

PHILIPS

Fortimo

LED

Fortimo LED Strip iXt 2ft
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 2ft HF FC 830 HV7	8721103 122414 00	9290 040 10106	168
Fortimo LED Strip iXt 2ft HF FC 840 HV7	8721103 122438 00	9290 040 10206	168
Fortimo LED Strip iXt 2ft HF FC 850 HV7	8721103 122452 00	9290 040 10306	168
Fortimo LED Strip iXt 2ft HF FC 865 HV7	8721103 122476 00	9290 040 10406	168

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
Fortimo LED Strip iXt 2ft HF FC HV7	274	400	480	mA

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T _c (case temperature at T _c 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 2ft HF FC 830 HV7](#)

[Fortimo LED Strip iXt 2ft HF FC 840 HV7](#)

[Fortimo LED Strip iXt 2ft HF FC 850 HV7](#)

[Fortimo LED Strip iXt 2ft HF FC 865 HV7](#)

CCT	3000K	4000K	5000K	6500K	Unit
Luminous flux (Φ_{use})*	3860	4000	4000	3980	lm
Efficacy*	179	185	185	184	lm/W
Average Luminous flux (tolerance -2% + 7%)	3980	4083	4083	4061	lm
Average Efficacy	187	193	193	191	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 (Φ_{use}) and Efficacy refer to Single Lighting Regulation (SLR). Luminous flux (Φ_{use}) 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 4π sr (corresponding to a 360° sphere)

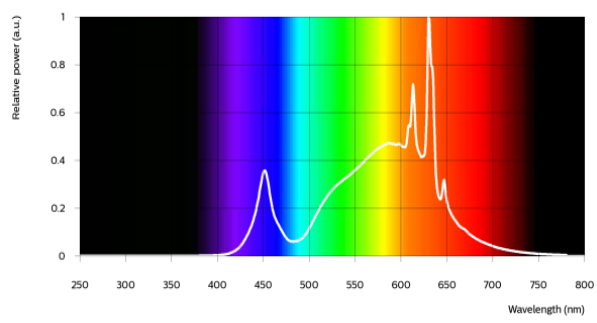
Tuning table

Operation Point		Current	3000K	4000K	5000K	6500K	Unit
Tc = 25°C	Luminous flux	80% I-nom 219mA	3214	3294	3294	3273	lm
		I-nom 274mA	3974	4078	4078	4055	lm
		I-max 480mA	6718	6921	6921	6890	lm
	Efficacy	80% I-nom 219mA	191	196	196	195	lm/W
		I-nom 274mA	187	191	191	190	lm/W
		I-max 480mA	173	177	177	177	lm/W
Tc = 55°C	Luminous flux	80% I-nom 219mA	3102	3176	3176	3146	lm
		I-nom 274mA	3980	4083	4083	4061	lm
		I-max 480mA	6483	6662	6662	6619	lm
	Efficacy	80% I-nom 219mA	187	191	191	190	lm/W
		I-nom 274mA	187	193	193	191	lm/W
		I-max 480mA	168	173	173	171	lm/W
Tc = 95°C	Luminous flux	80% I-nom 219mA	2931	2838	2838	2935	lm
		I-nom 274mA	3624	3509	3509	3636	lm
		I-max 480mA	6122	5923	5923	6169	lm
	Efficacy	80% I-nom 219mA	179	174	174	180	lm/W
		I-nom 274mA	174	170	170	176	lm/W
		I-max 480mA	161	156	156	162	lm/W

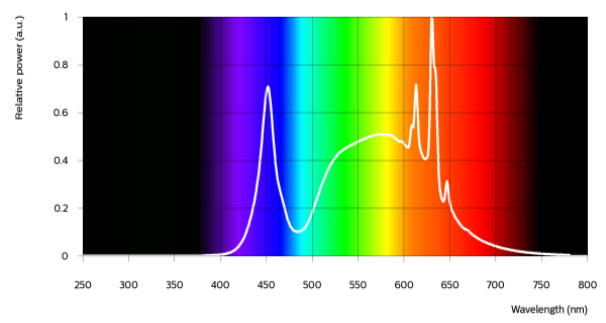
*Based on average value

Spectral characteristics

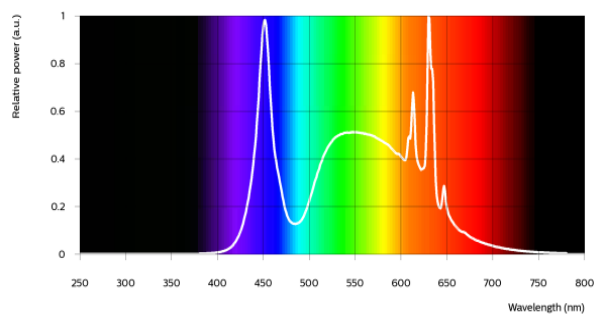
CRI80 3000K



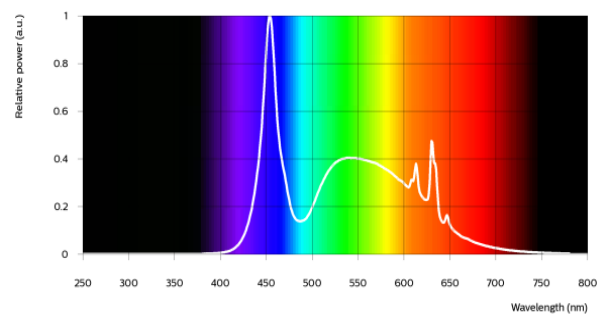
CRI80 4000K



CRI80 5000K



CRI80 6500K



Electrical characteristics

Fortimo LED Strip iXt 2ft HF FC 865 HV7

Fortimo LED Strip iXt 2ft HF FC 830 HV7

Parameter	Min	Typ	Max	Unit
Forward voltage	74.7	79.0	80.4	V
Power consumption	20.5	21.6	22.0	W = kWh/1000h
Number of modules in series per chain			4	
Number of modules in parallel			2	

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

Fortimo LED Strip iXt 2ft HF FC 850 HV7

Fortimo LED Strip iXt 2ft HF FC 840 HV7

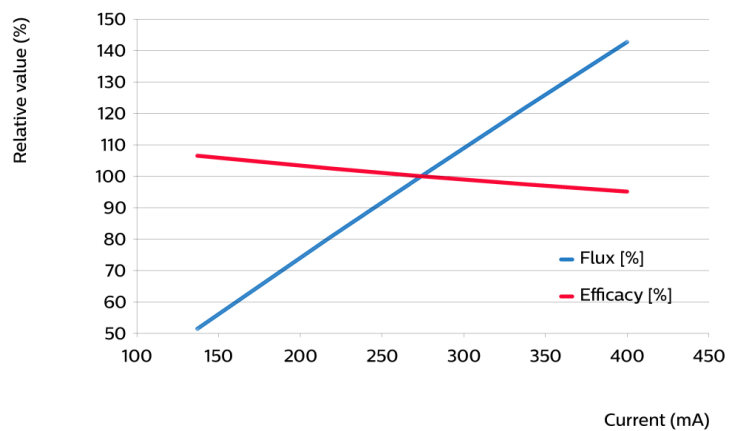
Parameter	Min	Typ	Max	Unit
Forward voltage	74.6	78.9	80.4	V
Power consumption	20.4	21.6	22.0	W = kWh/1000h
Number of modules in series per chain			4	
Number of modules in parallel			2	

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

Tuning information

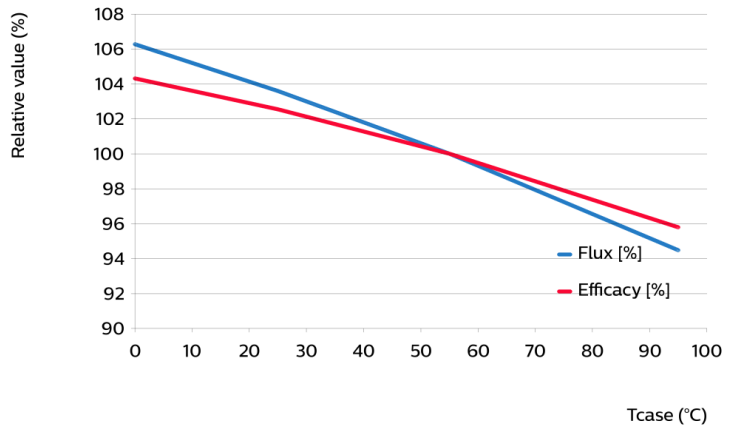
Flux and efficacy versus current (at Tc nominal)

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

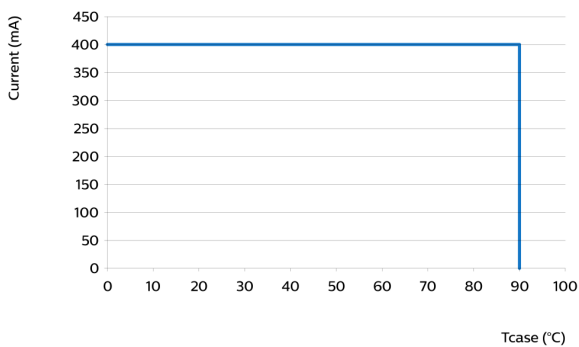
Operation point	Lumen maintenance x 1000 hours	L70			L80			L90		
		B50	B20	B10	B50	B20	B10	B50	B20	B10
80% Inom= 219,2 mA	Tc=25°C	>100	>100	>100	>100	>100	>100	>100	>100	>100
	Tc_nom=55°C	>100	>100	>100	>100	>100	>100	78	76	75
	Tc_life=90°C	>100	65	48	>100	65	48	55	53	48
Inom=274 mA	Tc=25°C	>100	>100	>100	>100	>100	>100	>100	>100	>100
	Tc_nom=55°C	>100	>100	>100	>100	>100	>100	76	74	73
	Tc_life=90°C	>100	65	48	>100	65	48	54	52	48
Ilife=400 mA	Tc=25°C	>100	>100	>100	>100	>100	>100	99	97	96
	Tc_nom=55°C	>100	>100	>100	>100	>100	>100	70	69	68
	Tc_life=90°C	>100	65	48	>100	65	48	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

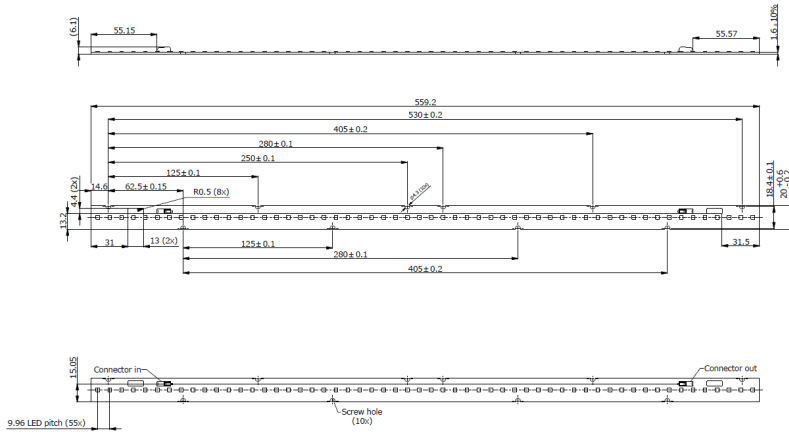
Parameter	Value	Unit
M70F50 nominal	>100000	hours
M70F50 life	>100000	hours

Performance Window



Mechanical characteristics

Parameter	Min	Typ	Max	Unit
Length	558.9	559.2	559.5	mm
Width	19.8	20	20.6	mm
Height PCB	1.4	1.6	1.8	mm
Height total		6.1		mm
Product mass		37		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 _{dc}

Application information

Certificates and Standards

CB
ENEC
ENEC+
CE

Application

Dimming

Yes



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