

April 29, 2003

Federal Communications Commission Equipment Authorization Branch 7435 Oakland Mills Road Columbia, MD 21046 Attn: Stan Lyles

SUBJECT:

ITRONIX CORPORATION FCC ID: KBCIX260AC555-MPI 731 Confirmation No.: EA203220 Correspondence Ref. No.: 25105

## Dear Stan:

On behalf of Itronix Corporation is our response to your e-mail dated April 25, 2003 requesting additional information for the subject application.

- 1. The Bluetooth transmitter does not apply to this Laptop PC configuration and has been removed from the user manual. Please see attached revised user manual.
- 2. Please see attached revised SAR test data table (page 6) with corrected separation distance (1.5 cm) for the cellular band right-side test position.
- 3. The transmit power, test position, and spacing for the 1880MHz LCD-back whip retracted configuration were the same for both single transmitter mode and co-located transmitter mode. The peak gain from the WLAN antenna is perpendicular to the plane of the back of the unit. In the retracted position the dipole antenna is mismatched and does not radiate at its maximum power.
- 4. The distance across the LCD back between the dipole antenna feed/swivel-joint and WLAN antenna edge is approximately 4 cm (see attached photograph).
- 5. The distance from the closest point of the dipole antenna feed/swivel to the flat phantom for lapheld position is approximately 7 mm from the LCD-back, and approximately 4.5 cm from the bottom of Laptop PC (see attached photographs).

If you have any questions or comments concerning the above, please contact the undersigned.

Sincerely,

Jonathan Hughes General Manager Celltech Labs Inc.

cc: Itronix Corporation



## **MEASUREMENT SUMMARY (Cont.)**

BODY SAR MEASUREMENT RESULTS - Cellular CDMA									
Transmit Mode	Freq. (MHz)	Channel	Test Mode	Conducto (dE		Antenna Position to Planar Phantom	Laptop PC Position to Planar Phanton	Separation Distance (cm)	Measured SAR 1g (W/kg)
CDMA	835.89	363	CDMA	23.0	23.0	Parallel (Stowed)	Back of LCD (LCD Closed)	0.0	0.493
CDMA	835.89	363	CDMA	23.0	23.0	Perpendicular (180°)	Back of LCD (LCD Closed)	0.0	0.0404
CDMA & DSSS	835.89	363	CDMA	23.0	22.8	Parallel (Stowed)	Back of LCD (LCD Closed)	0.0	0.424
CDMA & DSSS	835.89	363	CDMA	23.0	22.8	Perpendicular (180°)	Back of LCD (LCD Closed)	0.0	0.401
CDMA	835.89	363	CDMA	23.0	22.8	Parallel (Stowed)	Bottom Side of F (LCD Closed)	O.0	0.0072
CDMA	835.89	363	CDMA	23.0	22.8	Perpendicular (Extended)	Bottom Side of F (LCD Closed)	O.0	0.0175
CDMA & DSSS	835.89	363	CDMA	23.0	22.8	Parallel (Stowed)	Bottom Side of F (LCD Closed)	O.0	0.0047
CDMA & DSSS	835.89	363	CDMA	23.0	22.8	Perpendicular (Extended)	Bottom Side of F (LCD Closed)	O.0	0.0197
CDMA	835.89	363	CDMA	23.0	22.9	Parallel (Stowed)	Right Side of LC (LCD Closed)	D 1.5	0.112
CDMA	835.89	363	CDMA	23.0	22.9	Parallel (Extended)	Right Side of LC (LCD Closed)	1.5	0.231
CDMA & DSSS	835.89	363	CDMA	23.0	22.8	Parallel (Stowed)	Right side of LC (LCD Closed)	1.5	0.0790
CDMA & DSSS	835.89	363	CDMA	23.0	22.8	Parallel (Extended)	Right side of LC (LCD Closed)	1.5	0.207
ANSI / IEEE C95.1 1992 - SAFETY LIMIT BODY: 1.6 W/kg (averaged over 1 gram) Spatial Peak - Uncontrolled Exposure / General Population									
Test Da		11/01/02			Relative Humidity		66 %	66 %	
Measured M		835MHz Muscle			Atmospheric Pressure		103.3 kPa		
Dielectric Constant		IEE	IEEE Target Measured		red	Ambient Temperature		22.2 °C	

## Note(s)

Conductivity

s (mho/m)

1. If the SAR measurements performed at the middle channel were ≥ 3dB below the SAR limit, SAR evaluation for the low and high channels was optional for each test configuration (per FCC OET Bulletin 65, Supplement C, Edition 01-01 (see reference [3]).

53.3

Measured

0.96

55.2 ±5%

**IEEE Target** 

0.97 ±5%

**Fluid Temperature** 

**Fluid Depth** 

r (Kg/m³)

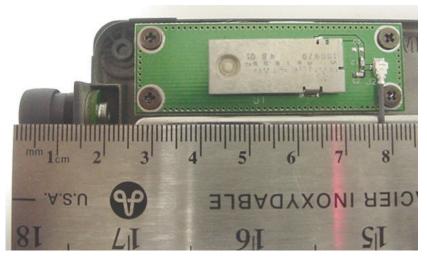
- 2. The ambient and fluid temperatures were measured prior to, and during, the fluid dielectric parameter check and the SAR evaluation. The temperatures listed in the table above were consistent for all measurement periods.
- 3. For the simultaneous transmit tests the co-located Cisco MPI-350 DSSS WLAN Card was set to the maximum conducted power level (21.1 dBm) at mid channel (2437MHz) with a CW signal and the right side internal antenna transmitting.

22.0 °C

 $\geq$  15 cm

1000





Distance at LCD-Back between dipole antenna feed/swivel-joint and WLAN antenna edge



Distance from closest point of whip antenna feed/swivel to flat phantom - LCD Back



Distance from closest point of whip antenna feed/swivel to flat phantom - Bottom of PC