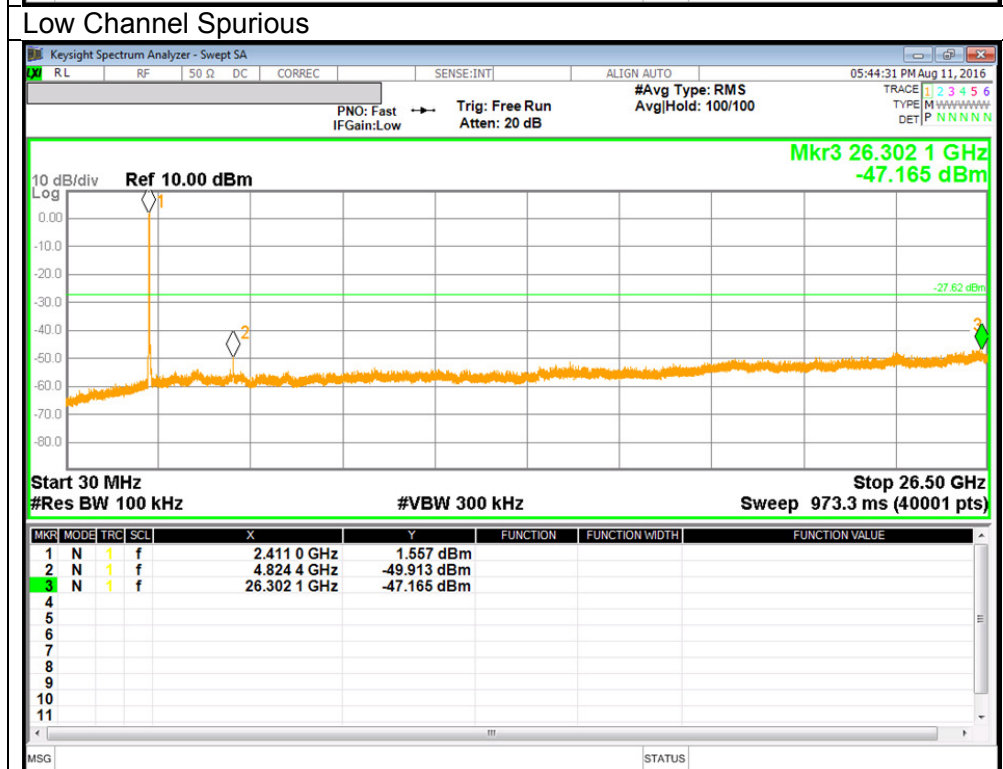
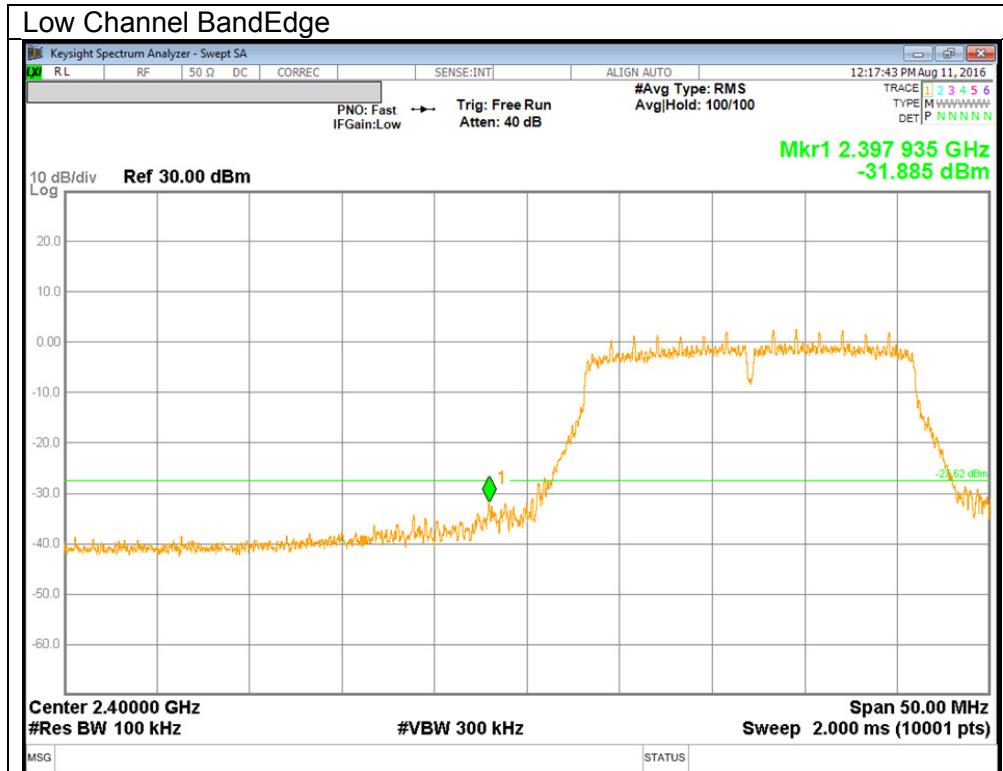
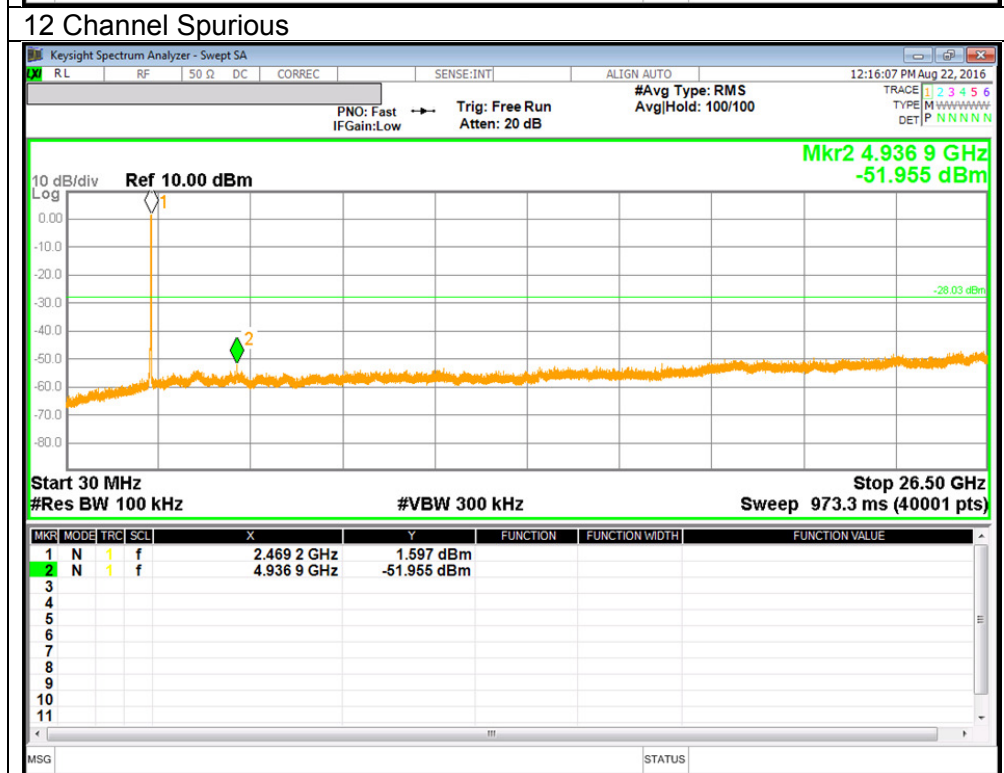
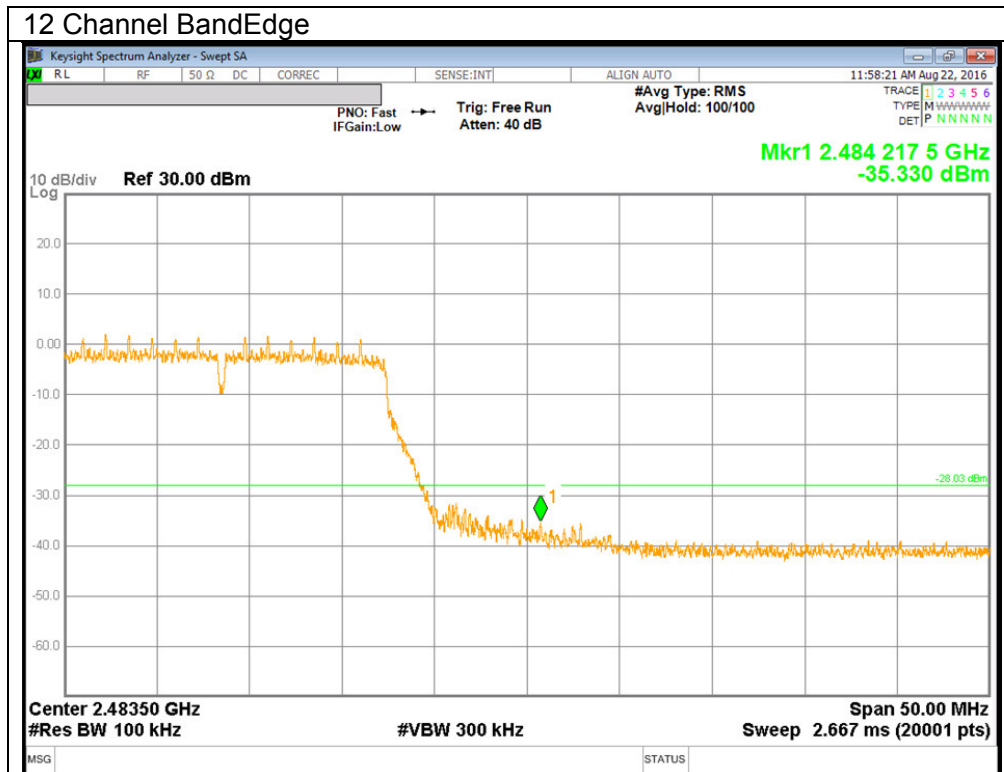
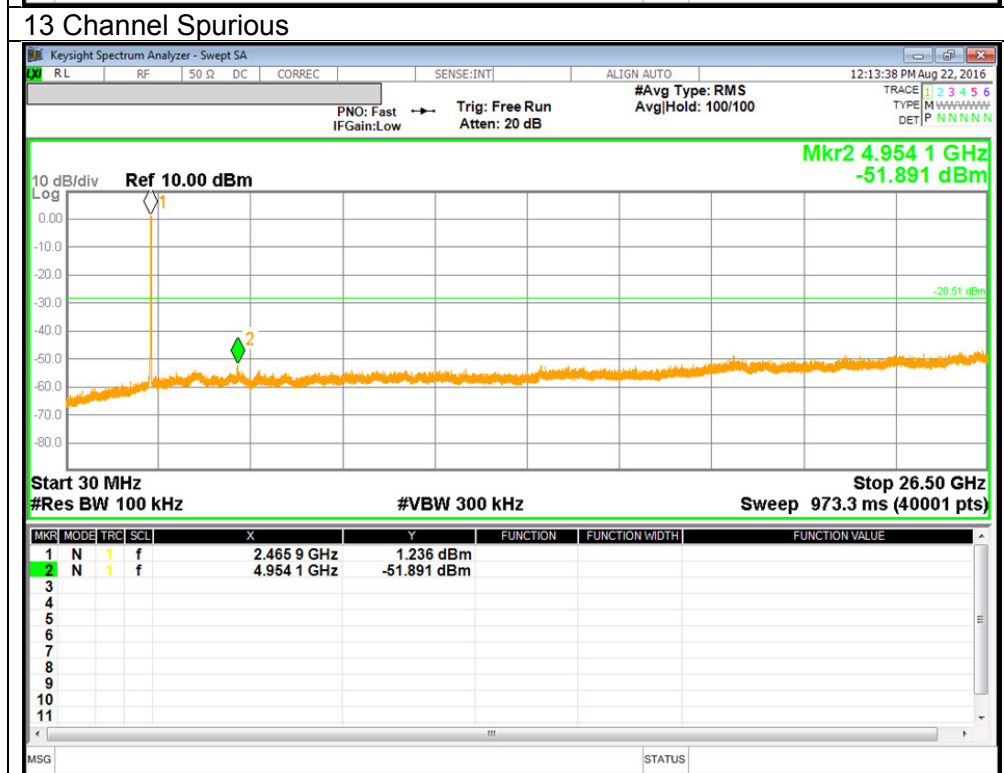
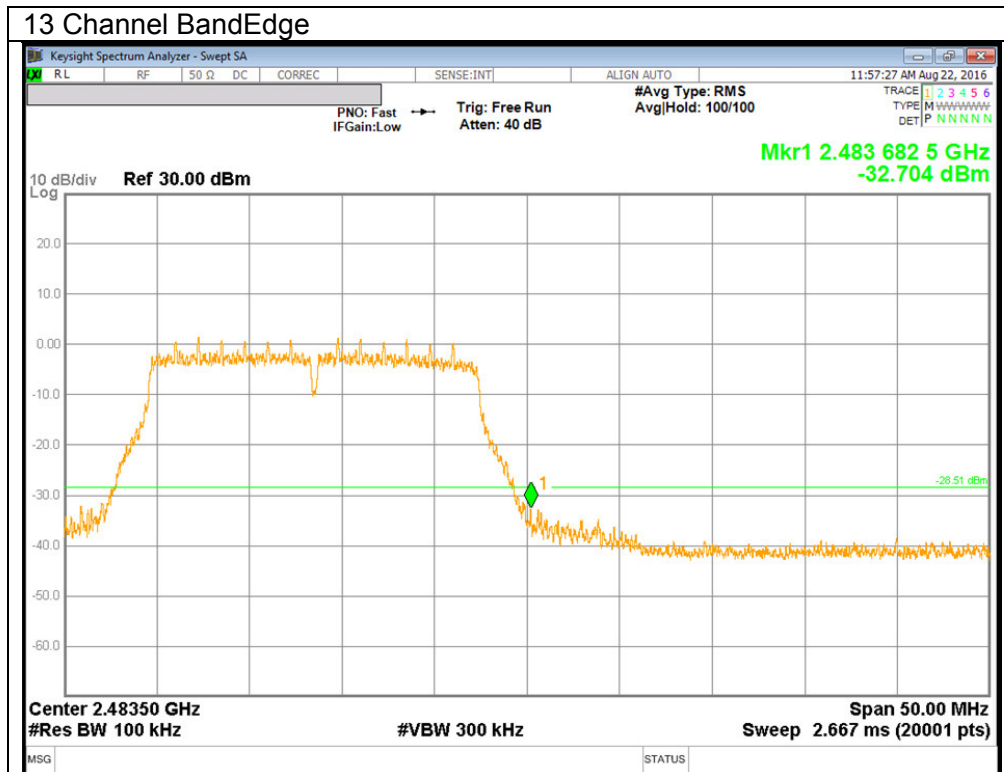


10.5.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND







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 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.

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. (Restricted bandedge, Final detection of spurious harmonic emissions)
Duty cycle factor= $10\log(1/x)$ For this sample B mode = 0dB (duty cycle >98%); G mode = 0.32dB; N mode = 0.34dB.

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 30 MHz to 26 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.

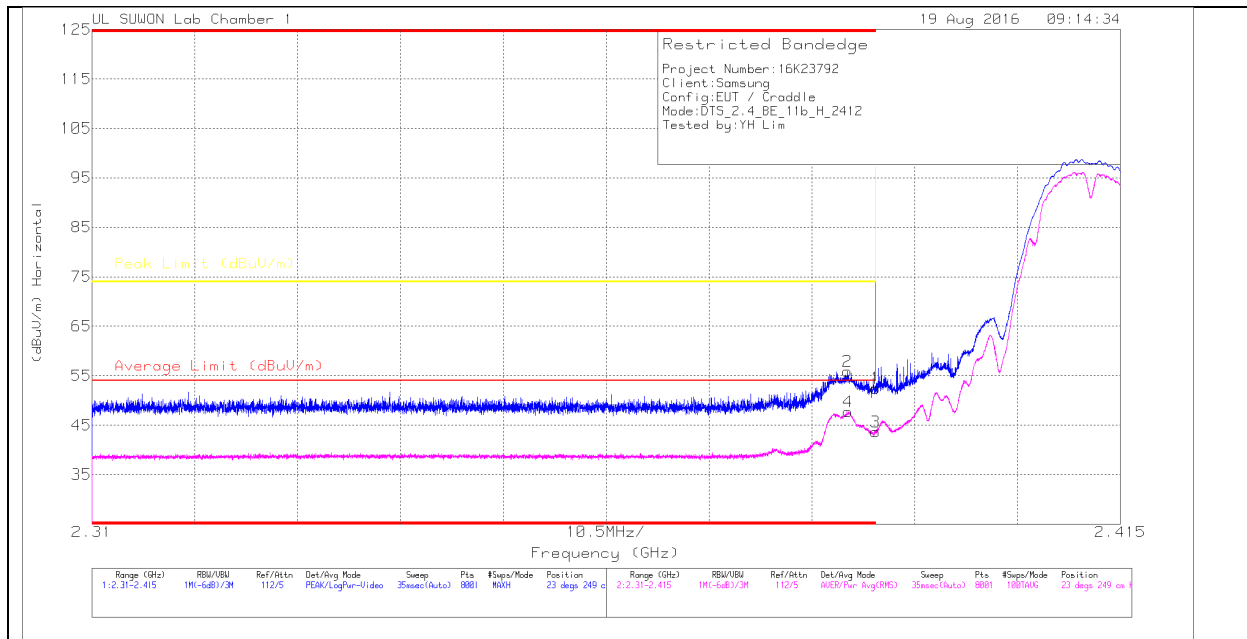
Formula for converting the filed strength from uV/m to dBuV/m is:
Limit (dBuV/m) = $20 \log \text{limit (uV/m)}$

11.2. TRANSMITTER ABOVE 1 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

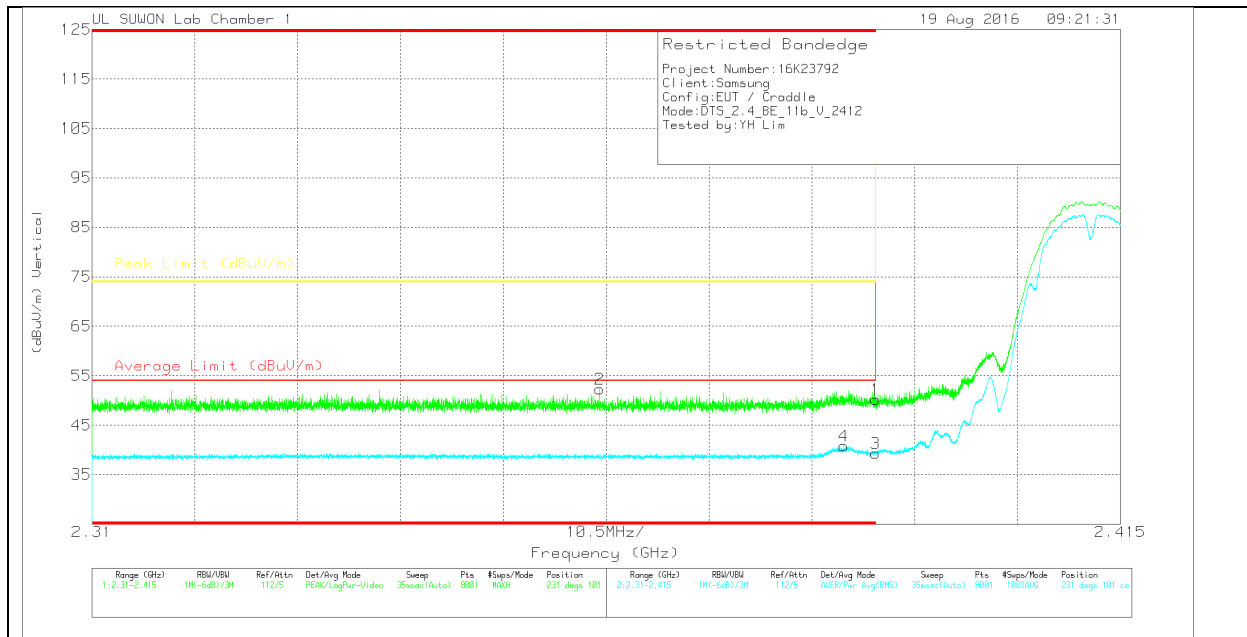
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	49.69	Pk		-29	0	52.49	-	-	74	-21.51	23	249	H
2	* 2.387	53.06	Pk		-29	0	55.86	-	-	74	-18.14	23	249	H
3	* 2.39	40.9	RMS		-29	0	43.7	54	-10.3	-	-	23	249	H
4	* 2.387	44.92	RMS		-29	0	47.72	54	-6.28	-	-	23	249	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	47.45	PK	31.8	-29	0	50.25	-	-	74	-23.75	231	101	V
2	* 2.362	49.55	PK	31.7	-29	0	52.25	-	-	74	-21.75	231	101	V
3	* 2.39	36.55	RMS	31.8	-29	0	39.35	54	-14.65	-	-	231	101	V
4	* 2.387	37.96	RMS	31.8	-29	0	40.76	54	-13.24	-	-	231	101	V

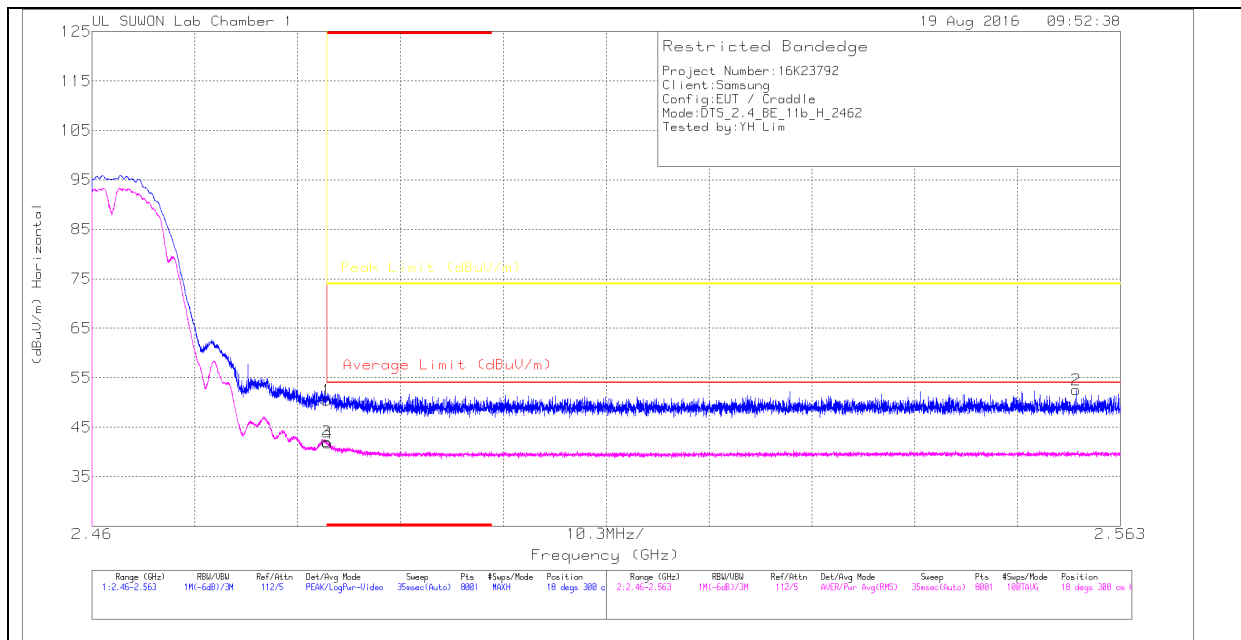
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

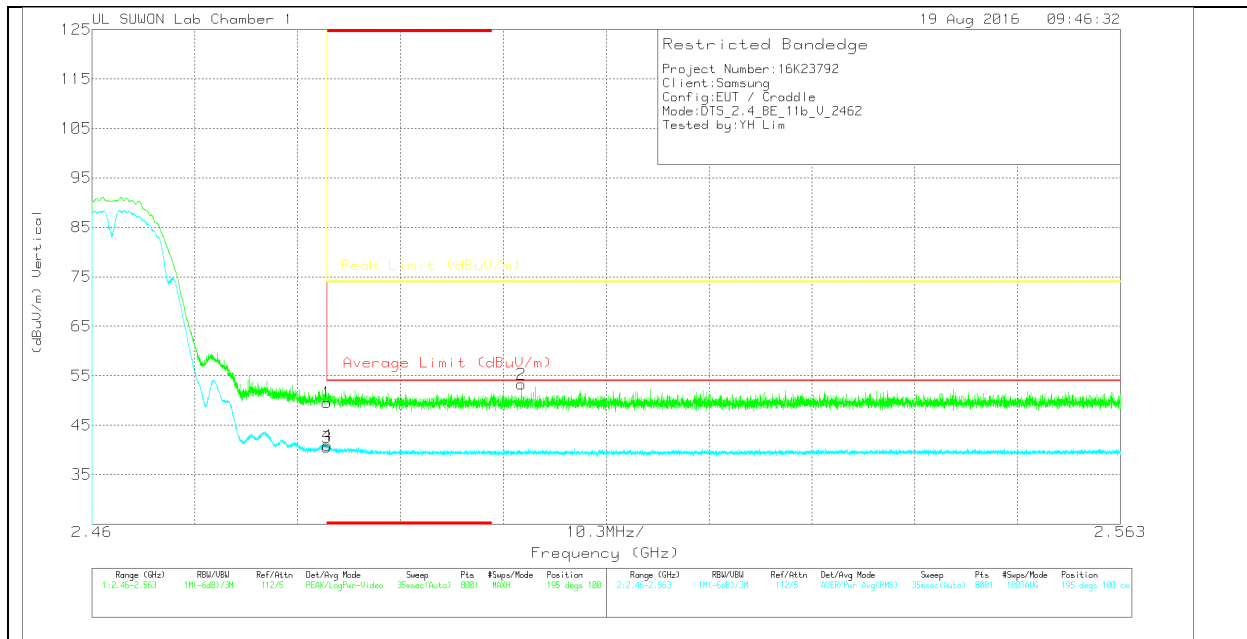
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	46.78	Pk	32	-28.3	0	50.48	-	-	74	-23.52	18	300	H
2	2.559	48.71	Pk	32	-28.2	0	52.51	-	-	74	-21.49	18	300	H
3	* 2.484	38.31	RMS	32	-28.3	0	42.01	54	-11.99	-	-	18	300	H
4	* 2.484	38.05	RMS	32	-28.3	0	41.75	54	-12.25	-	-	18	300	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	45.91	PK	32	-28.3	0	49.61	-	-	74	-24.39	195	100	V
2	2.503	49.57	PK	32	-28.3	0	53.27	-	-	74	-20.73	195	100	V
3	* 2.484	36.81	RMS	32	-28.3	0	40.51	54	-13.49	-	-	195	100	V
4	* 2.484	37.28	RMS	32	-28.3	0	40.98	54	-13.02	-	-	195	100	V

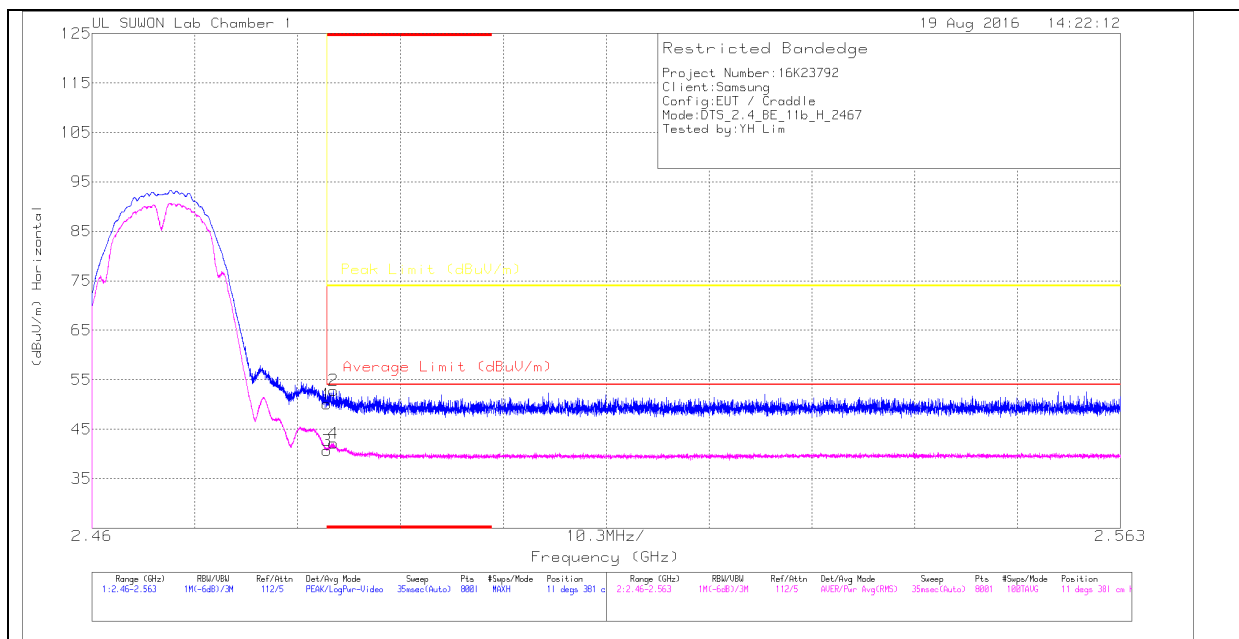
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (12 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

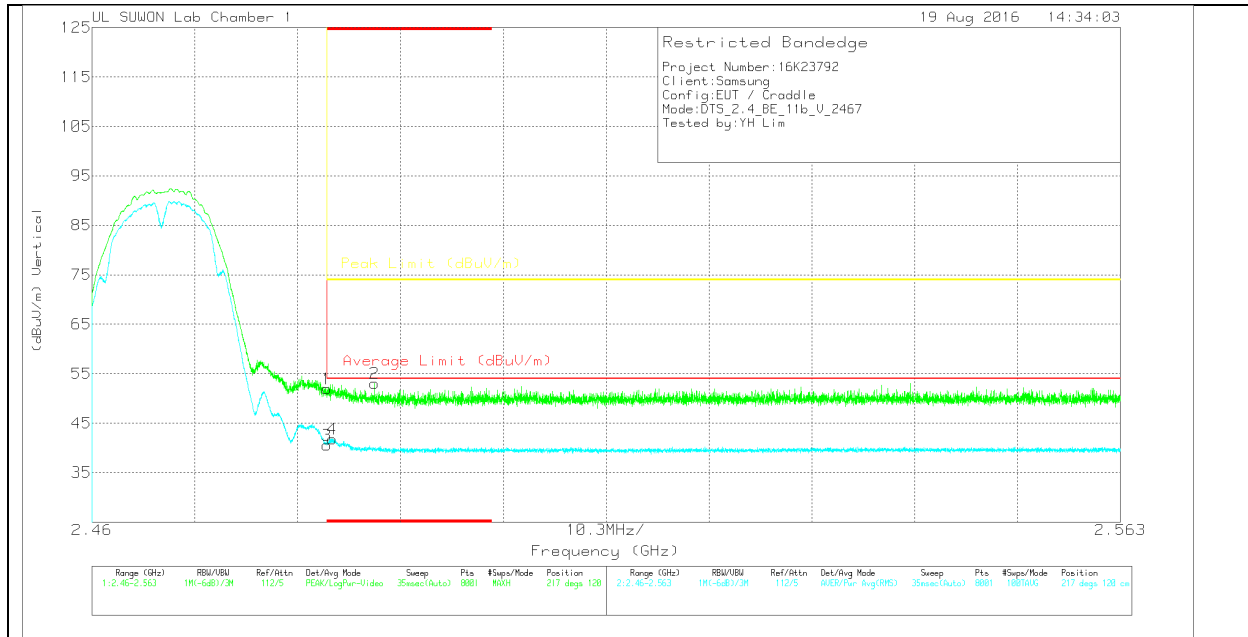
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	46.42	Pk	32	-28.3	0	50.12	-	-	74	-23.88	11	381	H
2	* 2.484	49.16	Pk	32	-28.3	0	52.86	-	-	74	-21.14	11	381	H
3	* 2.484	37.03	RMS	32	-28.3	0	40.73	54	-13.27	-	-	11	381	H
4	* 2.484	38.51	RMS	32	-28.3	0	42.21	54	-11.79	-	-	11	381	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	48.27	PK	32	-28.3	0	51.97	-	-	74	-22.03	217	120	V
2	* 2.488	49.33	PK	32	-28.3	0	53.03	-	-	74	-20.97	217	120	V
3	* 2.484	36.88	RMS	32	-28.3	0	40.58	54	-13.42	-	-	217	120	V
4	* 2.484	38.1	RMS	32	-28.3	0	41.8	54	-12.2	-	-	217	120	V

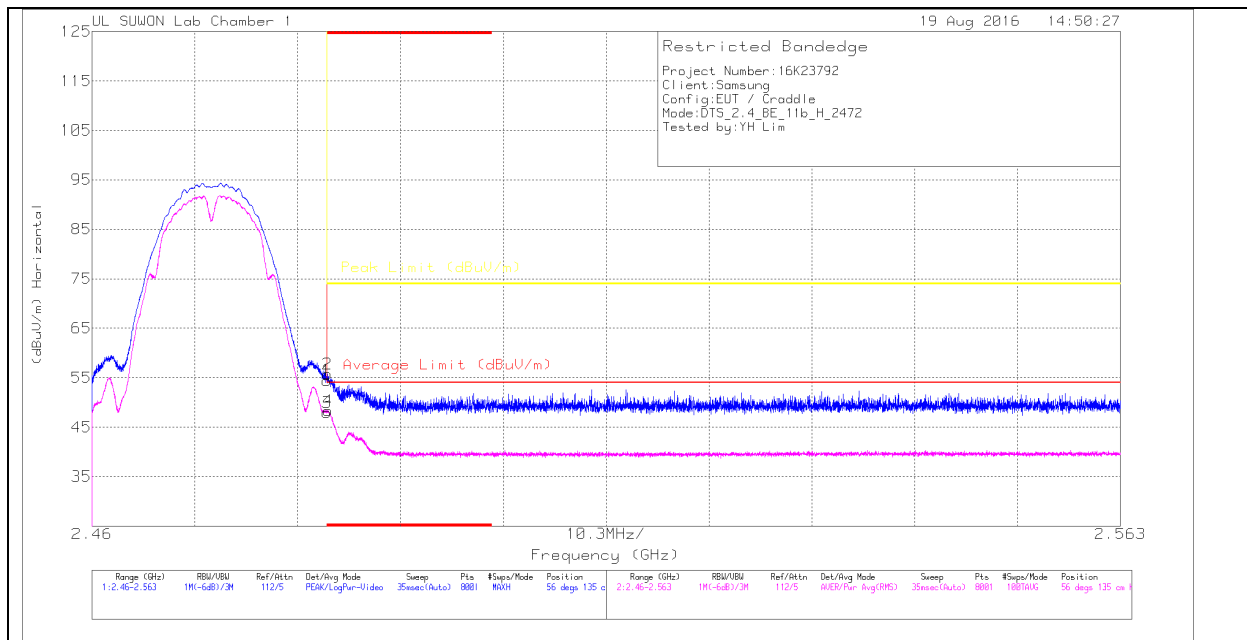
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (13 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

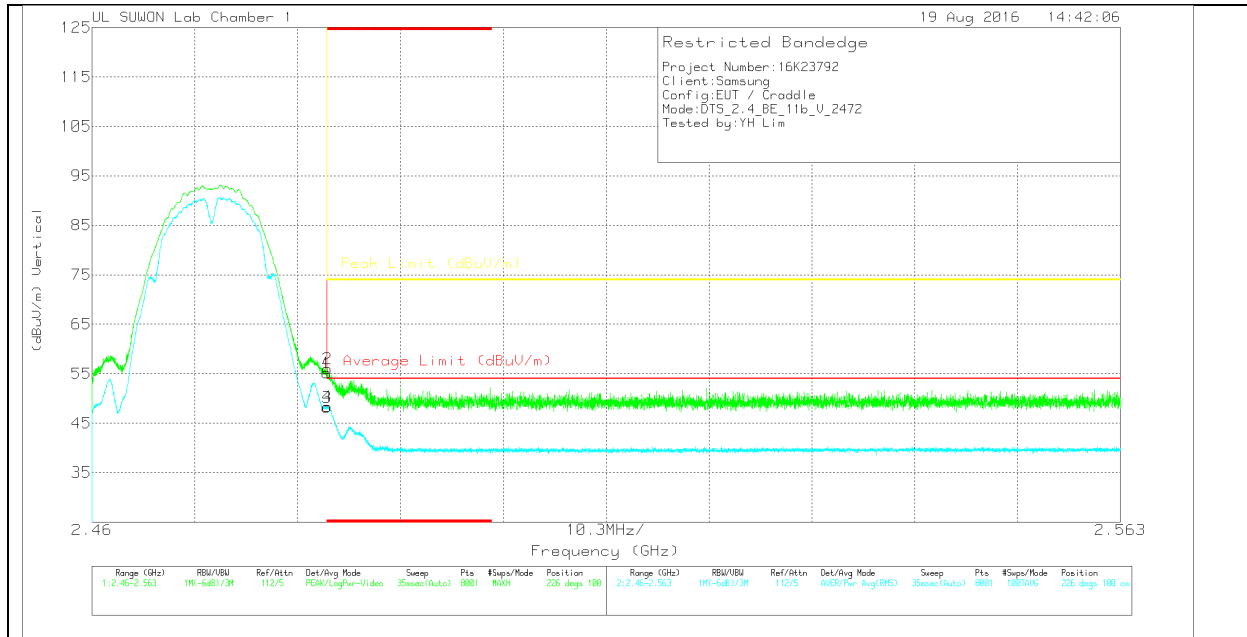
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	50.77	Pk	32	-28.3	0	54.47	-	-	74	-19.53	56	135	H
2	* 2.484	52.07	Pk	32	-28.3	0	55.77	-	-	74	-18.23	56	135	H
3	* 2.484	44.28	RMS	32	-28.3	0	47.98	54	-6.02	-	-	56	135	H
4	* 2.484	44.64	RMS	32	-28.3	0	48.34	54	-5.66	-	-	56	135	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	51.42	PK	32	-28.3	0	55.12	-	-	74	-18.88	226	100	V
2	* 2.484	52.28	PK	32	-28.3	0	55.98	-	-	74	-18.02	226	100	V
3	* 2.484	44.52	RMS	32	-28.3	0	48.22	54	-5.78	-	-	226	100	V
4	* 2.484	44.62	RMS	32	-28.3	0	48.32	54	-5.68	-	-	226	100	V

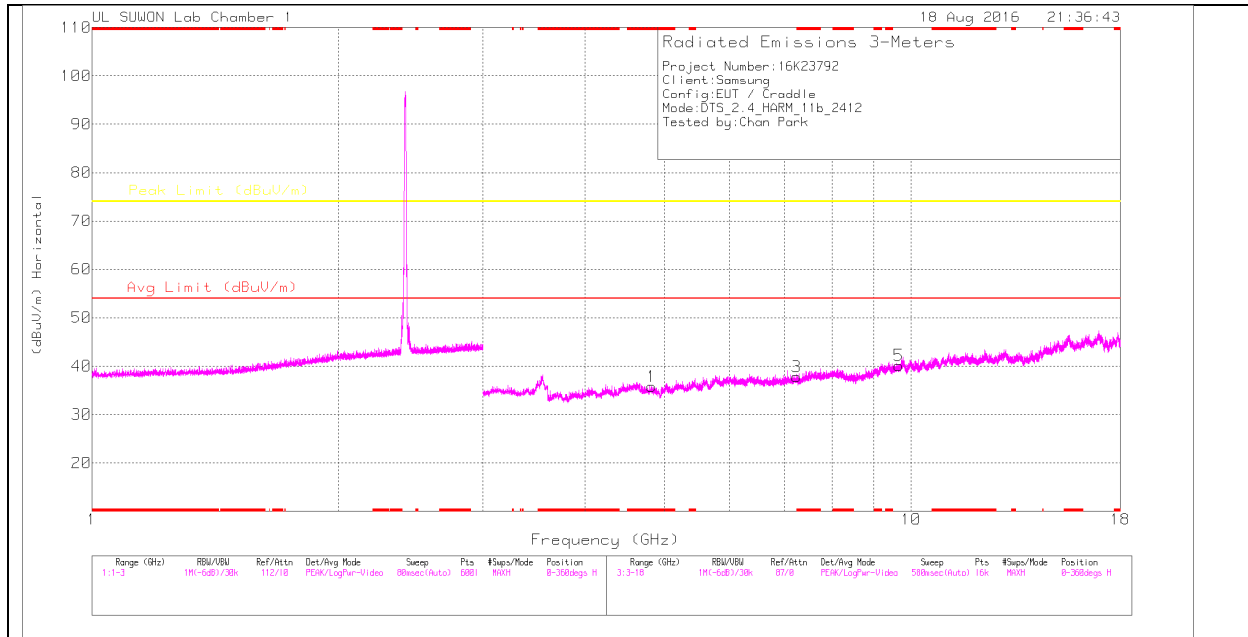
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

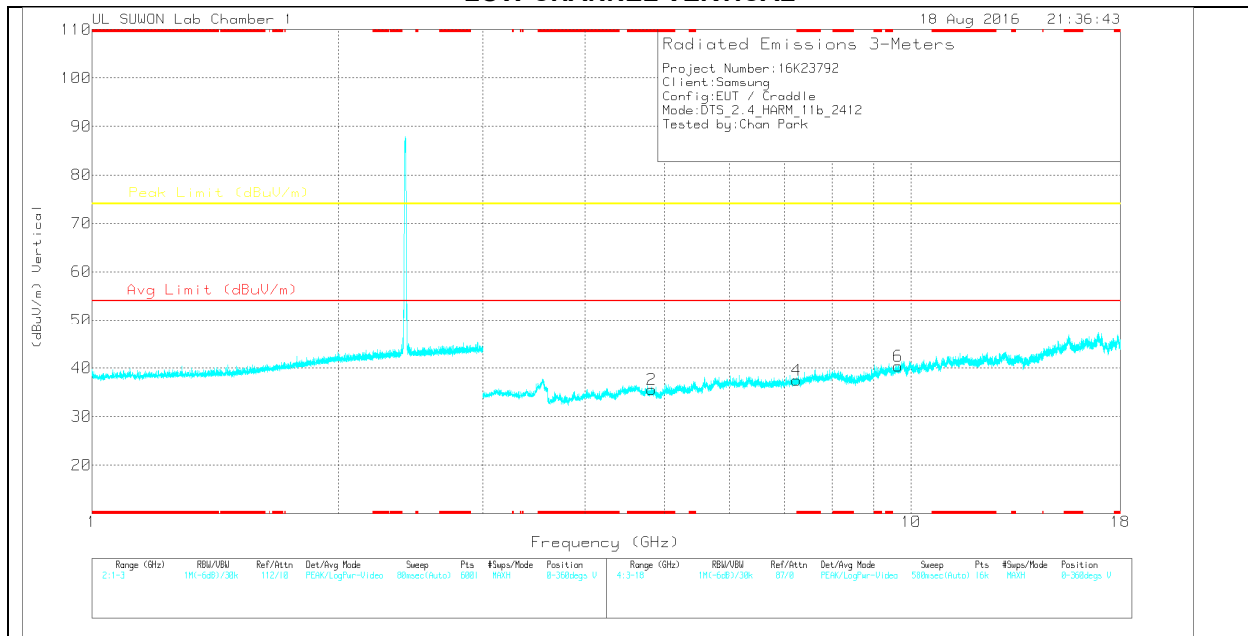
RMS - RMS detection

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

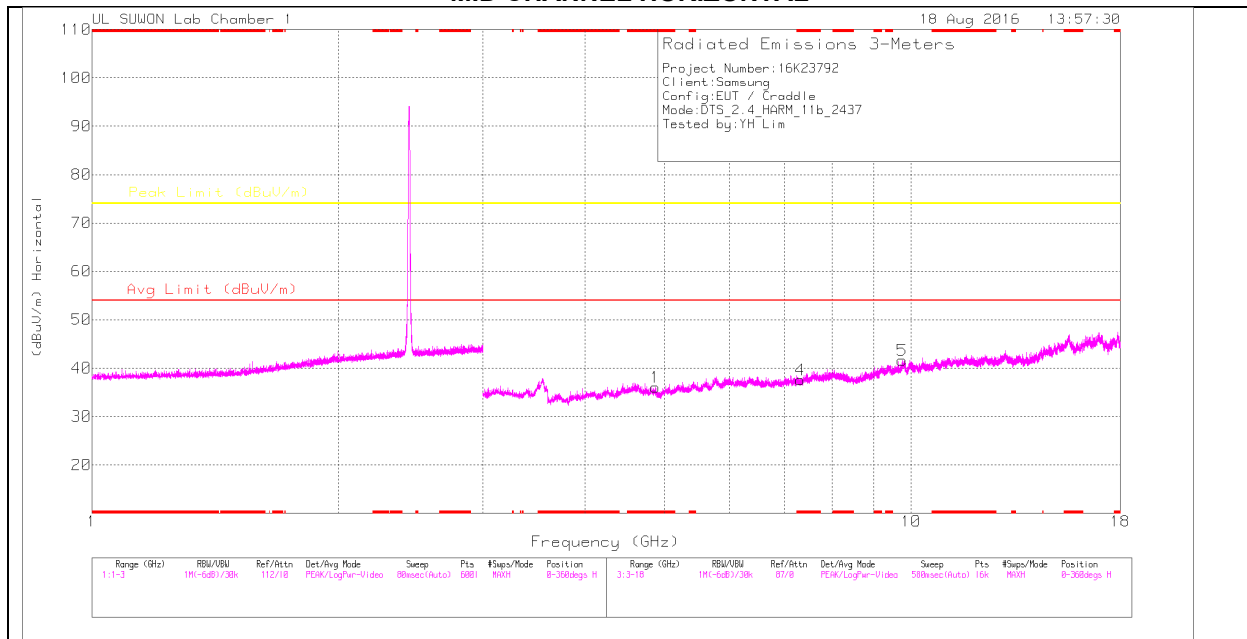
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.825	35.65	PK	34	-33.8	0	35.85	-	-	74	-38.15	0-360	150	H
3	7.241	33.01	PK	35.7	-30.9	0	37.81	-	-	74	-36.19	0-360	150	H
5	9.651	30.47	PK	37.1	-27.4	0	40.17	-	-	74	-33.83	0-360	150	H
2	* 4.822	35.31	PK	34	-33.8	0	35.51	-	-	74	-38.49	0-360	250	V
4	7.244	32.68	PK	35.7	-30.9	0	37.48	-	-	74	-36.52	0-360	250	V
6	9.647	30.67	PK	37.1	-27.4	0	40.37	-	-	74	-33.63	0-360	250	V

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

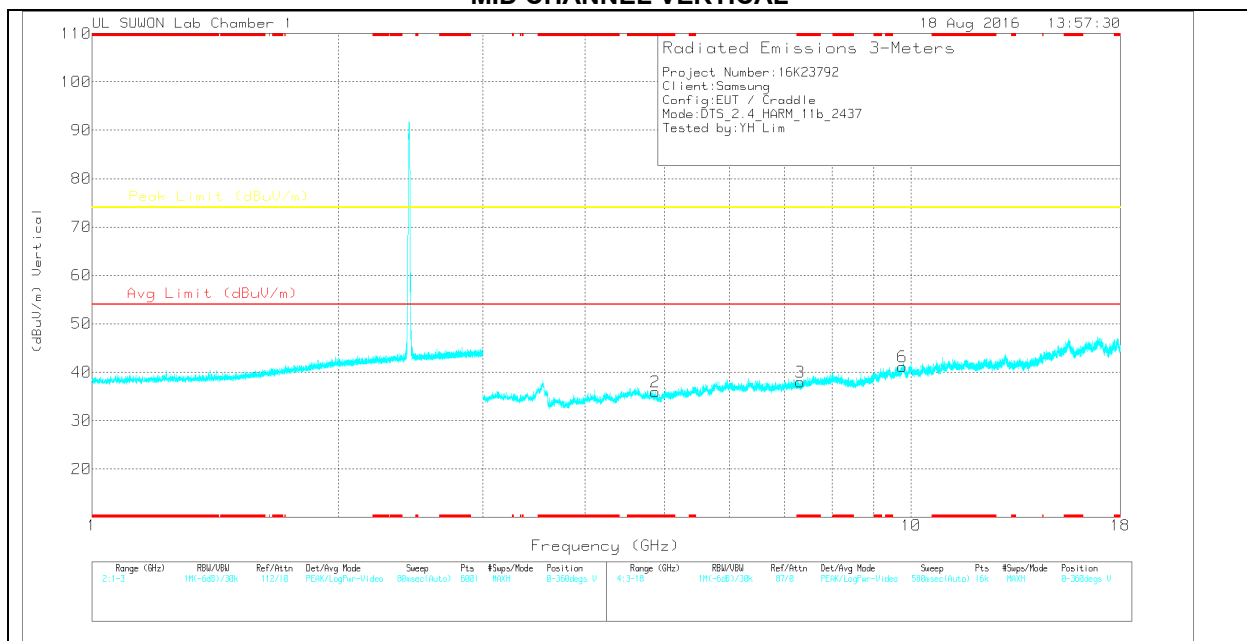
PK – Peak detector

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

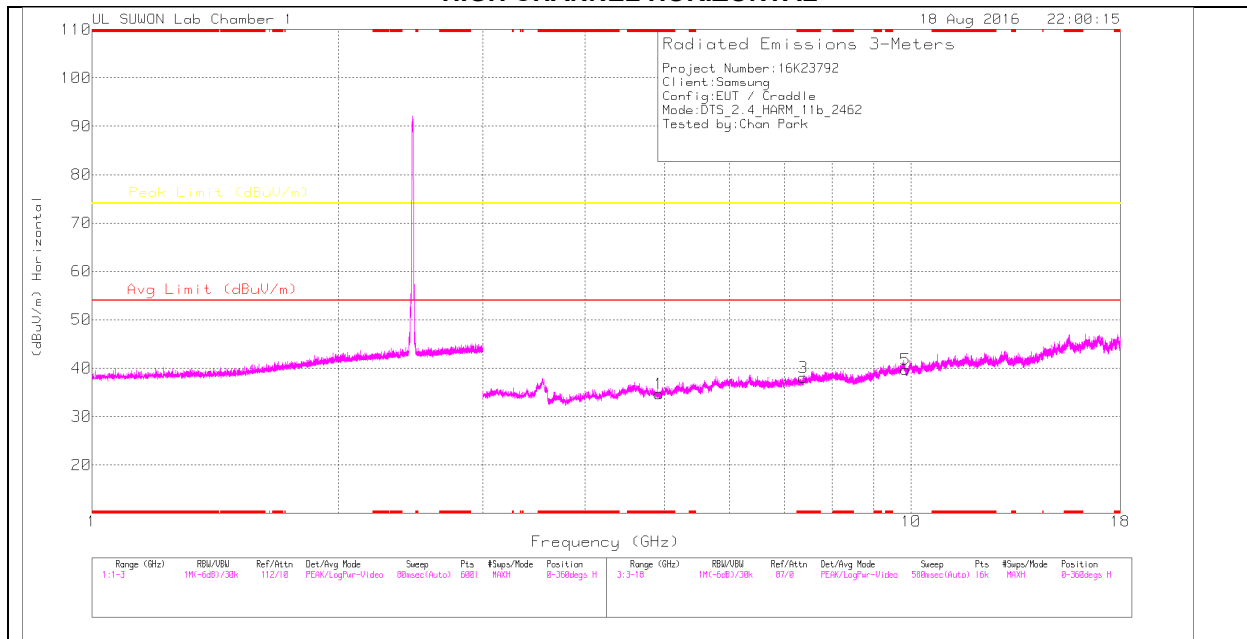
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.871	36.03	Pk	34	-34	0	36.03	-	-	74	-37.97	0-360	250	H
4	* 7.323	32.64	Pk	35.8	-30.9	0	37.54	-	-	74	-36.46	0-360	250	H
5	9.749	31.23	Pk	37.2	-26.8	0	41.63	-	-	74	-32.37	0-360	250	H
2	* 4.875	35.98	Pk	34	-34	0	35.98	-	-	74	-38.02	0-360	250	V
3	* 7.322	33.06	Pk	35.8	-30.9	0	37.96	-	-	74	-36.04	0-360	250	V
6	9.75	30.67	Pk	37.2	-26.8	0	41.07	-	-	74	-32.93	0-360	150	V

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

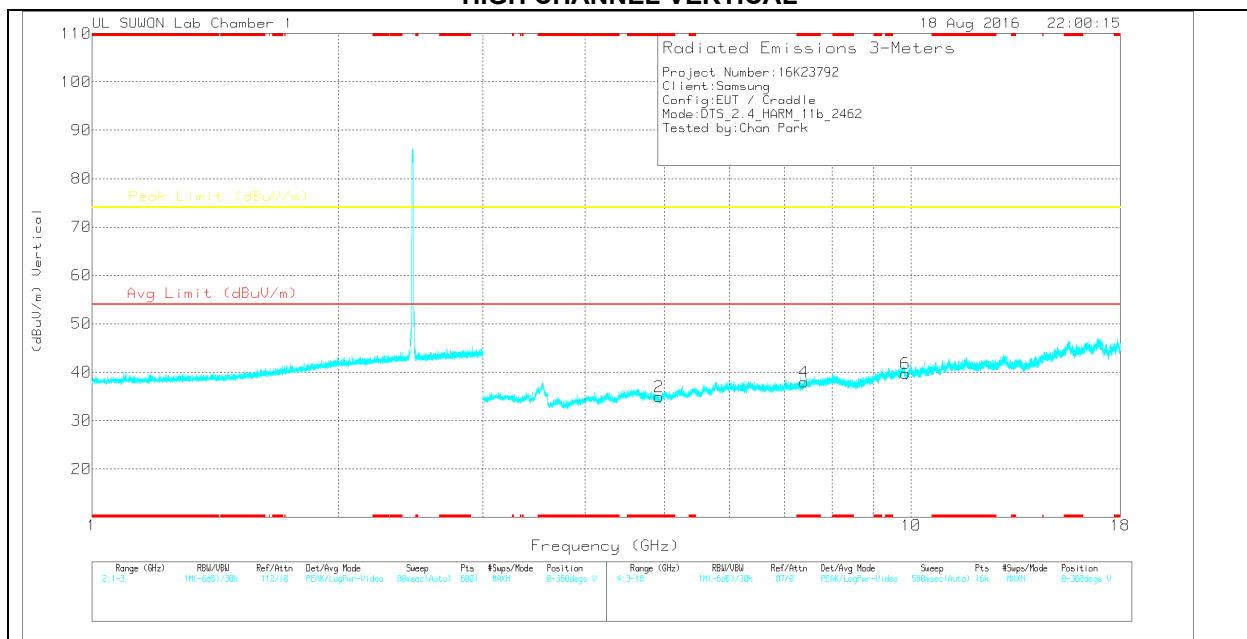
Pk – Peak detector

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

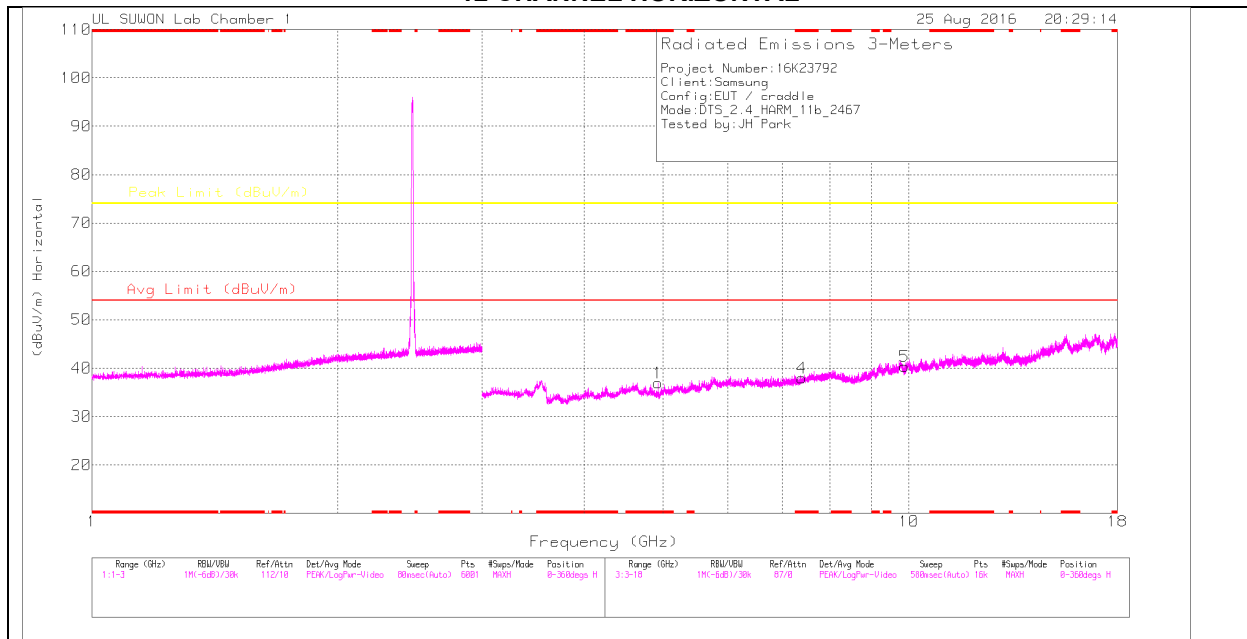
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.924	34.65	PK	34	-34	0	34.65	-	-	74	-39.35	0-360	250	H
3	* 7.386	32.96	PK	35.8	-30.7	0	38.06	-	-	74	-35.94	0-360	250	H
5	9.848	30.02	PK	37.3	-27.6	0	39.72	-	-	74	-34.28	0-360	150	H
2	* 4.924	34.88	PK	34	-34	0	34.88	-	-	74	-39.12	0-360	150	V
4	* 7.392	32.72	PK	35.8	-30.6	0	37.92	-	-	74	-36.08	0-360	250	V
6	9.846	30.06	PK	37.3	-27.6	0	39.76	-	-	74	-34.24	0-360	250	V

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

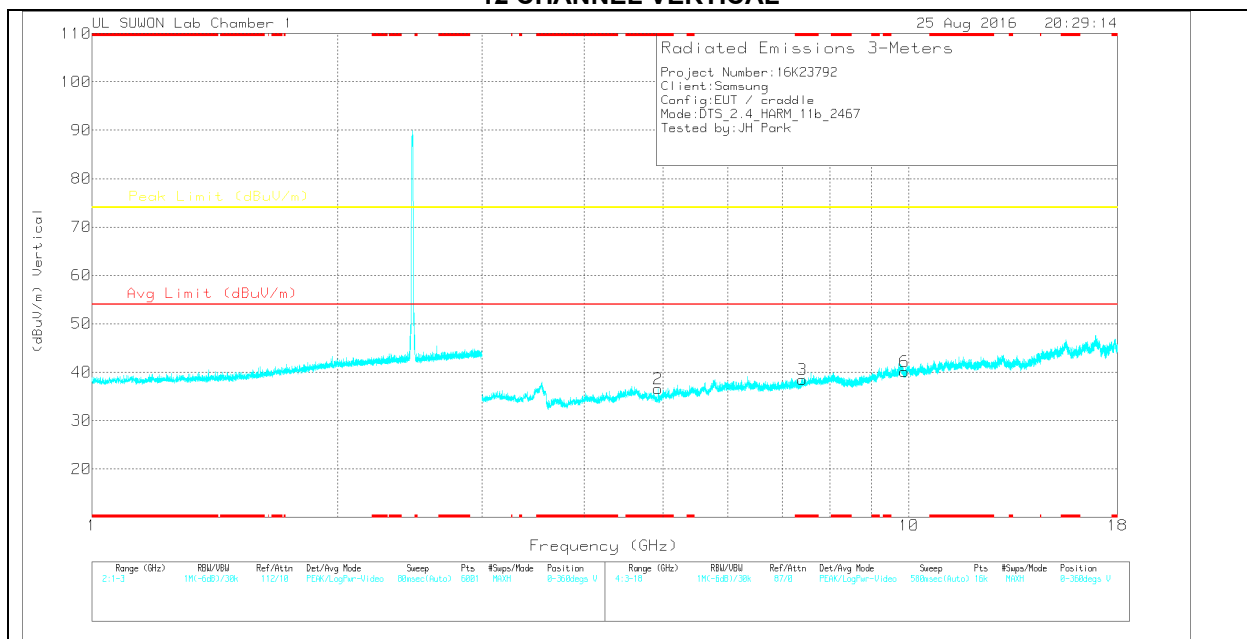
PK – Peak detector

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

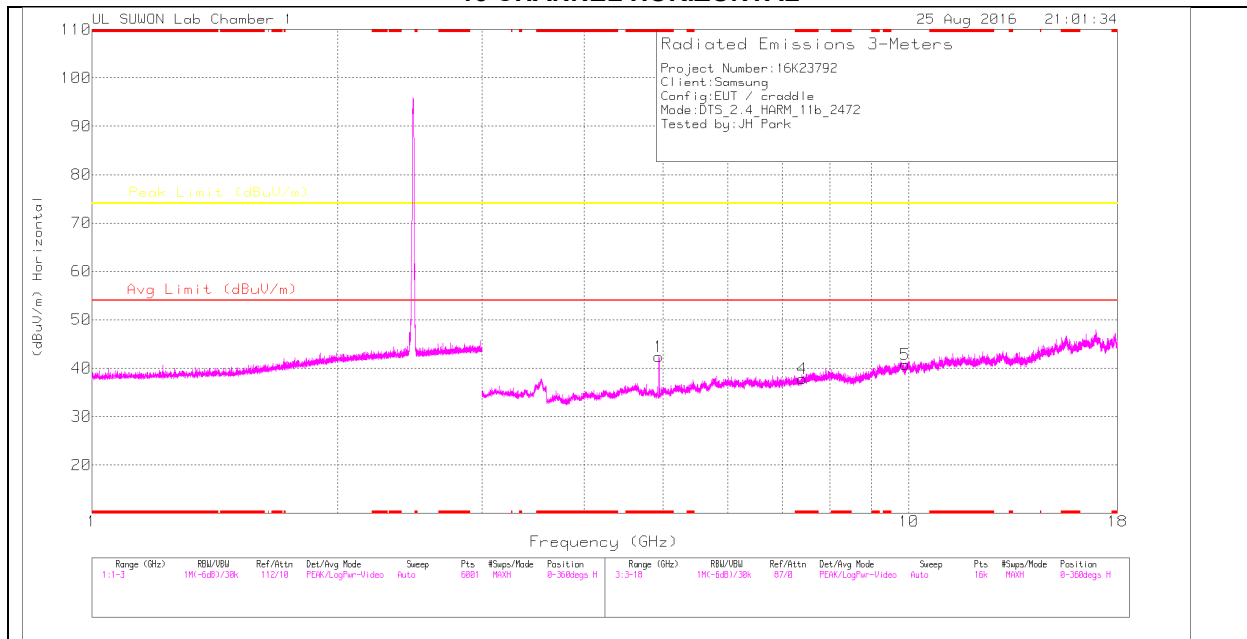
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.934	37	PK	34	-34	0	37	-	-	74	-37	0-360	250	H
4	* 7.398	32.8	PK	35.8	-30.6	0	38	-	-	74	-36	0-360	150	H
5	9.87	30.93	PK	37.3	-27.9	0	40.33	-	-	74	-33.67	0-360	250	H
2	* 4.933	36.53	PK	34	-34	0	36.53	-	-	74	-37.47	0-360	150	V
3	* 7.402	33.32	PK	35.8	-30.6	0	38.52	-	-	74	-35.48	0-360	150	V
6	9.872	30.8	PK	37.3	-28	0	40.1	-	-	74	-33.9	0-360	150	V

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

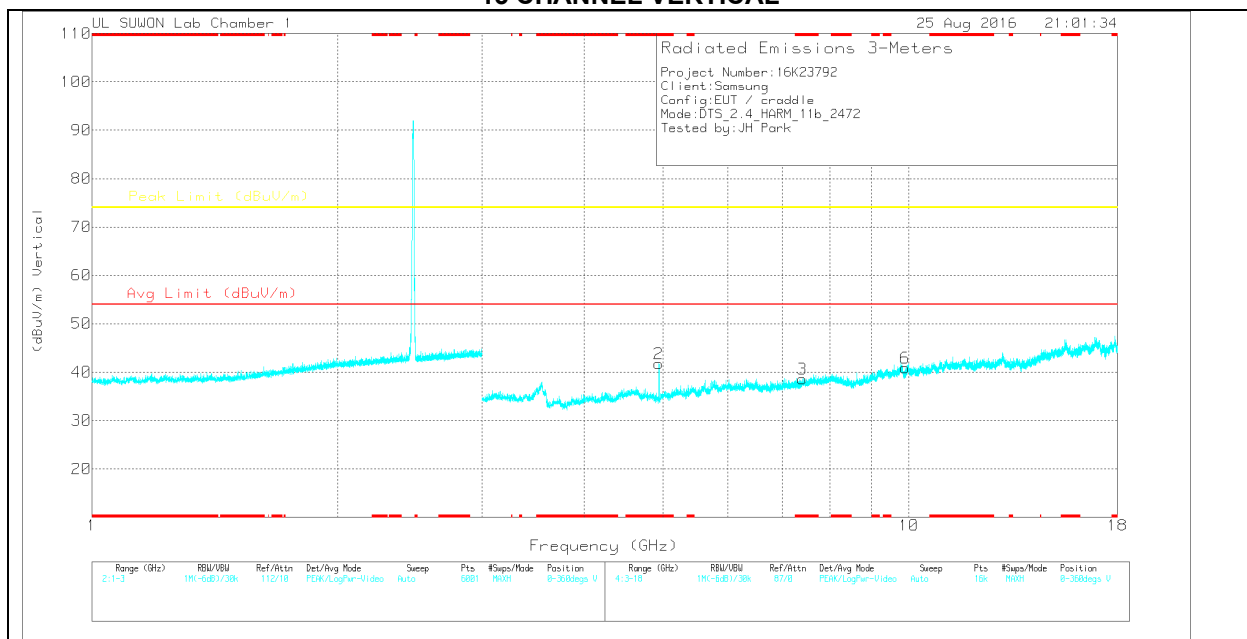
PK – Peak Detector

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(00168717)_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	* 4.943	42.35	PK	34	-34	0	42.35	-	-	74	-31.65	0-360	250	H
4	* 7.403	32.62	PK	35.8	-30.6	0	37.82	-	-	74	-36.18	0-360	250	H
5	9.895	31.02	PK	37.4	-27.7	0	40.72	-	-	74	-33.28	0-360	150	H
2	* 4.943	41.78	PK	34	-34	0	41.78	-	-	74	-32.22	0-360	250	V
3	* 7.403	33.34	PK	35.8	-30.6	0	38.54	-	-	74	-35.46	0-360	150	V
6	9.898	31.12	PK	37.4	-27.7	0	40.82	-	-	74	-33.18	0-360	150	V

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

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_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
* 4.944	49.1	PK2	34	-34	0	49.1	-	-	74	-24.9	21	100	V
* 4.944	41.11	MAv1	34	-34	0	41.11	54	-12.89	-	-	21	100	V
* 4.944	49.04	PK2	34	-34	0	49.04	-	-	74	-24.96	341	100	H
* 4.944	39.88	MAv1	34	-34	0	39.88	54	-14.12	-	-	341	100	H

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

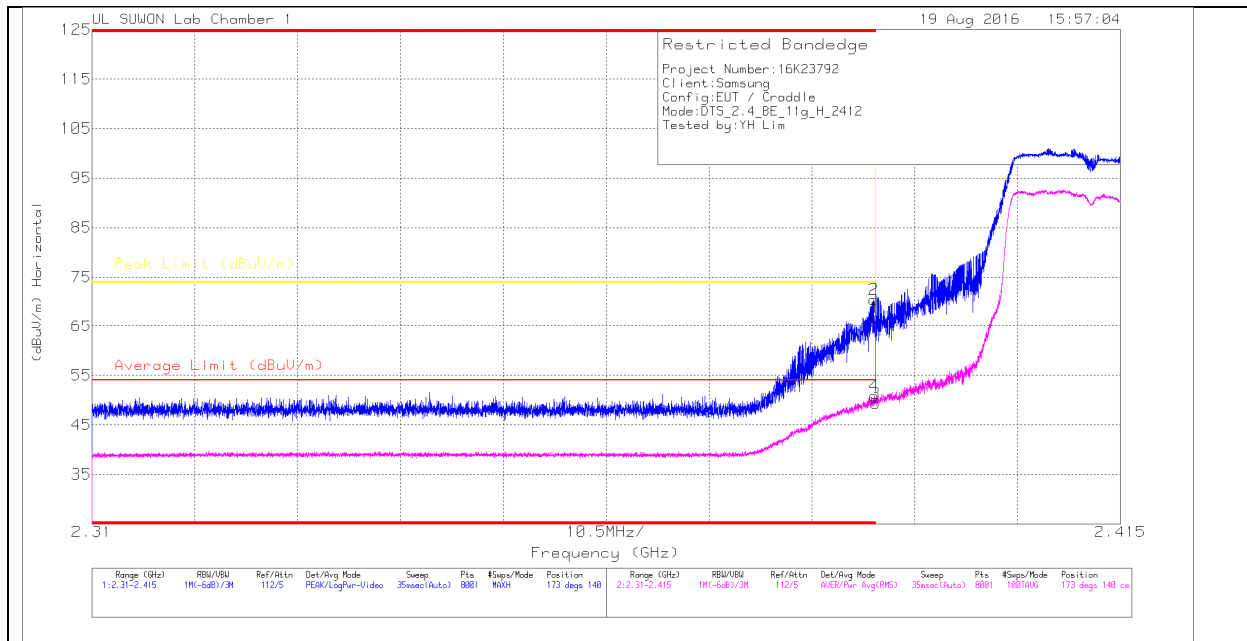
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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

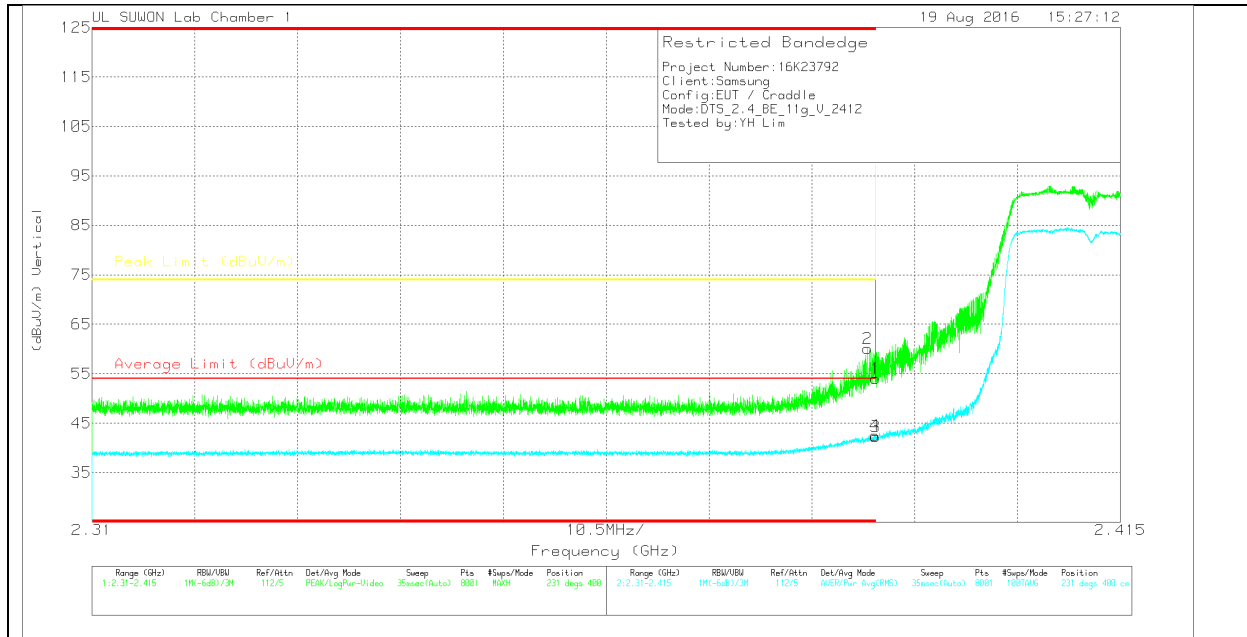
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	64.13	PK	31.8	-29	0	66.93	-	-	74	-7.07	173	140	H
2	* 2.39	67.66	PK	31.8	-29	0	70.46	-	-	74	-3.54	173	140	H
3	* 2.39	46.2	RMS	31.8	-29	.32	49.32	54	-4.68	-	-	173	140	H
4	* 2.39	47.75	RMS	31.8	-29	.32	50.87	54	-3.13	-	-	173	140	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	51.19	Pk	31.8	-29	0	53.99	-	-	74	-20.01	231	400	V
2	* 2.389	57.32	Pk	31.8	-29	0	60.12	-	-	74	-13.88	231	400	V
3	* 2.39	39.12	RMS	31.8	-29	.32	42.24	54	-11.76	-	-	231	400	V
4	* 2.39	39.36	RMS	31.8	-29	.32	42.48	54	-11.52	-	-	231	400	V

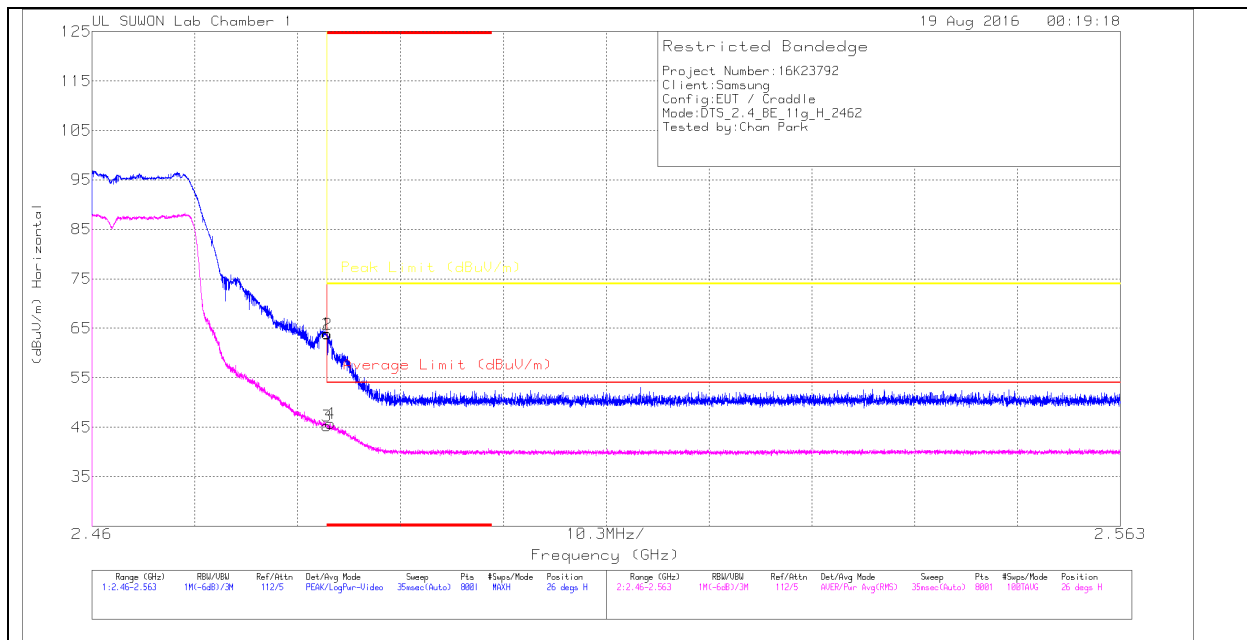
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

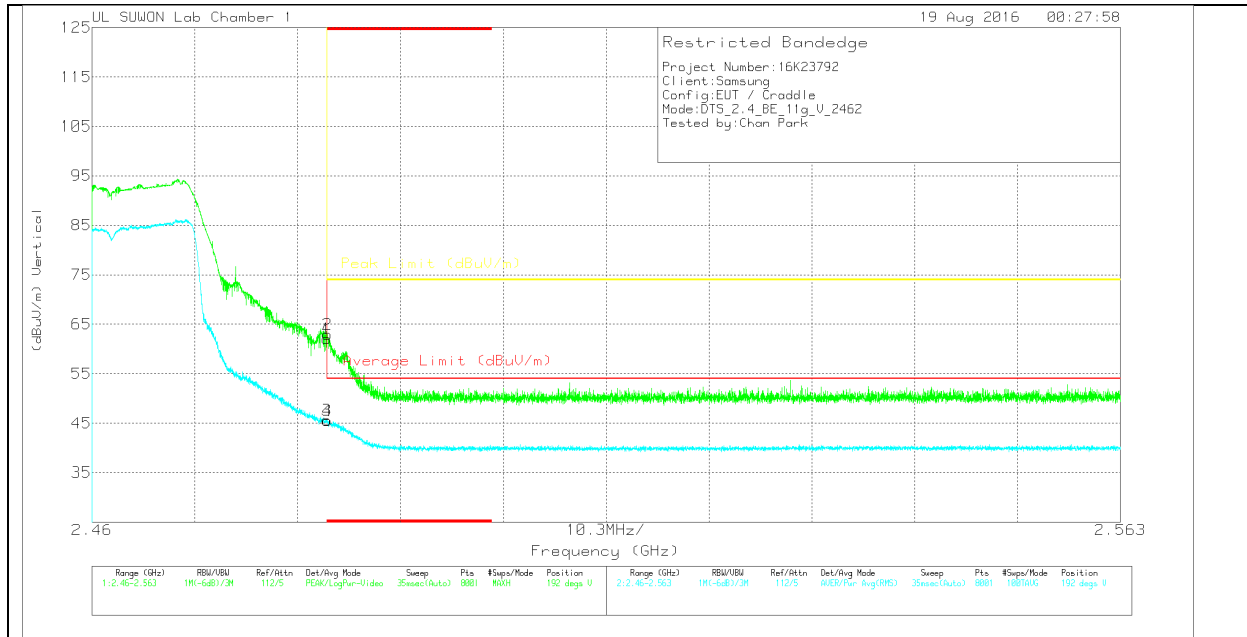
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	60.25	Pk	32	-28.3	0	63.95	-	-	74	-10.05	26	140	H
2	* 2.484	60.06	Pk	32	-28.3	0	63.76	-	-	74	-10.24	26	140	H
3	* 2.484	41.18	RMS	32	-28.3	.32	45.2	54	-8.8	-	-	26	140	H
4	* 2.484	41.74	RMS	32	-28.3	.32	45.76	54	-8.24	-	-	26	140	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	58.42	Pk	32	-28.3	0	62.12	-	-	74	-11.88	192	120	V
2	* 2.484	59.2	Pk	32	-28.3	0	62.9	-	-	74	-11.1	192	120	V
3	* 2.484	41.57	RMS	32	-28.3	.32	45.59	54	-8.41	-	-	192	120	V
4	* 2.484	41.48	RMS	32	-28.3	.32	45.5	54	-8.5	-	-	192	120	V

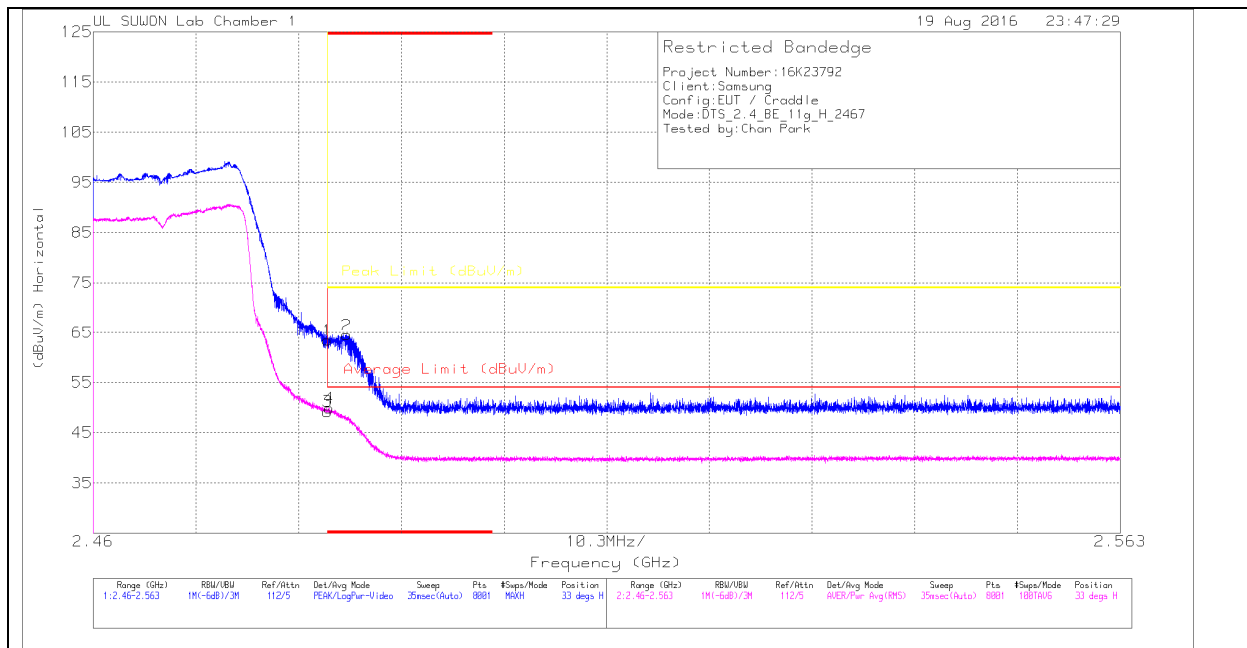
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (12 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

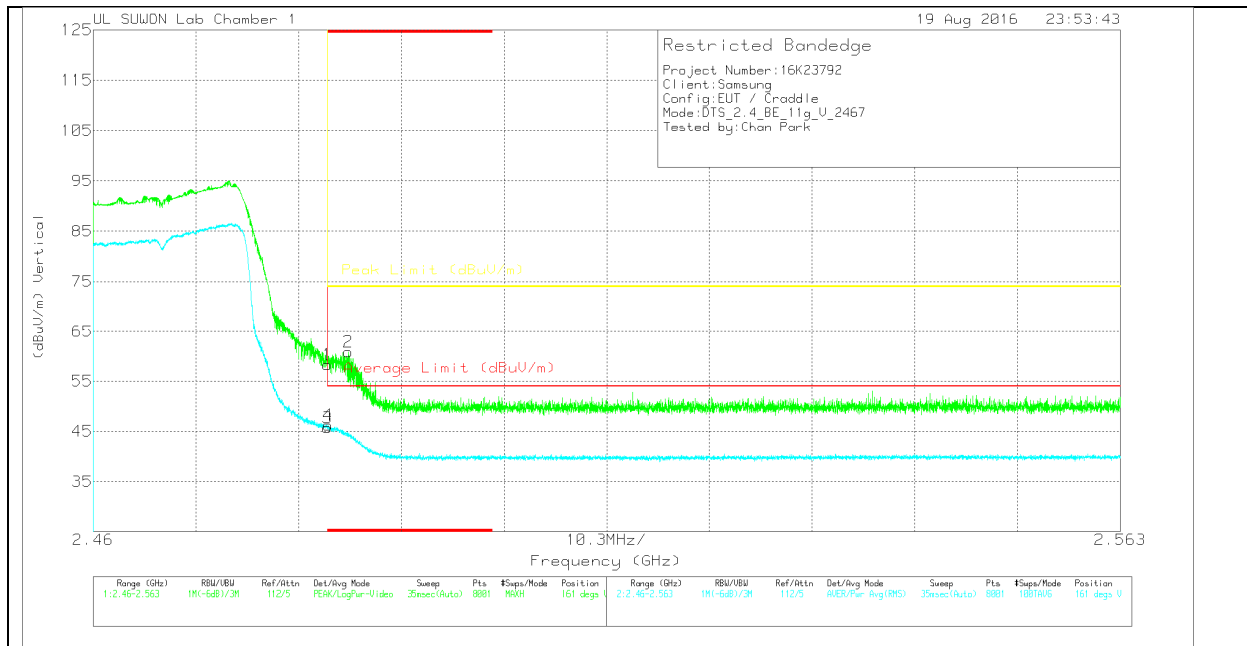
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	59.74	Pk	32	-28.3	0	63.44	-	-	74	-10.56	33	185	H
2	* 2.485	60.78	Pk	32	-28.3	0	64.48	-	-	74	-9.52	33	185	H
3	* 2.484	45.2	RMS	32	-28.3	.32	49.22	54	-4.78	-	-	33	185	H
4	* 2.484	45.85	RMS	32	-28.3	.32	49.87	54	-4.13	-	-	33	185	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	54.6	PK	32	-28.3	0	58.3	-	-	74	-15.7	161	150	V
2	* 2.486	57.16	PK	32	-28.3	0	60.86	-	-	74	-13.14	161	150	V
3	* 2.484	41.72	RMS	32	-28.3	.32	45.74	54	-8.26	-	-	161	150	V
4	* 2.484	42.23	RMS	32	-28.3	.32	46.25	54	-7.75	-	-	161	150	V

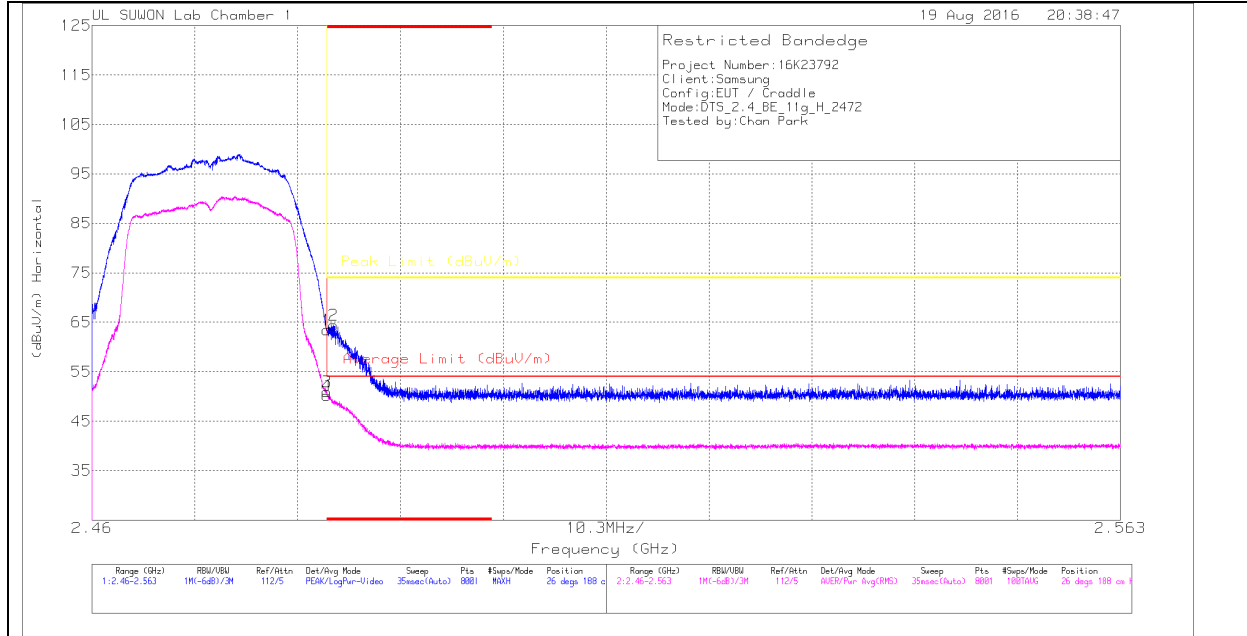
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (13 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

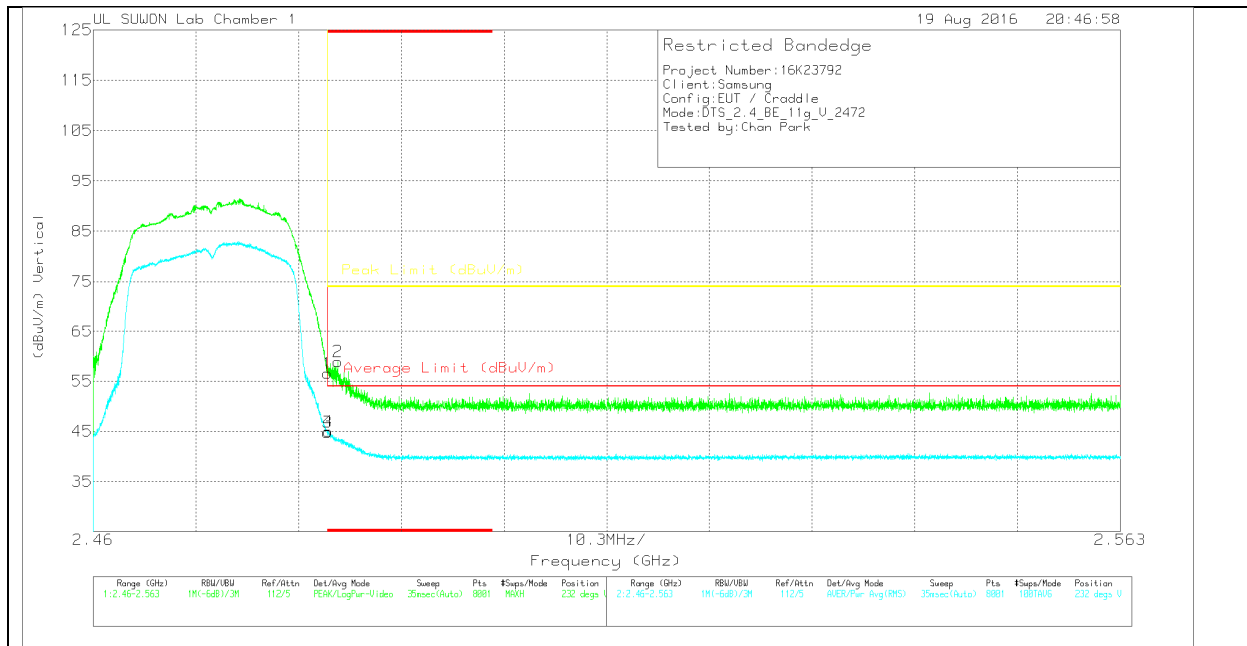
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/001687 17_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	59.74	Pk	32	-28.3	0	63.44	-	-	74	-10.56	26	188	H
2	* 2.484	60.78	Pk	32	-28.3	0	64.48	-	-	74	-9.52	26	188	H
3	* 2.484	46.93	RMS	32	-28.3	.32	50.95	54	-3.05	-	-	26	188	H
4	* 2.484	46.23	RMS	32	-28.3	.32	50.25	54	-3.75	-	-	26	188	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	52.88	PK	32	-28.3	0	56.58	-	-	74	-17.42	232	112	V
2	* 2.485	55.2	PK	32	-28.3	0	58.9	-	-	74	-15.1	232	112	V
3	* 2.484	40.82	RMS	32	-28.3	.32	44.84	54	-9.16	-	-	232	112	V
4	* 2.484	40.99	RMS	32	-28.3	.32	45.01	54	-8.99	-	-	232	112	V

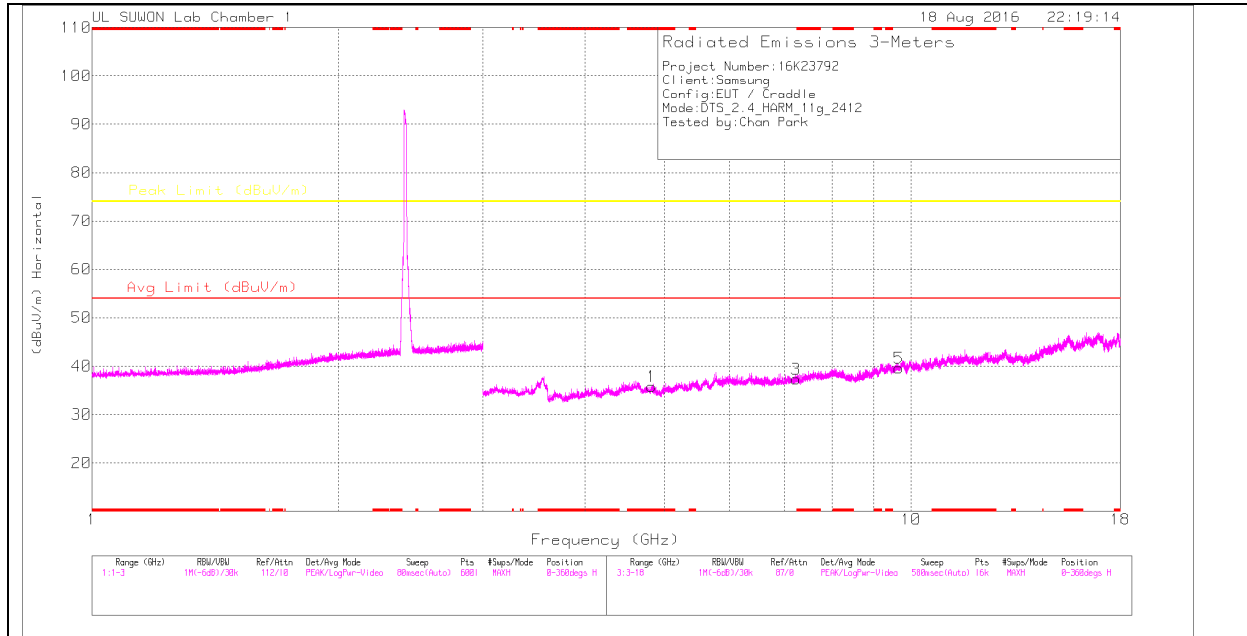
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

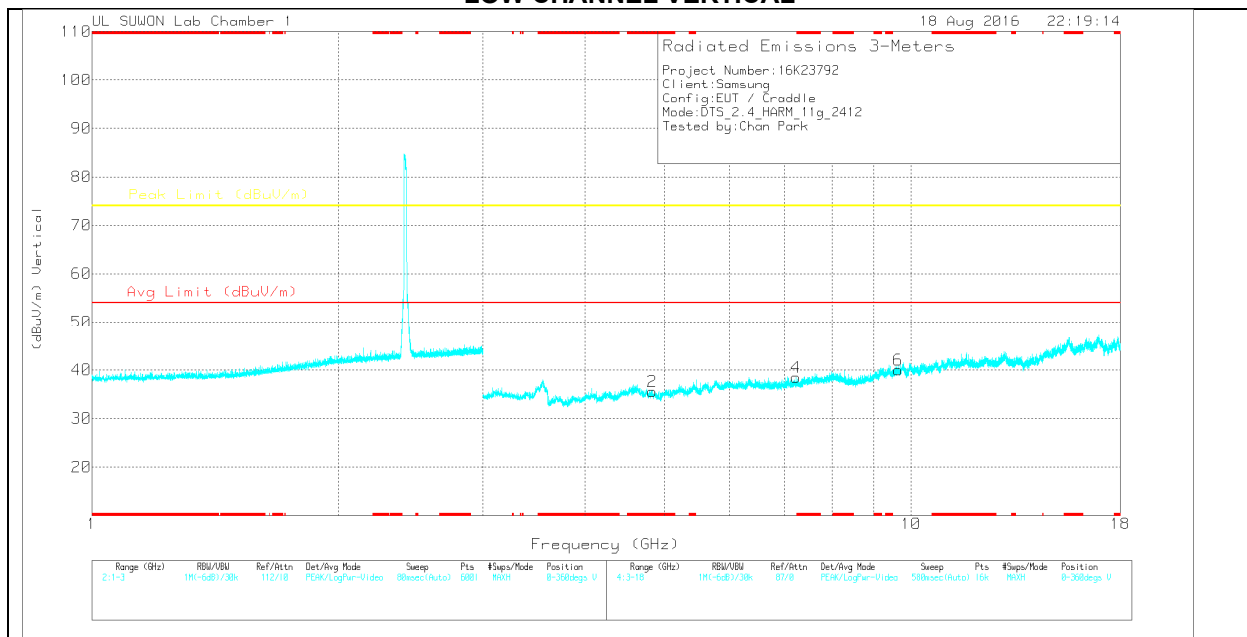
RMS - RMS detection

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

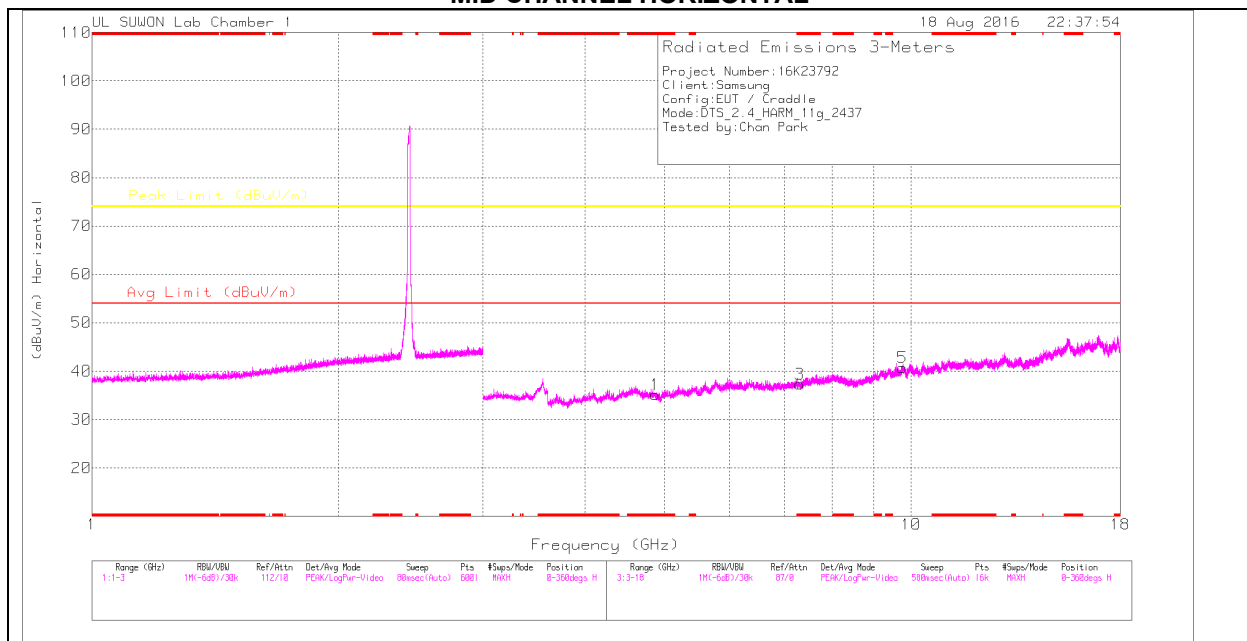
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.822	35.56	PK	34	-33.8	0	35.76	-	-	74	-38.24	0-360	250	H
3	7.238	32.54	PK	35.7	-30.9	0	37.34	-	-	74	-36.66	0-360	250	H
5	9.653	30.02	PK	37.1	-27.5	0	39.62	-	-	74	-34.38	0-360	150	H
2	* 4.828	35.4	PK	34	-33.8	0	35.6	-	-	74	-38.4	0-360	250	V
4	7.238	33.62	PK	35.7	-30.9	0	38.42	-	-	74	-35.58	0-360	150	V
6	9.648	30.23	PK	37.1	-27.4	0	39.93	-	-	74	-34.07	0-360	150	V

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

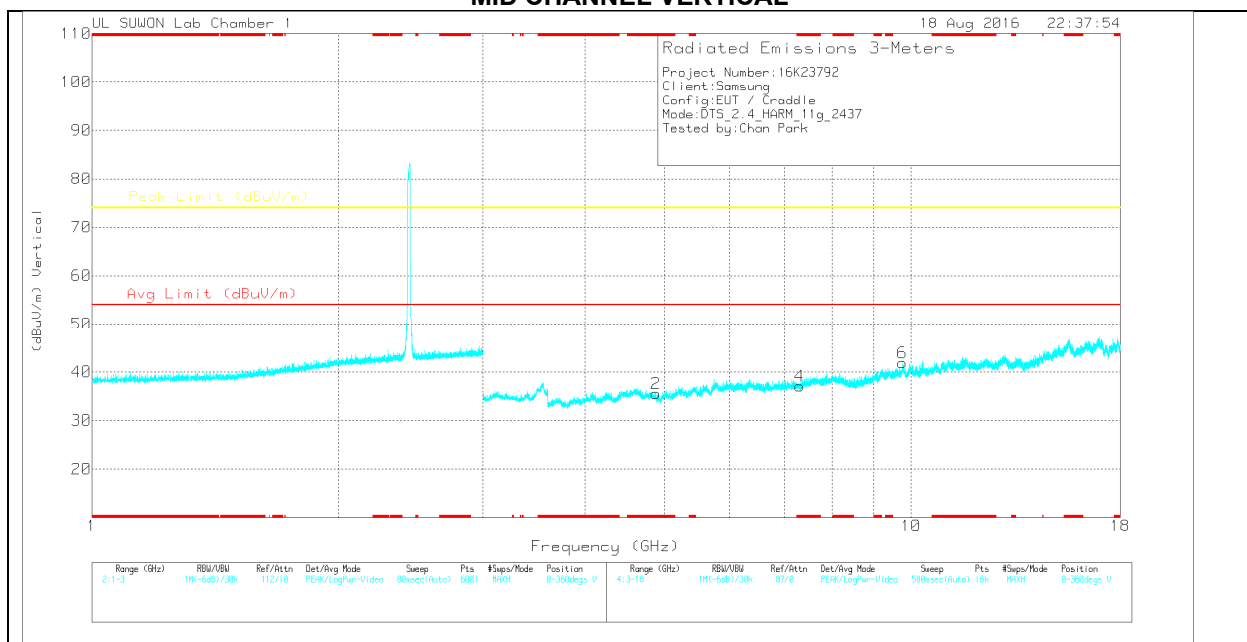
PK – Peak detector

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

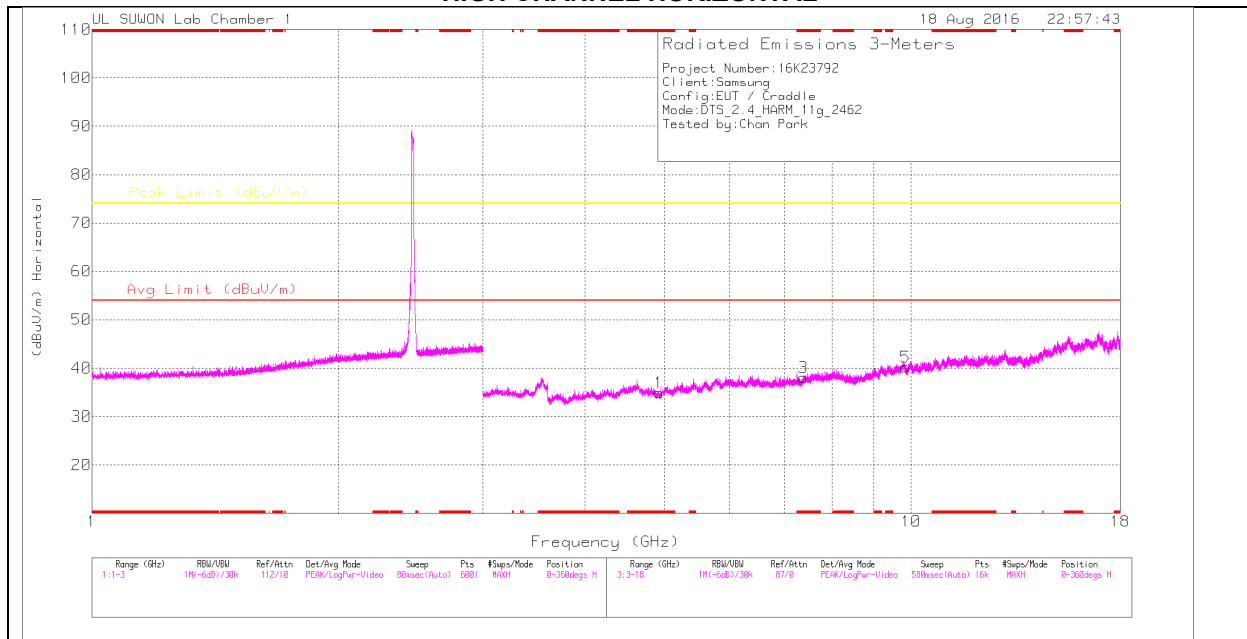
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.873	35.16	PK	34	-34	0	35.16	-	-	74	-38.84	0-360	250	H
3	* 7.31	32.54	PK	35.7	-30.9	0	37.34	-	-	74	-36.66	0-360	250	H
5	9.751	30.4	PK	37.2	-26.8	0	40.8	-	-	74	-33.2	0-360	150	H
2	* 4.877	35.57	PK	34	-34	0	35.57	-	-	74	-38.43	0-360	150	V
4	* 7.311	32.3	PK	35.7	-30.9	0	37.1	-	-	74	-36.9	0-360	150	V
6	9.752	31.36	PK	37.2	-26.7	0	41.86	-	-	74	-32.14	0-360	150	V

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

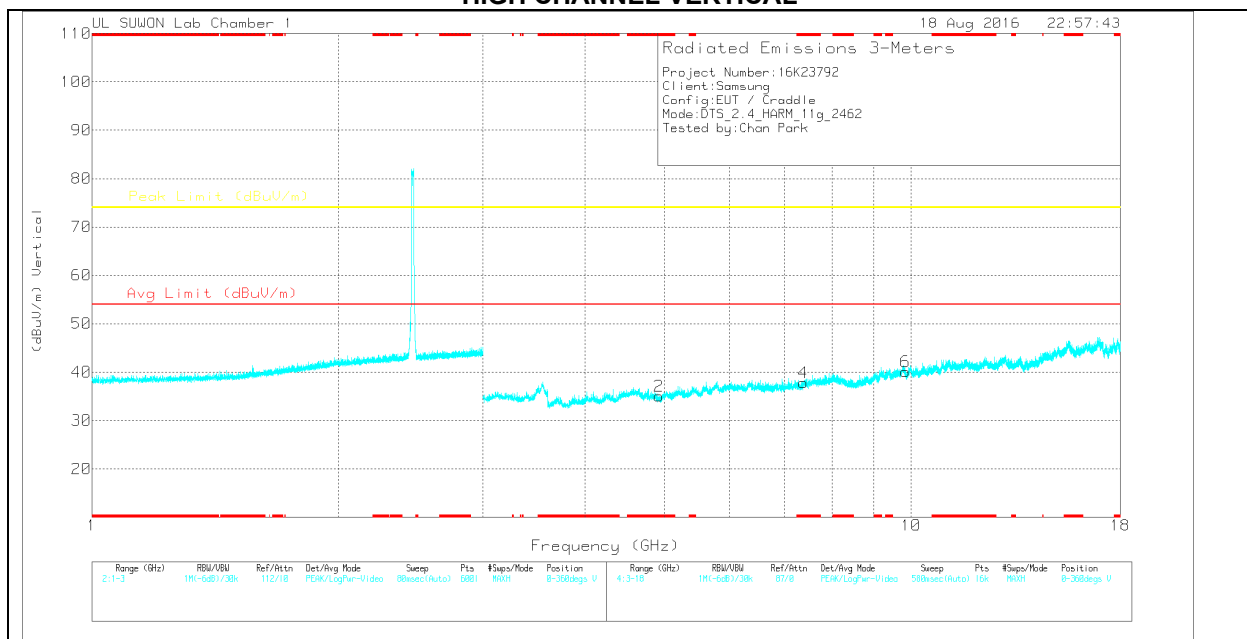
PK – Peak detector

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

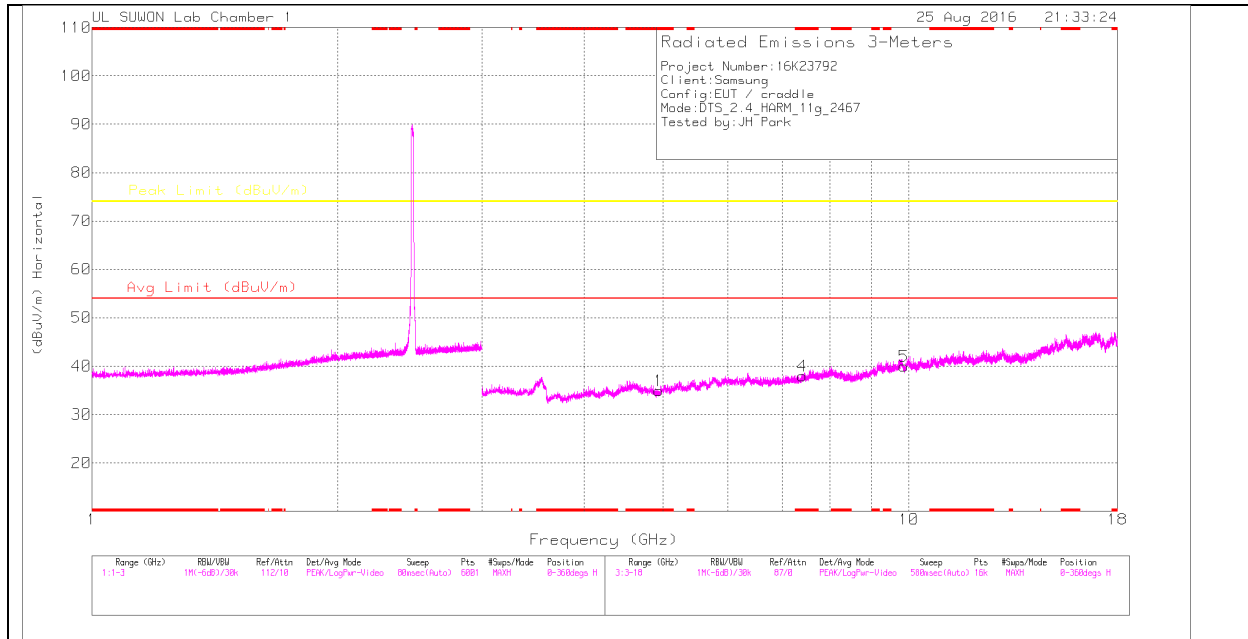
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.923	34.87	PK	34	-34	0	34.87	-	-	74	-39.13	0-360	150	H
3	* 7.383	33.14	PK	35.8	-30.8	0	38.14	-	-	74	-35.86	0-360	150	H
5	9.849	30.58	PK	37.3	-27.6	0	40.28	-	-	74	-33.72	0-360	150	H
2	* 4.924	35.01	PK	34	-34	0	35.01	-	-	74	-38.99	0-360	250	V
4	* 7.386	32.79	PK	35.8	-30.7	0	37.89	-	-	74	-36.11	0-360	150	V
6	9.844	30.26	PK	37.3	-27.5	0	40.06	-	-	74	-33.94	0-360	250	V

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

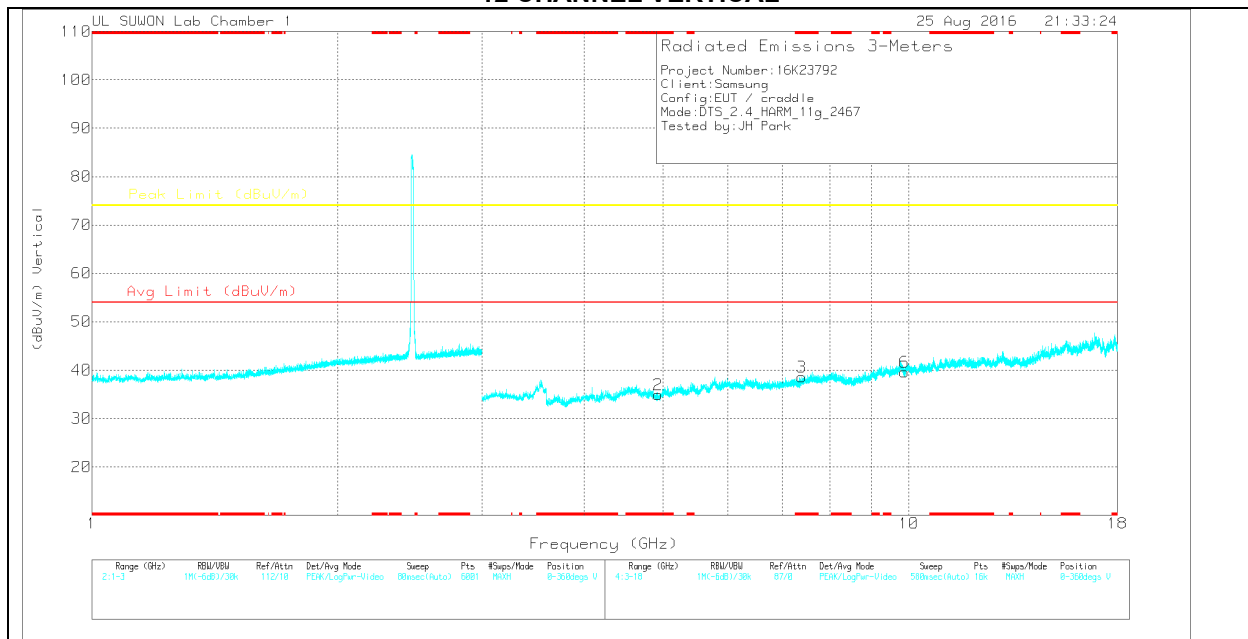
PK – Peak detector

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

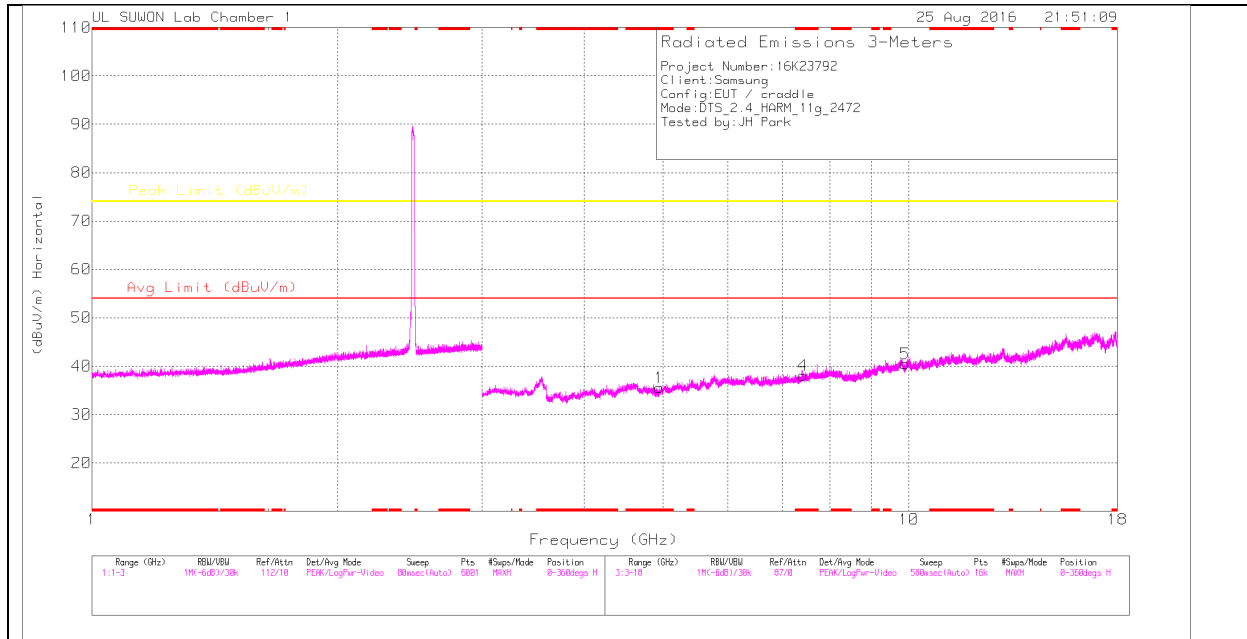
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.94	34.97	PK	34	-34	0	34.97	-	-	74	-39.03	0-360	250	H
4	* 7.405	32.8	PK	35.8	-30.6	0	38	-	-	74	-36	0-360	150	H
5	9.866	30.57	PK	37.3	-27.9	0	39.97	-	-	74	-34.03	0-360	150	H
2	* 4.934	34.98	PK	34	-34	0	34.98	-	-	74	-39.02	0-360	150	V
3	* 7.395	33.35	PK	35.8	-30.6	0	38.55	-	-	74	-35.45	0-360	150	V
6	9.869	30.26	PK	37.3	-27.9	0	39.66	-	-	74	-34.34	0-360	250	V

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

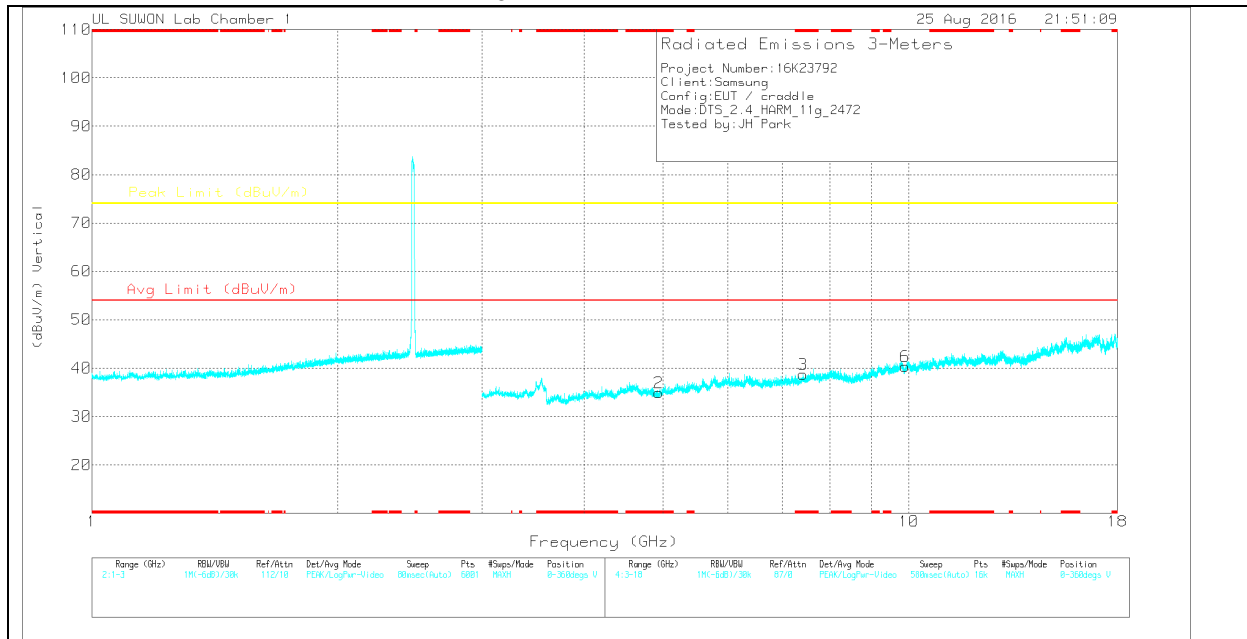
PK – Peak Detector

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	* 4.947	35.56	PK	34	-34	0	35.56	-	-	74	-38.44	0-360	250	H
4	* 7.417	32.99	PK	35.8	-30.7	0	38.09	-	-	74	-35.91	0-360	250	H
5	9.894	30.94	PK	37.4	-27.8	0	40.54	-	-	74	-33.46	0-360	250	H
2	* 4.943	34.91	PK	34	-34	0	34.91	-	-	74	-39.09	0-360	150	V
3	* 7.423	33.76	PK	35.8	-30.8	0	38.76	-	-	74	-35.24	0-360	250	V
6	9.889	30.87	PK	37.3	-27.8	0	40.37	-	-	74	-33.63	0-360	250	V

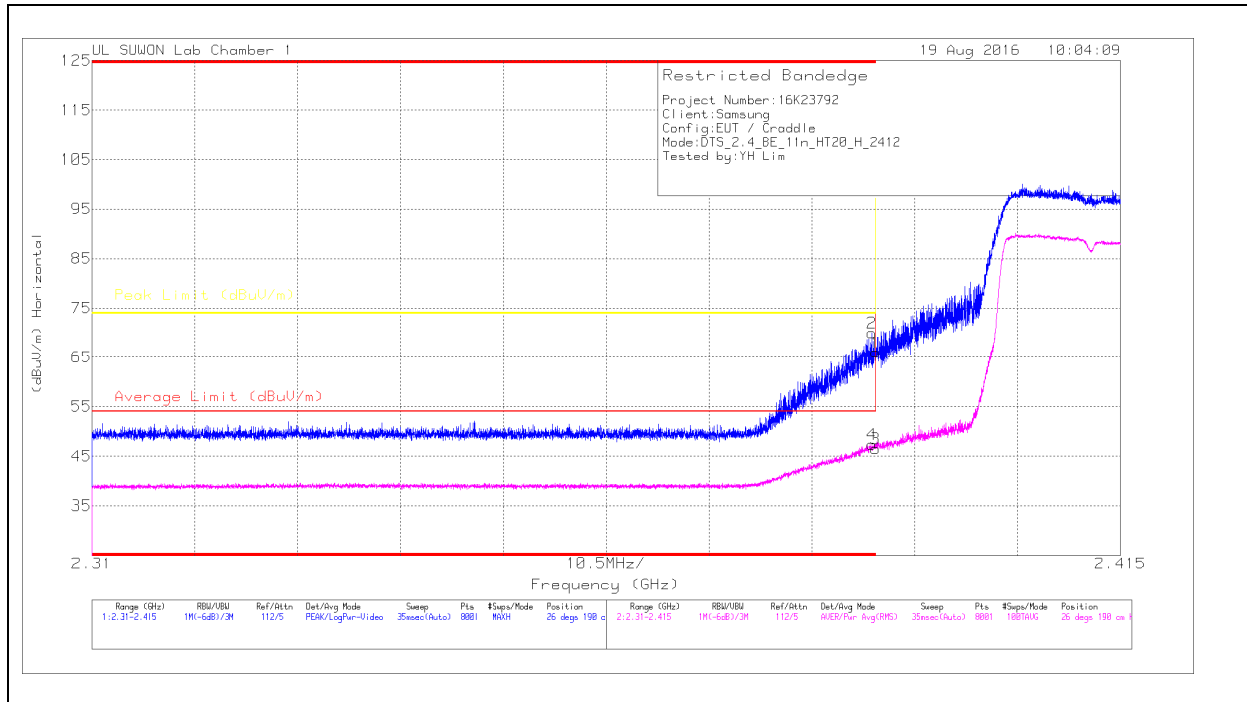
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

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

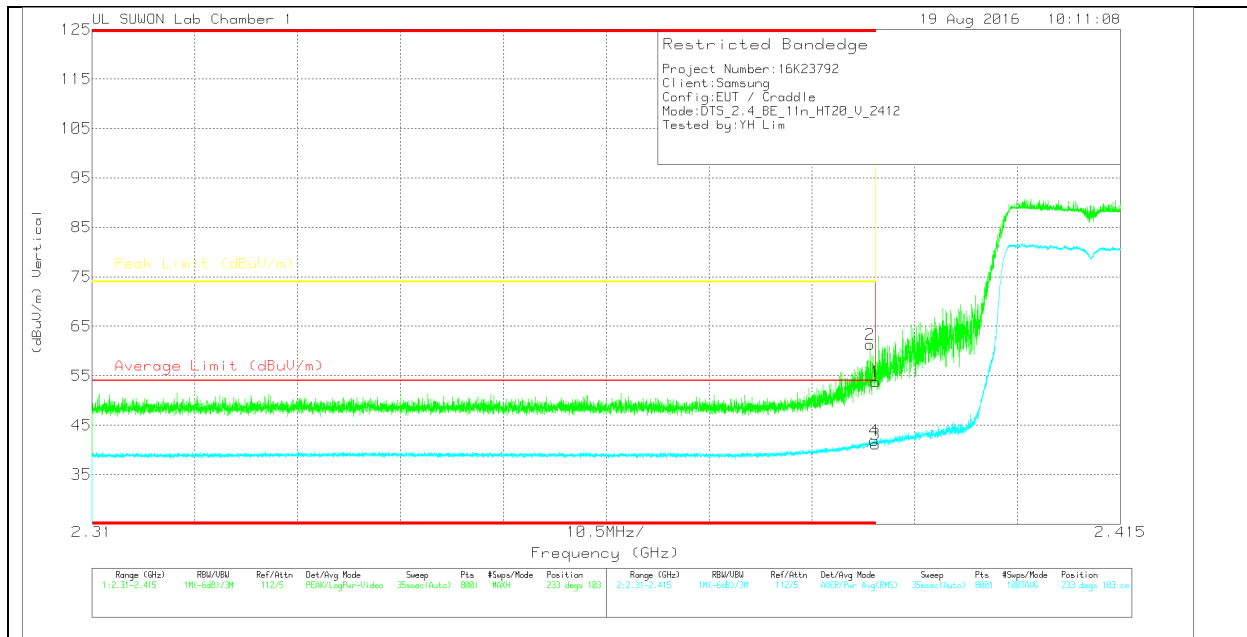
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	63.21	PK		-29	0	66.01	-	-	74	-7.99	26	190	H
2	* 2.39	67.14	PK		-29	0	69.94	-	-	74	-4.06	26	190	H
3	* 2.39	43.37	RMS		-29	.34	46.51	54	-7.49	-	-	26	190	H
4	* 2.39	44.24	RMS		-29	.34	47.38	54	-6.62	-	-	26	190	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	50.96	Pk	31.8	-29	0	53.76	-	-	74	-20.24	233	103	V
2	* 2.389	58.54	Pk	31.8	-29	0	61.34	-	-	74	-12.66	233	103	V
3	* 2.39	37.99	RMS	31.8	-29	.34	41.13	54	-12.87	-	-	233	103	V
4	* 2.39	38.73	RMS	31.8	-29	.34	41.87	54	-12.13	-	-	233	103	V

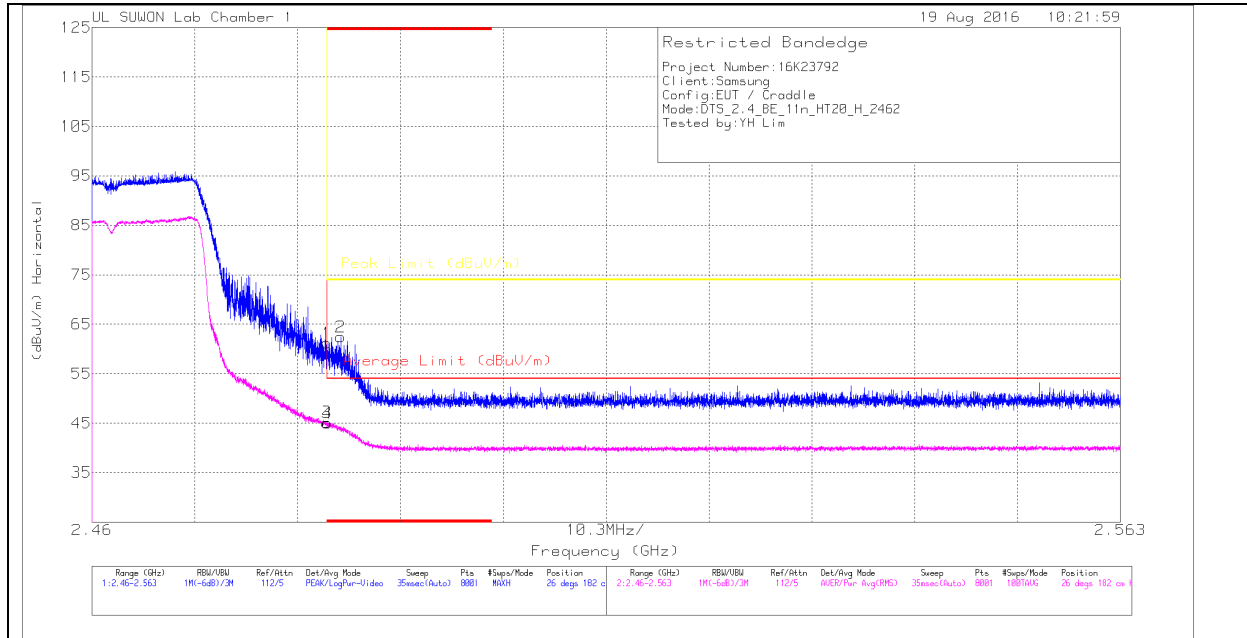
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

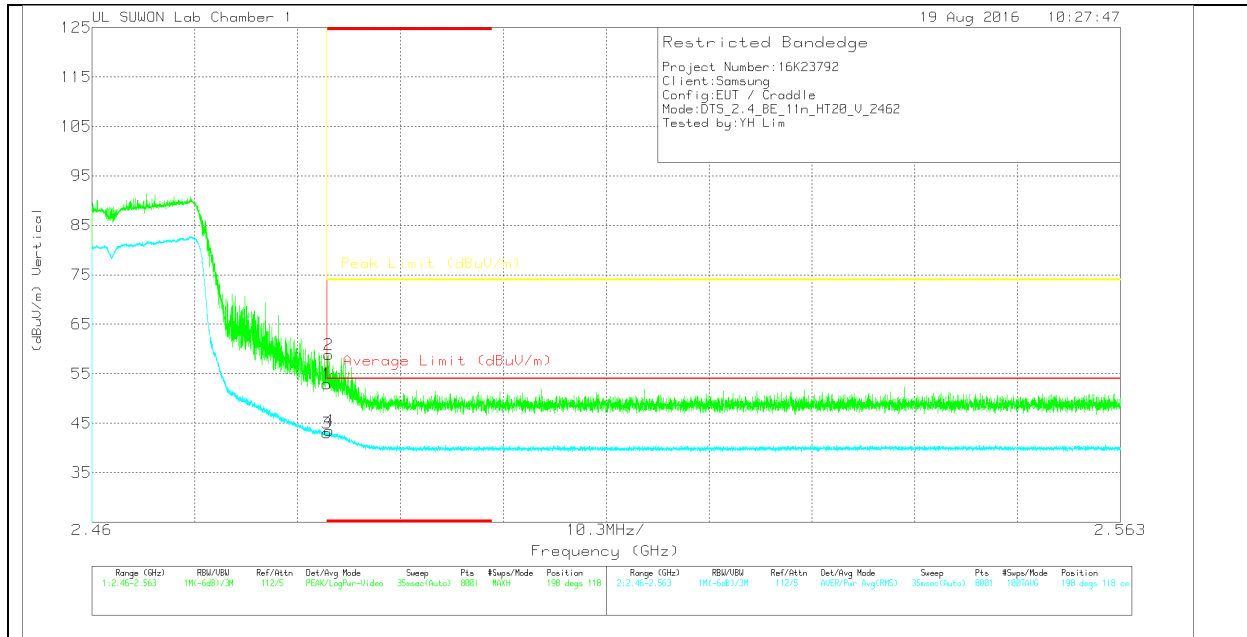
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	57.48	Pk	32	-28.3	0	61.18	-	-	74	-12.82	26	182	H
2	* 2.485	58.79	Pk	32	-28.3	0	62.49	-	-	74	-11.51	26	182	H
3	* 2.484	41.15	RMS	32	-28.3	.34	45.19	54	-8.81	-	-	26	182	H
4	* 2.484	41.01	RMS	32	-28.3	.34	45.05	54	-8.95	-	-	26	182	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	49.2	Pk	32	-28.3	0	52.9	-	-	74	-21.1	198	118	V
2	* 2.484	55.19	Pk	32	-28.3	0	58.89	-	-	74	-15.11	198	118	V
3	* 2.484	39.04	RMS	32	-28.3	.34	43.08	54	-10.92	-	-	198	118	V
4	* 2.484	39.51	RMS	32	-28.3	.34	43.55	54	-10.45	-	-	198	118	V

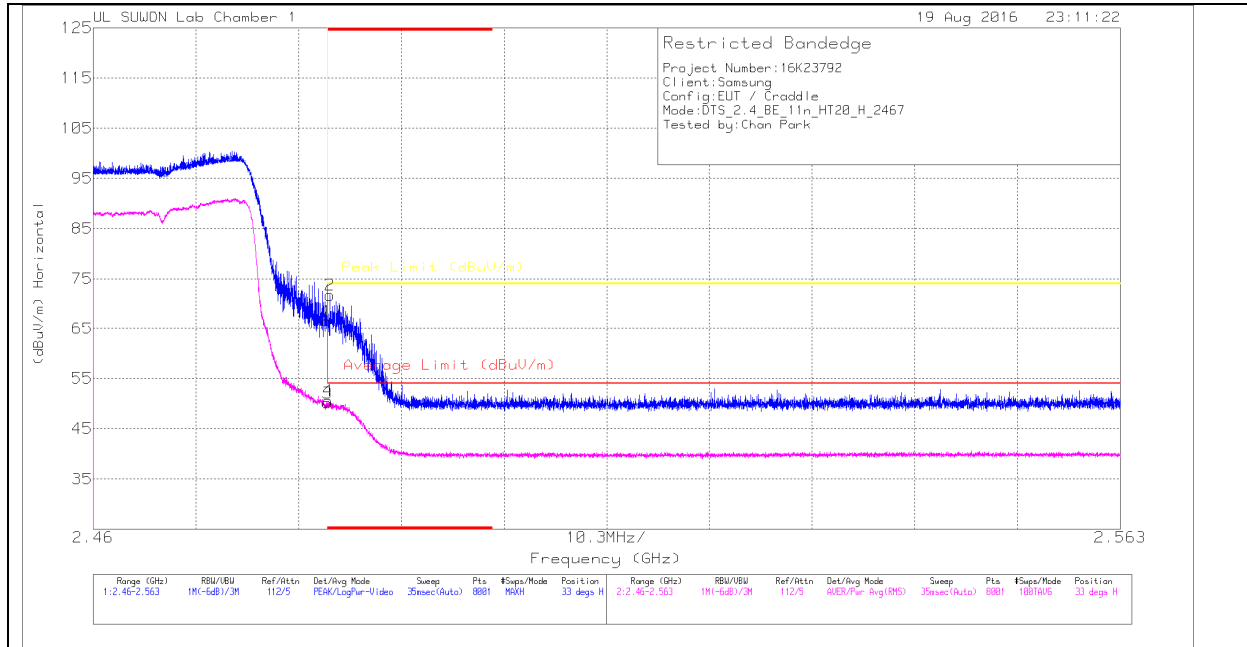
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (12 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

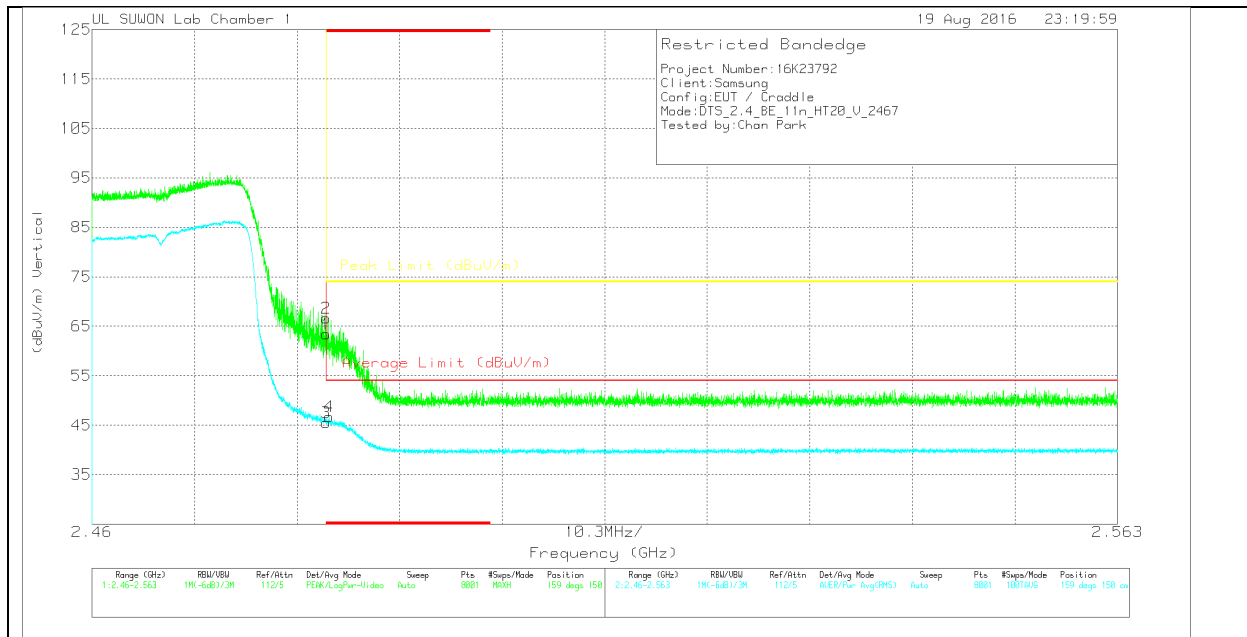
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	62.85	Pk	32	-28.3	0	66.55	-	-	74	-7.45	33	185	H
2	* 2.484	68.04	Pk	32	-28.3	0	71.74	-	-	74	-2.26	33	185	H
3	* 2.484	46.07	RMS	32	-28.3	.34	50.11	54	-3.89	-	-	33	185	H
4	* 2.484	46.51	RMS	32	-28.3	.34	50.55	54	-3.45	-	-	33	185	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	59.7	PK	32	-28.3	0	63.4	-	-	74	-10.6	159	150	V
2	* 2.484	62.99	PK	32	-28.3	0	66.69	-	-	74	-7.31	159	150	V
3	* 2.484	41.41	RMS	32	-28.3	.34	45.45	54	-8.55	-	-	159	150	V
4	* 2.484	42.66	RMS	32	-28.3	.34	46.7	54	-7.3	-	-	159	150	V

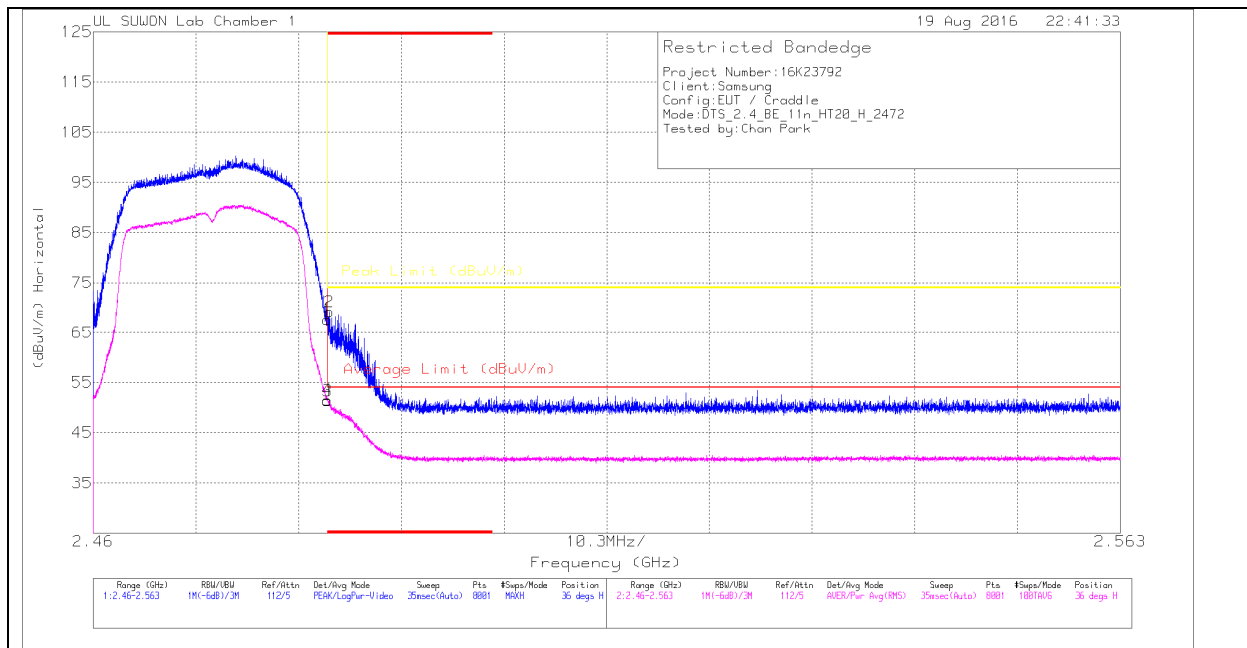
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (13 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

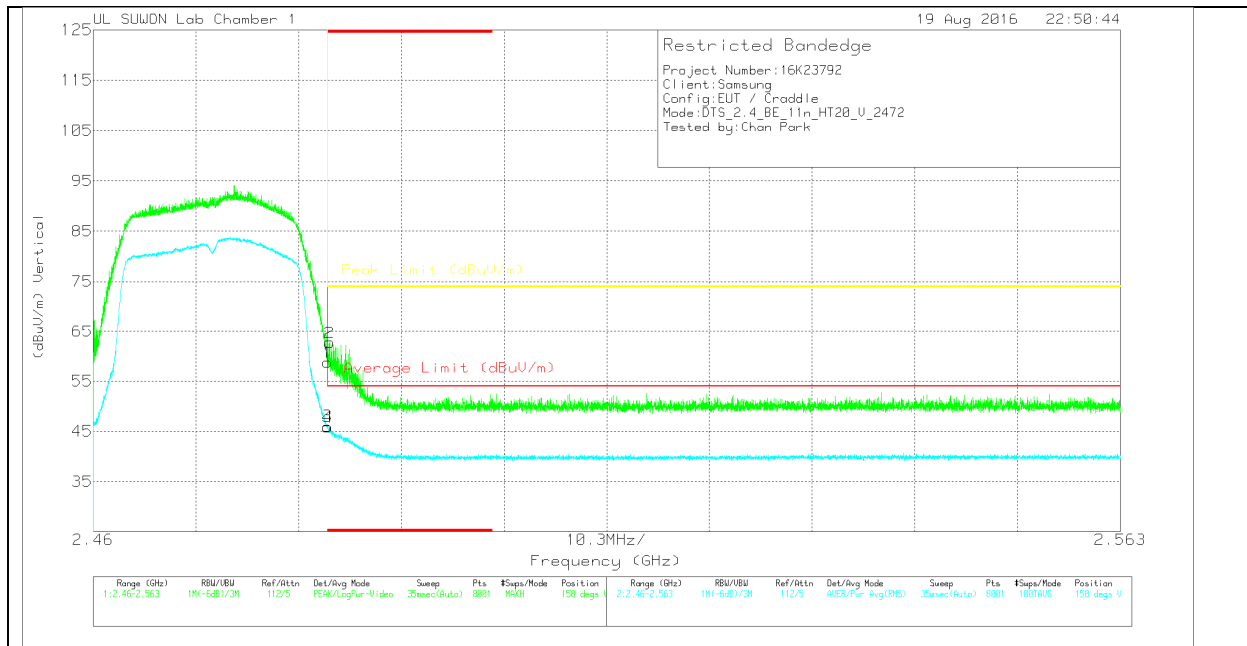
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	63.99	Pk	32	-28.3	0	67.69	-	-	74	-6.31	36	240	H
2	* 2.484	65.5	Pk	32	-28.3	0	69.2	-	-	74	-4.8	36	240	H
3	* 2.484	47.32	RMS	32	-28.3	.34	51.36	54	-2.64	-	-	36	240	H
4	* 2.484	47.44	RMS	32	-28.3	.34	51.48	54	-2.52	-	-	36	240	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	55.07	PK	32	-28.3	0	58.77	-	-	74	-15.23	158	175	V
2	* 2.484	59.03	PK	32	-28.3	0	62.73	-	-	74	-11.27	158	175	V
3	* 2.484	41.97	RMS	32	-28.3	.34	46.01	54	-7.99	-	-	158	175	V
4	* 2.484	41.83	RMS	32	-28.3	.34	45.87	54	-8.13	-	-	158	175	V

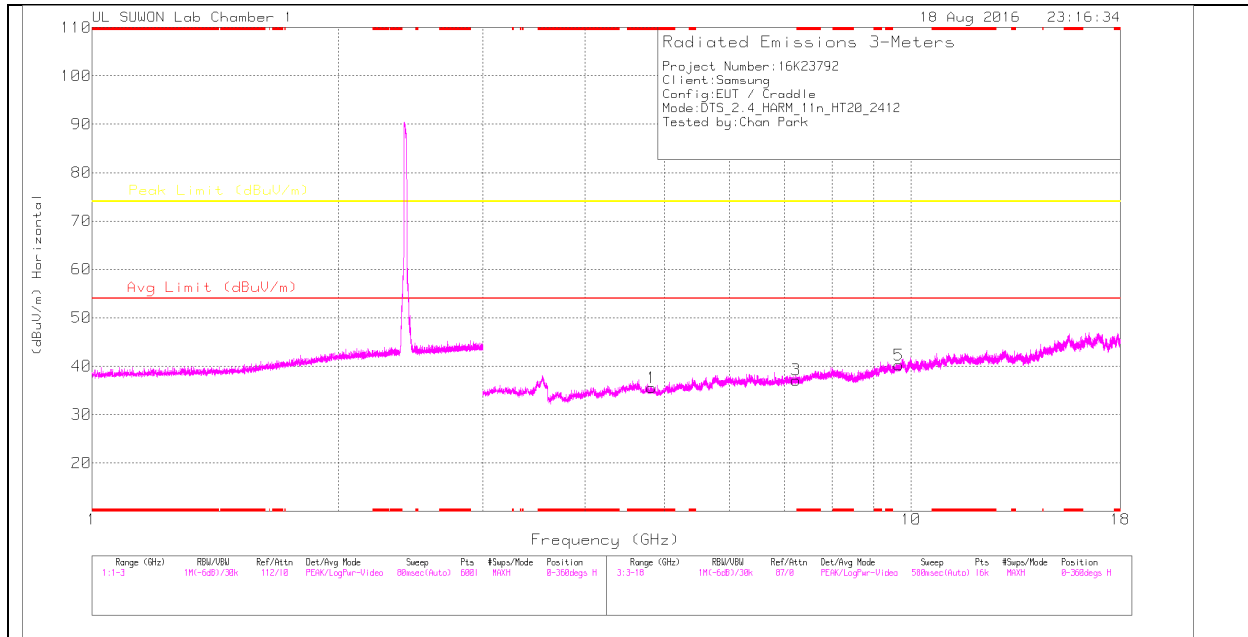
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

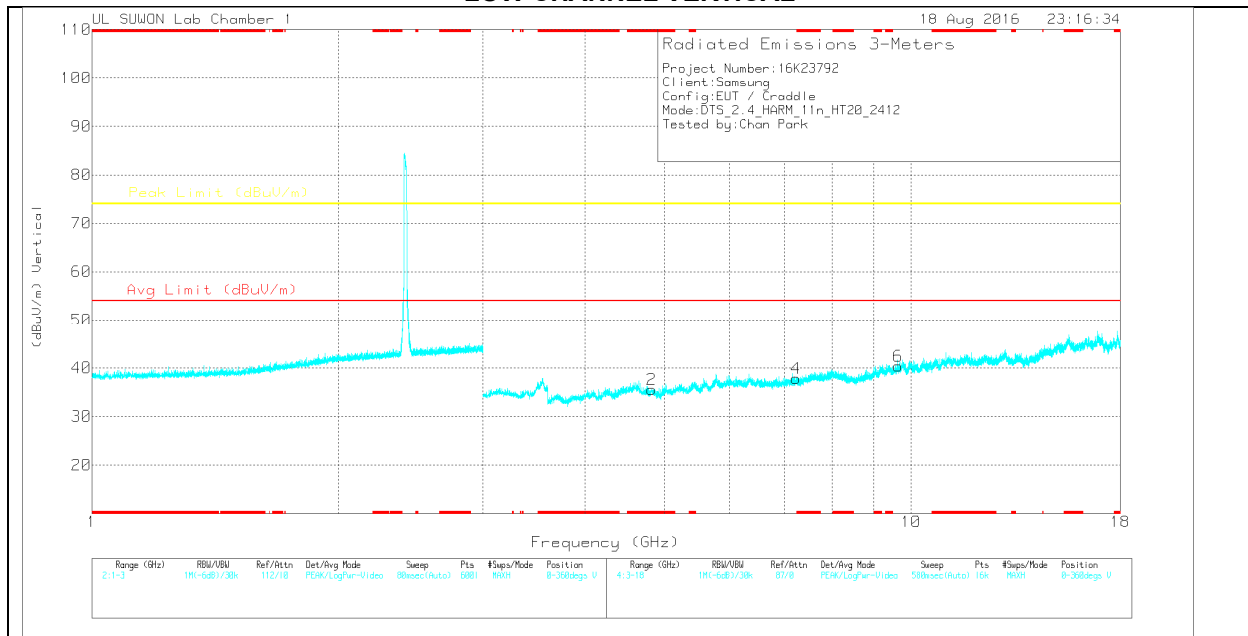
RMS - RMS detection

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

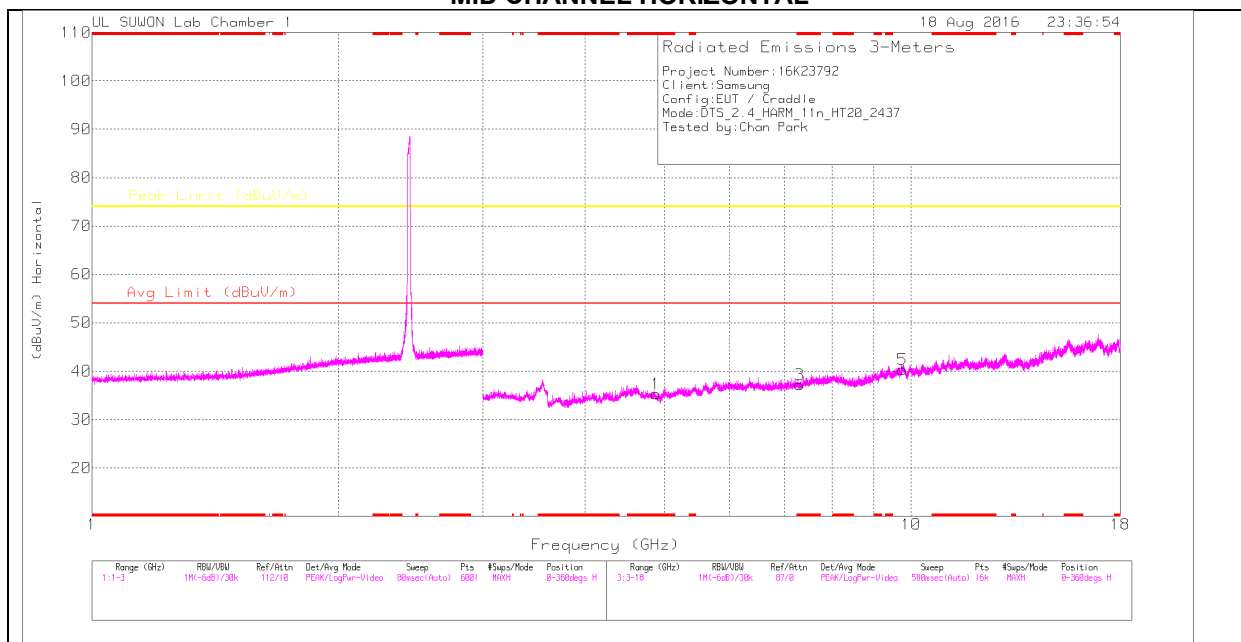
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.824	35.39	PK	34	-33.8	0	35.59	-	-	74	-38.41	0-360	150	H
3	7.237	32.34	PK	35.7	-30.9	0	37.14	-	-	74	-36.86	0-360	250	H
5	9.651	30.59	PK	37.1	-27.4	0	40.29	-	-	74	-33.71	0-360	150	H
2	* 4.825	35.35	PK	34	-33.8	0	35.55	-	-	74	-38.45	0-360	250	V
4	7.238	33	PK	35.7	-30.9	0	37.8	-	-	74	-36.2	0-360	150	V
6	9.648	30.64	PK	37.1	-27.4	0	40.34	-	-	74	-33.66	0-360	150	V

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

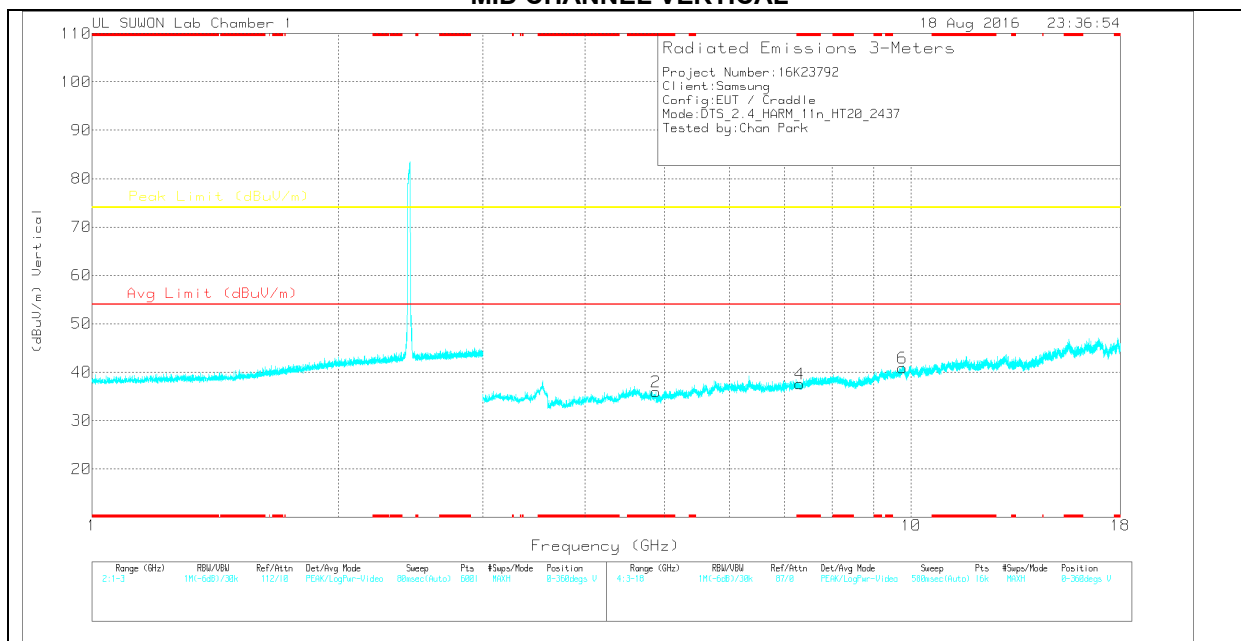
PK – Peak detector

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

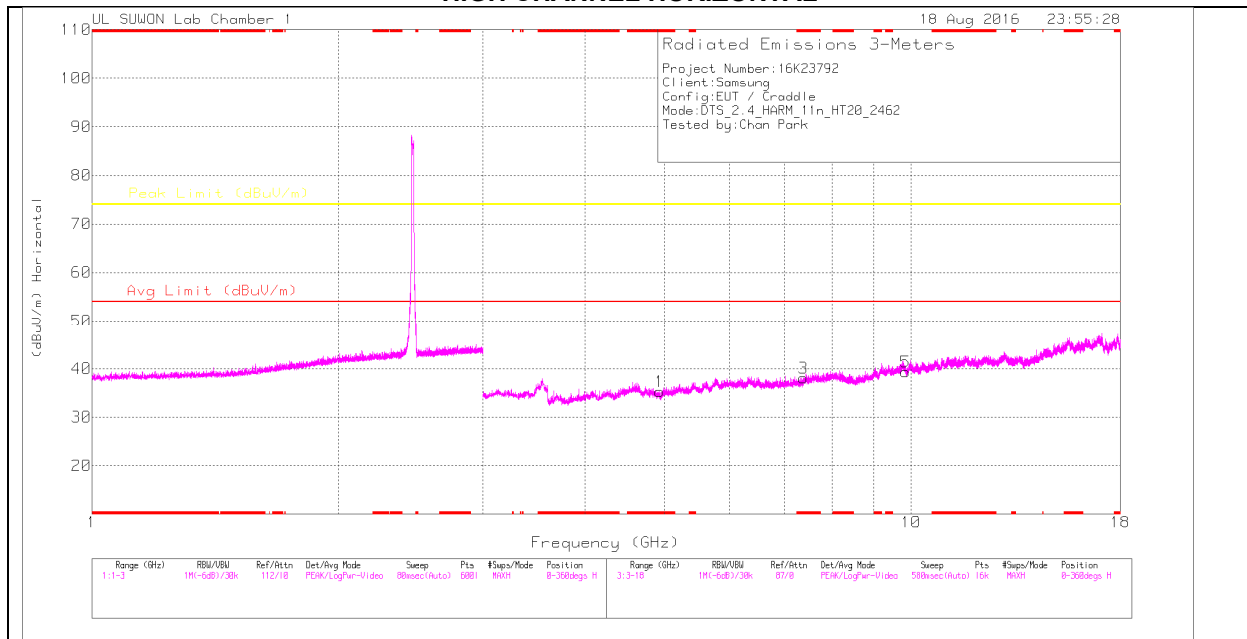
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.879	35.32	PK	34	-34	0	35.32	-	-	74	-38.68	0-360	250	H
3	* 7.313	32.3	PK	35.8	-30.9	0	37.2	-	-	74	-36.8	0-360	150	H
5	9.751	30	PK	37.2	-26.8	0	40.4	-	-	74	-33.6	0-360	250	H
2	* 4.881	35.92	PK	34	-34	0	35.92	-	-	74	-38.08	0-360	150	V
4	* 7.312	32.82	PK	35.7	-30.9	0	37.62	-	-	74	-36.38	0-360	150	V
6	9.751	30.45	PK	37.2	-26.8	0	40.85	-	-	74	-33.15	0-360	250	V

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

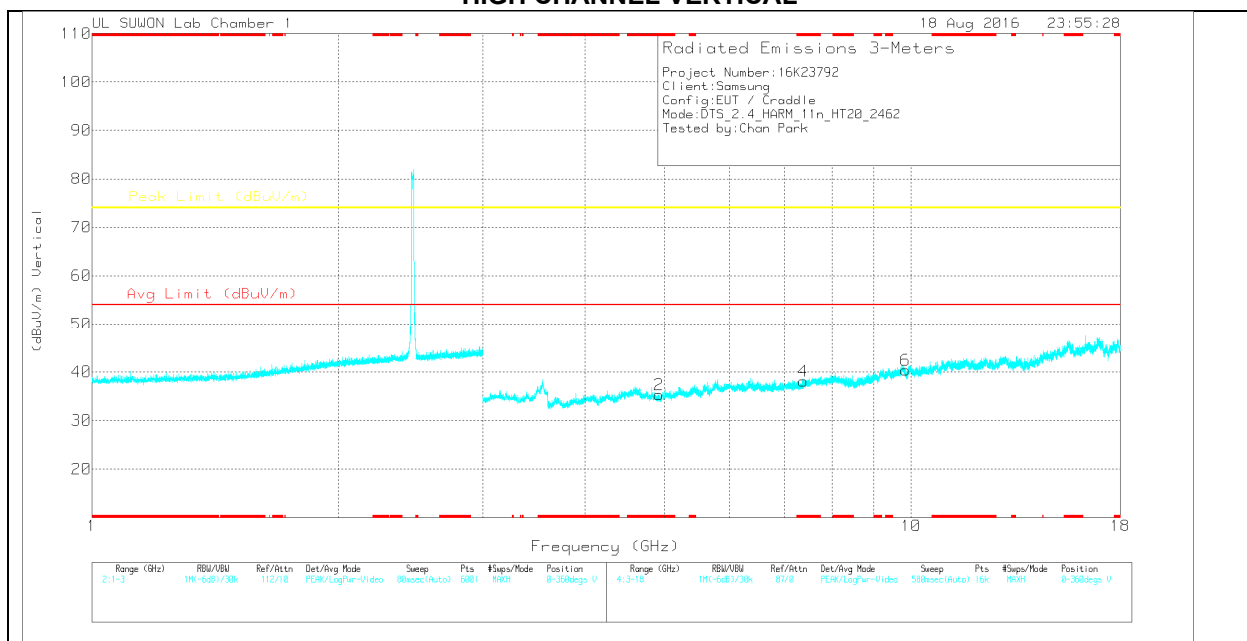
PK – Peak detector

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

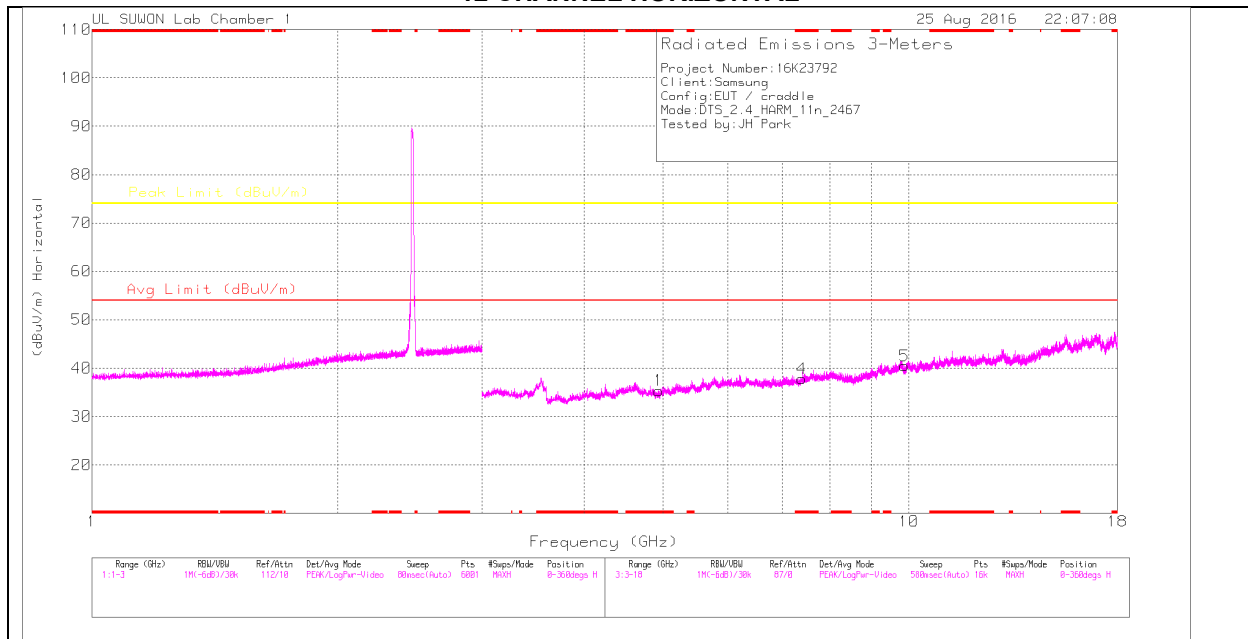
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.927	35.28	PK	34	-34	0	35.28	-	-	74	-38.72	0-360	150	H
3	* 7.389	32.99	PK	35.8	-30.7	0	38.09	-	-	74	-35.91	0-360	150	H
5	9.847	29.71	PK	37.3	-27.6	0	39.41	-	-	74	-34.59	0-360	150	H
2	* 4.923	35.26	PK	34	-34	0	35.26	-	-	74	-38.74	0-360	150	V
4	* 7.389	32.97	PK	35.8	-30.7	0	38.07	-	-	74	-35.93	0-360	250	V
6	9.845	30.61	PK	37.3	-27.5	0	40.41	-	-	74	-33.59	0-360	150	V

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

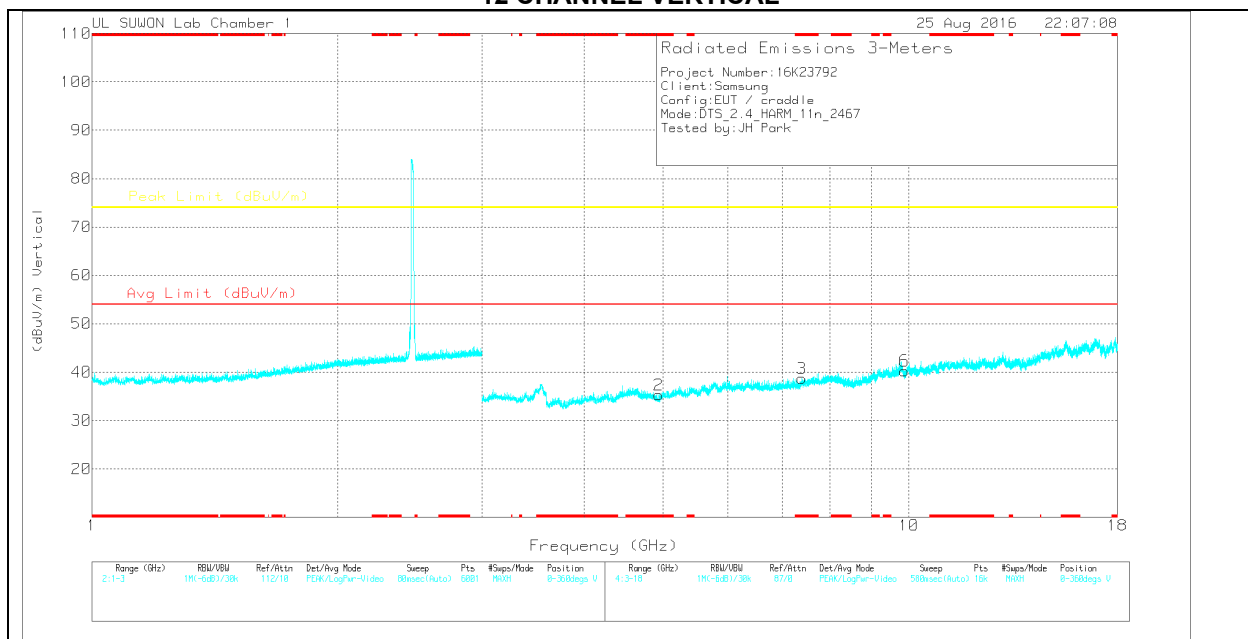
PK – Peak detector

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

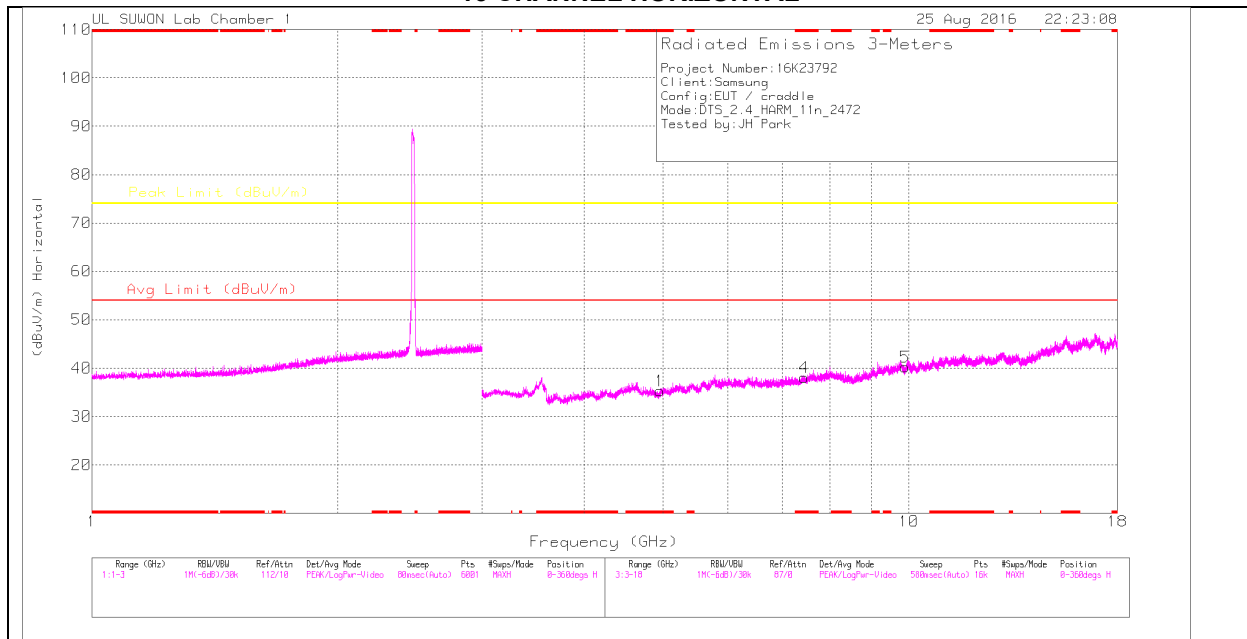
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.936	35.37	PK	34	-34	0	35.37	-	-	74	-38.63	0-360	150	H
4	* 7.395	32.58	PK	35.8	-30.6	0	37.78	-	-	74	-36.22	0-360	250	H
5	9.882	31.1	PK	37.3	-27.9	0	40.5	-	-	74	-33.5	0-360	150	H
2	* 4.941	35.27	PK	34	-34	0	35.27	-	-	74	-38.73	0-360	150	V
3	* 7.397	33.51	PK	35.8	-30.6	0	38.71	-	-	74	-35.29	0-360	250	V
6	9.877	31	PK	37.3	-28	0	40.3	-	-	74	-33.7	0-360	150	V

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

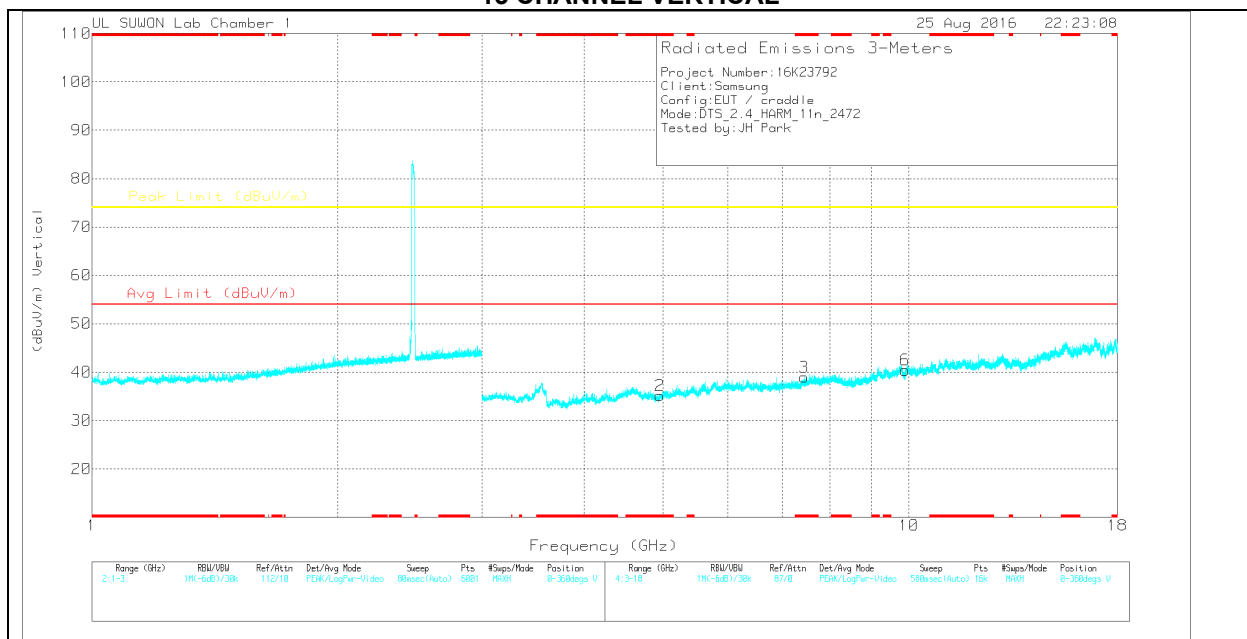
PK – Peak Detector

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	* 4.957	35.27	PK	34	-34	0	35.27	-	-	74	-38.73	0-360	150	H
4	* 7.439	33.02	PK	35.8	-30.7	0	38.12	-	-	74	-35.88	0-360	150	H
5	9.898	30.51	PK	37.4	-27.7	0	40.21	-	-	74	-33.79	0-360	150	H
2	* 4.953	35.14	PK	34	-34	0	35.14	-	-	74	-38.86	0-360	250	V
3	* 7.44	33.88	PK	35.8	-30.7	0	38.98	-	-	74	-35.02	0-360	150	V
6	9.893	30.83	PK	37.4	-27.8	0	40.43	-	-	74	-33.57	0-360	150	V

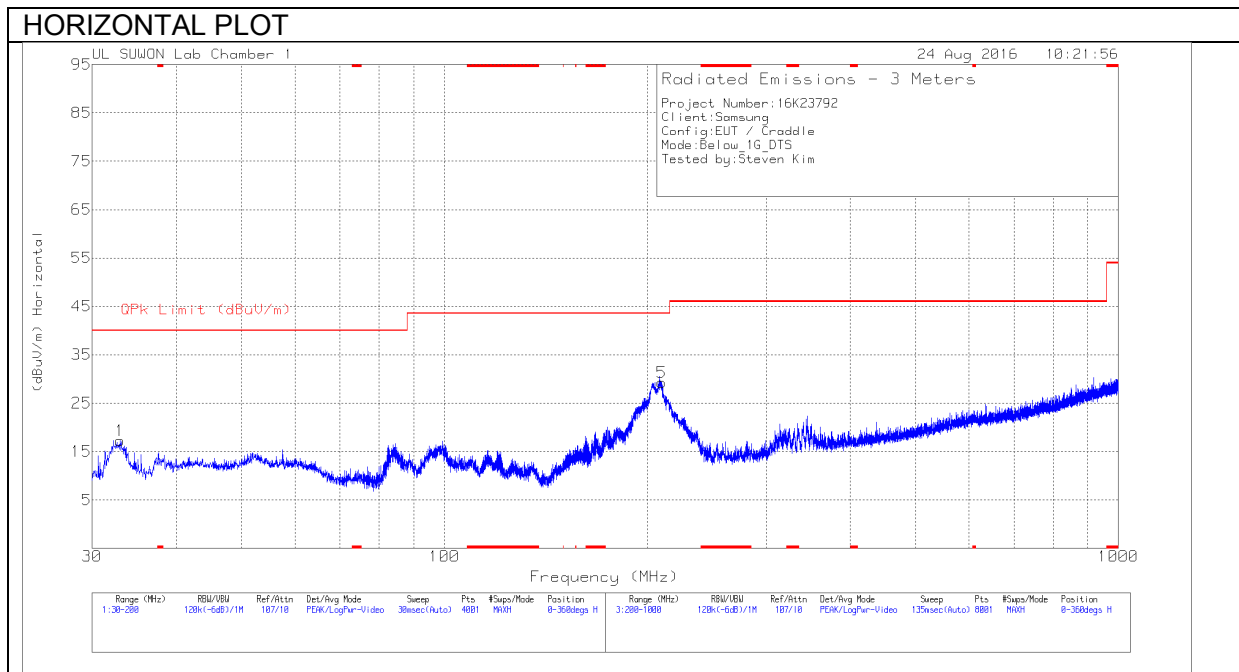
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak Detector

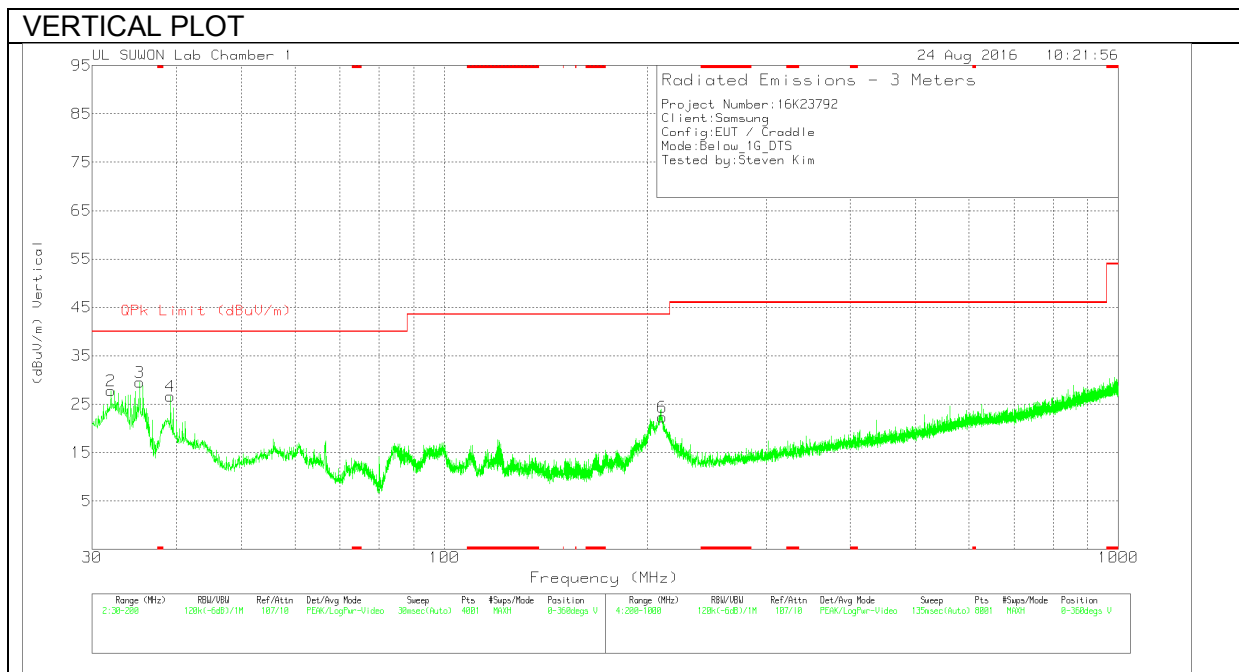
Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

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	33.0175	37.38	Pk	10.4	-30.5	17.28	40	-22.72	0-360	300	H
2	31.9975	47.95	Pk	10.3	-30.5	27.75	40	-12.25	0-360	100	V
3	35.3125	49.39	Pk	10.6	-30.4	29.59	40	-10.41	0-360	200	V
4	39.2225	44.77	Pk	12.2	-30.3	26.67	40	-13.33	0-360	200	V
5	209.9	45.91	Pk	11.5	-28.1	29.31	43.52	-14.21	0-360	200	H
6	210.5	38.85	Pk	11.6	-28.1	22.35	43.52	-21.17	0-360	100	V

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.

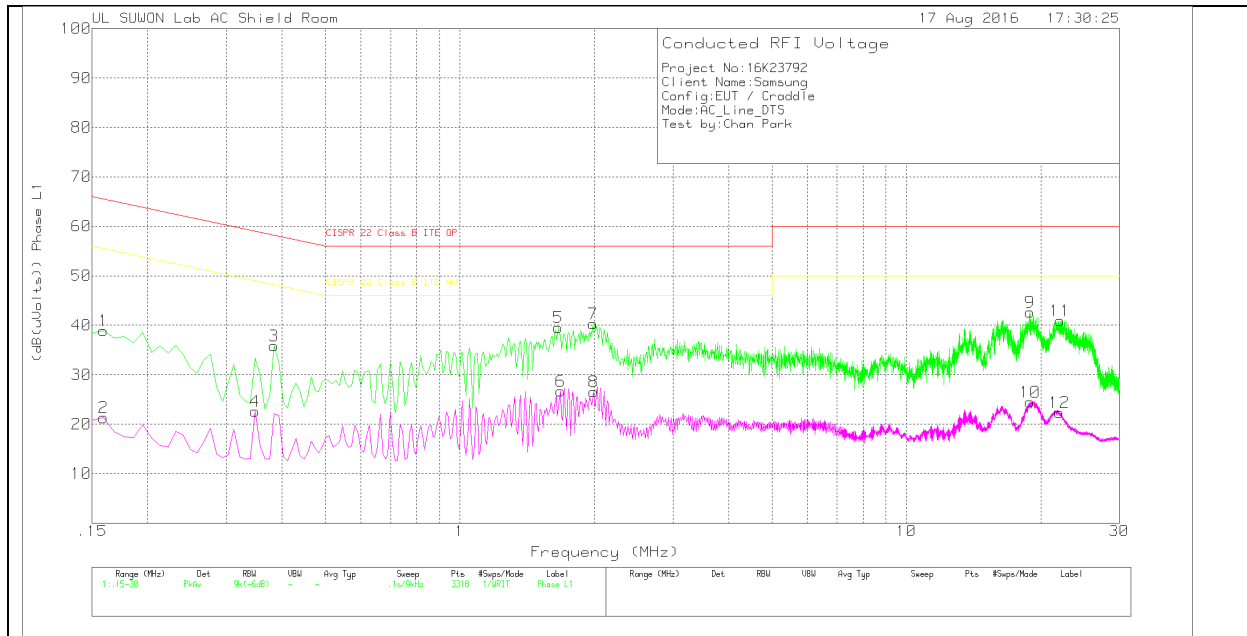
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

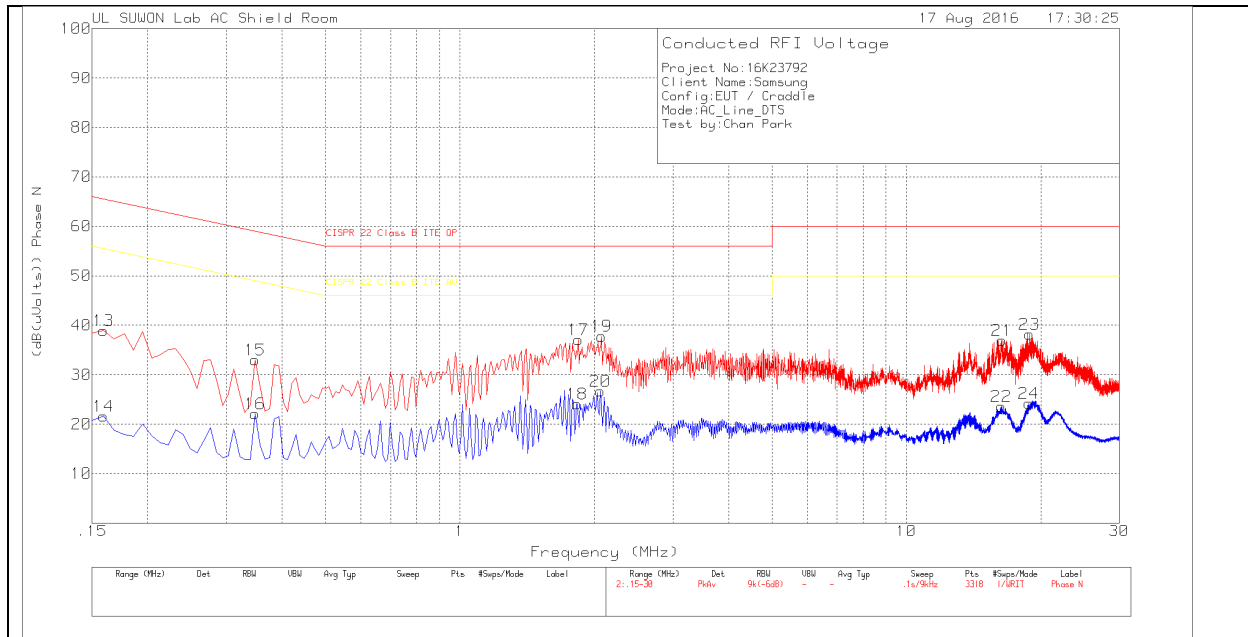
Phase L1 .15 - 30MHz

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	.159	28.9	Pk	10	0	38.9	65.52	-26.62	-	-
2	.159	11.31	Av	10	0	21.31	-	-	55.52	-34.21
3	.384	25.71	Pk	10.1	0	35.81	58.19	-22.38	-	-
4	.348	12.49	Av	10.1	0	22.59	-	-	49.01	-26.42
5	1.662	29.62	Pk	9.8	.1	39.52	56	-16.48	-	-
6	1.68	16.83	Av	9.8	.1	26.73	-	-	46	-19.27
7	1.986	30.34	Pk	9.8	.1	40.24	56	-15.76	-	-
8	1.995	16.68	Av	9.8	.1	26.58	-	-	46	-19.42
9	18.951	32.05	Pk	10.4	.2	42.65	60	-17.35	-	-
10	18.951	13.89	Av	10.4	.2	24.49	-	-	50	-25.51
11	22.083	30.25	Pk	10.5	.2	40.95	60	-19.05	-	-
12	22.011	11.66	Av	10.5	.2	22.36	-	-	50	-27.64

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	.159	28.89	Pk	10	0	38.89	65.52	-26.63	-	-
14	.159	11.63	Av	10	0	21.63	-	-	55.52	-33.89
15	.348	23.05	Pk	10	0	33.05	59.01	-25.96	-	-
16	.348	12.11	Av	10	0	22.11	-	-	49.01	-26.9
17	1.842	27.17	Pk	9.8	.1	37.07	56	-18.93	-	-
18	1.833	14.23	Av	9.8	.1	24.13	-	-	46	-21.87
19	2.076	27.86	Pk	9.8	.1	37.76	56	-18.24	-	-
20	2.067	16.76	Av	9.8	.1	26.66	-	-	46	-19.34
21	16.368	26.39	Pk	10.4	.2	36.99	60	-23.01	-	-
22	16.323	12.97	Av	10.4	.2	23.57	-	-	50	-26.43
23	18.852	27.34	Pk	10.6	.2	38.14	60	-21.86	-	-
24	18.825	13.4	Av	10.6	.2	24.2	-	-	50	-25.8

Pk - Peak detector

Av - Average detection