

Cardinal Health, Inc.
RFID – Aux Cabinet FCC ID: WSIRFIDSNGLAUXCAB
February 2, 2009

TCB412 ITEM 9 RF Exposure Limits

Applicability of regulations:

Ref 47CFR 1.1310, Radio Frequency radiation exposure limits:

This section does not regulate exposure levels at frequencies below 0.3 MHz. Since the device operates at 119.7 kHz this device is excluded from review to this requirement.

Ref 47CFR 2.1091(b) The subject device is characterized as a “mobile device” as defined by this section “For purposes of this section, a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter’s radiating structure(s) and the body of the user or nearby persons. In this context, the term “fixed location” means that the device is physically secured at one location and is not able to be easily moved to another location. Transmitting devices designed to be used by consumers or workers that can be easily re-located, such as wireless devices associated with a personal computer, are considered to be mobile devices if they meet the 20 centimeter separation requirement.”

An evaluation was conducted for purposes of requirements under RSS-102 for Canada and the results when evaluated to requirements found in ICNIRP Guidelines and Health Canada Safety Code 6 for RF Exposure, the exposure levels were found to be well within requirements. For Magnetic Field, the worse case level recorded was on the front of the device and measured 139 mA/m at 20 cm from the device. Requirements for this standard call for 2.19 A/m when measured at 20 cm and averaged for whole body absorption. When whole body measurement is considered, the result shows that the total RF Exposure level is 8.3mA/m. Electric Field was also evaluated and worse case levels were found to be on the front of the device and measured to be 72.1 V/m. Requirements for this standard allow up to 280 V/m for total body absorption. When total body absorption is considered, the total field strength is 36.2 V/m.

Examination of the potential to harm with RF Exposure has been taken into consideration and is found to be in compliance to all U.S. and International Standards. Documentation of testing and results are found in NWEMC test reports.