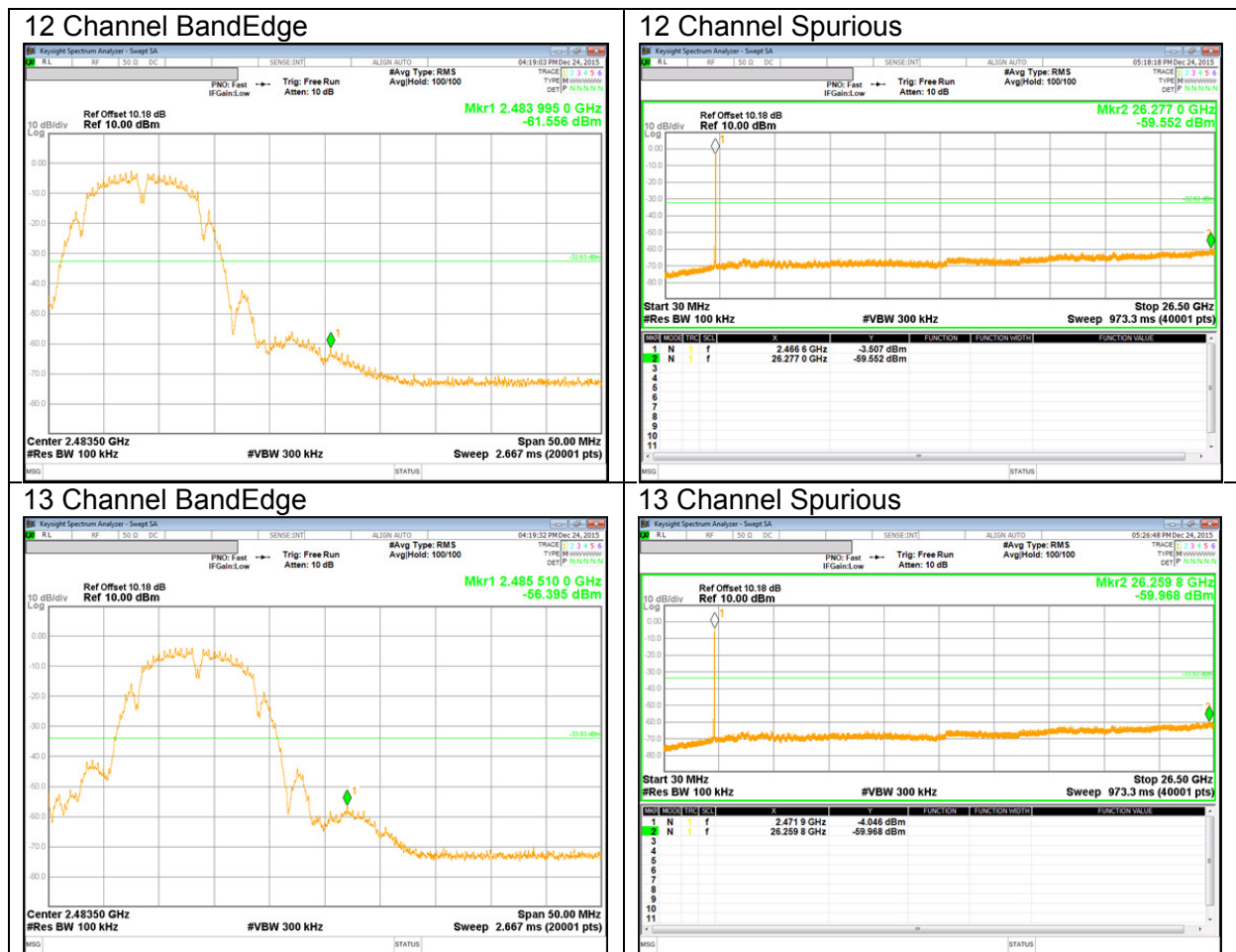
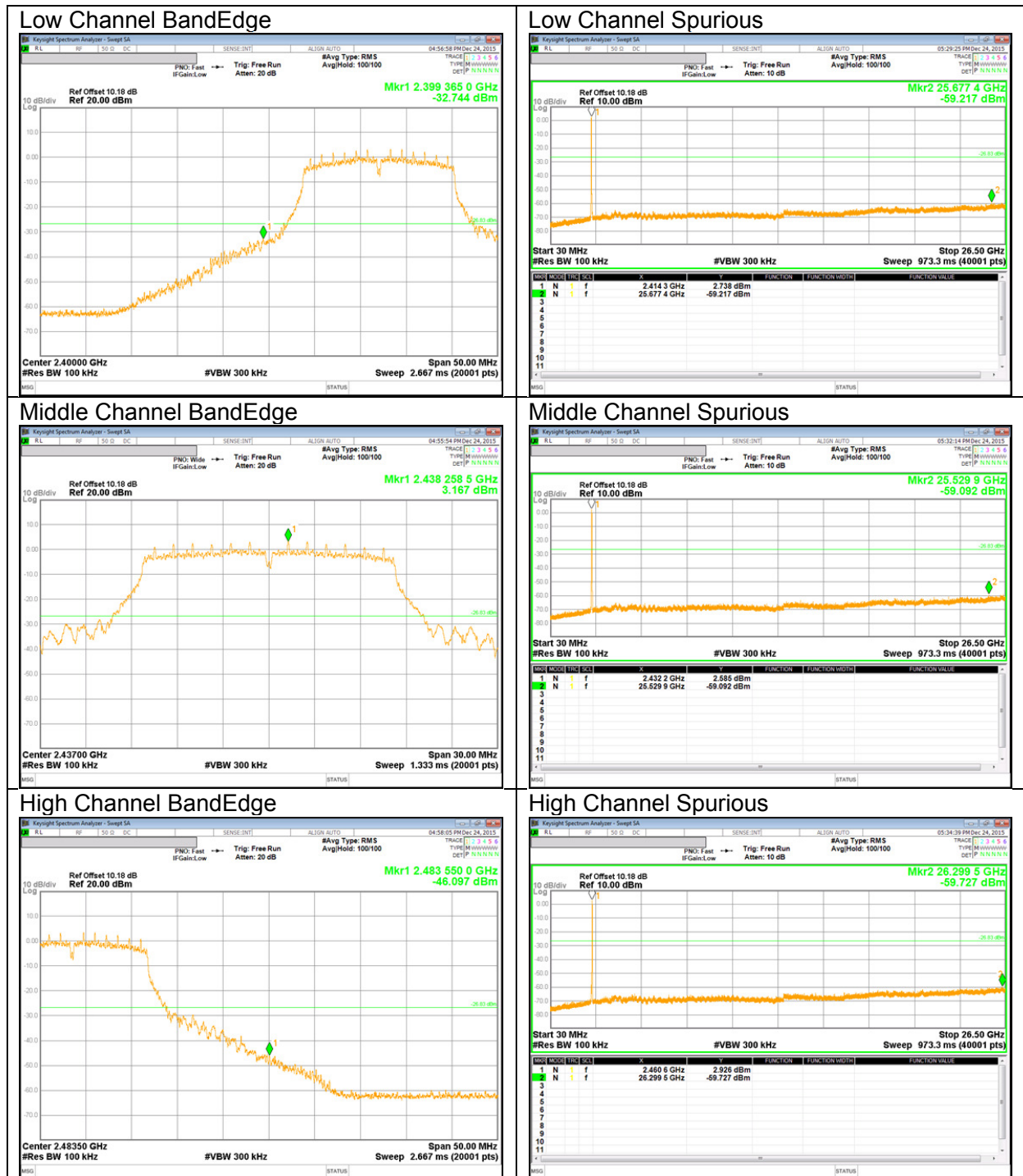
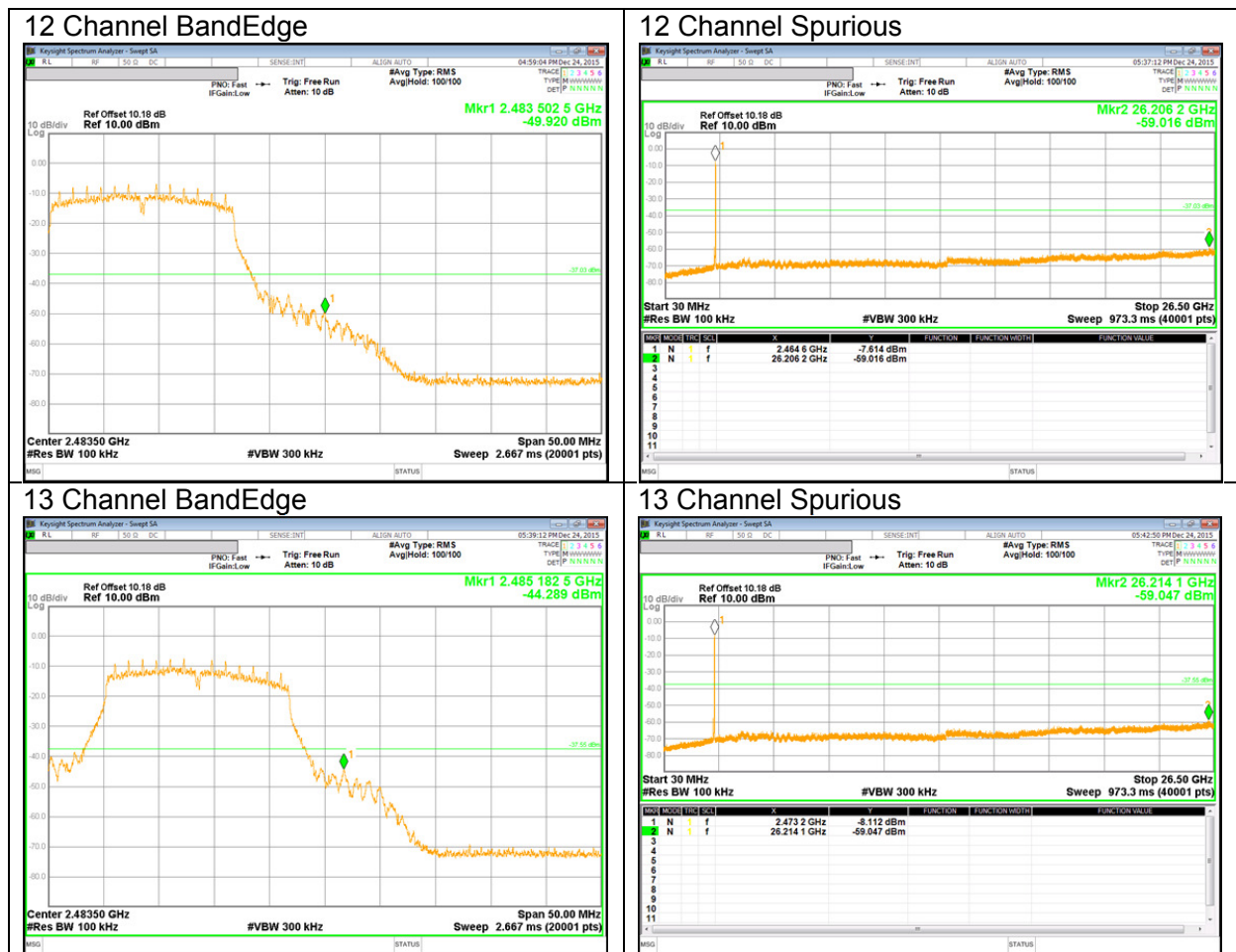




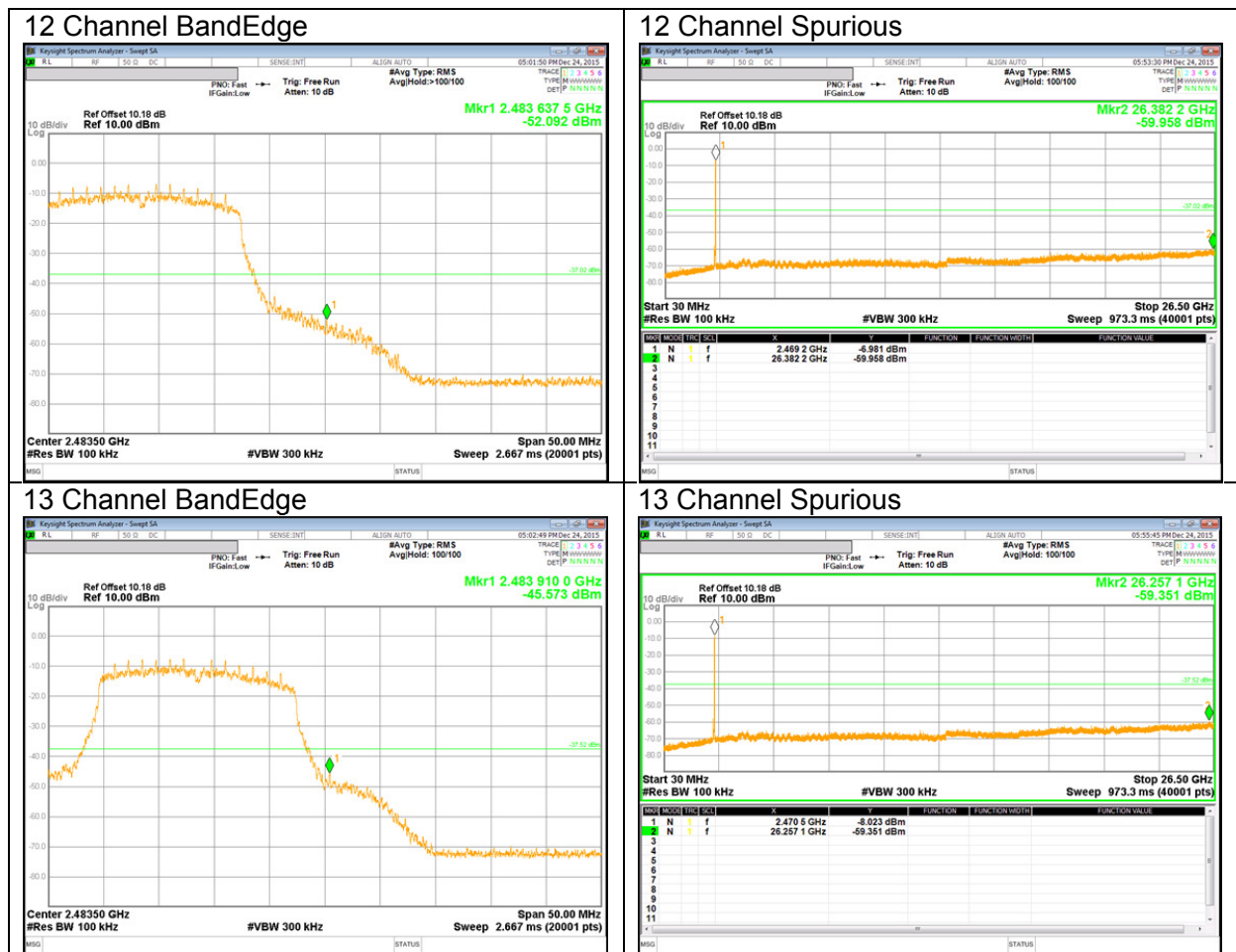
10.5.2. 802.11g MODE IN THE 2.4 GHz BAND





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

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

TEST PROCEDURE

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

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

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 = 0.29dB; N mode = 0.34dB.

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

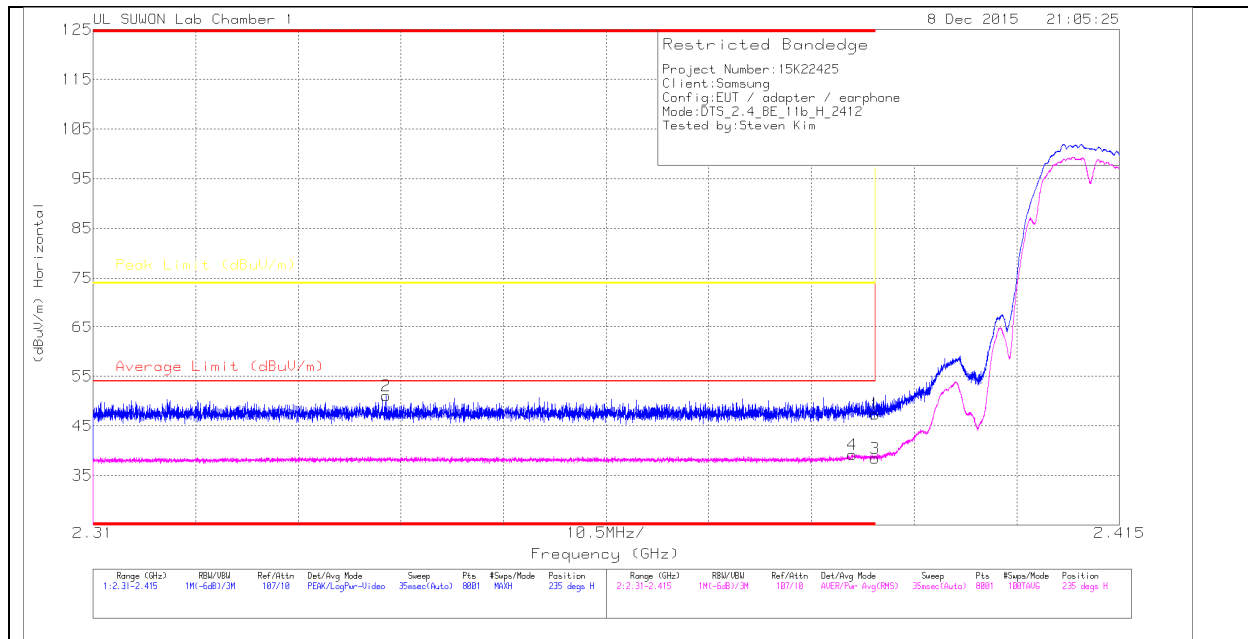
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

11.2. 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

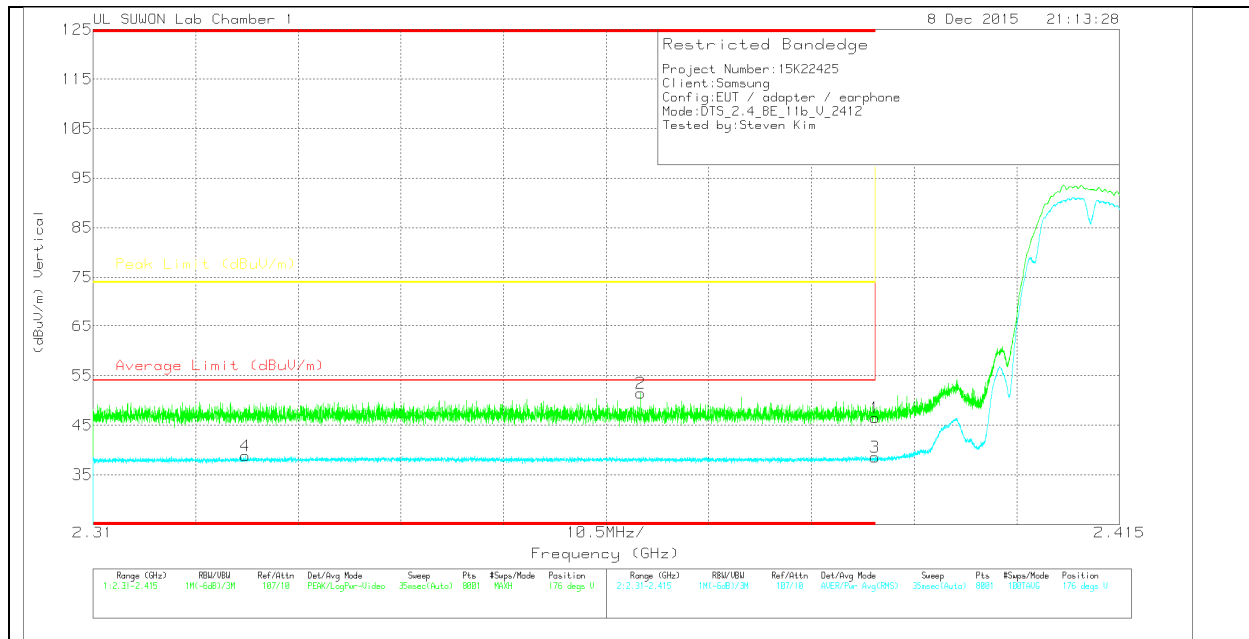
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	44.6	Pk	31.8	-29	0	47.4	-	-	74	-26.6	235	100	H
2	* 2.34	48.38	Pk	31.7	-29	0	51.08	-	-	74	-22.92	235	100	H
3	* 2.39	35.7	RMS	31.8	-29	0	38.5	54	-15.5	-	-	235	100	H
4	* 2.388	36.42	RMS	31.8	-29	0	39.22	54	-14.78	-	-	235	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	43.71	Pk	31.8	-29	0	46.51	-	-	74	-27.49	176	370	V
2	* 2.366	48.67	Pk	31.8	-29	0	51.47	-	-	74	-22.53	176	370	V
3	* 2.39	35.77	RMS	31.8	-29	0	38.57	54	-15.43	-	-	176	370	V
4	* 2.326	36.18	RMS	31.7	-29	0	38.88	54	-15.12	-	-	176	370	V

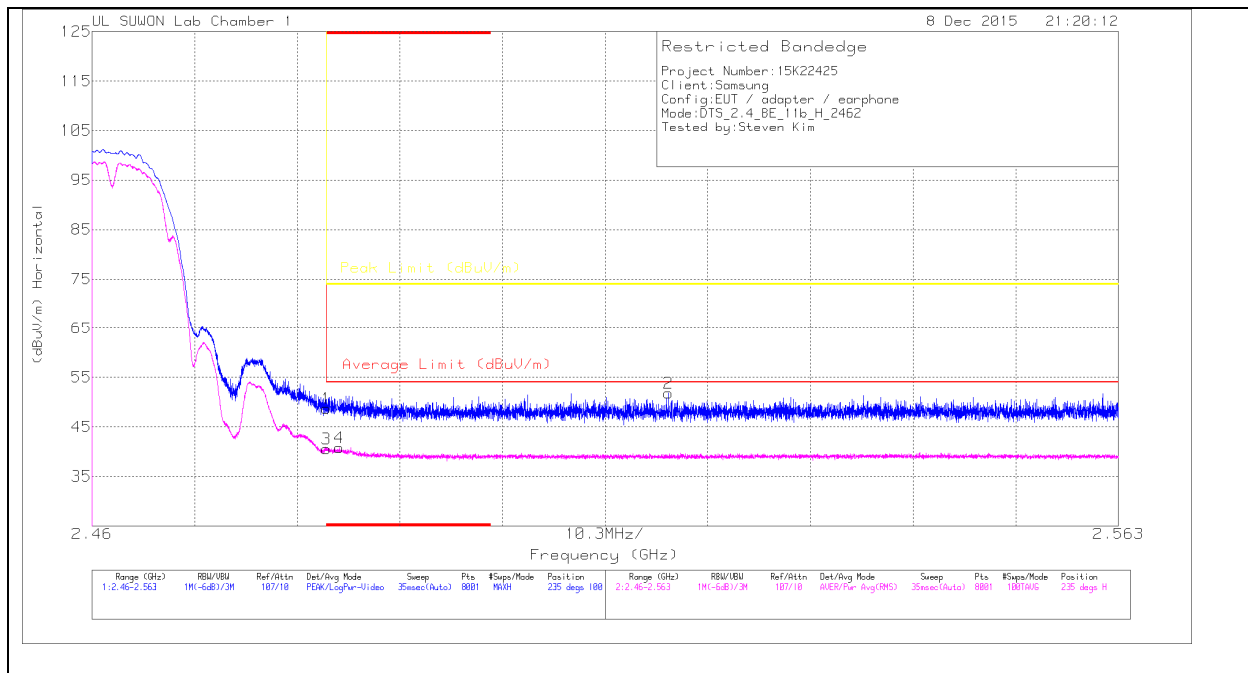
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

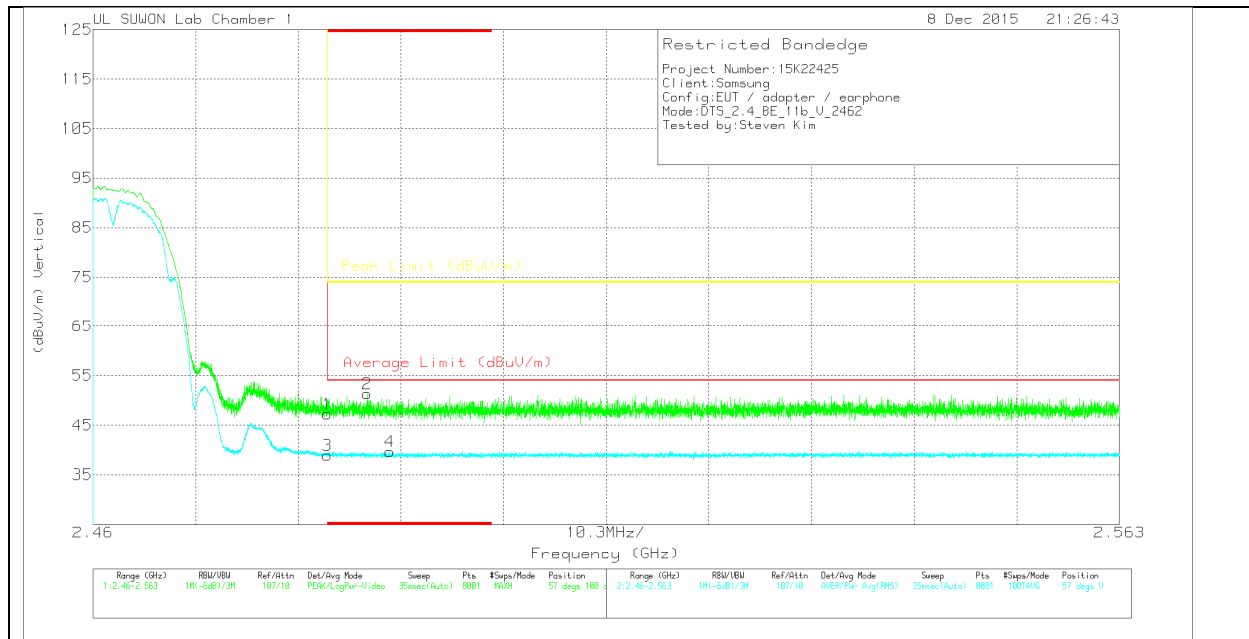
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	45.01	Pk	32	-28.3	0	48.71	-	-	74	-25.29	235	100	H
2	2.518	48.11	Pk	32	-28.3	0	51.81	-	-	74	-22.19	235	100	H
3	* 2.484	36.81	RMS	32	-28.3	0	40.51	54	-13.49	-	-	235	100	H
4	* 2.485	37.08	RMS	32	-28.3	0	40.78	54	-13.22	-	-	235	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	43.58	Pk	32	-28.3	0	47.28	-	-	74	-26.72	57	100	V
2	* 2.488	47.61	Pk	32	-28.3	0	51.31	-	-	74	-22.69	57	100	V
3	* 2.484	35.29	RMS	32	-28.3	0	38.99	54	-15.01	-	-	57	100	V
4	* 2.49	36.04	RMS	32	-28.3	0	39.74	54	-14.26	-	-	57	100	V

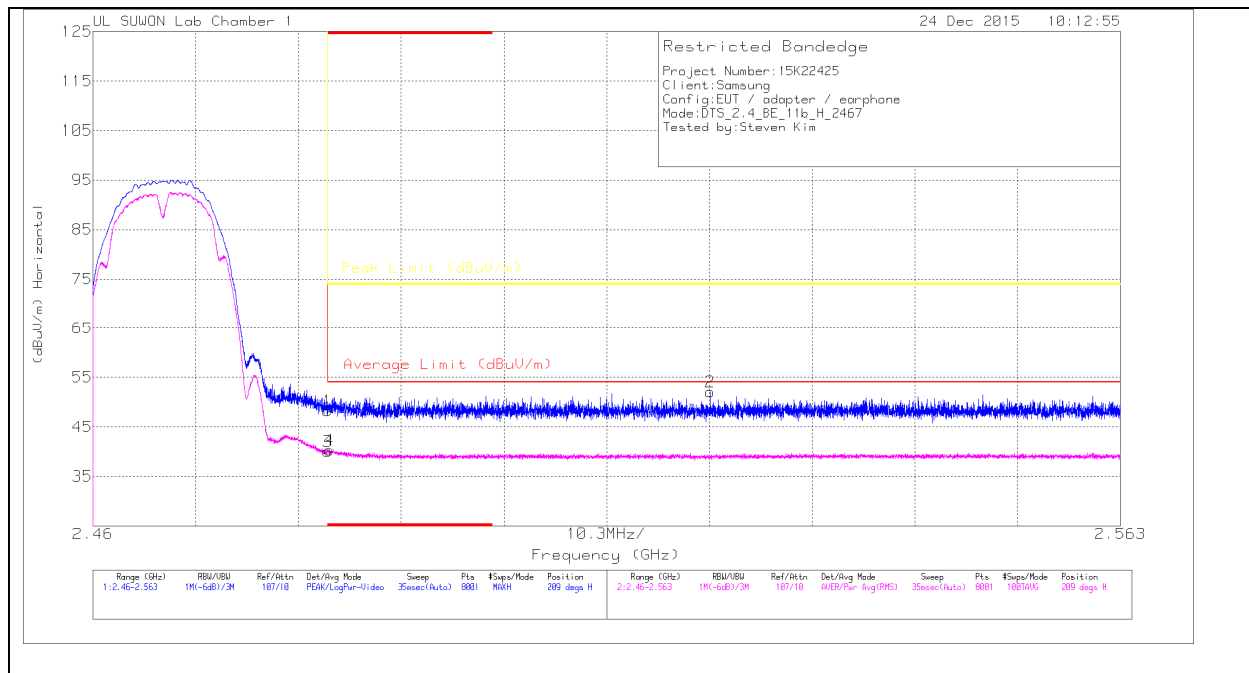
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (12 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

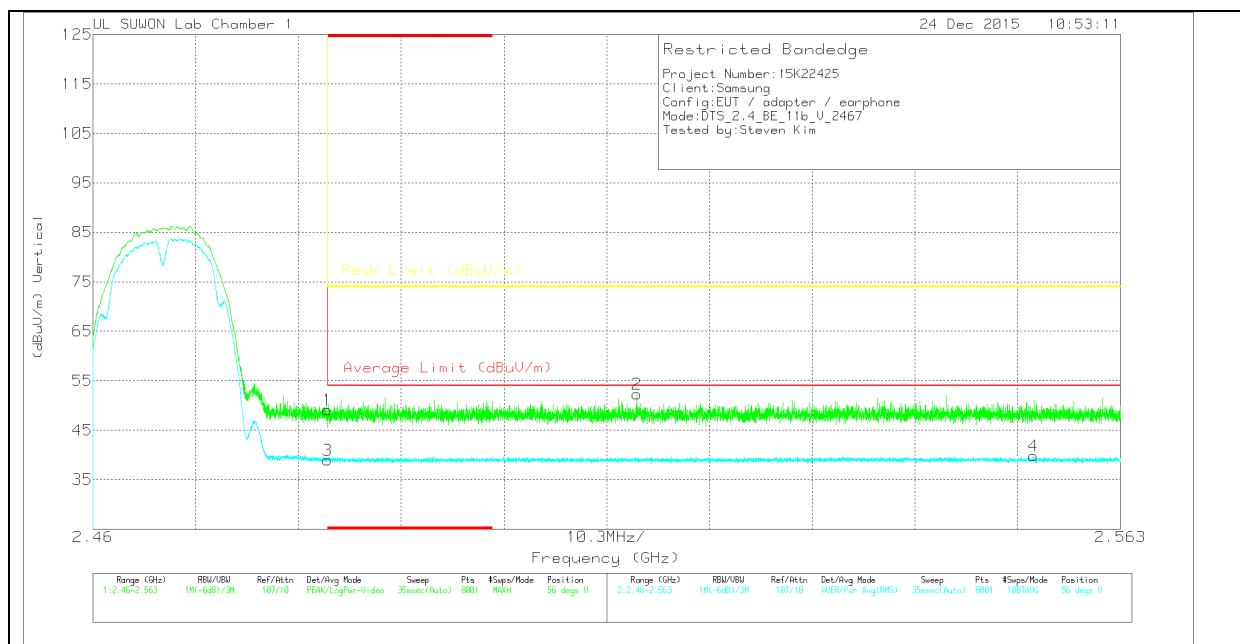
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	44.47	Pk	32	-28.3	0	48.17	-	-	74	-25.83	209	103	H
2	2.522	48.32	Pk	32	-28.3	0	52.02	-	-	74	-21.98	209	103	H
3	* 2.484	36.4	RMS	32	-28.3	0	40.1	54	-13.9	-	-	209	103	H
4	* 2.484	36.57	RMS	32	-28.3	0	40.27	54	-13.73	-	-	209	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)_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	45.34	Pk	32	-28.3	0	49.04	-	-	74	-24.96	56	100	V
2	2.515	48.6	Pk	32	-28.3	0	52.3	-	-	74	-21.7	56	100	V
3	* 2.484	35.26	RMS	32	-28.3	0	38.96	54	-15.04	-	-	56	100	V
4	2.554	36.02	RMS	32	-28.2	0	39.82	54	-14.18	-	-	56	100	V

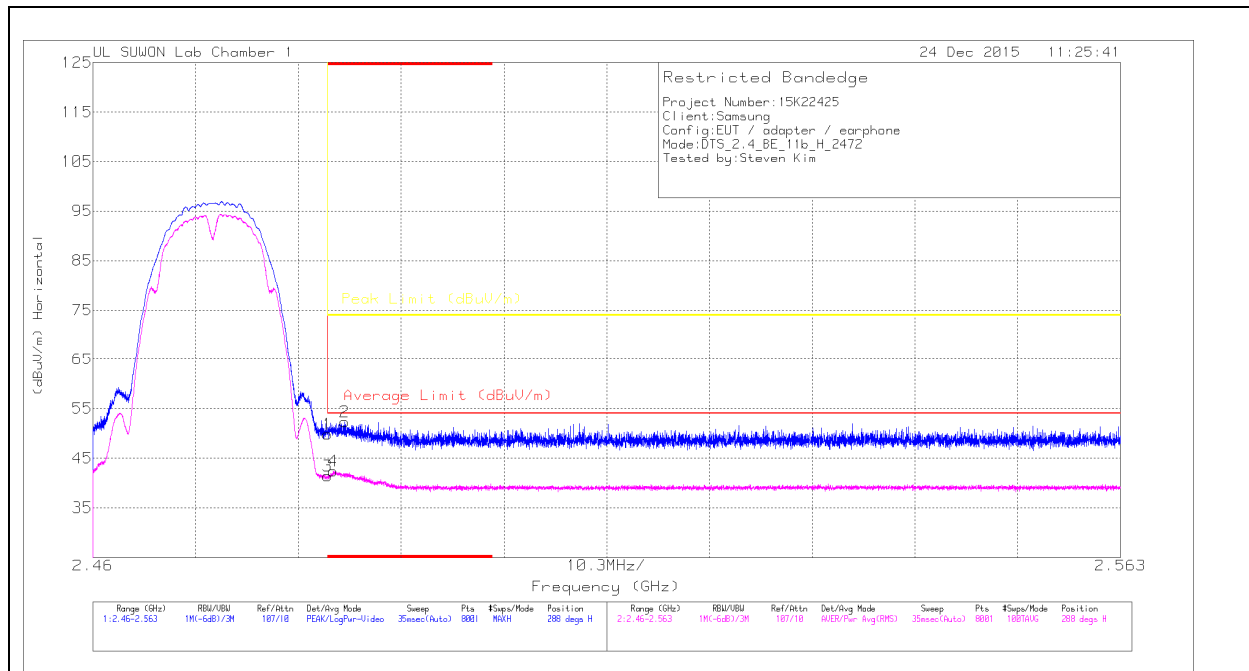
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (13 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

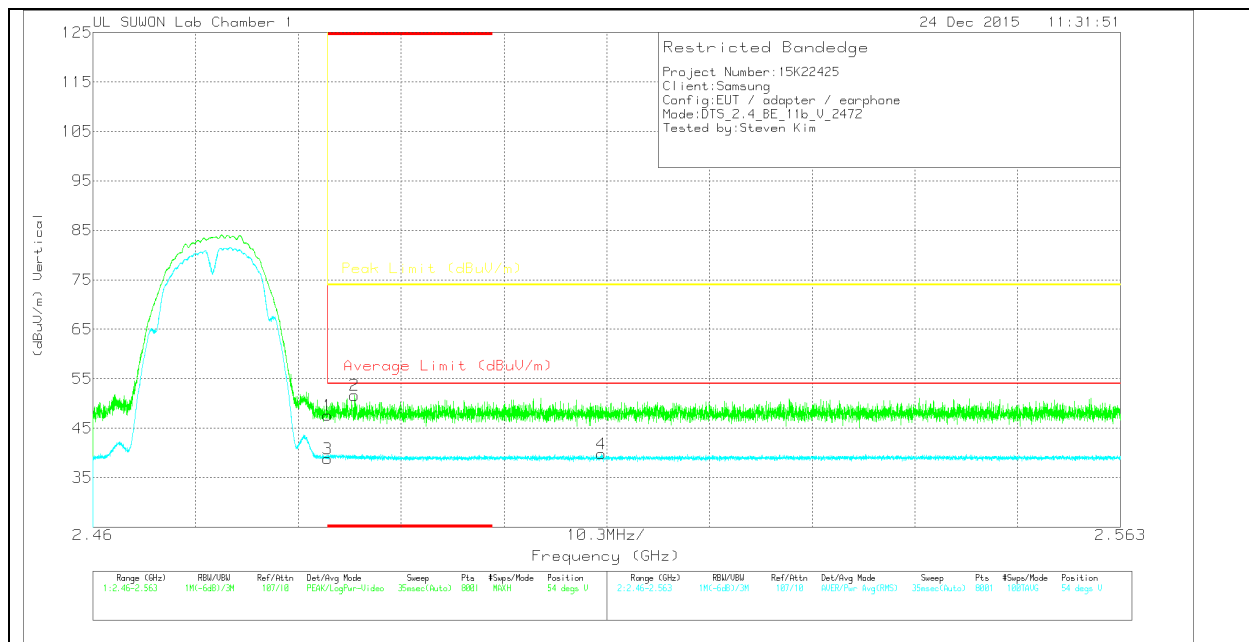
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.484	46.14	Pk	32	-28.3	0	49.84	-	-	74	-24.16	288	100	H
2	* 2.485	48.64	Pk	32	-28.3	0	52.34	-	-	74	-21.66	288	100	H
3	* 2.484	37.76	RMS	32	-28.3	0	41.46	54	-12.54	-	-	288	100	H
4	* 2.484	38.67	RMS	32	-28.3	0	42.37	54	-11.63	-	-	288	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)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.484	43.87	Pk	32	-28.3	0	47.57	-	-	74	-26.43	54	215	V
2	* 2.486	47.93	Pk	32	-28.3	0	51.63	-	-	74	-22.37	54	215	V
3	* 2.484	35.13	RMS	32	-28.3	0	38.83	54	-15.17	-	-	54	215	V
4	2.511	36.07	RMS	32	-28.3	0	39.77	54	-14.23	-	-	54	215	V

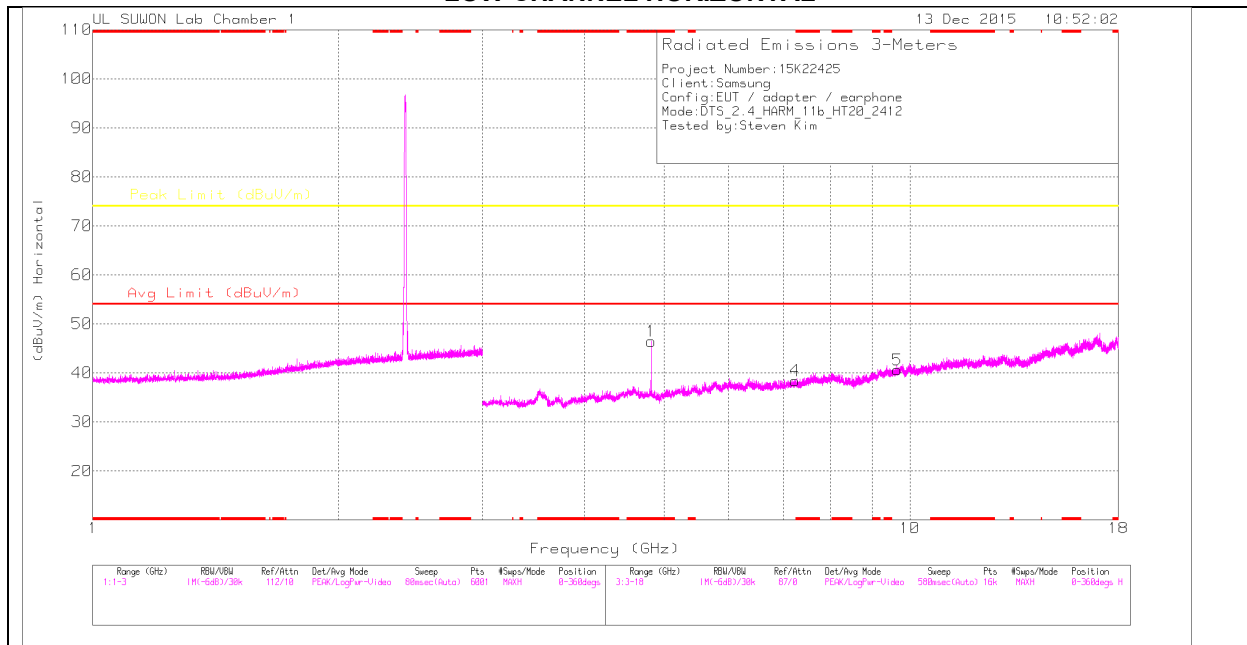
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

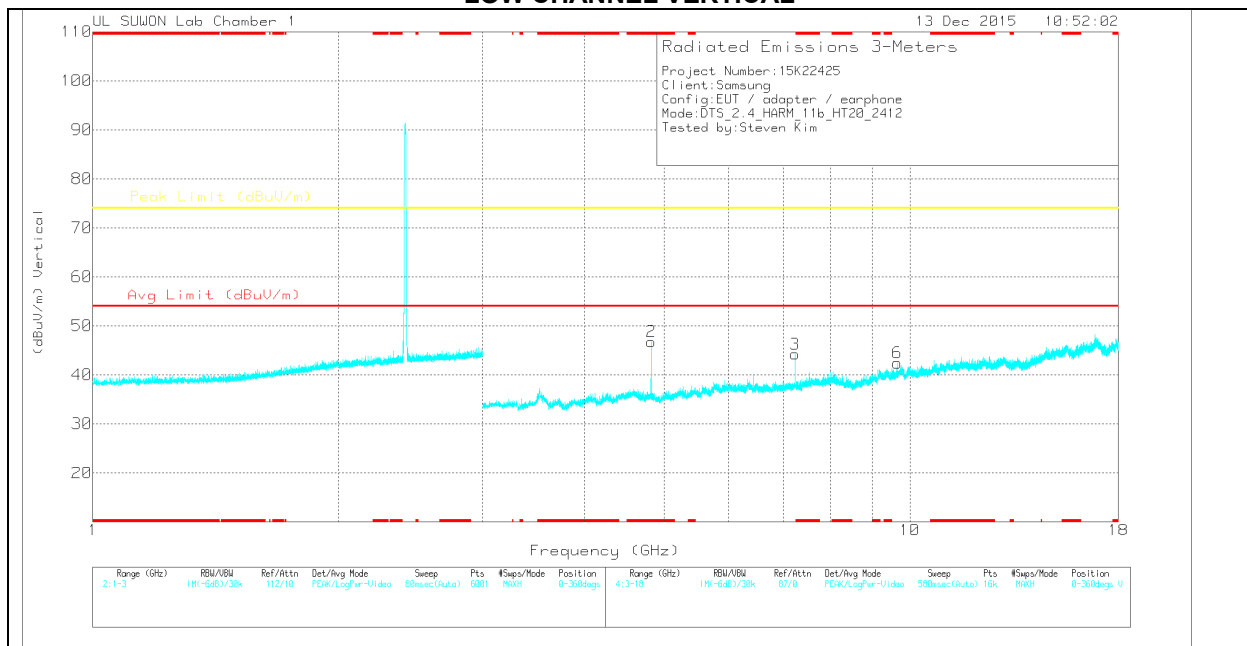
RMS - RMS detection

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	* 4.823	46.25	PK	34	-33.8	0	46.45	-	-	74	-27.55	0-360	100	H
4	7.232	33.72	PK	35.7	-31	0	38.42	-	-	74	-35.58	0-360	200	H
5	9.647	30.89	PK	37.1	-27.4	0	40.59	-	-	74	-33.41	0-360	200	H
2	* 4.824	46.61	PK	34	-33.8	0	46.81	-	-	74	-27.19	0-360	100	V
3	7.234	39.44	PK	35.7	-30.9	0	44.24	-	-	74	-29.76	0-360	100	V
6	9.648	32.74	PK	37.1	-27.4	0	42.44	-	-	74	-31.56	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

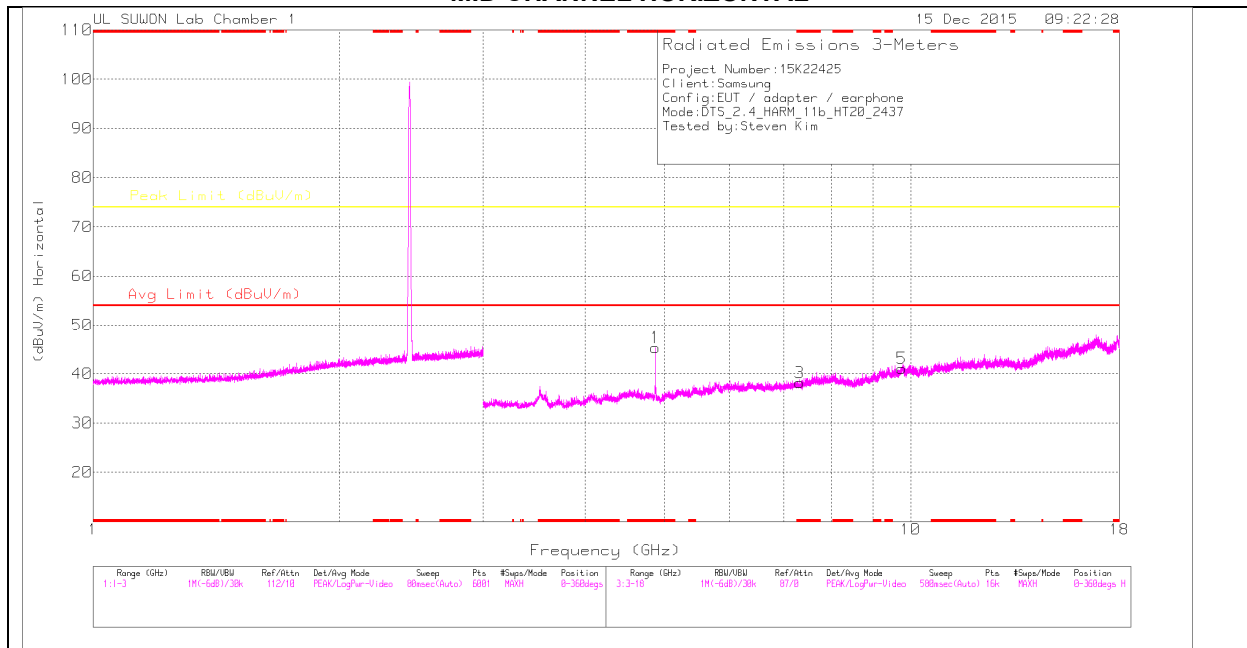
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001 68717)_1 50619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.824	51.92	PK2	34	-33.8	0	52.12	-	-	74	-21.88	201	101	H
* 4.824	46.2	MAv1	34	-33.8	0	46.4	54	-7.6	-	-	201	101	H
* 4.824	51.69	PK2	34	-33.8	0	51.89	-	-	74	-22.11	5	291	V
* 4.824	46.34	MAv1	34	-33.8	0	46.54	54	-7.46	-	-	5	291	V
7.237	48.19	PK2	35.7	-30.9	0	52.99	-	-	74	-21.01	358	100	V
7.235	39.62	MAv1	35.7	-30.9	0	44.42	-	-	-	-	358	100	V

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

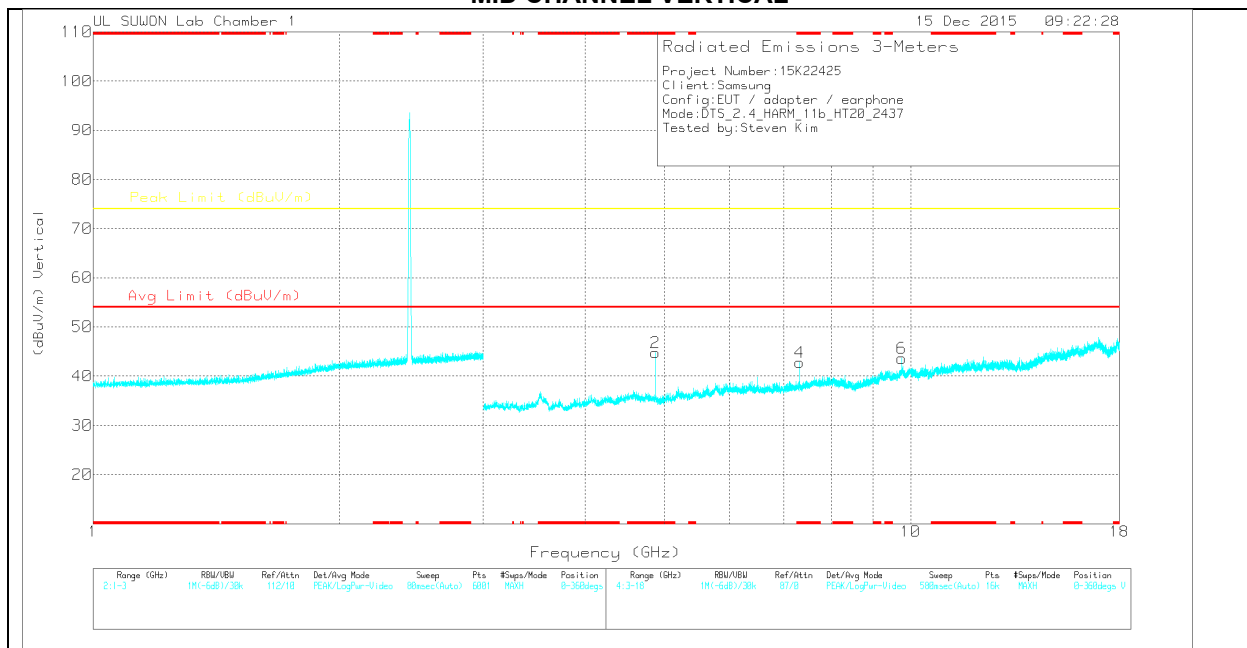
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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(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	* 4.874	45.3	PK	34	-34	0	45.3	-	-	74	-28.7	0-360	100	H
3	* 7.317	33.26	PK	35.8	-30.9	0	38.16	-	-	74	-35.84	0-360	200	H
5	9.749	30.66	PK	37.2	-26.8	0	41.06	-	-	74	-32.94	0-360	200	H
2	* 4.874	44.74	PK	34	-34	0	44.74	-	-	74	-29.26	0-360	100	V
4	* 7.313	37.88	PK	35.8	-30.9	0	42.78	-	-	74	-31.22	0-360	100	V
6	9.748	33.2	PK	37.2	-26.8	0	43.6	-	-	74	-30.4	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

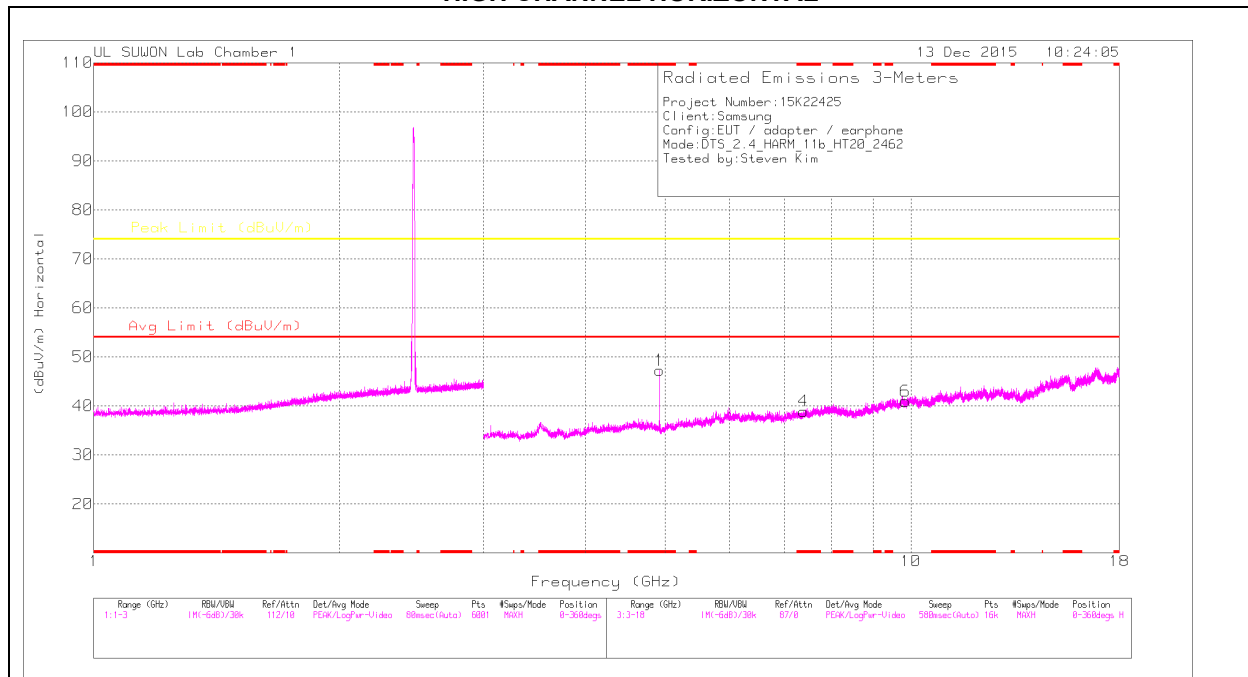
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.874	52.22	PK2	34	-34	0	52.22	-	-	74	-21.78	213	107	H
* 4.874	45.71	MAv1	34	-34	0	45.71	54	-8.29	-	-	213	107	H
* 4.874	52	PK2	34	-34	0	52	-	-	74	-22	268	107	V
* 4.874	45.96	MAv1	34	-34	0	45.96	54	-8.04	-	-	268	107	V
* 7.314	47.35	PK2	35.8	-30.9	0	52.25	-	-	74	-21.75	12	100	V
* 7.314	37.28	MAv1	35.8	-30.9	0	42.18	54	-11.82	-	-	12	100	V
9.748	42.03	PK2	37.2	-26.8	0	52.43	-	-	74	-21.57	19	109	V

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

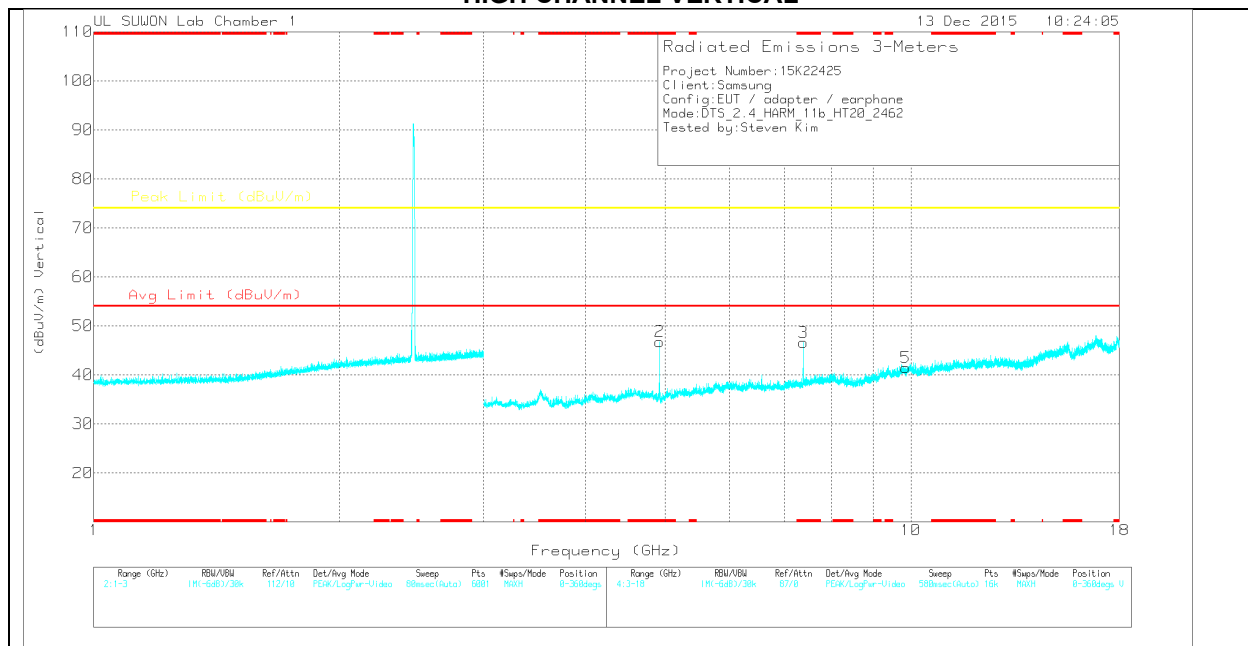
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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	47.27	Pk	34	-34	0	47.27	-	-	74	-26.73	0-360	100	H
4	* 7.385	33.84	Pk	35.8	-30.7	0	38.94	-	-	74	-35.06	0-360	100	H
6	9.845	31.15	Pk	37.3	-27.5	0	40.95	-	-	74	-33.05	0-360	200	H
2	* 4.924	46.81	Pk	34	-34	0	46.81	-	-	74	-27.19	0-360	100	V
3	* 7.386	41.52	Pk	35.8	-30.7	0	46.62	-	-	74	-27.38	0-360	100	V
5	9.848	31.78	Pk	37.3	-27.6	0	41.48	-	-	74	-32.52	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

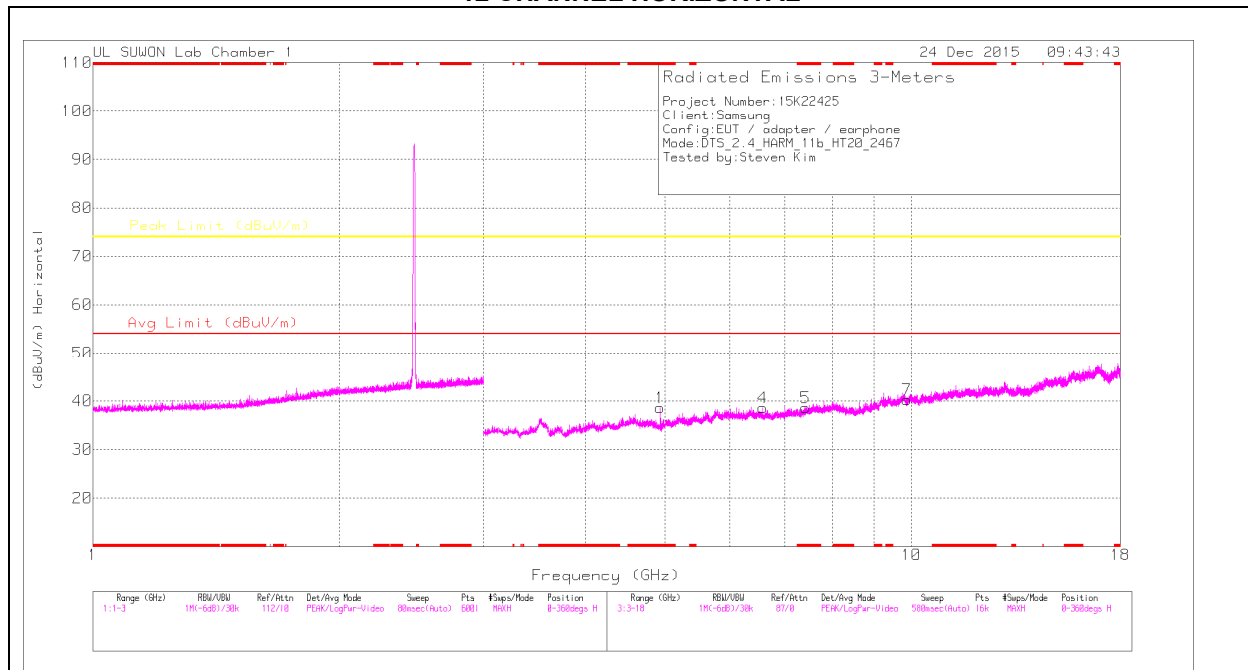
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001 68717)_1 50619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.924	52.66	PK2	34	-34	0	52.66	-	-	74	-21.34	276	100	H
* 4.924	47.36	MAv1	34	-34	0	47.36	54	-6.64	-	-	276	100	H
* 4.924	52.07	PK2	34	-34	0	52.07	-	-	74	-21.93	13	282	V
* 4.924	46.62	MAv1	34	-34	0	46.62	54	-7.38	-	-	13	282	V
* 7.388	49.73	PK2	35.8	-30.7	0	54.83	-	-	74	-19.17	0	105	V
* 7.387	42.08	MAv1	35.8	-30.7	0	47.18	54	-6.82	-	-	0	105	V

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

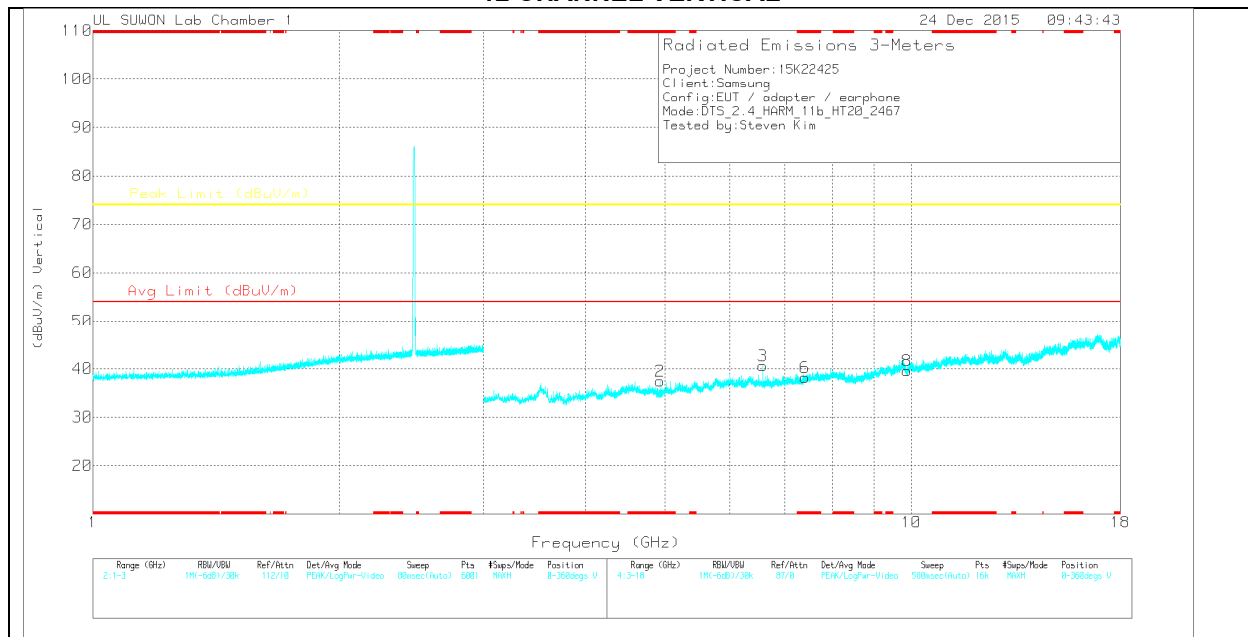
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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	38.55	Pk	34	-34	0	38.55	-	-	74	-35.45	0-360	100	H
4	6.578	34.22	Pk	35.5	-31.1	0	38.62	-	-	74	-35.38	0-360	200	H
5	* 7.417	33.5	Pk	35.8	-30.7	0	38.6	-	-	74	-35.4	0-360	200	H
7	9.872	30.99	Pk	37.3	-28	0	40.29	-	-	74	-33.71	0-360	100	H
2	* 4.934	37.46	Pk	34	-34	0	37.46	-	-	74	-36.54	0-360	100	V
3	6.578	36.24	Pk	35.5	-31.1	0	40.64	-	-	74	-33.36	0-360	100	V
6	* 7.412	33.17	Pk	35.8	-30.7	0	38.27	-	-	74	-35.73	0-360	200	V
8	9.868	30.16	Pk	37.3	-27.9	0	39.56	-	-	74	-34.44	0-360	100	V

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

PK – Peak Detector

Radiated Emissions

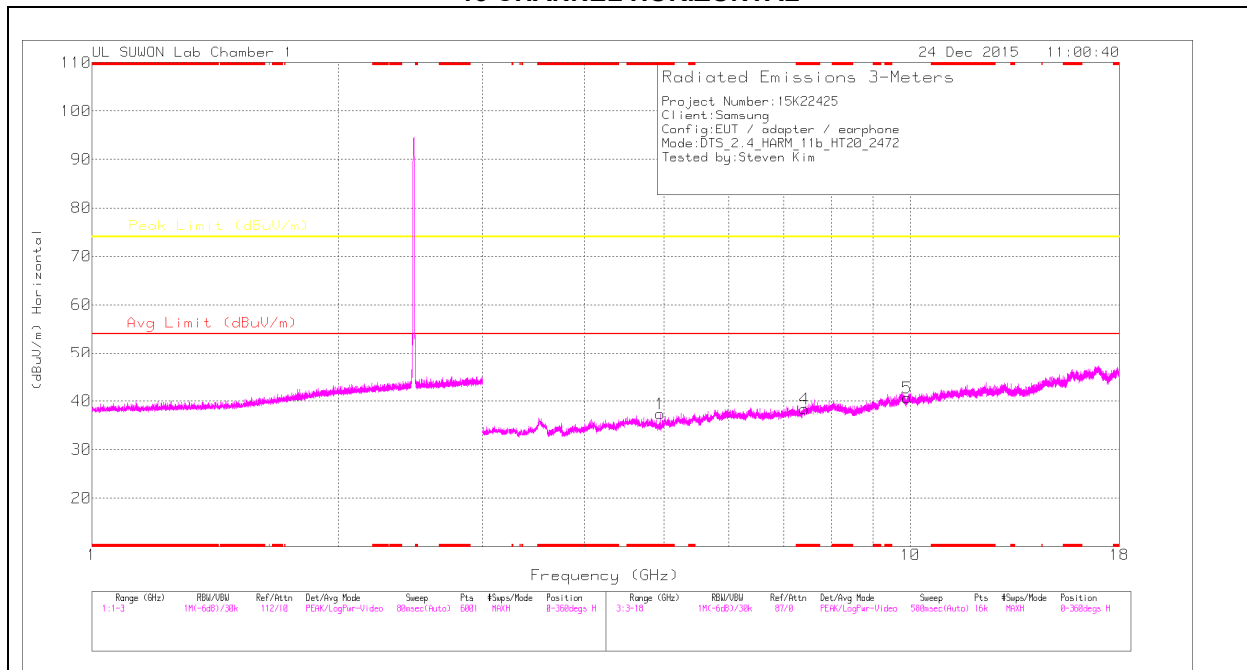
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001 68717)_1 50619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.934	46.64	PK2	34	-34	0	46.64	-	-	74	-27.36	188	192	H
* 4.934	36.03	MAv1	34	-34	0	36.03	54	-17.97	-	-	188	192	H
* 4.934	46.27	PK2	34	-34	0	46.27	-	-	74	-27.73	277	172	V
* 4.927	34.27	MAv1	34	-34	0	34.27	54	-19.73	-	-	277	172	V
6.579	44.31	PK2	35.5	-31.1	0	48.71	-	-	74	-25.29	278	131	V
6.579	31.91	MAv1	35.5	-31.1	0	36.31	-	-	-	-	278	131	V

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

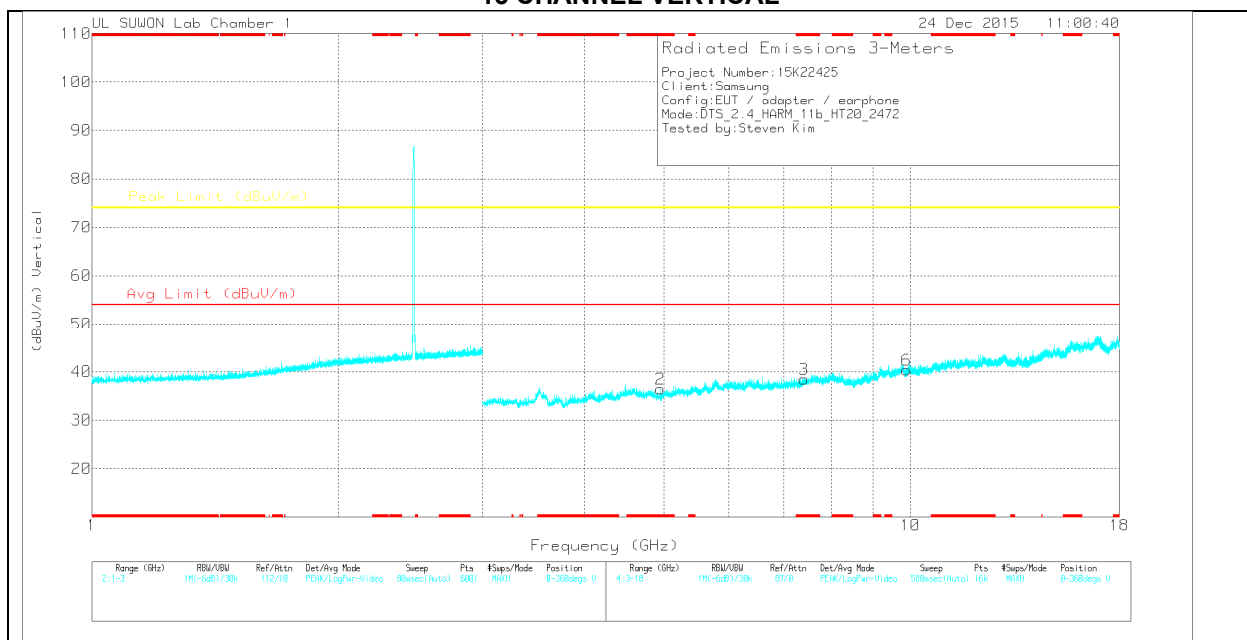
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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	* 4.943	37.29	PK	34	-34	0	37.29	-	-	74	-36.71	0-360	100	H
4	* 7.421	33.28	PK	35.8	-30.7	0	38.38	-	-	74	-35.62	0-360	200	H
5	9.905	30.85	PK	37.4	-27.6	0	40.65	-	-	74	-33.35	0-360	100	H
2	* 4.943	36.41	PK	34	-34	0	36.41	-	-	74	-37.59	0-360	200	V
3	* 7.414	33.36	PK	35.8	-30.7	0	38.46	-	-	74	-35.54	0-360	100	V
6	9.9	30.71	PK	37.4	-27.7	0	40.41	-	-	74	-33.59	0-360	100	V

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

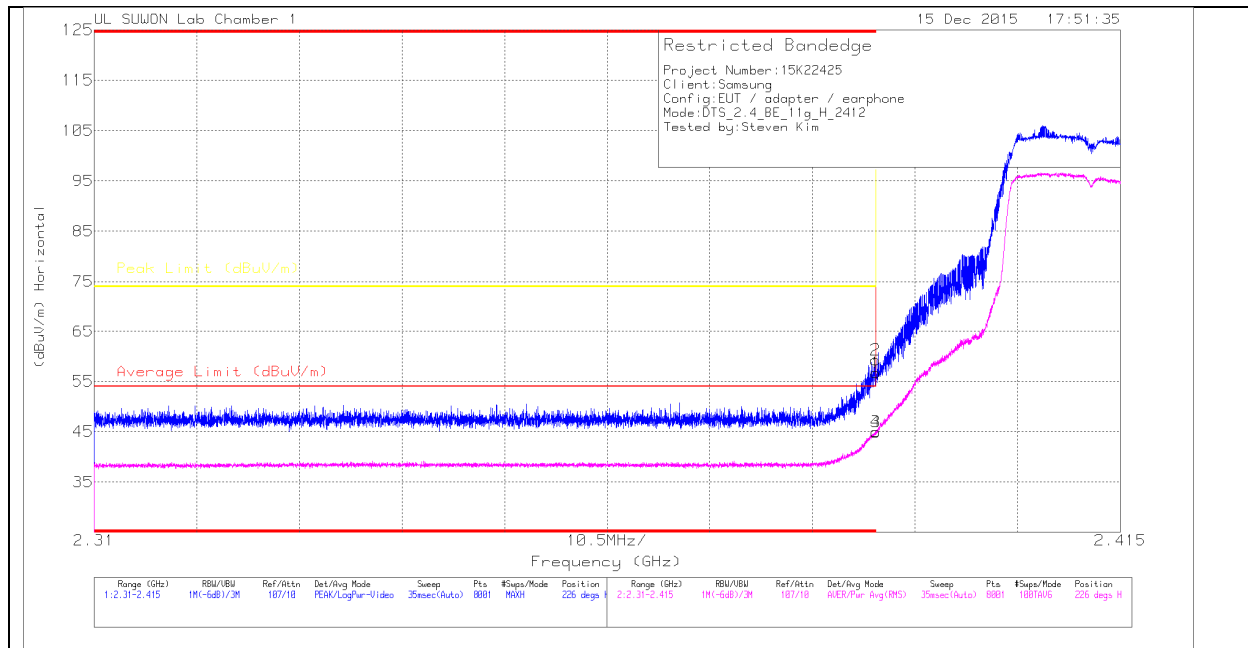
PK – Peak Detector

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

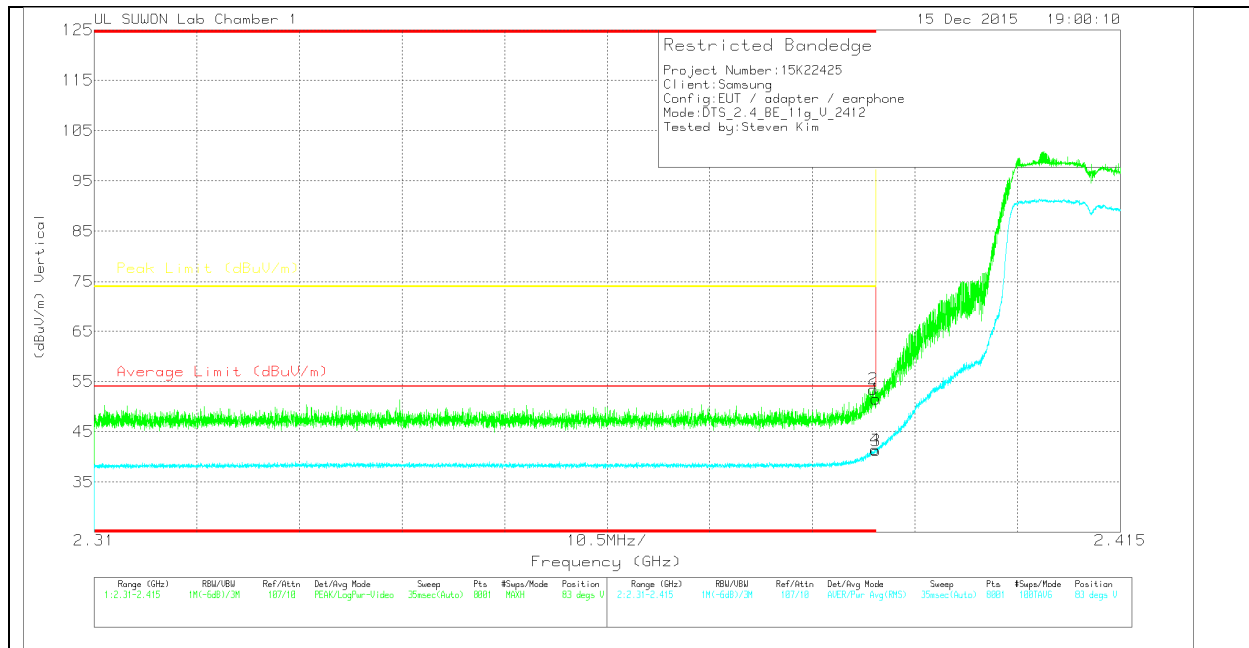
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	53.88	Pk	31.8	-29	0	56.68	-	-	74	-17.32	226	102	H
2	* 2.39	56.46	Pk	31.8	-29	0	59.26	-	-	74	-14.74	226	102	H
3	* 2.39	41.9	RMS	31.8	-29	.29	44.99	54	-9.01	-	-	226	102	H
4	* 2.39	41.87	RMS	31.8	-29	.29	44.96	54	-9.04	-	-	226	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	* 2.39	48.74	Pk	31.8	-29	0	51.54	-	-	74	-22.46	83	366	V
2	* 2.39	50.66	Pk	31.8	-29	0	53.46	-	-	74	-20.54	83	366	V
3	* 2.39	38.17	RMS	31.8	-29	.29	41.26	54	-12.74	-	-	83	366	V
4	* 2.39	38.38	RMS	31.8	-29	.29	41.47	54	-12.53	-	-	83	366	V

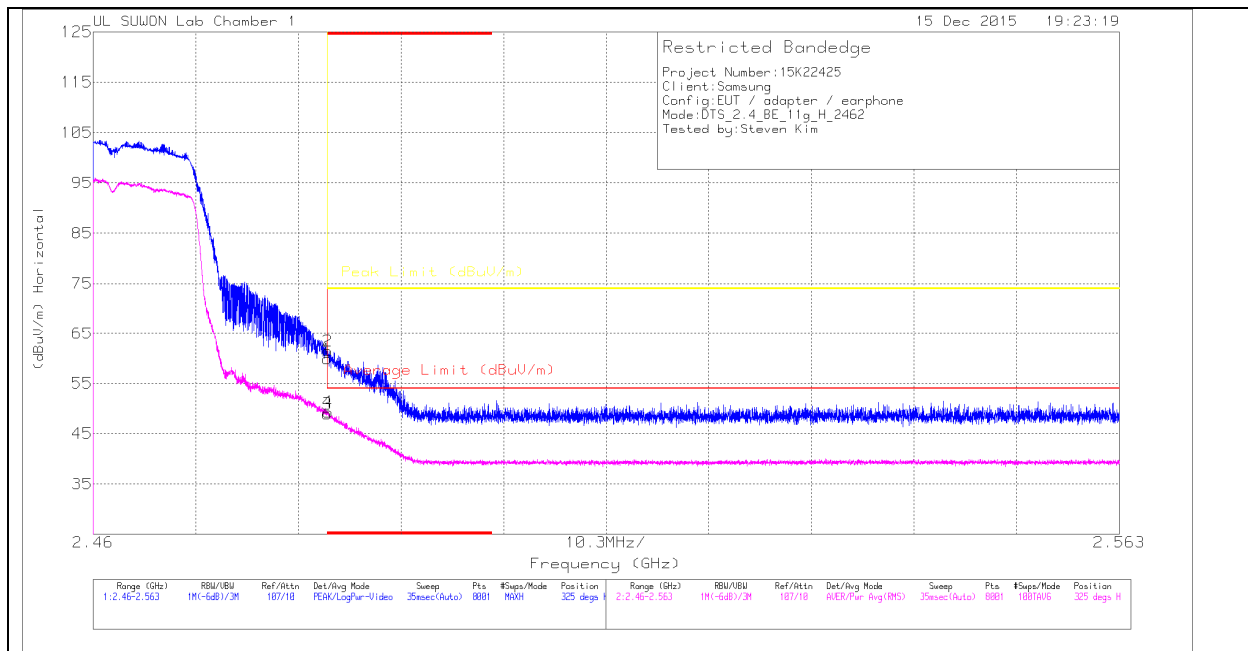
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

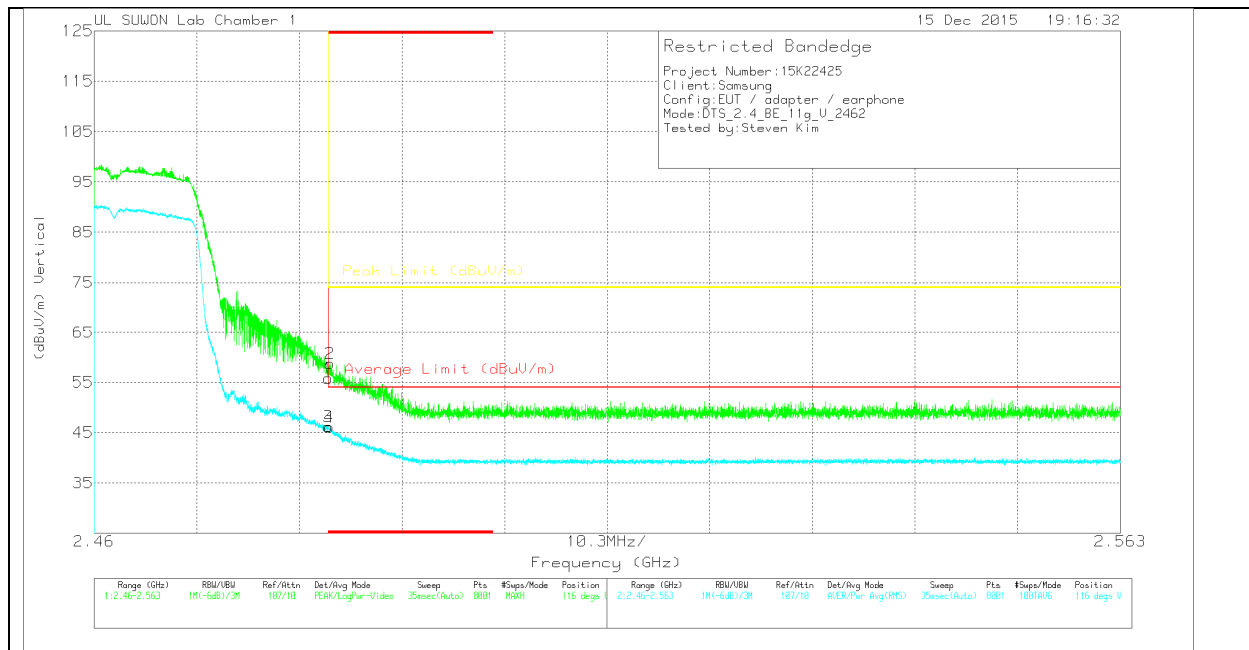
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	56.13	Pk	32	-28.3	0	59.83	-	-	74	-14.17	325	346	H
2	* 2.484	57.73	Pk	32	-28.3	0	61.43	-	-	74	-12.57	325	346	H
3	* 2.484	44.93	RMS	32	-28.3	29	48.92	54	-5.08	-	-	325	346	H
4	* 2.484	45.3	RMS	32	-28.3	29	49.29	54	-4.71	-	-	325	346	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	52.1	Pk	32	-28.3	0	55.8	-	-	74	-18.2	116	284	V
2	* 2.484	55.04	Pk	32	-28.3	0	58.74	-	-	74	-15.26	116	284	V
3	* 2.484	42.2	RMS	32	-28.3	.29	46.19	54	-7.81	-	-	116	284	V
4	* 2.484	42.1	RMS	32	-28.3	.29	46.09	54	-7.91	-	-	116	284	V

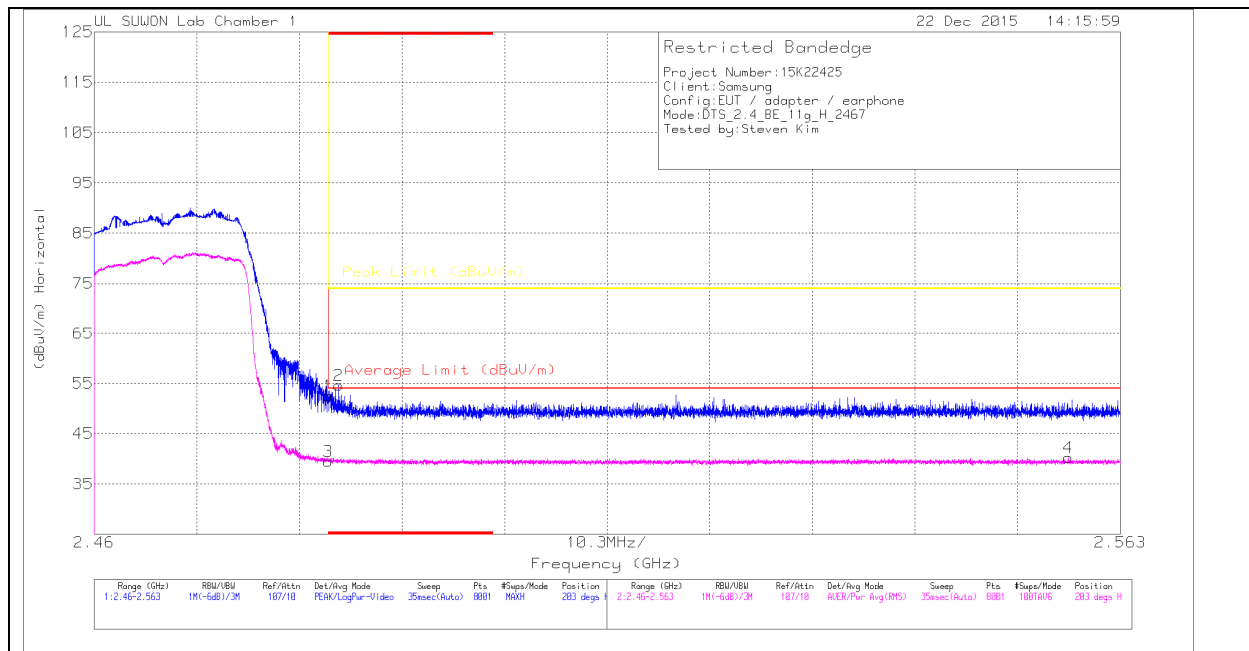
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (12 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

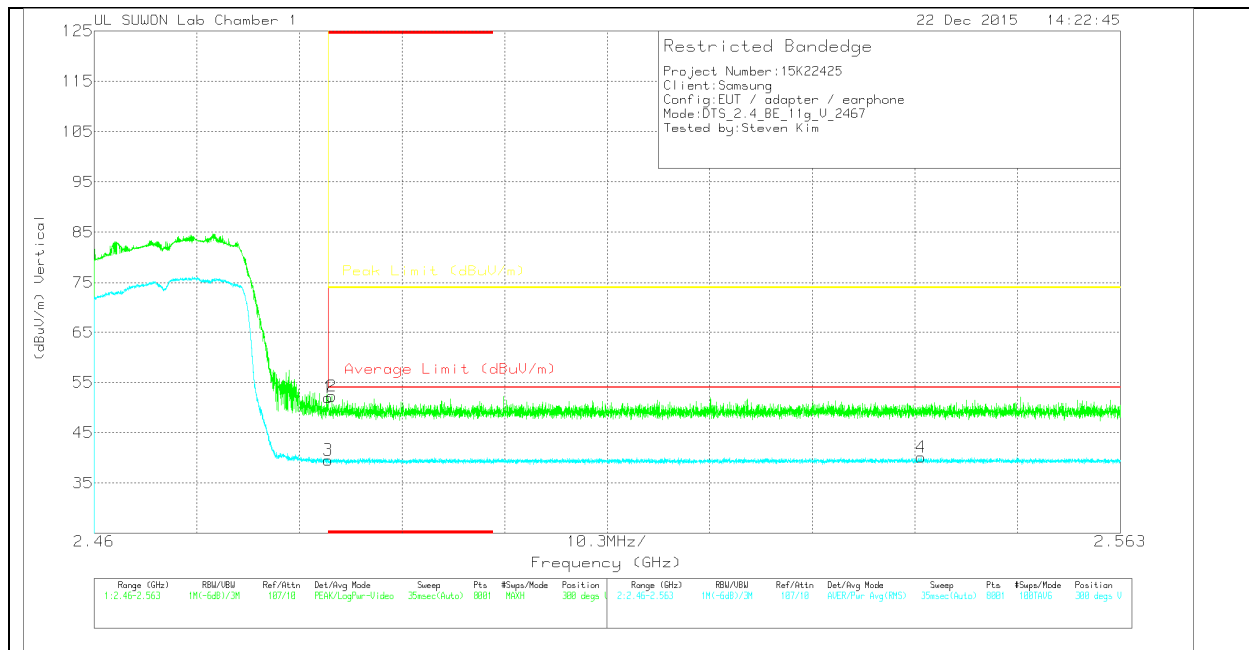
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	48.82	Pk	32	-28.3	0	52.52	-	-	74	-21.48	203	101	H
2	* 2.485	50.92	Pk	32	-28.3	0	54.62	-	-	74	-19.38	203	101	H
3	* 2.484	35.55	RMS	32	-28.3	29	39.54	54	-14.46	-	-	203	101	H
4	2.558	36.14	RMS	32	-28.2	29	40.23	54	-13.77	-	-	203	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	48.27	Pk	32	-28.3	0	51.97	-	-	74	-22.03	300	342	V
2	* 2.484	48.57	Pk	32	-28.3	0	52.27	-	-	74	-21.73	300	342	V
3	* 2.484	35.59	RMS	32	-28.3	.29	39.58	54	-14.42	-	-	300	342	V
4	2.543	36.08	RMS	32	-28.2	.29	40.17	54	-13.83	-	-	300	342	V

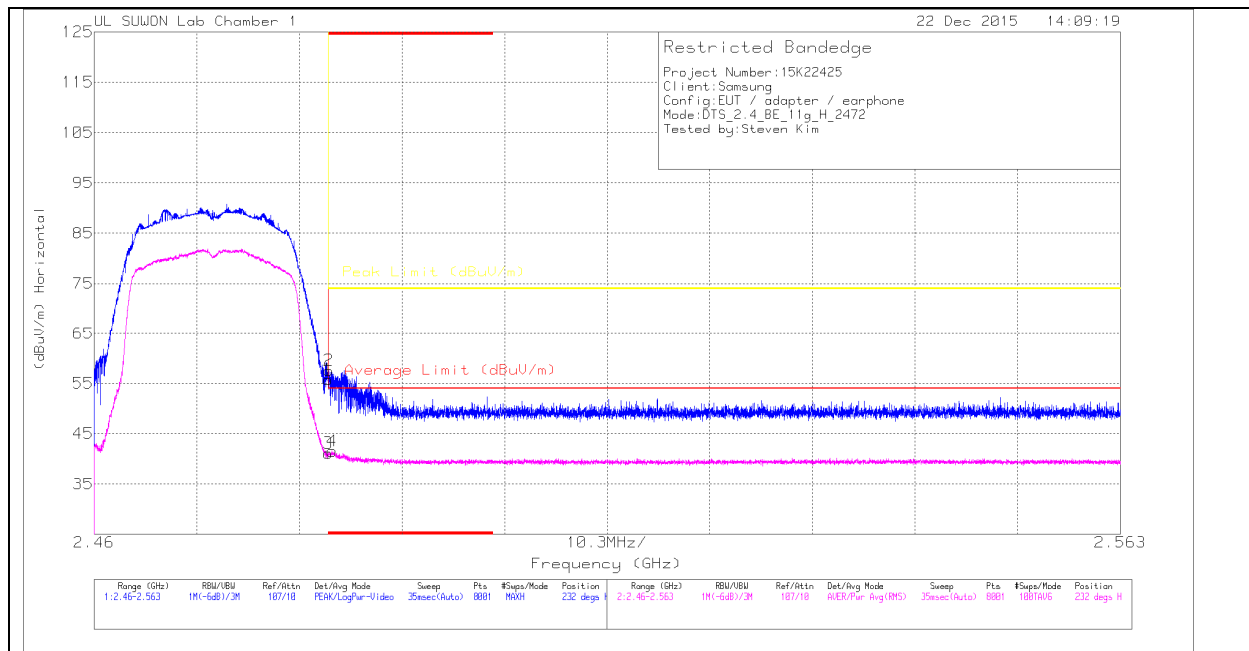
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (13 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

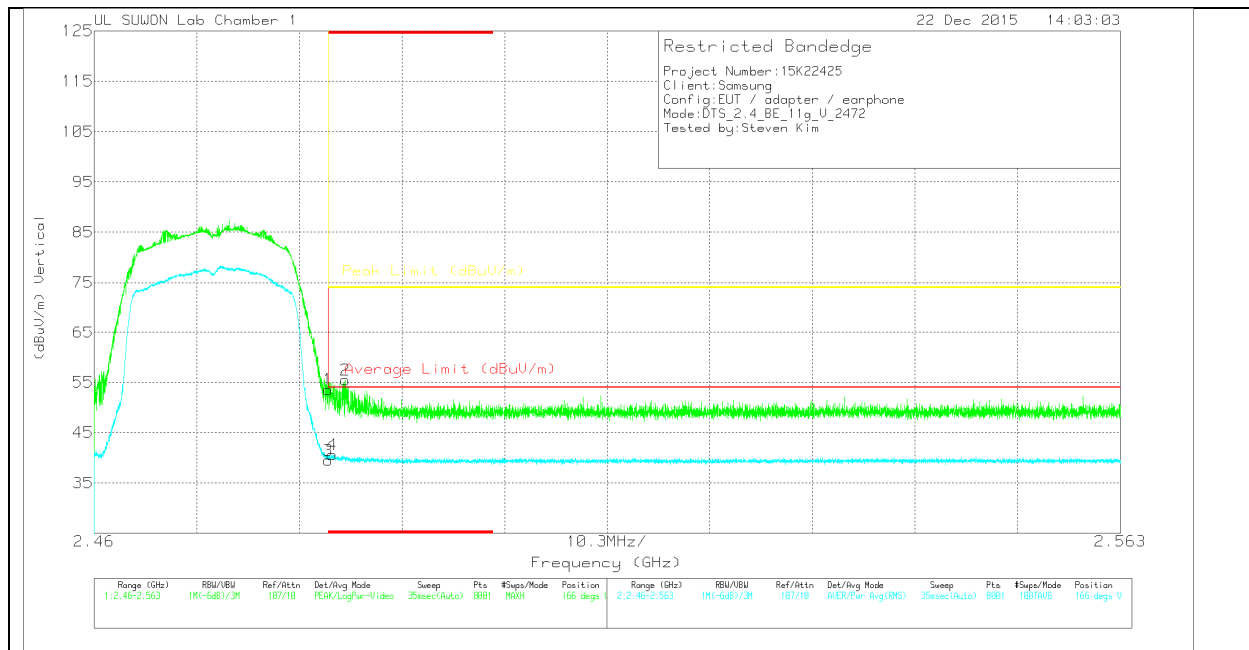
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	52.04	Pk	32	-28.3	0	55.74	-	-	74	-18.26	232	101	H
2	* 2.484	53.89	Pk	32	-28.3	0	57.59	-	-	74	-16.41	232	101	H
3	* 2.484	37.14	RMS	32	-28.3	29	41.13	54	-12.87	-	-	232	101	H
4	* 2.484	37.56	RMS	32	-28.3	29	41.55	54	-12.45	-	-	232	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	49.89	Pk	32	-28.3	0	53.59	-	-	74	-20.41	166	353	V
2	* 2.485	51.75	Pk	32	-28.3	0	55.45	-	-	74	-18.55	166	353	V
3	* 2.484	35.51	RMS	32	-28.3	.29	39.5	54	-14.5	-	-	166	353	V
4	* 2.484	36.62	RMS	32	-28.3	.29	40.61	54	-13.39	-	-	166	353	V

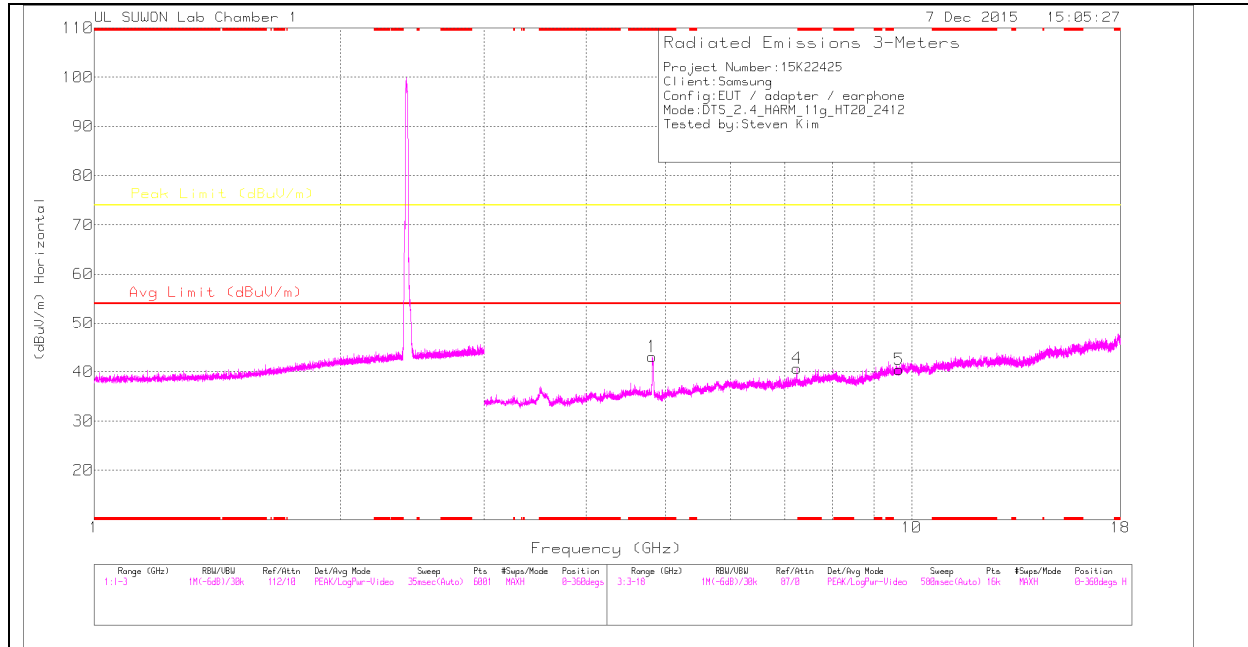
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

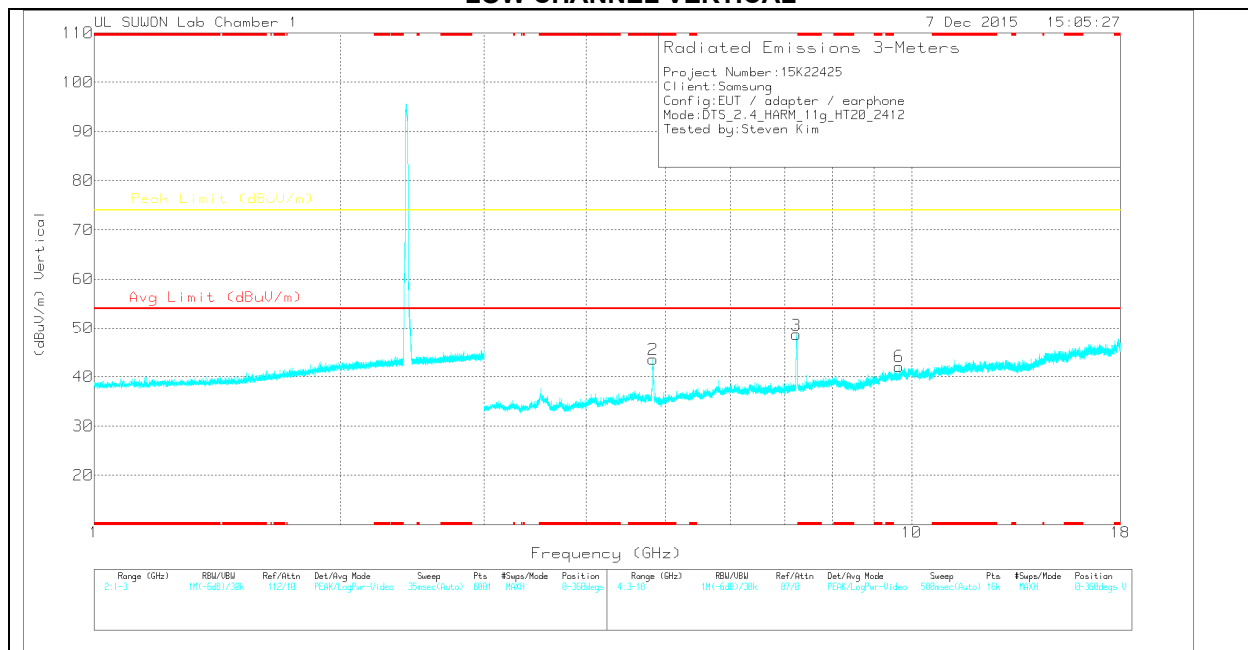
RMS - RMS detection

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	* 4.818	42.86	Pk	34	-33.8	0	43.06	-	-	74	-30.94	0-360	100	H
4	7.239	35.92	Pk	35.7	-30.9	0	40.72	-	-	74	-33.28	0-360	200	H
5	9.647	30.77	Pk	37.1	-27.4	0	40.47	-	-	74	-33.53	0-360	100	H
2	* 4.827	43.31	Pk	34	-33.8	0	43.51	-	-	74	-30.49	0-360	100	V
3	7.231	43.89	Pk	35.7	-31	0	48.59	-	-	74	-25.41	0-360	100	V
6	9.647	32.36	Pk	37.1	-27.4	0	42.06	-	-	74	-31.94	0-360	100	V

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

PK – Peak detector

Radiated Emissions

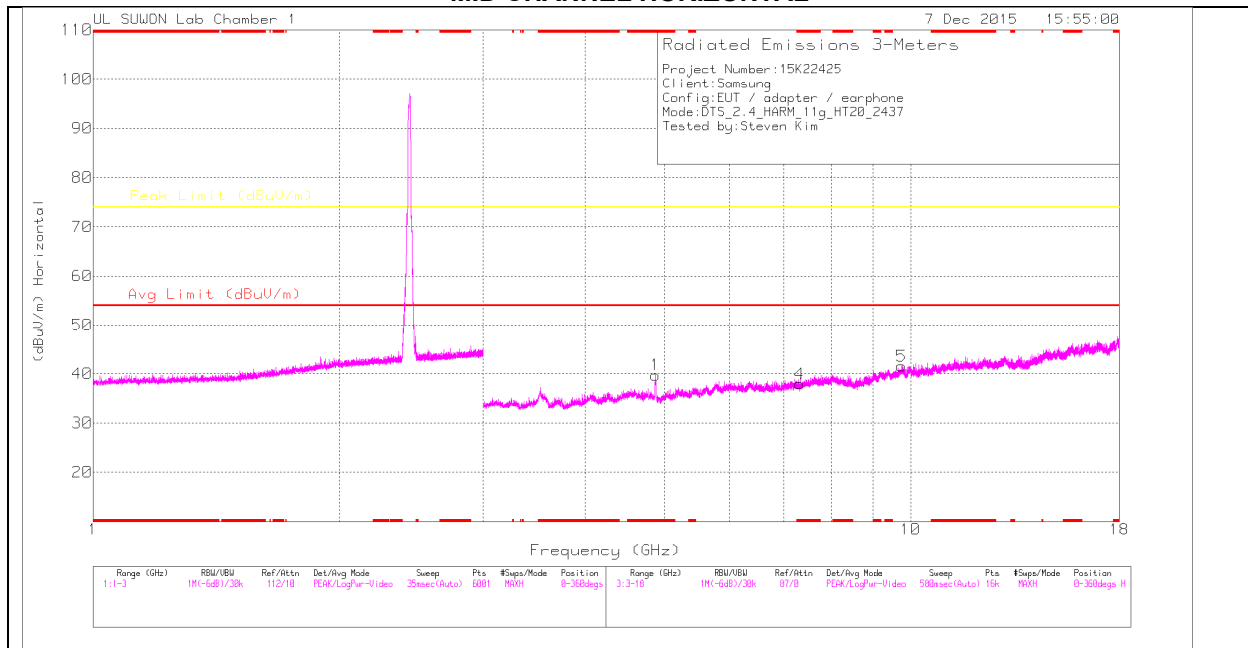
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001 68717)_1 50619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.82	53.7	PK2	34	-33.8	0	53.9	-	-	74	-20.1	306	102	H
* 4.822	41.45	MAv1	34	-33.8	.29	41.94	54	-12.06	-	-	306	102	H
* 4.826	53.8	PK2	34	-33.8	0	54	-	-	74	-20	347	291	V
* 4.824	40	MAv1	34	-33.8	.29	40.49	54	-13.51	-	-	347	291	V
7.235	56.73	PK2	35.7	-30.9	0	61.53	-	-	74	-12.47	347	100	V
7.235	42.04	MAv1	35.7	-30.9	.29	47.13	-	-	-	-	347	100	V

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

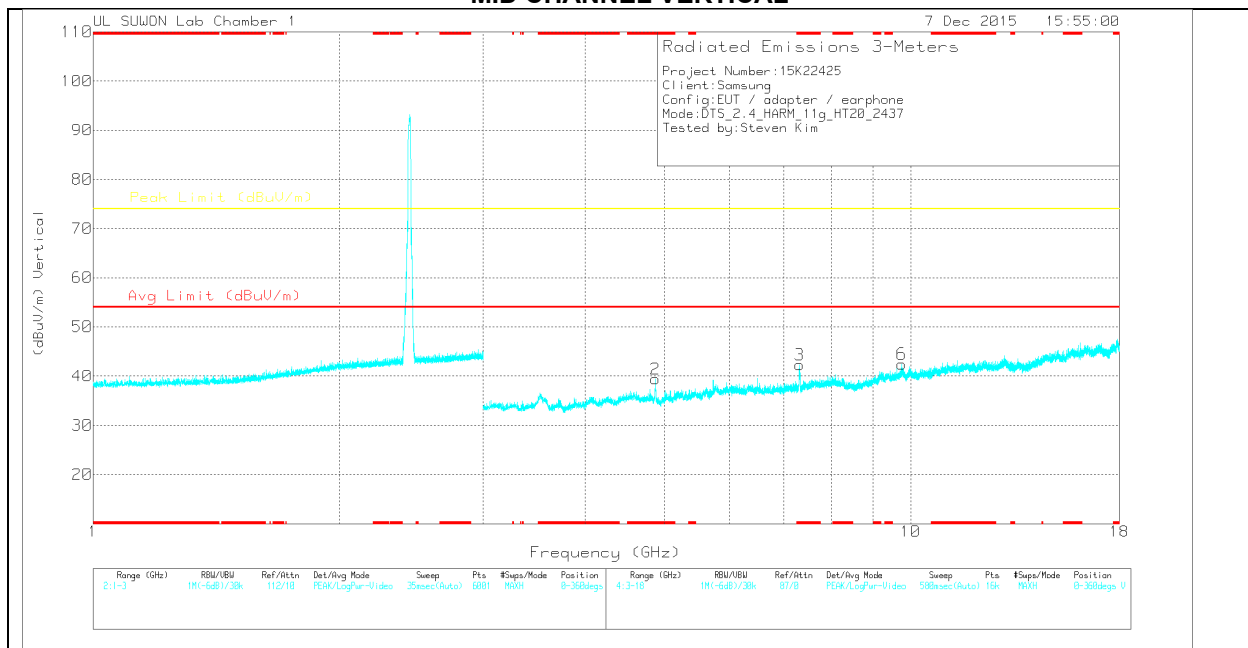
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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	39.73	PK	34	-34	0	39.73	-	-	74	-34.27	0-360	100	H
4	* 7.315	33.03	PK	35.8	-30.9	0	37.93	-	-	74	-36.07	0-360	200	H
5	9.745	31.23	PK	37.2	-26.9	0	41.53	-	-	74	-32.47	0-360	200	H
2	* 4.876	39.4	PK	34	-34	0	39.4	-	-	74	-34.6	0-360	100	V
3	* 7.313	37.4	PK	35.8	-30.9	0	42.3	-	-	74	-31.7	0-360	100	V
6	9.748	32.05	PK	37.2	-26.8	0	42.45	-	-	74	-31.55	0-360	100	V

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

PK – Peak detector

Radiated Emissions

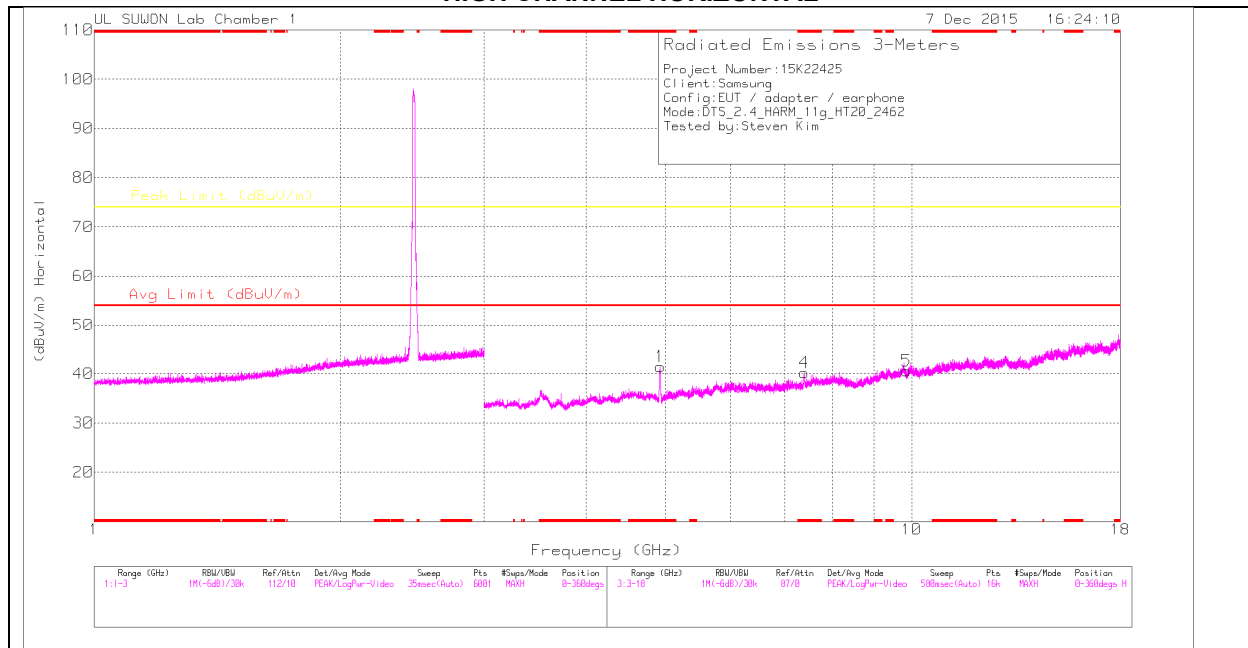
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001 68717)_1 50619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.872	53.59	PK2	34	-34	0	53.59	-	-	74	-20.41	184	100	H
* 4.872	38.71	MAv1	34	-34	.29	39	54	-15	-	-	184	100	H
* 4.874	51.7	PK2	34	-34	0	51.7	-	-	74	-22.3	300	311	V
* 4.874	36.88	MAv1	34	-34	.29	37.17	54	-16.83	-	-	300	311	V
* 7.316	53.57	PK2	35.8	-30.9	0	58.47	-	-	74	-15.53	353	100	V
* 7.318	35.56	MAv1	35.8	-30.9	.29	40.75	54	-13.25	-	-	353	100	V

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

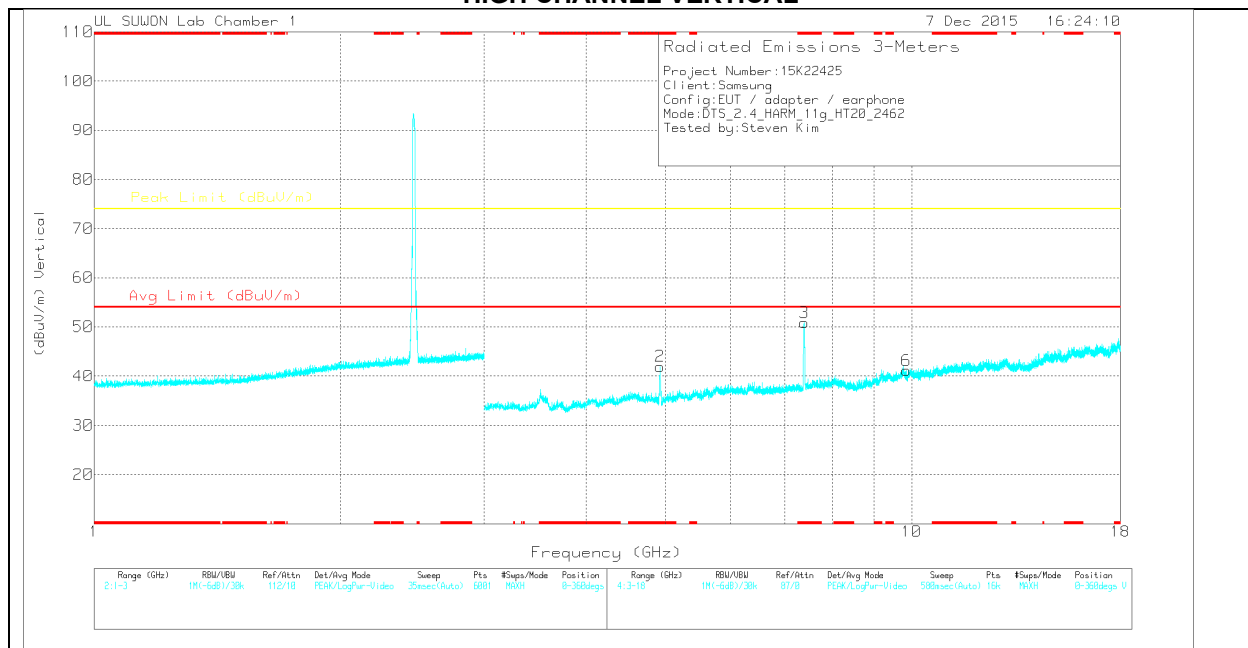
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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	41.45	Pk	34	-34	0	41.45	-	-	74	-32.55	0-360	100	H
4	* 7.389	35.11	Pk	35.8	-30.7	0	40.21	-	-	74	-33.79	0-360	100	H
5	9.854	30.99	Pk	37.3	-27.7	0	40.59	-	-	74	-33.41	0-360	100	H
2	* 4.926	41.97	Pk	34	-34	0	41.97	-	-	74	-32.03	0-360	100	V
3	* 7.389	45.78	Pk	35.8	-30.7	0	50.88	-	-	74	-23.12	0-360	100	V
6	9.848	31.43	Pk	37.3	-27.6	0	41.13	-	-	74	-32.87	0-360	100	V

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

PK – Peak detector

Radiated Emissions

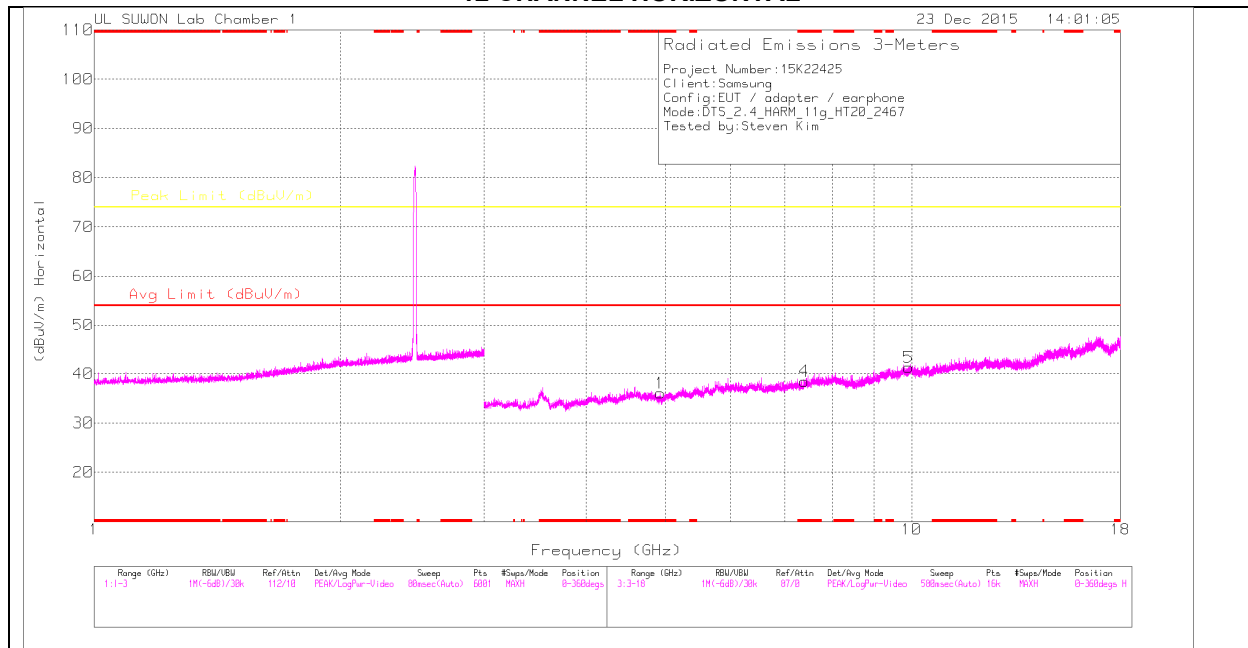
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001 68717)_1 50619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.928	53.26	PK2	34	-34	0	53.26	-	-	74	-20.74	203	100	H
* 4.926	40.45	MAv1	34	-34	.29	40.74	54	-13.26	-	-	203	100	H
* 4.926	53.3	PK2	34	-34	0	53.3	-	-	74	-20.7	5	311	V
* 4.926	40.53	MAv1	34	-34	.29	40.82	54	-13.18	-	-	5	311	V
* 7.385	58.12	PK2	35.8	-30.7	0	63.22	-	-	74	-10.78	356	103	V
* 7.386	43.56	MAv1	35.8	-30.7	.29	48.95	54	-5.05	-	-	356	103	V

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

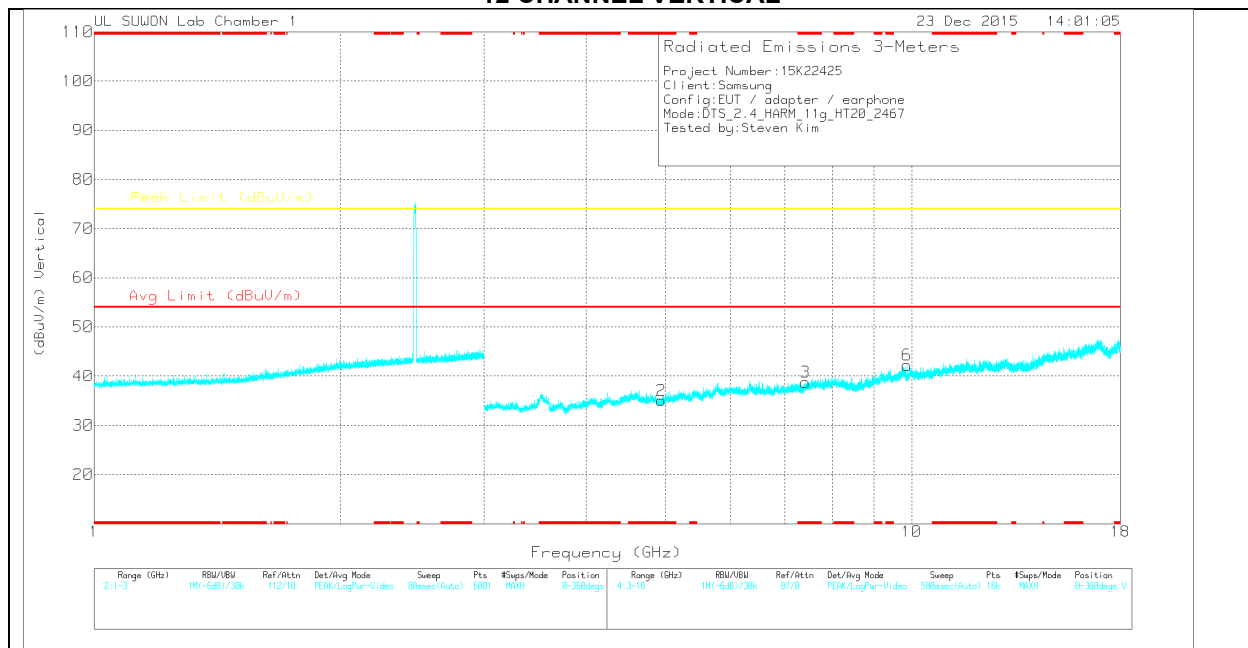
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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

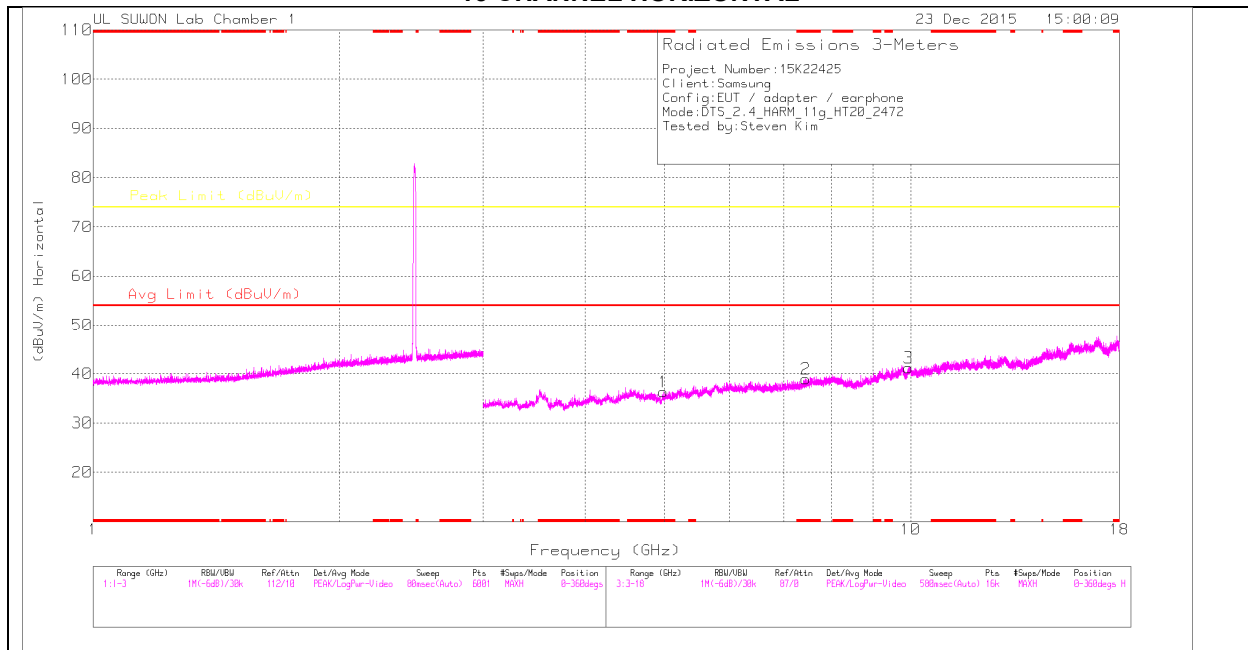
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Asimuth (Degs)	Height (cm)	Polarity
1	* 4.927	36.07	PK	34	-34	0	36.07	-	-	74	-37.93	0-360	100	H
4	* 7.396	33.28	PK	35.8	-30.6	0	38.48	-	-	74	-35.52	0-360	100	H
5	9.912	31.26	PK	37.4	-27.4	0	41.26	-	-	74	-32.74	0-360	100	H
2	* 4.938	35.05	PK	34	-34	0	35.05	-	-	74	-38.95	0-360	100	V
3	* 7.42	33.65	PK	35.8	-30.7	0	38.75	-	-	74	-35.25	0-360	100	V
6	9.868	32.83	PK	37.3	-27.9	0	42.23	-	-	74	-31.77	0-360	100	V

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

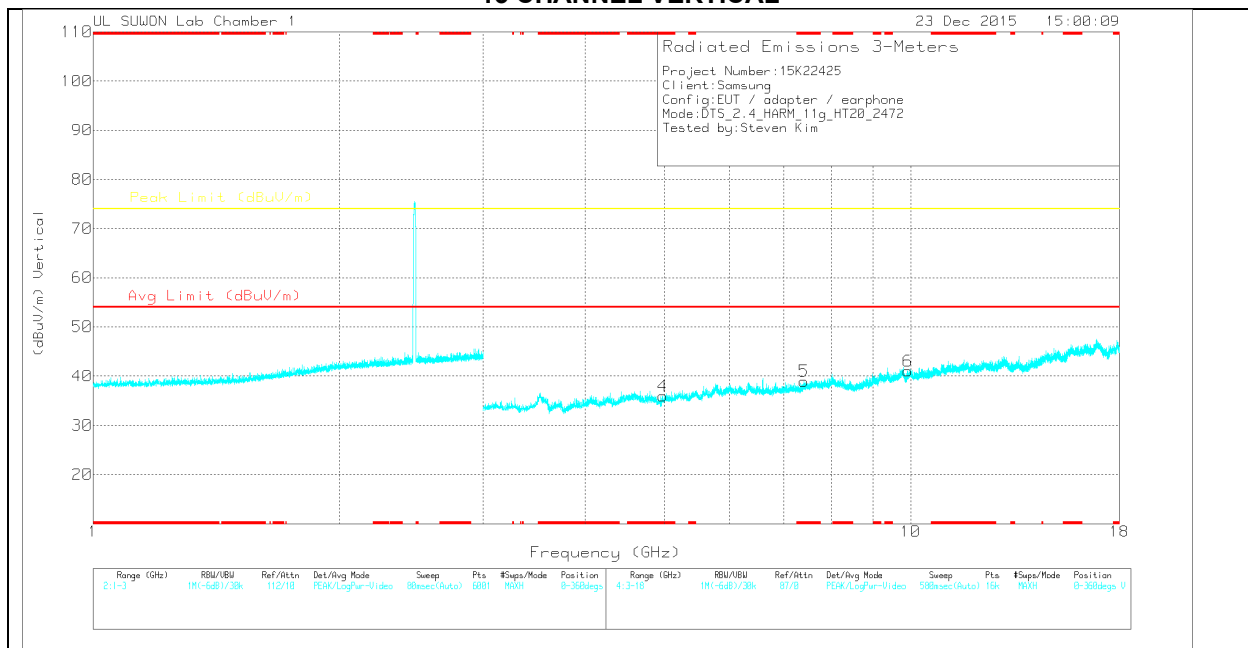
PK – Peak detector

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

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)	Asimuth (Degs)	Height (cm)	Polarity
1	* 4.982	36.12	PK	34.1	-33.9	0	36.32	-	-	74	-37.68	0-360	100	H
2	* 7.439	33.84	PK	35.8	-30.7	0	38.94	-	-	74	-35.06	0-360	100	H
3	9.937	30.58	PK	37.4	-26.8	0	41.18	-	-	74	-32.82	0-360	100	H
4	* 4.972	35.83	PK	34.1	-34	0	35.93	-	-	74	-38.07	0-360	100	V
5	* 7.4	33.77	PK	35.8	-30.6	0	38.97	-	-	74	-35.03	0-360	200	V
6	9.921	30.82	PK	37.4	-27.2	0	41.02	-	-	74	-32.98	0-360	200	V

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

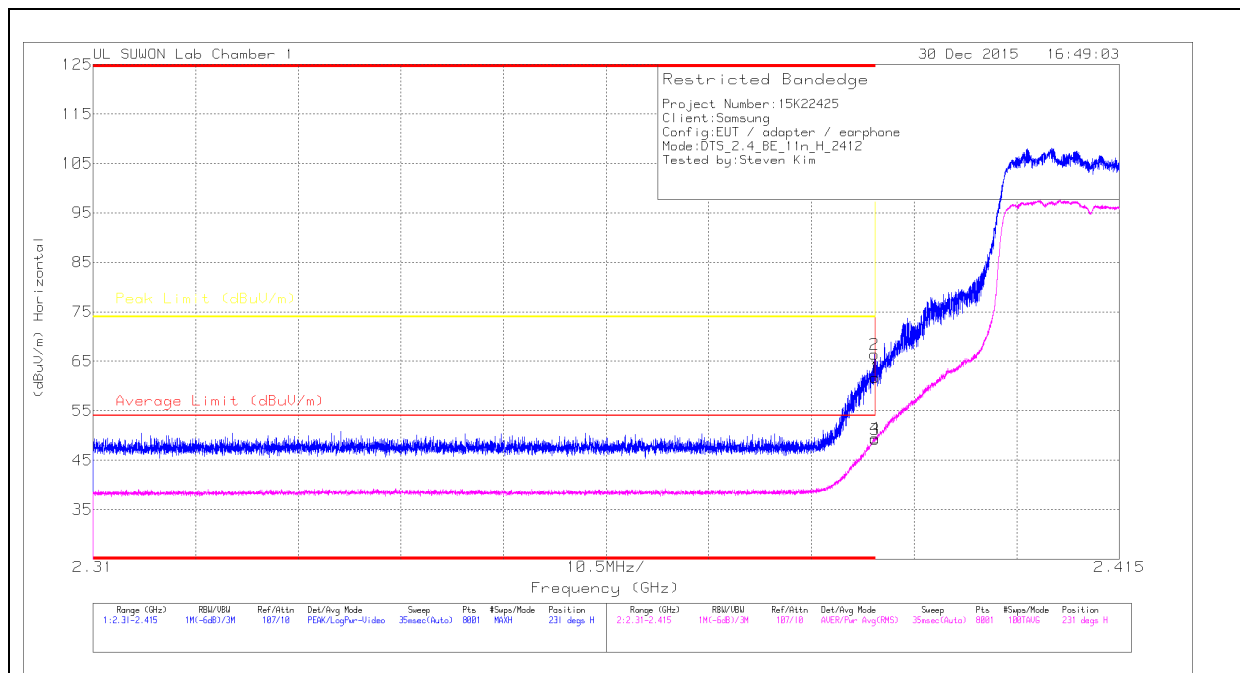
PK – Peak detector

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

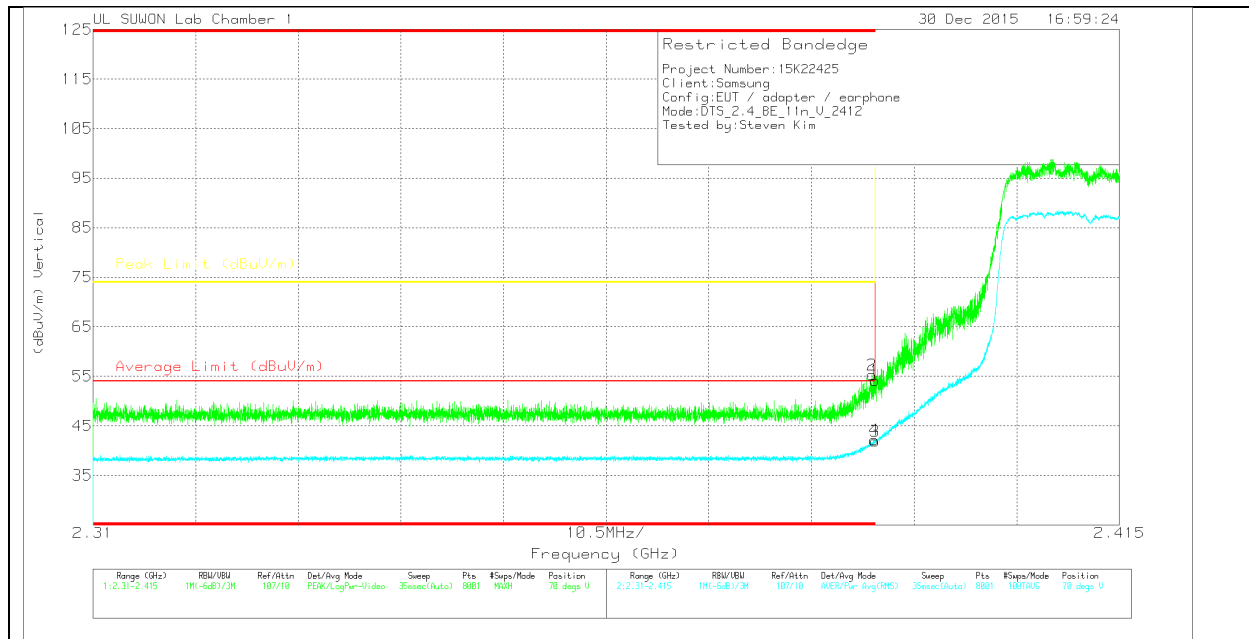
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	58.88	Pk	31.8	-29	0	61.68	-	-	74	-12.32	231	103	H
2	* 2.39	63.58	Pk	31.8	-29	0	66.38	-	-	74	-7.62	231	103	H
3	* 2.39	46.04	RMS	31.8	-29	.34	49.18	54	-4.82	-	-	231	103	H
4	* 2.39	46.31	RMS	31.8	-29	.34	49.45	54	-4.55	-	-	231	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)_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	51.36	Pk	31.8	-29	0	54.16	-	-	74	-19.84	70	364	V
2	* 2.39	52.45	Pk	31.8	-29	0	55.25	-	-	74	-18.75	70	364	V
3	* 2.39	38.8	RMS	31.8	-29	.34	41.94	54	-12.06	-	-	70	364	V
4	* 2.39	39.08	RMS	31.8	-29	.34	42.22	54	-11.78	-	-	70	364	V

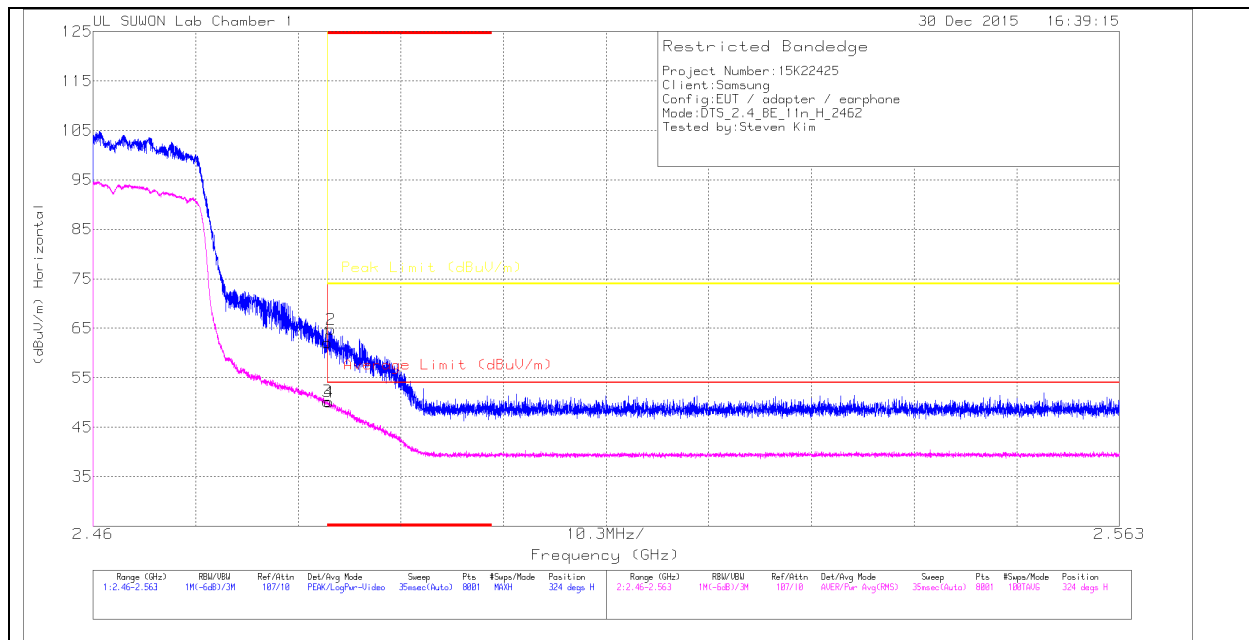
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

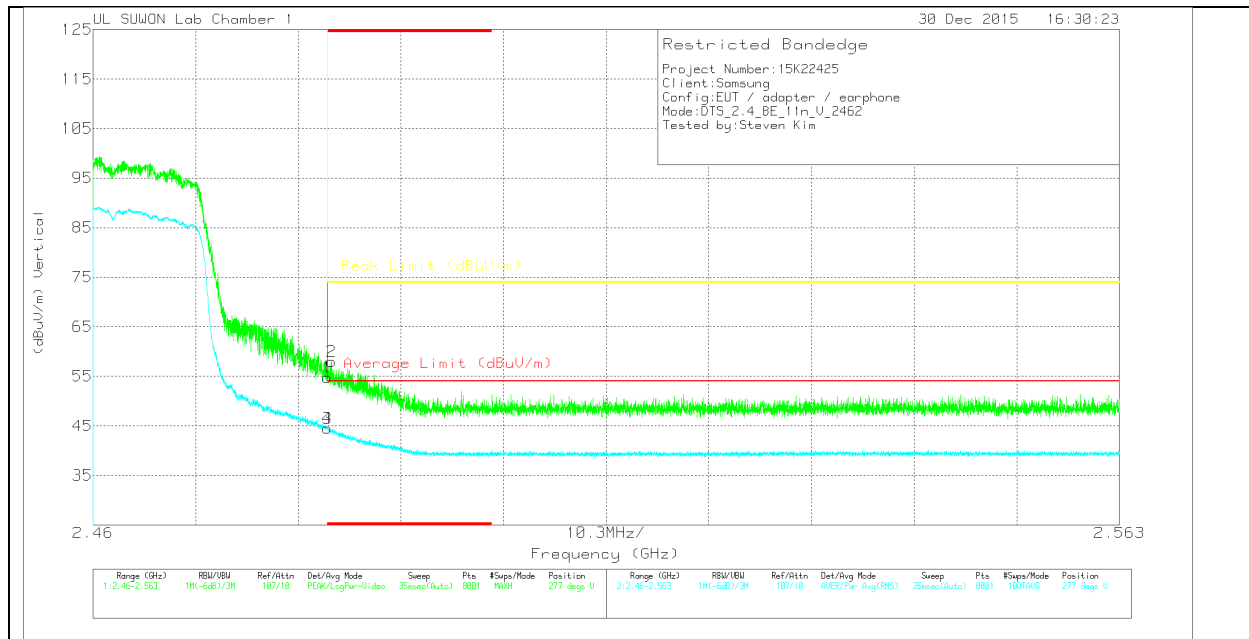
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	58.35	Pk	32	-28.3	0	62.05	-	-	74	-11.95	324	100	H
2	* 2.484	61.11	Pk	32	-28.3	0	64.81	-	-	74	-9.19	324	100	H
3	* 2.484	46.22	RMS	32	-28.3	.34	50.26	54	-3.74	-	-	324	100	H
4	* 2.484	46.07	RMS	32	-28.3	.34	50.11	54	-3.89	-	-	324	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	51.04	Pk	32	-28.3	0	54.74	-	-	74	-19.26	277	283	V
2	* 2.484	54.31	Pk	32	-28.3	0	58.01	-	-	74	-15.99	277	283	V
3	* 2.484	40.49	RMS	32	-28.3	.34	44.53	54	-9.47	-	-	277	283	V
4	* 2.484	40.51	RMS	32	-28.3	.34	44.55	54	-9.45	-	-	277	283	V

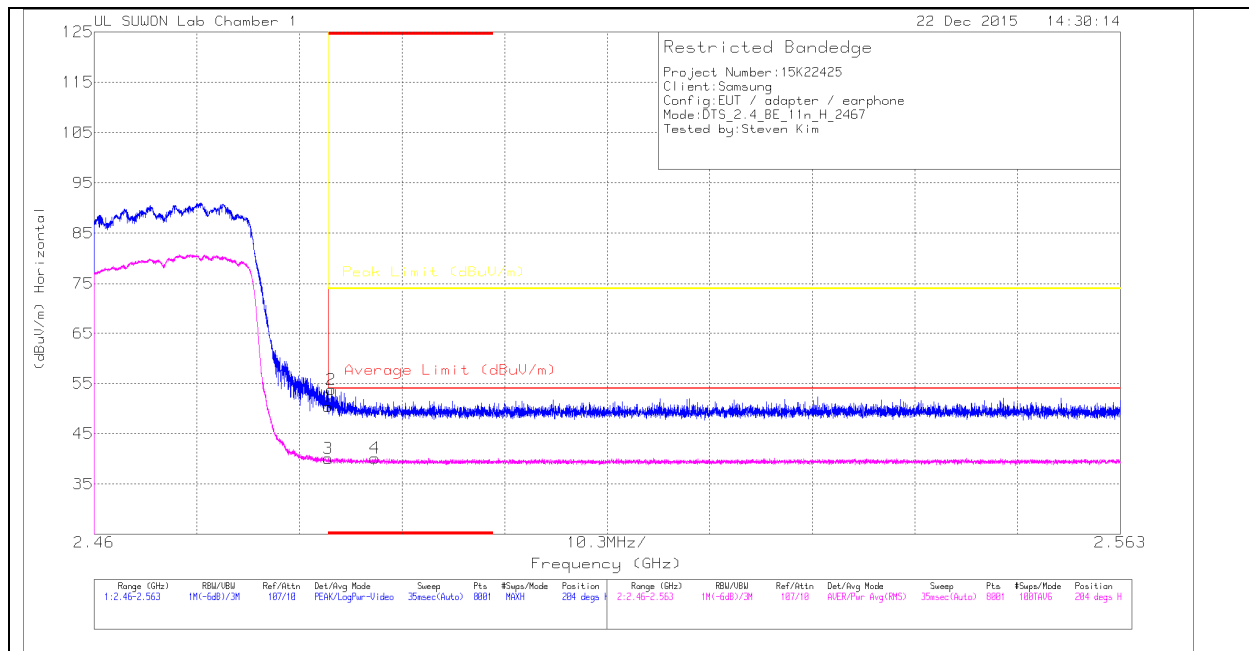
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (12 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

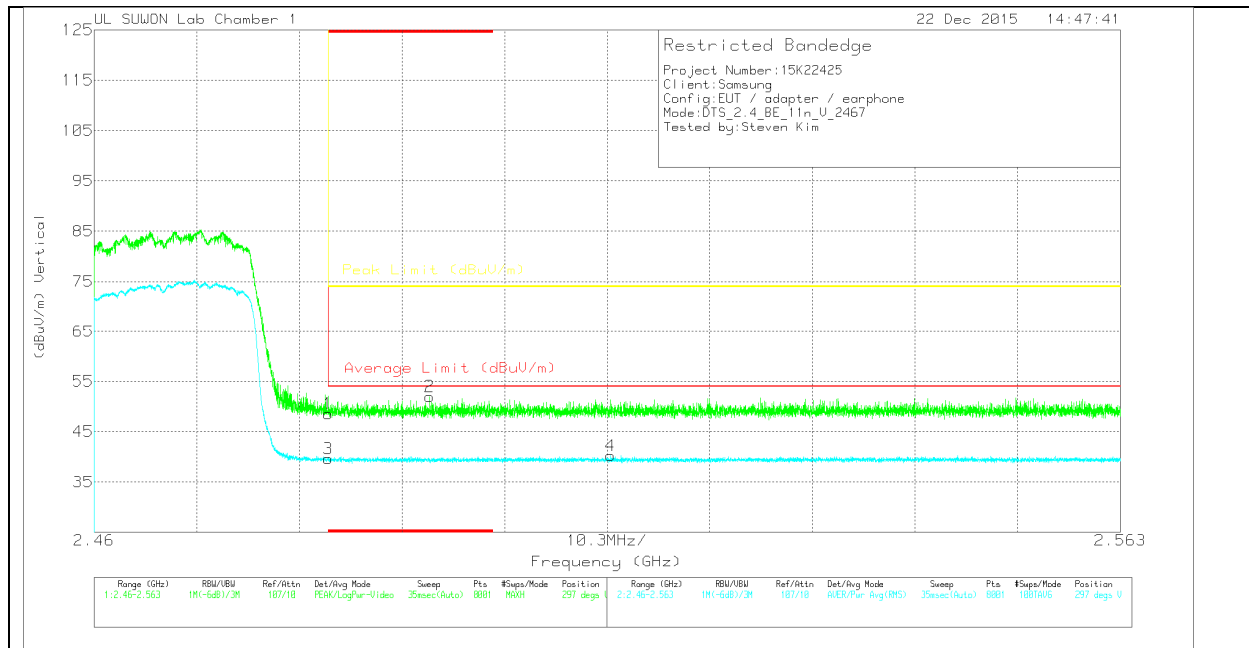
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	46.69	Pk	32	-28.3	0	50.39	-	-	74	-23.61	204	100	H
2	* 2.484	50.06	Pk	32	-28.3	0	53.76	-	-	74	-20.24	204	100	H
3	* 2.484	36.06	RMS	32	-28.3	-34	40.1	54	-13.9	-	-	204	100	H
4	* 2.488	36.14	RMS	32	-28.3	-34	40.18	54	-13.82	-	-	204	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	44.88	Pk	32	-28.3	0	48.58	-	-	74	-25.42	297	336	V
2	* 2.494	48.29	Pk	32	-28.3	0	51.99	-	-	74	-22.01	297	336	V
3	* 2.484	35.61	RMS	32	-28.3	.34	39.65	54	-14.35	-	-	297	336	V
4	2.512	36.2	RMS	32	-28.3	.34	40.24	54	-13.76	-	-	297	336	V

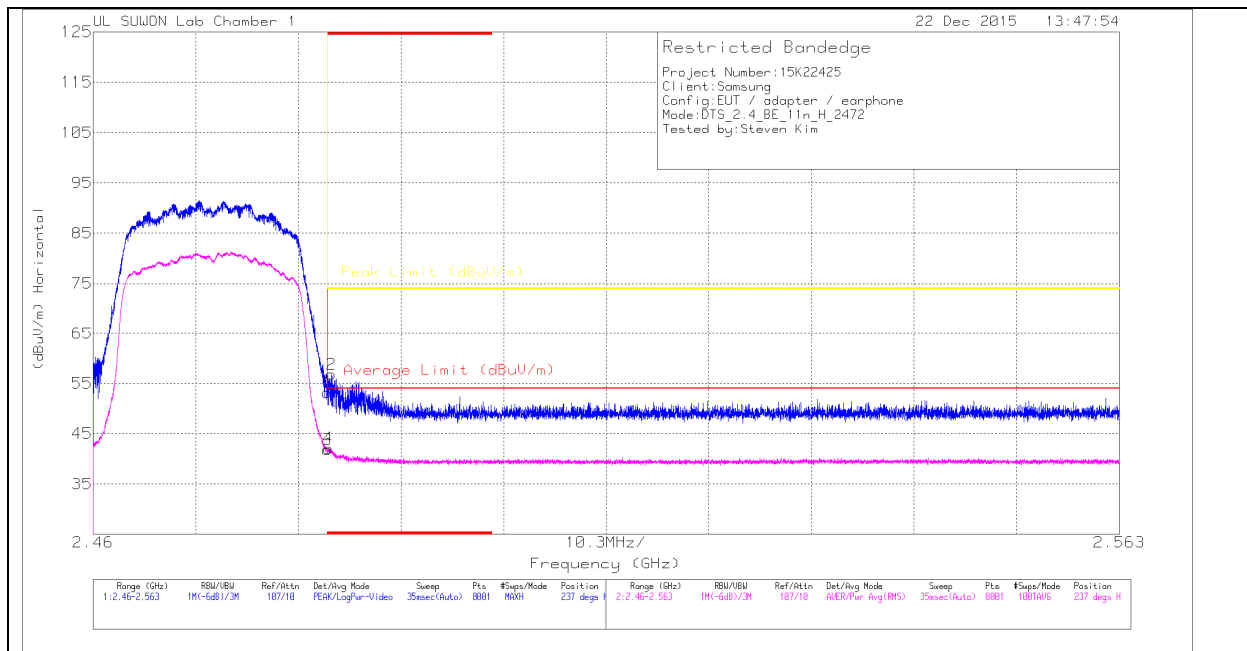
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (13 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

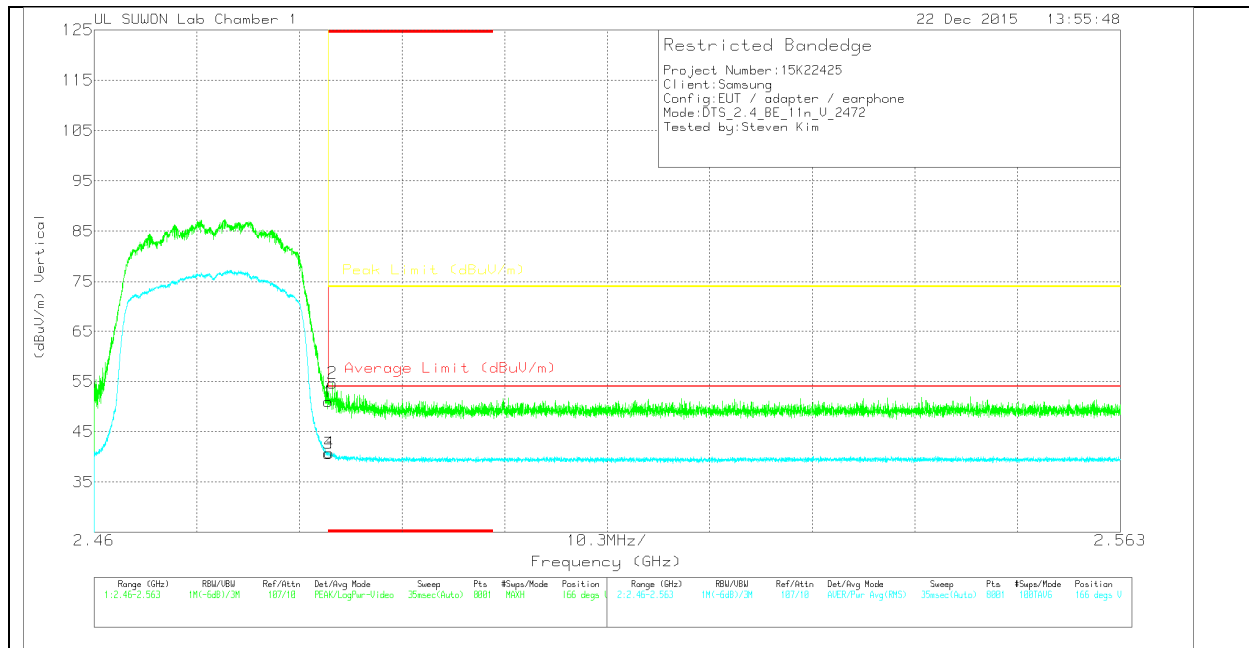
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	49.48	Pk	32	-28.3	0	53.18	-	-	74	-20.82	237	101	H
2	* 2.484	53.1	Pk	32	-28.3	0	56.8	-	-	74	-17.2	237	101	H
3	* 2.484	37.81	RMS	32	-28.3	-34	41.85	54	-12.15	-	-	237	101	H
4	* 2.484	38.06	RMS	32	-28.3	-34	42.1	54	-11.9	-	-	237	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	47.26	Pk	32	-28.3	0	50.96	-	-	74	-23.04	166	349	V
2	* 2.484	50.97	Pk	32	-28.3	0	54.67	-	-	74	-19.33	166	349	V
3	* 2.484	36.67	RMS	32	-28.3	.34	40.71	54	-13.29	-	-	166	349	V
4	* 2.484	36.75	RMS	32	-28.3	.34	40.79	54	-13.21	-	-	166	349	V

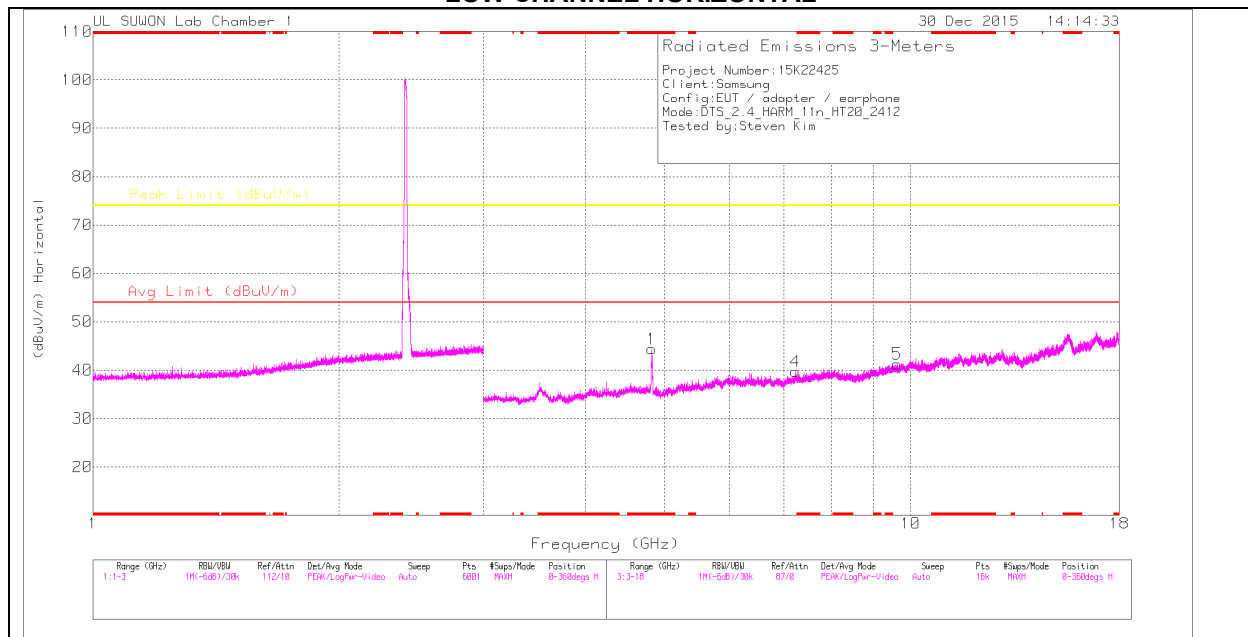
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

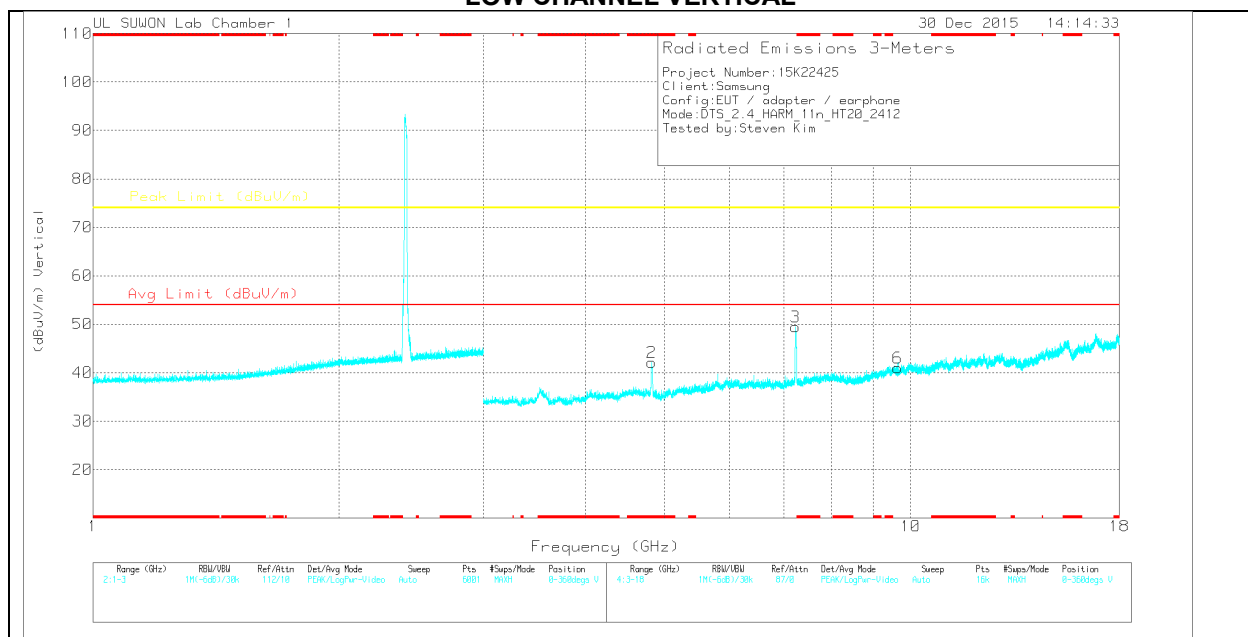
RMS - RMS detection

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	44.2	Pk	34	-33.8	0	44.4	-	-	74	-29.6	0-360	100	H
4	7.229	35	Pk	35.7	-31	0	39.7	-	-	74	-34.3	0-360	100	H
5	9.63	31.51	Pk	37	-27.2	0	41.31	-	-	74	-32.69	0-360	200	H
2	* 4.821	41.96	Pk	34	-33.8	0	42.16	-	-	74	-31.84	0-360	100	V
3	7.233	44.7	Pk	35.7	-30.9	0	49.5	-	-	74	-24.5	0-360	100	V
6	9.64	31.33	Pk	37	-27.3	0	41.03	-	-	74	-32.97	0-360	100	V

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

PK – Peak detector

Radiated Emissions

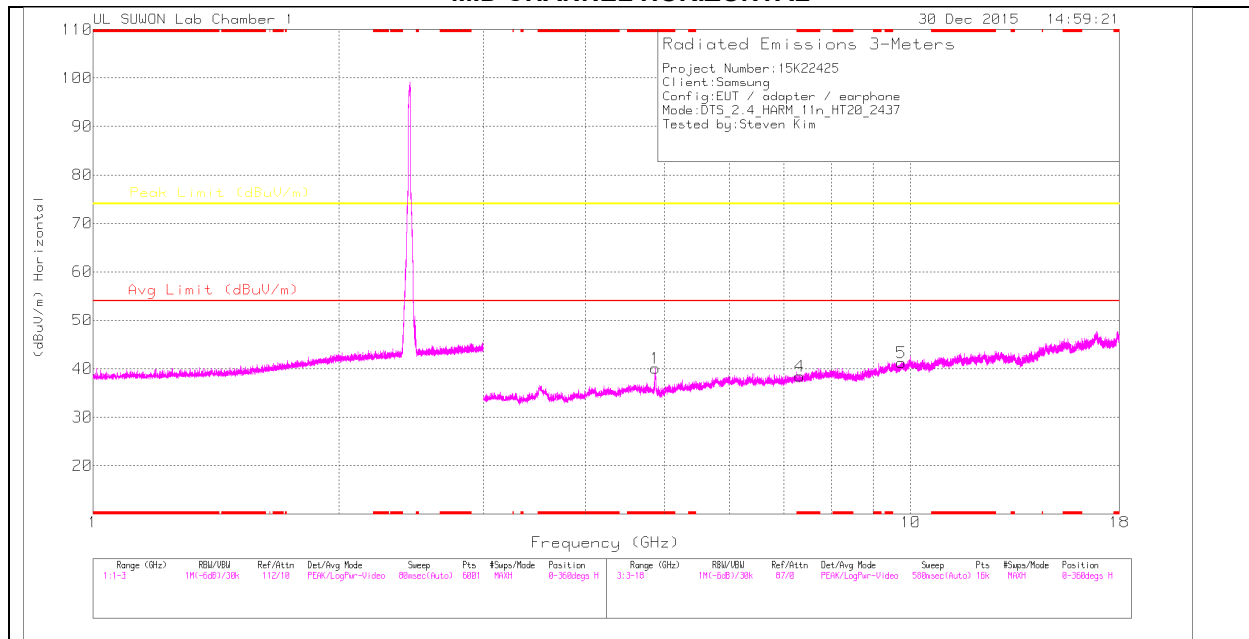
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001 68717)_1 50619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.825	56.52	PK2	34	-33.8	0	56.72	-	-	74	-17.28	206	100	H
* 4.824	41.94	MAv1	34	-33.8	.34	42.48	54	-11.52	-	-	206	100	H
* 4.822	56.31	PK2	34	-33.8	0	56.51	-	-	74	-17.49	346	298	V
* 4.824	42.11	Pk	34	-33.8	0	42.31	-	-	74	-31.69	346	298	V
7.23	53.59	PK2	35.7	-31	0	58.29	-	-	74	-15.71	51	100	V
7.235	32.84	MAv1	35.7	-30.9	.34	37.98	-	-	-	-	51	100	V

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

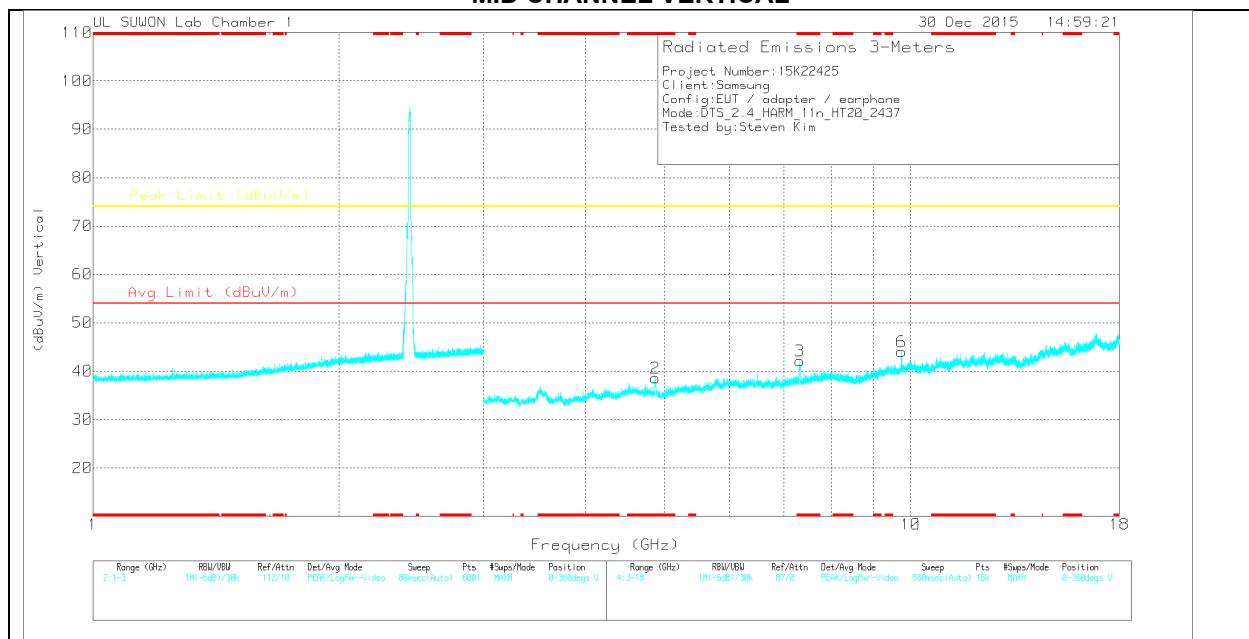
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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	* 4.872	40.1	PK	34	-34	0	40.1	-	-	74	-33.9	0-360	100	H
4	* 7.321	33.53	PK	35.8	-30.9	0	38.43	-	-	74	-35.57	0-360	100	H
5	9.746	31	PK	37.2	-26.9	0	41.3	-	-	74	-32.7	0-360	100	H
2	* 4.872	38.56	PK	34	-34	0	38.56	-	-	74	-35.44	0-360	100	V
3	* 7.315	37.25	PK	35.8	-30.9	0	42.15	-	-	74	-31.85	0-360	100	V
6	9.748	33.61	PK	37.2	-26.8	0	44.01	-	-	74	-29.99	0-360	100	V

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

PK – Peak detector

Radiated Emissions

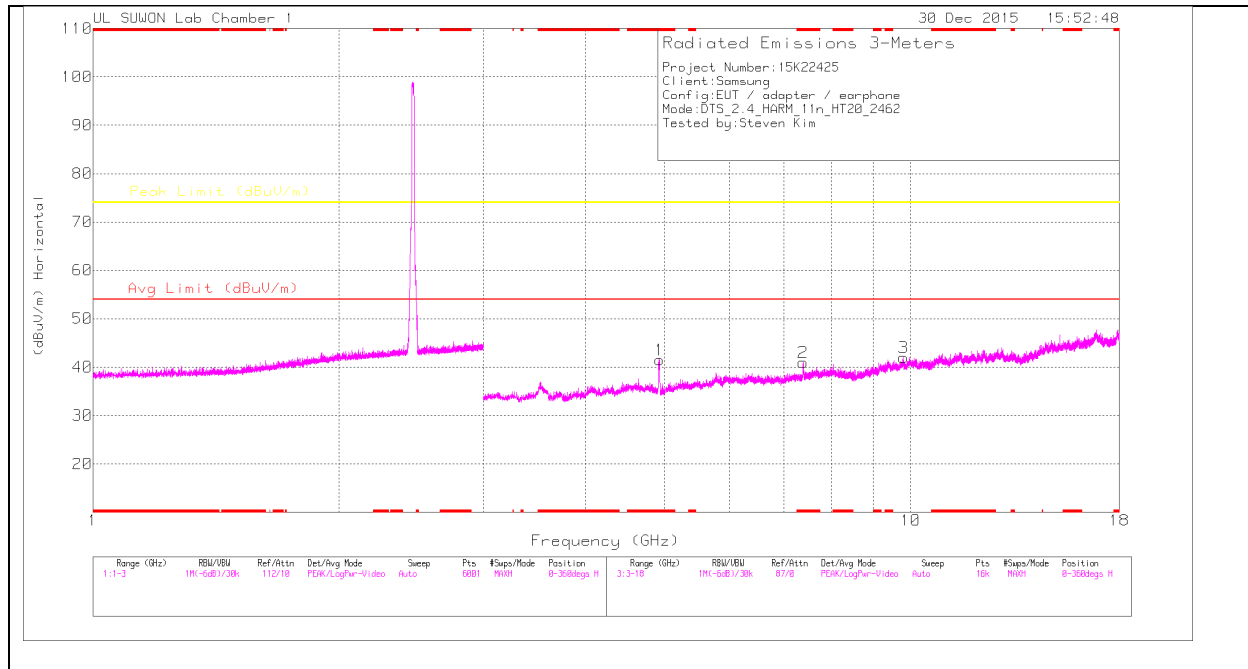
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001 68717)_1 50619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.869	54.71	PK2	34	-34	0	54.71	-	-	74	-19.29	193	104	H
* 4.872	38.83	MAv1	34	-34	.34	39.17	54	-14.83	-	-	193	104	H
* 4.869	52.12	PK2	34	-34	0	52.12	-	-	74	-21.88	319	290	V
* 4.874	37.63	MAv1	34	-34	.34	37.97	54	-16.03	-	-	319	290	V
* 7.318	54.08	PK2	35.8	-30.9	0	58.98	-	-	74	-15.02	359	376	V
* 7.317	34.94	MAv1	35.8	-30.9	.34	40.18	54	-13.82	-	-	359	376	V
9.738	41.66	PK2	37.2	-27.1	0	51.76	-	-	74	-22.24	156	392	V
9.738	29.06	MAv1	37.2	-27.1	.34	39.5	-	-	-	-	156	392	V

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

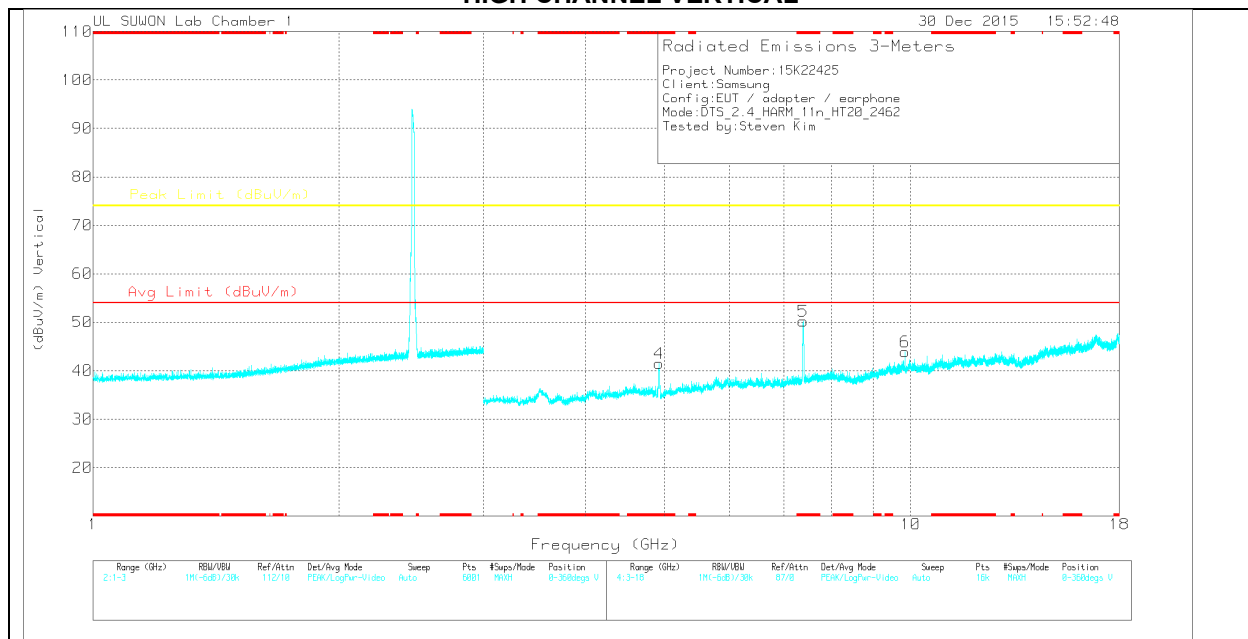
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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	* 4.928	41.48	Pk	34	-34	0	41.48	-	-	74	-32.52	0-360	100	H
2	* 7.386	35.91	Pk	35.8	-30.7	0	41.01	-	-	74	-32.99	0-360	200	H
3	9.798	31.29	Pk	37.2	-26.5	0	41.99	-	-	74	-32.01	0-360	100	H
4	* 4.924	41.45	Pk	34	-34	0	41.45	-	-	74	-32.55	0-360	100	V
5	* 7.386	45.1	Pk	35.8	-30.7	0	50.2	-	-	74	-23.8	0-360	100	V
6	9.848	34.22	Pk	37.3	-27.6	0	43.92	-	-	74	-30.08	0-360	100	V

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

PK – Peak detector

Radiated Emissions

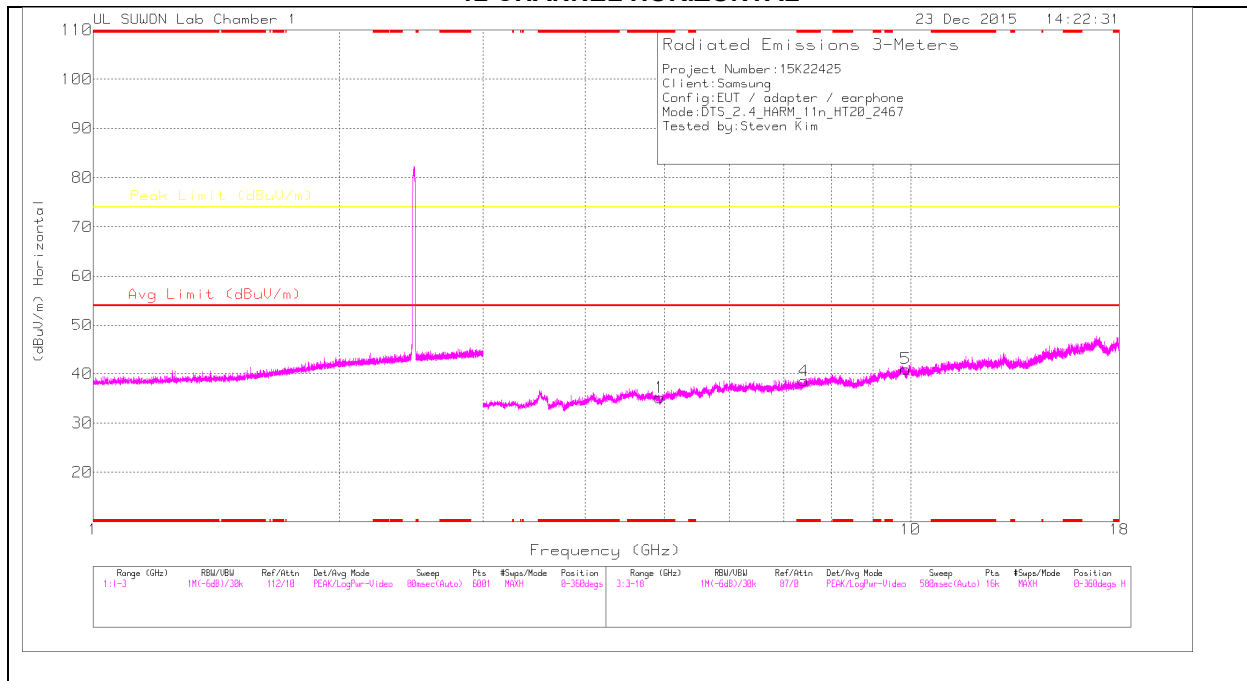
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.925	54.19	PK2	34	-34	0	54.19	-	-	74	-19.81	206	109	H
* 4.922	45.43	MAv1	34	-34	0	45.43	-	-	74	-28.57	206	109	H
* 4.925	55.42	PK2	34	-34	0	55.42	-	-	74	-18.58	347	319	V
* 4.92	46.94	MAv1	34	-34	0	46.94	-	-	74	-27.06	347	319	V
* 7.383	57.26	PK2	35.8	-30.8	0	62.26	-	-	74	-11.74	10	104	V
* 7.386	42.13	MAv1	35.8	-30.7	.34	47.57	54	-6.43	-	-	10	104	V
9.854	41.05	PK2	37.3	-27.7	0	50.65	-	-	74	-23.35	251	109	V
9.854	28.5	MAv1	37.3	-27.7	.34	38.44	-	-	-	-	251	109	V

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

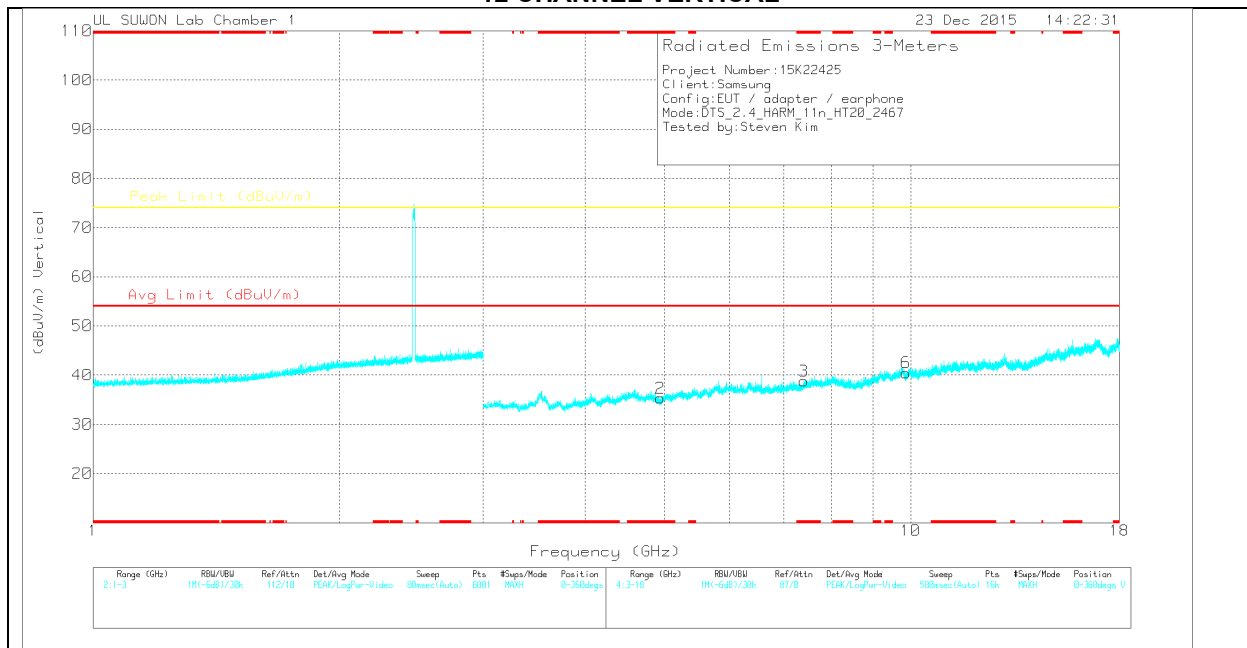
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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

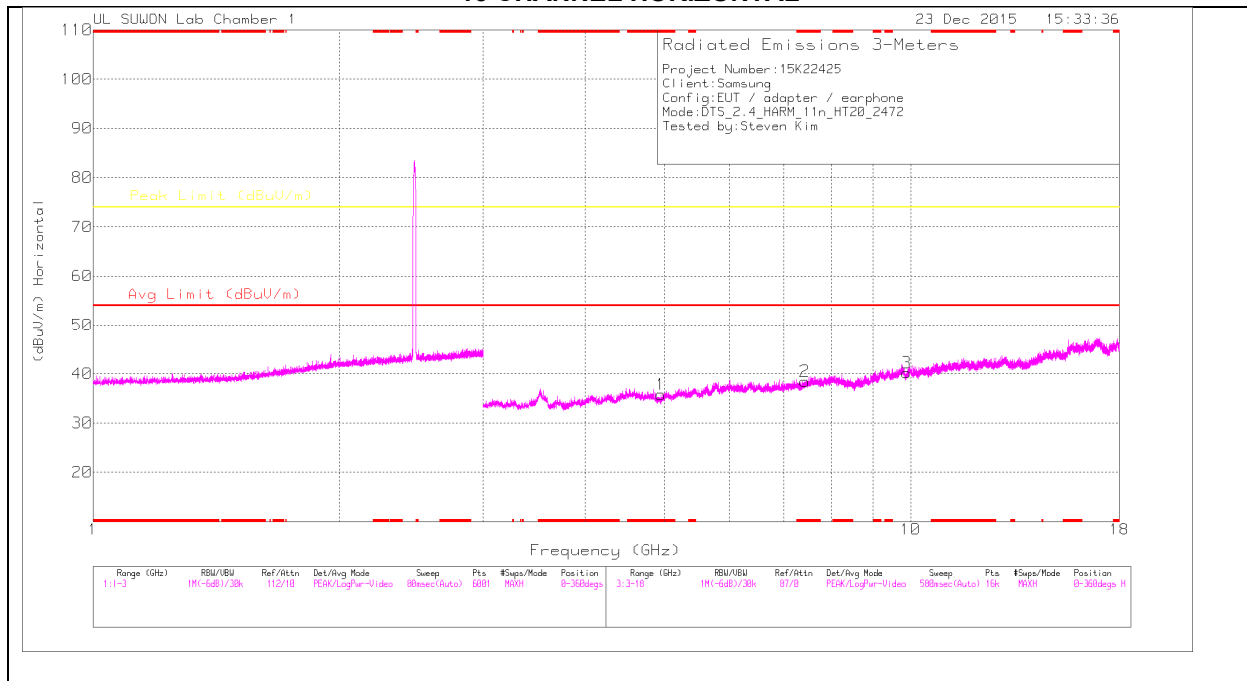
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.932	35.14	PK	34	-34	0	35.14	-	-	74	-38.86	0-360	200	H
4	* 7.404	33.35	PK	35.8	-30.6	0	38.55	-	-	74	-35.45	0-360	100	H
5	9.86	31.48	PK	37.3	-27.8	0	40.98	-	-	74	-33.02	0-360	100	H
2	* 4.94	35.29	PK	34	-34	0	35.29	-	-	74	-38.71	0-360	100	V
3	* 7.403	33.58	PK	35.8	-30.6	0	38.78	-	-	74	-35.22	0-360	100	V
6	9.872	31.18	PK	37.3	-28	0	40.48	-	-	74	-33.52	0-360	200	V

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

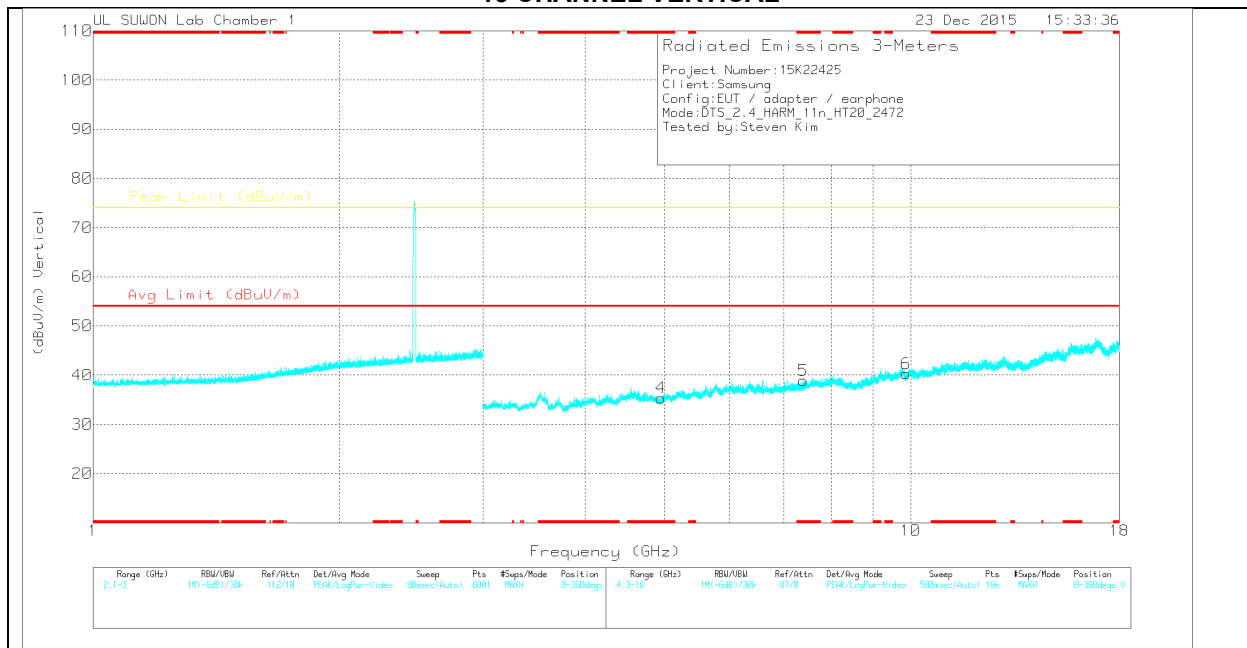
PK – Peak detector

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	35.76	PK	34	-34	0	35.76	-	-	74	-38.24	0-360	200	H
2	* 7.425	33.47	PK	35.8	-30.8	0	38.47	-	-	74	-35.53	0-360	100	H
3	9.881	30.79	PK	37.3	-27.9	0	40.19	-	-	74	-33.81	0-360	100	H
4	* 4.952	35.37	PK	34	-34	0	35.37	-	-	74	-38.63	0-360	100	V
5	* 7.39	33.8	PK	35.8	-30.7	0	38.9	-	-	74	-35.1	0-360	100	V
6	9.872	30.96	PK	37.3	-28	0	40.26	-	-	74	-33.74	0-360	100	V

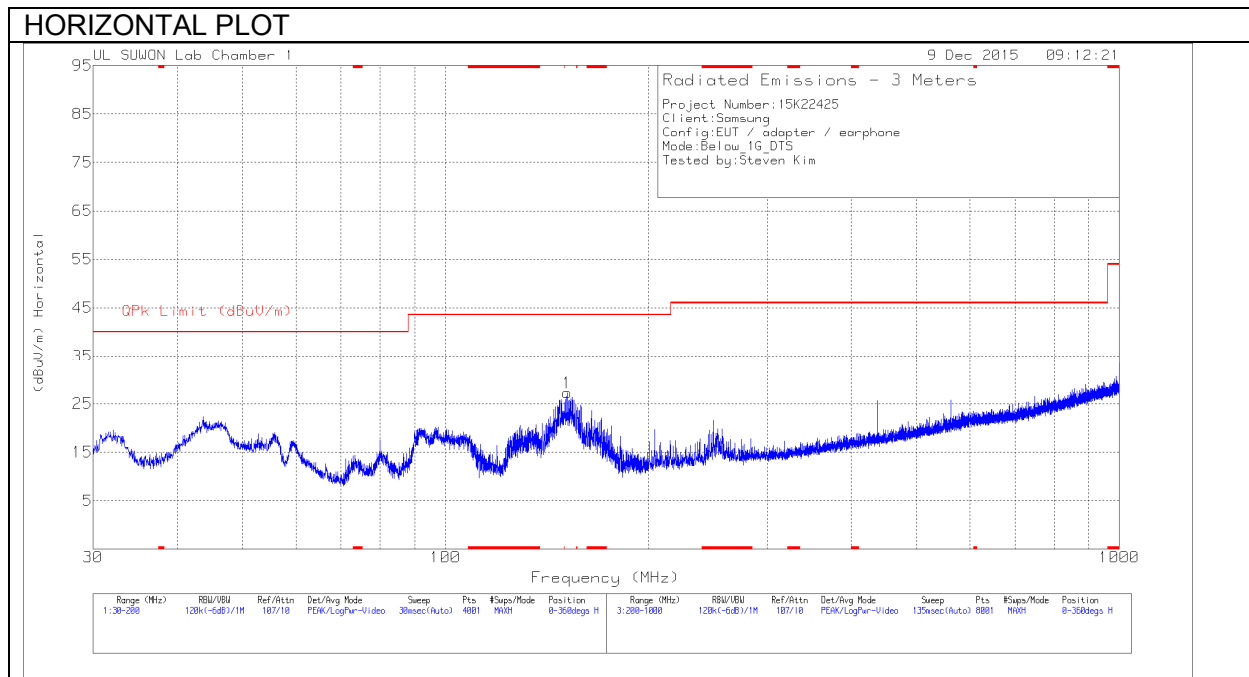
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

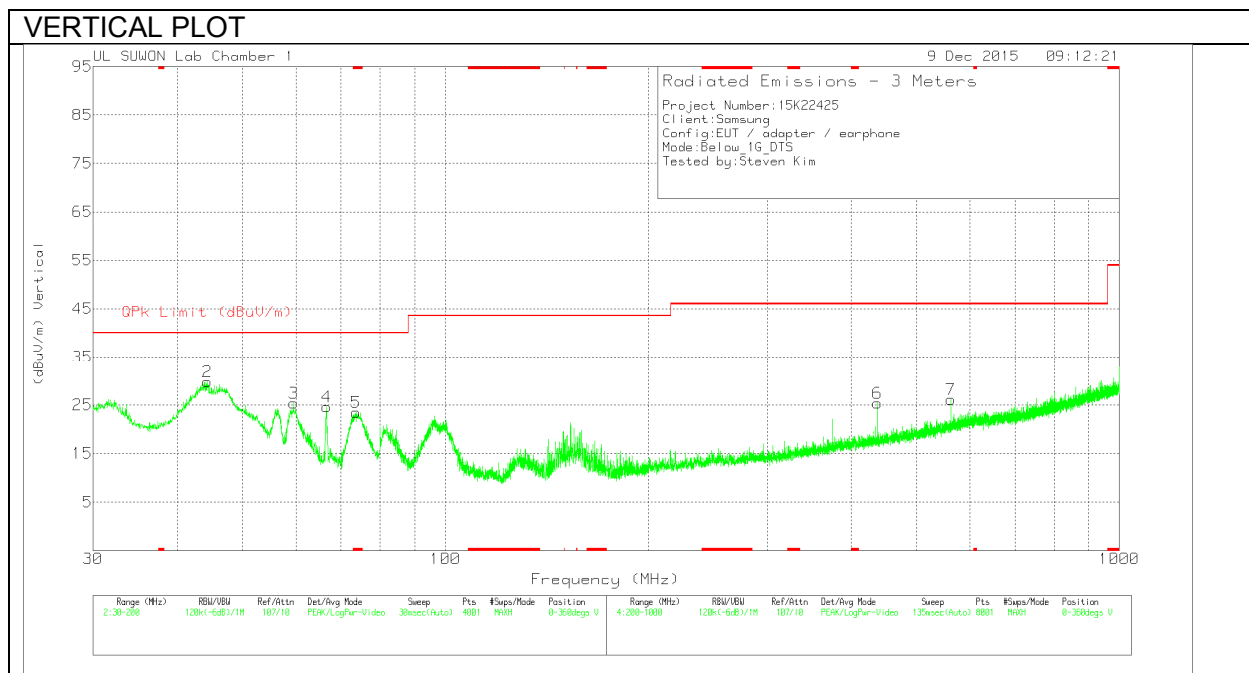
Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

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	151.465	47.66	Pk	8.2	-28.6	27.26	43.52	-16.26	0-360	200	H
2	44.365	46.49	Pk	13.5	-30.2	29.79	40	-10.21	0-360	100	V
3	59.5375	42.52	Pk	12.7	-29.9	25.32	40	-14.68	0-360	100	V
4	66.5925	43.65	Pk	10.7	-29.8	24.55	40	-15.45	0-360	100	V
5	* 73.69	44.51	Pk	8.6	-29.7	23.41	40	-16.59	0-360	100	V
6	437.5	35.82	Pk	16.1	-26.6	25.32	46.02	-20.7	0-360	100	V
7	562.6	33.7	Pk	18.4	-26	26.1	46.02	-19.92	0-360	200	V

* - 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.

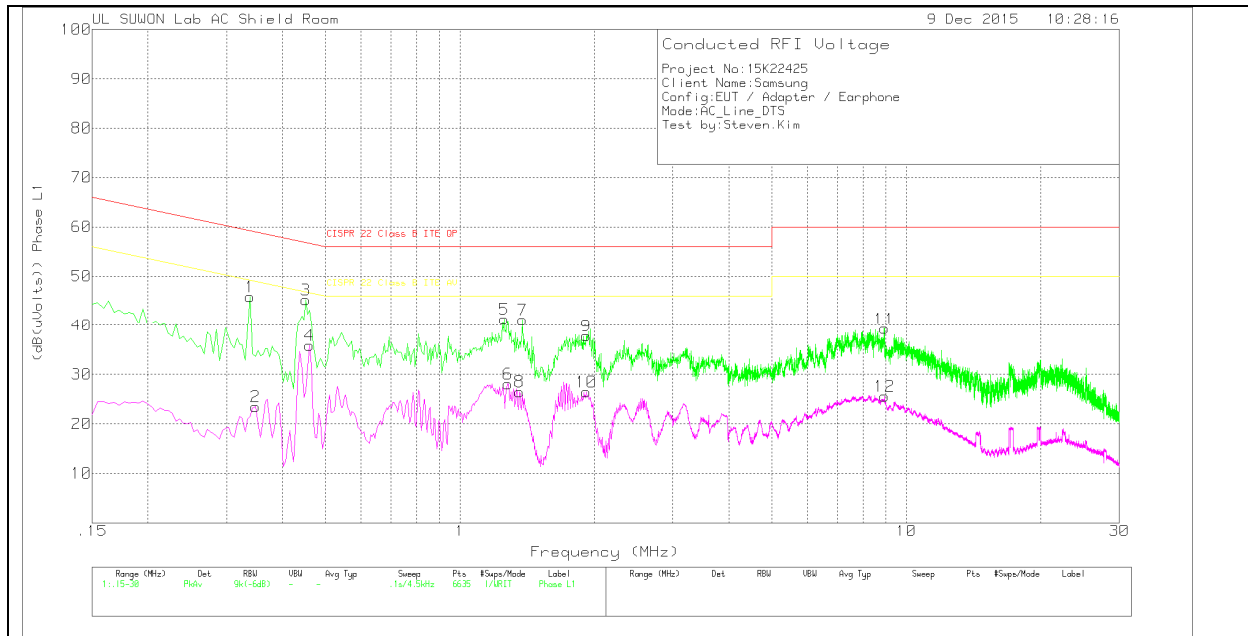
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

Trace Markers

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	.339	35.88	Pk	10	0	45.88	59.23	-13.35	-	-
2	.348	13.44	Av	10	0	23.44	-	-	49.01	-25.57
3	.4515	35.17	Pk	10.1	0	45.27	56.85	-11.58	-	-
4	.4605	25.75	Av	10.1	0	35.85	-	-	46.68	-10.83
5	1.257	31.43	Pk	9.8	.1	41.33	56	-14.67	-	-
6	1.2795	18.14	Av	9.8	.1	28.04	-	-	46	-17.96
7	1.383	31.2	Pk	9.8	.1	41.1	56	-14.9	-	-
8	1.3605	16.6	Av	9.8	.1	26.5	-	-	46	-19.5
9	1.9185	27.89	Pk	9.8	.1	37.79	56	-18.21	-	-
10	1.9185	16.51	Av	9.8	.1	26.41	-	-	46	-19.59
11	8.943	29.3	Pk	9.9	.1	39.3	60	-20.7	-	-
12	8.9385	15.61	Av	9.9	.1	25.61	-	-	50	-24.39

Pk - Peak detector

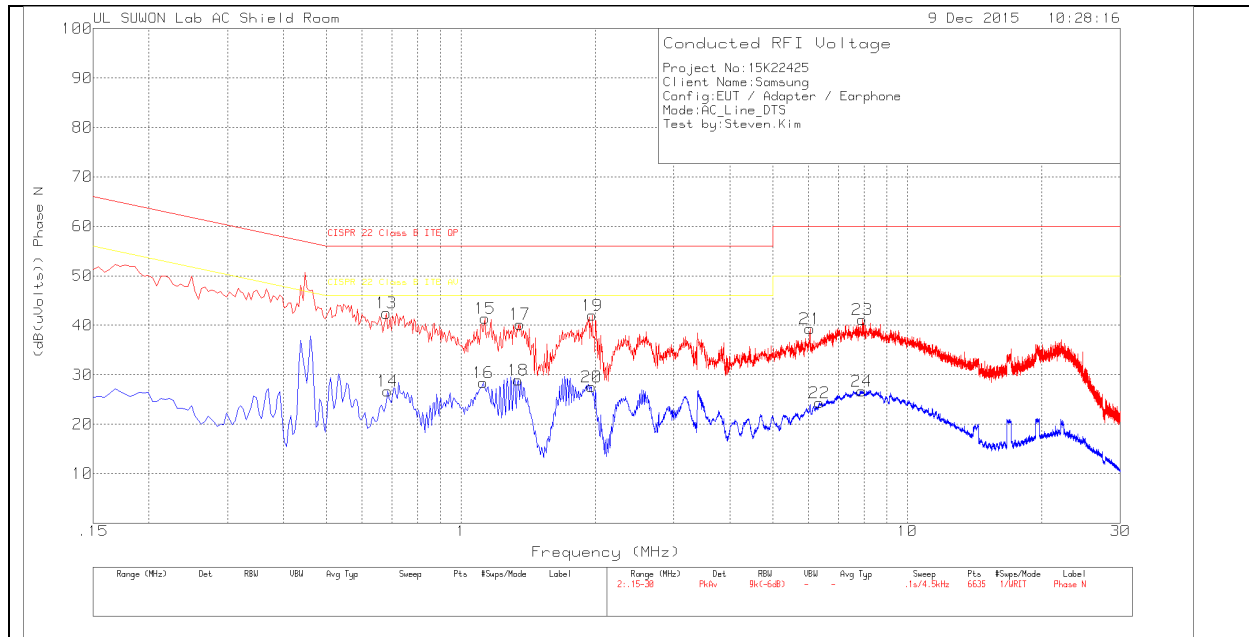
Av - Average detection

Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_wit h 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)
.3435	20.25	Qp	10	0	30.25	59.12	-28.87	-	-
.456	26.74	Qp	10.1	0	36.84	56.77	-19.93	-	-
1.2525	20.93	Qp	9.8	.1	30.83	56	-25.17	-	-
1.3848	22.04	Qp	9.8	.1	31.94	56	-24.06	-	-
1.9158	22.6	Qp	9.8	.1	32.5	56	-23.5	-	-
8.9403	19.99	Qp	9.9	.1	29.99	60	-30.01	-	-

Qp - Quasi-Peak detector

LINE 2 PLOT



LINE 2 RESULTS

Trace Markers

Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_wit h 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	.681	32.46	Pk	10	0	42.46	56	-13.54	-	-
14	.6855	16.66	Av	10	0	26.66	-	-	46	-19.34
15	1.131	31.6	Pk	9.8	0	41.4	56	-14.6	-	-
16	1.122	18.64	Av	9.8	0	28.44	-	-	46	-17.56
17	1.356	30.33	Pk	9.8	.1	40.23	56	-15.77	-	-
18	1.3425	19.02	Av	9.8	.1	28.92	-	-	46	-17.08
19	1.968	32.1	Pk	9.8	.1	42	56	-14	-	-
20	1.959	17.67	Av	9.8	.1	27.57	-	-	46	-18.43
21	6.0495	29.39	Pk	9.8	.1	39.29	60	-20.71	-	-
22	6.36	14.38	Av	9.9	.1	24.38	-	-	50	-25.62
23	7.917	31.13	Pk	9.9	.1	41.13	60	-18.87	-	-
24	7.8945	16.66	Av	9.9	.1	26.66	-	-	50	-23.34

Pk - Peak detector

Av - Average detection

Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_wit h 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)
.6792	21.8	Qp	10	0	31.8	56	-24.2	-	-
1.1337	24.67	Qp	9.8	0	34.47	56	-21.53	-	-
1.3515	23.27	Qp	9.8	.1	33.17	56	-22.83	-	-
1.9698	23.5	Qp	9.8	.1	33.4	56	-22.6	-	-
6.045	22.02	Qp	9.8	.1	31.92	60	-28.08	-	-
7.9125	24.25	Qp	9.9	.1	34.25	60	-25.75	-	-

Qp - Quasi-Peak detector