

Category 1 Standard

1-066 Lighting of London Underground Assets



Please read the Written Notices
attached to this standard

Issue: A3

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MAYOR OF LONDON



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1 Purpose

- 1.1 The purpose of this standard is to ensure that lighting systems provided for London Underground (LU) are safe, enable the effective performance of all necessary tasks by both passengers and staff, including the visually and sensory impaired, provide a welcoming visual environment and endeavour to utilise energy efficiently.

2 Scope

- 2.1 The requirements of this standard cover the illumination of LU operational areas and premises. This does not cover rolling stock, lift cars or lift shafts.
- 2.2 This standard replaces 1-066 A2. The standard addresses written notice LU-WN-0860. This category 1 standard should be used in conjunction with part 1 of the supporting electrical guidance document G-073 which provides support for the majority of this standard.

3 Requirements

3.1 Schedule 1: Normal Lighting Illuminance

The illuminance levels in Schedule 1 are Maintained Average levels unless otherwise stated.

LOCATION	AVERAGE HORIZONTAL ILLUMINANCE (lux)	UNIFORMITY	MINIMUM COLOUR RENDERING (Ra)	NOTE
Gatelines	150		75	1
Ticket hall/Concourse	100	0.7	75	
Passageways/corridors	100	0.6	75	
Escalators	150	0.8	75	
Stairs/Internal Ramps	100	0.8	75	
Escalator Landings	150		75	2
Stair Landings	100		75	
Surface Platform – Open	50	0.4	65	
Surface Platform – Canopy	100	0.4	65	
Sub-Surface Platform – Platform Edge Lighting Zone	150	0.5	75	
Sub-Surface Platform	100	0.5	75	
Waiting Areas	100	0.4		
Station Exterior Walking Route	20	0.4		
Station Entrance	20		65	
Plant Rooms	150	0.4	85	3
SER's/IMR's	See 1-197			
Operational Areas – Secure Suite, Station and Other Control Rooms	350		85	4
Operational Areas – Mess Room	150	0.5	75	
Operational Areas - Stores	TBD		75	
Lift Car Interior	See 1-093			
Lift Pits and Shafts	See 1-093			
Lift Motor Rooms	See 1-093			
Escalator Machine Rooms	150	0.4	80	5
Escalator Inclines	150	0.4	80	5



LOCATION	AVERAGE HORIZONTAL ILLUMINANCE (lux)	UNIFORMITY	MINIMUM COLOUR RENDERING (Ra)	NOTE
Running Tunnels	10	0.6	65	
Crossover/Junction - Tunnels	20		65	
Platform Inverts	0		65	6
Intervention Points	10		65	7
Ventilation & Cable Shafts	20	0.4	65	8
Depots – Exterior Stabling Area	10	0.5		9
Depots – Designated uncovered Exterior Walkways (Including footpaths & overbridges)	10	0.5	25	
Depots – Designated covered Exterior Walkways	20	0.5		
Depots – Covered Stabling Areas	125	0.5		
Depots – Track within Depot (excluding Stabling Area)	10	0.5		
Depots – Roads	10	0.5		
Depots – Road Tunnels & Subways	50	0.5		
Depots – Swimming Pool Roads Underneath Train	150	0.5		
Depots – Swimming Pool Roads Walkways	200	0.5		
Depots – Standard Inspection Pit	125	0.7		10
Depots – Lifting Sheds	250	0.5		
Depots – Maintenance Sheds	200	0.5		
Depots – Cleaning Shed	125	0.5		
Depots – Loading Bay	150	0.5		
Depots – Stores: General & Flammable	150	0.5	85	
Depots – Stores: Open Compound	20	0.5		
Depots – Plant & Equipment Rooms	150	0.5	85	
Depots – Office	350	0.5	85	
Depots – Staff Accommodation	150	0.5	75	
Depots – Trip Cock Test	30	0.4		

Notes

1. Measurement taken at oyster card reader level.
2. This is the minimum value.
3. Includes CER's, substations, switchrooms, switchcupboards, pump rooms, fan rooms and transformer rooms.
4. Maximum 350lx measured on desk; 150lx on floor. Human factors assessment for any task lighting requirements.
5. Further information is held within LU Lift and escalator category 1 standard 1-092.
6. No lighting required if defined as confined space.
7. Requirement to be confirmed by SQE.
8. Figure stated where cat ladders and landings installed.
9. Figure stated with no trains stabled.
10. Illuminance measured in horizontal plane at rail height in centre of pit when train is present. Measurement at floor level with the same conditions is 50lx.