

Technical Submittal – Running Track Lighting

Project Name: Cornbrook
Project No. MC1096
Date: 14/04/2020
Technical Submittal No: MC1096-TSE027
Comment Period: 1 Week

Supplier: Light Distribution

Datasheets & Design are attached for the proposed luminaries to illuminate the running track on the roof. Please refer to Ameon drawing MC1096-63-15-E003 for locations

Documents :

LD Lighting Calculations

LD Keita Bollard specification sheet

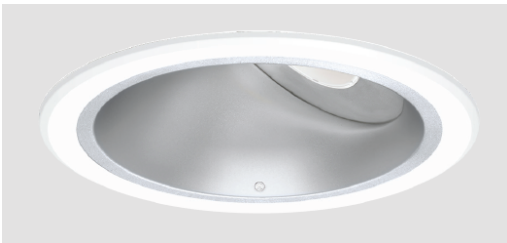
LD 93 Asymmettric Downlight specification sheet



Roof

Installation : Cornbrook - Mancunian Springs

Project number :
Customer : Ameen
Processed by : SH
Date : 28.01.2020



The following values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, whereby gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data.

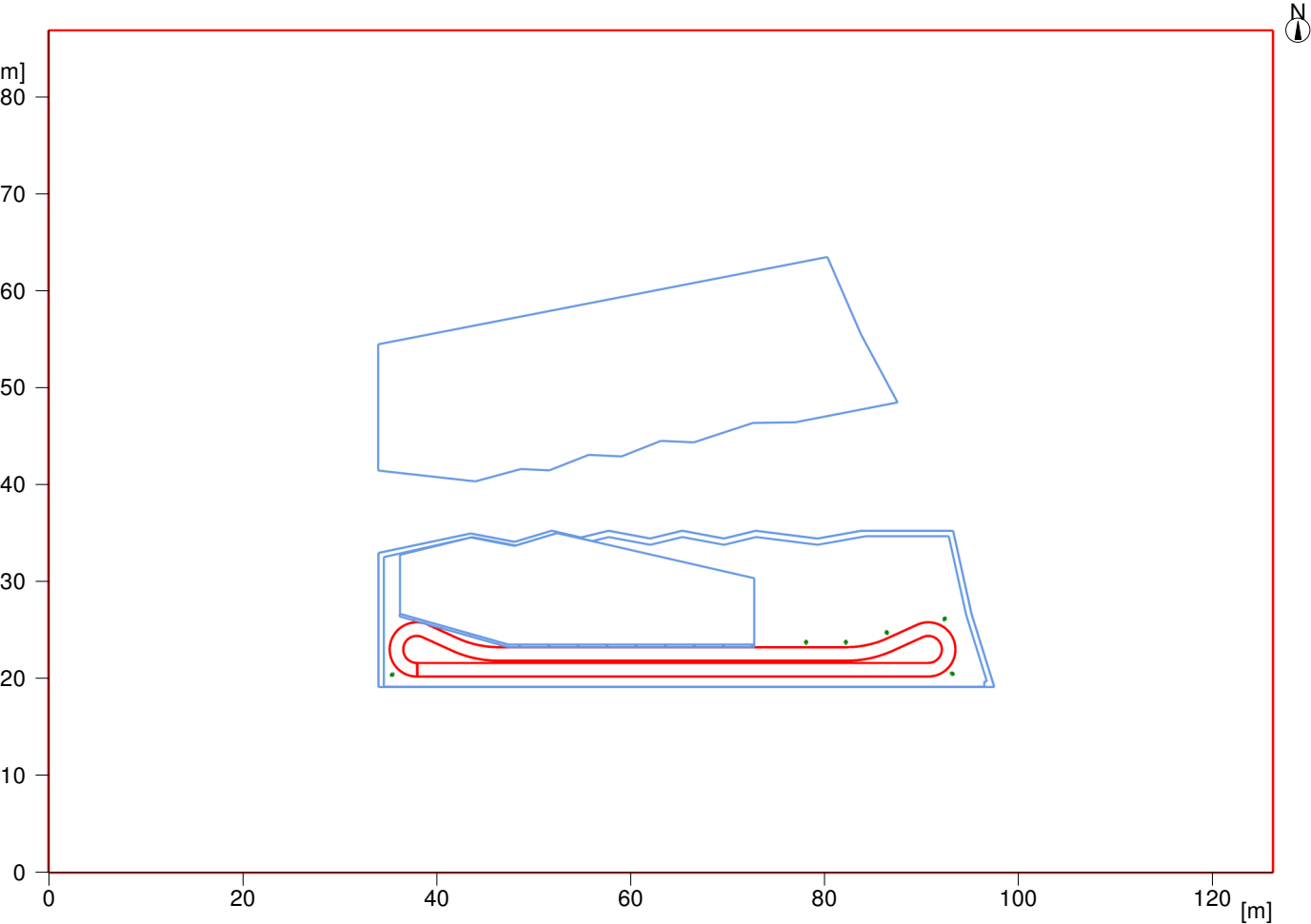
This exclusion of liability applies irrespective of the legal grounds for both damages and consequential damages suffered by users and third parties.

Object : Roof
Installation : Cornbrook - Mancunian Springs
Project number :
Date : 28.01.2020



2.1 Description, Roof

2.1.2 Floor plan



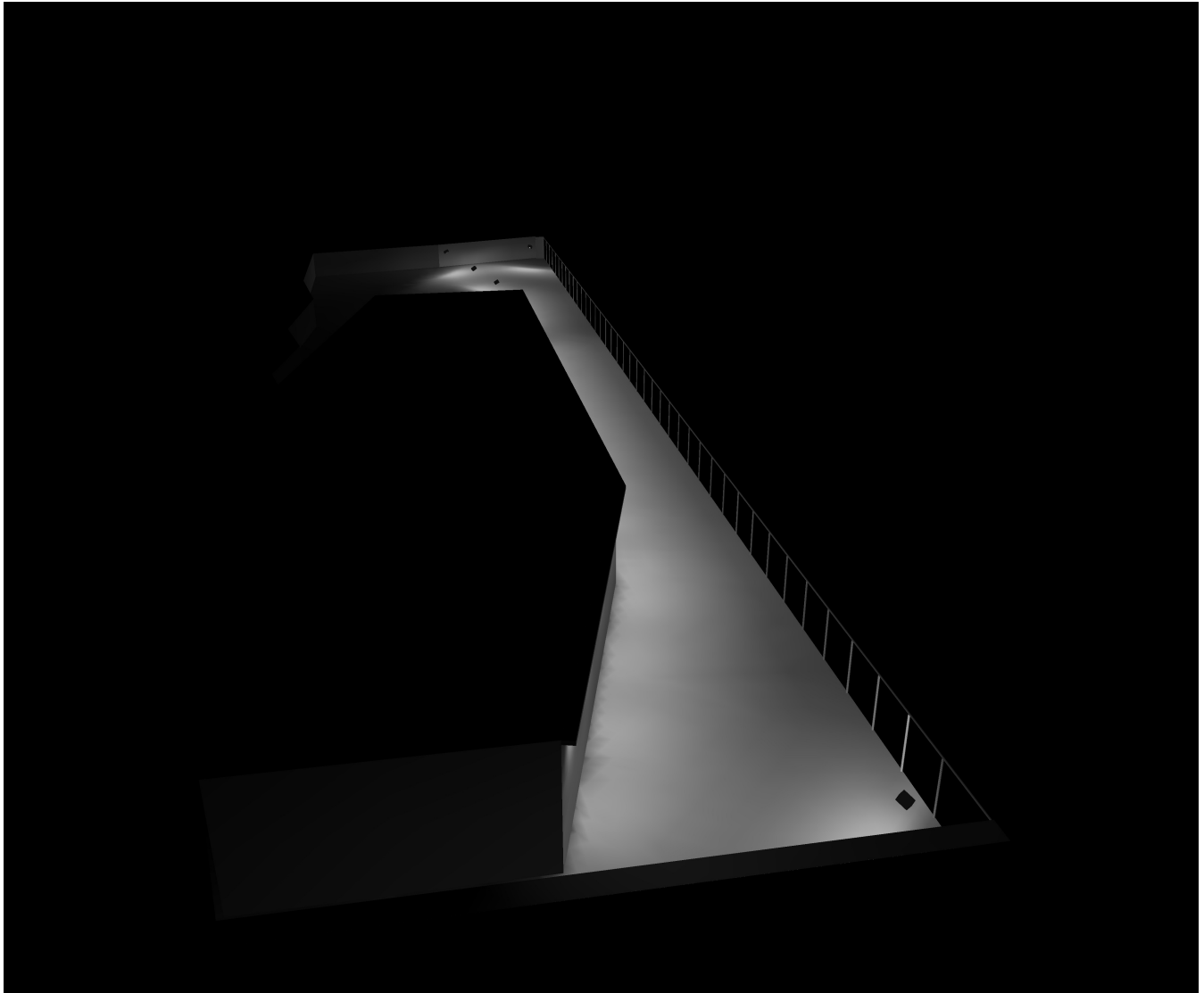
Object : Roof
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Roof

Calculation results, Roof

3D luminance, View 1



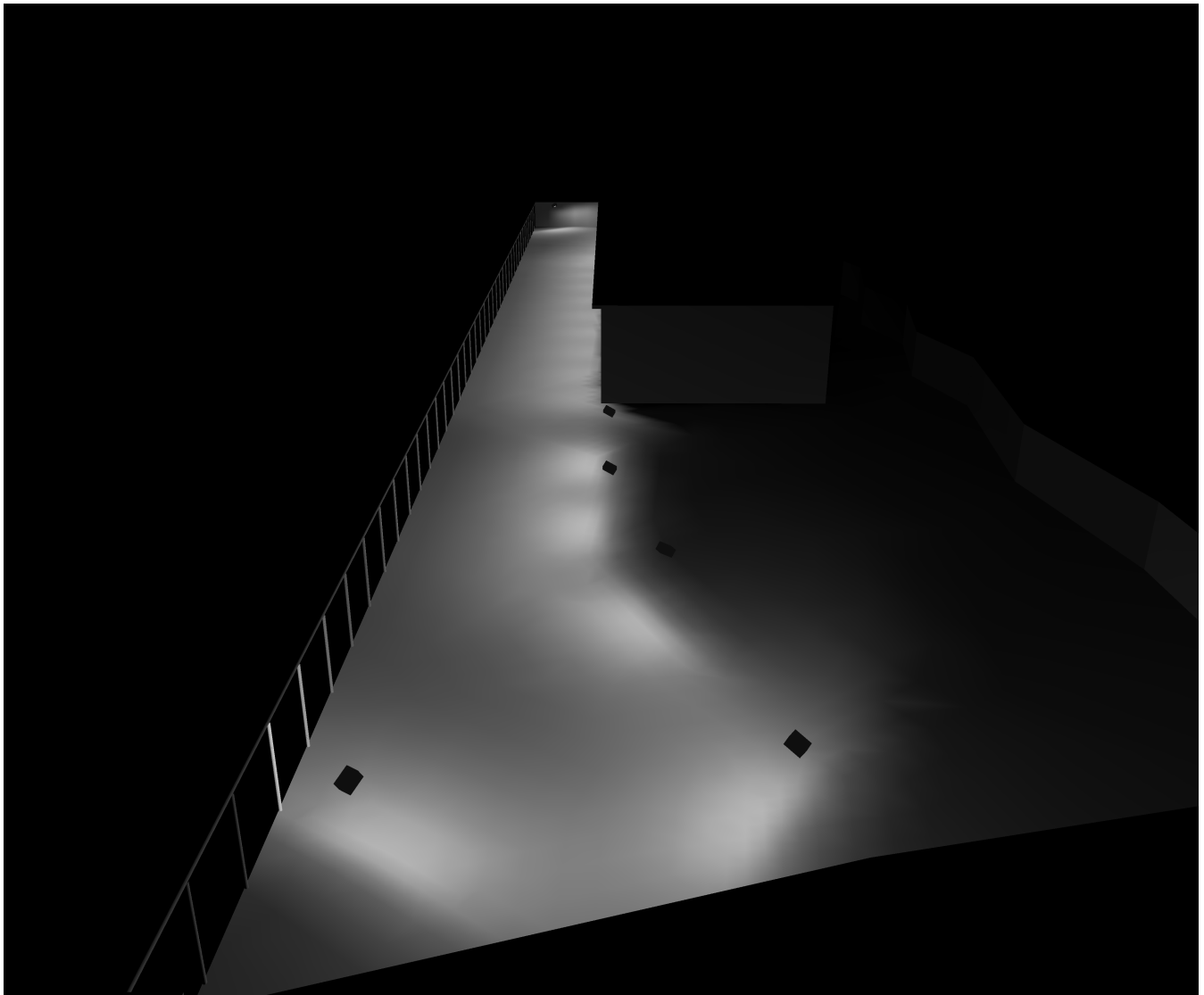
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Roof

Calculation results, Roof

3D luminance, View 1



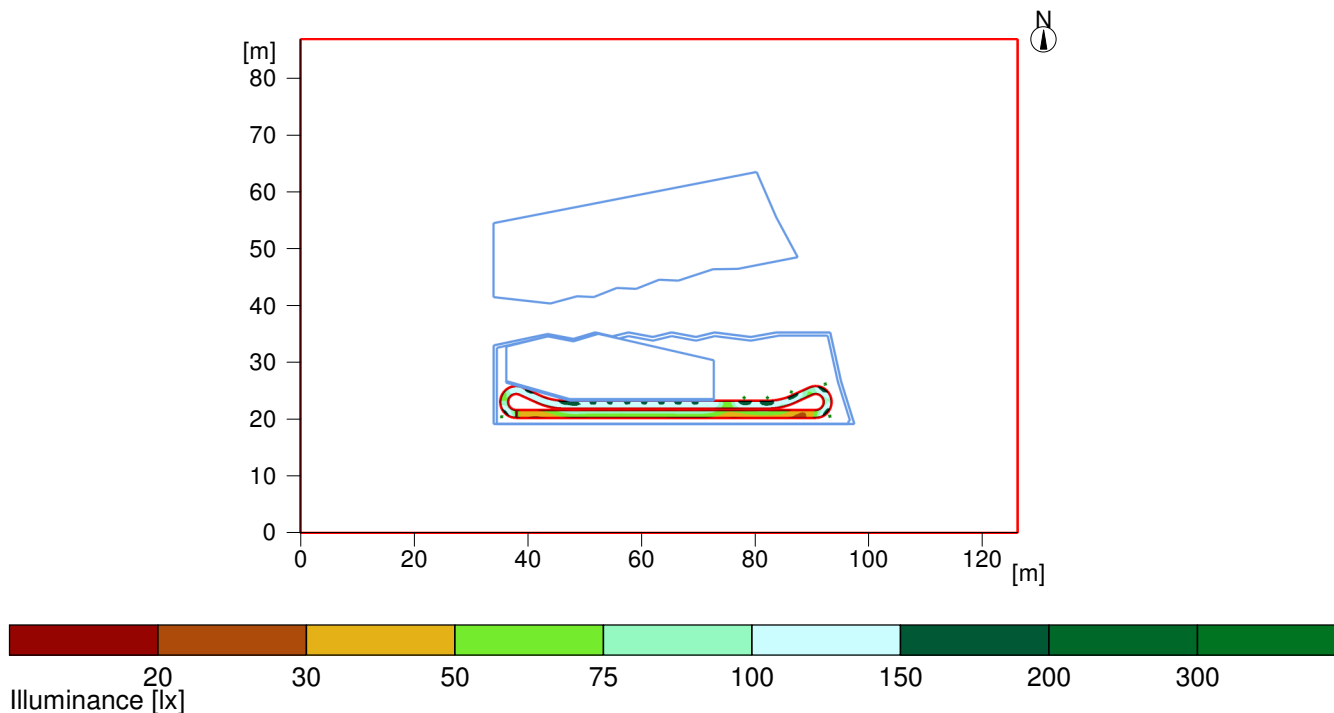
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2 Roof

2.2 Summary, Roof

2.2.1 Result overview, Measuring area 1



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	50.00 m
Maintenance factor	0.85
Total luminous flux of all lamps	41300 lm
Total power	504.2 W
Total power per area (10963.52 m ²)	0.05 W/m ²

Illuminance

Average illuminance	Em	81 lx
Minimum illuminance	Emin	24 lx
Maximum illuminance	Emax	189 lx
Uniformity Uo	Emin/Em	1:3.42 (0.29)
Diversity Ud	Emin/Emax	1:8.01 (0.12)

Type No. \ Make

15	13	LDL	
	Order No.	: LD93/3000/4/IP65	
	Luminaire name	: LD93 3000lm 4000K IP65	
	Equipment	: 1 x DLM Flex G1 27.8 W / 2000 lm	



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2 Roof

2.2 Summary, Roof

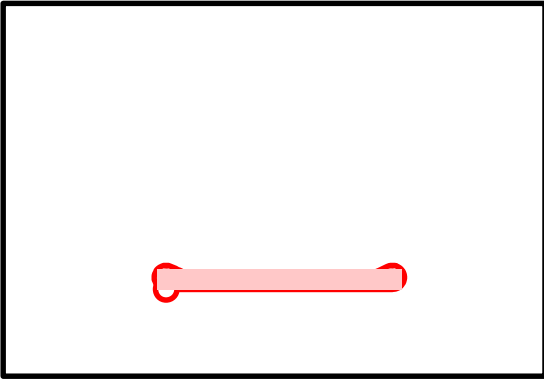
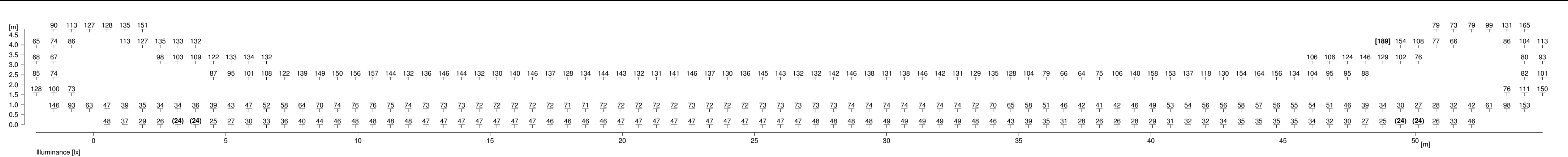
2.2.1 Result overview, Measuring area 1

19	6	Order No.	: KEI/LED/1
		Luminaire name	: Keita: Floodlight with pole (H=1000mm) - Neutral White
		Equipment	: 1 x LED / 20W 23.8 W / 2550 lm



2.3 Calculation results, Roof

2.3.3 Table, Measuring area 1 (E)



Height reference plane	Em	: 50.00 m
Average illuminance	Emin	: 81 lx
Minimum illuminance	Emin	: 24 lx
Maximum illuminance	Emin	: 189 lx
Uniformity Uo	Emin/Em	: 1 : 3.42 (0.29)
Diversity Ud	Emin/Emax	: 1 : 8.01 (0.12)

KEITA LED BOLLARD

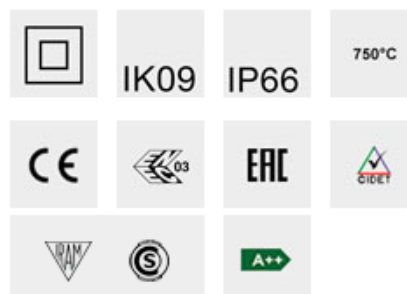


The Keita LED Pole lighting system consists of an extruded aluminium support, and an aluminium alloy fastening plate and cover. The optical assembly and the pole attachment system are made of aluminium alloy and subjected to a multi-step, pre-treatment process, in which the main phases are degreasing, fluorozirconation (a protective surface film) and sealing (with a nano-structured silane layer). The painting stage consists of a primer and a liquid acrylic paint, cured at 150 °C, with a high level of weather and UV ray resistance. 4 mm thick, transparent, sodium-calcium tempered glass closure, joined to the frame with silicone. The frame is secured to the optical assembly with two AISI 304 stainless steel, captive screws and an AISI 303 stainless steel hinged pin with a 50 Shore silicone gasket between them. The device can be adjusted vertically by +45°/-60° and 337° horizontally with a mechanical locking mechanism for precision aiming. The body and frame include slots for rainwater drainage. The product consists of a die-cast aluminium alloy base fitted with a PG 11, EPDM, double cable gland for pass-through wiring. Replaceable LEDs, and control gear, connected using quick-couplings and removed using clips.

1m Weight: 5.33kg, 2.5m Weight: 8.82kg.



Part No.	Watt	CCT	CRI	Lumens	Height	Finish
KEI/LED/1	24	4000	70	2550	1M	Grey
KEI/LED/2	24	3000	70	2470	1M	Grey
KEI/LED/3	24	4000	70	2360	2.5M	Grey
KEI/LED/4	24	3000	70	2280	2.5M	Grey



Light Distribution Ltd

LD93

LED DOWNLIGHTER



The LD93 range of led asymmetric downlighters incorporates Philips LED technology and are designed to meet the highest of specifications.

The incorporation of various lumen outputs and an IP attachment make the downlighter ideal for most commercial and industrial applications.

The satin etched reflector produces a pleasing appearance and the use of optimised thermal management technology results in an expected lifespan of 60,000 hours (L70/B10). The range incorporates four lumen outputs, two colour temperatures.

Part No.	Lumens	L (mm)	H (mm)	Ø (mm)
LD93/1100	1150	237	170	222
LD93/2000	1925	237	170	222
LD93/3000	2750	237	170	222
LD93/5000	3750	237	170	222

Options

For 3000k colour temp suffix /**83**

For 4000k colour temp suffix /**84**

For Dimmable suffix /**DIM**

For Self-contained Emergency suffix /**EMR**

For Monitor Self-test suffix /**MON**

For Dali Emergency suffix /**EMP**

Accessories



SG3 IP65 Clear Glass

ie. **LD93/1100/84/DIMM/MON/SG3**

LD93 1150 lumen, 4000k, Dimmable c/w Monitor Emergency and IP65 Attachment