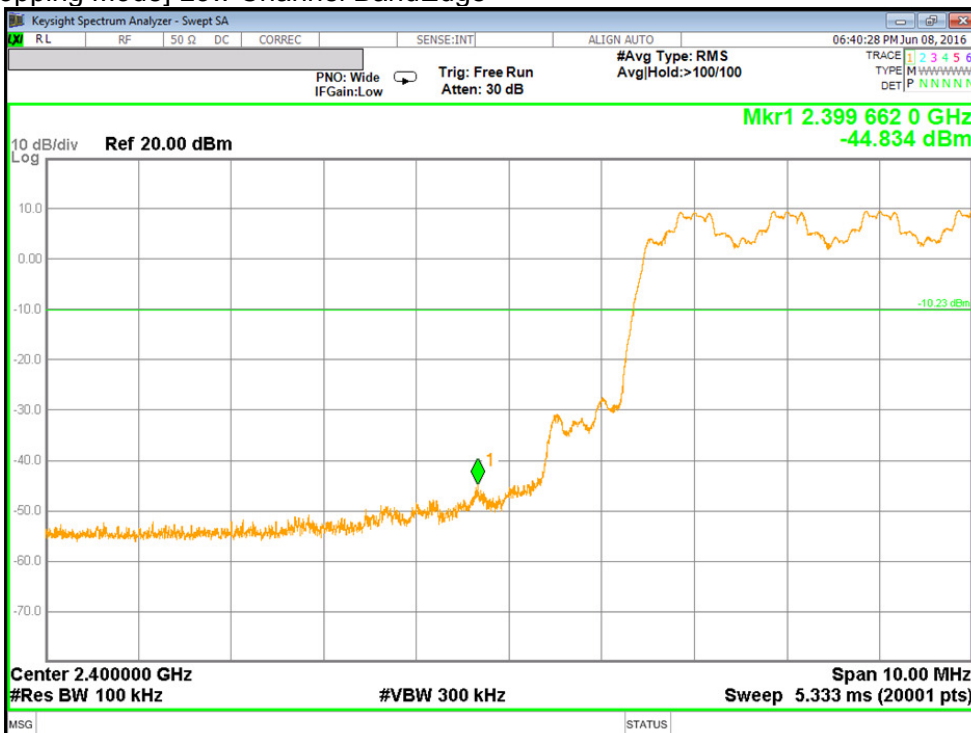
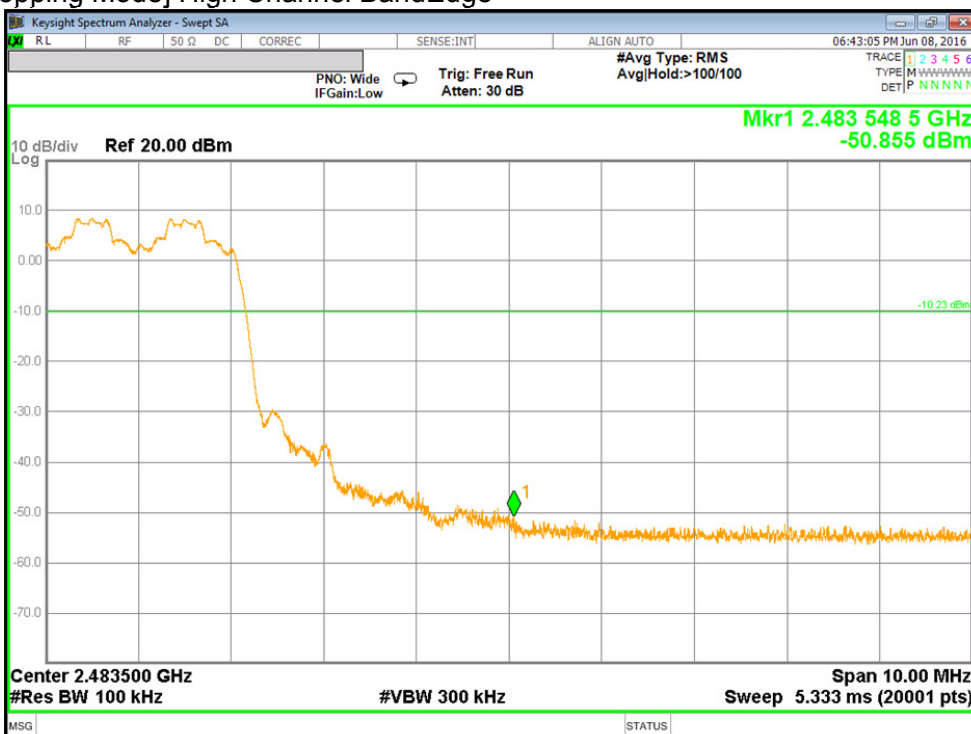


**BandEdge Emission at 8PSK Hopping Mode**

[8PSK Hopping Mode] Low Channel BandEdge



[8PSK Hopping Mode] High Channel BandEdge



## 9. RADIATED TEST RESULTS

### 9.1. LIMITS AND PROCEDURE

#### LIMITS

FCC §15.205 and §15.209

Limits for radiated disturbance of an intentional radiator		
Frequency range (MHz)	Limits (µV/m)	Measurement Distance (m)
0.009 – 0.490	2400 / F (kHz)	300
0.490 – 1.705	24000 / F (kHz)	30
1.705 – 30.0	30	30
30 – 88	100**	3
88 - 216	150**	3
216 – 960	200**	3
Above 960	500	3

\*\* Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g. §§ 15.231 and 15.241.

---

## **TEST PROCEDURE**

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

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

For band edge measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 1/T (on time) for average measurement.

$GFSK = 1/T = 1 / 0.0029S = 350Hz.$

The spectrum from 1GHzHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

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

Note : Emission was pre-scanned from 9KHz to 30MHz; No emissions were detected which was at least 20dB below the specification limit (consider distance correction factor).  
Per FCC part 15.31(o), test results were not reported.

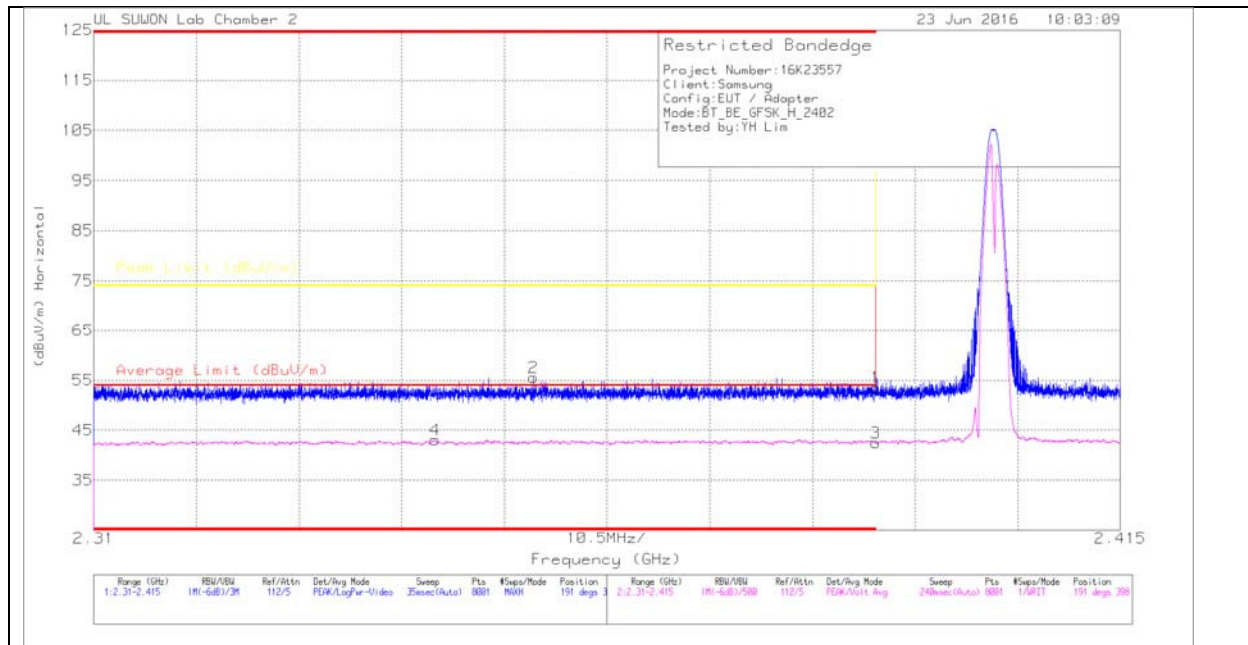
Formula for converting the filed strength from uV/m to dBuV/m is:  
 $Limit (dBuV/m) = 20 \log limit (uV/m)$

## 9.2. TRANSMITTER ABOVE 1 GHz

### 9.2.1. BASIC DATA RATE GFSK MODULATION

#### RESTRICTED BANDEDGE (LOW CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

##### Trace Markers

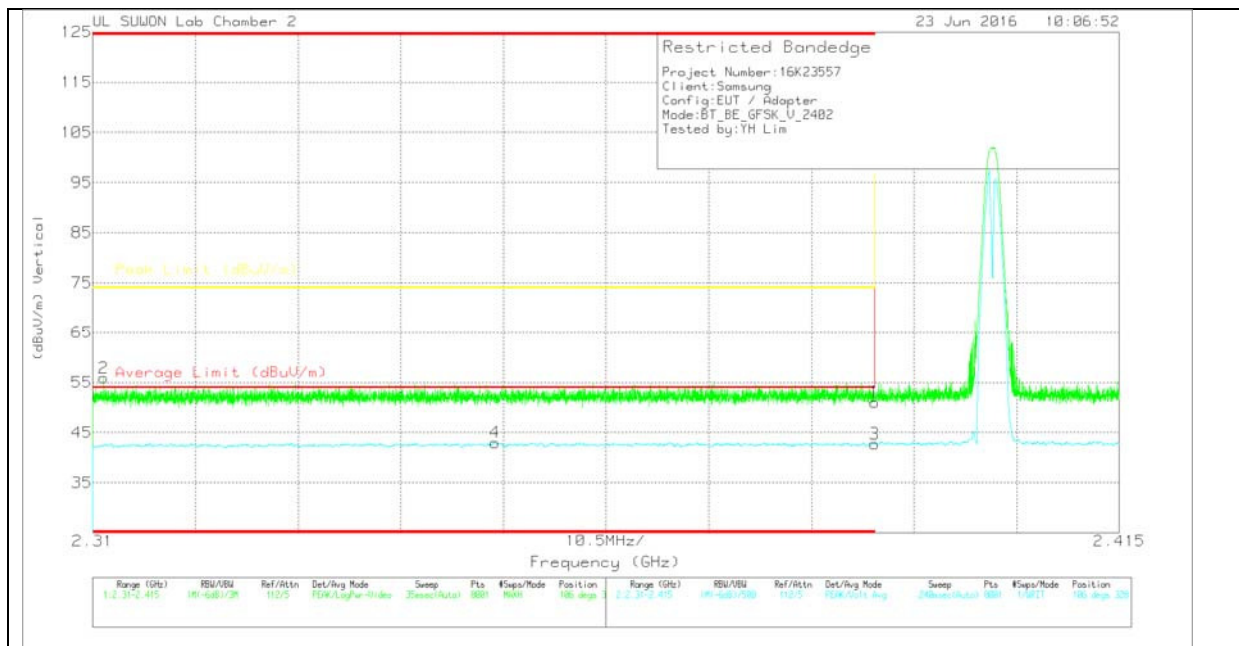
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	41.32	Pk	31.7	-19.5	53.52	-	-	74	-20.48	191	398	H
2	* 2.355	43.56	Pk	31.6	-19.6	55.56	-	-	74	-18.44	191	398	H
3	* 2.39	30.25	VA1T	31.7	-19.5	42.45	54	-11.55	-	-	191	398	H
4	* 2.345	31.09	VA1T	31.6	-19.6	43.09	54	-10.91	-	-	191	398	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average  $VB=1/Ton$  where: Ton is transmit duration

**VERTICAL PEAK AND AVERAGE PLOT**



**VERTICAL DATA**

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	Path_2_10 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	38.86	Pk	31.7	-19.5	51.06	-	-	74	-22.94	106	328	V
2	* 2.311	43.98	Pk	31.6	-19.7	55.88	-	-	74	-18.12	106	328	V
3	* 2.39	30.54	VA1T	31.7	-19.5	42.74	54	-11.26	-	-	106	328	V
4	* 2.351	31.02	VA1T	31.6	-19.6	43.02	54	-10.98	-	-	106	328	V

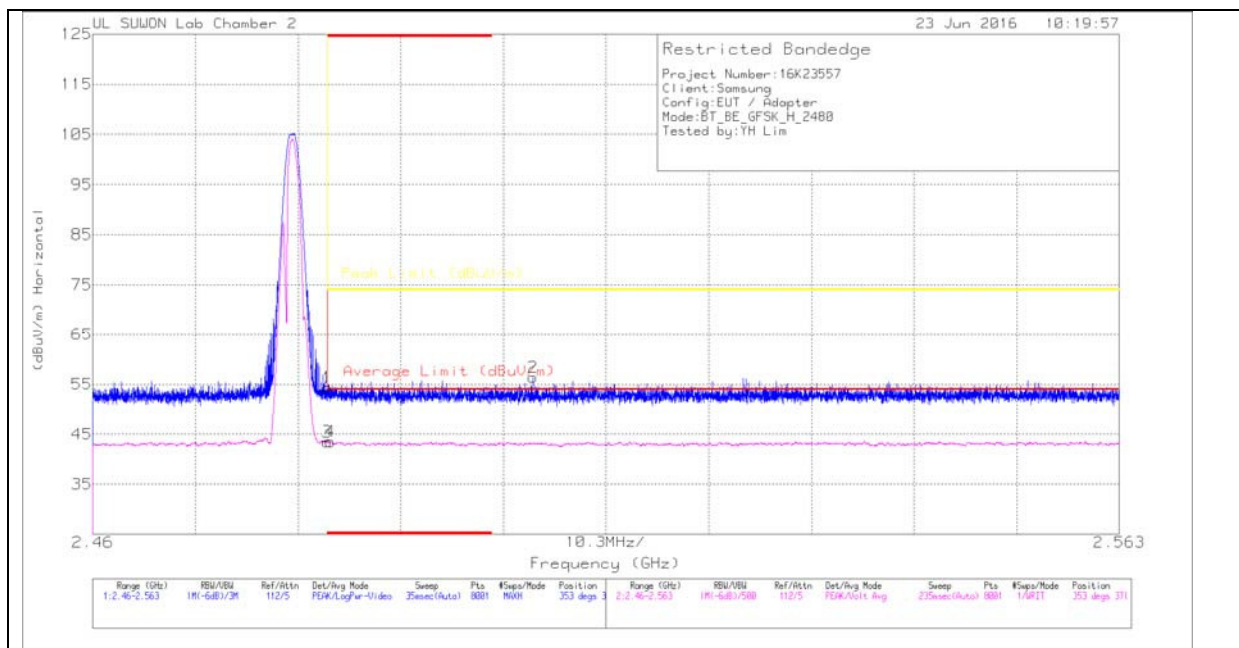
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average  $VB=1/Ton$  where: Ton is transmit duration

**AUTHORIZED BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL PEAK AND AVERAGE PLOT**



**HORIZONTAL DATA**

Trace Markers

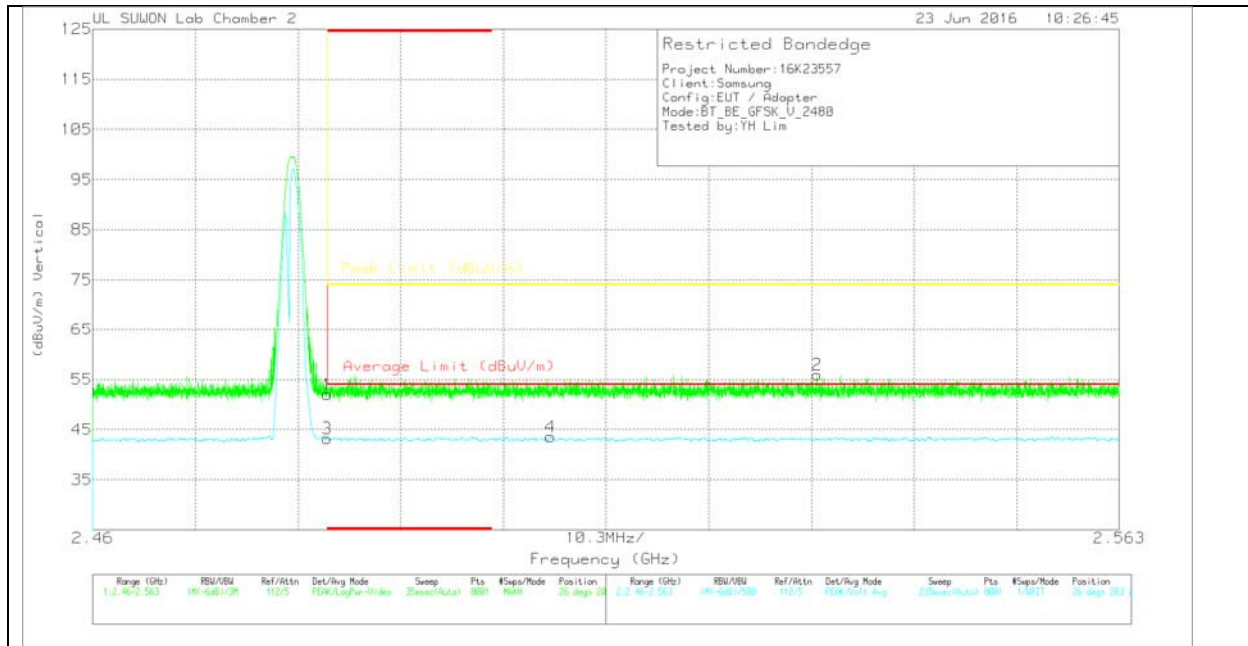
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	Path_2_10 dB	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	41.95	Pk	31.8	-19.4	54.35	-	-	74	-19.65	353	371	H
2	2.504	43.79	Pk	31.9	-19.3	56.39	-	-	74	-17.61	353	371	H
3	* 2.484	31.09	VA1T	31.8	-19.4	43.49	54	-10.51	-	-	353	371	H
4	* 2.484	31.13	VA1T	31.8	-19.4	43.53	54	-10.47	-	-	353	371	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average  $V_B=1/T_{on}$  where:  $T_{on}$  is transmit duration

**VERTICAL PEAK AND AVERAGE PLOT**



**VERTICAL DATA**

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	Path_2_10 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	39.62	Pk	31.8	-19.4	52.02	-	-	74	-21.98	26	203	V
2	2.533	43.35	Pk	31.9	-19.3	55.95	-	-	74	-18.05	26	203	V
3	* 2.484	30.83	VA1T	31.8	-19.4	43.23	54	-10.77	-	-	26	203	V
4	2.506	30.95	VA1T	31.9	-19.3	43.55	54	-10.45	-	-	26	203	V

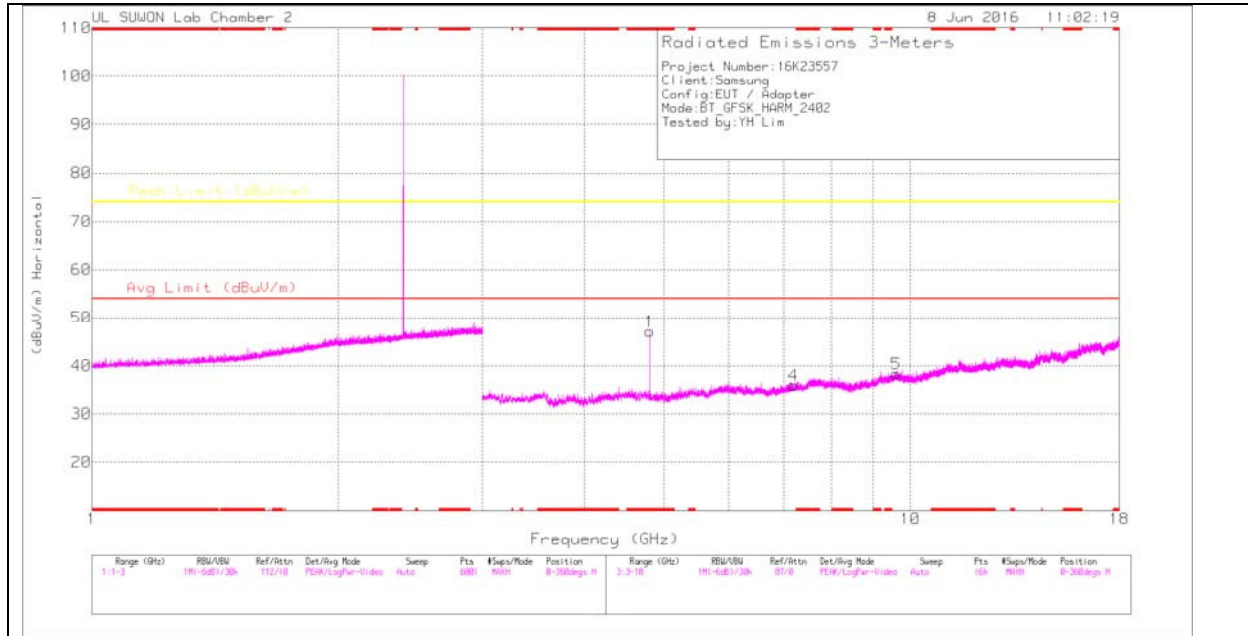
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

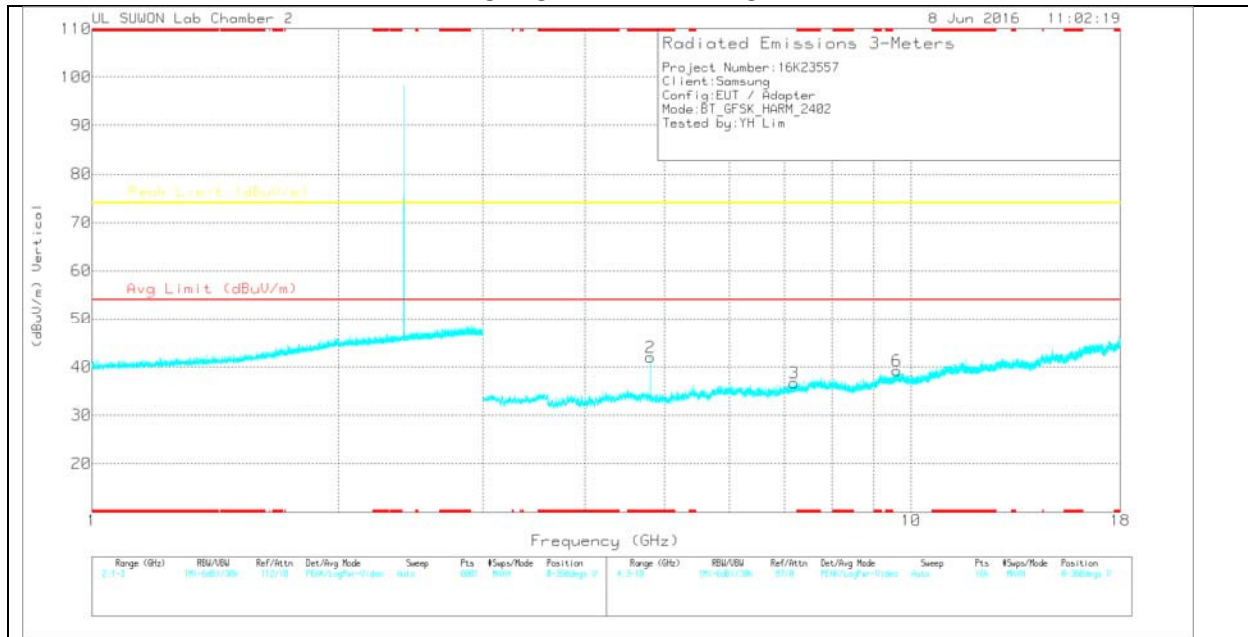
VA1T - FHSS: Linear Voltage Average  $VB=1/Ton$  where: Ton is transmit duration

### 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(00168724)_150619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.804	38.61	Pk	33.9	-25.3	47.21	-	-	74	-26.79	0-360	100	H
4	7.191	23.09	Pk	35.7	-22.9	35.89	-	-	74	-38.11	0-360	200	H
5	9.602	20.55	Pk	36.9	-19.1	38.35	-	-	74	-35.65	0-360	100	H
2	* 4.804	33.38	Pk	33.9	-25.3	41.98	-	-	74	-32.02	0-360	200	V
3	7.195	23.92	Pk	35.7	-22.9	36.72	-	-	74	-37.28	0-360	200	V
6	9.61	21.41	Pk	36.9	-19.1	39.21	-	-	74	-34.79	0-360	100	V

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

Pk – Peak detector

Radiated Emissions

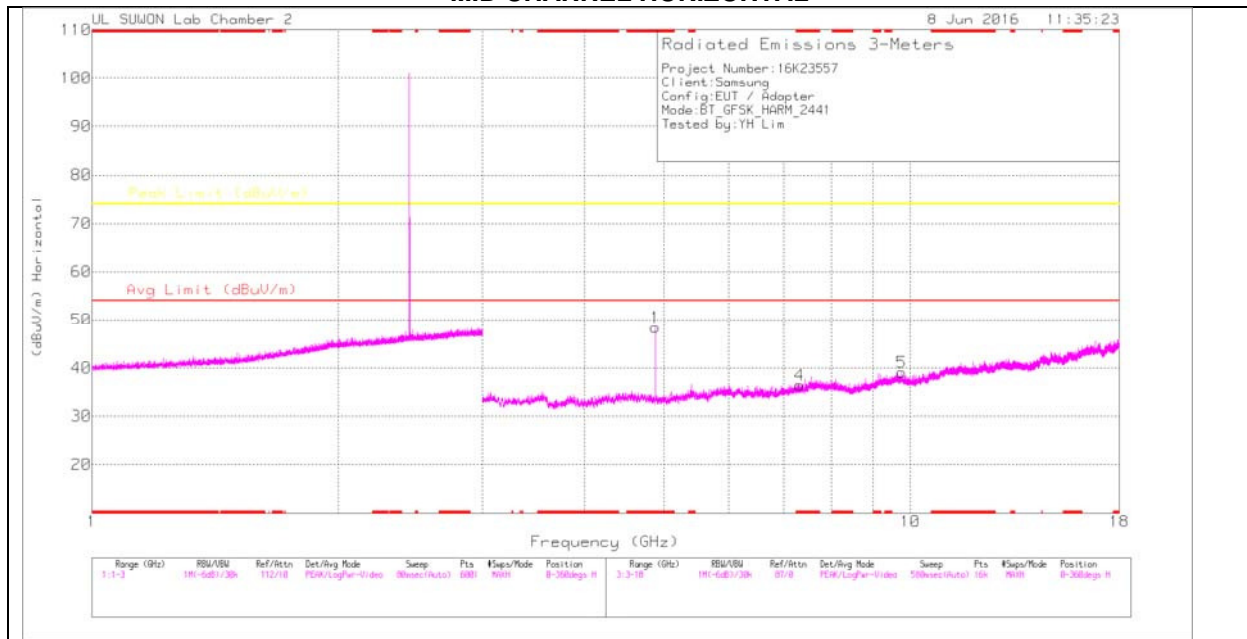
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168724)_150619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.804	42.84	PK2	33.9	-25.3	51.44	-	-	74	-22.56	199	101	H
* 4.804	37.69	VA1T	33.9	-25.3	46.29	54	-7.71	-	-	199	101	H
* 4.804	35.85	PK2	33.9	-25.3	44.45	-	-	74	-29.55	18	367	V
* 4.804	32.18	VA1T	33.9	-25.3	40.78	54	-13.22	-	-	18	367	V

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

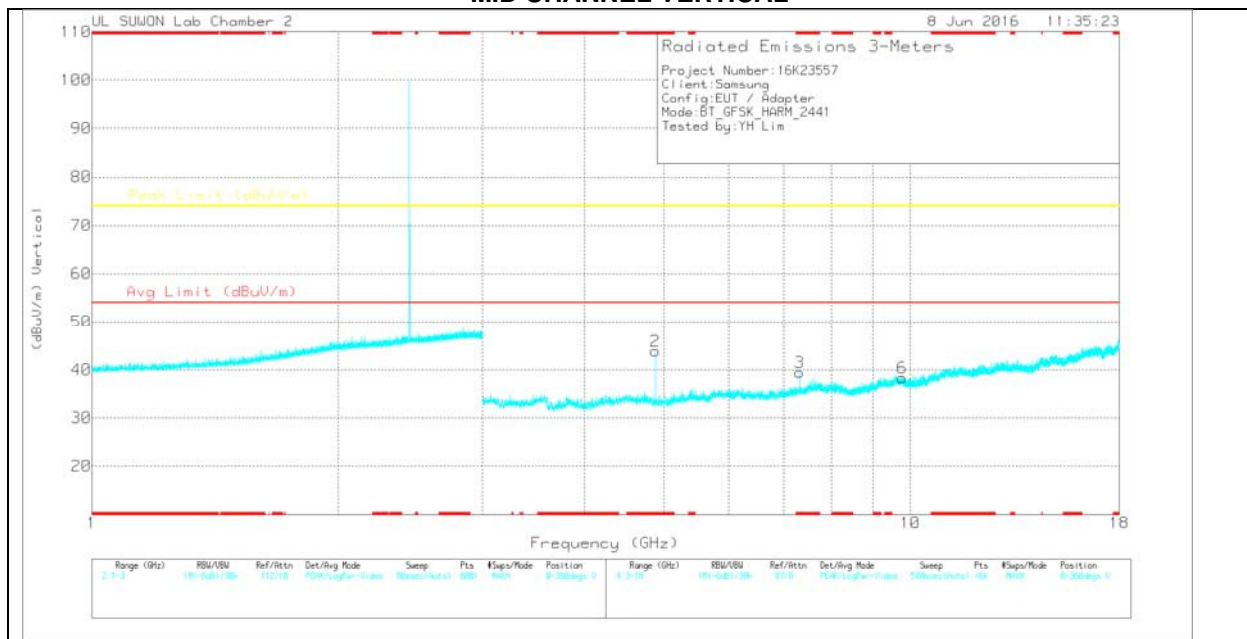
PK2 - Maximum Peak

VA1T - FHSS: Linear Voltage Average  $V_B=1/T_{on}$  where:  $T_{on}$  is transmit duration

**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(00168724)_150619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.882	39.72	Pk	33.9	-25.2	48.42	-	-	74	-25.58	0-360	100	H
4	* 7.322	23.02	Pk	35.9	-22.5	36.42	-	-	74	-37.58	0-360	200	H
5	9.764	21.45	Pk	37	-19.3	39.15	-	-	74	-34.85	0-360	200	H
2	* 4.881	35.24	Pk	33.9	-25.2	43.94	-	-	74	-30.06	0-360	200	V
3	* 7.323	26.09	Pk	35.9	-22.5	39.49	-	-	74	-34.51	0-360	200	V
6	9.774	20.67	Pk	37	-19.3	38.37	-	-	74	-35.63	0-360	200	V

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

Pk – Peak detector

Radiated Emissions

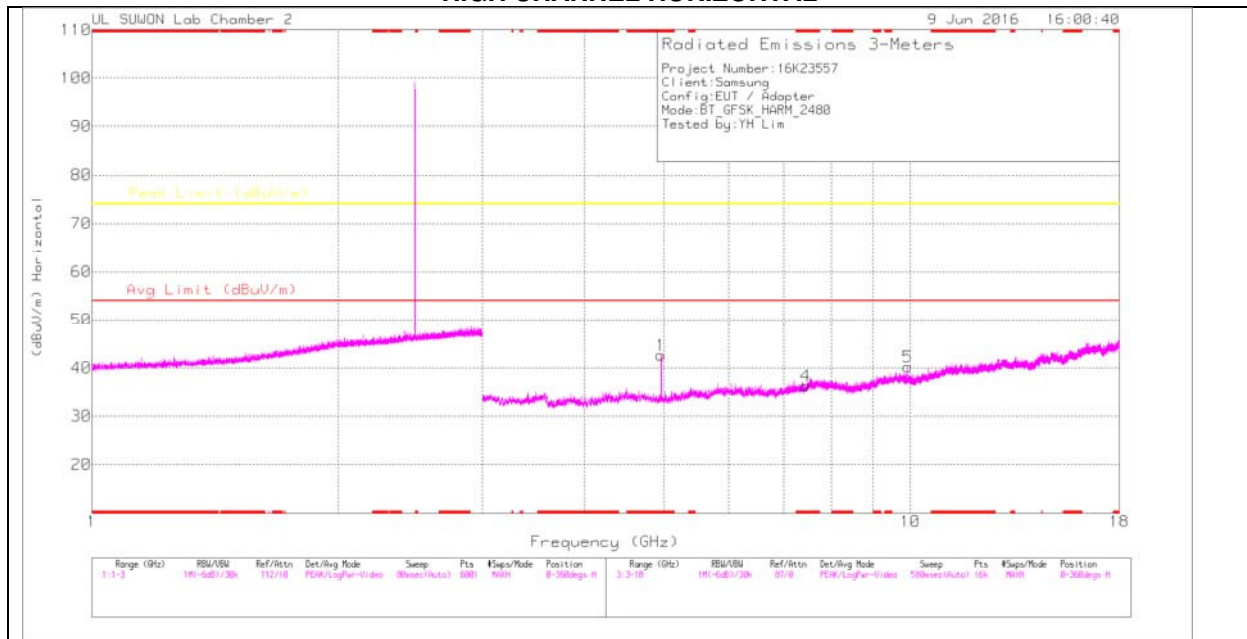
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168724)_150619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.882	42.74	PK2	33.9	-25.2	51.44	-	-	74	-22.56	200	110	H
* 4.882	40.56	VA1T	33.9	-25.2	49.26	54	-4.74	-	-	200	110	H
* 4.89	30.16	PK2	33.9	-25.2	38.86	-	-	74	-35.14	191	369	V
* 4.892	21.72	VA1T	33.9	-25.2	30.42	54	-23.58	-	-	191	369	V
* 7.313	26.72	PK2	35.9	-22.6	40.02	-	-	74	-33.98	61	326	V
* 7.315	19.69	VA1T	35.9	-22.6	32.99	54	-21.01	-	-	61	326	V

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

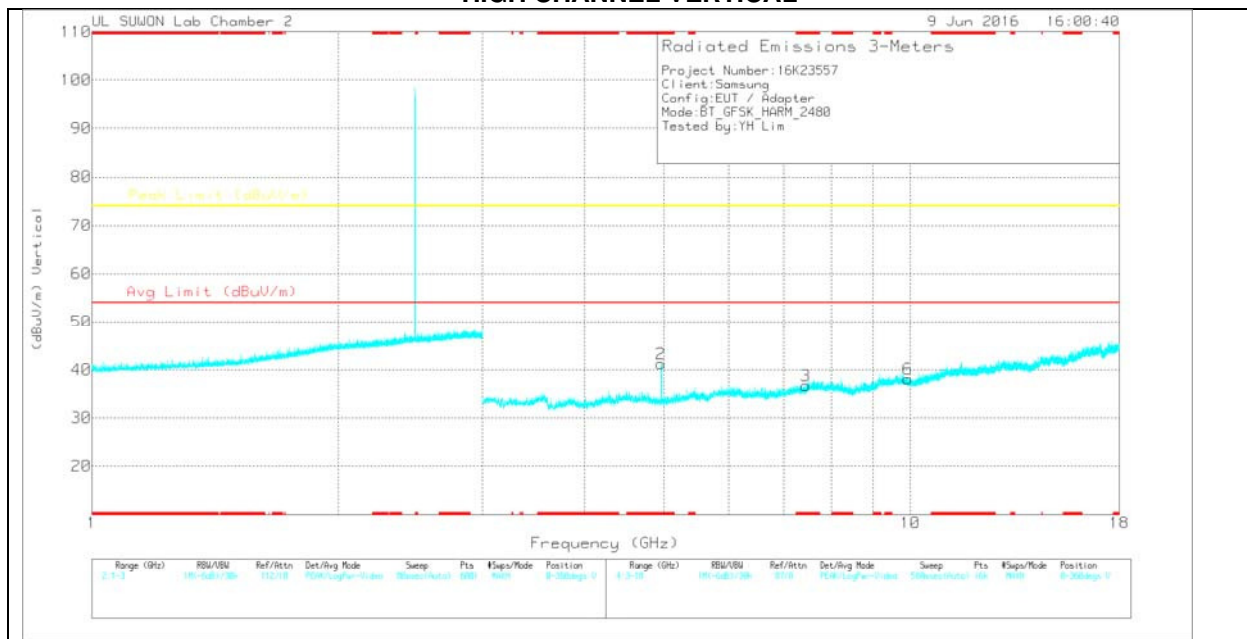
PK2 - Maximum Peak

VA1T - FHSS: Linear Voltage Average  $V_B=1/T_{on}$  where:  $T_{on}$  is transmit duration

### 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(00168724)_150619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.959	33.79	Pk	33.9	-25	42.69	-	-	74	-31.31	0-360	100	H
4	* 7.45	22.38	Pk	36	-22.1	36.28	-	-	74	-37.72	0-360	100	H
5	9.92	22.12	Pk	37.1	-19	40.22	-	-	74	-33.78	0-360	100	H
2	* 4.959	32.39	Pk	33.9	-25	41.29	-	-	74	-32.71	0-360	200	V
3	* 7.445	22.79	Pk	36	-22.1	36.69	-	-	74	-37.31	0-360	200	V
6	9.924	19.94	Pk	37.2	-19	38.14	-	-	74	-35.86	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(00168724)_150619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.96	40.54	PK2	33.9	-25	49.44	-	-	74	-24.56	200	124	H
* 4.96	34.54	VA1T	33.9	-25	43.44	54	-10.56	-	-	200	124	H
* 4.96	35.83	PK2	33.9	-25	44.73	-	-	74	-29.27	216	271	V
* 4.96	30.85	VA1T	33.9	-25	39.75	54	-14.25	-	-	216	271	V

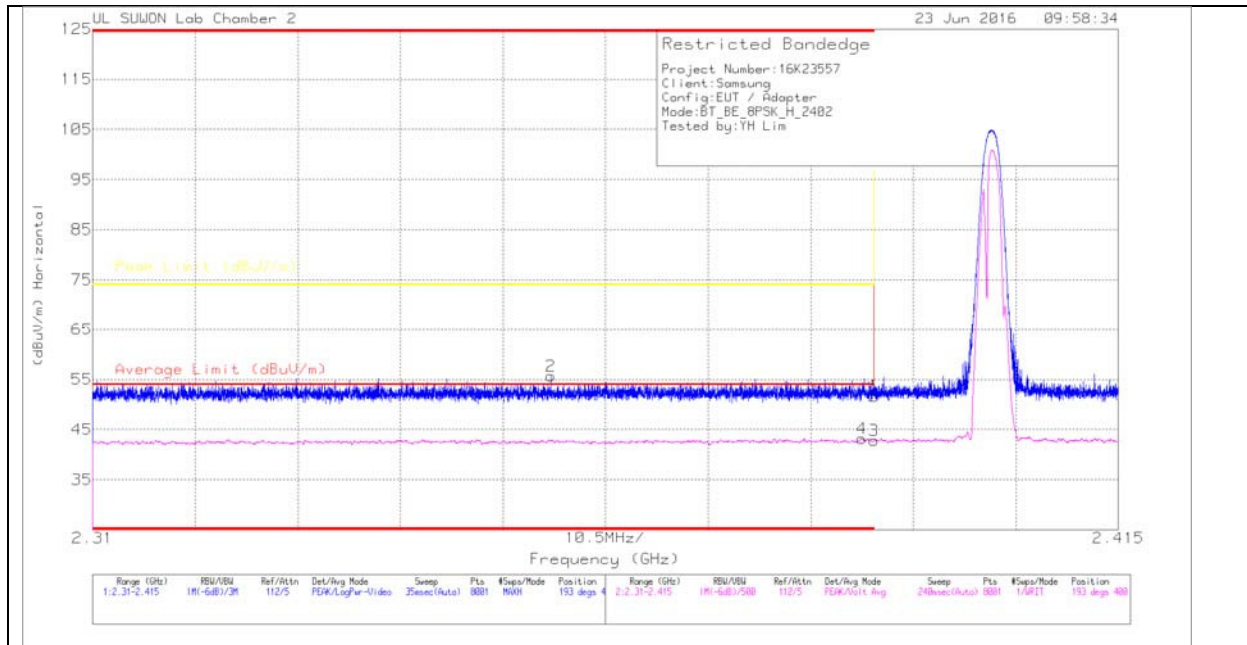
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - Maximum Peak

VA1T - FHSS: Linear Voltage Average  $V_B=1/T_{on}$  where:  $T_{on}$  is transmit duration

### 9.2.2. ENHANCED DATA RATE 8PSK MODULATION RESTRICTED BANDEDGE (LOW CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

##### Trace Markers

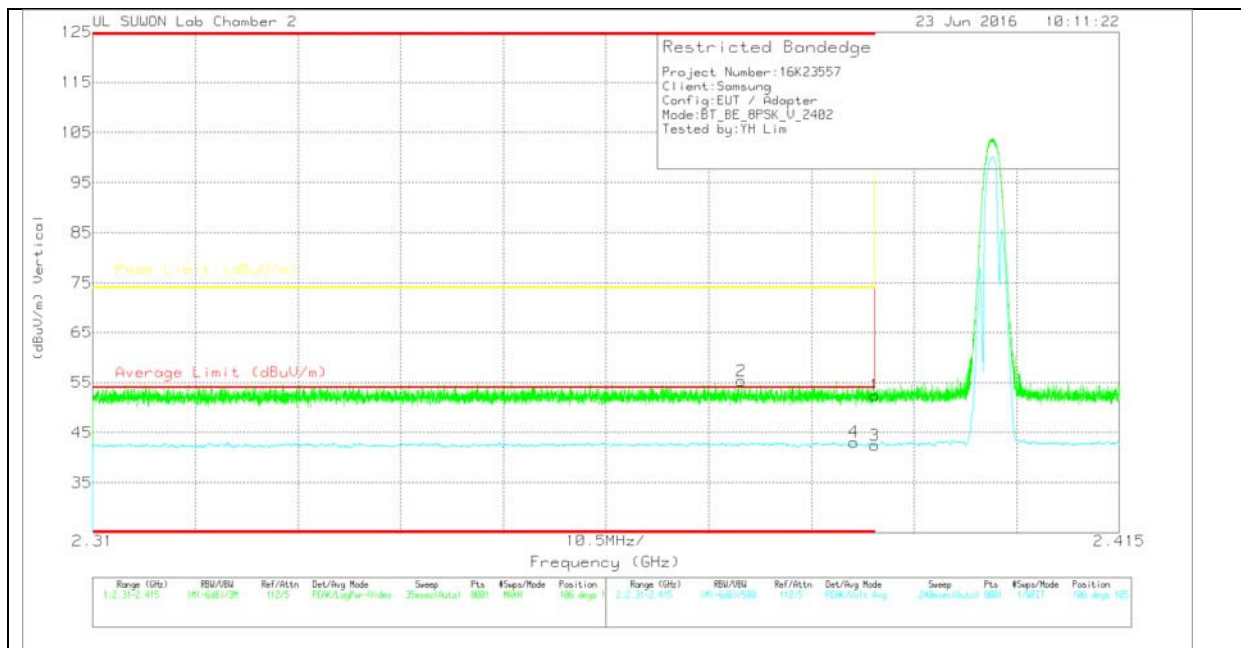
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.5	Pk	31.7	-19.5	51.7	-	-	74	-22.3	193	400	H
2	* 2.357	43.56	Pk	31.7	-19.6	55.66	-	-	74	-18.34	193	400	H
3	* 2.39	30.63	VA1T	31.7	-19.5	42.83	54	-11.17	-	-	193	400	H
4	* 2.389	30.99	VA1T	31.7	-19.5	43.19	54	-10.81	-	-	193	400	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average  $V_B=1/T_{on}$  where:  $T_{on}$  is transmit duration

**VERTICAL PEAK AND AVERAGE PLOT**



**VERTICAL DATA**

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	Path_2_10 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	40.21	Pk	31.7	-19.5	52.41	-	-	74	-21.59	106	105	V
2	* 2.376	43.22	Pk	31.7	-19.6	55.32	-	-	74	-18.68	106	105	V
3	* 2.39	30.27	VA1T	31.7	-19.5	42.47	54	-11.53	-	-	106	105	V
4	* 2.388	30.93	VA1T	31.7	-19.5	43.13	54	-10.87	-	-	106	105	V

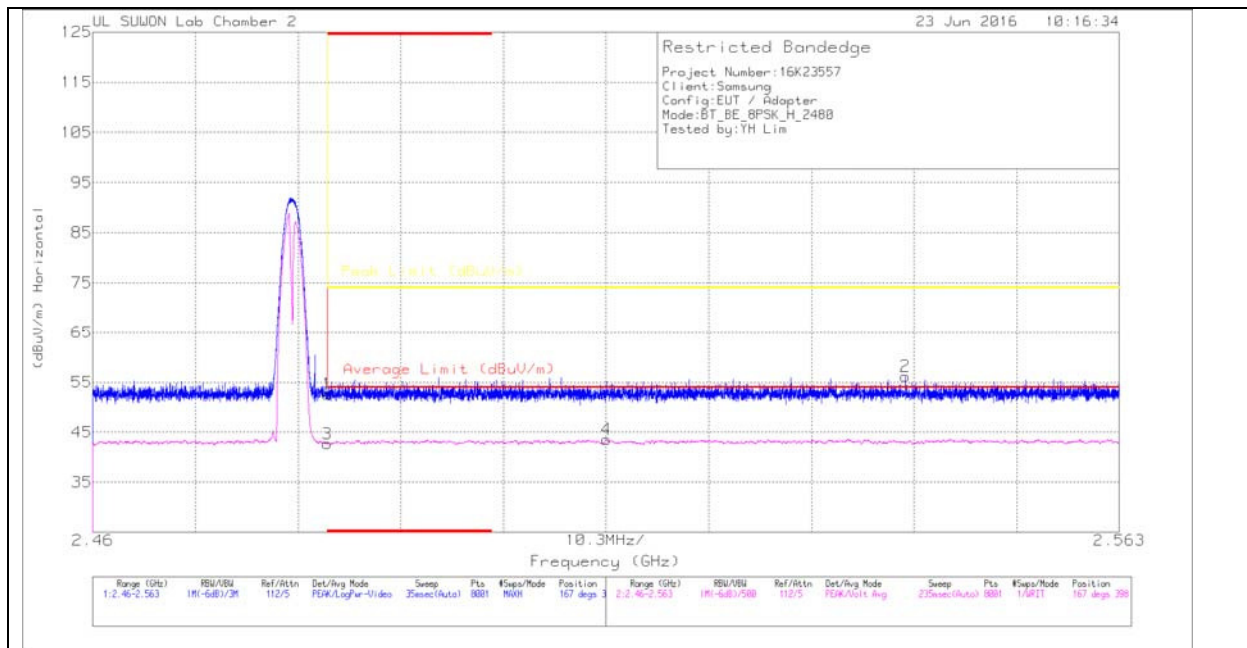
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average  $VB=1/Ton$  where: Ton is transmit duration

**AUTHORIZED BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL PEAK AND AVERAGE PLOT**



**HORIZONTAL DATA**

Trace Markers

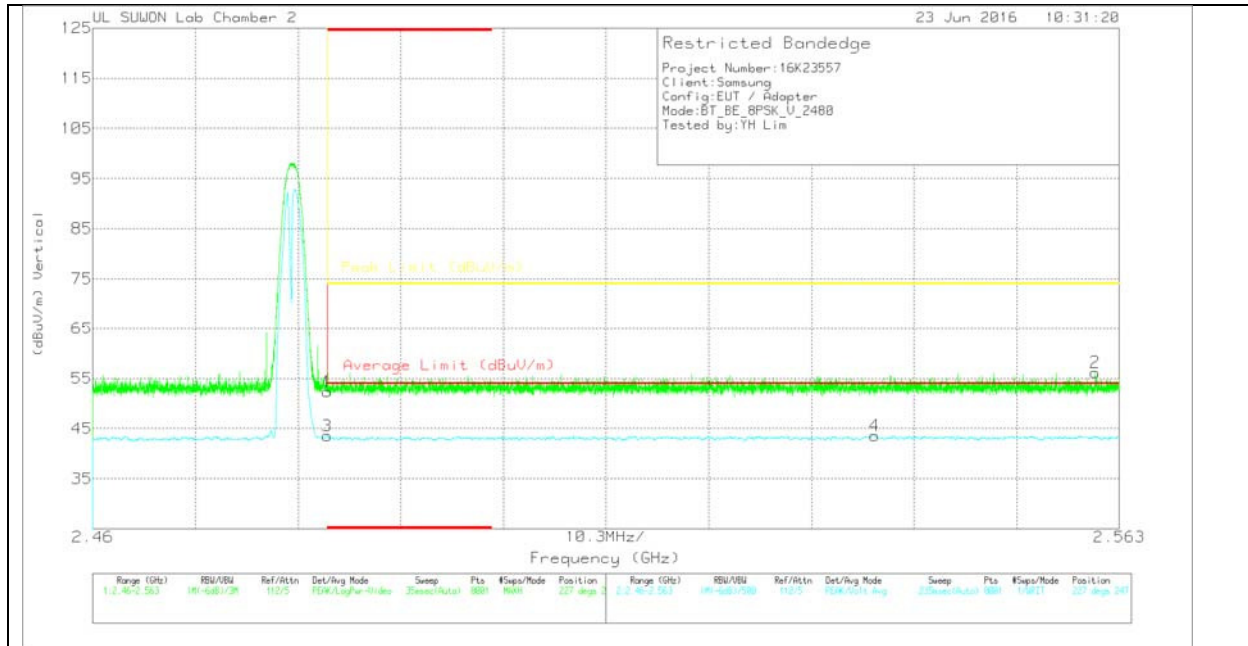
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	Path_2_10 dB	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.25	Pk	31.8	-19.4	52.65	-	-	74	-21.35	167	398	H
2	2.542	43.61	Pk	31.9	-19.3	56.21	-	-	74	-17.79	167	398	H
3	* 2.484	30.28	VA1T	31.8	-19.4	42.68	54	-11.32	-	-	167	398	H
4	2.512	31.01	VA1T	31.9	-19.3	43.61	54	-10.39	-	-	167	398	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average  $VB=1/Ton$  where: Ton is transmit duration

**VERTICAL PEAK AND AVERAGE PLOT**



**VERTICAL DATA**

**Trace Markers**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117/0016 8724_150 619	Path_2_10 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	39.93	Pk	31.8	-19.4	52.33	-	-	74	-21.67	227	247	V
2	2.561	43.6	Pk	31.9	-19.3	56.2	-	-	74	-17.8	227	247	V
3	* 2.484	31.14	VA1T	31.8	-19.4	43.54	54	-10.46	-	-	227	247	V
4	2.538	31.01	VA1T	31.9	-19.3	43.61	54	-10.39	-	-	227	247	V

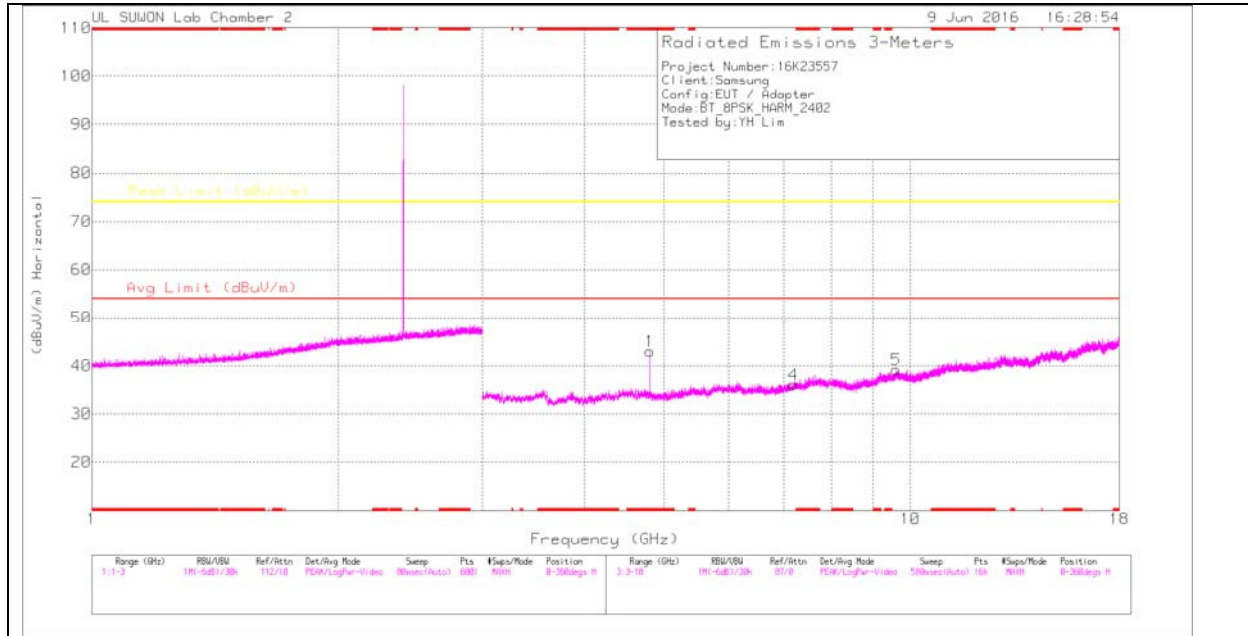
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

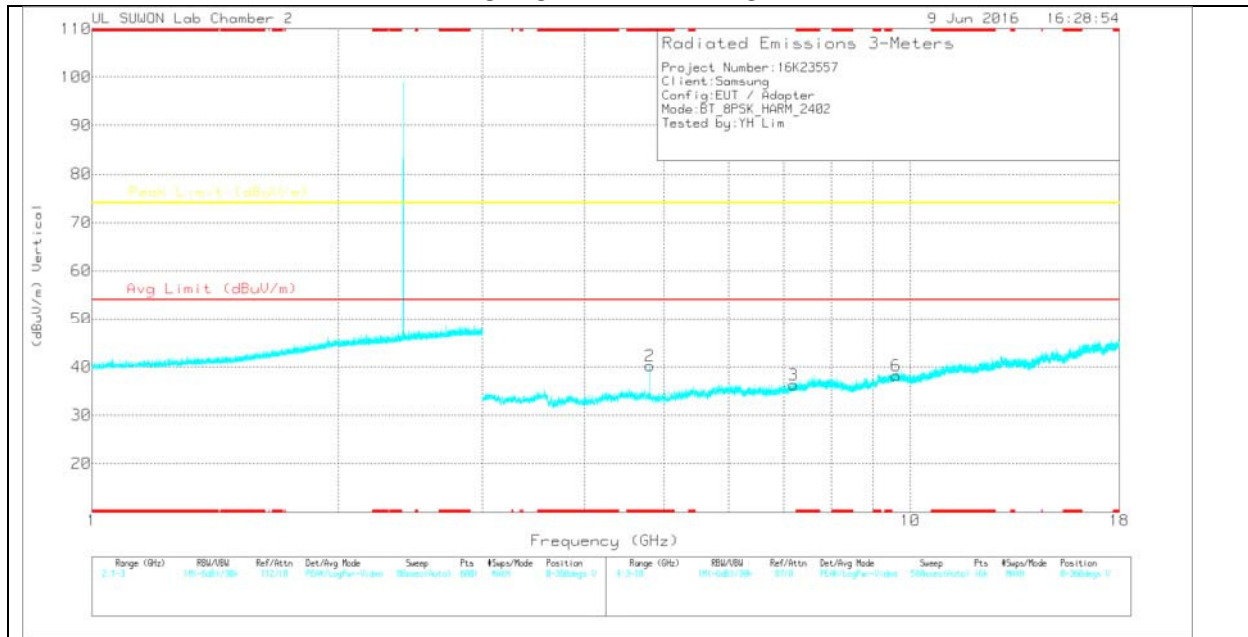
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

### 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(00168724)_150619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.804	34.47	Pk	33.9	-25.3	43.07	-	-	74	-30.93	0-360	100	H
4	7.197	23.28	Pk	35.7	-22.9	36.08	-	-	74	-37.92	0-360	200	H
5	9.608	21.48	Pk	36.9	-19.1	39.28	-	-	74	-34.72	0-360	200	H
2	* 4.804	31.65	Pk	33.9	-25.3	40.25	-	-	74	-33.75	0-360	200	V
3	7.201	23.56	Pk	35.7	-22.9	36.36	-	-	74	-37.64	0-360	100	V
6	9.61	20.43	Pk	36.9	-19.1	38.23	-	-	74	-35.77	0-360	200	V

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

Pk – Peak detector

Radiated Emissions

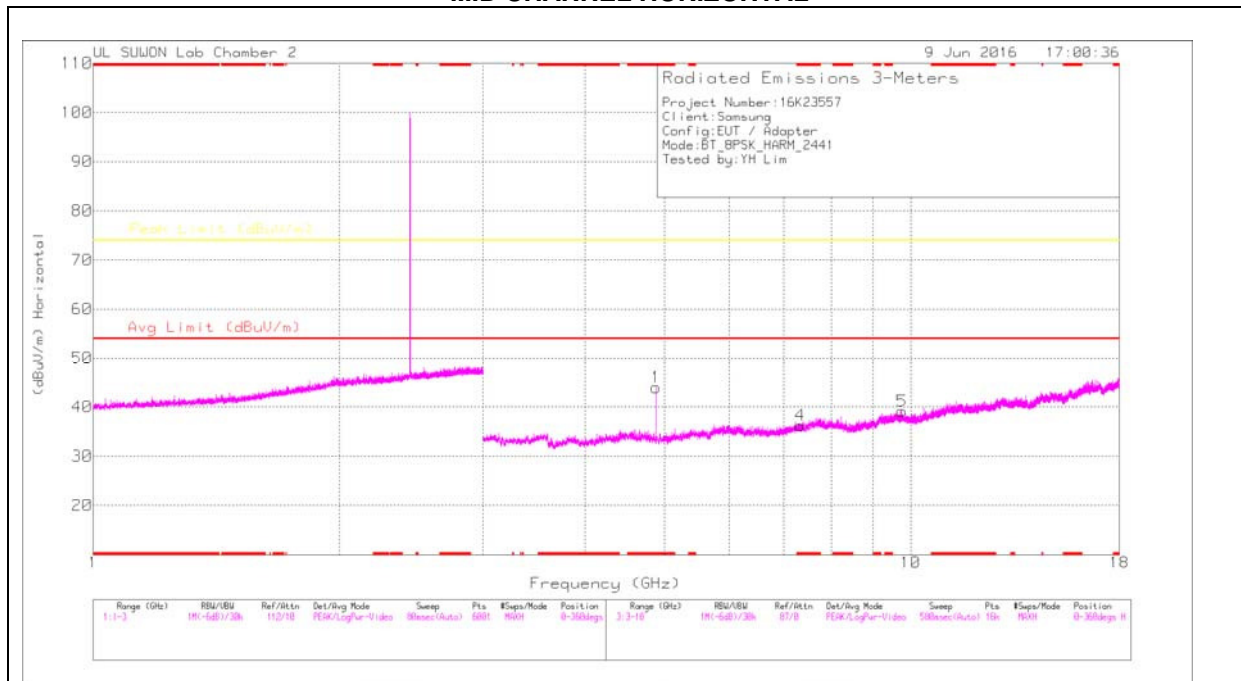
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168724)_150619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.804	41.89	PK2	33.9	-25.3	50.49	-	-	74	-23.51	202	115	H
* 4.804	34.46	VA1T	33.9	-25.3	43.06	54	-10.94	-	-	202	115	H
* 4.809	35.34	PK2	33.9	-25.3	43.94	-	-	74	-30.06	189	153	V
* 4.814	21.74	VA1T	33.9	-25.3	30.34	54	-23.66	-	-	189	153	V

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

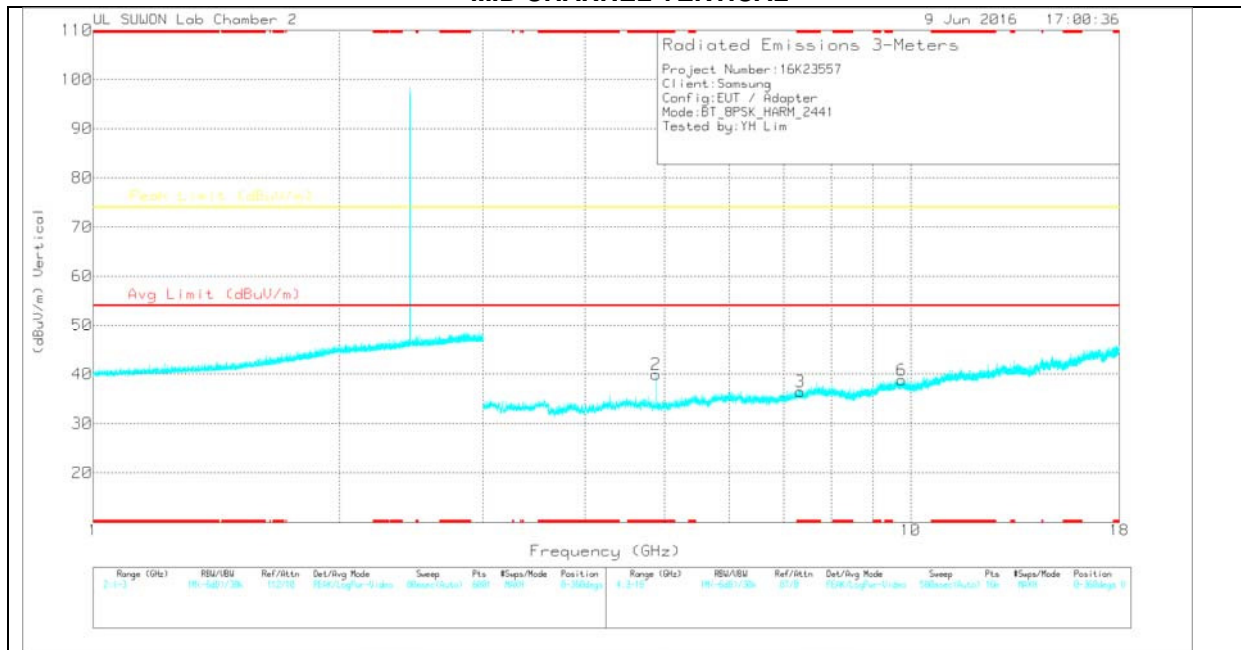
PK2 - Maximum Peak

VA1T - FHSS: Linear Voltage Average  $V_B=1/T_{on}$  where:  $T_{on}$  is transmit duration

**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(00168724)_150619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.881	35.28	Pk	33.9	-25.2	43.98	-	-	74	-30.02	0-360	100	H
4	* 7.326	22.85	Pk	35.9	-22.5	36.25	-	-	74	-37.75	0-360	100	H
5	9.759	21.48	Pk	37	-19.3	39.18	-	-	74	-34.82	0-360	100	H
2	* 4.881	31.24	Pk	33.9	-25.2	39.94	-	-	74	-34.06	0-360	100	V
3	* 7.324	23.05	Pk	35.9	-22.5	36.45	-	-	74	-37.55	0-360	200	V
6	9.755	21.07	Pk	37	-19.3	38.77	-	-	74	-35.23	0-360	200	V

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

Pk – Peak detector

Radiated Emissions

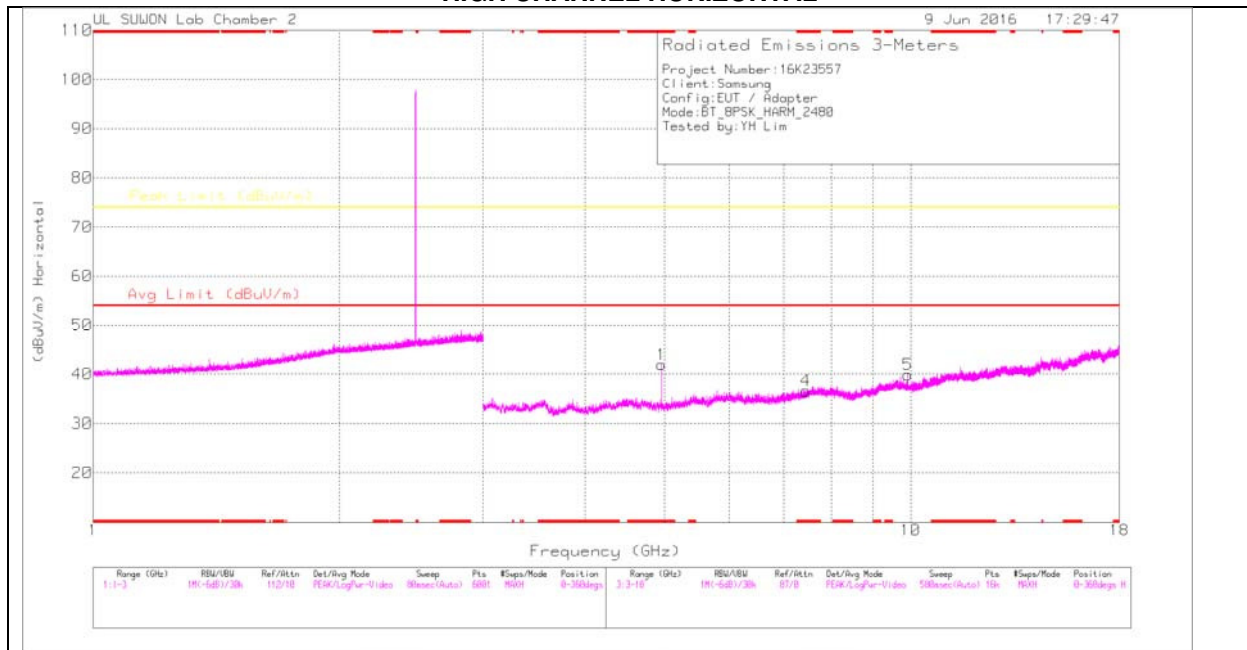
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168724)_150619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.882	39.63	PK2	33.9	-25.2	48.33	-	-	74	-25.67	196	120	H
* 4.882	33.58	VA1T	33.9	-25.2	42.28	54	-11.72	-	-	196	120	H
* 4.882	35.01	PK2	33.9	-25.2	43.71	-	-	74	-30.29	214	277	V
* 4.882	29.59	VA1T	33.9	-25.2	38.29	54	-15.71	-	-	214	277	V

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

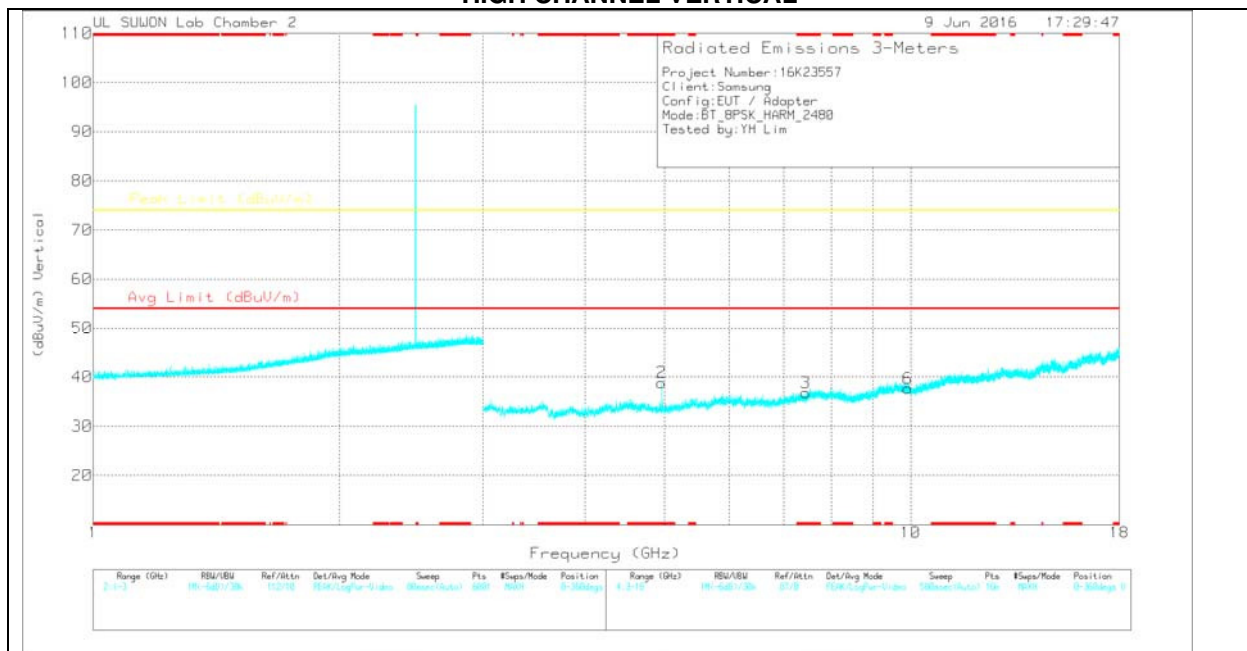
PK2 - Maximum Peak

VA1T - FHSS: Linear Voltage Average  $V_B=1/T_{on}$  where:  $T_{on}$  is transmit duration

### 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(00168724)_150619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.96	33	Pk	33.9	-25	41.9	-	-	74	-32.1	0-360	200	H
4	* 7.443	22.73	Pk	36	-22.1	36.63	-	-	74	-37.37	0-360	100	H
5	9.92	21.77	Pk	37.1	-19	39.87	-	-	74	-34.13	0-360	100	H
2	* 4.959	29.96	Pk	33.9	-25	38.86	-	-	74	-35.14	0-360	200	V
3	* 7.441	22.88	Pk	36	-22.1	36.78	-	-	74	-37.22	0-360	100	V
6	9.927	19.49	Pk	37.2	-19	37.69	-	-	74	-36.31	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(00168724)_150619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.96	31.1	PK2	33.9	-25	40	-	-	74	-34	195	185	H
* 4.96	30.19	VA1T	33.9	-25	39.09	54	-14.91	-	-	195	185	H
* 4.96	33.78	PK2	33.9	-25	42.68	-	-	74	-31.32	215	270	V
* 4.96	27.23	VA1T	33.9	-25	36.13	54	-17.87	-	-	215	270	V

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

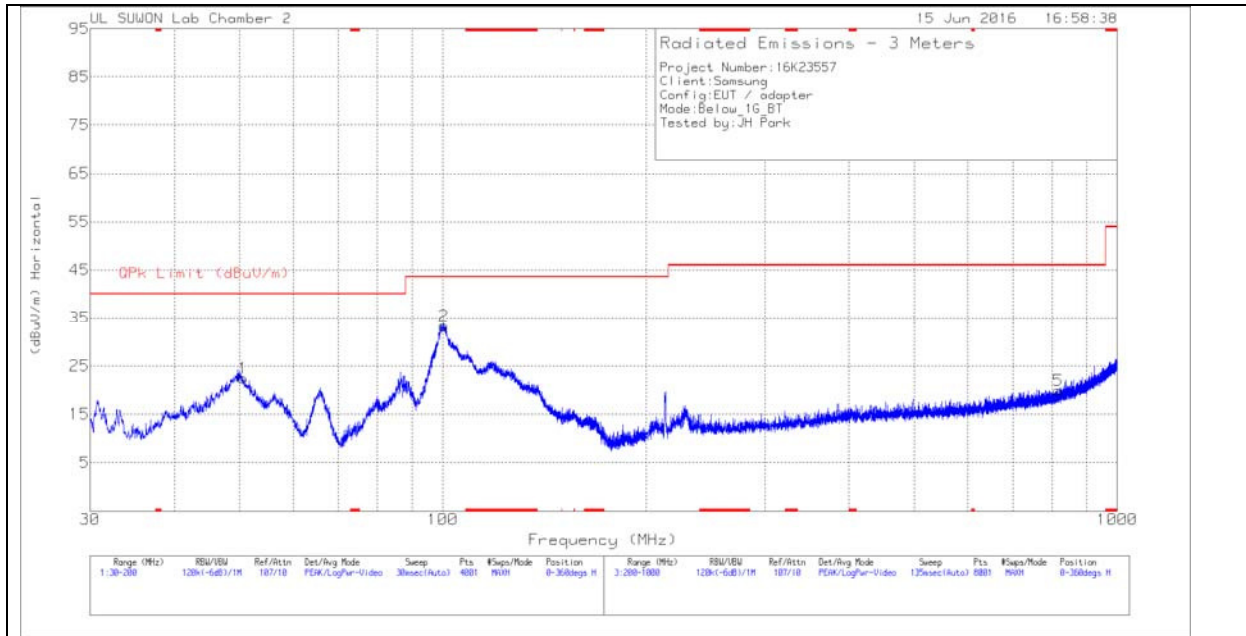
PK2 - Maximum Peak

VA1T - FHSS: Linear Voltage Average  $V_B=1/T_{on}$  where:  $T_{on}$  is transmit duration

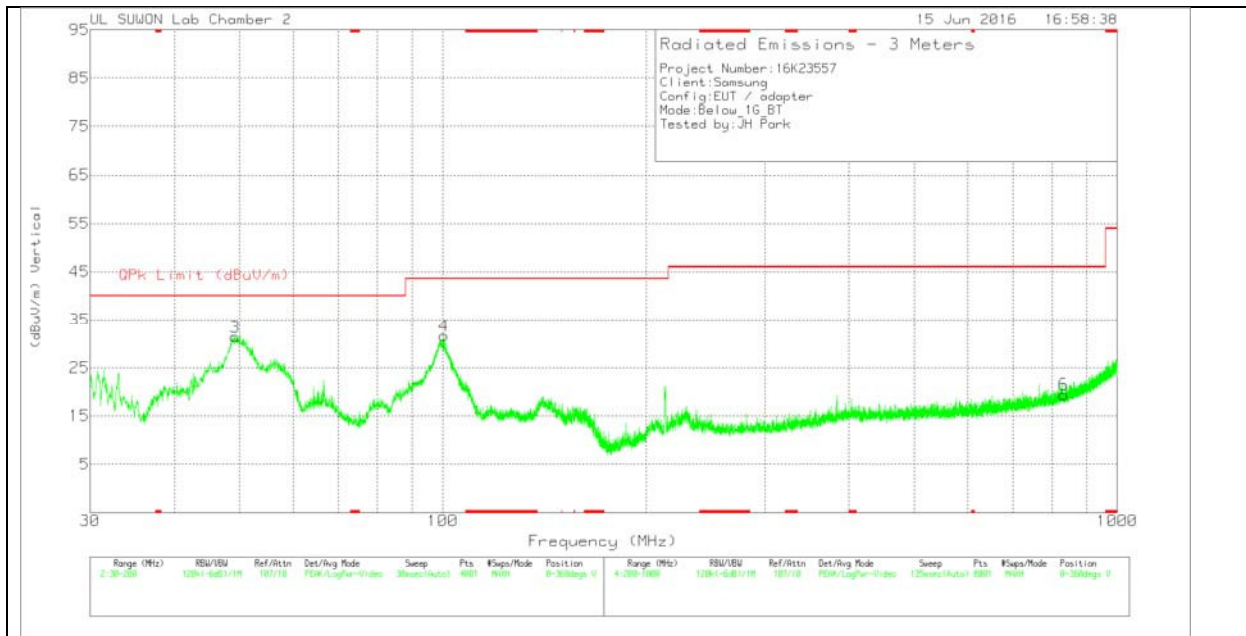
### 9.3. WORST-CASE BELOW 1 GHz

#### GFSK SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

#### HORIZONTAL PLOT



#### VERTICAL PLOT



**BELOW 1 GHz TABLE**

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	50.6125	39.1	Pk	14	-30.7	22.4	40	-17.6	0-360	400	H
2	100.4225	52.37	Pk	11.5	-30.5	33.37	43.52	-10.15	0-360	300	H
3	49.21	48	Pk	14.1	-30.7	31.4	40	-8.6	0-360	100	V
4	100.3375	50.54	Pk	11.6	-30.5	31.64	43.52	-11.88	0-360	100	V
5	817.4	30.3	Pk	18.2	-28.6	19.9	46.02	-26.12	0-360	300	H
6	832.6	29.58	Pk	18.4	-28.5	19.48	46.02	-26.54	0-360	300	V

Pk - Peak detector

## 10. AC POWER LINE CONDUCTED EMISSIONS

### LIMITS

FCC §15.207 (a)

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

\*Decreases with the logarithm of the frequency.

### TEST PROCEDURE

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

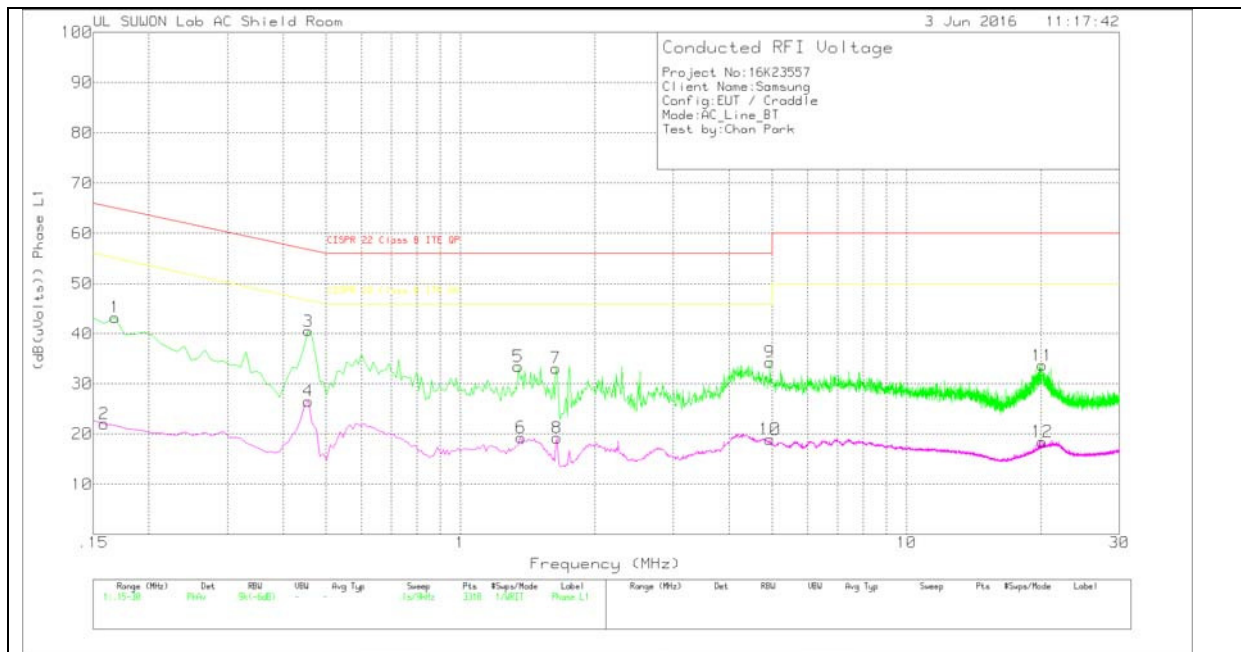
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

### RESULTS

**6 WORST EMISSIONS**

**LINE 1 PLOT**



**LINE 1 RESULTS**

Trace Markers

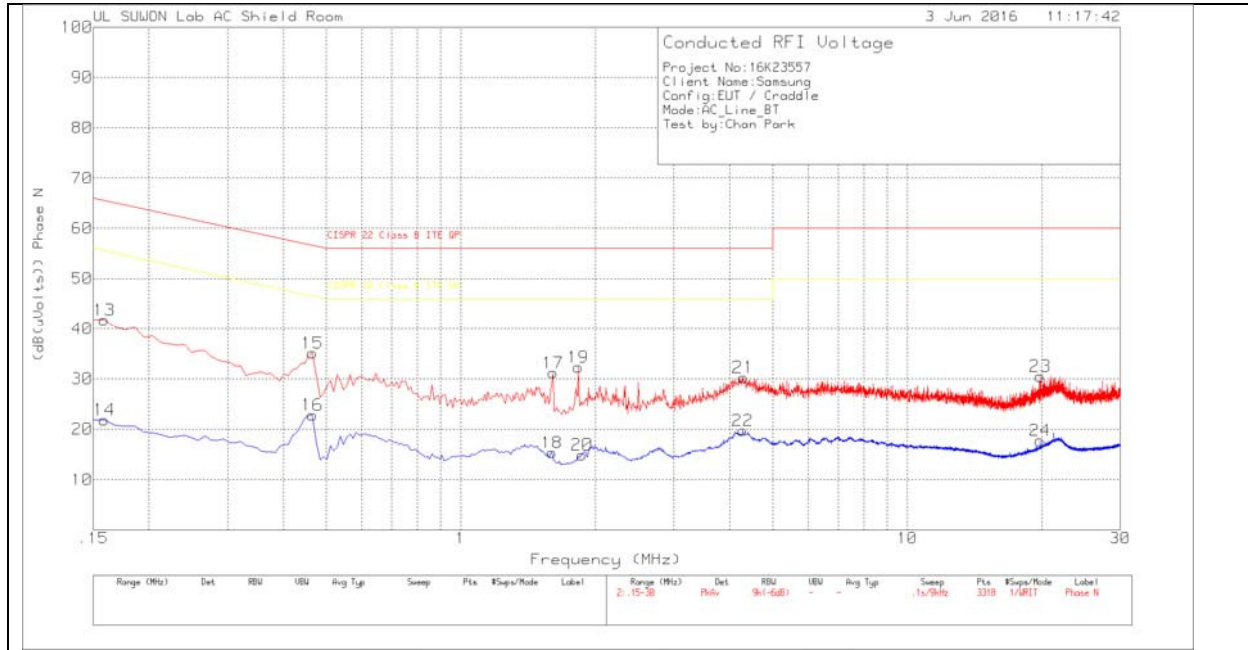
Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_w ith ex-cord_L1	CE Shield Room	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
1	.168	33.11	Pk	10.2	0	43.31	65.06	-21.75	-	-
2	.159	12.02	Av	10	0	22.02	-	-	55.52	-33.5
3	.456	30.38	Pk	10.2	0	40.58	56.77	-16.19	-	-
4	.456	16.31	Av	10.2	0	26.51	-	-	46.77	-20.26
5	1.347	23.42	Pk	9.9	.1	33.42	56	-22.58	-	-
6	1.365	9.41	Av	9.8	.1	19.31	-	-	46	-26.69
7	1.635	23.19	Pk	9.8	.1	33.09	56	-22.91	-	-
8	1.644	9.33	Av	9.8	.1	19.23	-	-	46	-26.77
9	4.938	24.4	Pk	9.8	.1	34.3	56	-21.7	-	-
10	4.938	9.05	Av	9.8	.1	18.95	-	-	46	-27.05
11	20.139	23.03	Pk	10.4	.2	33.63	60	-26.37	-	-
12	20.139	7.87	Av	10.4	.2	18.47	-	-	50	-31.53

Pk - Peak detector

Av - Average detection

LINE 2 PLOT



**LINE 2 RESULTS**

Trace Markers

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	31.76	Pk	10	0	41.76	65.52	-23.76	-	-
14	.159	11.86	Av	10	0	21.86	-	-	55.52	-33.66
15	.465	24.98	Pk	10.1	0	35.08	56.6	-21.52	-	-
16	.465	12.73	Av	10.1	0	22.83	-	-	46.6	-23.77
17	1.608	21.27	Pk	9.8	.1	31.17	56	-24.83	-	-
18	1.599	5.47	Av	9.8	.1	15.37	-	-	46	-30.63
19	1.833	22.4	Pk	9.8	.1	32.3	56	-23.7	-	-
20	1.869	5.04	Av	9.8	.1	14.94	-	-	46	-31.06
21	4.29	20.36	Pk	9.8	.1	30.26	56	-25.74	-	-
22	4.281	9.83	Av	9.8	.1	19.73	-	-	46	-26.27
23	19.86	19.7	Pk	10.6	.2	30.5	60	-29.5	-	-
24	19.842	6.96	Av	10.6	.2	17.76	-	-	50	-32.24

Pk - Peak detector

Av - Average detection