PHILIPS Lighting



LED cleanroom – hygienic, efficient solution offering excellent vision at work

Cleanroom LED

Customers operating highly hygienic facilities – in hospitals, laboratories, and certain production environments, e.g. in the food industry – require special IP65, easy-toclean, dust-free luminaires that meet all applicable lighting requirements and norms. With the latest LED engine on board, this LED cleanroom luminaire represents the ideal solution, delivering market-leading energy performance – far beyond fluorescent solutions – over 50,000 hours of maintenance-free operation. This means extremely low operational cost over the total lifetime of the luminaire, and so an excellent financial return on investment. The luminaire's high color rendering properties ensure the top-class optical performance required in e.g. clinical areas in hospitals and other areas where it is crucial to be able to distinguish between colors, such as in the graphical and clothing industries.

Benefits

- Excellent functional cleanroom performance
- Market-leading energy efficiency; extremely low operational cost over total lifetime
- $\boldsymbol{\cdot}$ Excellent quality of light with high color rendering

Cleanroom LED

Features

- Latest LED engine
- IP65
- ISO class 2-9 Fraunhofer-certified
- CRI 90
- Push-in connector: connection without opening the luminaire

Application

- \cdot Hygienic areas in hospitals and laboratories
- Production facilities in the clothing industry
- Graphic design studios

Specifications

Туре	CR434B (lay-in, 596 x 596 / 1196 x 296 mm version)
	CR444B (lay-out, 612 x 612 / 1212 x 312 mm version)
	CR436B (lay-in, 621 x 621 / 1246 x 308 mm version)
	CR446B (lay-out, 637 x 637 / 1262x324 mm version)
Ceiling type	Exposed T-bar ceiling
	Plaster (board) ceiling
Ceiling grid	Module size in length: 300 and 600 mm
	Module size in length: 312.5 and 625 mm
Light source	Replaceable LED module
Power (+/-10%)	LED48: 49.5 W
	LED88: 80 W
Luminous flux	Square LED48: 3700 lm (3000 K) or 3500 lm (4000 K)
	(depending type)
	Square LED88: 6200 lm (3000 K) or 5700 lm (4000 K)
	(depending type)
	Rectangular LED88: 6300 lm (3000 K) or 5700 lm (4000 K)
	(depending type)
Correlated Color	3000 or 4000 K
Temperature	
Color Rendering Index	> 80 (3000 and 4000 K)
	> 90 (4000 K)
Median useful life	70,000 hours
L70B50	
Median useful life	50,000 hours
L80B50	

Median useful life	25,000 hours
L90B50	
Driver failure rate	1% per 5000 hours
Average ambient	+25 ºC
temperature	
Operating temperature	-20 to +35°C
range	
Driver	Built-in
Mains voltage	220-240 V / 50-60 Hz
Dimming	Touch-dim or DALI
Material	Housing: sheet steel, laquerred
	Cover: glass, tempered
	Internal optic: aluminum
	Heatsink: aluminum sheet steel
Color	White RAL 9003
Optical cover	AC-MLO
Connection	Push-in connector
Maintenance	No internal cleaning required
Installation	Lay in: fixation with spring fastener
	Lay out: fixation with bolt and nuts
	No through-wiring
	Installation without removing light source and optical cover (not
	in case of plaster-ceiling versions)
Accessories	Safety cable

Cleanroom LED

Versions



Cleanroom LED CR434B recessed luminaire

Product details

Front view





Access to the optics, lamps and gear

Cleanroom LED CR434B recessed

luminaire



IPDP_CR434Bi_0023-Detail photo



Polar Wide Diagrams



IFPS_CR434B W30L120 1xLED88/840 AC-MLO-Polar Normal (separate)

IFPS_CR434B W30L120 1xLED88/940 AC-MLO-Polar Normal (separate) **Cleanroom LED**



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