RF Exposure Exhibit for RF Technologies, Inc. KXU-PCFSZ24 Pull Cord

Mobile Devices are defined as a transmitting device designed to be used in other than fixed locations and 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. 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 state that the limits are given in 1.1310. The limit given in 1.1310 for general population/uncontrolled at 2480 MHz is a Maximum Permissible Exposure (MPE) limit of 1 mW/cm^2.

For 2480 MHz this limit is 1 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.

$$S = \frac{PG}{4\pi R^2}$$

S = power density (units e.g. mW/cm^2)
P = power into to the antenna (or power output) (units e.g. mW)
G = power gain of the antenna (worst case = 1)
R = distance to the center of antenna (units e.g. cm)

The highest power measurement for this device is -14.2 dBm.
For this prediction we will use a worst-case power of -14.2 dBm or .0375 mW.
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 0.000007567 mW/cm^2. This is well within the limit given in 1.1310.