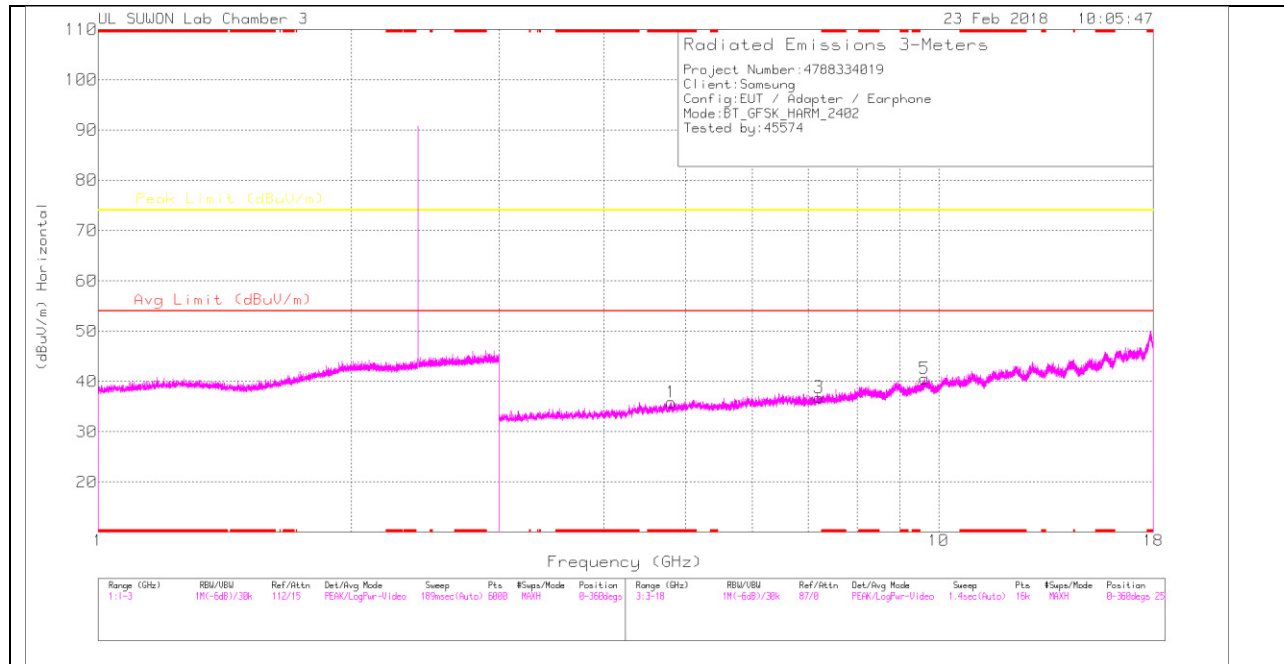
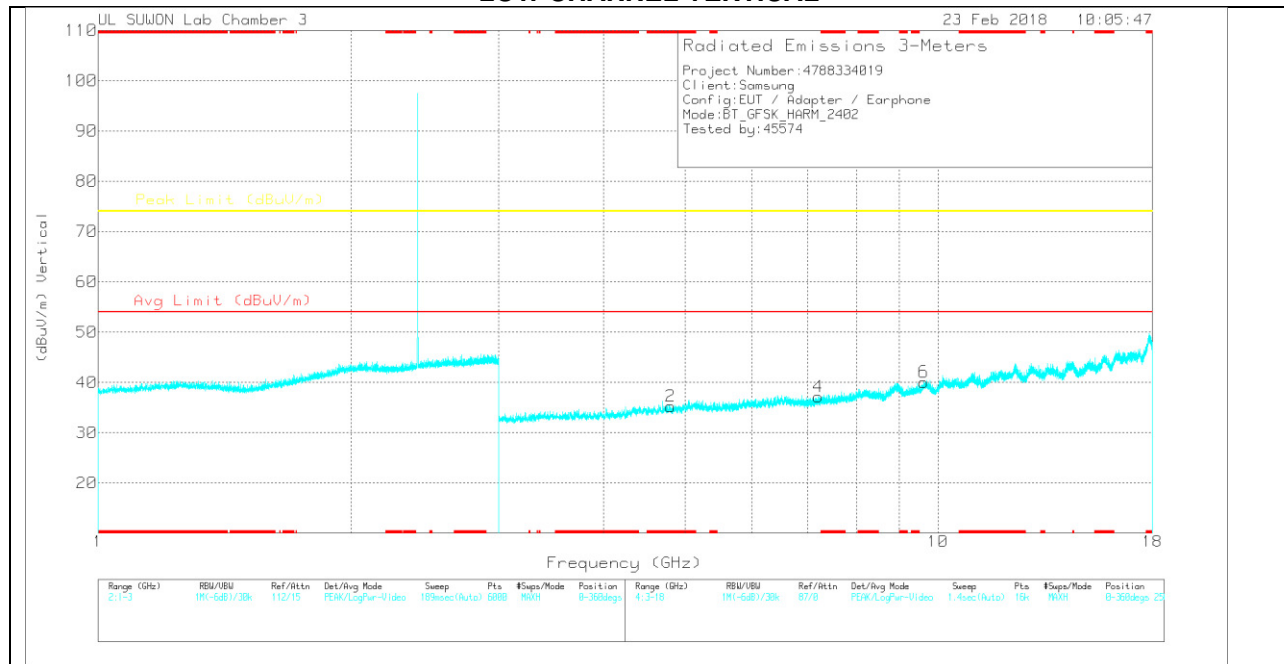


HARMONICS AND SPURIOUS EMISSIONS

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

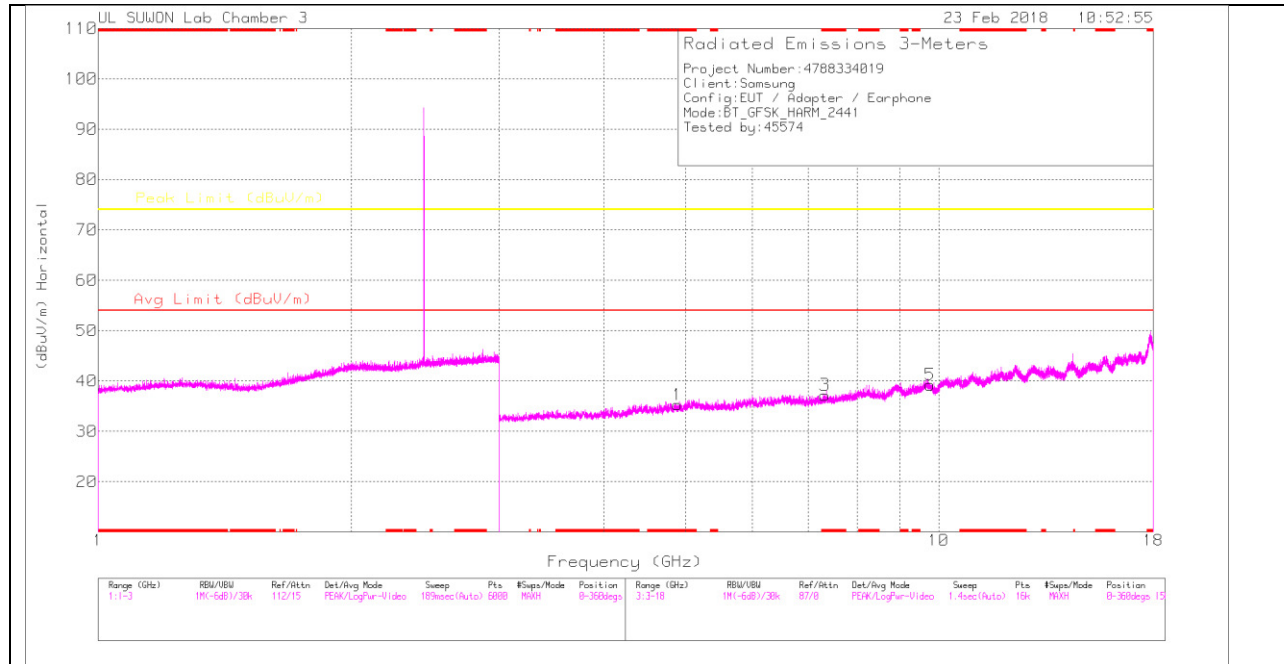
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[00205959]	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.809	30.15	PK	33.9	-28.2	35.85	-	-	74	-38.15	0-360	250	H
3	7.198	25.23	PK	35.6	-24	36.83	-	-	74	-37.17	0-360	150	H
5	9.615	23.78	PK	36.7	-19.9	40.58	-	-	74	-33.42	0-360	150	H
2	* 4.808	29.54	PK	33.9	-28.2	35.24	-	-	74	-38.76	0-360	149	V
4	7.199	25.54	PK	35.6	-24	37.14	-	-	74	-36.86	0-360	250	V
6	9.618	23.27	PK	36.7	-19.9	40.07	-	-	74	-33.93	0-360	149	V

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

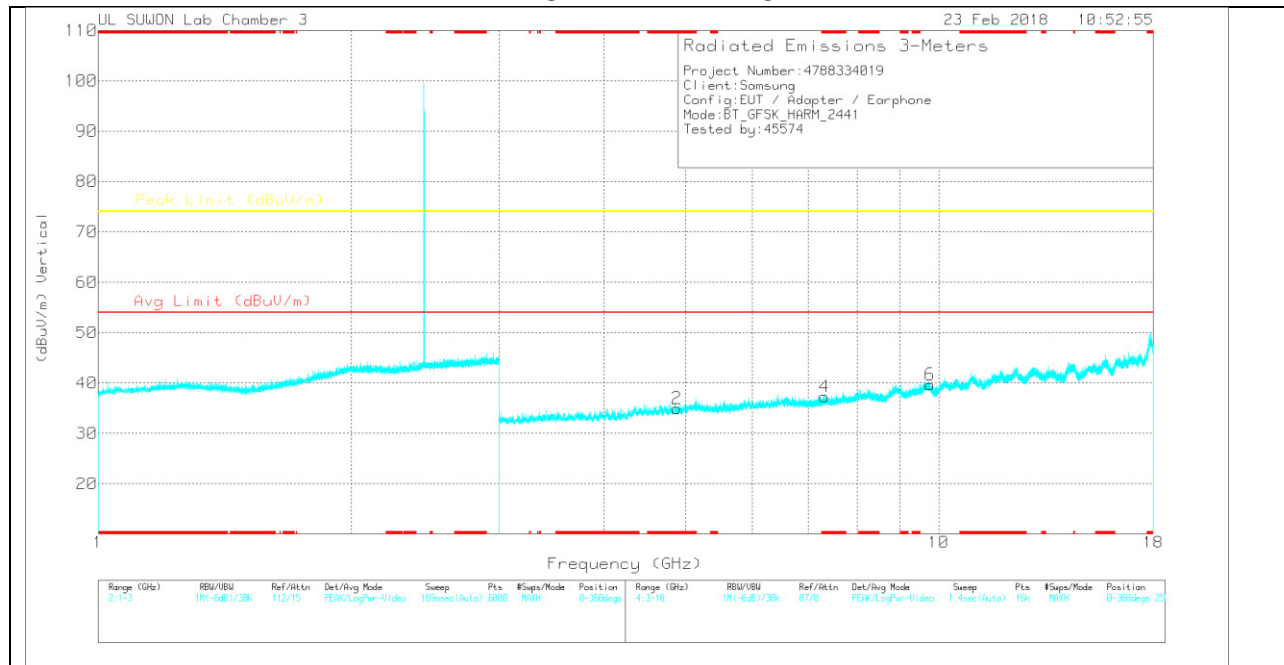
PK – Peak Detector

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

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

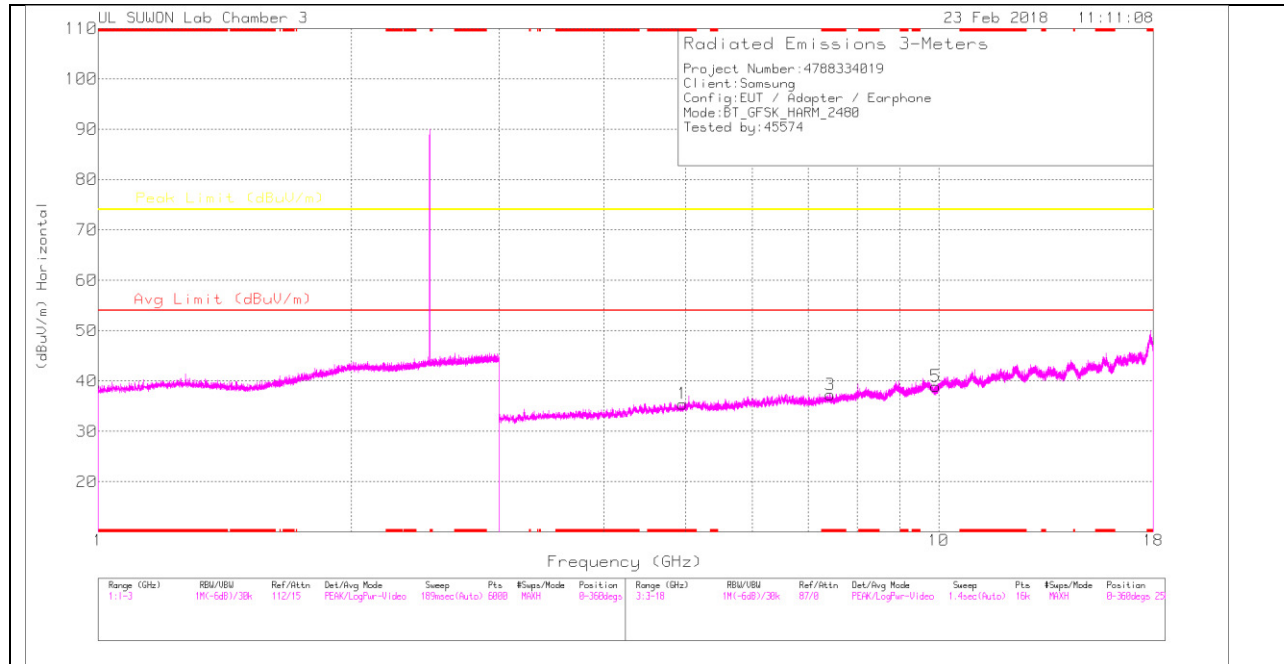
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[00205959]	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.89	30.16	PK	34	-28.9	35.26	-	-	74	-38.74	0-360	250	H
3	* 7.322	24.99	PK	35.6	-23.4	37.19	-	-	74	-36.81	0-360	250	H
5	9.764	21.84	PK	36.9	-19.5	39.24	-	-	74	-34.76	0-360	150	H
2	* 4.879	29.75	PK	34	-28.8	34.95	-	-	74	-39.05	0-360	250	V
4	* 7.32	25.06	PK	35.6	-23.4	37.26	-	-	74	-36.74	0-360	250	V
6	9.764	22.27	PK	36.9	-19.5	39.67	-	-	74	-34.33	0-360	149	V

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

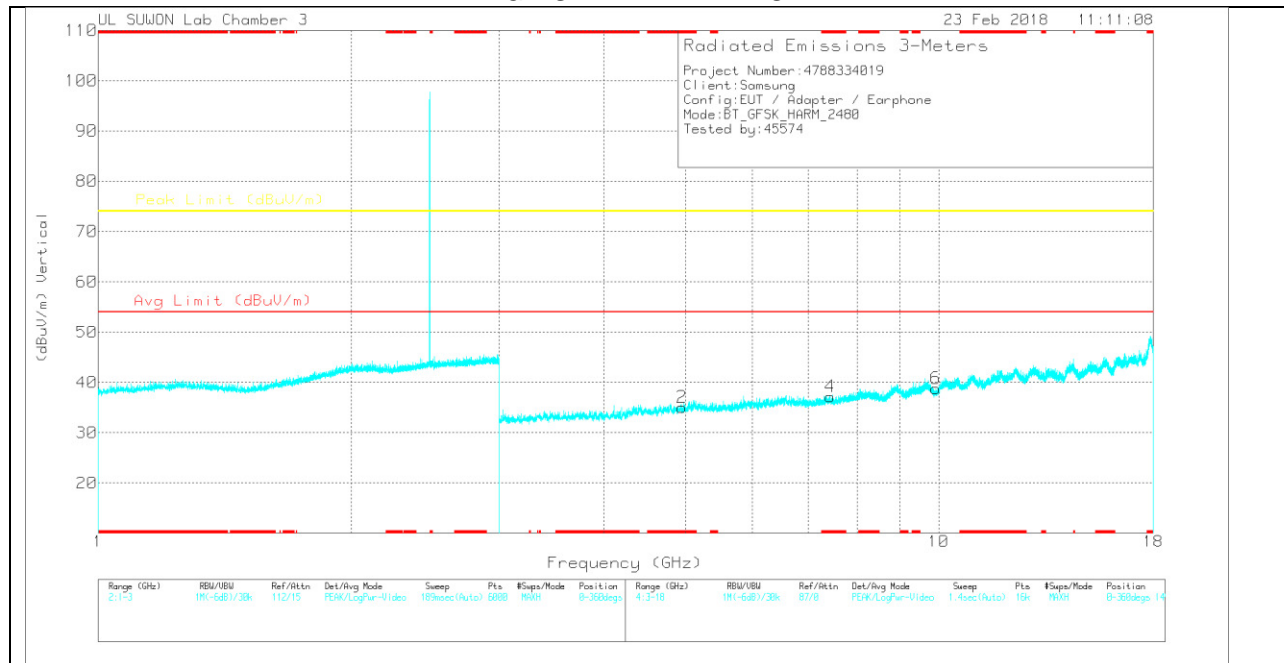
PK – Peak detector

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

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	* 4.956	29.97	PK	34.1	-28.6	35.47	-	-	74	-38.53	0-360	250	H
3	* 7.434	24.89	PK	35.6	-23.2	37.29	-	-	74	-36.71	0-360	150	H
5	9.919	21.62	PK	37	-19.7	38.92	-	-	74	-35.08	0-360	150	H
2	* 4.951	29.66	PK	34.1	-28.7	35.06	-	-	74	-38.94	0-360	250	V
4	* 7.434	24.78	PK	35.6	-23.2	37.18	-	-	74	-36.82	0-360	149	V
6	9.918	21.53	PK	37	-19.7	38.83	-	-	74	-35.17	0-360	149	V

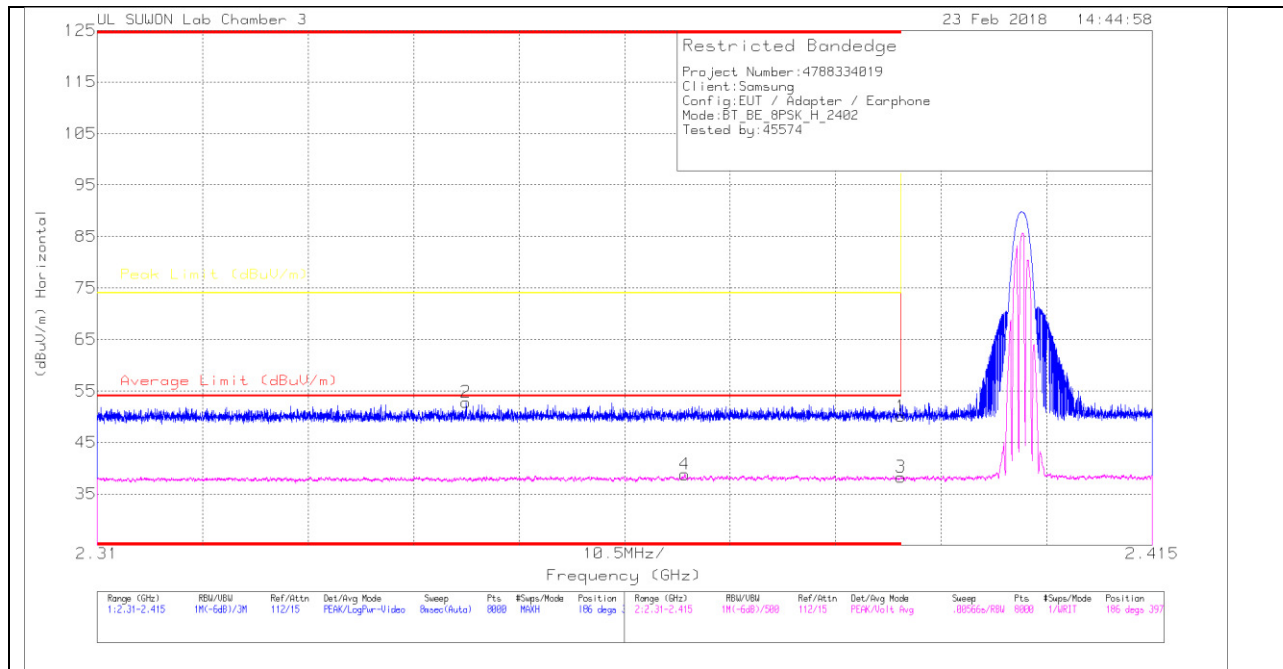
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK – Peak Detector

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

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

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

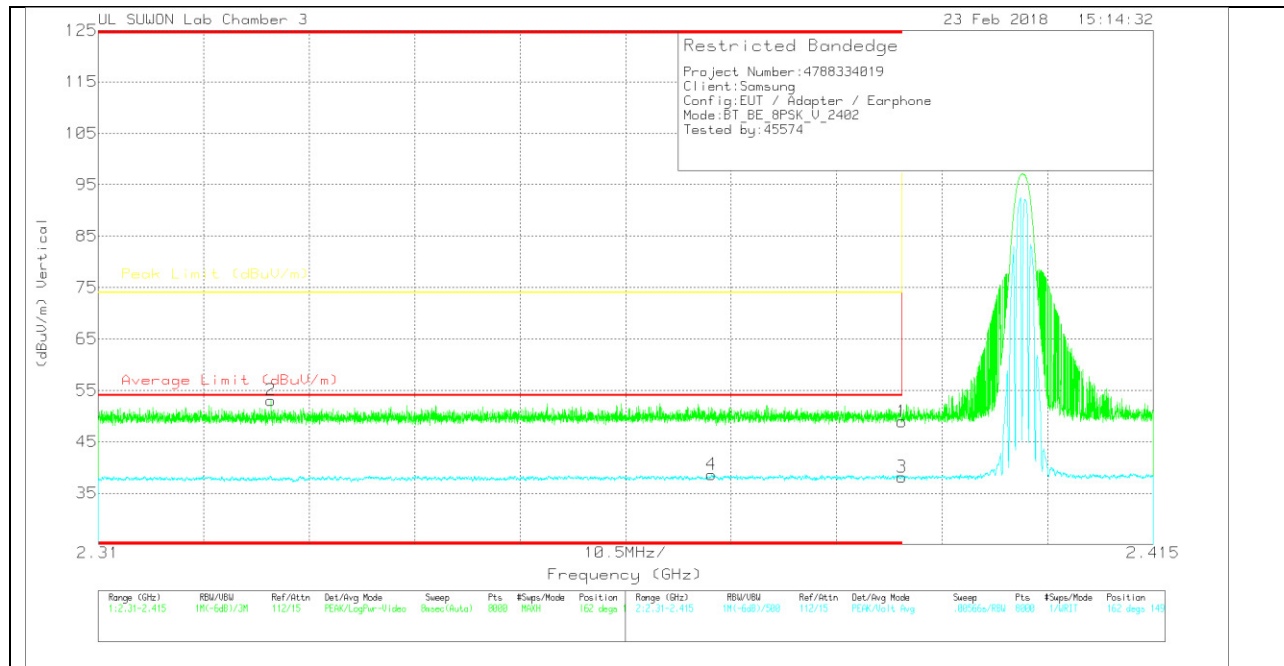
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[00205959]	10dB_ATT[dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	41.55	Pk	31.8	-23.3	50.05	-	-	74	-23.95	186	397	H
2	* 2.347	44.4	Pk	31.7	-23.3	52.8	-	-	74	-21.2	186	397	H
3	* 2.39	29.78	VA1T	31.8	-23.3	38.28	54	-15.72	-	-	186	397	H
4	* 2.368	30.3	VA1T	31.7	-23.2	38.8	54	-15.2	-	-	186	397	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	40.43	Pk	31.8	-23.3	48.93	-	-	74	-25.07	162	149	V
2	* 2.327	44.77	Pk	31.6	-23.3	53.07	-	-	74	-20.93	162	149	V
3	* 2.39	29.64	VA1T	31.8	-23.3	38.14	54	-15.86	-	-	162	149	V
4	* 2.371	30.24	VA1T	31.7	-23.3	38.64	54	-15.36	-	-	162	149	V

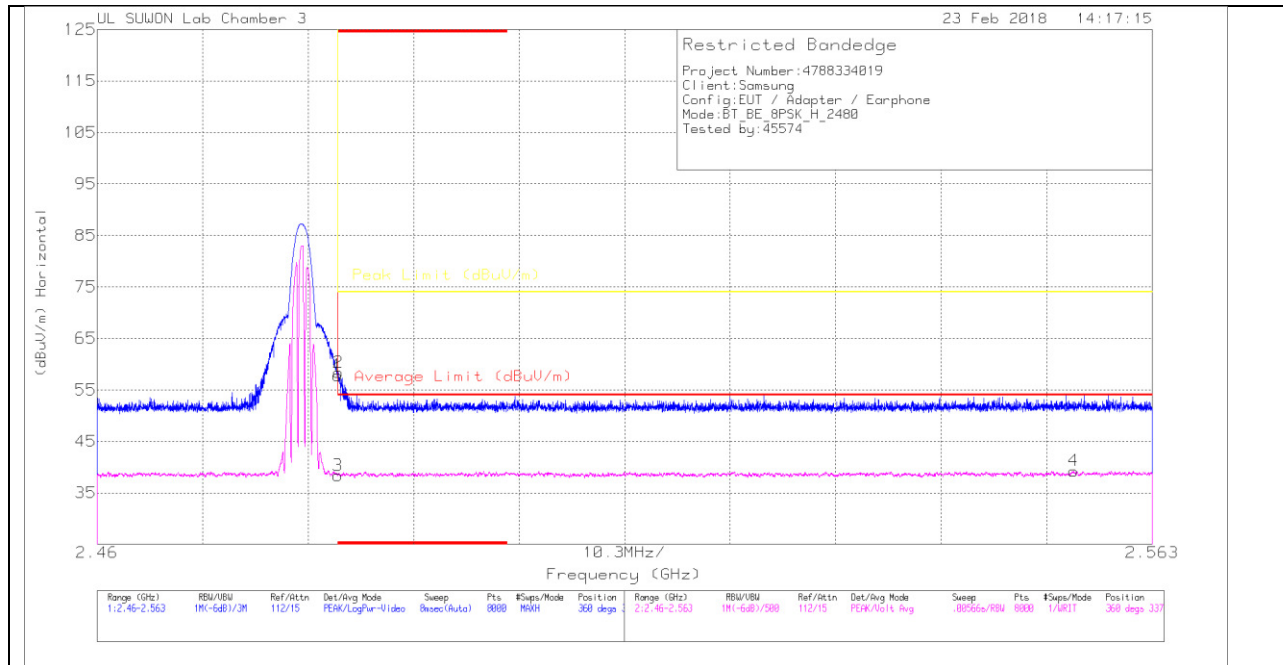
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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

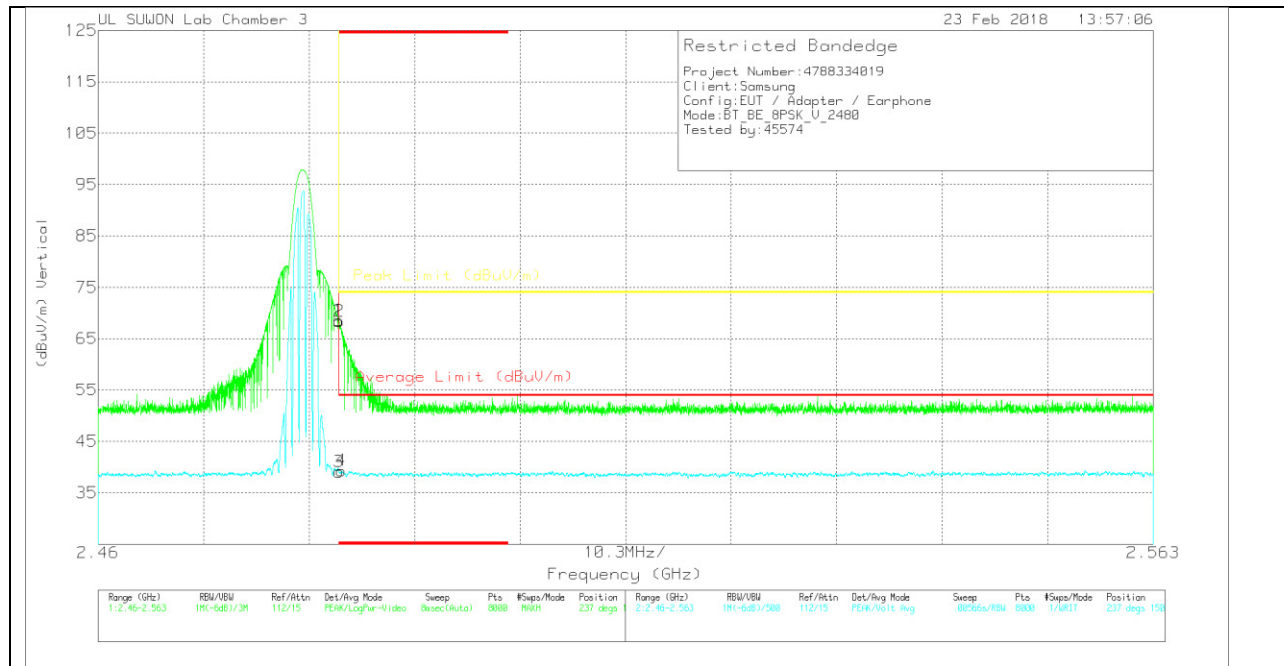
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[00205959]	10dB_ATT[dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	48.71	Pk	32.1	-23	57.81	-	-	74	-16.19	360	337	H
2	* 2.484	49.29	Pk	32.1	-23	58.39	-	-	74	-15.61	360	337	H
3	* 2.484	29.27	VA1T	32.1	-23	38.37	54	-15.63	-	-	360	337	H
4	2.555	30.07	VA1T	32.1	-22.9	39.27	54	-14.73	-	-	360	337	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	59.46	Pk	32.1	-23	68.56	-	-	74	-5.44	237	150	V
2	* 2.484	59.28	Pk	32.1	-23	68.38	-	-	74	-5.62	237	150	V
3	* 2.484	30	VA1T	32.1	-23	39.1	54	-14.9	-	-	237	150	V
4	* 2.484	30.32	VA1T	32.1	-23.1	39.32	54	-14.68	-	-	237	150	V

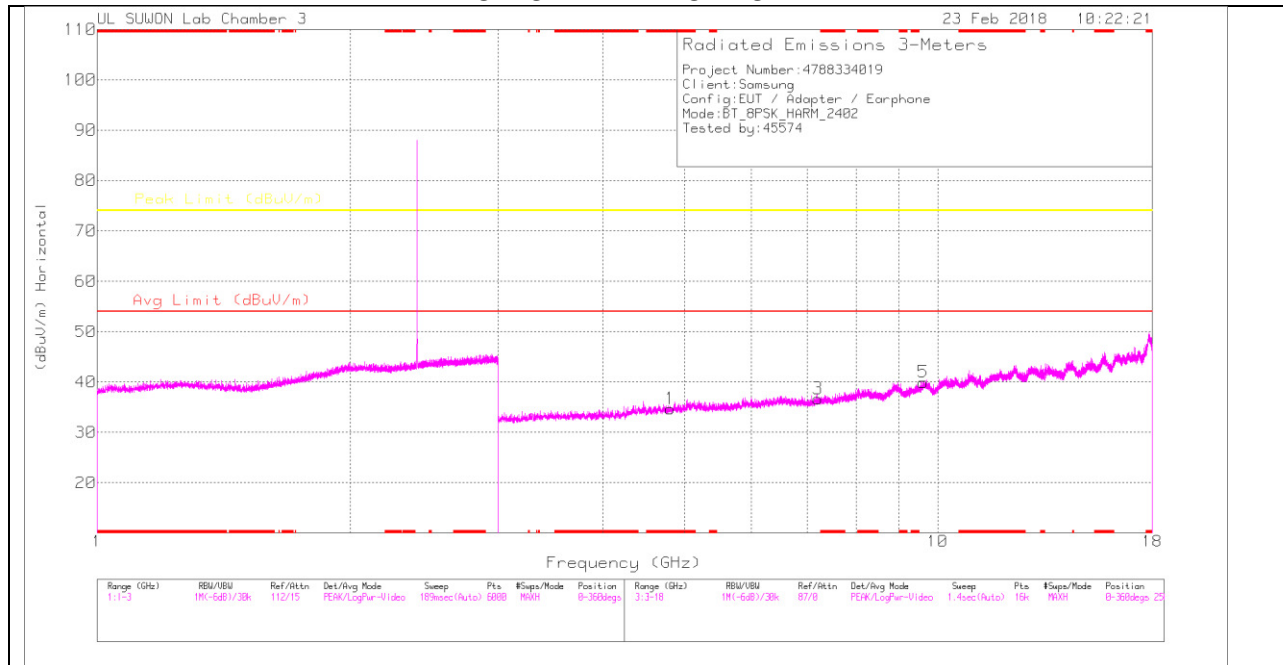
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

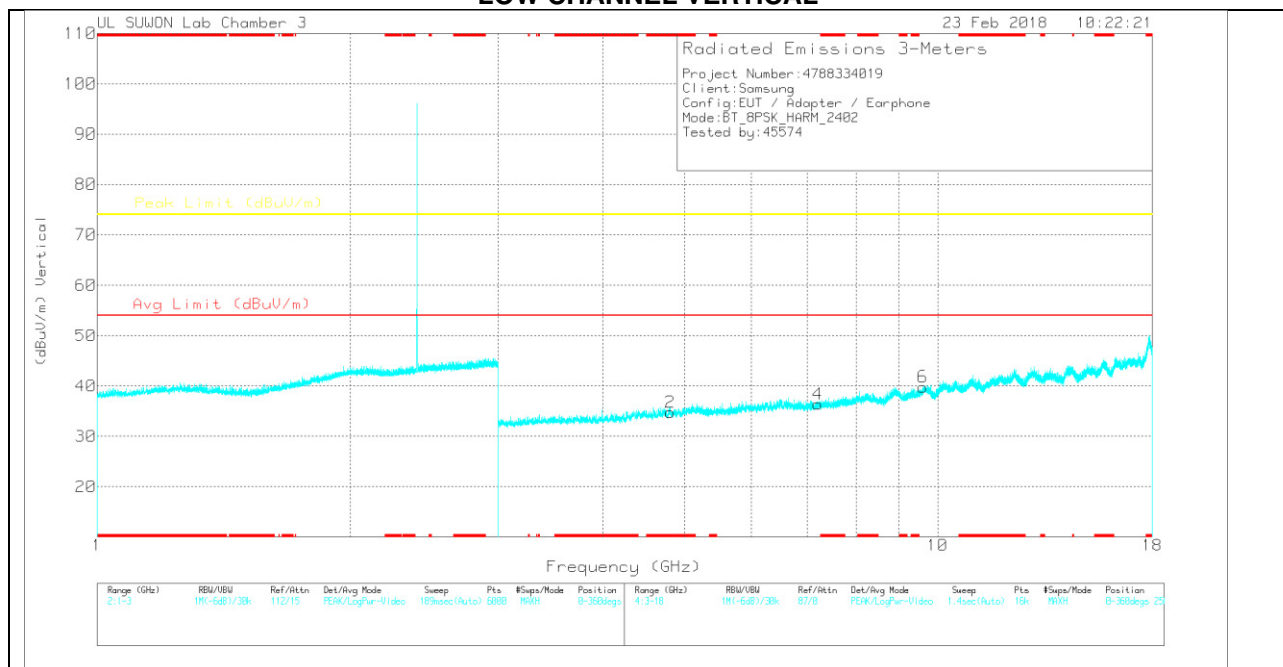
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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

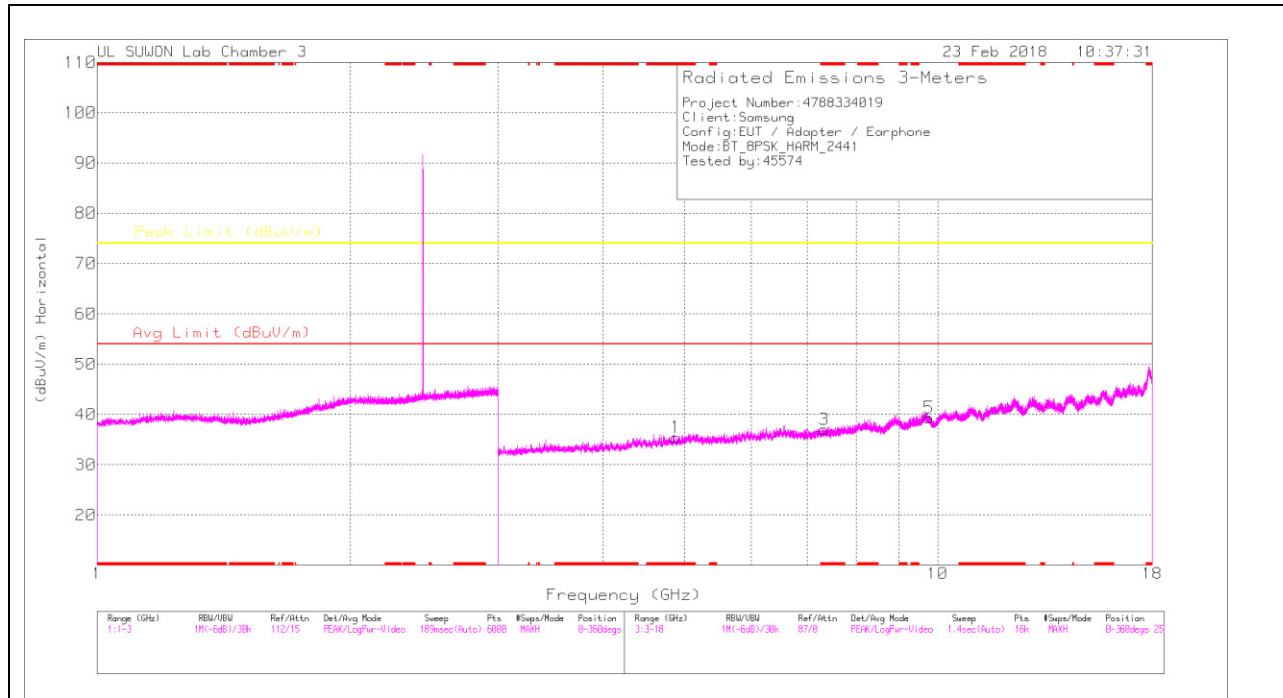
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[00205959]	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.804	28.98	PK	33.9	-28.2	34.68	-	-	74	-39.32	0-360	250	H
3	7.205	25	PK	35.6	-23.9	36.7	-	-	74	-37.3	0-360	250	H
5	9.611	23.16	PK	36.7	-19.9	39.96	-	-	74	-34.04	0-360	150	H
2	* 4.805	29.09	PK	33.9	-28.2	34.79	-	-	74	-39.21	0-360	149	V
4	7.205	24.68	PK	35.6	-23.9	36.38	-	-	74	-37.62	0-360	250	V
6	9.608	23	PK	36.7	-19.9	39.8	-	-	74	-34.2	0-360	250	V

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

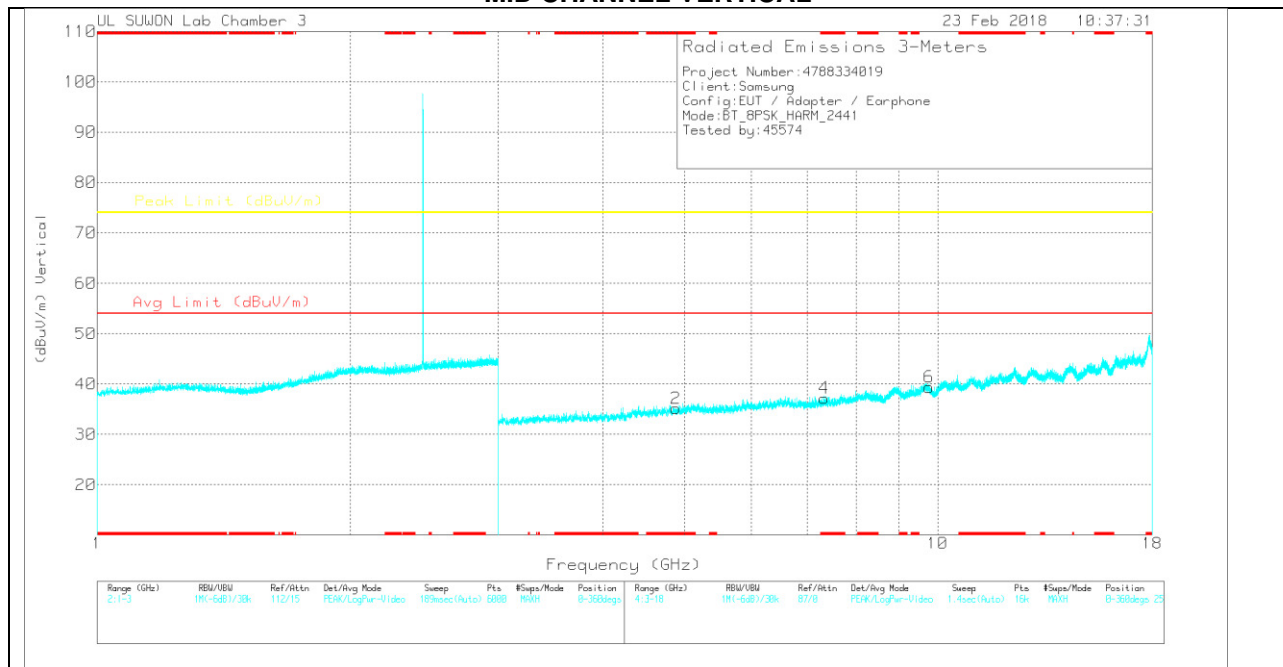
PK – Peak Detector

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

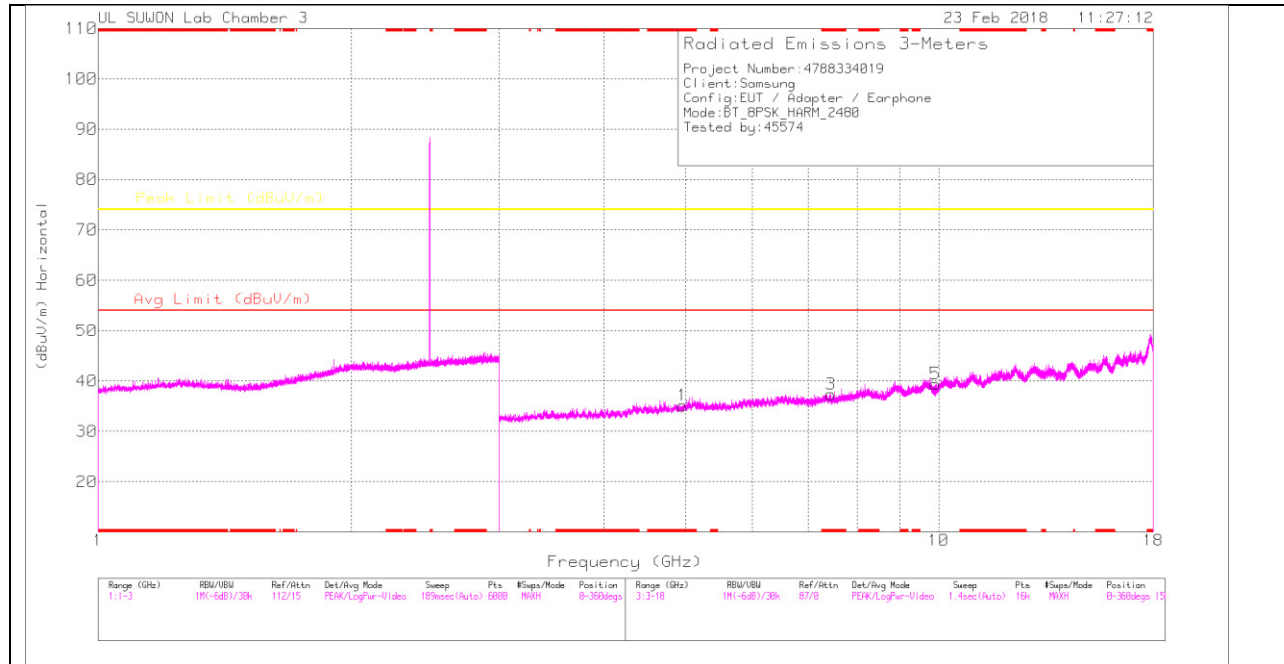
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[00205959]	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.884	30.34	PK	34	-28.9	35.44	-	-	74	-38.56	0-360	150	H
3	* 7.327	24.72	PK	35.6	-23.3	37.02	-	-	74	-36.98	0-360	250	H
5	9.768	21.9	PK	36.9	-19.5	39.3	-	-	74	-34.7	0-360	150	H
2	* 4.882	30.05	PK	34	-28.9	35.15	-	-	74	-38.85	0-360	251	V
4	* 7.325	24.97	PK	35.6	-23.4	37.17	-	-	74	-36.83	0-360	149	V
6	9.767	22.05	PK	36.9	-19.6	39.35	-	-	74	-34.65	0-360	251	V

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

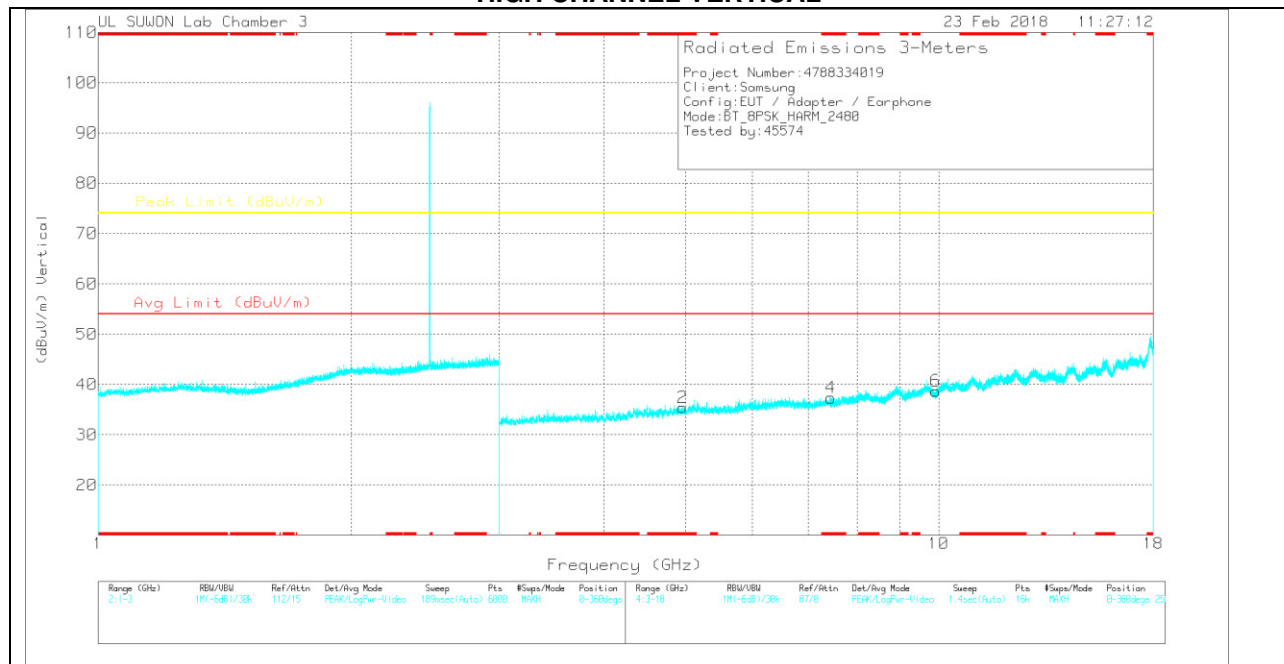
PK – Peak Detector

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	* 4.955	29.6	PK	34.1	-28.6	35.1	-	-	74	-38.9	0-360	150	H
3	* 7.439	25.05	PK	35.6	-23.3	37.35	-	-	74	-36.65	0-360	150	H
5	9.914	22.12	PK	37	-19.7	39.42	-	-	74	-34.58	0-360	250	H
2	* 4.96	29.78	PK	34.1	-28.5	35.38	-	-	74	-38.62	0-360	250	V
4	* 7.441	24.95	PK	35.6	-23.2	37.35	-	-	74	-36.65	0-360	250	V
6	9.919	21.4	PK	37	-19.7	38.7	-	-	74	-35.3	0-360	149	V

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

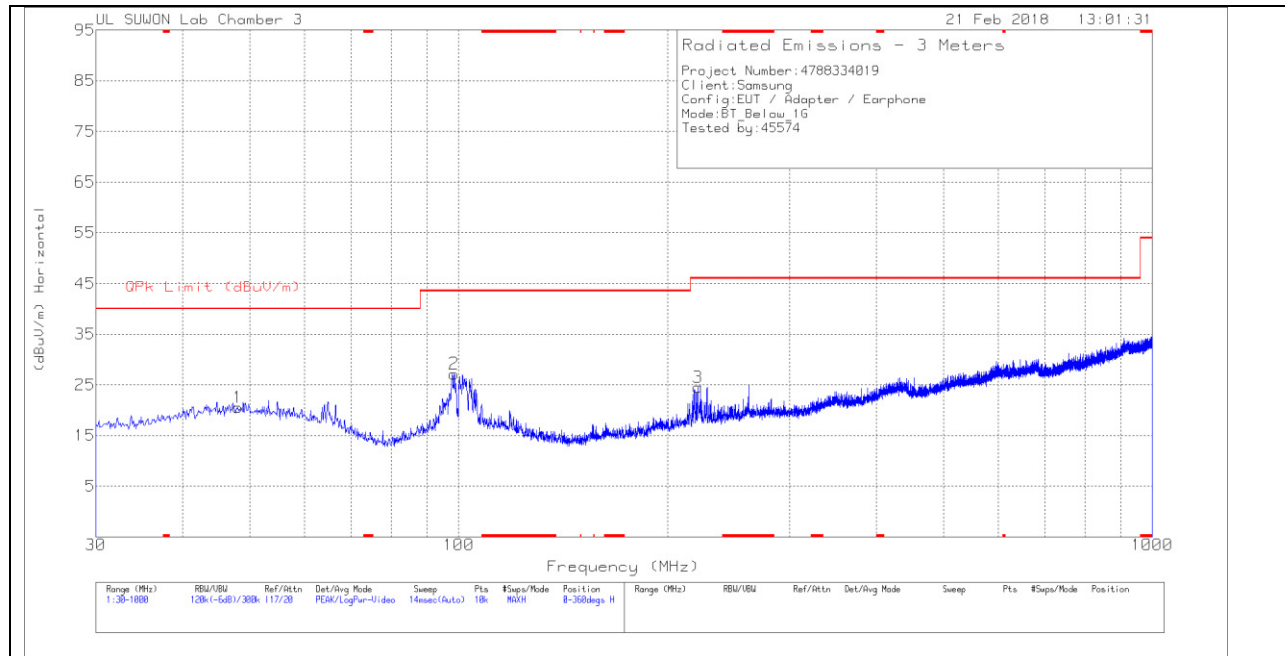
PK – Peak Detector

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

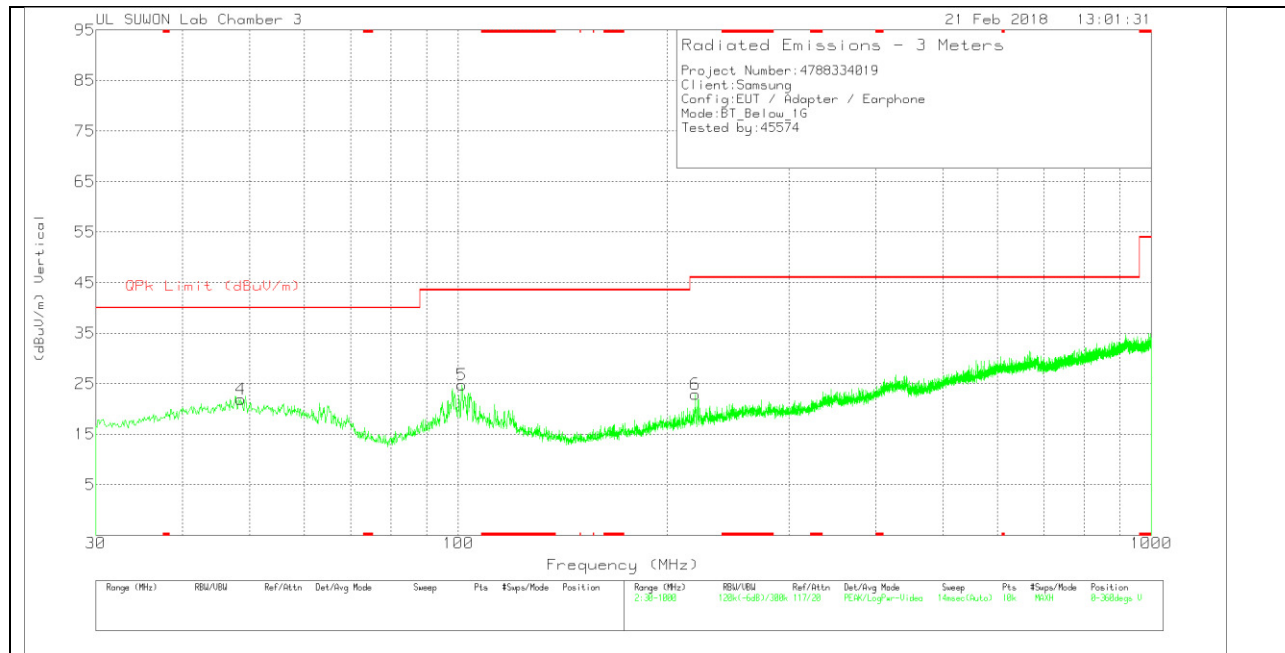
11.3. WORST-CASE BELOW 1 GHz

GFSK SPURIOUS EMISSIONS 30 TO 1000 MHz (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	48.0439	32.47	Pk	20.1	-32	20.57	40	-19.43	0-360	100	H
2	98.5861	41.08	Pk	17.6	-31.5	27.18	43.52	-16.34	0-360	300	H
3	221.1097	38.28	Pk	17.2	-31	24.48	46.02	-21.54	0-360	100	H
4	48.5289	33.93	Pk	20.1	-32.1	21.93	40	-18.07	0-360	100	V
5	101.2053	38.42	Pk	17.8	-31.5	24.72	43.52	-18.8	0-360	400	V
6	219.7516	36.76	Pk	17.1	-31	22.86	46.02	-23.16	0-360	100	V

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.

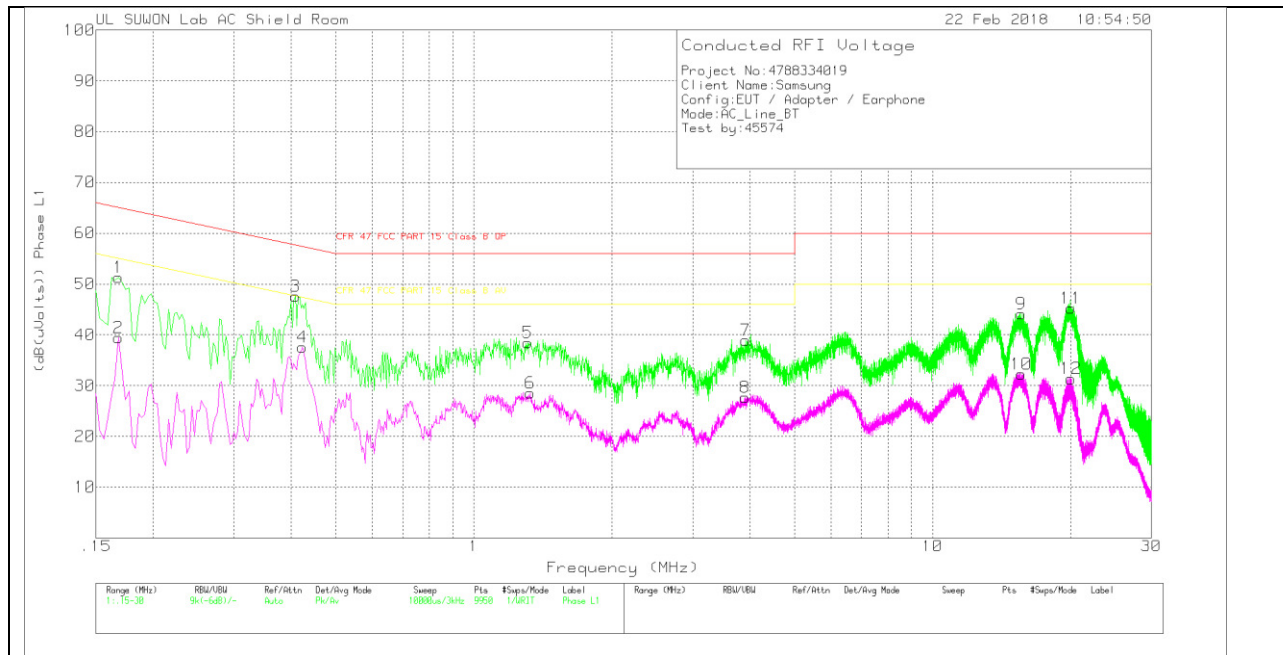
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

Trace Markers

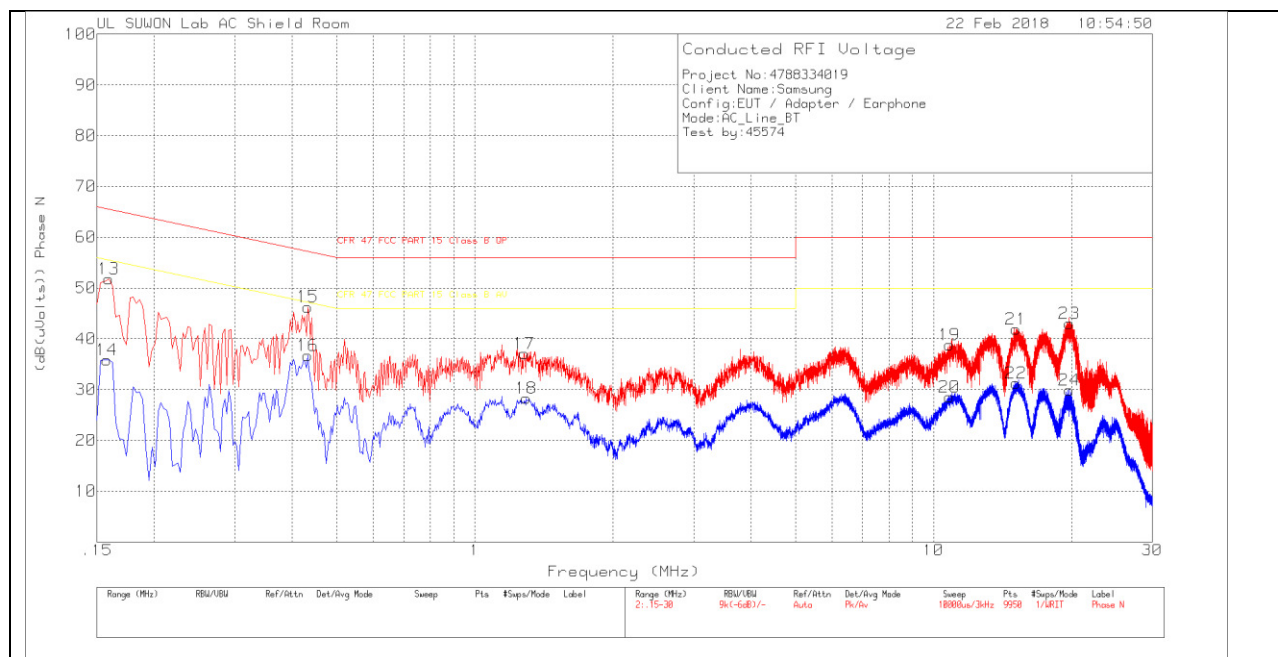
Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_L1_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	.168	41.21	Pk	10	.1	51.31	65.06	-13.75	-	-
2	.168	29.28	Av	10	.1	39.38	-	-	55.06	-15.68
3	.408	37.63	Pk	9.8	.2	47.63	57.69	-10.06	-	-
4	.423	27.56	Av	9.8	.2	37.56	-	-	47.39	-9.83
5	1.311	28.26	Pk	9.9	.3	38.46	56	-17.54	-	-
6	1.329	18.34	Av	9.9	.3	28.54	-	-	46	-17.46
7	3.909	28.84	Pk	9.8	.3	38.94	56	-17.06	-	-
8	3.897	17.59	Av	9.8	.3	27.69	-	-	46	-18.31
9	15.612	33.87	Pk	9.9	.4	44.17	60	-15.83	-	-
10	15.612	21.93	Av	9.9	.4	32.23	-	-	50	-17.77
11	20.022	34.71	Pk	10.1	.4	45.21	60	-14.79	-	-
12	20.028	20.83	Av	10.1	.4	31.33	-	-	50	-18.67

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	.159	41.75	Pk	10	.1	51.85	65.52	-13.67	-	-
14	.1575	25.77	Av	10	.1	35.87	-	-	55.59	-19.72
15	.432	36.29	Pk	9.8	.2	46.29	57.21	-10.92	-	-
16	.432	26.71	Av	9.8	.2	36.71	-	-	47.21	-10.5
17	1.284	26.88	Pk	9.9	.3	37.08	56	-18.92	-	-
18	1.296	18.05	Av	9.9	.3	28.25	-	-	46	-17.75
19	10.842	28.7	Pk	9.8	.3	38.8	60	-21.2	-	-
20	10.83	18.39	Av	9.8	.3	28.49	-	-	50	-21.51
21	15.12	31.56	Pk	9.9	.4	41.86	60	-18.14	-	-
22	15.12	20.97	Av	9.9	.4	31.27	-	-	50	-18.73
23	19.788	32.51	Pk	10.1	.4	43.01	60	-16.99	-	-
24	19.779	19.42	Av	10.1	.4	29.92	-	-	50	-20.08

Pk - Peak detector

Av - Average detection