

Compliance Testing, LLC

Previously Flom Test Lab

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

RF, EMC and Safety Testing Experts Since 1963 http://www.ComplanceTesting.com

info@ComplianceTesting.com

Date:	January 27, 2010	January 27, 2010		
Applicant:	2440 Kiowa Blvd. N.,	Xtreme Power Systems, LLC 2440 Kiowa Blvd. N., Suite 102 Lake Havasu City, AZ 86403		
Attention of:	Jim Drew Ph: (928) 854-9228 Fax: (928) 854-9228 E-mail: jd@extremepo	owersystems.net		
Equipment: FCC ID: FCC Rules:	Micro Rx X5L-XPSRX6NP Radio Frequency Rad 47 CFR 1.1310 MPE - Mobiles	iation Exposure I	Limits Fixed Based Station	
Gentlemen:				
Enclosed please find yo (MPE) of the referenced		t Data Report, the	e whole for Environmental Assessmen	
Please allow from 8-12 veven a sample for pre-gr		on, who may requ	uest additional data or information, and	
Should you need any cla	arification just fax or phone. That	nk vou again for th	his order - it has been a pleasure to be	

Sincerely yours,

John Erhard, Engineering Manager

of service.



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Date: January 27, 2010

Federal Communications Commission

Via: Electronic Filing

Attention: Authorization & Evaluation Division

Xtreme Power Systems, LLC Applicant:

Equipment: Micro Rx

FCC ID: X5L-XPSRX6NP

FCC Rules: Radio Frequency Radiation Exposure Limits

47 CFR 1.1310

MPE - Mobiles Fixed Based Station Χ

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,

John Erhard, Engineering Manager



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Environmental Assessment

for

Mobiles

for

FCC ID: X5L-XPSRX6NP

Model: Micro Rx

to

Federal Communications Commission

47 CFR 1.1310

Radio Frequency Radiation Exposure Limits

Date Of Report: January 27, 2010

On the Behalf of the Applicant: Xtreme Power Systems, LLC

At the Request of: Xtreme Power Systems, LLC

2440 Kiowa Blvd. N., Suite 102 Lake Havasu City, AZ 86403

Attention of: Jim Drew

> Ph: (928) 854-9228 Fax: (928) 854-9228

E-mail: jd@extremepowersystems.net

Supervised By:

John Erhard, Engineering Manager



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Required information per ISO 17025-2005, paragraph 5.10:

a) Test Report (Supplemental)

b) Laboratory: Compliance Testing

(FCC: 31040/SIT) 3356 N. San Marcos Place, Suite 107

(Canada: IC 2044) Chandler, AZ 85225

c) Report Number: d1010019

d) Client: Xtreme Power Systems, LLC

2440 Kiowa Blvd. N., Suite 102 Lake Havasu City, AZ 86403

e) Identification: Micro Rx

Description: Zigbee Transceiver

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

g) Report Date: January 27, 2010

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

i) Sampling method: No sampling procedure used.

I) Uncertainty: In accordance with Compliance Testing internal quality manual.

m) Supervised by:

John Erhard, Engineering 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:	Xtreme Power Systems, LLC 2440 Kiowa Blvd. N., Suite 102 Lake Havasu City, AZ 86403 Xtreme Power Systems, LLC 2440 Kiowa Blvd. N., Suite 102 Lake Havasu City, AZ 86403		
Manufacturer:			
FCC ID:	X5L-XPSRX6NP		
Model Number:	Micro Rx		
Description:	Zigbee Transceiver		
Type of Emission:	DSS		
Frequency Range, MHz:	2405 - 2475		
Power Rating, Watts: Switchable	.004 VariableX_ N/A		
Modulation: Antenna:	AMPS TDMA CDMA X OTHER Helical Monopole Whip X Other		

Note: For RF Safety test antenna gain taken at the upper range of expected gain (i.e. 0 dBi) and RF Power set to highest nominal power across all channels.



A2LA

"A2LA has accredited Compliance Testing in 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 C63.4-2009 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) $\begin{array}{lll} 0.3\text{-}1.234 \text{ MHz:} & \text{Limit } [\text{mw/cm}^2] = 100 \\ 1.34\text{-}30 \text{ MHz:} & \text{Limit } [\text{mw/cm}^2] = (180/\text{f}^2) \\ 30\text{-}300 \text{ MHz:} & \text{Limit } [\text{mw/cm}^2] = 0.2 \\ 300\text{-}1500 \text{ MHz} & \text{Limit } [\text{mw/cm}^2] = f/1500 \\ 1500\text{-}100,000 \text{ MHz:} & \text{Limit } [\text{mw/cm}^2] = 1.0 \\ \end{array}$

Test Frequencies, MHz 2405 - 2475 Power, Conducted, W (P) .004

Antenna Gain Isotropic

Antenna Gain Numeric (G)

Antenna Type

Distance (R)

1.5 dBi
1.41
dipole
20 cm

Power Density Calculations Formula = $S = PG / 4\pi R^2$ Power Density (S) = 0.0011220754

Limit = 1.0

Supervised By: John Erhard, Engineering Manager



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: Greg Corbin

Areg Corbin