RF Exposure Exhibit for Reliance Controls Corporation FCC ID: SPV-11031
Wireless Remote Flood or Freeze Warning Alarm

Since the EUT only transmits when it is activated by a flood condition or when the temperature drops below freezing, normal operation during transmission would have the user located greater than 20 centimeters away and not touching the EUT. There are no buttons on the device to make it transmit. This means a distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure and the body of the user or nearby persons. Therefore, this device is classified under section 2.1091 as a "mobile" device.

Although this device is categorically excluded from RF exposure evaluation under Part 2, it can be shown that the device meets the limits used for evaluating other devices (those which are not excluded) under this section. Section 2.1091 for mobile devices states that the limits are given in 1.1310. The limit given in 1.1310 for general population/uncontrolled at 315 MHz is a Maximum Permissible Exposure (MPE) limit of (f/1500) mW/cm^2.

For 315 MHz this limit is 0.21 mW/cm^2.

The FCC OET Bulletin 65 Section 2 can be used to determine compliance with guidelines for human exposure to RF radiation. We will use equation 3 of that section for predicting RF fields.

The highest power measurement for this device is -24.6 dBm.
For this prediction we will use a worst-case power of -24 dBm or 400 uW.
Since the device is "mobile", we will use a worst-case distance of 20 cm.
For worst-case antenna gain, we will use a gain of one.

Using equation 3 of OET Bulletin 65 Section 2, the power density is calculated to be 0.00000079 mW/cm^2. This is well within the limit given in 1.1310.