FCC CFR47 PART 15 SUBPART C
INDUSTRY CANADA RSS-210 ISSUE 7
CLASS II PERMISSIVE CHANGE
CERTIFICATION TEST REPORT

FOR

802.11 b/g PCIExpress Minicard
(Tested inside of Notebook PC, Model NP-NC10)

MODEL NUMBER: AR5BXB63

FCC ID: PPD-AR5BXB63
IC: 4104A-AR5BXB63

REPORT NUMBER: 08I12084-3A

ISSUE DATE: OCTOBER 13, 2008

Prepared for
ATHEROS COMMUNICATIONS, INC.
5480 GREAT AMERICA PARKWAY
SANTA CLARA, CA 95054

Prepared by
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47173 BENICIA STREET
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	October 6, 2008	Initial Issue	S. Shih
A	10/13/08	Updated model number and EUT description	A. Zaffar

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Atheros Communications, Inc.
5480 Great America Parkway
Santa Clara, CA 95054

EUT DESCRIPTION: 802.11 b/g PCIExpress Minicard

MODEL: AR5BXB63

SERIAL NUMBER: ES4793GQ900061Y

DATE TESTED: SEPTEMBER 20-27, 2008

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C	Pass
INDUSTRY CANADA RSS-210 Issue 7 Annex 8	Pass
INDUSTRY CANADA RSS-GEN Issue 2	Pass

Compliance Certification Services, Inc. (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 CCS based on interpretations and/or observations of test results. 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 CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by CCS will constitute fraud and shall nullify the document. No part of this report may be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any government agency.

Approved & Released For CCS By:

SUNNY SHIH
EMC SUPERVISOR
COMPLIANCE CERTIFICATION SERVICES

Tested By:

CAN MING CHUNG
EMC ENGINEER
COMPLIANCE CERTIFICATION SERVICES

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2003, FCC CFR 47 Part 2, FCC CFR 47 Part 15, RSS-GEN Issue 2, and RSS-210 Issue 7.

3. FACILITIES AND ACCREDITATION

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

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. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Power Line Conducted Emission	+/- 2.3 dB
Radiated Emission	+/- 3.4 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a Notebook PC, Model AR5BXB63 with 802.11b/g transceiver and BT module installed.

The WLAN transceiver radio module is manufactured by Atheros.

5.2. DESCRIPTION OF CLASS II CHANGE

The changes filed under this application are:

Change #1 The module is being used in a different host (Portable category Configuration).

Change #2 Add two antennas. Please refer to antenna specs submitted.

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

Manufactured	Type	Antenna ID	Model	Peak gain (dBi)
Foxconn	PCB	Main	WDAN-M1WC1002-DF	0.18
		Aux	WDAN-M1WC1001-DF	-0.28
Wistron NeWeb Corporation (WNC)	PCB	Main	BA42-00217A (81.EHD15.005)	0.95
		Aux	BA4200216A (81.EHD15.004)	-1.51

5.4. SOFTWARE AND FIRMWARE

The EUT driver software installed in the host support equipment during testing was art id=7131.

The test utility software used during testing was Atheros ART 5.3.Build #30

5.5. WORST-CASE CONFIGURATION AND MODE

The worst-case channel is determined as the channel with the highest output power.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
AC Adapter	**Delta**	**ADP-40MHAB**	**327W88E004B**	**DOC**

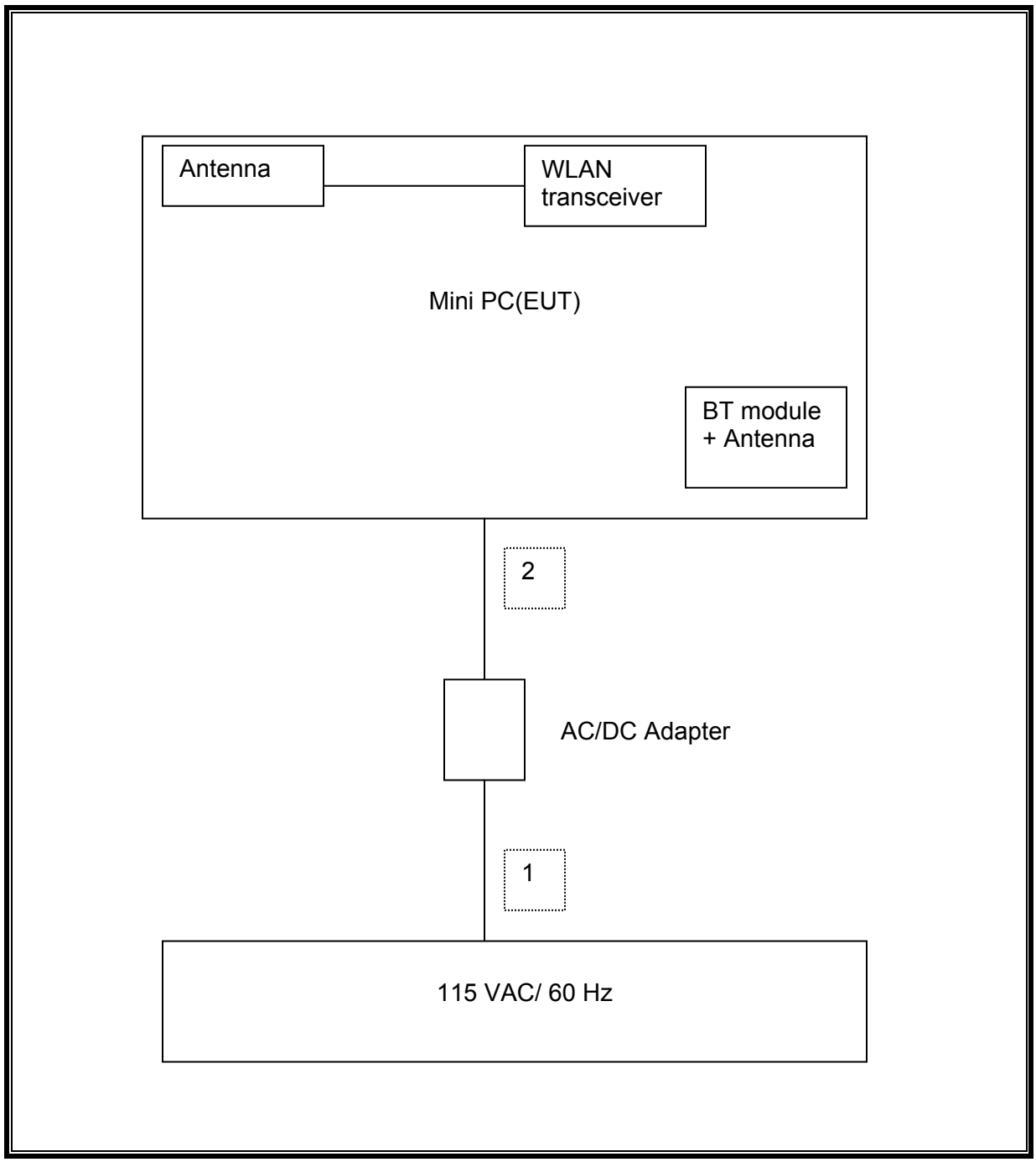
I/O CABLES

I/O CABLE LIST						
Cable No.	**Port**	**# of Identica Ports**	**Connector Type**	**Cable Type**	**Cable Length**	**Remarks**
1	AC	1	AC	Unshielded	1m	N/A
2	DC	1	DC	Unshielded	1.8m	Ferrite on Notebook End

TEST SETUP

The EUT is installed in a host laptop computer during the tests. Test software exercised the radio card.

SETUP DIAGRAM FOR TESTS



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**
EMI Receiver, 2.9 GHz	Agilent / HP	8542E	C00957	02/06/08	06/12/09
RF Filter Section, 2.9 GHz	Agilent / HP	85420E	C00958	02/06/08	06/12/09
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00885	05/09/08	05/09/09
LISN, 30 MHz	FCC	LISN-50/250-25-2	N02625	10/25/07	10/25/08
LISN, 10 kHz ~ 30 MHz	Solar	8012-50-R-24-BNC	N02481	10/25/07	10/25/08
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	10/16/07	01/27/09
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01012	12/03/07	03/03/09
Antenna, Horn, 18 GHz	ETS	3117	C01006	04/15/08	04/15/09
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01052	08/03/08	08/03/09
Antenna, Bilog, 2 GHz	Sunol Sciences	JB1	C01011	10/13/07	10/13/08
Peak Power Meter	Agilent / HP	E4416A	C00963	02/14/07	12/02/08
Peak / Average Power Sensor	Agilent	E9327A	C00964	02/14/07	12/02/08
4.0 GHz High Pass Filter	Micro Tronics	HPM13351	N/A	N/A	N/A

7. ANTENNA PORT TEST RESULTS

7.1.1. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

RESULTS

The cable assembly insertion loss of 10.5dB (including 10 dB pad and 0.5 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

802.11b

Channel	Frequency (MHz)	Average Power (dBm)
Low (1)	2412	20.6
Middle (6)	2437	20.6
High (11)	2462	19.0

802.11g

Channel	Frequency (MHz)	Average Power (dBm)
Low (1)	2412	17.5
Middle (6)	2437	20.7
High (11)	2462	15.5

7.1.2. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

IC RSS-210 A8.2 (a)

The minimum 6 dB bandwidth shall be at least 500 kHz.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The RBW is set to 100 kHz and the VBW is set to 300 kHz. The sweep time is coupled.

RESULTS

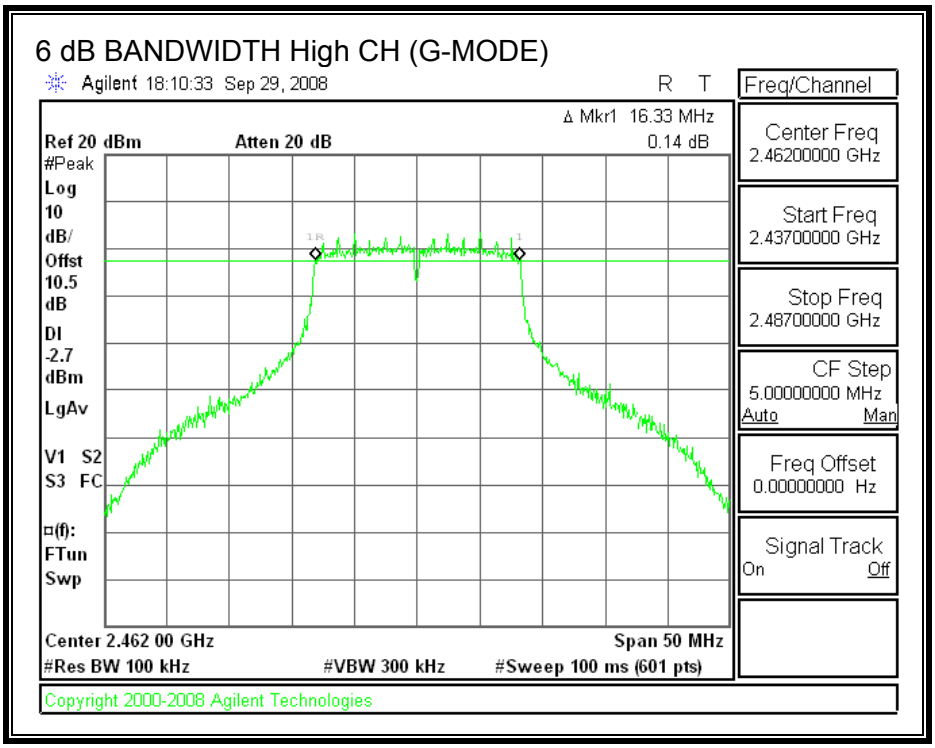
B-Mode

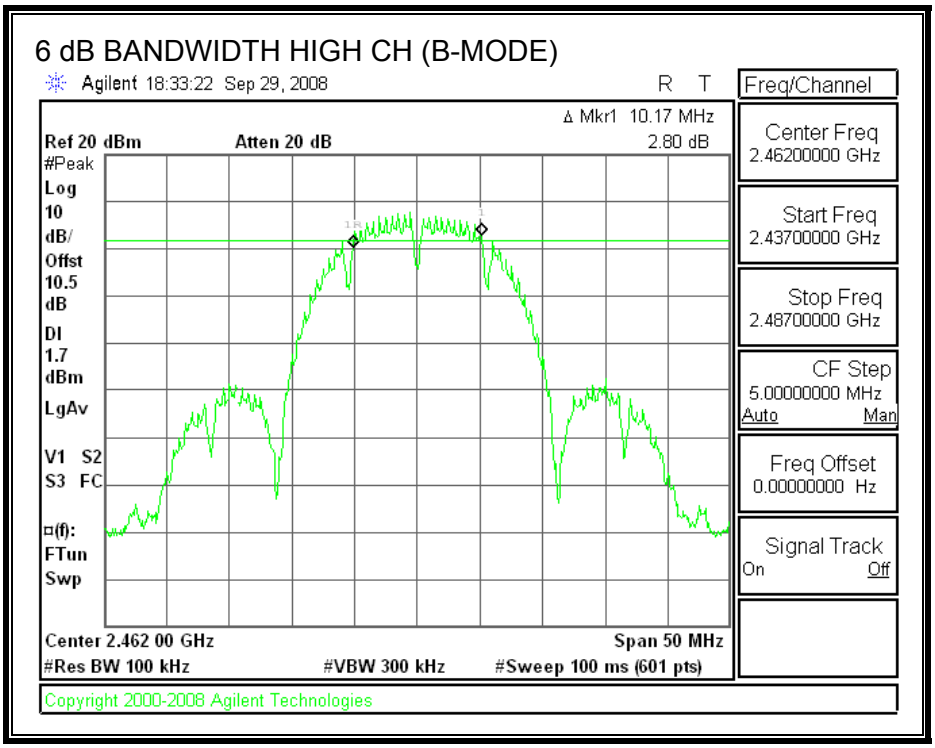
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
High	2462	16.33	0.5

G-Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
High	2462	10.17	0.5

6 dB BANDWIDTH





7.1.3. OUTPUT POWER

LIMITS

FCC §15.247 (b)

IC RSS-210 A8.4

The maximum antenna gain is less than or equal to 6 dBi, therefore the limit is 30 dBm.

TEST PROCEDURE

Peak power is measured using the Channel bandwidth Alternative peak output power procedure specified in "TCB Training for Devices covered under Scopes A1 - A4" by Joe Dichoso, May 2003.

RESULTS

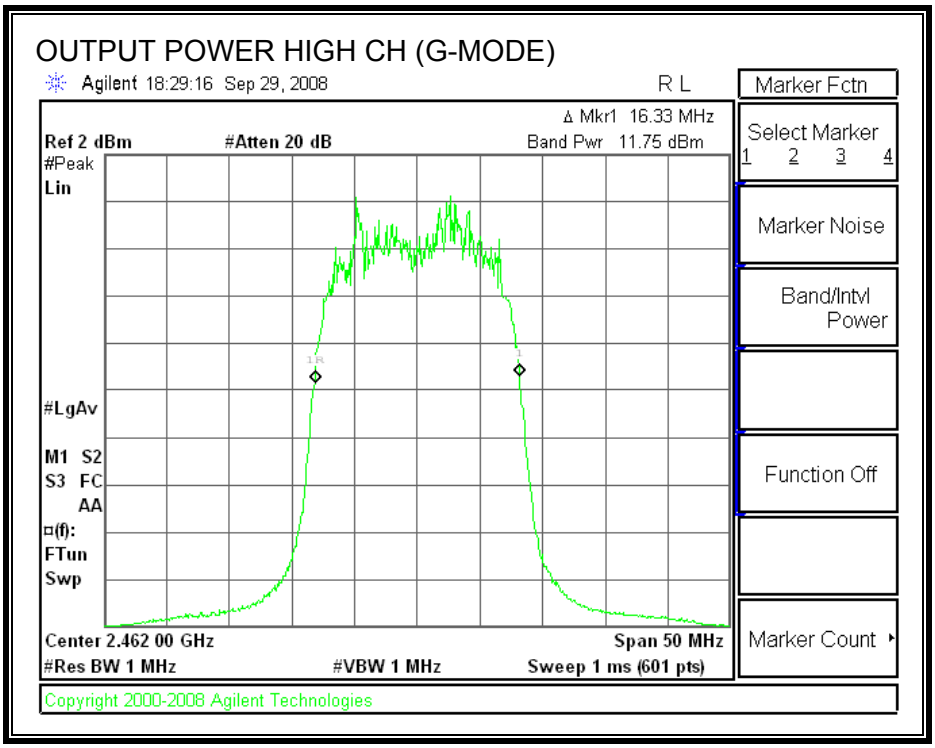
G-MODE

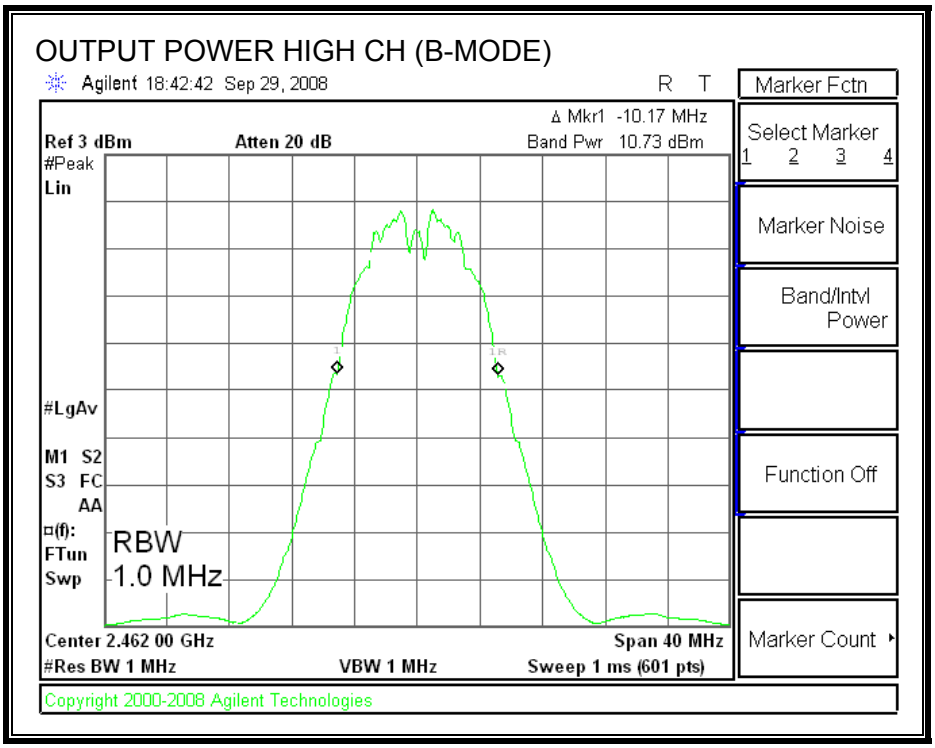
Channel	Frequency (MHz)	Spectrum Analyzer Reading (dBm)	Attenuator and Cable Offset (dB)	Output Power (dBm)	Limit (dBm)	Margin (dB)
High	2462	11.75	10.5	22.25	30	-7.75

B-MODE

Channel	Frequency (MHz)	Spectrum Analyzer Reading (dBm)	Attenuator and Cable Offset (dB)	Output Power (dBm)	Limit (dBm)	Margin (dB)
High	2462	10.73	10.5	21.23	30	-8.77

OUTPUT POWER





8. RADIATED TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-210 Clause 2.6 (Transmitter)

IC RSS-GEN Clause 6 (Receiver)

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.

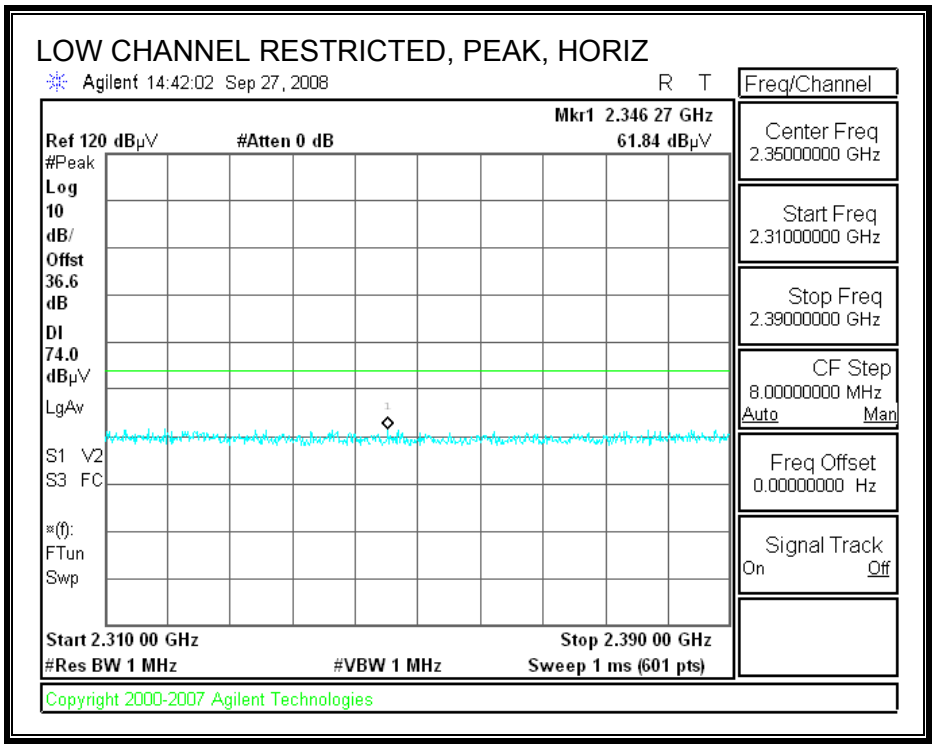
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each appplicable band.

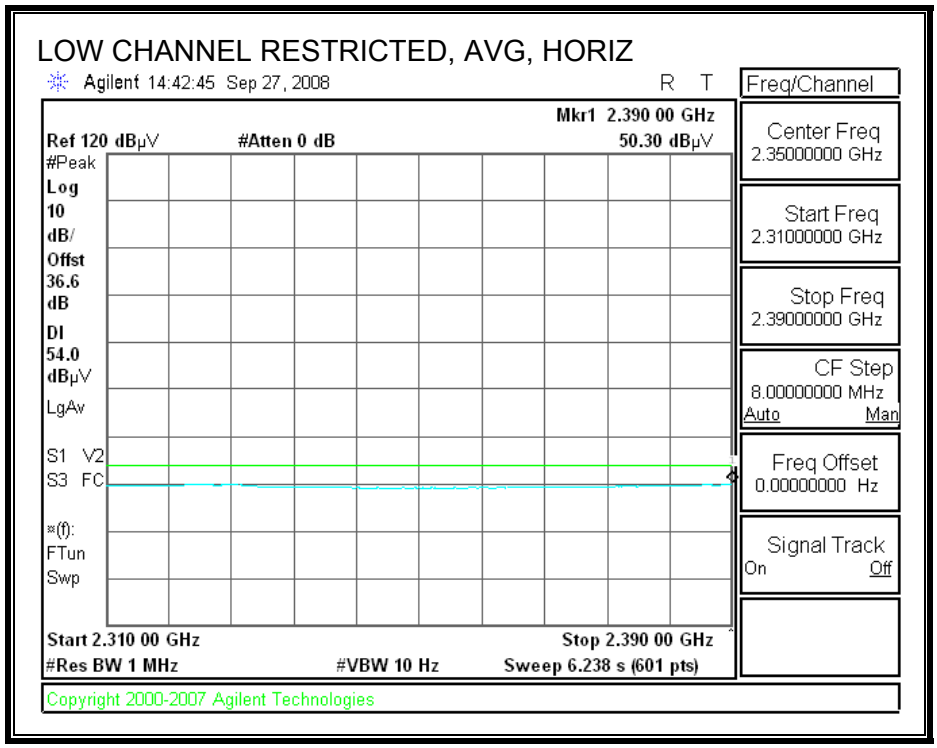
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

8.2. TRANSMITTER ABOVE 1 GHz

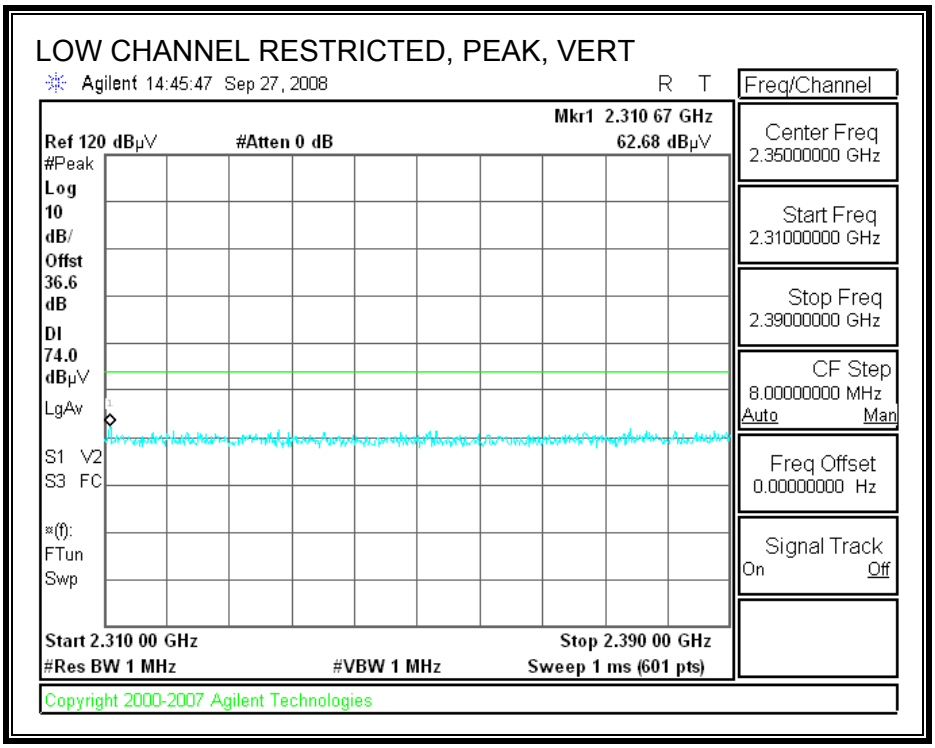
8.2.1. 802.11b MODE

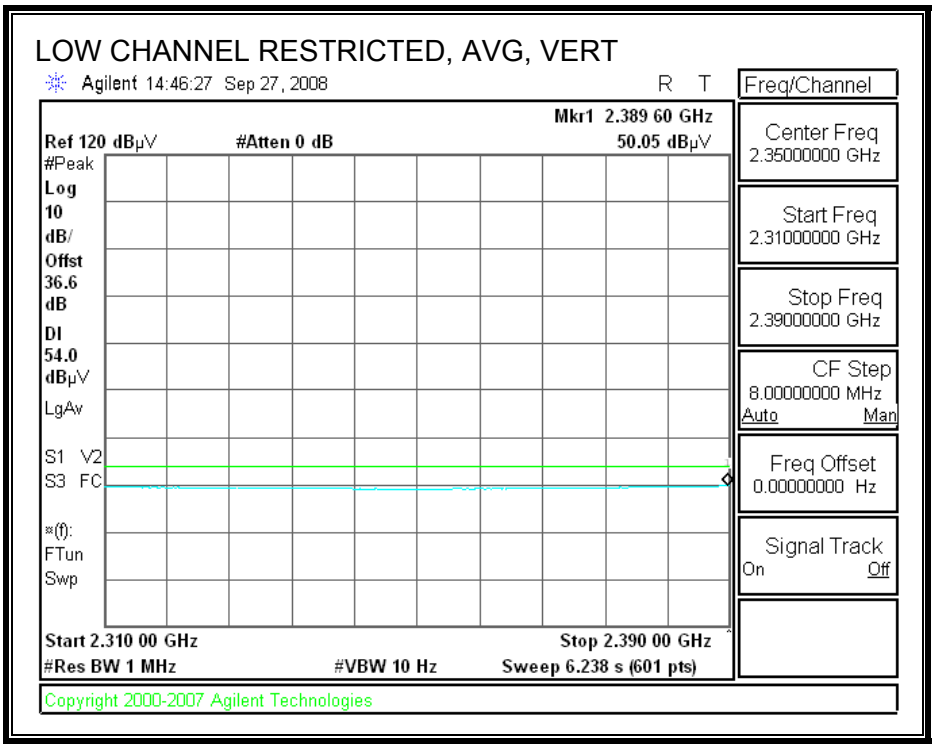
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



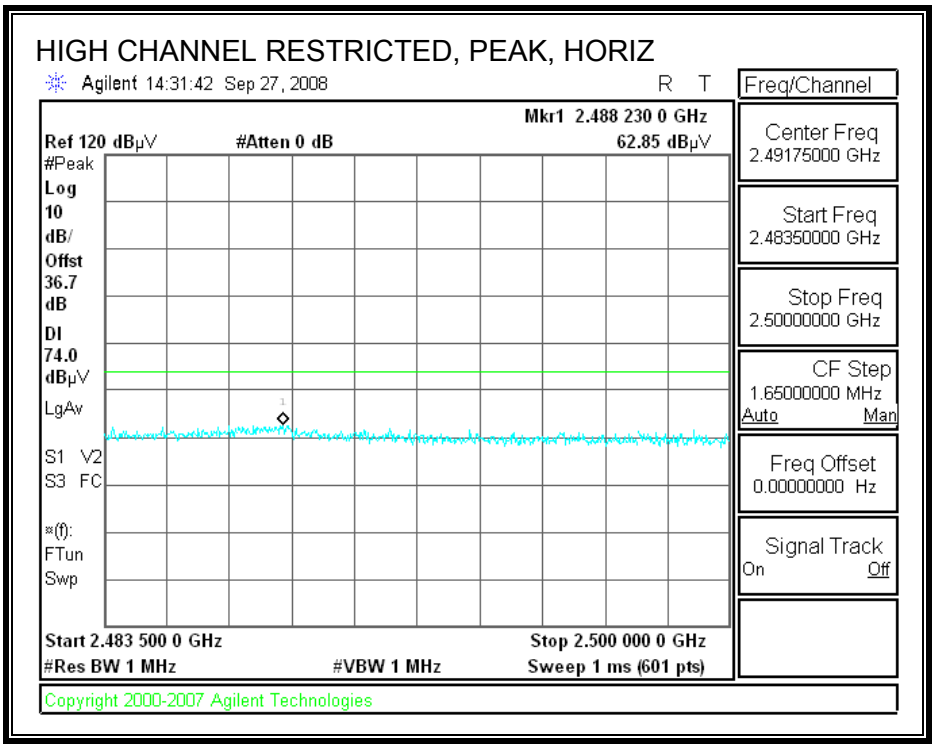


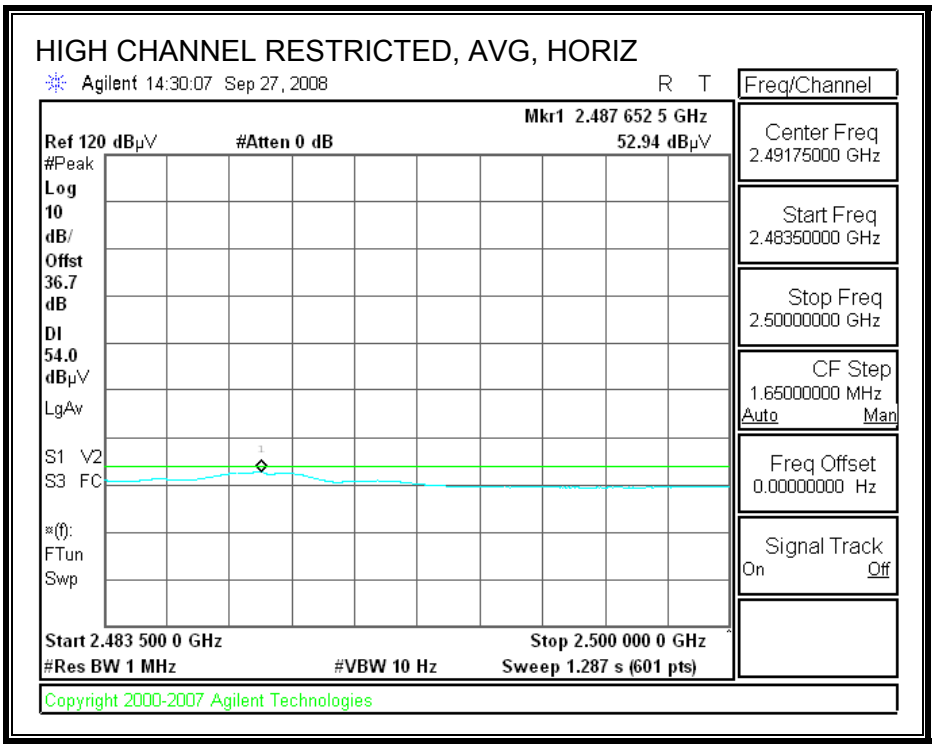
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



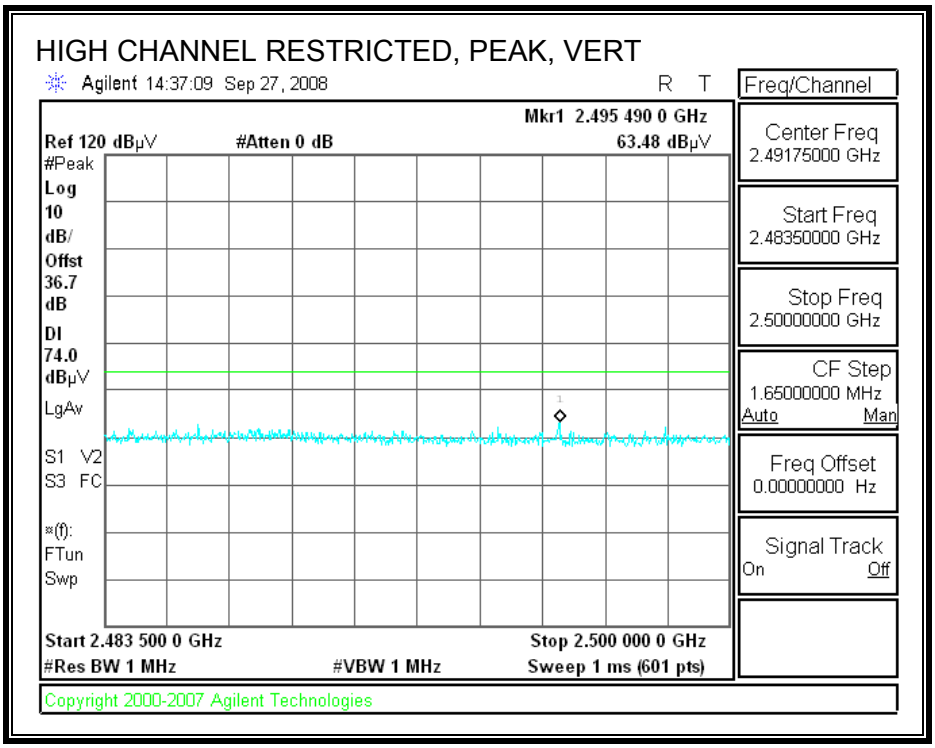


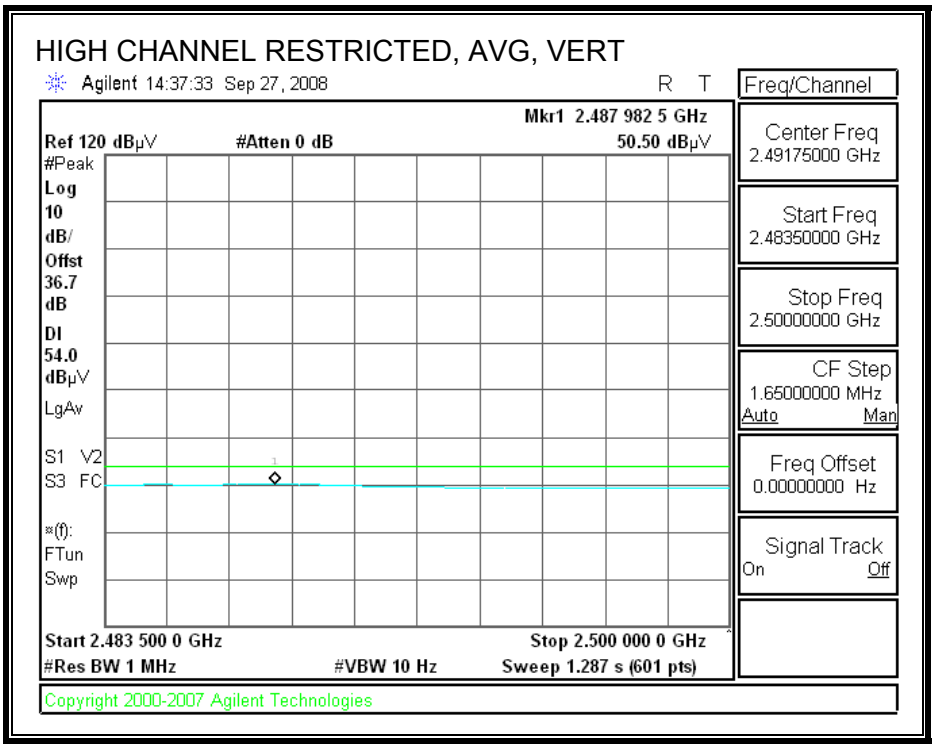
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Company: SAMSUNG
Project #: 08I12084
Date:09/27/08
Test Engineer: Can Ming Chung
Configuration: EUT Only
Mode: Tx B-Mode

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T119; S/N: 29301 @3m	T144 Miteq 3008A00931			42.17

Hi Frequency Cables

2 foot cable	3 foot cable	12 foot cable	HPF	Reject Filter
		A-5m Chamber		R_001

Peak Measurements
RBW=VBW=1MHz
Average Measurements
RBW=1MHz ; VBW=10Hz

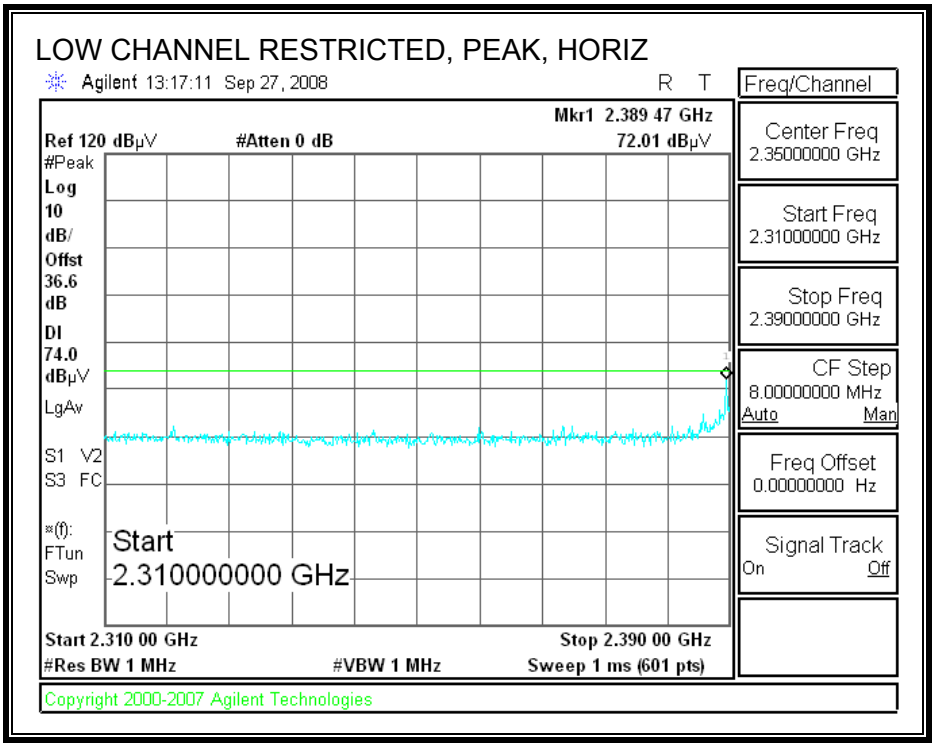
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
LOW CH															
4.824	3.0	42.8	33.4	33.7	6.9	-36.5	0.0	0.0	47.0	37.5	74	54	-27.0	-16.5	V
7.275	3.0	41.3	30.6	35.2	8.4	-36.2	0.0	0.0	48.6	38.0	74	54	-25.4	-16.0	V
4.824	3.0	44.7	38.1	33.7	6.9	-36.5	0.0	0.0	48.8	42.2	74	54	-25.2	-11.8	H
7.275	3.0	41.1	29.0	35.2	8.4	-36.2	0.0	0.0	48.5	36.3	74	54	-25.5	-17.7	H
MID CH															V
4.874	3.0	45.5	41.1	33.7	6.9	-36.5	0.0	0.0	49.6	45.3	74	54	-24.4	-8.7	V
7.311	3.0	42.2	28.9	35.2	8.4	-36.2	0.0	0.0	49.6	36.3	74	54	-24.4	-17.7	V
4.874	3.0	46.6	30.4	33.7	6.9	-36.5	0.0	0.0	50.8	34.6	74	54	-23.2	-19.4	H
7.311	3.0	41.5	29.8	35.2	8.4	-36.2	0.0	0.0	48.9	37.2	74	54	-25.1	-16.8	H
HIGH CH															V
4.924	3.0	49.7	44.7	33.8	7.0	-36.5	0.0	0.0	54.0	48.9	74	54	-20.0	-5.1	V
7.386	3.0	42.1	30.1	35.2	8.4	-36.2	0.0	0.0	49.5	37.5	74	54	-24.5	-16.5	V
4.924	3.0	49.3	42.3	33.8	7.0	-36.5	0.0	0.0	53.6	46.6	74	54	-20.4	-7.4	H
7.386	3.0	42.9	29.6	35.2	8.4	-36.2	0.0	0.0	50.3	37.0	74	54	-23.7	-17.0	H

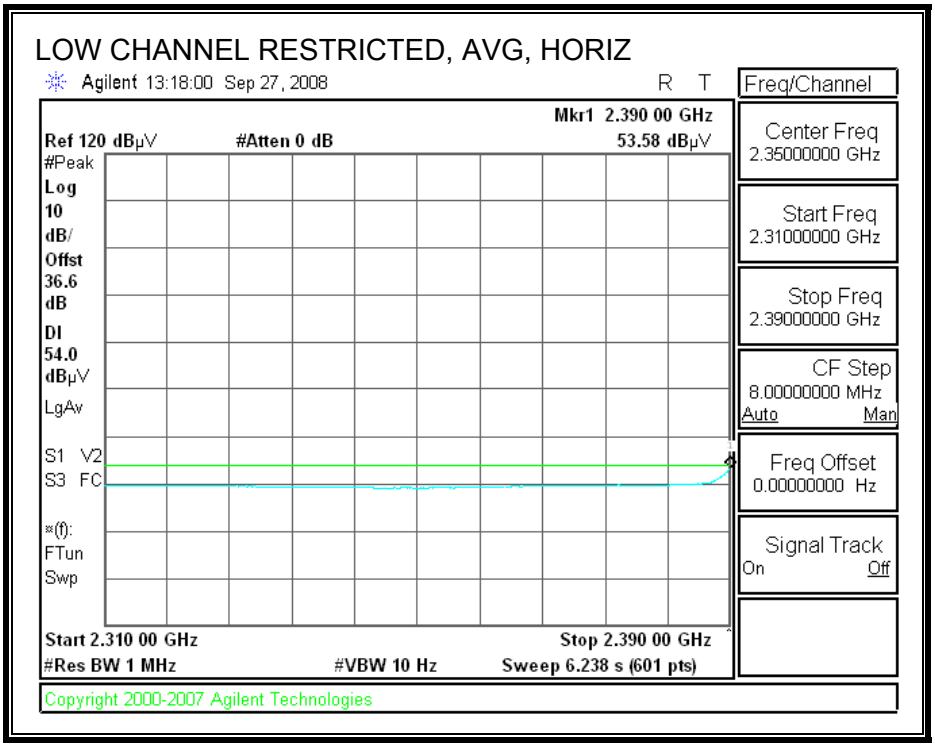
Rev. 4.12.7

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

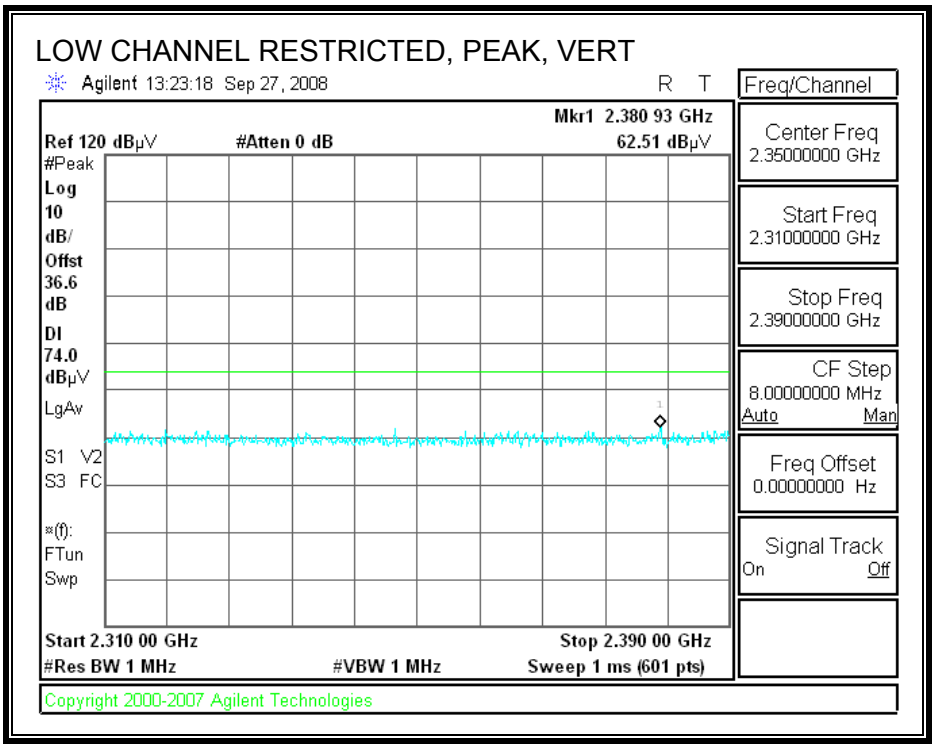
8.2.2. 802.11g MODE

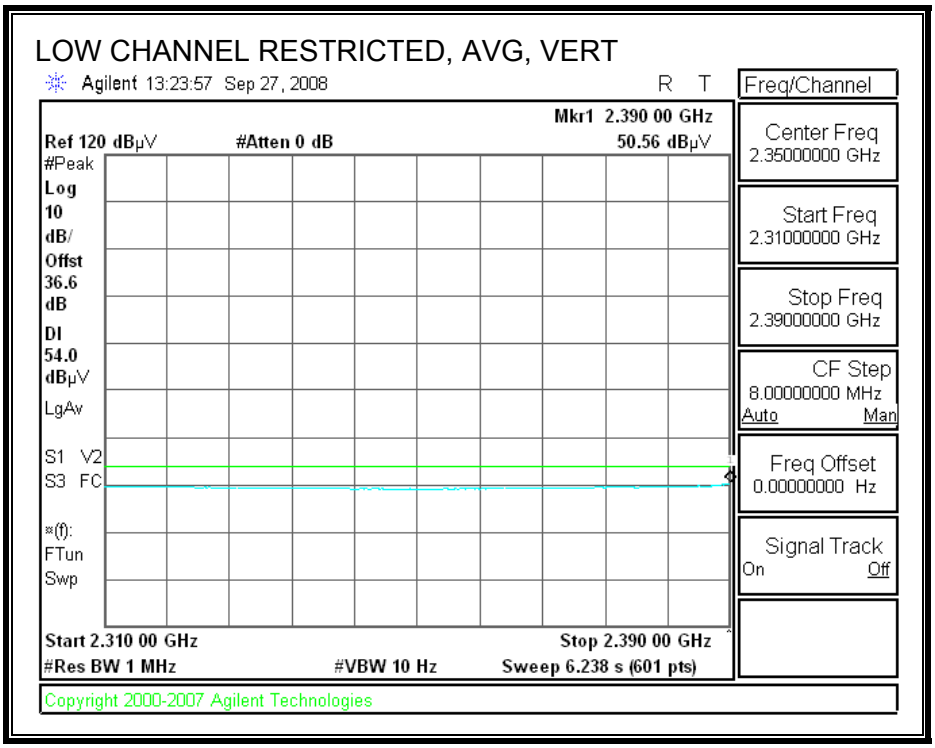
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



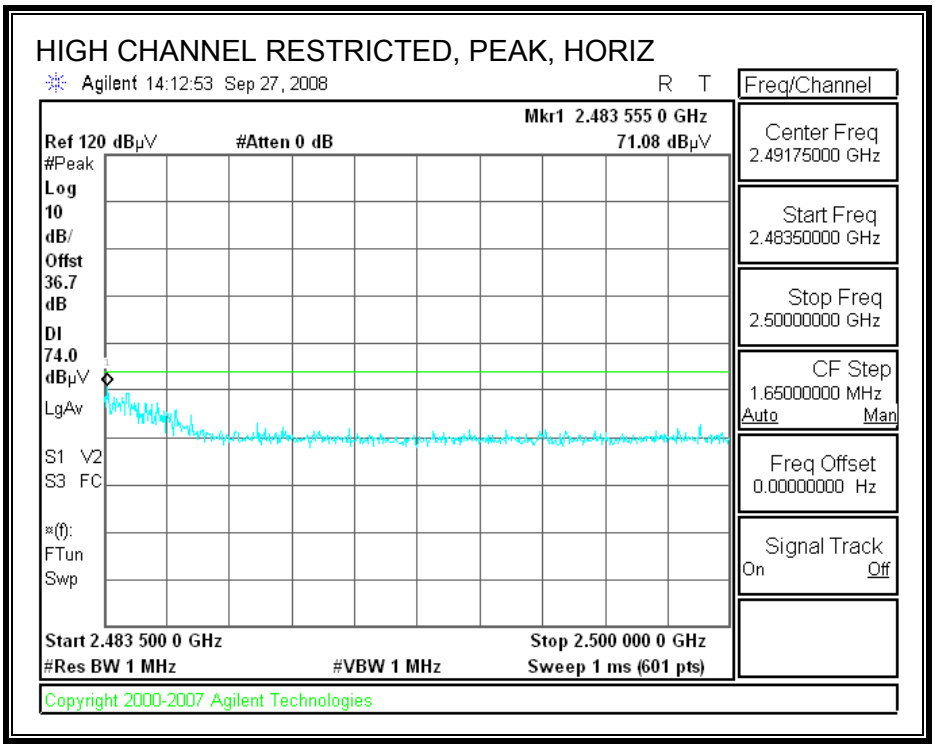


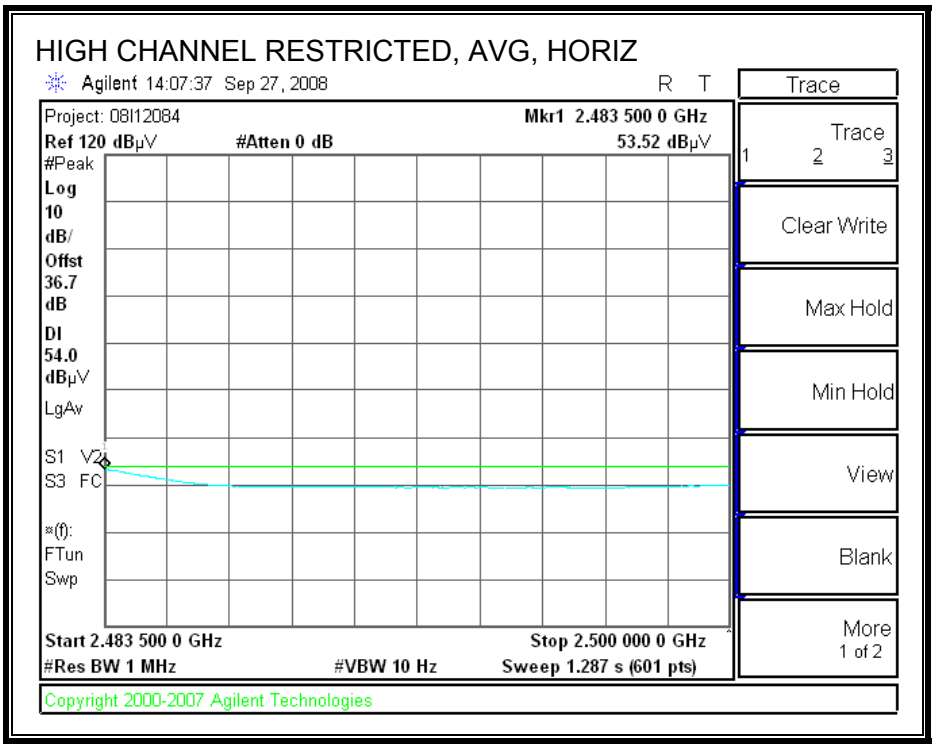
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



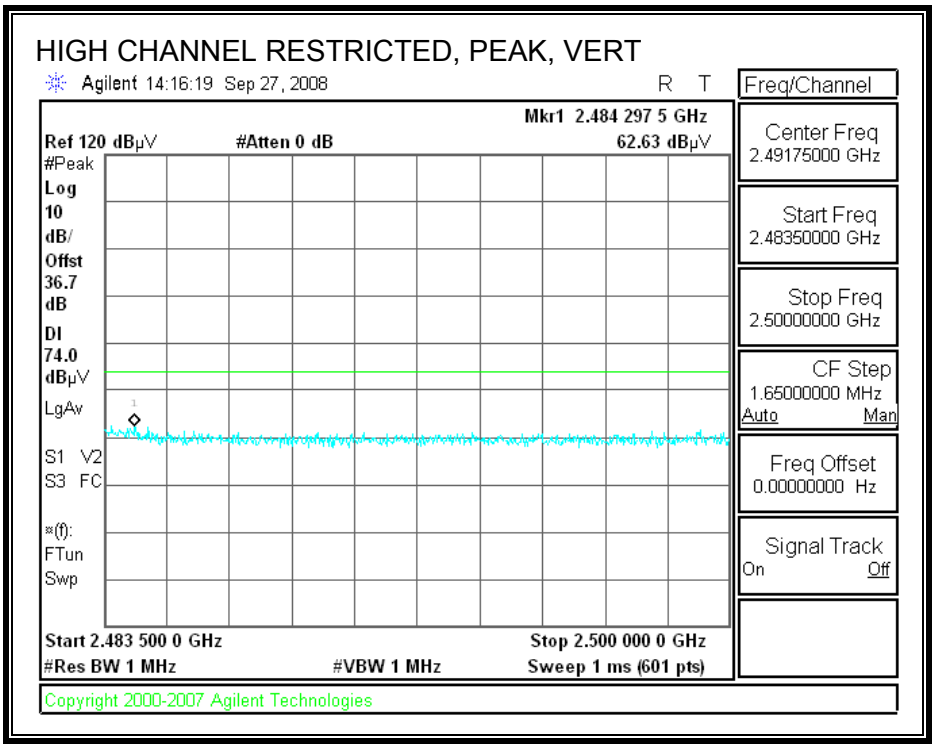


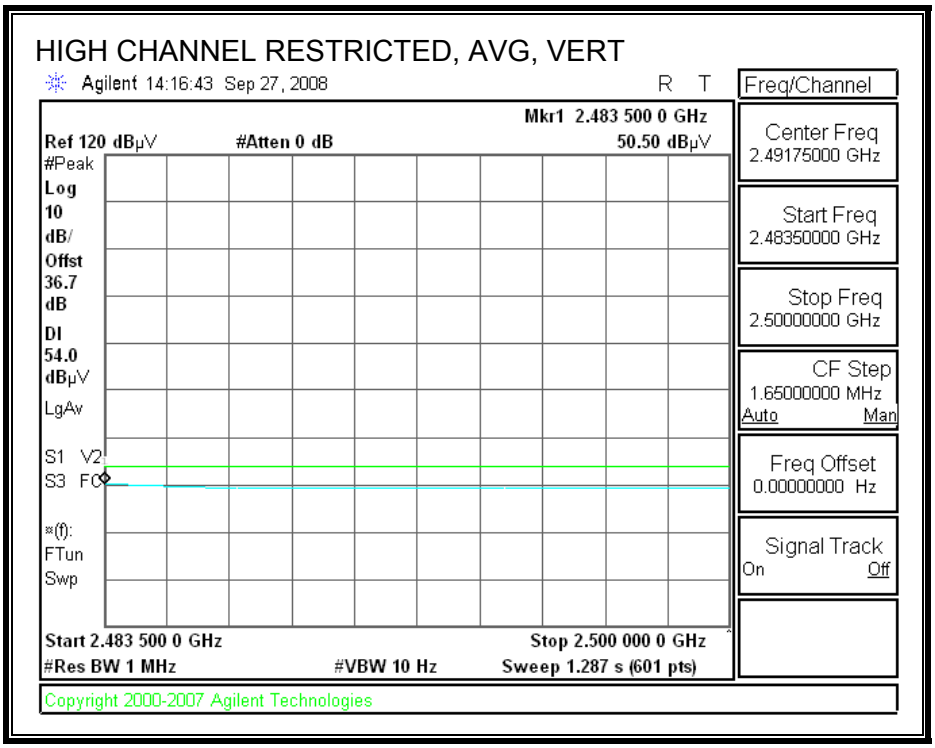
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Company: SAMSUNG
Project #: 08I12084
Date:09/27/08
Test Engineer: Can Ming Chung
Configuration: EUT Only
Mode: Tx B-Mode

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T119; S/N: 29301 @3m	T144 Miteq 3008A00931			42.17

Hi Frequency Cables

2 foot cable	3 foot cable	12 foot cable	HPF	Reject Filter
		A-5m Chamber		R_001

Peak Measurements
RBW=VBW=1MHz
Average Measurements
RBW=1MHz ; VBW=10Hz

f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
LOW CH															
4.824	3.0	40.9	28.3	33.7	6.9	-36.5	0.0	0.0	45.0	32.4	74	54	-29.0	-21.6	V
7.275	3.0	41.7	29.0	35.2	8.4	-36.2	0.0	0.0	49.0	36.3	74	54	-25.0	-17.7	V
4.824	3.0	43.2	29.3	33.7	6.9	-36.5	0.0	0.0	47.3	33.4	74	54	-26.7	-20.6	H
7.275	3.0	42.7	28.9	35.2	8.4	-36.2	0.0	0.0	50.0	36.3	74	54	-24.0	-17.7	H
MID CH															V
4.874	3.0	42.4	29.5	33.7	6.9	-36.5	0.0	0.0	46.6	33.7	74	54	-27.4	-20.3	V
7.311	3.0	41.6	29.0	35.2	8.4	-36.2	0.0	0.0	49.0	36.3	74	54	-25.0	-17.7	V
4.874	3.0	43.6	30.2	33.7	6.9	-36.5	0.0	0.0	47.8	34.4	74	54	-26.2	-19.6	H
7.311	3.0	41.7	28.9	35.2	8.4	-36.2	0.0	0.0	49.1	36.3	74	54	-24.9	-17.7	H
HIGH CH															V
4.924	3.0	41.1	29.5	33.8	7.0	-36.5	0.0	0.0	45.3	33.7	74	54	-28.7	-20.3	V
7.386	3.0	41.7	29.0	35.2	8.4	-36.2	0.0	0.0	49.1	36.4	74	54	-24.9	-17.6	V
4.924	3.0	43.4	30.1	33.8	7.0	-36.5	0.0	0.0	47.7	34.4	74	54	-26.3	-19.6	H
7.386	3.0	41.7	29.1	35.2	8.4	-36.2	0.0	0.0	49.1	36.5	74	54	-24.9	-17.5	H

Rev. 4.12.7

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

8.3. RECEIVER ABOVE 1 GHz

8.3.1. 2.4 GHz BAND

High Frequency Measurement
Compliance Certification Services, Fremont 5m Chamber

Company: SAMSUNG
Project #: 08I12084
Date: 09/26/08
Test Engineer: Can Ming Chung
Configuration: Eut only
Mode: Rx

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T119; S/N: 29301 @3m	T144 Miteq 3008A00931			RX RSS 210

Hi Frequency Cables

2 foot cable	3 foot cable	12 foot cable	HPF	Reject Filter
		A-5m Chamber		

Peak Measurements
RBW=VBW=1MHz
Average Measurements
RBW=1MHz ; VBW=10Hz

f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
1.332	3.0	58.2	38.2	29.0	3.4	-39.0	0.0	0.0	51.6	31.5	74	54	-22.4	-22.5	V
1.499	3.0	54.3	50.3	29.6	3.6	-38.8	0.0	0.0	48.8	44.8	74	54	-25.2	-9.2	V
4.983	3.0	44.6	30.9	33.8	7.0	-36.5	0.0	0.0	49.0	35.2	74	54	-25.0	-18.8	V
1.331	3.0	56.1	37.2	29.0	3.4	-39.0	0.0	0.0	49.5	30.6	74	54	-24.5	-23.4	H
1.499	3.0	55.3	51.3	29.6	3.6	-38.8	0.0	0.0	49.8	45.8	74	54	-24.2	-8.2	H
4.997	3.0	42.4	28.8	33.8	7.0	-36.5	0.0	0.0	46.8	33.1	74	54	-27.2	-20.9	H

Rev. 4.12.7

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

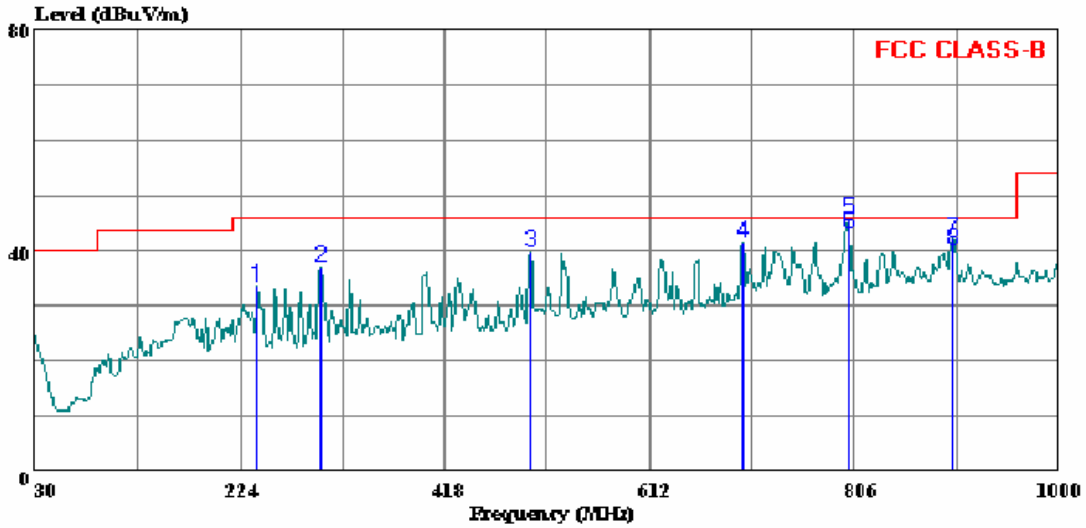
8.4. WORST-CASE BELOW 1 GHz

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

HORIZONTAL PLOT

Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 3 File#: 08i12084-09.EMI Date: 09-26-2008 Time: 18:11:25



Trace: 1 Ref Trace:

Condition: FCC CLASS-B HORIZONTAL
Test Operator:: Can Ming Chung
Project #: : 08U12084
Company: : SAMSUNG
Configuration:: EUT Only
Mode : : TX worst case
Target: : FCC-Class B

HORIZONTAL DATA

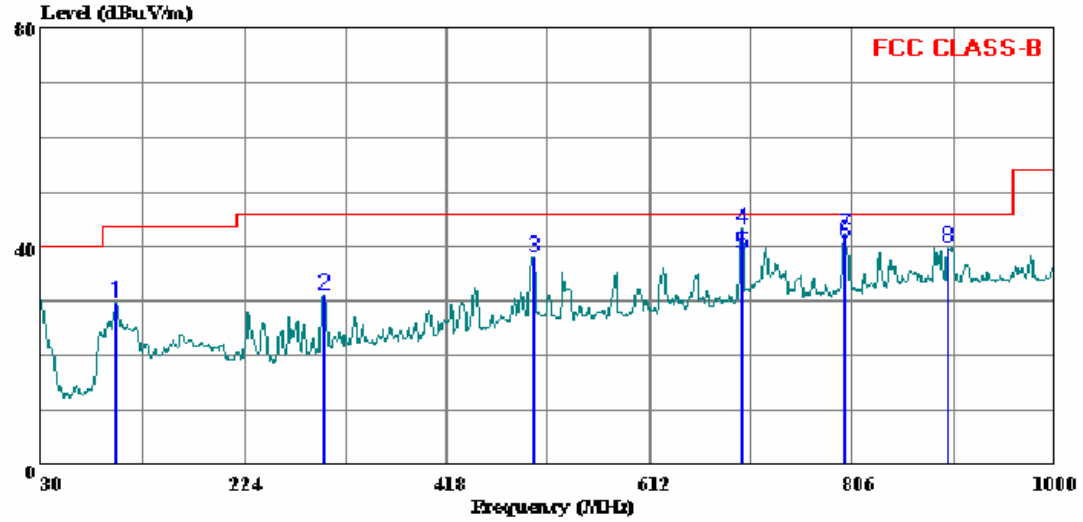
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	240.490	46.84	-13.21	33.63	46.00	-12.37	Peak
2	300.630	47.98	-11.01	36.97	46.00	-9.03	Peak
3	499.480	44.69	-4.79	39.90	46.00	-6.10	Peak
4	701.240	42.17	-0.44	41.73	46.00	-4.27	Peak
5	800.180	44.83	0.87	45.70	46.00	-0.30	Peak
6	800.180	41.91	1.43	43.34	46.00	-2.66	QP
7	899.120	39.21	2.87	42.09	46.00	-3.91	Peak
8	899.120	37.54	2.66	40.20	46.00	-5.80	QP

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

VERTICAL PLOT

Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 6 File#: 08i12084-09.EMI Date: 09-26-2008 Time: 18:42:06



Trace: 4 Ref Trace:

Condition: FCC CLASS-B VERTICAL
Test Operator:: Can Ming Chung
Project #: : 08U12084
Company: : SAMSUNG
Configuration:: EUT Only
Mode : : TX worst case
Target: : FCC-Class B

VERTICAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	101.780	46.11	-16.41	29.70	43.50	-13.80	Peak
2	300.630	42.16	-11.01	31.15	46.00	-14.85	Peak
3	501.420	42.76	-4.74	38.02	46.00	-7.98	Peak
4	701.240	43.72	-0.44	43.28	46.00	-2.72	Peak
5	701.240	38.70	-0.06	38.64	46.00	-7.36	QP
6	798.240	39.24	1.45	40.69	46.00	-5.31	QP
7	798.240	41.38	0.85	42.23	46.00	-3.77	Peak
8	897.180	37.10	2.85	39.95	46.00	-6.05	Peak

9. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

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

ANSI C63.4

RESULTS

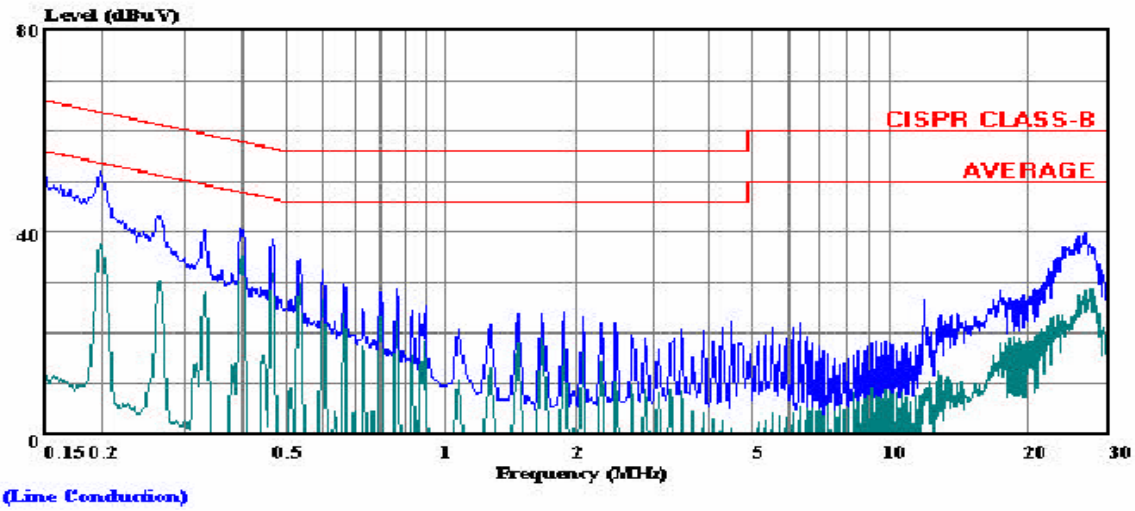
6 WORST EMISSIONS

CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	Limit	FCC_B	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.20	51.83	--	37.39	0.00	63.69	53.69	-11.86	-16.30	L1
0.46	38.59	--	29.86	0.00	56.62	46.62	-18.03	-16.76	L1
26.84	39.78	--	28.77	0.00	60.00	50.00	-20.22	-21.23	L1
0.20	52.15	--	37.74	0.00	63.69	53.69	-11.54	-15.95	L2
0.47	37.64	--	30.91	0.00	56.58	46.58	-18.94	-15.67	L2
26.42	39.44	--	26.57	0.00	60.00	50.00	-20.56	-23.43	L2
6 Worst Data									

LINE 1 RESULTS

Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 14 File#: 08i12084.emi Date: 09-19-2008 Time: 19:09:51



(Line Conduction)

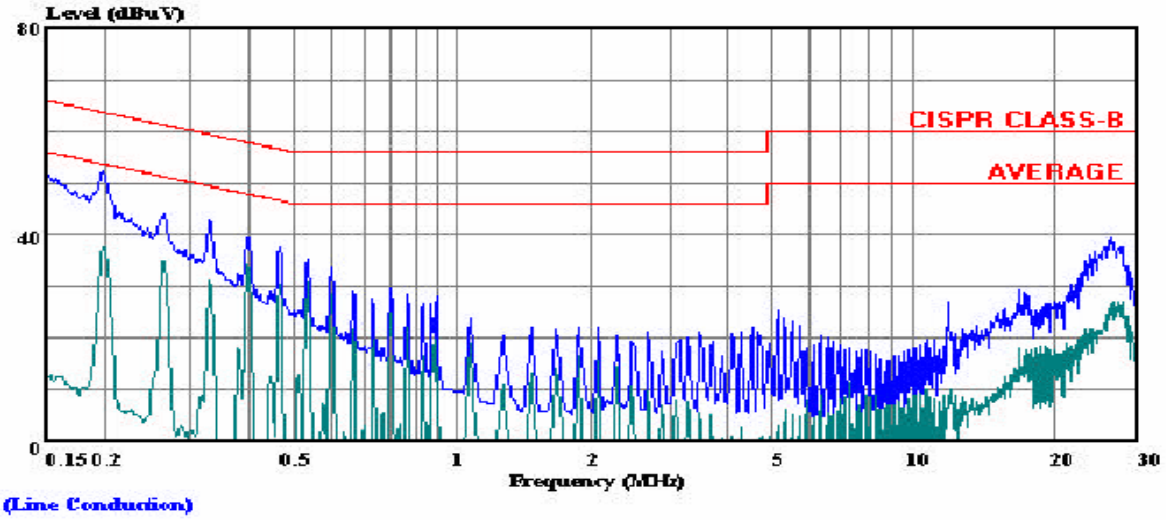
Trace: 12 Ref Trace:

Condition: CISPR CLASS-B
Test Operator:: Can Ming Chung
Project #: : 08I12084
Company: : SAMSUNG
Configuration:: Mini PC with AR5BXB63 Module
Mode: : Tx worst case
Target: : Cispr Class B
Voltage: : 115VAc 60Hz
: L1: Peak(Blue), Avg (Green)

LINE 2 RESULTS

Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 7 File#: 08i12084.emi Date: 09-19-2008 Time: 19:00:31



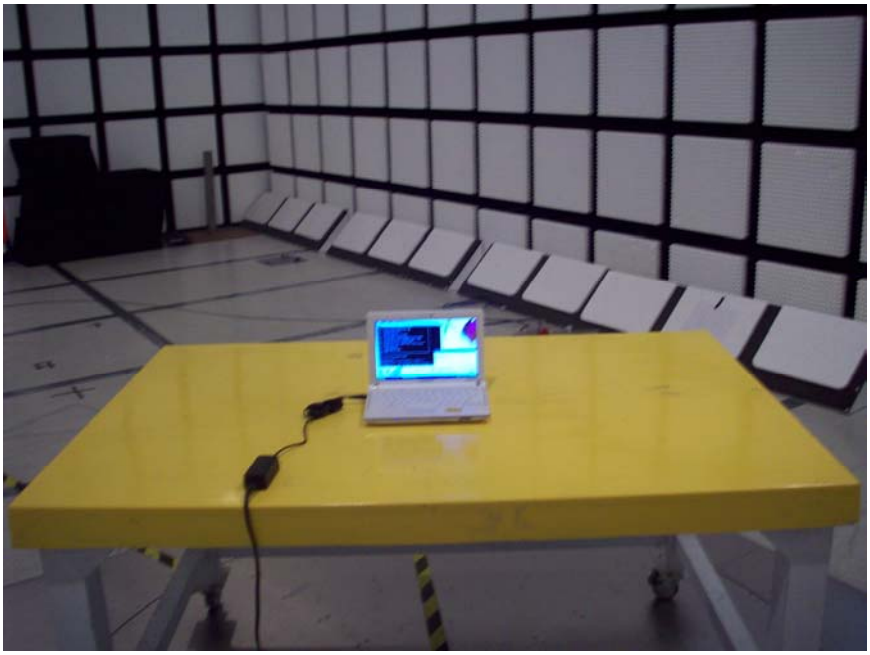
Trace: 5 Ref Trace:

Condition: CISPR CLASS-B
Test Operator:: Can Ming Chung
Project #: : 08I12084
Company: : SAMSUNG
Configuration:: Mini PC with AR5BXB63 Module
Mode: : Tx worst case
Target: : Cispr Class B
Voltage: : 115VAc 60Hz
: L2: Peak(Blue), Avg (Green)

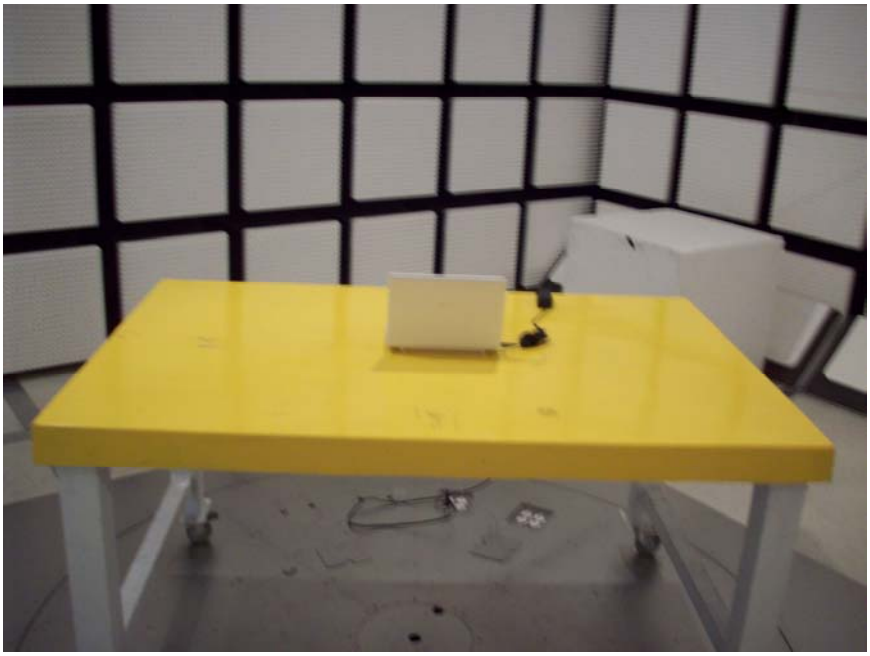
10. SETUP PHOTOS

RADIATED RF MEASUREMENT SETUP

RADIATED FRONT PHOTO



RADIATED BACK PHOTO



POWERLINE CONDUCTED EMISSIONS MEASUREMENT SETUP

LINE CONDUCTED FRONT PHOTO

LINE CONDUCTED BACK PHOTO

END OF REPORT