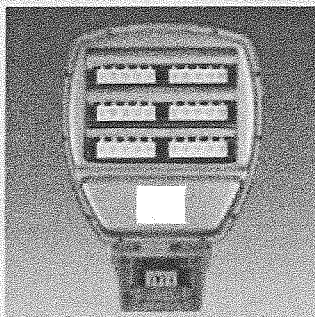
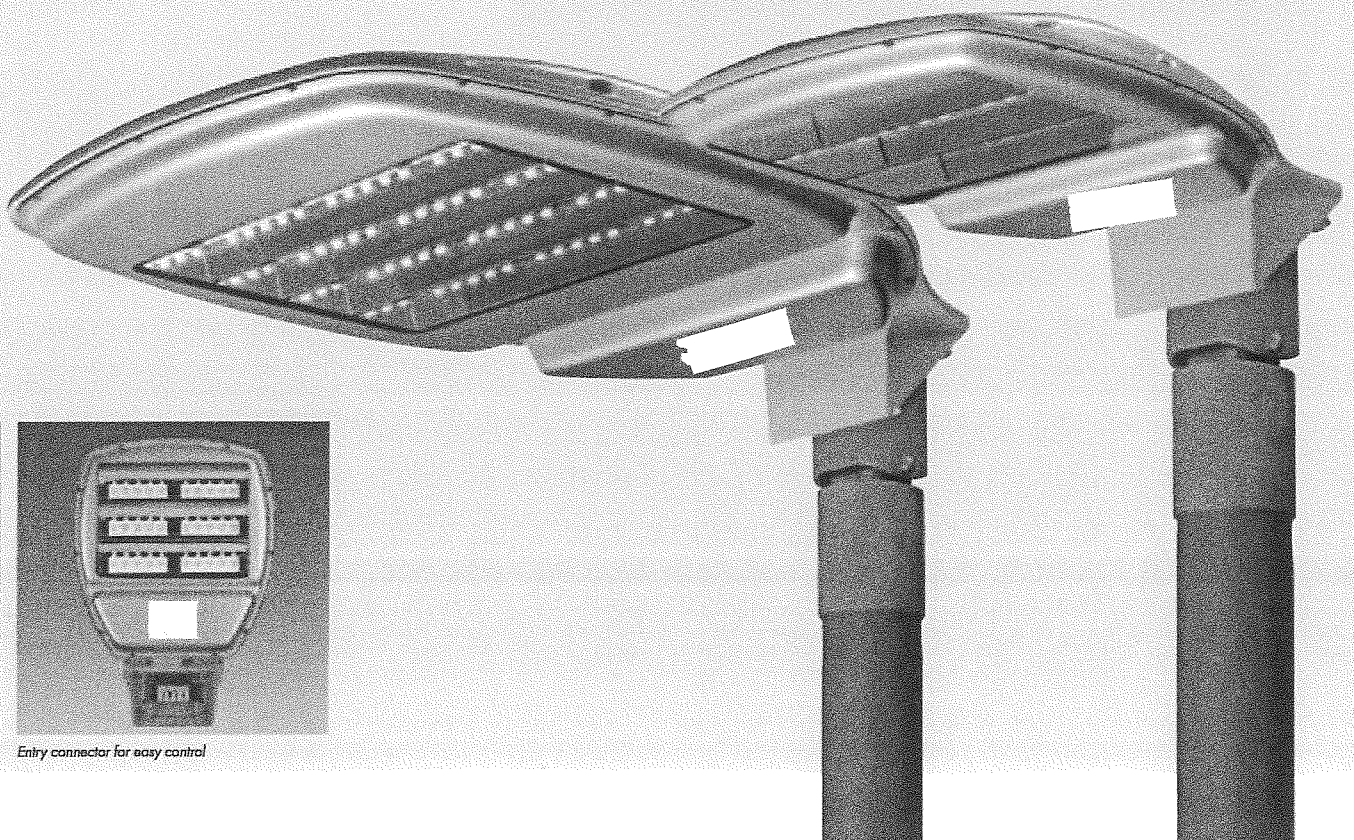


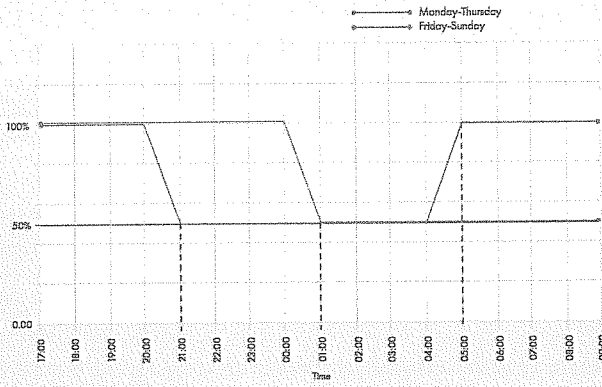
Highly efficient road lighting luminaire
incorporating the latest LED technology
in a timeless housing

- The heat sink and optic are protected to prevent gathering of dirt and dust and contoured to maximise airflow and minimise wind loading
- Optimised heat dissipation extends LED lifetime (>60,000 hrs, L70, 25°C Ta)
- Designed for use with high-efficiency LEDs in 49W (3800 lm) or 98W (7800 lm) configurations
- Post-top or side entry mounting, with adjustable +/- 15° tilting (Ø60mm or Ø76mm in 5° and 15° steps respectively)

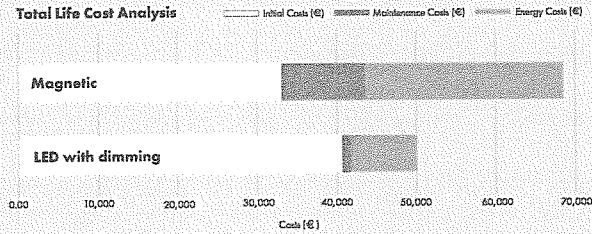


Entry connector for easy control

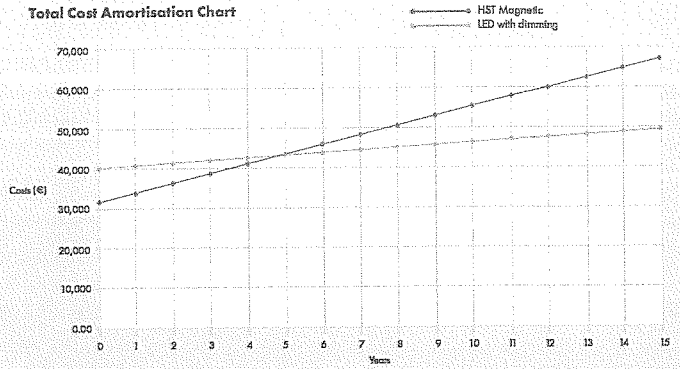
Energy efficiency



Total Life Cost Analysis



Total Cost Amortisation Chart



This example compares a 98W Indra to a 150W HST lantern which fulfils the same lighting requirements. Dimming is automatic (input is via a control line from the switching cabinet) and adjustable according to a pre-set time schedule. Power reduction is in two (bi-level) stepped increments at 50% and 100% of light output. As LEDs have a linear relationship between light levels and energy consumption, during the dim-down period power consumption is halved. Consequently, with a simple and accurate setting of the cabinet clock, Indra can precisely deliver light when required (sooner during a busy week morning or later during an extended late-night weekend), thus optimising energy usage.

The total life cost analysis clearly shows that the higher investment cost of LEDs is positively balanced by reduced, forecastable operation and maintenance costs.

In this refurbishment example, keeping the same lighting layout and moving to LED, improves the efficiency and comfort of the installation and pays back the investment after only 5 years vs HST.

Lamps

LED (4200k) 49-98W
up-to 79.51 luminaire Lm/W

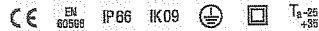
Materials/Finish

Body : powder coated die-cast aluminium. RAL9006
Bracket: plain die-cast aluminium
Enclosure: PMMA

Installation/Mounting

Mounting of the luminaire on Ø60mm or Ø76mm (to be specified at order) side entry or post top.
Variable tilting setting : Ø60mm - 15° to +15° in 5° steps and Ø76mm - 15° to +15° in 15° steps

Standards



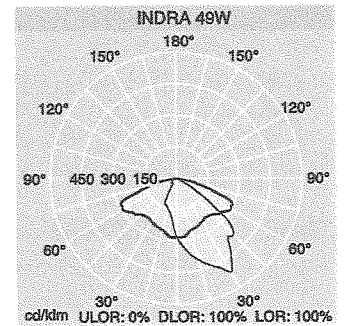
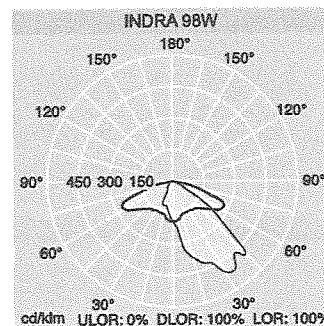
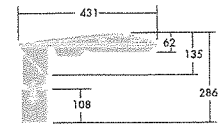
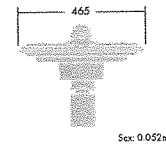
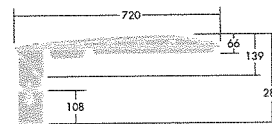
Specification

To specify state:
A road-lighting LED luminaire for lighting classes up to ME3.
All around slim surfaces for performance longevity though optimised heat dissipation.
The tilting of the lantern can be adjusted to optimise the light distribution for varying road geometries. Integrated dimming system. With photocell options.
As Thorn Indra

Ordering Guide

Description	Weight (kg)	SAP Code CL1	SAP Code CL2
INDRA 49W BPL MA60	4.6	96259900	96259899
INDRA 49W BPL MA76	4.6	96259901	96260461
INDRA 49W PN MA60	4.8	96259902	-
INDRA 49W PN MA76	4.8	96259903	-
INDRA 98W BPL MA60	7.9	96259905	96259904
INDRA 98W BPL MA76	7.9	96259906	96260462
INDRA 98W PN MA60	8.1	96259907	-
INDRA 98W PN MA76	8.1	96259908	-

W - Watts, BPL - Bi power line, PN - Integrate photocell nema socket, MA - Mounting adaptor, CL1 - Class I electrical, CL2 - Class II electrical

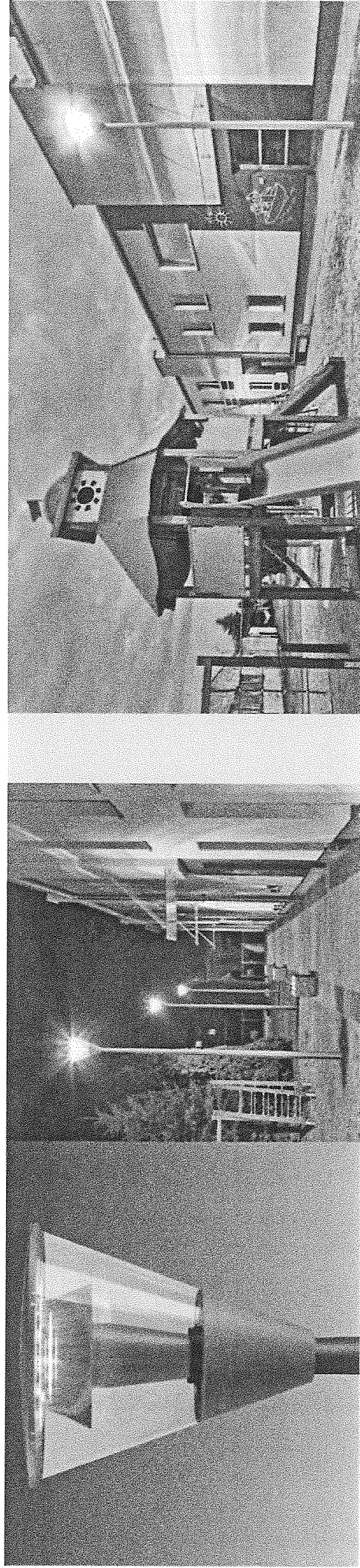


Nella LED

NEW

Standards
EN 1881, EN 125, IP66

Lamps
100W



Glare free and efficient decorative post top LED lantern

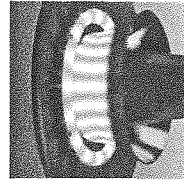
- New anti-glare optic for optimal comfort
- Great light efficiency (> 60lm/W) to optimise energy savings
- Quick payback for cost-focused projects
- Minimalist design for easy integration into the landscape

Applications

- Car Parks
- Building surroundings
- Private gardens
- Residential areas

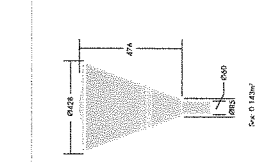
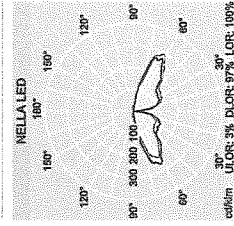
Lamp Information

- Life time: 50,000 Hours @L80, Ta 25°C
- 2315lm (37W)
- 63lm/W
- Colour Temperature 4000K
- CRI: 70



U-r-effect

Overview



Materials/Finish

Base and canopy: die-cast aluminum powder-coated satin silver grey (RAL 9006)
Diffuser: UV stabilised polycarbonate
Reflector: metallised polycarbonate
Central cable cover: grey polycarbonate

Installation/Mounting

Suitable for posttop mounting on a 60mm diameter spigot, length 65mm. Recommended height: 3 to 4m. Access to optical bloc via a screw under the diffuser.

Specification

To specify state:
simple design post top IP66 LED lantern with anti-glare optic. Die-cast aluminium base and canopy, powder-coated grey (RAL 9006).
As From Nella LED

Ordering Guide

Supplied complete with LEDs

Description	Wt (kg)	SAP Code
NELLA LED 2 37W 4000K	4.8	9252263
NELLA-NELLA-ENCOUT 60W/60 L65		92526621