

MFA Report Tracker

For MFA internal use only

Please keep this page with the report in out files.

Applicant:	Digital Wireless Corporation
Model:	DM-3010
FCC ID:	OHN-M3010

Formulaire:	L:\\Project\\Formulaire\\FCC.MPE.rtf
Last Modified:	2000-Oct-17
Purpose:	Environmental Assessment (MPE)
MFA Project ID:	p0680006
Client ID:	DIGITALWIRELESS
MFA Document ID:	d0680038
Date:	August 15, 2006
This Printing	2007-Jan-23 Tue
Writer:	DEL/hsb

<input type="checkbox"/> < Check here if this report has been manually modified.
<input type="checkbox"/> < Check here if this report was made from another report.
Original document:
<input type="checkbox"/> < Check here if this report varies significantly from the formulaire



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: August 15, 2006

Applicant: Digital Wireless Corporation
696 Moulton Ave, Unit E
Los Angeles, CA 90031

Attention of: Brent Jaybush
323-276-5311
Email: bjay@digitalwireless.com

Equipment: DM-3010
FCC ID: OHN-M3010
P.O. Number: 16281
FCC Rules: Radiofrequency Radiation Exposure Limits
47 CFR 1.1310
MPE - Mobiles x 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.

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



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: August 15, 2006

Federal Communications Commission
Via: Electronic Filing

Attention: Authorization & Evaluation Division

Applicant: Digital Wireless Corporation
Equipment: DM-3010
FCC ID: OHN-M3010
FCC Rules: Radiofrequency Radiation Exposure Limits
47 CFR 1.1310
MPE - Mobiles x 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



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

Environmental Assessment

for

Mobiles/Fixed Base Station

for

FCC ID: OHN-M3010
Model:DM-3010

to

Federal Communications Commission

47 CFR 1.1310 (MPE)

Radiofrequency Radiation Exposure Limits

Date Of Report: August 15, 2006
Date Of Submission: December 8, 2006

On the Behalf of the Applicant:

Digital Wireless Corporation

At the Request of:

Digital Wireless Corporation
696 Moulton Ave, Unit E
Los Angeles, CA 90031

Attention of:

Brent Jaybush
323-276-5311
Email: bjay@digitalwireless.com

Supervised By:

Hoosamuddin S. Bandukwala, Lab Director

Table of Contents

Rule	Description	Page
	Test Report	1
	Identification of the Equipment Under Test	2
	Standard Test Conditions and Engineering Practices	3
1.1310	Environmental Assessment	4

Required information per ISO/IEC 17025:

a) **Test Report (Supplemental)**

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

c) Report Number: d0680038

d) Client: Digital Wireless Corporation
696 Moulton Ave, Unit E
Los Angeles, CA 90031

e) Identification: DM-3010
FCC ID: OHN-M3010
Description: UHF Mobile Transceiver

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

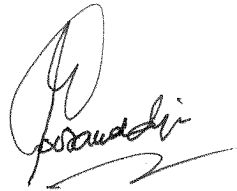
g) Report Date: August 15, 2006
EUT Received:

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.

Identification of the Equipment Under Test (EUT)

Name and Address of Applicant

Digital Wireless Corporation
 696 Moulton Ave, Unit E
 Los Angeles, CA 90031

Manufacturer:

Digital Wireless Corporation
 696 Moulton Ave, Unit E
 Los Angeles, CA 90031

FCC ID:	OHN-M3010
Model Number:	DM-3010
Description:	UHF Mobile Transceiver
Type of Emission:	11K2F1E ,11K2F1E, 6K00F1E, 6K00F1D
Frequency Range, MHz:	406 to 470
Power Rating, Watts:	25
<input type="checkbox"/> Switchable	<input type="checkbox"/> Variable <input checked="" type="checkbox"/> N/A
Modulation:	<input type="checkbox"/> AMPS <input type="checkbox"/> TDMA <input type="checkbox"/> CDMA <input checked="" type="checkbox"/> OTHER
Antenna:	<input type="checkbox"/> Helical <input type="checkbox"/> Monopole <input type="checkbox"/> Whip <input checked="" type="checkbox"/> 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 C63.4-1992/2000, section 6.1.9, and unless otherwise indicated in the specific measurement results, the ambient temperature of the actual EUT was maintained within the range of 10°C to 40°C (50°F 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.

A2LA



"A2LA has accredited M. Flom Associates, 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/IEC 17025 – 1999 'General Requirements for the Competence of Testing and Calibration Laboratories' and any additional program requirements in the identified field of testing."

Certificate Number: **2152-01**

Name of Test: Environmental Assessment

Specification: FCC: 47 CFR 1.1310

Measurement Guide: ANSI / IEEE C95.1 1992

Measurement Procedure: 1. The minimum safe distance was calculated from the formula Power Density = $EIRP / 4\pi R^2$ (Peak Watts/m²). The calculation is shown in the following pages.

Name of Test: R.F. Radiation Exposure

FCC Rules: 1.1307, 1.1310, 1.1311, 2.1091
Description, EUT: See page 2 of Test Report

Limits: Controlled Exposure 47 CFR 1.1310 Table 1, (A)	0.3-3.0 MHz:	Limit [mW/cm ²] = 100
	3.0-30 MHz:	Limit [mW/cm ²] = (900/f ²)
	30-300 MHz:	Limit [mW/cm ²] = 1.0
	300-1500 MHz	Limit [mW/cm ²] = f/300
	1500-100,000 MHz:	Limit [mW/cm ²] = 5.0

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	470MHz
Power, Conducted, W	= 25W
Antenna Gain	= 2.5 dBi
Antenna Model	N/A

Calculations	Power _[W EIRP] = P _[conducted] x G _[antenna]	=	44.5
	Limit _[mW/cm²]	=	.313
	Limit _[W/m²] = 10 x Limit _[mW/cm²]	=	3.13
	R _[m] = [P _[W EIRP] / (4π x Limit _[W/m²])] ^{1/2}	=	1.06

Ref: Reference Data for Radio Engineers, Fifth Ed., p. 25-7

$$P = P_t / 4\pi R^2$$

Where

P	=	Power Density (in W/m ²) at a distance R
P _t	=	Power radiated by an isotropic radiator (Watts)
	=	(Transmitter Power)%(Duty Cycle)%(Antenna Gain)
P	=	Distance of measurement from source (meters)

(The following will be placed in the Instruction Manual)

Mandatory Safety Instructions to Installers & Users

Use only manufacturer or dealer supplied antenna.

Antenna Minimum Safe Distance: 41.8 inches.

Antenna Gain: 2.5 dBi .

The Federal Communications Commission has adopted a safety standard for human exposure to RF (Radio Frequency) energy which is below the OSHA (Occupational Safety and Health Act) limits.

Antenna Mounting: The antenna supplied by the manufacturer or radio dealer must not be mounted at a location such that during radio transmission, any person or persons can come closer than the above indicated minimum safe distance to the antenna i.e. 41.8inches.

To comply with current FCC RF Exposure limits, the antenna must be installed at or exceeding the minimum safe distance shown above, and in accordance with the requirements of the antenna manufacturer or supplier.

Base Station Installation: The antenna should be fixed-mounted on an outdoor permanent structure. RF Exposure compliance must be addressed at the time of installation.

Antenna Substitution: Do not substitute any antenna for the one supplied or recommended by the manufacturer or radio dealer. You may be exposing person or persons to excess radio frequency radiation. You may contact your radio dealer or the manufacturer for further instructions.

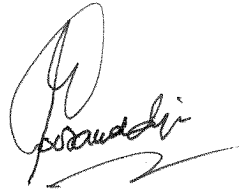
Warning: Maintain a separation distance from the antenna to a person(s) of at least **41.8inches**.

You, as the qualified end-user of this radio device must control the exposure conditions of bystanders to ensure the minimum separation distance (above) is maintained between the antenna and nearby persons for satisfying RF Exposure compliance. The operation of this transmitter must satisfy the requirements of Occupational/Controlled Exposure Environment, for work-related use. Transmit only when person(s) are at least the minimum distance from the properly installed, externally mounted antenna.

**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