



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-to-clean, 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
- Excellent quality of light with high color rendering

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Features

- Latest LED engine
- IP64/IP65
- CRI 90
- Push-in connector: connection without opening the luminaire
- Air Cleanliness Class I (according to ISO 14644-1)
- Office Compliant (UGR<19)

Application

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

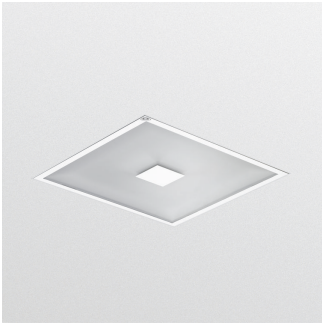
Specifications

Type	CR434B (lay-in, 596 x 596 / 1196 x 296 mm version)
	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 Temperature	3000 or 4000 K
Color Rendering Index	> 80 (3000 and 4000 K)
	> 90 (4000 K)
Median useful life L70B50	70,000 hours
Median useful life L80B50	50,000 hours

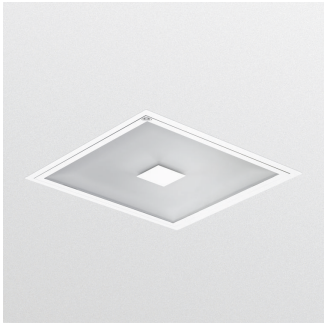
Median useful life L90B50	25,000 hours
Driver failure rate	1% per 5000 hours
Average ambient temperature	+25 °C
Operating temperature range	-20 to +35°C
Driver	Built-in
Mains voltage	220-240 V / 50-60 Hz
Dimming	Touch-dim or DALI
Material	Housing: sheet steel, laquerred
	Cover: glass, tempered
	Internal 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

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Versions



Cleanroom LED CR434B recessed luminaire



Cleanroom LED CR444B recessed luminaire

Product details



IPDP_CR434Bi_0001-Detail photo



IPDP_CR434Bi_0005-Detail photo



IPDP_CR434Bi_0023-Detail photo



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	IK02/05
Ingress protection code	IP64/65 Dust penetration-protected, splashproof/ Jet-proof
Controls and dimming	
Dimmable	Yes
Operating and electrical	
Input Voltage	220 to 240 V
General information	
Cap-Base	-
CE mark	CE mark
Protection class IEC	Safety class I
Optical cover/lens type	Acrylate micro-lens optic
Driver included	Yes
ENEC mark	-
Flammability mark	For mounting on normally flammable surfaces
Glow-wire test	Temperature 850 °C, duration 5 s
Light source replaceable	No
Number of gear units	1 unit
Number of light sources	1 pc
Optic type	-
Service tag	Yes
UL mark	-
Initial performance (IEC compliant)	
Luminous flux tolerance	+/-10%
Mechanical and housing	
Color	White
Geometry	Width 0.60 m, length 0.60 m

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
910501984203	CR434B LED48/840 PSD W60L60 AC-MLO PI SC	LED48	CR434B
910501984303	CR434B LED88/840 PSD W60L60 AC-MLO PI SC	LED88	CR434B
910502032203	CR434B LED48/940 PSD W60L60 AC-MLO PI	LED48	CR434B
910502032303	CR434B LED88/940 PSD W60L60 AC-MLO PI	LED88	CR434B
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
910502032803	CR444B LED48/940 PSD W60L60 AC-MLO PI	LED48	CR444B
910502032903	CR444B LED88/940 PSD W60L60 AC-MLO PI	LED88	CR444B

Initial performance (IEC compliant) (1/2)

Cleanroom LED

Order Code	Full Product Name	Initial chromaticity	Init. Corr. Color Temperature	Init. Color Rendering Index	Initial LED luminaire efficacy
910501978003	CR434B LED48/830 PSD W60L60 AC-MLO PI	(0.43, 0.40) SDCM <3	3000 K	≥80	113 lm/W
910501978103	CR434B LED48/840 PSD W60L60 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	≥80	120 lm/W
910501978203	CR434B LED88/830 PSD W60L60 AC-MLO PI	(0.43, 0.40) SDCM <3	3000 K	≥80	109 lm/W
910501978303	CR434B LED88/840 PSD W60L60 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	≥80	115 lm/W
910501984203	CR434B LED48/840 PSD W60L60 AC-MLO PI SC	(0.38, 0.38) SDCM <3	4000 K	≥80	120 lm/W
910501984303	CR434B LED88/840 PSD W60L60 AC-MLO PI SC	(0.38, 0.38) SDCM <3	4000 K	≥80	115 lm/W
910502032203	CR434B LED48/940 PSD W60L60	(0.38, 0.38) SDCM <3	4000 K	≥90	96 lm/W

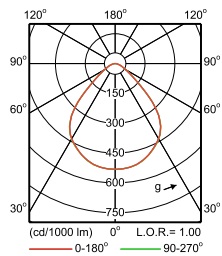
Initial performance (IEC compliant) (2/2)

Order Code	Full Product Name	Initial luminous flux	Initial input power
910501978003	CR434B LED48/830 PSD W60L60 AC-MLO PI	3600 lm	56 W
910501978103	CR434B LED48/840 PSD W60L60 AC-MLO PI	3900 lm	28 W
910501978203	CR434B LED88/830 PSD W60L60 AC-MLO PI	6000 lm	56 W
910501978303	CR434B LED88/840 PSD W60L60 AC-MLO PI	6300 lm	56 W
910501984203	CR434B LED48/840 PSD W60L60 AC-MLO PI SC	3900 lm	56 W
910501984303	CR434B LED88/840 PSD W60L60 AC-MLO PI SC	6300 lm	56 W
910502032203	CR434B LED48/940 PSD W60L60 AC-MLO PI	3900 lm	56 W

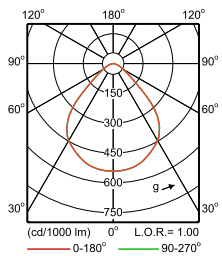
Order Code	Full Product Name	Initial chromaticity	Init. Corr. Color Temperature	Init. Color Rendering Index	Initial LED luminaire efficacy
910502032303	CR434B LED88/940 PSD W60L60 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	≥90	93 lm/W
910501979203	CR444B LED48/830 PSD W60L60 AC-MLO PI	(0.43, 0.40) SDCM <3	3000 K	≥80	113 lm/W
910501979303	CR444B LED48/840 PSD W60L60 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	≥80	120 lm/W
910501979503	CR444B LED88/840 PSD W60L60 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	≥80	115 lm/W
910502032803	CR444B LED48/940 PSD W60L60 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	≥80	96 lm/W
910502032903	CR444B LED88/940 PSD W60L60 AC-MLO PI	(0.38, 0.38) SDCM <3	4000 K	≥80	93 lm/W

Order Code	Full Product Name	Initial luminous flux	Initial input power
910502032303	CR434B LED88/940 PSD W60L60 AC-MLO PI	6300 lm	56 W
910501979203	CR444B LED48/830 PSD W60L60 AC-MLO PI	3600 lm	29 W
910501979303	CR444B LED48/840 PSD W60L60 AC-MLO PI	3900 lm	56 W
910501979503	CR444B LED88/840 PSD W60L60 AC-MLO PI	6300 lm	56 W
910502032803	CR444B LED48/940 PSD W60L60 AC-MLO PI	3900 lm	56 W
910502032903	CR444B LED88/940 PSD W60L60 AC-MLO PI	6300 lm	56 W

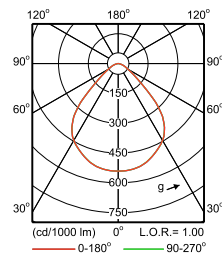
Polar Wide Diagrams



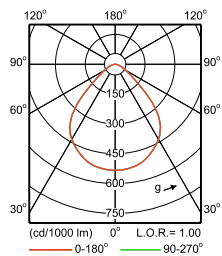
IFPS_CR434B W60L60 1xLED88/830 AC-MLO-Polar Normal (separate)



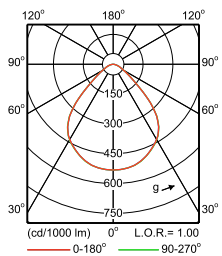
IFPS_CR434B W60L60 1xLED48/940 AC-MLO-Polar Normal (separate)



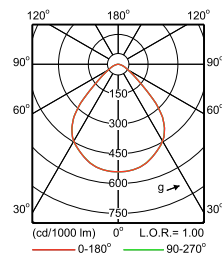
IFPS_CR434B W60L60 1xLED88/940 AC-MLO-Polar Normal (separate)



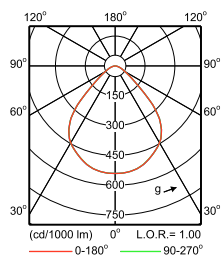
IFPS_CR444B W60L60 1xLED48/840 AC-MLO-Polar Normal (separate)



IFPS_CR444B W60L60 1xLED88/830 AC-MLO-Polar Normal (separate)



IFPS_CR444B W60L60 1xLED48/940 AC-MLO-Polar Normal (separate)



IFPS_CR444B W60L60 1xLED88/940 AC-MLO-Polar Normal (separate)

