



Flom Test Labs
EMI, EMC, RF Testing Experts Since 1963

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

Date: January 8, 2009

Applicant: Innovative Wireless Technologies
1047 Vista Park Drive
Forest VA 24551

Attention of: Gary L. Raulerson, Jr.
434-316-5230 x14
434-316-5232 fax

Equipment: FAP2210-001
FCC ID: SP8-FAP2210-001
FCC Rules: Radio Frequency Radiation Exposure Limits
47 CFR 1.1310
MPE - Mobiles _____ Fixed Based Station X

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 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

p08b0016, d0910004



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Date: January 8, 2009

Federal Communications Commission
Via: Electronic Filing

Attention: Authorization & Evaluation Division

Applicant: Innovative Wireless Technologies
Equipment: FAP2210-001
FCC ID: SP8-FAP2210-001
FCC Rules: Radio Frequency Radiation Exposure Limits
47 CFR 1.1310
MPE - Mobiles _____

Fixed Based Station X

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 Bandukwala, Lab Director

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Environmental Assessment

for

Mobiles

for

FCC ID: SP8-FAP2210-001

Model: FAP2210-001

to

Federal Communications Commission

47 CFR 1.1310

Radio Frequency Radiation Exposure Limits

Date Of Report: January 8, 2009

On the Behalf of the Applicant: Innovative Wireless Technologies

At the Request of: Innovative Wireless Technologies
1047 Vista Park Drive
Forest VA 24551

Attention of: Gary L. Raulerson, Jr.
434-316-5230 x14
434-316-5232 fax

Supervised By:

Hoosamuddin Bandukwala, Lab Director

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Table of Contents

Rule	Description	Page
	Test Report	1
	Identification of the Equipment Under Test	2
	Standard Test Conditions and Engineering Practices	4
1.1310	Environmental Assessment	5



Required information per ISO 17025-2005, paragraph 5.10:

a) Test Report (Supplemental)

b) Laboratory: Flom Test Labs
(FCC: 31040/SIT) 3356 N. San Marcos Place, Suite 107
(Canada: IC 2044) Chandler, AZ 85225

c) Report Number: d0910004

d) Client: Innovative Wireless Technologies
1047 Vista Park Drive
Forest VA 24551

e) Identification: SP8-FAP2210-001

Description: Gateway Node FAP2210-001

f) EUT Condition: Not required unless specified in individual tests.

g) Report Date: January 8, 2009

h, j, k): As indicated in individual tests.

i) Sampling method: No sampling procedure used.

l) Uncertainty: In accordance with FTL internal quality manual.

m) Supervised by:

Hoosamuddin 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.



Identification of the Equipment Under Test (EUT)

Name and Address of Applicant: Innovative Wireless Technologies
1047 Vista Park Drive
Forest VA 24551

Manufacturer: Innovative Wireless Technologies
1047 Vista Park Drive
Forest VA 24551

FCC ID: SP8-FAP2210-001

Model Number: FAP2210-001

Description: Gateway Node FAP2210-001

Type of Emission: DTS

Frequency Range, MHz: 903 - 927

Power Rating, Watts:
☐ 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.



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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 for current scope of accreditation.

Certificate number: 2152.01





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.



Name of Test: Environmental Assessment

Specification: FCC: 47 CFR 1.1310

Measurement Guide: ANSI/IEEE C95.1 1992

Name of Test: 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 [mW/cm²] = 100

Limit [mW/cm²] = (180/f²)

Limit [mW/cm²] = 0.2

Limit [mW/cm²] = f/1500 915/1500 = 0.61

Limit [mW/cm²] = 1.0

Test Frequencies, MHz

915

Power, Conducted, W (P)

0.200

Antenna Gain Isotropic

6dBi

Antenna Gain Numeric (G)

3.98

Antenna Type

Monopole

Distance (R)

20 cm

Power Density Calculations

Formula =

Power Density (S) =

Limit =

$S = PG / 4\pi R^2$

0.000158 W/cm²

0.61 mW/cm²

Supervised By:

Hoosamuddin Bandukwala, Lab Director



**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:

Test Engineer