

**PHILIPS**

**Fortimo**

**LED**

Fortimo LED Strip iXt 1ft  
HF FC HV7



Datasheet

# Redefining brilliance with efficiency and innovation

## Key features and benefits

- Two lumen output versions: 2000 lm/ft and 3000 lm/ft
- LED module efficiency of 185 lm/W (4000K, CRI80)
- Robust LED package to withstand high temperatures
- Long life time of >100,000 hours
- High color rendering: CRI >80
- Excellent color consistency of 3 SDCM
- Variation of color temperatures: 3000 K, 4000 K, 5000 K, and 6500 K
- Two lengths: 1ft and 2ft
- Wide case temperature (Tc) range from -40 °C to +95 °C
- A 7 year warranty is granted when combined with an LED Driver from the Xitanium iXt range. Otherwise, the standard 5 year warranty applies

Application: Industry, Warehouse, Office, Marine

January 2026



## Ordering data

| Commercial product name                 | EOC               | 12NC           | Box quantity |
|-----------------------------------------|-------------------|----------------|--------------|
| Fortimo LED Strip iXt 1ft HF FC 830 HV7 | 8721103 122339 00 | 9290 040 09706 | 168          |
| Fortimo LED Strip iXt 1ft HF FC 840 HV7 | 8721103 122353 00 | 9290 040 09806 | 168          |
| Fortimo LED Strip iXt 1ft HF FC 850 HV7 | 8721103 122377 00 | 9290 040 09906 | 168          |
| Fortimo LED Strip iXt 1ft HF FC 865 HV7 | 8721103 122391 00 | 9290 040 10006 | 168          |

## Drive currents

| Parameter                           | Nominal* | Life** | Max*** | Unit |
|-------------------------------------|----------|--------|--------|------|
| Fortimo LED Strip iXt 1ft HF FC HV7 | 274      | 400    | 480    | mA   |

## Module temperatures

| Parameter                                                 | Nominal* | Life** | Max*** | Unit |
|-----------------------------------------------------------|----------|--------|--------|------|
| T <sub>c</sub> (case temperature at T <sub>c</sub> point) | 55       | 90     | 95     | °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

Fortimo LED Strip iXt 1ft HF FC 830 HV7

Fortimo LED Strip iXt 1ft HF FC 840 HV7

Fortimo LED Strip iXt 1ft HF FC 850 HV7

Fortimo LED Strip iXt 1ft HF FC 865 HV7

| CCT                                           | 3000K                                                                               | 4000K                                                                               | 5000K                                                                                | 6500K                                                                                 | Unit |
|-----------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------|
| Luminous flux (Φuse)*                         | 1930                                                                                | 2000                                                                                | 2000                                                                                 | 1990                                                                                  | lm   |
| Efficacy*                                     | 179                                                                                 | 185                                                                                 | 185                                                                                  | 184                                                                                   | lm/W |
| Average Luminous flux<br>(tolerance -2% + 7%) | 1990                                                                                | 2041                                                                                | 2041                                                                                 | 2031                                                                                  | lm   |
| Average Efficacy                              | 188                                                                                 | 193                                                                                 | 193                                                                                  | 192                                                                                   | lm/W |
| Max. Color consistency                        | 3                                                                                   | 3                                                                                   | 3                                                                                    | 3                                                                                     | SDCM |
| Color coordinates (CIEx, CIEy)                | 0.432, 0.399                                                                        | 0.380, 0.375                                                                        | 0.348, 0.352                                                                         | 0.310, 0.323                                                                          |      |
| Min. CRI                                      | 80                                                                                  | 80                                                                                  | 80                                                                                   | 80                                                                                    |      |
| Min. R9                                       | 0                                                                                   | 0                                                                                   | 0                                                                                    | 0                                                                                     |      |
| Max. Photobiological safety                   | RG1 unlimited                                                                       | RG1 unlimited                                                                       | RG1 unlimited                                                                        | RG1 unlimited                                                                         |      |
| Energy label EPREL                            | C  | C  | C  | C  |      |

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

Measurement precision for Vf +/- 3%. Measurement precision for power +/- 3.3%.

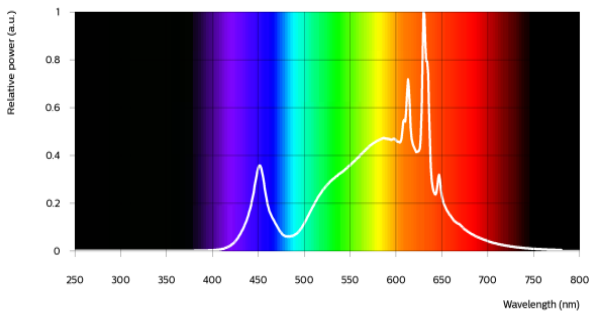
\* Luminous flux (Φuse) and Efficacy refer to Single Lighting Regulation (SLR). Luminous flux (Φuse) means the part of the luminous flux of a light source that is considered when determining its energy efficiency: – for non-directional light sources it is the total flux emitted in a solid angle of  $4\pi$  sr (corresponding to a 360° sphere)

## Tuning table

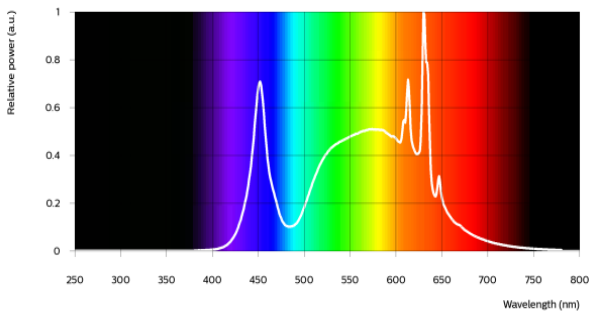
| Operation Point |               | Current         | 3000K | 4000K | 5000K | 6500K | Unit |
|-----------------|---------------|-----------------|-------|-------|-------|-------|------|
| Tc = 25°C       | Luminous flux | 80% I-nom 219mA | 1607  | 1647  | 1647  | 1636  | lm   |
|                 |               | I-nom 274mA     | 1987  | 2039  | 2039  | 2028  | lm   |
|                 |               | I-max 480mA     | 3359  | 3460  | 3460  | 3445  | lm   |
|                 | Efficacy      | 80% I-nom 219mA | 191   | 196   | 196   | 195   | lm/W |
|                 |               | I-nom 274mA     | 187   | 192   | 192   | 191   | lm/W |
|                 |               | I-max 480mA     | 172   | 177   | 177   | 177   | lm/W |
| Tc = 55°C       | Luminous flux | 80% I-nom 219mA | 1551  | 1588  | 1588  | 1573  | lm   |
|                 |               | I-nom 274mA     | 1990  | 2041  | 2041  | 2031  | lm   |
|                 |               | I-max 480mA     | 3242  | 3331  | 3331  | 3310  | lm   |
|                 | Efficacy      | 80% I-nom 219mA | 187   | 191   | 191   | 190   | lm/W |
|                 |               | I-nom 274mA     | 188   | 193   | 193   | 192   | lm/W |
|                 |               | I-max 480mA     | 168   | 173   | 173   | 171   | lm/W |
| Tc = 95°C       | Luminous flux | 80% I-nom 219mA | 1466  | 1419  | 1419  | 1468  | lm   |
|                 |               | I-nom 274mA     | 1812  | 1755  | 1755  | 1818  | lm   |
|                 |               | I-max 480mA     | 3061  | 2962  | 2962  | 3085  | lm   |
|                 | Efficacy      | 80% I-nom 219mA | 179   | 173   | 173   | 179   | lm/W |
|                 |               | I-nom 274mA     | 174   | 170   | 170   | 175   | lm/W |
|                 |               | I-max 480mA     | 161   | 156   | 156   | 162   | lm/W |

\*Based on average value

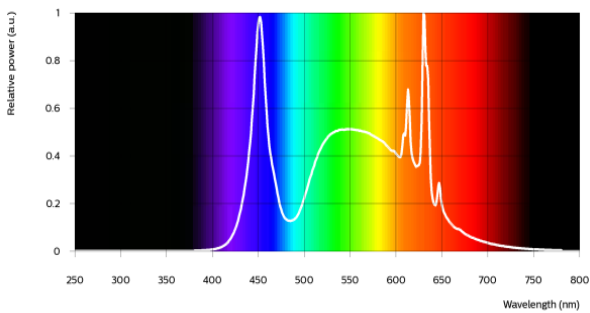
CRI80 3000K



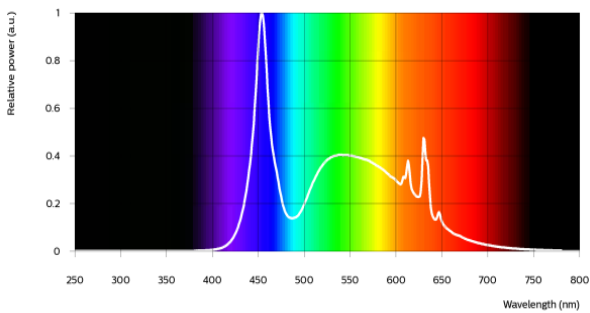
CRI80 4000K



CRI80 5000K



CRI80 6500K



## Electrical characteristics

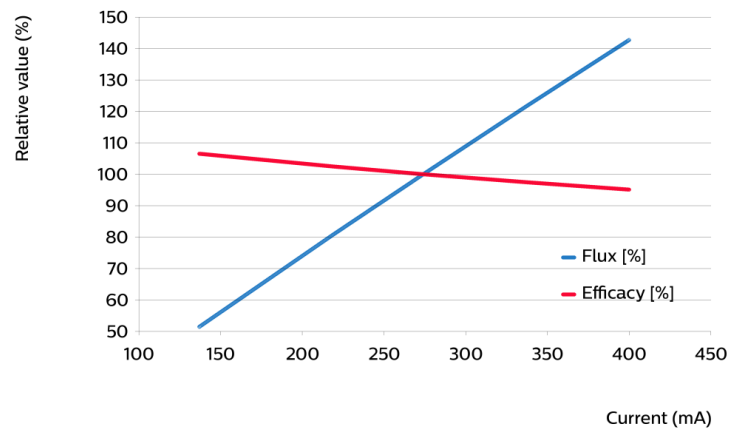
| Parameter                             | Min  | Typ  | Max  | Unit          |
|---------------------------------------|------|------|------|---------------|
| Forward voltage                       | 37.3 | 39.5 | 40.2 | V             |
| Power consumption                     | 10.2 | 10.8 | 11.0 | W = kWh/1000h |
| Number of modules in series per chain |      |      | 8    |               |
| Number of modules in parallel         |      |      | 2    |               |

Measurement precision for Vf +/- 3%. Measurement precision for power +/- 3.3%

## Tuning information

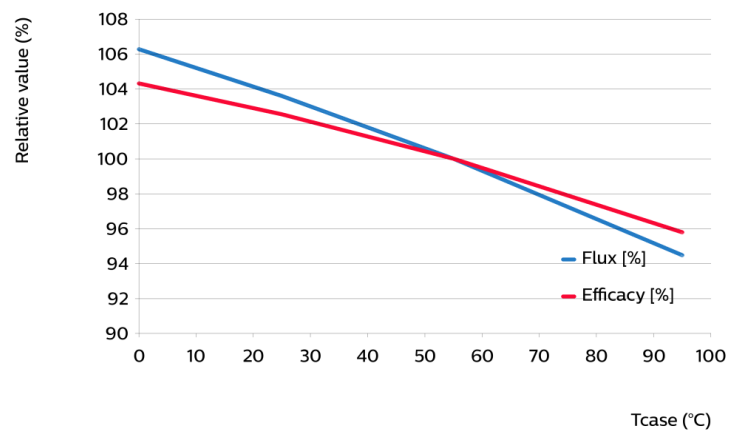
Flux and efficacy versus current (at Tc nominal)

| I [mA] | Flux [%] | Efficacy [%] |
|--------|----------|--------------|
| 400    | 143      | 95           |
| 337    | 122      | 97           |
| 274    | 100      | 100          |
| 219    | 81       | 102          |
| 137    | 51       | 106          |



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

| Tc [°C] | Flux [%] | Efficacy [%] |
|---------|----------|--------------|
| 95      | 94       | 96           |
| 55      | 100      | 100          |
| 25      | 104      | 103          |
| 0       | 106      | 104          |



## Lumen maintenance

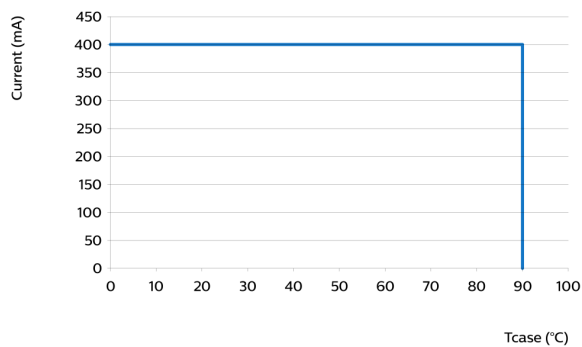
| Operation point    | Lumen maintenance<br>x 1000 hours | L70  |      |      | L80  |      |      | L90  |      |      |
|--------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
|                    |                                   | B50  | B20  | B10  | B50  | B20  | B10  | B50  | B20  | B10  |
| 80% Inom= 219,2 mA | Tc=25°C                           | >100 | >100 | >100 | >100 | >100 | >100 | >100 | >100 | >100 |
|                    | Tc_nom=55°C                       | >100 | >100 | >100 | >100 | >100 | >100 | 78   | 76   | 74   |
|                    | Tc_life=90°C                      | >100 | 85   | 64   | >100 | 85   | 64   | 55   | 53   | 52   |
| Inom=274 mA        | Tc=25°C                           | >100 | >100 | >100 | >100 | >100 | >100 | >100 | >100 | >100 |
|                    | Tc_nom=55°C                       | >100 | >100 | >100 | >100 | >100 | >100 | 76   | 74   | 72   |
|                    | Tc_life=90°C                      | >100 | 85   | 64   | >100 | 85   | 64   | 54   | 52   | 51   |
| Ilife=400 mA       | Tc=25°C                           | >100 | >100 | >100 | >100 | >100 | >100 | 100  | 96   | 95   |
|                    | Tc_nom=55°C                       | >100 | >100 | >100 | >100 | >100 | >100 | 70   | 68   | 67   |
|                    | Tc_life=90°C                      | >100 | 85   | 64   | >100 | 85   | 64   | 50   | 48   | 47   |

We use a Philips designed lifetime model, which uses LM80 data as only one of its inputs, and assumes a continues operation of the module. Please check design-in guide for more information on industry conditions.

## Lifetime

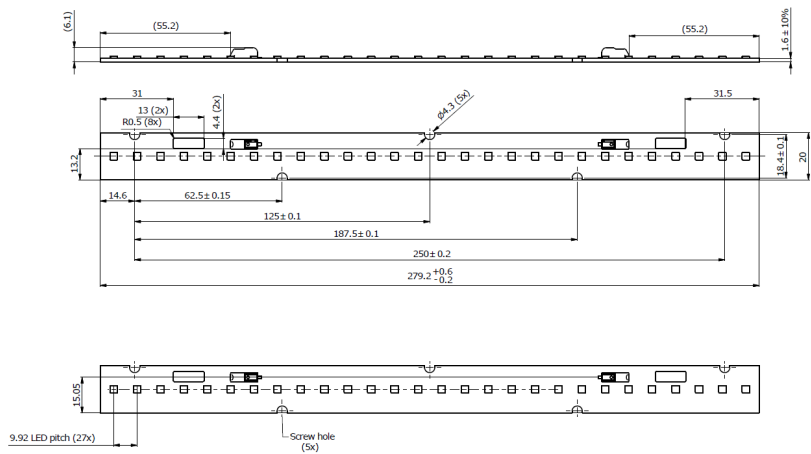
| Parameter      | Value   | Unit  |
|----------------|---------|-------|
| M70F50 nominal | >100000 | hours |
| M70F50 life    | >100000 | hours |

## Performance Window



Mechanical characteristics

| Parameter    | Min  | Typ   | Max   | Unit |
|--------------|------|-------|-------|------|
| Length       | 279  | 279.2 | 279.8 | mm   |
| Width        | 19.8 | 20    | 20.2  | mm   |
| Height PCB   | 1.4  | 1.6   | 1.8   | mm   |
| Height total |      | 6.1   |       | mm   |
| Product mass |      | 18    |       | gram |



Absolute ratings

| Parameter                              | Min | Max | Unit            |
|----------------------------------------|-----|-----|-----------------|
| Current through the LED module (I-max) |     | 480 | mA              |
| Case temperature (Tc-max)              |     | 95  | °C              |
| ESD (direct contact)                   | 8   |     | kV              |
| Working voltage                        |     | 350 | V <sub>dc</sub> |

Application information

Certificates and Standards

CB  
ENEC  
ENEC+  
CE

Application

|         |     |
|---------|-----|
| Dimming | Yes |
|---------|-----|



© 2026 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.

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: Signify Commercial UK Limited, 2 Guildford Business Park, GU2 8XG, UK

21/01/2026

<https://www.lighting.philips.com/prof/led-electronics>