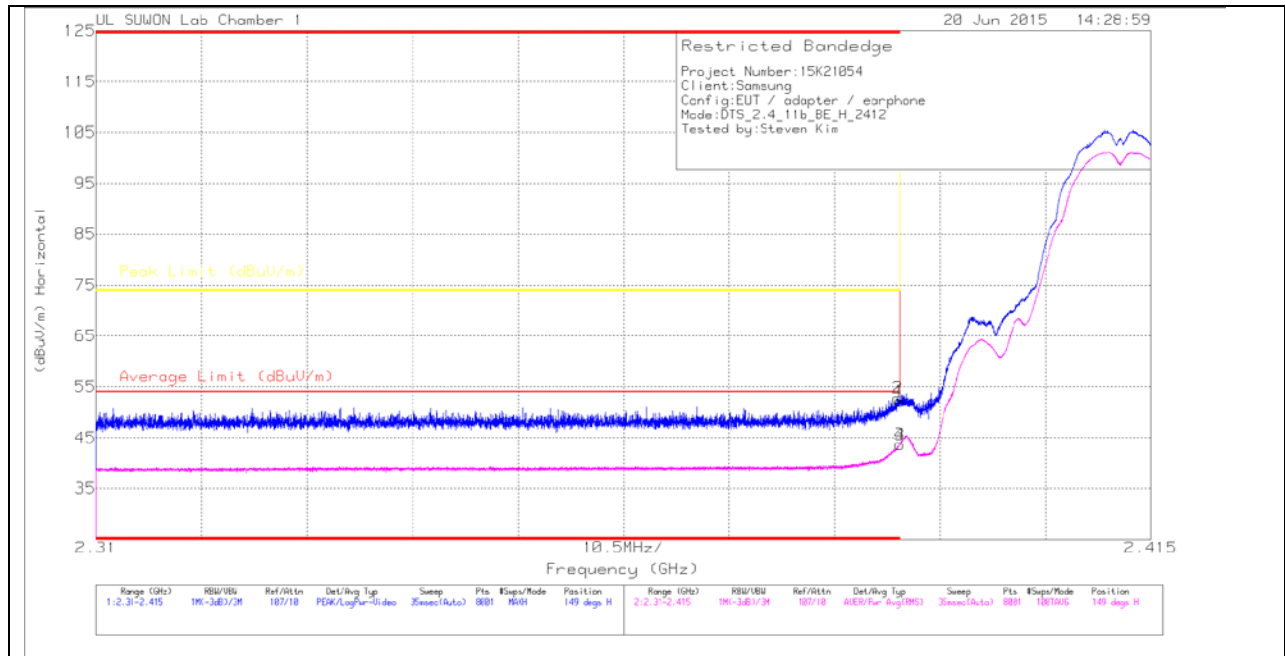


## 11.2. TRANSMITTER ABOVE 1 GHz

### 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

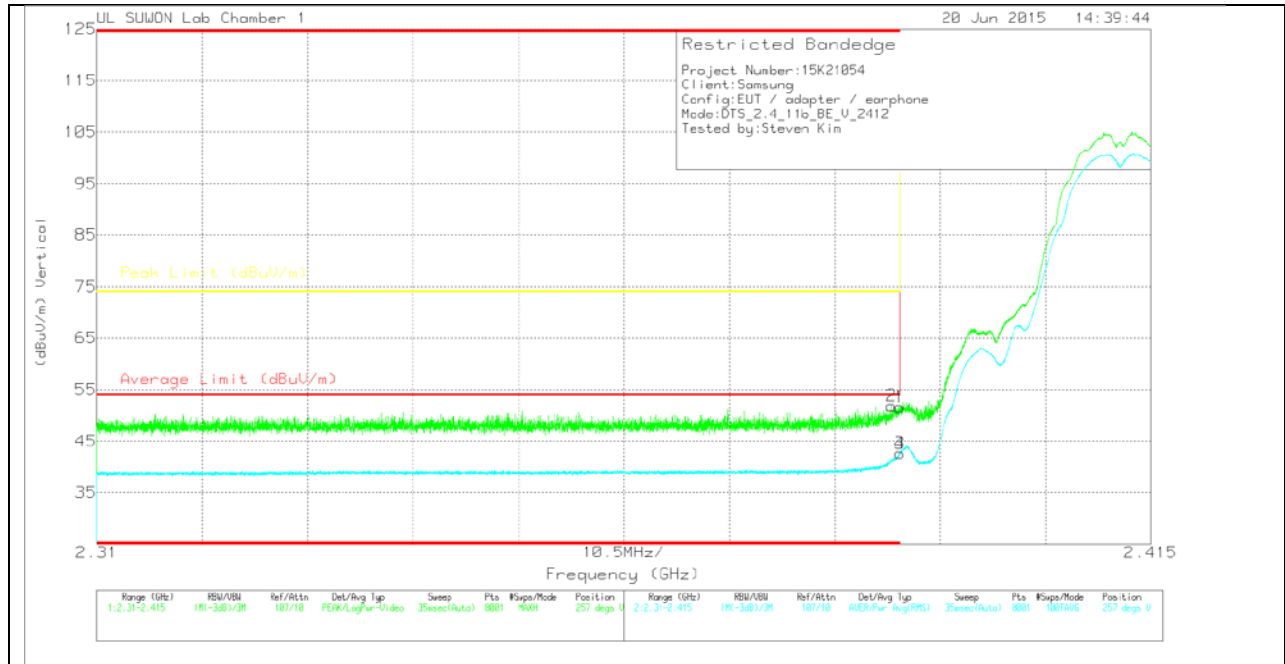
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168 717_15061 9)	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	43.21	Pk		-22.8	0	52.21	-	-	74	-21.79	149	208	H
2	* 2.39	43.84	Pk		-22.8	0	52.84	-	-	74	-21.16	149	208	H
3	* 2.39	34.65	RMS		-22.8	0	43.65	54	-10.35	-	-	149	208	H
4	* 2.39	34.65	RMS		-22.8	0	43.65	54	-10.35	-	-	149	208	H

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

Pk - Peak detector

RMS - RMS detection

**VERTICAL PEAK AND AVERAGE PLOT**



**VERTICAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168 717)_15061 g	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.59	Pk	31.8	-22.8	0	51.59	-	-	74	-22.41	257	343	V
2	* 2.389	42.84	Pk	31.8	-22.8	0	51.84	-	-	74	-22.16	257	343	V
3	* 2.39	33.64	RMS	31.8	-22.8	0	42.64	54	-11.36	-	-	257	343	V
4	* 2.39	33.56	RMS	31.8	-22.8	0	42.56	54	-11.44	-	-	257	343	V

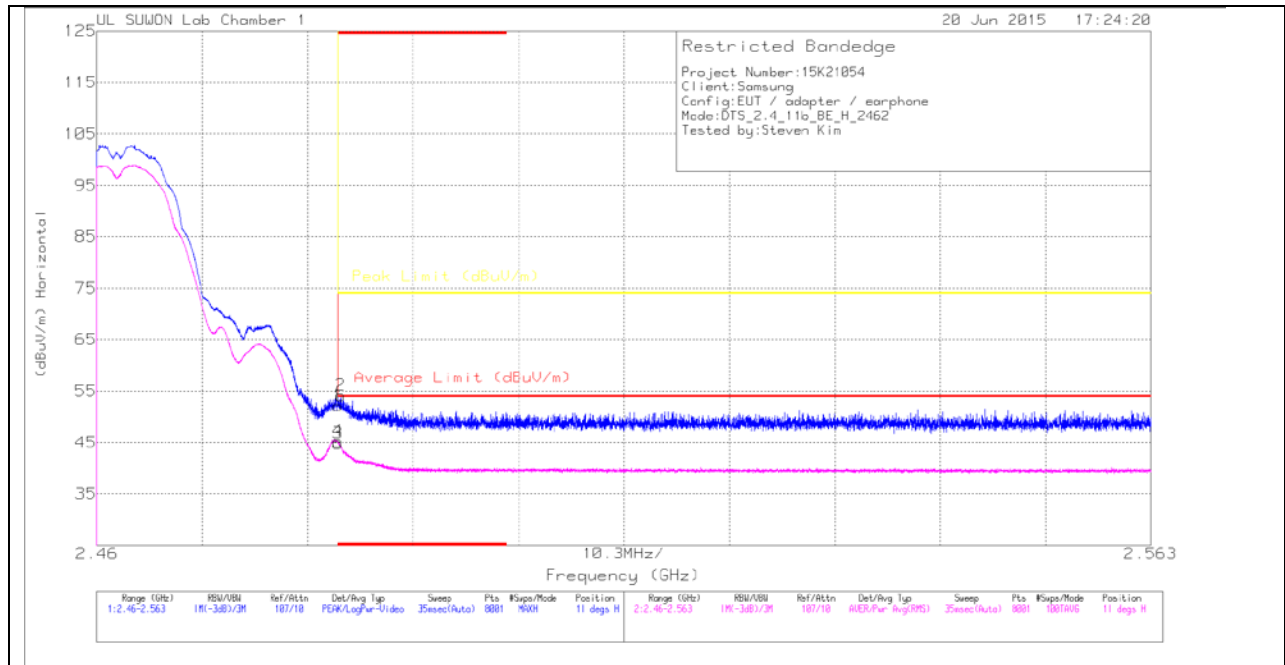
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL PEAK AND AVERAGE PLOT**



**HORIZONTAL DATA**

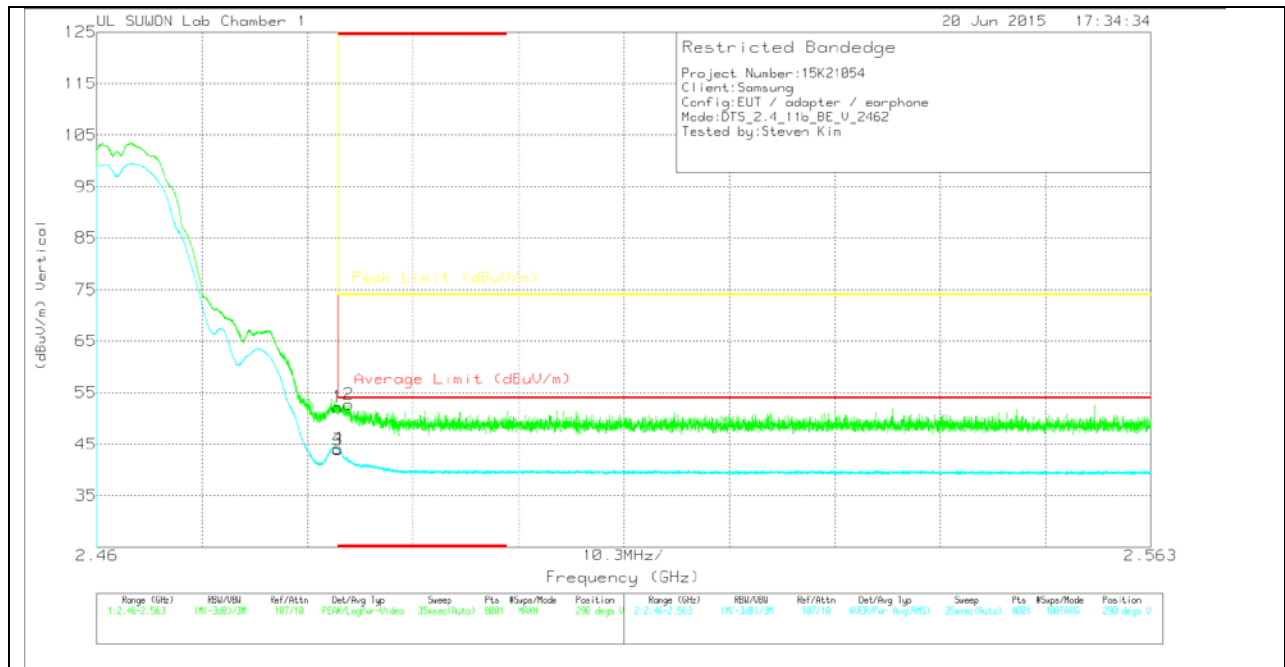
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	42.72	Pk	32	-22.6	0	52.12	-	-	74	-21.88	11	245	H
2	* 2.484	44.75	Pk	32	-22.6	0	54.15	-	-	74	-19.85	11	245	H
3	* 2.484	35.47	RMS	32	-22.6	0	44.87	54	-9.13	-	-	11	245	H
4	* 2.484	35.84	RMS	32	-22.6	0	45.24	54	-8.76	-	-	11	245	H

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

Pk - Peak detector

RMS - RMS detection

**VERTICAL PEAK AND AVERAGE PLOT**



**VERTICAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168 717)_15061 9	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	42.83	Pk	32	-22.6	0	52.23	-	-	74	-21.77	290	336	V
2	* 2.485	43.33	Pk	32	-22.6	0	52.73	-	-	74	-21.27	290	336	V
3	* 2.484	34.56	RMS	32	-22.6	0	43.96	54	-10.04	-	-	290	336	V
4	* 2.484	34.74	RMS	32	-22.6	0	44.14	54	-9.86	-	-	290	336	V

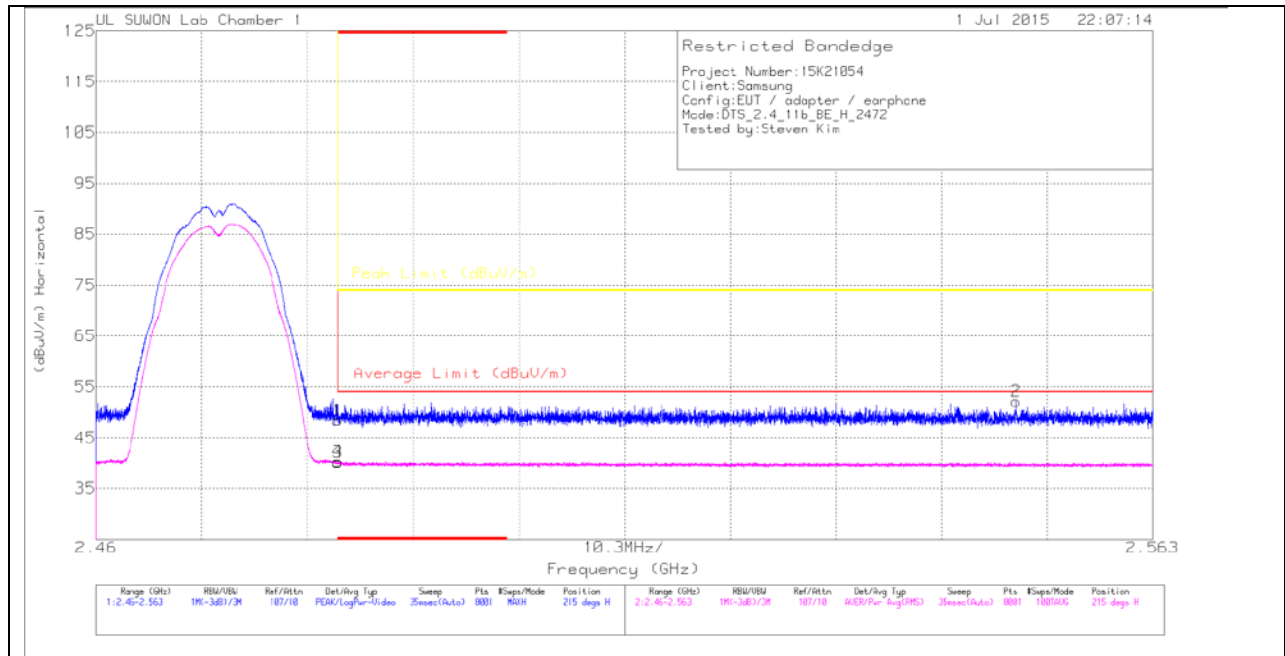
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

### AUTHORIZED BANDEDGE (13 CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

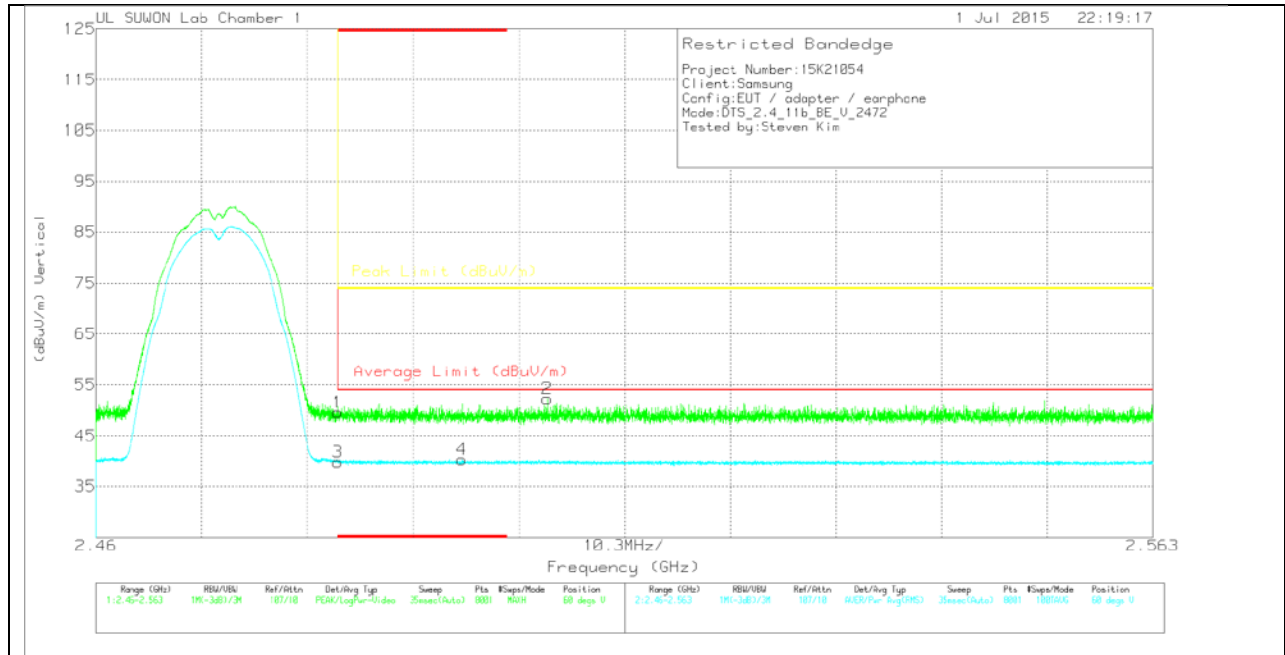
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168 717_15061 9)	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.08	Pk	32	-22.6	0	48.48	-	-	74	-25.52	215	273	H
2	2.55	42.73	Pk	32	-22.6	0	52.13	-	-	74	-21.87	215	273	H
3	* 2.484	30.75	RMS	32	-22.6	0	40.15	54	-13.85	-	-	215	273	H
4	* 2.484	30.91	RMS	32	-22.6	0	40.31	54	-13.69	-	-	215	273	H

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

Pk - Peak detector

RMS - RMS detection

**VERTICAL PEAK AND AVERAGE PLOT**



**VERTICAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_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	40.13	Pk	32	-22.6	0	49.53	-	-	74	-24.47	60	238	V
2	2.504	42.89	Pk	32	-22.6	0	52.29	-	-	74	-21.71	60	238	V
3	* 2.484	30.46	RMS	32	-22.6	0	39.86	54	-14.14	-	-	60	238	V
4	* 2.496	30.94	RMS	32	-22.6	0	40.34	54	-13.66	-	-	60	238	V

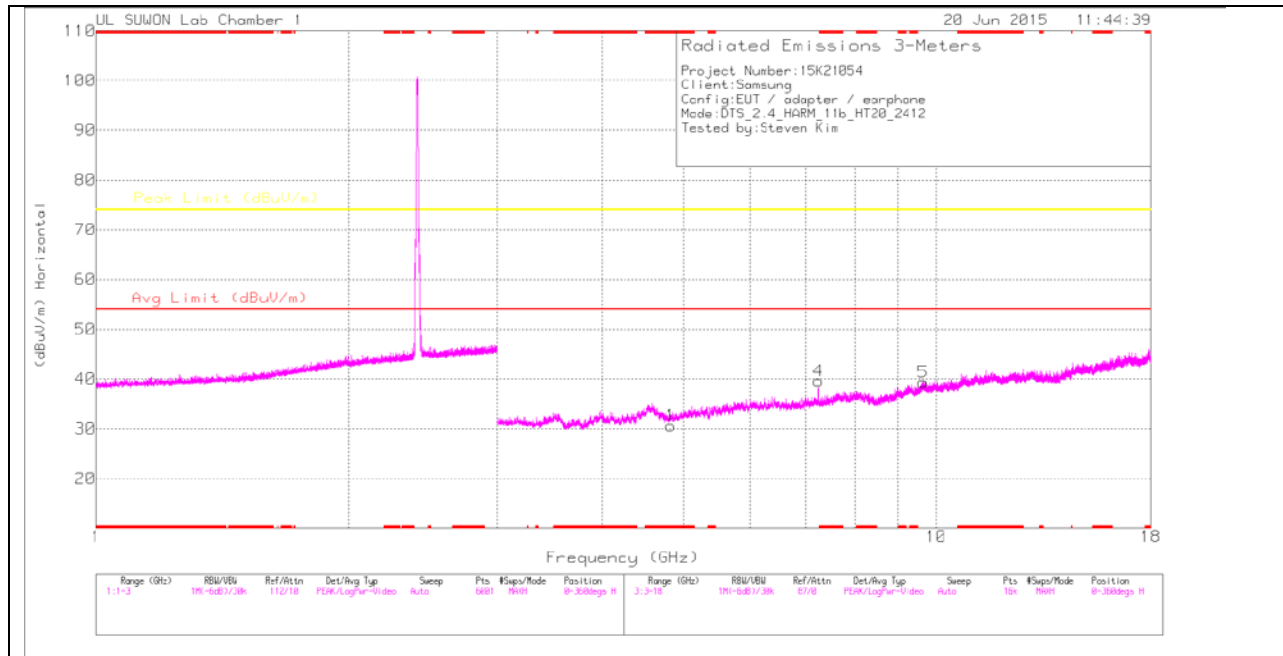
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

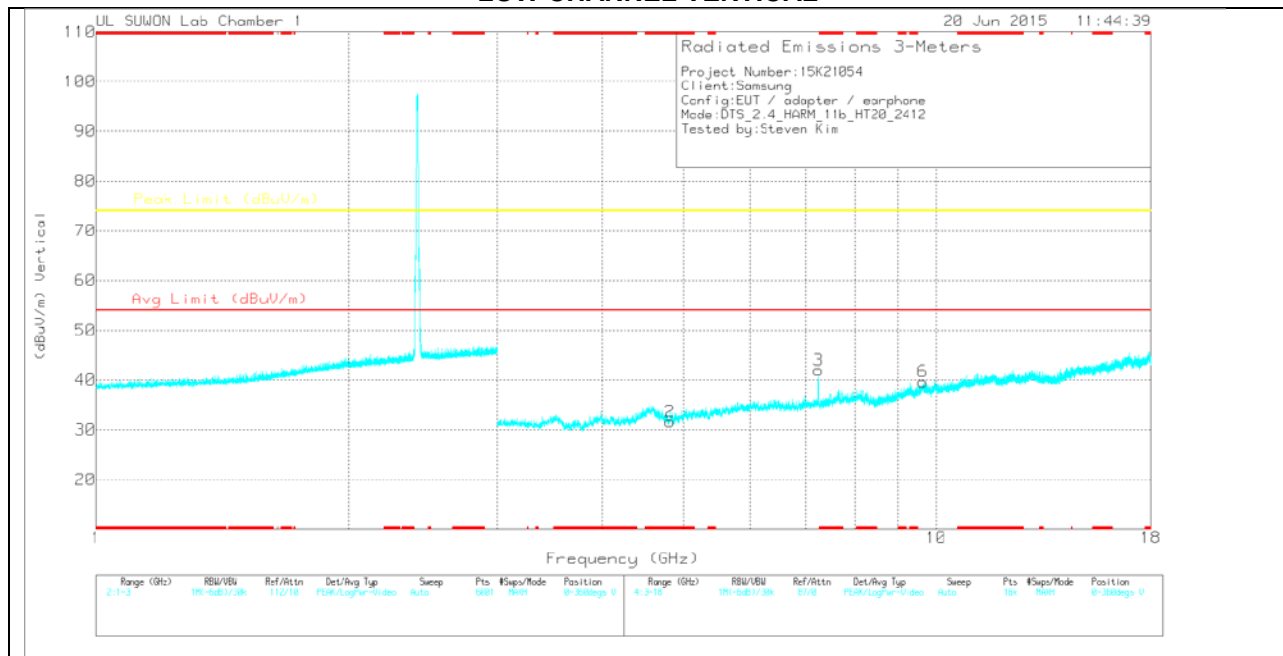
RMS - RMS detection

## 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_3GHP	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	* 4.826	28.27	PK	34	-29.5	0	32.77	-	-	74	-41.23	0-360	100	H
4	7.235	28.11	PK	35.7	-25.5	0	38.31	-	-	-	-	0-360	100	H
5	9.647	22.53	PK	37.1	-20.8	0	38.83	-	-	-	-	0-360	100	H
2	* 4.823	29.36	PK	34	-29.6	0	33.76	-	-	74	-40.24	0-360	100	V
3	7.236	30.56	PK	35.7	-25.5	0	40.76	-	-	-	-	0-360	200	V
6	9.646	22.87	PK	37.1	-20.8	0	39.17	-	-	-	-	0-360	100	V

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

PK – Peak detector

**Radiated Emissions**

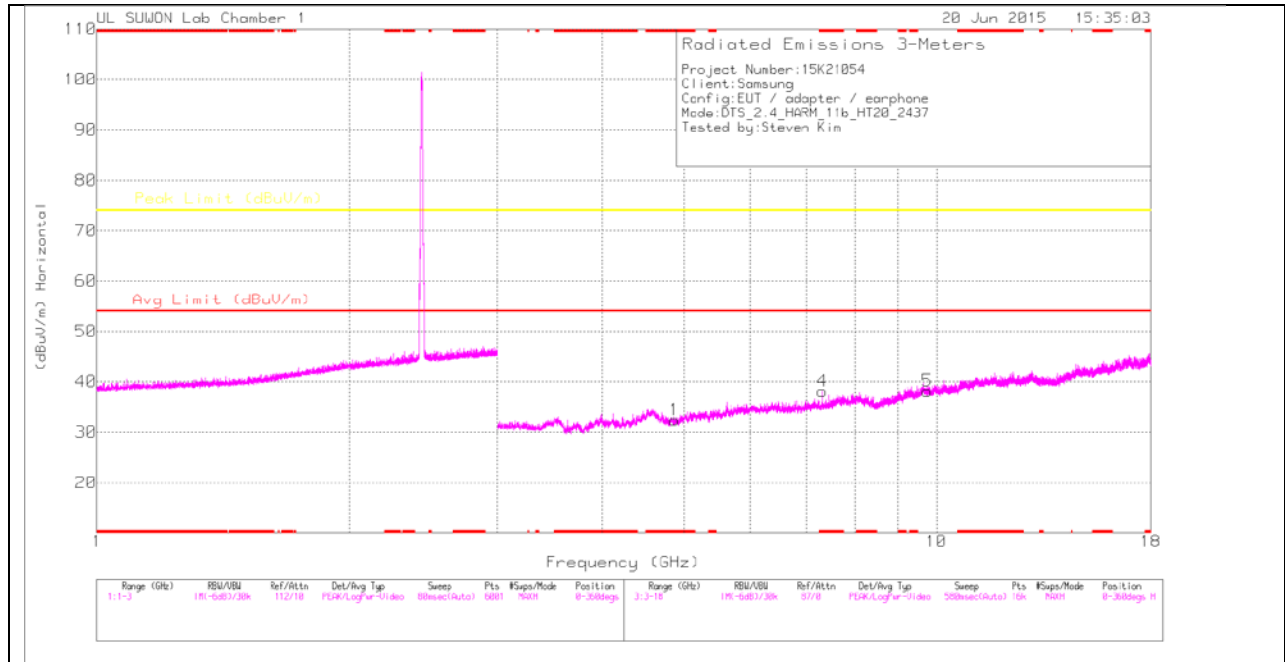
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_3_3 GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.235	38.21	PK2	35.7	-25.5	0	48.41	-	-	-	-	267	103	H
7.236	27.1	MAv1	35.7	-25.5	0	37.3	-	-	-	-	267	103	H
7.235	39.47	PK2	35.7	-25.5	0	49.67	-	-	-	-	156	266	V
7.236	29.2	MAv1	35.7	-25.5	0	39.4	-	-	-	-	156	266	V

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

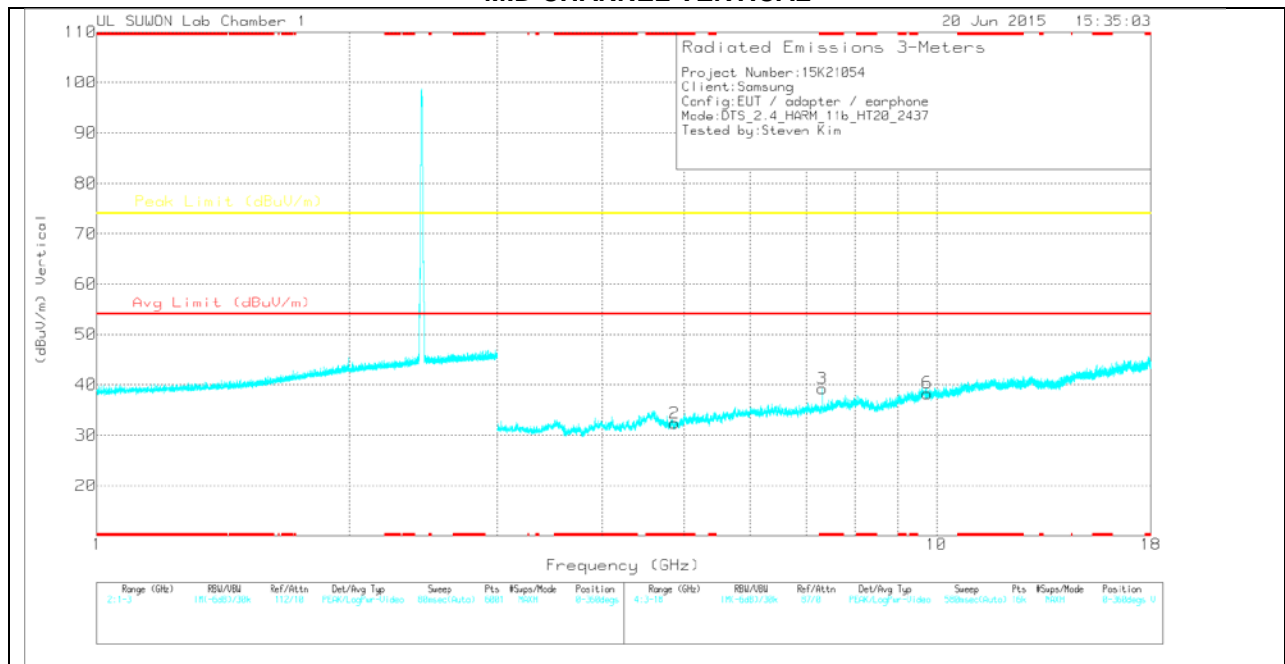
PK2 - KDB558074 Method: Maximum Peak

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_3GHP	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	* 4.877	27.51	PK	34	-29.1	0	32.41	-	-	74	-41.59	0-360	200	H
4	* 7.31	28.14	PK	35.7	-25.7	0	38.14	-	-	74	-35.86	0-360	100	H
5	9.751	22.85	PK	37.2	-21.9	0	38.15	-	-	-	-	0-360	200	H
2	* 4.874	27.58	PK	34	-29.2	0	32.38	-	-	74	-41.62	0-360	200	V
3	* 7.31	29.27	PK	35.7	-25.7	0	39.27	-	-	74	-34.73	0-360	200	V
6	9.754	23.11	PK	37.2	-22	0	38.31	-	-	-	-	0-360	200	V

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

PK – Peak detector

**Radiated Emissions**

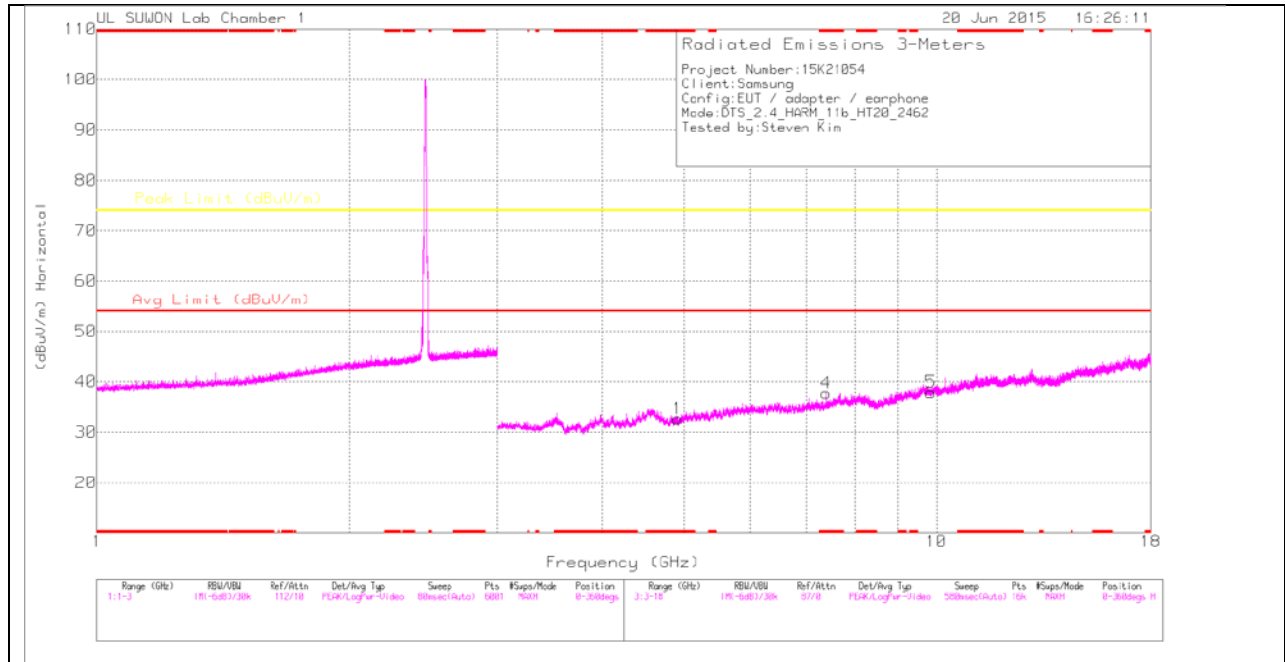
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001 68717)_1 50619	Path_3_3 GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.311	37.89	PK2	35.7	-25.7	0	47.89	-	-	74	-26.11	262	101	H
* 7.311	27.22	MAv1	35.7	-25.7	0	37.22	54	-16.78	-	-	262	101	H
* 7.311	38.58	PK2	35.7	-25.7	0	48.58	-	-	74	-25.42	143	343	V
* 7.311	29.08	MAv1	35.7	-25.7	0	39.08	54	-14.92	-	-	143	343	V

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

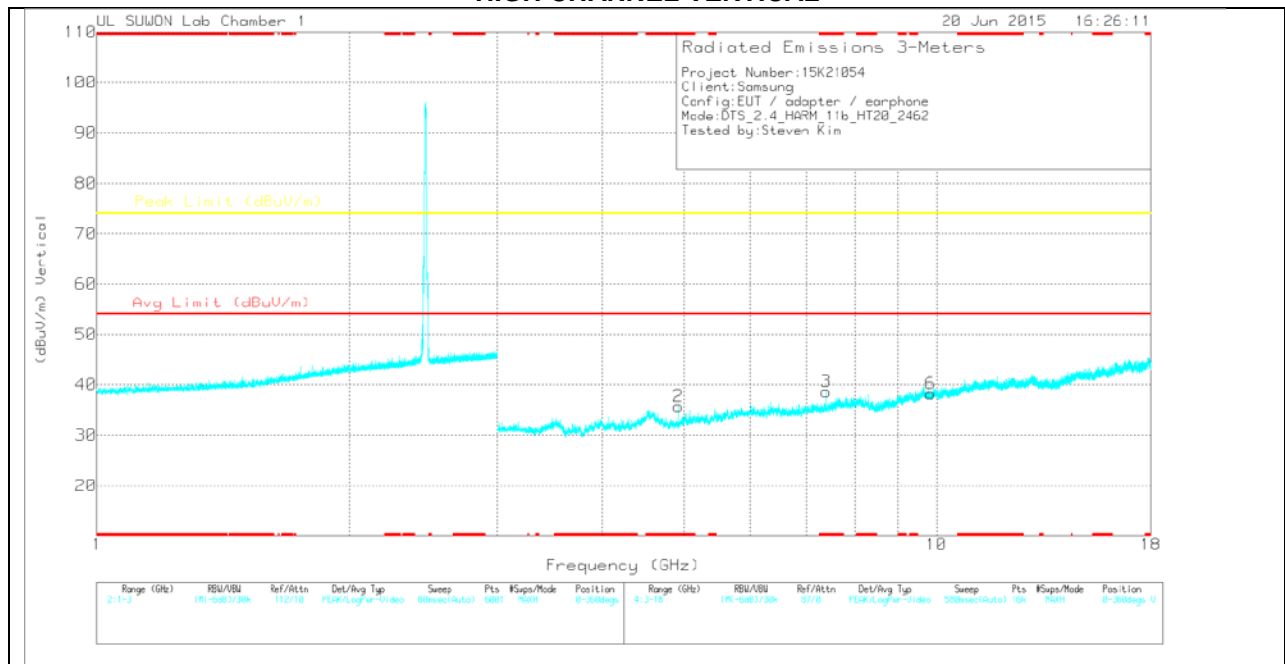
PK2 - KDB558074 Method: Maximum Peak

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_3GHP	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	* 4.919	27.76	PK	34	-29.1	0	32.66	-	-	74	-41.34	0-360	100	H
4	* 7.388	27.03	PK	35.8	-25.1	0	37.73	-	-	74	-36.27	0-360	100	H
5	9.846	22.22	PK	37.3	-21.6	0	37.92	-	-	-	-	0-360	200	H
2	* 4.924	30.75	PK	34	-29	0	35.75	-	-	74	-38.25	0-360	200	V
3	* 7.385	27.98	PK	35.8	-25.1	0	38.68	-	-	74	-35.32	0-360	200	V
6	9.843	22.61	PK	37.3	-21.7	0	38.21	-	-	-	-	0-360	100	V

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

PK – Peak detector

**Radiated Emissions**

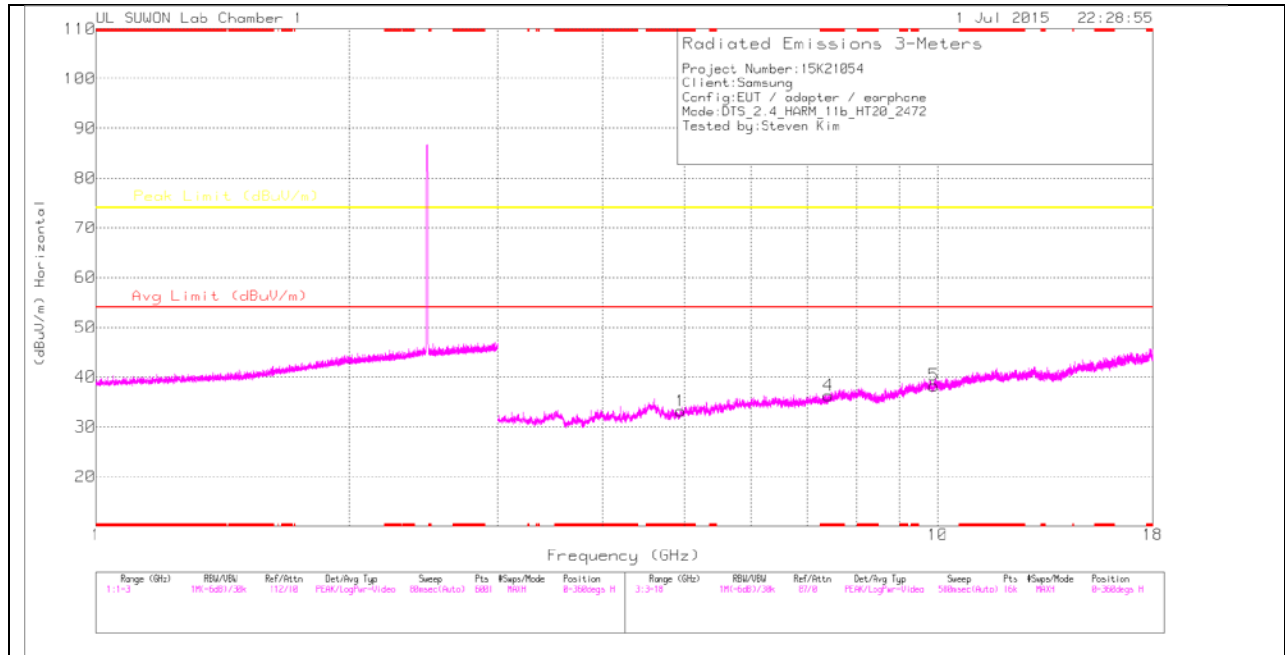
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	Path_3_3GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.385	37.28	PK2	35.8	-25.1	0	47.98	-	-	74	-26.02	262	110	H
* 7.385	26.17	MAv1	35.8	-25.1	0	36.87	54	-17.13	-	-	262	110	H
* 4.924	40.6	PK2	34	-29	0	45.6	-	-	74	-28.4	178	387	V
* 4.924	31.28	MAv1	34	-29	0	36.28	54	-17.72	-	-	178	387	V
* 7.384	38.3	PK2	35.8	-25.1	0	49	-	-	74	-25	150	271	V
* 7.386	28.71	MAv1	35.8	-25.1	0	39.41	54	-14.59	-	-	150	271	V

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

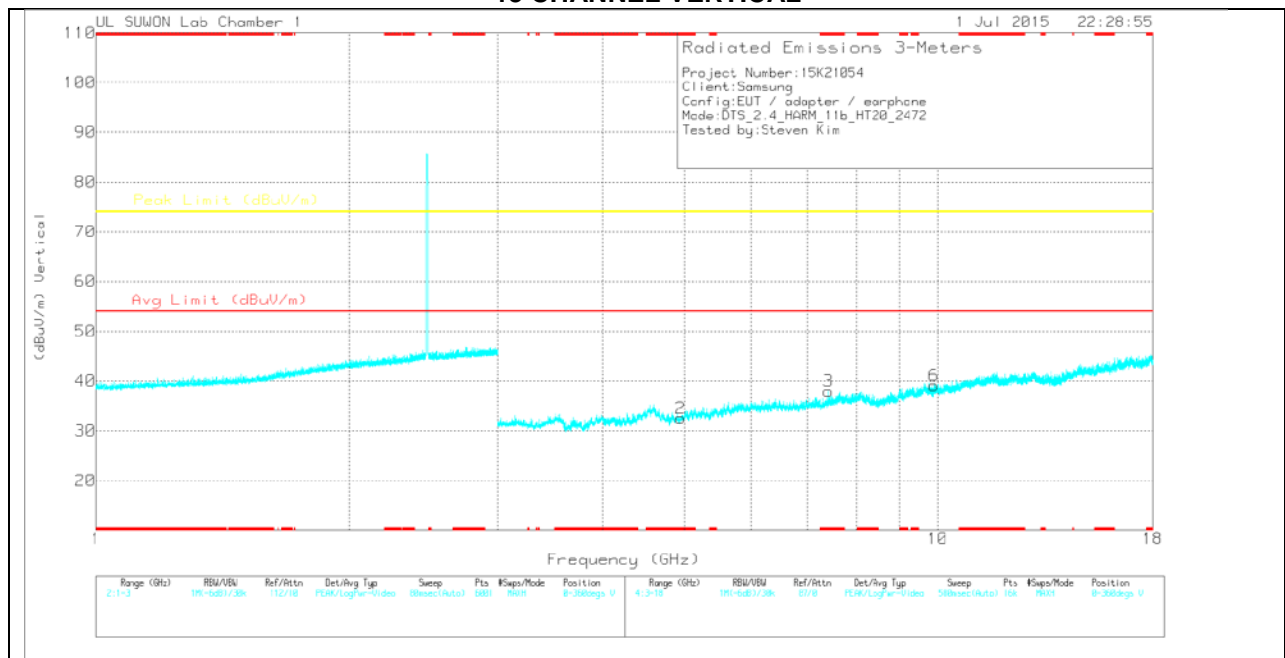
PK2 - KDB558074 Method: Maximum Peak

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_3GHP	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	28.14	PK	34	-29	0	33.14	-	-	74	-40.86	0-360	200	H
4	* 7.415	25.4	PK	35.8	-24.9	0	36.3	-	-	74	-37.7	0-360	200	H
5	9.891	21.78	PK	37.3	-20.8	0	38.28	-	-	-	-	0-360	100	H
2	* 4.945	27.47	PK	34	-29	0	32.47	-	-	74	-41.53	0-360	100	V
3	* 7.416	27.02	PK	35.8	-24.9	0	37.92	-	-	74	-36.08	0-360	100	V
6	9.891	22.58	PK	37.3	-20.8	0	39.08	-	-	-	-	0-360	100	V

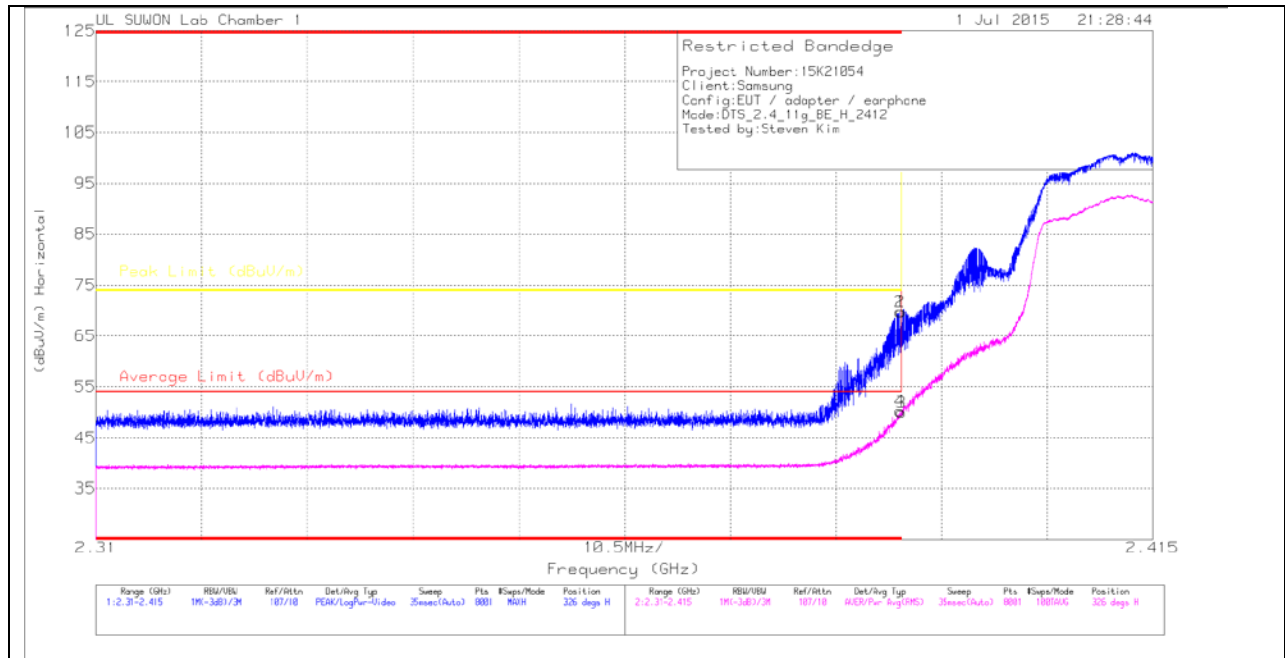
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

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

### RESTRICTED BANDEDGE (LOW CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

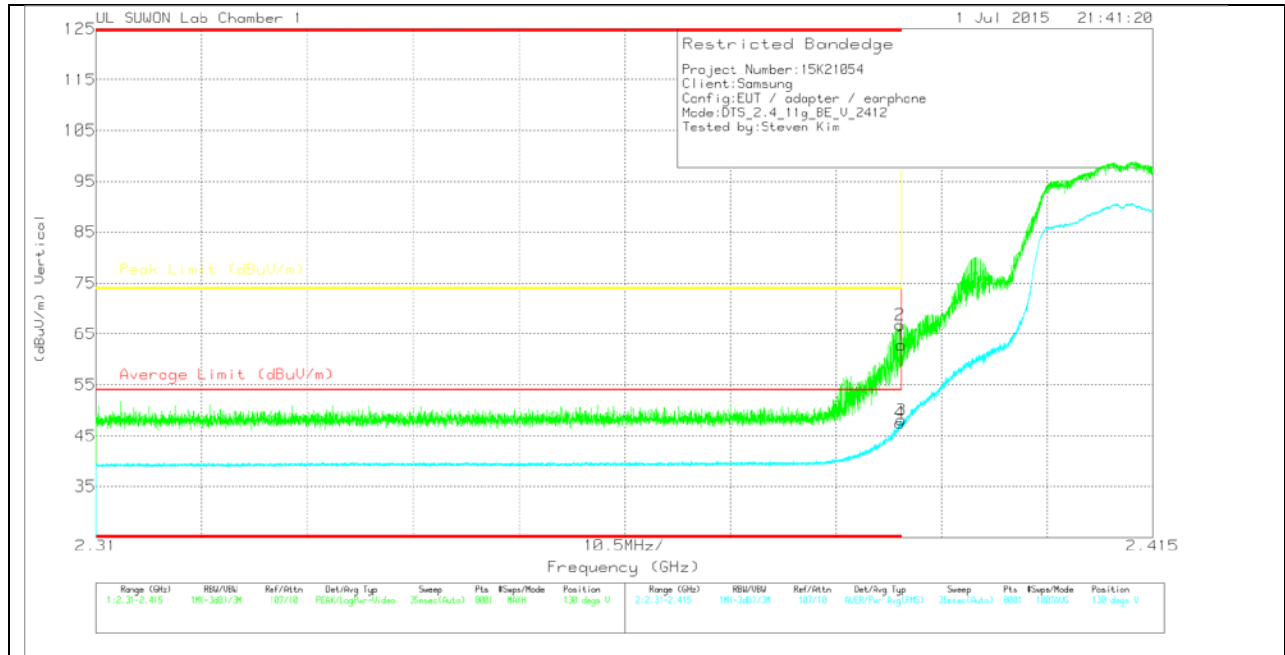
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	60.73	Pk	31.8	-22.8	0	69.73	-	-	74	-4.27	326	100	H
2	* 2.39	60.8	Pk	31.8	-22.8	0	69.8	-	-	74	-4.2	326	100	H
3	* 2.39	40.6	RMS	31.8	-22.8	.31	49.91	54	-4.09	-	-	326	100	H
4	* 2.39	40.89	RMS	31.8	-22.8	.31	50.2	54	-3.8	-	-	326	100	H

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

Pk - Peak detector

RMS - RMS detection

**VERTICAL PEAK AND AVERAGE PLOT**



**VERTICAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	53.78	Pk		-22.8	0	62.78	-	-	74	-11.22	130	246	V
2	* 2.39	57.83	Pk		-22.8	0	66.83	-	-	74	-7.17	130	246	V
3	* 2.39	38.84	RMS		-22.8	.31	48.15	54	-5.85	-	-	130	246	V
4	* 2.39	38.23	RMS		-22.8	.31	47.54	54	-6.46	-	-	130	246	V

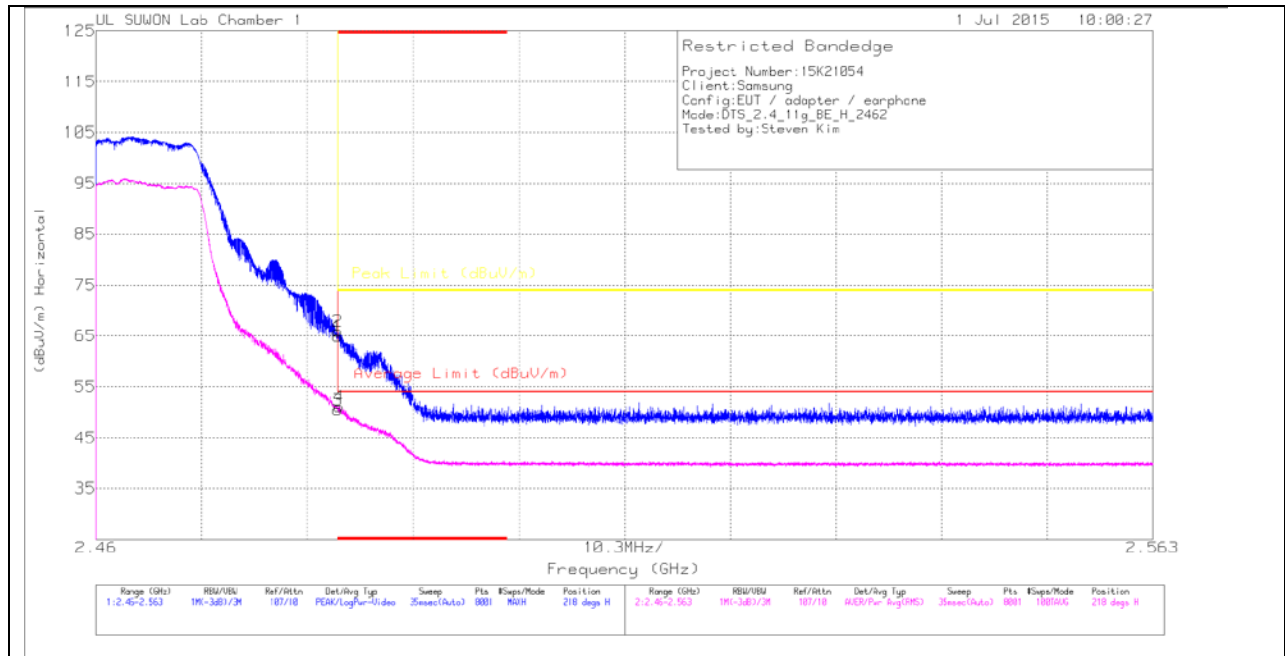
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL PEAK AND AVERAGE PLOT**



**HORIZONTAL DATA**

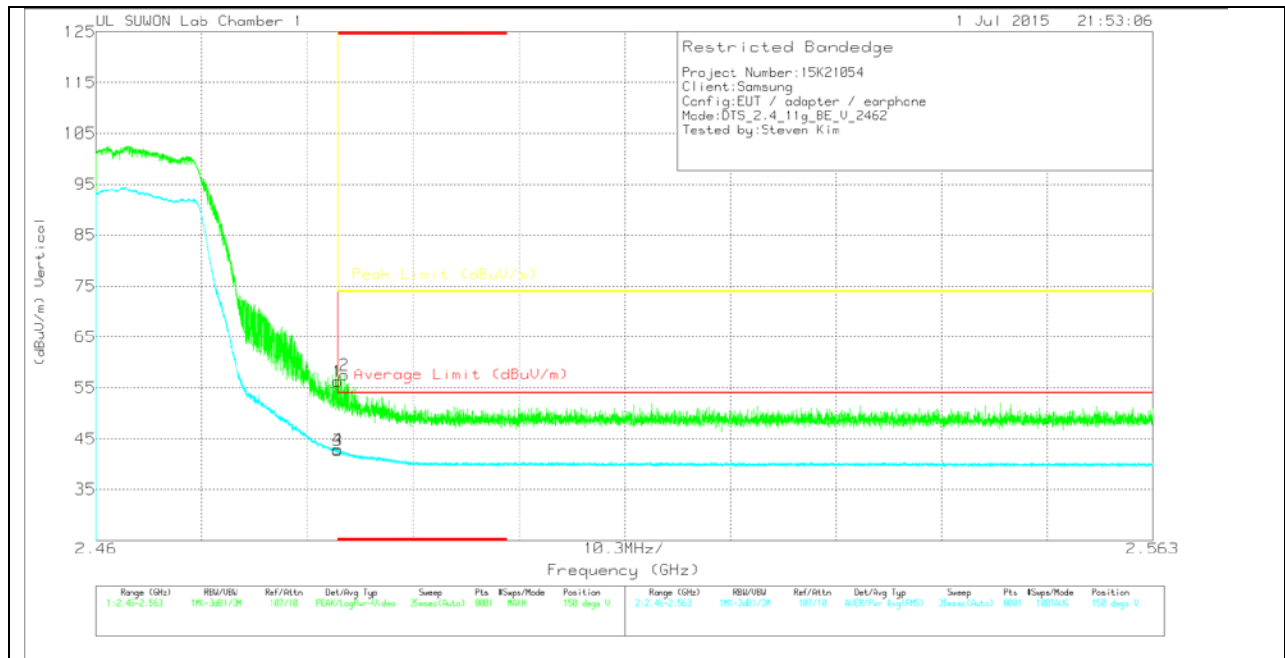
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	55.54	Pk	32	-22.6	0	64.94	-	-	74	-9.06	218	275	H
2	* 2.484	56.53	Pk	32	-22.6	0	65.93	-	-	74	-8.07	218	275	H
3	* 2.484	40.73	RMS	32	-22.6	.31	50.44	54	-3.56	-	-	218	275	H
4	* 2.484	41.39	RMS	32	-22.6	.31	51.1	54	-2.9	-	-	218	275	H

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

Pk - Peak detector

RMS - RMS detection

**VERTICAL PEAK AND AVERAGE PLOT**



**VERTICAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168 717)_15061 9	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	46.89	Pk	32	-22.6	0	56.29	-	-	74	-17.71	150	295	V
2	* 2.484	48.1	Pk	32	-22.6	0	57.5	-	-	74	-16.5	150	295	V
3	* 2.484	32.96	RMS	32	-22.6	.31	42.67	54	-11.33	-	-	150	295	V
4	* 2.484	33.2	RMS	32	-22.6	.31	42.91	54	-11.09	-	-	150	295	V

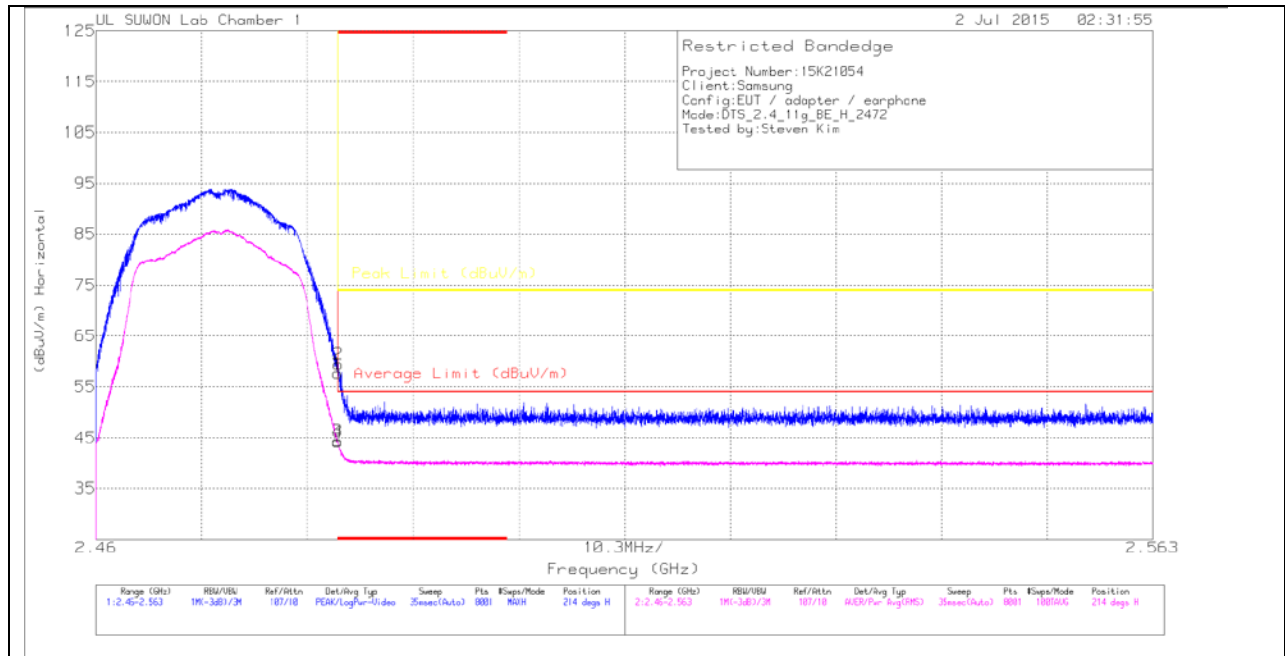
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

## AUTHORIZED BANDEDGE (13 CHANNEL)

### HORIZONTAL PEAK AND AVERAGE PLOT



### HORIZONTAL DATA

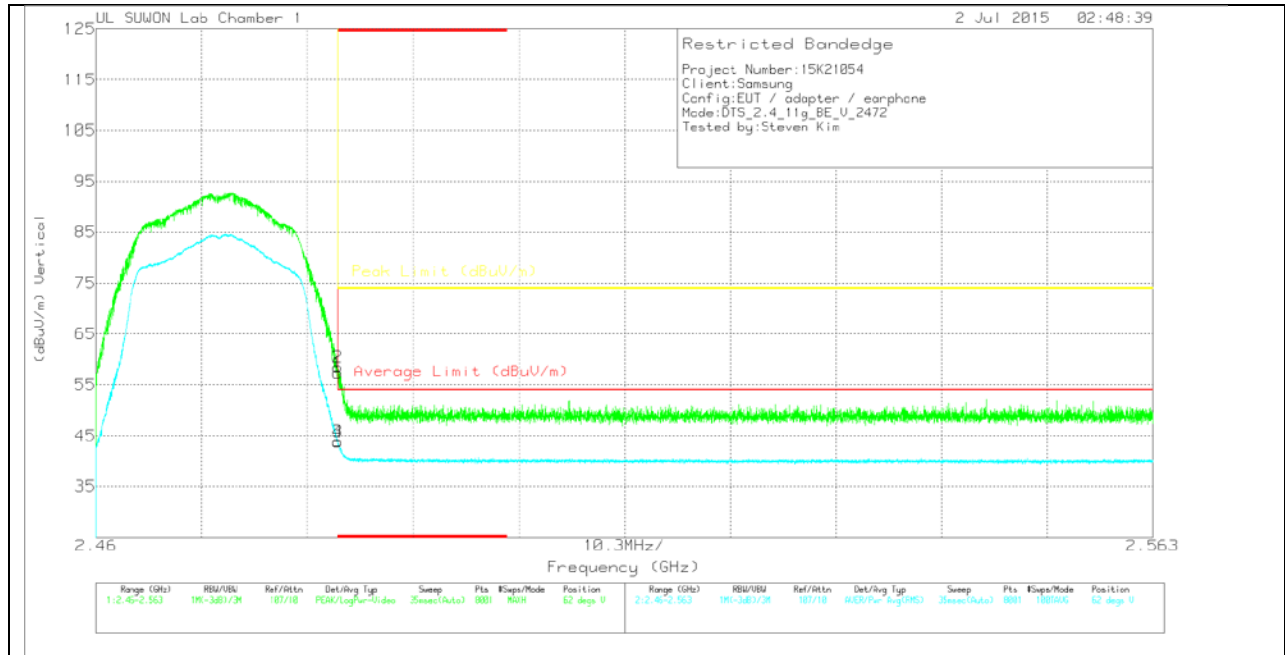
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	48.25	Pk	32	-22.6	0	57.65	-	-	74	-16.35	214	282	H
2	* 2.484	50.03	Pk	32	-22.6	0	59.43	-	-	74	-14.57	214	282	H
3	* 2.484	34.68	RMS	32	-22.6	.31	44.39	54	-9.61	-	-	214	282	H
4	* 2.484	34.4	RMS	32	-22.6	.31	44.11	54	-9.89	-	-	214	282	H

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

Pk - Peak detector

RMS - RMS detection

**VERTICAL PEAK AND AVERAGE PLOT**



**VERTICAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168 717)_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	47.92	Pk	32	-22.6	0	57.32	-	-	74	-16.68	62	242	V
2	* 2.484	49.06	Pk	32	-22.6	0	58.46	-	-	74	-15.54	62	242	V
3	* 2.484	34.14	RMS	32	-22.6	.31	43.85	54	-10.15	-	-	62	242	V
4	* 2.484	34.05	RMS	32	-22.6	.31	43.76	54	-10.24	-	-	62	242	V

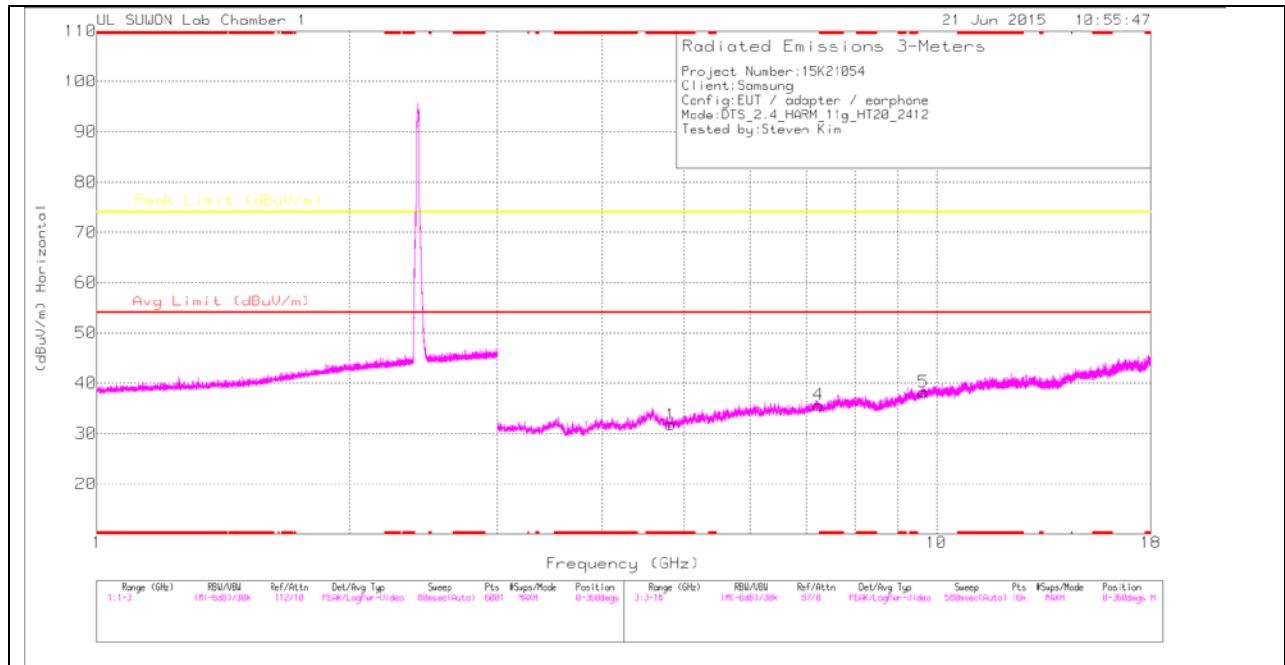
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

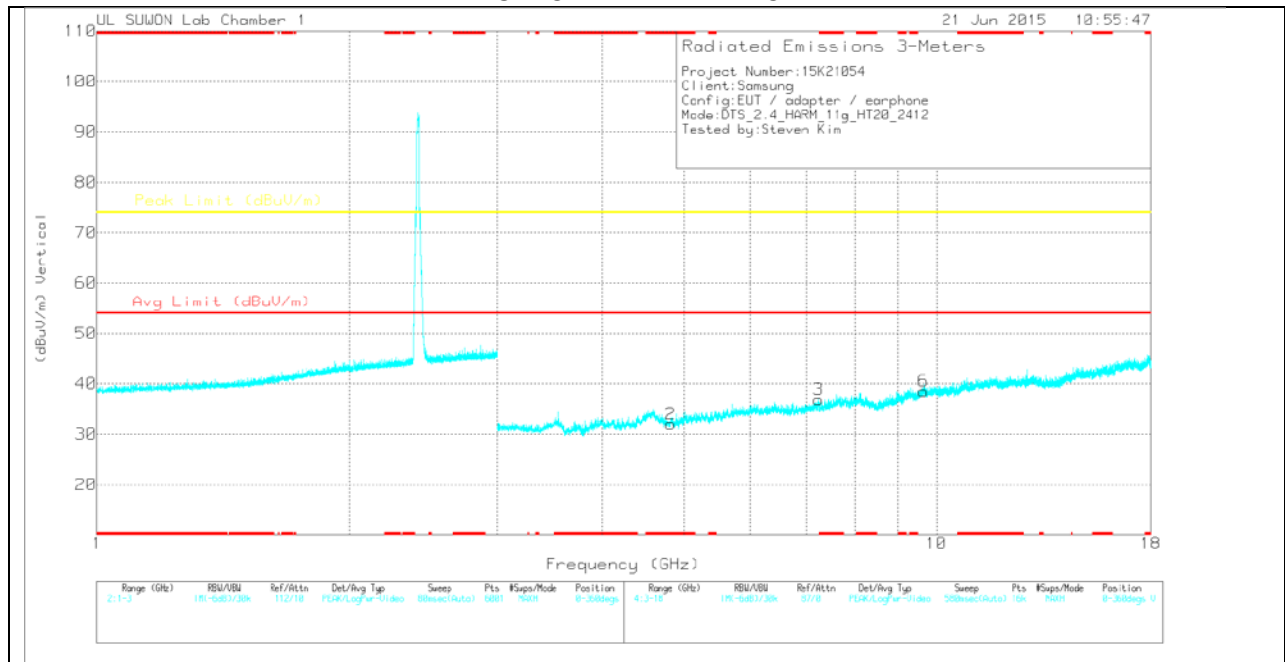
RMS - RMS detection

### 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**

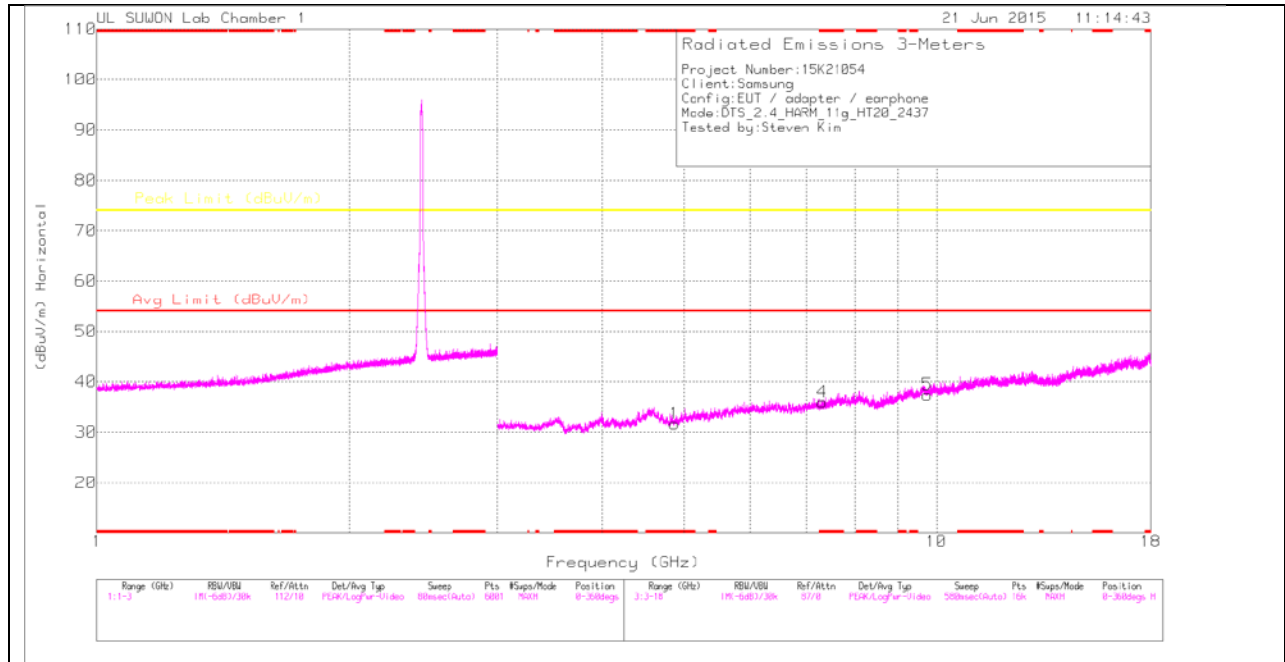
**TRACE MARKERS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_3_3GHP	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	27.36	PK	34	-29.6	0	31.76	-	-	74	-42.24	0-360	100	H
4	7.236	25.49	PK	35.7	-25.5	0	35.69	-	-	-	-	0-360	100	H
5	9.648	21.96	PK	37.1	-20.8	0	38.26	-	-	-	-	0-360	100	H
2	* 4.824	27.61	PK	34	-29.6	0	32.01	-	-	74	-41.99	0-360	100	V
3	7.237	26.69	PK	35.7	-25.5	0	36.89	-	-	-	-	0-360	200	V
6	9.648	22.24	PK	37.1	-20.8	0	38.54	-	-	-	-	0-360	200	V

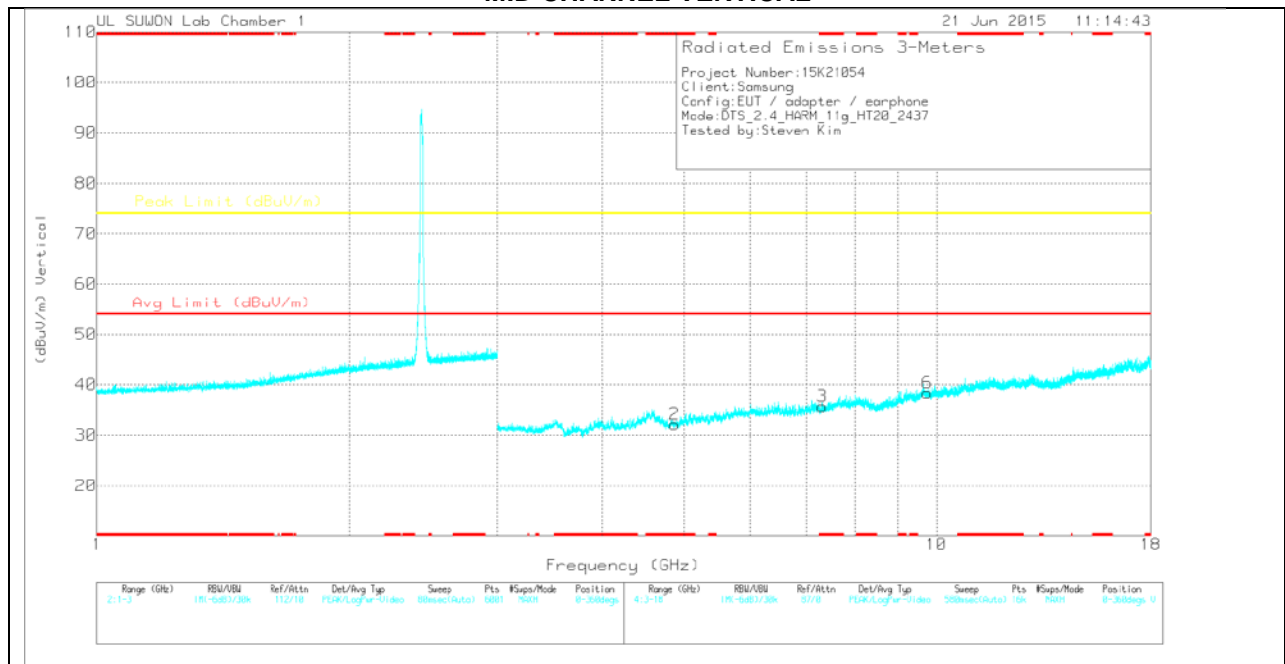
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

**MID CHANNEL HORIZONTAL**



**MID CHANNEL VERTICAL**



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

**MID CHANNEL DATA**

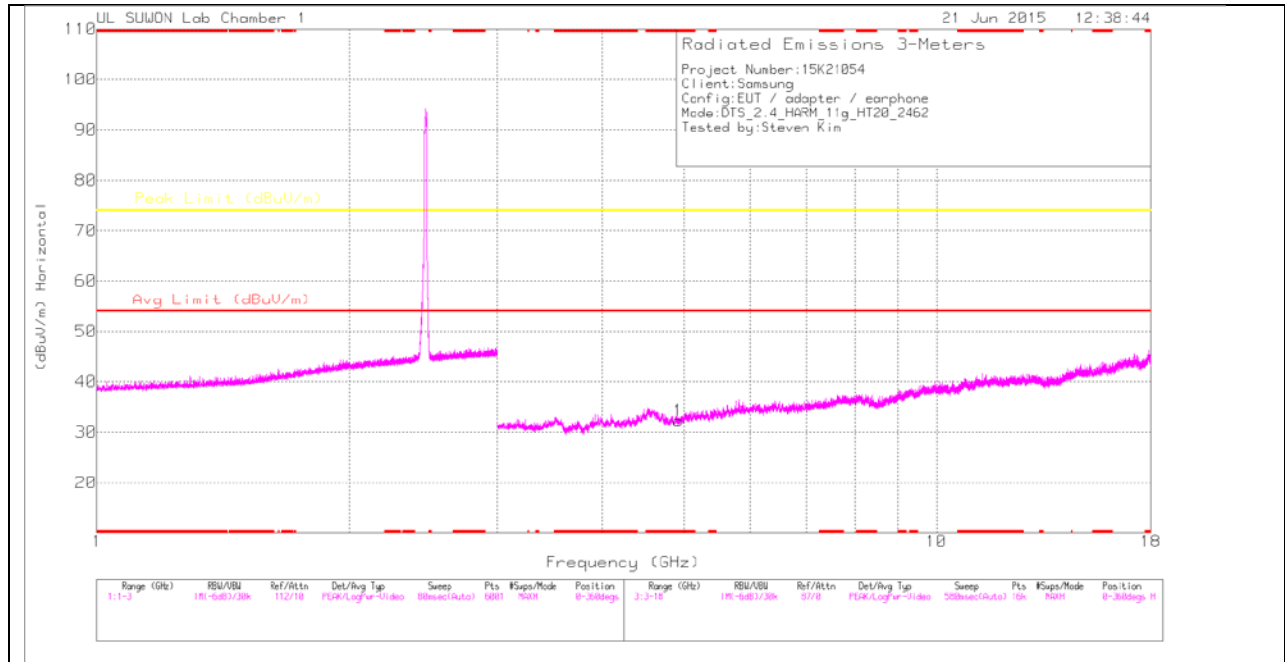
**TRACE MARKERS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_3_3GHP	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	26.89	PK	34	-29.2	0	31.69	-	-	74	-42.31	0-360	200	H
4	* 7.311	26.02	PK	35.7	-25.7	0	36.02	-	-	74	-37.98	0-360	200	H
5	9.749	22.13	PK	37.2	-21.9	0	37.43	-	-	-	-	0-360	200	H
2	* 4.874	27.37	PK	34	-29.2	0	32.17	-	-	74	-41.83	0-360	200	V
3	* 7.311	25.74	PK	35.7	-25.7	0	35.74	-	-	74	-38.26	0-360	200	V
6	9.749	23.06	PK	37.2	-21.9	0	38.36	-	-	-	-	0-360	200	V

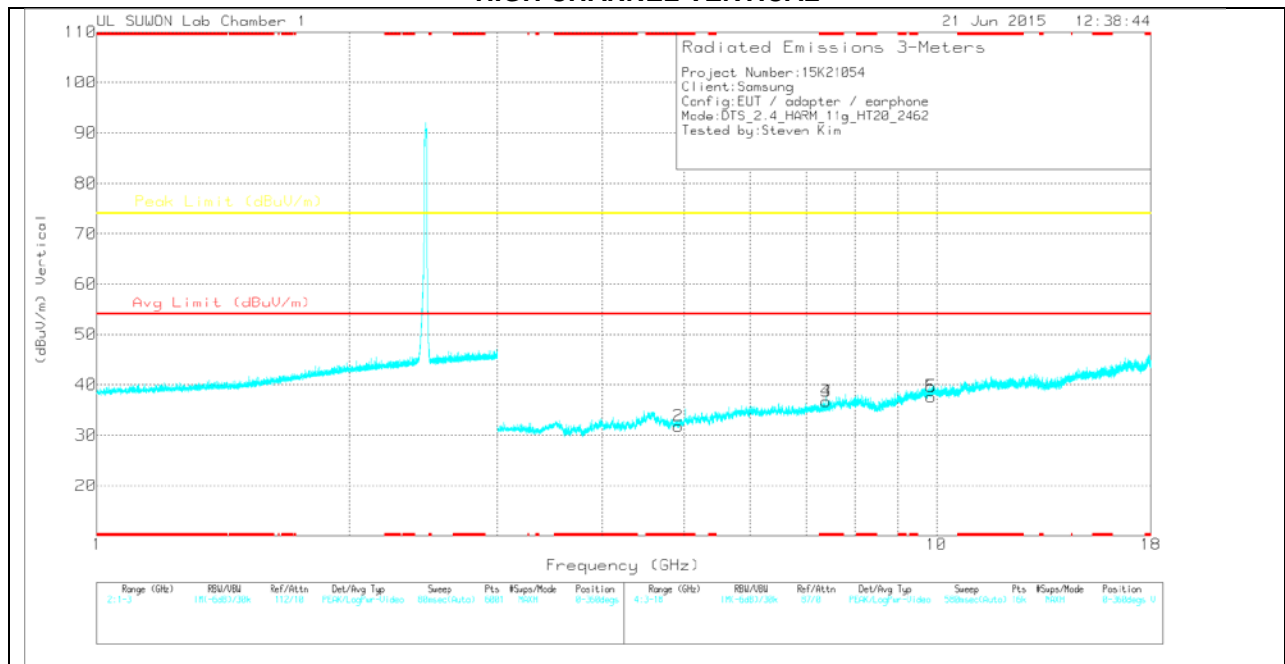
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak Detector

**HIGH CHANNEL HORIZONTAL**



**HIGH CHANNEL VERTICAL**



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

**HIGH CHANNEL DATA**

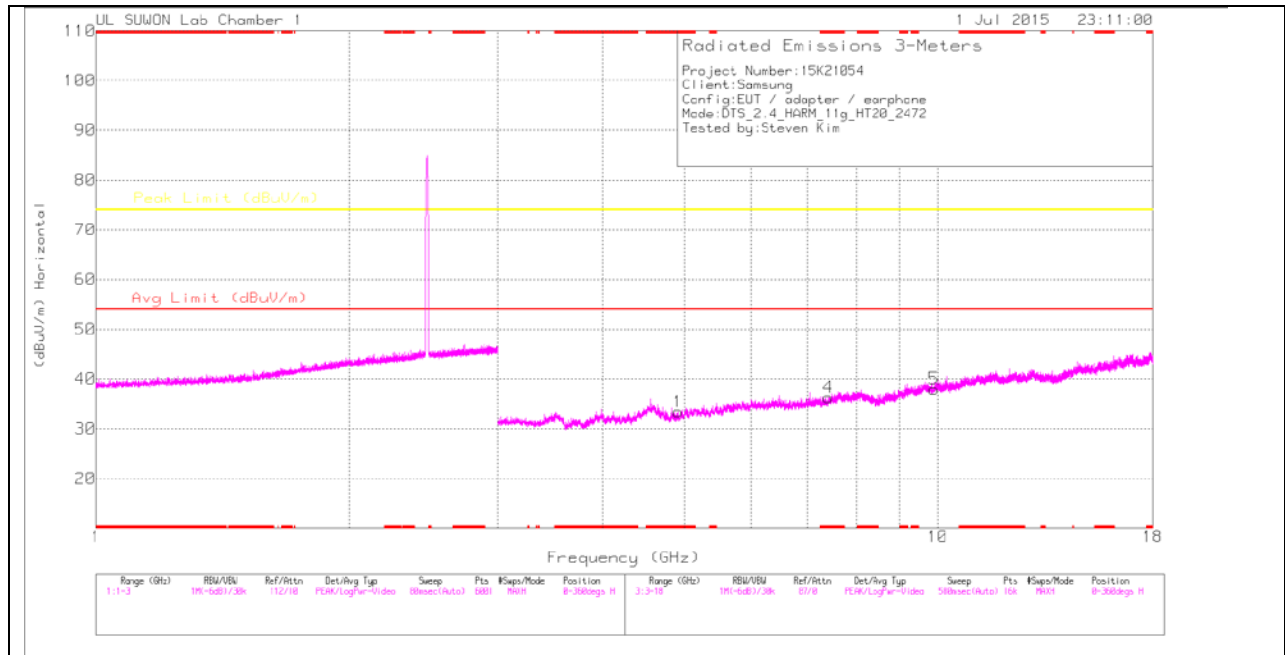
**TRACE MARKERS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_3_3GHP	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	27.28	PK	34	-29	0	32.28	-	-	74	-41.72	0-360	200	H
2	* 4.924	26.81	PK	34	-29	0	31.81	-	-	74	-42.19	0-360	200	V
3	* 7.386	26.03	PK	35.8	-25.1	0	36.73	-	-	74	-37.27	0-360	200	V
4	* 7.386	26.03	PK	35.8	-25.1	0	36.73	-	-	74	-37.27	0-360	200	V
5	9.849	21.95	PK	37.3	-21.6	0	37.65	-	-	-	-	0-360	200	V
6	9.849	21.95	PK	37.3	-21.6	0	37.65	-	-	-	-	0-360	200	V

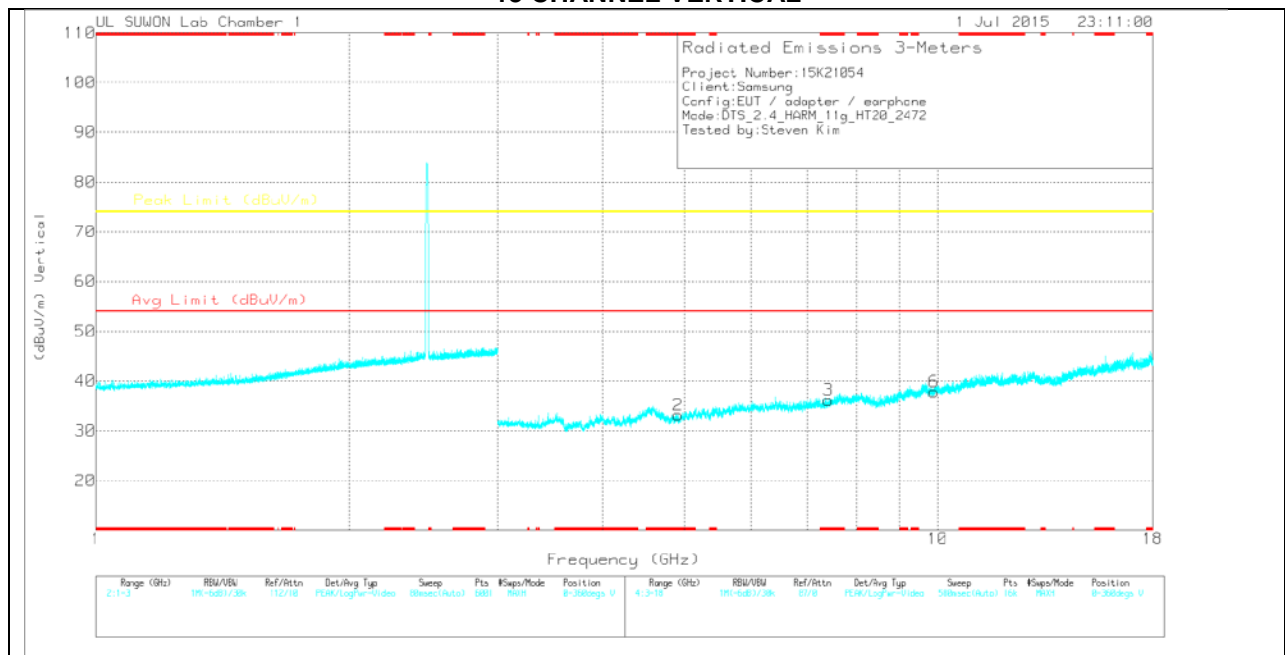
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak Detector

### 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**

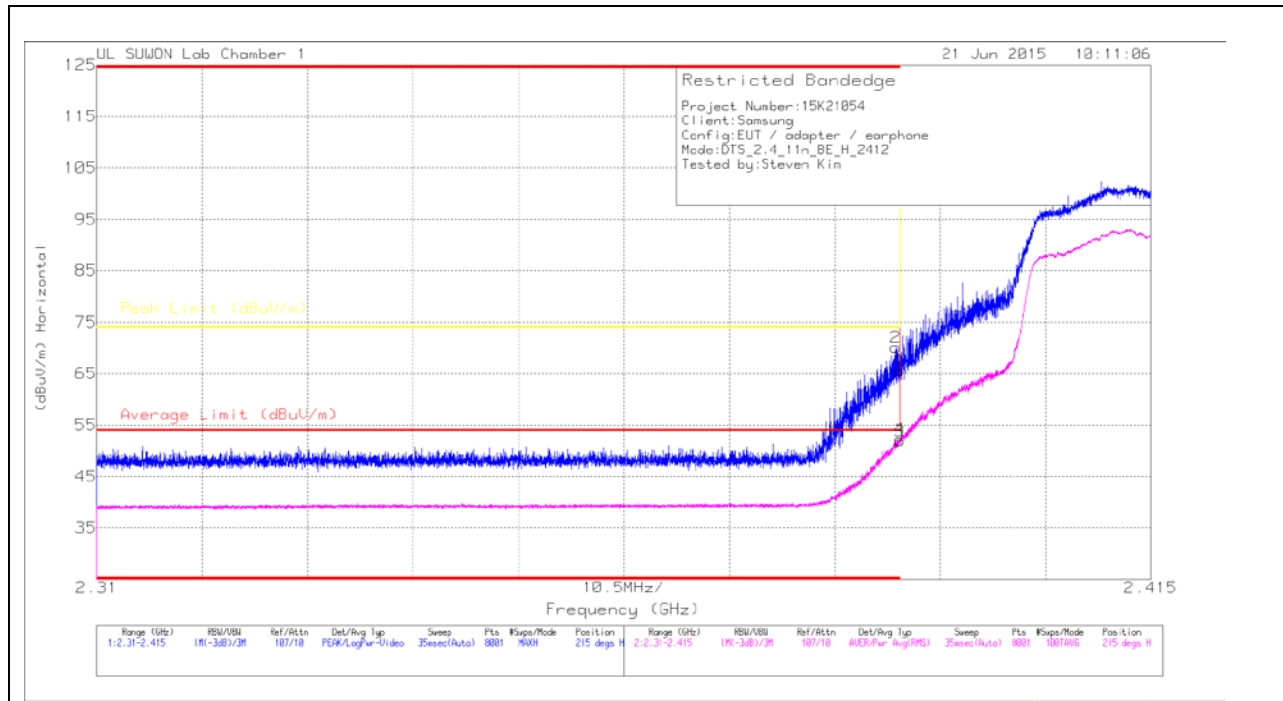
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_3_3GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.917	28.47	PK	34	-29.1	0	33.37	-	-	74	-40.63	0-360	100	H
4	* 7.415	25.38	PK	35.8	-24.9	0	36.28	-	-	74	-37.72	0-360	200	H
5	9.887	21.62	PK	37.3	-20.9	0	38.02	-	-	-	-	0-360	100	H
2	* 4.913	28.23	PK	34	-29.1	0	33.13	-	-	74	-40.87	0-360	200	V
3	* 7.416	25.34	PK	35.8	-24.9	0	36.24	-	-	74	-37.76	0-360	100	V
6	9.888	21.39	PK	37.3	-20.8	0	37.89	-	-	-	-	0-360	100	V

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

PK – Peak Detector

### 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

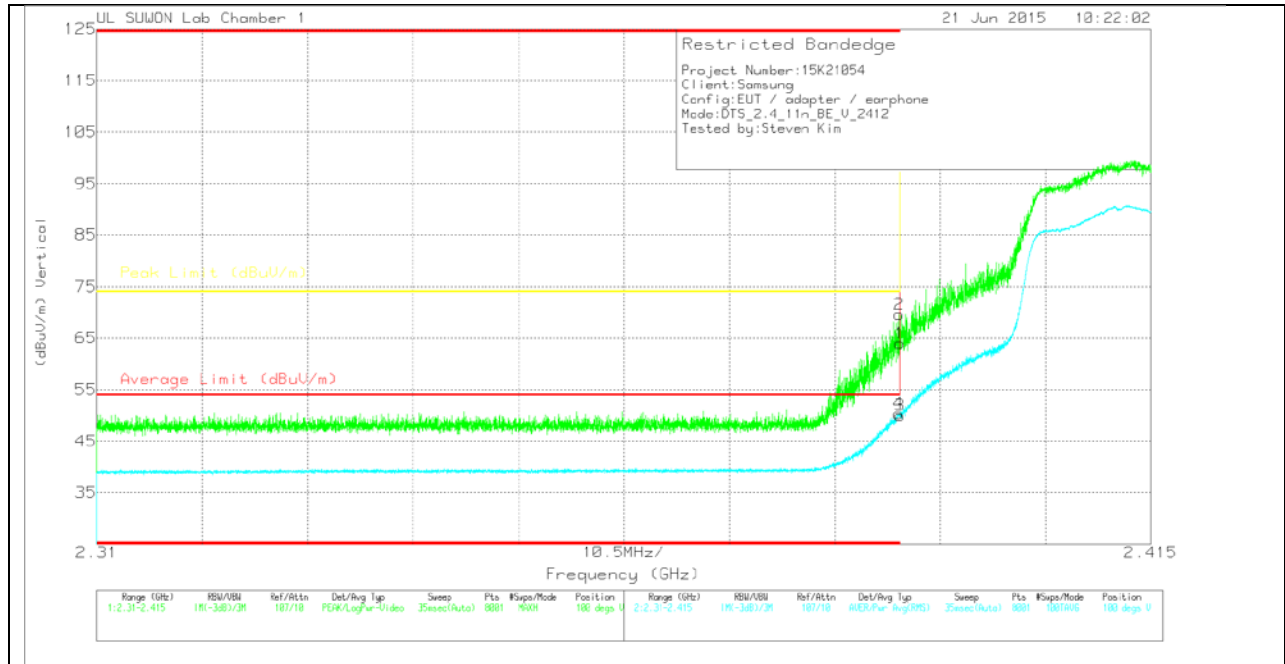
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	56.62	Pk	31.8	-22.8	0	65.62	-	-	74	-8.38	215	104	H
2	* 2.39	61.06	Pk	31.8	-22.8	0	70.06	-	-	74	-3.94	215	104	H
3	* 2.39	42.55	RMS	31.8	-22.8	.32	51.87	54	-2.13	-	-	215	104	H
4	* 2.39	42.95	RMS	31.8	-22.8	.32	52.27	54	-1.73	-	-	215	104	H

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

Pk - Peak detector

RMS - RMS detection

**VERTICAL PEAK AND AVERAGE PLOT**



**VERTICAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	54.96	Pk	31.8	-22.8	0	63.96	-	-	74	-10.04	100	102	V
2	* 2.39	60.59	Pk	31.8	-22.8	0	69.59	-	-	74	-4.41	100	102	V
3	* 2.39	40.66	RMS	31.8	-22.8	.32	49.98	54	-4.02	-	-	100	102	V
4	* 2.39	41.03	RMS	31.8	-22.8	.32	50.35	54	-3.65	-	-	100	102	V

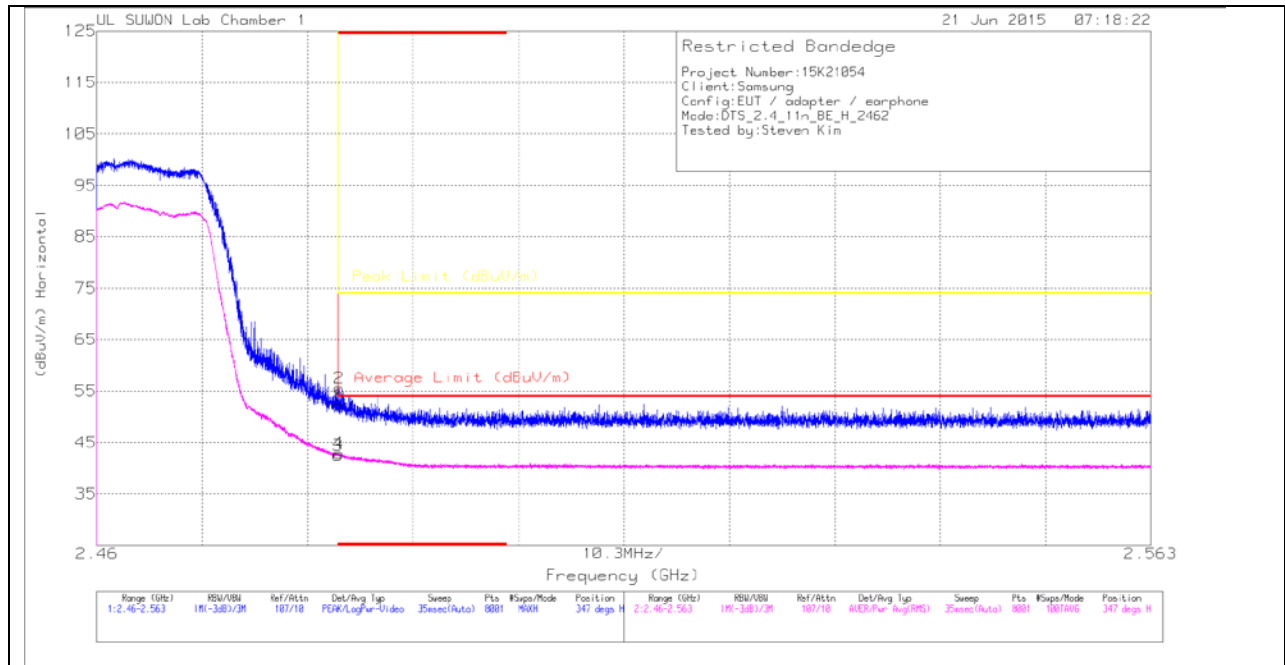
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

### AUTHORIZED BANDEDGE (HIGH CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

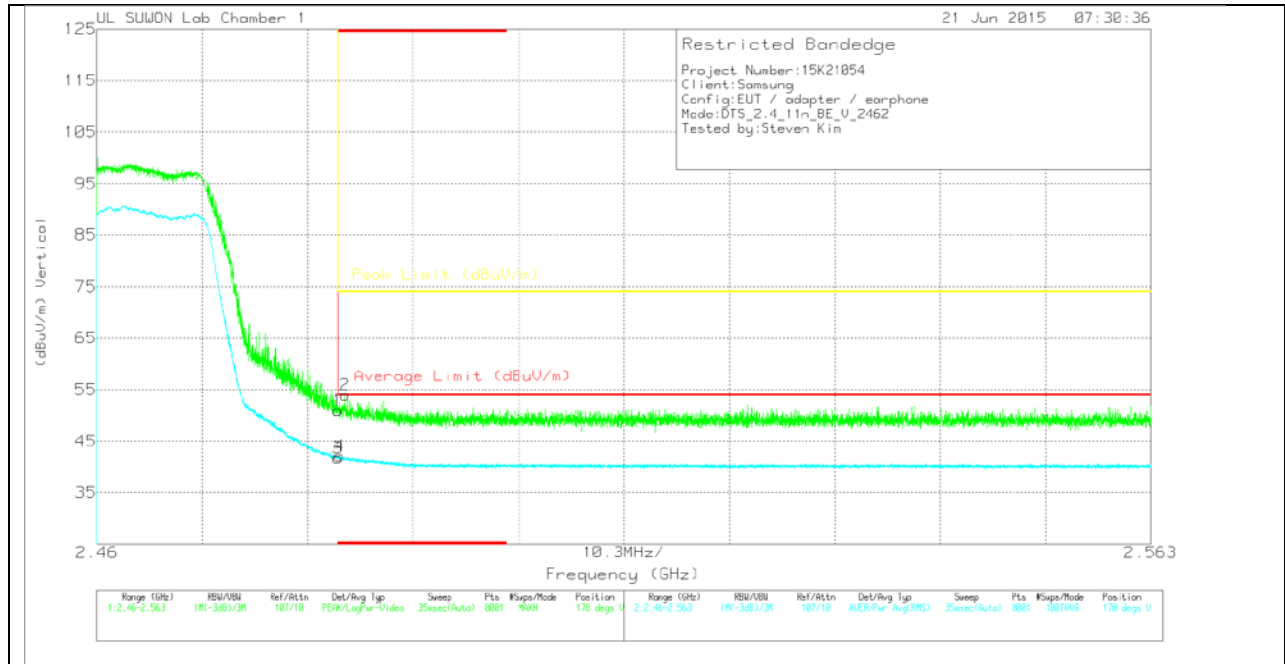
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	Path_2_10dB	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	42.87	Pk	32	-22.6	0	52.27	-	-	74	-21.73	347	101	H
2	* 2.484	46.16	Pk	32	-22.6	0	55.56	-	-	74	-18.44	347	101	H
3	* 2.484	32.76	RMS	32	-22.6	.32	42.48	54	-11.52	-	-	347	101	H
4	* 2.484	33.15	RMS	32	-22.6	.32	42.87	54	-11.13	-	-	347	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**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168 717)_15061 9	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	41.58	Pk	32	-22.6	0	50.98	-	-	74	-23.02	178	107	V
2	* 2.484	44.58	Pk	32	-22.6	0	53.98	-	-	74	-20.02	178	107	V
3	* 2.484	31.99	RMS	32	-22.6	.32	41.71	54	-12.29	-	-	178	107	V
4	* 2.484	32.4	RMS	32	-22.6	.32	42.12	54	-11.88	-	-	178	107	V

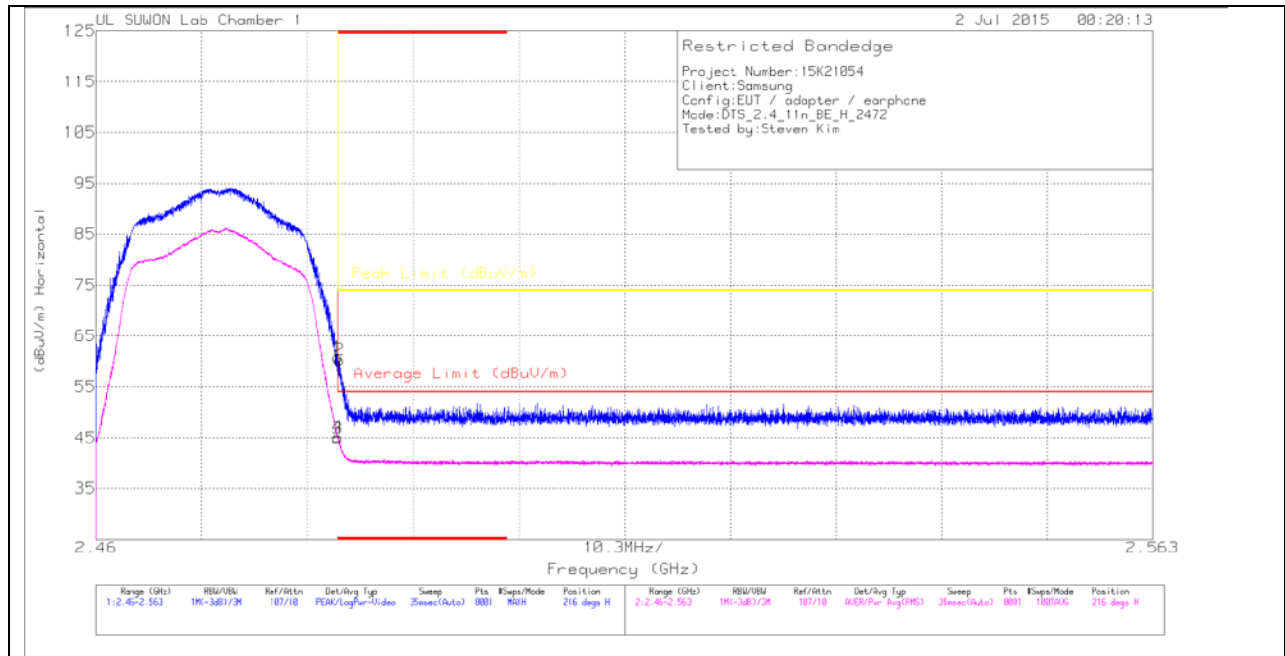
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

## AUTHORIZED BANDEDGE (13 CHANNEL)

### HORIZONTAL PEAK AND AVERAGE PLOT



### HORIZONTAL DATA

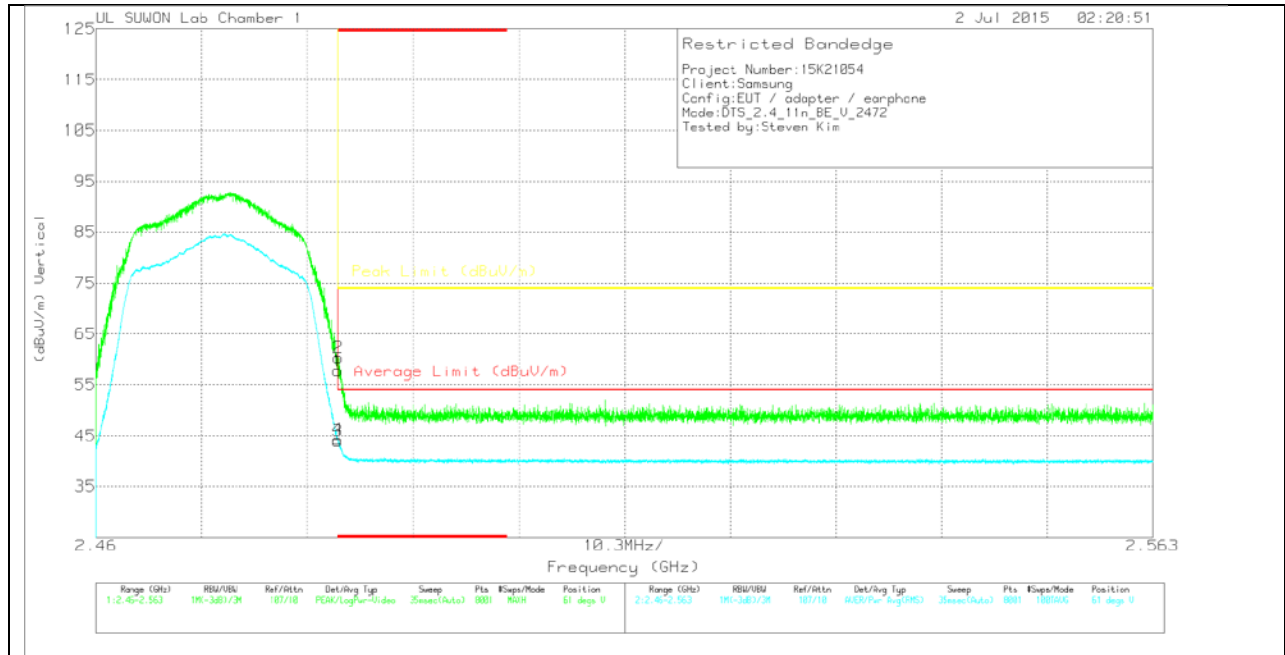
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17)_150619	Path_2_10d B	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	51.42	Pk	32	-22.6	0	60.82	-	-	74	-13.18	216	104	H
2	* 2.484	50.98	Pk	32	-22.6	0	60.38	-	-	74	-13.62	216	104	H
3	* 2.484	35.21	RMS	32	-22.6	.32	44.93	54	-9.07	-	-	216	104	H
4	* 2.484	35.41	RMS	32	-22.6	.32	45.13	54	-8.87	-	-	216	104	H

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

Pk - Peak detector

RMS - RMS detection

**VERTICAL PEAK AND AVERAGE PLOT**



**VERTICAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168 717)_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	48.35	Pk	32	-22.6	0	57.75	-	-	74	-16.25	61	244	V
2	* 2.484	50.99	Pk	32	-22.6	0	60.39	-	-	74	-13.61	61	244	V
3	* 2.484	34.24	RMS	32	-22.6	.32	43.96	54	-10.04	-	-	61	244	V
4	* 2.484	34.55	RMS	32	-22.6	.32	44.27	54	-9.73	-	-	61	244	V

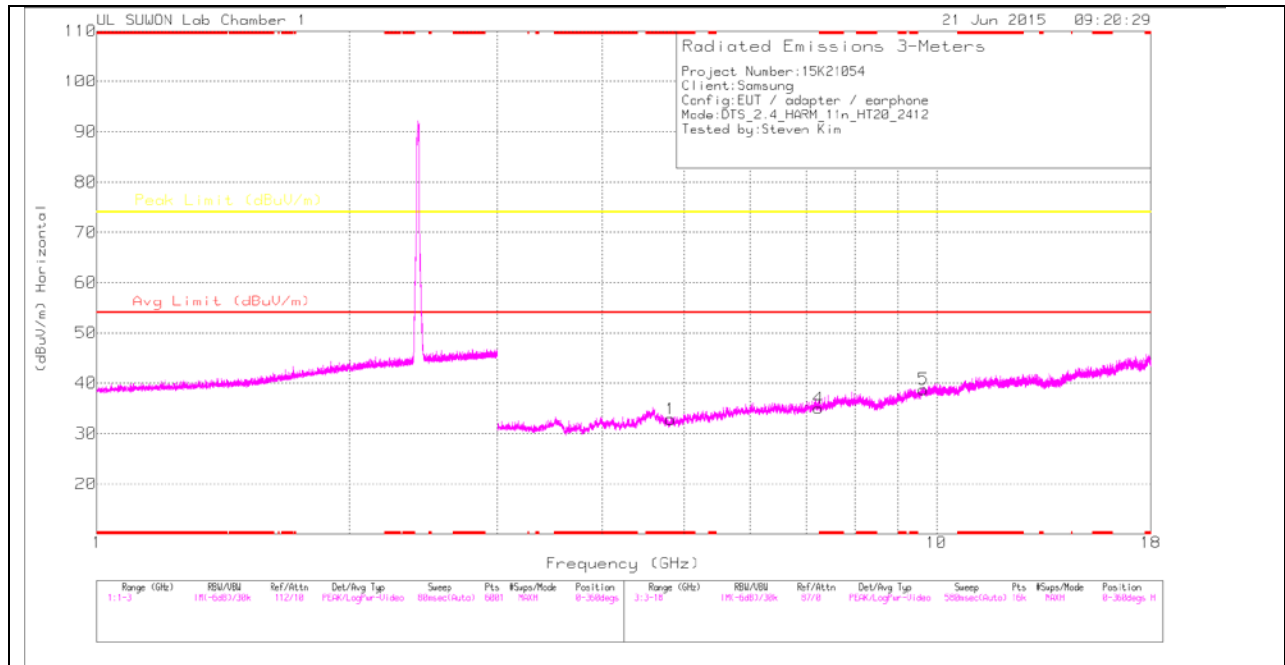
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

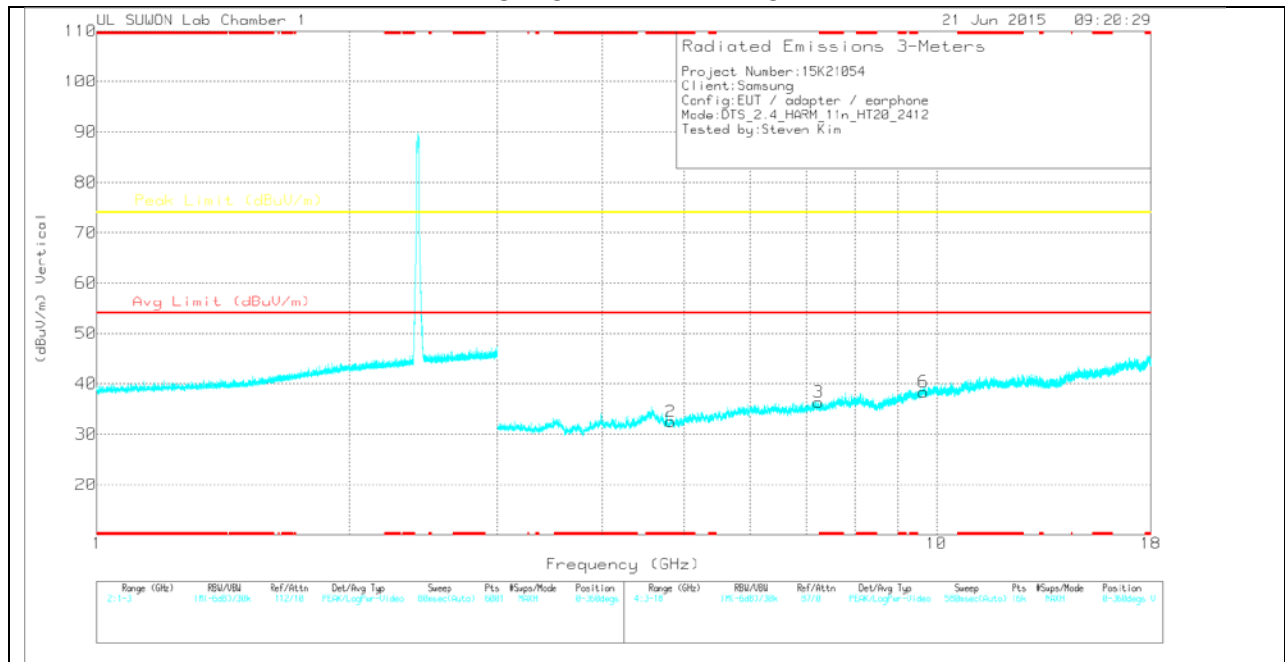
RMS - RMS detection

## 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**

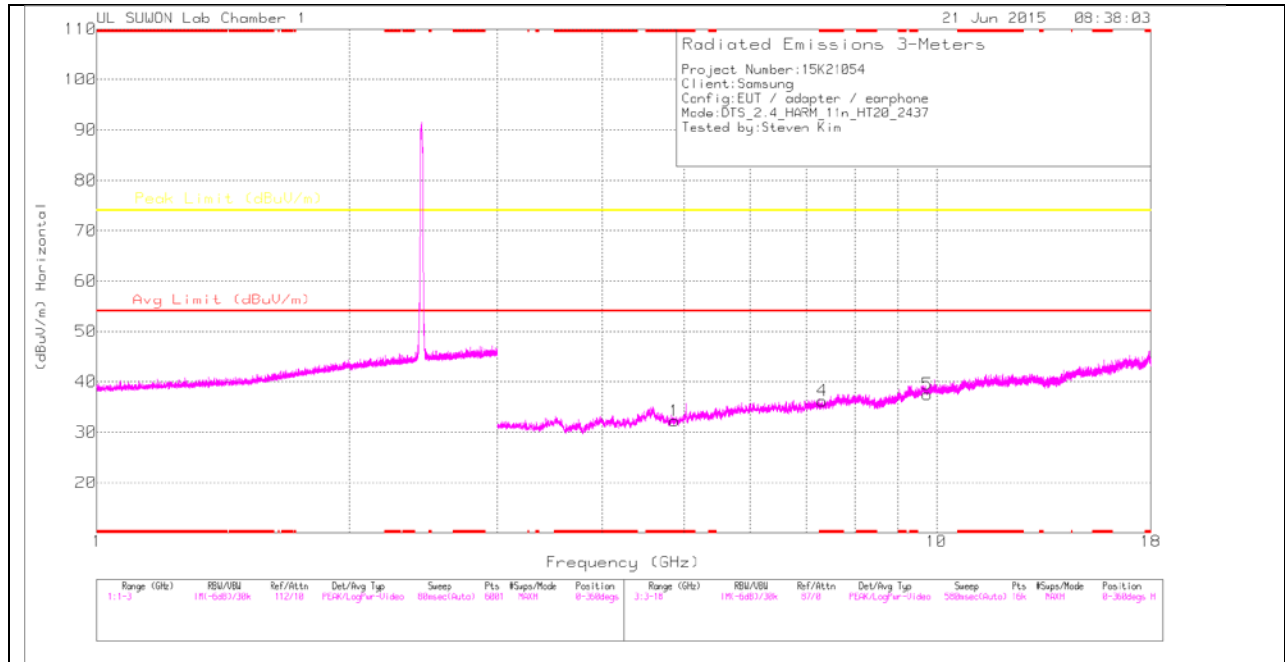
**TRACE MARKERS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_3_3GHP	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	28.42	PK	34	-29.6	0	32.82	-	-	74	-41.18	0-360	200	H
4	7.236	24.79	PK	35.7	-25.5	0	34.99	-	-	-	-	0-360	200	H
5	9.648	22.5	PK	37.1	-20.8	0	38.8	-	-	-	-	0-360	200	H
2	* 4.824	28.11	PK	34	-29.6	0	32.51	-	-	74	-41.49	0-360	100	V
3	7.236	26.15	PK	35.7	-25.5	0	36.35	-	-	-	-	0-360	200	V
6	9.648	22.06	PK	37.1	-20.8	0	38.36	-	-	-	-	0-360	200	V

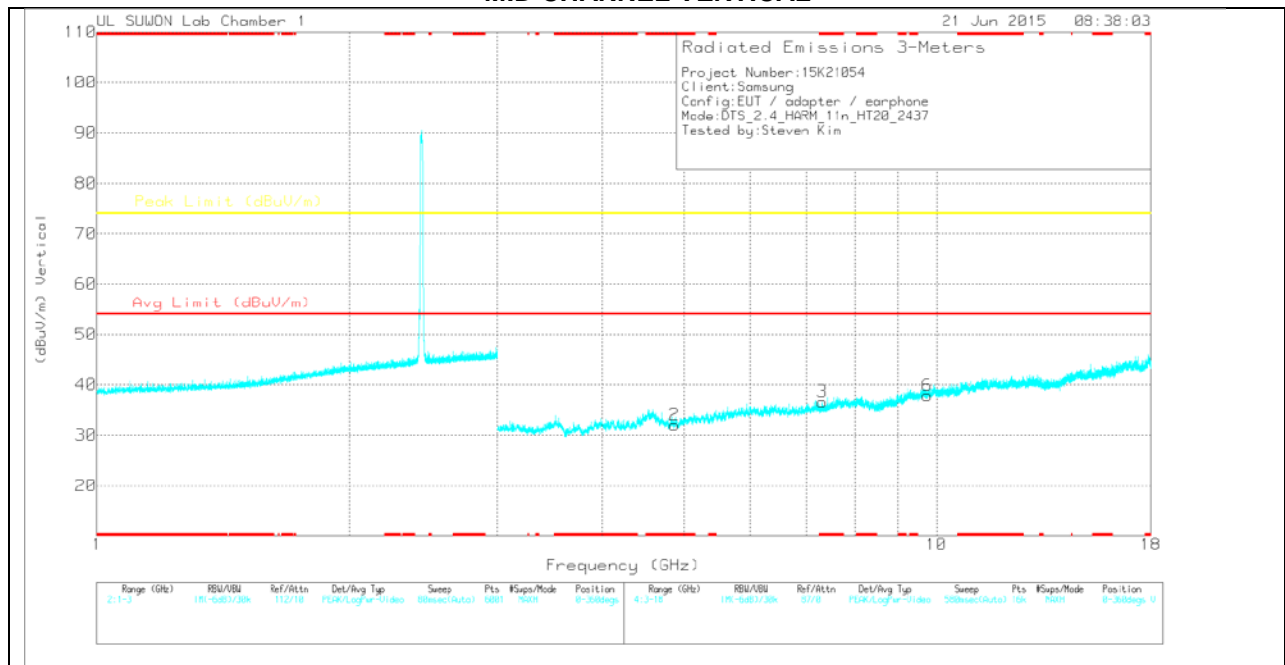
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

**MID CHANNEL HORIZONTAL**



**MID CHANNEL VERTICAL**



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

**MID CHANNEL DATA**

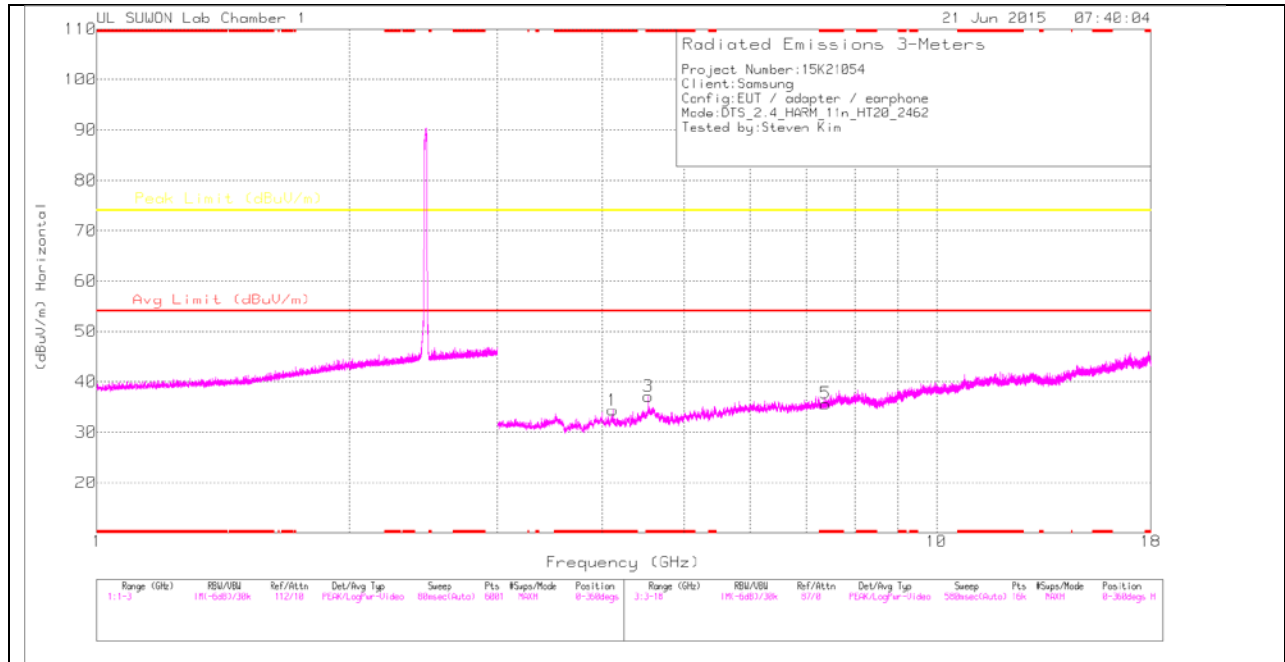
**TRACE MARKERS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_3_3GHP	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	27.46	PK	34	-29.2	0	32.26	-	-	74	-41.74	0-360	200	H
4	* 7.311	26.27	PK	35.7	-25.7	0	36.27	-	-	74	-37.73	0-360	200	H
5	9.748	22.17	PK	37.2	-21.9	0	37.47	-	-	-	-	0-360	200	H
2	* 4.874	27.25	PK	34	-29.2	0	32.05	-	-	74	-41.95	0-360	100	V
3	* 7.311	26.65	PK	35.7	-25.7	0	36.65	-	-	74	-37.35	0-360	200	V
6	9.748	22.56	PK	37.2	-21.9	0	37.86	-	-	-	-	0-360	200	V

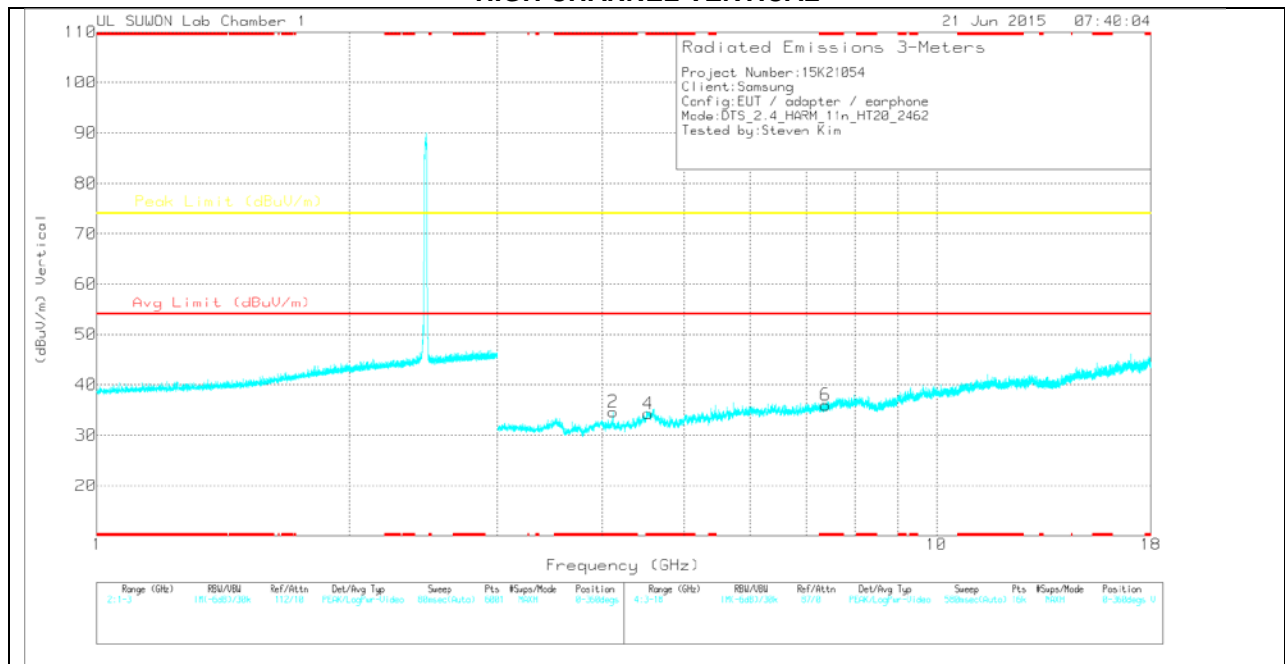
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

### HIGH CHANNEL HORIZONTAL



### HIGH CHANNEL VERTICAL



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

**HIGH CHANNEL DATA**

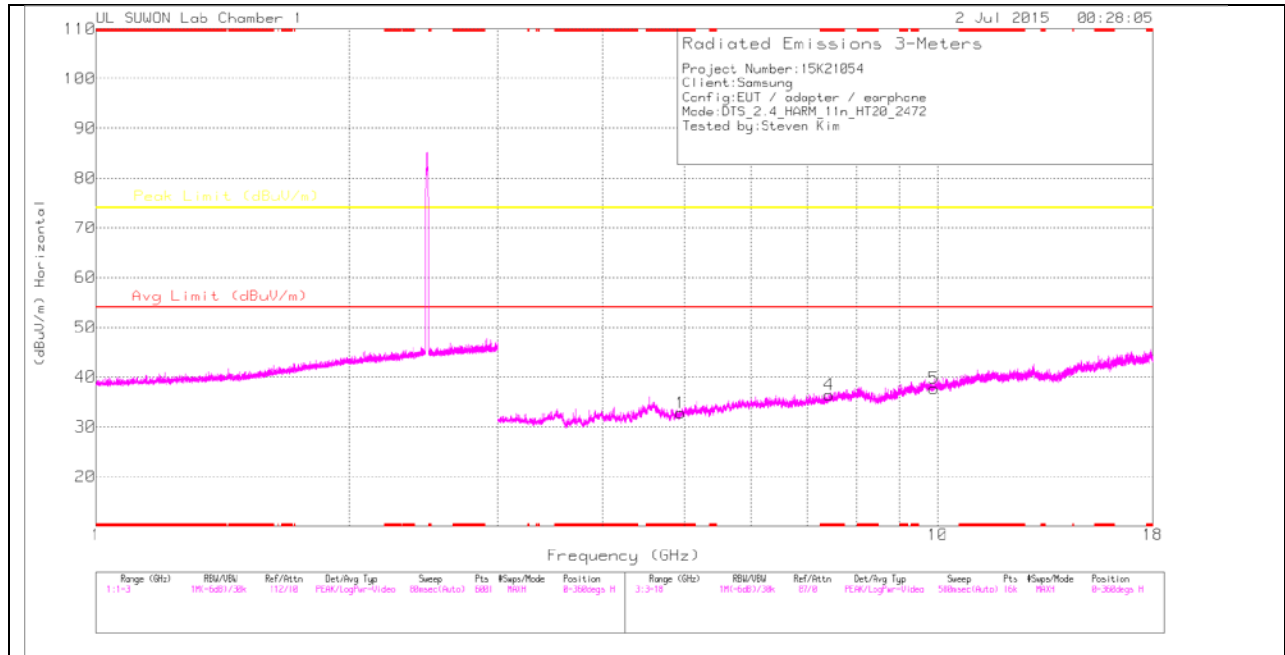
**TRACE MARKERS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_3_3GHP	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	* 4.114	30.14	PK	33.5	-29.3	0	34.34	-	-	74	-39.66	0-360	100	H
3	* 4.537	32.09	PK	33.9	-28.9	0	37.09	-	-	74	-36.91	0-360	200	H
5	* 7.377	25.09	PK	35.8	-25.2	0	35.69	-	-	74	-38.31	0-360	200	H
2	* 4.115	30.56	PK	33.5	-29.4	0	34.66	-	-	74	-39.34	0-360	200	V
4	* 4.536	29.28	PK	33.9	-28.9	0	34.28	-	-	74	-39.72	0-360	100	V
6	* 7.372	25.43	PK	35.8	-25.2	0	36.03	-	-	74	-37.97	0-360	200	V

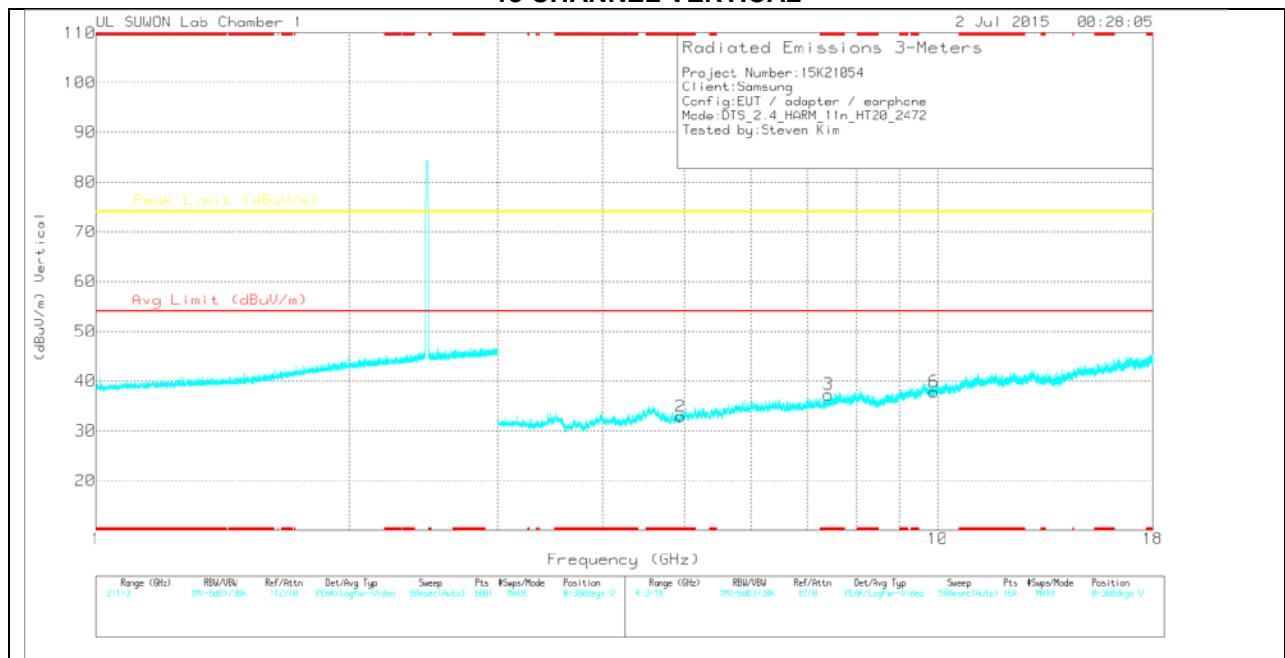
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

### 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**

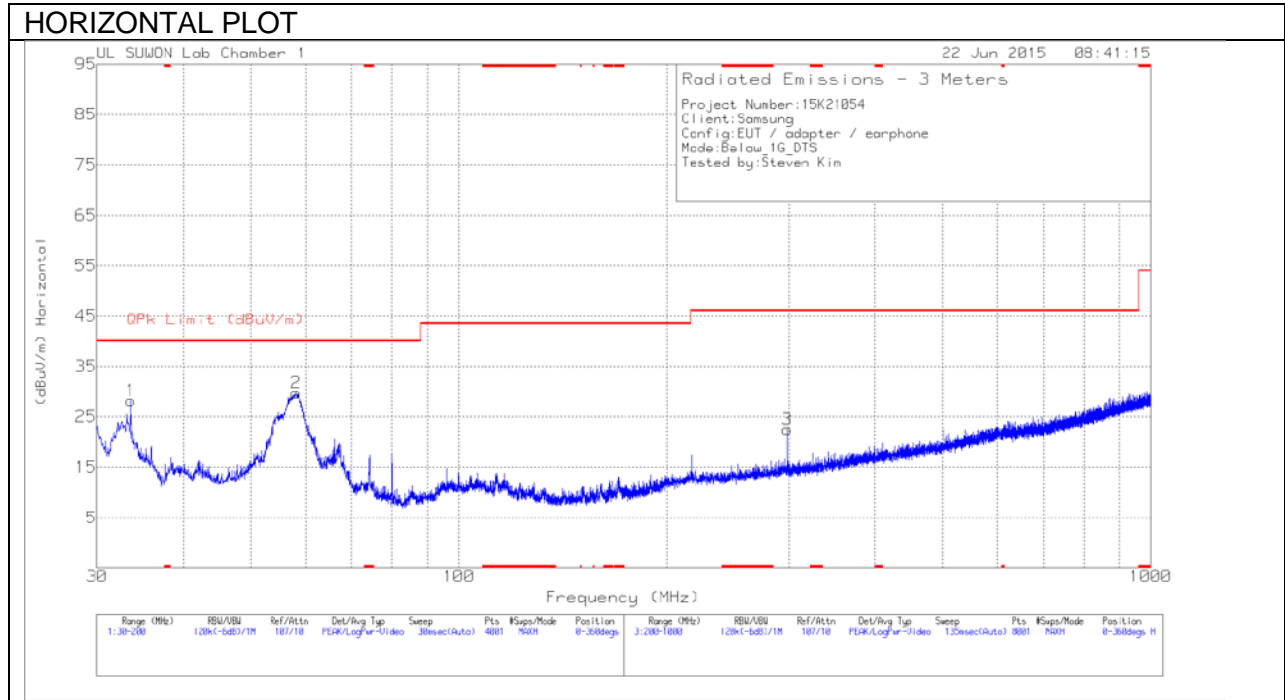
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(001687 17_150619)	Path_3_3GHP	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.945	27.79	PK	34	-29	0	32.79	-	-	74	-41.21	0-360	100	H
4	* 7.417	25.58	PK	35.8	-24.9	0	36.48	-	-	74	-37.52	0-360	200	H
5	9.888	21.17	PK	37.3	-20.8	0	37.67	-	-	-	-	0-360	100	H
2	* 4.944	27.9	PK	34	-29	0	32.9	-	-	74	-41.1	0-360	100	V
3	* 7.415	26.37	PK	35.8	-24.9	0	37.27	-	-	74	-36.73	0-360	100	V
6	9.889	21.34	PK	37.3	-20.8	0	37.84	-	-	-	-	0-360	100	V

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

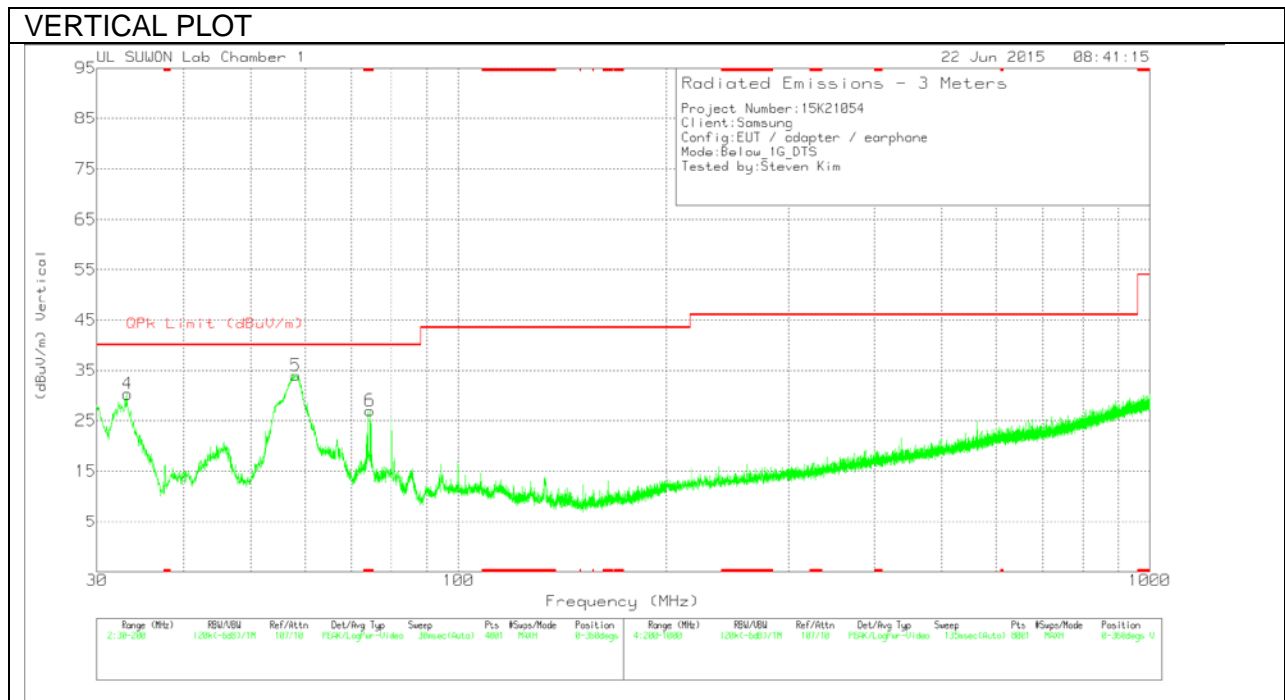
PK – Peak detector

### 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**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163-750	Bi-Log	DC Corr (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	33.57	48.31	Pk	10.4	-30.5	0	28.21	40	-11.79	0-360	300	H
2	58.22	46.83	Pk	12.9	-30	0	29.73	40	-10.27	0-360	400	H
4	33.1875	50.42	Pk	10.4	-30.5	0	30.32	40	-9.68	0-360	100	V
5	58.135	51.13	Pk	12.9	-30	0	34.03	40	-5.97	0-360	100	V
6	* 74.455	48.34	Pk	8.4	-29.7	0	27.04	40	-12.96	0-360	400	V
3	298.3	36.61	Pk	13.3	-27.4	0	22.51	46.02	-23.51	0-360	100	H

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 C63.4 2009.

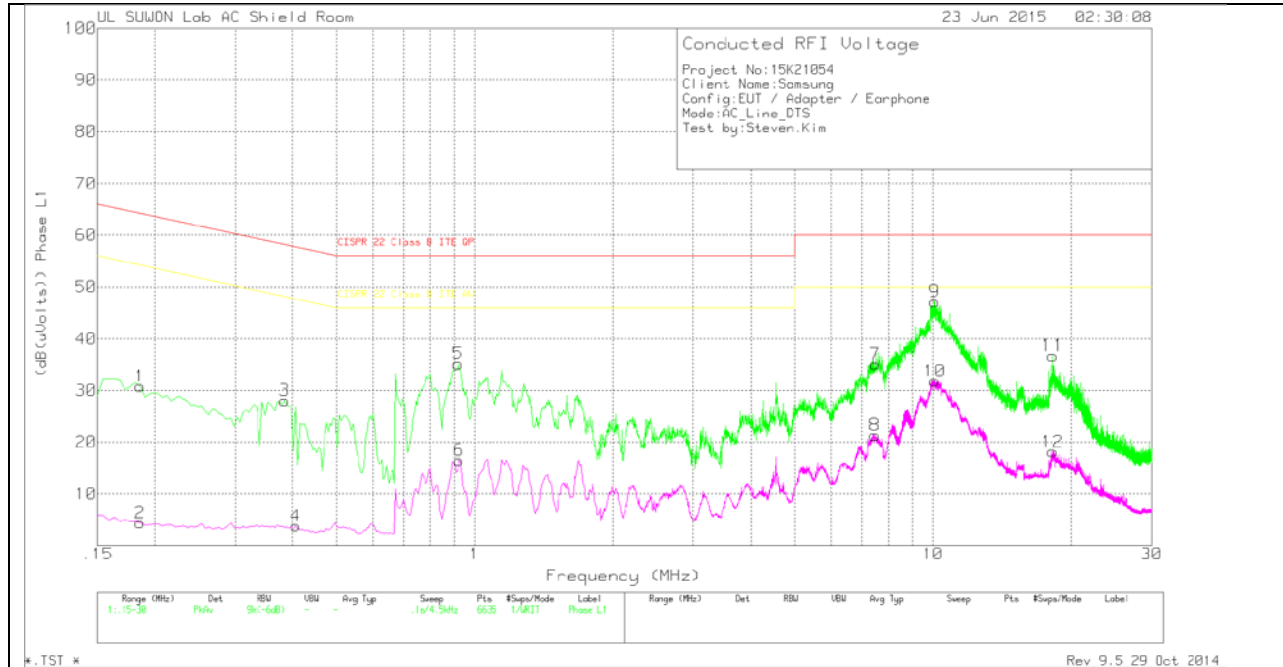
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

**RESULTS**

**6 WORST EMISSIONS**

**LINE 1 PLOT**



**LINE 1 RESULTS**

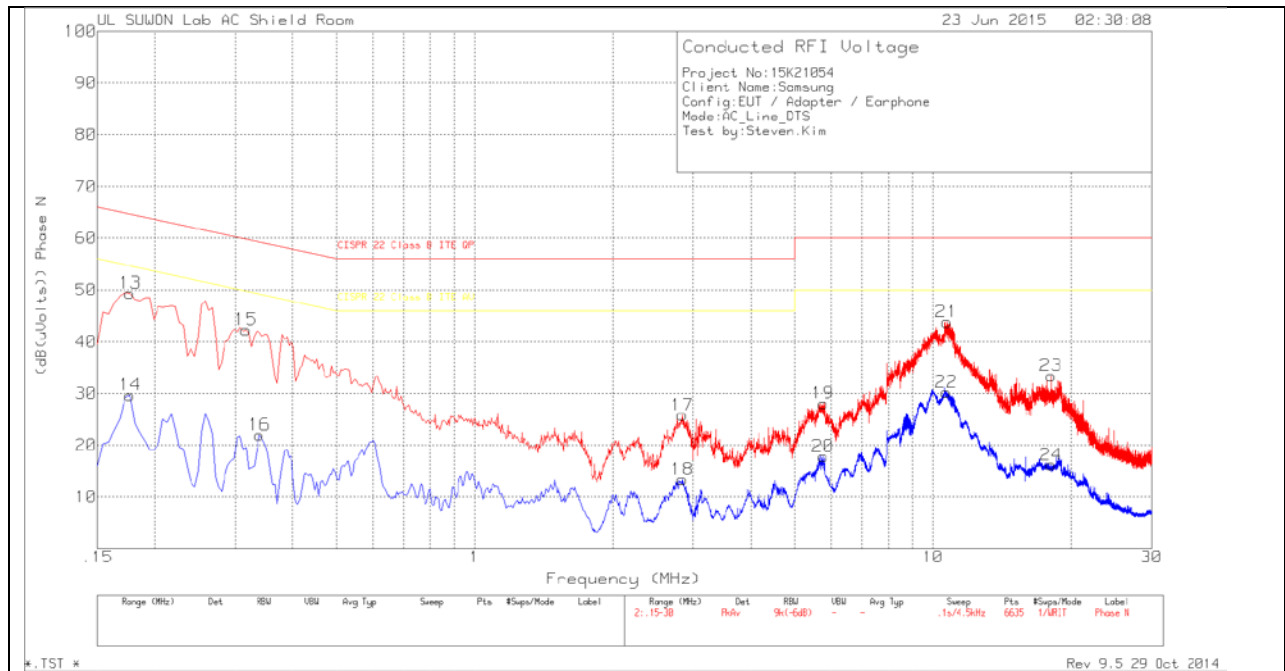
Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_w ith ex-cord_L1	CE Shield Room	Corrected Reading (dBuV)	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
1	.186	20.71	Pk	10.1	0	30.81	64.21	-33.4	-	-
2	.186	-5.69	Av	10.1	0	4.41	-	-	54.21	-49.8
3	.384	17.98	Pk	10.1	0	28.08	58.19	-30.11	-	-
4	.4065	-6.3	Av	10.1	0	3.8	-	-	47.72	-43.92
5	.9195	25.28	Pk	9.9	0	35.18	56	-20.82	-	-
6	.924	6.61	Av	9.9	0	16.51	-	-	46	-29.49
7	7.476	25.07	Pk	9.9	.1	35.07	60	-24.93	-	-
8	7.4715	11.37	Av	9.9	.1	21.37	-	-	50	-28.63
9	10.095	36.98	Pk	10	.2	47.18	60	-12.82	-	-
10	10.104	21.61	Av	10	.2	31.81	-	-	50	-18.19
11	18.24	26.21	Pk	10.3	.2	36.71	60	-23.29	-	-
12	18.24	7.67	Av	10.3	.2	18.17	-	-	50	-31.83

Pk - Peak detector

Av - Average detection

**LINE 2 PLOT**



**LINE 2 RESULTS**

Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_w ith ex-cord_N	CE Shield Room	Corrected Reading (dBuV)	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
13	.177	39.29	Pk	10.1	0	49.39	64.63	-15.24	-	-
14	.177	19.58	Av	10.1	0	29.68	-	-	54.63	-24.95
15	.3165	32.42	Pk	9.9	0	42.32	59.8	-17.48	-	-
16	.339	12	Av	10	0	22	-	-	49.23	-27.23
17	2.8365	15.94	Pk	9.8	.1	25.84	56	-30.16	-	-
18	2.8365	3.52	Av	9.8	.1	13.42	-	-	46	-32.58
19	5.7525	18.2	Pk	9.8	.1	28.1	60	-31.9	-	-
20	5.7525	7.94	Av	9.8	.1	17.84	-	-	50	-32.16
21	10.7115	33.52	Pk	10.1	.2	43.82	60	-16.18	-	-
22	10.6845	19.96	Av	10.1	.2	30.26	-	-	50	-19.74
23	18.087	22.75	Pk	10.5	.2	33.45	60	-26.55	-	-
24	18.0915	5.54	Av	10.5	.2	16.24	-	-	50	-33.76

Pk - Peak detector

Av - Average detection