

**PHILIPS**

Fortimo

LED system

DLM Flex 3000 lm



## Datasheet

# A new generation solution for downlight applications

### Fortimo LED DLM Flex 3000 lm

The Fortimo LED DLM Flex is a new generation solution for downlight applications. It is a product in line with the Fortimo brand promise of light quality and a smart system. We provide you with a system proposition ranging from 1100 lm to 5000 lm in preset outputs, with the flexibility to tune as per your needs.

This module is available in the following options. Apart from the nominal value, the module can be operated at different currents. More information about such tuning can be found further on in the document.

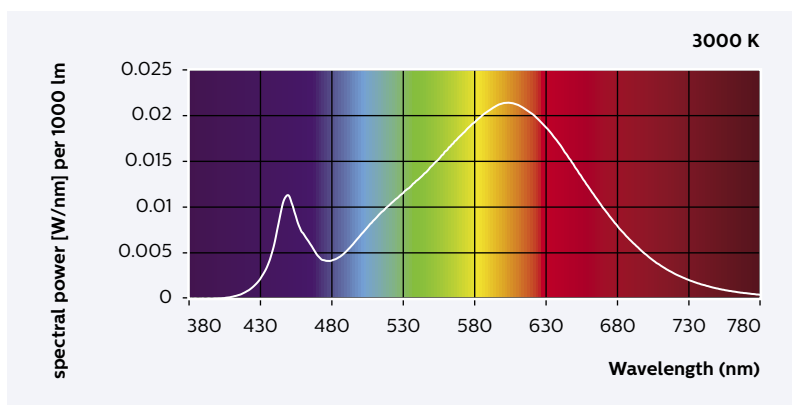
Commercial product name	Type	EOC	12NC
Fortimo LED DLM Flex 3000/830 Gen1	LED board	8718291 797319 00	92900 0907 906
Fortimo LED DLM Flex 3000/840 Gen1	LED board	8718291 797333 00	92900 0908 006
Fortimo LED DLM Flex Cover	Shallow housing	8718291 797456 00	92900 0908 506
Fortimo LED DLM Flex High Cover	High housing	8718696 421178 00	92900 0927 806
Fortimo LED DLM Flex cable 600mm	Cable	8718696 421192 00	92900 0910 706

## Optical characteristics - table per CCT

### Fortimo LED DLM 3000 lm 830

Parameter	LED board	With Shallow Housing	With High Housing	Unit
Typical Luminous Flux	3488	3000	3000	lm
Module Efficiency	129	111	91	lm/W
Nominal Current	790	790	950	mA
Rset2	2210 (On board)	2210 (On board)	3090	$\Omega$
Correlated Colour Temperature	3000	3000	3000	K
Colour Consistency	3	3	3	SDCM
CRI	>80	>80	>80	-
Radiation Angle		94	108	deg
Thermal Power	16.1	17.6	23.7	W
Energy efficiency label	A+	A+	A	-

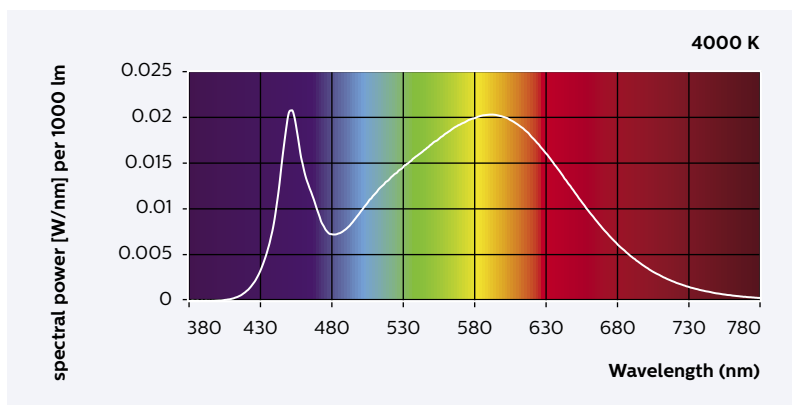
Note: Specifications stated at Tc nom = 75 °C



### Fortimo LED DLM 3000 lm 840

Parameter	LED board	With Shallow Housing	With High Housing	Unit
Luminous Flux	3488	3000	3000	lm
Module Efficiency	141	121	100	lm/W
Nominal Current	720	720	870	mA
Rset2	1960 (On board)	1960 (On board)	2610	$\Omega$
Correlated Colour Temperature	4000	4000	4000	K
Colour Consistency	3	3	3	SDCM
CRI	>80	>80	>80	-
Radiation Angle		94	108	deg
Thermal Power	14.1	15.5	20.8	W
Energy efficiency label	A+	A+	A+	-

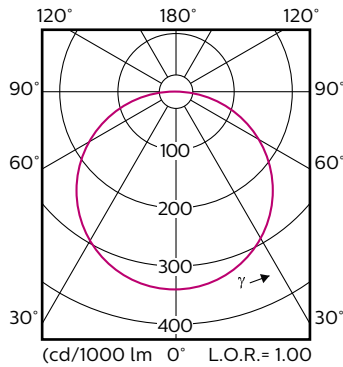
Note: Specifications stated at Tc nom = 75 °C



## Beam shape

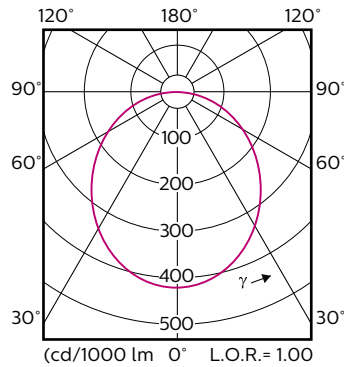
The Philips Fortimo LED DLM generates a Lambertian beam shape, which is a pragmatic starting point for OEMs wishing to design secondary optics.

Polar intensity diagram



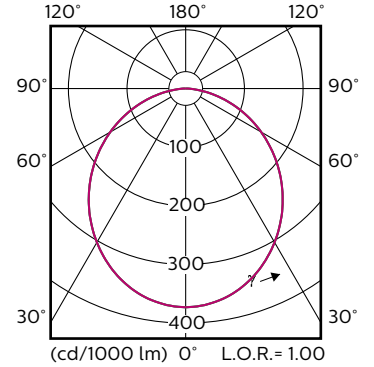
Only LED board (L2)

Polar intensity diagram



With Shallow Housing (L2+)

Polar intensity diagram



With High Housing (L2+)

## Electrical characteristics

### Fortimo LED DLM 3000 lm 830

Parameter	Typ (Shallow Housing)	Typ (High Housing)	Unit
Nominal current	790	950	mA
Forward voltage	34.4	34.8	V
Power consumption	27.0	33.1	W

Note: Specifications stated at Tc nom = 75 °C

### Fortimo LED DLM 3000 lm 840

Parameter	Typ (Shallow Housing)	Typ (High Housing)	Unit
Nominal current	720	870	mA
Forward voltage	34.3	34.6	V
Power consumption	24.7	30.0	W

Note: Specifications stated at Tc nom = 75 °C

## Lifetime

Parameter	Min	Typ	Max	Unit
Lumen maintenance B50L70	60,000			hours

Note: Specifications stated at Tc nom = 75 °C and nominal current

Parameter	Nominal *	Max**
Tc [°C]	75	85

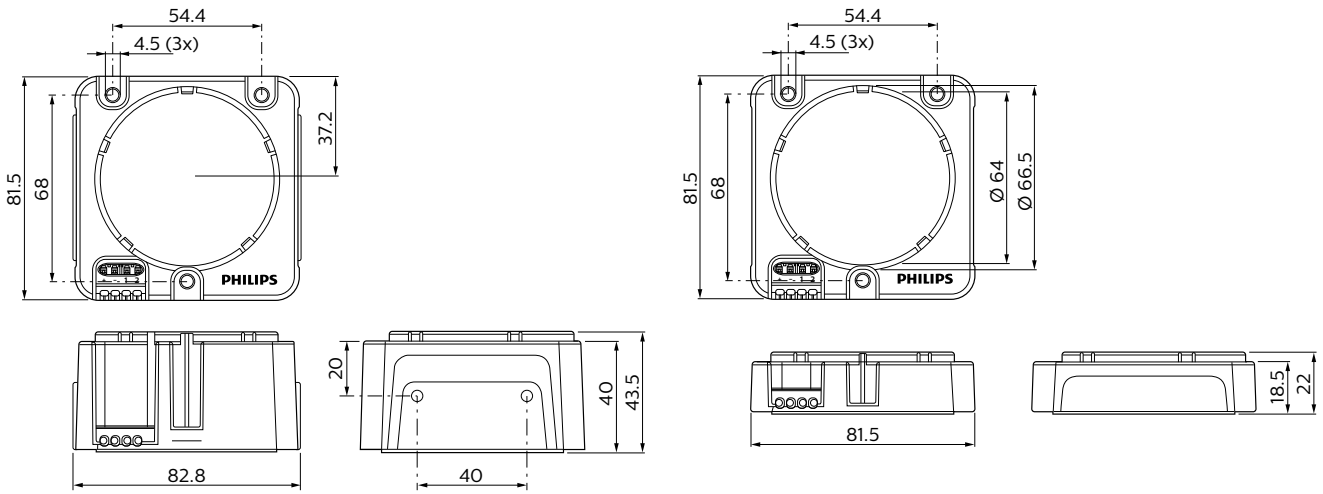
\* Nominal value at which performance is specified

\*\* Maximum value for safety

## Abs max ratings

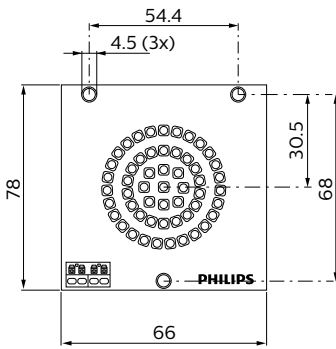
Parameter	Min	Max	Unit
Current I <sub>max</sub>		1920	mA
Case temperature T <sub>c max</sub>		85	°C
Human Body Model (HBM) Class 2A JS-001-2012		1	kV
Storage temperature	-40	100	°C

## Mechanical characteristics



High housing

Shallow housing



LED board

## Application information

### Compliance and approval

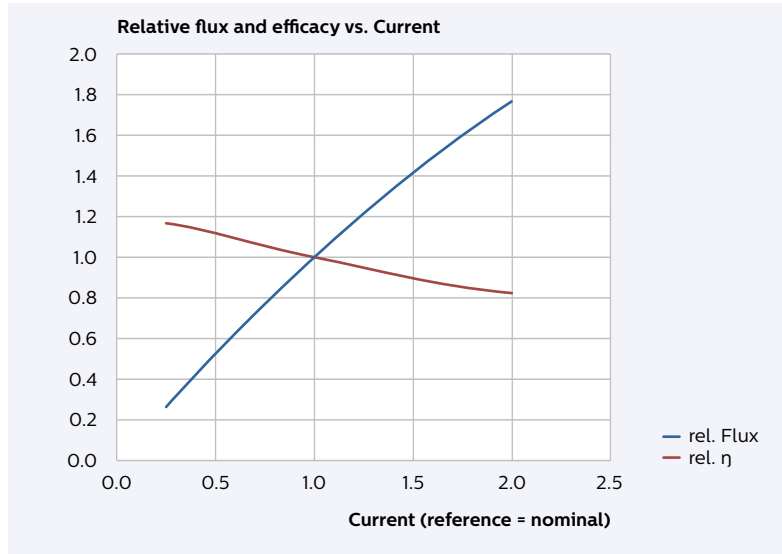
IEC/EN 62031, IEC 62471

### Application information

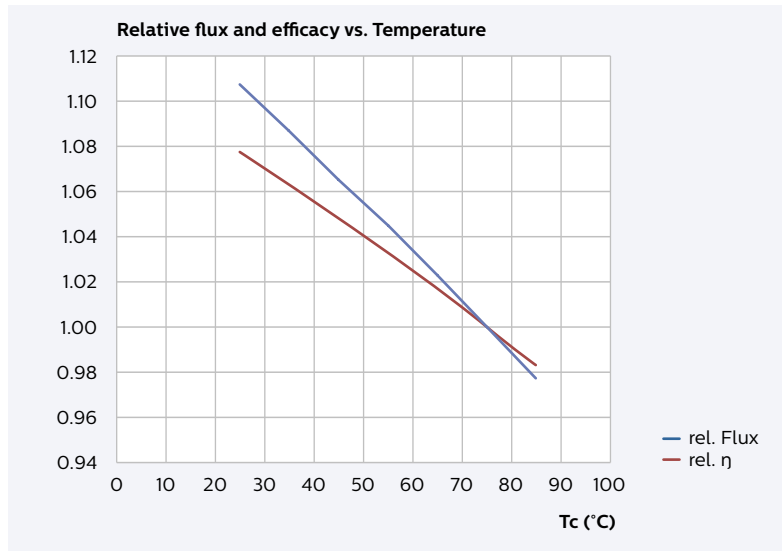
IP rating	No IP rating
Overheating protection	No protection

## Tuning information

### Flux and efficacy versus current (at nominal temperature) 3000 lm

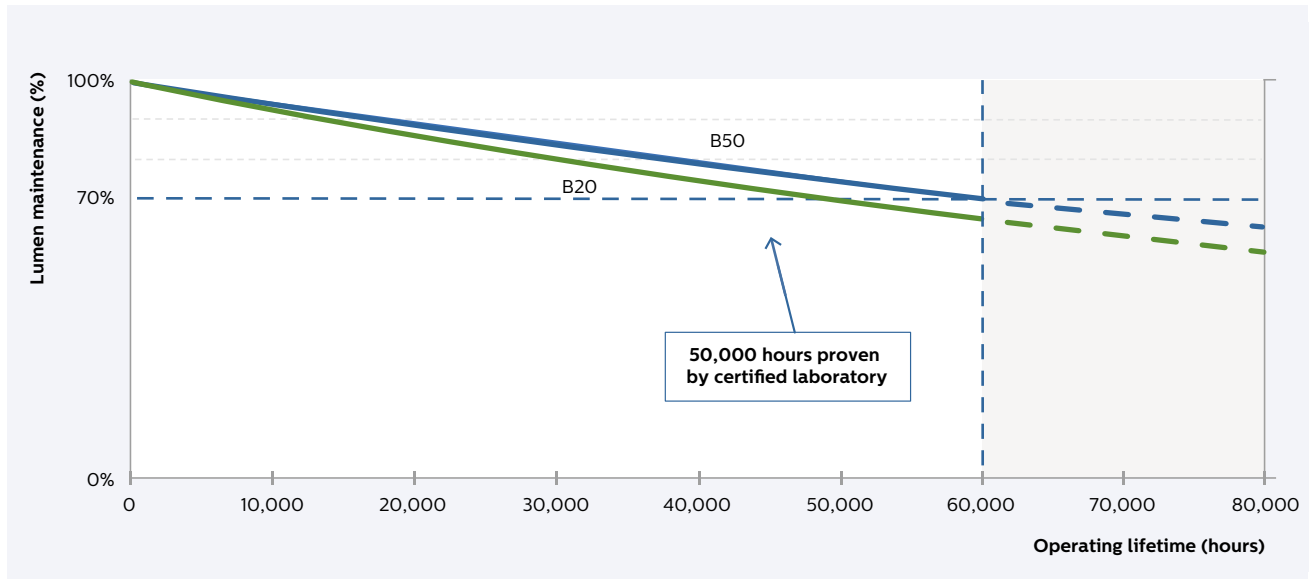


### Flux and efficacy versus temperature at $T_c$ (at nominal current) 1100 lm

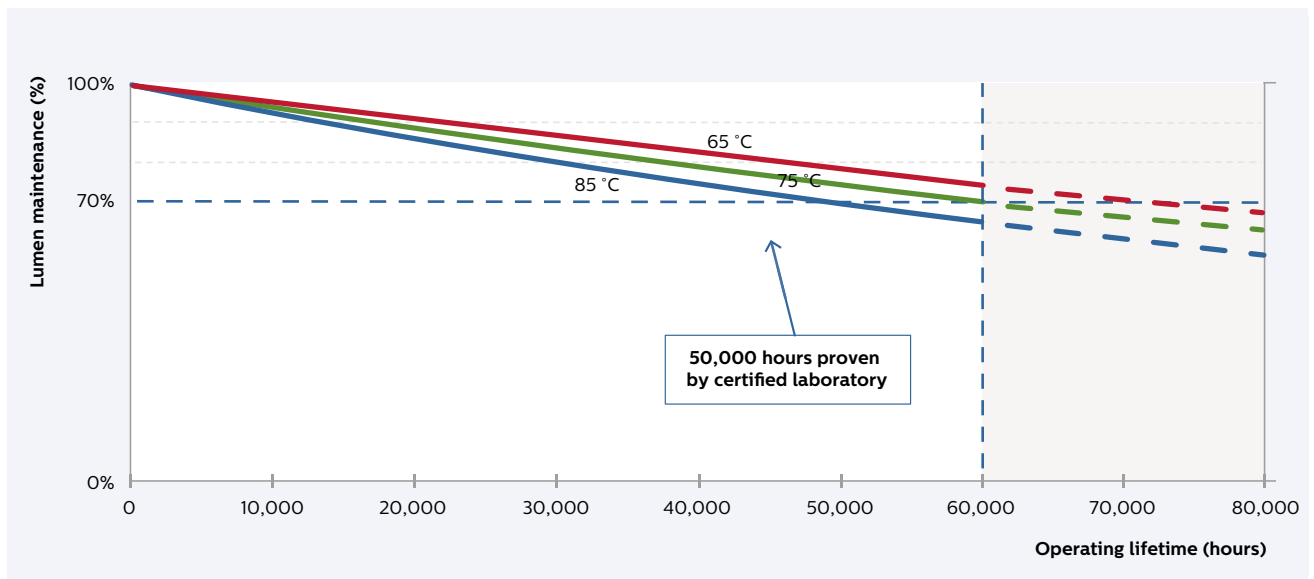


# Lumen maintenance

Lumen maintenance: Nominal Conditions  
Fortimo LED DLM 3000 lm



Lumen Maintenance B50: Nominal Current  
Fortimo LED DLM 3000 lm





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