

GENERAL GUIDE TO LIGHTING LEVELS

Illuminance is a measure of how much [luminous flux](#) is spread over a given area. One can think of luminous flux (measured in [lumens](#)) as a measure of the total "amount" of visible light present, and the illuminance as a measure of the intensity of illumination on a surface. A given amount of light will illuminate a surface more dimly if it is spread over a larger area, so illuminance (lux) is inversely proportional to area when the luminous flux (lumens) is held constant.

One lux is equal to one lumen per [square metre](#):

To calculate:

Add all of the lumen output of all light fixtures in room

Calculate square feet convert to square meters by dividing by 0.092903

Divide total lumens by total square meters = total Lux

Building Type	Space Type	Maintained Average Illuminance at working level (lux)	Measurement (working) Height (1 meter = 3.3 feet)
Barracks/Dormitories	Bedrooms	300	at 0 m
	Laundry rooms	300	at 1 m
Educational Buildings	Play room, nursery, classroom	400	at 0 m
	Lecture hall	400	at 0.8 m
	Computer rooms	30	at 0.8 m
Office buildings	Single offices	400	at 0.8 m
	Open plan offices	400	at 0.8 m
	Conference rooms	300	at 0.8 m
Educational buildings	Classrooms	300	at 0.8 m
	Classrooms for adult education	400	at 0.8 m
	Lecture hall	400	at 0.8 m
Hospitals	General ward lighting	300	at 0.8 m
	Simple examination	500	at 0.8 m
	Examination and treatment	1000	at 0.8 m

Hotels and restaurants	Self-service restaurant, dining room	100	at 0.8 m
	Kitchen	500	at 0.8 m
	Buffet	100	at 0.8 m
Sport facilities	Sports halls	300	at 0 m
Wholesale and retail sales	Sales area	500	at 0.8 m
	Till area	500	at 0.8 m
Circulation areas	Corridor	50	at 0 m
	Stairs	50	at 0 m
	Restrooms	300	at 0 m
	Cloakrooms, washrooms, bathrooms, toilets	300	at 0.8 m
Industrial	Metal working/ welding	300	at 1 m
	Simple Assembly	300	at 1 m
	Difficult Assembly	1,000	
	Exacting Assembly	3,000-10,000	
Central Plant	Boiler house Machine Halls	50	at 0 m
	Side rooms, e.g. pump rooms, condenser rooms etc.	300	
	Control rooms	300	
		500	
Vehicle Construction/	Body work and assembly	500	at 1 m
Maintenance	Painting, spraying, polishing	1000	
	Painting, touch-up, inspection	3,000-10,000	
Wood working and processing	Saw frame	300	at 1 m
	Work at joiner's bench, assembly	300	
	Polishing, painting, fancy joinery	1000	
	Work on wood working machines e.g. turning, fluting, dressing,	500	

	rebating, grooving, cutting, sawing, sinking		
Livestock Barn Swine	Breeding/gilts Gestation Farrowing Gestation Nursery	>100 >50 >50 >50 >50	At 1 m
Livestock Barn Cattle	Milking	150 - 200	At 1 m
Equestrian	Stable Arena National Arena Regional Arena Local	>200 >500 >200 >100	At 1 m
Chickens	Laying hens Broilers Chicks	>100 >150 >100	At 1 m
Sheep	Lambing Growing & finishing	100 100	At 1 m