



# Flom Test Labs

EMI, EMC, RF Testing Experts Since 1963

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fax: (480) 926-3598  
<http://www.flomlabs.com>  
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Date: November 14, 2007

Applicant: Thrane & Thrane A/S  
Lundtoftegardsvej 93D  
DK-2800 Lyngby, Denmark

Attention of: Bror Malm, Director, Development, AERO Satcom Products  
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Equipment: BDU  
FCC ID: ROJBGAN-XTERMINAL  
FCC Rules: Radio Frequency 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.

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



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Date: November 14, 2007

Federal Communications Commission  
Via: Electronic Filing

Attention: Authorization & Evaluation Division

Applicant: Thrane & Thrane A/S  
Equipment: BDU  
FCC ID: ROJBGAN-XTERMINAL  
FCC Rules: Radio Frequency 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



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## **Environmental Assessment**

for

**Mobiles**

for

**FCC ID: ROJBGAN-XTERMINAL**

Model:BDU

to

**Federal Communications Commission**

**47 CFR 1.1310 (MPE)**

Radio Frequency Radiation Exposure Limits

**Date Of Report:** November 14, 2007

**On the Behalf of the Applicant:** Thrane & Thrane A/S

**At the Request of:** Thrane & Thrane A/S  
Lundtoftegardsvej 93D  
DK-2800 Lyngby, Denmark

**Attention of:** Bror Malm, Director, Development, AERO Satcom Products  
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Supervised By:

Hoosamuddin S. Bandukwala, Lab Director

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p07a0009, d07b0009

## 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: d07b0009

d) Client: Thrane & Thrane A/S  
Lundtoftegardsvej 93D  
DK-2800 Lyngby, Denmark

e) Identification: BDU

Description: Below deck unit for mobile satellite radio

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

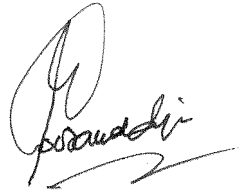
g) Report Date: November 14, 2007

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:

<b>Name and Address of Applicant:</b>	Thrane & Thrane A/S Lundtoftegardsvej 93D DK-2800 Lyngby, Denmark		
<b>Manufacturer:</b>	Thrane & Thrane A/S Lundtoftegardsvej 93D DK-2800 Lyngby, Denmark		
<b>FCC ID:</b>	ROJBGAN-XTERMINAL		
<b>Model Number:</b>	BDU		
<b>Description:</b>	Below deck unit for mobile satellite radio		
<b>Type of Emission:</b>	PI/4 QPSK, 16-QAM		
<b>Frequency Range, MHz:</b>	1626.6 to 1660.4		
<b>Power Rating, Watts:</b>	18.6 mW		
<input type="checkbox"/> Switchable	<input type="checkbox"/> Variable	<input checked="" type="checkbox"/> x	N/A
<b>Modulation:</b>	<input type="checkbox"/>	AMPS	
	<input type="checkbox"/>	TDMA	
	<input type="checkbox"/>	CDMA	
	<input type="checkbox"/>	OTHER	
<b>Antenna:</b>	<input type="checkbox"/>	Helical	
	<input type="checkbox"/>	Monopole	
	<input type="checkbox"/>	Whip	
None	<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.

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



## **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.

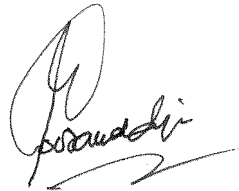
Measurement results, unless otherwise noted, are worst-case measurements.



**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  
**Description, EUT:** See page 2 of Test Report

RF exposure is not required for this device on an individual basis. It is part of a system that supports multiple antenna types and gains. This unit is never used without additional components to complete the system. The RF exposure calculations will be provided as a system with the specific antenna type and gain.



Supervised By:

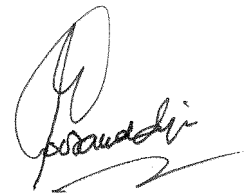
Hoosamuddin S. Bandukwala, Lab Director

**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:



Hoosamuddin S. Bandukwala, Lab Director