

**FCC CFR47 PART 15 SUBPART C
CERTIFICATION**



TEST REPORT ADDENDUM

FOR

802.11a/b CARDBUS PEAK/AVERAGE POWER RATIO

MODEL NUMBER: WLC221-D4 / BCP3483U

BRAND NAME: ASKEY

FCC ID: H8NWLC221-D4

REPORT NUMBER: 02T1639-5

ISSUE DATE: MARCH 7, 2003

Prepared for
**ASKEY COMPUTER CORP.
10F, NO. 119, CHIENKANG RD.
CHUNG-HO, TAIPEI
TAIWAN, R.O.C.**

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

TABLE OF CONTENTS

1. TEST RESULT CERTIFICATION	3
2. TEST METHODOLOGY.....	4
3. FACILITIES AND ACCREDITATION.....	4
3.1. <i>FACILITIES AND EQUIPMENT</i>	<i>4</i>
3.2. <i>LABORATORY ACCREDITATIONS AND LISTINGS</i>	<i>4</i>
3.3. <i>TABLE OF ACCREDITATIONS AND LISTINGS</i>	<i>5</i>
4. CALIBRATION AND UNCERTAINTY	6
4.1. <i>MEASURING INSTRUMENT CALIBRATION</i>	<i>6</i>
4.2. <i>MEASUREMENT UNCERTAINTY.....</i>	<i>6</i>
4.3. <i>TEST AND MEASUREMENT EQUIPMENT.....</i>	<i>6</i>
5. RESULTS	7

1. TEST RESULT CERTIFICATION

COMPANY NAME: ASKEY COMPUTER CORP.
10F, NO. 119, CHIENKANG RD.
CHUNG-HO, TAIPEI, TAIWAN, R.O.C.

EUT DESCRIPTION: 802.11A/B CARDBUS

MODEL NAME: WLC221-D4 / BCP3483U

DATE TESTED: FEBRUARY 28, 2003

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

Compliance Certification Services, Inc. tested the peak and average power of the above equipment.

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:

Tested By:



MIKE HECKROTTE
CHIEF ENGINEER
COMPLIANCE CERTIFICATION SERVICES

FRANK IBRAHIM
EMC SUPERVISOR
COMPLIANCE CERTIFICATION SERVICES

2. TEST METHODOLOGY

Conducted and radiated testing were performed according to the procedures documented on chapter 13 of ANSI C63.4 and FCC CFR 47 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055, 2.1057, and 15.407.

3. FACILITIES AND ACCREDITATION

3.1. FACILITIES AND EQUIPMENT







The open area test sites and conducted measurement facilities used to collect the radiated data are located at 561F Monterey Road, Morgan Hill, California, USA. The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

Receiving equipment (i.e., receiver, analyzer, quasi-peak adapter, pre-selector) and LISNs conform to CISPR specifications for "Radio Interference Measuring Apparatus and Measurement Methods," Publication 16.

3.2. LABORATORY ACCREDITATIONS AND LISTINGS

The test facilities used to perform radiated and conducted emissions tests are accredited by National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under Lab Code: 200065-0 to perform Electromagnetic Interference tests according to FCC PART 15 AND CISPR 22 requirements. No part of this report may be used to claim or imply product endorsement by NVLAP or any agency of the US Government. In addition, the test facilities are listed with Federal Communications Commission (reference no: 31040/SIT (1300B3) and 31040/SIT (1300F2)).

3.3. TABLE OF ACCREDITATIONS AND LISTINGS

Country	Agency	Scope of Accreditation	Logo
USA	FCC	3/10 meter Open Area Test Sites to perform FCC Part 15/18 measurements	 1300
Japan	VCCI	CISPR 22 Two OATS and one conducted Site	 R-1014, R-619, C-640
Norway	NEMKO	EN50081-1, EN50081-2, EN50082-1, EN50082-2, IEC61000-6-1, IEC61000-6-2, EN50083-2, EN50091-2, EN50130-4, EN55011, EN55013, EN55014-1, EN55104, EN55015, EN61547, EN55022, EN55024, EN61000-3-2, EN61000-3-3, EN60945, EN61326-1	 ELA 117
Norway	NEMKO	EN60601-1-2 and IEC 60601-1-2, the Collateral Standards for Electro-Medical Products. MDD, 93/42/EEC, AIMD 90/385/EEC	 ELA-171
Taiwan	BSMI	CNS 13438	 SL2-IN-E-1012
Canada	Industry Canada	RSS210 Low Power Transmitter and Receiver	 IC2324 A,B,C, and F

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which 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:

Radiated Emission	
30MHz – 200 MHz	+/- 3.3dB
200MHz – 1000MHz	+4.5/-2.9dB
1000MHz – 2000MHz	+4.6/-2.2dB
Power Line Conducted Emission	
150kHz – 30MHz	+/-2.9

Any results falling within the above values are deemed to be marginal.

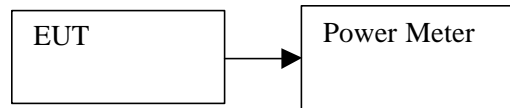
4.3. TEST AND MEASUREMENT EQUIPMENT

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
Power Meter	Agilent	E4416A	GB41291160	8/9/03
Power Sensor	Agilent	E9327A	US40440755	9/5/03

5. RESULTS

TEST SETUP



TEST PROCEDURE

The transmitter output is connected to the power meter. The power meter is set to read peak and average power.

RESULTS

No non-compliance noted:

2.4 GHz Band

Channel	Frequency (MHz)	Peak Power (dBm)	Average Power (dBm)
Low	2412	17.70	16.36
Middle	2437	16.38	15.05
High	2462	17.10	15.64

5.8 GHz Band Normal Mode

Channel	Frequency (MHz)	Peak Power (dBm)	Average Power (dBm)
Low	5745	20.47	15.39
Middle	5785	20.28	15.34
High	5825	18.78	13.25

5.8 GHz Band Turbo Mode

Channel	Frequency (MHz)	Peak Power (dBm)	Average Power (dBm)
Low	5760	18.37	12.58
Middle	N/A	N/A	N/A
High	5800	20.31	15.46

Output Power, 2.412GHz (NORMAL)



Output Power, 2.437GHz (NORMAL)



Output Power, 2.462GHz (NORMAL)



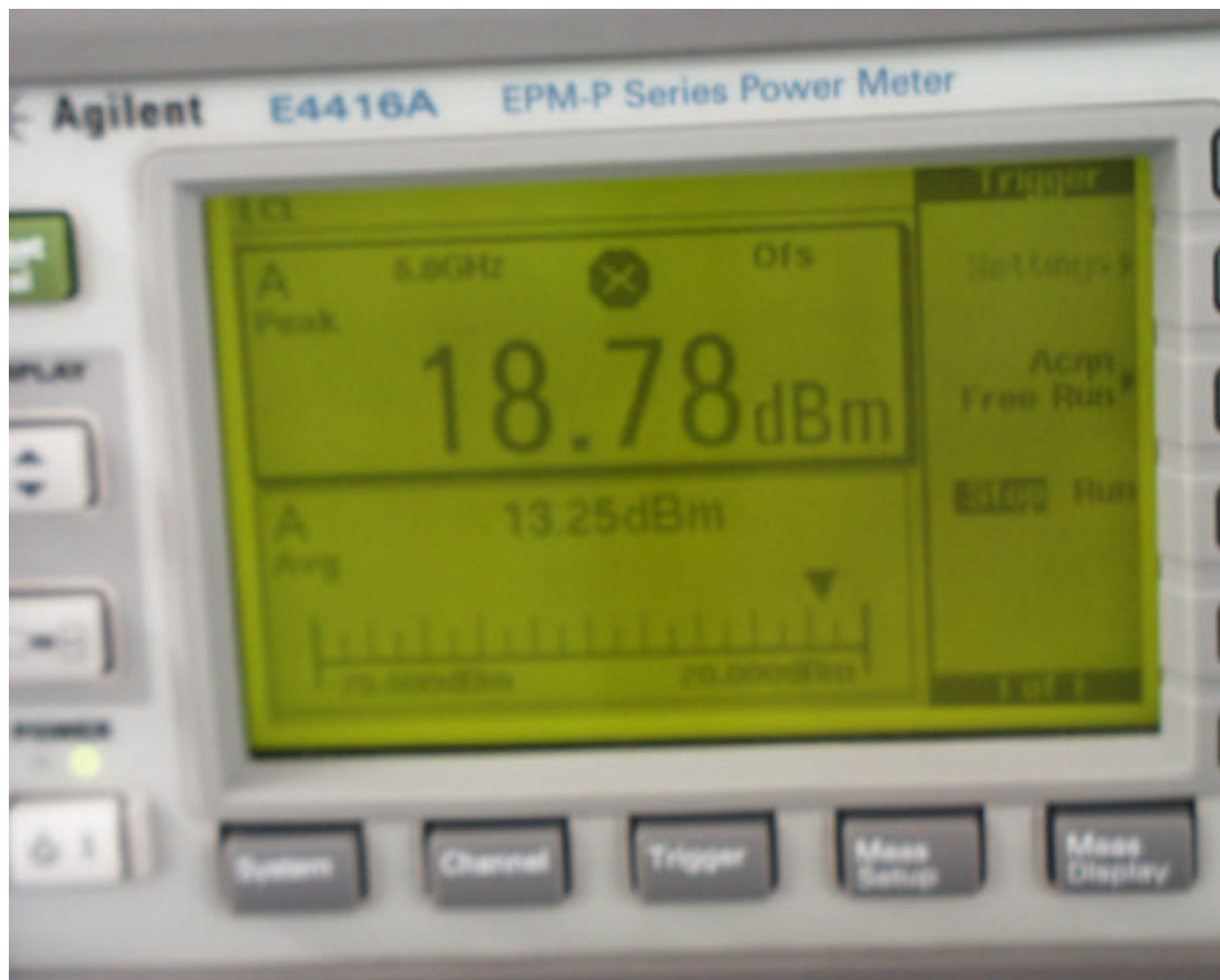
Output Power, 5.745GHz (NORMAL)



Output Power, 5.785GHz (NORMAL)



Output Power, 5.825GHz (NORMAL)



Output Power, 5.76GHz (TURBO)



Output Power, 5.8GHz (TURBO)



END OF REPORT