Intermec
Technologies
Corporation

6001 36th Avenue West
Everett, Washington 98203
United States
tel 425.348.2600
fax 425.355.9551
www.intermec.com

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To whom it may concern:

This letter is intended to explain why the Wistron DRCB radio module used by Intermec Technologies Corporation does not provide a 100% duty cycle for modulated transmitter testing.

The Wistron DRCB radio module is an 802.11b/g Compact Flash radio module used in Intermec Technologies Corporation products.

Wistron DRCB duty cycle limitation explanation:

The Wistron DRCB radio module has a duty cycle limitation because the radio does not support an internally generated random data steam. The random data needs to be supplied by the host device. The limitation on this approach is the data bus capability of the Compact Flash system itself. For modulated transmitter testing, the host device supplies random data to the DRCB card at the maximum rate allowed by the data bus. The DRCB card then divides the supplied data into transmit packets and transmits the packets.

At the lowest (1 Mbps) data rate, enough data can be supplied by the host to enable a transmit duty cycle near 100%. As higher transmit data rates are selected during the testing, the transmit duty cycle is reduced because not enough data can be supplied to allow the maximum duty cycle.

The duty cycle measured during the modulated transmitter testing is the highest duty cycle that the DRCB radio module can possibly generate. No higher duty cycle could be experienced in the field, as the duty cycle during the testing is the maximum that the radio can provide.

Please contact me using the contact information below if there are any questions.

Sincerely,

Scott J. Holub
RF and EMC Compliance Manager
Intermec Technologies Corporation
550 Second Street S.E.
Cedar Rapids, IA 52401 USA
tel: 319.369.3865
fax: 319.369.3299
email scott.holub@intermec.com