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 144 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

indirect

100%
instant

Ordering data

Commercial product name	EOC	12NC	Box quantity
Fortimo LEDFlex 5m 2000lm/m 830 C10 G1	8718699 661687 00	9290 014 91680	15
Fortimo LEDFlex 5m 2000lm/m 840 C10 G1	8718699 661700 00	9290 014 91780	15
Fortimo LEDFlex 5m 2000lm/m 827 C10 G1	8718699 661724 00	9290 014 91880	15
Fortimo LEDFlex 5m 2000lm/m 865 C10 G1	8718699 661748 00	9290 014 91980	15
Fortimo LEDFlex 50m 2000lm/m 830 C10 G1	8718699 662080 00	9290 014 93680	5
Fortimo LEDFlex 50m 2000lm/m 840 C10 G1	8718699 662103 00	9290 014 93780	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

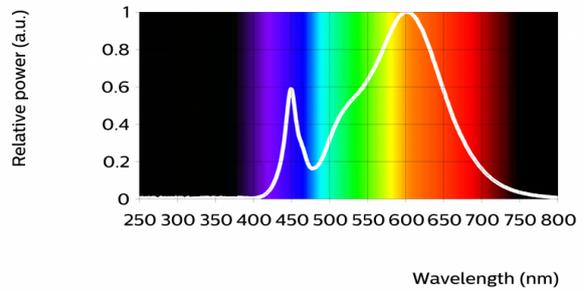*** Maximum value for safe operation, do not operate above this value

Optical characteristics - table per color (CCT)

Fortimo LEDFlex 5m 2000lm/m 830 C10 G1
Fortimo LEDFlex 50m 2000lm/m 830 C10 G1

Parameter	Min	Typ	Max	Unit
Luminous flux	1800	2000	2200	lm
Module efficacy		134		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.434, 0.403)		-
Color consistency			3	SDCM
CRI	80			
Photometric code		830/359		
Radiation angle		120		deg
Photobiological safety			RG1 unlimited	

R9>0.

Flux expressed per meter

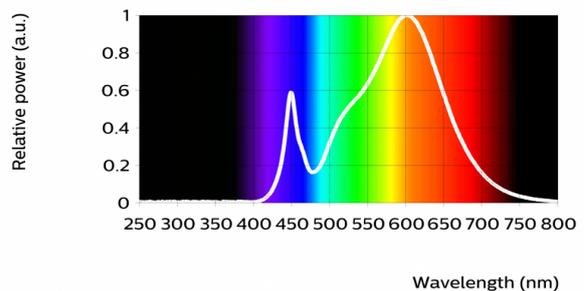Measurement precision for flux +/- 5%, for efficacy +/- 6%, for x, y +/- 0.005, for CRI +/- 1.5

Fortimo LEDFlex 5m 2000lm/m 840 C10 G1
Fortimo LEDFlex 50m 2000lm/m 840 C10 G1

Parameter	Min	Typ	Max	Unit
Luminous flux	1800	2000	2200	lm
Module efficacy		144		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.382, 0.380)		-
Color consistency			3	SDCM
CRI	80			
Photometric code		840/359		
Radiation angle		120		deg
Photobiological safety			RG1 unlimited	

R9>0.

Flux expressed per meter

Measurement precision for flux +/- 5%, for efficacy +/- 6%, for x, y +/- 0.005, for CRI +/- 1.5
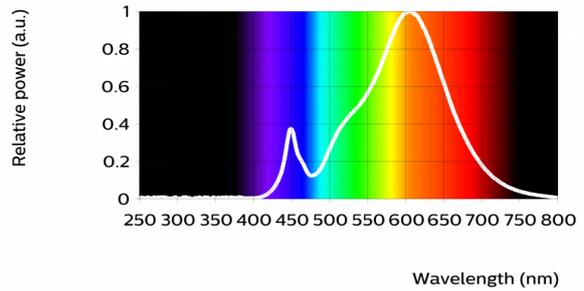
Fortimo LEDFlex 5m 2000lm/m 827 C10 G1

Parameter	Min	Typ	Max	Unit
Luminous flux	1800	2000	2200	lm
Module efficacy		128		lm/W
Correlated color temperature (CCT)		2700		K
Color coordinates (CIEx, CIEy)		(0.458, 0.410)		-
Color consistency			3	SDCM
CRI	80			
Photometric code		827/359		
Radiation angle		120		deg
Photobiological safety			RG1 unlimited	

R9>0.

Flux expressed per meter

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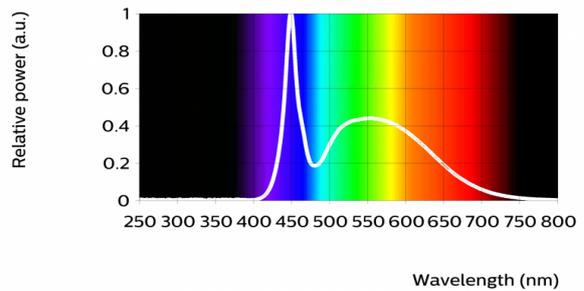

Fortimo LEDFlex 5m 2000lm/m 865 C10 G1

Parameter	Min	Typ	Max	Unit
Luminous flux	1800	2000	2200	lm
Module efficacy		144		lm/W
Correlated color temperature (CCT)		6500		K
Color coordinates (CIEx, CIEy)		(0.312, 0.328)		-
Color consistency			3	SDCM
CRI	80			
Photometric code		865/359		
Radiation angle		120		deg
Photobiological safety			RG1 unlimited	

R9>0.

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 830 C10 G1
Fortimo LEDFlex 50m 2000lm/m 830 C10 G1

Parameter	Min	Typ	Max	Unit
Forward voltage	22.8	24.0	25.2	V
Power consumption		14.9		W = kWh/1000h
Thermal power		8.8		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.

Fortimo LEDFlex 5m 2000lm/m 840 C10 G1
Fortimo LEDFlex 50m 2000lm/m 840 C10 G1

Parameter	Min	Typ	Max	Unit
Forward voltage	22.8	24.0	25.2	V
Power consumption		13.8		W = kWh/1000h
Thermal power		7.4		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.

Fortimo LEDFlex 5m 2000lm/m 827 C10 G1

Parameter	Min	Typ	Max	Unit
Forward voltage	22.8	24.0	25.2	V
Power consumption		15.6		W = kWh/1000h
Thermal power		9.5		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.

Fortimo LEDFlex 5m 2000lm/m 865 C10 G1

Parameter	Min	Typ	Max	Unit
Forward voltage	22.8	24.0	25.2	V
Power consumption		13.8		W = kWh/1000h
Thermal power		7.6		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.

Lumen maintenance

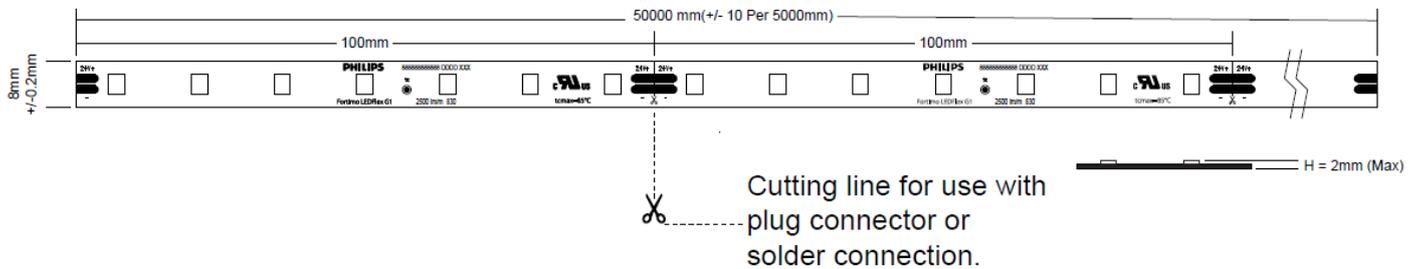| Operation point	Lumen maintenance	L70		
	x 1000 hours	B50	B20	B10
	Tc 55℃	>50	>50	>50
	Tc 65℃	>50	>50	>50
	Tc 75℃	>50	>50	>50

Lifetime

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

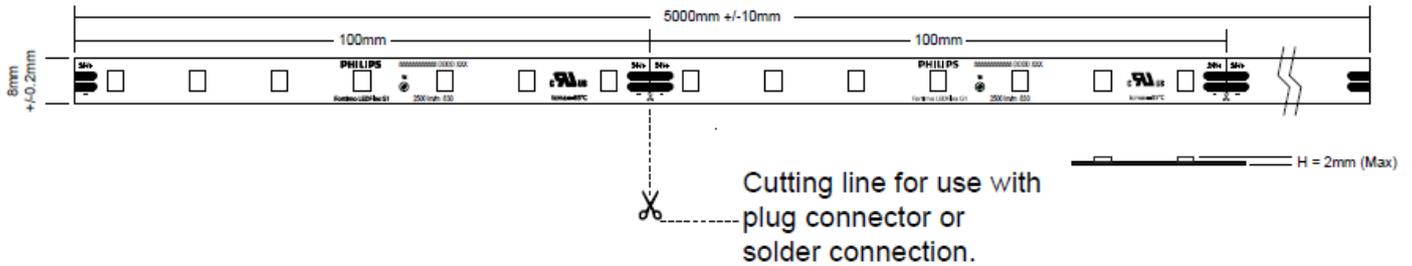Switching cycles in accordance to EU 1194/2012: >15000

Mechanical characteristics

Fortimo LEDFlex 50m 2000lm/m 830 C10 G1
Fortimo LEDFlex 50m 2000lm/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

Cutting line for use with plug connector or solder connection.

Fortimo LEDFlex 5m 2000lm/m 830 C10 G1
Fortimo LEDFlex 5m 2000lm/m 840 C10 G1
Fortimo LEDFlex 5m 2000lm/m 827 C10 G1
Fortimo LEDFlex 5m 2000lm/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

Cutting line for use with plug connector or solder connection.

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.

www.philips.com/oem

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for LED Lighting Bars and Strips *category:*

Click to view products by Philips *manufacturer:*

Other Similar products are found below :

LFBLL-SW823-24V-8S125-20 S010060CC3PZ HH-SX144F008W24 -2835 WW WHITE PCB IP20 HH-SRGB840F010W24-COB N004120BB1LZ (6000K) N004120BC1LZ (3000K) N008120BB1LZ (BLUE) N008120BC1LZ (4000K) S008144CA4SA1/C1 (RGB+4000K IP20) S0121134ZC3PZ 929002650401 929002650801 929002650201 929002699801 929002650701 N013060CA3SA1 HQS-12W-60LED-NW-WP-12V-5M HQS-6W-60LED-WW-WP-24V-5M S020240BC1DC0/C3 HQS-12W-60LED-WW-WP-24V-5M HQS-12W-60LED-NW-24V-5M S012060CC4DC0/C3 HQS-9.6W-120LED-NW-WP-12V-5M HQS-6W-60LED-W-12V-5M HQS-12W-60LED-WW-12V-5M HH-SRGB60F310W12-5050 WHITE PCB IP65A HQS-6W-60LED-NW-12V-5M HQS-6W-60LED-NW-24V-5M TAMA LED K-30-2400-24V 24W/M TAMA LED K-CR30-1440-24 14,4W/M TAMA LED KWP-GHD30-0960-24 9,6W/M TAMA LED K-1920-120-RGB-24V 19.2W/M TAMA LED K-40-1091-24V 9.1W/M TAMA LED K-30-1091-24V 9.1W/M TAMA LED K-RGB-0700-24V TAMA LED K-VHE40-1440-24V 14,4W/M TAMA LED K-HD30-0480-24 4,8W/M TAMA LED K-HD40-0480-24 4,8W/M TAMA LED K-HD30-1440-24 14,4W/M TAMA LED K-VHE30-1440-24V 14,4W/M TAMA LED K-30-0480-24 4.8 W/M TAMA K-30/18-0960-24V TAMA LED K-VHE40-0960-24V 9.6W/M TAMA LED K-30-1440-24V 14.4W/M TAMA LED K-30-0960-24V 9.6W/M TAMA LED K-HD30-0960-24 9,6W/M TAMA LED K-CR40-0960-24 9,6W/M HQS-9.6W-120LED-W-24V-5M TAMA LED KWP-GHD30-1440-24 14,4W/M HQS-12W-60LED-W-12V-5M