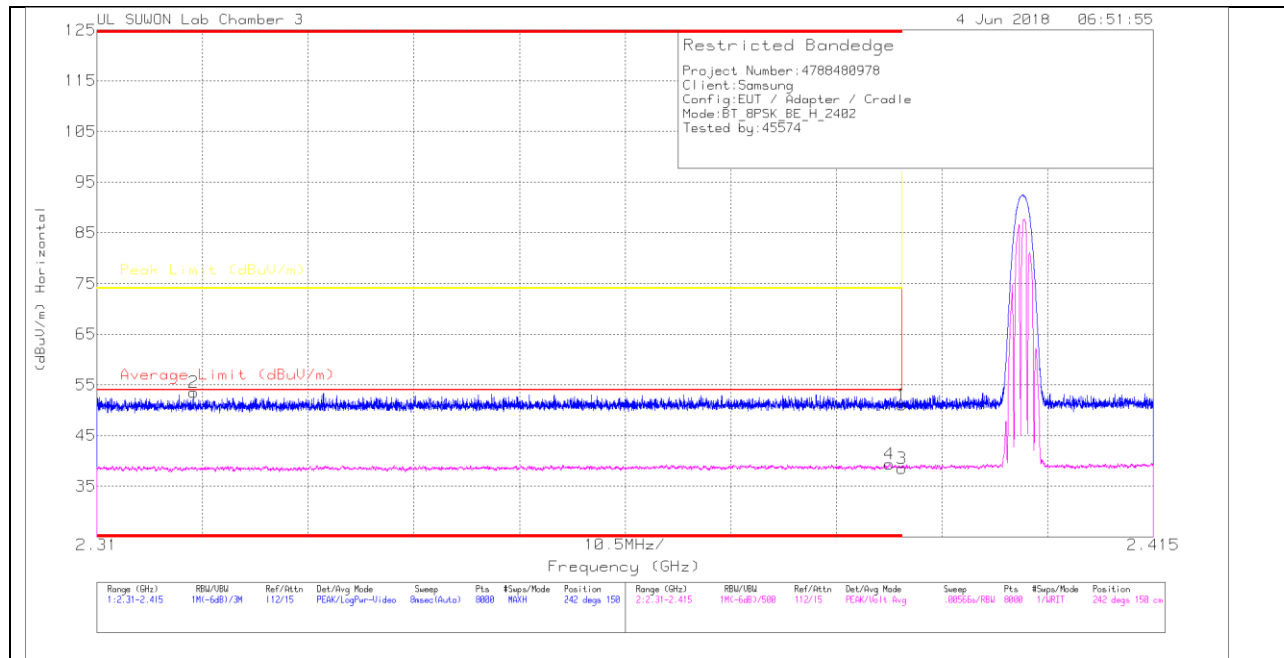


11.2.2. ENHANCED DATA RATE 8PSK MODULATION RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

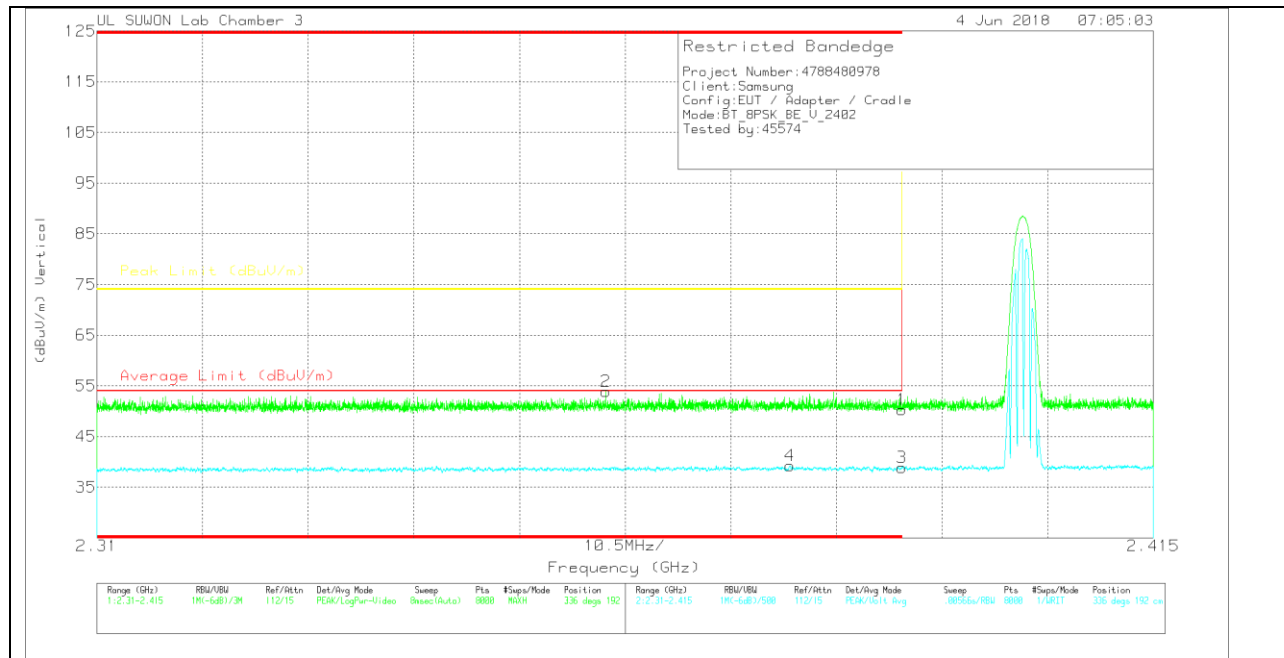
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	10dB_ATT(dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.57	Pk	31.8	-23.3	51.07	-	-	74	-22.93	242	150	H
2	* 2.32	45.15	Pk	31.6	-23.2	53.55	-	-	74	-20.45	242	150	H
3	* 2.39	30.02	VA1T	31.8	-23.3	38.52	54	-15.48	-	-	242	150	H
4	* 2.389	30.9	VA1T	31.8	-23.3	39.4	54	-14.6	-	-	242	150	H

* - 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

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	* 2.39	41.84	Pk	31.8	-23.3	50.34	-	-	74	-23.66	336	192	V
2	* 2.361	45.47	Pk	31.7	-23.3	53.87	-	-	74	-20.13	336	192	V
3	* 2.39	30.34	VA1T	31.8	-23.3	38.84	54	-15.16	-	-	336	192	V
4	* 2.379	30.6	VA1T	31.8	-23.2	39.2	54	-14.8	-	-	336	192	V

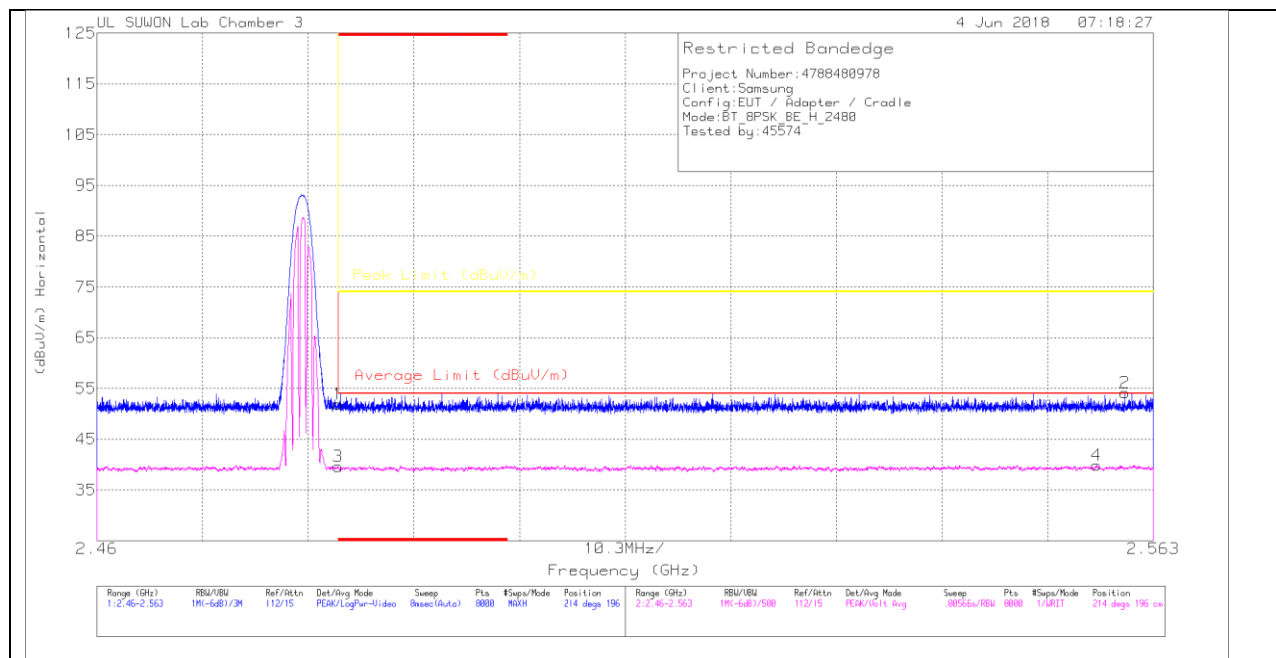
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

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

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

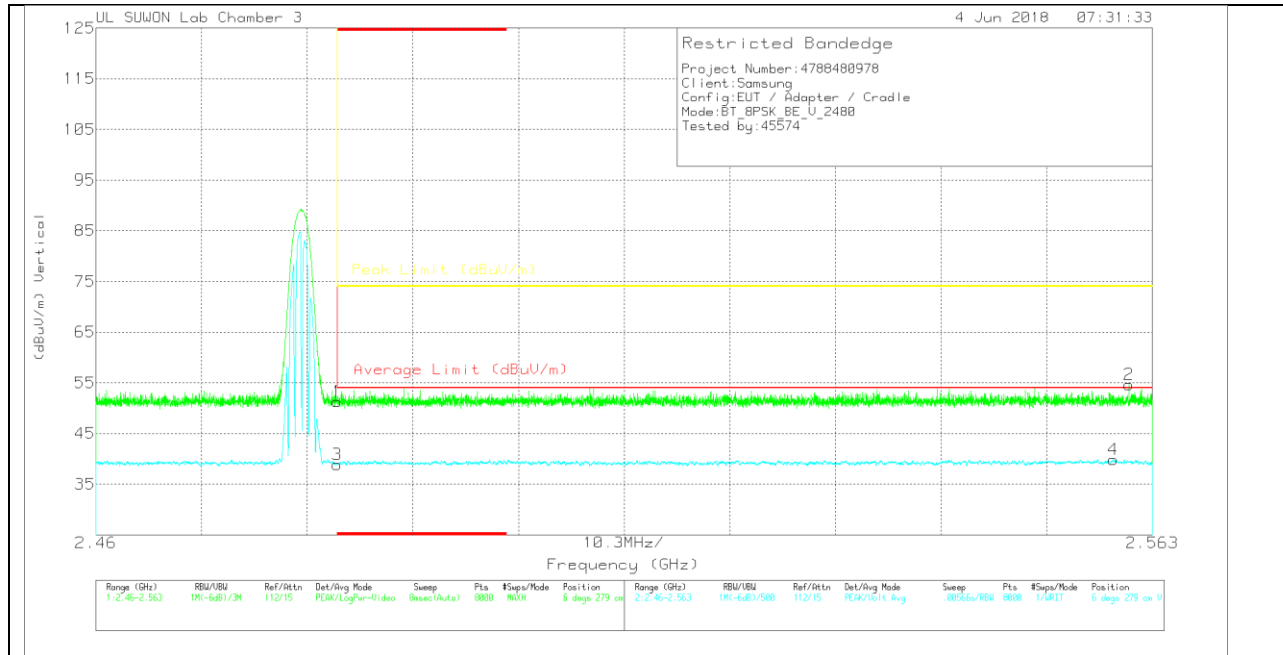
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[00205959]	10dB_ATT[dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	42.81	Pk	32.1	-23	51.91	-	-	74	-22.09	214	196	H
2	2.56	45.08	Pk	32.1	-23	54.18	-	-	74	-19.82	214	196	H
3	* 2.484	30.52	VA1T	32.1	-23	39.62	54	-14.38	-	-	214	196	H
4	2.558	30.78	VA1T	32.1	-23	39.88	54	-14.12	-	-	214	196	H

* - 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

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	42.22	Pk	32.1	-23	51.32	-	-	74	-22.68	6	279	V
2	2.561	45.38	Pk	32.1	-22.9	54.58	-	-	74	-19.42	6	279	V
3	* 2.484	29.73	VA1T	32.1	-23	38.83	54	-15.17	-	-	6	279	V
4	2.559	30.66	VA1T	32.1	-22.9	39.86	54	-14.14	-	-	6	279	V

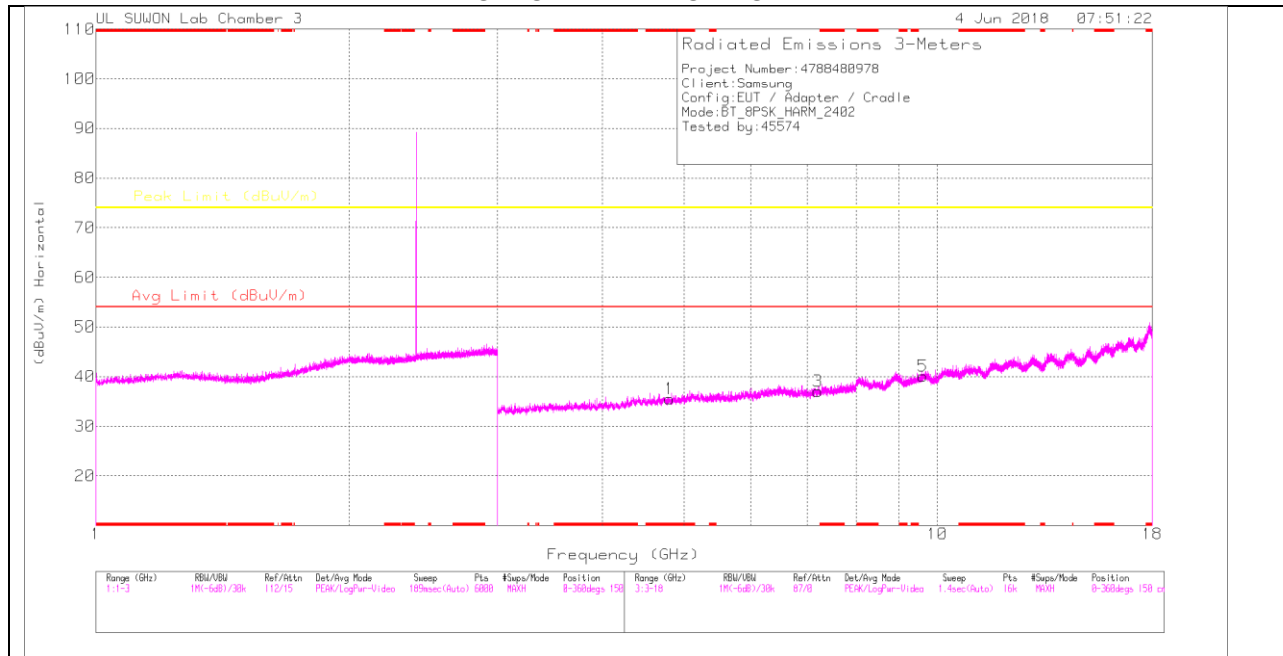
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

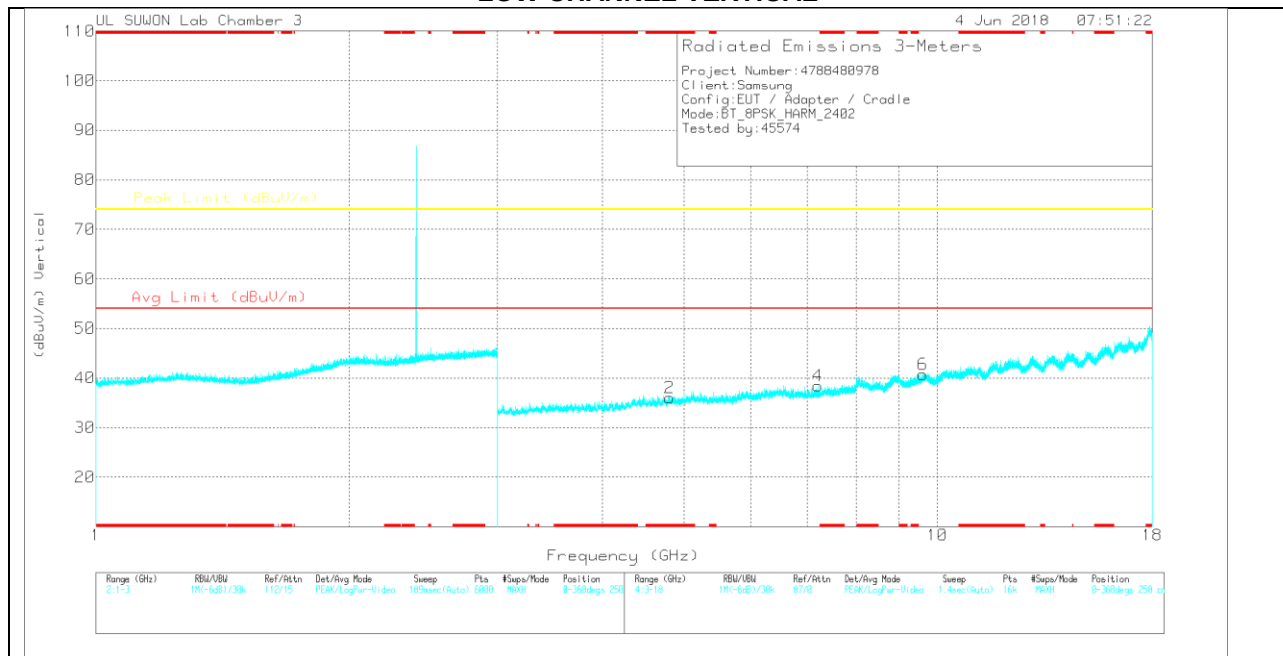
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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

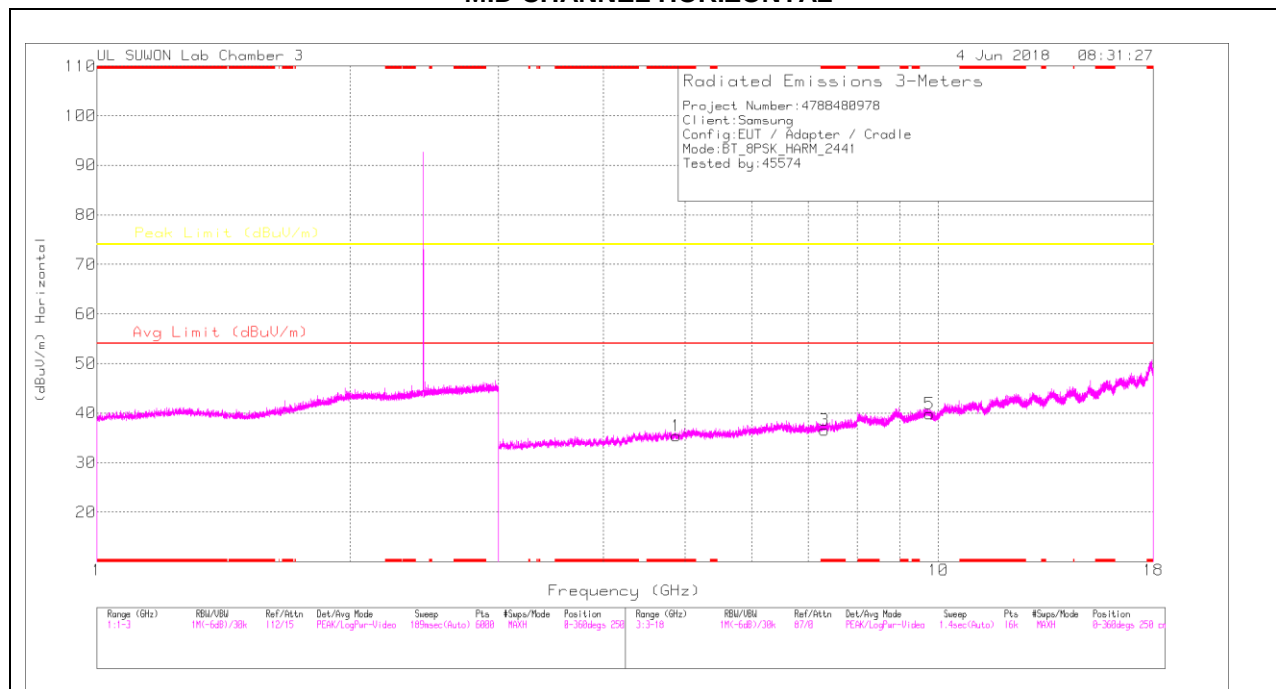
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[00205959]	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.803	29.85	PK	33.9	-28.2	35.55	-	-	74	-38.45	0-360	150	H
3	7.207	25.39	PK	35.6	-24	36.99	-	-	74	-37.01	0-360	250	H
5	9.608	23.3	PK	36.7	-19.9	40.1	-	-	74	-33.9	0-360	150	H
2	* 4.803	30.33	PK	33.9	-28.2	36.03	-	-	74	-37.97	0-360	250	V
4	7.208	26.82	PK	35.6	-24	38.42	-	-	74	-35.58	0-360	250	V
6	9.608	23.94	PK	36.7	-19.9	40.74	-	-	74	-33.26	0-360	250	V

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

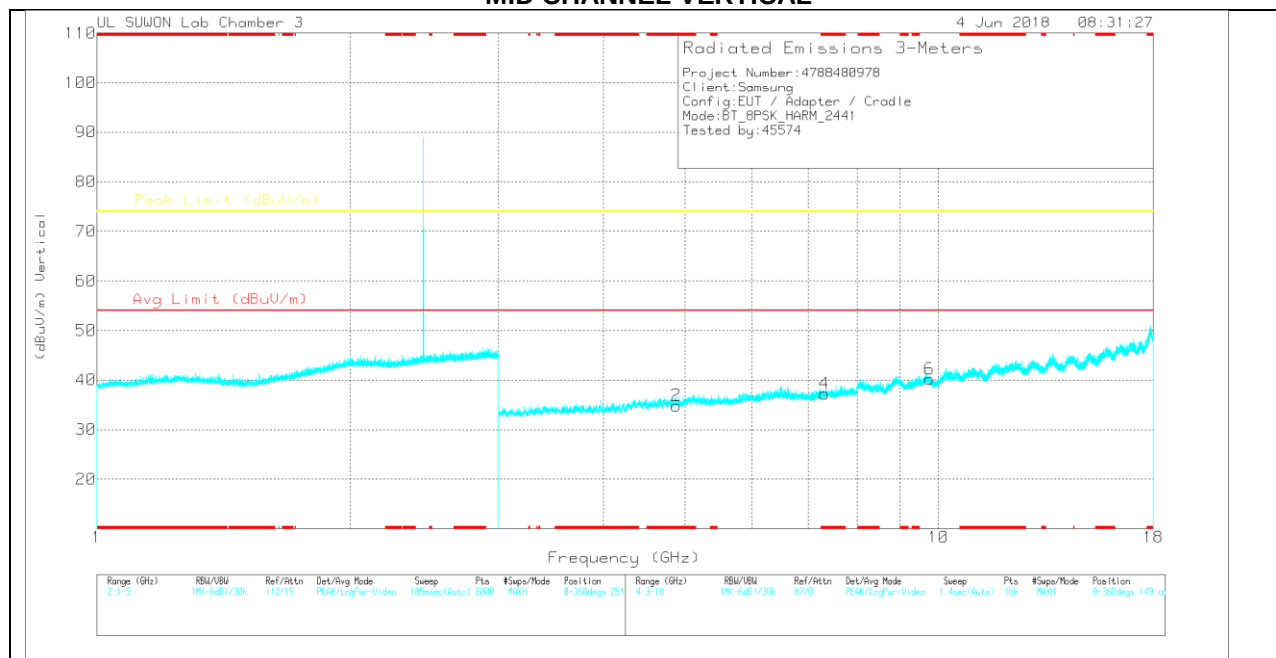
PK – Peak Detector

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

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

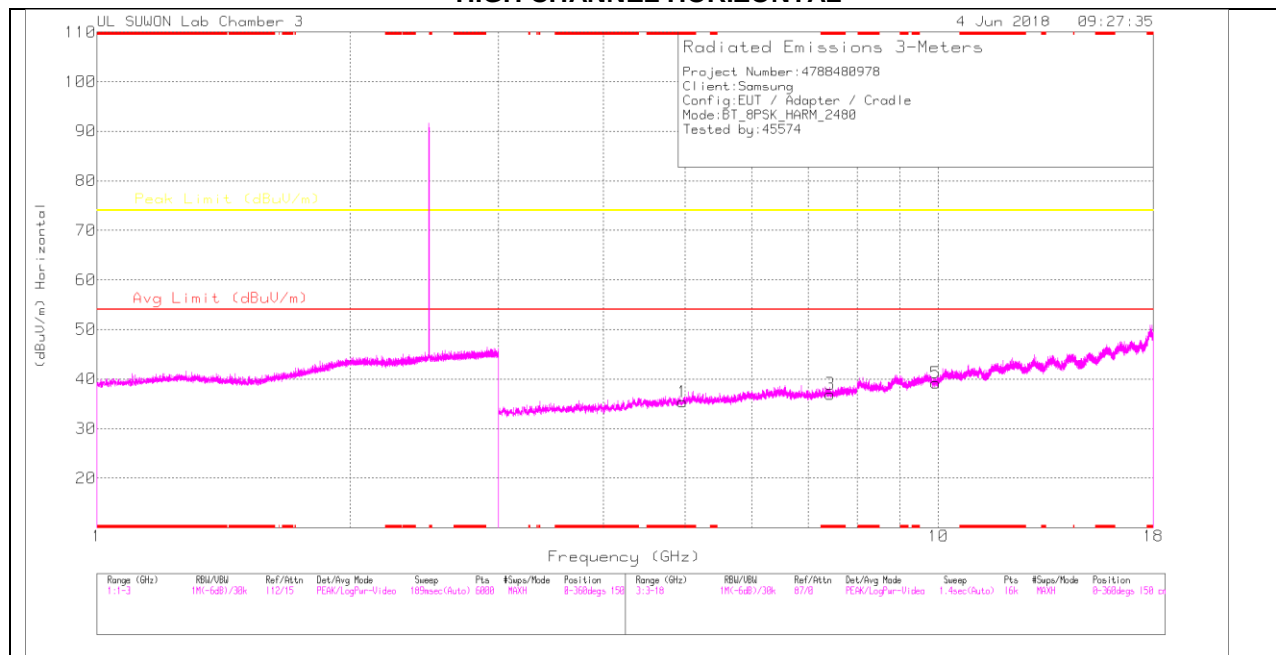
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[00205959]	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.883	30.33	PK	34	-28.9	35.43	-	-	74	-38.57	0-360	150	H
3	* 7.323	24.37	PK	35.6	-23.4	36.57	-	-	74	-37.43	0-360	150	H
5	9.764	22.4	PK	36.9	-19.5	39.8	-	-	74	-34.2	0-360	250	H
2	* 4.883	29.73	PK	34	-28.9	34.83	-	-	74	-39.17	0-360	250	V
4	* 7.323	25.04	PK	35.6	-23.4	37.24	-	-	74	-36.76	0-360	250	V
6	9.764	22.77	PK	36.9	-19.5	40.17	-	-	74	-33.83	0-360	250	V

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

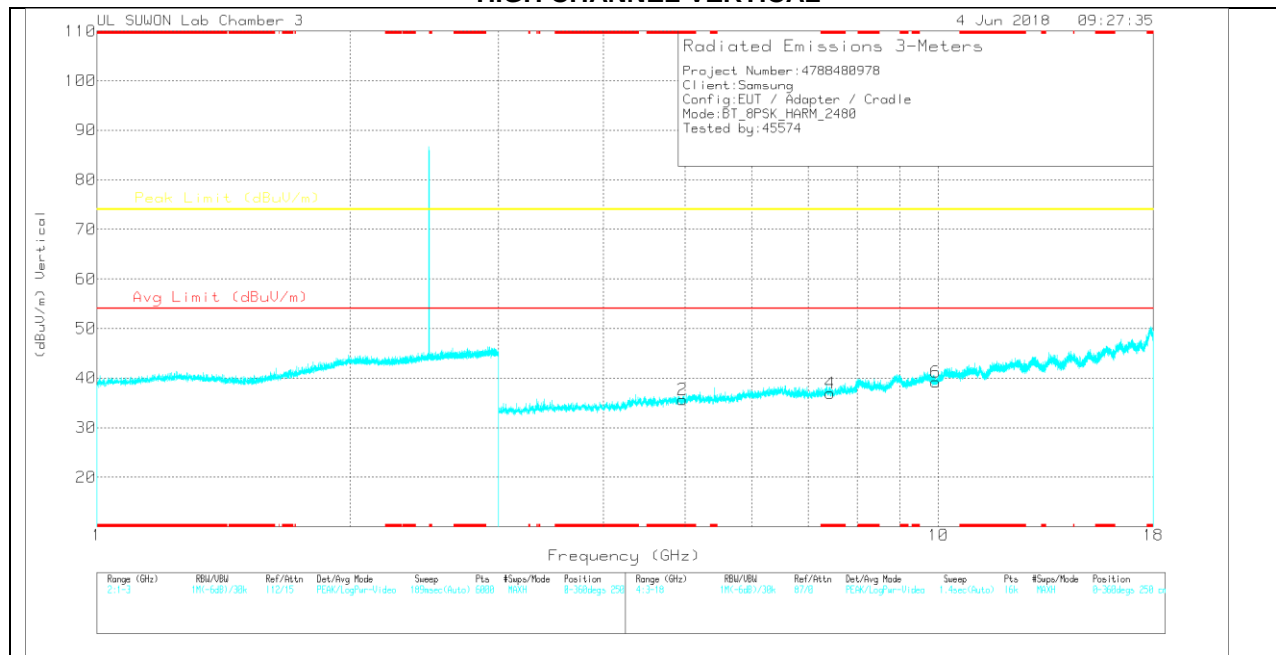
PK – Peak Detector

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	* 4.96	29.85	PK	34.1	-28.5	35.45	-	-	74	-38.55	0-360	150	H
3	* 7.44	24.58	PK	35.6	-23.2	36.98	-	-	74	-37.02	0-360	250	H
5	9.92	21.9	PK	37	-19.7	39.2	-	-	74	-34.8	0-360	250	H
2	* 4.96	30.05	PK	34.1	-28.5	35.65	-	-	74	-38.35	0-360	149	V
4	* 7.44	24.53	PK	35.6	-23.2	36.93	-	-	74	-37.07	0-360	149	V
6	9.921	21.95	PK	37	-19.7	39.25	-	-	74	-34.75	0-360	149	V

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

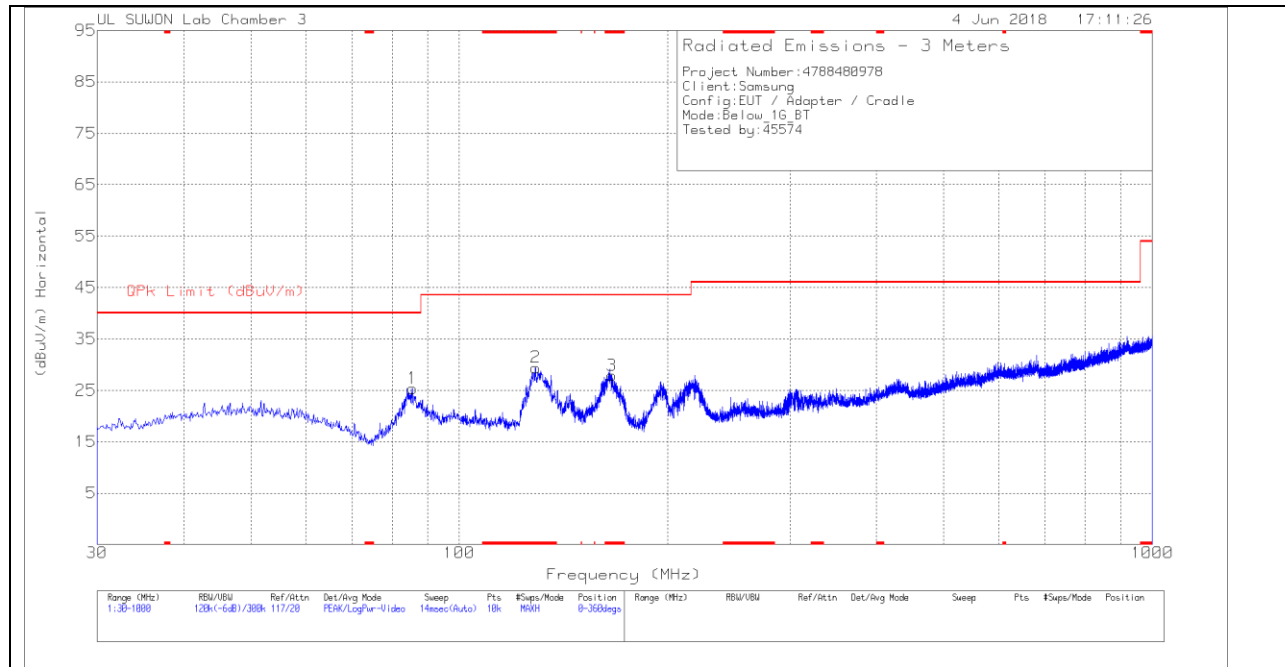
PK – Peak Detector

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

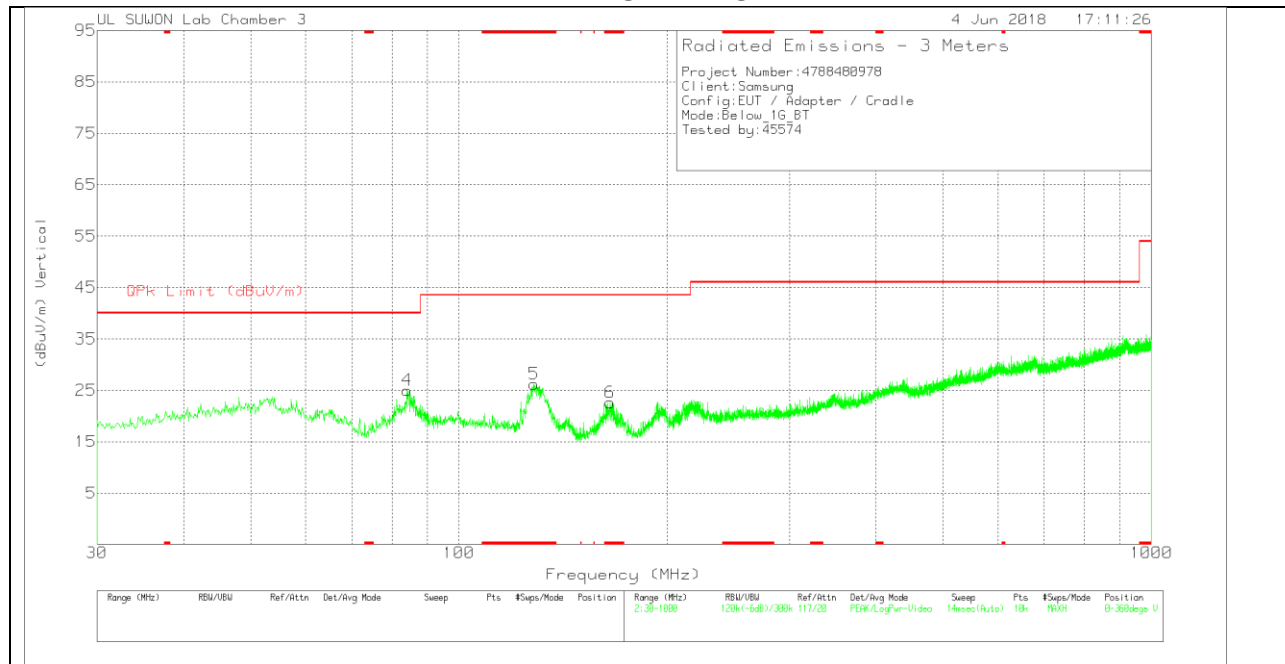
11.3. WORST-CASE BELOW 1 GHz

GFSK SPURIOUS EMISSIONS 30 TO 1000 MHz

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	85.5867	42.47	Pk	14.5	-31.6	25.37	40	-14.63	0-360	200	H
2	* 128.8532	45.82	Pk	14.9	-31.3	29.42	43.52	-14.1	0-360	200	H
3	* 166.008	44.2	Pk	14.9	-31.2	27.9	43.52	-15.62	0-360	200	H
4	84.1316	42.62	Pk	14.1	-31.7	25.02	40	-14.98	0-360	100	V
5	* 128.4652	42.73	Pk	14.9	-31.4	26.23	43.52	-17.29	0-360	100	V
6	* 165.1349	38.91	Pk	14.9	-31.2	22.61	43.52	-20.91	0-360	200	V

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

Pk - Peak detector

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.

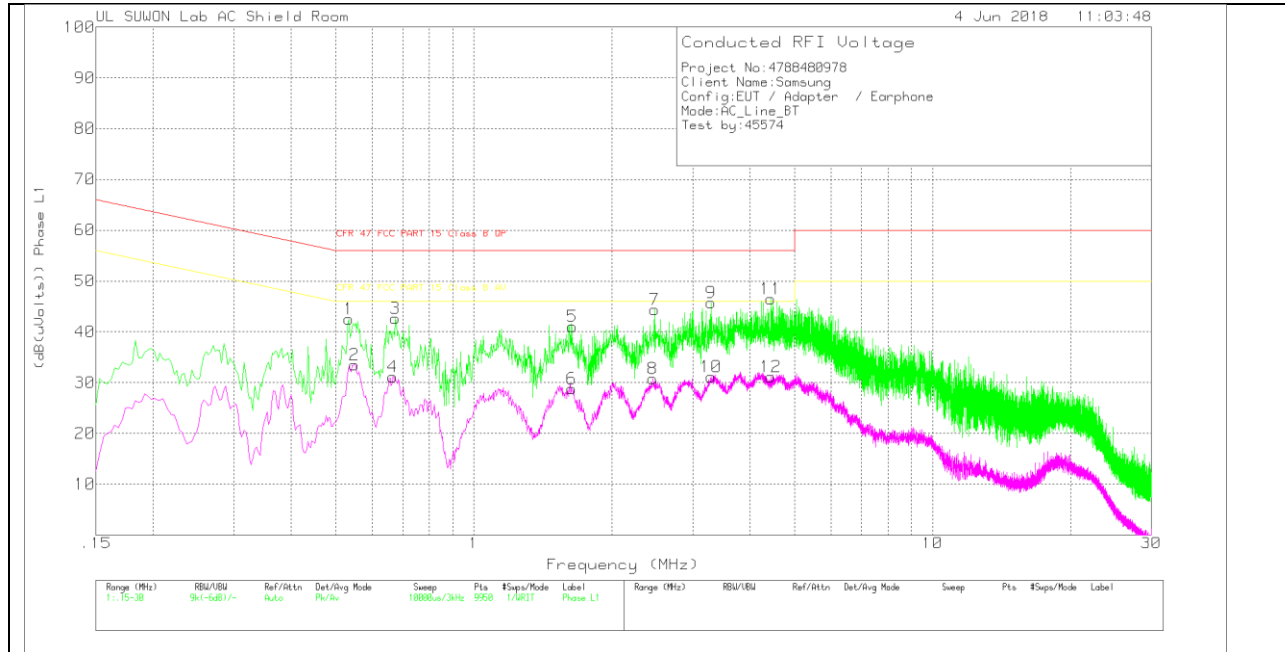
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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_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)
1	.534	32.66	Pk	9.7	.2	42.56	56	-13.44	-	-
2	.549	23.49	Av	9.8	.2	33.49	-	-	46	-12.51
3	.675	32.59	Pk	9.8	.2	42.59	56	-13.41	-	-
4	.666	21.13	Av	9.8	.2	31.13	-	-	46	-14.87
5	1.638	30.87	Pk	9.9	.3	41.07	56	-14.93	-	-
6	1.635	18.58	Av	9.9	.3	28.78	-	-	46	-17.22
7	2.481	34.33	Pk	9.8	.3	44.43	56	-11.57	-	-
8	2.457	20.64	Av	9.8	.3	30.74	-	-	46	-15.26
9	3.288	35.67	Pk	9.8	.3	45.77	56	-10.23	-	-
10	3.288	21.09	Av	9.8	.3	31.19	-	-	46	-14.81
11	4.446	36.44	Pk	9.7	.3	46.44	56	-9.56	-	-
12	4.446	21.16	Av	9.7	.3	31.16	-	-	46	-14.84

Pk - Peak detector

Av - Average detection

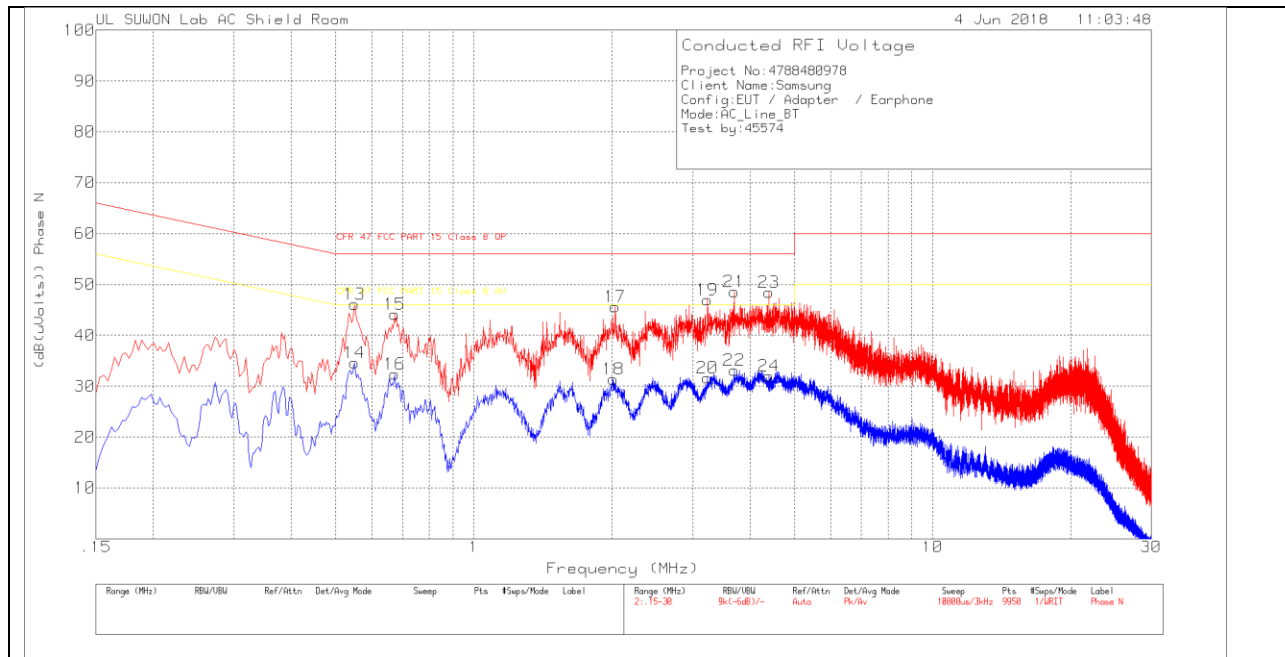
Quasi-Peak Emissions

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_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)
4.44615	27.02	Qp	9.7	.3	37.02	56	-18.98	-	-

Qp - Quasi-Peak detector

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	.549	36.16	Pk	9.8	.2	46.16	56	-9.84	-	-
14	.549	24.6	Av	9.8	.2	34.6	-	-	46	-11.4
15	.672	34.13	Pk	9.8	.2	44.13	56	-11.87	-	-
16	.672	22.36	Av	9.8	.2	32.36	-	-	46	-13.64
17	2.034	35.38	Pk	9.9	.3	45.58	56	-10.42	-	-
18	2.016	21.15	Av	9.9	.3	31.35	-	-	46	-14.65
19	3.234	36.85	Pk	9.8	.3	46.95	56	-9.05	-	-
20	3.234	21.54	Av	9.8	.3	31.64	-	-	46	-14.36
21	3.693	38.49	Pk	9.8	.3	48.59	56	-7.41	-	-
22	3.693	23.05	Av	9.8	.3	33.15	-	-	46	-12.85
23	4.395	38.38	Pk	9.8	.3	48.48	56	-7.52	-	-
24	4.395	21.92	Av	9.8	.3	32.02	-	-	46	-13.98

Pk - Peak detector

Av - Average detection

Quasi-Peak Emissions

Range 2: Phase N .15 - 30MHz

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)
.54825	32.2	Qp	9.8	.2	42.2	56	-13.8	-	-
2.03475	28.42	Qp	9.9	.3	38.62	56	-17.38	-	-
3.23475	28.9	Qp	9.8	.3	39	56	-17	-	-
4.39515	29.31	Qp	9.8	.3	39.41	56	-16.59	-	-

Qp - Quasi-Peak detector