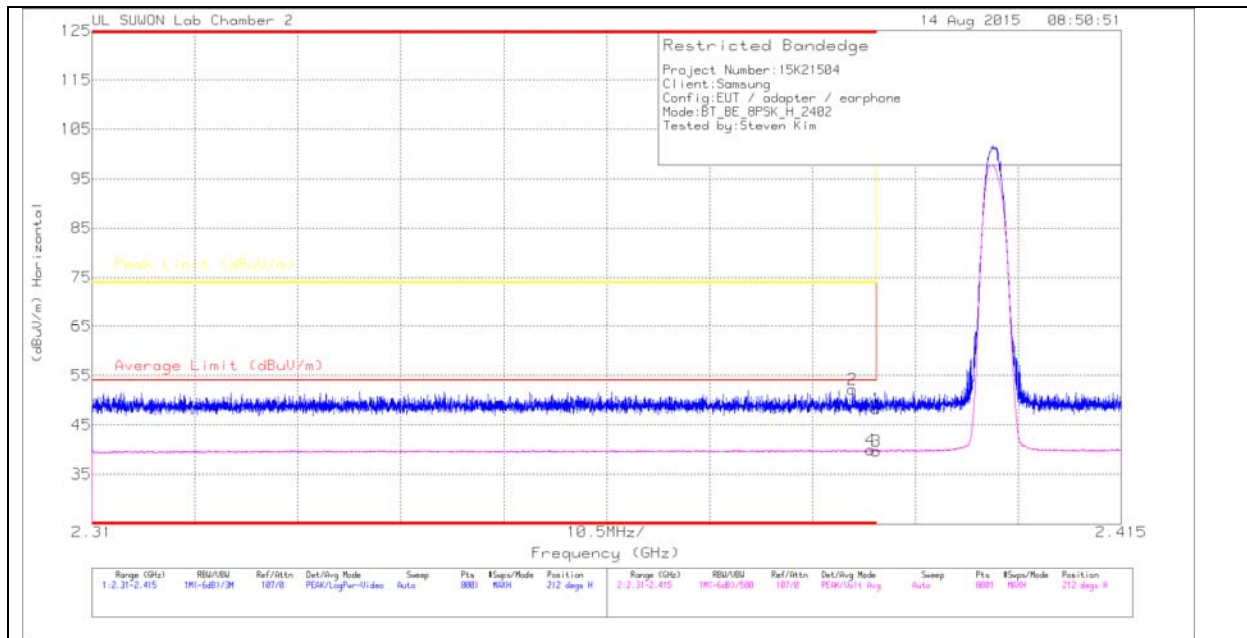


9.2.2. ENHANCED DATA RATE 8PSK MODULATION RESTRICTED BANDEDGE (LOW CHANNEL)



HORIZONTAL DATA

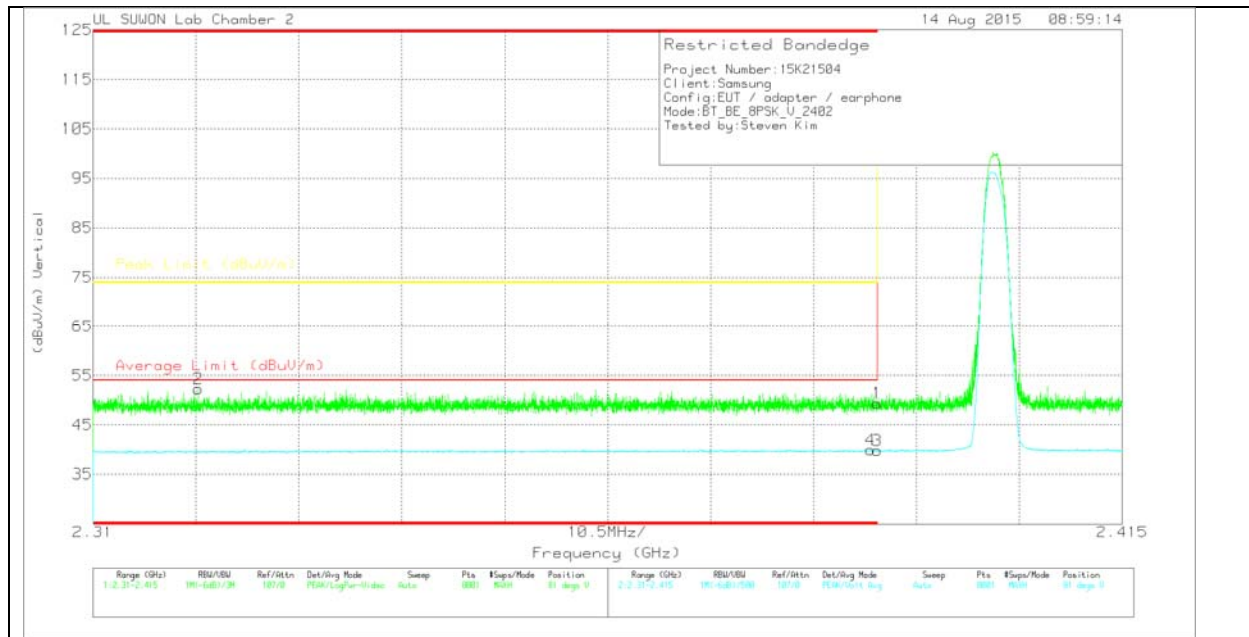
Trace Markers

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	36.02	Pk	31.7	-19.5	48.22	-	-	74	-25.78	212	356	H
2	* 2.388	39.95	Pk	31.7	-19.5	52.15	-	-	74	-21.85	212	356	H
3	* 2.39	27.48	V1TV	31.7	-19.5	39.68	54	-14.32	-	-	212	356	H
4	* 2.389	27.74	V1TV	31.7	-19.5	39.94	54	-14.06	-	-	212	356	H

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

Pk - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

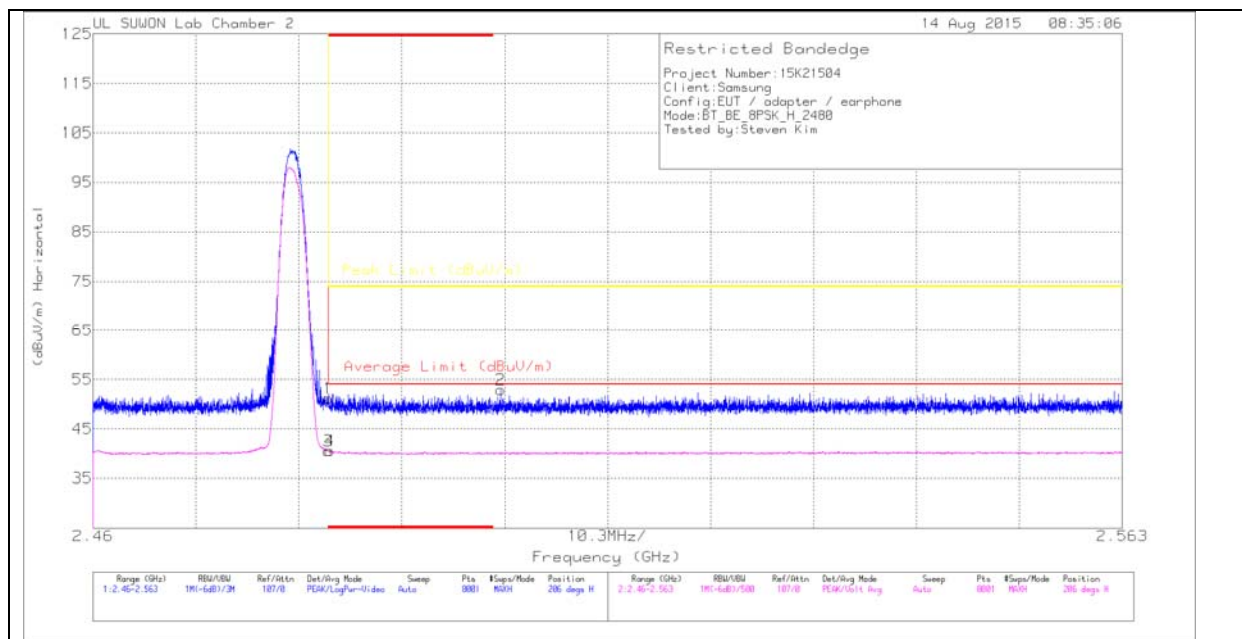
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	37.2	Pk	31.7	-19.5	49.4	-	-	74	-24.6	81	198	V
2	* 2.321	40.41	Pk	31.6	-19.7	52.31	-	-	74	-21.69	81	198	V
3	* 2.39	27.61	V1TV	31.7	-19.5	39.81	54	-14.19	-	-	81	198	V
4	* 2.389	27.75	V1TV	31.7	-19.5	39.95	54	-14.05	-	-	81	198	V

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

Pk - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

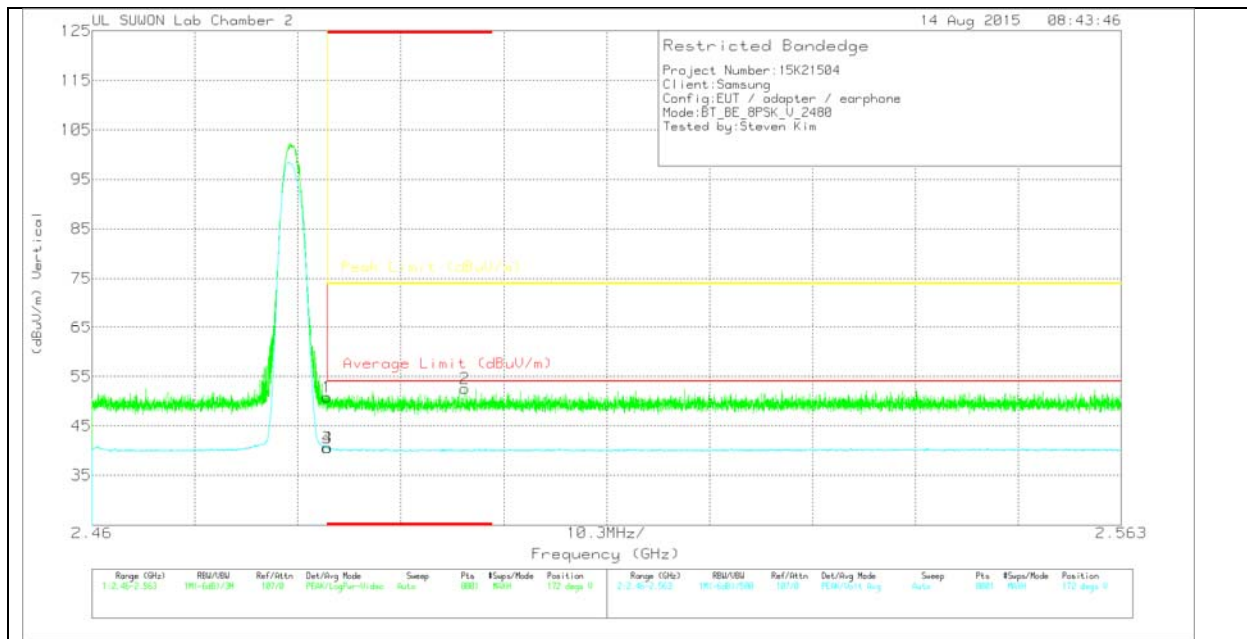
Trace Markers

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	38.75	Pk	31.8	-19.4	51.15	-	-	74	-22.85	206	277	H
2	2.501	40.31	Pk	31.9	-19.3	52.91	-	-	74	-21.09	206	277	H
3	* 2.484	28.17	V1TV	31.8	-19.4	40.57	54	-13.43	-	-	206	277	H
4	* 2.484	28.11	V1TV	31.8	-19.4	40.51	54	-13.49	-	-	206	277	H

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

Pk - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

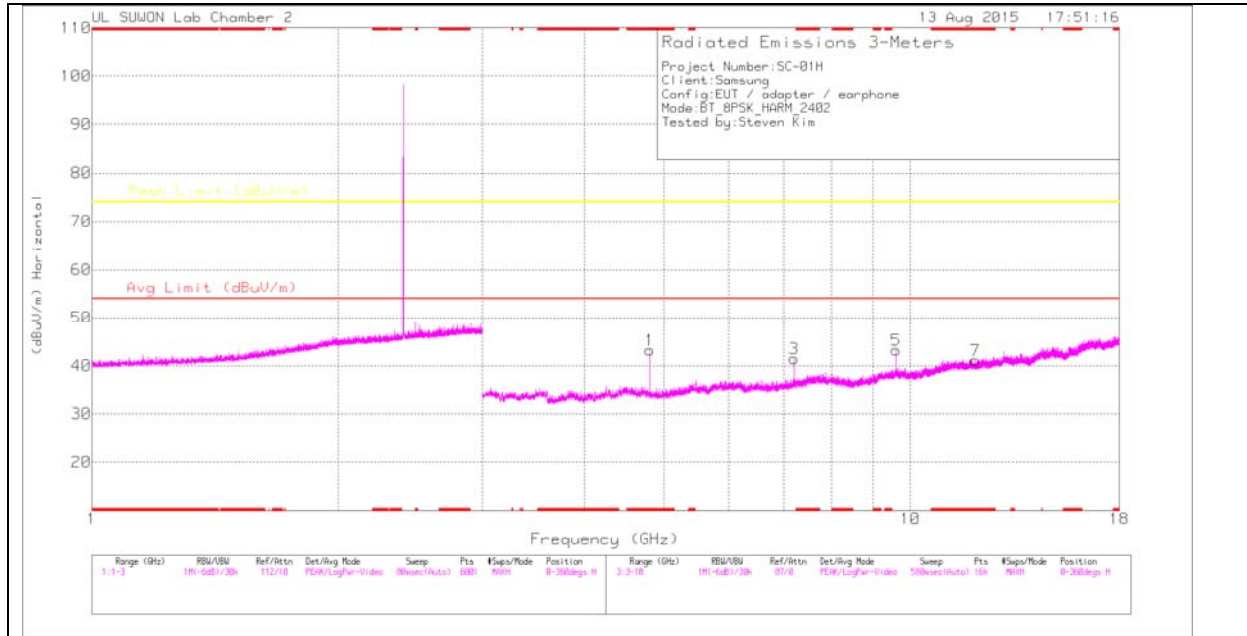
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8724)_150 619	Path_2_10 dB	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	38.45	Pk	31.8	-19.4	50.85	-	-	74	-23.15	172	331	V
2	* 2.497	40.07	Pk	31.8	-19.3	52.57	-	-	74	-21.43	172	331	V
3	* 2.484	28.15	V1TV	31.8	-19.4	40.55	54	-13.45	-	-	172	331	V
4	* 2.484	28.12	V1TV	31.8	-19.4	40.52	54	-13.48	-	-	172	331	V

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

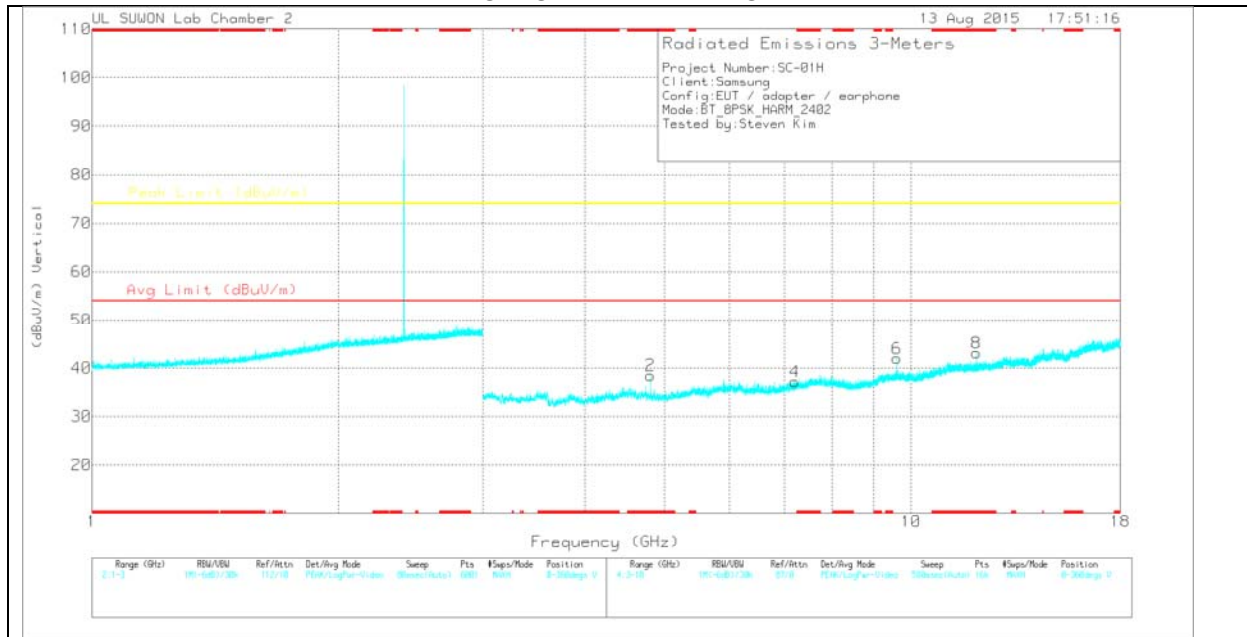
Pk - Peak detector

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(00168 724)_15061 9	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	34.65	PK	33.9	-25.3	43.25	-	-	74	-30.75	0-360	200	H
3	7.205	28.61	PK	35.8	-22.9	41.51	-	-	74	-32.49	0-360	200	H
5	9.608	25.48	PK	36.9	-19.1	43.28	-	-	74	-30.72	0-360	100	H
7	* 12.01	19.91	PK	38.7	-17.5	41.11	-	-	74	-32.89	0-360	200	H
2	* 4.804	29.93	PK	33.9	-25.3	38.53	-	-	74	-35.47	0-360	200	V
4	7.205	24.32	PK	35.8	-22.9	37.22	-	-	74	-36.78	0-360	200	V
6	9.608	24.21	PK	36.9	-19.1	42.01	-	-	74	-31.99	0-360	200	V
8	* 12.01	21.95	PK	38.7	-17.5	43.15	-	-	74	-30.85	0-360	200	V

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

PK – Peak detector

Radiated Emissions

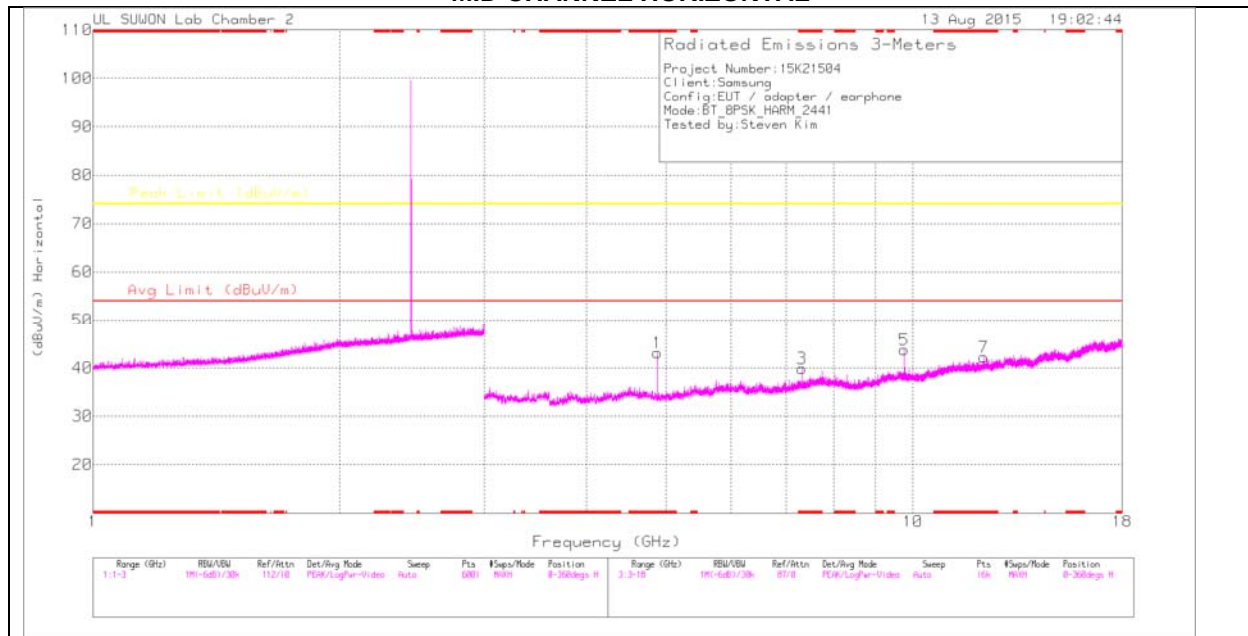
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168 724)_15061 9	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.804	43.91	PK2	33.9	-25.3	52.51	-	-	74	-21.49	217	193	H
* 4.804	33.31	VA1T	33.9	-25.3	41.91	54	-12.09	-	-	217	193	H
* 4.804	38.33	PK2	33.9	-25.3	46.93	-	-	74	-27.07	219	249	V
* 4.804	25.26	VA1T	33.9	-25.3	33.86	54	-20.14	-	-	219	249	V
7.206	39.5	PK2	35.8	-22.9	52.4	-	-	74	-21.6	98	149	H
7.206	26.87	VA1T	35.8	-22.9	39.77	-	-	-	-	98	149	H
7.206	34.42	PK2	35.8	-22.9	47.32	-	-	74	-26.68	62	105	V
7.206	20.95	VA1T	35.8	-22.9	33.85	-	-	-	-	62	105	V
9.608	33.85	PK2	36.9	-19.1	51.65	-	-	74	-22.35	180	159	H
9.608	25.01	VA1T	36.9	-19.1	42.81	-	-	-	-	180	159	H
9.608	32.99	PK2	36.9	-19.1	50.79	-	-	74	-23.21	210	131	V
9.608	22.53	VA1T	36.9	-19.1	40.33	-	-	-	-	210	131	V
* 12.01	30.93	PK2	38.7	-17.5	52.13	-	-	74	-21.87	210	140	H
* 12.01	18.96	VA1T	38.7	-17.5	40.16	54	-13.84	-	-	210	140	H
* 12.01	32.12	PK2	38.7	-17.5	53.32	-	-	74	-20.68	201	133	V
* 12.01	20.76	VA1T	38.7	-17.5	41.96	54	-12.04	-	-	201	133	V

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

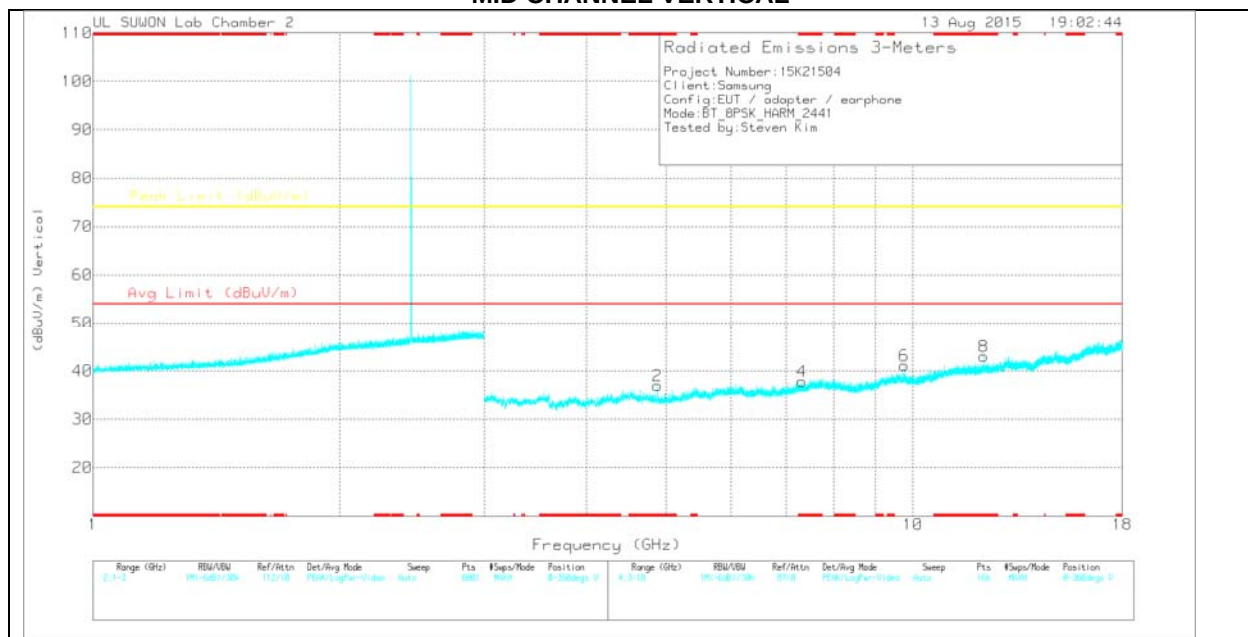
PK2 - Maximum Peak

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(00168 724)_15061 9	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	34.4	PK	33.9	-25.2	43.1	-	-	74	-30.9	0-360	200	H
3	* 7.323	26.52	PK	35.9	-22.5	39.92	-	-	74	-34.08	0-360	200	H
5	9.764	26.06	PK	37	-19.3	43.76	-	-	74	-30.24	0-360	200	H
7	* 12.205	20.69	PK	38.8	-17.2	42.29	-	-	74	-31.71	0-360	200	H
2	* 4.881	28.28	PK	33.9	-25.2	36.98	-	-	74	-37.02	0-360	200	V
4	* 7.323	24.45	PK	35.9	-22.5	37.85	-	-	74	-36.15	0-360	200	V
6	9.764	23.47	PK	37	-19.3	41.17	-	-	74	-32.83	0-360	200	V
8	* 12.205	21.38	PK	38.8	-17.2	42.98	-	-	74	-31.02	0-360	100	V

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

PK – Peak detector

Radiated Emissions

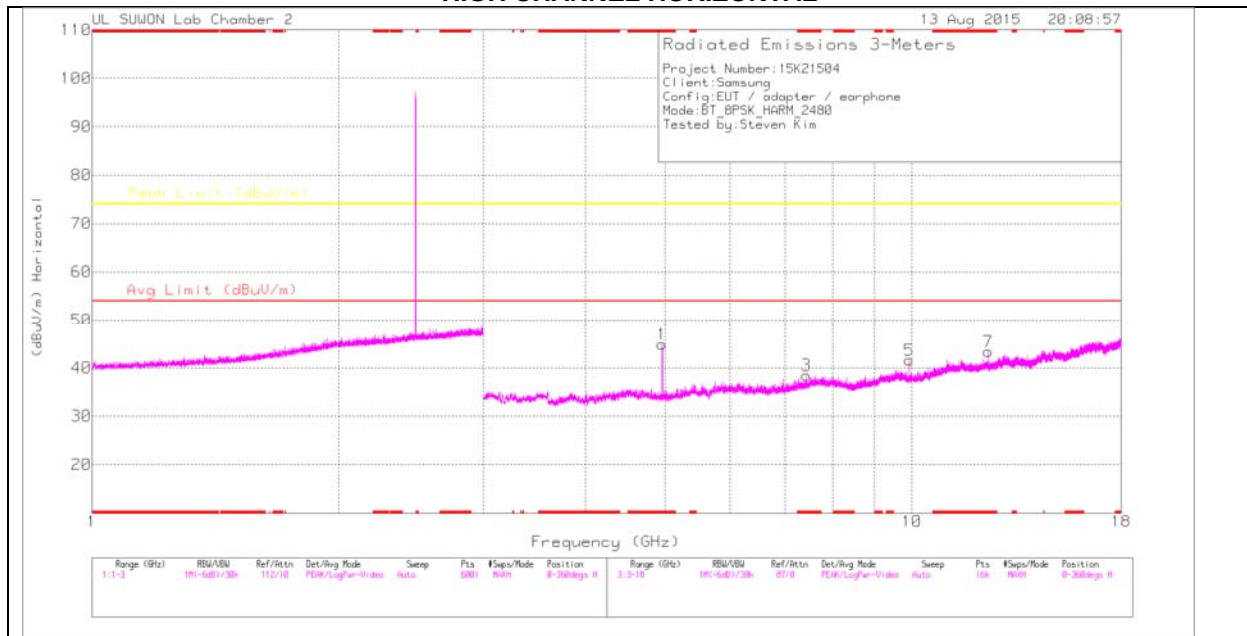
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168 724)_15061 9	Path_3	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.882	44.66	PK2	33.9	-25.2	53.36	-	-	74	-20.64	207	263	H
* 4.882	34.03	VA1T	33.9	-25.2	42.73	54	-11.27	-	-	207	263	H
* 4.882	40.51	PK2	33.9	-25.2	49.21	-	-	74	-24.79	193	272	V
* 4.882	28.46	VA1T	33.9	-25.2	37.16	54	-16.84	-	-	193	272	V
* 7.323	38.61	PK2	35.9	-22.5	52.01	-	-	74	-21.99	95	145	H
* 7.323	25.91	VA1T	35.9	-22.5	39.31	54	-14.69	-	-	95	145	H
* 7.323	34.87	PK2	35.9	-22.5	48.27	-	-	74	-25.73	279	390	V
* 7.318	19.86	VA1T	35.9	-22.6	33.16	54	-20.84	-	-	279	390	V
9.764	33.96	PK2	37	-19.3	51.66	-	-	74	-22.34	189	145	H
9.764	24.99	VA1T	37	-19.3	42.69	-	-	-	-	189	145	H
9.76	31.01	PK2	37	-19.3	48.71	-	-	74	-25.29	184	236	V
9.764	17.84	VA1T	37	-19.3	35.54	-	-	-	-	184	236	V
* 12.205	31.88	PK2	38.8	-17.2	53.48	-	-	74	-20.52	210	155	H
* 12.205	19.05	VA1T	38.8	-17.2	40.65	54	-13.35	-	-	210	155	H
* 12.205	31.49	PK2	38.8	-17.2	53.09	-	-	74	-20.91	197	134	V
* 12.205	20.23	VA1T	38.8	-17.2	41.83	54	-12.17	-	-	197	134	V

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

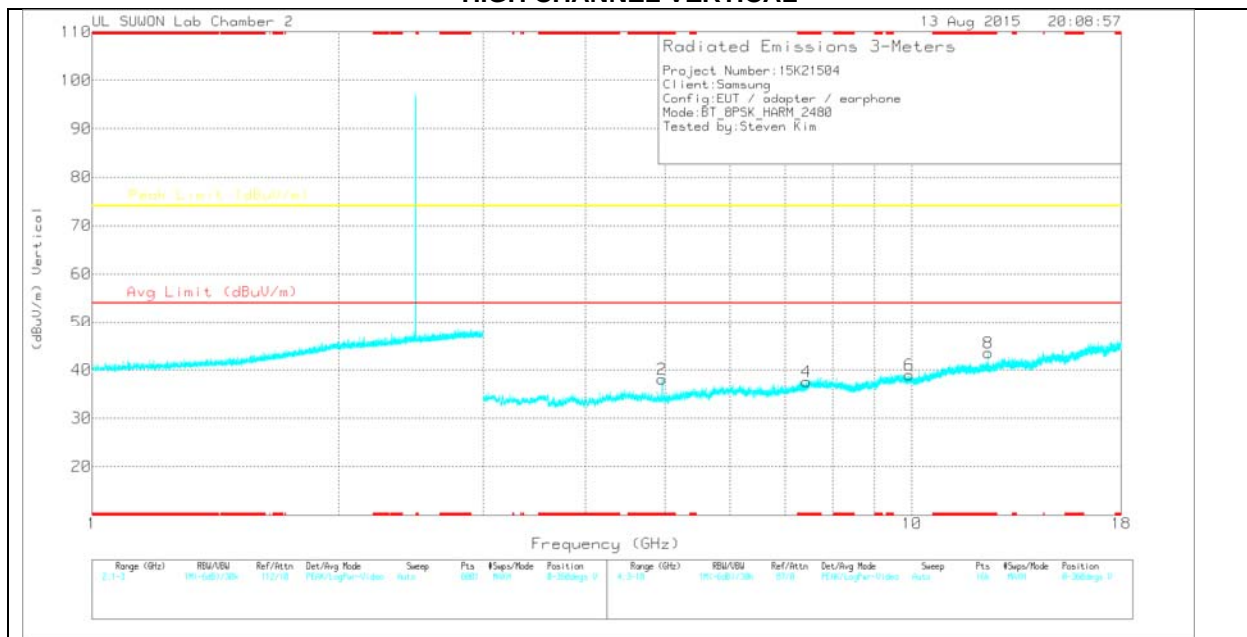
PK2 - Maximum Peak

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(00168 724)_15061 9	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	35.98	PK	33.9	-25	44.88	-	-	74	-29.12	0-360	200	H
3	* 7.44	24.63	PK	36	-22.1	38.53	-	-	74	-35.47	0-360	200	H
5	9.92	23.54	PK	37.1	-19	41.64	-	-	74	-32.36	0-360	200	H
7	* 12.4	21.86	PK	38.8	-17.3	43.36	-	-	74	-30.64	0-360	200	H
2	* 4.959	29.22	PK	33.9	-25	38.12	-	-	74	-35.88	0-360	100	V
4	* 7.437	23.66	PK	36	-22.1	37.56	-	-	74	-36.44	0-360	200	V
6	9.92	20.91	PK	37.1	-19	39.01	-	-	74	-34.99	0-360	200	V
8	* 12.401	22.02	PK	38.8	-17.3	43.52	-	-	74	-30.48	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(00168 724)_15061 9	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	43	PK2	33.9	-25	51.9	-	-	74	-22.1	175	347	H
* 4.96	32.41	VA1T	33.9	-25	41.31	54	-12.69	-	-	175	347	H
* 4.96	39.69	PK2	33.9	-25	48.59	-	-	74	-25.41	182	328	V
* 4.96	27.82	VA1T	33.9	-25	36.72	54	-17.28	-	-	182	328	V
* 7.44	35.79	PK2	36	-22.1	49.69	-	-	74	-24.31	138	190	H
* 7.44	22.26	VA1T	36	-22.1	36.16	54	-17.84	-	-	138	190	H
* 7.44	35.25	PK2	36	-22.1	49.15	-	-	74	-24.85	197	277	V
* 7.44	22.64	VA1T	36	-22.1	36.54	54	-17.46	-	-	197	277	V
9.92	32.01	PK2	37.1	-19	50.11	-	-	74	-23.89	167	177	H
9.92	22.96	VA1T	37.1	-19	41.06	-	-	-	-	167	177	H
9.917	31.53	PK2	37.1	-19	49.63	-	-	74	-24.37	291	186	V
9.916	16.62	VA1T	37.1	-19	34.72	-	-	-	-	291	186	V
* 12.4	31.73	PK2	38.8	-17.3	53.23	-	-	74	-20.77	220	145	H
* 12.4	19.37	VA1T	38.8	-17.3	40.87	54	-13.13	-	-	220	145	H
* 12.399	30.52	PK2	38.8	-17.3	52.02	-	-	74	-21.98	225	197	V
* 12.398	15.61	VA1T	38.8	-17.3	37.11	54	-16.89	-	-	225	197	V

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

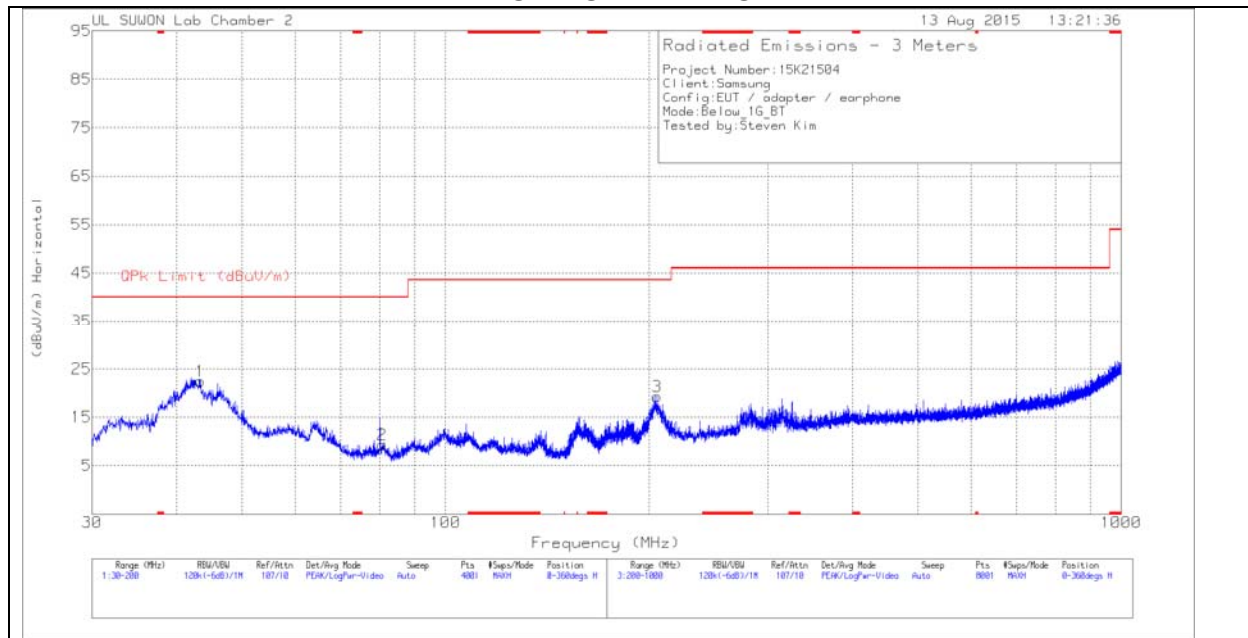
PK2 - Maximum Peak

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

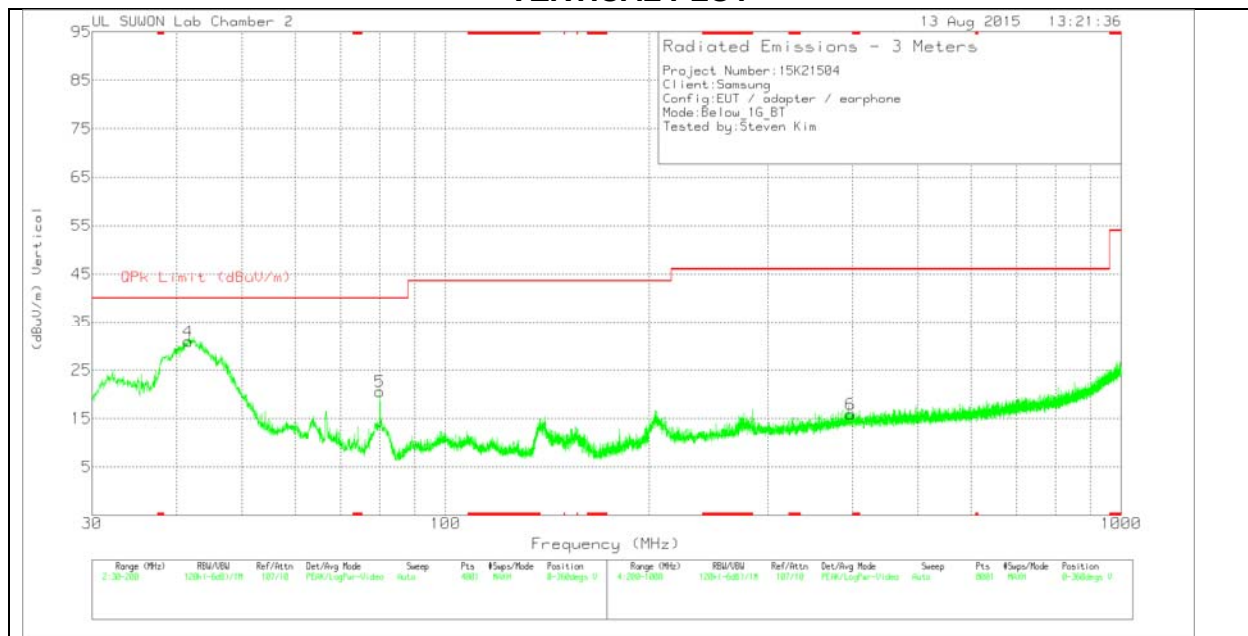
9.3. WORST-CASE BELOW 1 GHz

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	DC Corr (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	43.43	39.71	Pk	13.5	-30.7	0	22.51	40	-17.49	0-360	400	H
2	80.66	32.71	Pk	7.2	-30.6	0	9.31	40	-30.69	0-360	400	H
4	41.645	48.54	Pk	13.1	-30.7	0	30.94	40	-9.06	0-360	100	V
5	79.98	44.01	Pk	7.1	-30.6	0	20.51	40	-19.49	0-360	200	V
3	205.7	38.09	Pk	11.5	-30.3	0	19.29	43.52	-24.23	0-360	100	H
6	397.4	30.4	Pk	15.2	-29.7	0	15.9	46.02	-30.12	0-360	400	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.

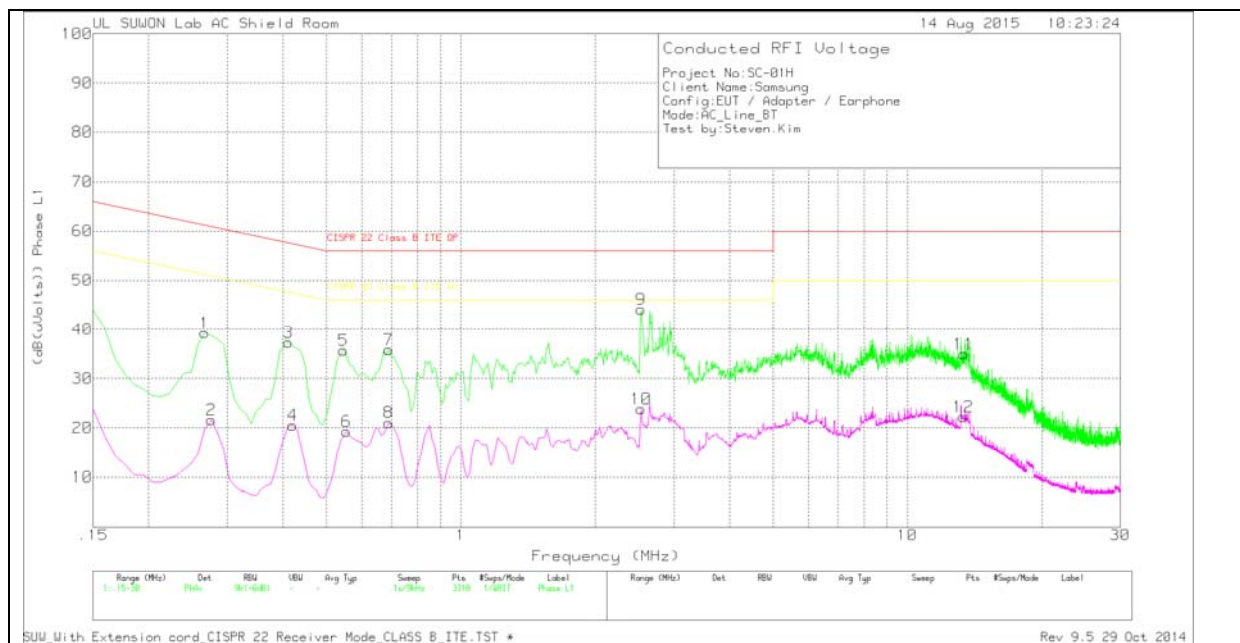
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

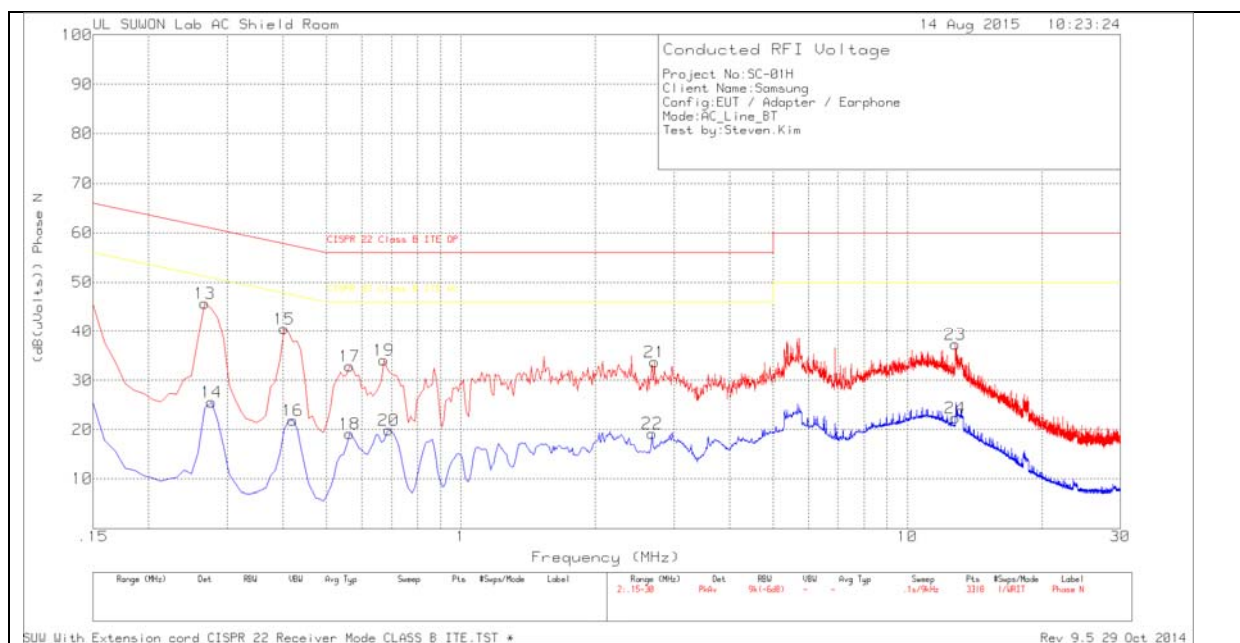
Phase L1 .15 - 30MHz

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	.267	29.56	Pk	9.8	0	39.36	61.21	-21.85	-	-
2	.276	11.79	Av	9.8	0	21.59	-	-	50.94	-29.35
3	.411	27.26	Pk	10.1	0	37.36	57.63	-20.27	-	-
4	.42	10.46	Av	10.1	0	20.56	-	-	47.45	-26.89
5	.546	25.59	Pk	10.1	0	35.69	56	-20.31	-	-
6	.555	9.15	Av	10.1	0	19.25	-	-	46	-26.75
7	.69	25.75	Pk	10.1	0	35.85	56	-20.15	-	-
8	.69	10.96	Av	10.1	0	21.06	-	-	46	-24.94
9	2.535	34.24	Pk	9.8	.1	44.14	56	-11.86	-	-
10	2.535	13.98	Av	9.8	.1	23.88	-	-	46	-22.12
11	13.362	24.7	Pk	10.1	.2	35	60	-25	-	-
12	13.335	11.94	Av	10.1	.2	22.24	-	-	50	-27.76

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	.267	36.06	Pk	9.7	0	45.76	61.21	-15.45	-	-
14	.276	15.76	Av	9.8	0	25.56	-	-	50.94	-25.38
15	.402	30.49	Pk	10.1	0	40.59	57.81	-17.22	-	-
16	.42	11.78	Av	10.1	0	21.88	-	-	47.45	-25.57
17	.564	22.72	Pk	10.1	0	32.82	56	-23.18	-	-
18	.564	8.99	Av	10.1	0	19.09	-	-	46	-26.91
19	.672	24.14	Pk	10	0	34.14	56	-21.86	-	-
20	.69	9.89	Av	10	0	19.89	-	-	46	-26.11
21	2.715	23.83	Pk	9.8	.1	33.73	56	-22.27	-	-
22	2.679	9.3	Av	9.8	.1	19.2	-	-	46	-26.8
23	12.804	26.92	Pk	10.2	.2	37.32	60	-22.68	-	-
24	12.804	11.98	Av	10.2	.2	22.38	-	-	50	-27.62

Pk - Peak detector

Av - Average detection