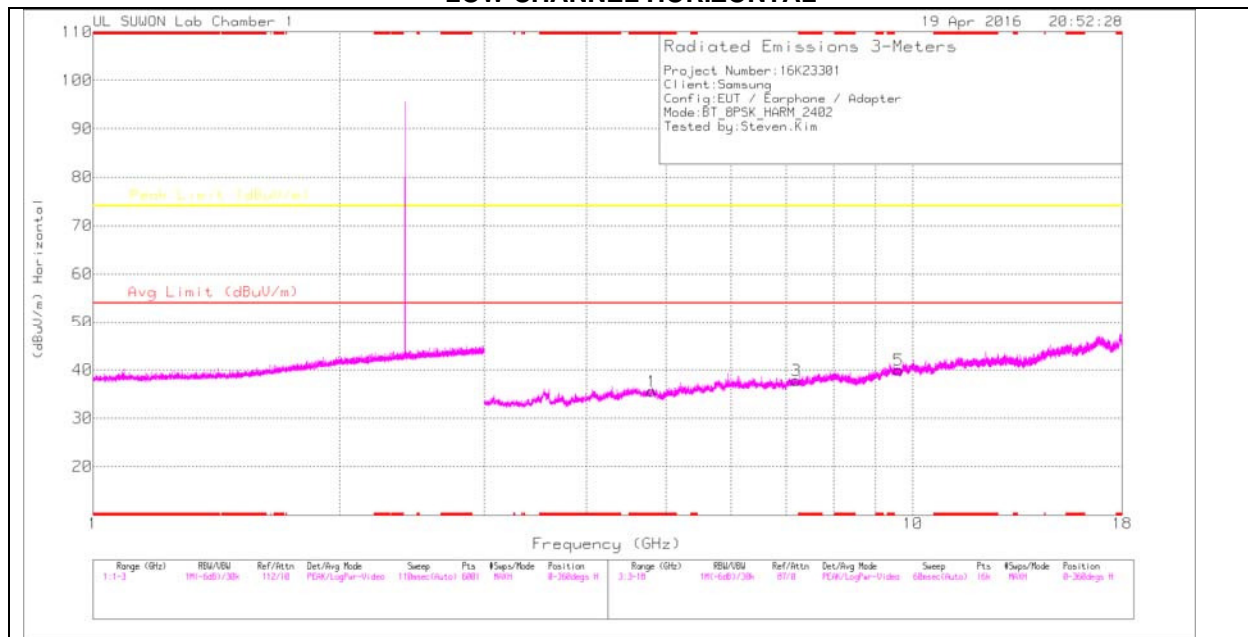
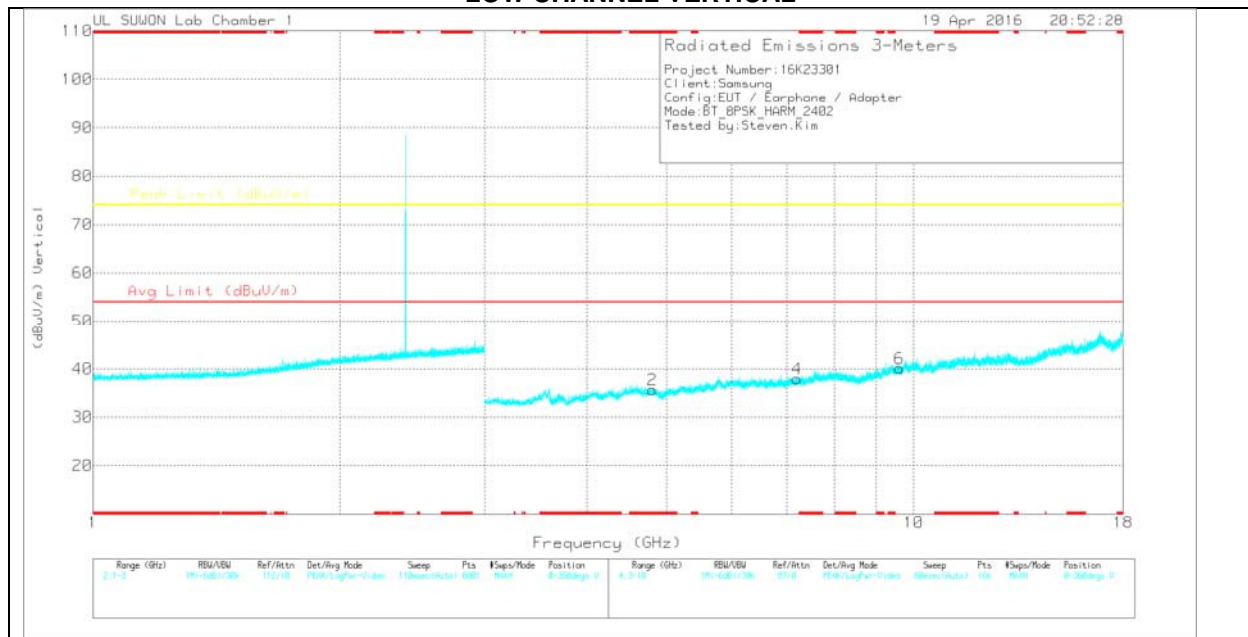


HARMONICS AND SPURIOUS EMISSIONS

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

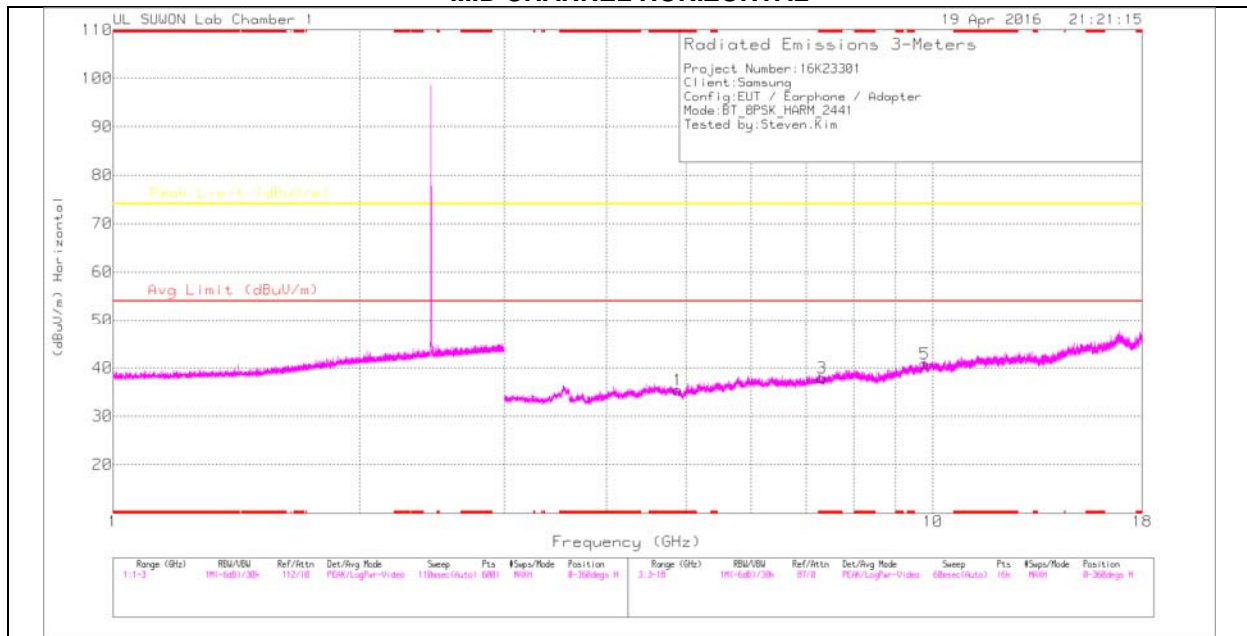
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.804	35.35	PK	34	-33.8	35.55	-	-	74	-38.45	0-360	200	H
3	7.203	32.97	PK	35.7	-30.8	37.87	-	-	74	-36.13	0-360	200	H
5	9.608	30.29	PK	37	-27.3	39.99	-	-	74	-34.01	0-360	100	H
2	* 4.805	35.48	PK	34	-33.8	35.68	-	-	74	-38.32	0-360	100	V
4	7.204	33.01	PK	35.7	-30.8	37.91	-	-	74	-36.09	0-360	200	V
6	9.611	30.42	PK	37	-27.3	40.12	-	-	74	-33.88	0-360	200	V

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

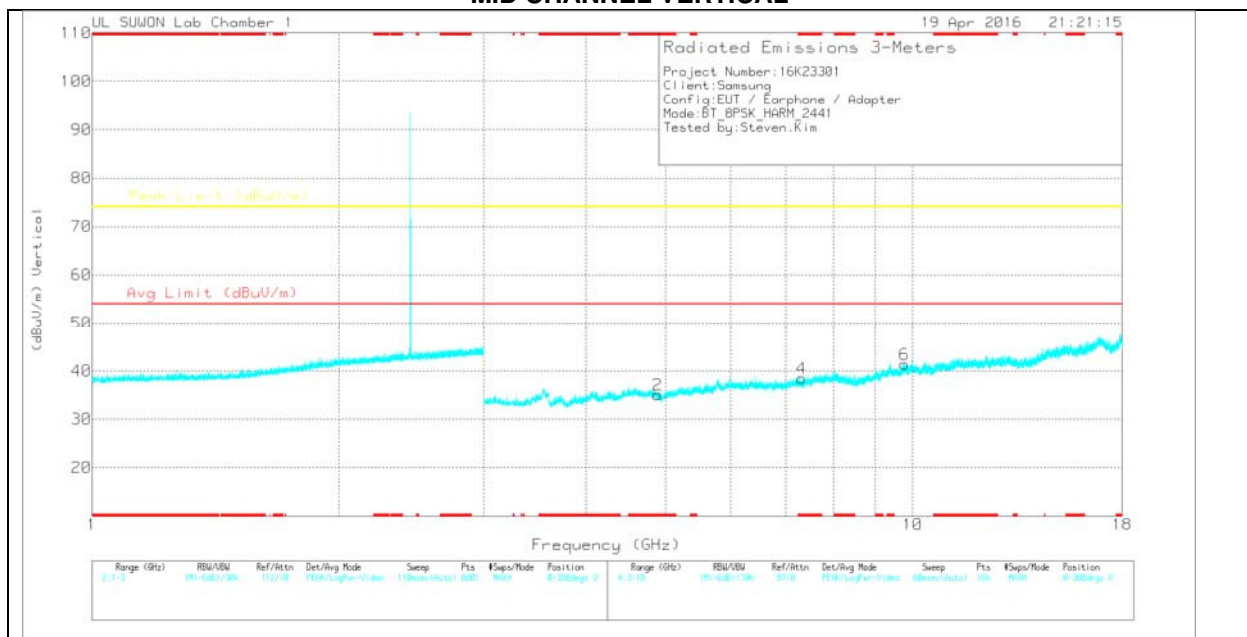
PK – Peak detector

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

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

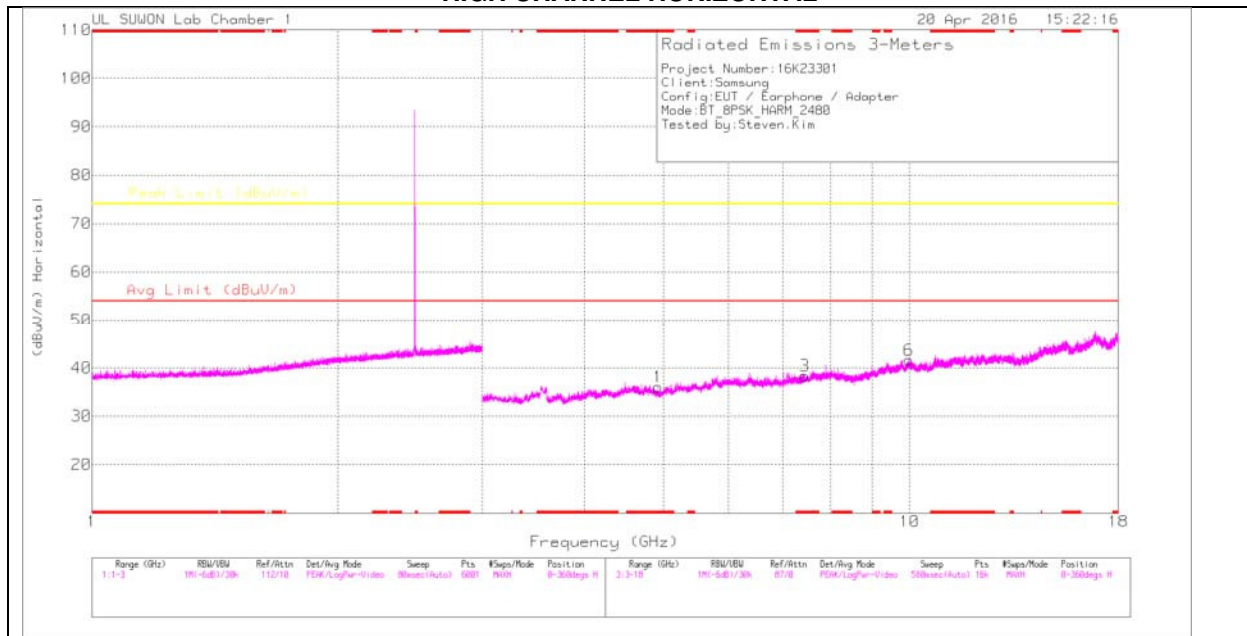
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.886	35.4	PK	34	-34	35.4	-	-	74	-38.6	0-360	200	H
3	* 7.323	33.1	PK	35.8	-30.9	38	-	-	74	-36	0-360	100	H
5	9.769	30.2	PK	37.2	-26.5	40.9	-	-	74	-33.1	0-360	100	H
2	* 4.888	35.01	PK	34	-34	35.01	-	-	74	-38.99	0-360	100	V
4	* 7.32	33.61	PK	35.8	-30.9	38.51	-	-	74	-35.49	0-360	100	V
6	9.77	30.63	PK	37.2	-26.5	41.33	-	-	74	-32.67	0-360	100	V

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

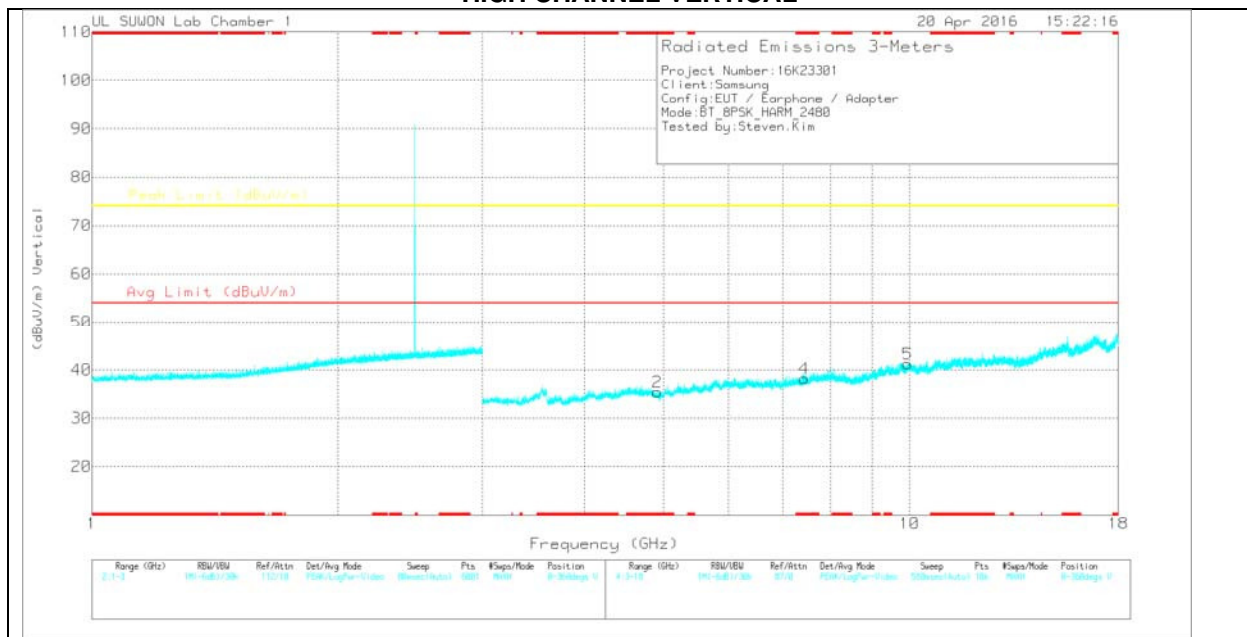
PK – Peak detector

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

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(0016 8717)_150 619	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.92	36.06	Pk	34	-34	36.06	-	-	74	-37.94	0-360	200	H
3	* 7.441	33.3	Pk	35.8	-30.7	38.4	-	-	74	-35.6	0-360	100	H
6	9.974	30.17	Pk	37.4	-25.9	41.67	-	-	74	-32.33	0-360	100	H
2	* 4.917	35.43	Pk	34	-34	35.43	-	-	74	-38.57	0-360	100	V
4	* 7.436	33.11	Pk	35.8	-30.7	38.21	-	-	74	-35.79	0-360	200	V
5	9.937	30.62	Pk	37.4	-26.8	41.22	-	-	74	-32.78	0-360	100	V

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

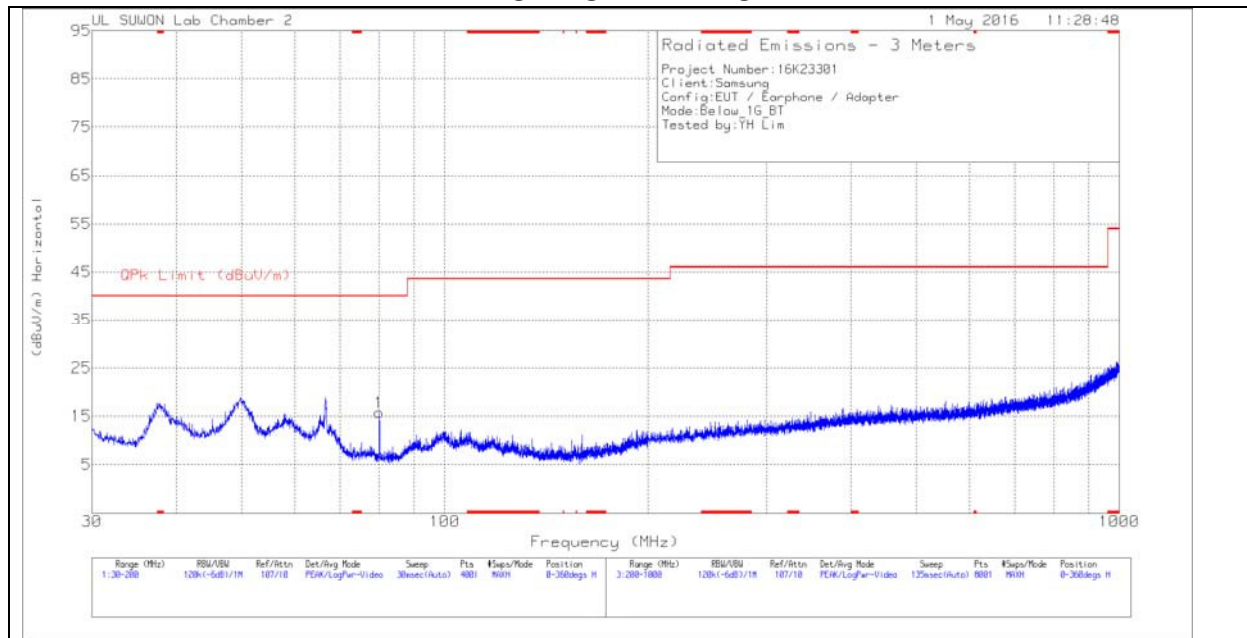
PK – Peak detector

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

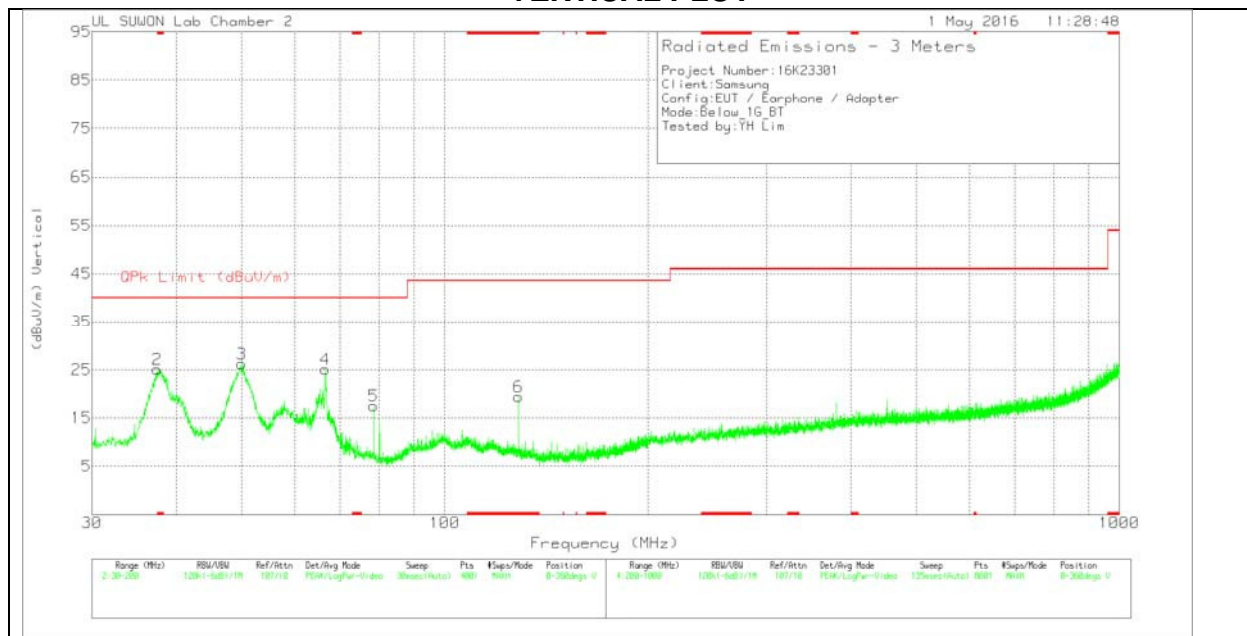
9.3. WORST-CASE BELOW 1 GHz

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	79.98	39.3	Pk	7.1	-30.6	15.8	40	-24.2	0-360	200	H
2	37.48	44.15	Pk	11.8	-30.8	25.15	40	-14.85	0-360	100	V
3	49.975	42.84	Pk	14.1	-30.7	26.24	40	-13.76	0-360	100	V
4	66.55	45.13	Pk	10.7	-30.7	25.13	40	-14.87	0-360	100	V
5	78.4925	40.73	Pk	7.4	-30.6	17.53	40	-22.47	0-360	100	V
6	* 128.6	40.79	Pk	9.1	-30.5	19.39	43.52	-24.13	0-360	100	V

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

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.

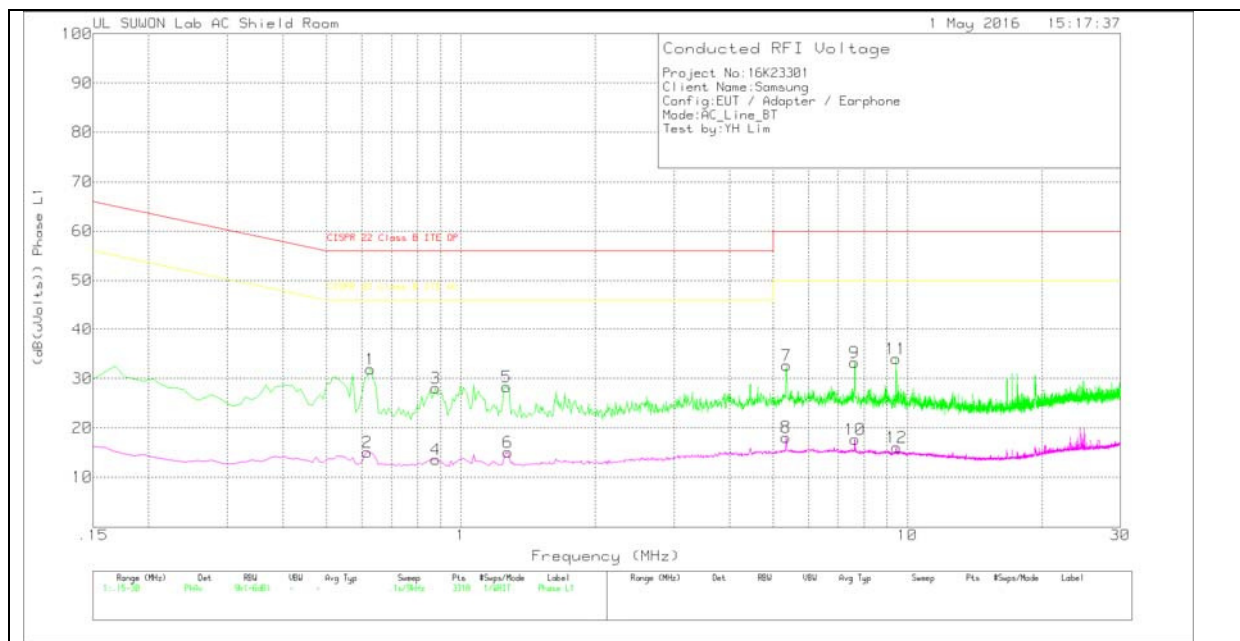
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

Trace Markers

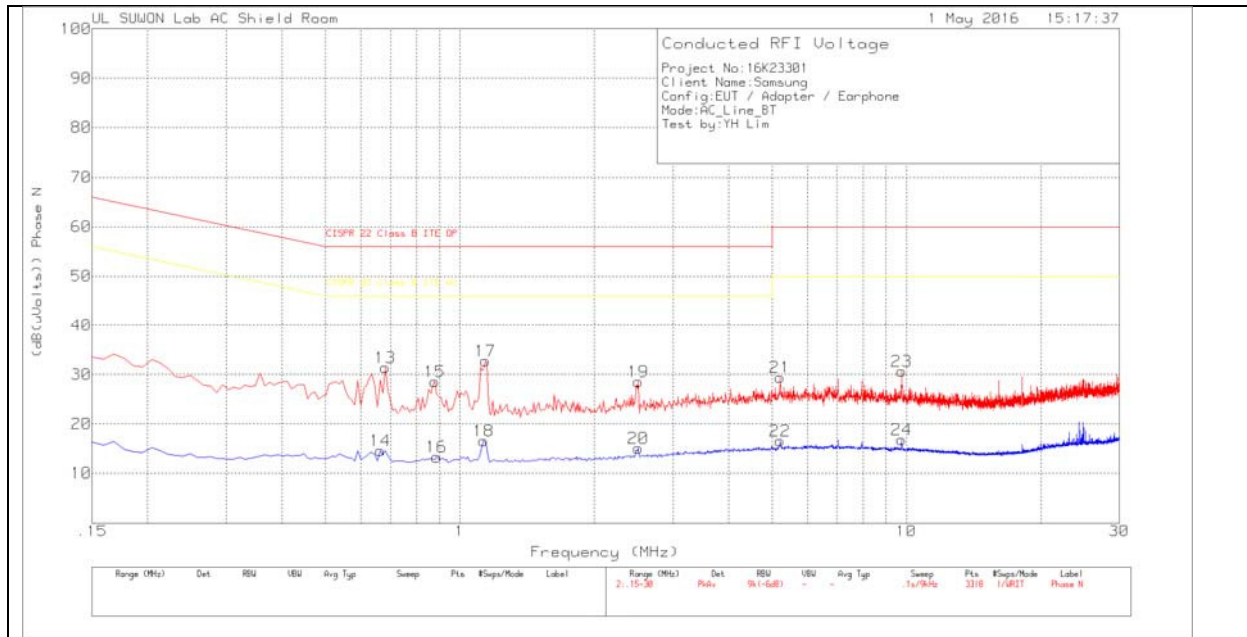
Phase L1 .15 - 30MHz

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	.627	21.81	Pk	10.1	0	31.91	56	-24.09	-	-
2	.618	4.91	Av	10.1	0	15.01	-	-	46	-30.99
3	.879	18.08	Pk	10	0	28.08	56	-27.92	-	-
4	.879	3.59	Av	10	0	13.59	-	-	46	-32.41
5	1.266	18.26	Pk	9.9	.1	28.26	56	-27.74	-	-
6	1.275	5.08	Av	9.9	.1	15.08	-	-	46	-30.92
7	5.361	22.75	Pk	9.8	.1	32.65	60	-27.35	-	-
8	5.352	8.19	Av	9.8	.1	18.09	-	-	50	-31.91
9	7.62	23.27	Pk	9.9	.1	33.27	60	-26.73	-	-
10	7.629	7.71	Av	9.9	.1	17.71	-	-	50	-32.29
11	9.438	23.81	Pk	10	.2	34.01	60	-25.99	-	-
12	9.447	5.89	Av	10	.2	16.09	-	-	50	-33.91

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	.681	21.39	Pk	10	0	31.39	56	-24.61	-	-
14	.663	4.54	Av	10	0	14.54	-	-	46	-31.46
15	.879	18.66	Pk	9.9	0	28.56	56	-27.44	-	-
16	.888	3.37	Av	9.9	0	13.27	-	-	46	-32.73
17	1.14	22.93	Pk	9.8	0	32.73	56	-23.27	-	-
18	1.131	6.77	Av	9.8	0	16.57	-	-	46	-29.43
19	2.508	18.64	Pk	9.8	.1	28.54	56	-27.46	-	-
20	2.508	5.18	Av	9.8	.1	15.08	-	-	46	-30.92
21	5.217	19.48	Pk	9.8	.1	29.38	60	-30.62	-	-
22	5.217	6.63	Av	9.8	.1	16.53	-	-	50	-33.47
23	9.762	20.47	Pk	10	.2	30.67	60	-29.33	-	-
24	9.762	6.58	Av	10	.2	16.78	-	-	50	-33.22

Pk - Peak detector

Av - Average detection