

http://www.flomlabs.com info@flomlabs.com

Date:	December 18,	2007

Applicant: Artaflex, Inc.

> 215 Konrad Crescent Markham, Ontario L3R8T9

Canada

Attention of: Sebastian Palazzo

sebastian\_palazzo@artaflex.com

(905)479-0148 X292

Equipment: AWA24S FCC ID: UP2AWA24S

FCC Rules: Radio Frequency Radiation Exposure Limits

47 CFR 1.1310

MPE - Mobiles Fixed Based Station Χ

#### 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: December 18, 2007

Flom Test Labs 3356 N. San Marcos Place, Suite 107 Chandler, Arizona 85225-7176 (866) 311-3268 phone, (480) 926-3598 fax p0790010, d07c0019



Federal Communications Commission

Via: Electronic Filing

Attention: Authorization & Evaluation Division

Applicant: Artaflex, Inc. Equipment: AWA24S FCC ID: UP2AWA24S

FCC Rules: Radio Frequency Radiation Exposure Limits

47 CFR 1.1310

Fixed Based Station \_\_\_\_\_ MPE - Mobiles

#### 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,



http://www.flomlabs.com

## **Environmental Assessment**

for

Mobiles

for

FCC ID: FCC ID: UP2AWA24S

Model: AWA24S

to

**Federal Communications Commission** 

47 CFR 1.1310

Radio Frequency Radiation Exposure Limits

Date Of Report: December 18, 2007

At the Request of: Artaflex, Inc.

215 Konrad Crescent

Markham, Ontario L3R8T9

Canada

Attention of: Sebastian Palazzo

sebastian\_palazzo@artaflex.com

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Supervised By:



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### 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: d07c0019

d) Client: Artaflex, Inc.

215 Konrad Crescent Markham, Ontario L3R8T9

Canada

e) Identification: AWA24S

FCC ID: UP2AWA24S

Description: 2.4 GHz DSS Transmitter

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

g) Report Date: December 18, 2007

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

i) Sampling method: No sampling procedure used.

I) 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.



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

## Name and Address of Applicant:

Name and Address of Applicant:	Artaflex, Inc. 215 Konrad Crescent Markham, Ontario L3R8T9 Canada
Manufacturer:	Artaflex, Inc. 215 Konrad Crescent Markham, Ontario L3R8T9 Canada
FCC ID:	UP2AWA24S
Model Number:	AWA24S
Description:	2.4 GHz DSS Transmitter
Type of Emission:	
Frequency Range, MHz:	2407 to 2467
Power Rating, Watts: Switchable	104 mW Variablex N/A
Modulation:	AMPS TDMA CDMA OTHER
Antenna:	Helical Monopole Whip Other
Note: For RF Safety test antenna gain tal	ken at the upper range of expected gain (i.e. 0 dBd) and RF Powe

**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.



### 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: Limit  $[mW/cm^2] = 100$ 1.34-30 MHz: Limit  $[mW/cm^2] = (180/f^2)$ 30-300 MHz: Limit  $[mW/cm^2] = 0.2$ 300-1500 MHz Limit  $[mW/cm^2] = f/1500$ 1500-100,000 MHz: Limit  $[mW/cm^2] = 1.0$ 

Test Frequencies, MHz
Power, Conducted, W (P)
Antenna Gain Isotropic
Antenna Gain Numeric (G)
Antenna Type
Distance (D)

2407
104 mW
1.5 dBi
1.41
monopole
20 cm

Power Density Calculations Formula =

Formula =  $S = PG / 4pR^2$ Power Density (S) =  $0.0292 \text{ mW/cm}^2$ Limit =  $mW/cm^2 = 1.0$ 

Test Frequencies, MHz
Power, Conducted, W (P)
Antenna Gain Isotropic
Antenna Gain Numeric (G)
Antenna Type
Distance (D)

2407
104 mW
2.0 dBi
1.58
monopole
20 cm

Power Density Calculations Formula =

Formula =  $S = PG / 4pR^2$ Power Density (S) =  $0.0326 \text{ mW/cm}^2$ Limit =  $mW/cm^2 = 1.0$ 

Supervised By:



# 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: