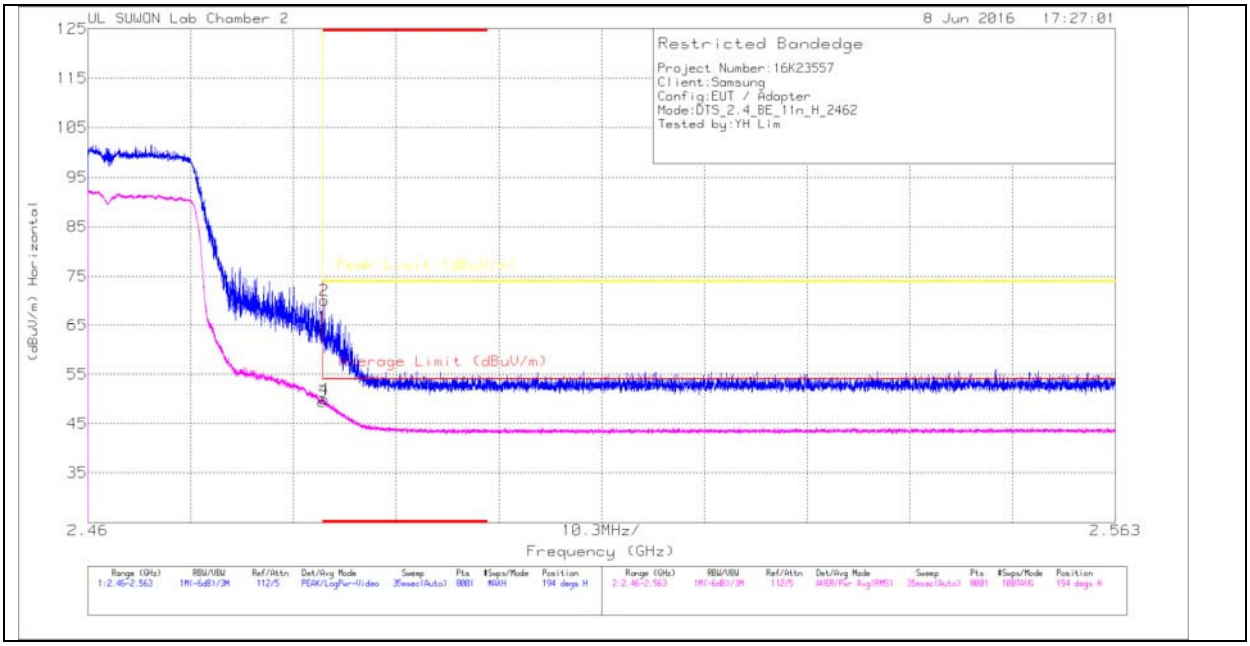
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168724)_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	52.26	Pk	31.8	-19.4	0	64.66	-	-	74	-9.34	194	310	H
2	* 2.484	57.67	Pk	31.8	-19.4	0	70.07	-	-	74	-3.93	194	310	H
3	* 2.484	36.73	RMS	31.8	-19.4	.32	49.45	54	-4.55	-	-	194	310	H
4	* 2.484	37.25	RMS	31.8	-19.4	.32	49.97	54	-4.03	-	-	194	310	H

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

Pk - Peak detector

RMS - RMS detection

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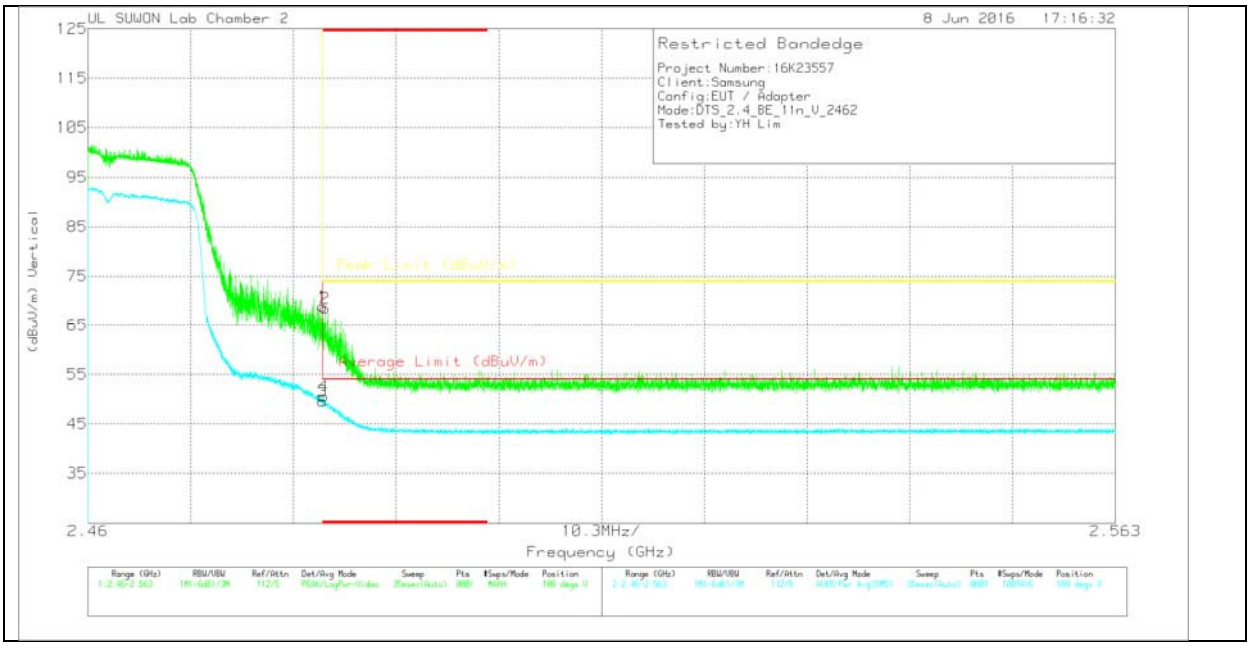
VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168724)_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	56.51	Pk	31.8	-19.4	0	68.91	-	-	74	-5.09	108	373	V
2	* 2.484	56.09	Pk	31.8	-19.4	0	68.49	-	-	74	-5.51	108	373	V
3	* 2.484	36.89	RMS	31.8	-19.4	.32	49.61	54	-4.39	-	-	108	373	V
4	* 2.484	37.8	RMS	31.8	-19.4	.32	50.52	54	-3.48	-	-	108	373	V

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

Pk - Peak detector

RMS - RMS detection

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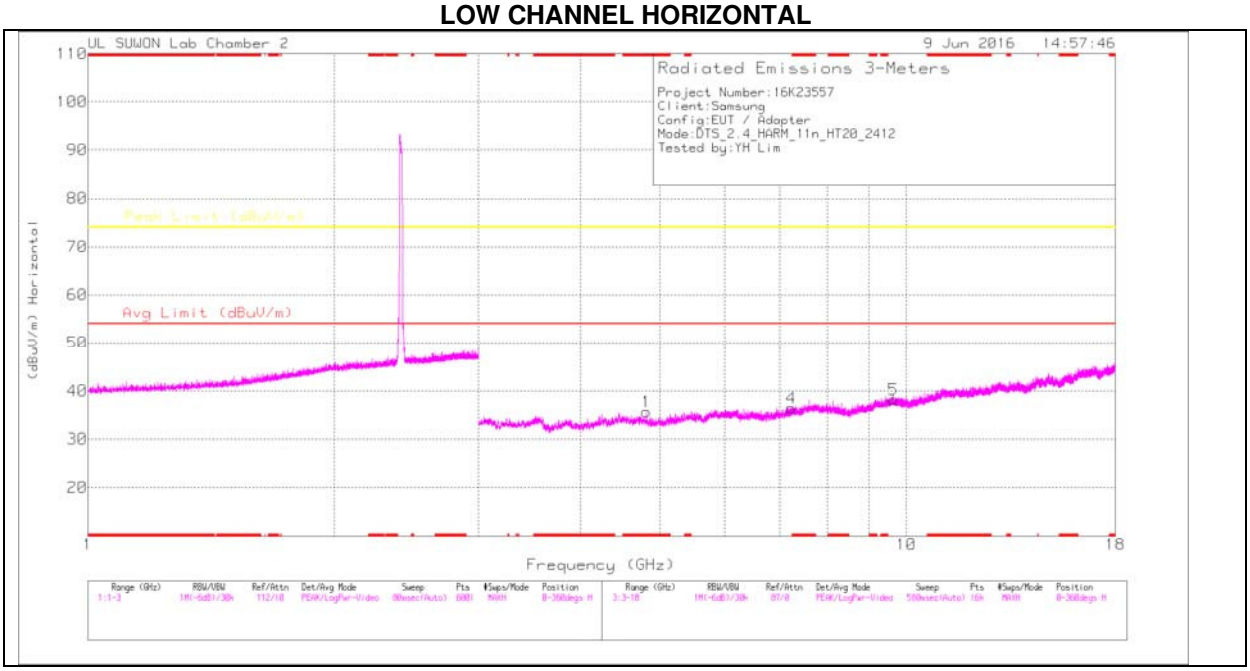
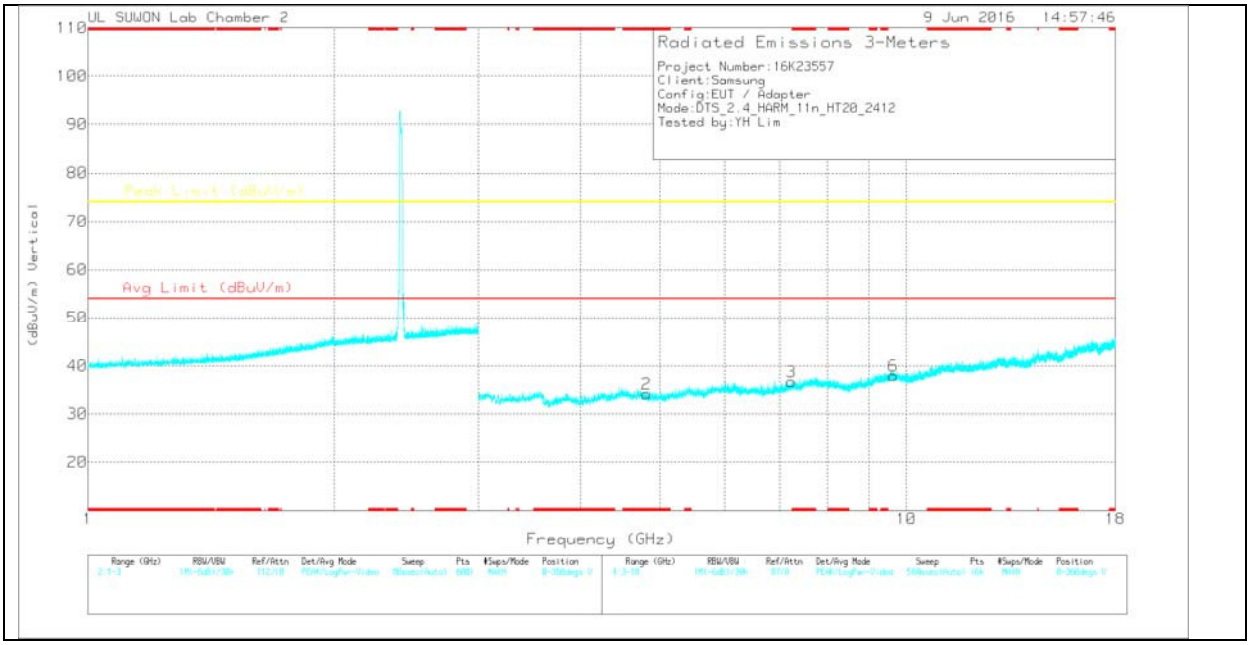
HARMONICS AND SPURIOUS EMISSIONS

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.

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LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168724)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.815	27.11	Pk	33.9	-25.3	0	35.71	-	-	74	-38.29	0-360	100	H
4	7.231	23.66	Pk	35.8	-23	0	36.46	-	-	74	-37.54	0-360	200	H
5	9.646	20.32	Pk	36.9	-19	0	38.22	-	-	74	-35.78	0-360	200	H
2	* 4.811	25.6	Pk	33.9	-25.3	0	34.2	-	-	74	-39.8	0-360	200	V
3	7.231	23.9	Pk	35.8	-23	0	36.7	-	-	74	-37.3	0-360	200	V
6	9.64	20.11	Pk	36.9	-19.1	0	37.91	-	-	74	-36.09	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 limt (54dBuV/m).

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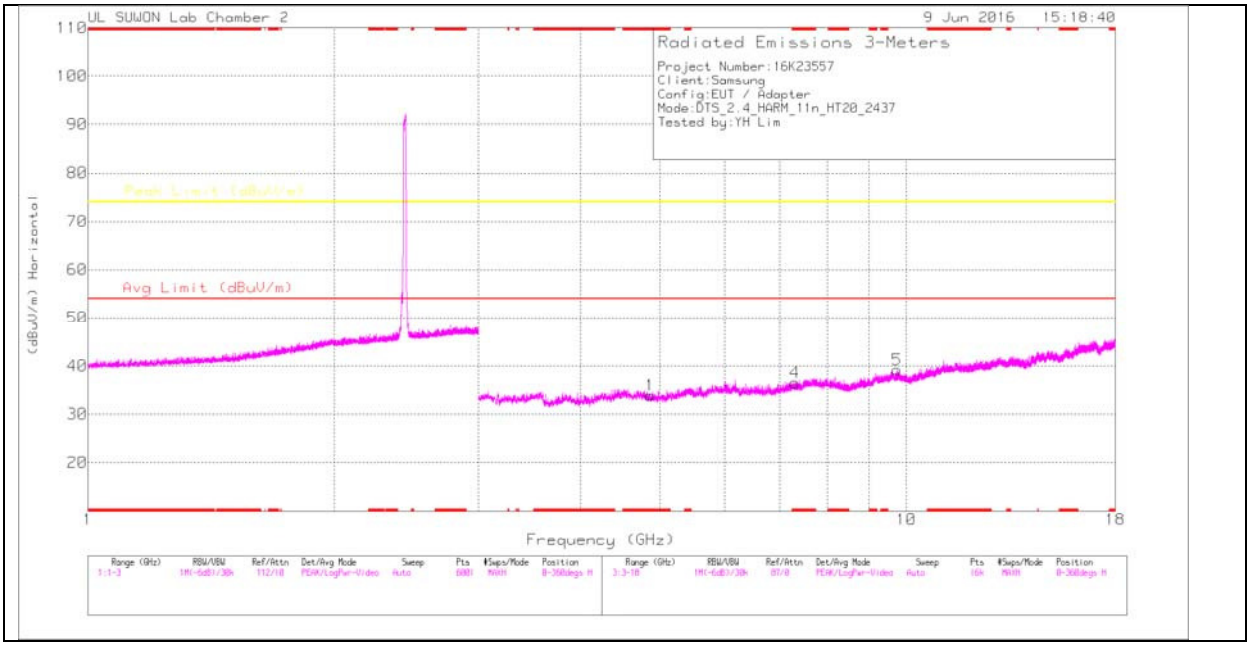
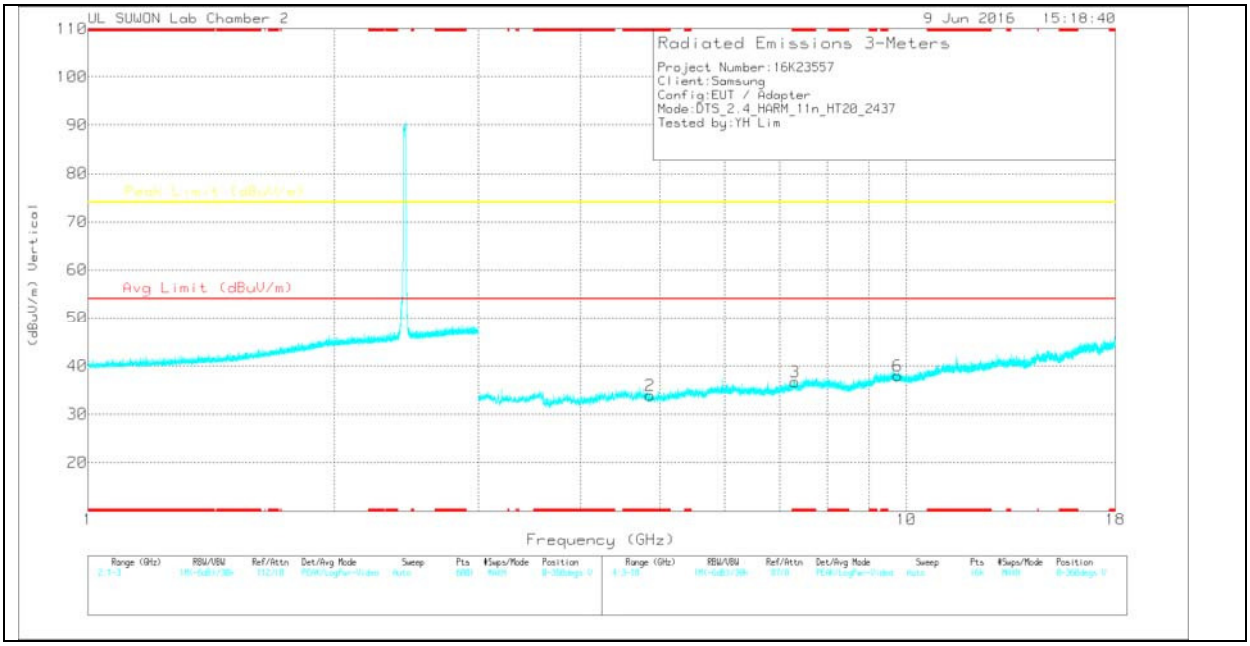
MID CHANNEL HORIZONTAL



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.

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MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168724)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.864	25.26	Pk	33.9	-25.3	0	33.86	-	-	74	-40.14	0-360	200	H
4	* 7.309	23.21	Pk	35.9	-22.6	0	36.51	-	-	74	-37.49	0-360	100	H
5	9.748	21.52	Pk	37	-19.3	0	39.22	-	-	74	-34.78	0-360	100	H
2	* 4.859	25.27	Pk	33.9	-25.3	0	33.87	-	-	74	-40.13	0-360	200	V
3	* 7.304	23.55	Pk	35.9	-22.7	0	36.75	-	-	74	-37.25	0-360	200	V
6	9.75	20.26	Pk	37	-19.3	0	37.96	-	-	74	-36.04	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 limt (54dBuV/m).

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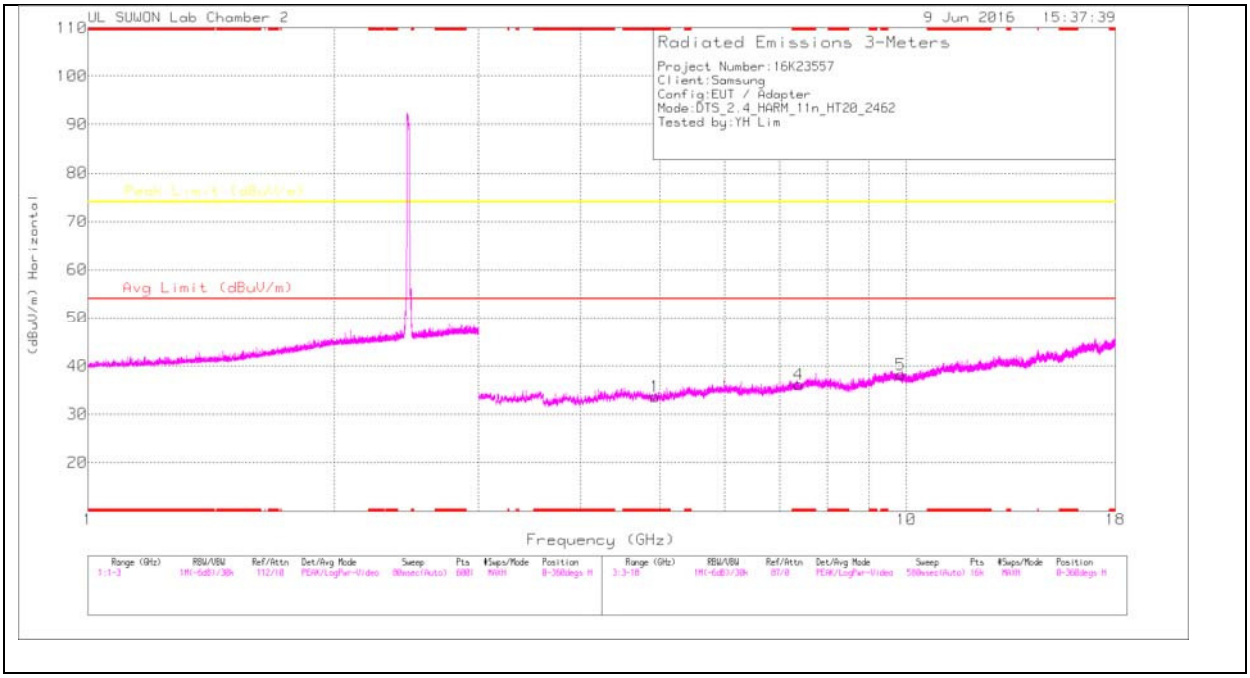
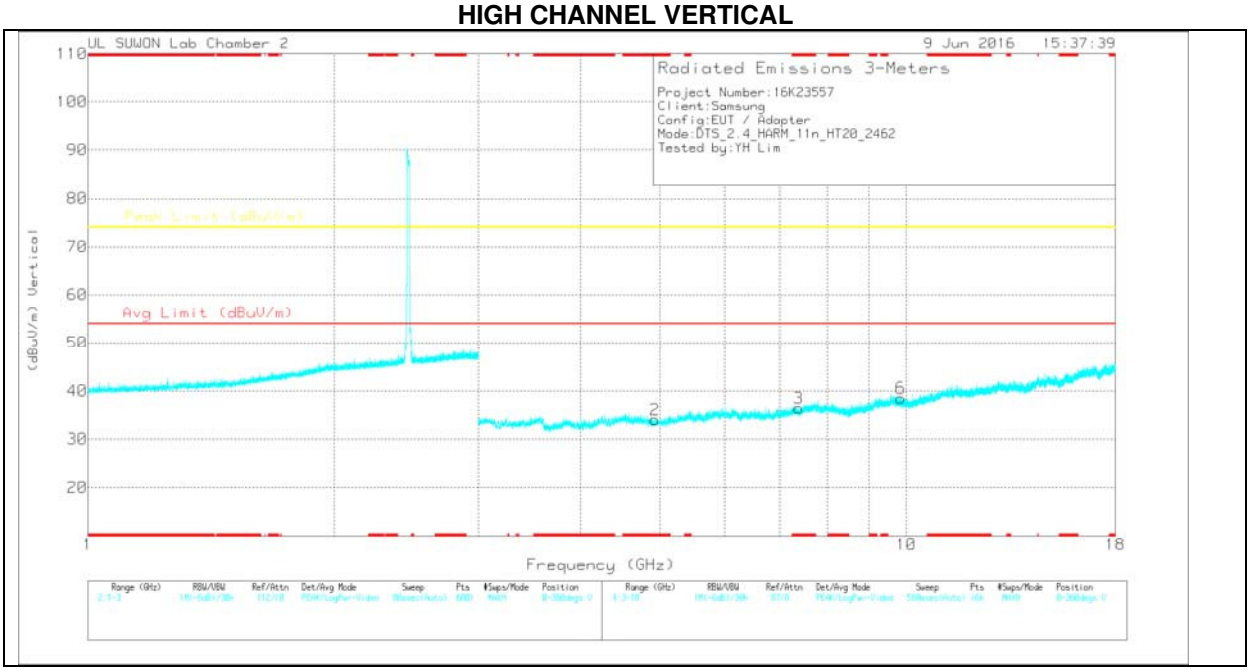
HIGH CHANNEL HORIZONTAL



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.

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HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168724)_150619	Path_3	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.929	24.83	Pk	33.9	-25.1	0	33.63	-	-	74	-40.37	0-360	200	H
4	* 7.382	22.53	Pk	35.9	-22.2	0	36.23	-	-	74	-37.77	0-360	200	H
5	9.844	20.3	Pk	37.1	-19.2	0	38.2	-	-	74	-35.8	0-360	100	H
2	* 4.932	25.24	Pk	33.9	-25.1	0	34.04	-	-	74	-39.96	0-360	100	V
3	* 7.382	22.75	Pk	35.9	-22.2	0	36.45	-	-	74	-37.55	0-360	100	V
6	9.848	20.63	Pk	37.1	-19.2	0	38.53	-	-	74	-35.47	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 limt (54dBuV/m).

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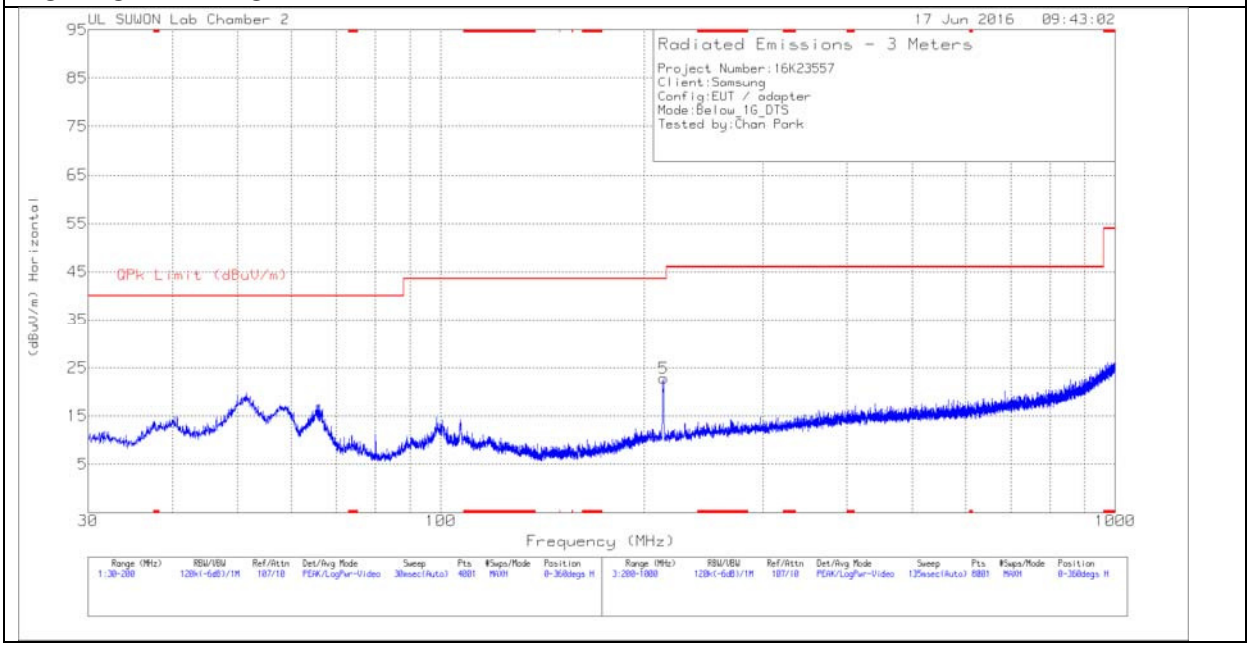
11.3. WORST-CASE BELOW 1 GHz

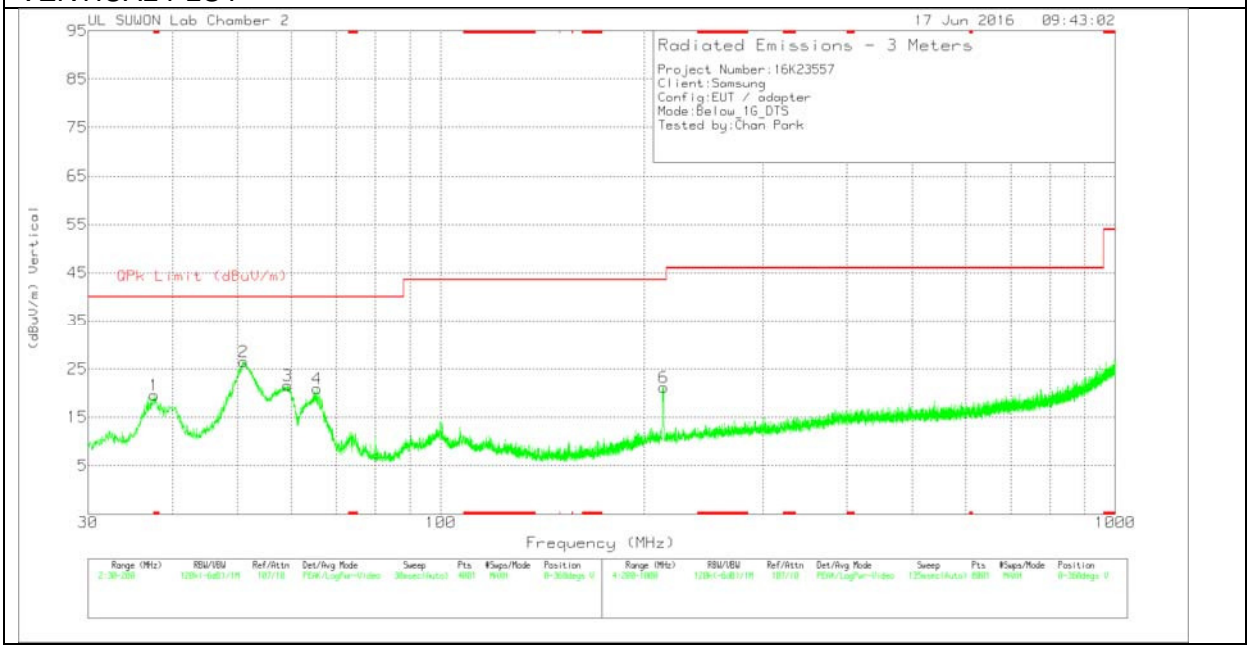
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

VERTICAL PLOT



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Below 1G Data

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163-749	Below_1G	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 37.6075	38.49	Pk	11.8	-30.8	19.49	40	-20.51	0-360	100	V
2	51.0375	43.2	Pk	14	-30.7	26.5	40	-13.5	0-360	100	V
3	59.24	39.34	Pk	12.9	-30.7	21.54	40	-18.46	0-360	100	V
4	65.4875	40.59	Pk	11.1	-30.7	20.99	40	-19.01	0-360	100	V
5	214	41.39	Pk	11.7	-30.2	22.89	43.52	-20.63	0-360	100	H
6	214	39.71	Pk	11.7	-30.2	21.21	43.52	-22.31	0-360	200	V

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

Pk - Peak detector

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12. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

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

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

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

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

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

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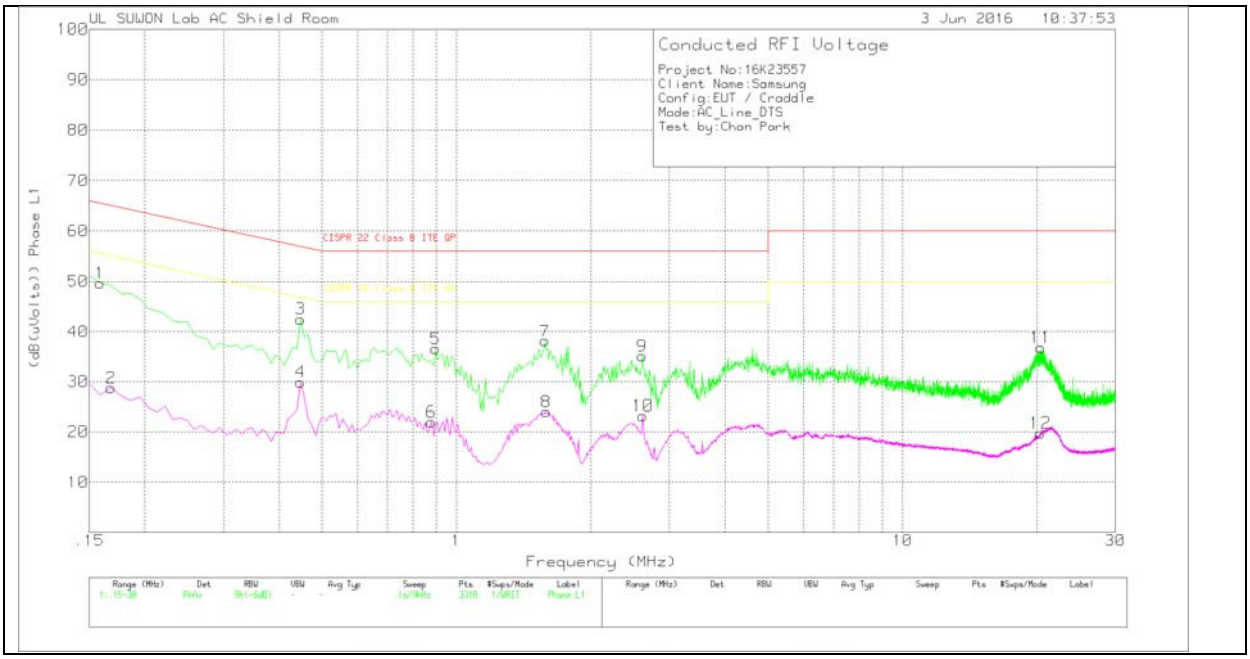
RESULTS

WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_with ex-cord_L1	CE Shield Room	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
1	.159	39.71	Pk	10	0	49.71	65.52	-15.81	-	-
2	.168	18.58	Av	10.2	0	28.78	-	-	55.06	-26.28
3	.447	32.48	Pk	10.1	0	42.58	56.93	-14.35	-	-
4	.447	19.82	Av	10.1	0	29.92	-	-	46.93	-17.01
5	.897	26.57	Pk	10	0	36.57	56	-19.43	-	-
6	.879	11.97	Av	10	0	21.97	-	-	46	-24.03
7	1.581	28.21	Pk	9.8	.1	38.11	56	-17.89	-	-
8	1.59	14.11	Av	9.8	.1	24.01	-	-	46	-21.99
9	2.607	25.2	Pk	9.8	.1	35.1	56	-20.9	-	-
10	2.616	13.31	Av	9.8	.1	23.21	-	-	46	-22.79
11	20.409	26.22	Pk	10.4	.2	36.82	60	-23.18	-	-
12	20.382	9.18	Av	10.4	.2	19.78	-	-	50	-30.22

Pk - Peak detector

Av - Average detection

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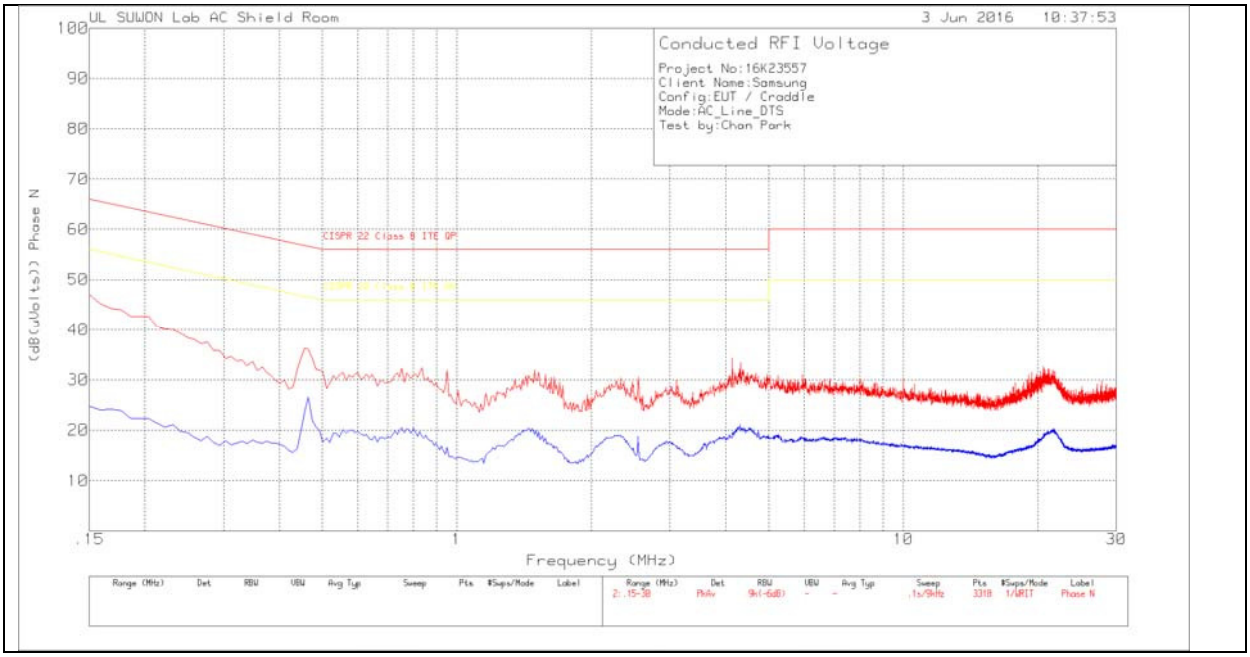
LINE 2 PLOT



LINE 2 RESULTS

Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_with 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	35.15	Pk	10	0	45.15	65.52	-20.37	-	-
14	.168	13.97	Av	10.2	0	24.17	-	-	55.06	-30.89
15	.456	26.28	Pk	10.1	0	36.38	56.77	-20.39	-	-
16	.465	16.54	Av	10.1	0	26.64	-	-	46.6	-19.96
17	.834	22.52	Pk	9.9	0	32.42	56	-23.58	-	-
18	.798	10.32	Av	10	0	20.32	-	-	46	-25.68
19	1.491	22.1	Pk	9.8	.1	32	56	-24	-	-
20	1.446	10.54	Av	9.8	.1	20.44	-	-	46	-25.56
21	4.137	24.34	Pk	9.8	.1	34.24	56	-21.76	-	-
22	4.155	9.92	Av	9.8	.1	19.82	-	-	46	-26.18
23	20.571	21.93	Pk	10.6	.2	32.73	60	-27.27	-	-
24	20.58	8.49	Av	10.6	.2	19.29	-	-	50	-30.71

Pk - Peak detector

Av - Average detection

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