PHILIPS

CertaFlux

LED

CertaFlux DL-S 4"
550lm G2

Datasheet

The most affordable integrated LED downlight module

Certaflux DL-S G2 is the best value for money LED downlight module from Philips. With integrated driver, heatsink and optics, our customers can easily design in for downlight application. Specific designed diffuser and LEDs lay out together make best high efficiency but no sacrifice on uniformity. Full portfolio is available for different application.

Key features and benefits

Integrated driver, heatsink and optics to maximum simplicity for design in
High efficiency with up to > 90lm/W @ system level
Full portfolio, flux from 550lm to 2000lm available in 3000K, 4000K and 5000K with CRI >80, covering most general light applications
2 form factors: 4" and 6" which are same for existing main cut out sizes for easy replacement
Lifetime is 25,000 hours @B50L70

December 2018

direct

100%
instant

Ordering data

Commercial product name	12NC	Box quantity
CertaFlux DL-S 4" 550lm/830 G2	9290 008 89880	30
CertaFlux DL-S 4" 550lm/840 G2	9290 008 89980	30
CertaFlux DL-S 4" 550lm/850 G2	9290 008 90080	30

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T_c (case temperature at T_c point)	65	65	100	°C

* Nominal value at which typical performance is specified

** Value at which life time is specified

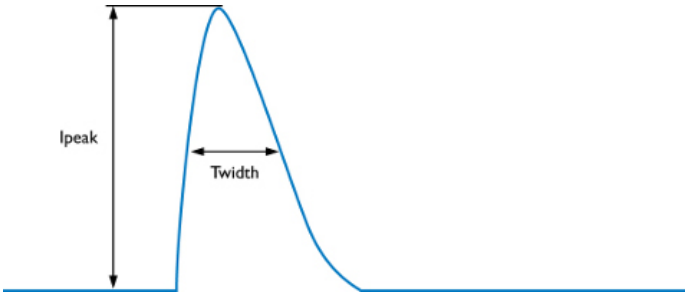
*** Maximum value for safe operation, do not operate above this value

Electrical input data

Specification item	Value	Unit	Condition
Rated input voltage	220...240	Vac	Performance range
Rated input frequency	50...60	Hz	Performance range
Rated input current	0.033	A	@ full output power @ rated input voltage
Rated input power	6.8	W	@ full power @ rated input voltage
Power factor	> 0.84		@ full power @ rated input voltage

Inrush current

Specification item	Value	Unit	Condition
Inrush current I_{peak}	3.4	A	Input voltage 0V
Inrush current T_{width}	20	µs	Input voltage 0V, measured at 50% I_{peak}
Drivers / MCB 16A type B	246	pcs	



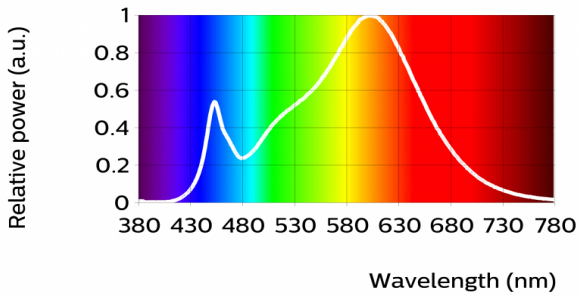
MCB	Rating	Relative number of LED modules
B	10A	63%
B	13A	81%
B	16A	100% (stated in datasheet)
B	20A	125%
B	25A	156%
C	10A	104%
C	13A	135%
C	16A	170%
C	20A	208%
C	25A	260%

Optical characteristics - table per color (CCT)

CertaFlux DL-S 4" 550lm/830 G2

Parameter	Min	Typ	Max	Unit
Luminous flux	537	596	715	lm
Flux within 120° cone		499		lm
Module efficacy		85		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.435, 0.405)		-
Color consistency			6	SDCM
CRI	80			
Radiation angle		100		deg
Photobiological safety			RG1 unlimited	

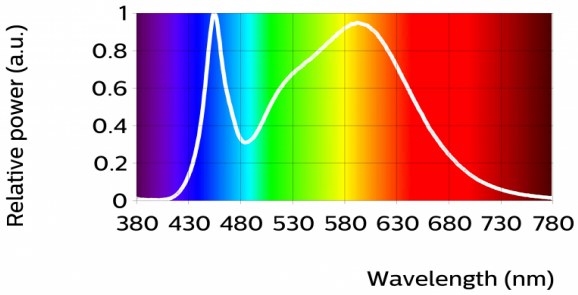
Measurement precision for flux +/- 5%.Measurement precision for efficacy +/- 6%. Measurement precision for x, y +/- 0.005. Measurement precision for CRI +/- 1.5



CertaFlux DL-S 4" 550lm/840 G2

Parameter	Min	Typ	Max	Unit
Luminous flux	565	628	754	lm
Flux within 120° cone		526		lm
Module efficacy		90		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.383, 0.382)		-
Color consistency			6	SDCM
CRI	80			
Radiation angle		100		deg
Photobiological safety			RG1 unlimited	

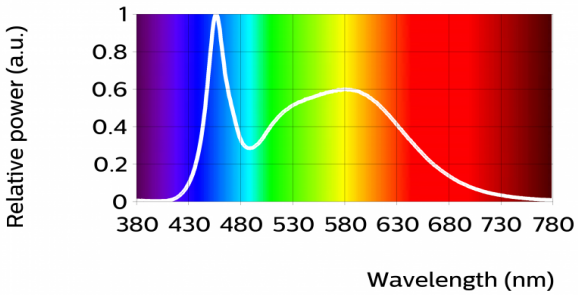
Measurement precision for flux +/- 5%.Measurement precision for efficacy +/- 6%. Measurement precision for x, y +/- 0.005. Measurement precision for CRI +/- 1.5



CertaFlux DL-S 4" 550lm/850 G2

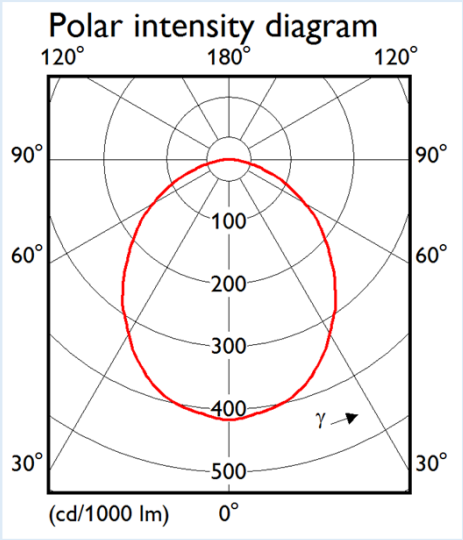
Parameter	Min	Typ	Max	Unit
Luminous flux	564	627	752	lm
Flux within 120° cone		526		lm
Module efficacy		90		lm/W
Correlated color temperature (CCT)		5000		K
Color coordinates (CIEx, CIEy)		(0.346, 0.358)		-
Color consistency			6	SDCM
CRI	80			
Radiation angle		100		deg
Photobiological safety			RG1 unlimited	

Measurement precision for flux +/- 5%.Measurement precision for efficacy +/- 6%. Measurement precision for x, y +/- 0.005. Measurement precision for CRI +/- 1.5



Beam shape

The Philips LED modules generates a rotational symmetric beam shape with an opening angle of 100°, which is a pragmatic starting point for OEMs wishing to design secondary optics.

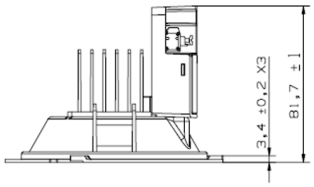


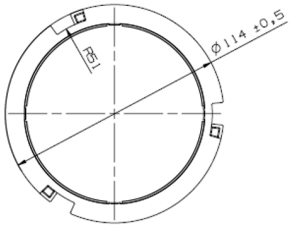
Lifetime

Lumen depreciation in operating hours: B50/L70 @ 25Khrs @ 25C ambient

Mechanical characteristics

Parameter	Min	Typ	Max	Unit
Length	113.5	114	114.5	mm
Width	113.5	114	114.5	mm
Height	80.7	81.7	82.7	mm





Absolute ratings

Parameter	Min	Max	Unit
Case temperature (Tc-max)		100	℃
Ambient temperature	-20	40	℃
Storage temperature	-40	65	℃

Application information

Certificates and Standards
CB/CQC

Application	
IP rating	20
Luminaire class	class I
Dimming	No

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