## **Footcandle Light Guide**



Footcandles are a common unit of measure used by lighting professionals to calculate light levels in businesses spaces. A footcandle is defined as the illuminance on a one square foot surface from a uniform source of light.

The <u>Illuminating Engineering Society (IES)</u> recommends the following footcandle levels to ensure adequate illumination and safety for occupants.

|                                | Average Maintained            | Range of Maintained Footcandles (Horizontal) |  |
|--------------------------------|-------------------------------|--|--|
| Building Area & Task           | Footcandles (Horizontal) (FC) | (FC)   |  |
| WAREHOUSING & STORAGE          |                               |  |  |
| Bulky Items—Large Labels       | 10                            |  |  |
| Small Items—Small Labels       | 30                            |  |  |
| Cold Storage                   | 20                            | 10 - 30                                      |  |
| Open Warehouse                 | 20                            | 10 - 30                                      |  |
| Warehouse w/Aisles             | 20                            | 10 - 30                                      |  |
| COMMERCIAL OFFICE              |                               |  |  |
| Open Office                    | 40                            | 30 - 50                                      |  |
| Private Office                 | 40                            | 30 - 50                                      |  |
| Conference Room                | 30                            |  |  |
| Restroom                       | 18                            | 7.5 - 30                                     |  |
| Lunch & Break Room             | 15                            | 5 - 20                                       |  |
| EDUCATIONAL (SCHOOLS)          |                               |  |  |
| Classroom                      | 40                            | 30 - 50                                      |  |
| Gymn                           | asium                         |  |  |
| Class I (Pro or Div.1 College) | 125                           |  |  |
| Class II (Div. 2 or 3 College) | 80                            |  |  |
| Class III (High School)        | 50                            |  |  |
| Class IV (Elementary)          | 30                            |  |  |
| Auditorium                     | 7.5                           | 3 - 10                                       |  |
| Corridor                       | 25                            | 10 - 40                                      |  |
| INDUSTRIAL/MANUFACTURING       |                               |  |  |
| Assembly                       |                               |  |  |
| Simple (Large Item)            | 30                            | 15 - 60                                      |  |
| Difficult (fine)               | 100                           | 50 - 200                                     |  |
| Component Manufacturing        |                               |  |  |
| Large                          | 30                            | 15 - 60                                      |  |
| Medium                         | 50                            | 25 - 100                                     |  |
| EXTERIOR                       |                               |  |  |
| Parking (Covered)              | 5                             |  |  |
| Lighting Zone 3 (Urban)        | 1.5                           | .75 - 3                                      |  |
| Lighting Zone 2 (suburban)     | 1                             | 0.5 - 2                                      |  |
| Gas Station Canopy             | 12.5                          | 10 - 15                                      |  |
| Safety (Building Exterior)     |                               | 0.5 - 2                                      |  |
| RETAIL                         |                               |  |  |
| General Retail (Ambient)       |                               | 50   |  |
| Department Store               | 40                            | 20 - 80                                      |  |
| Perimeter                      |                               |  |  |

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| Accent Lighting (Displays) |    |          |  |
|----------------------------|----|----------|--|
| AUTOMOTIVE                 |    |          |  |
| Showroom                   | 50 | 25 - 100 |  |
| Service Area               | 50 | 25 - 100 |  |
| Sales Lot (Exterior)       |    |          |  |
| Lighting Zone 3 (Urban)    | 20 | 10 - 40  |  |
| Lighting Zone 2 (Suburban) | 15 | 7.5 - 30 |  |
| GROCERY                    |    |          |  |
| Circulation                | 20 | 10 - 40  |  |
| General Retail             | 50 | 25 - 100 |  |
| Perimeter                  |    |          |  |
| BANKING                    |    |          |  |
| ATM                        | 20 | 10-40    |  |