THORN

Menlo³ LED[™]



Distinctive LED luminaires with outstanding aesthetics, photometric performance and up to 94Llm/w efficacy

- Recessed and semi-recessed LED luminaires (2500 and 3200lm) available with an opal or micro-prism technology diffuser
- Unique twin light chamber provides a smooth brightness transition and direct/indirect illumination
- Specifically designed to create a visually stimulating, extremely comfortable and uplifting environment using minimal energy
- Distinctive 70mm deep shallow body from deep drawn steel, to give superior strength and corner quality
- Quick and easy to install, supplied fully assembled in one box with external connector for fast electrical connection

Applications

- Office
- Education
- Commercial
- · Meeting Room
- Conference Room

LED Lamp Information

- Life time 50,000 Hours @L70 Ta 25C
- 3508lm (39W) / 2698lm (28W)
- 85 94 Llm/W
- Colour Temperature 4000K
- CRI 80
- SDCM MacAdams 3 initial

Overview







Onal diffuser semi-recessed version



Opal diffuser recessed version

MPT diffuser semi-recessed version



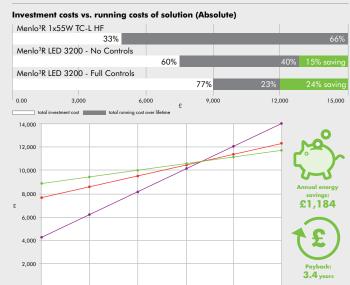
MPT diffuser recessed version







Energy efficiency



A Family of LED Solutions

Maintaining the excellent photometric performance of the Menlo³ range, all LED versions have vastly improved efficacy, within the family of aesthetic options available.

	Menlo ³ LED range			
	Recessed Opal	Semi-Recessed Opal	Circular	
Lumen Output	3200lm	3300lm	3700lm	
Efficacy	91Llm/w	94Llm/w	78Llm/w	
Glare (Cd/m²)	<3000	<3000	<3000	

For details on Menlo3 LED Circular range please visit www.thornlighting.co.uk/MNLC

A real alternative to the traditional fluorescent equivalent

The Menlo³ LED range provides excellent efficacy, yet maintains the superior lighting performance expected of the Menlo³ range.

	EN12464 Recommendation	Menlo ³ R PR	Menlo ³ R OP	Menlo ³ SR OP
Task Illuminance (Eh)	500 lux	513 lux	535 lux	505 lux
Glare	<3000Cd/m ²	<3000Cd/m ²	<3000Cd/m ²	<3000Cd/m ²
UGR	at or below 19	19	19	18
Cylindrical Illuminance (Ecyl)	200 lux	196 lux	205 lux	212 lux
Modelling Index	30-60%	38%	38%	42%



Greater functionality and control

Emergency luminaire spacing comparison for 0.5 lux open area:

				Luminaire spacing (m)				
	Maintenance Factor	BLF	Mounting Height	Centre to end			Between centres	
			(m)	Trans	Axial	Trans	Axial	
Menlo ³ with LED	1	1	2.5	2.55	2.50	8.65	8.60	
emergency			3.0	2.60	2.60	9.15	9.10	

BLF - Ballast Lumen Factor

Easy to Comply

Menlo³ has been designed in accordance with the following lighting regulations, making it easy to ensure that your lighting scheme complies

Criteria for	Detail	Menlo ³ LED
BREEAM	HEA4/5/6	✓
LENI	<20.82 kWh/m2/yr	✓
ECA*	including: >60Llm/w, UGR19	✓

* ECA LED life testing on-going

Assumptions

- 36nr Menlo luminaires installed in each option
- 9nr Sensa Photocells installed in the LED Full Controls Option
- Full controls assumes Absence Detection, Constant Illuminance & Daylight Detection
- Full controls assumes 40% area absence and 20% daylight dimming

Materials/Finish

Body: deep drawn steel pre-painted white (RAL 9010) Light chamber/wings: extruded high purity acrylic (PMMA) bead suspended diffuser pearl finish

Diffuser: high purity acrylic (PMMA) diffuser pearl finish MPT diffuser: Microprismatic and high purity acrylic (PMMA) pearl finish Suspension arms: moulded silver Polycarbonate

Installation/Mounting

Supplied fully assembled with protective film for quick, easy and clean installation. Suitable for lay-in installation into 15mm or 24mm, exposed tee ceilings. Unique 'wedge' brackets (included) are fitted externally via adjacent tile opening. This allows pull up installation into most exposed tee or concealed grid ceilings without opening the luminaire. Electrical connection is quick and easy via externally mounted connector on back of body.

Electrical connection via GST 18/6 box T connector for dimmable WL6 versions which protrudes 30mm from back of body. E3TX emergency versions have an additional GST 18/3 box T connector (not mains rated) protruding 30mm for back of body. Appropriate female connectors (sockets) must be ordered separately (see Thorn Connect range) to electrically connect luminaires.

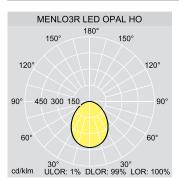
For full installation details please visit our website

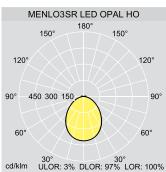


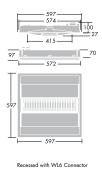
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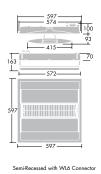
Menlo³ LED[™]

Overview









Specification

To specify state: Recessed mounted LED luminaire with shallow 70mm deep drawn body with distinctive diffusing pearl twin light chamber and MPT diffuser / Opal diffuser for direct / indirect lighting performance. Suitable for lay-in into exposed tee grids or for pull up into concealed grids with unique mini-wedge brackets and external electrical connection. DALI dimmable control gear with 3 hour manual or self / addressable test integral LED emergency versions.

To specify state: Semi-recessed mounted LED luminaire with shallow 70mm deep drawn body with suspended diffusing pearl optic and central MPT diffuser / Opal diffuser for direct / indirect lighting performance. Suitable for lay-in into exposed tee grids or for pull up into concealed grids with unique mini-wedge brackets and external electrical connection. DALI dimmable control gear with 3 hour manual or self / addressable test integral LED emergency versions.







Ordering Guide

Supplied complete with LEDs

<u> </u>					
Description	Wt (Kg)	Cat No.	SAP Code		
Menlo ³ Recessed LED					
Menlo ³ Recessed LED Opal diffuser, dimmabl	е				
MENLO3R LED 2500 HFIX WL6 AC OP 597	5.5	MNR2500XOP	96550946		
MENLO3R LED 3200 HFIX WL6 AC OP 597	5.5	MNR3200XOP	96550947		
Menlo ³ Recessed LED Opal diffuser, dimmable	e, eme	rgency			
MENLO3R LED 2500 HFIX E3 WL6 AC OP 597	5.7	MNR2500XEOP	96550950		
MENLO3R LED 2500 HFIX E3TX WL6 AC OP 597	5.7	MNR2500XEXOP	96550954		
MENLO3R LED 3200 HFIX E3 WL6 AC OP 597	5.7	MNR3200XEOP	96550951		
MENLO3R LED 3200 HFIX E3TX WL6 AC OP 597	5.7	MNR3200XEXOP	96550955		
Menlo ³ Recessed LED Prismatic diffuser, dimn	nable				
MENLO3R LED 2500 HFIX WL6 AC PR 597	5.7	MNR2500XPR	96550948		
MENLO3R LED 3200 HFIX WL6 AC PR 597	5.7	MNR3200XPR	96550949		
Menlo ³ Recessed LED Prismatic diffuser, dimn	nable,	emergency			
MENLO3R LED 2500 HFIX E3 WL6 AC PR 597	5.9	MNR2500XEPR	96550952		
MENLO3R LED 2500 HFIX E3TX WL6 AC PR 597	5.9	MNR2500XEXPR	96550956		
MENLO3R LED 3200 HFIX E3 WL6 AC PR 597	5.9	MNR3200XEPR	96550953		
MENLO3R LED 3200 HFIX E3TX WL6 AC PR 597	5.9	MNR3200XEXPR	96550957		
Menlo ³ Semi-Recessed LED					
Menlo ³ Semi-Recessed LED Opal diffuser, dim	mable	•			
MENLO3SR LED 2500 HFIX WL6 AC OP 597	5.3	MNSR2500XOP	96550958		
MENLO3SR LED 3300 HFIX WL6 AC OP 597	5.3	MNSR3300XOP	96550959		
Menlo ³ Semi-Recessed LED Opal diffuser, dimmable, emergency					
MENLO3SR LED 2500 HFIX E3 WL6 AC OP 597	5.5	MNSR2500XEOP	96550962		
MENLO3SR LED 2500 HFIX E3TX WL6 AC OP 597	5.5	MNSR2500XEXOP	96550966		
MENLO3SR LED 3300 HFIX E3 WL6 AC OP 597	5.5	MNSR3300XEOP	96550963		
MENLO3SR LED 3300 HFIX E3TX WL6 AC OP 597	5.5	MNSR3300XEXOP	96550967		
Menlo ³ Semi-Recessed LED Prismatic diffuser, dimmable					
MENLO3SR LED 2500 HFIX WL6 AC PR 597	5.5	MNSR2500XPR	96550960		
MENLO3SR LED 3300 HFIX WL6 AC PR 597	5.5	MNSR3300XPR	96550961		
Menlo ³ Semi-Recessed LED Prismatic diffuser, dimmable, emergency					
MENLO3SR LED 2500 HFIX E3 WL6 AC PR 597	5.7	MNSR2500XEPR	96550964		
MENLO3SR LED 2500 HFIX E3TX WL6 AC PR 597	5.7	MNSR2500XEXPR	96550968		
MENLO3SR LED 3300 HFIX E3 WL6 AC PR 597	5.7	MNSR3300XEPR	96550965		
MENLO3SR LED 3300 HFIX E3TX WL6 AC PR 597	5.7	MNSR3300XEXPR	96550969		

Description		Wt (Kg)	SAP Code	
Menlo ³ Recessed Accessories				
CONNECT EM S3 R	Wieland GST 6 pole socket for connecting HFI luminaires	0.02	96503766	
CONNECT S6 B	Wieland GST 3 pole socket for connecting E3TX luminaires	1.00	96233052	
GRIPPLE SAFETY WIRE		0.01	96239327	

HFIX Digital dimmable electronic ballast with DALI function WL6 Wieland GST 18/6 pole connector 3 hr Emergency function, manual test 3 hr Emergency function, selftest/addressable test

