

XCT™ technology – the Lutron advantage


Lutron XCT technology measures occupancy in a whole new way, dramatically improving the performance of Lutron passive infrared (PIR) sensors. Traditional PIR sensors can experience performance issues resulting from insufficient sensitivity settings.


XCT technology enables the Lutron PIR sensor to accurately distinguish between background noise and motion. This enables the sensor to detect occupancy based solely on actual movement in the space. Sensitivity adjustments are unnecessary.

This breakthrough technology recognizes noise as being present in the measurement, enabling the sensor to retain high sensitivity to fine motion (like turning the page of a book). As with standard PIR sensors, the Lutron sensor requires an unobstructed line-of-sight for occupancy detection.

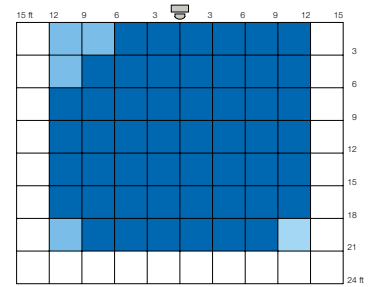
In accordance with NEMA testing standards, Lutron performed minor-motion coverage testing on the Maestro PIR occupancy sensor with XCT technology, and on four additional PIR occupancy sensors manufactured by others. The graphs clearly demonstrate that sensors with XCT technology have the superior ability to detect minor motion.

 sensor

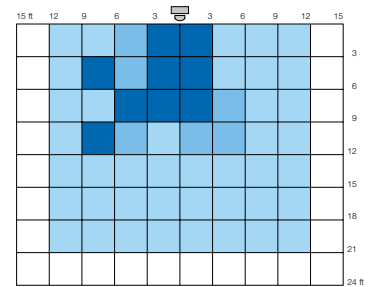
 greater than 75% detection rate

 50% – 75% detection rate

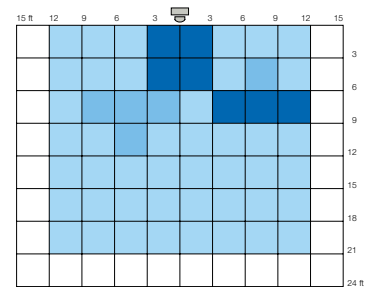
 less than 50% detection rate



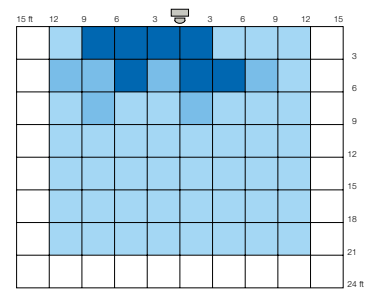
Lutron Maestro® occupancy sensor



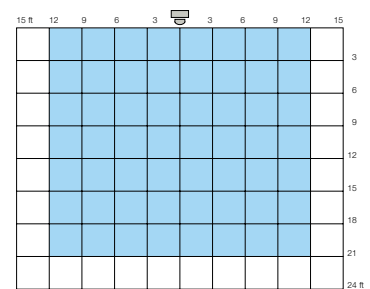
Company 1 occupancy sensor



Company 2 occupancy sensor



Company 3 occupancy sensor



Company 4 occupancy sensor

