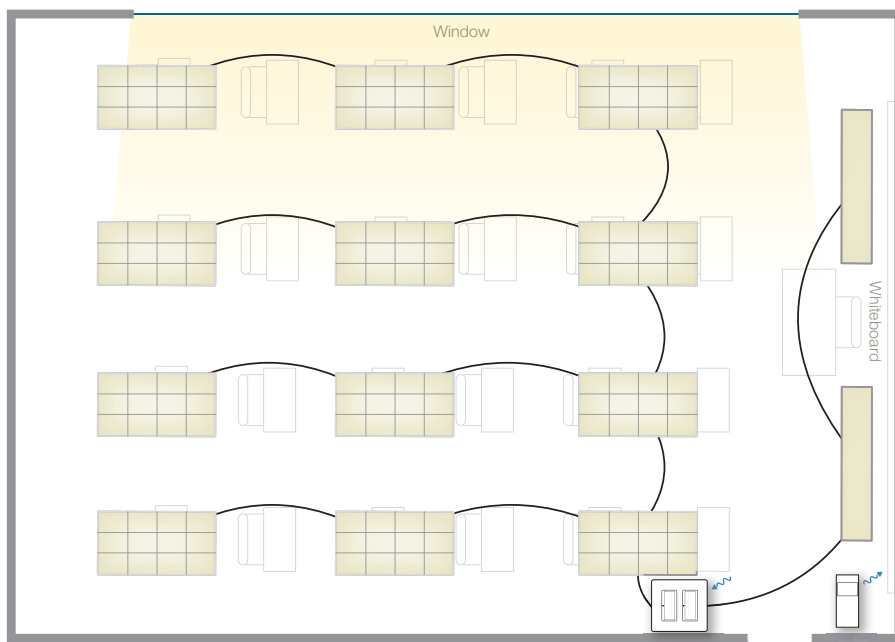


# Occupancy/Vacancy Sensing in Classrooms – Switching Solutions

A best-practice classroom combines energy efficiency with a high-quality learning environment. Classroom lighting plays a particularly critical role because of the direct relationship between good lighting and student performance.<sup>1</sup>

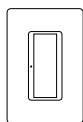
## Classroom Occupancy/Vacancy Sensing with Switching Control

A simple switching solution ensures that lighting is not left on when the classroom is unoccupied, and enables multi-zone switching for lights near blackboards or smart boards, and the rest of the room.



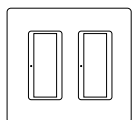
**Lutron Clear Connect® RF**  
wireless communication

## Bill of materials



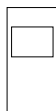
### Maestro Wireless® switch

MRF2-8S-DV-WH (dual voltage, no neutral)



### Maestro Wireless® 2-gang switch

CW-2-WH (dual-gang faceplate)



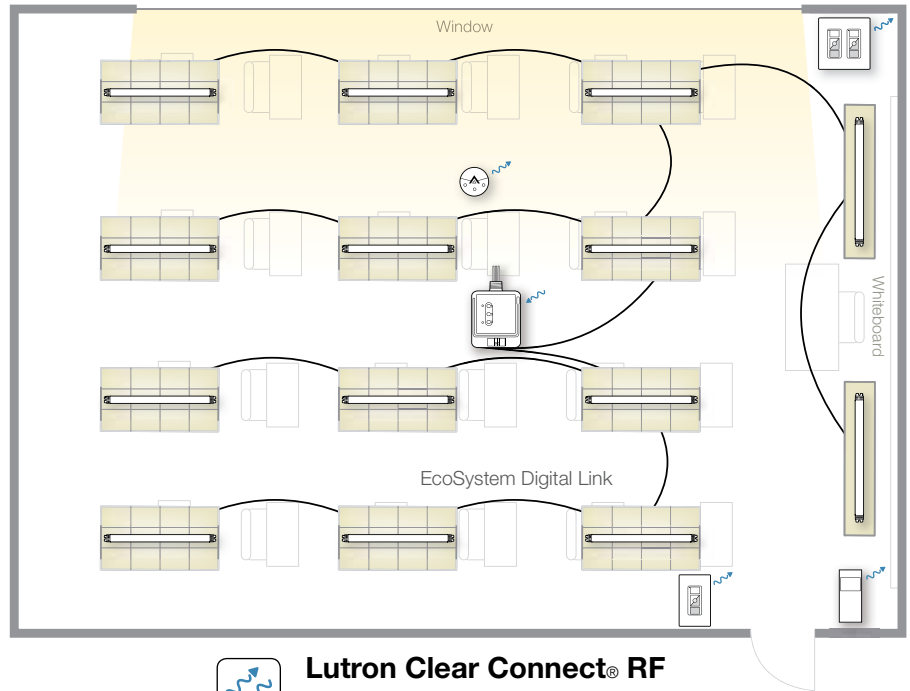
### Radio Powr Savr™ occupancy/vacancy sensor (corner-mount)

LRF2-OKLB-P-WH

Save 20 - 60% lighting energy<sup>2</sup> with Lutron occupancy/vacancy sensors

# Classroom Occupancy/Vacancy Sensing with Dimming and Daylight Control

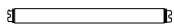
Wireless daylight sensors combined with Lutron dimming ballasts automatically adjust electric lights in response to available daylight. Minimize glare and heat gain that disrupt the learning environment, and reduce demand on HVAC systems.



## Bill of materials



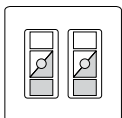
**Lutron Clear Connect® RF**  
wireless communication



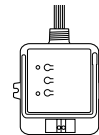
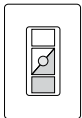
**EcoSystem® H-Series digital ballast**  
EHDT-(base model number)



**Radio Powr Savr™ occupancy/vacancy sensor (corner-mount)**  
LRF2-OKLB-P-WH



**Pico® wireless controls**  
PJ-3BRL-GWH-T01  
CW-1-WH (single-gang faceplate)  
CW-2-WH (dual-gang faceplate)  
PICO-FP-ADAPT (Pico faceplate adapter)



**PowPak™ dimming module with EcoSystem**  
RMJ-ECO32-DV-B



**Radio Powr Savr daylight sensor**  
LRF2-DCRB-WH

**Helps meet ASHRAE Code 90.1-2010**

Save up to 70% lighting energy<sup>2,3</sup> and reduce demand on air conditioning with a dimming and daylighting solution.

# Sources

- 1 Phillips, R. W. 1997. Educational Facility Age and the Academic Achievement of Upper Elementary School Students. Unpublished Doctoral Dissertation. University of Georgia.
- 2 VonNieda B, Maniccia D, & Tweed A. 2000. An analysis of the energy and cost savings potential of occupancy sensors for commercial lighting systems. Proceedings of the Illuminating Engineering Society. Paper #43.
- 3 Newsham GR & Birt B. 2010. Demand-responsive lighting: a field study. National Research Council Canada.

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