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...........................................20-50
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)

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

Barber Shops
Beauty Parlors.....................................50-100

Chemical Works..................................30

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)

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..........................................50-200
Fine..................................................100-500
Medium.............................................50-100
Molding.............................................50-200
Pouring, sorting..................................50-100

Garages-Motor Vehicles
Storage.............................................5
Traffic Lanes........................................10
Parking garage.....................................10
Service garage....................................10-20
Enterances.........................................50
Repair area........................................50-100

Gymnasiums
Assemblies..........................................10
General exercise & recreation...............30
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........................................100-200
General............................................10-20
Lobby................................................10-20
General lighting.................................10-20
Reading and working areas....................20-50

Iron & Steel Manufacturing
Stock, hot top, checker..........................20
Cellar, calcining..................................10-30
Building, slag pits, stripping 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

Mail sorting......................................50-100
Off-set printing and duplicating area........20-50
Spaces with VDT’s................................75

Paint Shop
Spraying, rubbering, 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............................................100
Tin plate inspection, galvanized, scribbling.100-200

Stores
Circulation area stockroom....................10-30
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...............................................20-50
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