

Whitecroft
lighting

UK Head Office

Whitecroft Lighting Ltd
Burlington Street
Ashton-Under-Lyne
Lancashire OL7 0AX

T +44 (0)161 330 6811
F +44 (0)161 331 5855
email@whitecroflight.com

London Customer Centre

Whitecroft Lighting Ltd
102-108 Clerkenwell Road
London
EC1M 5SA

T +44 (0)161 330 6811
F +44 (0)161 331 5855

Rep. Ireland Office

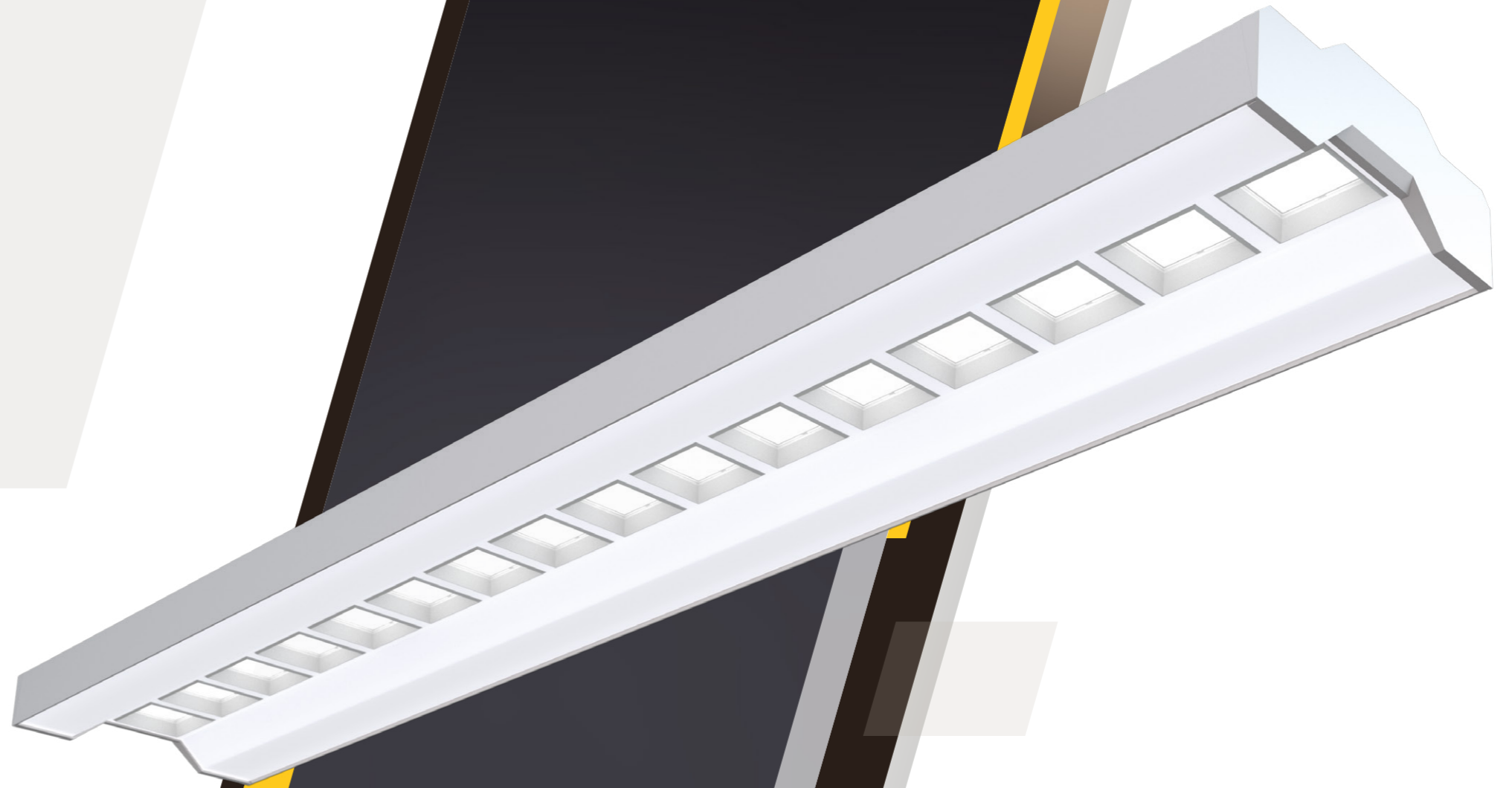
Ireland Office
Fagerhult Ltd
F1 Calmount Park
Ballymount, Dublin 12
Ireland

T +353 (0)1 426 0200
F +353 (0)1 429 9606
info@fagerhult.ie
www.fagerhult.ie

Middle East Office

Fagerhult Middle East
P.O. Box 126287
Dubai
United Arab Emirates

T +971 (0)4 3297120
F +971 (0)4 3297130
info@fagerhult.ae
www.fagerhult.ae



Whitecroft
lighting

whitecroflighting.com

Lance
Brilliant balance



Lance

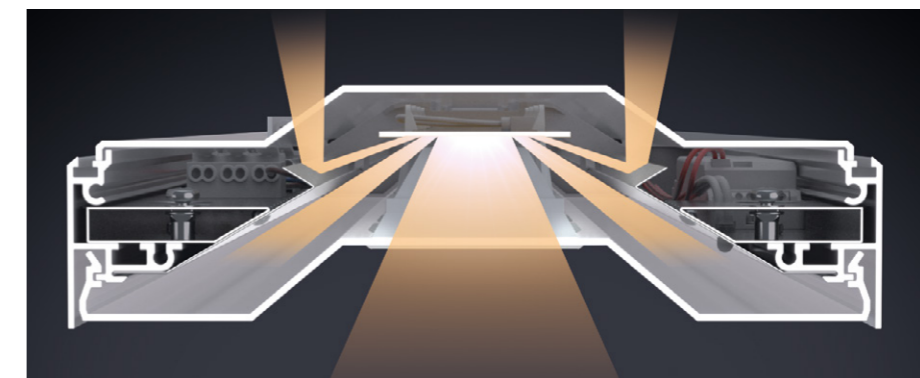
Cutting edge in every sense and perfect in any workspace, large or small, commercial or educational. Its unique tri-optic LED technology delivers excellent efficiency and outstanding glare compliance, while its distinctive lines can inspire the most visually pleasing interior designs. A brilliant balance of function and form.

Creating visual interest

Whether used as a single luminaire, or continuously mounted to create seamless lines of light, Lance offers the flexibility to be used in a wide variety of applications. The unique form factor, freed from the restraints of linear lamp technology incorporates three separate optic technologies to deliver visual interest, contrast and comfort.

Unique tri-optic technology

The combination of individually recessed pods, front face diffusers and inbuilt intermediate brightness zone ensures excellent glare control and maximum comfort. The optimised lighting distribution gives outstanding cylindrical illuminance and enhances both facial recognition and even room surface illumination, creating a more effective working environment.

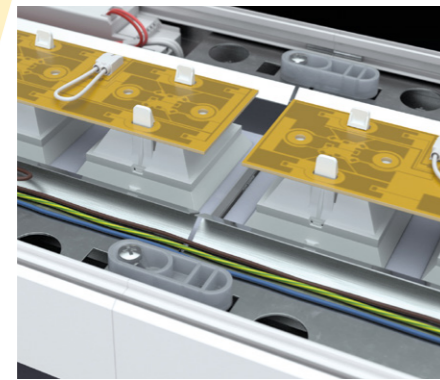
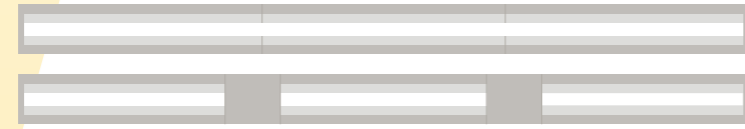


Tri-optic technology

Body

Continuous lines of light

With three body lengths that can be utilised with infills or alternatively without to create seamless continuous lines of light in any length to suit the application.



Body and through wiring

Lance's slim extruded aluminium body, in textured silver or white, is light and easy to handle. The body incorporates hidden twin repositionable suspension points to increase flexibility during installation. The through-wiring feature, available as standard allows power to be taken through the Lance body, minimising installation time and ceiling clutter.

Controls

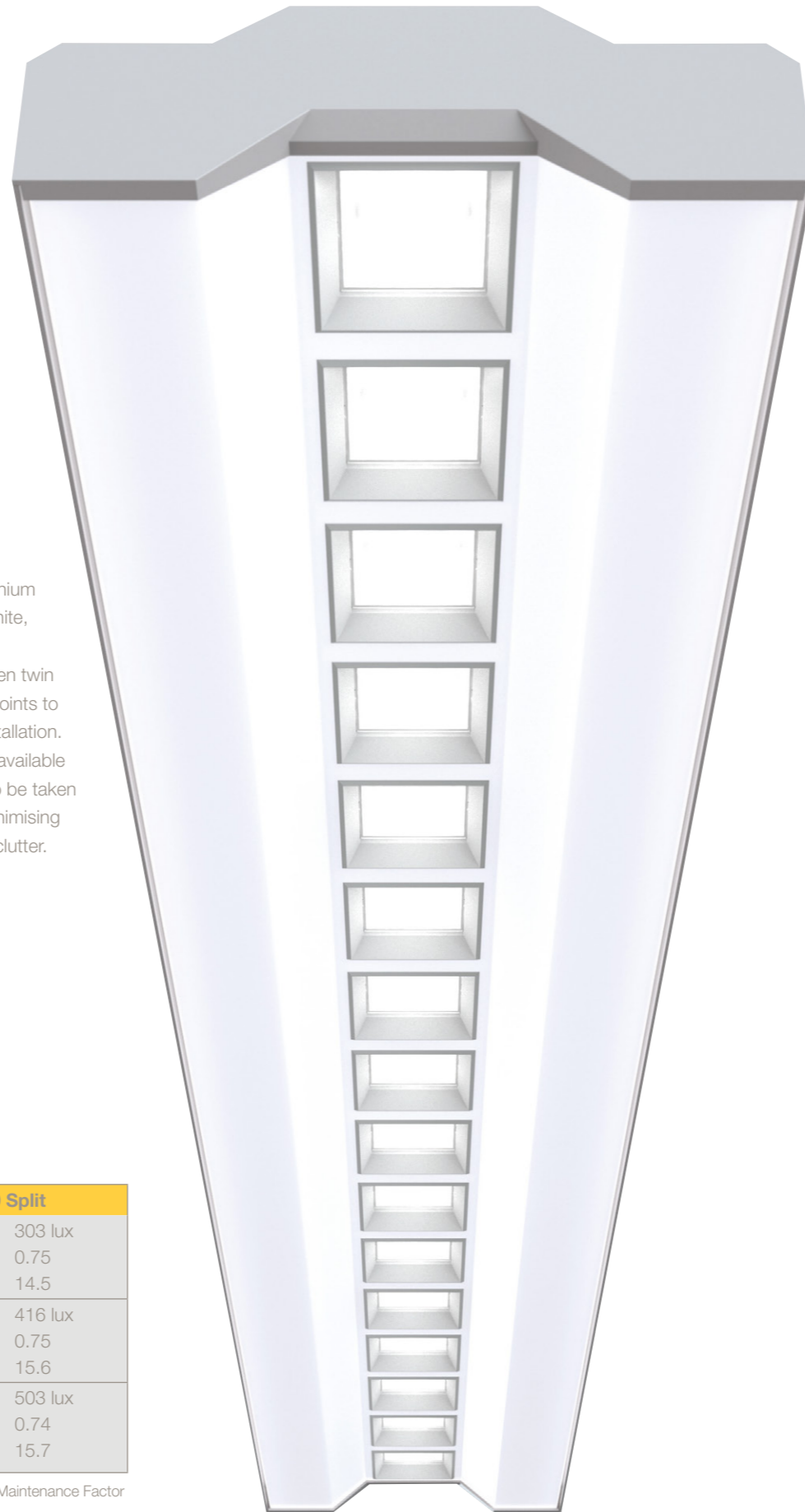
Lighting controls

The two optional Command PIR detectors with absence/presence detection and daylight sensing is integrated into Lance's optic and works to further reduce energy consumption.

Performance in Application

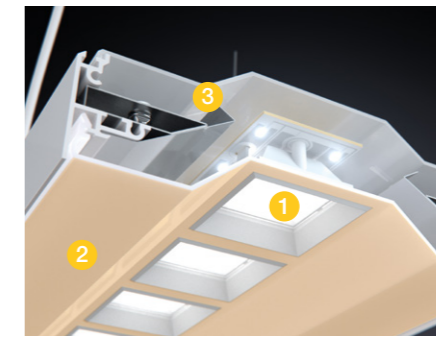
Lux Level	Luminaire	90/10 Split		70/30 Split	
300 lux office	1500mm long Low output	E_{av} 332 lux	E_m 303 lux	U_o 0.74	U_o 0.75
		UGR 16.7	UGR 14.5		
400 lux office	1500mm long High output	E_{av} 442 lux	E_m 416 lux	U_o 0.74	U_o 0.75
		UGR 17.7	UGR 15.6		
500 lux office	1800mm long High output	E_{av} 540 lux	E_m 503 lux	U_o 0.74	U_o 0.74
		UGR 17.7	UGR 15.7		

3.0m Centres 2.7m Mounting Height 70/50/20 Reflectance 17m x 17.5m Room Size 0.8 Maintenance Factor
 E_{av} – Average Illuminance
 U_o – Uniformity
 UGR – Unified Glare Rating



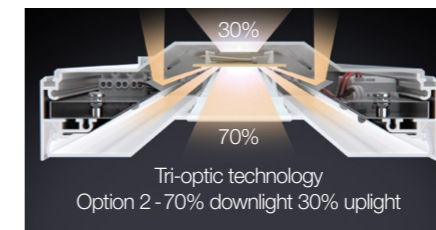
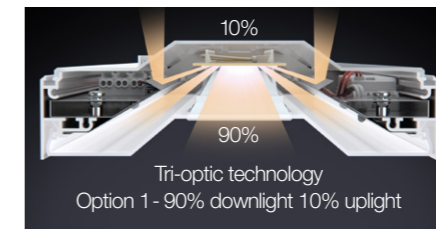
Optics

The primary objective in creating a comfortable lighting scheme is to avoid sudden changes in brightness. By illuminating the area surrounding the light source, the differential between object and background is reduced, creating visual interest and a more comfortable field of view.



Lighting distributions

The choice of two integrated lighting distributions allow for lighting solutions that create the perfect level of illumination and overall atmosphere.



Tri-optic technology

Lance incorporates three separate optic technologies to deliver visual interest and comfort.

1. Individual pods, recessed to shield the surface at 65° of elevation and above, deliver 80% of the luminaire lumens.
2. The full face outer optic acts as an intermediate brightness zone and minimises contrast between the luminaire and ceiling plane, creating a contrast ratio of 8:1 between the inner and outer optic.
3. The internal light guide redirects downlight to deliver 10% uplight without the need for an additional light engine mounted on the top surface of the luminaire.

LED light engine

Lance employs the latest high efficiency LED light engine, delivering over 100 lm/cw. Through innovative design, the central pod is densely packed with LEDs to increase lumen output and maximise performance. In areas illuminating the outer diffuser, the light engine is sparsely populated with LEDs delivering just 10% of the luminaire lumen output in the outer optic.



Lance

Standalone or continuous suspended solution



Optics

- **Low Output**
 - 1200mm, 2800 lumens (24W)
 - 1500mm, 3500 lumens (29W)
 - 1800mm, 4200 lumens (35W)
- **High Output**
 - 1200mm, 3800 lumens (32W)
 - 1500mm, 4750 lumens (40W)
 - 1800mm, 5700 lumens (48W)
- Tri-optic technology with full face polycarbonate front diffuser and centrally located recessed pod
- Luminaires can be connected continually without infills for a seamless aesthetic
- LED chips are densely distributed within the central pod to maximise lumen output
- LED chips are spaced further apart within the polycarbonate diffuser for excellent uniformity, visual comfort and surface luminance
- Two light distribution ratios
 - 30% uplight and 70% downlight
 - 10% uplight and 90% downlight
- 4000K 'cool' white LEDs

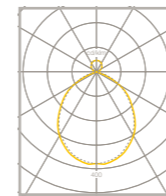
Body

- Slim extruded aluminium body finished in textured silver or white
- IP40
- For standalone or continuous installation (with or without infills)
- Through wiring as standard on continuous luminaires
- Mounting using architectural wire suspension kit (1.5m or 3m drop)
- Optional integral Command 4 detector mounted in the last cell at the end of the product for standalone luminaires (not available on continuous luminaires)
- Optional integral COMD1 detector mounted in the last cell at the end of the product
- Die cast aluminium end caps (separate order)
- Infills available in increments of 300mm up to 1500mm
- Choice of 3hr Emergency or COMEPS emergency options (COMEPS can be wired as Easytest if required)
- Note: Integral detectors require commissioning. Please contact Whitecroft Technical Desk

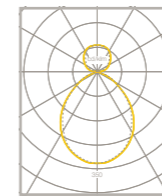


Uplighting feature

Photometric Performance



High Output 90/10
4750 lumens, 40W
• LOR = 100%
• SHR MAX = 1.54



Low Output 70/30
2800 lumens, 23W
• LOR = 100%
• SHR MAX = 1.49

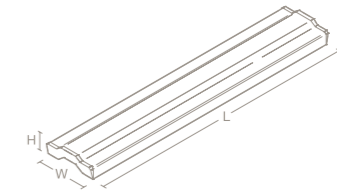
Utilisation Factors UF(F)

Room Reflectance		Room Index			
C	W	F	1.00	3.00	5.00
0.70	0.50	0.20	0.70	0.95	1.01

Utilisation Factors UF(F)

Room Reflectance		Room Index			
C	W	F	1.00	3.00	5.00
0.70	0.50	0.20	0.65	0.89	0.95

Dimensions



Version	L	W	H	KG	KG _{sq}
1200mm Continuous	1206	232	71	4.2	4.6
1500mm Continuous	1507	232	71	5.4	5.8
1800mm Continuous	1807	232	71	6.2	6.6
End Caps	14	232	71	0.15	0.15

Order Codes

Light output ratio 10% up 90% down

Low output	DALI	3hr Emergency
1200mm, 2800 lumens (24W)	LN12Y91W	LN12Y91WEM
1500mm, 3500 lumens (29W)	LN15Y91W	LN15Y91WEM
1800mm, 4200 lumens (35W)	LN18Y91W	LN18Y91WEM

High output	DALI	3hr Emergency
1200mm, 3800 lumens (32W)	LN12Y92W	LN12Y92WEM
1500mm, 4750 lumens (40W)	LN15Y92W	LN15Y92WEM
1800mm, 5700 lumens (48W)	LN18Y92W	LN18Y92WEM

Accessories

Suspension kit, up to 1.5m drop	LNSUSKIT1
Suspension kit, up to 3m drop	LNSUSKIT3
Continuous mount kit	LNCMOKIT
End cap kit, white	LNECW
300mm infill, white	LN3INFW
600mm infill, white	LN6INFW
900mm infill, white	LN9INFW
1200mm infill, white	LN12INFW
1500mm infill, white	LN15INFW

Options

SILVER FINISH	Replace W with S	i.e. LN12Y91S
70/30 LIGHT DISTRIBUTION	Replace 9 with 7	i.e. LN12Y71W
COMEPS	Add suffix EP	i.e. LN12Y91WEP
COMD1	Add Q1 before Y	i.e. LN15Q1Y91W
COM4 (Standalone only)	Add Q4 before Y	i.e. LN15Q4Y91W

LED Performance

Colour Temp	Ra (CRI)	Life Expectancy	Colour Consistency
4000K	≥ 80	L ₈₀ (50,000hrs)	MacAdam 3 SDCM

To Specify

Tri-optic suspended architectural LED luminaire with direct: indirect lighting ratio of 70:30 or 90:10, incorporating intermediate brightness zone to diffuse light and graduate brightness with full face polycarbonate diffuser and recessed central pod for maximum glare control and performance. Luminaires can be connected continually with or without infills for a seamless aesthetic – as Whitecroft Lighting LANCE.