

Clarksville-Montgomery County School System

The online version of this policy is official. Therefore, all printed versions of this document are unofficial copies.

WORK INSTRUCTIONS

This work instruction outlines the steps that must be taken to determine and verify light readings within district buildings. Doing so will allow CMCSS to conserve the most energy while ensuring we are meeting the district lighting standards of 50 foot candles(Ft cd) in classrooms and 10 Ft cd in hallways and common areas. All readings should be taken at night.

SPECIFIC INSTRUCTIONS: Determining light level readings for classrooms, Workspaces, Large Common Areas (Foyers, Cafeterias and Gyms):

- 1. Turn on the light meter and select the lighting function; then select foot candle as the unit of measure.
- 2. Make a rough sketch of the area to be measured. Example one will give the typical grid pattern to walk to take the readings. Depending on the size of the area being measured the grid may have to be expanded.
- 3. While taking the reading; place the meter at the height of a student desk. A kindergarten student desk height is 22 to 24 inches from floor. A first grade student desk height is 24 inches of the ground. A second grade student desk height is anywhere from 24 to 27 inches from the floor. Third and Fourth grade students are 27 inches from the floor. A fifth grade student desk is from 27 to 29 inches from the floor. Grades six through twelve desk height is 29 inches from the floor. The reading on the light meter should not be less than 48 to 52 Ft cd. Write down the reading on the sketch of the area being measured.
- 4. Once you have completed the first set of readings, you will now remove one light bulb from the fixture and complete steps 1 thru 3 again. If the readings are still not less than 48 to 52 Ft cd you will take a second light bulb from the fixture and complete steps 1 thru 3 again.
- 5. Mark all fixtures with the number of bulbs that are to be installed using a permanent marker.
- 6. Once complete there will be a yearly review to verify the fixture are not less than 48 to 52 Ft cd.

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Determining light readings for Hallways:

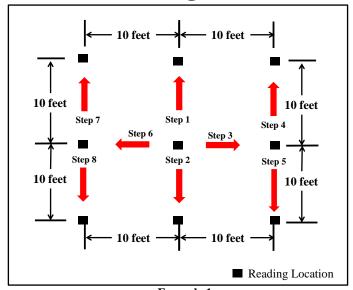
- 1. Turn on the light meter and select the lighting function; then select foot candle reading.
- 2. Make a rough sketch of the area to be measured. Example two indicates the typical grid pattern to walk for taking the readings. Depending on the size of the area being measured the grid may have to be expanded.
- 3. To take the reading; place the light meter at waist height. The reading on the light meter should not be less than 8 to 12 Ft cd. Write down the reading on the rough sketch.
- 4. If the first set of readings is greater than 8 to 12 Ft cd, remove one light bulb from each fixture and complete steps 1 through 3 again. If the readings are still greater than 8 to 12 Ft cd you will remove a second light bulb from the fixture and complete steps 1 through 3 again.
- 5. Mark all fixtures with the number of bulbs that are to be installed using a permanent marker.
- 6. Once complete there will be a yearly review to verify the fixtures are not less than 8 to 12 Ft cd.

See attached diagrams.



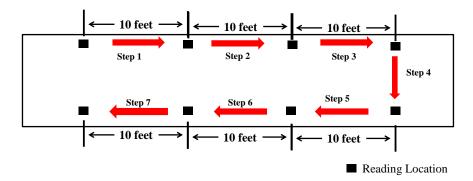
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Classroom and Large Common areas



Example 1
Typical Grid Pattern for Readings

Hallway



Example 2
Typical Grid Pattern for Readings



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REVISION HISTORY:

<u>Date:</u> <u>Rev.</u> <u>Description of Revision:</u>

11/12/15 Initial Release

End of Work Instructions

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