



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: May 16, 2007

Applicant: Unigen Corporation
45388 Warm Springs Blvd.
Fremont, CA 94539

Attention of: Mark Morrissey, Director of Business Development
(800) 826-0808; (510) 668-2088 ext 2087
Email: mmorrissey@unigen.com

Equipment: LETO-LPA
FCC ID: R8KUGWJ4USHN33
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.

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

enclosure(s)
HSB/je

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

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Date: May 16, 2007

Federal Communications Commission
Via: Electronic Filing

Attention: Authorization & Evaluation Division

Applicant: Unigen Corporation
Equipment: LETO-LPA
FCC ID: R8KUGWJ4USHN33
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

enclosure(s)
cc: Applicant
HSB/je

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Environmental Assessment

for

Mobiles/Fixed Base Station

for

FCC ID: R8KUGWJ4USHN33
Model:LETO-LPA

to

Federal Communications Commission

47 CFR 1.1310 (MPE)

Radiofrequency Radiation Exposure Limits

Date Of Report: May 16, 2007

**On the Behalf of the
Applicant:**

Unigen Corporation

At the Request of:

Unigen Corporation
45388 Warm Springs Blvd.
Fremont, CA 94539

Attention of:

Mark Morrissey, Director of Business Development
(800) 826-0808; (510) 668-2088 ext 2087
Email: mmorrissey@unigen.com

Supervised By:

Hoosamuddin S. Bandukwala, Lab Director

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Required information per ISO 17025-2005, paragraph 5.0:

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: d0750064

d) Client: Unigen Corporation
45388 Warm Springs Blvd.
Fremont, CA 94539

e) Identification: LETO-LPA

Description: 2400 MHz DTS Transmitter and Receiver

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

g) Report Date: May 16, 2007
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:

Unigen Corporation
45388 Warm Springs Blvd.
Fremont, CA 94539

Manufacturer:

Unigen Corporation
45388 Warm Springs Blvd.
Fremont, CA 94539

FCC ID: R8KUGWJ4USHN33

Model Number: LETO-LPA

Description: 2400 MHz DTS Transmitter and Reciever

Type of Emission: DTS

Frequency Range, MHz: 2404 to 2467

Power Rating, Watts: 30 mW
☐ 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.



**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° 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.

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





Name of Test: Environmental Assessment

Specification: FCC: 47 CFR 1.1310

Measurement Guide: ANSI/IEEE C95.1 1992

Test Equipment: Power Meter

Measurement Procedure:

1. The following measurements were performed with a Holaday HP 8481A power meter.
2. The maximum power was measured and the MPE calculations were performed and compared to the appropriate limits.

Results: Attached.



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: 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 2404 – 2467
Power, Conducted, W = 30 mW
Antenna Gain = 2 dB
Antenna Model Monopole

MPE Calculations

$Power_{[W \text{ EIRP}]} = P_{[conducted]} \times G_{[antenna]}$	=	0.0475
$Limit_{[mW/cm^2]}$	=	1.0
$Limit_{[W/m^2]} = 10 \times Limit_{[mW/cm^2]}$	=	10.0
$R_{[m]} = [P_{[W \text{ EIRP}]} / (4\pi \times Limit_{[W/m^2]})]^{1/2}$	=	0.0194

Supervised By:

Hoosamuddin S. Bandukwala, Lab Director



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**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.

Supervised By:

Hoosamuddin S. Bandukwala, Lab Director