



Datasheet

CertaFlux DLM Slim 2000lm 8" G2

Plug and Play, easy to use downlight solution

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CertaFlux DLM Slim G2 downlight module provides plug & play downlight solution with affordable cost but no sacrifice on light quality. The module is integrated with optical and heatsink which help to make the product extremely easy to use. Optimized diffuser gives uniform light. The family is available from 600 lm - 2000lm with different cut out size in 4 CCTs. CertaFlux DLM Slim is fully compatible with Philips recommended driver.

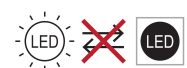
Key features and benefits

Integration with optics and heatsink makes it easy to use

High efficacy, up to 134lm/W @ module level

Full portfolio from 600lm - 2000lm, available in 830/840/850/865 CCT with 4" 6" 8"

Optimized diffuser provides good uniformity



Ordering data

Commercial product name	EOC	12NC	Box quantity
CertaFlux DLM Slim 2000lm 830 8" G2	6922341 946110 00	9290 033 91380	30
CertaFlux DLM Slim 2000lm 840 8" G2	6922341 946134 00	9290 033 91480	30
CertaFlux DLM Slim 2000lm 850 8" G2	6922341 946158 00	9290 033 91580	30
CertaFlux DLM Slim 2000lm 865 8" G2	6922341 946172 00	9290 033 91680	30

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
CertaFlux DLM Slim 2000lm 8" G2	500	See performance window	900	mA

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T _c (case temperature at T _c point)	50	See performance window	90	°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

Optical characteristics

CertaFlux DLM Slim 2000lm 830 8" G2
CertaFlux DLM Slim 2000lm 840 8" G2
CertaFlux DLM Slim 2000lm 850 8" G2
CertaFlux DLM Slim 2000lm 865 8" G2

	3000K	4000K	5000K	6500K	Unit
Luminous flux (Φuse)*	2150	2210	2210	2210	lm
Efficacy*	130	134	134	134	lm/W
Max. Color consistency	6	6	6	6	SDCM
Color coordinates (CIEx, CIEy)	0.439, 0.404	0.390, 0.386	0.351, 0.361	0.319, 0.338	
Min. CRI	80	80	80	80	
Photometric code	830/689	840/689	850/689	865/689	
Max. Photobiological safety	RG1 unlimited	RG1 unlimited	RG1 unlimited	RG1 unlimited	
Product contains light sources	E	E	E	E	

of energy class:

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

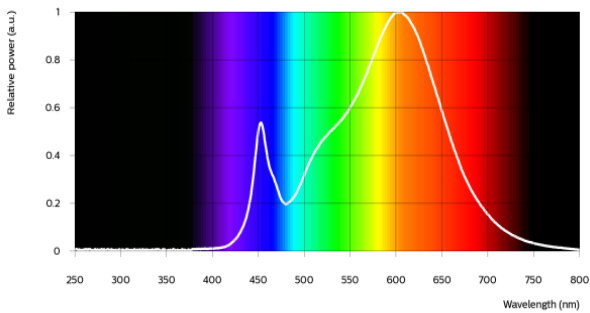
* Flux lower limit spec: -10% of typical. Luminous flux(Φuse) and Efficacy refer to Single Lighting Regulation (SLR).
9290 033 91380 contains light source EPREL model identifier: 929003391380LS. Registration number: 840081.
9290 033 91480 contains light source EPREL model identifier: 929003391480LS. Registration number: 840082.
9290 033 91580 contains light source EPREL model identifier: 929003391580LS. Registration number: 840083.
9290 033 91680 contains light source EPREL model identifier: 929003391680LS. Registration number: 840085.

Tuning table

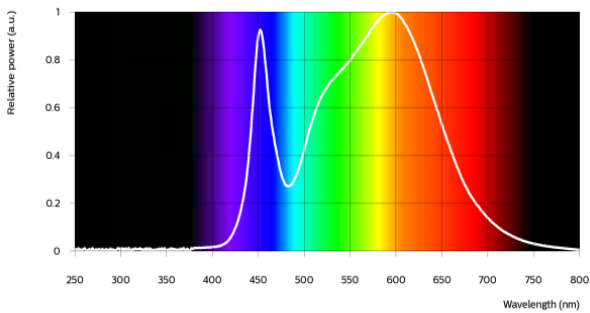
Operation Point		Current	3000K	4000K	5000K	6500K	Unit
Tc = 25°C	Luminous	80% I-nom 400mA	1801	1859	1859	1859	lm
	flux	I-nom 500mA	2228	2300	2300	2300	lm
		I-max 900mA	3810	3933	3933	3933	lm
	Efficacy	80% I-nom 400mA	137	141	141	141	lm/W
		I-nom 500mA	134	138	138	138	lm/W
		I-max 900mA	123	127	127	127	lm/W
Tc = 50°C	Luminous	80% I-nom 400mA	1740	1796	1796	1796	lm
	flux	I-nom 500mA	2150	2210	2210	2210	lm
		I-max 900mA	3643	3761	3761	3761	lm
	Efficacy	80% I-nom 400mA	134	139	139	139	lm/W
		I-nom 500mA	130	134	134	134	lm/W
		I-max 900mA	120	124	124	124	lm/W
Tc = 90°C	Luminous	80% I-nom 400mA	1631	1684	1684	1684	lm
	flux	I-nom 500mA	1998	2062	2062	2062	lm
		I-max 900mA	3341	3448	3448	3448	lm
	Efficacy	80% I-nom 400mA	130	134	134	134	lm/W
		I-nom 500mA	126	130	130	130	lm/W
		I-max 900mA	113	117	117	117	lm/W

Spectral characteristics

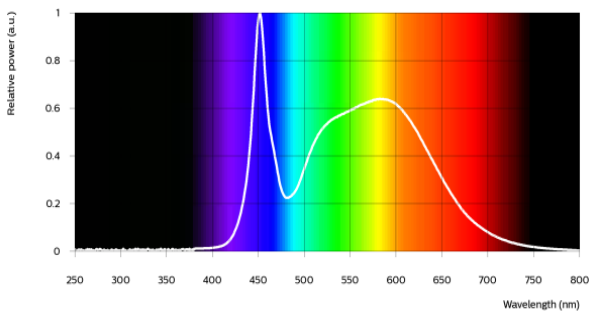
CRI80 3000K



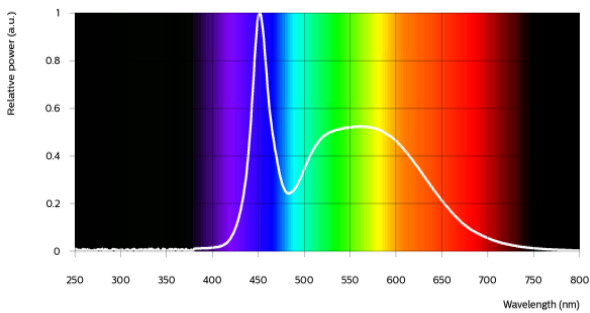
CRI80 4000K



CRI80 5000K

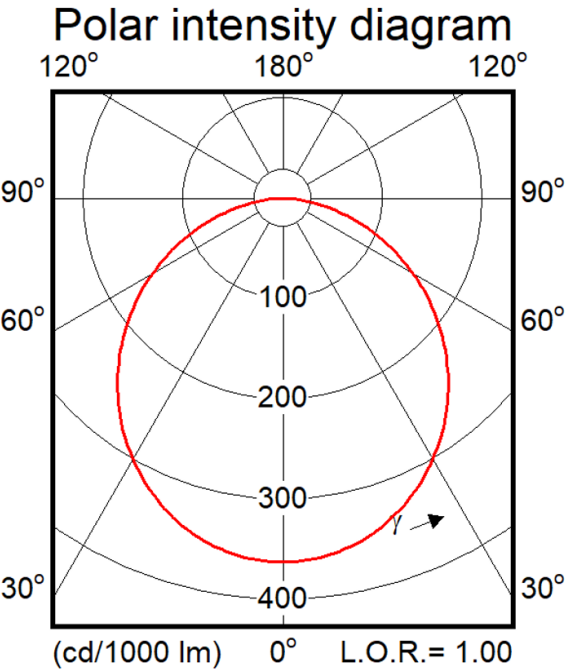


CRI80 6500K



Beam shape

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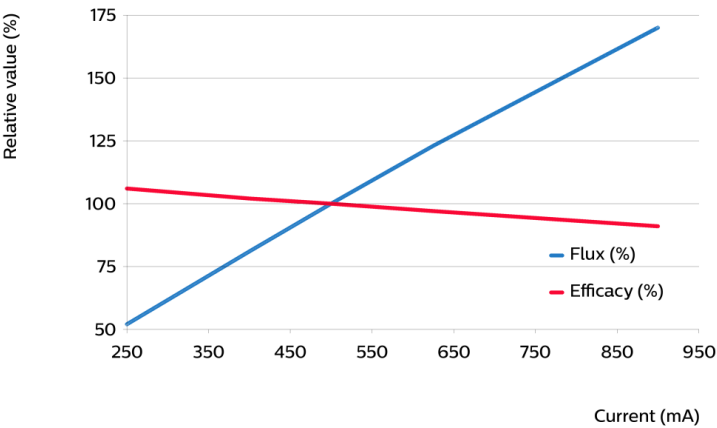
Electrical characteristics

Parameter	Min	Typ	Max	Unit
Forward voltage	31.0	33.0	36.0	V
Power consumption	15.5	16.5	18.0	W = kWh/1000h
Number of modules in series per chain			1	
Number of modules in parallel			1	
Measurement precision for Vf +/- 3%. Measurement precision for power +/- 3.3%				

Tuning information

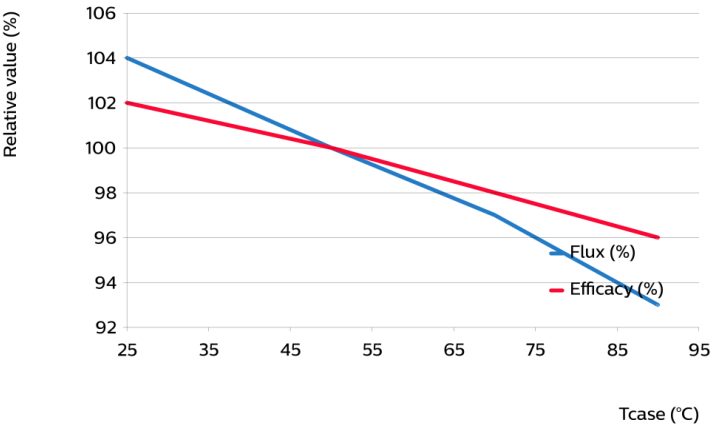
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
900	170	91
625	123	97
500	100	100
400	81	102
250	52	106



Flux and efficacy versus temperature at Tc (at I nominal)

Tc [°C]	Flux [%]	Efficacy [%]
90	93	96
70	97	98
50	100	100
25	104	102



Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70 B50	B20	B10	L80 B50	B20	B10	L90 B50	B20	B10
80% I nom 400mA	Tc nom 50°C	>50	>50	>50	>50	>50	>50	40	34	31
	Tc 65°C	>50	>50	>50	>50	>50	>50	34	29	27
	Tc max 90°C	>50	>50	>50	>50	49	45	27	23	21
I nom 500mA	Tc nom 50°C	>50	>50	>50	>50	>50	>50	38	32	29
	Tc 65°C	>50	>50	>50	>50	>50	>50	33	28	25
	Tc max 90°C	>50	>50	>50	>50	47	43	26	22	20
I max 900mA	Tc nom 50°C	>50	>50	>50	>50	>50	>50	33	28	25
	Tc 65°C	>50	>50	>50	>50	>50	47	28	24	22
	Tc max 90°C	>50	>50	>50	47	40	37	22	19	17

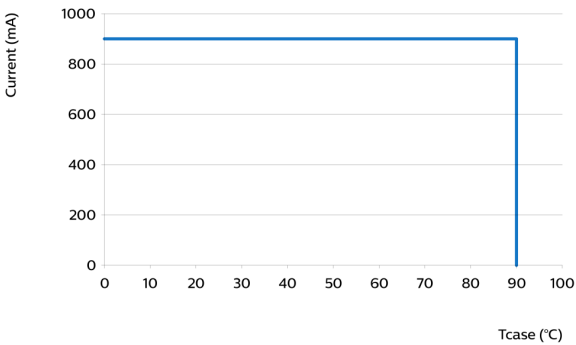
We use a Philips designed lifetime model, which uses LM80 data as only one of its inputs and assumes a continues operation of the module.

*B20 and B10 values are calculated by means of statistical techniques.

Lifetime

Parameter	Value	Unit
C10 at Tc life	>50000	hours
M70F50 nominal	>50000	hours

Performance Window



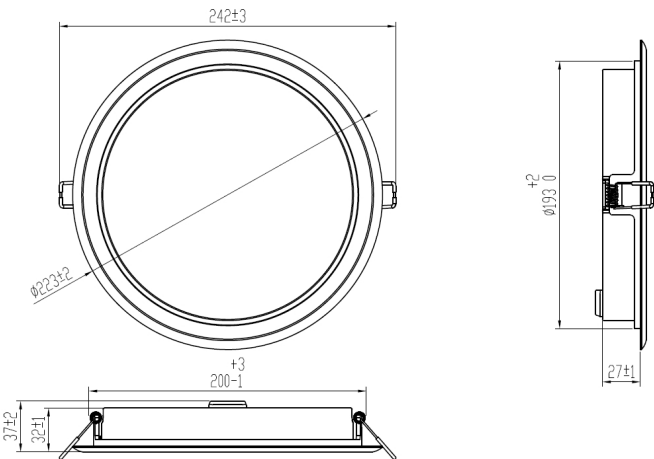
Wiring

Specification item	Value	Unit	Condition
Input wire cross-section	0.75...0.75	mm²	solid, fused, stranded
	18...18	AWG	solid, fused, stranded
Input wire strip length	8...10	mm	

Stranded, Brown=Positive Blue=Negative

Mechanical characteristics

Parameter	Min	Typ	Max	Unit
Length	221	223	225	mm
Width	221	223	225	mm
Height	35.5	36.5	37.5	mm
Product mass		250		gram



Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		900	mA
Case temperature (Tc-max)		90	°C
ESD (air)	8		kV
Working voltage		60	V _{dc}
Ambient temperature	-20	35	°C
Storage temperature	-40	65	°C

Application information

Certificates and Standards

CB
CE
IEC/TR 62778
IEC/EN 62031
UKCA

Environmental

RoHS/REACH

Application	
IP rating	No IP rating
Overheating protection	No protection
Luminaire class	SELV input only
Dimming	Yes

