

PHILIPS

Fortimo

LED

Fortimo LEDFlex
2500lm/m 8xx 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 2700/3000/4000/6500 K with 3 SDCM color consistency
- CRI 80
- Efficacy up to 142 lm/W
- Narrow pitch distance with 70 leds per meter enables best uniformity
- High design freedom by cut-options every 10 cm
- Self-adhesive 3M tape on the back for simple 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

September 2021



Ordering data

Commercial product name	EOC	12NC	Box quantity
Fortimo LEDFlex 5m 2500lm/m 830 C10 G1	8718699 661762 00	9290 014 92080	15
Fortimo LEDFlex 5m 2500lm/m 840 C10 G1	8718699 661786 00	9290 014 92180	15
Fortimo LEDFlex 5m 2500lm/m 827 C10 G1	8718699 661809 00	9290 014 92280	15
Fortimo LEDFlex 5m 2500lm/m 865 C10 G1	8718699 661823 00	9290 014 92380	15
Fortimo LEDFlex 50m 2500lm/m 830 C10 G1	8718699 662127 00	9290 014 93880	5
Fortimo LEDFlex 50m 2500lm/m 840 C10 G1	8718699 662141 00	9290 014 93980	5

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T _c (case temperature at T _c 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

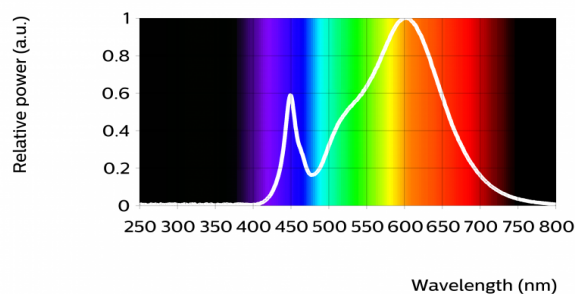
Optical characteristics - table per color (CCT)

Fortimo LEDFlex 5m 2500lm/m 830 C10 G1
Fortimo LEDFlex 50m 2500lm/m 830 C10 G1

Parameter	Min	Typ	Max	Unit
Luminous flux	2250	2500	2750	lm
Module efficacy		132		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.434, 0.403)		-
Color consistency			3	SDCM
CRI	80			
R9	0			
Photometric code		830/359		
Radiation angle		120		deg
Photobiological safety			RG1 unlimited	

Flux expressed per meter

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

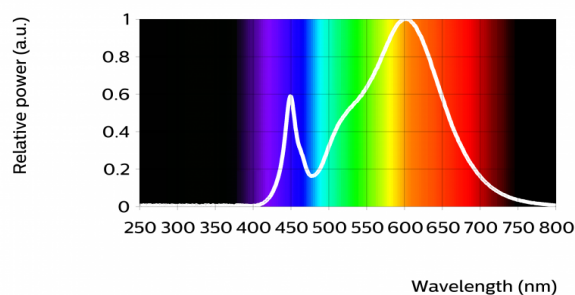


Fortimo LEDFlex 5m 2500lm/m 840 C10 G1
Fortimo LEDFlex 50m 2500lm/m 840 C10 G1

Parameter	Min	Typ	Max	Unit
Luminous flux	2250	2500	2750	lm
Module efficacy		142		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.382, 0.380)		-
Color consistency			3	SDCM
CRI	80			
R9	0			
Photometric code		840/359		
Radiation angle		120		deg
Photobiological safety			RG1 unlimited	

Flux expressed per meter

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

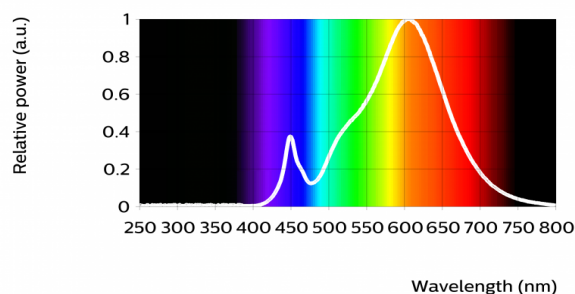


Fortimo LEDFlex 5m 2500lm/m 827 C10 G1

Parameter	Min	Typ	Max	Unit
Luminous flux	2250	2500	2750	lm
Module efficacy		126		lm/W
Correlated color temperature (CCT)		2700		K
Color coordinates (CIEx, CIEy)		(0.458, 0.410)		-
Color consistency			3	SDCM
CRI	80			
R9	0			
Photometric code		827/359		
Radiation angle		120		deg
Photobiological safety			RG1 unlimited	

Flux expressed per meter

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

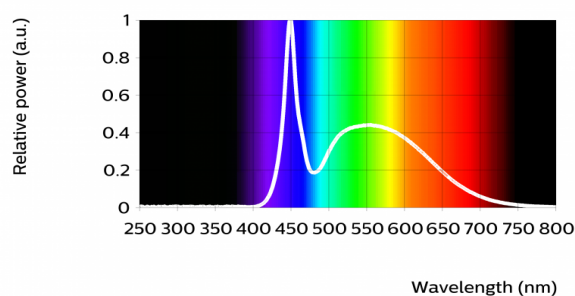


Fortimo LEDFlex 5m 2500lm/m 865 C10 G1

Parameter	Min	Typ	Max	Unit
Luminous flux	2250	2500	2750	lm
Module efficacy		142		lm/W
Correlated color temperature (CCT)		6500		K
Color coordinates (CIEx, CIEy)		(0.312, 0.328)		-
Color consistency			3	SDCM
CRI	80			
R9	0			
Photometric code		865/359		
Radiation angle		120		deg
Photobiological safety			RG1 unlimited	

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 2500lm/m 830 C10 G1 Fortimo LEDFlex 50m 2500lm/m 830 C10 G1

Parameter	Min	Typ	Max	Unit
Forward voltage	22.8	24.0	25.2	V
Power consumption		18.9		W = kWh/1000h
Thermal power		11.5		W

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

Maximum LEDFlex length is 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.

Fortimo LEDFlex 5m 2500lm/m 840 C10 G1 Fortimo LEDFlex 50m 2500lm/m 840 C10 G1

Parameter	Min	Typ	Max	Unit
Forward voltage	22.8	24.0	25.2	V
Power consumption		17.6		W = kWh/1000h
Thermal power		10.2		W

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

Maximum LEDFlex length is 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.

Fortimo LEDFlex 5m 2500lm/m 827 C10 G1

Parameter	Min	Typ	Max	Unit
Forward voltage	22.8	24.0	25.2	V
Power consumption		19.9		W = kWh/1000h
Thermal power		12.2		W

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

Maximum LEDFlex length is 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.

Fortimo LEDFlex 5m 2500lm/m 865 C10 G1

Parameter	Min	Typ	Max	Unit
Forward voltage	22.8	24.0	25.2	V
Power consumption		17.6		W = kWh/1000h
Thermal power		9.9		W

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

Maximum LEDFlex length is 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.

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

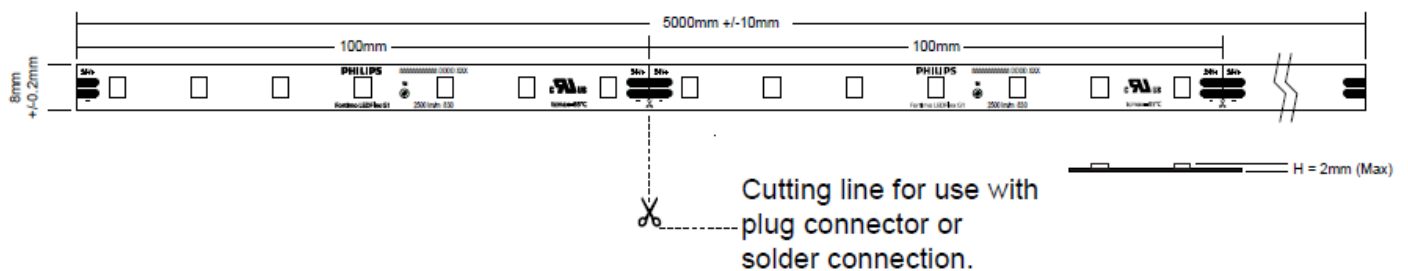
Fortimo LEDFlex 5m 2500lm/m 830 C10 G1

Fortimo LEDFlex 5m 2500lm/m 840 C10 G1

Fortimo LEDFlex 5m 2500lm/m 827 C10 G1

Fortimo LEDFlex 5m 2500lm/m 865 C10 G1

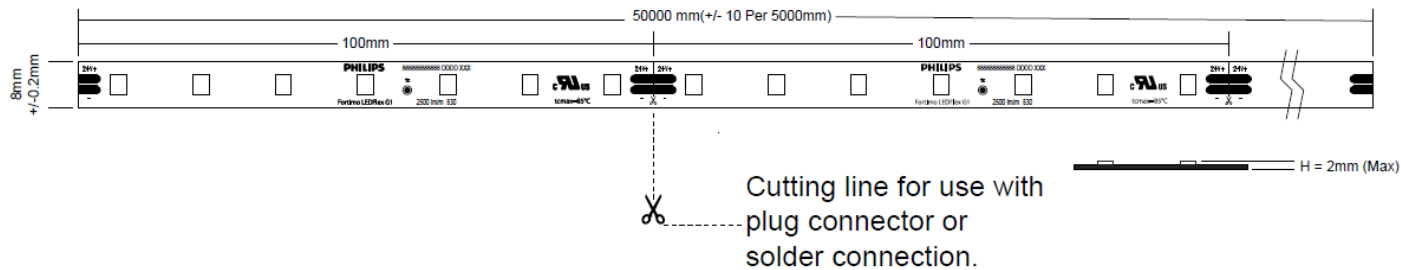
Parameter	Min	Typ	Max	Unit
Length		5000		mm
Width	7.8	8	8.2	mm
Height			2	mm
Product mass		70		gram



Fortimo LEDFlex 50m 2500lm/m 830 C10 G1

Fortimo LEDFlex 50m 2500lm/m 840 C10 G1

Parameter	Min	Typ	Max	Unit
Length		50000		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

CB
CE
ENEC
ENEC+
CQC

Application

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

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



© 2021 Signify Holding, IBRS 10461, 5600VB, NL. All rights reserved. The information provided herein is subject to change, without notice. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract, unless otherwise agreed by Signify.

www.philips.com/oem

Philips and the Philips Shield Emblem are registered trademarks of Koninklijke Philips N.V. All other trademarks are owned by Signify Holding or their respective owners.
UK importer address: 3 Guildford Business Park, GU2 8XG

08/09/2021