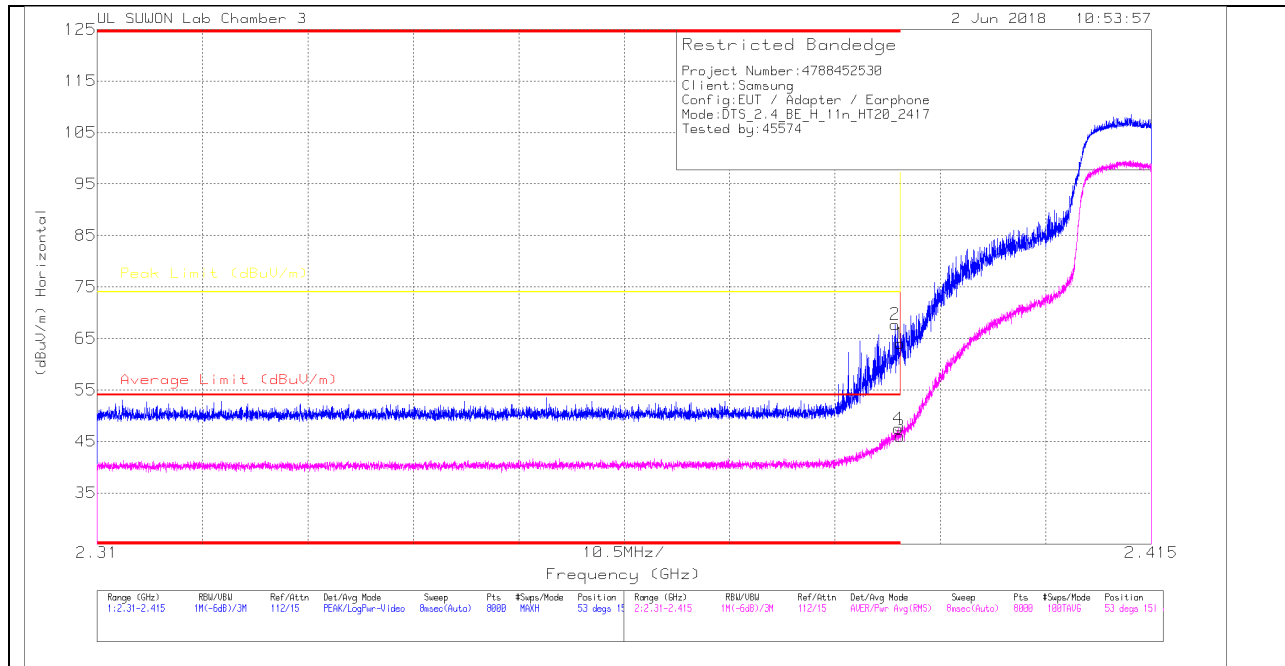


### RESTRICTED BANDEDGE (2 CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

##### Trace Markers

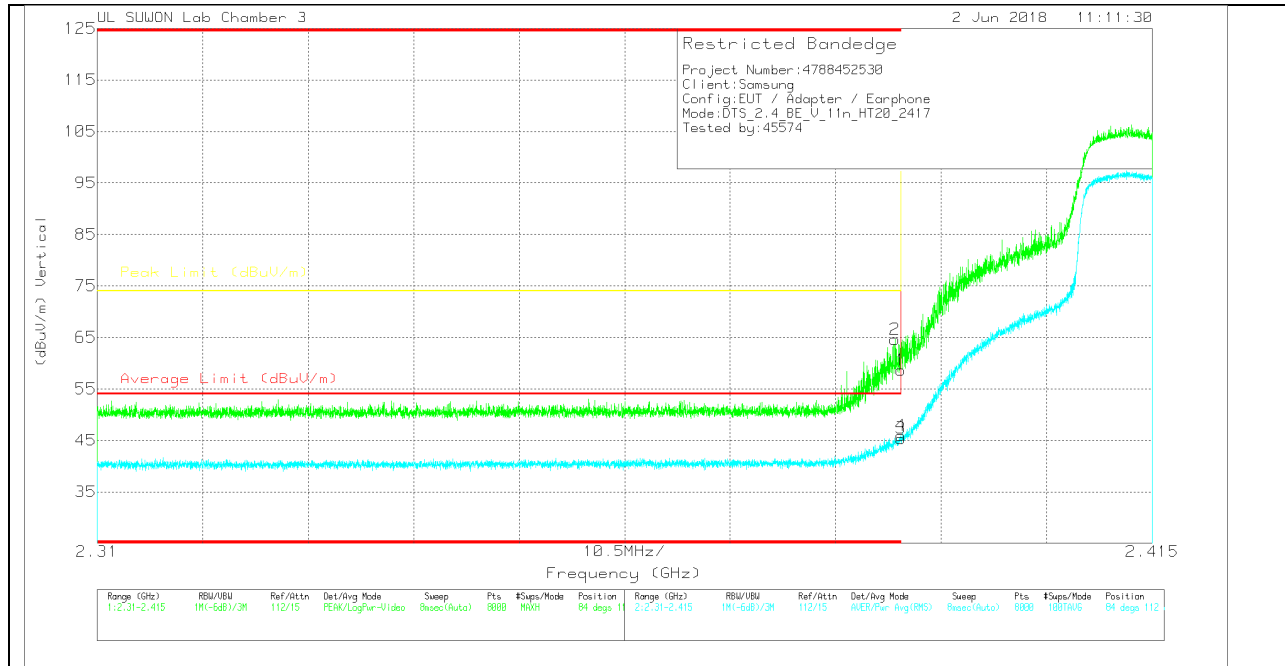
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	311700205959	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	55.48	Pk	31.8	-23.3	0	63.98	-	-	74	-10.02	53	151	H
2	* 2.389	59.21	Pk	31.8	-23.3	0	67.71	-	-	74	-6.29	53	151	H
3	* 2.39	37.5	RMS	31.8	-23.3	0	46	54	-8	-	-	53	151	H
4	* 2.39	39.02	RMS	31.8	-23.3	0	47.52	54	-6.48	-	-	53	151	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-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(00205959)	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	50.15	PK	31.8	-23.3	0	58.65	-	-	74	-15.35	84	112	V
2	* 2.389	56.1	PK	31.8	-23.3	0	64.6	-	-	74	-9.4	84	112	V
3	* 2.39	36.87	RMS	31.8	-23.3	0	45.37	54	-8.63	-	-	84	112	V
4	* 2.39	37.41	RMS	31.8	-23.3	0	45.91	54	-8.09	-	-	84	112	V

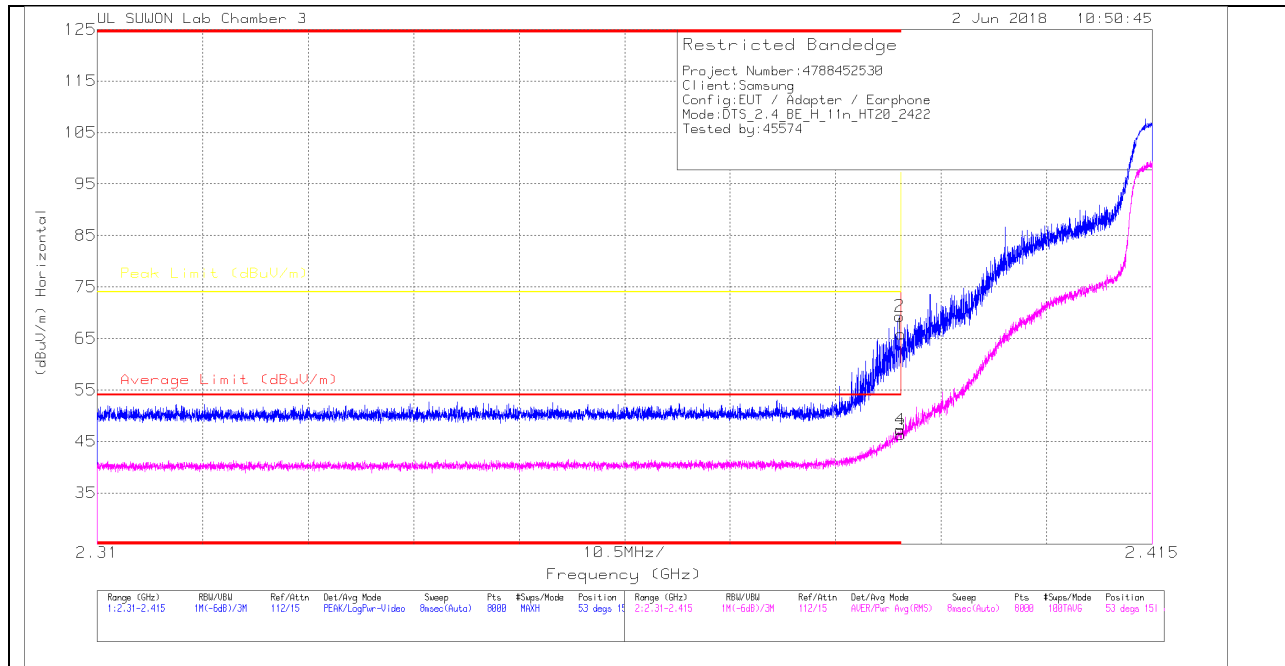
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK - Peak detector

RMS - RMS detection

### RESTRICTED BANDEDGE (3 CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

##### Trace Markers

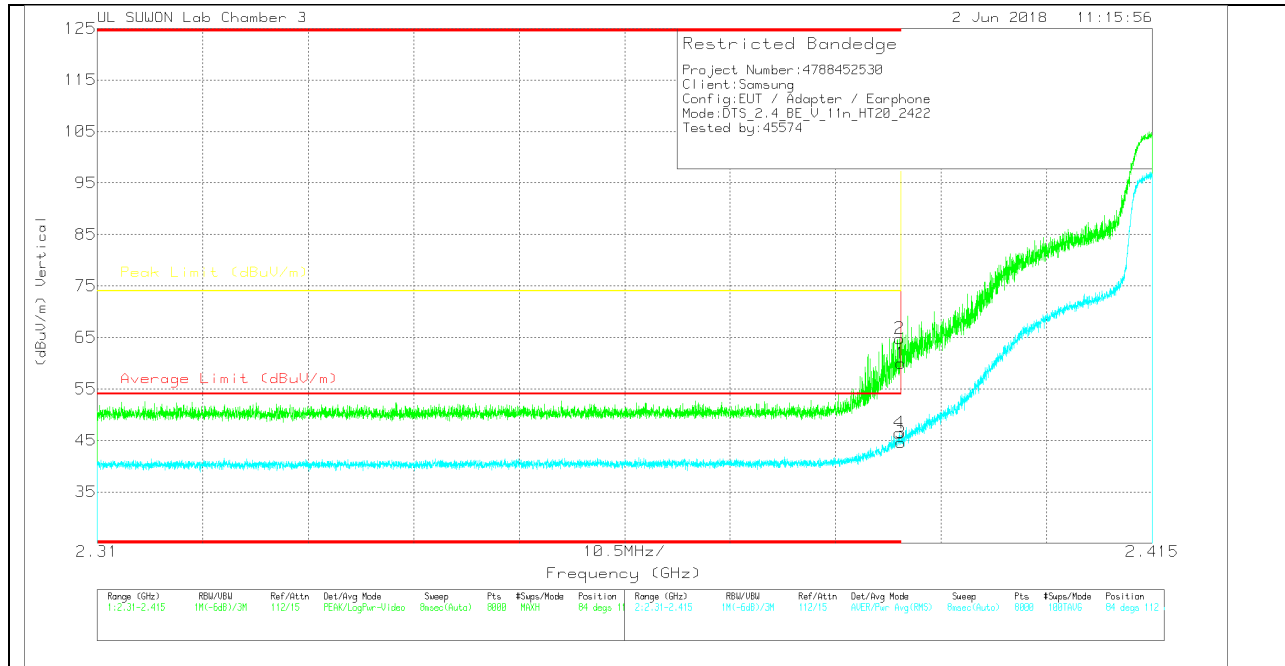
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	311700205959	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azmuth (Degs)	Height (cm)	Polarity
1	* 2.39	57.35	Pk	31.8	-23.3	0	65.85	-	-	74	-8.15	53	151	H
2	* 2.39	60.8	Pk	31.8	-23.3	0	69.3	-	-	74	-4.7	53	151	H
3	* 2.39	37.78	RMS	31.8	-23.3	0	46.28	54	-7.72	-	-	53	151	H
4	* 2.39	38.74	RMS	31.8	-23.3	0	47.24	54	-6.76	-	-	53	151	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-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(00205959)	10dB_ATT(dB)	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	51.47	PK	31.8	-23.3	0	59.97	-	-	74	-14.03	84	112	V
2	* 2.39	56.28	PK	31.8	-23.3	0	64.78	-	-	74	-9.22	84	112	V
3	* 2.39	36.1	RMS	31.8	-23.3	0	44.6	54	-9.4	-	-	84	112	V
4	* 2.39	37.96	RMS	31.8	-23.3	0	46.46	54	-7.54	-	-	84	112	V

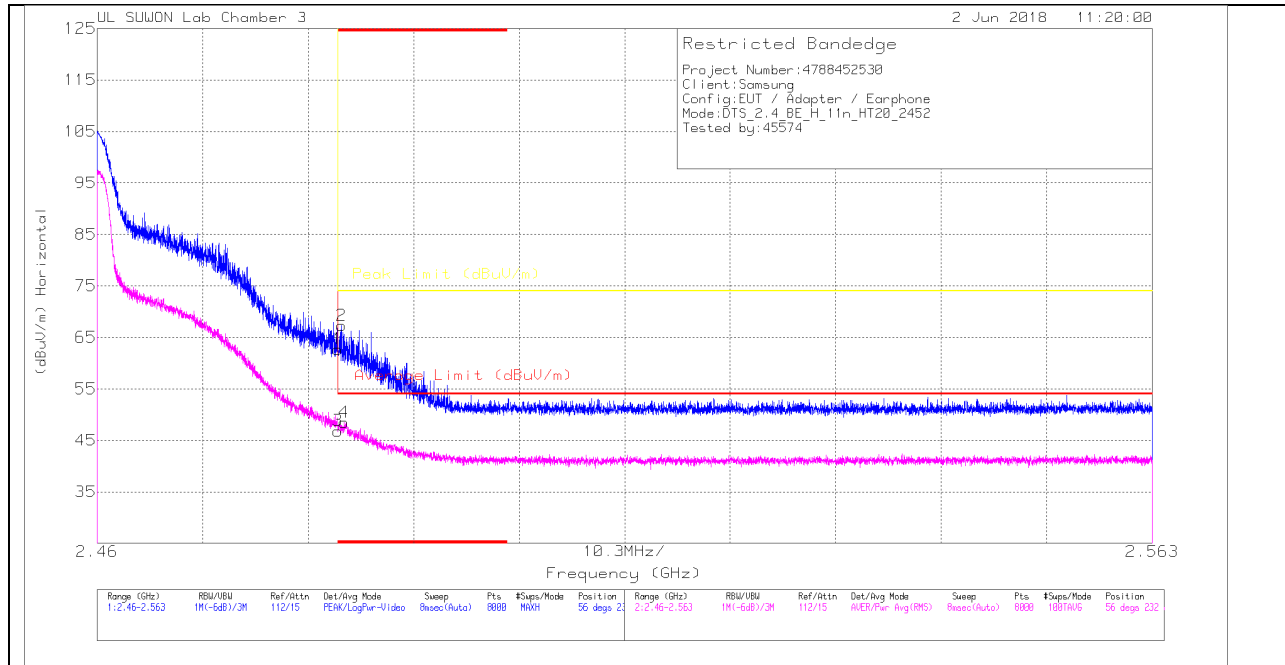
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK - Peak detector

RMS - RMS detection

### AUTHORIZED BANDEDGE (9 CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

##### Trace Markers

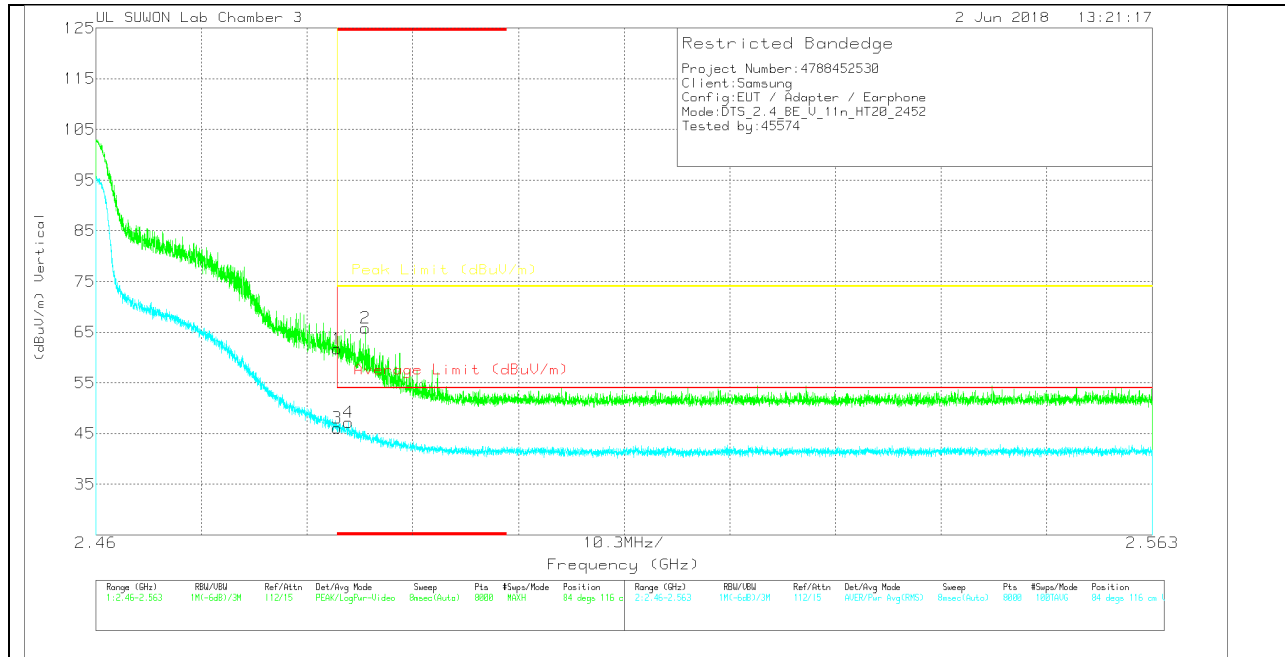
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	53.63	Pk	32.1	-23	0	62.73	-	-	74	-11.27	56	232	H
2	* 2.484	58.31	Pk	32.1	-23.1	0	67.31	-	-	74	-6.69	56	232	H
3	* 2.484	37.74	RMS	32.1	-23	0	46.84	54	-7.16	-	-	56	232	H
4	* 2.484	39.49	RMS	32.1	-23.1	0	48.49	54	-5.51	-	-	56	232	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-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(0020959)	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Asmuth (Degs)	Height (cm)	Polarity
1	* 2.484	52.58	Pk	32.1	-23	0	61.68	-	-	74	-12.32	84	116	V
2	* 2.486	56.8	Pk	32.1	-23.1	0	65.8	-	-	74	-8.2	84	116	V
3	* 2.484	36.93	RMS	32.1	-23	0	46.03	54	-7.97	-	-	84	116	V
4	* 2.485	38.23	RMS	32.1	-23.1	0	47.23	54	-6.77	-	-	84	116	V

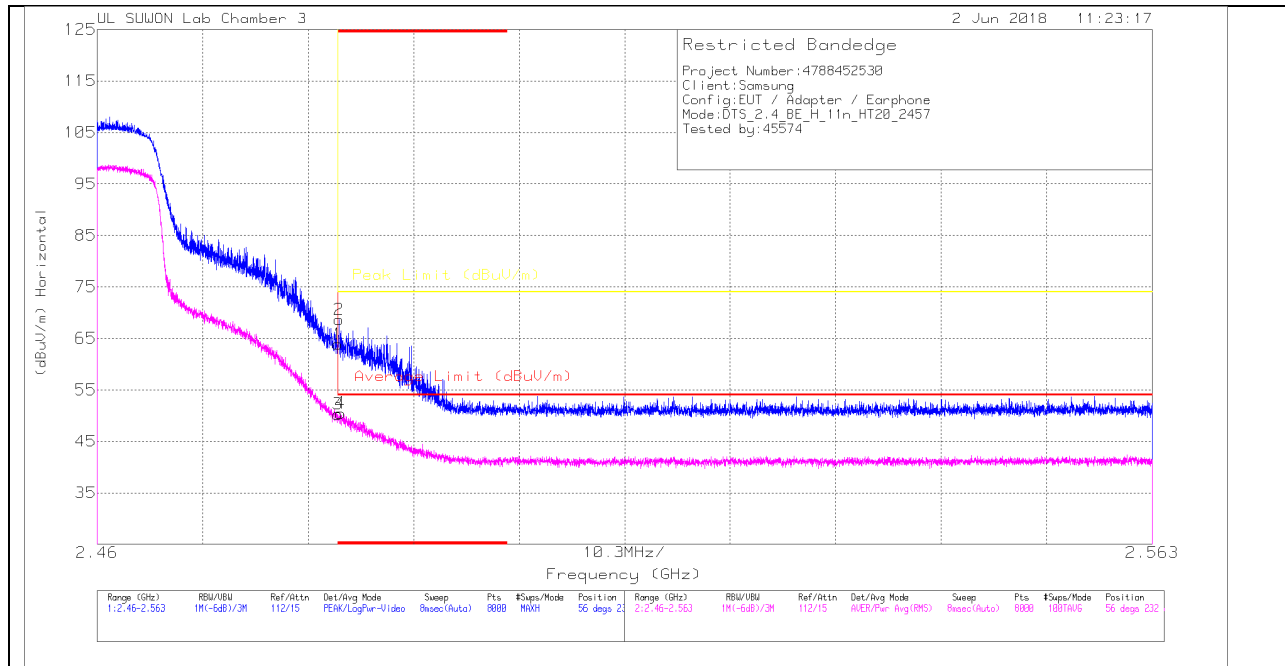
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

### AUTHORIZED BANDEDGE (10 CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

##### Trace Markers

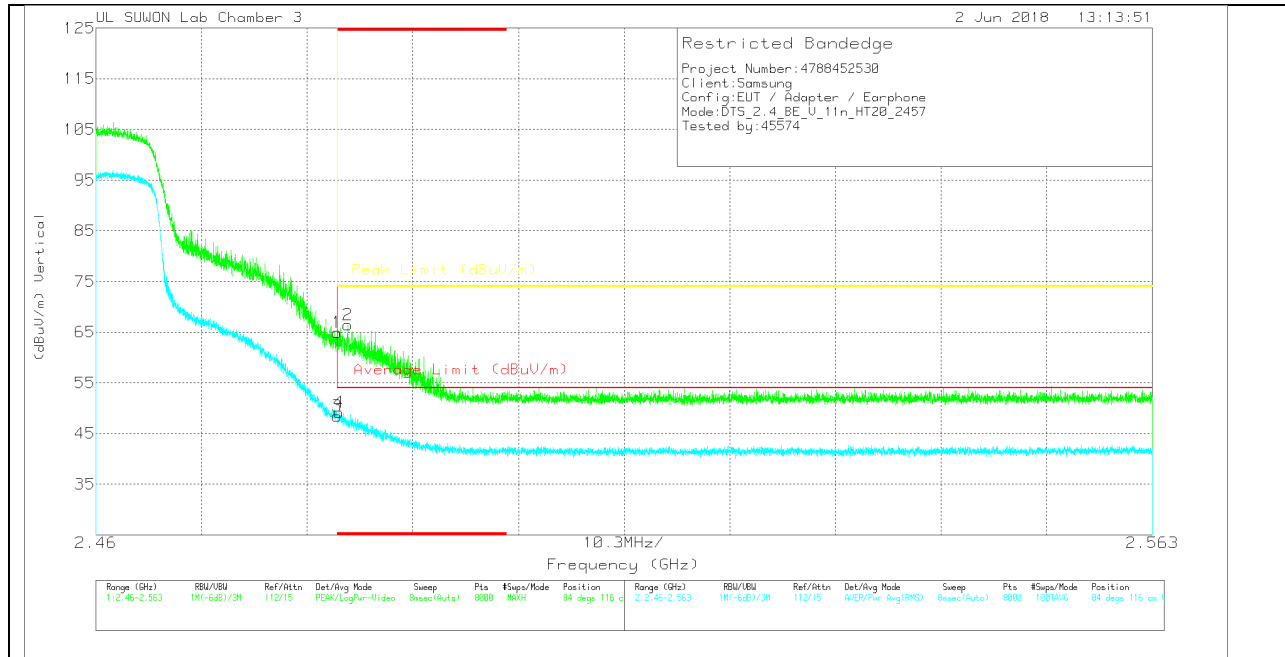
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	311700205959	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	54.76	Pk	32.1	-23	0	63.86	-	-	74	-10.14	56	232	H
2	* 2.484	59.55	Pk	32.1	-23	0	68.65	-	-	74	-5.35	56	232	H
3	* 2.484	41.17	RMS	32.1	-23	0	50.27	54	-3.73	-	-	56	232	H
4	* 2.484	41.47	RMS	32.1	-23.1	0	50.47	54	-3.53	-	-	56	232	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-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(0020959)	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Asmuth (Degs)	Height (cm)	Polarity
1	* 2.484	55.89	Pk	32.1	-23	0	64.99	-	-	74	-9.01	84	116	V
2	* 2.485	57.38	Pk	32.1	-23.1	0	66.38	-	-	74	-7.62	84	116	V
3	* 2.484	39.38	RMS	32.1	-23	0	48.48	54	-5.52	-	-	84	116	V
4	* 2.484	40.18	RMS	32.1	-23.1	0	49.18	54	-4.82	-	-	84	116	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

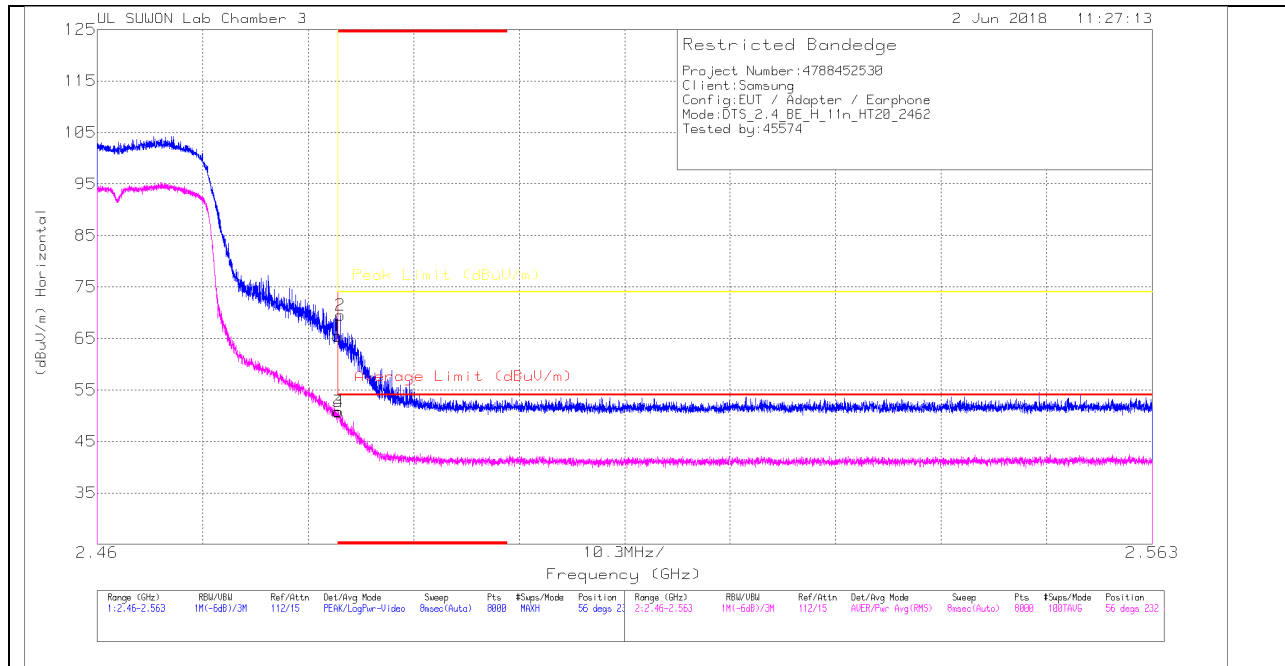
Pk - Peak detector

RMS - RMS detection



### AUTHORIZED BANDEDGE (11 CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

##### Trace Markers

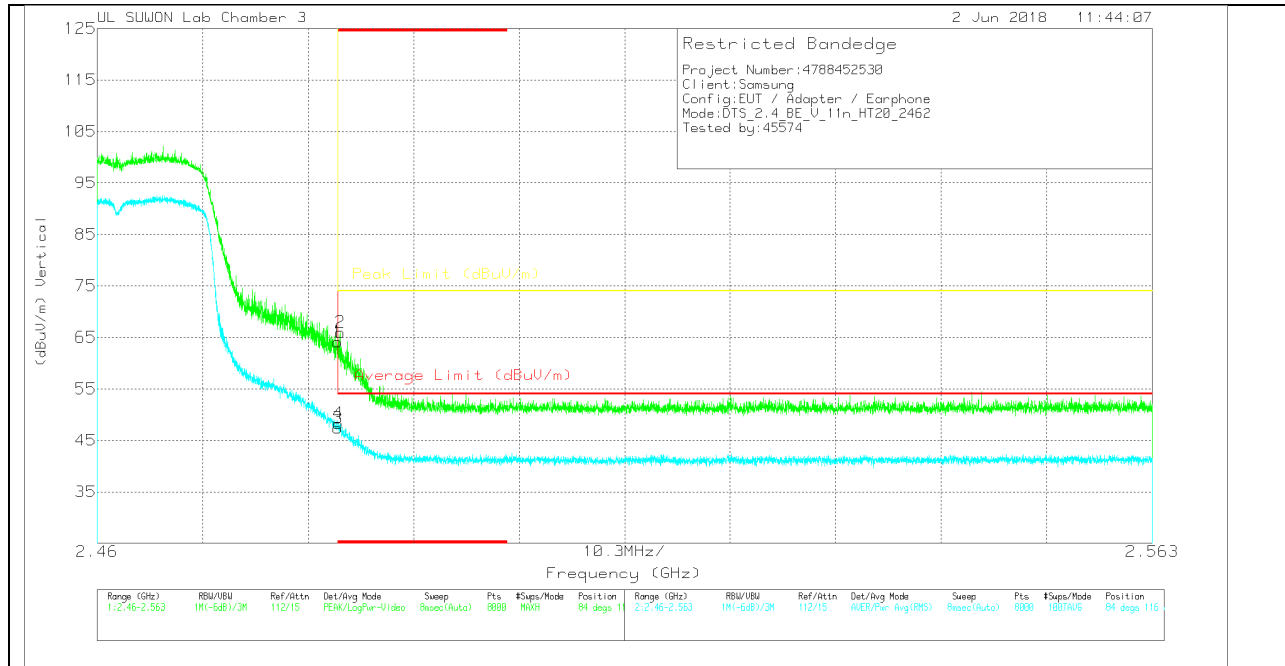
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	311700205959	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	56.34	Pk	32.1	-23	0	65.44	-	-	74	-8.56	56	232	H
2	* 2.484	60.48	Pk	32.1	-23.1	0	69.48	-	-	74	-4.52	56	232	H
3	* 2.484	41.7	RMS	32.1	-23	0	50.8	54	-3.2	-	-	56	232	H
4	* 2.484	41.62	RMS	32.1	-23	0	50.72	54	-3.28	-	-	56	232	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-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(00205959)	10dB_ATT(dB)	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	55.04	PK	32.1	-23	0	64.14	-	-	74	-9.86	84	116	V
2	* 2.484	56.98	PK	32.1	-23.1	0	65.98	-	-	74	-8.02	84	116	V
3	* 2.484	38.26	RMS	32.1	-23	0	47.36	54	-6.64	-	-	84	116	V
4	* 2.484	39.18	RMS	32.1	-23	0	48.28	54	-5.72	-	-	84	116	V

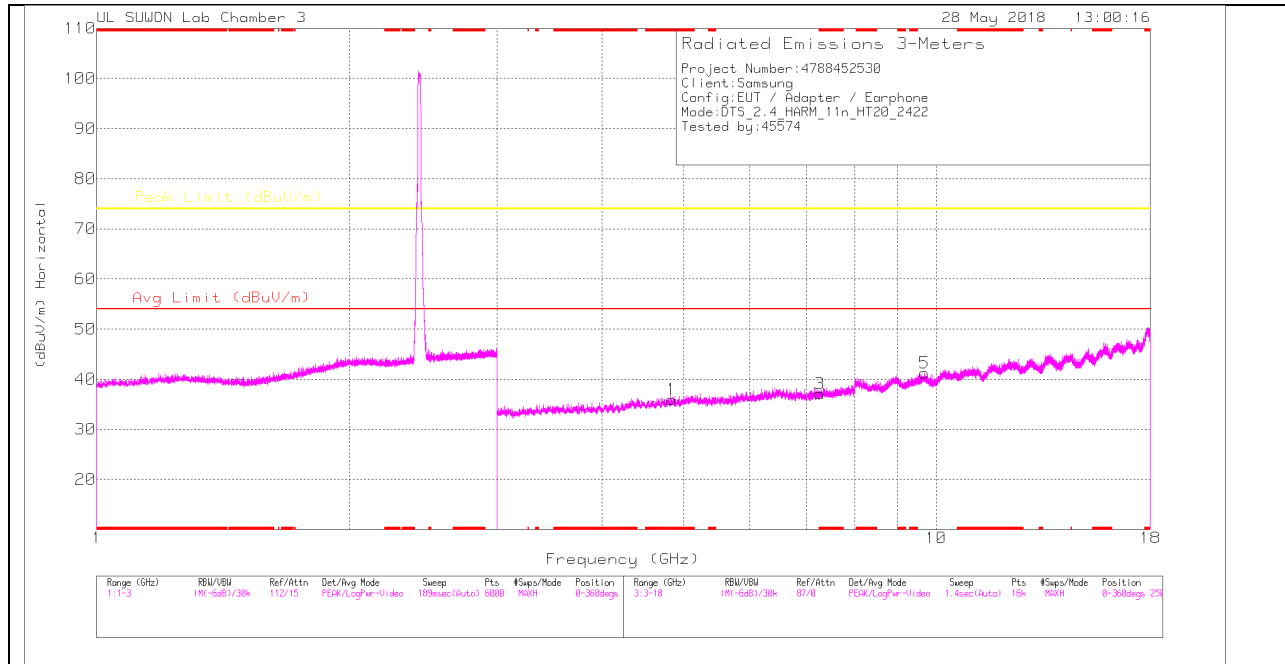
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK - Peak detector

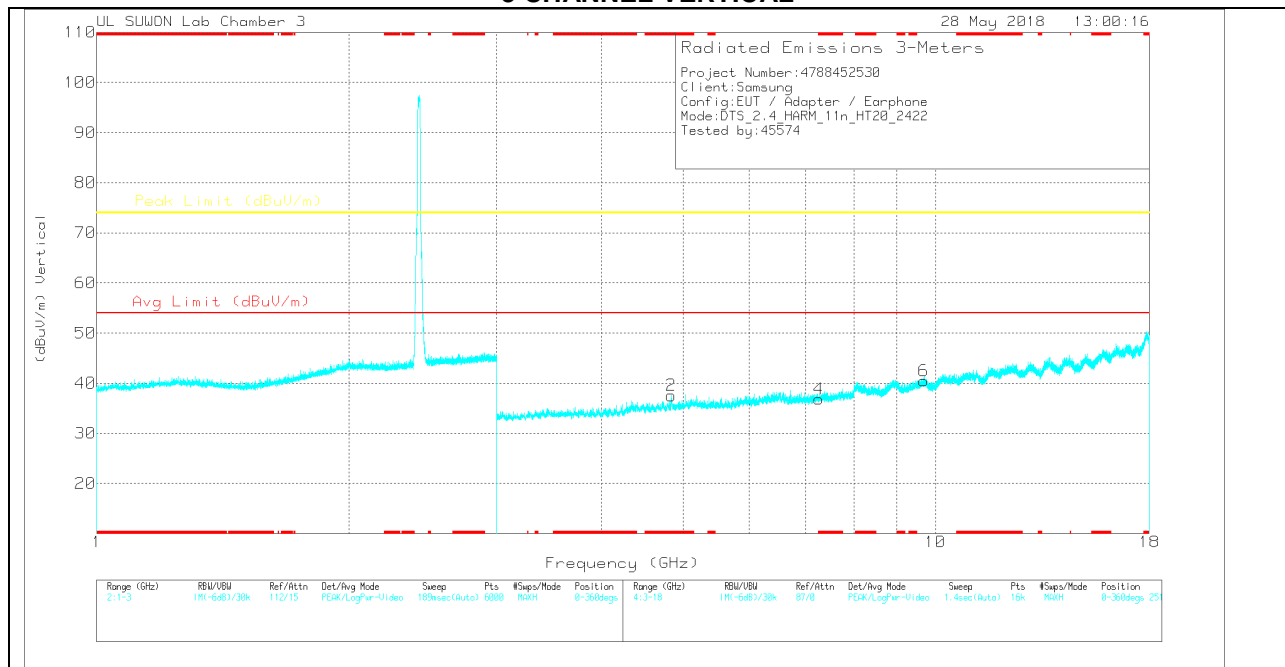
RMS - RMS detection

### HARMONICS AND SPURIOUS EMISSIONS

#### 3 CHANNEL HORIZONTAL



#### 3 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.

**3 CHANNEL DATA**

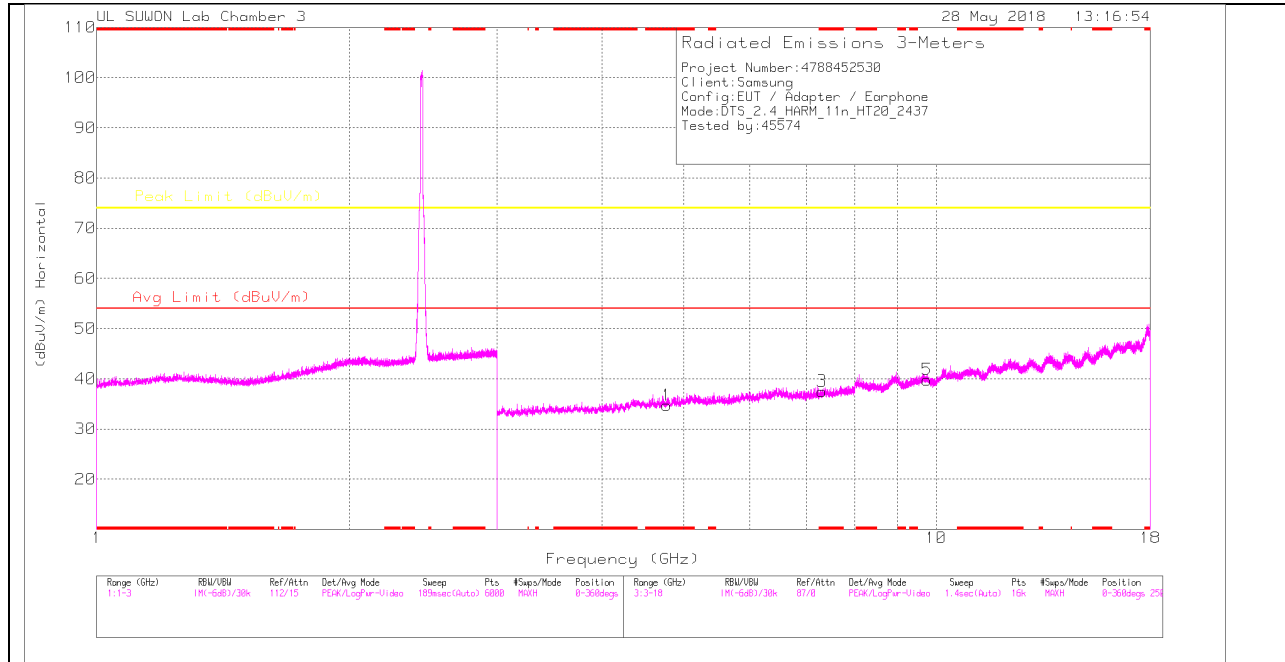
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Ag Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.839	30.47	PK	34	-28.5	0	35.97	-	-	74	-38.03	0-360	250	H
3	* 7.267	25.32	PK	35.6	-23.8	0	37.12	-	-	74	-36.88	0-360	250	H
5	9.689	23.91	PK	36.8	-19.5	0	41.21	-	-	74	-32.79	0-360	150	H
2	* 4.84	32.05	PK	34	-28.5	0	37.55	-	-	74	-36.45	0-360	251	V
4	* 7.266	25.06	PK	35.6	-23.8	0	36.86	-	-	74	-37.14	0-360	251	V
6	9.689	23.17	PK	36.8	-19.5	0	40.47	-	-	74	-33.53	0-360	149	V

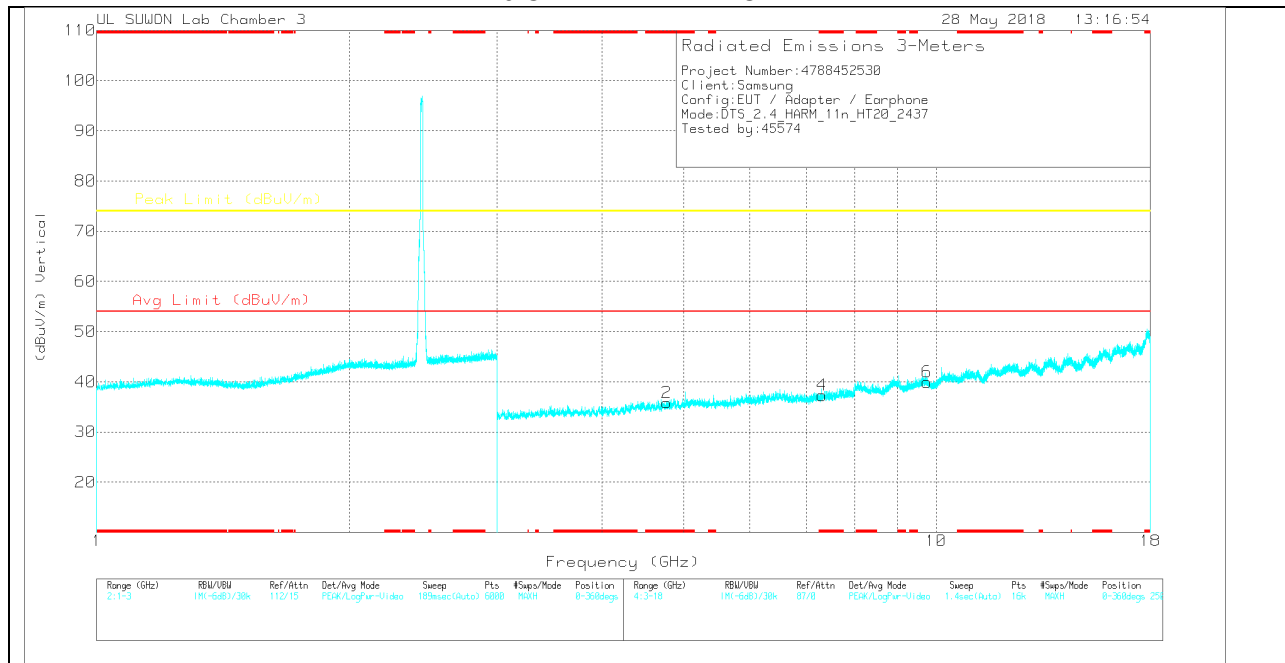
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK – Peak Detector

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

### 6 CHANNEL HORIZONTAL



### 6 CHANNEL VERTICAL



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

**6 CHANNEL DATA**

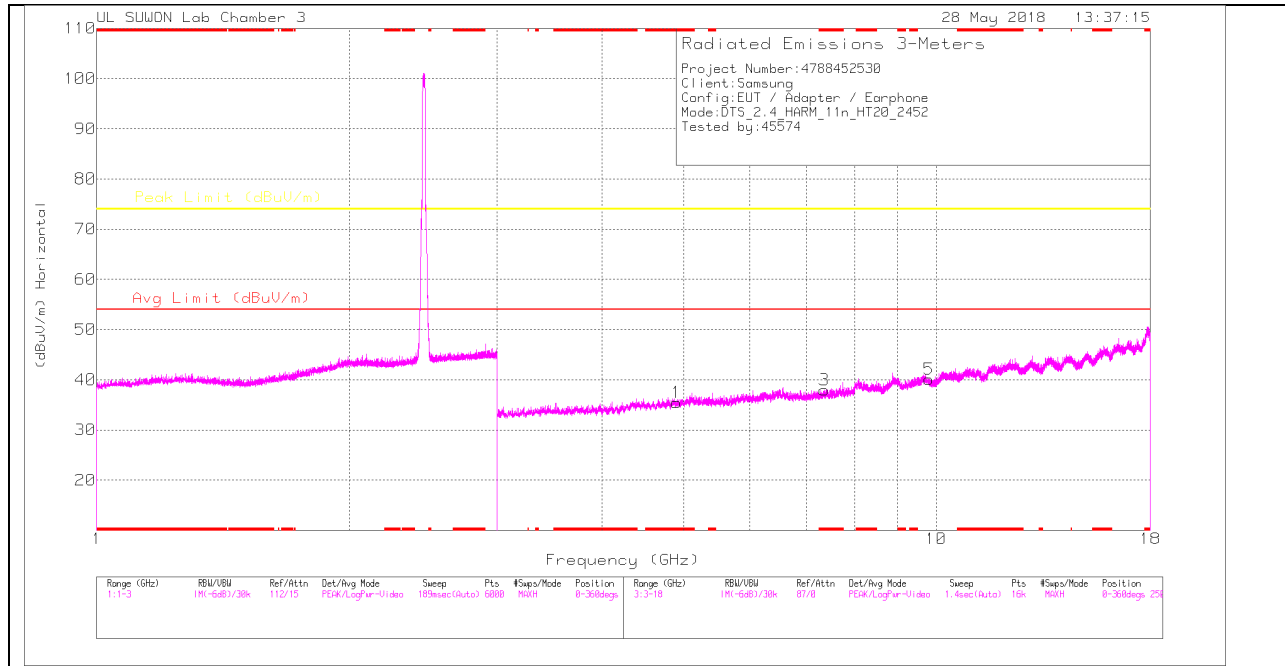
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	3GHz_HP[dB]	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	* 4.775	28.9	PK	33.9	-28.1	0	34.7	-	-	74	-39.3	0-360	150	H
3	* 7.31	25.42	PK	35.6	-23.5	0	37.52	-	-	74	-36.48	0-360	250	H
5	9.749	22.5	PK	36.9	-19.6	0	39.8	-	-	74	-34.2	0-360	250	H
2	* 4.775	30.01	PK	33.9	-28.1	0	35.81	-	-	74	-38.19	0-360	149	V
4	* 7.314	25.2	PK	35.6	-23.5	0	37.3	-	-	74	-36.7	0-360	250	V
6	9.749	22.63	PK	36.9	-19.6	0	39.93	-	-	74	-34.07	0-360	149	V

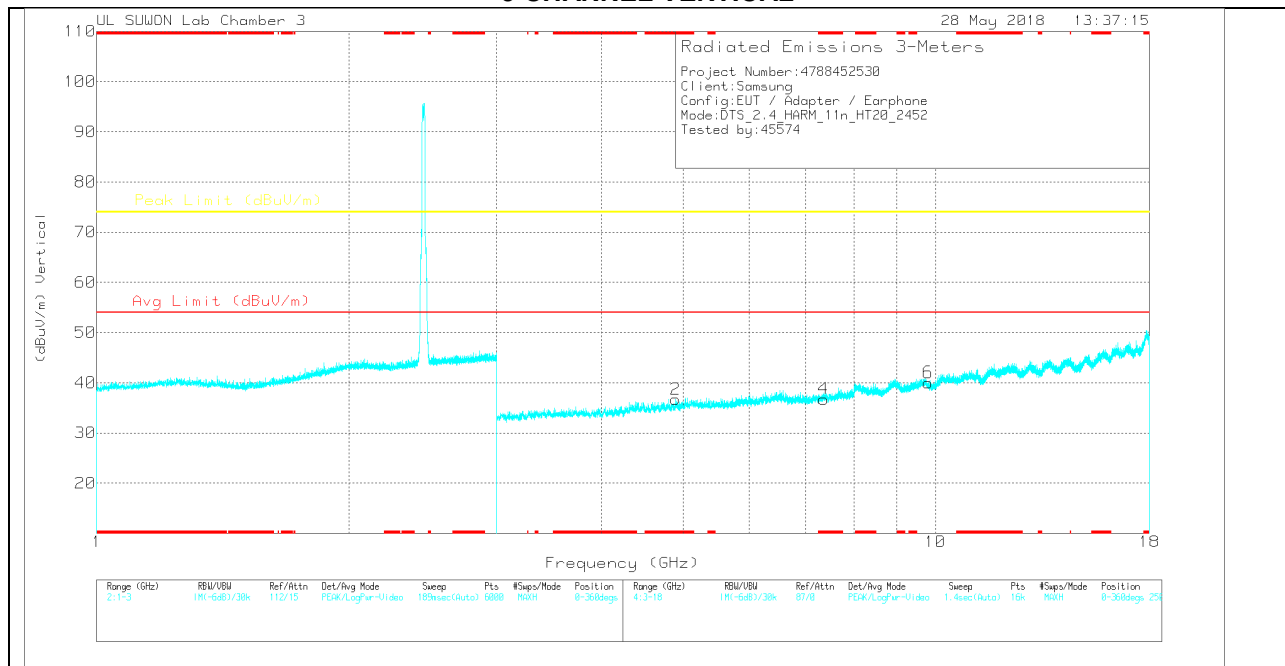
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK – Peak Detector

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

### 9 CHANNEL HORIZONTAL



### 9 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.

**9 CHANNEL DATA**

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	3GHz_HP[dB]	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	* 4.905	30.33	PK	34	-28.9	0	35.43	-	-	74	-38.57	0-360	150	H
3	* 7.357	25.59	PK	35.6	-23.2	0	37.99	-	-	74	-36.01	0-360	250	H
5	9.808	22.81	PK	36.9	-19.6	0	40.11	-	-	74	-33.89	0-360	250	H
2	* 4.903	31.73	PK	34	-29	0	36.73	-	-	74	-37.27	0-360	149	V
4	* 7.357	24.38	PK	35.6	-23.2	0	36.78	-	-	74	-37.22	0-360	250	V
6	9.804	22.73	PK	36.9	-19.6	0	40.03	-	-	74	-33.97	0-360	149	V

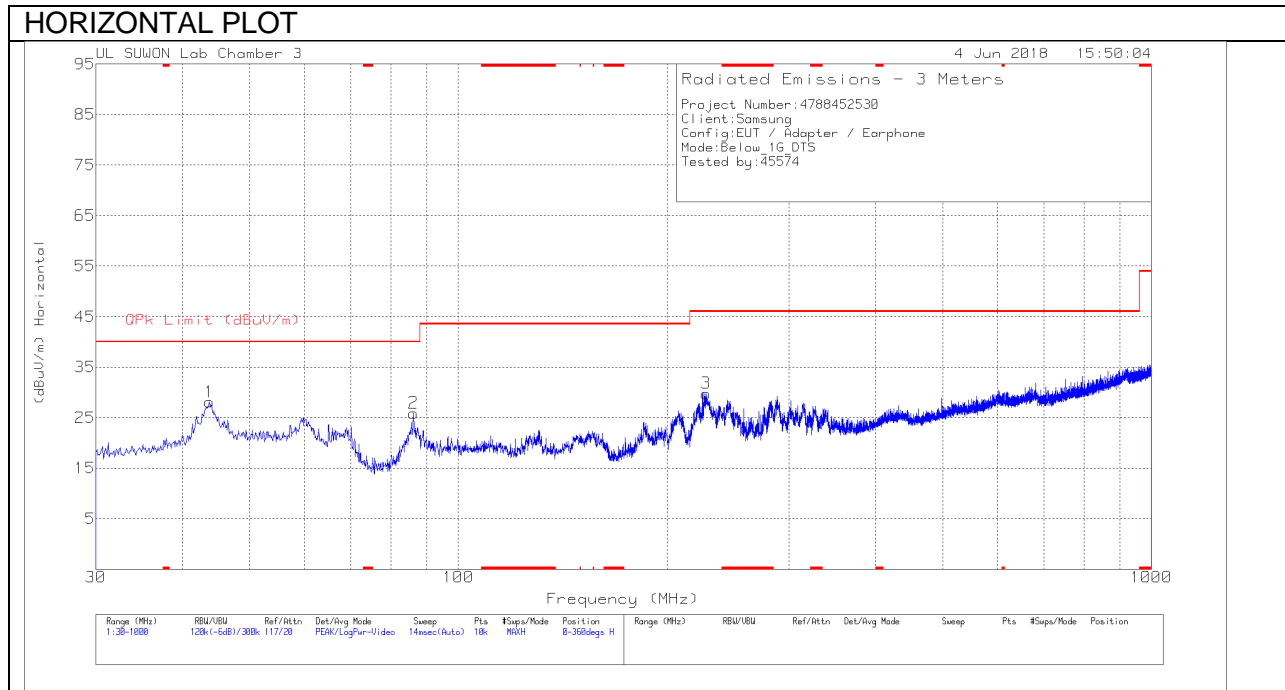
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK – Peak Detector

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

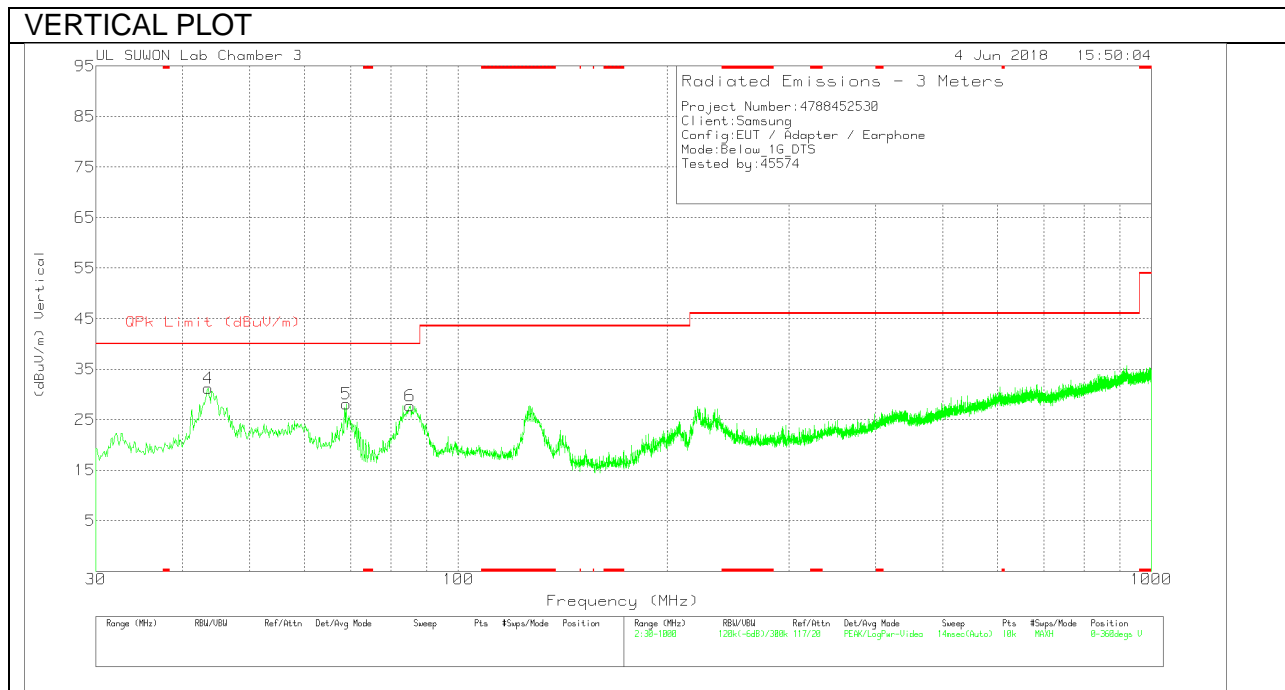


### 11.3. WORST-CASE BELOW 1 GHz

#### 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	VULB9163-845	30-1000MHz[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	43.7754	40.29	Pk	19.8	-32	28.09	40	-11.91	0-360	400	H
2	86.2658	43.14	Pk	14.7	-31.9	25.94	40	-14.06	0-360	300	H
3	227.9974	43.19	Pk	17.6	-31	29.79	46.02	-16.23	0-360	100	H
4	43.5814	43.37	Pk	19.7	-31.9	31.17	40	-8.83	0-360	100	V
5	68.901	44.31	Pk	15.7	-31.9	28.11	40	-11.89	0-360	100	V
6	85.1987	44.91	Pk	14.4	-31.6	27.71	40	-12.29	0-360	100	V

Pk - Peak detector

## 12. AC POWER LINE CONDUCTED EMISSIONS

### LIMITS

FCC §15.207 (a)  
IC RSS-GEN Clause 8.8

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

\* Decreases with the logarithm of the frequency.

### TEST PROCEDURE

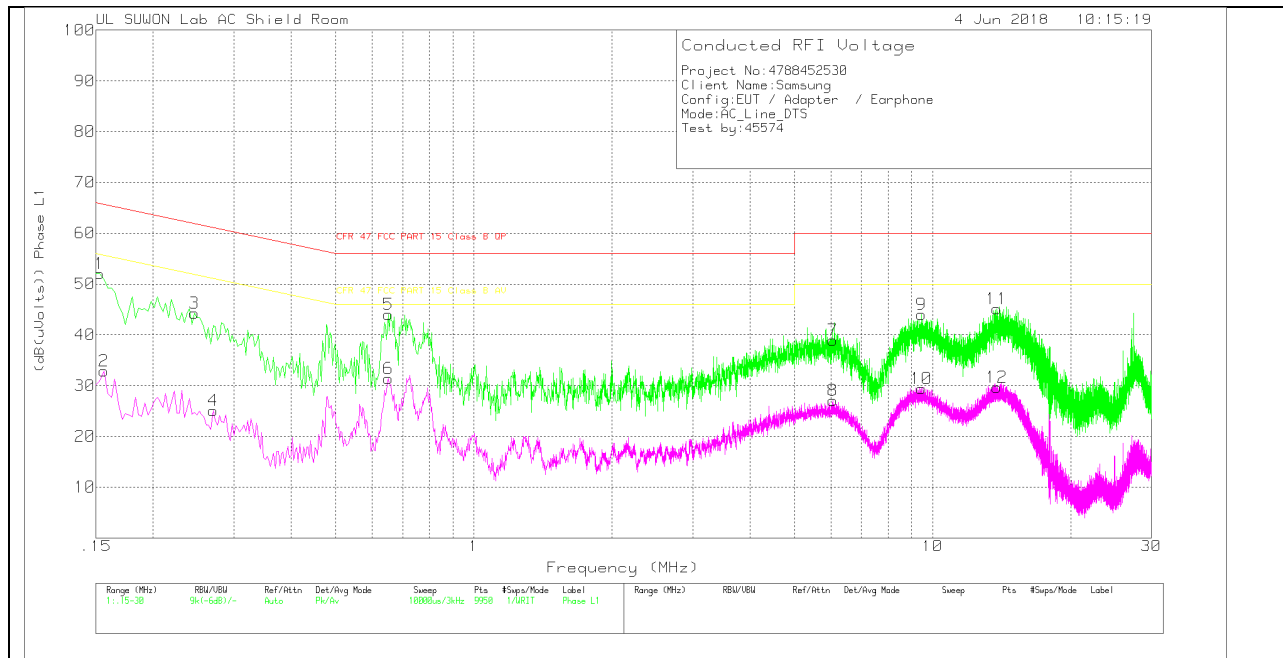
The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

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

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

**WORST EMISSIONS**

**LINE 1 PLOT**



## LINE 1 RESULTS

### Trace Markers

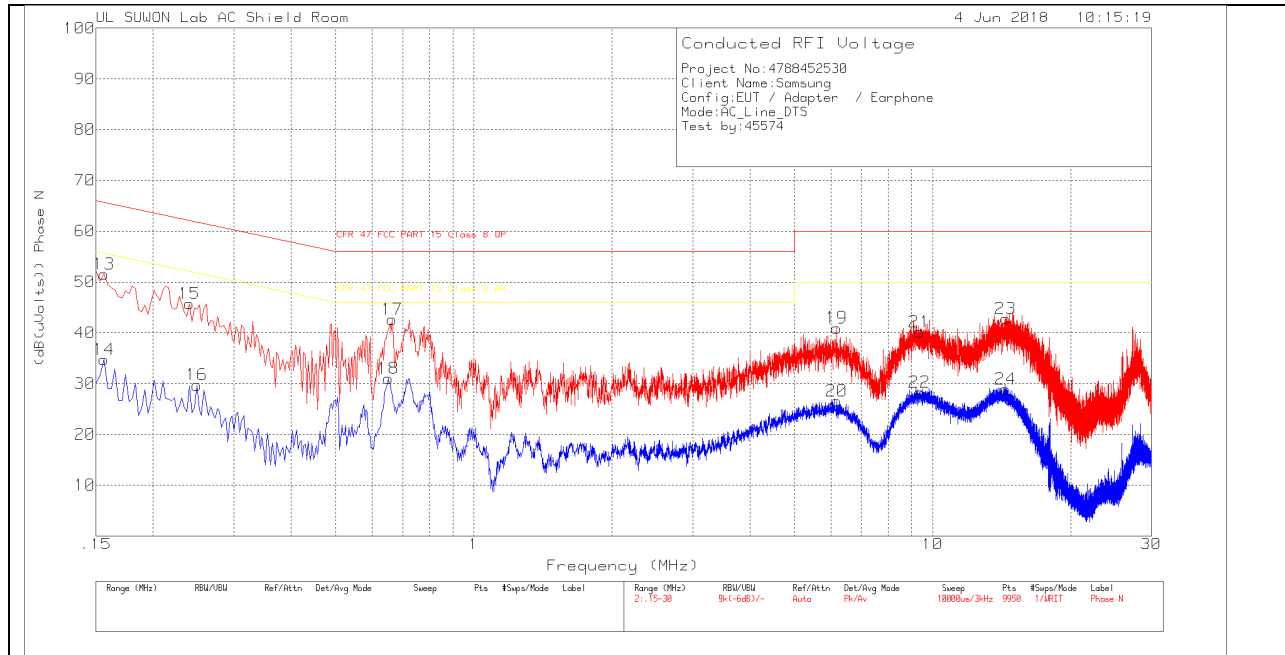
#### Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_wit h extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.153	41.95	Pk	10	.1	52.05	65.84	-13.79	-	-
2	.156	22.78	Av	10	.1	32.88	-	-	55.67	-22.79
3	.246	34.55	Pk	9.5	.2	44.25	61.89	-17.64	-	-
4	.27	15.32	Av	9.6	.2	25.12	-	-	51.12	-26
5	.651	34	Pk	9.8	.2	44	56	-12	-	-
6	.651	21.37	Av	9.8	.2	31.37	-	-	46	-14.63
7	6.075	28.91	Pk	9.7	.3	38.91	60	-21.09	-	-
8	6.063	17.02	Av	9.7	.3	27.02	-	-	50	-22.98
9	9.456	33.91	Pk	9.7	.4	44.01	60	-15.99	-	-
10	9.474	19.36	Av	9.7	.4	29.46	-	-	50	-20.54
11	13.803	34.86	Pk	9.8	.4	45.06	60	-14.94	-	-
12	13.797	19.43	Av	9.8	.4	29.63	-	-	50	-20.37

Pk - Peak detector

Av - Average detection

**LINE 2 PLOT**



**LINE 2 RESULTS**

Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_N_with extension	CABLELOSS(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.156	41.4	Pk	10	.1	51.5	65.67	-14.17	-	-
14	.156	24.58	Av	10	.1	34.68	-	-	55.67	-20.99
15	.24	35.8	Pk	9.7	.2	45.7	62.1	-16.4	-	-
16	.249	19.92	Av	9.6	.2	29.72	-	-	51.79	-22.07
17	.663	32.62	Pk	9.8	.2	42.62	56	-13.38	-	-
18	.651	20.98	Av	9.8	.2	30.98	-	-	46	-15.02
19	6.189	30.87	Pk	9.8	.3	40.97	60	-19.03	-	-
20	6.189	16.41	Av	9.8	.3	26.51	-	-	50	-23.49
21	9.36	29.95	Pk	9.8	.4	40.15	60	-19.85	-	-
22	9.369	18.05	Av	9.8	.4	28.25	-	-	50	-21.75
23	14.442	32.51	Pk	9.9	.4	42.81	60	-17.19	-	-
24	14.424	18.62	Av	9.9	.4	28.92	-	-	50	-21.08

Pk - Peak detector

Av - Average detection