

## **Exhibit P: SAR Test Report Cover Letters**

**FCC ID: HN2SB555-2**



A **UNOVA** Company

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February 28, 2003

To Whom It May Concern:

This letter is to explain the justification of the different configurations used in SAR testing of our Model 700C Mobile Computer with a Bluetooth, 802.11b and CDMA transmitters.

Model 700C is a handheld computer intended for industrial and business customers with data collection, inventory tracking etc. needs. The product can contain any combination of the three transmitters listed above. The transmitters have all been granted FCC approval as a mobile application. With our new application we would like to obtain approval for portable uses of the product, which covers use of body worn accessories such as belt clip and holster, and a cell phone – like application with the CDMA transmitter, where an integrated speaker and microphone on the back of the product allow it to be used as a phone (although the product's size limits this application to infrequent uses).

Three separate SAR reports based on tests performed by Celltech Labs have been submitted with our grant application. These reports cover:

- 1) The Bluetooth transmitter alone
- 2) The 802.11b transmitter alone
- 3) The CDMA transmitter in both bands along with the 802.11b transmitter

As can be seen in the Bluetooth and 802.11b test reports, both transmitters register very low SAR levels (~ 1% of the limit). Despite that fact, the effect of the 802.11b transmitter when it is co-located with the CDMA transmitter was tested as shown in the third report. While the CDMA transmitter was tested transmitting in various channels, the 802.11b transmitter was tested in the middle channel only due to its low SAR reading in the prior test (test report 2).

The Bluetooth transmitter's effect when it is co-located with the CDMA transmitter was not tested mainly due to its very low output power and very low SAR readings. Also, the Bluetooth transmitter does not operate when the CDMA transmitter is used in cell phone mode.

The Bluetooth transmitter uses a lossy integrated antenna, which was used during its standalone SAR testing (test report 1). The 802.11b transmitter can use an internal and an external antenna alternatively, when the CDMA transmitter is not present. Both antenna configurations were tested during the standalone SAR test (test report 2). The CDMA transmitter only uses the external antenna, and when it and 802.11b transmitter are both present, the 802.11b transmitter uses only the internal antenna. Those antennas were used in the combined SAR test (test report 3).

The belt clip and the holster accessories were not used during the SAR tests, since those are purely plastic and their presence would have only added to the distance. So, the SAR measurements reflect the absolute worst case scenario. The speaker and microphone for the cell phone application are internal to the product, and head model tests were performed (test report 3).

If you have any questions, please feel free to contact our Safety and Compliance Group in Everett, WA USA at +1 425 356 1765.

Sincerely,

Carl K. Turk, MSEE  
Sr. EMC Engineer  
Intermec Technologies Corp.



March 3, 2003

To Whom It May Concern:

Celltech Labs Inc. performed three separate SAR measurements on behalf of Intermec Corporation Model 700C handheld data terminal with Bluetooth, 802.11b, and dual-band CDMA transmitters. The Bluetooth and 802.11b transmitters were tested individually in separate platforms; the Bluetooth with integrated antenna and the 802.11b with internal and external antenna configurations. The dual-band CDMA transmitter utilized an external antenna only, and was tested for single transmit and co-located simultaneous transmit with the 802.11b transmitter. The dual-band CDMA and 802.11b transmitters were not tested for co-located simultaneous transmit with the Bluetooth transmitter due to the low power of the Bluetooth (10mW). Subsequently, three SAR test reports were issued with the following serial numbers:

Bluetooth: 080701-143EHA  
802.11b: 100202-284HN2  
CDMA: 010303-327HN2

Please do not hesitate to contact me if you have any further questions or comments.

Sincerely,



Jon Hughes  
General Manager  
Celltech Labs Inc.