Nebraska Center for Excellence in Electronics
4740 Discovery Drive
Lincoln, NE 68521-5376
Phone: 402.472.5880
Fax: 402.472.5881

RF Exposure REPORT

Amendment to and including RFE073108-02-01C

Company:	Worth Data 623 Swift St. Santa Cruz, CA 95060
Contact:	Steve Luzovich
Product:	B5001, B5002 Base Station
FCC ID: IC ID:	JWSB5001 4724A-B5001
Test Report No:	RFE073108-02-02D
Issued by:	NCEE Labs 4740 Discovery Dr. Lincoln, NE 68521
DATE:	23 March 2009
Total Pages:	4

The Nebraska Center for Excellence in Electronics (NCEE) authorizes the above named company to reproduce this report provided it is reproduced in its entirety for use by the company's employees only. Any use that a third party makes of this report, or any reliance on or decisions made based on it, are the responsibility of such third parties. NCEE accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. This report applies only to the items tested.

RF Exposure Calculations:
The minimum separation distance is calculated from FCC OET 65 Appendix B, Table 1B "Guidelines for General Population/Uncontrolled Exposure." This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain. The duty cycle of the EUT is set in the firmware and is not adjustable by the user. It operates in half-duplex mode, therefore has a maximum duty cycle of 50%

RF Power Measurement
The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuators. The spectrum analyzer was used to make power measurements using the channel power function, with a channel width of 20MHz

Frequency (MHz)	Output Power dBm	Output Power mW
902.971	20.93	123.880
915.000	21.51	141.580
926.277	22.82	191.426

Test Equipment Used

Serial #	*Manufacturer*	*Model*	*Description*	*Last Cal.*
100007	Rohde & Schwarz	ESIB7	EMI Test Receiver	6/9/08

Test Environment
Testing was performed at the NCEE Labs Lincoln facility. Laboratory environmental conditions varied slightly throughout the test:
Relative humidity of 40 ± 5%
Temperature of 20 ± 2º Celsius

Exposure Limit (mW/cm^2) = F/1200	0.77 mW/cm^2
Frequency (MHz)	926.277
Maximum peak output power (mW)	191.426
Antenna Gain (Numeric)	1.50
Antenna type	Dipole(whip)
Maximum duty cycle	50%

$P_d = D \times (P_{out} \times G) / (4\pi \times R^2)$

$R = \sqrt{(P_{out} \times G \times D) / (4 \pi \times P_d)}$

P_d = Power density limit, mW/cm^2
P_{out} = Peak power output, mW

G =Numeric Antenna Gain
R = Distance from antenna, cm
D = Duty cycle factor

P_{out} mW	G Numeric	P_d mW/cm^2	R cm	D	Frequency MHz	Calculation
191.426	1.500	0.770	**0.24**	0.500	926.277	Minimum distance to meet limit
191.426	1.500	**0.029**	20.0	0.500	926.277	Power density at 20 cm

Notes:

1. The minimum safe distance is based on a conservative "worst case" prediction, i.e. using the formula shown above and no duty factor. In practice the minimum distance will be much shorter. (Ref. 2)

References:

1. FCC OET Bulletin 65, Edition 97-01
2. FCC Supplement C to OET Bulletin 65, edition 01-01
3. IEEE C95.1, 1999

Radio Frequency Exposure Compliance of
Radiocommunication Apparatus (All Frequency Bands) RSS-102

Annex B - Declaration of RF Exposure Compliance

ATTESTATION: I attest that the information provided in Annex A is correct; that a Technical Brief was prepared and the information it contains is correct; that the device evaluation was performed or supervised by me; that applicable measurement methods and evaluation methodologies have been followed and that the device meets the SAR and/or RF exposure limits of RSS-102.

Signature: _____ **Date:** 09 Feb 09

NAME (Please print or type): Nic Johnson

TITLE (Please print or type): Test Engineer

COMPANY (Please print or type): NCEE Labs