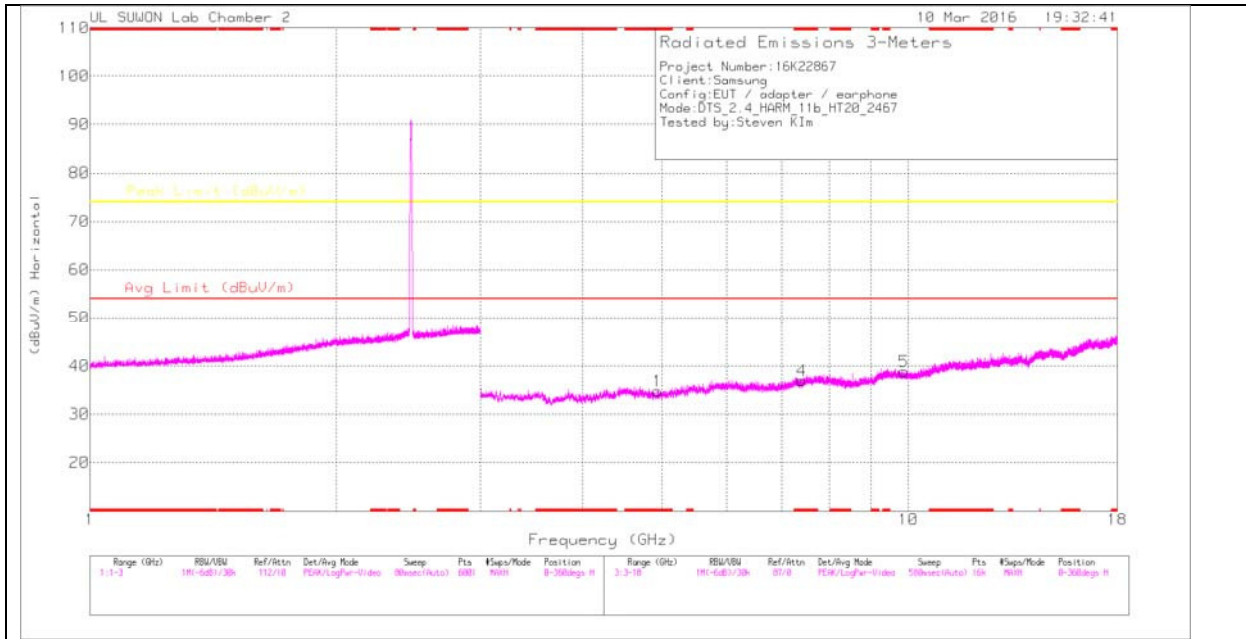
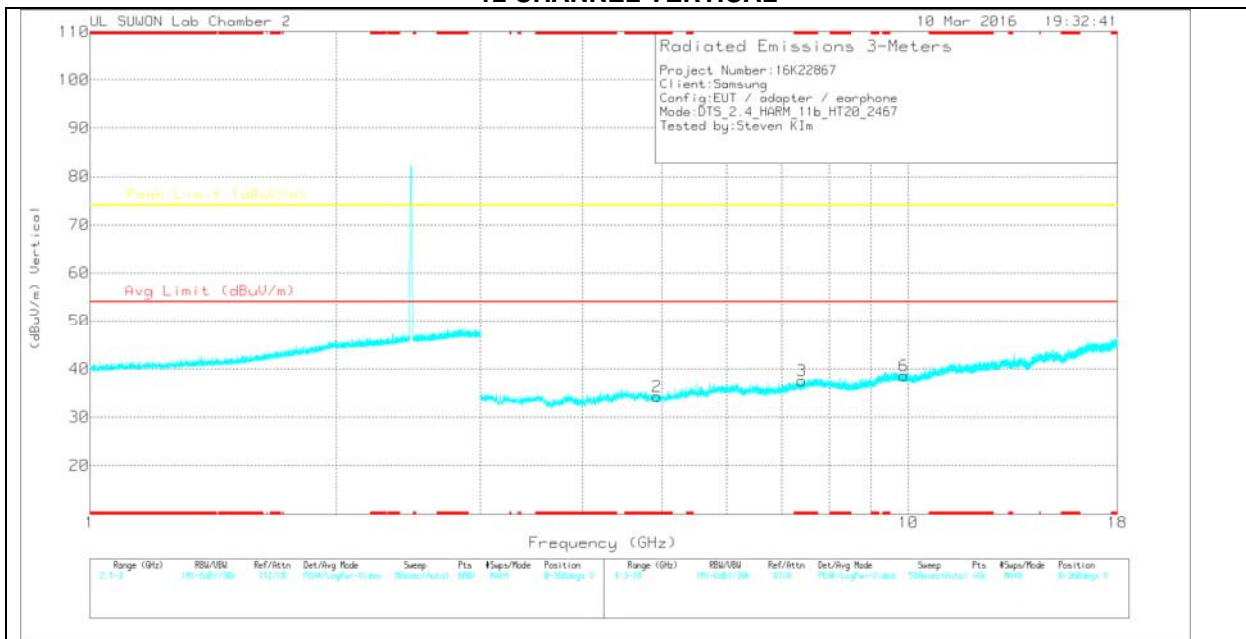


12 CHANNEL HORIZONTAL



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**

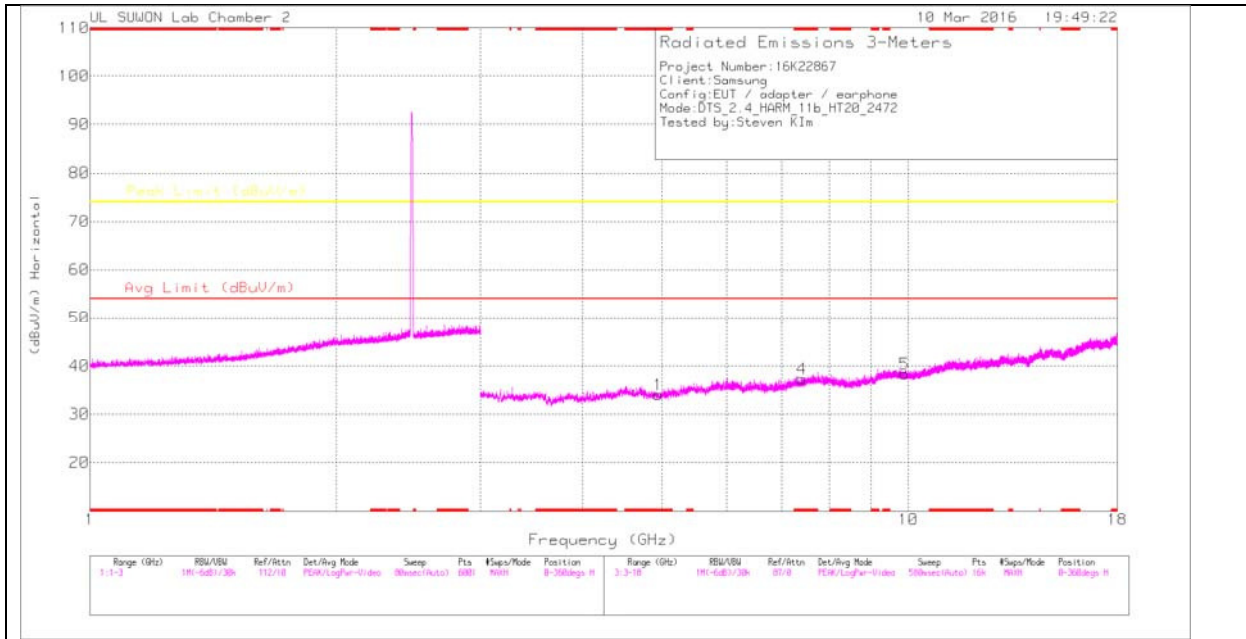
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.935	26.05	PK	33.9	-25.1	0	34.85	-	-	74	-39.15	0-360	100	H
4	* 7.405	23.01	PK	36	-22.1	0	36.91	-	-	74	-37.09	0-360	100	H
5	9.868	20.96	PK	37.1	-19.2	0	38.86	-	-	74	-35.14	0-360	100	H
2	* 4.934	25.5	PK	33.9	-25.1	0	34.3	-	-	74	-39.7	0-360	200	V
3	* 7.407	23.63	PK	36	-22.1	0	37.53	-	-	74	-36.47	0-360	100	V
6	9.869	20.75	PK	37.1	-19.2	0	38.65	-	-	74	-35.35	0-360	200	V

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

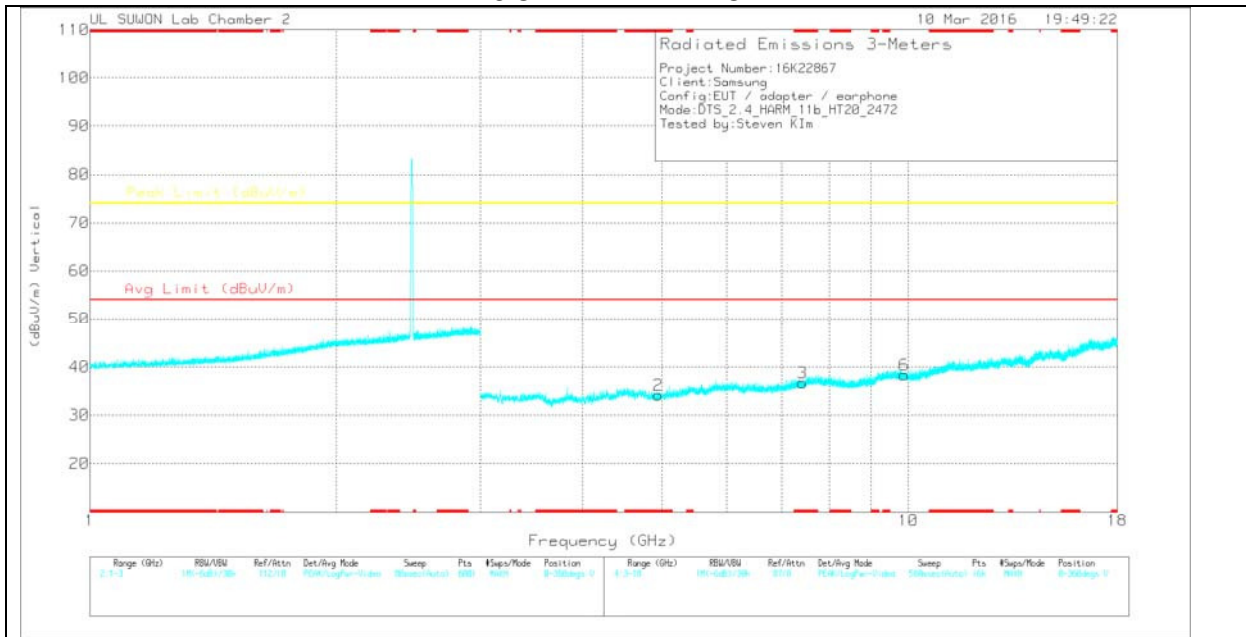
PK – Peak detector

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 24)_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	* 4.946	25.26	PK	33.9	-25.1	0	34.06	-	-	74	-39.94	0-360	200	H
4	* 7.415	23.45	PK	36	-22.1	0	37.35	-	-	74	-36.65	0-360	100	H
5	9.887	20.48	PK	37.1	-19.2	0	38.38	-	-	74	-35.62	0-360	100	H
2	* 4.943	25.32	PK	33.9	-25.1	0	34.12	-	-	74	-39.88	0-360	100	V
3	* 7.419	22.82	PK	36	-22.1	0	36.72	-	-	74	-37.28	0-360	100	V
6	9.884	20.46	PK	37.1	-19.2	0	38.36	-	-	74	-35.64	0-360	100	V

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

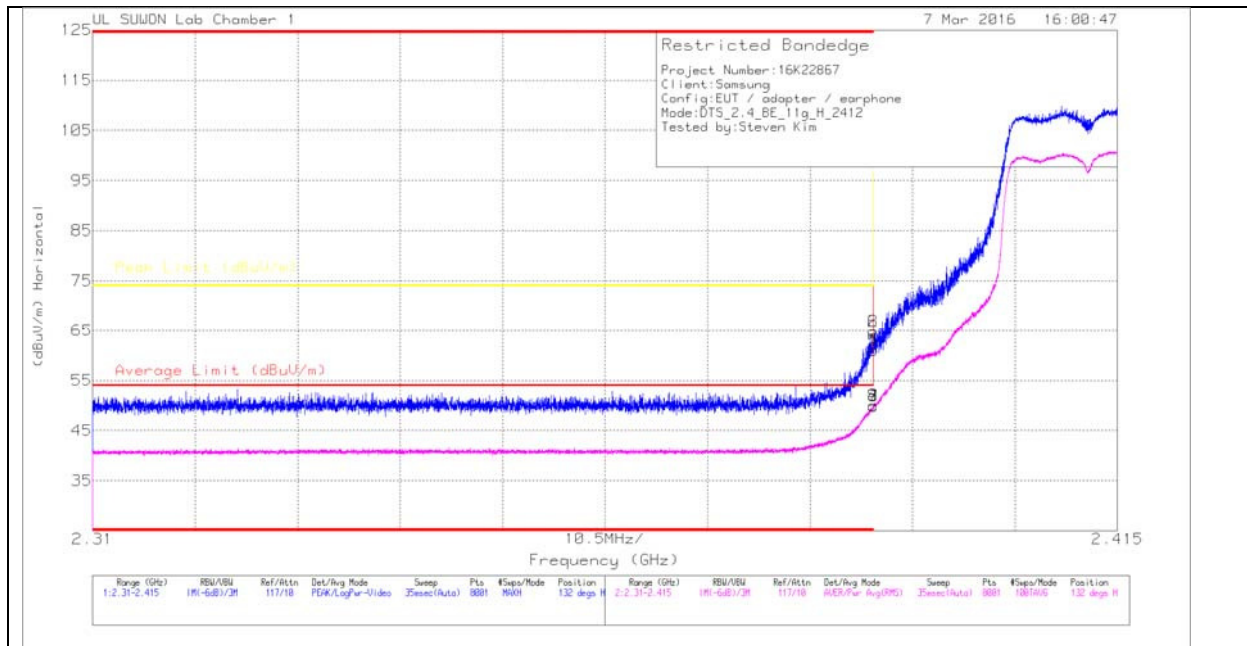
PK – Peak detector

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 2TX CDD MODE IN THE 2.4 GHz BAND

#### RESTRICTED BANDEDGE (LOW CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

##### TRACE MARKERS

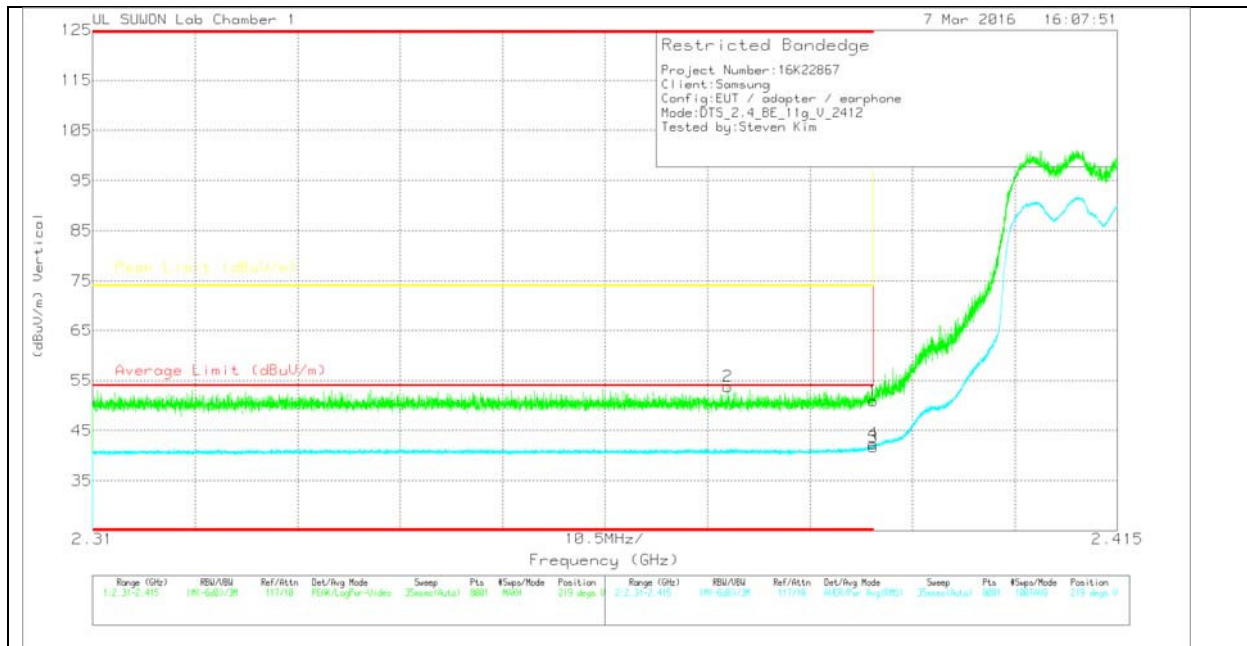
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	58.19	PK		-29	0	60.99	-	-	74	-13.01	132	144	H
2	* 2.39	62.09	PK		-29	0	64.89	-	-	74	-9.11	132	144	H
5	* 2.39	58.19	PK		-29	0	60.99	-	-	74	-13.01	132	144	H
6	* 2.39	62.09	PK		-29	0	64.89	-	-	74	-9.11	132	144	H
3	* 2.39	46.77	RMS		-29	.29	49.86	54	-4.14	-	-	132	144	H
4	* 2.39	46.94	RMS		-29	.29	50.03	54	-3.97	-	-	132	144	H
7	* 2.39	46.77	RMS		-29	.29	49.86	54	-4.14	-	-	132	144	H
8	* 2.39	46.94	RMS		-29	.29	50.03	54	-3.97	-	-	132	144	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(00168 717)_15061 9	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	48.11	Pk			0	50.91	-	-	74	-23.09	219	312	V
2	* 2.375	50.99	Pk			0	53.79	-	-	74	-20.21	219	312	V
3	* 2.39	38.61	RMS			.29	41.7	54	-12.3	-	-	219	312	V
4	* 2.39	39.3	RMS			.29	42.39	54	-11.61	-	-	219	312	V

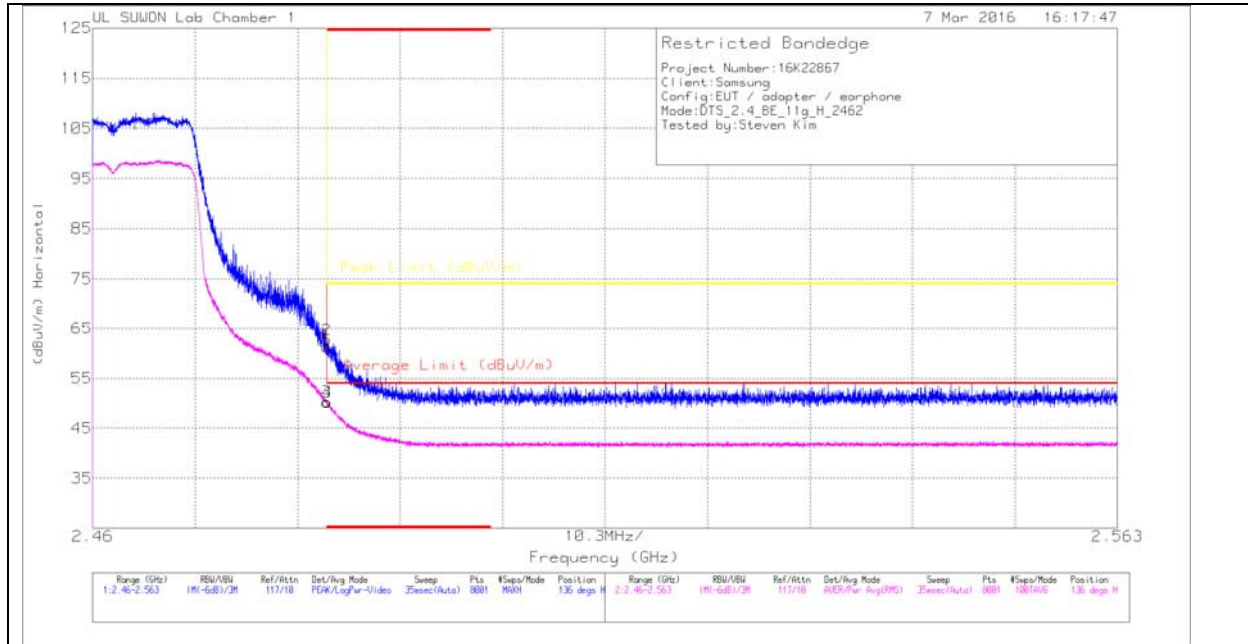
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL PEAK AND AVERAGE PLOT**



**HORIZONTAL DATA**

**TRACE MARKERS**

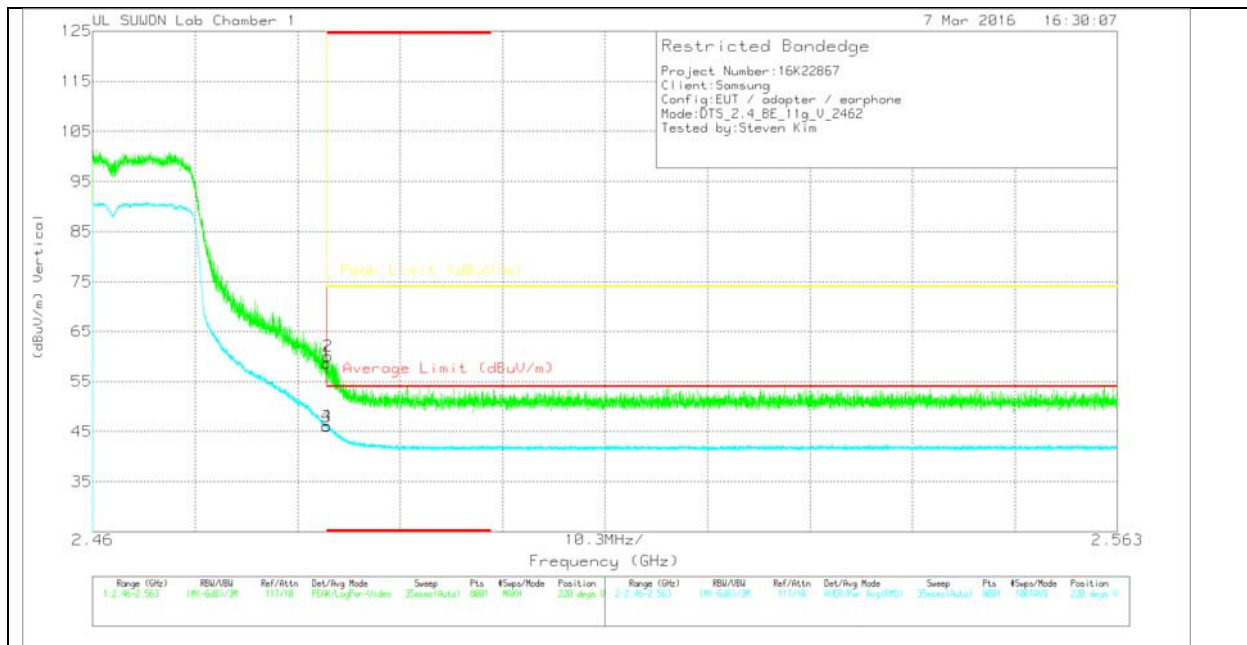
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/00168 717/15061 9	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	57.56	PK	32	-28.3	0	61.26	-	-	74	-12.74	136	138	H
2	* 2.484	59.08	PK	32	-28.3	0	62.78	-	-	74	-11.22	136	138	H
3	* 2.484	46.31	RMS	32	-28.3	.29	50.3	54	-3.7	-	-	136	138	H
4	* 2.484	46.21	RMS	32	-28.3	.29	50.2	54	-3.8	-	-	136	138	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(00168 717)_15061 9	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	54.88	Pk	32	-28.3	0	58.58	-	-	74	-15.42	220	102	V
2	* 2.484	56.35	Pk	32	-28.3	0	60.05	-	-	74	-13.95	220	102	V
3	* 2.484	42.03	RMS	32	-28.3	.29	46.02	54	-7.98	-	-	220	102	V
4	* 2.484	42.13	RMS	32	-28.3	.29	46.12	54	-7.88	-	-	220	102	V

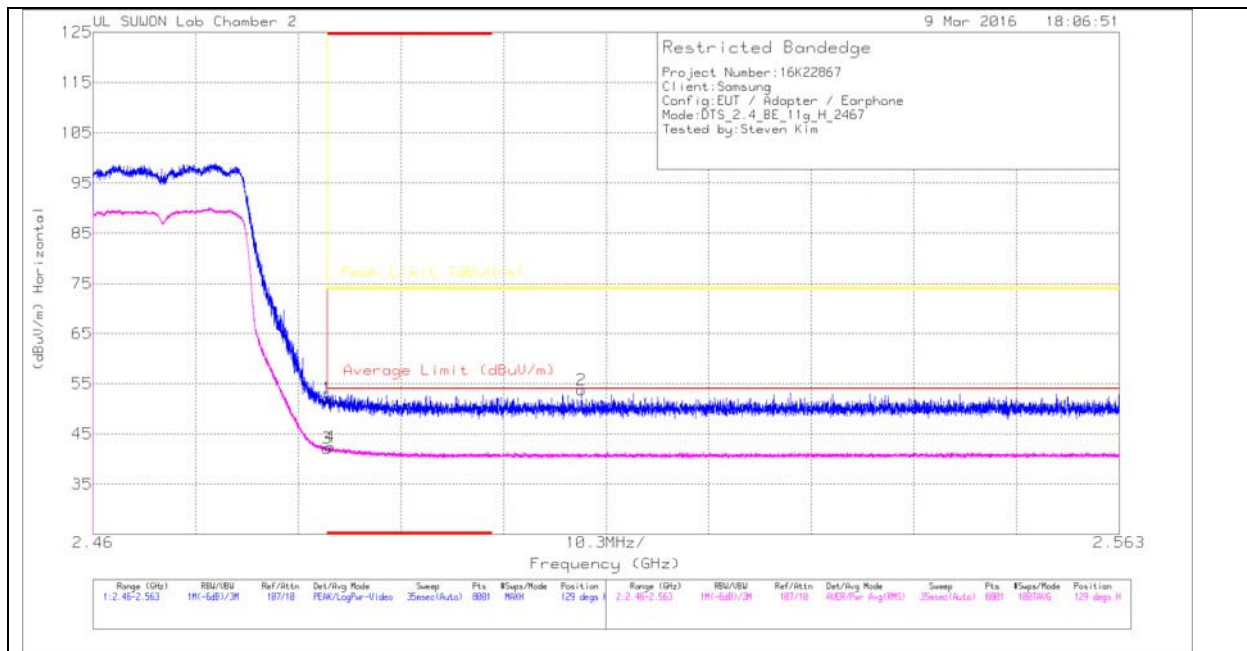
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (12 CHANNEL)**

**HORIZONTAL PEAK AND AVERAGE PLOT**



**HORIZONTAL DATA**

Trace Markers

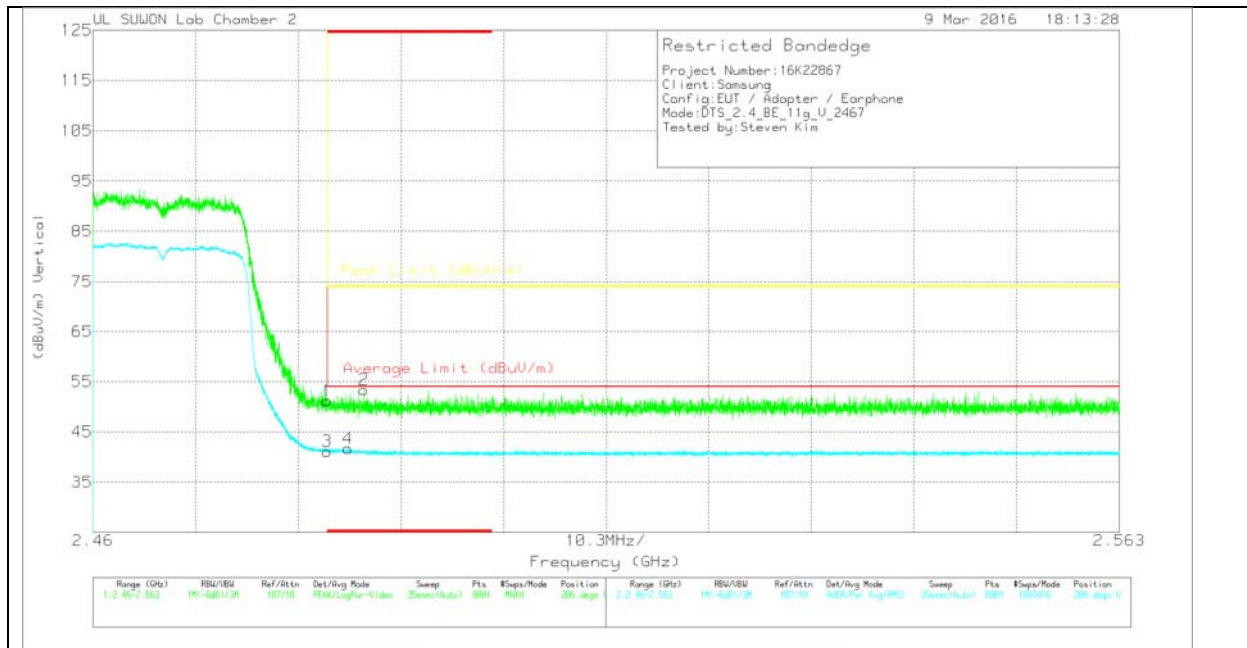
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.7	Pk	31.8	-19.4	0	52.1	-	-	74	-21.9	129	136	H
2	2.509	41.17	Pk	31.9	-19.3	0	53.77	-	-	74	-20.23	129	136	H
3	* 2.484	29.45	RMS	31.8	-19.4	29	42.14	54	-11.86	-	-	129	136	H
4	* 2.484	29.76	RMS	31.8	-19.4	29	42.45	54	-11.55	-	-	129	136	H

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

Pk - Peak detector

RMS - RMS detection

**VERTICAL PEAK AND AVERAGE PLOT**



**VERTICAL DATA**

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	38.78	Pk	31.8	-19.4	0	51.18	-	-	74	-22.82	206	249	V
2	* 2.487	41.02	Pk	31.8	-19.4	0	53.42	-	-	74	-20.58	206	249	V
3	* 2.484	28.47	RMS	31.8	-19.4	.29	41.16	54	-12.84	-	-	206	249	V
4	* 2.486	29.04	RMS	31.8	-19.4	.29	41.73	54	-12.27	-	-	206	249	V

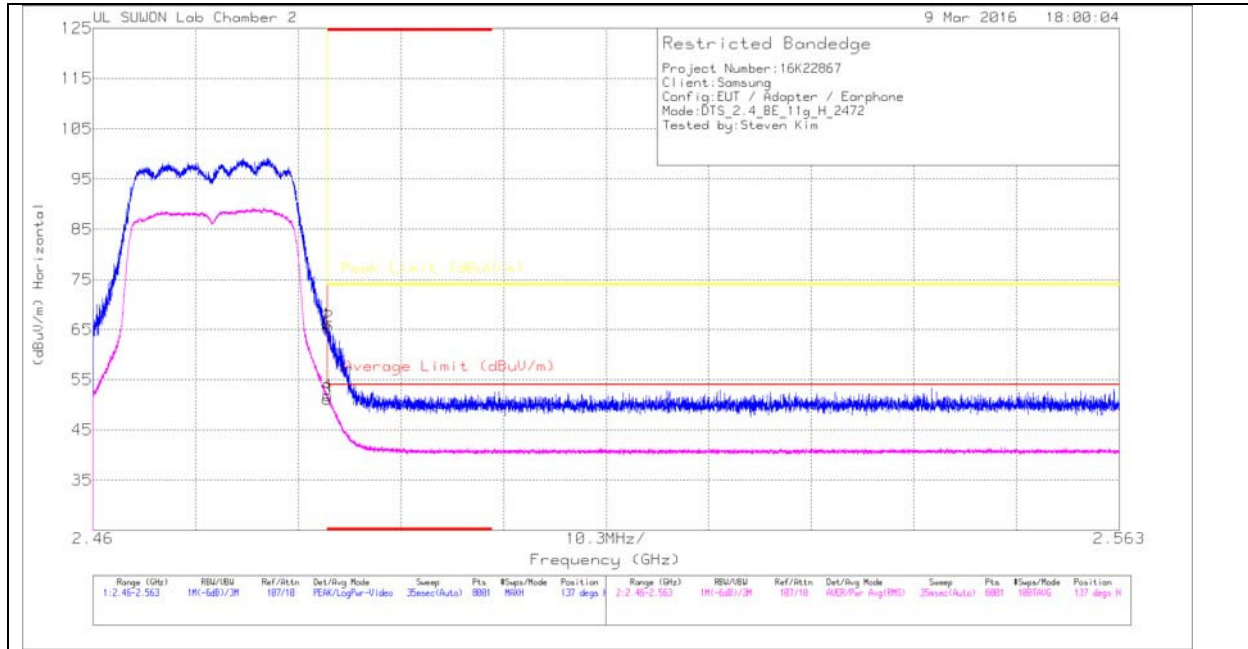
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEGE (13 CHANNEL)**

**HORIZONTAL PEAK AND AVERAGE PLOT**



**HORIZONTAL DATA**

Trace Markers

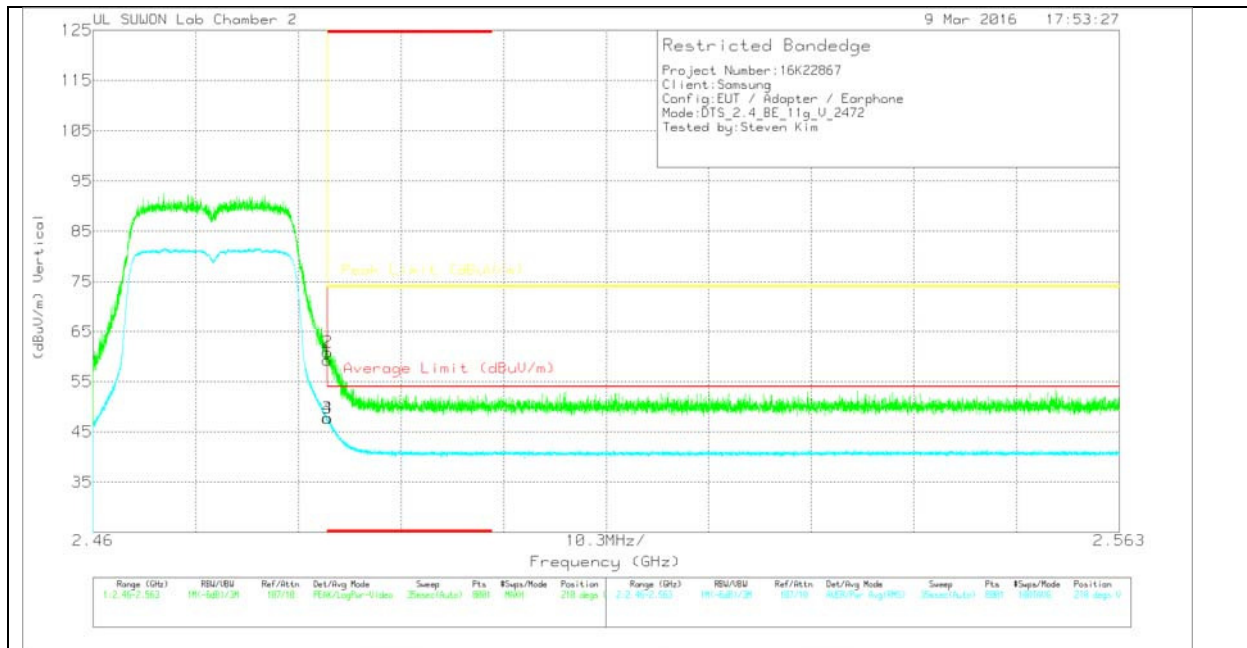
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	53.69	Pk	31.8	-19.4	0	66.09	-	-	74	-7.91	137	141	H
2	* 2.484	53.28	Pk	31.8	-19.4	0	65.68	-	-	74	-8.32	137	141	H
3	* 2.484	38.42	RMS	31.8	-19.4	29	51.11	54	-2.89	-	-	137	141	H
4	* 2.484	39.17	RMS	31.8	-19.4	29	51.86	54	-2.14	-	-	137	141	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 24)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	46.84	Pk	31.8	-19.4	0	59.24	-	-	74	-14.76	210	240	V
2	* 2.484	48.46	Pk	31.8	-19.4	0	60.86	-	-	74	-13.14	210	240	V
3	* 2.484	35.06	RMS	31.8	-19.4	.29	47.75	54	-6.25	-	-	210	240	V
4	* 2.484	35.06	RMS	31.8	-19.4	.29	47.75	54	-6.25	-	-	210	240	V

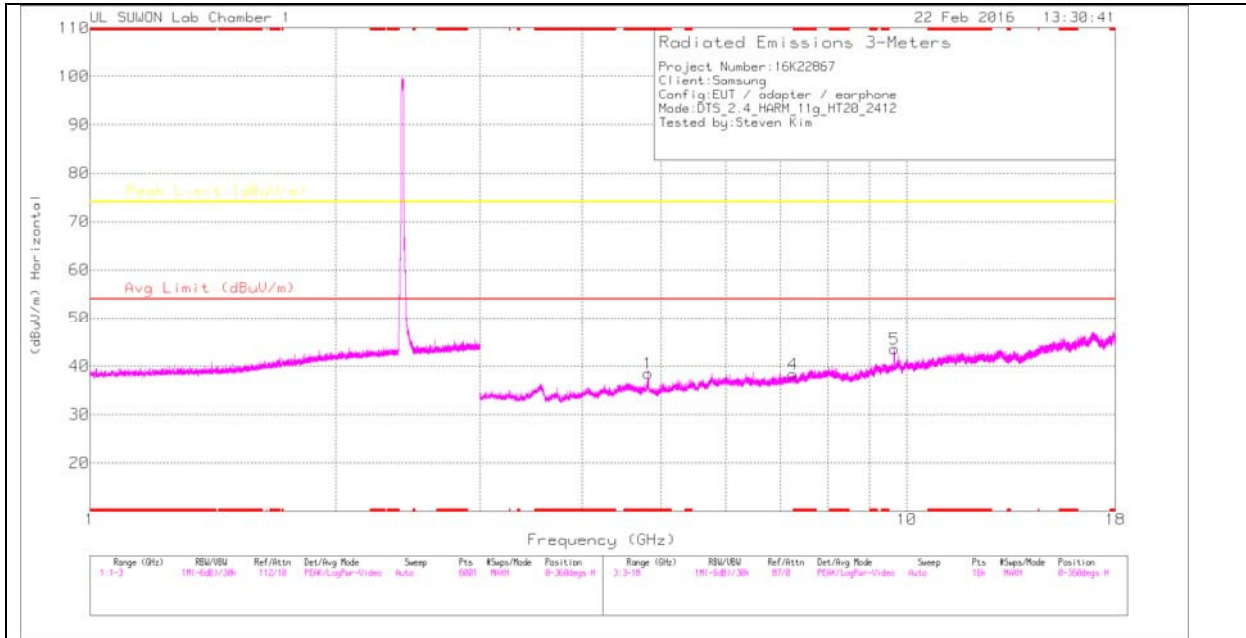
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

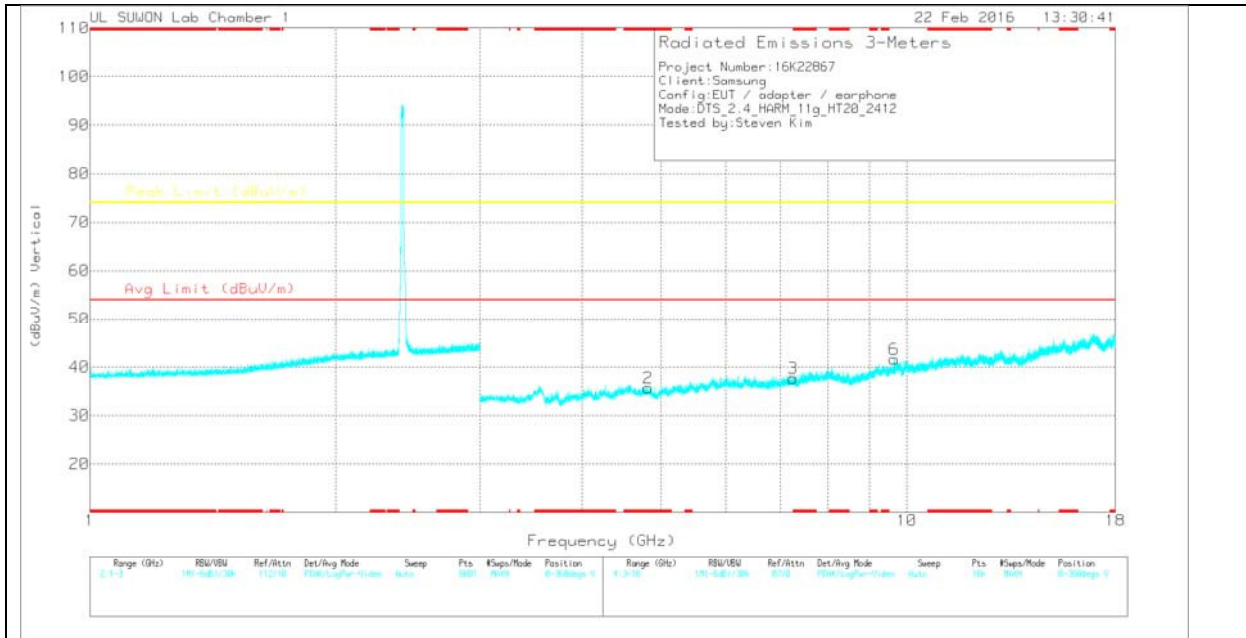
RMS - RMS detection

### 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	38.29	Pk	34	-33.8	0	38.49	-	-	74	-35.51	0-360	100	H
4	* 7.26	33.55	Pk	35.7	-30.9	0	38.35	-	-	74	-35.65	0-360	200	H
5	9.648	33.82	Pk	37.1	-27.4	0	43.52	-	-	74	-30.48	0-360	200	H
2	* 4.824	35.48	Pk	34	-33.8	0	35.68	-	-	74	-38.32	0-360	200	V
3	* 7.251	32.75	Pk	35.7	-30.8	0	37.65	-	-	74	-36.35	0-360	200	V
6	9.647	31.96	Pk	37.1	-27.4	0	41.66	-	-	74	-32.34	0-360	200	V

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

PK – Peak detector

**Radiated Emissions**

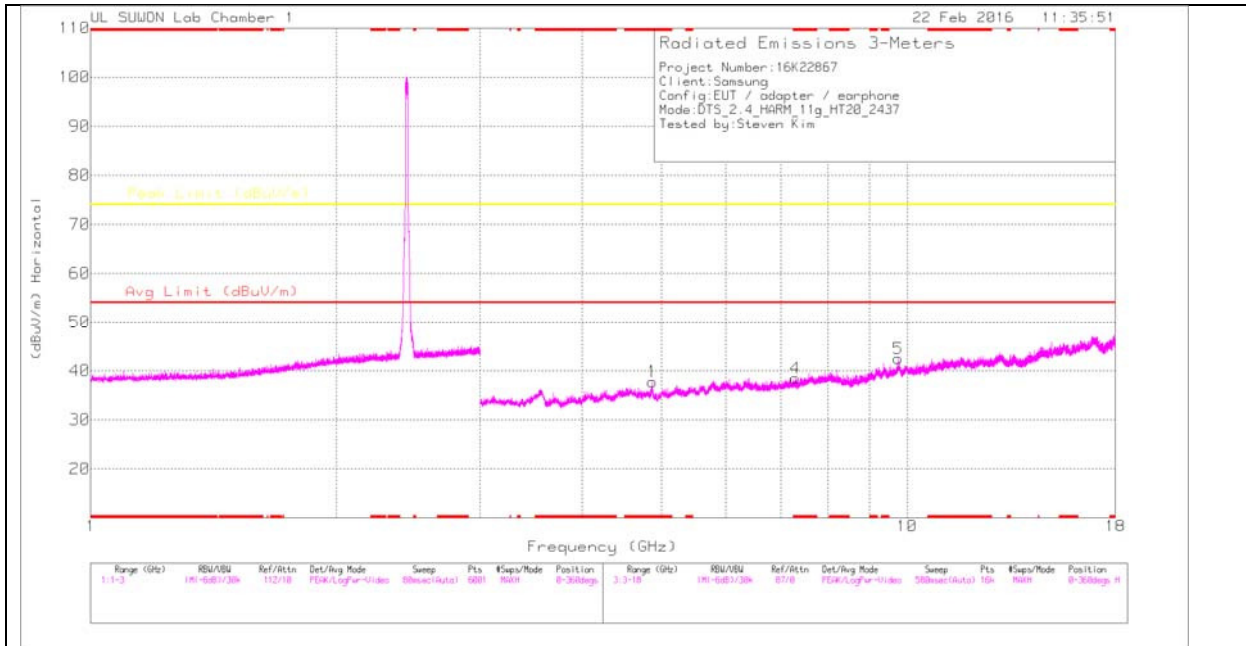
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001 68717)_1 50619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.83	51.3	PK2	34	-33.8	0	51.5	-	-	74	-22.5	210	110	H
* 4.824	37.85	MAv1	34	-33.8	.29	38.34	54	-15.66	-	-	210	110	H
9.648	41.83	PK2	37.1	-27.4	0	51.53	-	-	74	-22.47	138	111	H
9.648	34.51	MAv1	37.1	-27.4	.29	44.5	-	-	-	-	138	111	H

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

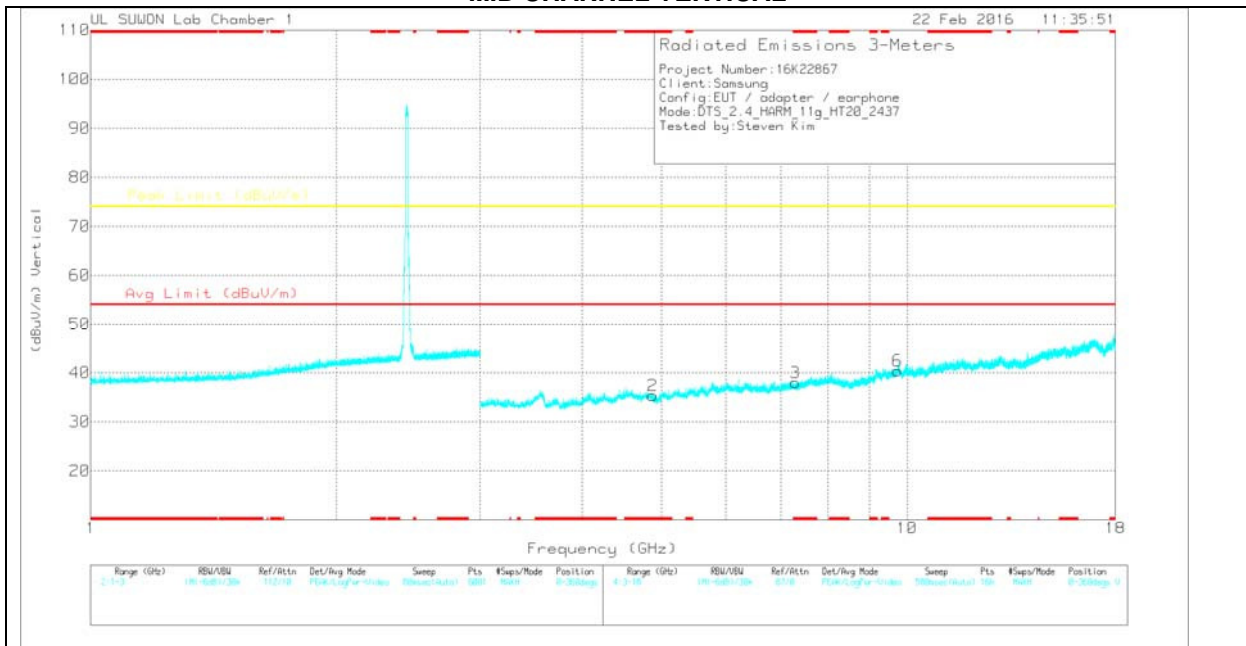
PK2 - KDB558074 Method: Maximum Peak

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	37.79	Pk	34	-34	0	37.79	-	-	74	-36.21	0-360	100	H
4	* 7.295	33.7	Pk	35.7	-30.9	0	38.5	-	-	74	-35.5	0-360	100	H
5	9.748	32.1	Pk	37.2	-26.8	0	42.5	-	-	74	-31.5	0-360	100	H
2	* 4.88	35.39	Pk	34	-34	0	35.39	-	-	74	-38.61	0-360	200	V
3	* 7.3	33.22	Pk	35.7	-30.9	0	38.02	-	-	74	-35.98	0-360	100	V
6	9.735	30.41	Pk	37.2	-27.2	0	40.41	-	-	74	-33.59	0-360	100	V

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

PK – Peak detector

**Radiated Emissions**

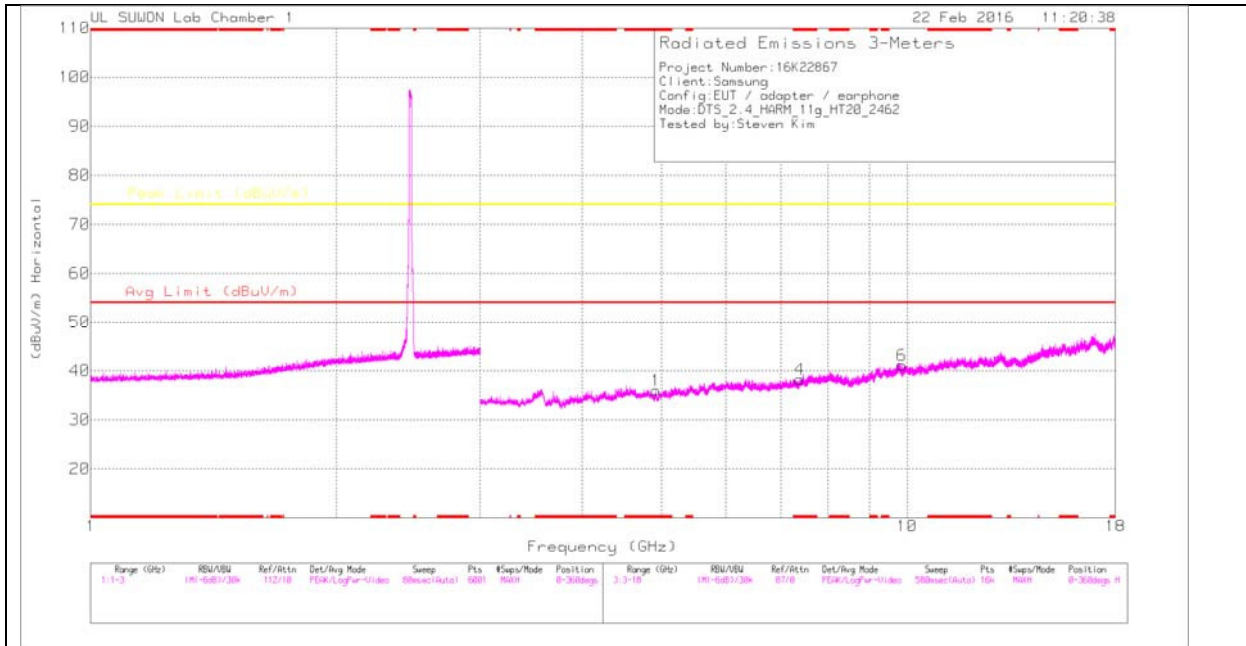
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.869	49.09	PK2	34	-34	0	49.09	-	-	74	-24.91	206	109	H
* 4.874	36.53	MAv1	34	-34	.29	36.82	54	-17.18	-	-	206	109	H

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

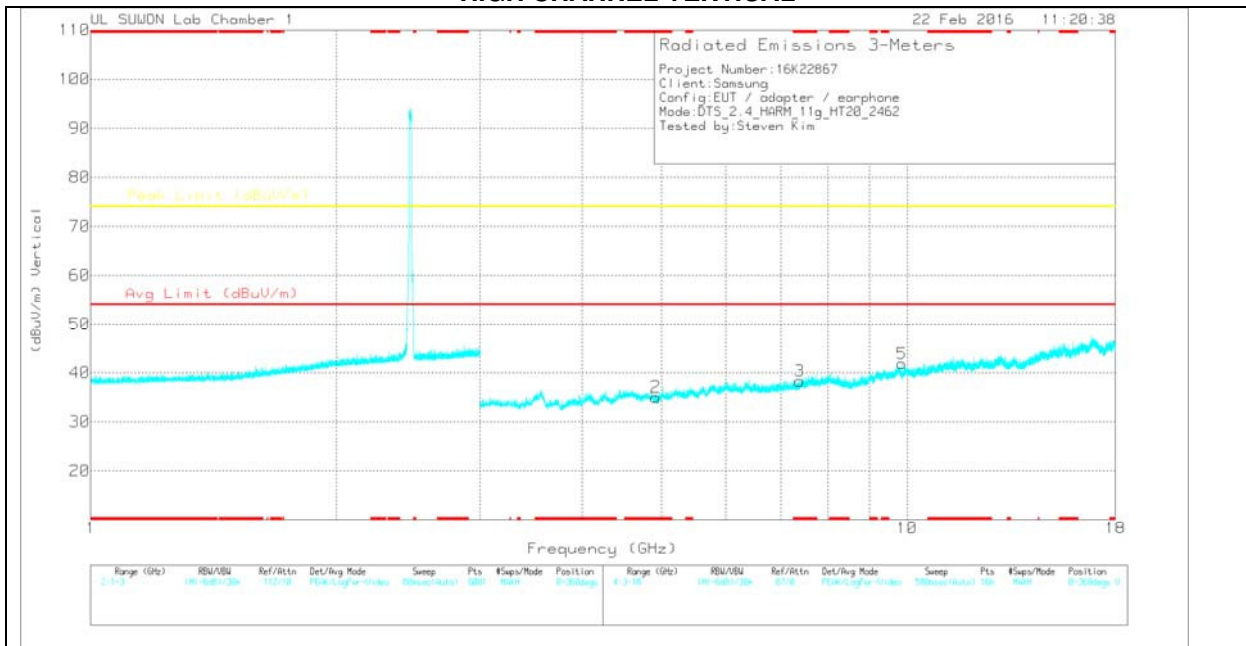
PK2 - KDB558074 Method: Maximum Peak

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**

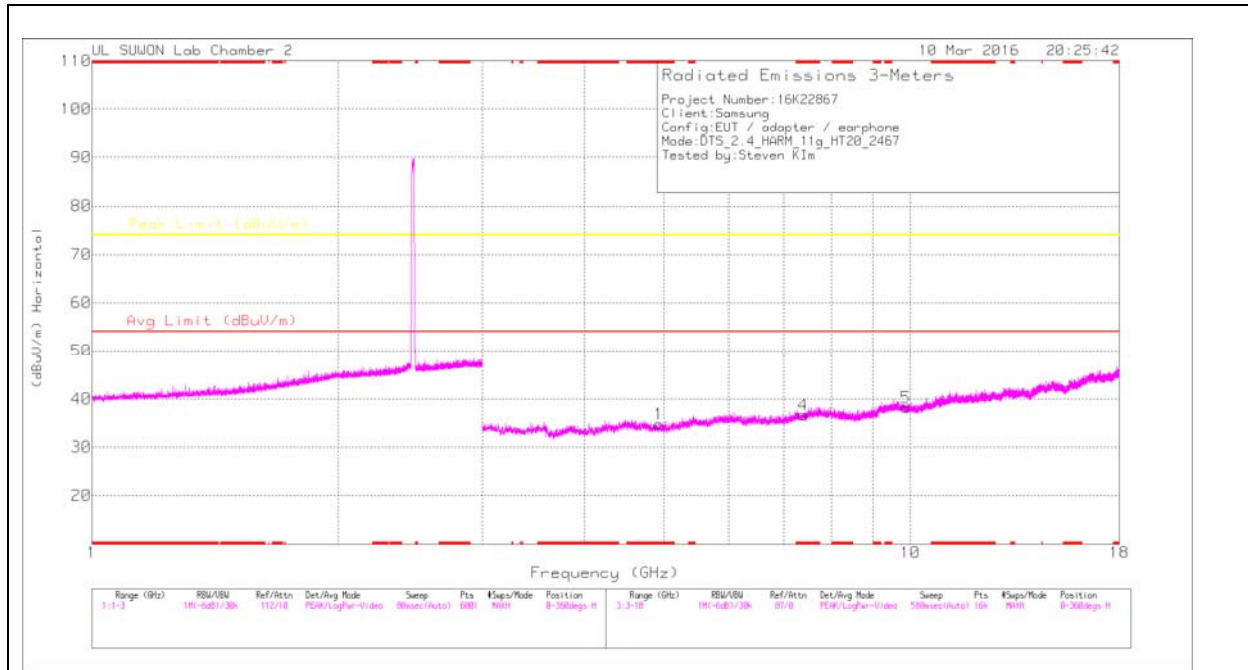
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.925	36	Pk	34	-34	0	36	-	-	74	-38	0-360	100	H
4	* 7.388	33.14	Pk	35.8	-30.7	0	38.24	-	-	74	-35.76	0-360	200	H
6	9.849	31.44	Pk	37.3	-27.6	0	41.14	-	-	74	-32.86	0-360	200	H
2	* 4.922	35.04	Pk	34	-34	0	35.04	-	-	74	-38.96	0-360	200	V
3	* 7.389	33.22	Pk	35.8	-30.7	0	38.32	-	-	74	-35.68	0-360	200	V
5	9.848	32.14	Pk	37.3	-27.6	0	41.84	-	-	74	-32.16	0-360	200	V

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

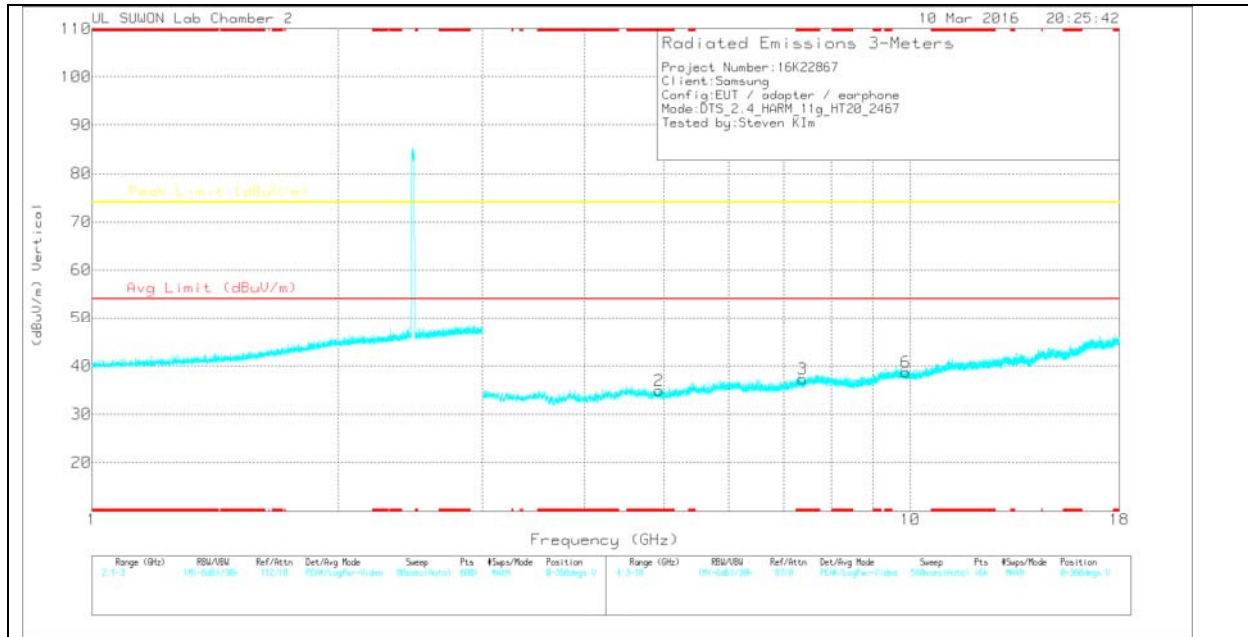
PK – Peak detector

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

12 CHANNEL HORIZONTAL



12 CHANNEL VERTICAL



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

**12 CHANNEL DATA**

Trace Markers

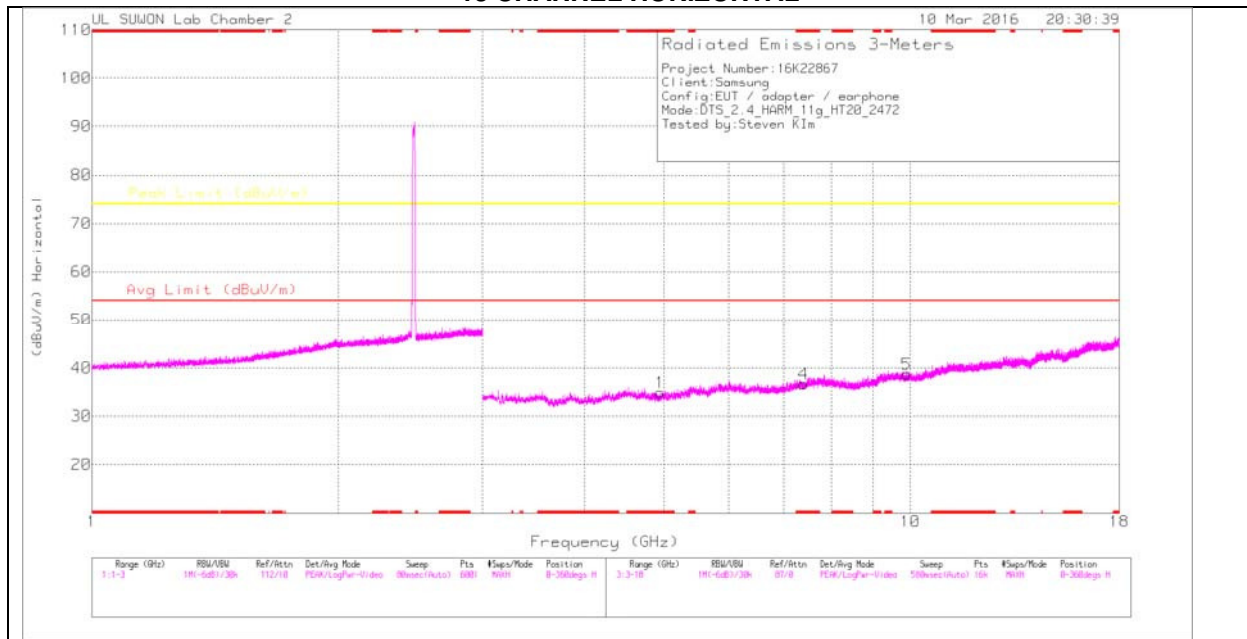
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.934	26.03	PK	33.9	-25.1	0	34.83	-	-	74	-39.17	0-360	100	H
4	* 7.393	22.95	PK	35.9	-22.1	0	36.75	-	-	74	-37.25	0-360	100	H
5	9.871	20.29	PK	37.1	-19.2	0	38.19	-	-	74	-35.81	0-360	200	H
2	* 4.934	26.12	PK	33.9	-25.1	0	34.92	-	-	74	-39.08	0-360	100	V
3	* 7.387	23.68	PK	35.9	-22.2	0	37.38	-	-	74	-36.62	0-360	100	V
6	9.868	20.78	PK	37.1	-19.2	0	38.68	-	-	74	-35.32	0-360	100	V

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

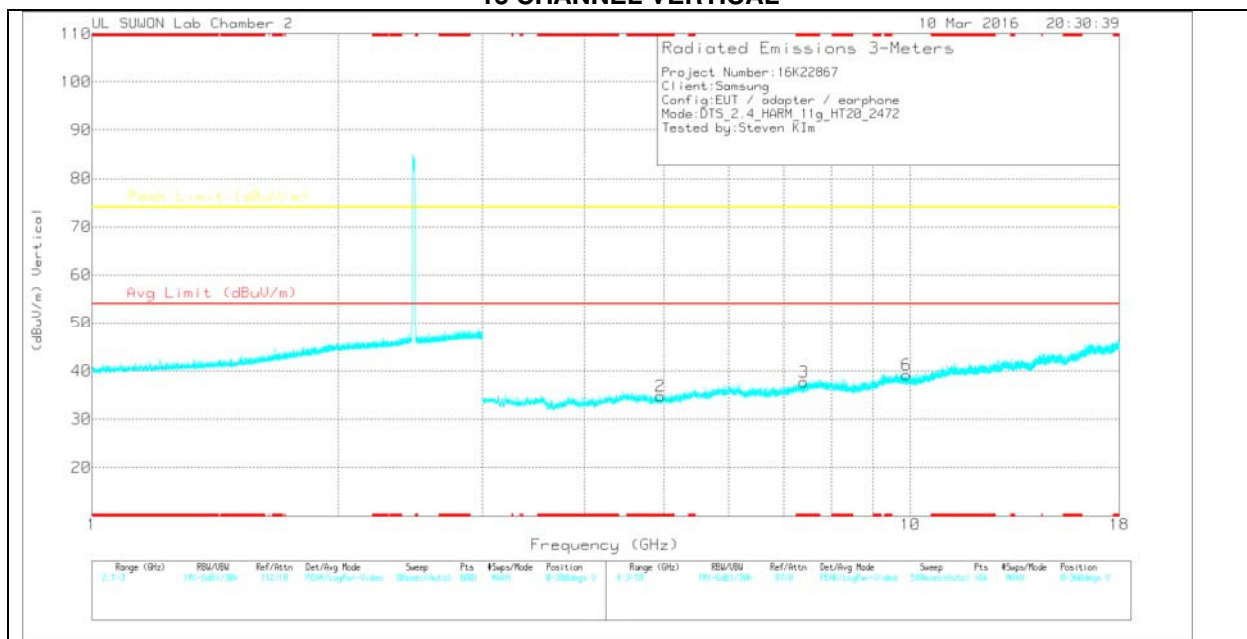
PK – Peak detector

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 24)_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	* 4.944	26.07	PK	33.9	-25.1	0	34.87	-	-	74	-39.13	0-360	100	H
4	* 7.404	22.81	PK	36	-22.1	0	36.71	-	-	74	-37.29	0-360	100	H
5	9.893	20.72	PK	37.1	-19.1	0	38.72	-	-	74	-35.28	0-360	200	H
2	* 4.943	26.04	PK	33.9	-25.1	0	34.84	-	-	74	-39.16	0-360	100	V
3	* 7.407	23.8	PK	36	-22.1	0	37.7	-	-	74	-36.3	0-360	200	V
6	9.888	21.38	PK	37.1	-19.2	0	39.28	-	-	74	-34.72	0-360	200	V

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

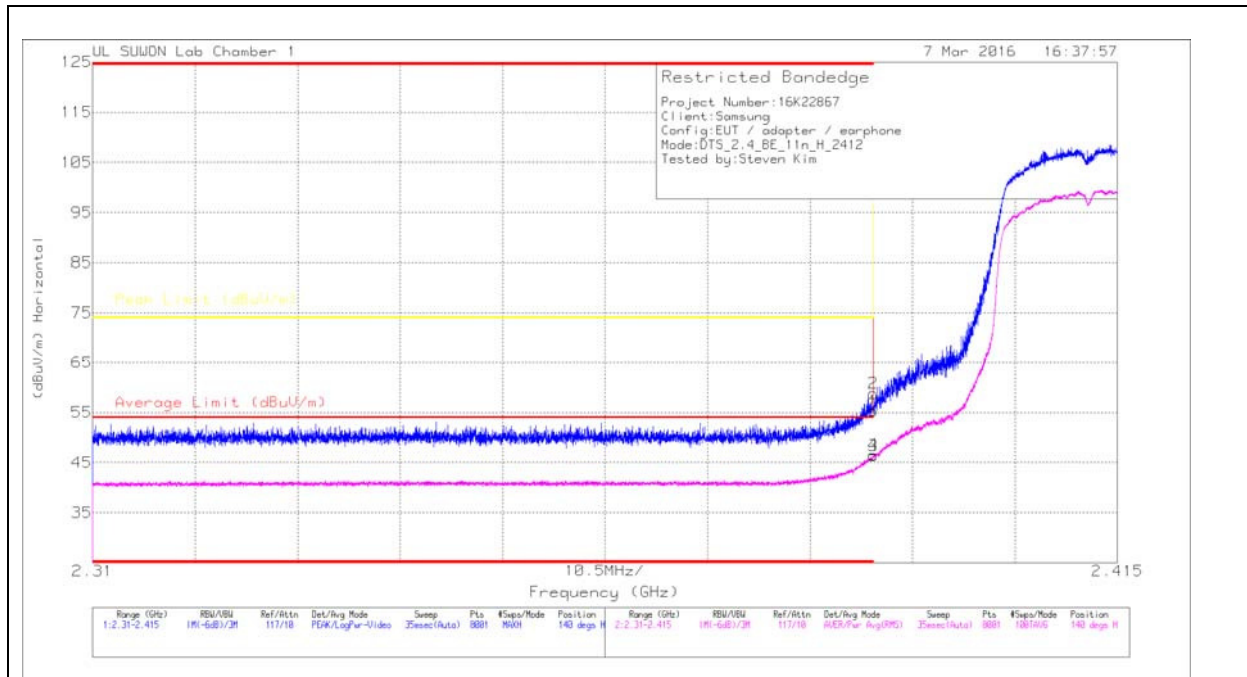
PK – Peak detector

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 2TX CDD MODE IN THE 2.4 GHz BAND

#### RESTRICTED BANDEDGE (LOW CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

##### TRACE MARKERS

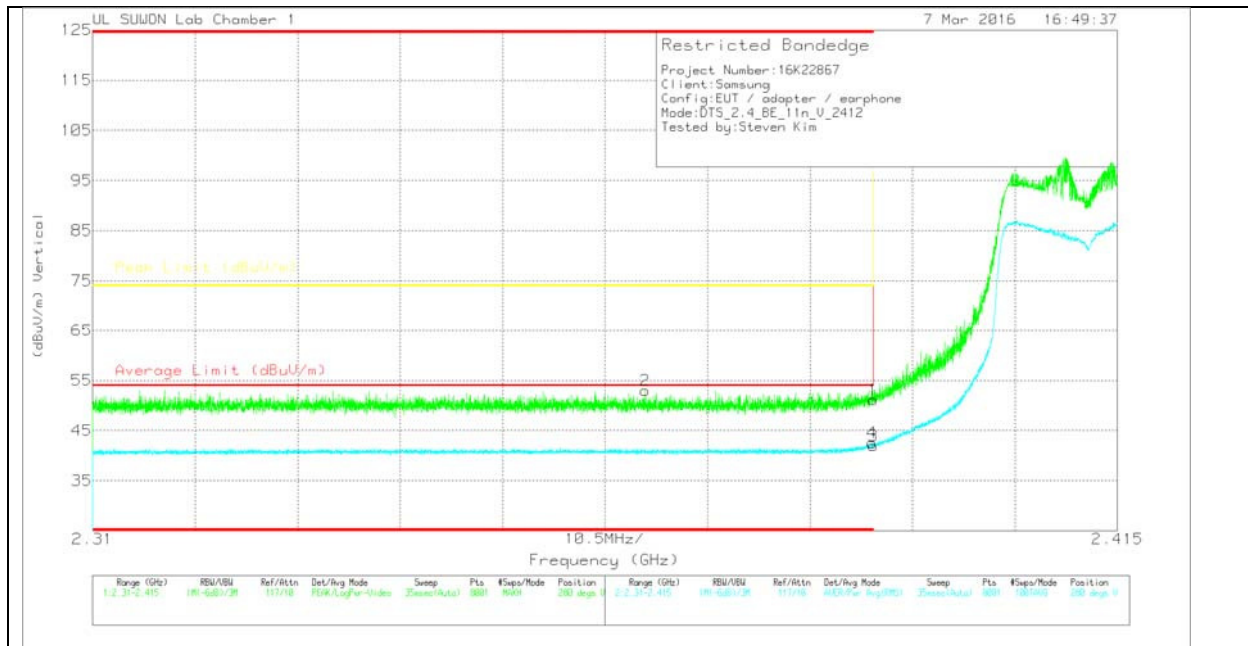
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	52.5	PK		-29	0	55.3	-	-	74	-18.7	140	143	H
2	* 2.39	55.99	PK		-29	0	58.79	-	-	74	-15.21	140	143	H
3	* 2.39	43.24	RMS		-29	.31	46.35	54	-7.65	-	-	140	143	H
4	* 2.39	43.43	RMS		-29	.31	46.54	54	-7.46	-	-	140	143	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(00168 717_15061 9)	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	48.36	Pk	31.8	-29	0	51.16	-	-	74	-22.84	280	351	V
2	* 2.367	50.2	Pk	31.8	-29	0	53	-	-	74	-21	280	351	V
3	* 2.39	38.85	RMS	31.8	-29	.31	41.96	54	-12.04	-	-	280	351	V
4	* 2.39	39.44	RMS	31.8	-29	.31	42.55	54	-11.45	-	-	280	351	V

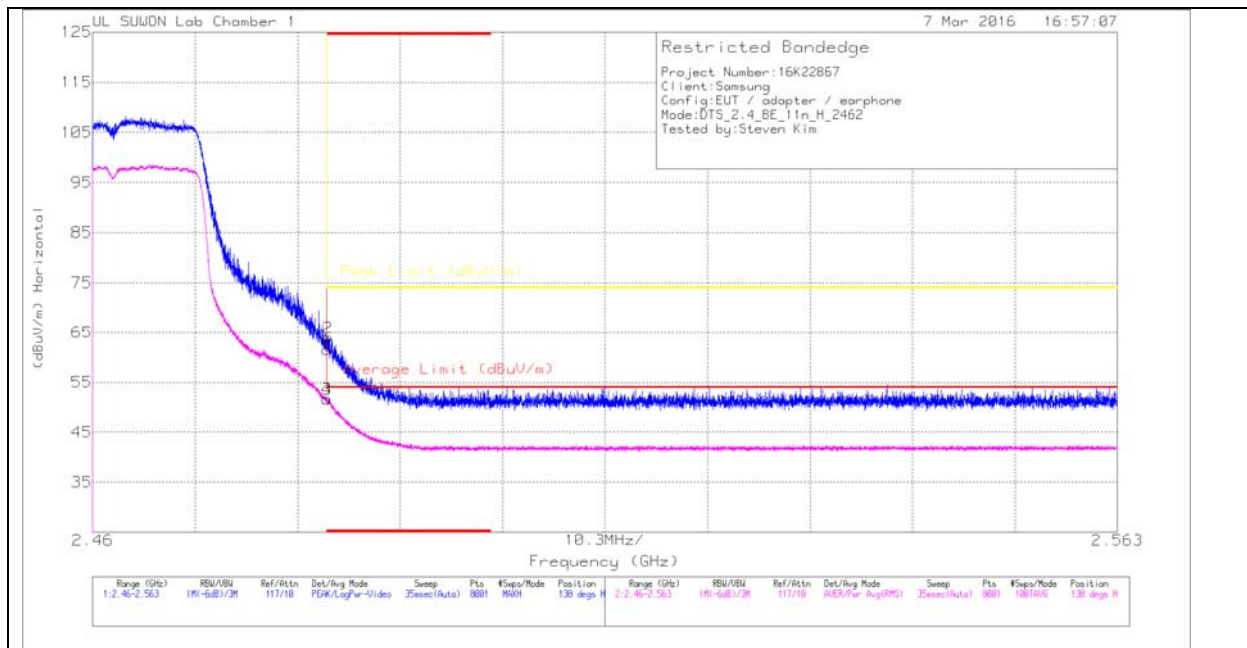
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL PEAK AND AVERAGE PLOT**



**HORIZONTAL DATA**

**TRACE MARKERS**

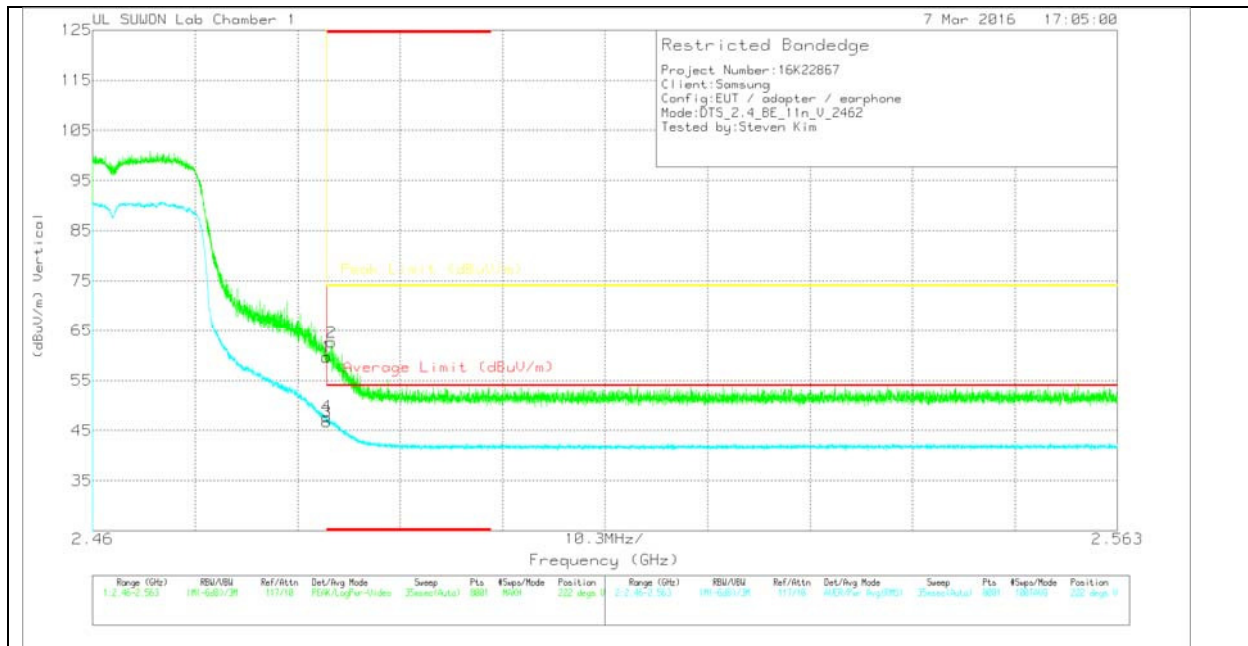
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	57.83	PK	32	-28.3	0	61.53	-	-	74	-12.47	138	138	H
2	* 2.484	60.29	PK	32	-28.3	0	63.99	-	-	74	-10.01	138	138	H
3	* 2.484	47.61	RMS	32	-28.3	.31	51.62	54	-2.38	-	-	138	138	H
4	* 2.484	47.59	RMS	32	-28.3	.31	51.6	54	-2.4	-	-	138	138	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(00168 717)_15061 9	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	55.96	Pk	32	-28.3	0	59.66	-	-	74	-14.34	222	102	V
2	* 2.484	58.94	Pk	32	-28.3	0	62.64	-	-	74	-11.36	222	102	V
3	* 2.484	42.73	RMS	32	-28.3	.31	46.74	54	-7.26	-	-	222	102	V
4	* 2.484	43.74	RMS	32	-28.3	.31	47.75	54	-6.25	-	-	222	102	V

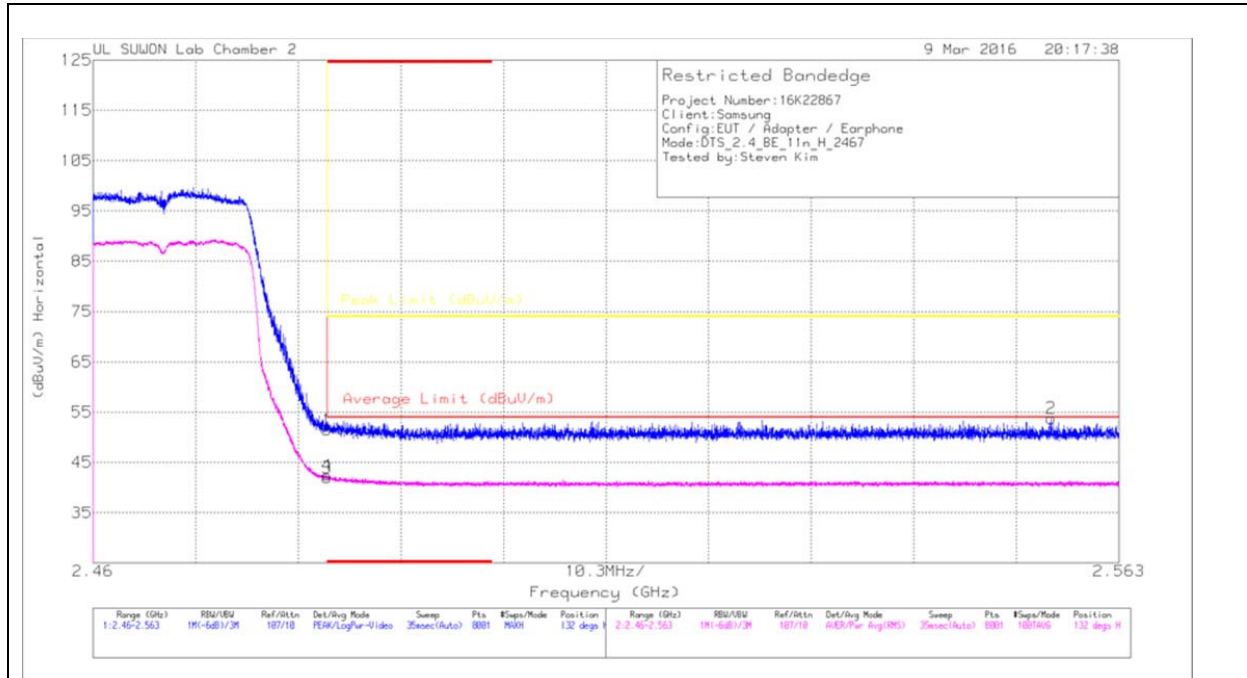
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (12 CHANNEL)**

**HORIZONTAL PEAK AND AVERAGE PLOT**



**HORIZONTAL DATA**

Trace Markers

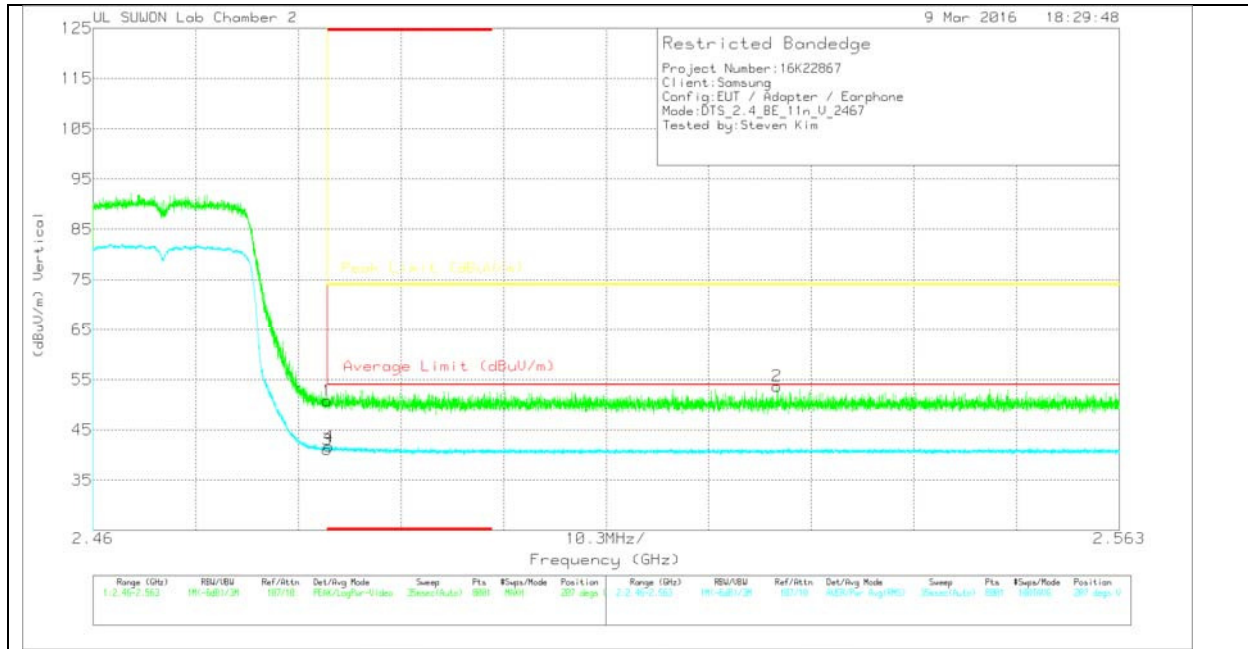
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.07	Pk	31.8	-19.4	0	51.47	-	-	74	-22.53	132	137	H
2	2.556	41.19	Pk	31.9	-19.3	0	53.79	-	-	74	-20.21	132	137	H
3	* 2.484	29.27	RMS	31.8	-19.4	.31	41.98	54	-12.02	-	-	132	137	H
4	* 2.484	29.72	RMS	31.8	-19.4	.31	42.43	54	-11.57	-	-	132	137	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 24)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	38.41	Pk	31.8	-19.4	0	50.81	-	-	74	-23.19	207	246	V
2	2.529	41.1	Pk	31.9	-19.3	0	53.7	-	-	74	-20.3	207	246	V
3	* 2.484	28.4	RMS	31.8	-19.4	.31	41.11	54	-12.89	-	-	207	246	V
4	* 2.484	28.98	RMS	31.8	-19.4	.31	41.69	54	-12.31	-	-	207	246	V

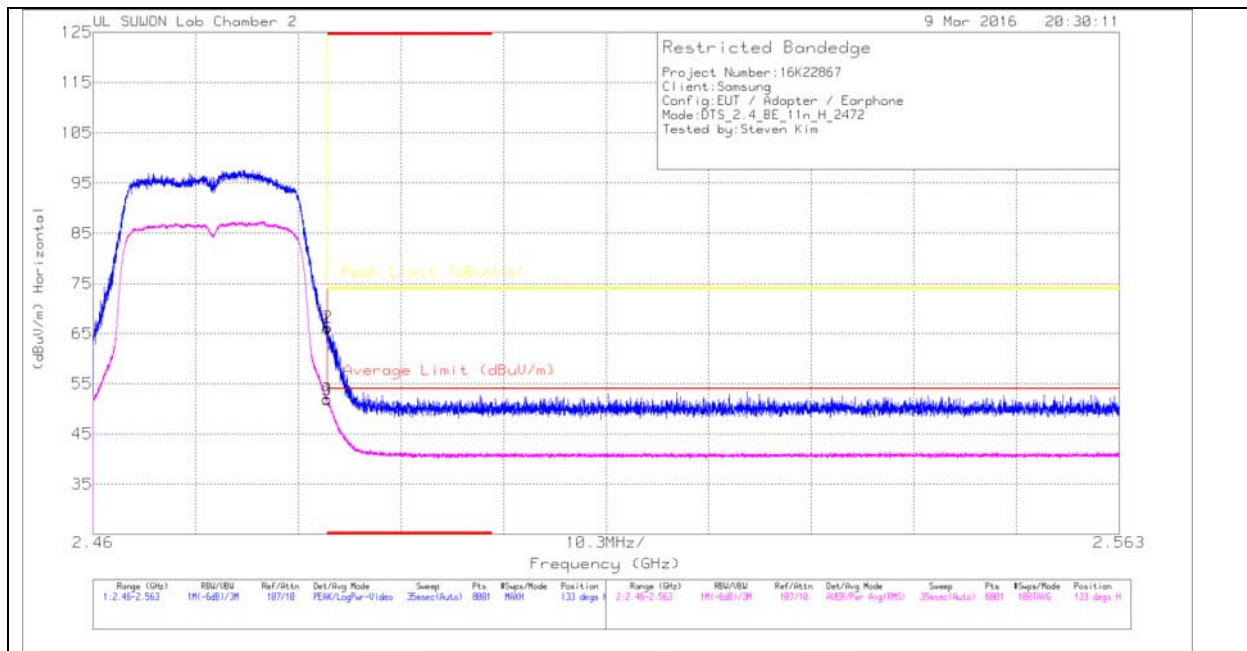
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (13 CHANNEL)**

**HORIZONTAL PEAK AND AVERAGE PLOT**



**HORIZONTAL DATA**

Trace Markers

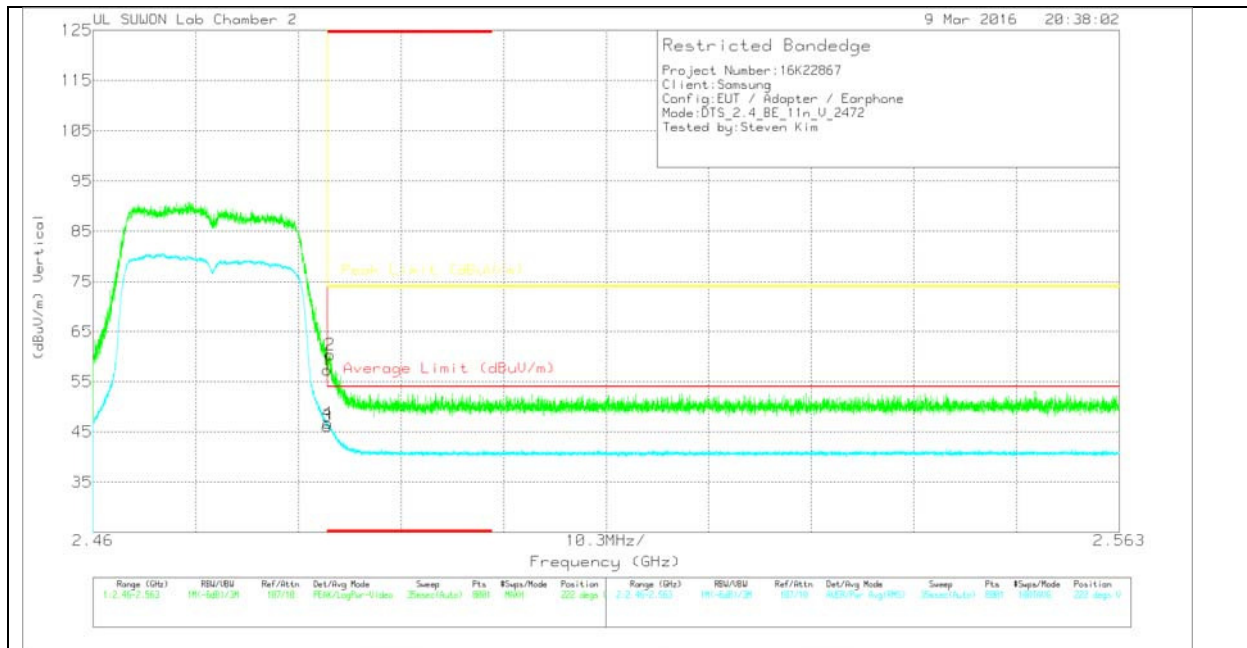
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	53.61	Pk	31.8	-19.4	0	66.01	-	-	74	-7.99	133	135	H
2	* 2.484	53.93	Pk	31.8	-19.4	0	66.33	-	-	74	-7.67	133	135	H
3	* 2.484	39.13	RMS	31.8	-19.4	.31	51.84	54	-2.16	-	-	133	135	H
4	* 2.484	39.23	RMS	31.8	-19.4	.31	51.94	54	-2.06	-	-	133	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 24)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	44.88	Pk	31.8	-19.4	0	57.28	-	-	74	-16.72	222	131	V
2	* 2.484	47.97	Pk	31.8	-19.4	0	60.37	-	-	74	-13.63	222	131	V
3	* 2.484	33.45	RMS	31.8	-19.4	.31	46.16	54	-7.84	-	-	222	131	V
4	* 2.484	34.05	RMS	31.8	-19.4	.31	46.76	54	-7.24	-	-	222	131	V

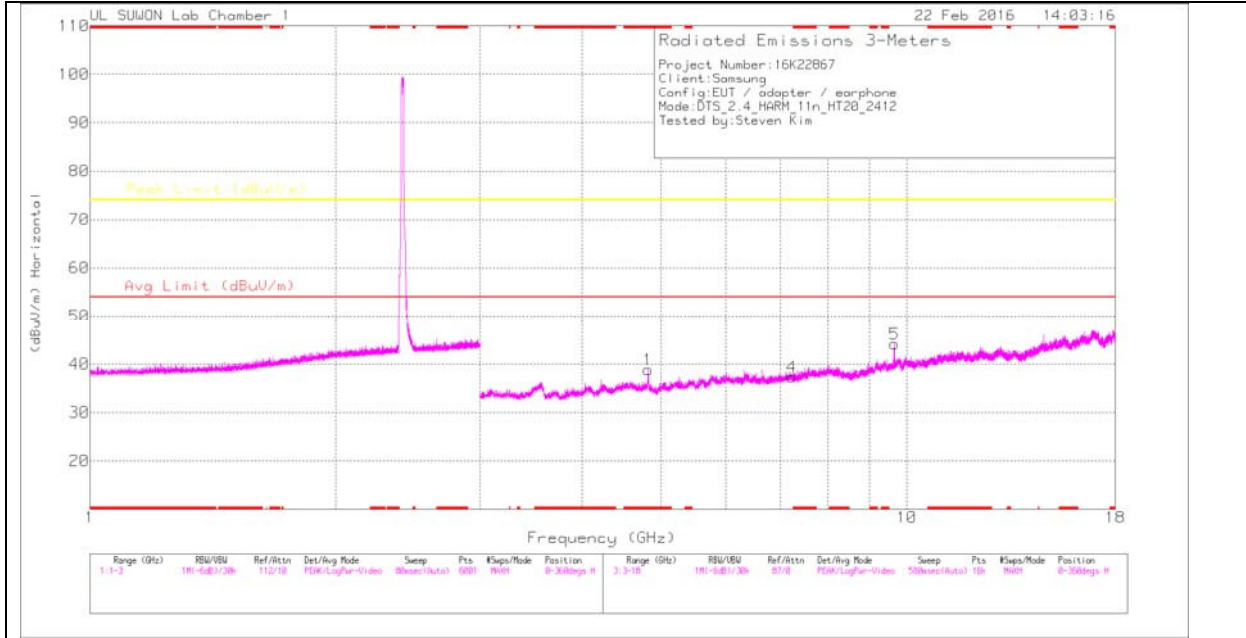
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

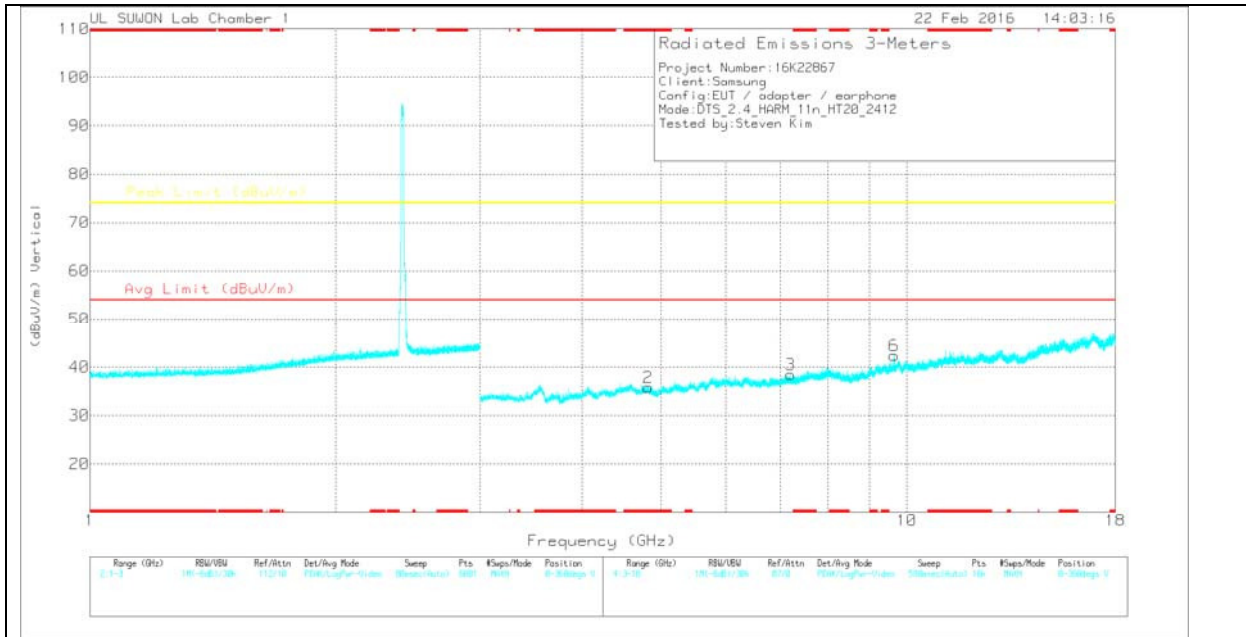
RMS - RMS detection

### 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	38.63	Pk	34	-33.8	0	38.83	-	-	74	-35.17	0-360	100	H
4	7.231	32.63	Pk	35.7	-31	0	37.33	-	-	74	-36.67	0-360	100	H
5	9.648	34.46	Pk	37.1	-27.4	0	44.16	-	-	74	-29.84	0-360	200	H
2	* 4.824	35.65	Pk	34	-33.8	0	35.85	-	-	74	-38.15	0-360	100	V
3	7.204	33.52	Pk	35.7	-30.8	0	38.42	-	-	74	-35.58	0-360	200	V
6	9.647	32.73	Pk	37.1	-27.4	0	42.43	-	-	74	-31.57	0-360	200	V

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

PK – Peak detector

**Radiated Emissions**

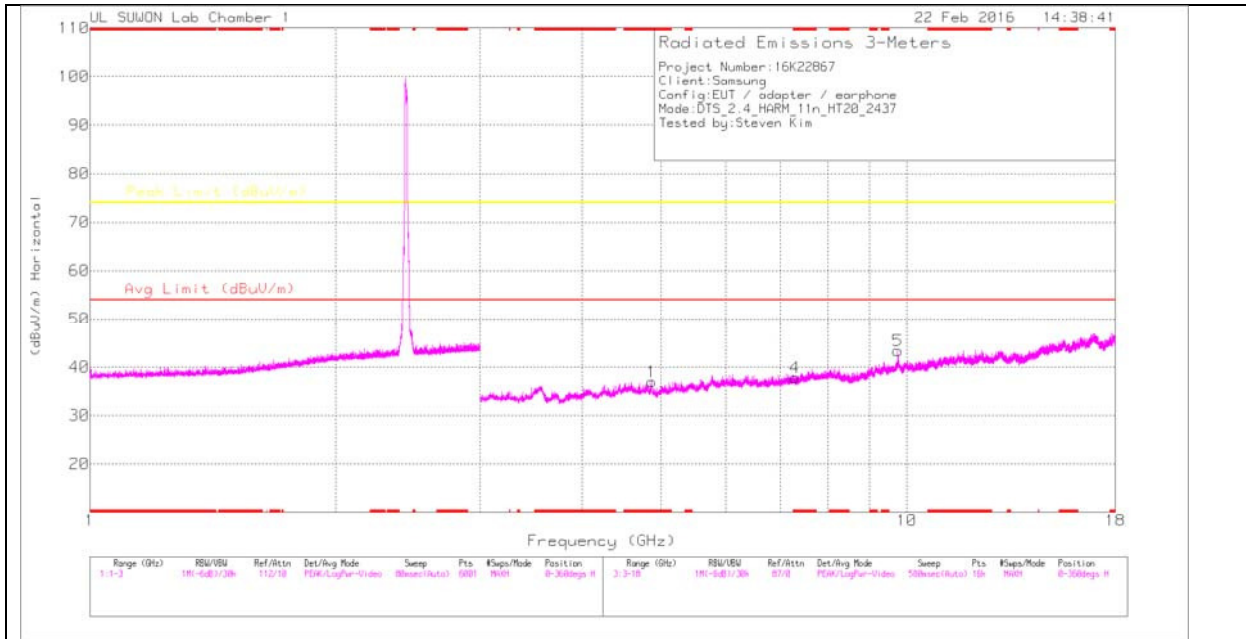
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001 68717)_1 50619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.822	50.3	PK2	34	-33.8	0	50.5	-	-	74	-23.5	221	106	H
* 4.824	38.91	MAv1	34	-33.8	.31	39.42	54	-14.58	-	-	221	106	H
9.648	41.53	PK2	37.1	-27.4	0	51.23	-	-	74	-22.77	141	116	H
9.648	31.66	MAv1	37.1	-27.4	.31	41.67	-	-	-	-	141	116	H
9.648	41.91	PK2	37.1	-27.4	0	51.61	-	-	74	-22.39	9	315	V
9.648	32.99	MAv1	37.1	-27.4	.31	43	-	-	-	-	9	315	V

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

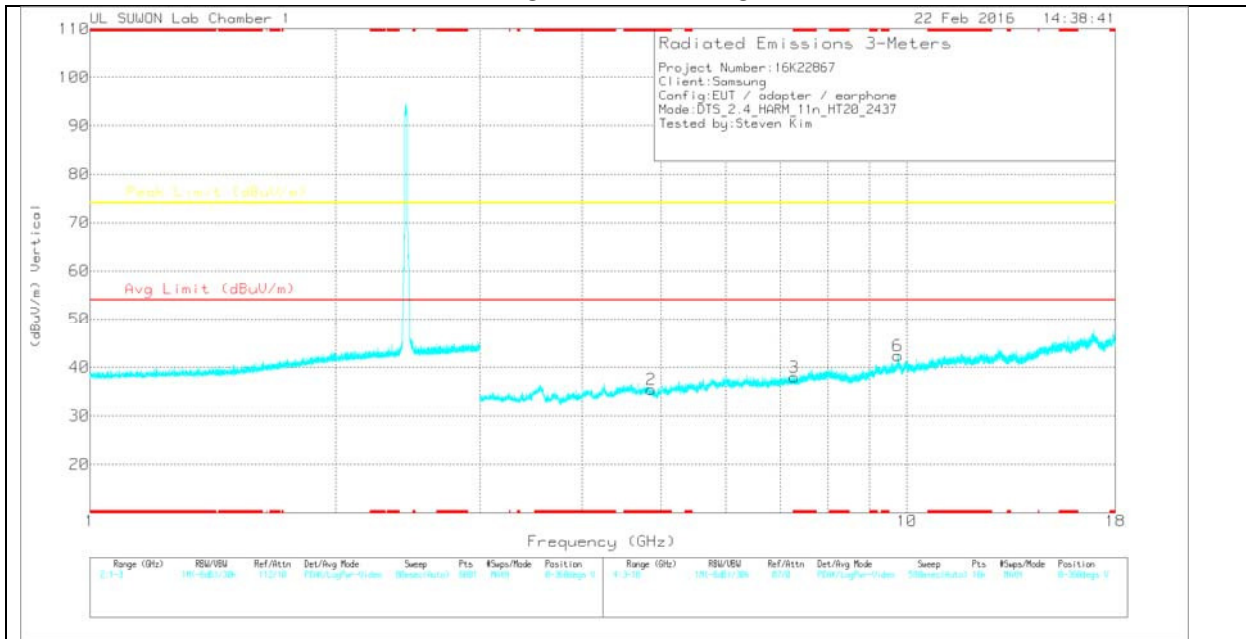
PK2 - KDB558074 Method: Maximum Peak

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	* 4.869	36.95	Pk	34	-34	0	36.95	-	-	74	-37.05	0-360	100	H
4	* 7.29	33	Pk	35.7	-30.9	0	37.8	-	-	74	-36.2	0-360	200	H
5	9.748	32.97	Pk	37.2	-26.8	0	43.37	-	-	74	-30.63	0-360	200	H
2	* 4.866	35.43	Pk	34	-34	0	35.43	-	-	74	-38.57	0-360	100	V
3	* 7.275	33.28	Pk	35.7	-31	0	37.98	-	-	74	-36.02	0-360	200	V
6	9.748	32	Pk	37.2	-26.8	0	42.4	-	-	74	-31.6	0-360	200	V

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

PK – Peak detector

**Radiated Emissions**

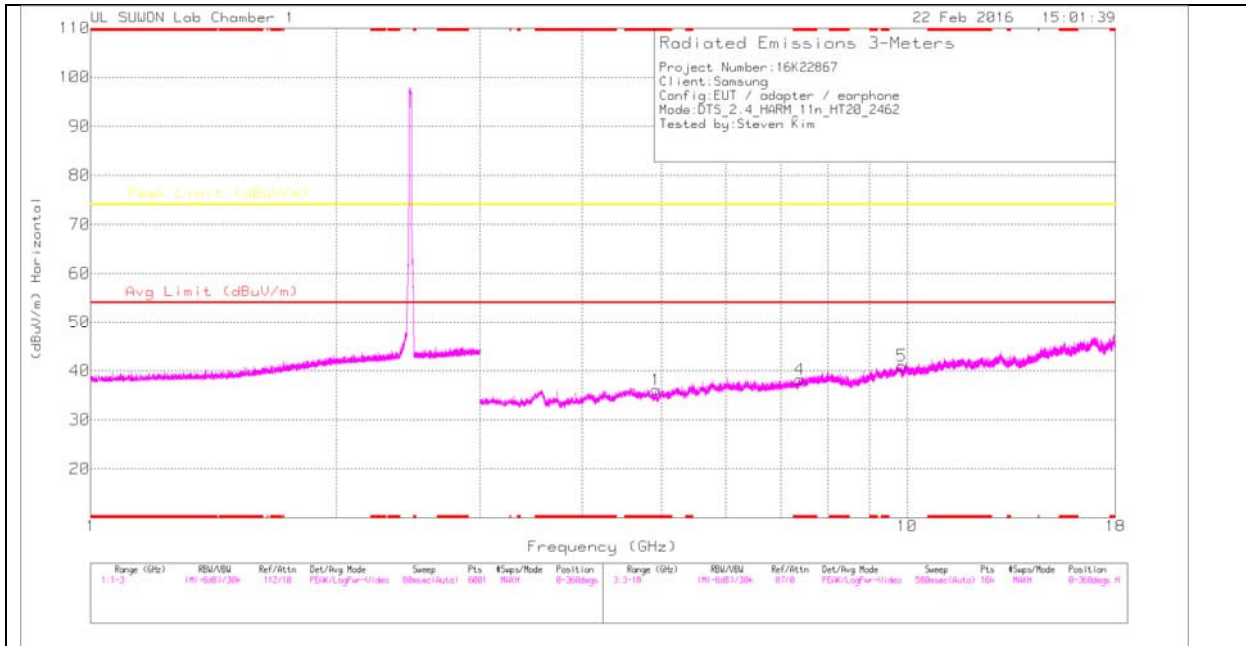
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9.749	42.52	PK2	37.2	-26.8	0	52.92	-	-	74	-21.08	319	189	H
9.748	28.64	MAv1	37.2	-26.8	.31	39.35	-	-	-	-	319	189	H
9.746	40.57	PK2	37.2	-26.9	0	50.87	-	-	74	-23.13	28	271	V
9.748	30.03	MAv1	37.2	-26.8	.31	40.74	-	-	-	-	28	271	V

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

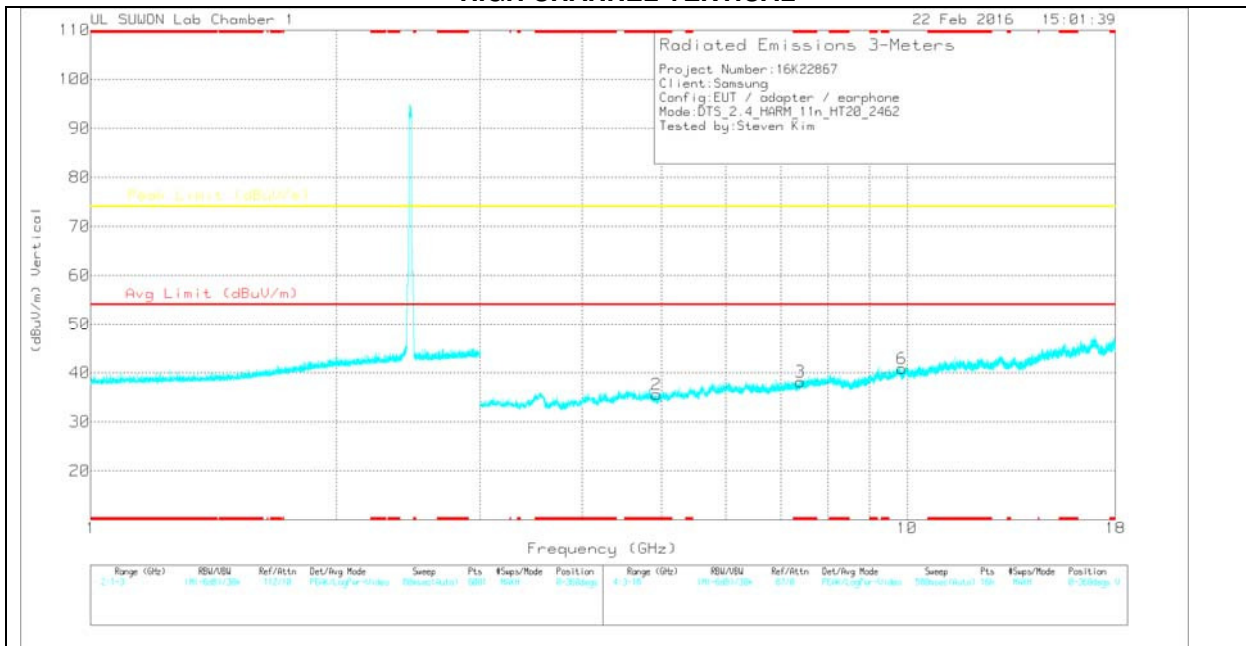
PK2 - KDB558074 Method: Maximum Peak

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**

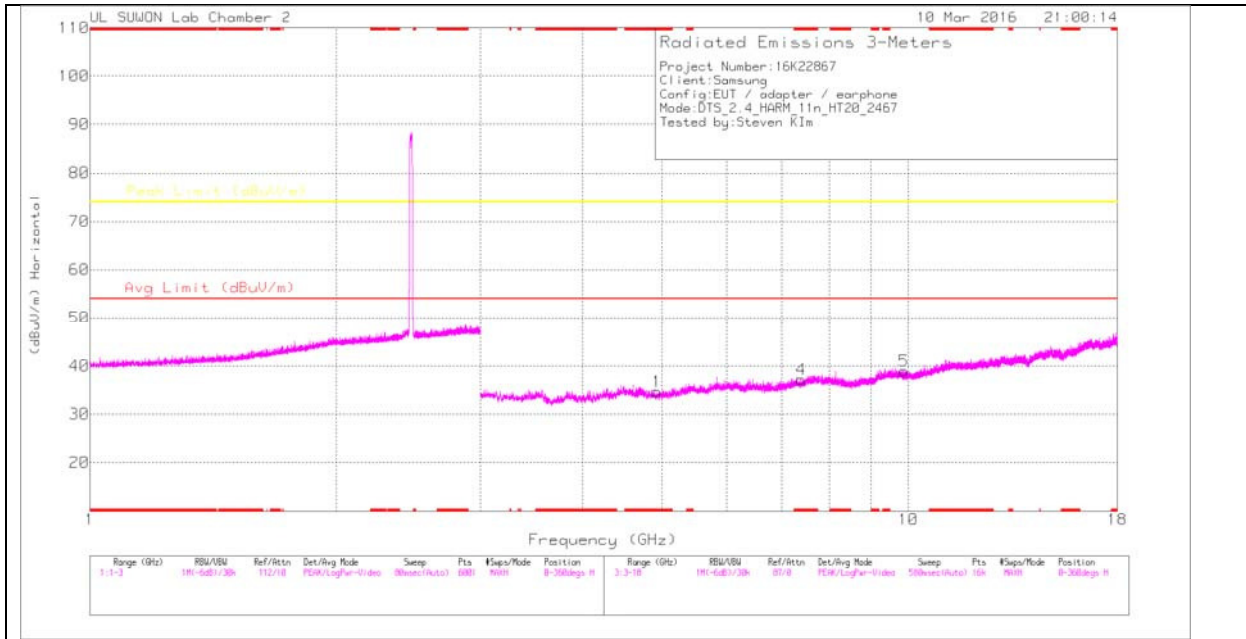
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.925	36.13	Pk	34	-34	0	36.13	-	-	74	-37.87	0-360	100	H
4	* 7.388	33.17	Pk	35.8	-30.7	0	38.27	-	-	74	-35.73	0-360	100	H
5	9.848	31.33	Pk	37.3	-27.6	0	41.03	-	-	74	-32.97	0-360	200	H
2	* 4.931	35.63	Pk	34	-34	0	35.63	-	-	74	-38.37	0-360	200	V
3	* 7.398	32.97	Pk	35.8	-30.6	0	38.17	-	-	74	-35.83	0-360	200	V
6	9.848	31.18	Pk	37.3	-27.6	0	40.88	-	-	74	-33.12	0-360	100	V

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

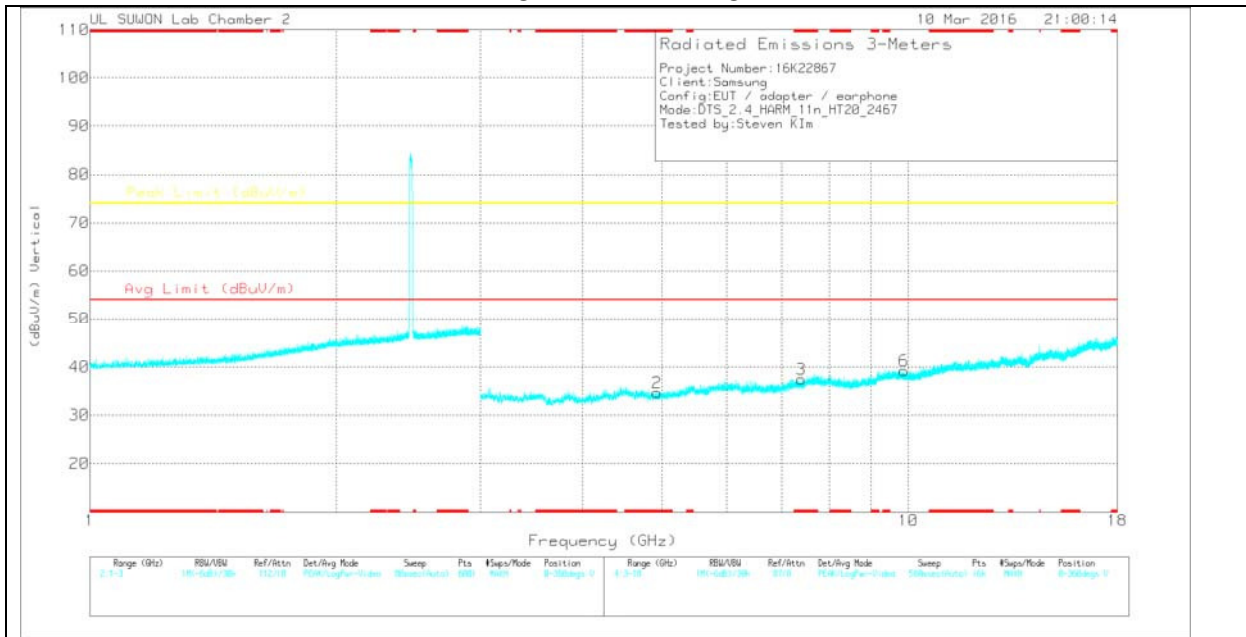
PK – Peak detector

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

12 CHANNEL HORIZONTAL



12 CHANNEL VERTICAL



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

**12 CHANNEL DATA**

Trace Markers

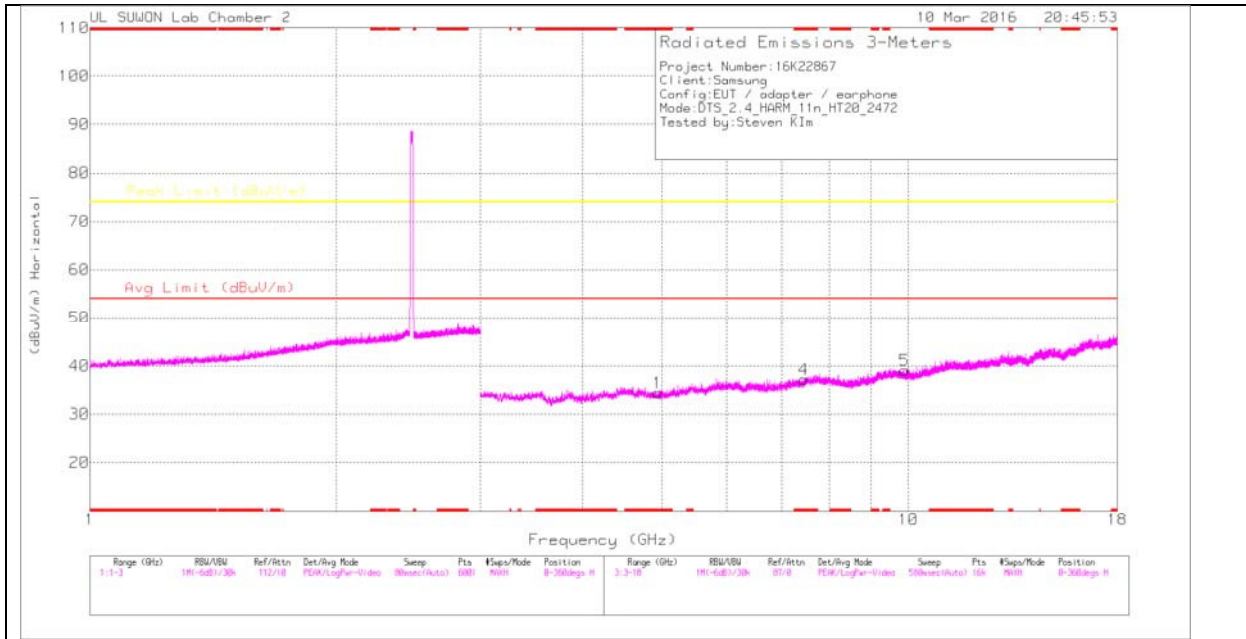
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 24)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.932	25.88	PK	33.9	-25.1	0	34.68	-	-	74	-39.32	0-360	200	H
4	* 7.395	23.3	PK	36	-22.1	0	37.2	-	-	74	-36.8	0-360	100	H
5	9.869	21.13	PK	37.1	-19.2	0	39.03	-	-	74	-34.97	0-360	200	H
2	* 4.932	25.83	PK	33.9	-25.1	0	34.63	-	-	74	-39.37	0-360	200	V
3	* 7.398	23.52	PK	36	-22.1	0	37.42	-	-	74	-36.58	0-360	100	V
6	9.868	21.37	PK	37.1	-19.2	0	39.27	-	-	74	-34.73	0-360	200	V

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

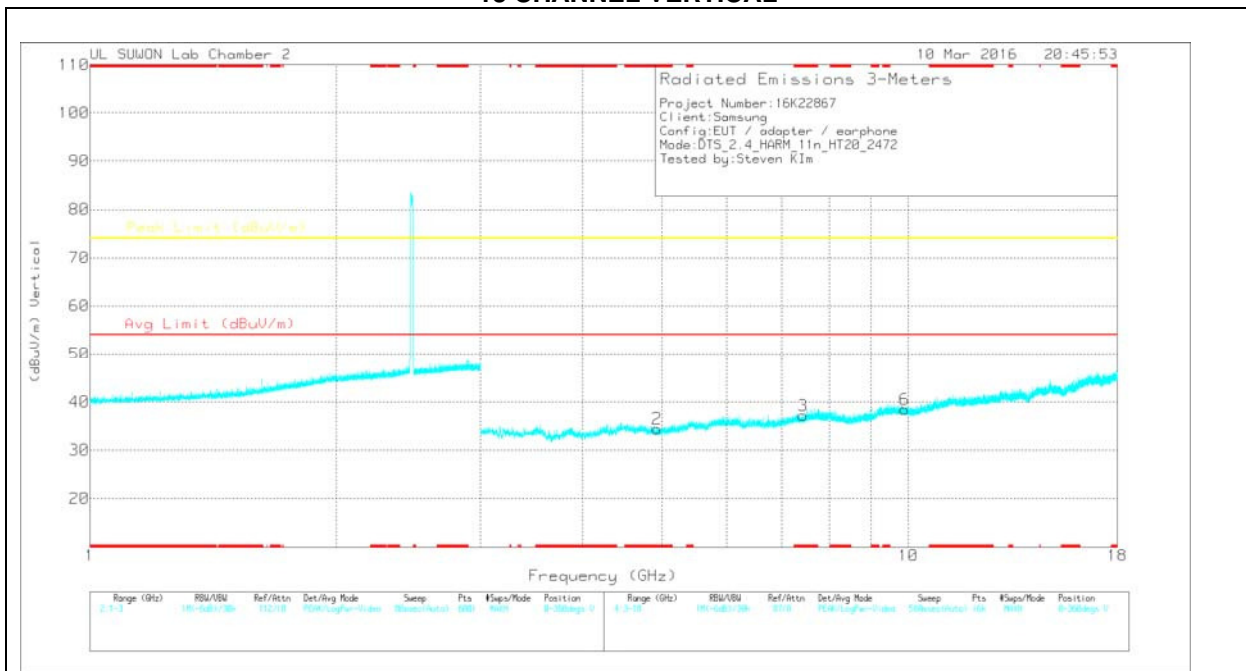
PK – Peak detector

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 24)_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	* 4.938	25.65	PK	33.9	-25.1	0	34.45	-	-	74	-39.55	0-360	200	H
4	* 7.443	23.31	PK	36	-22.1	0	37.21	-	-	74	-36.79	0-360	100	H
5	9.888	21.2	PK	37.1	-19.2	0	39.1	-	-	74	-34.9	0-360	100	H
2	* 4.932	25.68	PK	33.9	-25.1	0	34.48	-	-	74	-39.52	0-360	200	V
3	* 7.439	23.36	PK	36	-22.1	0	37.26	-	-	74	-36.74	0-360	100	V
6	9.887	20.51	PK	37.1	-19.2	0	38.41	-	-	74	-35.59	0-360	100	V

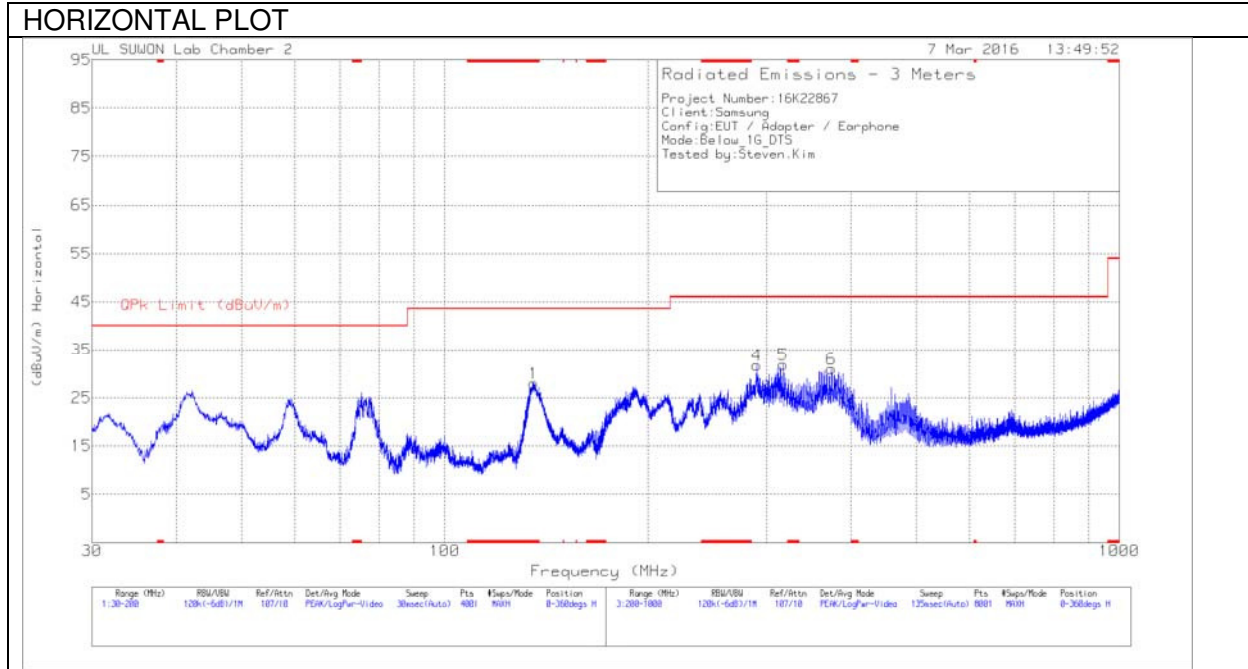
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

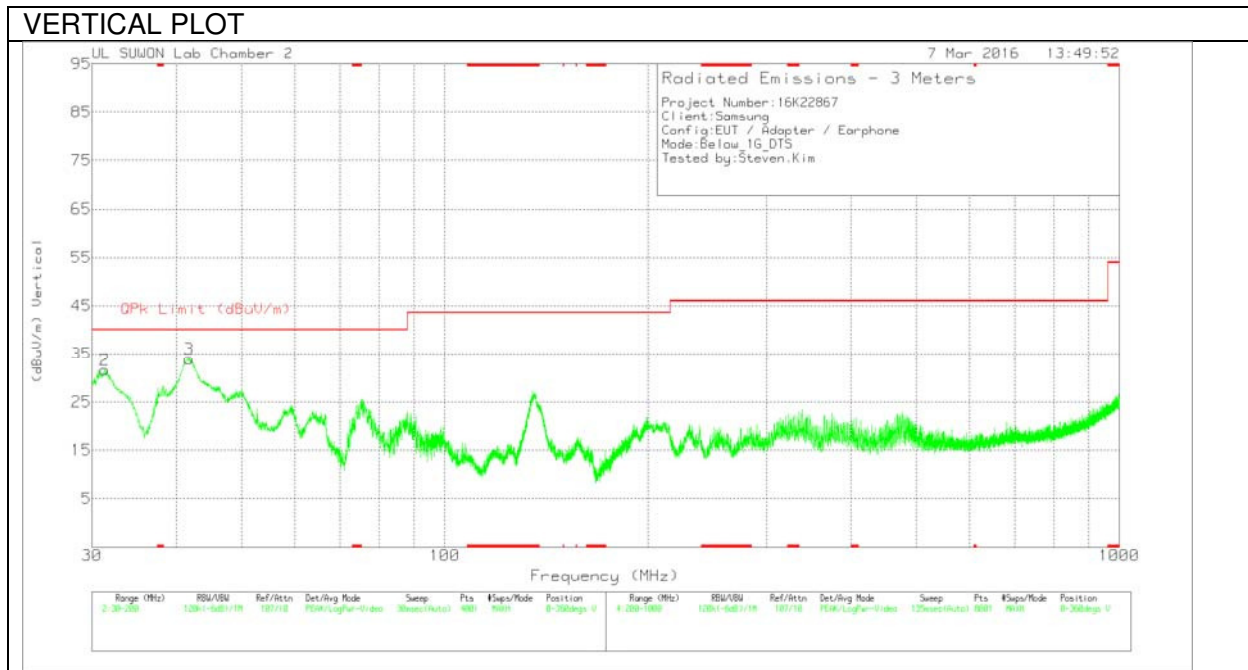
Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

### 11.3. 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	VULB9163-749	Below_1G	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 135.485	50.14	Pk	8.4	-30.5	28.04	43.52	-15.48	0-360	200	H
2	31.36	52.04	Pk	10.4	-30.8	31.64	40	-8.36	0-360	100	V
3	41.815	51.54	Pk	13.1	-30.7	33.94	40	-6.06	0-360	100	V
4	289.9	48.65	Pk	13.2	-30	31.85	46.02	-14.17	0-360	100	H
5	317.2	48.1	Pk	13.7	-29.9	31.9	46.02	-14.12	0-360	100	H
6	374.4	46.07	Pk	14.8	-29.8	31.07	46.02	-14.95	0-360	100	H

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

Pk - Peak detector

## 12. AC POWER LINE CONDUCTED EMISSIONS

### LIMITS

FCC §15.207 (a)

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

\* Decreases with the logarithm of the frequency.

### TEST PROCEDURE

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

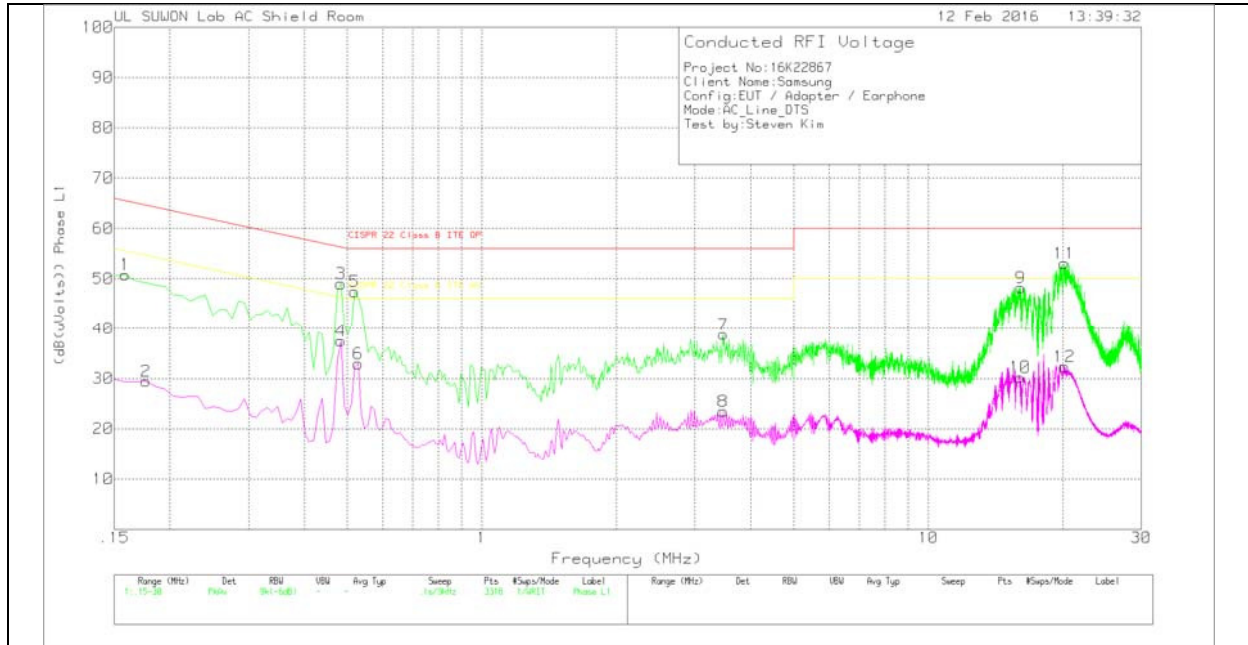
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

**RESULTS**

**6 WORST EMISSIONS**

**LINE 1 PLOT**



**LINE 1 RESULTS**

Phase L1 .15 - 30MHz

Marker	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)
1	.159	40.8	Pk	10	0	50.8	65.52	-14.72	-	-
2	.177	19.22	Av	10.2	0	29.42	-	-	54.63	-25.21
3	.483	38.81	Pk	10.2	0	49.01	56.29	-7.28	-	-
4	.483	27.3	Av	10.2	0	37.5	-	-	46.29	-8.79
5	.519	37.23	Pk	10.2	0	47.43	56	-8.57	-	-
6	.528	22.84	Av	10.1	0	32.94	-	-	46	-13.06
7	3.48	28.93	Pk	9.8	.1	38.83	56	-17.17	-	-
8	3.471	13.55	Av	9.8	.1	23.45	-	-	46	-22.55
9	16.107	37.78	Pk	10.2	.2	48.18	60	-11.82	-	-
10	16.062	19.8	Av	10.2	.2	30.2	-	-	50	-19.8
11	20.184	42.45	Pk	10.4	.2	53.05	60	-6.95	-	-
12	20.193	21.73	Av	10.4	.2	32.33	-	-	50	-17.67

Pk - Peak detector

Av - Average detection

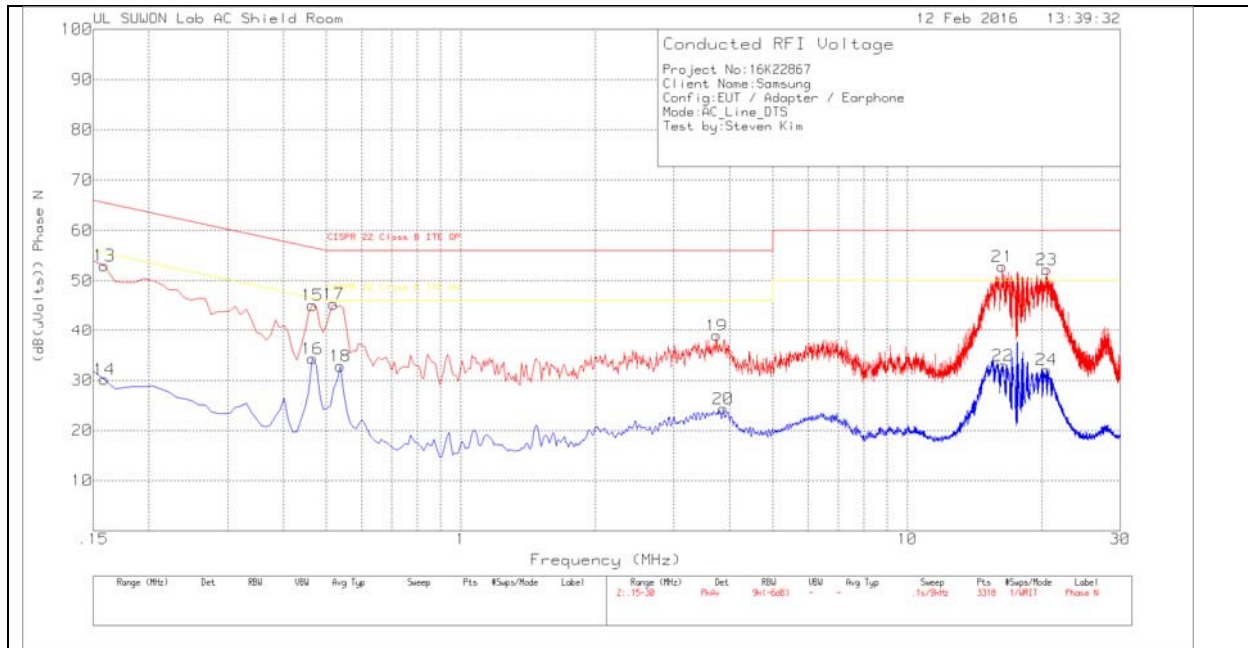
**Quasi-Peak Emissions**

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)
.4794	34.27	Qp	10.2	0	44.47	56.35	-11.88	-	-
.5235	31.88	Qp	10.1	0	41.98	56	-14.02	-	-
20.1885	25.66	Qp	10.4	.2	36.26	60	-23.74	-	-

Qp - Quasi-Peak detector

**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	42.98	Pk	10	0	52.98	65.52	-12.54	-	-
14	.159	20.19	Av	10	0	30.19	-	-	55.52	-25.33
15	.465	35.02	Pk	10.1	0	45.12	56.6	-11.48	-	-
16	.465	24.22	Av	10.1	0	34.32	-	-	46.6	-12.28
17	.519	35.25	Pk	10.1	0	45.35	56	-10.65	-	-
18	.537	22.72	Av	10.1	0	32.82	-	-	46	-13.18
19	3.741	29.11	Pk	9.8	.1	39.01	56	-16.99	-	-
20	3.867	14.43	Av	9.8	.1	24.33	-	-	46	-21.67
21	16.332	42.2	Pk	10.4	.2	52.8	60	-7.2	-	-
22	16.386	22.33	Av	10.4	.2	32.93	-	-	50	-17.07
23	20.544	41.43	Pk	10.6	.2	52.23	60	-7.77	-	-
24	20.517	21.26	Av	10.6	.2	32.06	-	-	50	-17.94

Pk - Peak detector

Av - Average detection

**Quasi-Peak Emissions**

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)
16.3293	31.07	Qp	10.4	.2	41.67	60	-18.33	-	-
20.5485	32.58	Qp	10.6	.2	43.38	60	-16.62	-	-

Qp - Quasi-Peak detector