

12/06

2006 IECC/Comm 63—Lighting:

1. If the IECC requirements are not to be used for a commercial building, what national standard can be substituted for demonstrating compliance with lighting? Are there limitations when taking such action?
2. In order to determine the interior lighting power allowance in watts per square foot in the area of a building addition or building alteration, which Table in the code is required to be used?
3. A public building will have lighting on a main exterior entrance and an exit door. Both the entrance and the exit have 3 feet wide doors. Using IECC 505.6.2, what is the Exterior Lighting Unit Power Allowance for this building assuming no other allowances are defined?
4. True or False: When calculating the interior lighting power for lighting in high rise residential building, dwelling units that provide complete independent living facilities for one or more persons including permanent provisions for living, sleeping, eating, cooking, and sanitation may be excluded from the calculated interior lighting power of the building.
5. True or False: When calculating the interior lighting power, lighting for exit signs is excluded from the calculated interior lighting power of the building.
6. A fixture uses an incandescent bulb. The bulb to be used in the fixture is rated for 75 watts. The fixture is rated for a maximum of 250 watts. What should the installed wattage be listed as?
7. Exactly 30 linear feet of track lighting will be installed. The designer is proposing to install a total luminaire wattage of 1,000 watts. What should the installed wattage be listed as?
8. Public areas with switches that are accessible only to authorized personnel are exempt from the interior lighting control requirements. True or False?
9. True or False: Controls to reduce lighting are required in an enclosed office area which uses over 0.6 watts per square foot of light for the space using multiple luminaires. The area shall be controlled so that the load for the lights may be reduced by at least one-half while maintaining a reasonably uniform level of illuminance throughout the area.
10. True or False: Daylit area for a window always means the space on the floor that is daylit by vertical glazing. The daylit area has the length of 15 feet, or the distance on the floor, perpendicular to the glazing, to the nearest 60-inch or higher opaque partition, whichever is less; and a width of the window plus either 2 feet on each side, the distance to an opaque partition, or one-half the distance to the closest skylight or vertical glazing whichever is least.
11. A 1,600 ft² square room which uses 1.3 watts/sf and has 1 window on 3 of its 4 exterior walls. How many light reduction controls per IECC 505.2.2.1 are required? How many daylit area controls per Comm 63.0505(2) are required?
12. Using IECC, determine the Interior Lighting Power Allowance associated with a conference meeting room.
13. If I have a retail area which displays jewelry in cases and shelves involving 200 sf of the retail area's total 1,000 sf space, what is the interior lighting power allowance for the area?

14. Yes or No: The Exterior Lighting Power Allowance (ELPA) on a commercial building is determined to be 1,700 watts. The Interior Lighting Power Allowance for the same building is determined to be 5,000 watts. The designer has 700 watts which he will not use from the ELPA which he would like to use toward the installation of lighting on the inside of the building. Can the designer trade-off a portion of the exterior lighting power allowance with the interior lighting power allowance?
15. Are outdoor athletic facilities, including the playing area and seating areas, exempted from the exterior lighting requirements?
16. Are daylighting controls required if the lighting density is less than 0.8 watts/sf in an interior enclosed space of over 250 sf?
17. If a 400 watt high pressure sodium light fixture installed, what would be the installed wattage required to be accounted for in the installed lighting calculations?
18. True or False. Occupancy sensors may be used as an automatic shut off device in order to meet IECC 505.2.2.2?
19. What is the minimum number of automatic shut-off controls required for a 14,000 sf single story factory building, assuming no exemptions are met and occupancy sensors are not used.
20. True or False: The need for tandem wiring changes if electronic high-frequency ballasts are installed instead of magnetic ballasts?
21. What is the maximum wattage allowed per side of an internally illuminated exit sign?