

**APPLICATION**

LS450 Clarline is a versatile linear luminaire developed with a particular focus on wall washing and classroom board lighting. Versions with asymmetric optics provide uniform illumination of vertical surfaces, helping to minimise shadows, glare and distracting reflections. This makes LS450 an excellent solution for blackboards, whiteboards, presentation walls, displays and other areas where clear and even vertical illumination is essential. The luminaire is also available with symmetric 60° and 110° optics and double-asymmetric light distribution for general lighting, corridors, retail areas, shelving and workspaces. Its minimalist aluminium housing with smooth die-cast end caps is suitable for surface-mounted, suspended or track installation. LS450 is available with CRI 80 or CRI 90, 3000K or 4000K, as well as Tunable White from 2700K to 6500K. DALI, Touch and Dim, Corridor Mode and Casambi-compatible versions allow the lighting to be adapted to different educational and commercial environments. High-quality LEDIL optics, OSRAM LED modules and Philips Xitanium drivers ensure efficient and reliable long-term operation.

4300 lm SYSTEM FLUX	29 W INPUT POWER	148 lm/W EFFICACY	4000 K CCT	≥80 CRI	IP40 INGRESS	IK05 IMPACT	100 000 h L90B10
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ELECTRICAL PARAMETERS

Nominal supply voltage	230 (220–240) V AC	Supply voltage range	198–264 V AC
Type of supply current	AC	Supply frequency	50 / 60 Hz
Rated input power	29W	Power factor (PF)	0.98
Driver efficiency at nominal load	92%	Total harmonic distortion (THDi)	<10%
Protection class (electric shock)	I	Inrush current / time	5A 50μsec
Driver type	TCI	Number of luminaires on MCB 16A type B	45

PHOTOMETRIC PARAMETERS

Luminous flux — system	4300lm	Luminous flux — LED module	5100lm
Luminous efficacy — system	148lm/W	Correlated colour temperature (CCT)	4000 K
Colour rendering index Ra (CRI)	≥80	Init. CRI tolerance	±3
Light distribution type	Symmetric	Luminaire beam spread	60°
Optic type	60D	Photobiological safety class	RG1
Flicker — Output PstLM / SVM	≤0.1 / ≤0.2	Colour consistency (SDCM)	< 3 MacAdam steps
Upward light output ratio (ULOR)	0	Luminous flux tolerance	±5 %

CONSTRUCTION & MATERIALS

Luminaire type	Linear suspended	Light source type	LED
Light source replaceable	yes	Cap / base type	Integrated
Housing material	Aluminium profile	Housing coating	Powder coating
Optic material	PMMA	Housing colour (RAL)	any RAL on request
Mounting type	Surface-mounted, suspended, track	Number of gear units	1 pcs

PROTECTION & ENVIRONMENT

IP rating — enclosure	IP40	Impact resistance class IK	IK05
Operating temperature range	-40...+35 °C	Storage temperature range	-40...+65 °C
Glow-wire test	650 °C / 5 s	Relative humidity (max)	N/A

CONTROL & DIMMING

Dimmable	No	Control protocol / interface	On/off
Built-in motion / presence sensor	Easyair sensor on request		

RELIABILITY & LIFETIME

Light source lifetime	100000@L90 B10h	Lumen maintenance @ 50 000 h	L95B5
Lumen maintenance @ 100 000 h	L90 B10	Control gear failure rate @ 50 000 h	36 %
Control gear failure rate @ 100 000 h	10%	Maximum case temperature Tc	75°C

CERTIFICATIONS

Warranty period	5 years	CE marking	CE marked
ENEC mark	No	ENEC+ mark	No
UKCA marking	UKCA marked	D4i certified (DALI)	No
EU RoHS compliant	Yes		

STANDARDS & SUSTAINABILITY

Applicable standard	EN-IEC 62722-2-33	ETIM Class	Not determined
Recyclable content ratio	Not determined	Non-virgin material ratio	Not determined
Sustainability rating	Not determined	EAN / UPC	Not determined
Application areas	Classroom boards, presentation walls, displays, corridors, retail, shelving and workspaces		

Environmental data. Embedded carbon, recyclable content and sustainability ratings are provided per article where determined.

Documents. Photometric files (IES / LDT) and installation instructions are available at takton.ee.