FCC CFR47 PART 15 SUBPART C CERTIFICATION

TEST REPORT

FOR

MITSUMI ELECTRONIC CO., LTD

EUT: WIRELESS ADAPTER FOR GAMEBOY ADVANCED

MODEL NUMBER: AGB-015

FCC ID: EW4-AGBWA

REPORT NUMBER: 03I2313-1

ISSUE DATE: NOVEMBER 12, 2003

Prepared for
MITSUMI ELECTRONIC CO., LTD
1601, SAKAI
ATSUGI
KANAGAWA 243-8533, JAPAN

Prepared by
COMPLIANCE CERTIFICATION SERVICES
561F MONTEREY ROAD,
MORGAN HILL, CA 95037, USA
TEL: (408) 463-0885
FAX: (408) 463-0888

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1. TEST RESULT CERTIFICATION

COMPANY NAME: MITSUMI ELECTRONIC CO., LTD
1601, SAKAI
ATSUGI, KANAGAWA 243-8533, JAPAN

EUT DESCRIPTION: WIRELESS ADAPTER FOR GAMEBOY ADVANCED

MODEL: AGB-015

DATE TESTED: OCTOBER 28, 2003 - NOVEMBER 06, 2003

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 15 SUBPART C	NO NON-COMPLIANCE NOTED

Compliance Certification Services, Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: This document reports conditions under which testing was conducted and results of tests performed. This document may not be altered or revised in any way unless done so by Compliance Certification Services and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Compliance Certification Services will constitute fraud and shall nullify the document.

Approved & Released For CCS By:

THU CHAN
EMC SUPERVISOR
COMPLIANCE CERTIFICATION SERVICES

Tested By:

VIEN TRAN
EMC ENGINEER
COMPLIANCE CERTIFICATION SERVICES

2. EUT DESCRIPTION

EUT Type	**Wireless Adapter for Gameboy Advanced**
Chassis Type	**Plastic**
Frequency Range	**2426.248MHz and 2456.576MHz**
Number of Channels	**2**
Channel Spacing	**30.328MHz**
Type of Modulation	**ASK**
Duty Cycle of Transmitter	**10.8%**
Antenna Type	**Invert C**
Antenna Gain	**3.5dBi**
No of External Connectors and Types	**One; 6 pin plug**
Power requirement	**3.3 VDC**

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4/2001, FCC CFR 47 Part 2 and FCC CFR 47 Part 15.

4. FACILITIES AND ACCREDITATION

The open area test sites and conducted measurement facilities used to collect data are located at 561F Monterey Road, Morgan Hill, California, USA. The sites are constructed in conformance with the requirements of ANSI C63.4, ANSI C63.7 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

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

NVLAP®

LAB CODE:200065-0

No part of this report may be used to claim or imply product endorsement by NVLAP or any agency of the US Government.

5. CALIBRATION AND UNCERTAINTY

5.1. 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.

5.2. MEASUREMENT UNCERTAINTY

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

Radiated Emission, 30 to 200 MHz	+/- 3.3 dB
Radiated Emission, 200 to 1000 MHz	+4.5 / -2.9 dB
Radiated Emission, 1000 to 2000 MHz	+4.5 / -2.9 dB
Power Line Conducted Emission	+/- 2.9 dB

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

5.3. TEST AND MEASUREMENT EQUIPMENT

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

TEST AND MEASUREMENT EQUIPMENT LIST				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due Date
LISN, 10KHZ-30MHZ	Solar	8012-50-R-24-BNC	8379443	10/13/04
Line Filter	Linfgren	LMF-3489	497	CNR
LISN, 10KHZ-30MHZ	FCC	50/250-25-2	114	10/13/04
EMI Test Receiver	R & S	ESHS-20	827129/006	4/17/04
Antenna, Horn 1-18GHz	EMCO	3115	2238	2/4/04
Preamplifier, 1300MHz	HP	8447D	2944A06833	8/22/04
Spectrum Analyzer	Agilent	E4440A	US41421507	5/8/04
RF Filter Section	HP	85420E	3705A00256	11/20/03
EMI Receiver, 9KHz-2.9GHz	HP	8542E	3942A00286	11/20/03
Antenna, Bilog, 25-2000MHz	ARA	LPB-2520A	1185	3/6/04
Preamplifier, 1-26GHz	Miteq	NSP2600-SP	924342	4/25/04

6. SETUP OF EQUIPMENT UNDER TEST

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Device Type	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	Mitsumi	AGB-009	N/A	N/A
Memory Card	Nintendo	N/A	N/A	N/A
Head Phone	WOODI	NA	N/A	N/A

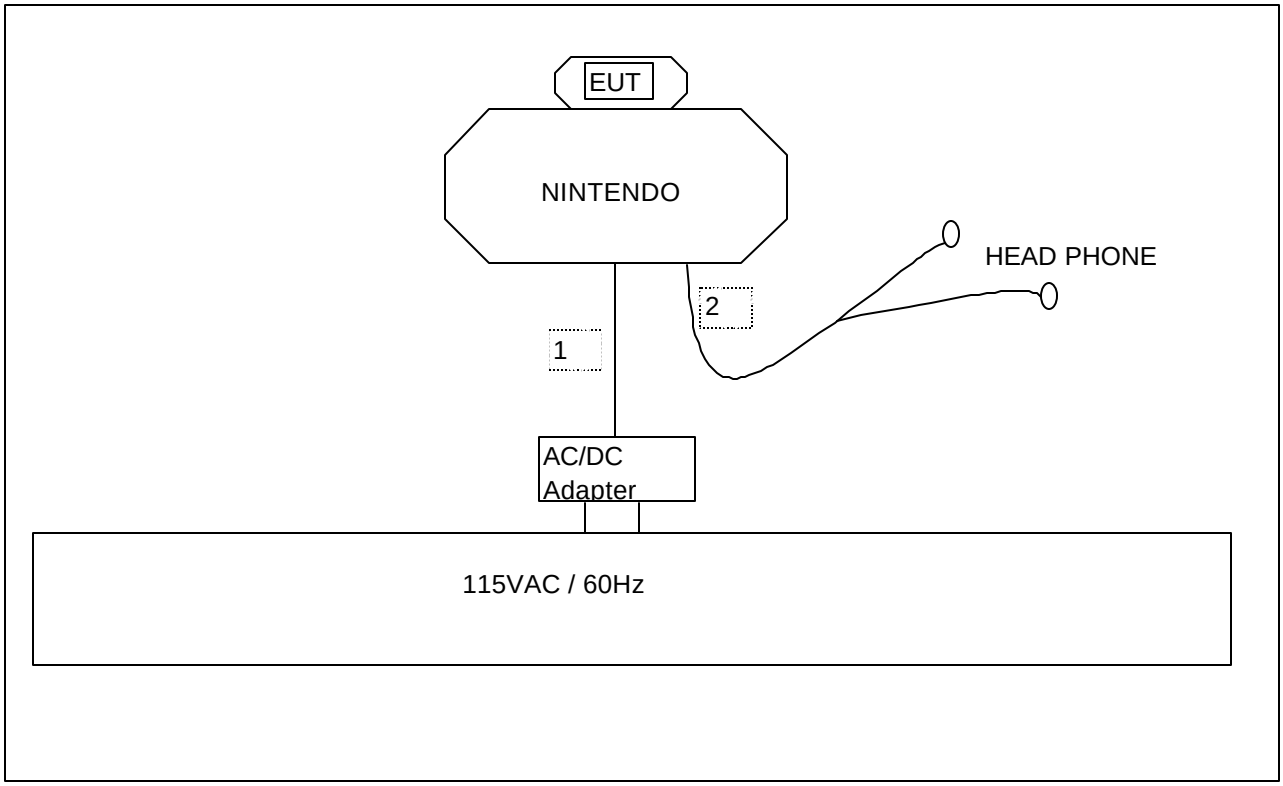
I/O CABLES

Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	DC	1	DC	Shielded	2m	Bundled AC Cable for LC Test
2	Audio Out	1	Din	Un-Shielded	2m	Connected to head phones

TEST SETUP

The EUT is wireless adapter for gameboy advanced.

SETUP DIAGRAM FOR TESTS



7. APPLICABLE LIMITS AND TEST RESULTS

7.1. 99% BANDWIDTH

LIMIT

None, for reporting purposes only.

TEST PROCEDURE

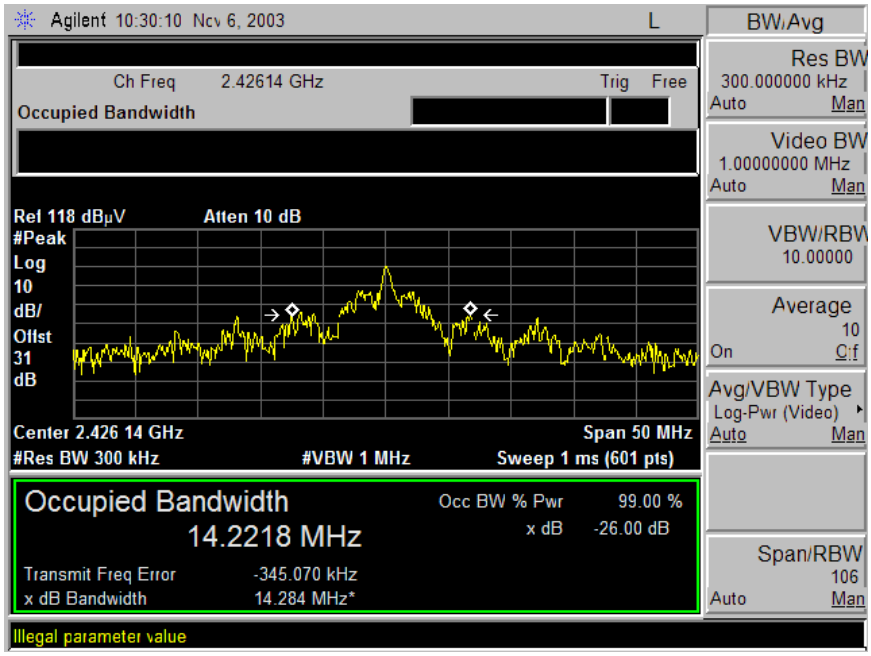
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

RESULTS

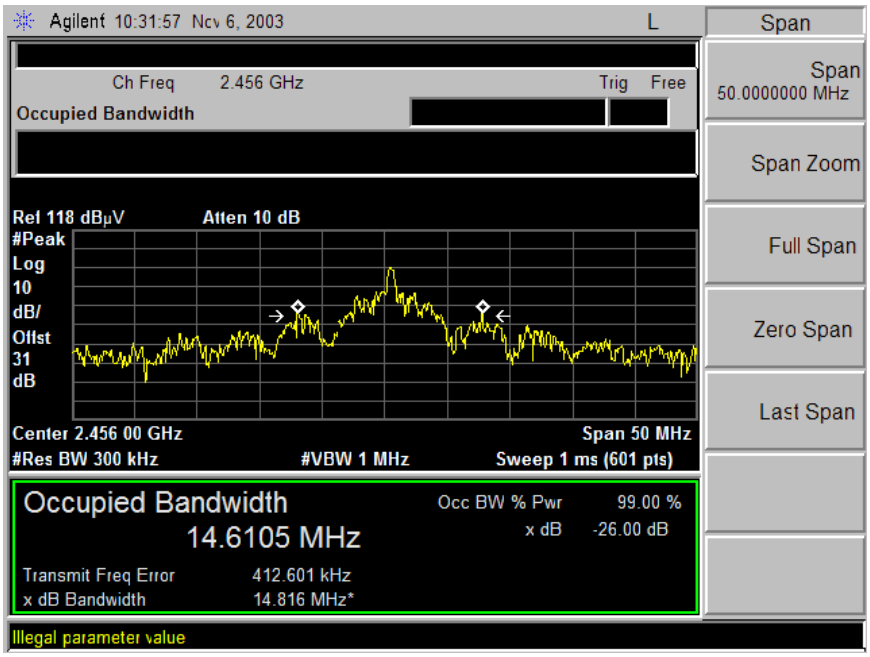
No non-compliance noted:

Channel	Frequency (MHz)	99% BW (MHz)	-26dBc BW (MHz)
Low	2426.248	14.2218	14.284
High	2456.576	14.6105	14.816

LOW CH



HIGH CH



7.2. Duty Cycle

LIMIT

None, for reporting purposes only and a correction factor will apply to average readings.

TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The sweep time is coupled and the span is set to 0Hz. The RBW & VBW is set to usual and enough to capture a good plot.

RESULTS

No non-compliance noted:

One Master Frame=2.78mS
Master Frame is repeated continuously.
Max Tx bits in a Master Frame= 179bitsx8=1432bits
Transmit duration (data rate = 4.798MHz) = 1/4.798MHz x 1432bits=298.46uS
298.46uS/2780uS=0.1073 = 10.7%

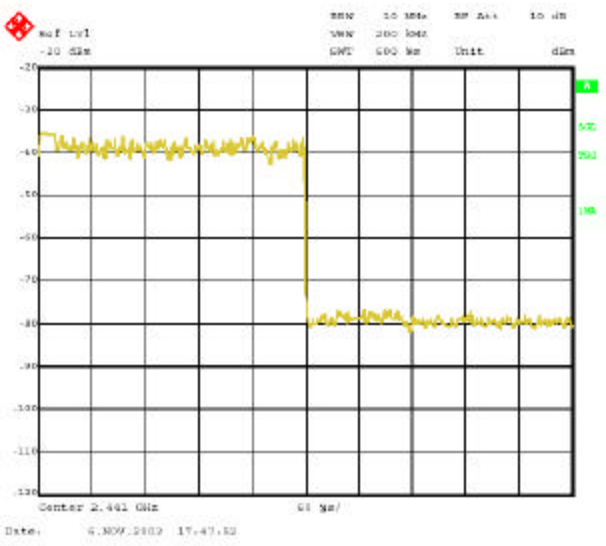


Figure 1: Maximum TX duration of 298.46 microseconds (horizontal scale is 60 microseconds/division)

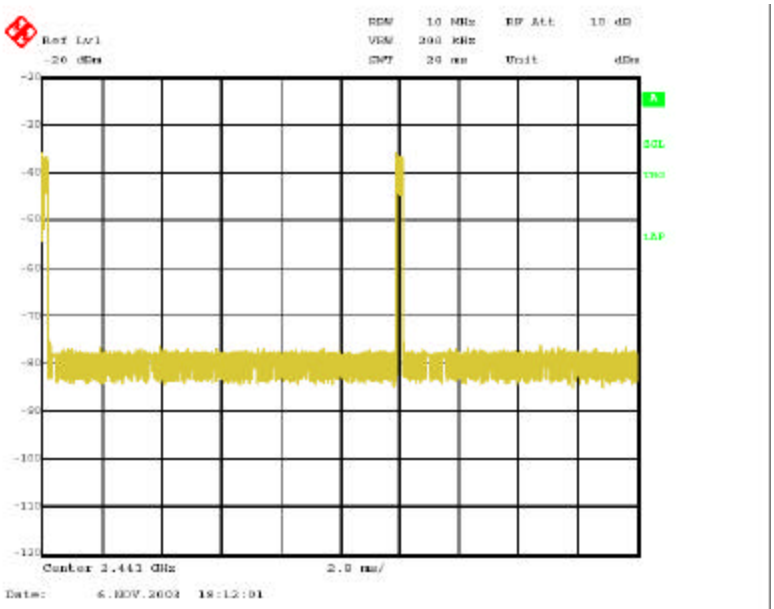


Figure 3: Normal TX rate of 298.46 microsecond pulses every 16.7 millisecond frame (horizontal scale is 2.8 milliseconds/division)

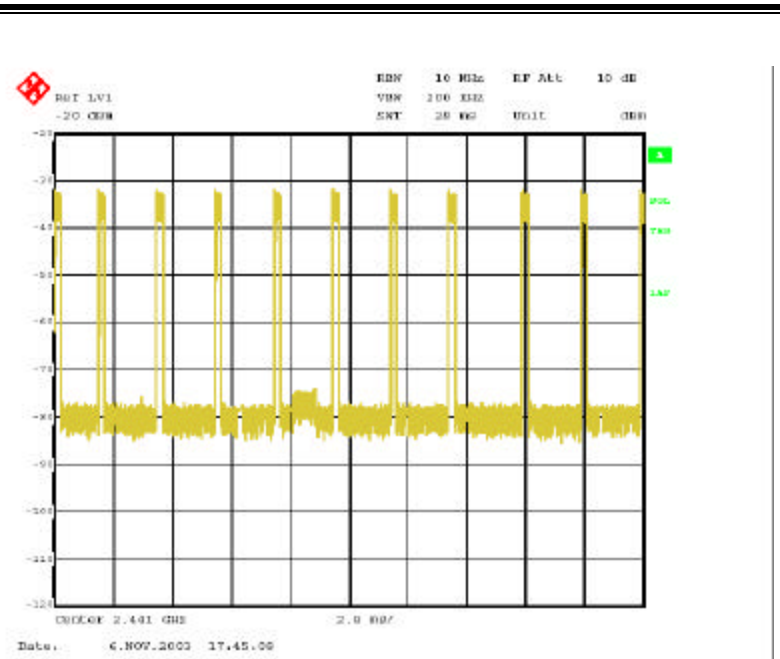


Figure 2: Worst case maximum TX rate of 298.46 microsecond pulses every 2.78 millisecond frame (horizontal scale is 2.8 milliseconds/division)

7.3. RADIATED EMISSIONS

7.3.1. TRANSMITTER RADIATED SPURIOUS EMISSIONS

LIMITS

The field strengths shall not exceed the following:

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of Harmonics (microvolts/meter)
902 - 928 MHz	50	500
2400 - 2483.5 MHz	50	500
5725 - 5875 MHz	50	500
24.0 - 24.25 GHz	250	2500

Field strength limits are specified at a distance of 3 meters.

§15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])
13.36 - 13.41			

[1] Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
[2] Above 38.6

§15.205 (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

§15.209 (a) Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 - 88	100 **	3
88 - 216	150 **	3
216 - 960	200 **	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

§15.209 (b) In the emission table above, the tighter limit applies at the band edges.

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. The X, Y, and Z positions shall be tested and the worst case reported.

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.

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.

RESULTS

No non-compliance noted:

NOTE: Worst Case Duty Cycle of 0.1073 or 10.7% (-19.4dB) is included to correct the peak reading to the average value of emissions.

Fundamental Measurement @ X, Y, & Z Positions:

10/28/03 **High Frequency Measurement**

Compliance Certification Services, Morgan Hill Open Field Site

Test Engr: vien tran
Project #: 03I2313-1
Company: NINTENDO
EUT Descrip.: WIRELESS ADAPTER FOR GAMEBOY ADVANCED
EUT M/N: AGB-015
Test Target: FCC 15.249
Mode Oper: TX_CW MODE _ FUNDAMENTAL _ X,Y, Z POSITION

Test Equipment:

EMCO Horn 1-18GHz — T60: S/N: 2238 @3m

Pre-amplifer 1-26GHz

Spectrum Analyzer — Agilent E4446A Analyzer

Horn > 18GHz

Hi Frequency Cables: ☐ (2 ft) ☐ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)

Peak Measurements:
1 MHz Resolution Bandwidth
1MHz Video Bandwidth

Average Measurements:
1 MHz Resolution Bandwidth
10Hz Video Bandwidth

f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
EUT AT X POSITION _ TX AT CW MODE															
LOW CH=2462.248MHz															
2.426	9.8	61.5	41.6	29.6	1.4	0.0	0.0	0.0	92.5	72.6	114.0	94.0	-21.5	-21.4	V
2.426	9.8	71.4	51.8	29.6	1.4	0.0	0.0	0.0	102.5	82.8	114.0	94.0	-11.5	-11.2	H
HI CH=2456.576MHZ															
2.456	9.8	62.6	42.8	29.7	1.5	0.0	0.0	0.0	93.7	73.9	114.0	94.0	-20.3	-20.1	V
2.456	9.8	71.2	51.4	29.7	1.5	0.0	0.0	0.0	102.3	82.5	114.0	94.0	-11.7	-11.5	H
EUT AT Y POSITION _ TX AT CW MODE															
LOW CH=2462.248MHz															
2.426	9.8	70.8	50.8	29.6	1.4	0.0	0.0	0.0	101.8	81.8	114.0	94.0	-12.2	-12.2	V
2.426	9.8	70.4	50.4	29.6	1.4	0.0	0.0	0.0	101.4	81.4	114.0	94.0	-12.6	-12.6	H
HI CH=2456.576MHZ															
2.456	9.8	70.5	50.5	29.7	1.5	0.0	0.0	0.0	101.6	81.6	114.0	94.0	-12.4	-12.4	V
2.456	9.8	70.1	50.1	29.7	1.5	0.0	0.0	0.0	101.2	81.2	114.0	94.0	-12.8	-12.8	H
EUT AT Z POSITION _ TX AT CW MODE															
LOW CH=2462.248MHz															
2.426	9.8	71.3	51.6	29.6	1.4	0.0	0.0	0.0	102.4	82.6	114.0	94.0	-11.6	-11.4	V
2.426	9.8	64.2	44.1	29.6	1.4	0.0	0.0	0.0	95.2	75.1	114.0	94.0	-18.8	-18.9	H
								0.0							
HI CH=2456.576MHZ															
2.456	9.8	70.2	50.6	29.7	1.5	0.0	0.0	0.0	101.3	81.7	114.0	94.0	-12.7	-12.3	V
2.456	9.8	65.0	44.9	29.7	1.5	0.0	0.0	0.0	96.1	76.0	114.0	94.0	-17.9	-18.0	H
NOTE: Worst Case Duty Cycle of 0.1073 or 10.7% (-19.4dB) is included to correct the peak reading to the average value of emissions.															

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		

HARMONICS AND SPURIOUS EMISSIONS

10/28/03 **High Frequency Measurement**
Compliance Certification Services, Morgan Hill Open Field Site

Test Engr: vien tran
Project #: 03I2313-1
Company: NINTENDO
EUT Descrip.: WIRELESS ADAPTER FOR GAMEBOY ADVANCED
EUT M/N: AGB-015
Test Target: FCC 15.249
Mode Oper: TX_ HARMONIC & SPUR_LOW / HI CHANNELS_EUT AT X POSITION

Test Equipment:

EMCO Horn 1-18GHz: T60; S/N: 2238 @3m
Pre-amplifer 1-26GHz: T87 Miteq 924342
Spectrum Analyzer: Agilent E4446A Analyzer
Horn > 18GHz:

Hi Frequency Cables: (2 ft) (2 ~ 3 ft) (4 ~ 6 ft) (12 ft)

Peak Measurements:
1 MHz Resolution Bandwidth
1MHz Video Bandwidth

Average Measurements:
1 MHz Resolution Bandwidth
10Hz Video Bandwidth

f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
LOW CH=2.462GHZ_CW MODE															
4.852	9.8	65.0	43.8	33.1	0.5	-44.7	0.0	1.0	54.9	33.7	74.0	54.0	-19.1	-20.3	H
7.279	9.8	62.0	39.8	36.2	0.6	-44.5	0.0	1.0	55.2	33.0	74.0	54.0	-18.8	-21.0	H
9.705	9.8	49.0	19.4	38.5	0.8	-42.4	0.0	1.0	46.9	17.3	74.0	54.0	-27.1	-36.7	H, NOISE FLOOR
4.852	9.8	63.6	41.7	33.1	0.5	-44.7	0.0	1.0	53.5	31.6	74.0	54.0	-20.5	-22.4	V
7.279	9.8	58.7	35.6	36.2	0.6	-44.5	0.0	1.0	51.9	28.8	74.0	54.0	-22.1	-25.2	V
9.705	9.8	46.8	15.6	38.5	0.8	-42.4	0.0	1.0	44.7	13.5	74.0	54.0	-29.3	-40.5	V, NOISE FLOOR
HI CH=2.456576GHz_CW MODE															
4.913	9.8	65.1	44.0	33.2	0.5	-44.8	0.0	1.0	55.0	33.9	74.0	54.0	-19.0	-20.1	H
7.370	9.8	58.0	35.9	36.3	0.7	-44.5	0.0	1.0	51.4	29.3	74.0	54.0	-22.6	-24.7	H
9.826	9.8	47.8	17.6	38.4	0.8	-42.2	0.0	1.0	45.8	15.6	74.0	54.0	-28.2	-38.4	H, NOISE FLOOR
								1.0							
4.913	9.8	63.0	41.9	33.2	0.5	-44.8	0.0	1.0	52.9	31.8	74.0	54.0	-21.1	-22.2	V
7.370	9.8	56.8	33.2	36.3	0.7	-44.5	0.0	1.0	50.2	26.6	74.0	54.0	-23.8	-27.4	V
9.826	9.8	46.5	15.3	38.4	0.8	-42.2	0.0	1.0	44.5	13.3	74.0	54.0	-29.5	-40.7	V, NOISE FLOOR

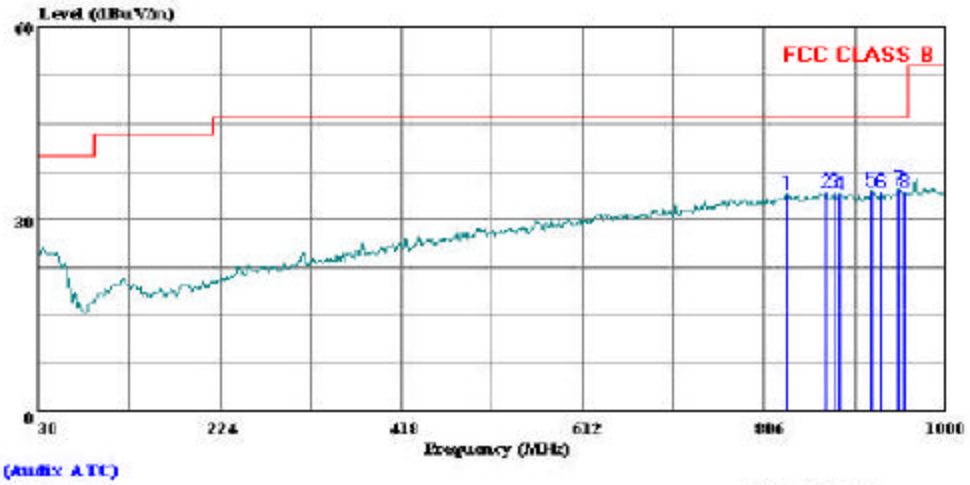
f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field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

7.3.2. WORST-CASE RADIATED EMISSIONS BELOW 1 GHZ

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

COMPLIANCE Engineering Services, Inc.
561F Monterey Road
San Jose, CA 95131
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 2 File#: EMI Below 1GHz.EMI
Date: 11-06-2003 Time: 11:34:49



(Audix ATC)
Trace: 1 Ref Trace:

Condition: FCC CLASS B 3m CHAMBER 030306 1185 HORIZONTAL
Test Eng: : VIEN TRAN
Project #: : 03I2313
Company: : NINTENDO
EUT: : WIRELESS ADAPTER FOR GAMBOY
Model No: : AGB-015
Configuration: : EUT / HEAD PHONE / AC_DC ADAPTER
Target of Test: : FCC CLASS B
Mode of Operation: TX AT WORST CASE

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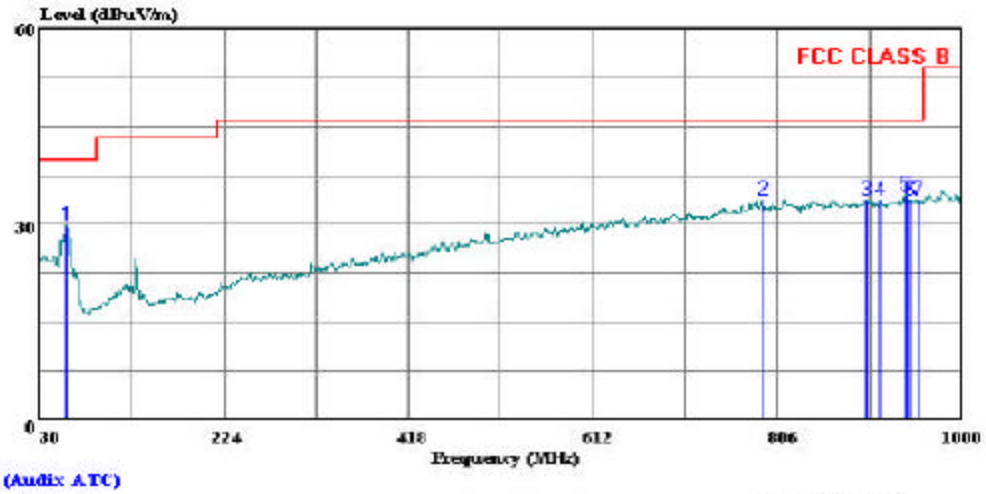
	Freq	Remark	Read Level	Factor	Level	Limit Line	Over Limit
	MHz		dBuV	dB	dBuV/m	dBuV/m	dB
1	829.280	Peak	10.99	23.07	34.06	46.00	-11.94
2	872.930	Peak	10.79	23.53	34.32	46.00	-11.68
3	880.690	Peak	10.69	23.63	34.32	46.00	-11.68
4	887.480	Peak	10.33	23.73	34.06	46.00	-11.94
5	921.430	Peak	10.57	23.98	34.55	46.00	-11.45
6	931.130	Peak	10.12	24.08	34.20	46.00	-11.80

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

COMPLIANCE Engineering Services, Inc.
561F Monterey Road
San Jose, CA 95131
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 4 File#: BMI Below 1GHz.BMI
Date: 11-06-2003 Time: 11:44:11



(Audix ATC)
Trace: 3 Ref Trace:

Condition: FCC CLASS B 3m CHAMBER 030306 1185 VERTICAL
Test Eng: : VIEN TRAN
Project #: : 03I2313
Company: : NINTENDO
EUT: : WIRELESS ADAPTER FOR GAMEBOY
Model No: : AGB-015
Configuration: : EUT / HEAD PHONE / AC_DC ADAPTER
Target of Test: : FCC CLASS B
Mode of Operation: TX AT WORST CASE
: VERTICAL

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	Freq	Remark	Read Level	Factor	Level	Limit Line	Over Limit
	MHz		dBuV	dB	dBuV/m	dBuV/m	dB
1	58.130	Peak	16.93	12.83	29.76	40.00	-10.25
2	790.480	Peak	10.98	22.70	33.68	46.00	-12.32
3	900.090	Peak	9.89	23.84	33.73	46.00	-12.27
4	914.640	Peak	9.73	23.94	33.67	46.00	-12.33
5	940.830	Peak	10.29	24.18	34.47	46.00	-11.53
6	945.680	Peak	9.65	24.23	33.88	46.00	-12.12
7	953.440	Peak	9.49	24.31	33.80	46.00	-12.20

7.4. POWERLINE CONDUCTED EMISSIONS

LIMIT

§15.207 (a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 µH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal.

The lower limit applies at the boundary between the frequency ranges.

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 resolution bandwidth is set to 9 kHz for both peak detection and quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

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

RESULTS

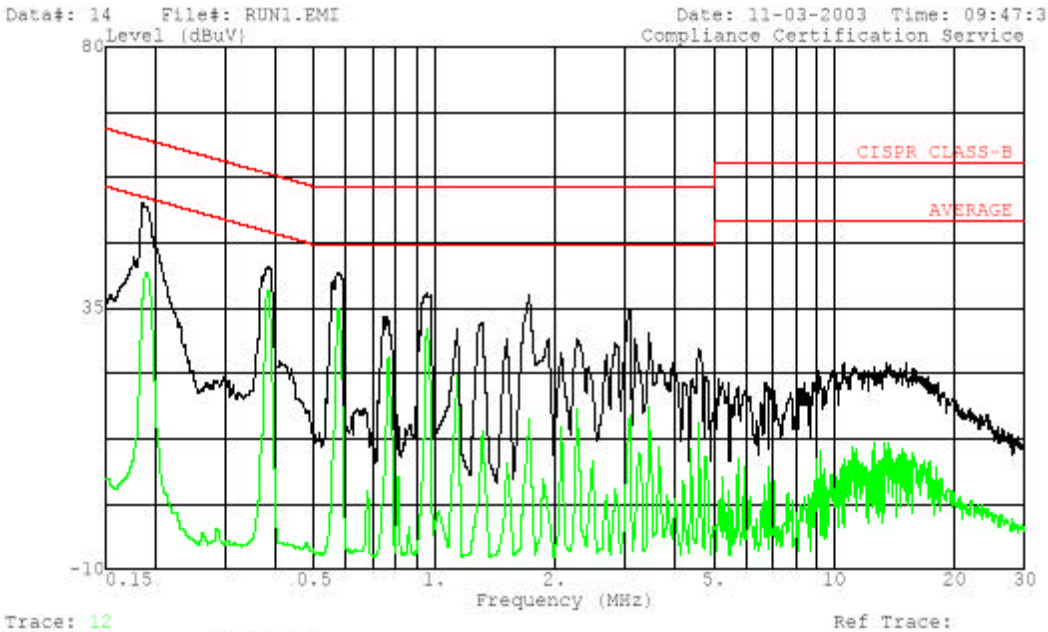
No non-compliance noted:

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
0.19	53.24	--	41.12	0.00	65.00	55.00	-11.76	-13.88	L1
0.39	42.08	--	37.88	0.00	59.23	49.23	-17.15	-11.35	L1
0.57	41.04	--	34.94	0.00	56.00	46.00	-14.96	-11.06	L1
0.19	48.62	--	45.83	0.00	65.00	55.00	-16.38	-9.17	L2
0.39	39.44	--	29.04	0.00	59.23	49.23	-19.79	-20.19	L2
0.57	39.74	--	29.73	0.00	56.00	46.00	-16.26	-16.27	L2
6 Worst Data									

LINE 1 RESULTS

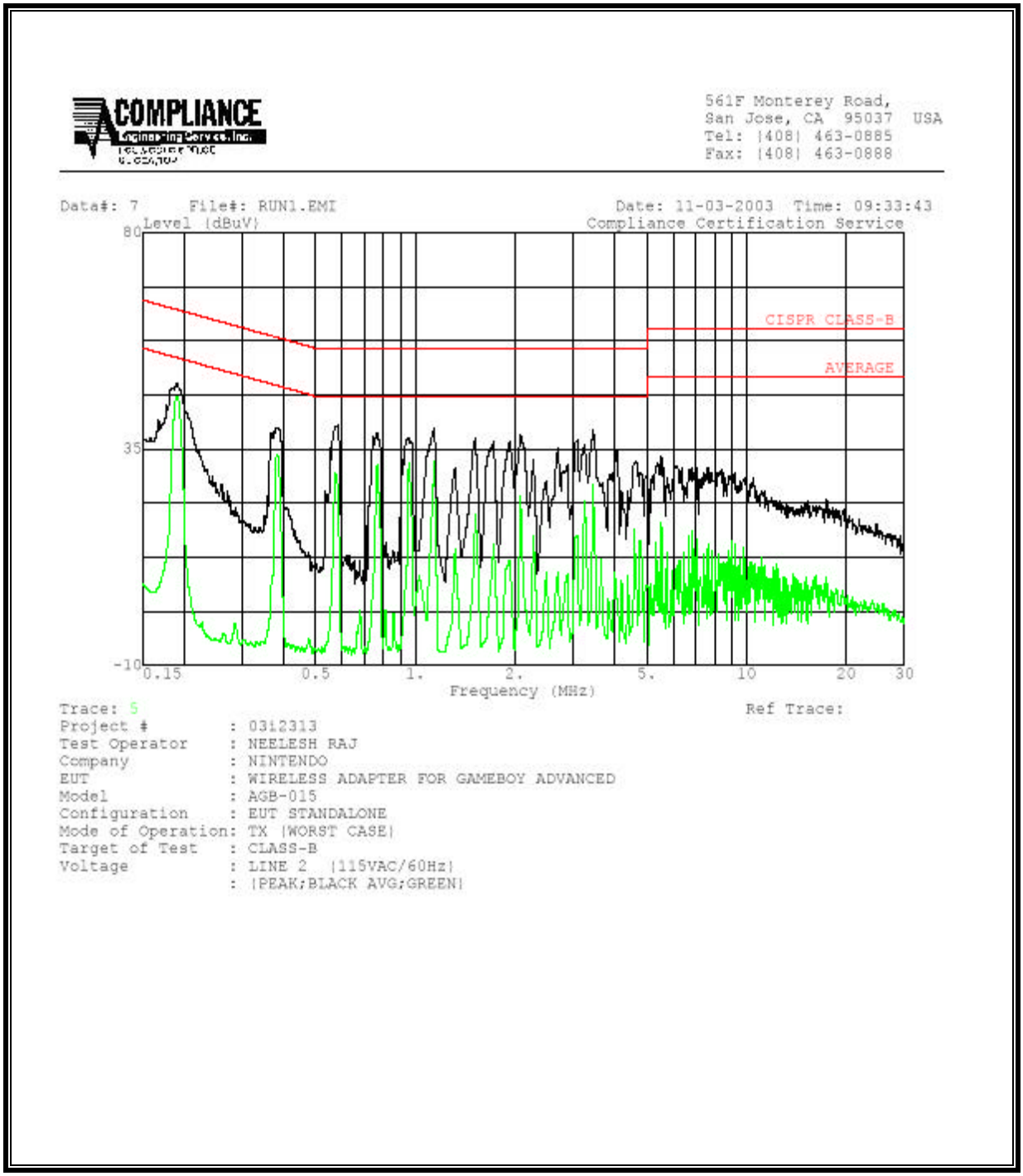
561F Monterey Road,
San Jose, CA 95037 USA
Tel: (408) 463-0885
Fax: (408) 463-0888



Trace: 12 Ref Trace:

Project #	: 0312313
Test Operator	: NEELESH RAJ
Company	: NINTENDO
EUT	: WIRELESS ADAPTER FOR GAMEBOY ADVANCED
Model	: AGB-015
Configuration	: EUT STANDALONE
Mode of Operation	: TX (WORST CASE)
Target of Test	: CLASS-B
Voltage	: LINE 1 (115VAC/60Hz)
	: (PEAK;BLACK AVG;GREEN)

LINE 2 RESULTS



8. SETUP PHOTOS

RF MEASUREMENT SETUP

EUT X POSITUION

EUT Y POSITUION

EUT Z POSITUION

RADIATED EMISSIONS SETUP

RADIATED FRONT PHOTO

RADIATED BACK PHOTO

POWERLINE CONDUCTED EMISSIONS MEASUREMENT SETUP

LINE CONDUCTED FRONT PHOTO

LINE CONDUCTED BACK PHOTO

END OF REPORT