



M. Flom Associates, Inc.

International Compliance Testing Laboratory

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

toll-free: (866) 311-3268
fax: (480) 926-3598

<http://www.mflom.com>
info@mflom.com

Date: August 19, 2005

Federal Communications Commission
Via: Electronic Filing

Attention: Authorization & Evaluation Division

Applicant: Danphone A/S
Equipment: DCM 9140 M Transceiver
FCC ID: NJ4
FCC Rules: Radiofrequency 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,

David E. Lee, Quality Assurance Manager

enclosure(s)
cc: Applicant
DEL/del



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Environmental Assessment

for

Mobiles/Fixed Base Station

for

FCC ID: NJ4DCB9140

Model: DCM 9140 M Transceiver

to

Federal Communications Commission

47 CFR 1.1310 (MPE)

Radiofrequency Radiation Exposure Limits

Date Of Report: August 19, 2005

On the Behalf of the Applicant:

Danphone A/S

At the Request of:

Danphone A/S
Fabriksvej 4
DK-9490 Pandrup, Denmark

Attention of:

Ove Jensen, Managing Director
and/or Olaf Karlsen, M.Sc.E.E.
+45 98 20 44 11; FAX: +45 98 24 64 85
E-MAIL: oj@danphone.com

Supervised By:

David E. Lee, Quality Assurance Manager

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Required information per ISO/IEC Guide 25-1990, paragraph 13.2:

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: d0580030

d) Client: Danphone A/S
Fabriksvej 4
DK-9490 Pandrup, Denmark

e) Identification: DCM 9140 M Transceiver
FCC ID: NJ4DCB9140
Description: Marine Base Station

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

g) Report Date: August 19, 2005
EUT Received: July 6, 2005

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:



David E. Lee, Quality Assurance Manager

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:

Danphone A/S
Fabriksvej 4
DK-9490 Pandrup, Denmark

Manufacturer:

Danphone A/S
Fabriksvej 4
DK-9490 Pandrup, Denmark

FCC ID:

NJ4DCB9140

Model Number:

DCM 9140 M Transceiver

Description:

Marine Base Station

Type of Emission:

16K0F3E, 16K0F1D (DSC)

Frequency Range, MHz:

All Marine Channels
156.050 - 157.425

Power Rating, Watts:

☒ Switchable ☐ Variable 50, 25, 10, 2 ☐ 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.



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**



NIST

I am pleased to inform you that your laboratory has been validated by the Chinese Taipei Bureau of Standards, Metrology and Inspection (BSMI) under the Asia Pacific Economic Cooperation Mutual Recognition Agreement (APEC MRA). Your laboratory is now formally designated to act as a Conformity Assessment Body (CAB) under Appendix B, Phase I Procedures, of the APEC MRA between the American Institute in Taiwan (AIT) and the Taipei Economic and Cultural Representative Office (TECRO) in the United States, covering equipment subject to Electro-Magnetic Compatibility (EMC) requirements. The names of all validated and nominated laboratories will be posted on the NIST website at <http://ts.nist.gov/mra> under the 'Asia' category."

BSMI Number: **SL2-IN-E-041R**

Specification: FCC: 47 CFR 1.1310

EUT is a Part 80 Coastal Station and Routine Evaluation is not required. (47 CFR 1.1310, Table 1)

RF Exposure considerations must be addressed at time of installation.

The following calculation is provided for the advise of installers.

MPE Calculated based on Uncontrolled Exposure
100% Duty Cycle, 6dBi Antenna
Frequency, MHZ 156.000
Limit 0.20mW/cm²
Minimum Safe Distance = $[4 \times 50.00 / (12.56 \times 2.00)]^{1/2}$
= 2.82 m



Calculated By:

David E. Lee, Quality Assurance Manager

(The following will be placed in the Instruction Manual)

Mandatory Safety Instructions to Installers

Antenna Minimum Safe Distance: 2.82m.

Antenna Gain: 3dBd referenced to a dipole.

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 should be fixed-mounted on an outdoor permanent structure.

RF Exposure compliance must be addressed at the time of installation.

Warning: Maintain a separation distance from the antenna to a person(s) of at least 2.82m for General Population / Uncontrolled Exposure.

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:

David E. Lee, Quality Assurance Manager