

Date of Test: March 17 to 23, 2006

FCC ID: S8IWPMS

1.0 Introduction

This report is intended to show compliance with the FCC Part 95, Subpart H Rules.

Edwards Lifesciences made a new product, based on the certified device FCC ID: S8IWPMS. The following changes were implemented by Edwards:

Radio and RFID circuitry and driver software is the same on battery powered X units, battery powered M units, monitor powered M units, and AC adaptor powered M units. The following notes apply to all types of Lightning units.

PCB

- PCB is still same type of 6 layer construction. The layers are used for the same function as before (layer 1 components, layer 2 ground plane, layers 3 and 4 internal signals, layer 5 power plane, layer 6 components). The top and bottom layers no longer have ground plane copper pours around all the components.
- Due to a change in the shape of the printed circuit board, the part placement and trace layout of the circuitry have changed significantly.
- The same shields are used around the microprocessor and radio circuitry .

1.4GHz Radio Design

- New radio antenna is a $\frac{1}{4}$ wave monopole using circuit board ground plane. Previous version used a $\frac{1}{2}$ wave dipole antenna.
- Radio software control settings (register values) are the same.
- The interval between radio messages has been increased from 23 ms to 52 ms.
- The message length change.
- Some components are change with new layout.

134 kHz RFID Design

- The same RFID chip is used. All circuitry around the RFID chip is the same.
- RFID antenna is mounted orthogonal to the PCB rather than horizontal to it.
- RFID software control settings (modes) are the same.

No change in frequency determining and stabilizing circuitry of the device (including clock or data rates), frequency multiplication stages, basic modulator circuit, or maximum power or field strength ratings has been done. Therefore, these changes can be considered as Class II permissive change.