

PHILIPS

CertaFlux

LED

CertaFlux LED Panel
30120



Datasheet

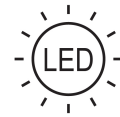
CertaFlux LED Panel

The ultra-slim CertaFlux LED panels enable an easy and economical solution for commercial spaces and buildings. With a wide choice of drivers different light levels can be achieved. It's different sizes (60x60; 62x62; 30x120; 60x120) makes it suitable for a wide range of ceilings. CertaFlux LED panels offer a good product performance (100 lm/W at 4000K CRI80) and reliability (30,000 hours).

Key features and benefits

- Efficacy up to 100 lm/W on module level
- Ultra-slim LED module
- Excellent light uniformity
- Good color rendering (CRI >80)
- Flexible lumen output due to wide driver choice
- 3 years system warranty
- Quick install connector is integrated
- Wide range of dimensions: 60x60; 62x62; 30x120; 60x120

September 2021



Ordering data

Commercial product name	EOC	12NC	Box quantity
CertaFlux LED Panel 30120 830 MD2	75173900	9290 021 66106	10
CertaFlux LED Panel 30120 840 MD2	75174600	9290 021 66206	10
CertaFlux LED Panel 30120 865 MD2	75175300	9290 021 66306	10

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
CertaFlux LED Panel 30120	800	1050	1150	mA

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T _c (case temperature at T _c point)	45	65	75	°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

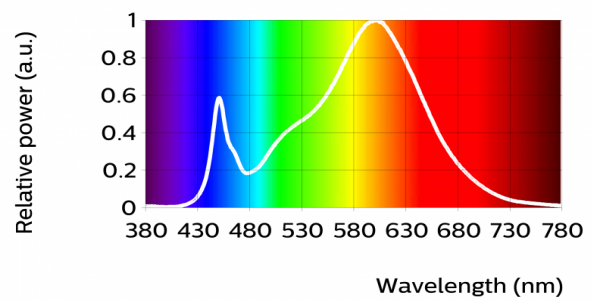
Optical characteristics - table per color (CCT)

CertaFlux LED Panel 30120 830 MD2

Parameter	Min	Typ	Max	Unit
Luminous flux	2610	2900	3190	lm
Module efficacy		101		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.439, 0.404)		-
Color consistency			6	SDCM
CRI	80			
Photometric code		830/699		
Radiation angle		115		deg
Photobiological safety			RG0	

Measurement precision $\pm 5\%$ for the flux data and $\pm 6\%$ for the efficacy data. Measurement precision for color coordinates ± 0.005 . Measurement precision for CRI ± 1.5

Operation point	830	lm	lm/W
50% I-nom 400mA	Tc 25 °C	1605	114
	Tc-nom 45 °C	1555	112
	Tc-max 75 °C	1472	107
I-nom 800mA	Tc 25 °C	2999	103
	Tc-nom 45 °C	2900	101
	Tc-max 75 °C	2736	96
I-max 1150mA	Tc 25 °C	4078	95
	Tc-nom 45 °C	3936	93
	Tc-max 75 °C	3699	88



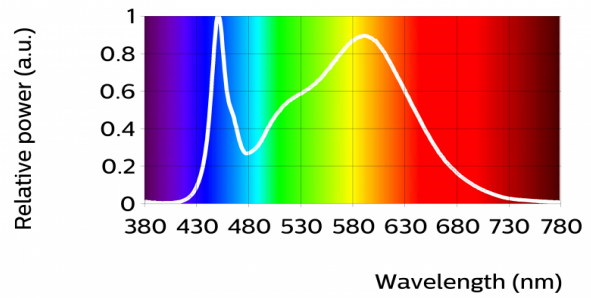
This product contains a light source of energy efficiency class E. EPREL model identifier: C0100111820D. Registration number: 840067.

CertaFlux LED Panel 30120 840 MD2

Parameter	Min	Typ	Max	Unit
Luminous flux	2790	3100	3410	lm
Module efficacy		108		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.380, 0.382)		-
Color consistency			6	SDCM
CRI	80			
Photometric code		840/699		
Radiation angle		115		deg
Photobiological safety			RG0	

Measurement precision ± 5% for the flux data and ± 6% for the efficacy data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5

Operation point	840	lm	lm/W
		Tc 25 °C	1714
50% I-nom 400mA	Tc-nom 45 °C	1661	119
	Tc-max 75 °C	1572	114
	Tc 25 °C	3206	110
I-nom 800mA	Tc-nom 45 °C	3100	108
	Tc-max 75 °C	2925	103
	Tc 25 °C	4361	102
I-max 1150mA	Tc-nom 45 °C	4209	99
	Tc-max 75 °C	3956	95



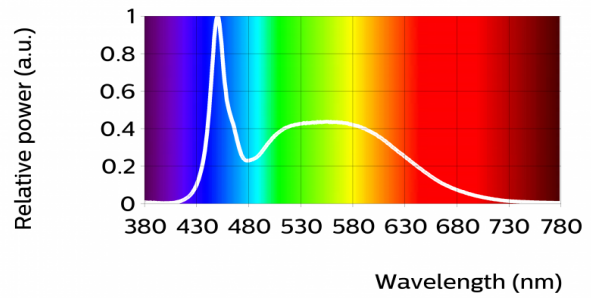
This product contains a light source of energy efficiency class E. EPREL model identifier: C0100111840D. Registration number: 840039.

CertaFlux LED Panel 30120 865 MD2

Parameter	Min	Typ	Max	Unit
Luminous flux	2790	3100	3410	lm
Module efficacy		108		lm/W
Correlated color temperature (CCT)		6500		K
Color coordinates (CIEx, CIEy)		(0.311, 0.337)		-
Color consistency			6	SDCM
CRI	80			
Photometric code		865/699		
Radiation angle		115		deg
Photobiological safety			RG0	

Measurement precision ± 5% for the flux data and ± 6% for the efficacy data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5

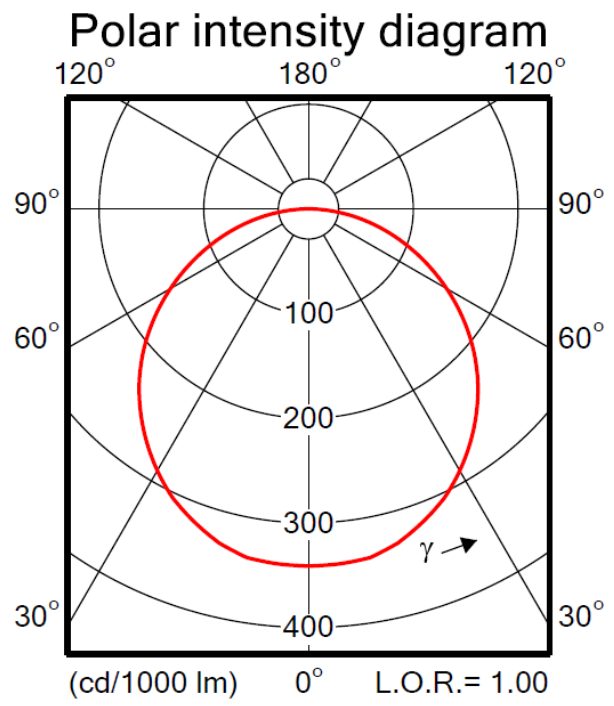
Operation point	865	lm	lm/W
		Tc 25 °C	1714
50% I-nom 400mA	Tc-nom 45 °C	1661	119
	Tc-max 75 °C	1572	114
	Tc 25 °C	3206	110
I-nom 800mA	Tc-nom 45 °C	3100	108
	Tc-max 75 °C	2925	103
	Tc 25 °C	4361	102
I-max 1150mA	Tc-nom 45 °C	4209	99
	Tc-max 75 °C	3956	95



This product contains a light source of energy efficiency class E. EPREL model identifier: C0100111850D. Registration number: 840061.

Beam shape

The CertaFlux LED panel creates a Lambertian light distribution.



Electrical characteristics

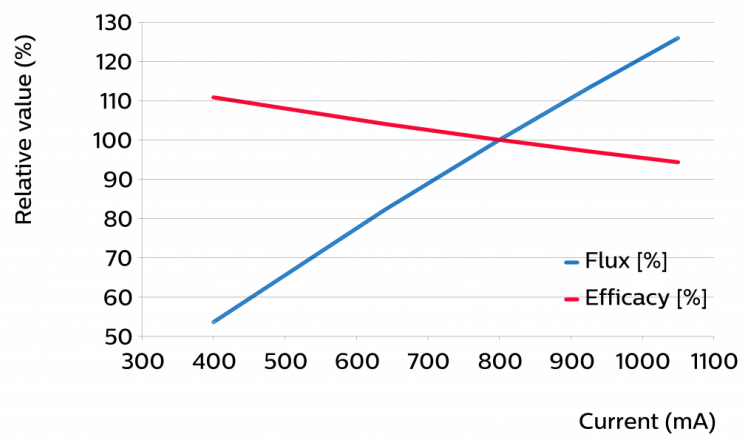
Parameter	Min	Typ	Max	Unit
Forward voltage	33.5	36.0	38.5	V
Power consumption	26.8	28.8	30.8	W = kWh/1000h
Number of modules in series per chain			1	
Number of modules in parallel			1	

Measurement precision for Vf +/- 3%. Measurement precision for power +/- 3.3%
 Specifications stated at Tc-nom and I-nom

Tuning information

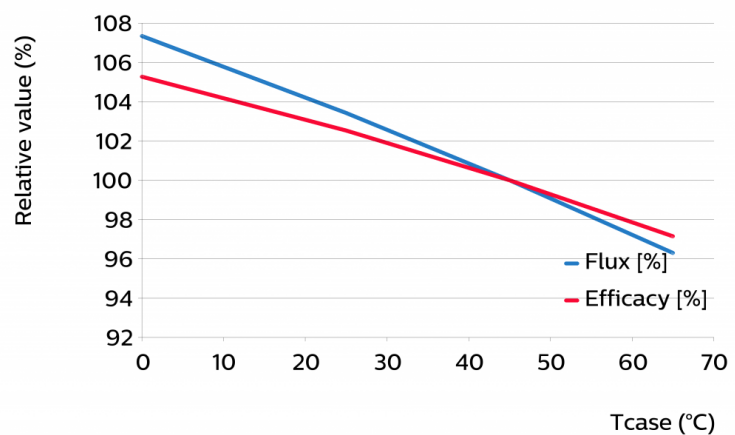
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
1050	126	94
925	113	97
800	100	100
640	82	104
400	54	111



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

Tc [°C]	Flux [%]	Efficacy [%]
65	96	97
45	100	100
25	103	103
0	107	105



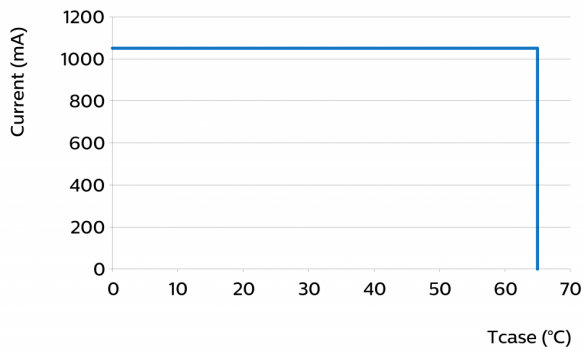
Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70		
		B50	B20	B10
I nom 800 mA	Tc 45°C	>30	>30	>30
	Tc 65°C	>30	>30	>30
	Tc 75°C	>30	>30	>30
I life 1050 mA	Tc 45°C	>30	>30	>30
	Tc 65°C	>30	>30	>30
	Tc 75°C	>30	>30	>30

Lifetime

Parameter	Value	Unit
C10 at Tc life	>30000	hours
M70F50 nominal	>30000	hours
M70F50 life	>30000	hours

Performance Window



Wiring

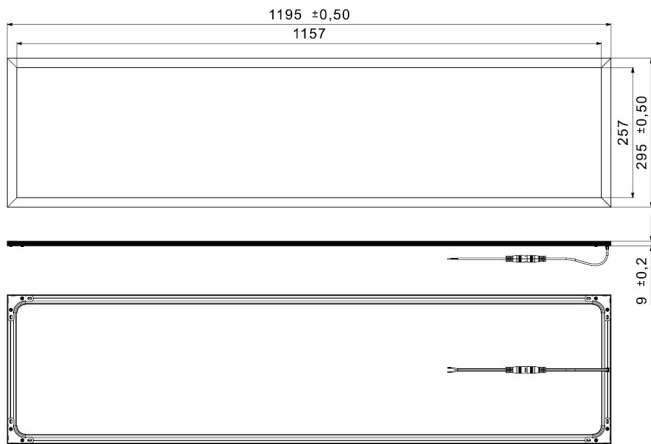
Specification item	Value	Unit	Condition
Input wire cross-section	0.5...0.5	mm ²	stranded
	20...20	AWG	stranded
Input wire strip length	7...9	mm	



The LED module is provided with a quick install connector pair. Color coding for lead wires: Brown = + and Blue = -

Mechanical characteristics

Parameter	Min	Typ	Max	Unit
Length	1194.5	1195	1195.5	mm
Width	294.5	295	295.5	mm
Height	8.8	9	9.2	mm
Product mass		2000		gram



Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		1150	mA
Case temperature (Tc-max)		75	°C
Power at rated Vf-max and I-max		38	W
ESD (direct contact)		8	kV
ESD (air)		15	kV
Working voltage		60	V _{dc}
Ambient temperature	-10	45	°C
Storage temperature	-20	60	°C

Application information

Certificates and Standards

CB
CE
IEC 62031
IEC 60598-1
IEC 60598-2-1
IEC 60598-2-2

Environmental

RoHS/REACH

Application

IP rating	IP40
Overheating protection	No protection
Luminaire class	IEC Class I, II and III. SELV input only.
Dimming	Yes



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