


HOLOPHANE[®]

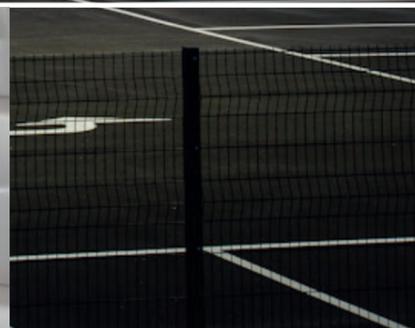
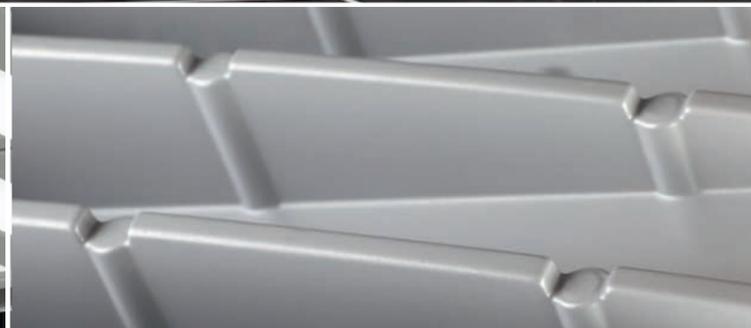


FACTOR[™]
SMALL



factor[™] small

FACTORTM SMALL



Optical Performance
Heat Management
Long System Life
Reduced Maintenance



FACTORTM Small delivers a variety of efficient lumen per watt packages with excellent optical performance. With its precision engineered optics and sleek body design - perfect for dissipating heat away from the LEDs and extending the luminaire life, FACTOR Small gives the complete cost saving solution for street lighting environments. With a range of delivered lumen packages equivalent from 35W to 150W ceramic metal halide lamps, FACTOR Small delivers efficient sustainable lighting solutions that have the flexibility to meet today's and tomorrow's lighting requirements.

FACTOR Small's design ensures cool operation that keeps it running for the long haul.

optics / light source

- > Lumen package of between 2,000 - 25,000 lumens
- > Three lighting distribution options

applications

- > S-Class, ME-Class, Pedestrian Areas, Residential Areas and Car Parks

TM66 CEAM-Make rating

Preliminary Rating: 2.3 (Definite/substantial progress to circularity)

approvals

- Complies with EN60598
- CE
- IP65 light engines
- TA: Rated for -40°C to 40°C

For further information please visit the Holophane website www.holophane.co.uk



Typical Luminaire Performance

Configuration	Delivered Lumens	Power Consumption	Drive Current	Rated Life of LED Module (L70B50 @Tq 15°C)*
FACTOR Small				
FTS.2.LA02X	c. 2000	17W	525mA	100,000+ hrs
FTS.2.LA03X	c. 3000	23W	700mA	100,000+ hrs
FTS.3.LA05X	c. 5000	35W	525mA	100,000+ hrs
FTS.2.LA06X	c. 6000	47W	700mA	100,000+ hrs
FTS.3.LA09X	c. 9000	66W	1050mA	100,000+ hrs
FTS.3.LA10X	c. 10,000	78W	1225mA	100,000+ hrs
FTS.2.LA07X	c. 7000	52W	525mA	100,000+ hrs
FTS.2.LA084	c. 8000	70W	700mA	100,000+ hrs
FTS.3.LA11X	c. 11000	82W	850mA	100,000+ hrs
FTS.2.LA12X	c. 12000	100W	1050mA	100,000+ hrs

Note: Data is correct at time of print.

* For other life metric data in line with IEC PAS62722-2-1 and 62717 contact your Holophane Representative for details.



Delivers a variety of lumen packages



Tool less trigger latch entry



10 LED Board – LA024 & LA034 versions



External fins to dissipate heat

specification

The 'finned' luminaire body, designed to dissipate heat, is manufactured from high pressure die cast aluminium that conforms to EN1706 AC-46500. A die cast aluminium door with tool less trigger latch allows access to the gear compartment concealing the IP65 control gear and connectors. The IP65 LED optical modules, with individual lenses, are mounted directly to the cast aluminium housing and wired in series. A thermal transfer interface is sandwiched between the LED module(s) and high grade aluminium housing to transfer heat away from the LEDs and dissipate through the 'finned' housing for cooling. FACTOR Small has been specifically designed for side entry mounting suitable for 42mm side entry. Option of 60mm version is available with code .SE60. 3000K or warmer must be selected for IDA dark sky certification.

features and benefits

Sleek Design with tool-less access

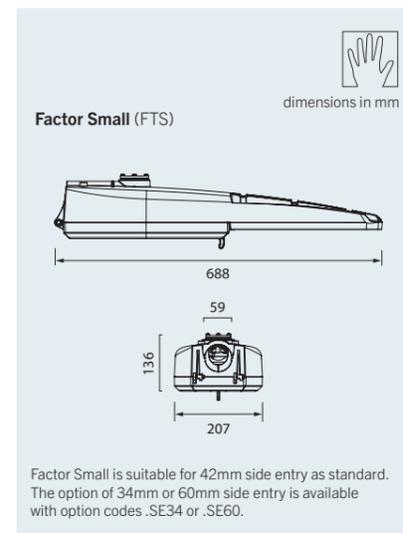
- > FACTOR Small's diecast aluminium housing acts as its primary heat sink. Its longitudinal fins employ conductive cooling techniques to dissipate heat away from the key LED components and extend luminaire life.
- > A die-cast trigger latch allows easy tool less access into the luminaire during installation and maintenance visits.

Exceptional Performance

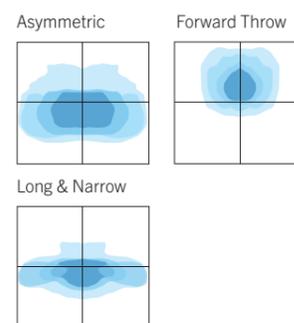
- > Offering four lumen packages ranging from 2,000lm to 25,000lm with efficiencies of up to 139lpw (Lumens Per Watts).
- > Two optimised roadway distributions (asymmetric, forward throw and long & narrow) delivered by quality LEDs and bespoke UV stabilised optics
- > LED light engines with 0% ULOR ensuring night time friendly.

Fully Maintainable Performance

- > Single tool-less latch access to the luminaire ensures straightforward entry to the luminaire at installation and maintenance.
- > Unique IP65 rated LED light engines that are interchangeable ensuring a futureproof and maintainable LED luminaire.



light distribution



weight

Factor Small	7.0 kg
--------------	--------

windage (effective projected area)

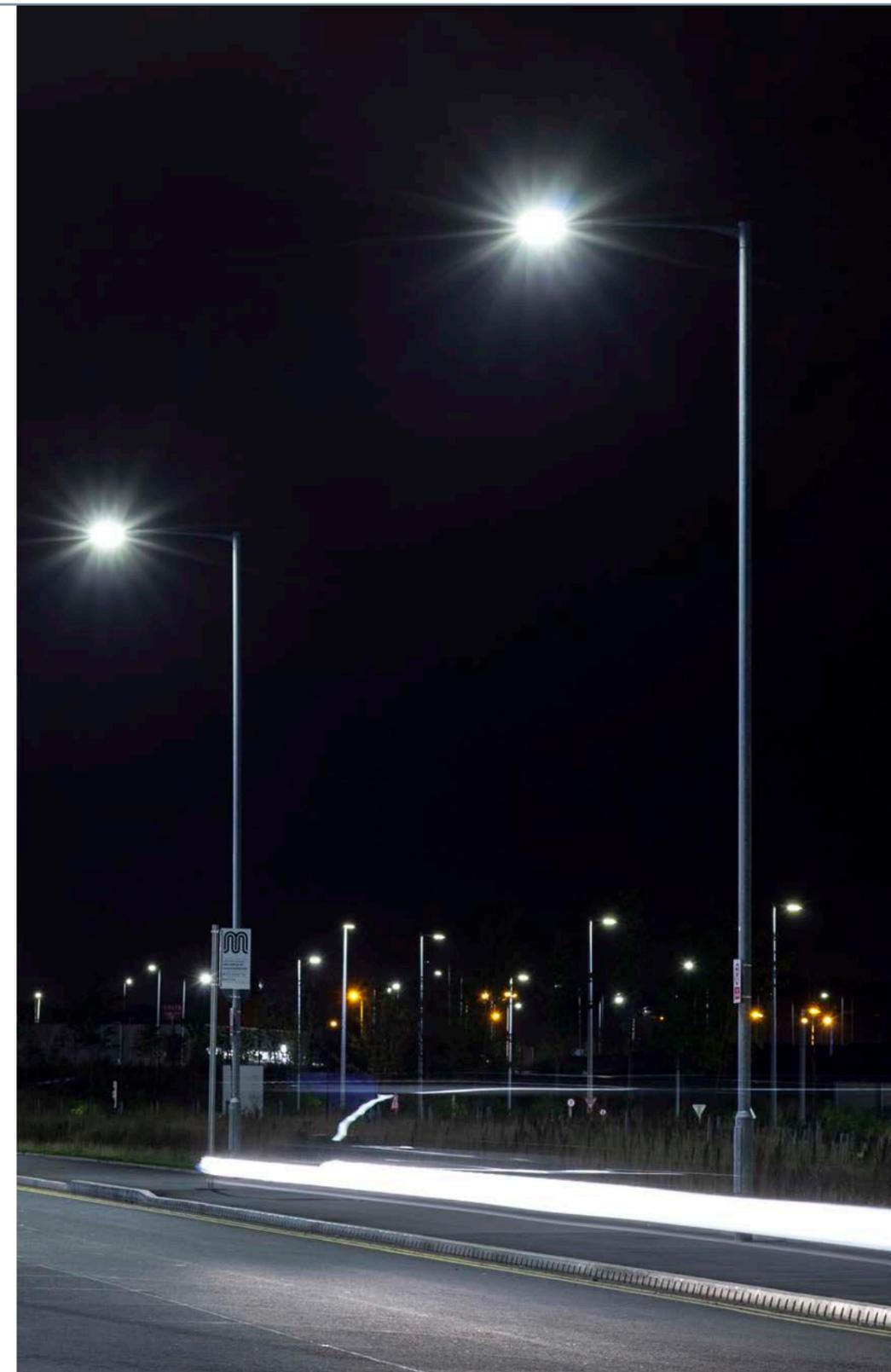
Factor Small	0.071 m ²
--------------	----------------------

Note: The specifications of the Holophane luminaire and columns represents typical values. All descriptions, illustrations, drawings and specifications in the Holophane catalogue and website represent only general particulars of the goods to which they apply and shall not form part of any contract. The company reserves the right to change specifications at its discretion without prior notification or public announcement.



typical spacing

- > Designed to S4, BSEN13201 P2, 2003
- > 6m mounting height, 2 lanes, 10m road width with 2m setback.
- > Achieving 32m max spacing with 0.25 uniformity.



Code	
FTS	Factor Small
Code	Prefix (optional)
.2	Series 2
.3	Series 3
Code	Lamp Type (required)
.LA024	LED light engine producing c.2,000 lm with a nominal 4000K colour temperature
.LA034	LED light engine producing c.3,000 lm with a nominal 4000K colour temperature
.LA054	LED light engine producing c.5,000 lm with a nominal 4000K colour temperature*
.LA064	LED light engine producing c.6,000 lm with a nominal 4000K colour temperature
.LA074	LED light engine producing c.7,000 lm with a nominal 4000K colour temperature
.LA084	LED light engine producing c.8,000 lm with a nominal 4000K colour temperature
.LA094	LED light engine producing c.9,000 lm with a nominal 4000K colour temperature
.LA104	LED light engine producing c.10,000 lm with a nominal 4000K colour temperature*
.LA114	LED light engine producing c.11,000 lm with a nominal 4000K colour temperature*
.LA124	LED light engine producing c.12,000 lm with a nominal 4000K colour temperature
.LA023	LED light engine producing c.2,000 lm with a nominal 3000K colour temperature
.LA033	LED light engine producing c.3,000 lm with a nominal 3000K colour temperature
.LA053	LED light engine producing c.5,000 lm with a nominal 3000K colour temperature*
.LA063	LED light engine producing c.6,000 lm with a nominal 3000K colour temperature
.LA073	LED light engine producing c.7,000 lm with a nominal 3000K colour temperature
.LA083	LED light engine producing c.8,000 lm with a nominal 3000K colour temperature
.LA093	LED light engine producing c.9,000 lm with a nominal 3000K colour temperature
.LA103	LED light engine producing c.10,000 lm with a nominal 3000K colour temperature*
.LA113	LED light engine producing c.11,000 lm with a nominal 3000K colour temperature*
.LA123	LED light engine producing c.12,000 lm with a nominal 3000K colour temperature
Code	Light Distribution (required)
.SY	Symmetrical
.AY	Asymmetric
.FW	Forward Throw
.NR	Long and Narrow
Code	Colour (required)
.C1	Smooth White (RAL9016)
.C4	Graphite (RAL7011)
.C6	Grey (RAL7035)
.C7	Black (RAL9005)
.C9	Metallic Silver (RAL9006)
.RAL****	(customer choice)
Code	Options
.T1	Complete with NEMA socket. (To accept standard NEMA Photocell, available from Holophane)
.TSZ	Complete with miniature 70 lux factory fitted photocell. (Zodion SS12)
.TSZA	Complete with miniature 55 lux factory fitted photocell. (Zodion SS12A)
.TSZB	Complete with miniature 35 lux factory fitted photocell. (Zodion SS12B)
.T5	Complete with 5-pin dimming NEMA ANSI C136.41 socket (photocell/node supplied by others) without locking top
.T7	Complete with 7-pin dimming NEMA ANSI C136.41 socket (photocell/node supplied by others) without locking top
.T5T	Complete with 5-pin dimming NEMA ANSI C136.41 socket (photocell/node supplied by others) with weather proof locking top
.T7T	Complete with 7-pin dimming NEMA ANSI C136.41 socket (photocell/node supplied by others) with weather proof locking top
Code	Fixing Method (optional)
.SE60	60mm side entry mounting
.SE34	34mm side entry mounting
Code	Control Gear (optional)
.CL7	Programmed to deliver 70% of the initial lumens over the life of the luminaire
.CL8	Programmed to deliver 80% of the initial lumens over the life of the luminaire
.CL9	Programmed to deliver 90% of the initial lumens over the life of the luminaire
.D2	DALI HF electronic control gear
Code	Dimming Outputs (optional)
.LRT56	pre-set to dim to 50% between 12am to 6am
.LRT66	pre-set to dim to 60% between 12am to 6am
.LRT76	pre-set to dim to 70% between 12am to 6am
Code	Cable Entry (optional) max length catered for
.FF10S	10 metres of 1.5mm ² 3 core cable "flex" for side entry mounting
.FS10S	10 metres of flat twin & earth 2.5mm ² for side entry mounting
.F510S	10 metres of 1.5mm ² 5 core cable "flex" for side entry mounting
Example	FTS .2.LA024 .AY .C1 .T1 .SE60 .CL7 .LRT56 .FF10S

Note: Factor and Factor Small are offered with 42mm side entry as standard. * Only available with Series 3 (.3)

Lumen data is considered to be representative of the configuration shown, and may vary, with a tolerance on flux of +/- 7% (typical of LED manufacturers data) and luminaire power of +/- 5%.





FACTOR[™] SMALL

Holophane Europe Limited
Bond Avenue, Bletchley, Milton Keynes MK1 1JG United Kingdom
Telephone: +44 (0) 1908 649292
E-mail: info@holophane.co.uk
www.holophane.co.uk

