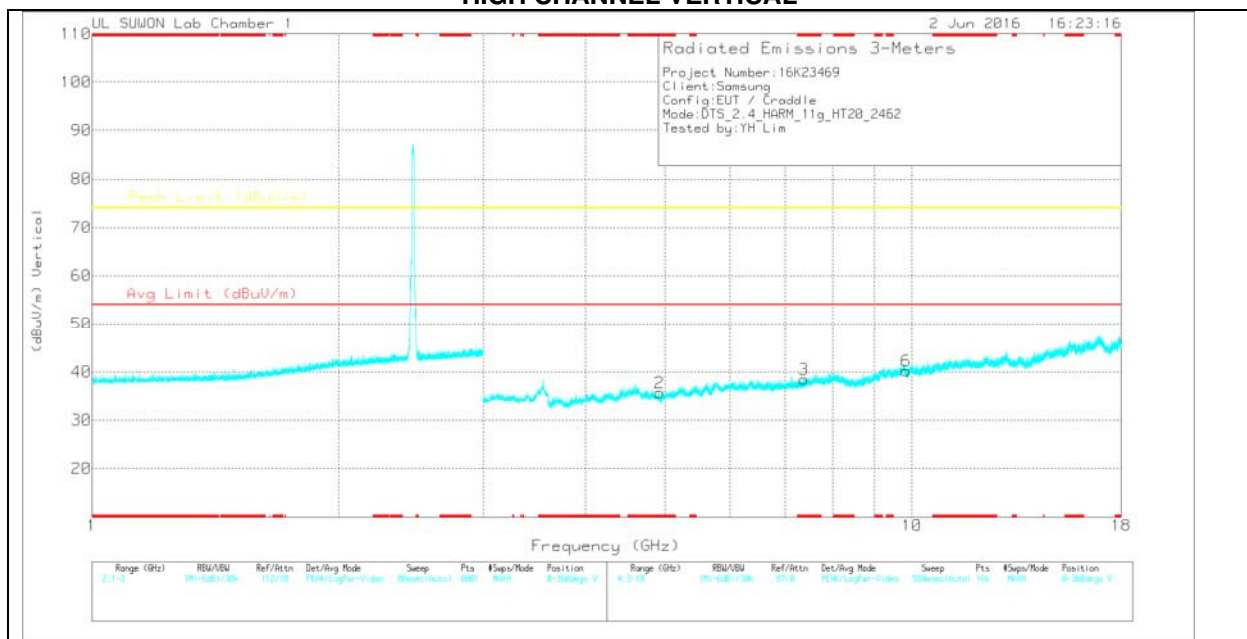
Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Trace Markers

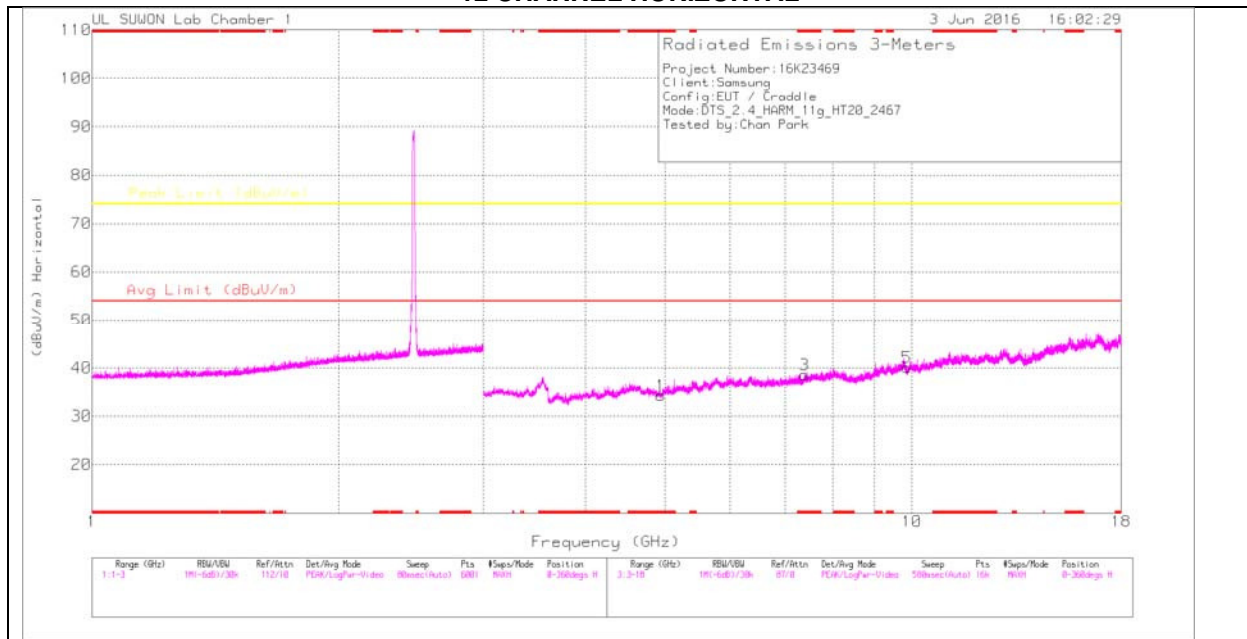
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.926	34.83	Pk	34	-34	0	34.83	-	-	74	-39.17	0-360	200	H
4	* 7.374	32.6	Pk	35.8	-30.8	0	37.6	-	-	74	-36.4	0-360	100	H
5	9.847	30.68	Pk	37.3	-27.6	0	40.38	-	-	74	-33.62	0-360	100	H
2	* 4.921	35.66	Pk	34	-34	0	35.66	-	-	74	-38.34	0-360	200	V
3	* 7.383	33.45	Pk	35.8	-30.8	0	38.45	-	-	74	-35.55	0-360	200	V
6	9.841	30.36	Pk	37.3	-27.4	0	40.26	-	-	74	-33.74	0-360	200	V

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

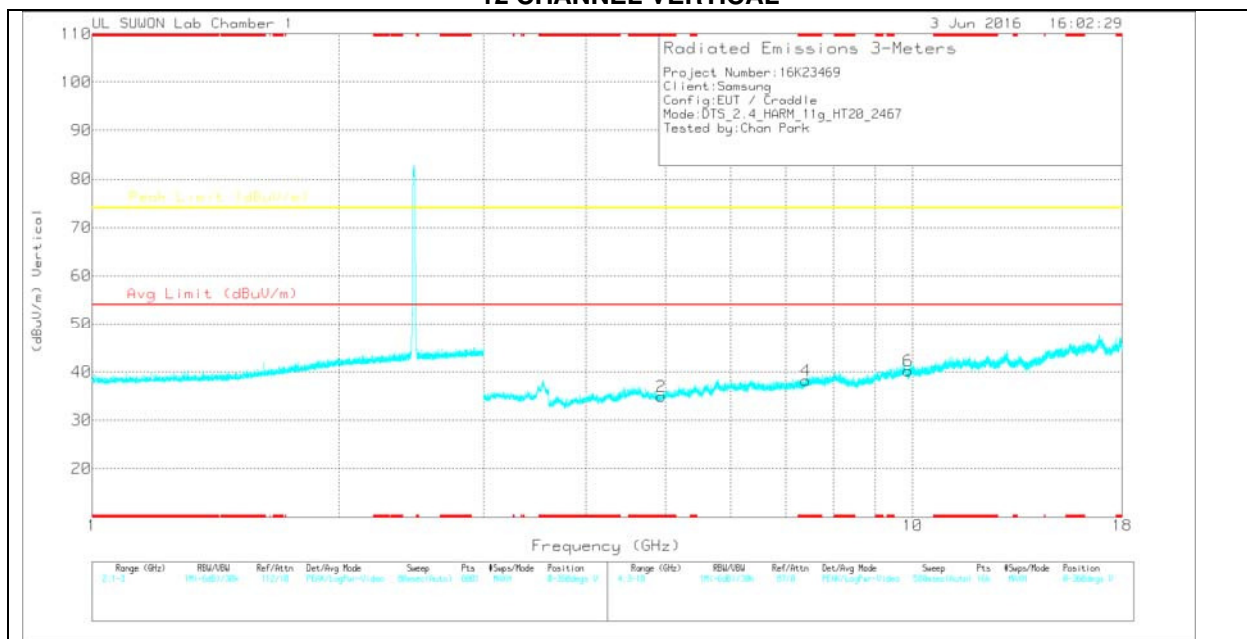
Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

12 CHANNEL HORIZONTAL



12 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

12 CHANNEL DATA

Trace Markers

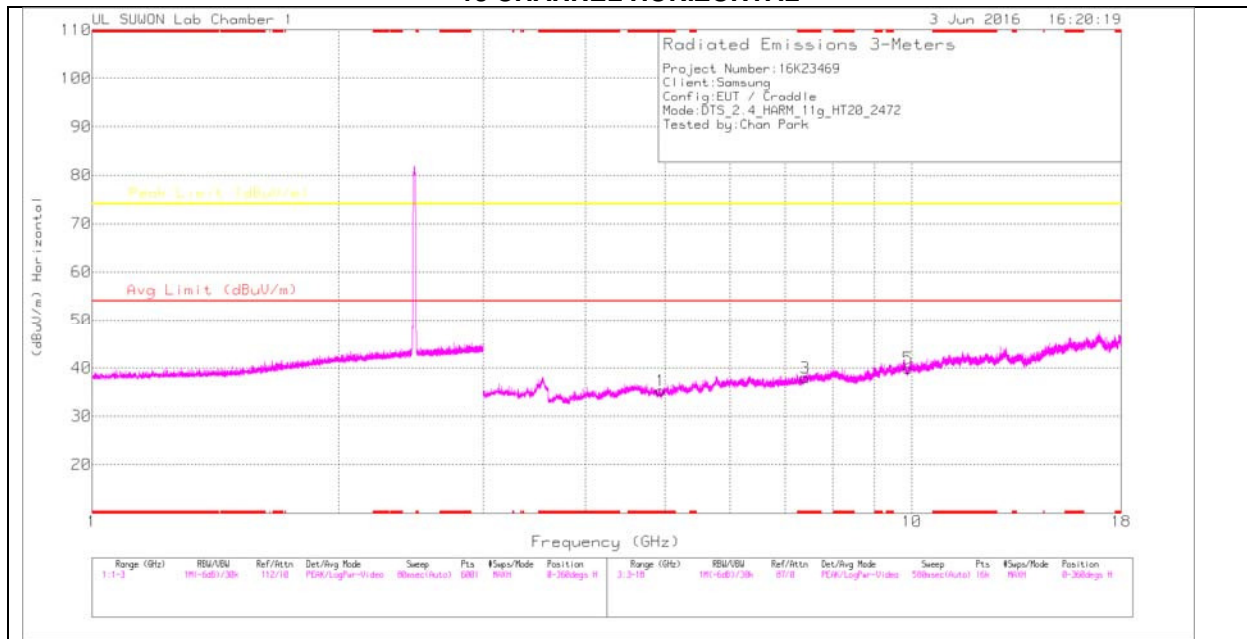
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.935	34.25	PK	34	-34	0	34.25	-	-	74	-39.75	0-360	200	H
3	* 7.403	33.4	PK	35.8	-30.6	0	38.6	-	-	74	-35.4	0-360	100	H
5	9.866	30.68	PK	37.3	-27.9	0	40.08	-	-	74	-33.92	0-360	100	H
2	* 4.936	34.9	PK	34	-34	0	34.9	-	-	74	-39.1	0-360	200	V
4	* 7.406	33	PK	35.8	-30.6	0	38.2	-	-	74	-35.8	0-360	100	V
6	9.871	30.89	PK	37.3	-28	0	40.19	-	-	74	-33.81	0-360	200	V

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

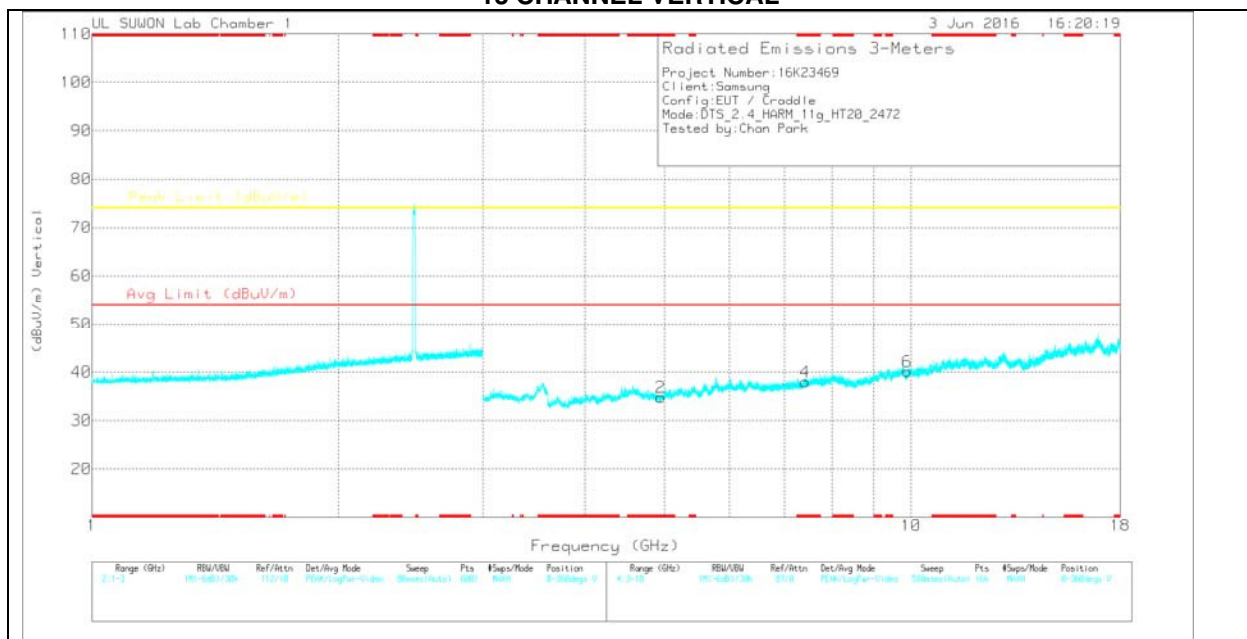
PK – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

13 CHANNEL HORIZONTAL



13 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

13 CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.941	35.26	PK	34	-34	0	35.26	-	-	74	-38.74	0-360	200	H
3	* 7.415	32.81	PK	35.8	-30.7	0	37.91	-	-	74	-36.09	0-360	200	H
5	9.886	30.52	PK	37.3	-27.9	0	39.92	-	-	74	-34.08	0-360	100	H
2	* 4.95	34.76	PK	34	-34	0	34.76	-	-	74	-39.24	0-360	200	V
4	* 7.418	32.91	PK	35.8	-30.7	0	38.01	-	-	74	-35.99	0-360	100	V
6	9.886	30.67	PK	37.3	-27.9	0	40.07	-	-	74	-33.93	0-360	200	V

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

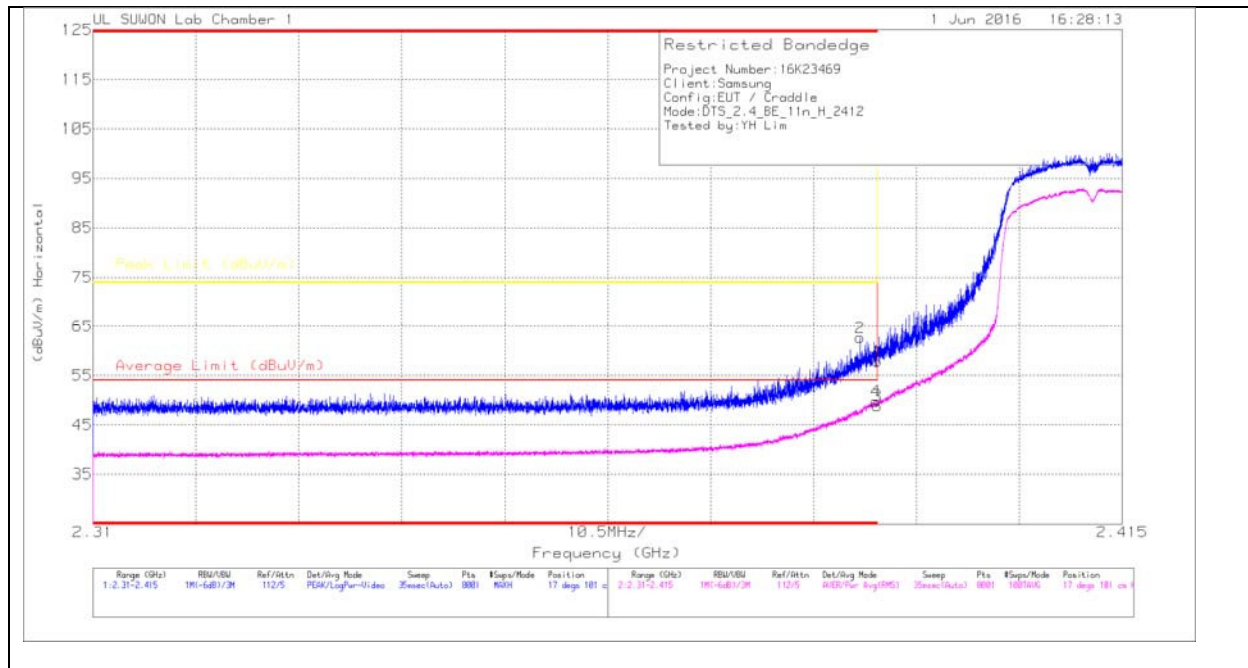
PK – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

11.2.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

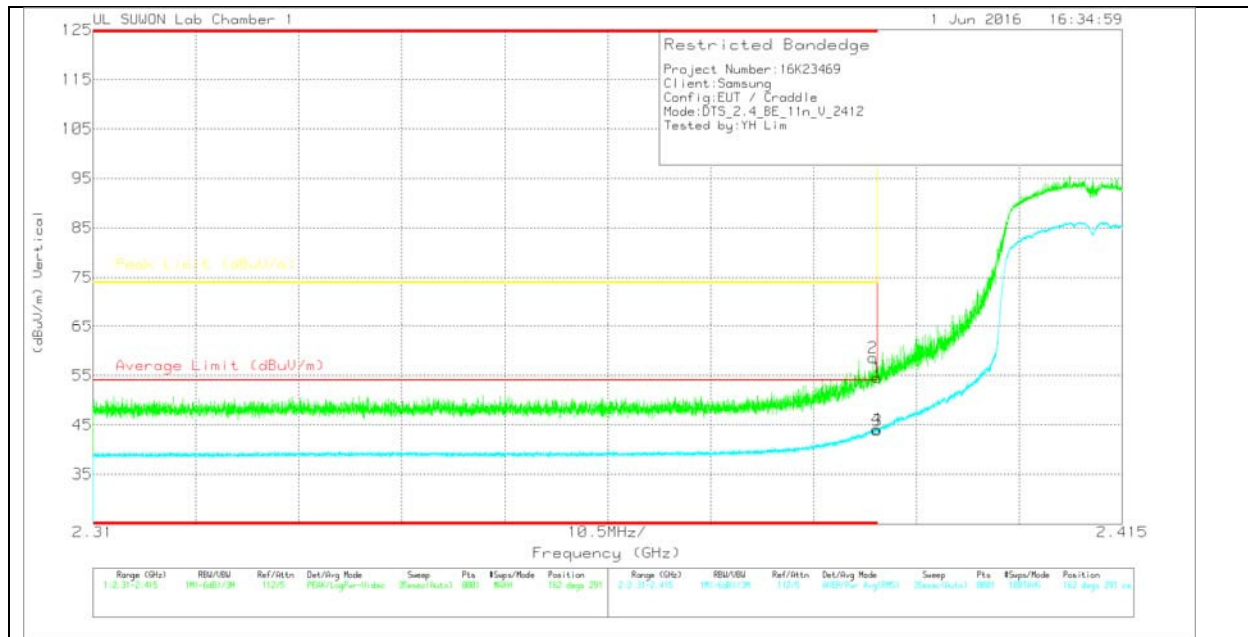
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	55.06	Pk	31.8	-29	0	57.86	-	-	74	-16.14	17	101	H
2	* 2.388	59.9	Pk	31.8	-29	0	62.7	-	-	74	-11.3	17	101	H
3	* 2.39	45.78	RMS	31.8	-29	.32	48.9	54	-5.1	-	-	17	101	H
4	* 2.39	46.65	RMS	31.8	-29	.32	49.77	54	-4.23	-	-	17	101	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619	Path_2	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	* 2.39	51.74	Pk	31.8	-29	0	54.54	-	-	74	-19.46	162	291	V
2	* 2.39	55.81	Pk	31.8	-29	0	58.61	-	-	74	-15.39	162	291	V
3	* 2.39	40.73	RMS	31.8	-29	.32	43.85	54	-10.15	-	-	162	291	V
4	* 2.39	41.04	RMS	31.8	-29	.32	44.16	54	-9.84	-	-	162	291	V

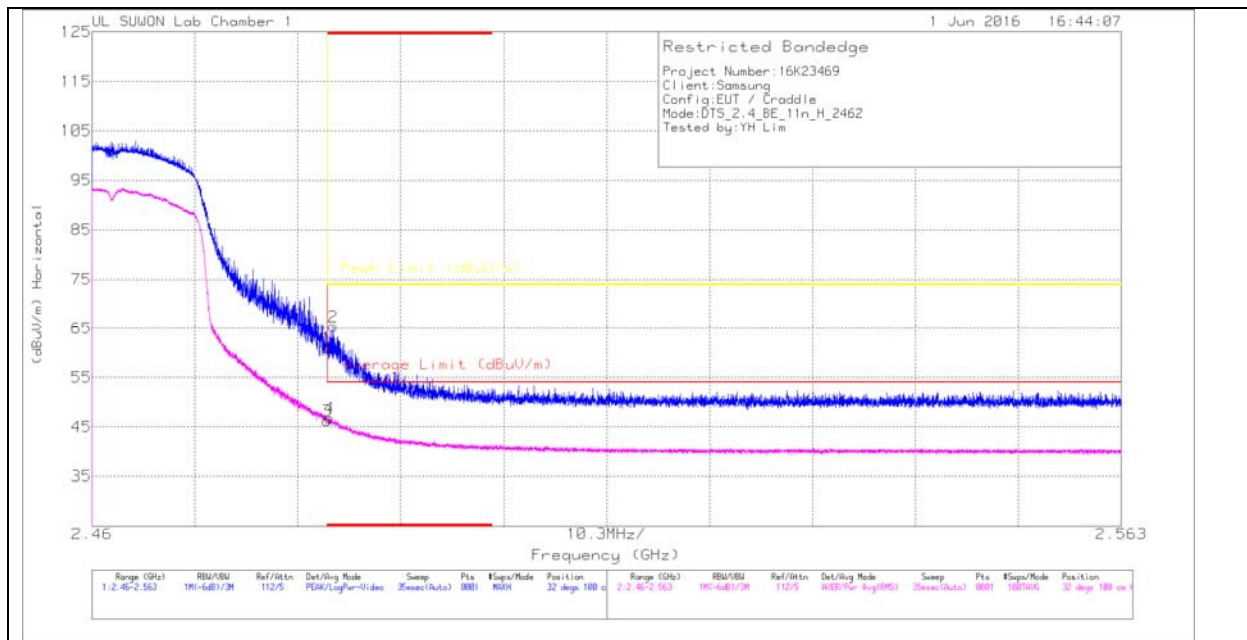
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

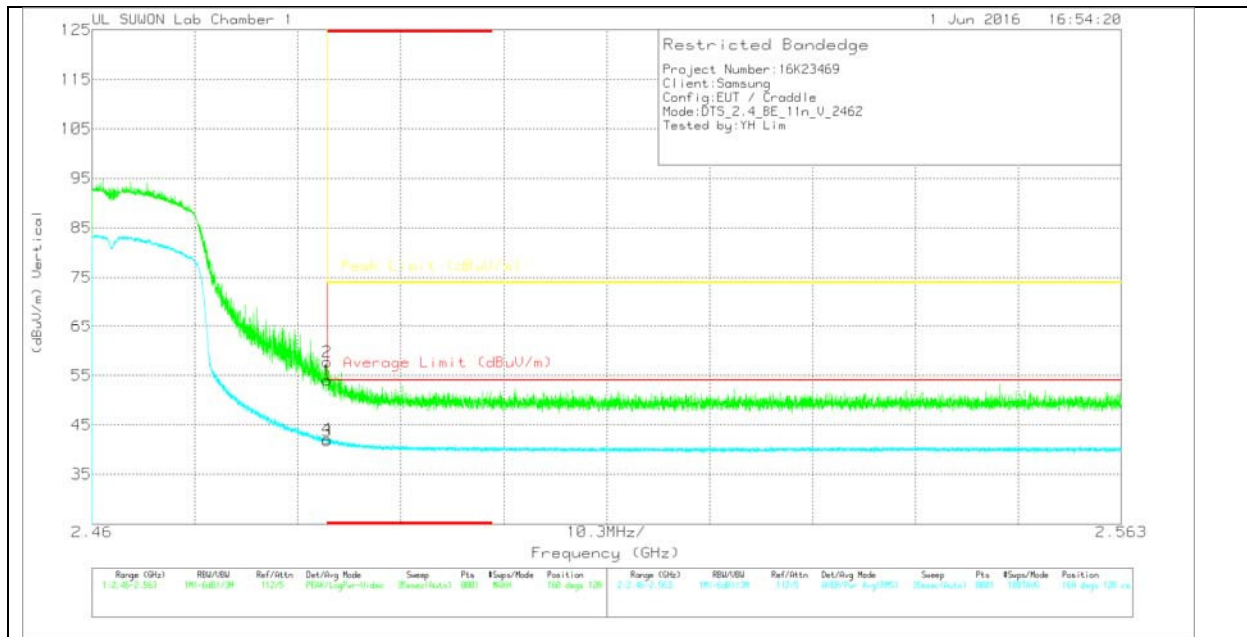
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	57.38	Pk	32	-28.3	0	61.08	-	-	74	-12.92	32	100	H
2	* 2.484	61.75	Pk	32	-28.3	0	65.45	-	-	74	-8.55	32	100	H
3	* 2.484	42.2	RMS	32	-28.3	.32	46.22	54	-7.78	-	-	32	100	H
4	* 2.484	42.75	RMS	32	-28.3	.32	46.77	54	-7.23	-	-	32	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	3117(001687 17)_150619	Path_2	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	* 2.484	50.31	Pk	32	-28.3	0	54.01	-	-	74	-19.99	168	128	V
2	* 2.484	54.06	Pk	32	-28.3	0	57.76	-	-	74	-16.24	168	128	V
3	* 2.484	37.77	RMS	32	-28.3	.32	41.79	54	-12.21	-	-	168	128	V
4	* 2.484	38.2	RMS	32	-28.3	.32	42.22	54	-11.78	-	-	168	128	V

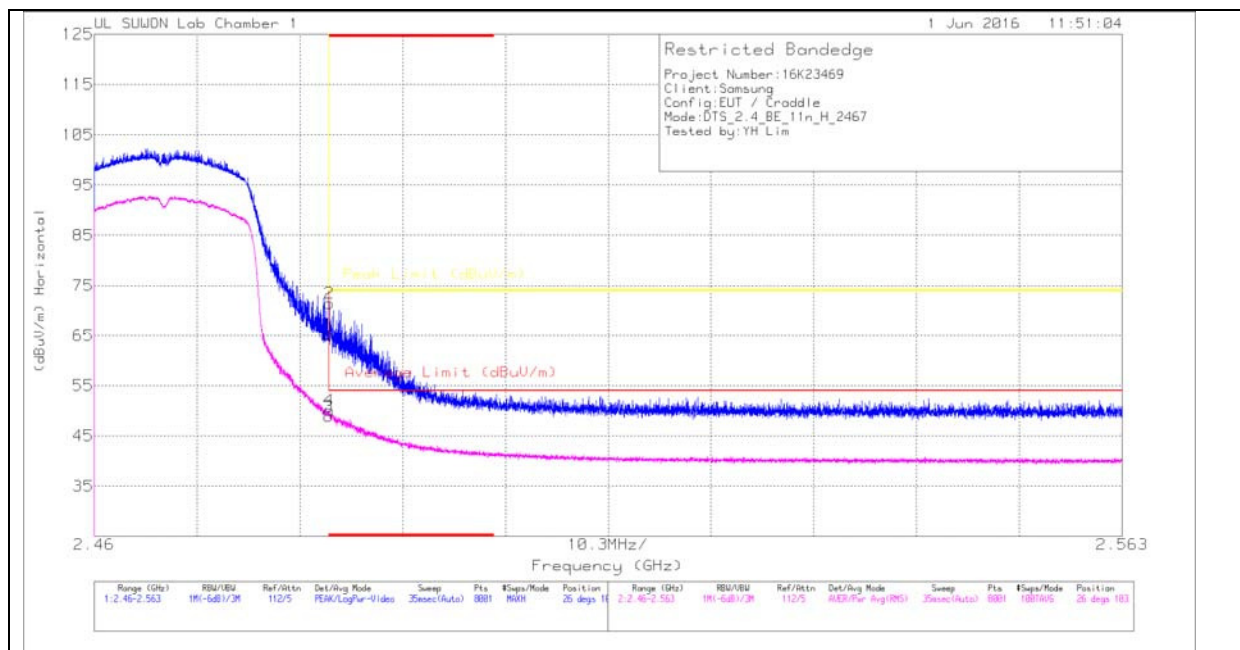
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (12 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

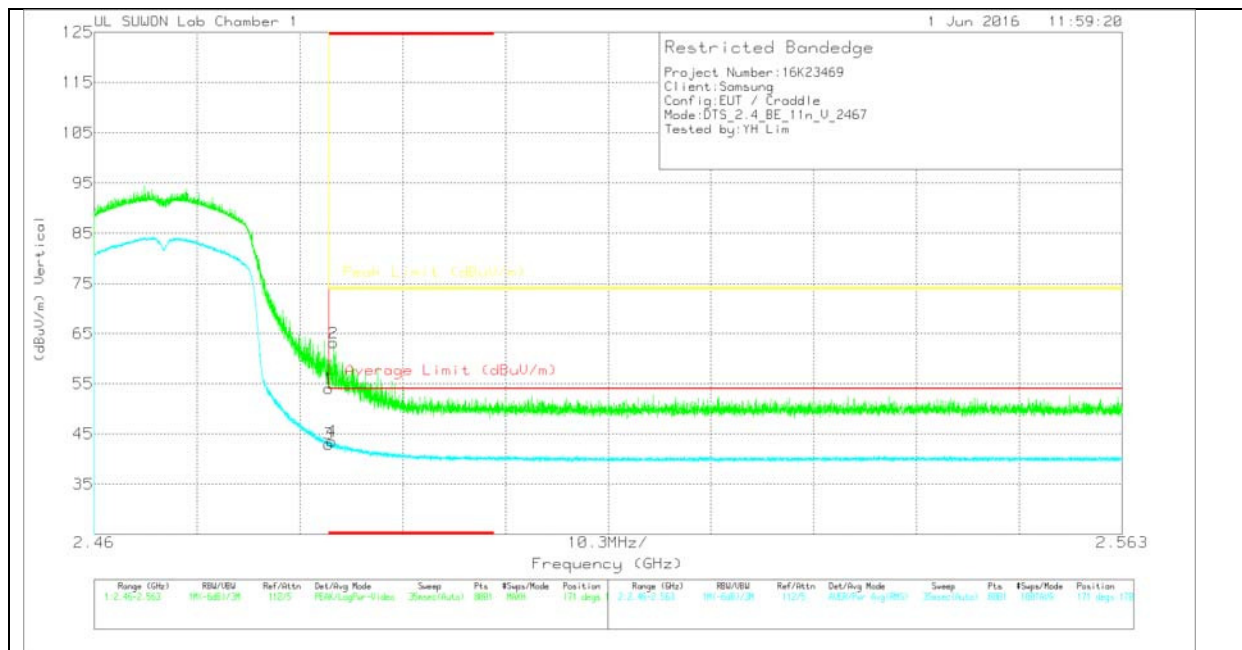
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	61.53	Pk	32	-28.3	0	65.23	-	-	74	-8.77	26	103	H
2	* 2.484	67.8	Pk	32	-28.3	0	71.5	-	-	74	-2.5	26	103	H
3	* 2.484	44.85	RMS	32	-28.3	.32	48.87	54	-5.13	-	-	26	103	H
4	* 2.484	46.1	RMS	32	-28.3	.32	50.12	54	-3.88	-	-	26	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	3117(001687 17)_t50619	Path_2	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	* 2.484	50.28	Pk	32	-28.3	0	53.98	-	-	74	-20.02	171	170	V
2	* 2.484	59.43	Pk	32	-28.3	0	63.13	-	-	74	-10.87	171	170	V
3	* 2.484	38.99	RMS	32	-28.3	.32	43.01	54	-10.99	-	-	171	170	V
4	* 2.484	39.53	RMS	32	-28.3	.32	43.55	54	-10.45	-	-	171	170	V

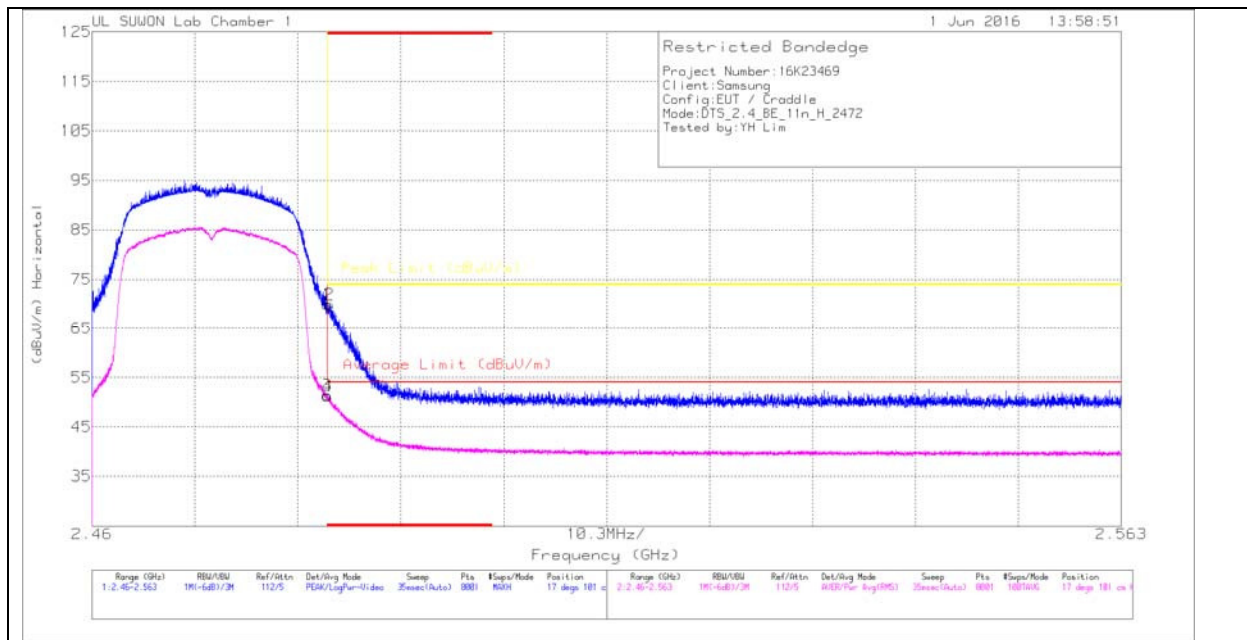
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (13 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

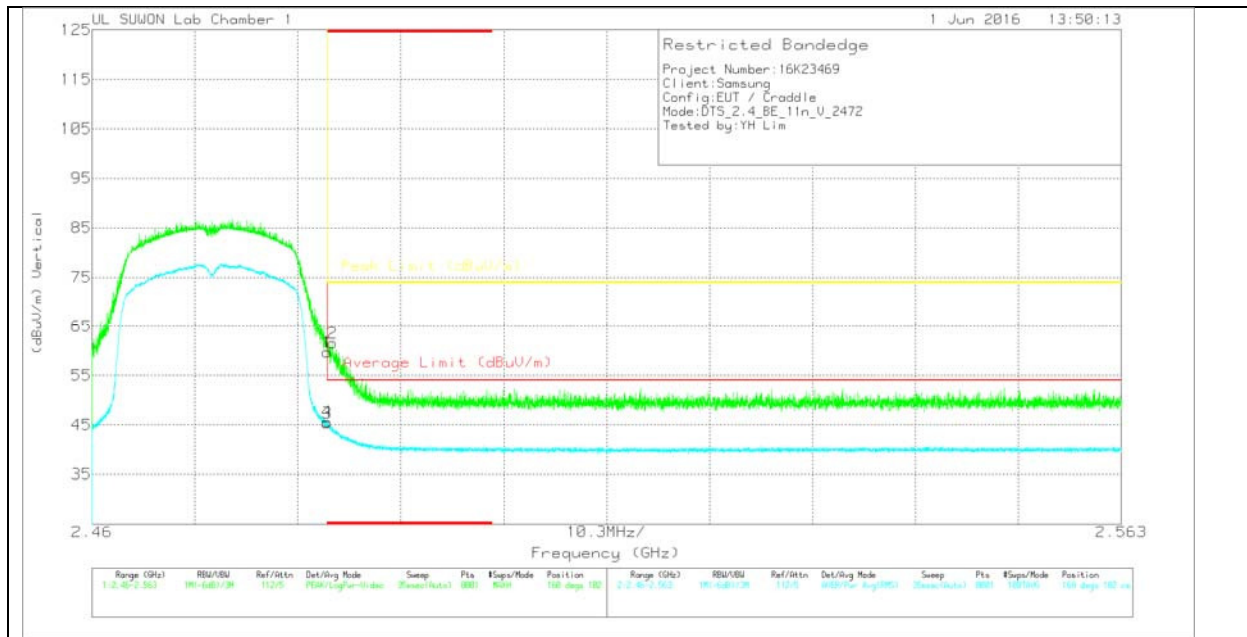
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.484	66.33	Pk	32	-28.3	0	70.03	-	-	74	-3.97	17	101	H
2	* 2.484	66.23	Pk	32	-28.3	0	69.93	-	-	74	-4.07	17	101	H
3	* 2.484	47.7	RMS	32	-28.3	0	51.4	54	-2.6	-	-	17	101	H
4	* 2.484	47.46	RMS	32	-28.3	0	51.16	54	-2.84	-	-	17	101	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	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	* 2.484	56.03	Pk	32	-28.3	0	59.73	-	-	74	-14.27	168	102	V
2	* 2.484	57.91	Pk	32	-28.3	0	61.61	-	-	74	-12.39	168	102	V
3	* 2.484	41.33	RMS	32	-28.3	.32	45.35	54	-8.65	-	-	168	102	V
4	* 2.484	41.55	RMS	32	-28.3	.32	45.57	54	-8.43	-	-	168	102	V

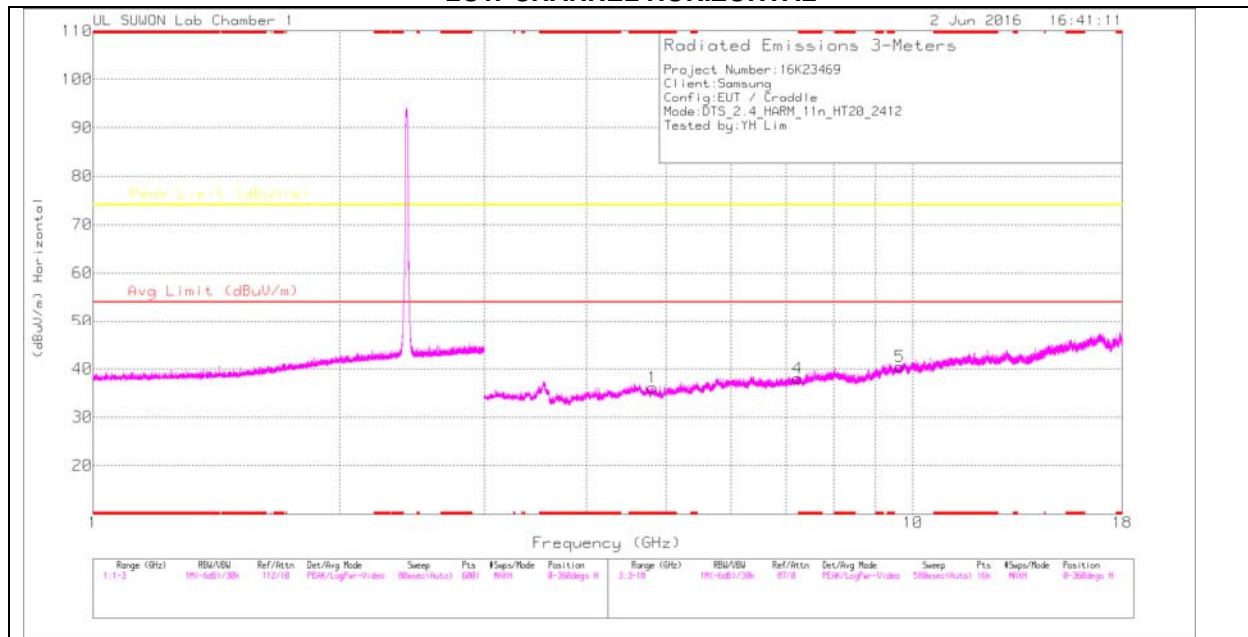
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

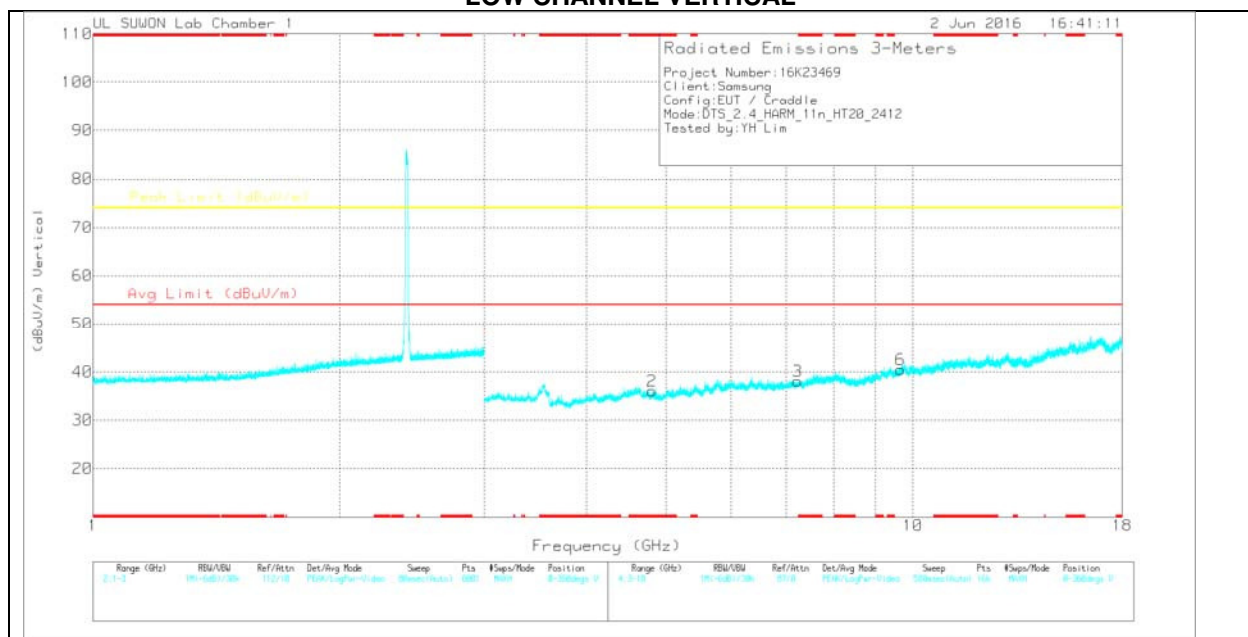
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Trace Markers

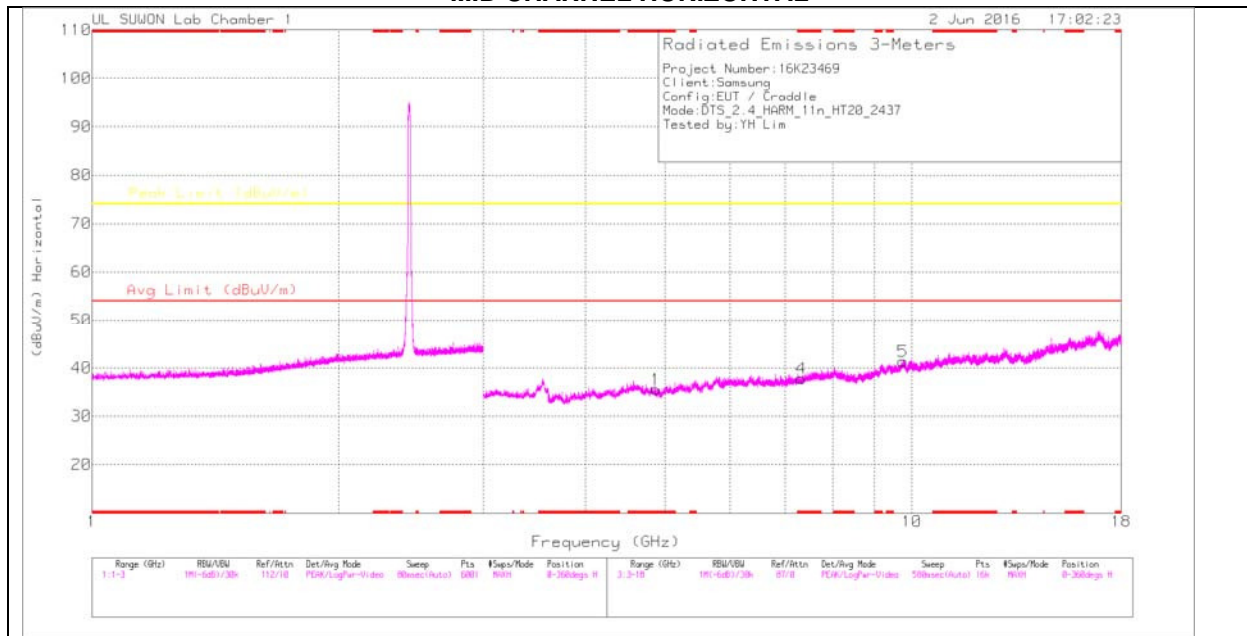
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.824	35.97	Pk	34	-33.8	0	36.17	-	-	74	-37.83	0-360	200	H
4	7.24	33.28	Pk	35.7	-30.9	0	38.08	-	-	74	-35.92	0-360	100	H
5	9.648	30.84	Pk	37.1	-27.4	0	40.54	-	-	74	-33.46	0-360	200	H
2	* 4.825	35.92	Pk	34	-33.8	0	36.12	-	-	74	-37.88	0-360	100	V
3	7.238	33.28	Pk	35.7	-30.9	0	38.08	-	-	74	-35.92	0-360	100	V
6	9.658	30.89	Pk	37.1	-27.5	0	40.49	-	-	74	-33.51	0-360	200	V

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

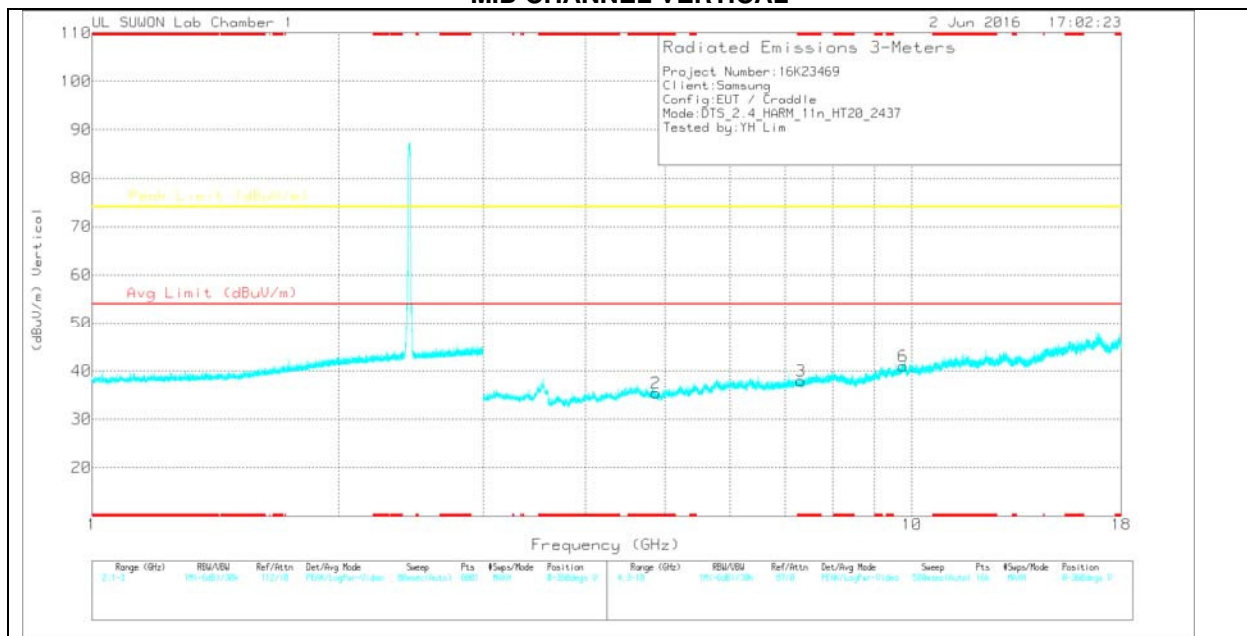
Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Trace Markers

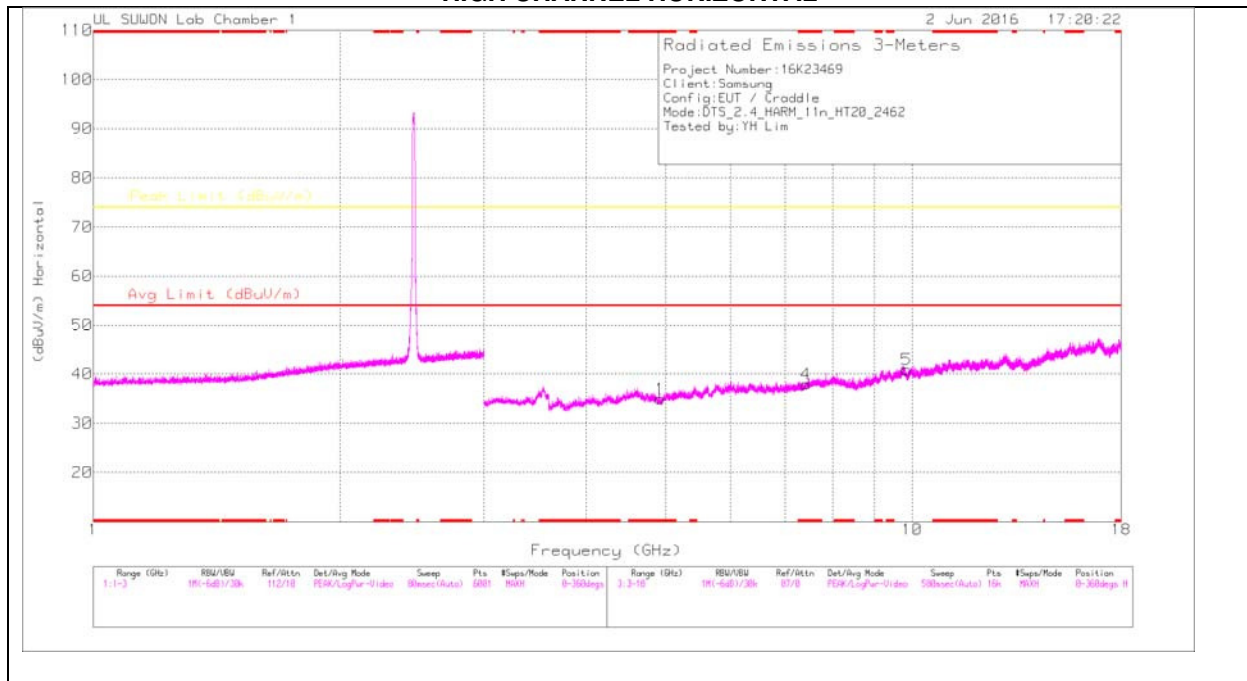
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.875	35.59	Pk	34	-34	0	35.59	-	-	74	-38.41	0-360	100	H
4	* 7.328	32.78	Pk	35.8	-30.8	0	37.78	-	-	74	-36.22	0-360	100	H
5	9.749	31.03	Pk	37.2	-26.8	0	41.43	-	-	74	-32.57	0-360	200	H
2	* 4.869	35.42	Pk	34	-34	0	35.42	-	-	74	-38.58	0-360	200	V
3	* 7.325	32.93	Pk	35.8	-30.8	0	37.93	-	-	74	-36.07	0-360	100	V
6	9.75	30.65	Pk	37.2	-26.8	0	41.05	-	-	74	-32.95	0-360	100	V

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

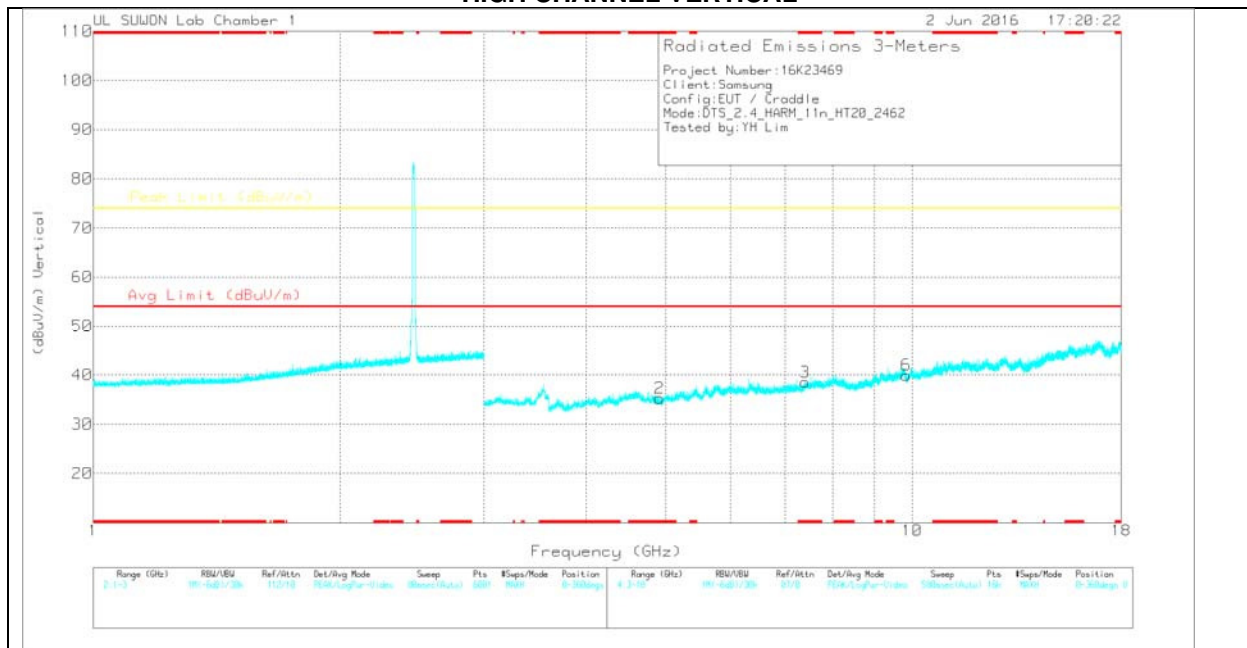
Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Trace Markers

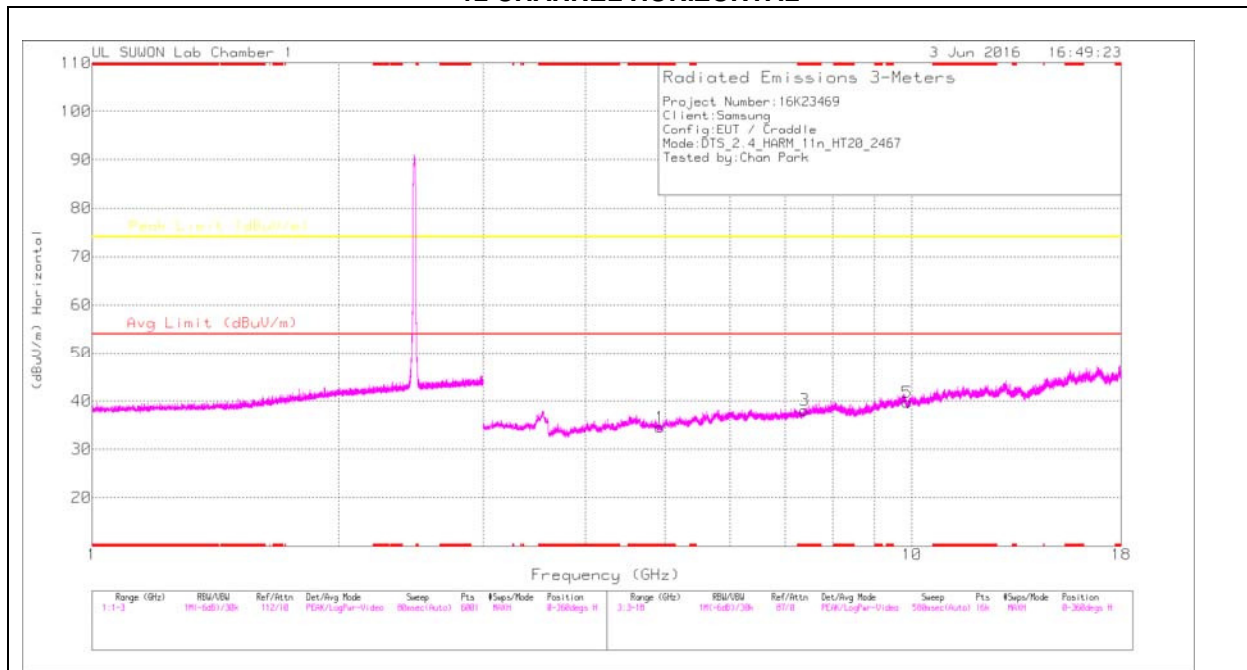
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.922	34.94	Pk	34	-34	0	34.94	-	-	74	-39.06	0-360	100	H
4	* 7.417	32.82	Pk	35.8	-30.7	0	37.92	-	-	74	-36.08	0-360	100	H
5	9.844	31.06	Pk	37.3	-27.5	0	40.86	-	-	74	-33.14	0-360	100	H
2	* 4.912	35.28	Pk	34	-34	0	35.28	-	-	74	-38.72	0-360	200	V
3	* 7.409	33.35	Pk	35.8	-30.6	0	38.55	-	-	74	-35.45	0-360	200	V
6	9.84	30.08	Pk	37.3	-27.4	0	39.98	-	-	74	-34.02	0-360	100	V

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

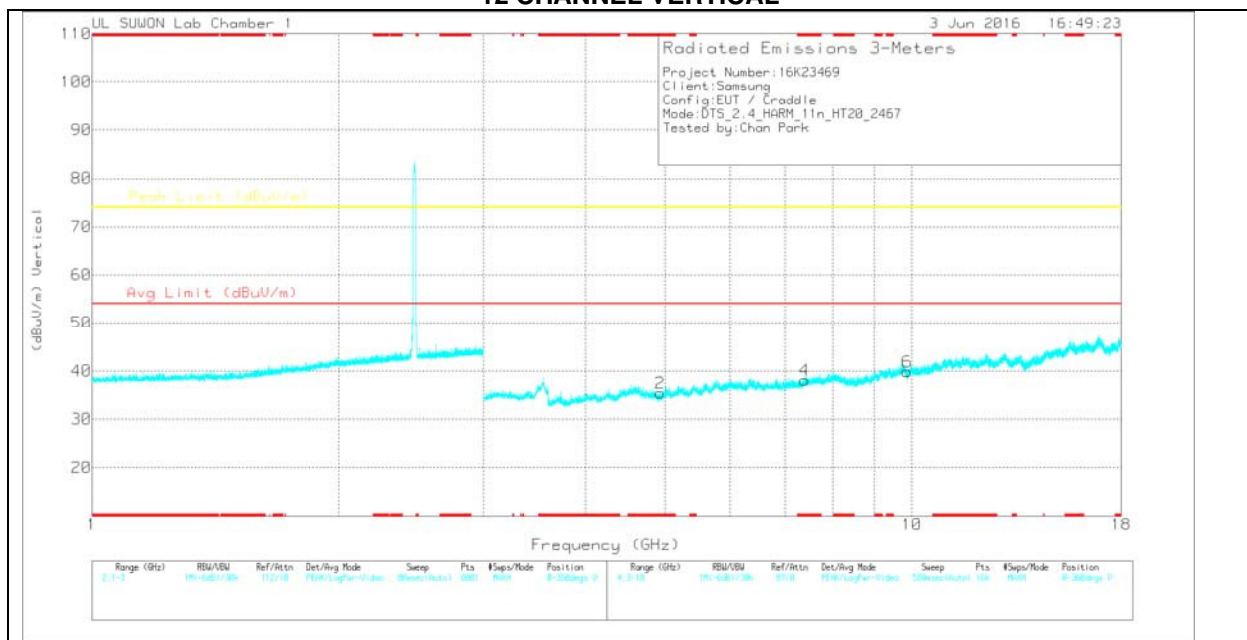
Pk – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

12 CHANNEL HORIZONTAL



12 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

12 CHANNEL DATA

Trace Markers

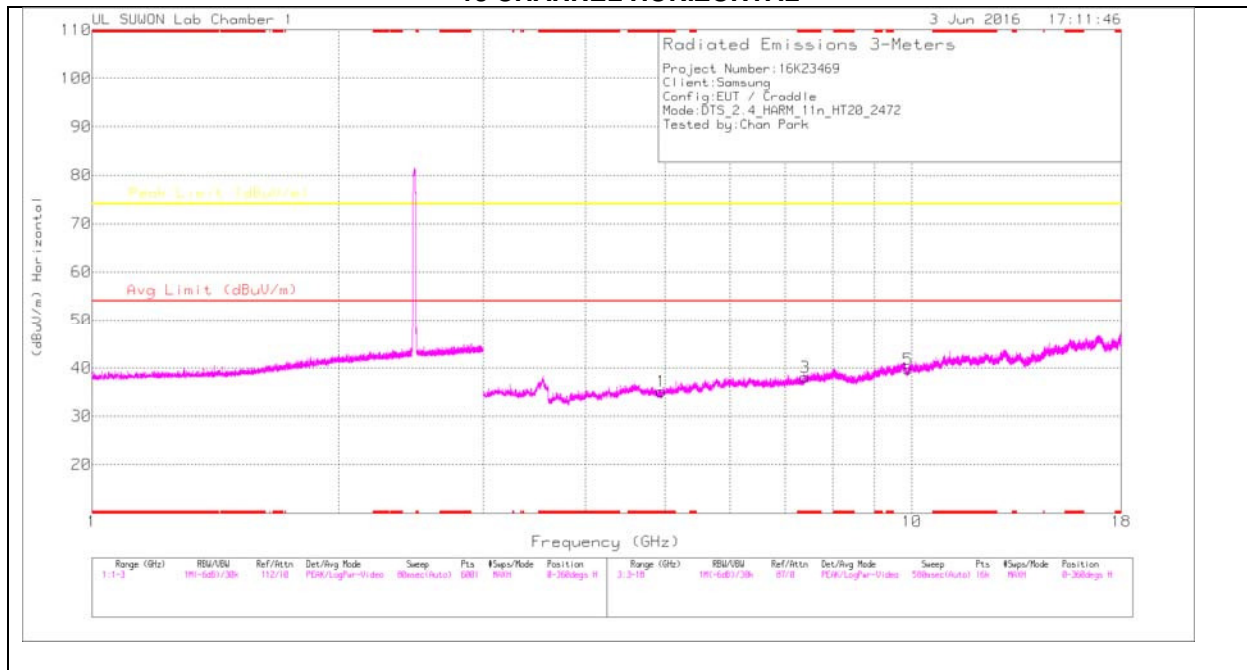
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.934	34.54	PK	34	-34	0	34.54	-	-	74	-39.46	0-360	100	H
3	* 7.401	32.95	PK	35.8	-30.6	0	38.15	-	-	74	-35.85	0-360	200	H
5	9.867	30.28	PK	37.3	-27.9	0	39.68	-	-	74	-34.32	0-360	200	H
2	* 4.93	35.41	PK	34	-34	0	35.41	-	-	74	-38.59	0-360	100	V
4	* 7.4	32.94	PK	35.8	-30.6	0	38.14	-	-	74	-35.86	0-360	100	V
6	9.867	30.47	PK	37.3	-27.9	0	39.87	-	-	74	-34.13	0-360	200	V

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

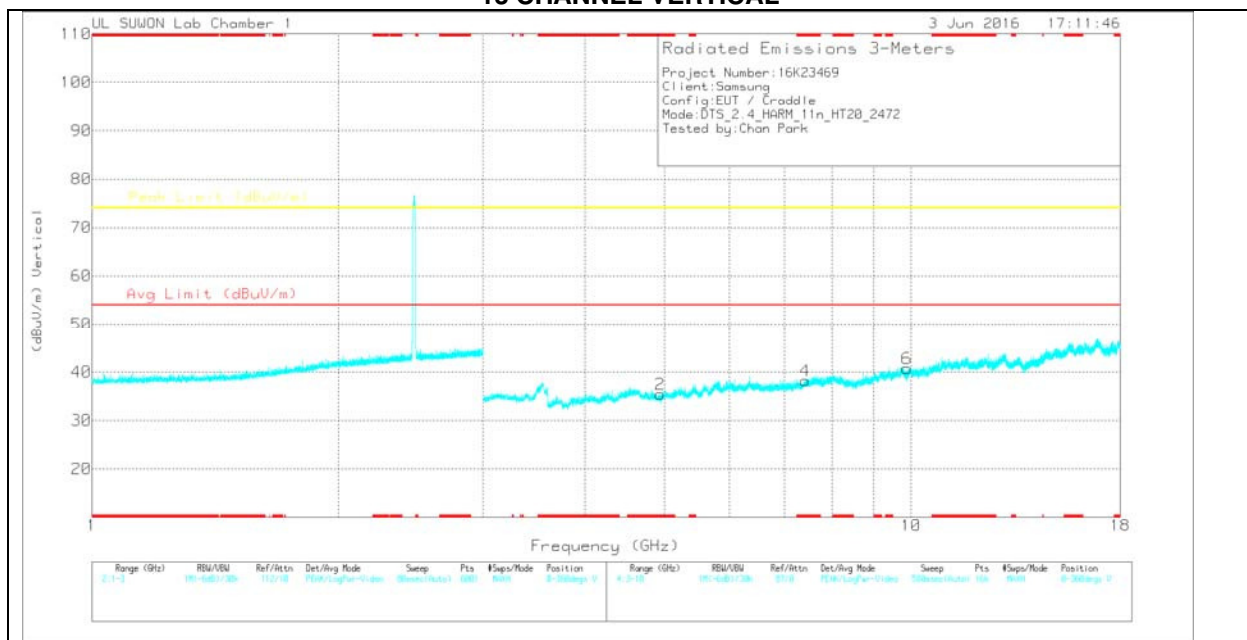
PK – Peak detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

13 CHANNEL HORIZONTAL



13 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

13 CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.948	35.12	PK	34	-34	0	35.12	-	-	74	-38.88	0-360	200	H
3	* 7.413	32.99	PK	35.8	-30.7	0	38.09	-	-	74	-35.91	0-360	200	H
5	9.885	30.35	PK	37.3	-27.9	0	39.75	-	-	74	-34.25	0-360	200	H
2	* 4.941	35.48	PK	34	-34	0	35.48	-	-	74	-38.52	0-360	200	V
4	* 7.421	33.09	PK	35.8	-30.7	0	38.19	-	-	74	-35.81	0-360	200	V
6	9.884	31.32	PK	37.3	-27.9	0	40.72	-	-	74	-33.28	0-360	100	V

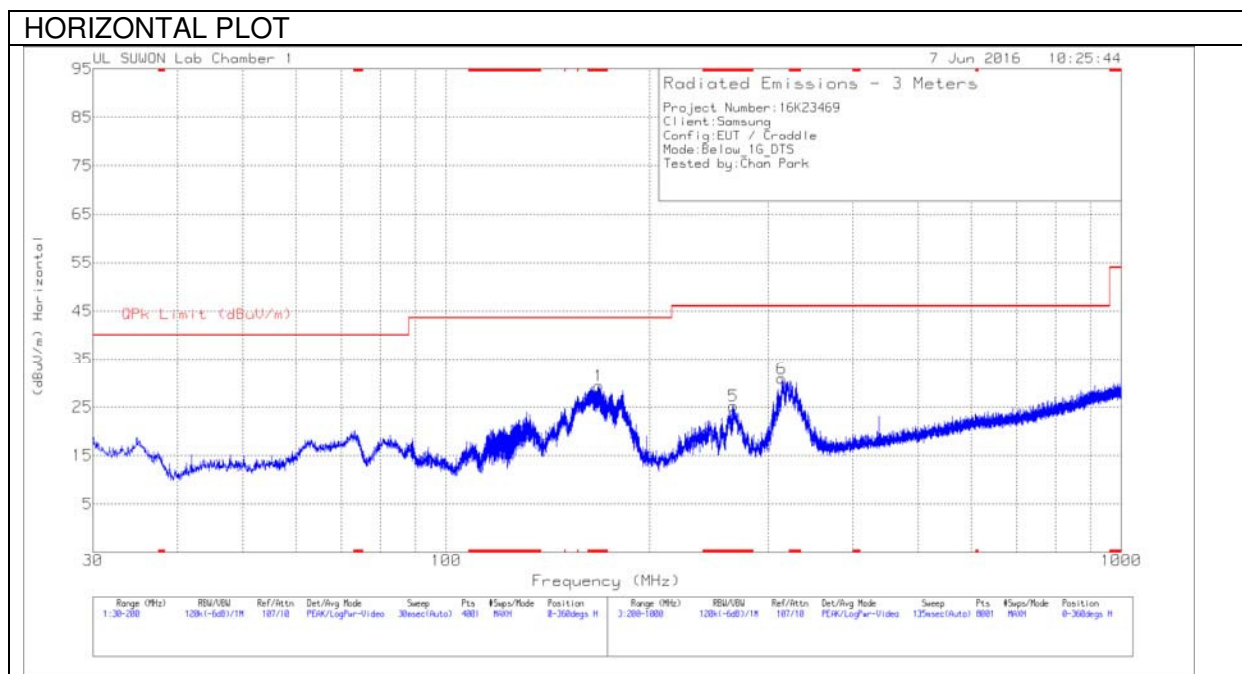
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

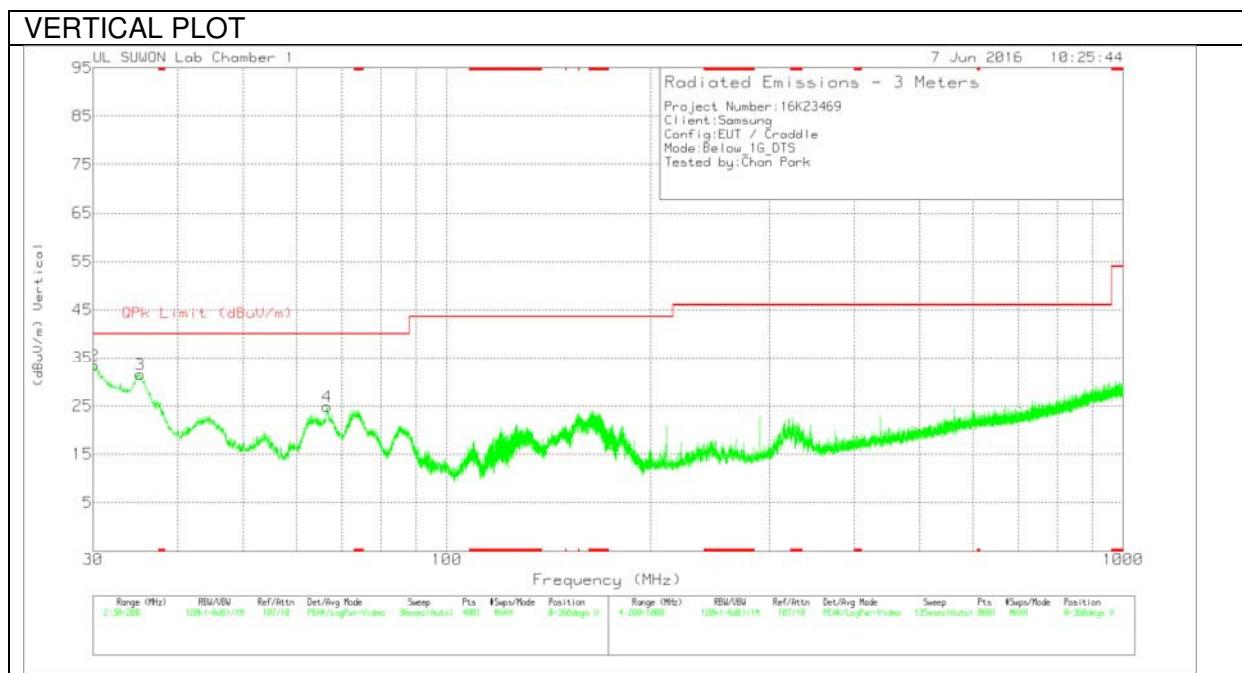
Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

11.3. WORST-CASE BELOW 1 GHz

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



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



Below 1G Data

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163-750	Bi-Log	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 168.2525	48.95	Pk	8.9	-28.5	29.35	43.52	-14.17	0-360	200	H
2	30.1275	53.66	Pk	10.3	-30.5	33.46	40	-6.54	0-360	100	V
3	35.185	51.4	Pk	10.6	-30.4	31.6	40	-8.4	0-360	100	V
4	66.5925	43.94	Pk	10.7	-29.8	24.84	40	-15.16	0-360	100	V
5	* 266.2	40.28	Pk	12.7	-27.7	25.28	46.02	-20.74	0-360	101	H
6	314.2	44.48	Pk	13.7	-27.3	30.88	46.02	-15.14	0-360	101	H

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

Pk - Peak detector

12. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 [*]	56 to 46 [*]
0.5-5	56	46
5-30	60	50

^{*} Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10 2009.

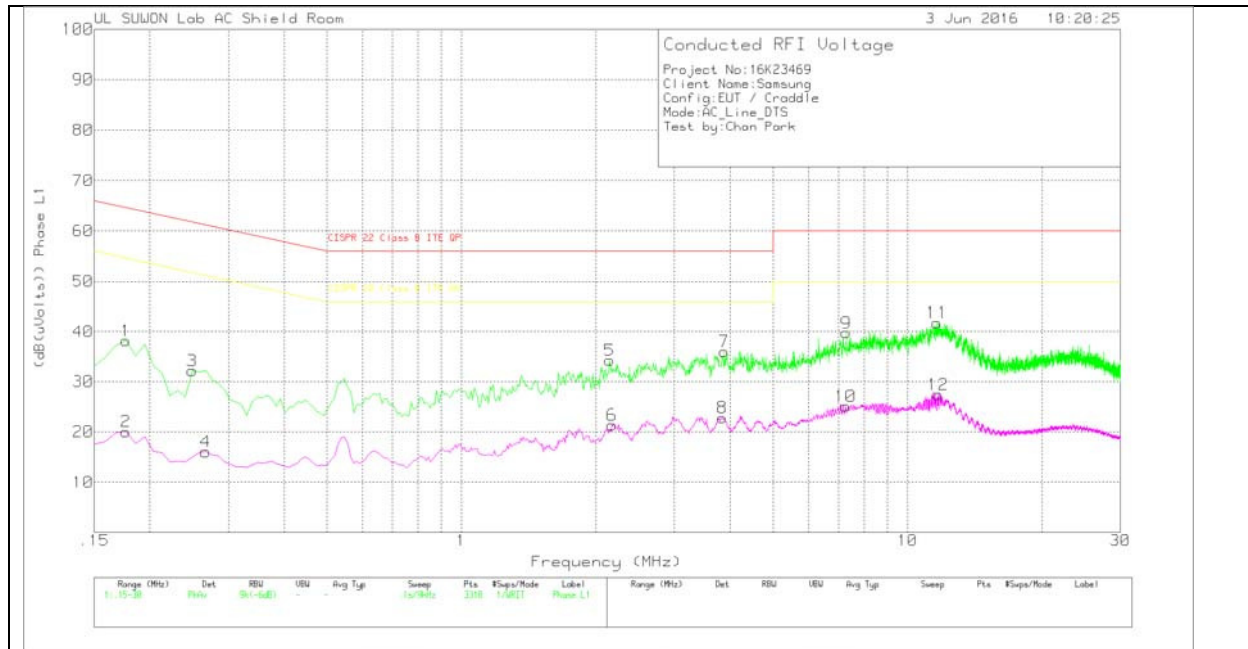
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

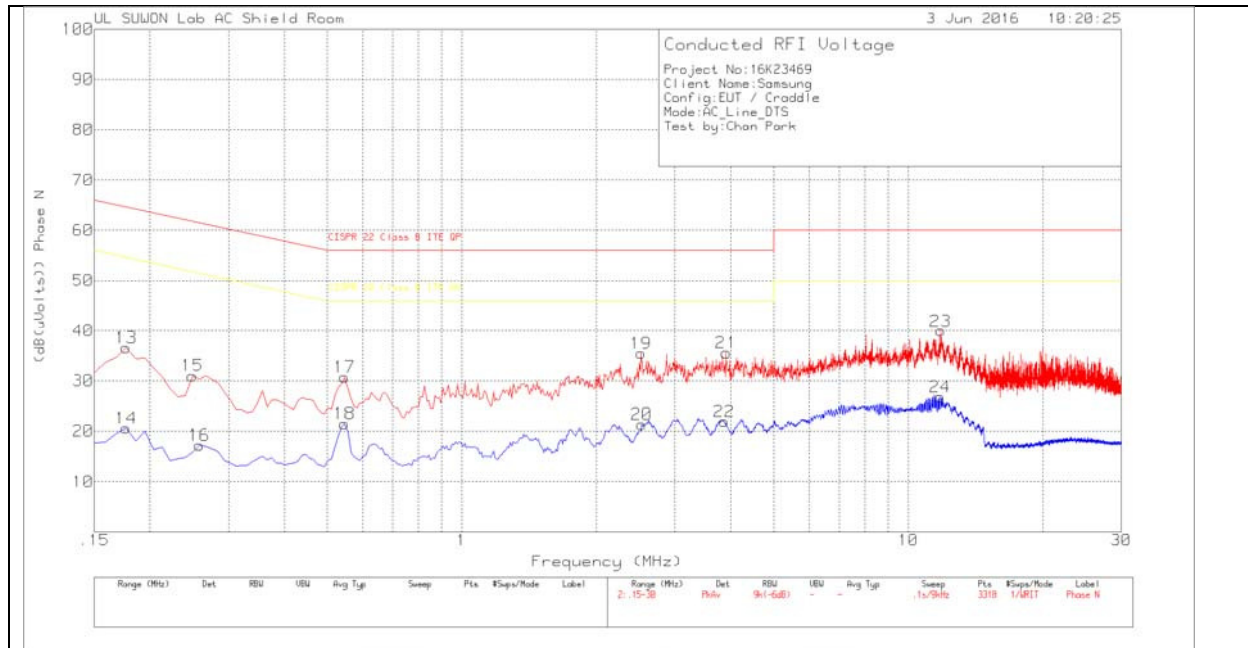
Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_w ith ex- cord_L1	CE Shield Room	Corrected Reading (dB(uVolts)	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
1	.177	27.98	Pk	10.2	0	38.18	64.63	-26.45	-	-
2	.177	9.87	Av	10.2	0	20.07	-	-	54.63	-34.56
3	.249	22.49	Pk	9.7	0	32.19	61.79	-29.6	-	-
4	.267	6.27	Av	9.8	0	16.07	-	-	51.21	-35.14
5	2.148	24.32	Pk	9.8	.1	34.22	56	-21.78	-	-
6	2.175	11.46	Av	9.8	.1	21.36	-	-	46	-24.64
7	3.885	26.1	Pk	9.8	.1	36	56	-20	-	-
8	3.849	12.95	Av	9.8	.1	22.85	-	-	46	-23.15
9	7.287	29.74	Pk	9.9	.1	39.74	60	-20.26	-	-
10	7.26	15.12	Av	9.9	.1	25.12	-	-	50	-24.88
11	11.652	31.63	Pk	10	.2	41.83	60	-18.17	-	-
12	11.715	17.22	Av	10	.2	27.42	-	-	50	-22.58

Pk - Peak detector

Av - Average detection

LINE 2 PLOT



LINE 2 RESULTS

Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_w ith ex-cord_N	CE Shield Room	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
13	.177	26.48	Pk	10.1	0	36.58	64.63	-28.05	-	-
14	.177	10.5	Av	10.1	0	20.6	-	-	54.63	-34.03
15	.249	21.32	Pk	9.7	0	31.02	61.79	-30.77	-	-
16	.258	7.53	Av	9.7	0	17.23	-	-	51.5	-34.27
17	.546	20.63	Pk	10.1	0	30.73	56	-25.27	-	-
18	.546	11.4	Av	10.1	0	21.5	-	-	46	-24.5
19	2.517	25.53	Pk	9.8	.1	35.43	56	-20.57	-	-
20	2.526	11.46	Av	9.8	.1	21.36	-	-	46	-24.64
21	3.912	25.65	Pk	9.8	.1	35.55	56	-20.45	-	-
22	3.867	12.04	Av	9.8	.1	21.94	-	-	46	-24.06
23	11.814	29.56	Pk	10.2	.2	39.96	60	-20.04	-	-
24	11.787	16.41	Av	10.2	.2	26.81	-	-	50	-23.19

Pk - Peak detector

Av - Average detection