

**PHILIPS**

**Fortimo**

**LED**

Fortimo LEDFlex  
2000lm/m 9xx G1



Datasheet

# Fortimo LEDFlex system

## Key features and benefits

- Ideal for built-in applications on aluminum extrusions and for various decorative lighting applications such as cove lighting, indoor facade accent lighting.
- Luminous flux range of 1000/1500/2000/2500 lm/m
- Colour temperature 2700/3000 Premium White/4000 Premium White/6500 K with 3 SDCM color consistency
- CRI 90
- Efficacy up to 125 lm/W
- Extremely narrow pitch distance enables outstanding uniformity even with a short distance to the diffuser.
- High design freedom by cut-options every 5 cm
- Self-adhesive 3M tape on the back for simple and reliable mounting on various surfaces
- PCB to PCB and wire to PCB connectors for toolless handling and connection
- Life-time of 50,000 hours
- Five year warranty

May 2019



indirect



instant

## Ordering data

Commercial product name	EOC	12NC	Box quantity
Fortimo LEDFlex 5m 2000lm/m 930PW C5 G1	8718699 661366 00	9290 014 90080	15
Fortimo LEDFlex 5m 2000lm/m 940PW C5 G1	8718699 661380 00	9290 014 90180	15
Fortimo LEDFlex 5m 2000lm/m 927 C5 G1	8718699 661403 00	9290 014 90280	15
Fortimo LEDFlex 5m 2000lm/m 965 C5 G1	8718699 661427 00	9290 014 90380	15
Fortimo LEDFlex 50m 2000lm/m 930PW C5 G1	8718699 661922 00	9290 014 92880	5
Fortimo LEDFlex 50m 2000lm/m 940PW C5 G1	8718699 661946 00	9290 014 92980	5

## Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T <sub>c</sub> (case temperature at T <sub>c</sub> point)	65	75	85	°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)

Fortimo LEDFlex 5m 2000lm/m 930PW C5 G1

Fortimo LEDFlex 50m 2000lm/m 930PW C5 G1

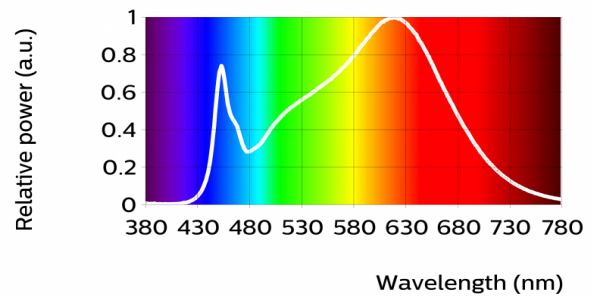
Parameter	Min	Typ	Max	Unit
Luminous flux	1800	2000	2400	lm
Module efficacy		117		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.422, 0.386)		-
Color consistency			3	SDCM
CRI	90			
R9	50			
Photometric code		930/359		
Radiation angle		120		deg
Photobiological safety			RG1 unlimited	



R9 typical is 68.

Flux expressed per meter

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

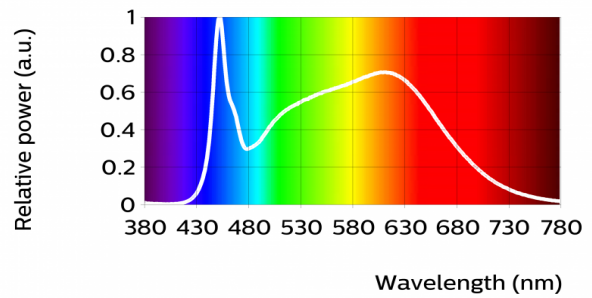


Fortimo LEDFlex 5m 2000lm/m 940PW C5 G1  
 Fortimo LEDFlex 50m 2000lm/m 940PW C5 G1

Parameter	Min	Typ	Max	Unit
Luminous flux	1800	2000	2400	lm
Module efficacy		125		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.374, 0.364)		-
Color consistency			3	SDCM
CRI	90			
R9	50			
Photometric code		940/359		
Radiation angle		120		deg
Photobiological safety			RG1 unlimited	



R9 typical is 68.  
 Flux expressed per meter  
 Measurement precision for flux +/- 5%, for efficacy +/- 6%, for x, y +/- 0.005, for CRI +/- 1.5



Fortimo LEDFlex 5m 2000lm/m 927 C5 G1

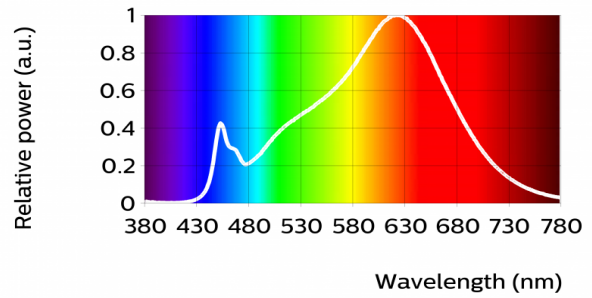
Parameter	Min	Typ	Max	Unit
Luminous flux	1800	2000	2400	lm
Module efficacy		111		lm/W
Correlated color temperature (CCT)		2700		K
Color coordinates (CIEx, CIEy)		(0.458, 0.410)		-
Color consistency			3	SDCM
CRI	90			
R9	50			
Photometric code		927/359		
Radiation angle		120		deg
Photobiological safety			RG1 unlimited	



R9 typical is 64.

Flux expressed per meter

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



Fortimo LEDFlex 5m 2000lm/m 965 C5 G1

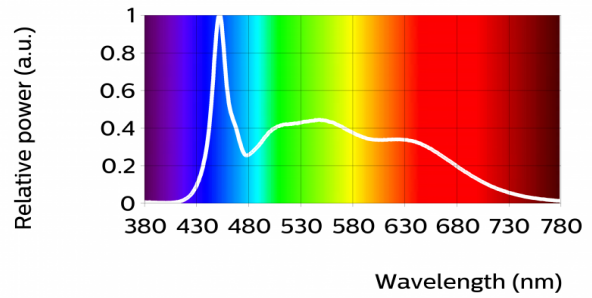
Parameter	Min	Typ	Max	Unit
Luminous flux	1800	2000	2400	lm
Module efficacy		125		lm/W
Correlated color temperature (CCT)		6500		K
Color coordinates (CIEx, CIEy)		(0.312, 0.328)		-
Color consistency			3	SDCM
CRI	90			
R9	50			
Photometric code		965/359		
Radiation angle		120		deg
Photobiological safety			RG1 unlimited	



R9 typical is 90.

Flux expressed per meter

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



## Electrical characteristics

### [Fortimo LEDFlex 5m 2000lm/m 930PW C5 G1](#) [Fortimo LEDFlex 50m 2000lm/m 930PW C5 G1](#)

Parameter	Min	Typ	Max	Unit
Forward voltage	22.8	24.0	25.2	V
Power consumption		17.1		W = kWh/1000h
Thermal power		10.0		W

Power expressed per meter. Measurement precision for power +/- 3.3%.

Maximum LEDFlex length is 7 meter, using 250mm cable at Tc nominal where luminous flux is above 90% of claimed.

For details see Design in Guide on [www.philips.com/oem](http://www.philips.com/oem).

### [Fortimo LEDFlex 5m 2000lm/m 940PW C5 G1](#) [Fortimo LEDFlex 50m 2000lm/m 940PW C5 G1](#)

Parameter	Min	Typ	Max	Unit
Forward voltage	22.8	24.0	25.2	V
Power consumption		16.0		W = kWh/1000h
Thermal power		9.1		W

Power expressed per meter. Measurement precision for power +/- 3.3%.

Maximum LEDFlex length is 7 meter, using 250mm cable at Tc nominal where luminous flux is above 90% of claimed.

For details see Design in Guide on [www.philips.com/oem](http://www.philips.com/oem).

### [Fortimo LEDFlex 5m 2000lm/m 927 C5 G1](#)

Parameter	Min	Typ	Max	Unit
Forward voltage	22.8	24.0	25.2	V
Power consumption		18.0		W = kWh/1000h
Thermal power		10.9		W

Power expressed per meter. Measurement precision for power +/- 3.3%.

Maximum LEDFlex length is 6.5 meter, using 250mm cable at Tc nominal where luminous flux is above 90% of claimed.

For details see Design in Guide on [www.philips.com/oem](http://www.philips.com/oem).

### [Fortimo LEDFlex 5m 2000lm/m 965 C5 G1](#)

Parameter	Min	Typ	Max	Unit
Forward voltage	22.8	24.0	25.2	V
Power consumption		16.0		W = kWh/1000h
Thermal power		8.6		W

Power expressed per meter. Measurement precision for power +/- 3.3%.

Maximum LEDFlex length is 7 meter, using 250mm cable at Tc nominal where luminous flux is above 90% of claimed.

For details see Design in Guide on [www.philips.com/oem](http://www.philips.com/oem).

## Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70		
		B50	B20	B10
	Tc 55°C	>50	>50	>50
	Tc 65°C	>50	>50	>50
	Tc 75°C	>50	>50	>50

## Lifetime

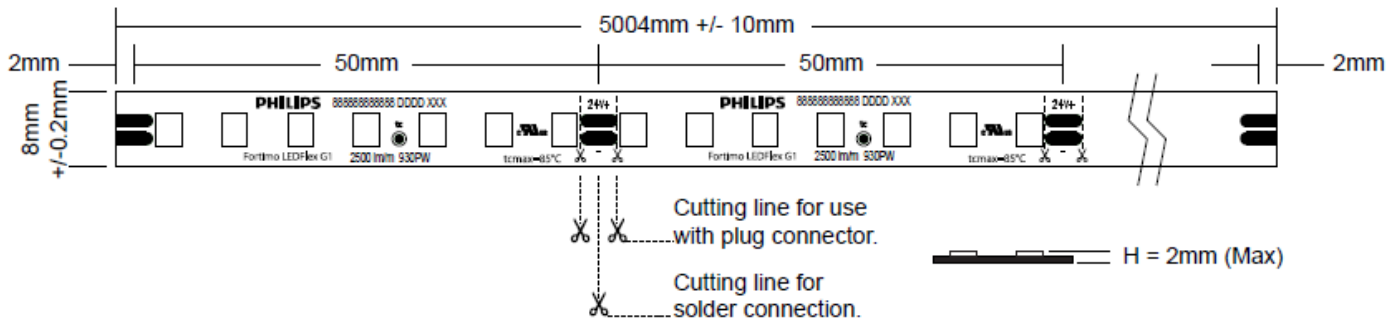
Parameter	Value	Unit
C10 at Tc life	>50000	hours
M70F50 nominal	>50000	hours
M70F50 life	>50000	hours

Switching cycles in accordance to EU 1194/2012: >15000

## Mechanical characteristics

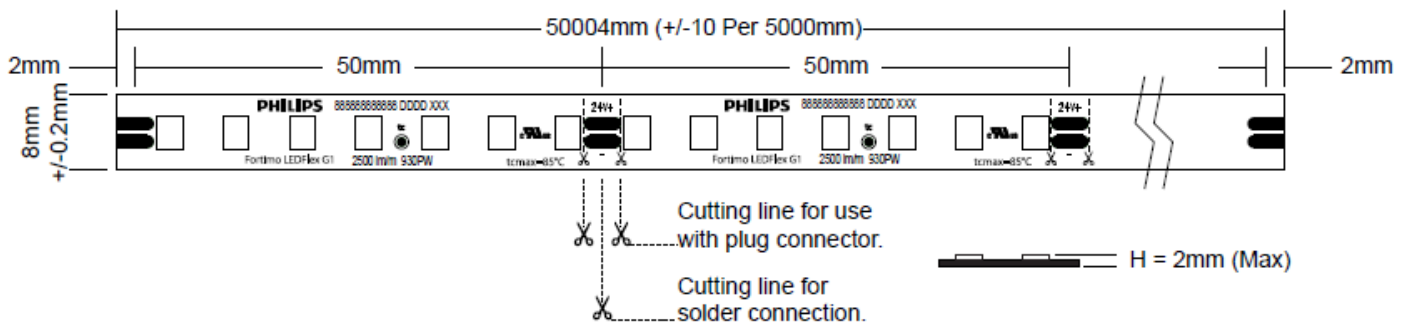
Fortimo LEDFlex 5m 2000lm/m 930PW C5 G1  
 Fortimo LEDFlex 5m 2000lm/m 940PW C5 G1  
 Fortimo LEDFlex 5m 2000lm/m 927 C5 G1  
 Fortimo LEDFlex 5m 2000lm/m 965 C5 G1

Parameter	Min	Typ	Max	Unit
Length		5004		mm
Width	7.8	8	8.2	mm
Height			2	mm
Product mass		70		gram



Fortimo LEDFlex 50m 2000lm/m 930PW C5 G1  
 Fortimo LEDFlex 50m 2000lm/m 940PW C5 G1

Parameter	Min	Typ	Max	Unit
Length		50004		mm
Width	7.8	8	8.2	mm
Height			2	mm
Product mass		700		gram





## Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		5000	mA
Case temperature (Tc-max)		85	°C
ESD (direct contact)		8	kV
ESD (air)		15	kV
Ambient temperature	-20	50	°C
Storage temperature	-30	85	°C

## Application information

### Certificates and Standards

UL/cRUus

CB

CE

CQC

ENEC

ENEC+

### Application

IP rating	no IP-rating
Overheating protection	No protection
Luminaire class	IEC class I, II and III. SELV input only, constant voltage 24V.
Luminaire class ANSI	UL class 2
Dimming	Yes

Built-in applications only. Dimming by pulse width modulation.



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