

# Intral

Integrated Lighting Trunking System, designed for quick installation and energy efficiency



140+  
LL / CW



IK07

IP40

IP54

IP65



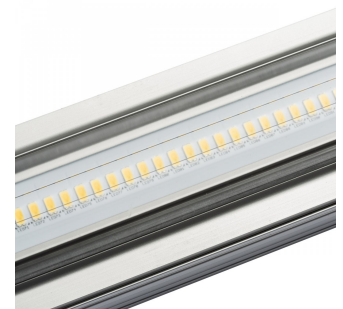
Intral - Lens Luminaire



Intral - Diffuser Luminaire



Intral - Lens Luminaire  
Narrow



Intral - Diffuser Luminaire  
Narrow

## Overview

Intral is a fully integrated lighting trunking system with extruded aluminium profile, highly efficient luminaires, pre-wired internal cables and plug-in connectors. Flexible luminaire positioning and the ability to fine-tune light output result in optimum design solutions for most Industrial projects.

There is no need to fit luminaires into the trunking on site as each section of the Intral system is delivered pre-assembled and labelled with project specific codes for a quick and easy installation. Minimal packaging ensures a low environmental impact and reduced time in waste removal.

Intral uses high quality components for long life and maximum energy efficiency. Aluminium profiles ensure rigid light-lines and produce lower internal temperatures than steel systems. This form of thermal management lengthens the life expectancy of wiring, drivers and other components therefore minimising failures caused by overheating.

## Optics

- Lens or diffuser optics
- Wide, medium and narrow (rack) distribution patterns
- Diffuser version - PMMA material as standard, polycarbonate on request
- Lens version - PMMA
- Long life 100,000 hours to L80B50
- 4000K Ra80 LEDs

# Body

- Quick and simple to install, typically half the time of other similar systems
- Delivered pre-assembled and labelled, ready to install
- High efficacy luminaires, up to 180 ll/cw
- Robust, high quality construction with long life components
- Allows flexibility for future use
- Extruded aluminium trunking profile
- 60mm wide trunking sections, supplied in lengths to suit project
- Pre-wired 7 core internal conductors with plug and sockets as standard
- 10 or 13 core versions available
- Optional trunking profile with additional cable channels on top for other services
- Integrated standalone lighting controls available to control groups of luminaires
- Presence and daylight sensing for maximum energy savings
- Detection zones to cover narrow areas (racking aisles) up to 15m high and open areas up to 6m
- Alternative detector for open areas over 6m height
- IP40 as standard when assembled
- IP54 and IP65 options available
- Suitable for ambient temperatures -25 to +35°C (integral emergency +5 to +25°C)
- High temperature to +55°C on request

## Order codes

### Design Files - Diffuser

Description	Fixed Output	LL/CW	L80 B50
Diffuser, Wide, 8016 lumen, 53W	LTDH1514KWO	151	>100k
Diffuser, Wide, 11850 lumen, 79W	LTDH1524KWO	150	>100k
Diffuser, Wide, 17000 lumen, 117W	LTDH1534KWO	145	>100k
Diffuser, Medium, 8006 lumen, 56W	LTDH1514KM	143	>100k
Diffuser, Medium, 10000 lumen, 73W	LTDH1524KM	137	>100k
Diffuser, Medium, 17250 lumen, 115W	LTDH1534KM	150	>100k
Diffuser, Narrow, 8016 lumen, 53W	LTDH1514KN	151	>100k
Diffuser, Narrow, 10211 lumen, 71W	LTDH1524KN	143	>100k
Diffuser, Narrow, 17000 lumen, 112W	LTDH1534KN	151	>100k

Intral is a project specific system, the codes shown are to assist with lighting design. Please contact Whitecroft for project design and pricing support.

Design Files - Lens

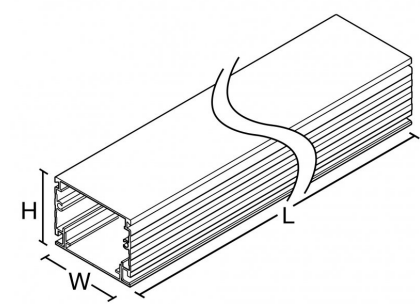
Description	Fixed Output	LL/CW	L80 B50
Lens, Wide, 8250 lumen, 47W	LTLH1514KW	175	>100k
Lens, Wide, 14008 lumen, 88W	LTLH1524KW	159	>100k
Lens, Medium, 8250 lumen, 47W	LTLH1514KM	175	>100k
Lens, Medium, 14008 lumen, 88W	LTLH1524KM	159	>100k
Lens, Narrow, 8250 lumen, 47W	LTLH1514KN	175	>100k
Lens, Narrow, 14008 lumen, 88W	LTLH1524KN	159	>100k

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LED Performance

Colour Temp	RA (CRI)	Life expectancy	Colour consistency
4000K	Ra>80	L80(100,000hrs)	MacAdam 3 SDCM

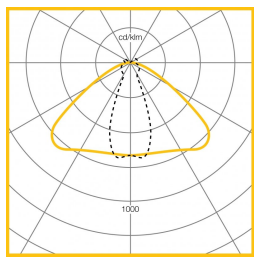
Dimensions



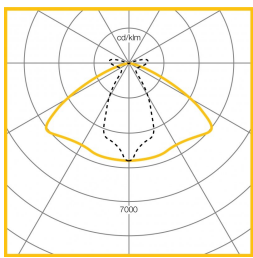
VERSION	L	W	H	KG	KG(EM)
per 1.53	1530	60	61.3	5.9	6.9
Power supply	150	60	55	0.5	-

Intral is a project based solution, supplied fully assembled in an optimum length of 4.59m. Weights shown above are the maximum for the complete system, per 1.53m. Exact details may change subject to project requirements.

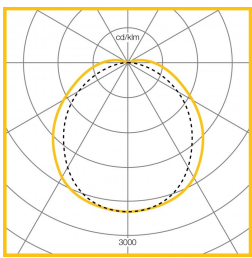
# Photometric Performance



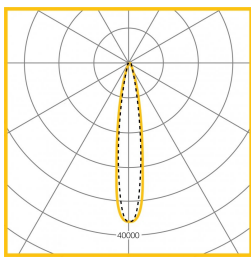
Intral Diffuser  
Luminaire -  
Narrow



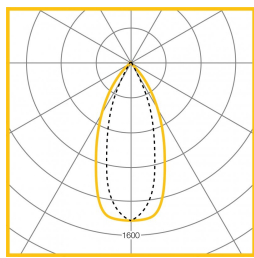
Intral Diffuser  
Luminaire -  
Medium



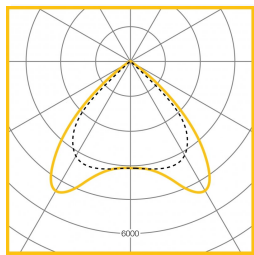
Intral Diffuser  
Luminaire - Wide



Intral Lens  
Luminaire -  
Narrow

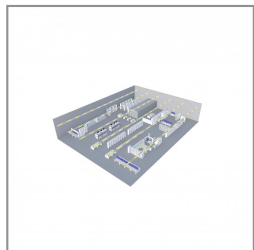
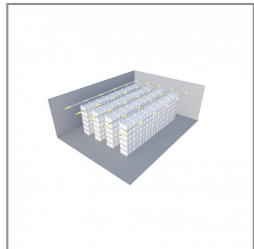
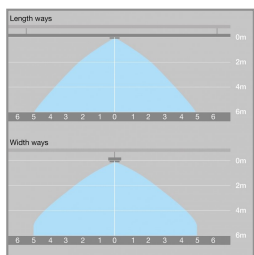


Intral Lens  
Luminaire -  
Medium

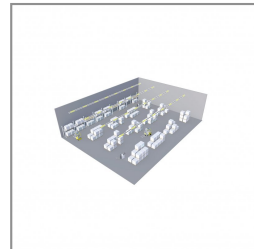
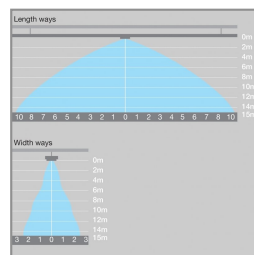


Intral Lens  
Luminaire - Wide

# Lighting Controls



Detection Zone	Open Area
Warehouse High Racking	11,000 lm, Narrow Beam Lens
Illuminance	200 Lux Horizontal
Spacing	6.12m
Maintenance	0.8
Reflectance	50, 30, 10%
Ceiling Height	13m
Working plane	0m
Suspension	1m
UGR	21
Uniformity	0.56
Width	2.4m
Manufacturing Open Area	14,000 lm, Wide Beam Lens
Illuminance	500 Lux
Spacing	5.2m x 3.06m (in length)
Maintenance	0.8
Reflectance	50, 30, 10%
Ceiling Height	7m
Working plane	1m
Suspension	1m
UGR	19
Uniformity	0.67



Detection Zone	Narrow Area
Warehouse Open Area	11,250 lm, Medium Beam Lens
Illuminance	300 Lux
Spacing	6.5m x 4.59m (in length)
Maintenance	0.8
Reflectance	50, 30, 10%
Ceiling Height	10m
Working plane	0m
Suspension	1m
UGR	19
Uniformity	0.67

## To Specify

Fully integrated lighting trunking system with extruded aluminium profile and highly efficient luminaires with efficacy up to 180 ll/cw. Pre-wired 7, 10 or 13 core 2.5mm<sup>2</sup> cables and plug-in connectors, enabling up to 3 live circuits, emergency central battery, emergency test and central lighting control. Robust, high quality components to ensure a long life and maximum performance. Suitable for use in ambient temperatures from -25°C up to 35°C as standard and options up to 55°C. Factory assembled system delivered ready to install, with minimal packaging, for a quick and easy installation – as Whitecroft Lighting INTRAL.

## Application images

