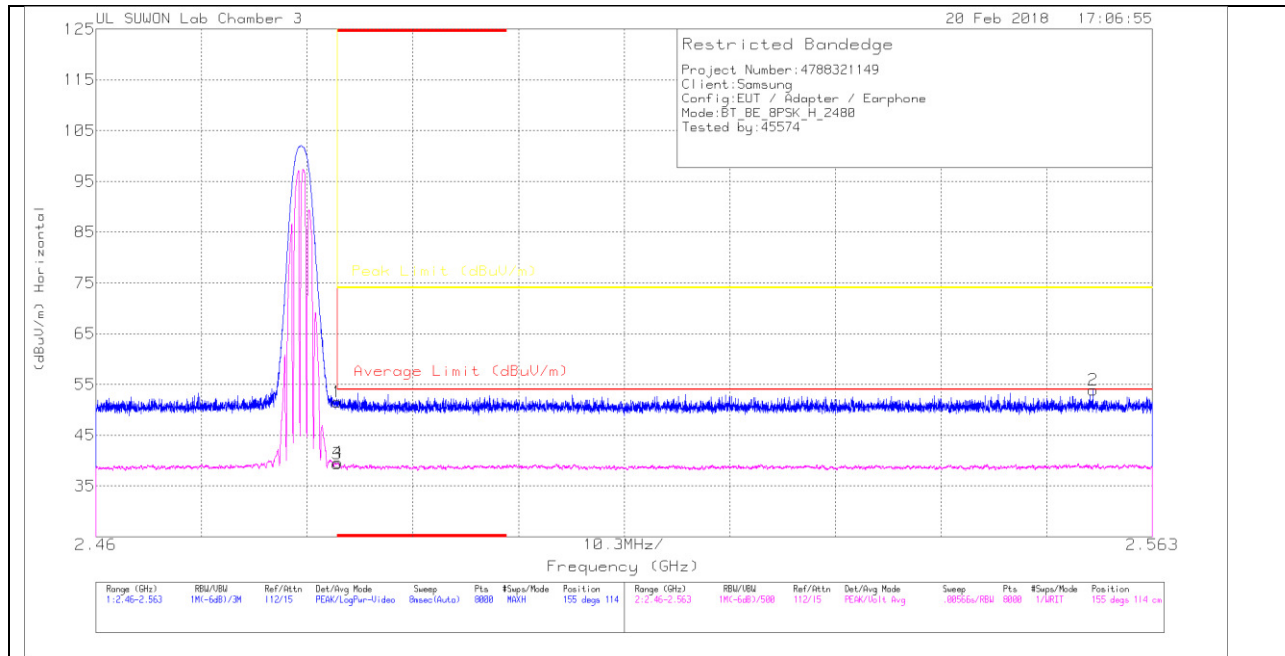


AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

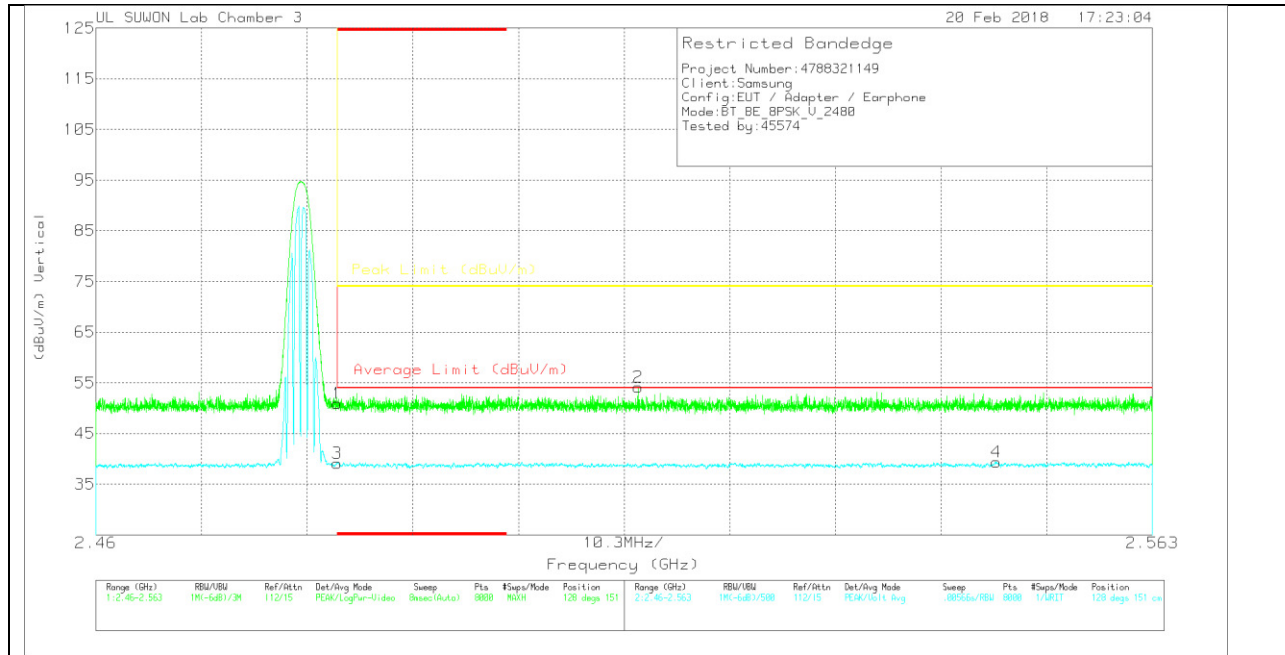
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[00205959]	10dB_ATT[dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	42.38	Pk	32.1	-23	51.48	-	-	74	-22.52	155	114	H
2	2.557	44.82	Pk	32.1	-23	53.92	-	-	74	-20.08	155	114	H
3	* 2.484	30.28	VA1T	32.1	-23	39.38	54	-14.62	-	-	155	114	H
4	* 2.484	30.46	VA1T	32.1	-23	39.56	54	-14.44	-	-	155	114	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-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(00205959)	10dB_ATT(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	41.76	Pk	32.1	-23	50.86	-	-	74	-23.14	128	151	V
2	2.513	45.09	Pk	32.1	-23	54.19	-	-	74	-19.81	128	151	V
3	* 2.484	30.01	VA1T	32.1	-23	39.11	54	-14.89	-	-	128	151	V
4	2.548	30.29	VA1T	32.1	-23	39.39	54	-14.61	-	-	128	151	V

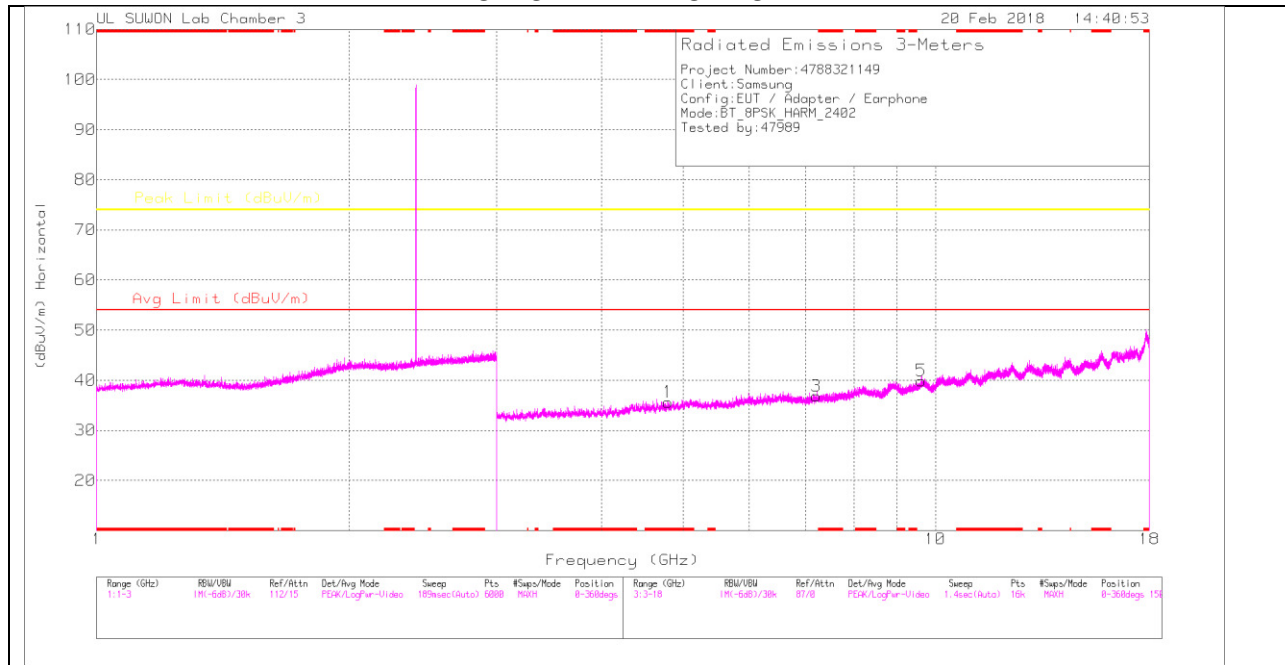
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

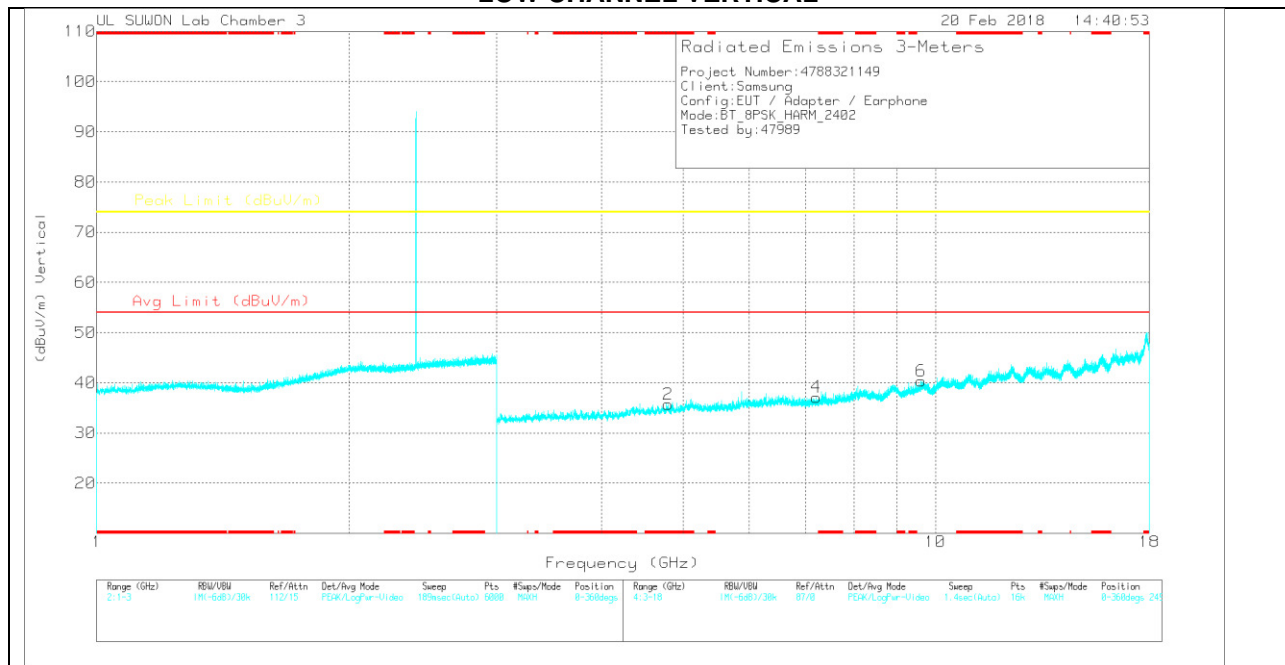
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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

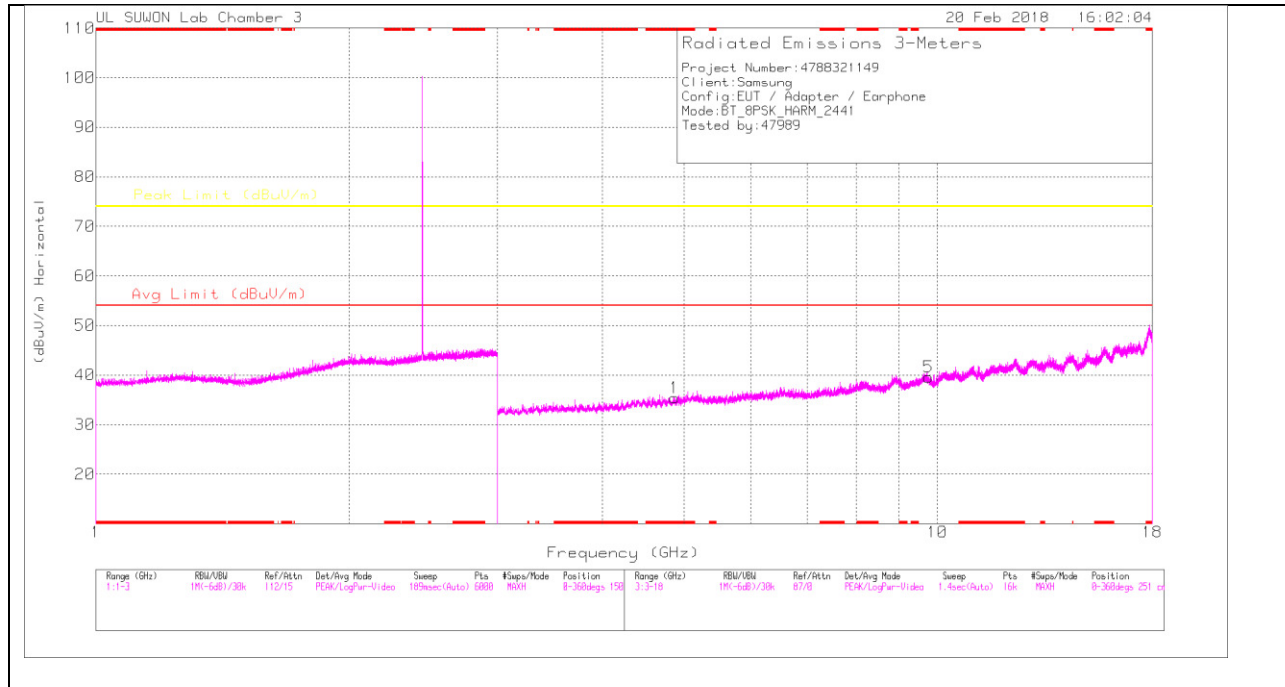
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[00205959]	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.798	29.94	PK	33.9	-28.2	35.64	-	-	74	-38.36	0-360	250	H
3	7.209	25.12	PK	35.6	-23.9	36.82	-	-	74	-37.18	0-360	150	H
5	9.616	23.1	PK	36.7	-19.9	39.9	-	-	74	-34.1	0-360	250	H
2	* 4.8	30.04	PK	33.9	-28.2	35.74	-	-	74	-38.26	0-360	249	V
4	7.208	25.55	PK	35.6	-24	37.15	-	-	74	-36.85	0-360	249	V
6	9.62	23.43	PK	36.7	-19.8	40.33	-	-	74	-33.67	0-360	249	V

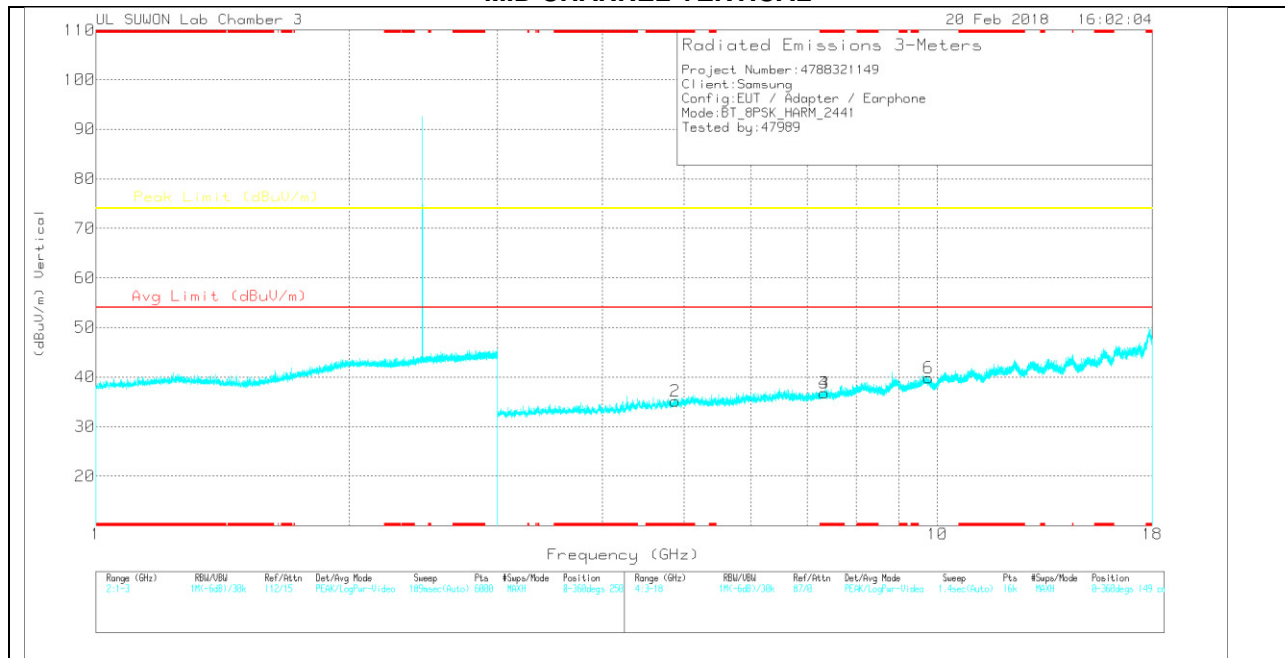
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

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

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

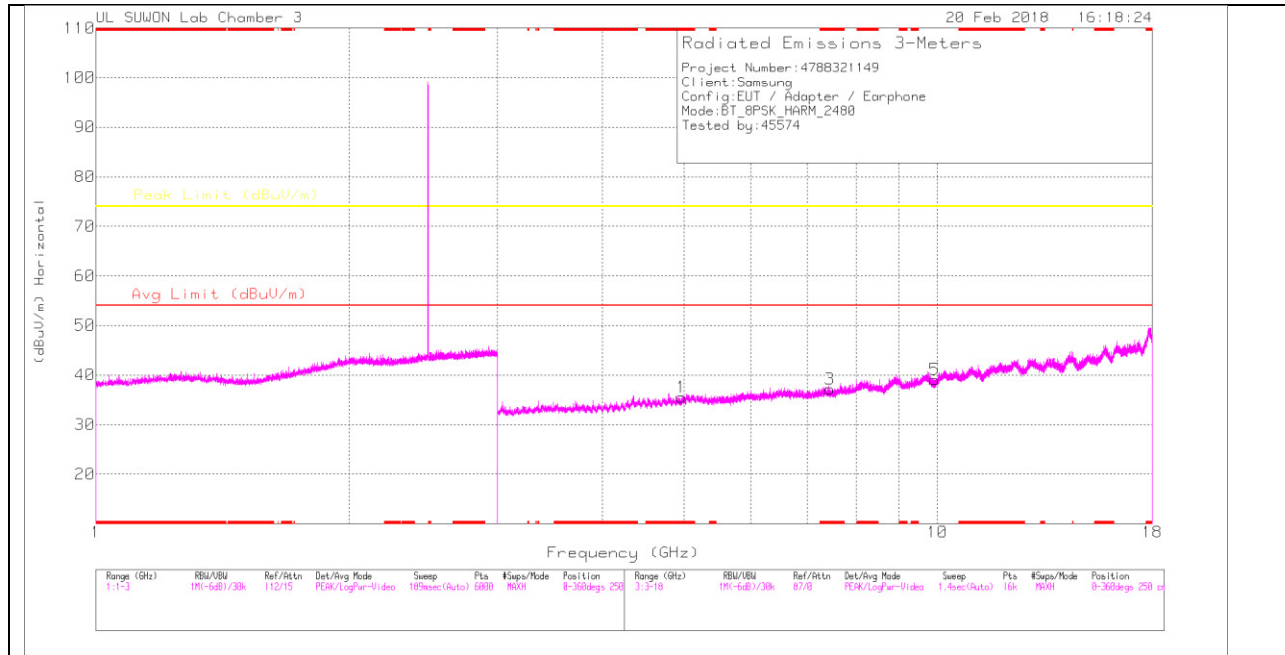
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[00205959]	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.875	30.32	PK	34	-28.9	35.42	-	-	74	-38.58	0-360	251	H
5	9.757	22.21	PK	36.9	-19.5	39.61	-	-	74	-34.39	0-360	150	H
2	* 4.884	30.03	PK	34	-28.9	35.13	-	-	74	-38.87	0-360	250	V
3	* 7.33	24.53	PK	35.6	-23.3	36.83	-	-	74	-37.17	0-360	149	V
4	* 7.33	24.53	PK	35.6	-23.3	36.83	-	-	74	-37.17	0-360	149	V
6	9.764	22.39	PK	36.9	-19.5	39.79	-	-	74	-34.21	0-360	250	V

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

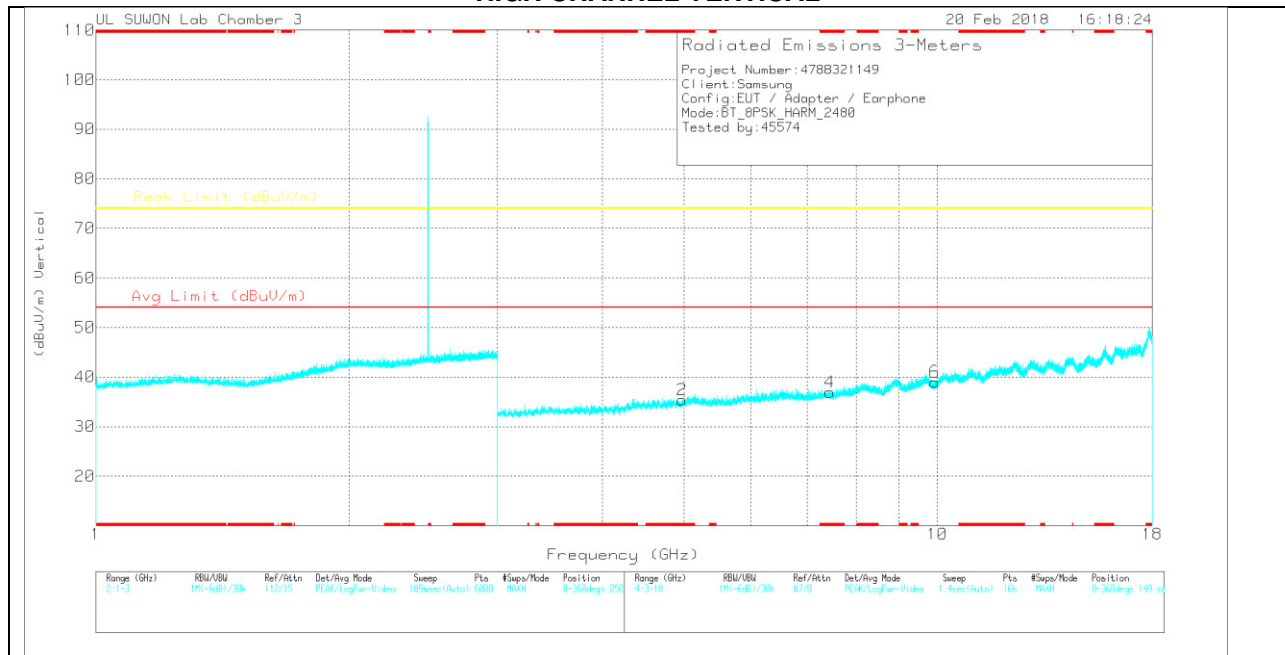
PK – Peak Detector

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

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[00205959]	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.964	29.88	PK	34.1	-28.5	35.48	-	-	74	-38.52	0-360	150	H
3	* 7.449	24.88	PK	35.6	-23.3	37.18	-	-	74	-36.82	0-360	150	H
5	9.928	21.8	PK	37	-19.7	39.1	-	-	74	-34.9	0-360	250	H
2	* 4.969	29.71	PK	34.1	-28.4	35.41	-	-	74	-38.59	0-360	250	V
4	* 7.447	24.61	PK	35.6	-23.3	36.91	-	-	74	-37.09	0-360	149	V
6	9.927	21.61	PK	37	-19.6	39.01	-	-	74	-34.99	0-360	149	V

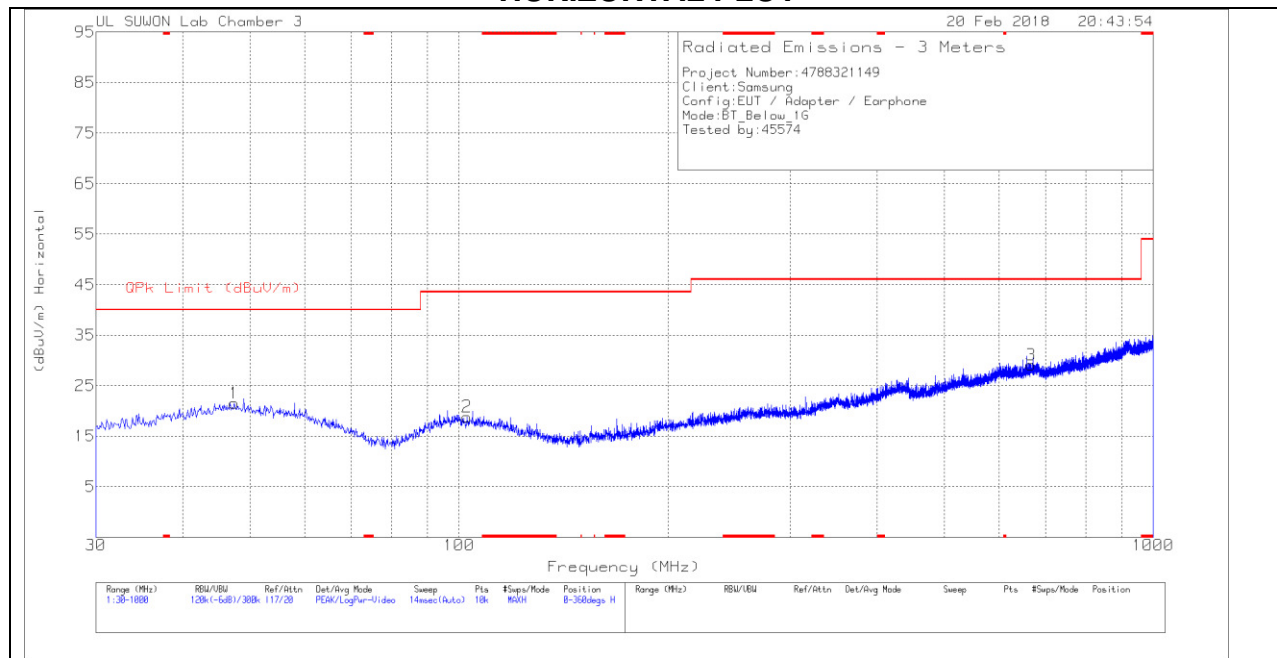
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK – Peak Detector

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

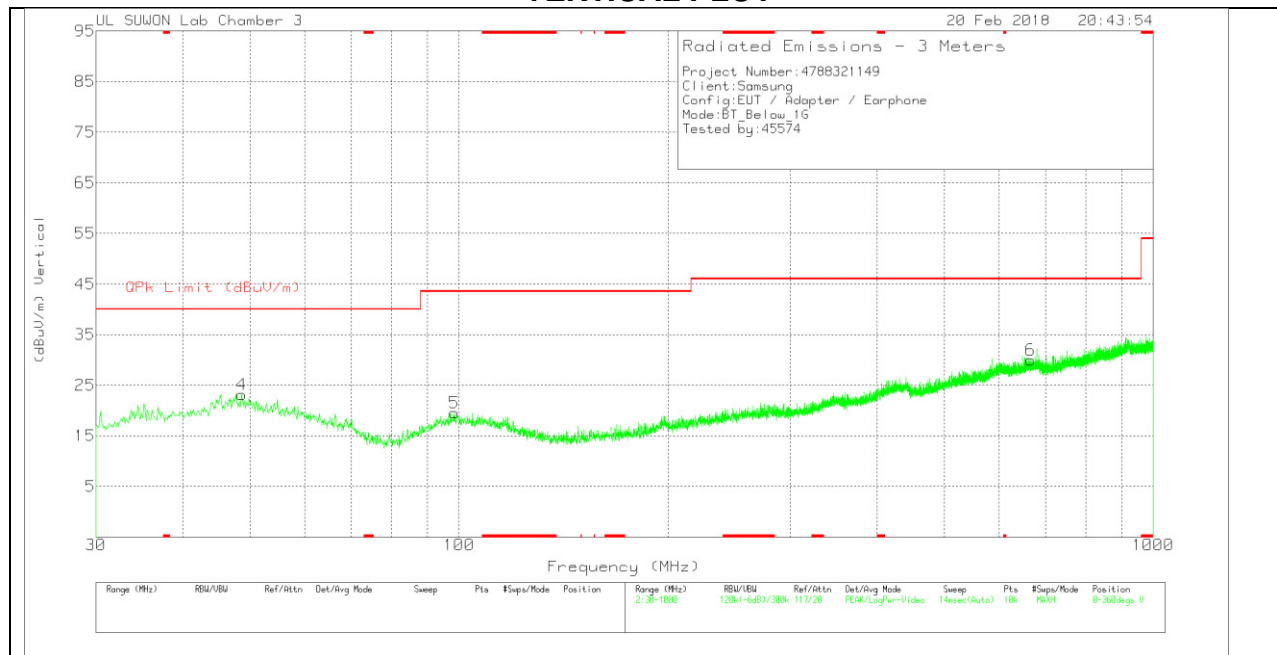
10.3. WORST-CASE BELOW 1 GHz

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	VULB9163-845	30-1000MHz[dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	47.4618	33.4	Pk	20.1	-32	21.5	40	-18.5	0-360	400	H
2	102.6605	32.46	Pk	17.8	-31.4	18.86	43.52	-24.66	0-360	400	H
3	667.0647	33.7	Pk	25.3	-29.9	29.1	46.02	-16.92	0-360	400	H
4	48.6259	35.04	Pk	20.1	-32	23.14	40	-16.86	0-360	100	V
5	98.5861	33.47	Pk	17.6	-31.5	19.57	43.52	-23.95	0-360	100	V
6	665.2215	33.89	Pk	25.3	-29.2	29.99	46.02	-16.03	0-360	400	V

Pk - Peak detector

11. 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.

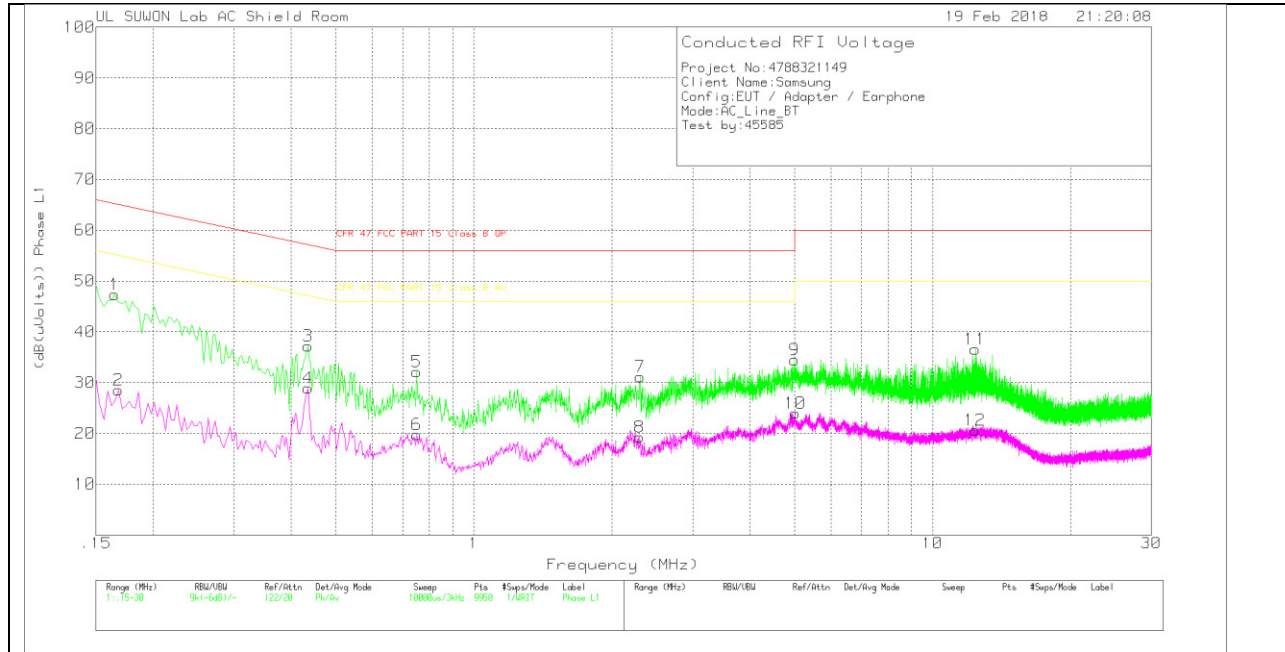
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

Trace Markers

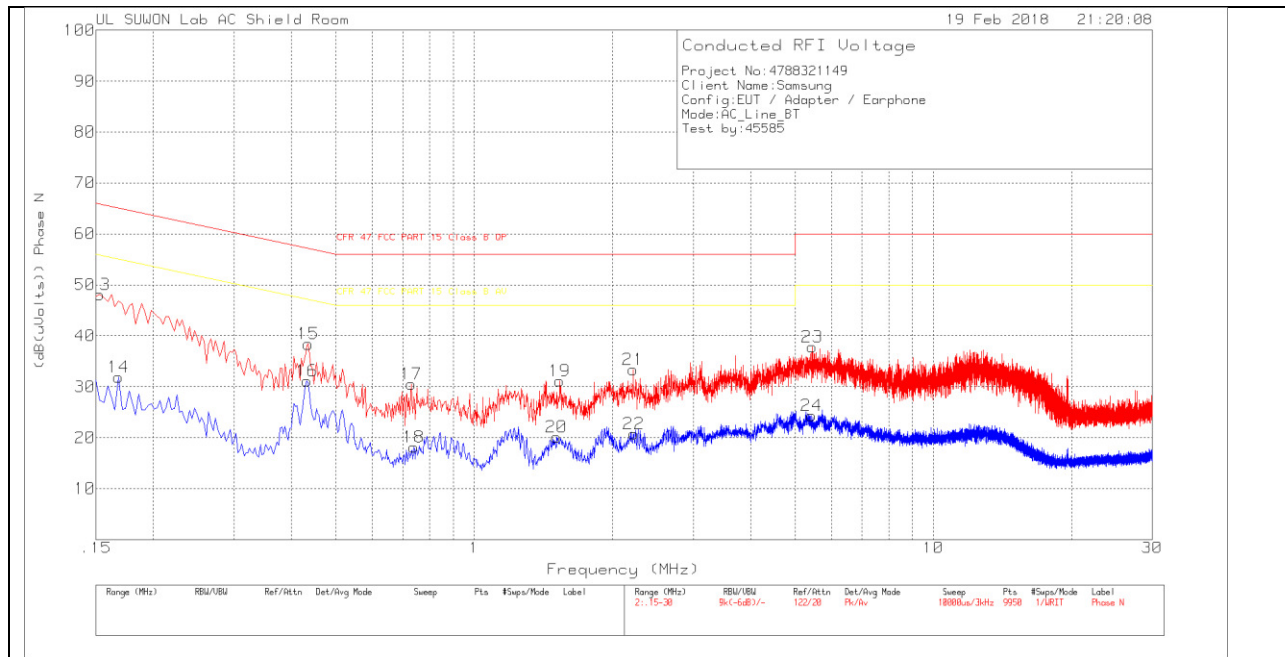
Range 1: Phase L1 .15 - 30MHz

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	.165	37.23	Pk	10	.1	47.33	65.21	-17.88	-	-
2	.168	18.48	Av	10	.1	28.58	-	-	55.06	-26.48
3	.435	27.27	Pk	9.7	.2	37.17	57.16	-19.99	-	-
4	.435	19.05	Av	9.7	.2	28.95	-	-	47.16	-18.21
5	.75	22.26	Pk	9.7	.2	32.16	56	-23.84	-	-
6	.75	9.86	Av	9.7	.2	19.76	-	-	46	-26.24
7	2.304	21.05	Pk	9.8	.3	31.15	56	-24.85	-	-
8	2.301	9.22	Av	9.8	.3	19.32	-	-	46	-26.68
9	4.998	24.45	Pk	9.7	.3	34.45	56	-21.55	-	-
10	5.019	14	Av	9.7	.3	24	-	-	50	-26
11	12.387	26.45	Pk	9.8	.3	36.55	60	-23.45	-	-
12	12.378	10.57	Av	9.8	.3	20.67	-	-	50	-29.33

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	.153	38.02	Pk	10	.1	48.12	65.84	-17.72	-	-
14	.168	21.81	Av	10	.1	31.91	-	-	55.06	-23.15
15	.435	28.38	Pk	9.8	.2	38.38	57.16	-18.78	-	-
16	.432	21.17	Av	9.8	.2	31.17	-	-	47.21	-16.04
17	.729	20.63	Pk	9.7	.2	30.53	56	-25.47	-	-
18	.738	8.3	Av	9.7	.2	18.2	-	-	46	-27.8
19	1.536	20.94	Pk	9.9	.3	31.14	56	-24.86	-	-
20	1.512	9.94	Av	9.9	.3	20.14	-	-	46	-25.86
21	2.217	23.19	Pk	9.9	.3	33.39	56	-22.61	-	-
22	2.226	10.51	Av	9.9	.3	20.71	-	-	46	-25.29
23	5.457	27.77	Pk	9.8	.3	37.87	60	-22.13	-	-
24	5.433	14.28	Av	9.8	.3	24.38	-	-	50	-25.62

Pk - Peak detector

Av - Average detection