



Cleanroom LED – hygienic and efficient

Cleanroom LED

Customers operating highly hygienic facilities require special IP65, easy-to-clean, dust-free luminaires that meet all lighting requirements and norms. Moreover, to ensure the integrity of these areas (and stay within budget), they also need to minimize costly downtime and maintenance. 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.

Benefits

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

Features

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

Application

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

Specifications

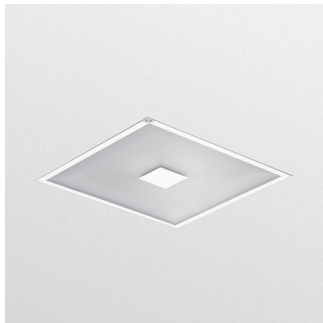
Type	CR434B (lay-in, 596 x 596 / 1196 x 296 mm version)	Ceiling type	Exposed T-bar ceiling
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Cleanroom LED

	Plaster (board) ceiling
Ceiling grid	Module size in length: 300 and 600 mm
Light source	Replaceable LED module
Power (+/-10%)	LED48: 49 W LED88: 77 W
Luminous flux	Square LED48: 3600 lm (3000 K) or 3900 lm (4000 K) (depending type) Square LED88: 6000 lm (3000 K) or 6300 lm (4000 K) (depending type) Rectangular LED88: 6000 lm (3000 K) or 6300 lm (4000 K) (depending type)
Correlated Colour	3000 or 4000 K
Temperature	
Colour Rendering Index	> 80
Median useful life L70B50	70,000 hours
Median useful life L80B50	50,000 hours
Median useful life L90B50	25,000 hours
Driver failure rate	1% per 5000 hours
Average ambient temperature	+25 °C

Operating temperature range	-20 to +35°C
Driver	Philips Xitanium
Mains voltage	220-240 V / 50-60 Hz
Dimming	Touch-dim or DALI
Material	Housing: sheet steel, laquerred Cover: glass, tempered Internal optic: aluminium Heatsink: aluminium sheet steel
Colour	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

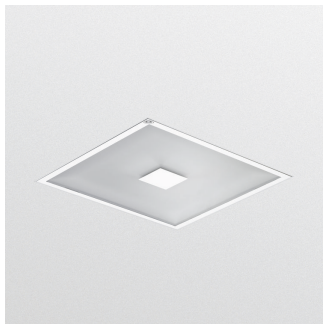
Versions



Cleanroom LED CR434B recessed luminaire



Cleanroom LED CR434B recessed luminaire



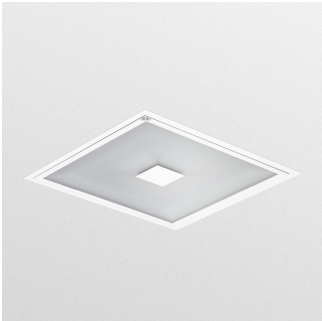
Cleanroom LED CR436B recessed luminaire



Cleanroom LED CR436B recessed luminaire

Cleanroom LED

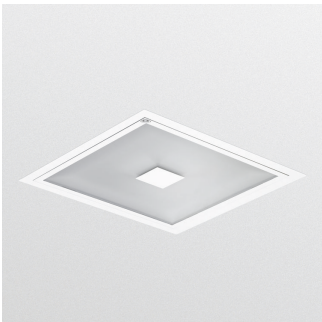
Versions



Cleanroom LED CR444B recessed luminaire



Cleanroom LED CR444B recessed luminaire



Cleanroom LED CR446B recessed luminaire

Product details



Cleanroom LED

Product details



Cleanroom LED

Application Conditions

Ambient temperature range	-20 to +40 °C
Maximum dim level	1%
Suitable for random switching	No

Approval and Application

Mech. impact protection code	IK05
Ingress protection code	IP65

Controls and Dimming

Dimmable	Yes
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Operating and Electrical

Input Voltage	220 to 240 V
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General Information

Cap-Base	-
CE mark	CE mark
Protection class IEC	Safety class I (I)
Optical cover/lens type	AC-MLO
Driver included	Yes
ENEC mark	ENEC plus mark
Flammability mark	F
Glow-wire test	850/5
Light source replaceable	No
Number of gear units	1 unit
Number of light sources	1
Optic type	No
UL mark	No

Initial Performance (IEC Compliant)

Init. Colour Rendering Index	≥80
Luminous flux tolerance	+/-10%

Mechanical and Housing

Colour	White
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General Information

Order Code	Full Product Name	Lamp family code	Product Family Code
910501978003	CR434B LED48/830 PSD W60L60 AC-MLO PI	LED48	CR434B
910501978103	CR434B LED48/840 PSD W60L60 AC-MLO PI	LED48	CR434B
910501978203	CR434B LED88/830 PSD W60L60 AC-MLO PI	LED88	CR434B
910501978303	CR434B LED88/840 PSD W60L60 AC-MLO PI	LED88	CR434B
910501978403	CR434B LED88/830 PSD W30L120 AC-MLO PI	LED88	CR434B
910501978503	CR434B LED88/840 PSD W30L120 AC-MLO PI	LED88	CR434B
910501978703	CR436B LED48/840 PSD W62L62 AC-MLO PI	LED48	CR436B
910501978903	CR436B LED88/840 PSD W62L62 AC-MLO PI	LED88	CR436B
910501979103	CR436B LED88/840 PSD W31L125 AC-MLO PI	LED88	CR436B
910501979203	CR444B LED48/830 PSD W60L60 AC-MLO PI	LED48	CR444B
910501979303	CR444B LED48/840 PSD W60L60 AC-MLO PI	LED48	CR444B
910501979503	CR444B LED88/840 PSD W60L60 AC-MLO PI	LED88	CR444B
910501979703	CR444B LED88/840 PSD W30L120 AC-MLO PI	LED88	CR444B
910501979903	CR446B LED48/840 PSD W62L62 AC-MLO PI	LED48	CR446B
910501980103	CR446B LED88/840 PSD W62L62 AC-MLO PI	LED88	CR446B

Initial Performance (IEC Compliant) (1/2)

Order Code	Full Product Name	Initial chromaticity	Init. Corr. Colour Temperature	Initial LED luminaire efficacy	Initial luminous flux
910501978003	CR434B LED48/830 PSD W60L60 AC-MLO PI	(0.43, 0.40) SDCM <3	3000 K	113 lm/W	3600 lm
910501978103	CR434B LED48/840 PSD W60L60 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	120 lm/W	3900 lm
910501978203	CR434B LED88/830 PSD W60L60 AC-MLO PI	(0.43, 0.40) SDCM <3	3000 K	109 lm/W	6000 lm

Order Code	Full Product Name	Initial chromaticity	Init. Corr. Colour Temperature	Initial LED luminaire efficacy	Initial luminous flux
910501978303	CR434B LED88/840 PSD W60L60 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	115 lm/W	6300 lm
910501978403	CR434B LED88/830 PSD W30L120 AC-MLO PI	(0.43, 0.40) SDCM <3	3000 K	109 lm/W	6000 lm

Cleanroom LED

Order Code	Full Product Name	Initial chromaticity	Init. Corr. Colour Temperature	Initial LED luminaire efficacy	Initial luminous flux
910501978503	CR434B LED88/840 PSD W30L120 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	115 lm/W	6300 lm
910501978703	CR436B LED48/840 PSD W62L62 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	120 lm/W	3900 lm
910501978903	CR436B LED88/840 PSD W62L62 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	115 lm/W	6300 lm
910501979103	CR436B LED88/840 PSD W31L125 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	115 lm/W	6300 lm
910501979203	CR444B LED48/830 PSD W60L60 AC-MLO PI	(0.43, 0.40) SDCM <3	3000 K	113 lm/W	3600 lm

Order Code	Full Product Name	Initial chromaticity	Init. Corr. Colour Temperature	Initial LED luminaire efficacy	Initial luminous flux
910501979303	CR444B LED48/840 PSD W60L60 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	120 lm/W	3900 lm
910501979503	CR444B LED88/840 PSD W60L60 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	115 lm/W	6300 lm
910501979703	CR444B LED88/840 PSD W30L120 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	115 lm/W	6300 lm
910501979903	CR446B LED48/840 PSD W62L62 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	120 lm/W	3900 lm
910501980103	CR446B LED88/840 PSD W62L62 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	115 lm/W	6300 lm

Initial Performance (IEC Compliant) (2/2)

Order Code	Full Product Name	Initial input power
910501978003	CR434B LED48/830 PSD W60L60 AC-MLO PI	32 W
910501978103	CR434B LED48/840 PSD W60L60 AC-MLO PI	32.5 W
910501978203	CR434B LED88/830 PSD W60L60 AC-MLO PI	55 W
910501978303	CR434B LED88/840 PSD W60L60 AC-MLO PI	55 W
910501978403	CR434B LED88/830 PSD W30L120 AC-MLO PI	55 W
910501978503	CR434B LED88/840 PSD W30L120 AC-MLO PI	55 W
910501978703	CR436B LED48/840 PSD W62L62 AC-MLO PI	32.5 W
910501978903	CR436B LED88/840 PSD W62L62 AC-MLO PI	55 W

Order Code	Full Product Name	Initial input power
910501979103	CR436B LED88/840 PSD W31L125 AC-MLO PI	55 W
910501979203	CR444B LED48/830 PSD W60L60 AC-MLO PI	32 W
910501979303	CR444B LED48/840 PSD W60L60 AC-MLO PI	32.5 W
910501979503	CR444B LED88/840 PSD W60L60 AC-MLO PI	55 W
910501979703	CR444B LED88/840 PSD W30L120 AC-MLO PI	55 W
910501979903	CR446B LED48/840 PSD W62L62 AC-MLO PI	32.5 W
910501980103	CR446B LED88/840 PSD W62L62 AC-MLO PI	55 W

Mechanical and Housing

Order Code	Full Product Name	Geometry
910501978003	CR434B LED48/830 PSD W60L60 AC-MLO PI	W60L60
910501978103	CR434B LED48/840 PSD W60L60 AC-MLO PI	W60L60
910501978203	CR434B LED88/830 PSD W60L60 AC-MLO PI	W60L60
910501978303	CR434B LED88/840 PSD W60L60 AC-MLO PI	W60L60
910501978403	CR434B LED88/830 PSD W30L120 AC-MLO PI	W30L120
910501978503	CR434B LED88/840 PSD W30L120 AC-MLO PI	W30L120
910501978703	CR436B LED48/840 PSD W62L62 AC-MLO PI	W62L62
910501978903	CR436B LED88/840 PSD W62L62 AC-MLO PI	W62L62

Order Code	Full Product Name	Geometry
910501979103	CR436B LED88/840 PSD W31L125 AC-MLO PI	W31L125
910501979203	CR444B LED48/830 PSD W60L60 AC-MLO PI	W60L60
910501979303	CR444B LED48/840 PSD W60L60 AC-MLO PI	W60L60
910501979503	CR444B LED88/840 PSD W60L60 AC-MLO PI	W60L60
910501979703	CR444B LED88/840 PSD W30L120 AC-MLO PI	W30L120
910501979903	CR446B LED48/840 PSD W62L62 AC-MLO PI	W62L62
910501980103	CR446B LED88/840 PSD W62L62 AC-MLO PI	W62L62

