IES Footcandle Recommendations

The following selected footcandle ranges represent the Illuminating Engineer Society's (IES) current illuminance recommendations. Individual applications will determine exact footcandle levels. Please refer to the IES Lighting Handbook for more detailed evaluation.

**Airplane Manufacturing**
- Drilling, riveting, screw fastening: 75
- Final assembly, hangar: 100
- Inspection: 50-200
- Welding: 50

**Assembly**
- Rough easy seeing: 20-50
- Rough difficult seeing: 50-100
- Medium: 100-200
- Fine: 200-500(a)
- Extra fine: 500-1000(a)

**Automobile Manufacturing**
- Final assembly, finishing, inspecting: 200
- Body & chassis assembly: 100
- Body parts manufacturing: 100
- Frame assembly: 50

**Banks**
- Lobby general: 10-50
- Writing areas: 20-70
- Teller stations, posting & keypunch: 50-150

**Barber Shops**
- Beauty Parlors: 50-100

**Chemical Works**
- Receiving, storing, shipping, winding, measuring: 20-50
- Pattern making, trimming: 50-100
- Shops, marking: 50-200
- Cutting, pressing: 100-500(a)
- Sewing, inspection: 200-500(a)

**Clothing Manufacturer**
- Receiving, storing, shipping, winding, measuring: 20-50
- Pattern making, trimming: 50-100
- Shops, marking: 50-200
- Cutting, pressing: 100-500(a)
- Sewing, inspection: 200-500(a)

**Electrical Equipment Manufacturing**
- Impregnating: 20-50
- Insulating coil winding, testing: 50-100

**Food Service Facilities**
- Dining areas:
  - Cashier: 20-50
  - Cleaning: 10-20
  - Dining: 5-20
  - Food displays: 30-100
  - Kitchen: 50-100

**Foundries**
- Annealing furnaces: 20-50
- Cleaning: 20-50
- Core making: 50-200
- Inspection:
  - Fine: 100-500
  - Medium: 50-100
  - Molding: 50-200
  - Pouring, sorting: 50-100

**Garages-Motor Vehicles**
- Storage: 5
- Traffic lanes: 10
- Parking garage: 10-20
- Service garage: 20-50
- Entrances: 5
- Repair area: 50-100

**Gymnasiums**
- Assemblies: 10
- Exhibitions, matches: 50

**Hospitals**
- Rooms: 10-30
- Corridors: 5-30
- Emergency rooms: 50-100
- Operating rooms: 100-200

**Hotels**
- Bathrooms: 20-50
- Bedrooms for reading: 20-50
- Corridors, elevators and stairs: 10-20
- Front desk: 50-100
- Linen room: 50-100
- Sewing: 100-200
- General: 10-20
- Lobby: 20-100
- General lighting: 10-20
- Reading and working areas: 20-50

**Iron & Steel Manufacturing**
- Stock, hot top, checker:
  - Cellar, calcining: 10-30
- Building, slag pits, striping yard: 20
- Control platforms, repairs, mixer building: 30
- Rolling mills: 30-50
- Shearing: 50
- Tin plate: 50
- Motor room, machine room: 30
- Inspection: 100

**Laundries**
- Washing: 20-50
- Ironing: 20-100

**Library**
- Ordinary reading, stacks: 20-50
- Book repair and binding: 20-50
- Study & notes, cataloging, card files, check desk: 20-100

**Machine Shops**
- Rough bench: 20-50
- Medium bench, rough grinding, buffing: 50-100
- Fine bench and work: 200-500(a)

**Materials Handling**
- Loading trucking: 10-20
- Picking stock classifying: 20-50
- Wrapping, packing, labeling: 20-50

**Offices**
- Accounting: 50-100
- Audio-visual areas: 20-50
- Conference areas: 20-70
- Corridors, stairways: 20(k)
- Drafting: 50-200
- General and private offices: 50-100
- Lobbies, lounges and reception areas: 0-20

**Paint Shop**
- Spraying, rubbing, hand art, stencil: 20-50
- Fine hand painting & finishing: 50-100

**Paper Manufacturing**
- Beaters, grinding: 20-50
- Finishing, cutting: 50-100
- Hand coating: 50-100
- Paper machine reel, inspection: 100-200
- Rewinder: 100-200

**Printing**
- Photo engraving, etching, blocking: 20-50
- Color inspecting: 100-200
- Presses: 50-100
- Proofreading: 100-200
- Composing room: 50-100

**Schools**
- Reading: 20-100
- Typing: 20-100
- Demonstrations: 100-200
- Sewing: 20-100

**Sheet Metal Works**
- General: 50
- Tin plate inspection, galvanized, scribing: 100-200

**Stores**
- Merchandising, serviced: 30-100
- Merchandising, self-service: 200

**Textile Mills**
- Cotton picking, carding, roving, spinning: 50
- Beaming & slashing: 150
- Drawing: 200
- Others: 100

**Warehousing, Storage**
- Inactive: 5-10
- Active:
  - Rough bulky: 10-20
  - Medium: 20
  - Fine: 20-50

**Welding**
- General: 20-50

**Woodworking**
- Rough sawing and bench work: 20-50
- Sizing, planing, rough sanding, medium quality machine and bench work, gluing, veneering, cooperage: 20-50
- Fine bench and machine work, fine sanding and finishing: 50-100

**Footnotes:**
- (a) Obtained with a combination of general light plus specialized supplementary lighting
- (k) Or not less than 1/5 the level in adjacent areas