



# Flom Test Lab

EMI, EMC, RF Testing Experts Since 1963

toll-free: (866) 311-3268  
fax: (480) 926-3598  
<http://www.flomlabs.com>  
info@flomlabs.com

Date: November 12, 2008

Applicant: eInstruction  
8224 E Evans Road  
Scottsdale, AZ 85260

Attention of: Dana Doubrava  
Ph: 480-443-2287  
Fax: 480-948-5508  
Email: [dana.doubrava@einstruction.com](mailto:dana.doubrava@einstruction.com)

Equipment: MOBI B4  
FCC ID: CTW-MOBI  
FCC Rules: Radio Frequency Radiation Exposure Limits  
47 CFR 1.1310  
MPE - Mobiles  Fixed Based Station

Gentlemen:

Enclosed please find your copy of the Supplemental Test Data Report, the whole for Environmental Assessment (MPE) of the referenced equipment as shown.

Please allow from 8-12 weeks to hear from the Commission, who may request additional data or information, and even a sample for pre-grant audit testing.

Should you need any clarification, just fax or phone. Thank you again for this order - it has been a pleasure to be of service.

Sincerely yours,

Hoosamuddin S. Bandukwala, Lab Director



Date: November 12, 2008

Federal Communications Commission  
Via: Electronic Filing

Attention: Authorization & Evaluation Division

Applicant: eInstruction  
Equipment: MOBI B4  
FCC ID: CTW-MOBI  
FCC Rules: Radio Frequency Radiation Exposure Limits  
47 CFR 1.1310  
MPE - Mobiles  Fixed Based Station

Gentlemen:

On behalf of the Applicant, enclosed please find the Supplemental Test Data Report, the whole for Environmental Assessment (MPE) of the referenced equipment as shown.

We trust the same is in order. Should you need any further information, kindly contact the writer who is authorized to act as agent.

Sincerely yours,

Hoosamuddin S. Bandukwala, Lab Director



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## **Environmental Assessment**

for

### **Mobiles**

for

**FCC ID: CTW-MOBI**

**Model: B4**

to

**Federal Communications Commission**

**47 CFR 1.1310**

Radio Frequency Radiation Exposure Limits

**Date Of Report:** November 12, 2008

**On the Behalf of the Applicant:** einstruction

**At the Request of:** einstruction  
8224 E Evans Road  
Scottsdale, AZ 85260

**Attention of:** Dana Doubrava  
Ph: 480-443-2287  
Fax: 480-948-5508  
Email: dana.doubrava@einstruction.com

Supervised By:

Hoosamuddin S. Bandukwala, Lab Director

Flom Test Labs  
3356 N. San Marcos Place, Suite 107  
Chandler, Arizona 85225-7176  
(866) 311-3268 phone, (480) 926-3598 fax

p08a0007, d08b0008 Rev 1.0

**Revision History**

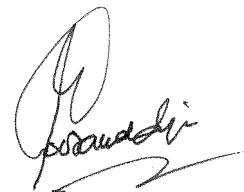
Revision	Date	Revised By	Reason for revision
1.0	November 12, 2008	J. Erhard	Original Document

## Testimonial and Statement of Certification

**This is to certify that:**

1. **That** the application was prepared either by, or under the direct supervision of, the undersigned.
2. **That** the technical data supplied with the application was taken under my direction and supervision.
3. **That** the data was obtained on representative units, randomly selected.
4. **That**, to the best of my knowledge and belief, the facts set forth in the application and accompanying technical data are true and correct.

Certifying Engineer:



Hoosamuddin S. Bandukwala, Lab Director

## Table of Contents

Rule	Description	Page
	Test Report	1
	Identification of the Equipment Under Test	3
1.1310	Environmental Assessment	5

Required information per ISO 17025-2005, paragraph 5.10:

a)

**Test Report (Supplemental)**

b) Laboratory:  
(FCC: 31040/SIT)  
(Canada: IC 2044)

Flom Test Labs  
3356 N. San Marcos Place, Suite 107  
Chandler, AZ 85225

c) Report Number:

d0920005

d) Client:

eInstruction  
8224 E Evans Road  
Scottsdale, AZ 85260

e) Identification:

MOBI B4

Description:

Wireless PCB Module, Model B4 for SPS500 School Pad System

f) EUT Condition:

Not required unless specified in individual tests.

g) Report Date:

November 12, 2008

h, j, k):

As indicated in individual tests.

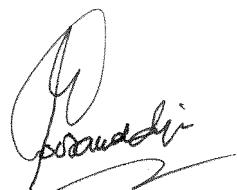
i) Sampling method:

No sampling procedure used.

l) Uncertainty:

In accordance with MFA internal quality manual.

m) Supervised by:



Hoosamuddin S. Bandukwala, Lab Director

n) Results:

The results presented in this report relate only to the item tested.

o) Reproduction:

This report must not be reproduced, except in full, without written permission from this laboratory.

**A2LA**

"A2LA has accredited Flom Test Labs, Inc. Chandler, AZ for technical competence in the field of Electrical testing. The accreditation covers the specific tests and types of tests listed on the agreed scope of accreditation. This laboratory meets the requirements of ISO 17025:2005 'General Requirements for the Competence of Testing and Calibration Laboratories' and any additional program requirements in the identified field of testing."

Please refer to [www.a2la.org](http://www.a2la.org) for current scope of accreditation.

Certificate number: 2152.01



**Identification of the Equipment Under Test (EUT)**

**Name and Address of Applicant:** eInstruction  
8224 E Evans Road  
Scottsdale, AZ 85260

**Manufacturer:** eInstruction  
8224 E Evans Road  
Scottsdale, AZ 85260

**FCC ID:** CTW-MOBI

**Model Number:** B4

**Description:** Wireless PCB Module, Model B4 for SPS500 School Pad System

**Type of Emission:** QPSK

**Frequency Range, MHz:** 2402 to 2479

**Power Rating, Watts:** .838 mW  
\_\_\_\_  Switchable      \_\_\_\_  Variable        N/A

**Modulation:**  
\_\_\_\_  AMPS  
\_\_\_\_  TDMA  
\_\_\_\_  CDMA  
  OTHER

**Antenna:**  
\_\_\_\_  Helical  
\_\_\_\_  Monopole  
\_\_\_\_  Whip  
  Other

**Note:** For RF Safety test antenna gain taken at the upper range of expected gain (i.e. 0 dBd) and RF Power set to highest nominal power across all channels.

### **Standard Test Conditions and Engineering Practices**

Except as noted herein, the following conditions and procedures were observed during the testing:

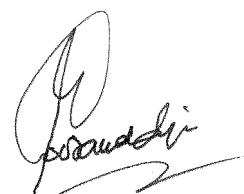
In accordance with ANSI C63.4-2004 and unless otherwise indicated in the specific measurement results, the ambient temperature of the actual EUT was maintained within the range of 10° to 40°C (50° to 104 °F) unless the particular equipment requirements specify testing over a different temperature range. Also, unless otherwise indicated, the humidity levels were in the range of 10% to 90% relative humidity.

Prior to testing, the EUT was tuned up in accordance with the manufacturer's alignment procedures. All external gain controls were maintained at the position of maximum and/or optimum gain throughout the testing.

Measurement results, unless otherwise noted, are worst-case measurements.

<b>Name of Test:</b>	Environmental Assessment		
<b>Specification:</b>	FCC: 47 CFR 1.1310		
<b>Measurement Guide:</b>	ANSI/IEEE C95.1 1992		
<b>Name of Test:</b>	R.F. Radiation Exposure		
FCC Rules:	1.1307, 1.1310, 1.1311, 2.1091		
Limits: Uncontrolled Exposure 47 CFR 1.1310 Table 1, (B)	0.3-1.234 MHz: 1.34-30 MHz: 30-300 MHz: 300-1500 MHz: 1500-100,000 MHz:	Limit $[\text{mW/cm}^2] = 100$ Limit $[\text{mW/cm}^2] = (180/f^2)$ Limit $[\text{mW/cm}^2] = 0.2$ Limit $[\text{mW/cm}^2] = f/1500$ Limit $[\text{mW/cm}^2] = 1.0$	
Test Frequencies, MHz	2402		
Power, Conducted, W (P)	0.838 mW		
Antenna Gain Isotropic	3.54 dBi		
Antenna Gain Numeric (G)	2.26		
Antenna Type	Inverted F planer integrated PCB		
Distance (R)	20 cm		
Power Density Calculations	Formula = Power Density (S) = Limit =	$S = PG / 4\pi R^2$ 0.000377 1.0	

Supervised By:



Hoosamuddin S. Bandukwala, Lab Director

END OF TEST REPORT