



# IESNA Lighting Design Guide

| VI. EMERGENCY, SAFETY, AND SECURITY   |                      | <span style="display: inline-block; width: 10px; height: 10px; background-color: #003366; border: 1px solid black;"></span> Very Important | <span style="display: inline-block; width: 10px; height: 10px; background-color: #0099CC; border: 1px solid black;"></span> Important | <span style="display: inline-block; width: 10px; height: 10px; background-color: #99CCCC; border: 1px solid black;"></span> Somewhat important | <span style="display: inline-block; width: 10px; height: 10px; background-color: white; border: 1px solid black;"></span> Blank = Not important or not applicable |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  |                        |  |                      |                      |
|---|----------------------|--|---|--|---|--------------------------------|---|--------------------------|-----------------------------|------------------------------|----------------------|-----------------|---------|--------------------------|-------------------------|------------------------|---------------------------------|--------------------------|--|------------------------|--|----------------------|----------------------|
|   | <b>Design Issues</b> |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  |                        |  |                      |                      |
|   |                      | Appearance of Space and Luminaires   | Color Appearance (and Color Contrast)   | Direct Glare   | Flicker   | Light Distribution on Surfaces | Light Distribution on Task Plane (Uniformity) | Light Pollution/Trespass | Luminances of Room Surfaces | Modeling of Faces or Objects | Peripheral Detection | Reflected Glare | Shadows | Source/Task/Eye Geometry | Surface Characteristics | Special Considerations | Notes on Special Considerations | Illuminance (Horizontal) | Category or Value (lux) <sup>(a)</sup> | Illuminance (Vertical) | Category or Value (lux) <sup>(a)</sup> | Notes on Illuminance | Reference chapter(s) |
| <b>Emergency Lighting</b>   |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  |                        |  | Ch. 29               |                      |
| Egress path   |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        | 10                              |                          |  | (1, 2)                 |  |                      |                      |
| Areas adj. to egress path   |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        | 0.5                             |                          |  | (2)                    |  |                      |                      |
| Stairwells  |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  | (2)                    |  |                      |                      |
| Exterior path of egress   |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        | 10                              |                          |  | (1, 2)                 |  |                      |                      |
| <b>Safety</b>   |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  | (2)                    | Ch. 29                                 |                      |                      |
| <b>Security, Buildings and Grounds</b>  |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  |                        |  | Ch. 29               |                      |
| CCTV Surveillance   |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  | (3)                    |  |                      |                      |
| Perimeter Fences for Correctional Facilities  |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 | 10                       |  | (3, 4)                 |  |                      |                      |
| Protection of People  |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  | (3)                    |  |                      |                      |
| Residential security  |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  | (3)                    |  |                      |                      |
| Security of property  |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  | (3)                    |  |                      |                      |
| Notes:  |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  |                        |  |                      |                      |
| (a) Low illuminances (less than 30 lux) are given in lux; values greater than 30 lux are given in letter categories.            |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  |                        |  |                      |                      |
| (1) 10 lx along center of egress path, 1 lx along 1-m band centered on egress path  |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  |                        |  |                      |                      |
| (2) Minimum illuminance for safety are listed in Chapter 29, Emergency, Safety, and Security                                    |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  |                        |  |                      |                      |
| (3) Illuminances for security are listed in Chapter 29, Emergency, Safety, and Security   |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  |                        |  |                      |                      |
| (4) Two levels of vertical illuminance are required, one for normal operations (10 lx) and one for full-alert operation (50 lx) |                      |  |   |  |   |                                |   |                          |                             |                              |                      |                 |         |                          |                         |                        |                                 |                          |  |                        |  |                      |                      |

