MPE Test Report

of

Product Name

Wireless Audio System

Model

WIDIO
(Brand: Albatron)

Applied by:

Albatron Technology Co., Ltd.
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Chung-Ho City, Taipei Hsien,
Taiwan, R. O. C.

Test Performed by:

International Standards Laboratory

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HC LAB:NVLAP:200234-0;VCCI: R-341,C-354;NEMKO:ELA 113a,113c;BSMI:SL2-IN-E-0037;SL2-R1-E-0037;CNLA:1178
LT LAB:NVLAP:200234-0;VCCI: R-1435,C-1440;NEMKO:ELA 113b,113d;BSMI:SL2-IN-E-0013;CNLA:0997

Contents of Report

1. General

1.1 Certification of Accuracy of Test Data

Standards:	CFR 47 Part 15 Subpart B Class B CFR 47 Part 15 Subpart C (Section 15.247)
Test Procedure:	ANSI C63.4: 2001
Equipment Tested:	Wireless Audio System
Model:	WIDIO
Applied by:	Albatron Technology Co., Ltd.
Sample received Date:	2004/08/05
Final test Date :	2004/08/23
Test Result	PASS
Test Site:	Chamber 02, Conduction 02
Temperature	Refer to each site test data
Humidity:	Refer to each site test data
Test Engineer:	Mailes Hsieh

All the tests in this report have been performed and recorded in accordance with the standards described above and performed by an independent electromagnetic compatibility consultant, International Standards Laboratory.

The test results contained in this report accurately represent the the measurements of the characteristics and the energy generated by sample equipment under test at the time of the test. The sample equipment tested as described in this report is in compliance with the limits of above standards.

Approve & Signature

---Eddy Hsiung----------

Eddy Hsiung/Director

Test results given in this report apply only to the specific sample(s) tested under stated test conditions.
This report shall not be reproduced other than in full without the explicit written consent of ISL.
This report totally 8 pages, including 1 cover page , 1 contents page, and 6 pages for the test description.
This report must not be use to claim product endorsement by NVLAP or any agency of the U.S. Government.

This test data shown below is traceable to NIST or national or international standard.
International Standards Laboratory certifies that no party to this application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 853(a).

2. Description of Equipment Under Test (EUT)

Description:	Wireless Audio System
FCC ID:	SGC00001
Brand:	Albatron
Condition:	Pre-Production
Model:	Widio
Serial Number:	N/A
Frequency Range 802.11b:	2400 ~ 2483.5 MHz
Support channel:	
802.11b	6 Channels
Modulation Skill:	
802.11b	DQPSK(2Mbps)
Antennas Type:	
Transmitter System :	Monopole (made by INPAQ, P/N: DAM00BM10580000)
Receiver System :	Monopole (made by INPAQ, P/N: DAM00BM10130000)
Antenna peak Gain:	
Transmitter System :	3.3dBi
Receiver System :	2.91dbi
Antenna Connected:	The monopole antenna is mounted to the PCB of the EUT. The user is not possible to change the antenna .
Power Type:	3.3V DC from the EUT

The channel and the operation frequency of 802.11b is listed below:

Channel	Frequency(MHz)	Channel	Frequency(MHz)
01	2412	07	2442
03	2422	09	2452
05	2432	11	2462

AC-DC Adapter:	SPEC LIN (Model: AZ11-SL05A105-U)
Headphone:	UNI (Model: ADV-168) or Audio Technica (Model: ATM-EM7)
Transmitter System…	
Power Input Port:	one
Audio Input:	two(Life & Right)
Charger Slot:	two(Battery & Receiver System)
Wireless Antenna:	one
Receiver System…	
Power Input Port:	one
Line-out Port:	one
Battery:	KTS (Model: BBLIS063048A-N8)
Wireless Antenna:	one

2.1 General Test Conditions

1. During the test, the EUT was set in continuously transmitting mode with a duty cycle of 100%.
2. The channel 1, 5, 11 of of 802.11b of EUT were all tested.

3. RF Exposure Measurement [Section 15.247(b)(4) & 1.1307(b)]

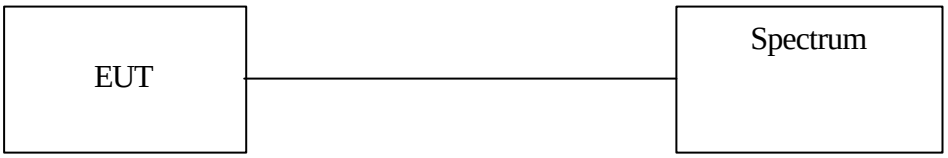
3.1 Applied Standards

FCC PART 1.1307, 1.1310, 2.1091, 2.1093 RF EXPOSURE

3.2 Test Procedure

1. The Transmitter output of EUT was connected to the peak power analyzer .

3.3 Test Setup



3.4 Calculation for Maximum Permissible Exposure (MPE)

From FCC 1.1310 Table 1B, the maximum permissible RF exposure for an uncontrolled environment is 1 mW/cm2 .The actual power density for the EUT with the antenna is calculated as shown below.

$$S = (P \times G)/(4 \times \pi \times d^2)$$

where:
S = power density
P = transmitter conducted power in (W)
G = antenna numeric gain
d = distance to radiation center (m)

802.11b:

Antenna Manufacturer	Antenna Type	Gain (dBi)	Numeric Gain	Frequency (MHz)	Power (dBm)	Power (mW)	Separation Distance (cm)	Power Density (W/m2)	Power Density (mW/cm2)
INPAQ, P/N: DAM00BM10580000	Monopole	3.3	2.14	2412	17.006	50.19	20	0.2135	0.02135
				2432	16.068	40.44	20	0.1720	0.01720
				2462	15.131	32.59	20	0.1386	0.01386

WARNING:

It is the responsibility of the installer to ensure that the EUT is a WLAN module and a specified antenna inside. Only the specified antennas listed above may be used. The use of any other antenna is expressly forbidden in accordance with FCC rules CFR 47 part 15.204.

NOTICE:

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits for an uncontrolled environment when installed as directed. This equipment should be installed and operated with the specified antennas(vendor: Yageo Corporation, P/N: CAN4311153002301K) in a fixed-mount configuration, installed with a maximum of 19.037 dBm of radiated output power during normal operation

4. Appendix : Test Equipment

4.1 Test Equipment List

Equipment Name: Spectrum Analyzer 08
Brand: Advantest
Model: R3132
S/N: 111000867
Last Cal. Date: 11/21/2003
Next Cal. Date: 11/21/2004

Note: Calibration traceable to NIST or national or international standards.