



# Fortimo Strip PR LV6

Advance Fortimo LED Strip PR LV6 modules are an ideal choice for high-performance architectural and indoor luminaires. Designed for high efficiency, offered in variable lengths, allowing for daisy chaining, and incorporating tight Vf binning to create a high-quality base for your luminaire designs.

## Key features and benefits

### Features:

- High flux density of up to 2000 lm per foot
- Narrow width of only 20mm
- High lumen maintenance (TM21) of L90 36,000 hours
- 3 SDCM color consistency
- Tight Vf binning enables longer daisy chaining

### Benefits:

- High energy efficacy and long lifetime provide optimized total cost of ownership
- Slim width and Zhaga compliant form factor provide excellent design-in options and assembly
- High quality and warm color temperatures of light enables new application areas like hospitality
- 5-year limited system warranty with Advance Xitanium LED drivers
- Specifications enable DLC Premium category

### Application:

- Retail
- Hospitality
- Office

## Ordering data

Commercial product name	12NC	Box quantity
FO Strip PR 11in 1100lm 830 LV6	9290 027 52513	160
FO Strip PR 11in 1100lm 835 LV6	9290 027 52613	160
FO Strip PR 11in 1100lm 840 LV6	9290 027 52713	160
FO Strip PR 11in 1100lm 850 LV6	9290 027 52813	160

## Drive currents

Parameter	Nominal*	Life**	Max***	Unit
FO Strip PR 11in 1100lm 8xx LV6	154	360	400	mA

## Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T <sub>c</sub> (case temperature at T <sub>c</sub> point)	45	85	90	°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

## Suggested maximum current at elevated ambient

Setting	1	2	3	4	Unit
Luminaire maximum ambient	35	45	55	65	°C
Suggested maximum current*	360	315	250	185	mA

\* Drive current that may be possible at the reference external ambient temperature. The maximum suggested current given is for a typical non-lensed luminaire design with good thermal transfer capability. Use of a lensed luminaire or luminaires with non-optimal thermal characteristics will require a further current reduction to meet the same maximum ambient temperature. The current suggestion is based on the module T<sub>c</sub>-life and thermal testing must be used to verify T<sub>c</sub>-life is never exceeded for your specific luminaire. It may be necessary to adjust the final current value in order to meet the T<sub>c</sub>-life rating of the module.

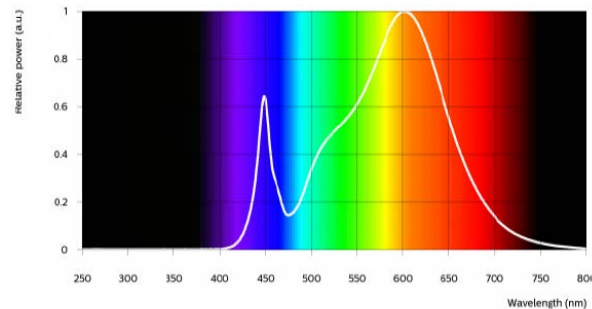
## Optical characteristics - table per color (CCT)

### FO Strip PR 11in 1100lm 830 LV6

Parameter	Min	Typ	Max	Unit
Luminous flux	980	1060	1140	lm
Efficacy	162	181		lm/W
Correlated color temperature (CCT)		3000		K
Color consistency			3	SDCM
CRI	80			
R9	0			

Measurement precision  $\pm 5\%$  for the flux data and  $\pm 6\%$  for the efficacy data. Measurement precision for color coordinates  $\pm 0.005$ . Measurement precision for CRI  $\pm 1.5$  and R9  $\pm 3$ .

Operation point	830	lm	lm/W
80% I-nom 123mA	Tc 25 °C	880	188
	Tc-nom 45 °C	860	185
	Tc-life 85 °C	810	176
I-nom 154mA	Tc 25 °C	1090	184
	Tc-nom 45 °C	1060	181
	Tc-life 85 °C	1000	173
I-life 360mA	Tc 25 °C	2380	165
	Tc-nom 45 °C	2320	162
	Tc-life 85 °C	2170	154

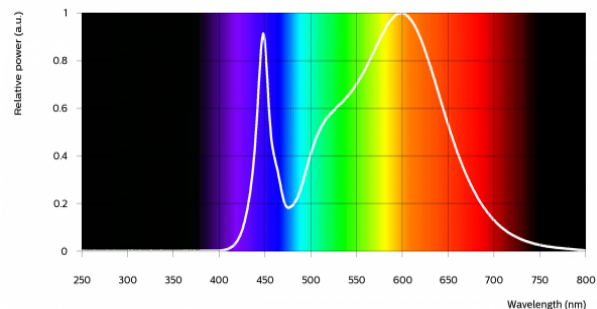


### FO Strip PR 11in 1100lm 835 LV6

Parameter	Min	Typ	Max	Unit
Luminous flux	1010	1090	1170	lm
Efficacy	167	186		lm/W
Correlated color temperature (CCT)		3500		K
Color consistency			3	SDCM
CRI	80			
R9	0			

Measurement precision  $\pm 5\%$  for the flux data and  $\pm 6\%$  for the efficacy data. Measurement precision for color coordinates  $\pm 0.005$ . Measurement precision for CRI  $\pm 1.5$  and R9  $\pm 3$ .

Operation point	835	lm	lm/W
80% I-nom 123mA	Tc 25 °C	910	194
	Tc-nom 45 °C	880	190
	Tc-life 85 °C	830	181
I-nom 154mA	Tc 25 °C	1120	190
	Tc-nom 45 °C	1090	186
	Tc-life 85 °C	1020	177
I-life 360mA	Tc 25 °C	2460	170
	Tc-nom 45 °C	2390	166
	Tc-life 85 °C	2240	158

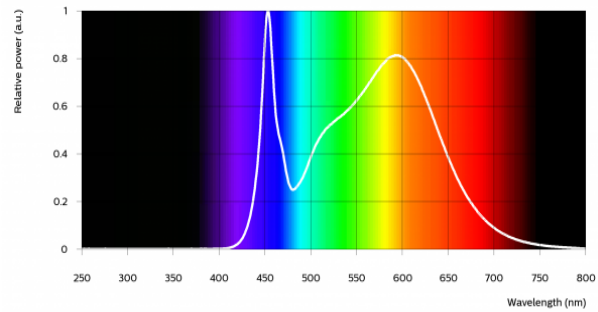


## FO Strip PR 11in 1100lm 840 LV6

Parameter	Min	Typ	Max	Unit
Luminous flux	1040	1120	1200	lm
Efficacy	172	191		lm/W
Correlated color temperature (CCT)		4000		K
Color consistency			3	SDCM
CRI	80			
R9	0			

Measurement precision  $\pm 5\%$  for the flux data and  $\pm 6\%$  for the efficacy data. Measurement precision for color coordinates  $\pm 0.005$ . Measurement precision for CRI  $\pm 1.5$  and R9  $\pm 3$ .

Operation point	840	lm	lm/W
80% I-nom 123mA	Tc 25 °C	930	199
	Tc-nom 45 °C	910	195
	Tc-life 85 °C	850	186
I-nom 154mA	Tc 25 °C	1150	195
	Tc-nom 45 °C	1120	191
	Tc-life 85 °C	1050	182
I-life 360mA	Tc 25 °C	2520	174
	Tc-nom 45 °C	2460	171
	Tc-life 85 °C	2300	162

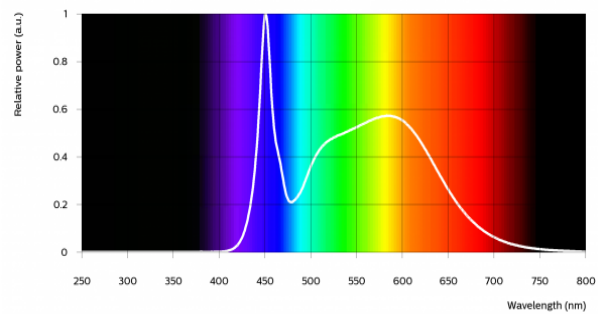


## FO Strip PR 11in 1100lm 850 LV6

Parameter	Min	Typ	Max	Unit
Luminous flux	1050	1130	1210	lm
Efficacy	173	193		lm/W
Correlated color temperature (CCT)		5000		K
Color consistency			3	SDCM
CRI	80			
R9	0			

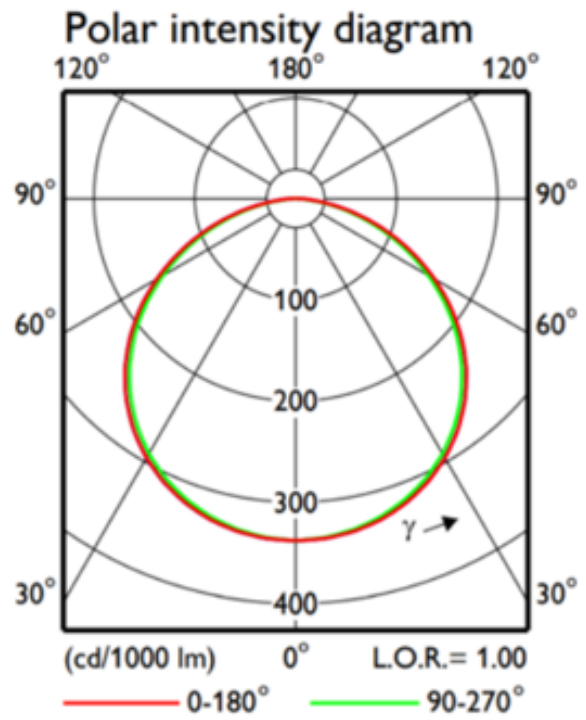
Measurement precision  $\pm 5\%$  for the flux data and  $\pm 6\%$  for the efficacy data. Measurement precision for color coordinates  $\pm 0.005$ . Measurement precision for CRI  $\pm 1.5$  and R9  $\pm 3$ .

Operation point	850	lm	lm/W
80% I-nom 123mA	Tc 25 °C	940	200
	Tc-nom 45 °C	910	197
	Tc-life 85 °C	860	187
I-nom 154mA	Tc 25 °C	1160	196
	Tc-nom 45 °C	1130	193
	Tc-life 85 °C	1060	184
I-life 360mA	Tc 25 °C	2560	177
	Tc-nom 45 °C	2490	174
	Tc-life 85 °C	2330	165



## Beam shape

The LED module has a Lambertian light distribution.



## Electrical characteristics

Parameter	Min	Typ	Max	Unit
Forward voltage	37.5	38.0	38.5	V
Power consumption		5.85		W
Number of modules in series per chain			1	

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

## System chain limits for Same Length modules

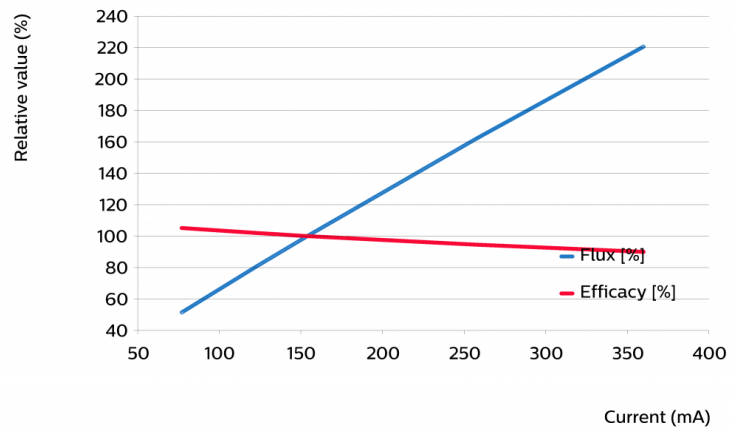
Total length (in)	Total current limit (mA)
44	1440
66	2060
88	1540

Please review the design-in guide or contact the Design-in team for further information.

## Tuning information

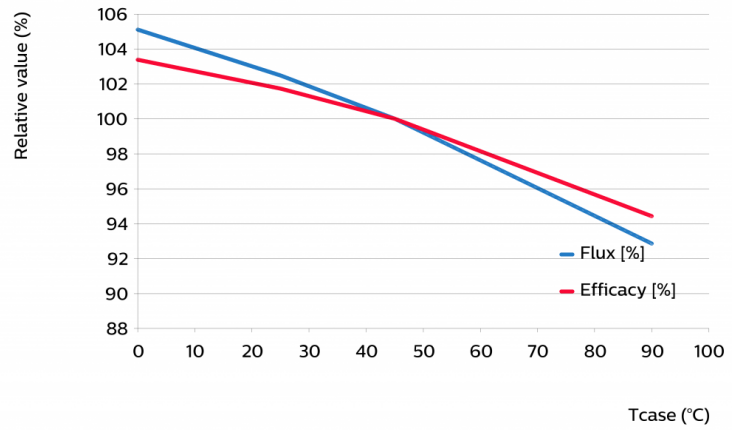
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
360	220	90
257	162	94
154	100	100
123	81	102
77	51	105



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

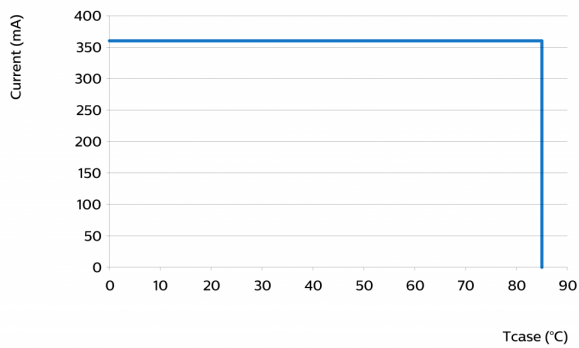
Tc [°C]	Flux [%]	Efficacy [%]
90	93	94
45	100	100
25	102	102
0	105	103



## Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70	L80	L90
		B50	B50	B50
80% I-nom 123mA	Ts nom 45°C	>60	>60	>36
	Ts 70°C	>60	>60	>36
	Ts-l-life 85°C	>60	>60	>36
I-nom 154mA	Ts nom 45°C	>60	>60	>36
	Ts 70°C	>60	>60	>36
	Ts-l-life 85°C	>60	>60	>36
I-life 360mA	Ts nom 45°C	>60	>60	>36
	Ts 70°C	>60	>60	>36
	Ts-l-life 85°C	>60	>60	>36

## Performance Window



## Thermal switching table

Warranted number of full thermal product cycles at 25°C ambient temperature

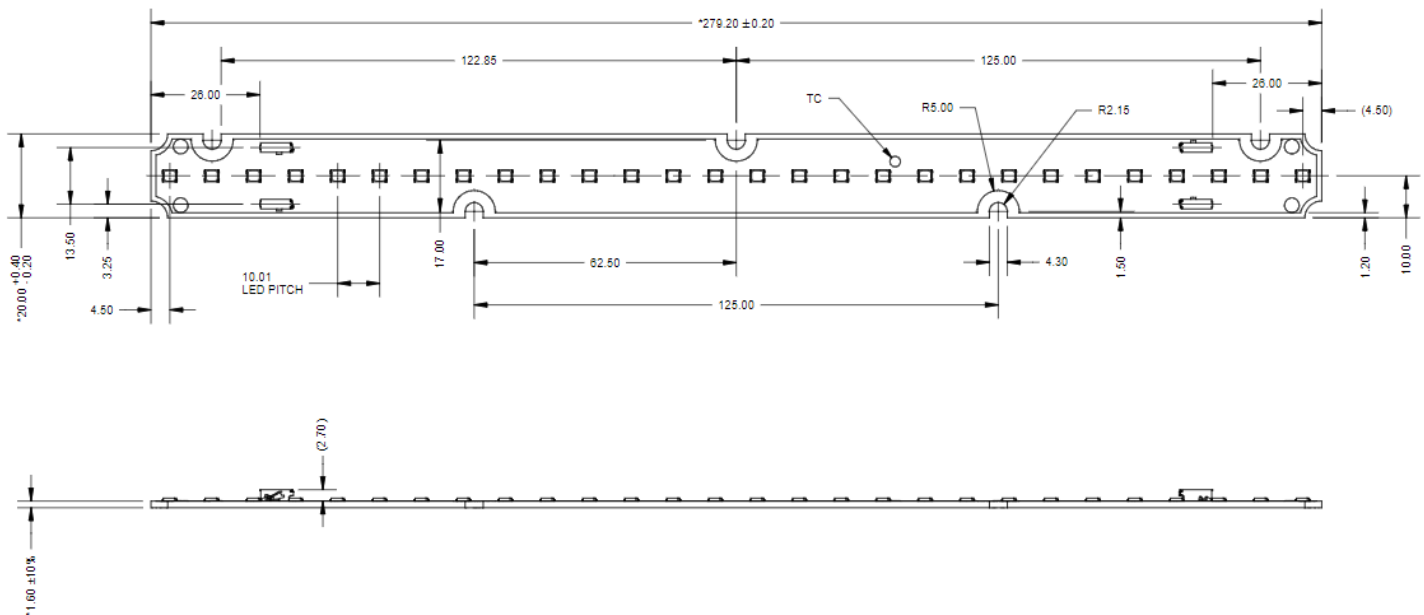
Case Temperature - Tc [°C]	Amount of Cycles
45 (or less)	>100,000
55	>100,000
65	>100,000
75	77,000
85	38,000
90	26,000

## Wiring

Specification item	Value	Unit	Condition
Input wire cross-section	0.25...0.75	mm <sup>2</sup>	solid, stranded
	18...24	AWG	solid, stranded
Input wire strip length	7.5...9.5	mm	

## Mechanical characteristics

Parameter	Min	Typ	Max	Unit
Length	278.9	279.2	279.5	mm
Width	19.8	20	20.2	mm
Height PCB	1.4	1.6	1.8	mm
Height total		4.3		mm
Warpage (IPC-TM-650)			0.75	%





## Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		400	mA
Case temperature (Tc-max)		90	°C
ESD (direct contact)	8		kV
Working voltage		60	V <sub>dc</sub>
Ambient temperature	-40		°C

Surge protection of the module must be provided by the driver or other components. Advance Xitanium and Certadrive drivers have built in protection circuitry and will protect the module up to the specified driver surge rating. When using third party drivers testing or confirmation from manufacturer is suggested to ensure adequate module protection.

## Application information

### Certificates and Standards

UL 8750

### Environmental

RoHS/REACH

### Application

IP rating	No IP rating
Overheating protection	No protection
Luminaire class ANSI	UL Class 2
Dimming	Yes

There cannot be any ice/fog/mist on any part of the module surface during the application at -40°C.

## Notes

View limited warranty at [www.signify.com/warranties](http://www.signify.com/warranties) for details and restrictions.

