



**FCC CFR47 PART 15 SUBPART C
CLASS II PERMISSIVE CHANGE**

BLUETOOTH

CERTIFICATION TEST REPORT

FOR

Tablet with 802.11abgn, BT3.0

MODEL NUMBER: GT-P6211

FCC ID: A3LGTP6210

REPORT NUMBER: 11I14172-1

ISSUE DATE: DECEMBER 20, 2011

Prepared for
**SAMSUNG ELECTRONICS CO., LTD.
416, MAETAN 3-DONG, YEONGTONG-GU
SUWON CITY, GYEONGGI-DO 443-742
SOUTH KOREA**

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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	12/20/11	Initial Issue	F. Ibrahim

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD
416, MAETAN 3-DONG, YEONGTONG-GU
SUWON CITY, GYEONGGI-DO 443-742, SOUTH KOREA

EUT DESCRIPTION: Tablet with 802.11abgn, BT3.0

MODEL: GT-P6211

SERIAL NUMBER: R#02

DATE TESTED: DECEMBER 08 – 14, 2011

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Pass

Compliance Certification Services (UL CCS) tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL CCS based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL CCS will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For UL CCS By:



FRANK IBRAHIM
EMC SUPERVISOR
UL CCS

Tested By:



VIEN TRAN
EMC ENGINEER
UL CCS

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2009, FCC CFR 47 Part 2, and FCC CFR 47 Part 15.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

UL CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://www.ccsemc.com>.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamplifier Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 1000 MHz	4.94 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a tablet PC with an 802.11a/b/g/n transceiver and Bluetooth transceiver.

The radio module is manufactured by CSR.

5.2. MAXIMUM OUTPUT POWER

The average output power was within $\pm 0.5\text{dBm}$ of the original output power.

5.3. DESCRIPTION OF CLASS II PERMISSIVE CHANGE

The major changes filed under this application are:

- 1/ the shape, pattern of BT/GPS antennas carrier changed.
- 2/ the receiver part doesn't changed, just the shape of FPCB changed. The shape of Neck Part of FPCB connected between Receiver and PCB changed.
- 3/ the location of SPK hole changed from bottom to front.
- 4/ the thickness of the motor changed from 3.6T to 3.0T.
- 5/ the AC adapter changed to model number ETA-P11X.

5.4. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an 802.11 a/b/g/n and a Bluetooth antenna, with a maximum gain as stated in the table below;

Frequency	Eff. (%)	Ave. Gain (dBi)	Peak Gain (dBi)	Directivity (dBi)
1574 MHz	46	-3.40	1.35	4.75
1574.4 MHz	46	-3.40	1.34	4.74
1574.8 MHz	46	-3.40	1.34	4.74
1575.2 MHz	46	-3.38	1.45	4.83
1575.6 MHz	46	-3.39	1.45	4.84
1576 MHz	46	-3.39	1.44	4.83
1596 MHz	45	-3.45	1.05	4.50
1598.2 MHz	45	-3.48	1.02	4.50
1600.4 MHz	45	-3.48	1.00	4.48
1602.6 MHz	45	-3.48	1.00	4.48
1604.8 MHz	45	-3.43	0.99	4.42
1607 MHz	45	-3.50	0.98	4.48
2400 MHz	45	-3.50	0.29	3.79
2445 MHz	44	-3.52	0.20	3.72
2447 MHz	44	-3.52	0.07	3.59
2475 MHz	44	-3.55		3.55
2484 MHz	44	-3.60	0.10	3.70
2500 MHz	41	-3.83		3.83

5.5. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was HCI Stack 4.0 (Software version: 26A).

The EUT driver software installed in the equipment during testing was BT: HW REV1.0, SW: P6211.001.

5.6. WORST-CASE CONFIGURATION AND MODE

Radiated emission below 1 GHz and power line conducted emissions were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

For the fundamental investigation, since the EUT is a portable device that has three orientations X, Y and Z orientations have been investigated, also with AC/DC adapter, and earphone, the worst case was found to be at Y orientation with AC Adapter. Final testing was performed at this worst-case orientation.

5.7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	Samsung	ETA-P11X	N/A	N/A
Earphone	Samsung	N/A	N/A	N/A

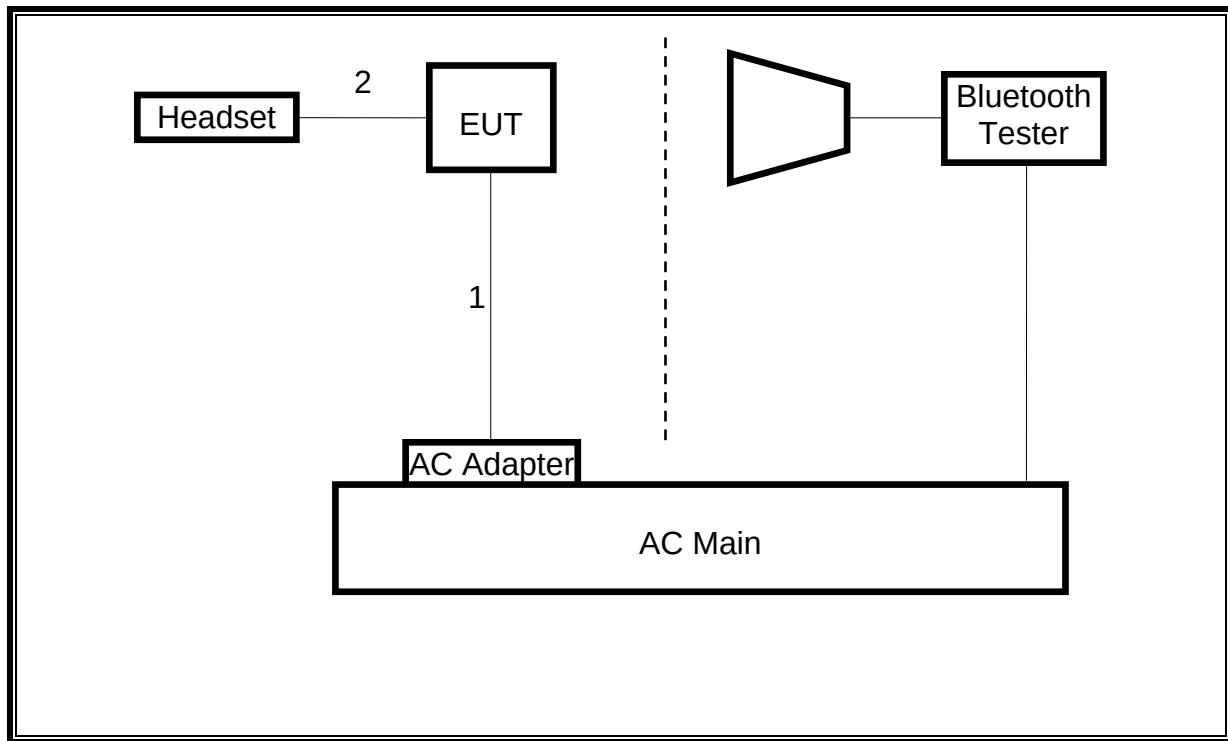
I/O CABLES

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	DC	1	DC	Un-shielded	2m	NA
2	Audio	1	Earphone	Un-shielded	2m	Volume Control on Cable

TEST SETUP

The EUT is a stand-alone device. A Communication Bluetooth Tester is used to link the device under test.

SETUP DIAGRAM FOR TESTS (RADIATED TEST SETUP)



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST					
Description	Manufacturer	Model	Asset	Cal Date	Cal Due
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01176	08/04/11	08/04/12
EMI Test Receiver, 9 kHz-7 GHz	R & S	ESCI 7	1000741	07/06/11	07/06/12
Antenna, Bilog, 2 GHz	Sunol Sciences	JB1	C01011	07/16/11	07/16/12
Antenna, Horn, 18 GHz	EMCO	3115	C00872	06/29/11	06/29/12
Antenna, Horn, 26.5 GHz	ARA	MWH-1826/B	C00589	07/28/11	07/28/12
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00558	01/27/11	01/27/12
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C00749	07/18/11	07/18/12
LISN, 30 MHz	FCC	LISN-50/250-25-2	N02625	11/10/10	11/10/11
Bluetooth Tester	R & S	1153.9000K35	N/A	04/22/11	04/22/12
Reject Filter, 2.4-2.5 GHz	Micro-Tronics	BRC13192	N02683	N/A	N/A

7. RADIATED TEST RESULTS

7.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

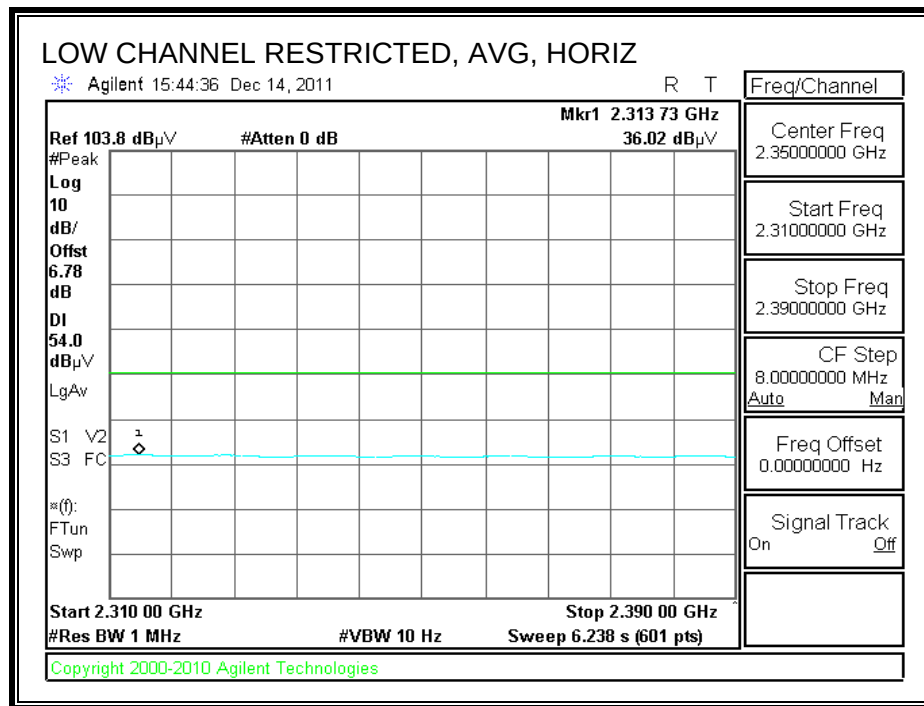
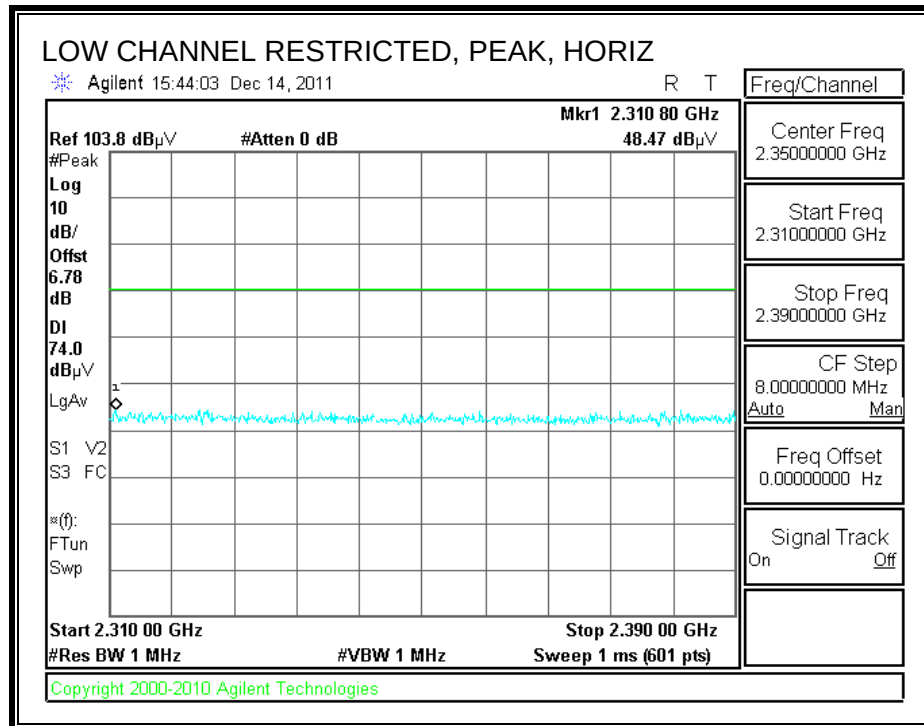
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

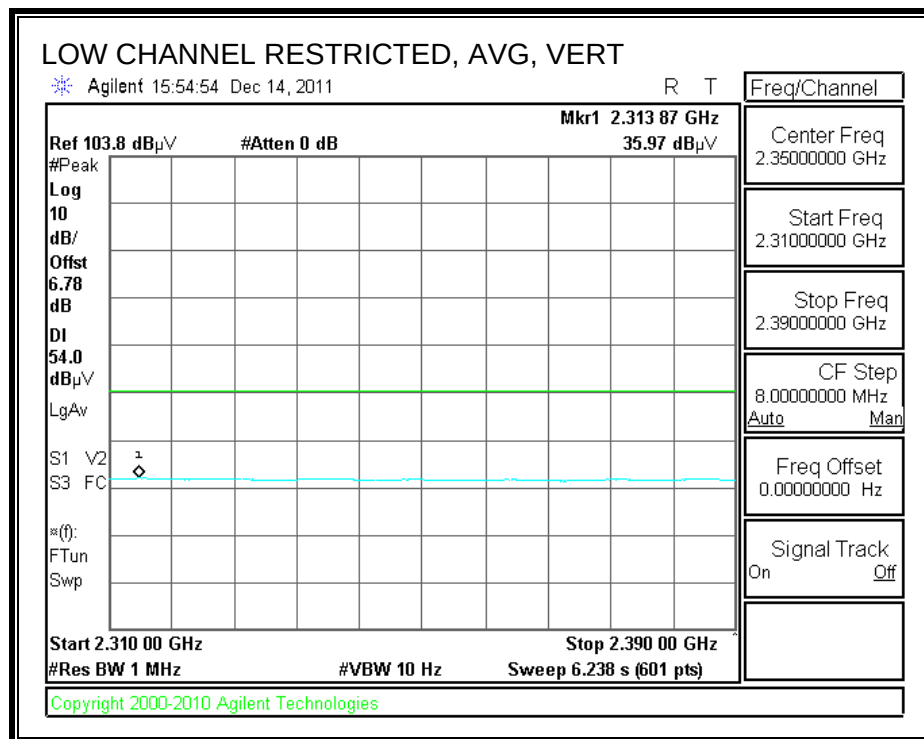
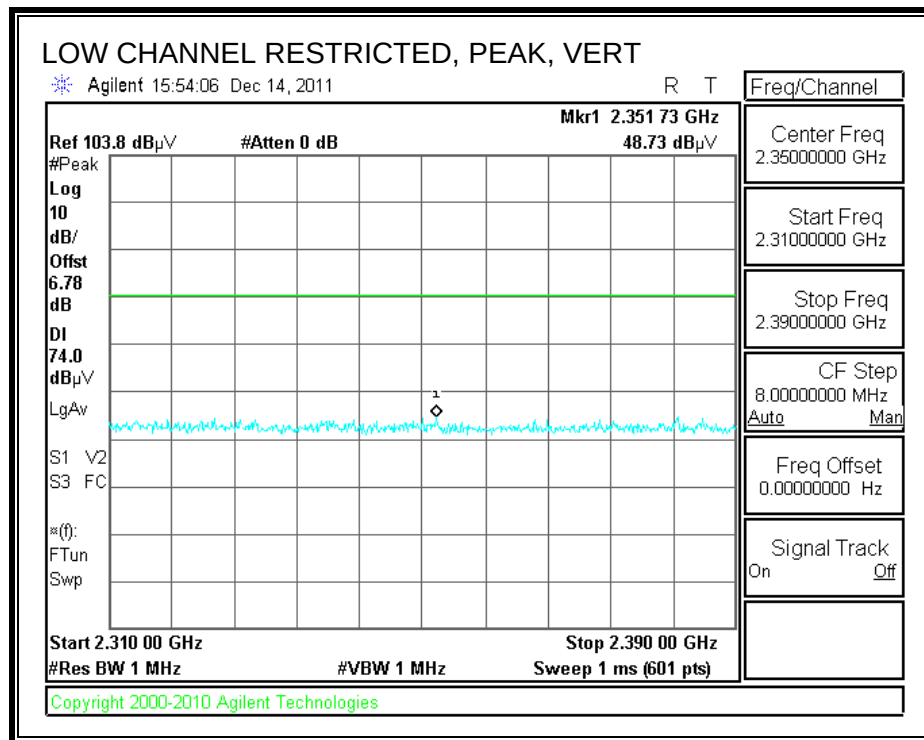
7.2. TRANSMITTER ABOVE 1 GHz

7.2.1. BASIC DATA RATE GFSK MODULATION

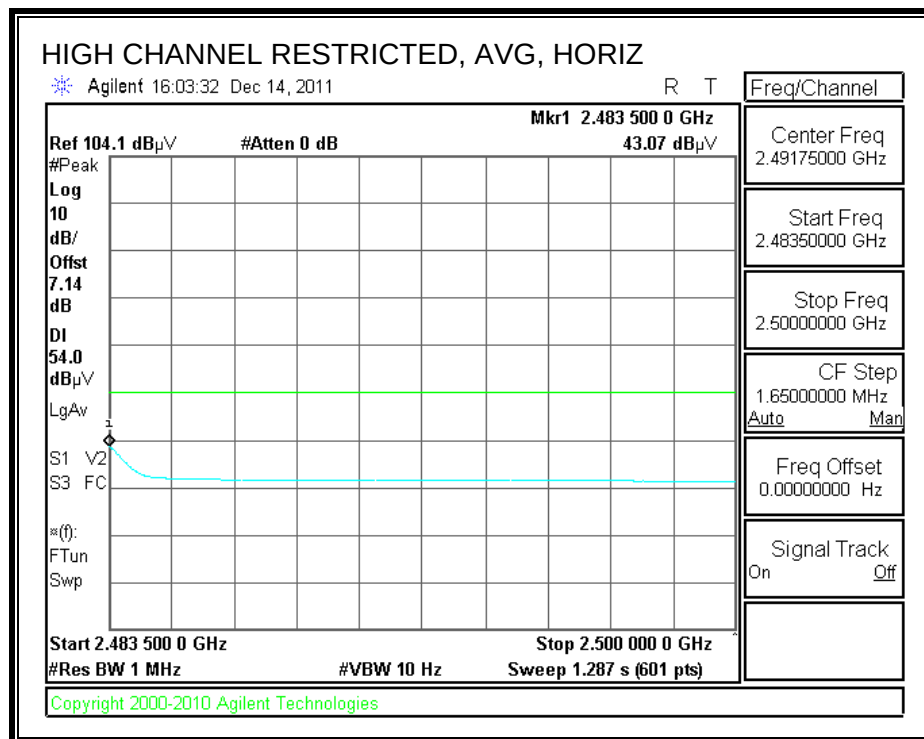
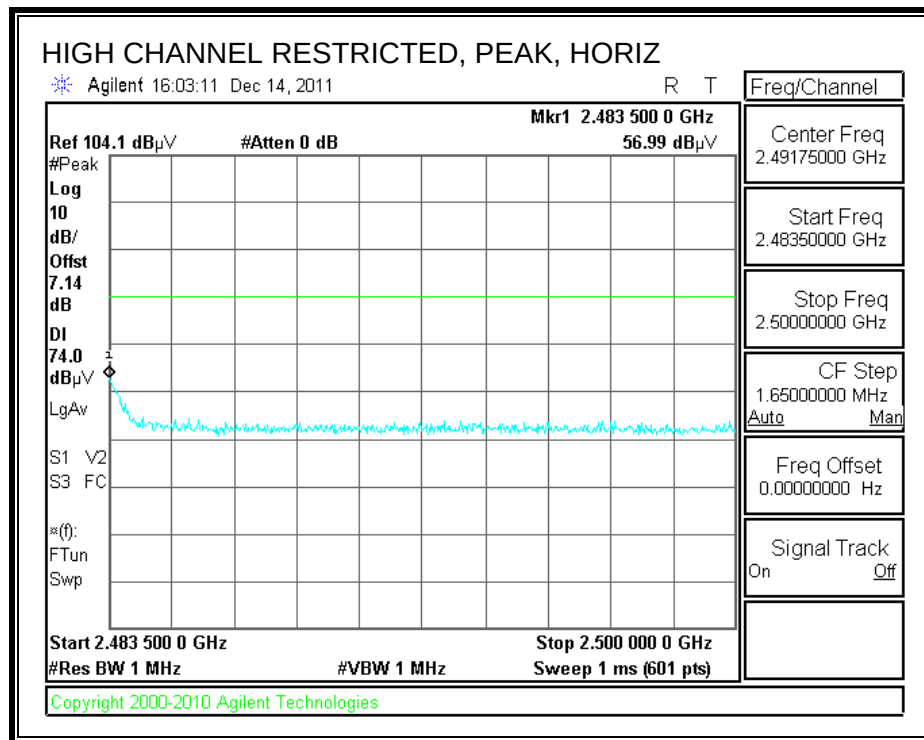
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



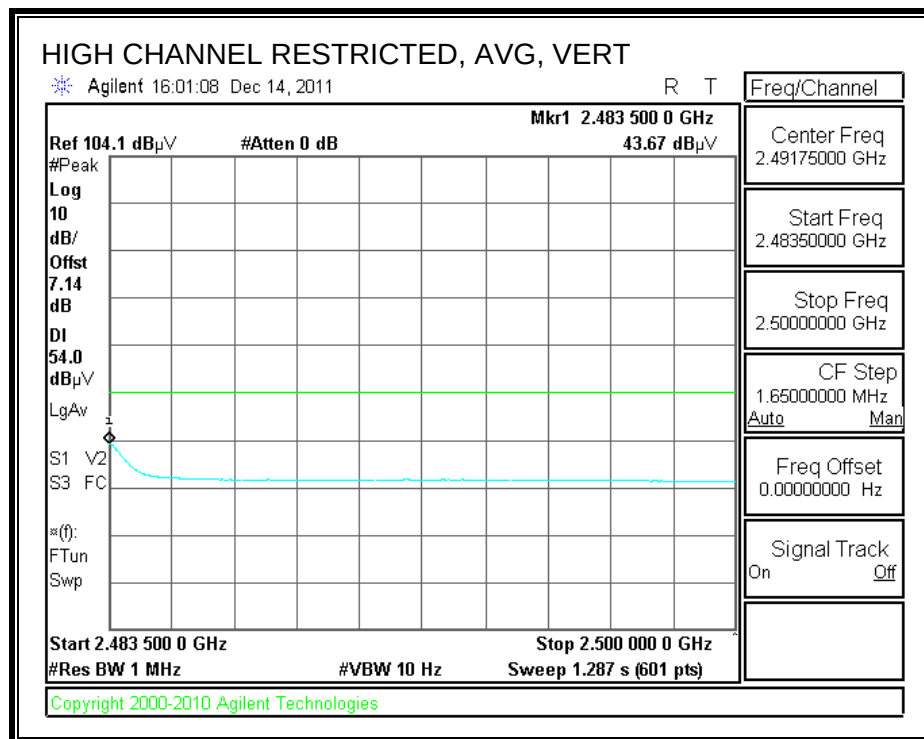
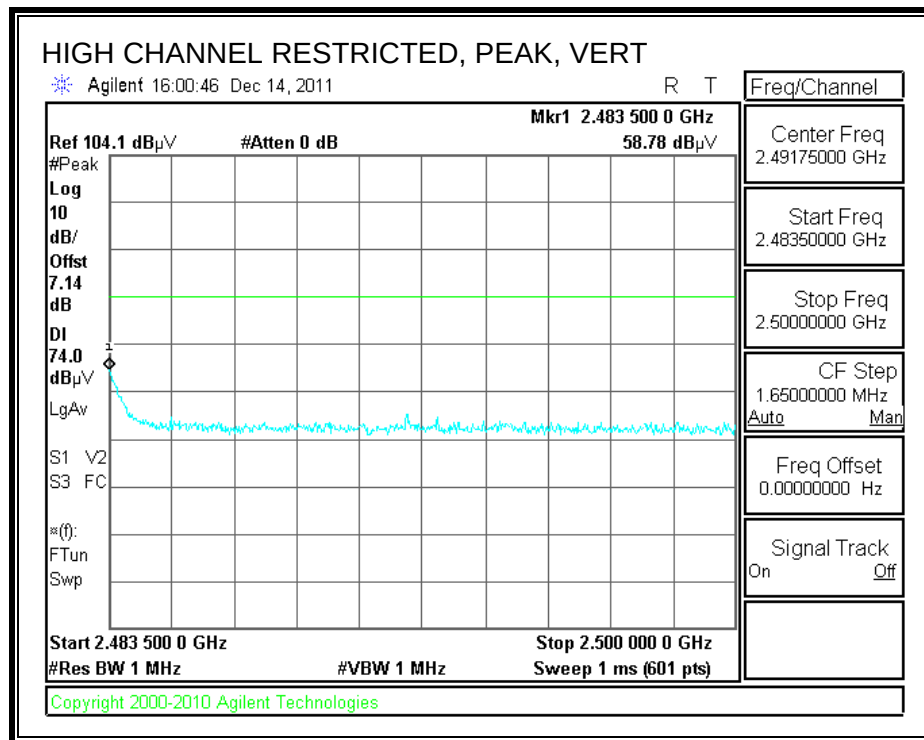
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement

Compliance Certification Services, Fremont 5m Chamber

Test Engr: William Zhuang

Date: 12/09/11

Project #: 11I14172_P6211

Company: Samsung

Test Target: FCC 15.205 limits

Mode Oper: GFSK

f	Measurement Frequency	Amp	Preamp Gain	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter	

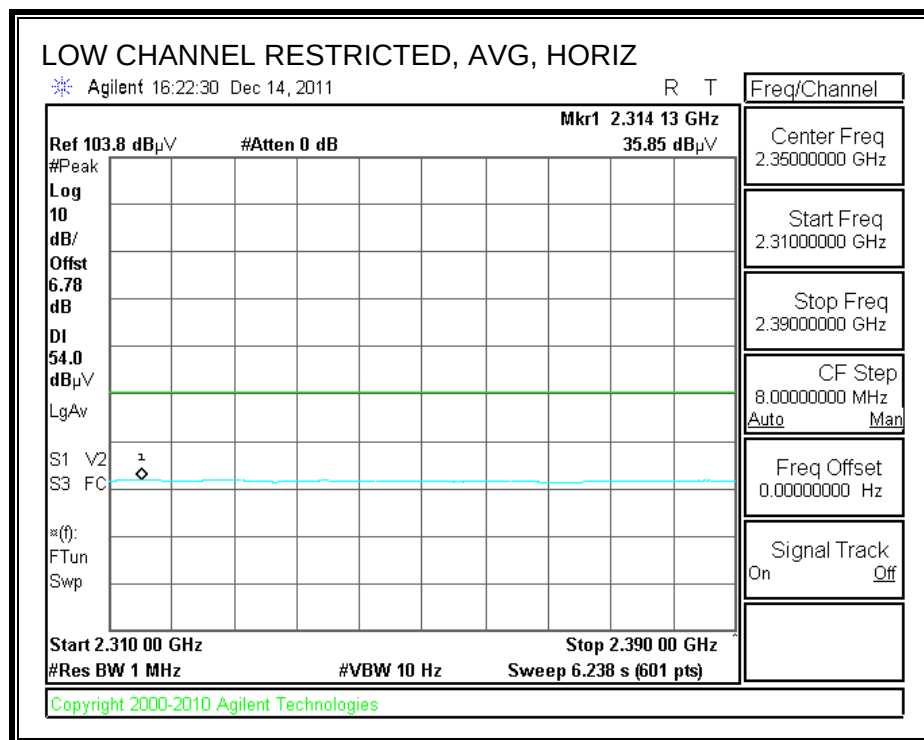
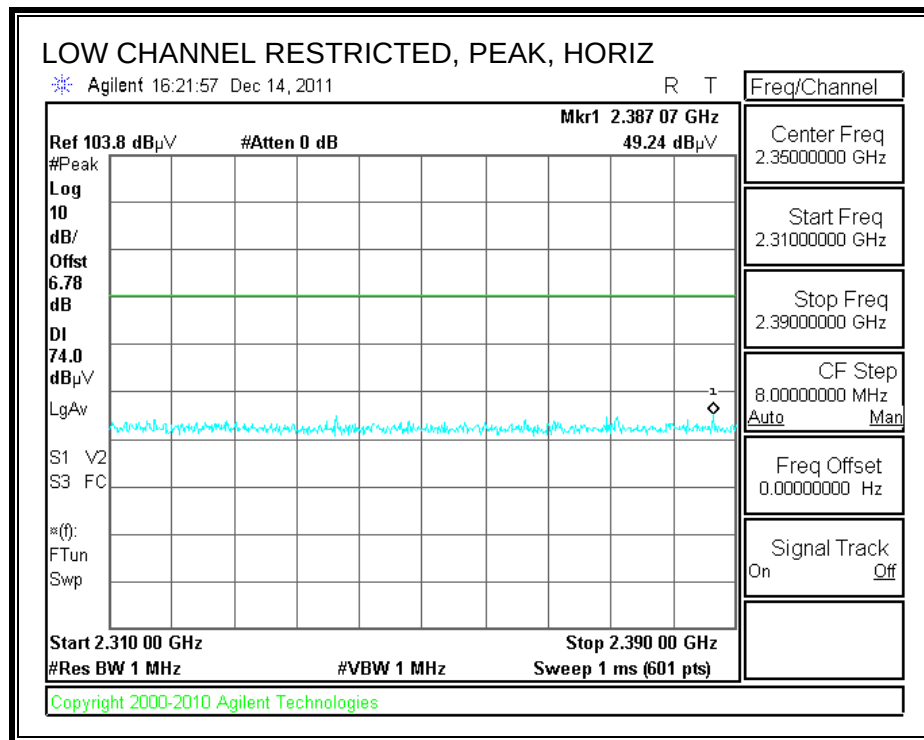
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Ant.High cm	Table Angle Degree	Notes
Low Ch. 2402 MHz															
4.804	3.0	38.8	33.4	5.8	-36.5	0.0	0.0	41.6	74.0	-32.4	V	P	106.3	174.2	
4.804	3.0	28.4	33.4	5.8	-36.5	0.0	0.0	31.2	54.0	-22.8	V	A	106.3	174.2	
4.804	3.0	38.9	33.4	5.8	-36.5	0.0	0.0	41.6	74.0	-32.4	H	P	100.0	276.9	
4.804	3.0	28.1	33.4	5.8	-36.5	0.0	0.0	30.8	54.0	-23.2	H	A	100.0	276.9	
12.010	3.0	35.8	39.3	9.7	-35.4	0.0	0.0	49.4	74.0	-24.6	H	P	178.0	198.6	
12.010	3.0	23.0	39.3	9.7	-35.4	0.0	0.0	36.6	54.0	-17.4	H	A	178.0	198.6	
12.010	3.0	35.3	39.3	9.7	-35.4	0.0	0.0	49.0	74.0	-25.0	V	P	109.1	329.9	
12.010	3.0	22.9	39.3	9.7	-35.4	0.0	0.0	36.6	54.0	-17.4	V	A	109.1	329.9	
Mid Ch. 2441 MHz															
4.882	3.0	39.4	33.5	5.8	-36.5	0.0	0.0	42.2	74.0	-31.8	V	P	170.2	177.1	
4.882	3.0	29.2	33.5	5.8	-36.5	0.0	0.0	32.1	54.0	-21.9	V	A	170.2	177.1	
4.882	3.0	40.1	33.5	5.8	-36.5	0.0	0.0	43.0	74.0	-31.0	H	P	100.0	251.2	
4.882	3.0	29.6	33.5	5.8	-36.5	0.0	0.0	32.4	54.0	-21.6	H	A	100.0	251.2	
7.323	3.0	40.4	35.7	7.3	-36.2	0.0	0.0	47.1	74.0	-26.9	H	P	112.5	6.2	
7.323	3.0	29.5	35.7	7.3	-36.2	0.0	0.0	36.3	54.0	-17.7	H	A	112.5	6.2	
7.323	3.0	40.1	35.7	7.3	-36.2	0.0	0.0	46.9	74.0	-27.1	V	P	109.5	204.7	
7.323	3.0	31.0	35.7	7.3	-36.2	0.0	0.0	37.8	54.0	-16.2	V	A	109.5	204.7	
12.205	3.0	34.9	39.3	9.8	-35.4	0.0	0.0	48.6	74.0	-25.4	V	P	156.1	148.9	
12.205	3.0	22.7	39.3	9.8	-35.4	0.0	0.0	36.5	54.0	-17.5	V	A	156.1	148.9	
12.205	3.0	35.6	39.3	9.8	-35.4	0.0	0.0	49.3	74.0	-24.7	H	P	182.5	325.8	
12.205	3.0	22.7	39.3	9.8	-35.4	0.0	0.0	36.4	54.0	-17.6	H	A	182.5	325.8	
High Ch. 2480 MHz															
4.960	3.0	39.0	33.6	5.9	-36.5	0.0	0.0	42.0	74.0	-32.0	V	P	138.0	181.3	
4.960	3.0	28.0	33.6	5.9	-36.5	0.0	0.0	31.0	54.0	-23.0	V	A	138.0	181.3	
4.960	3.0	38.3	33.6	5.9	-36.5	0.0	0.0	41.3	74.0	-32.7	H	P	100.4	200.4	
4.960	3.0	27.5	33.6	5.9	-36.5	0.0	0.0	30.5	54.0	-23.5	H	A	100.4	200.4	
7.440	3.0	39.6	35.9	7.3	-36.2	0.0	0.0	46.6	74.0	-27.4	H	P	144.3	13.3	
7.440	3.0	28.9	35.9	7.3	-36.2	0.0	0.0	36.0	54.0	-18.0	H	A	144.3	13.3	
7.440	3.0	40.0	35.9	7.3	-36.2	0.0	0.0	47.1	74.0	-26.9	V	P	100.4	69.3	
7.440	3.0	30.7	35.9	7.3	-36.2	0.0	0.0	37.8	54.0	-16.2	V	A	100.4	69.3	
12.400	3.0	34.4	39.3	9.9	-35.4	0.0	0.0	48.3	74.0	-25.7	V	P	198.3	214.4	
12.400	3.0	22.4	39.3	9.9	-35.4	0.0	0.0	36.2	54.0	-17.8	V	A	198.3	214.4	
12.400	3.0	34.1	39.3	9.9	-35.4	0.0	0.0	48.0	74.0	-26.0	H	P	101.2	93.9	
12.400	3.0	22.3	39.3	9.9	-35.4	0.0	0.0	36.1	54.0	-17.9	H	A	101.2	93.9	

Rev. 4.1.2.7

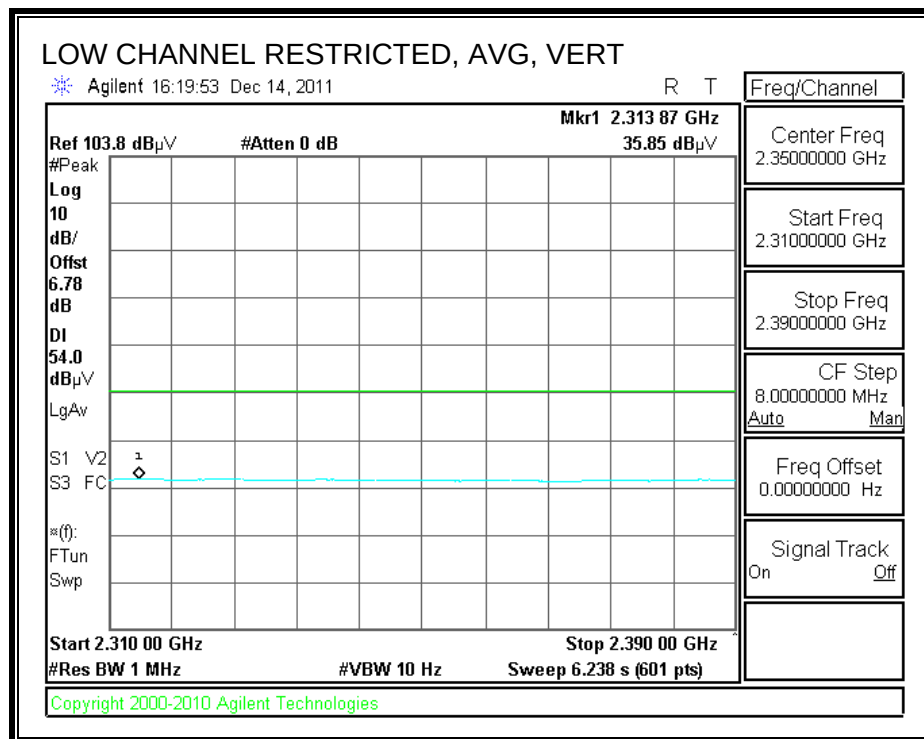
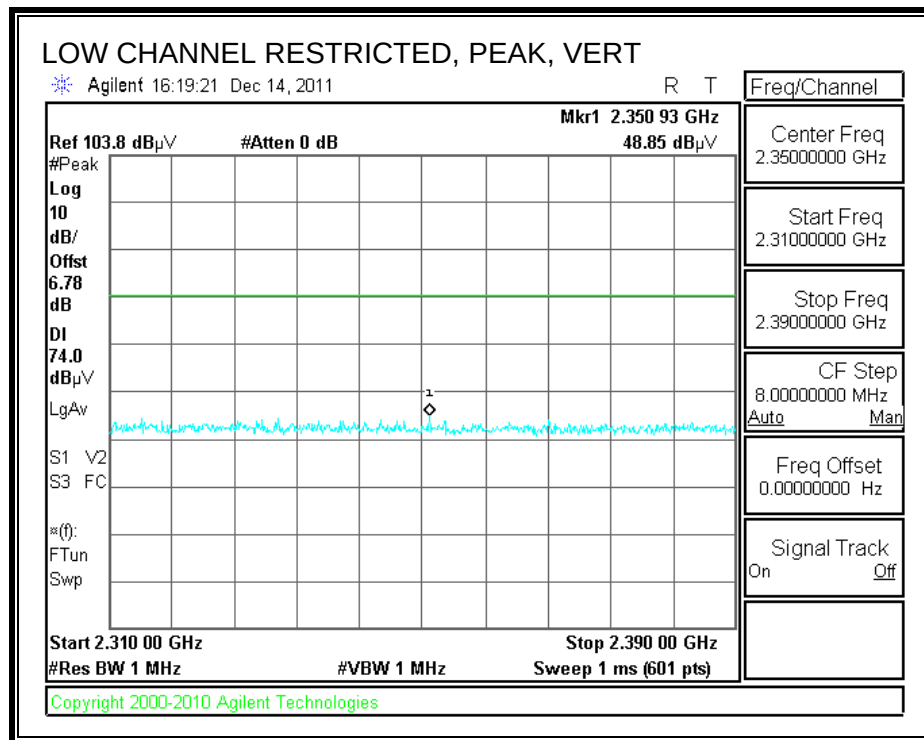
Note: No other emissions were detected above the system noise floor.

7.2.2. ENHANCED DATA RATE 8PSK MODULATION

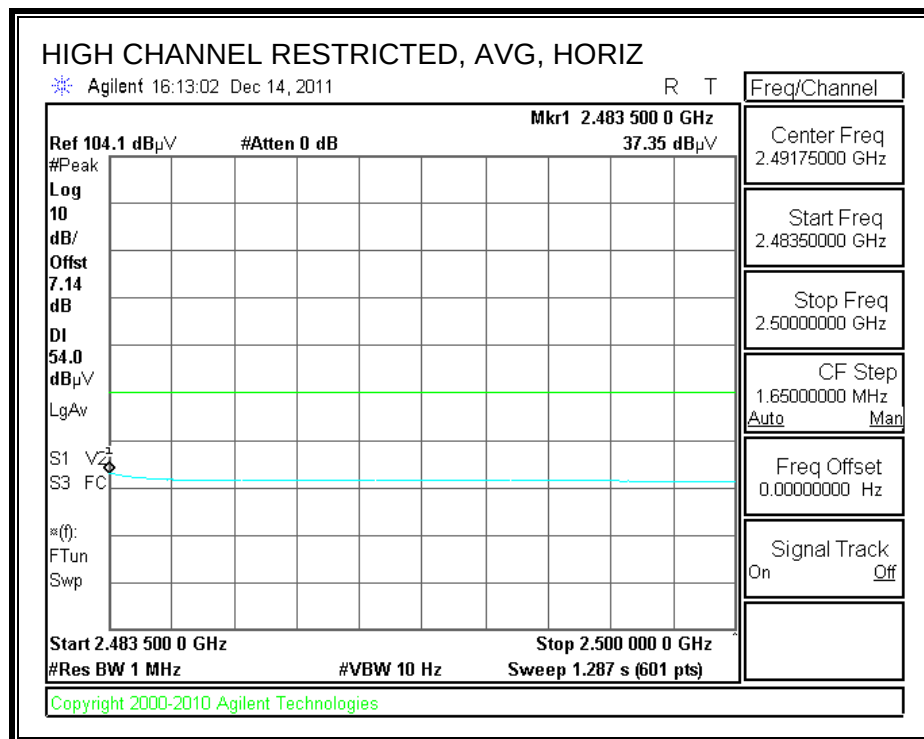
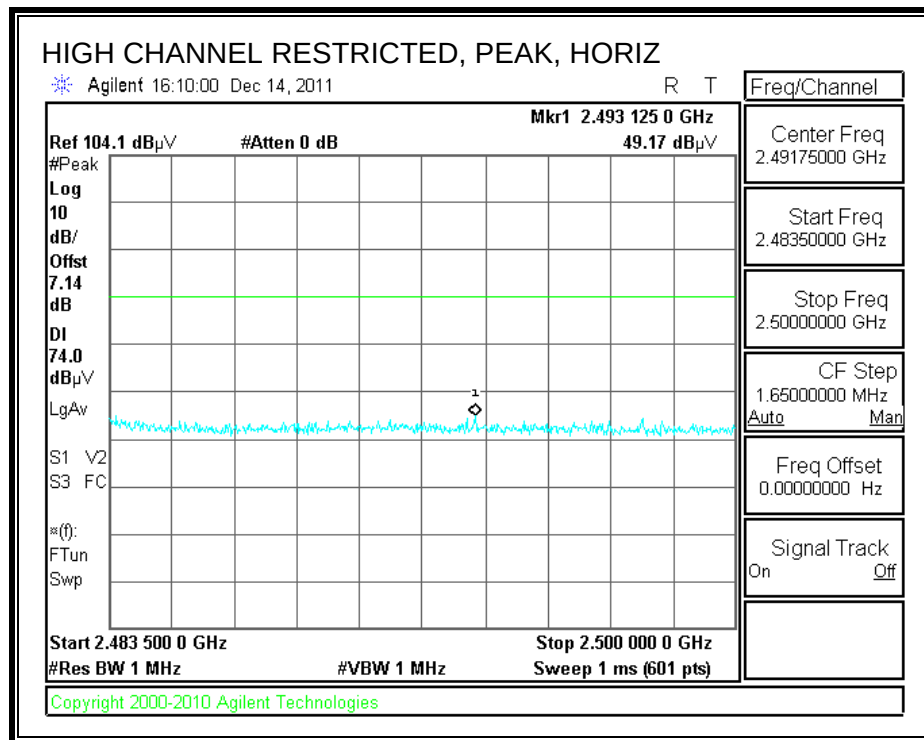
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



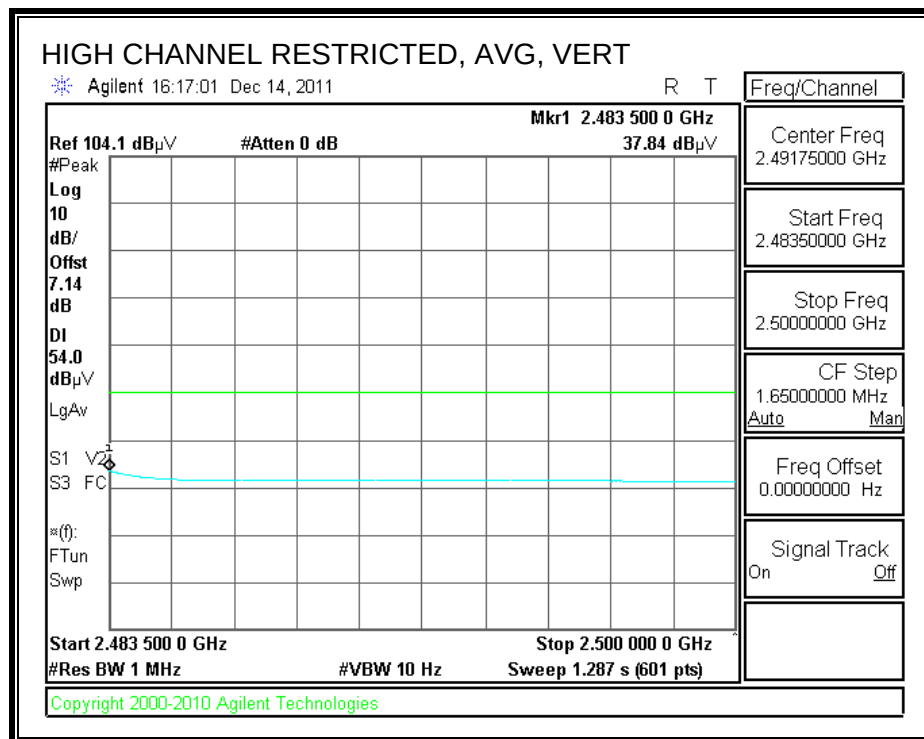
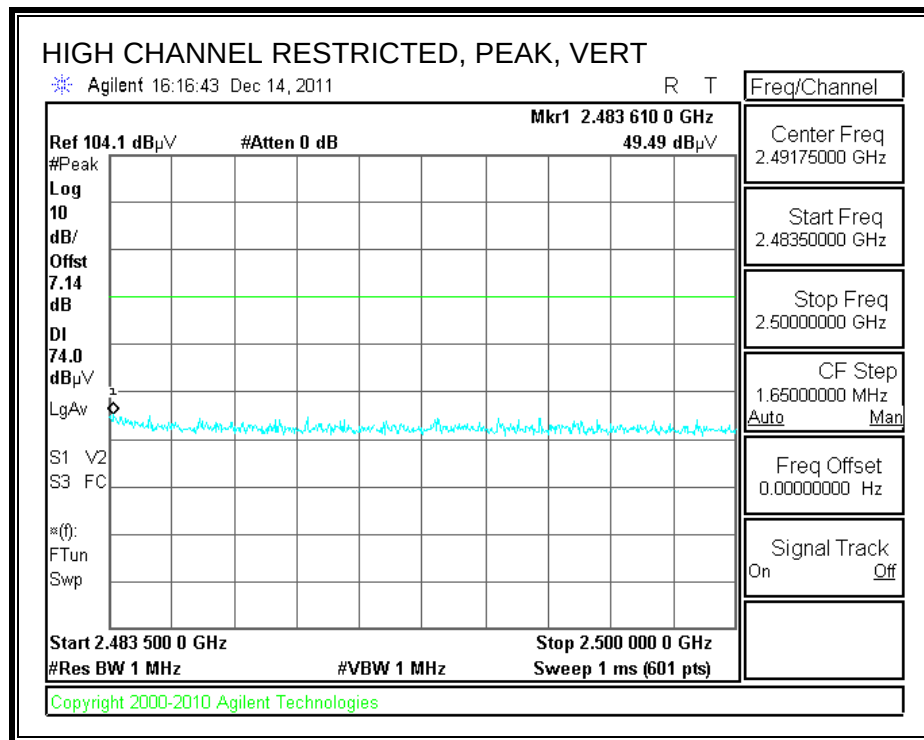
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement

Compliance Certification Services, Fremont 5m Chamber

Test Engr: William Zhuang

Date: 12/09/11

Project #: 11I14172_P6211

Company: Samsung

Test Target: FCC 15.205 limits

Mode Oper: 8PSK

f	Measurement Frequency	Amp	Preamp Gain	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter	

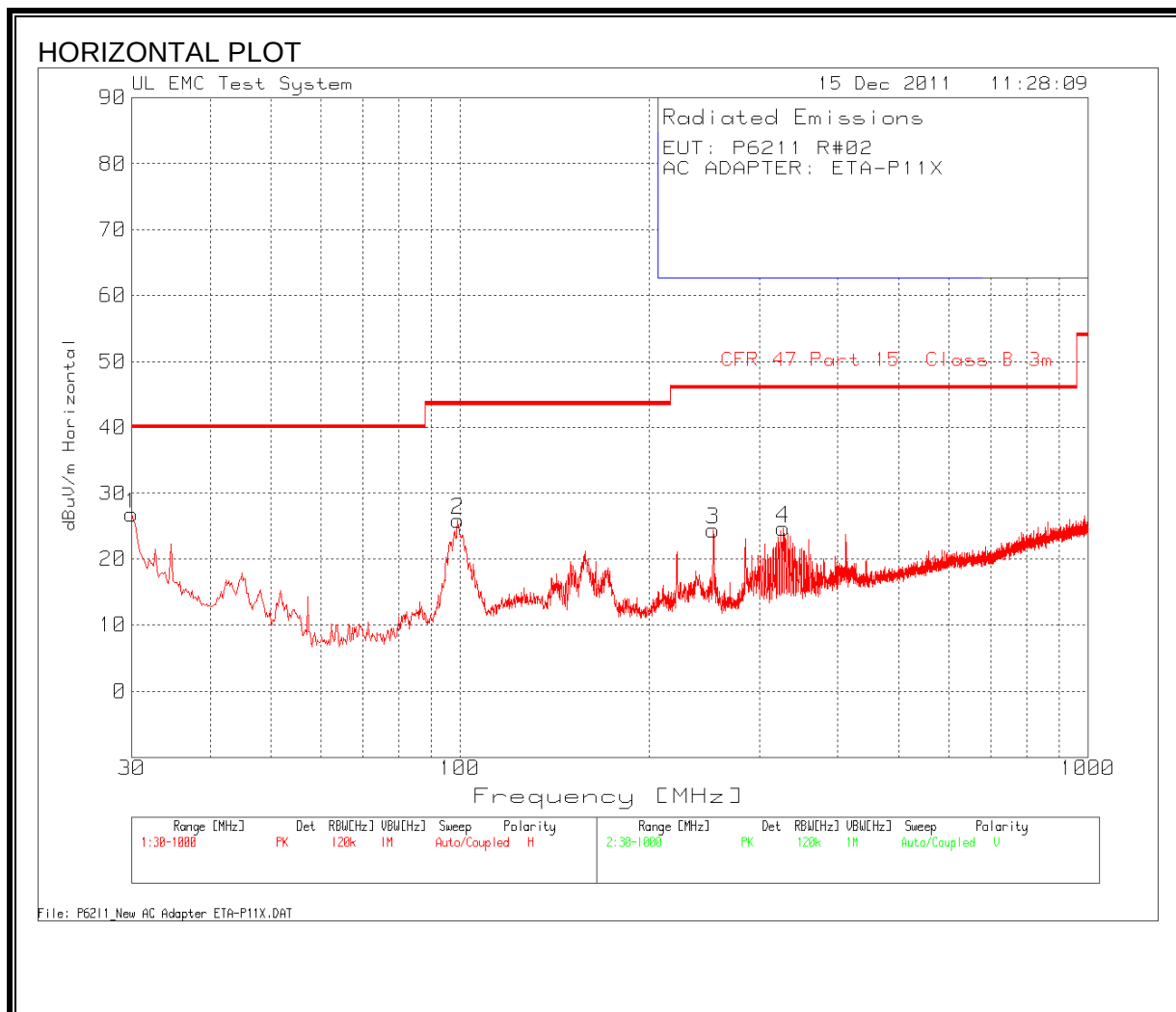
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Ant.High cm	Table Angle Degree	Notes
Low Ch. 2402 MHz															
4.804	3.0	37.9	33.4	5.8	-36.5	0.0	0.0	40.7	74.0	-33.3	V	P	198.3	0.7	
4.804	3.0	25.7	33.4	5.8	-36.5	0.0	0.0	28.5	54.0	-25.5	V	A	198.3	0.7	
4.804	3.0	38.6	33.4	5.8	-36.5	0.0	0.0	41.4	74.0	-32.6	H	P	149.3	283.4	
4.804	3.0	25.7	33.4	5.8	-36.5	0.0	0.0	28.5	54.0	-25.5	H	A	149.3	283.4	
12.010	3.0	35.5	39.3	9.7	-35.4	0.0	0.0	49.2	74.0	-24.8	H	P	176.4	45.5	
12.010	3.0	23.0	39.3	9.7	-35.4	0.0	0.0	36.7	54.0	-17.3	H	A	176.4	45.5	
12.010	3.0	35.2	39.3	9.7	-35.4	0.0	0.0	48.9	74.0	-25.1	V	P	174.9	194.9	
12.010	3.0	23.0	39.3	9.7	-35.4	0.0	0.0	36.7	54.0	-17.3	V	A	174.9	194.9	
Mid Ch. 2441 MHz															
4.882	3.0	37.8	33.5	5.8	-36.5	0.0	0.0	40.7	74.0	-33.3	V	P	195.6	174.8	
4.882	3.0	26.2	33.5	5.8	-36.5	0.0	0.0	29.1	54.0	-24.9	V	A	195.6	174.8	
4.882	3.0	38.0	33.5	5.8	-36.5	0.0	0.0	40.9	74.0	-33.1	H	P	101.6	156.3	
4.882	3.0	25.7	33.5	5.8	-36.5	0.0	0.0	28.6	54.0	-25.4	H	A	101.6	156.3	
7.323	3.0	36.9	35.7	7.3	-36.2	0.0	0.0	43.7	74.0	-30.3	H	P	185.7	48.7	
7.323	3.0	25.1	35.7	7.3	-36.2	0.0	0.0	31.9	54.0	-22.1	H	A	185.7	48.7	
7.323	3.0	37.1	35.7	7.3	-36.2	0.0	0.0	43.9	74.0	-30.1	V	P	130.6	52.8	
7.323	3.0	25.1	35.7	7.3	-36.2	0.0	0.0	31.9	54.0	-22.1	V	A	130.6	52.8	
12.205	3.0	35.7	39.3	9.8	-35.4	0.0	0.0	49.4	74.0	-24.6	V	P	188.0	4.2	
12.205	3.0	22.7	39.3	9.8	-35.4	0.0	0.0	36.5	54.0	-17.5	V	A	188.0	4.2	
12.205	3.0	34.4	39.3	9.8	-35.4	0.0	0.0	48.1	74.0	-25.9	H	P	115.3	109.3	
12.205	3.0	22.7	39.3	9.8	-35.4	0.0	0.0	36.4	54.0	-17.6	H	A	115.3	109.3	
High Ch. 2480 MHz															
4.960	3.0	38.3	33.6	5.9	-36.5	0.0	0.0	41.3	74.0	-32.7	V	P	137.6	41.5	
4.960	3.0	25.5	33.6	5.9	-36.5	0.0	0.0	28.5	54.0	-25.5	V	A	137.6	41.5	
4.960	3.0	39.3	33.6	5.9	-36.5	0.0	0.0	42.3	74.0	-31.7	H	P	198.8	1.9	
4.960	3.0	25.5	33.6	5.9	-36.5	0.0	0.0	28.5	54.0	-25.5	H	A	198.8	1.9	
7.440	3.0	37.8	35.9	7.3	-36.2	0.0	0.0	44.8	74.0	-29.2	H	P	184.6	212.5	
7.440	3.0	24.7	35.9	7.3	-36.2	0.0	0.0	31.7	54.0	-22.3	H	A	184.6	212.5	
7.440	3.0	38.0	35.9	7.3	-36.2	0.0	0.0	45.1	74.0	-28.9	V	P	143.3	71.6	
7.440	3.0	24.8	35.9	7.3	-36.2	0.0	0.0	31.8	54.0	-22.2	V	A	143.3	71.6	
12.400	3.0	34.5	39.3	9.9	-35.4	0.0	0.0	48.4	74.0	-25.6	V	P	106.5	182.3	
12.400	3.0	22.3	39.3	9.9	-35.4	0.0	0.0	36.2	54.0	-17.8	V	A	106.5	182.3	
12.400	3.0	34.4	39.3	9.9	-35.4	0.0	0.0	48.3	74.0	-25.7	H	P	138.2	327.7	
12.400	3.0	22.3	39.3	9.9	-35.4	0.0	0.0	36.1	54.0	-17.9	H	A	138.2	327.7	

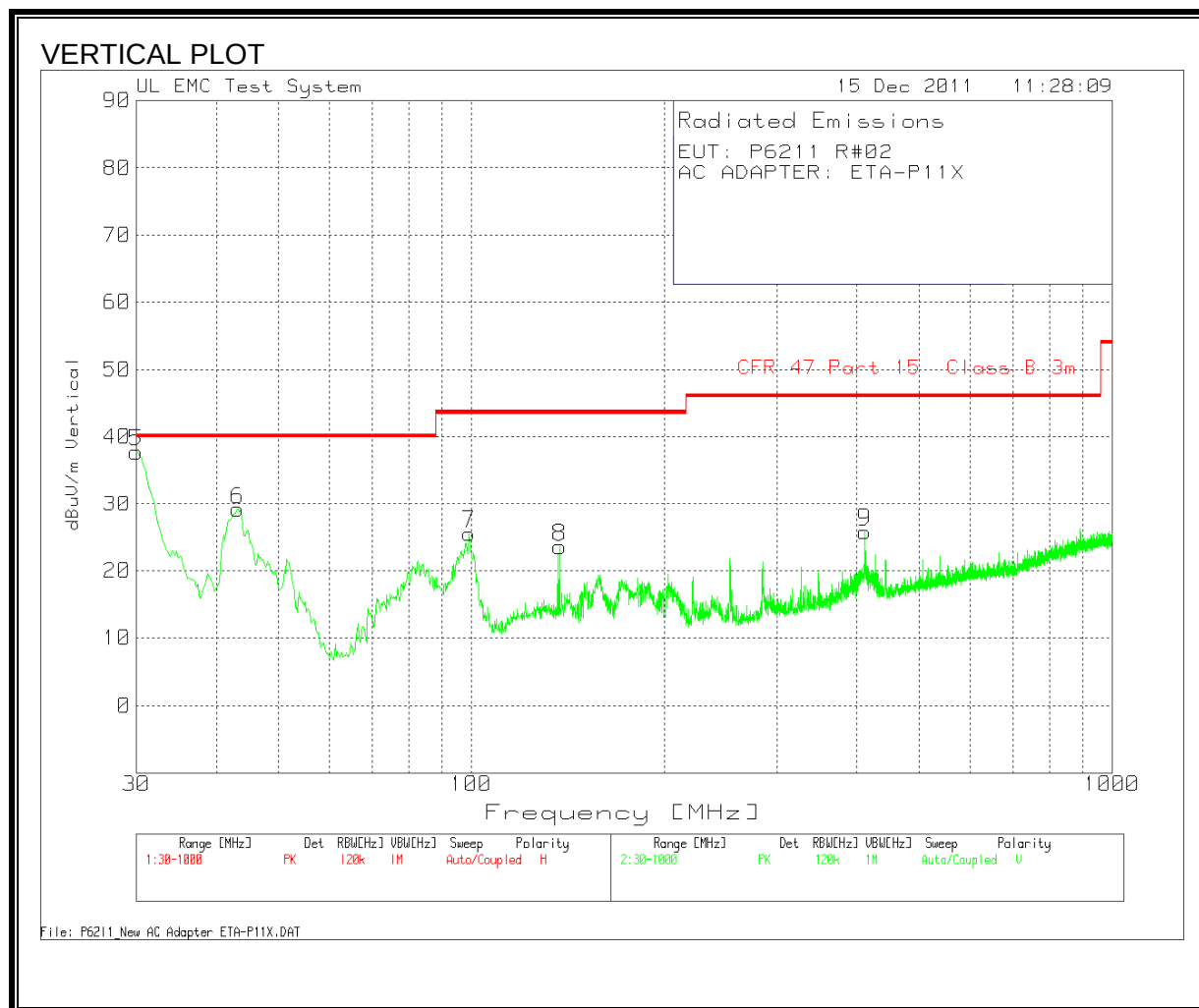
Rev. 4.1.2.7

Note: No other emissions were detected above the system noise floor.

7.3. WORST-CASE BELOW 1 GHz

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





HORIZONTAL AND VERTICAL DATA

COMPANY: SAMSUNG					TEST ENGINEER: VIEN TRAN				
PROJECT NUMBER: 11U14172					DATE TESTED: 12/15/11				
P6211, R#02									
30 - 1000MHz - HORIZONTAL									
Test Frequency	Meter Reading	Detector	25MHz-1GHz 3m Chamber Amplified [dB]	3m Bilog T185 below 1GHz.TXT [dB]	dBuVolts/ meter	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
30	34.23	PK	-27.5	20	26.73	40	-13.27	99	Horz
99.2026	43.40	PK	-26.8	9.2	25.8	43.5	-17.70	176	Horz
253.3094	37.86	PK	-25.4	11.9	24.36	46	-21.64	99	Horz
326.9704	35.96	PK	-25.3	13.9	24.56	46	-21.44	99	Horz
30 - 1000MHz - VERTICAL									
Test Frequency	Meter Reading	Detector	25MHz-1GHz 3m Chamber Amplified [dB]	3m Bilog T185 below 1GHz.TXT [dB]	dBuVolts/ meter	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
30	45.23	PK	-27.5	20	37.73	40	-2.27	99	Vert
43.18	44.23	PK	-27.4	12.3	29.13	40	-10.87	99	Vert
99.2026	43.08	PK	-26.8	9.2	25.48	43.5	-18.02	99	Vert
137.3901	36.71	PK	-26.5	13.3	23.51	43.5	-19.99	99	Vert
411.4868	36.24	PK	-25.7	15.2	25.74	46	-20.26	99	Vert
PK - Peak detector									
QP - Quasi-Peak detector									
LnAv - Linear Average detector									
LgAv - Log Average detector									
Av - Average detector									
CAV - CISPR Average detector									
RMS - RMS detection									
CRMS - CISPR RMS detection									

8. 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 C63.4.

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

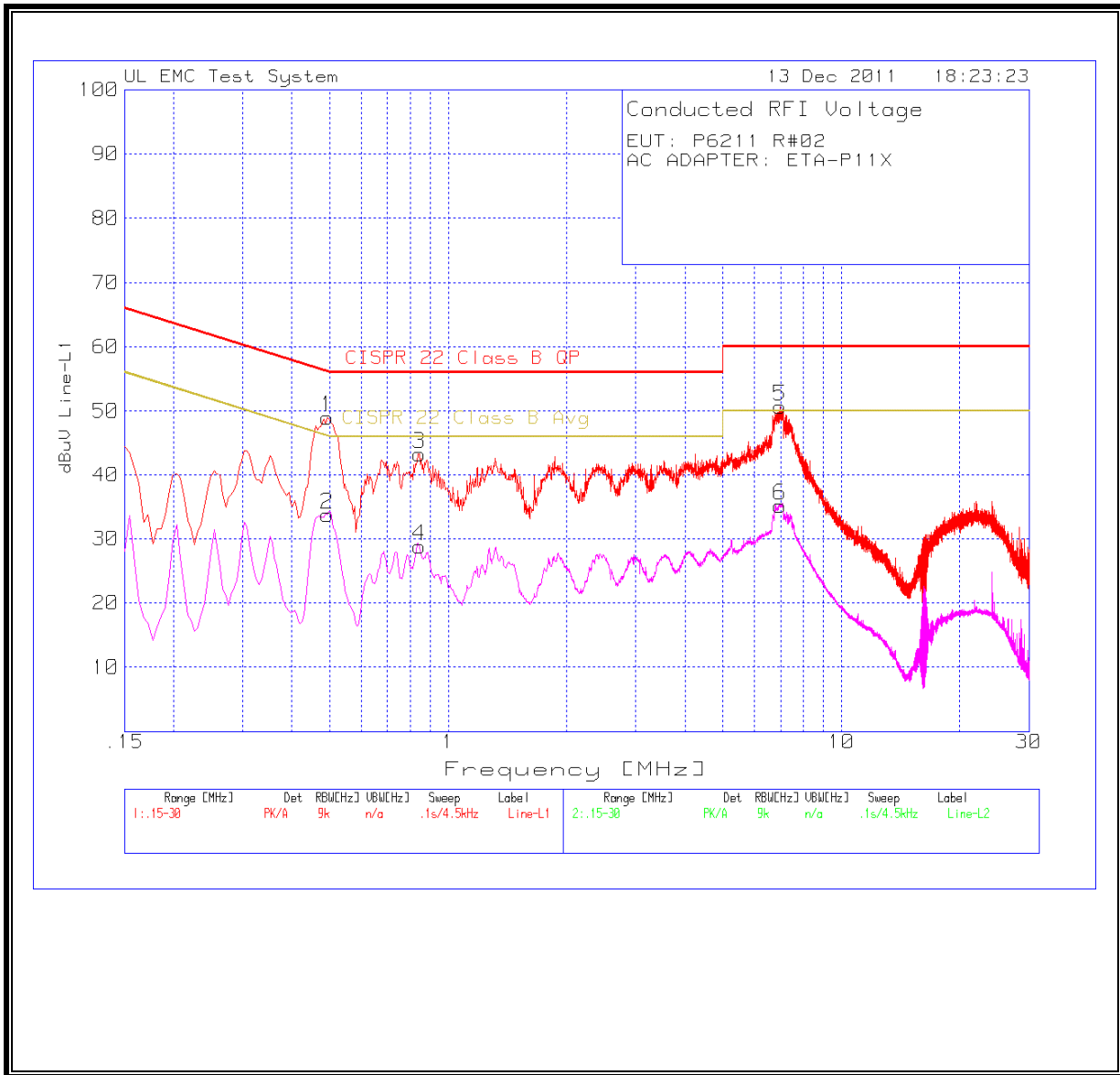
Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

6 WORST EMISSIONS

Samsung						Test Enginner: Vien Tran			
11U14110						Date: 12/13/11			
P6211 R#02									
Line-L1 .15 - 30MHz									
	Meter		LISN	Conducted		Class B		Class B	
Test Frequency	Reading	Detector	[dB]	Emission	dB[uVolts]	QP	Margin	Avg	Margin
				Cable [dB]		Limit		Limit	
0.492	48.90	PK	0.1	0	49.00	56.10	-7.10	-	-
0.492	33.64	Av	0.1	0	33.74	-	-	46.10	-12.36
0.843	43.21	PK	0.1	0	43.31	56.00	-12.69	-	-
0.843	28.76	Av	0.1	0	28.86	-	-	46.00	-17.14
6.972	50.47	PK	0.1	0.1	50.67	60.00	-9.33	-	-
6.972	34.96	Av	0.1	0.1	35.16	-	-	50.00	-14.84
Line-L2 .15 - 30MHz									
	Meter		LISN	Conducted		Class B		Class B	
Test Frequency	Reading	Detector	[dB]	Emission	dB[uVolts]	QP	Margin	Avg	Margin
				Cable [dB]		Limit		Limit	
0.474	44.83	PK	0.1	0	44.93	56.40	-11.47	-	-
0.474	23.23	Av	0.1	0	23.33	-	-	46.40	-23.07
3.5925	38.75	PK	0.1	0.1	38.95	56.00	-17.05	-	-
3.5925	18.54	Av	0.1	0.1	18.74	-	-	46.00	-27.26
7.1835	43.85	PK	0.1	0.1	44.05	60.00	-15.95	-	-
7.1835	24.44	Av	0.1	0.1	24.64	-	-	50.00	-25.36
PK - Peak detector									
QP - Quasi-Peak detector									
LnAv - Linear Average detector									
LgAv - Log Average detector									
Av - Average detector									
CAV - CISPR Average detector									
RMS - RMS detection									
CRMS - CISPR RMS detection									

LINE 1 RESULTS



LINE 2 RESULTS

