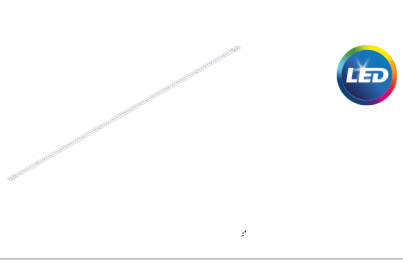


Fortimo Strip PR LV6

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 44in 4400lm 927 LV6	9290 027 55313	120
FO Strip PR 44in 4400lm 930 LV6	9290 027 55413	120
FO Strip PR 44in 4400lm 935 LV6	9290 027 55513	120
FO Strip PR 44in 4400lm 940 LV6	9290 027 55613	120

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
FO Strip PR 44in 4400lm 9xx LV6	616	1440	1600	mA

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T_c (case temperature at T_c 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*	1440	1245	985	720	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 Tc-life and thermal testing must be used to verify Tc-life is never exceeded for your specific luminaire. It may be necessary to adjust the final current value in order to meet the Tc-life rating of the module.

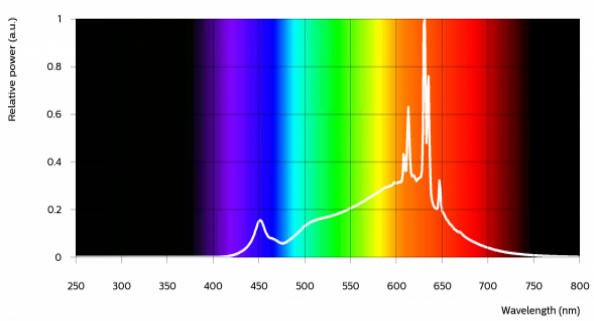
Optical characteristics - table per color (CCT)

FO Strip PR 44in 4400lm 927 LV6

Parameter	Min	Typ	Max	Unit
Luminous flux	3640	3940	4240	lm
Efficacy	151	168		lm/W
Correlated color temperature (CCT)		2700		K
Color consistency			3	SDCM
CRI	90			
R9	50			

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

Operation point	927	lm	lm/W
80% I-nom 493mA	Tc 25 °C	3260	174
	Tc-nom 45 °C	3180	172
	Tc-life 85 °C	2990	164
I-nom 616mA	Tc 25 °C	4030	171
	Tc-nom 45 °C	3940	168
	Tc-life 85 °C	3700	160
I-life 1440mA	Tc 25 °C	8910	151
	Tc-nom 45 °C	8690	148
	Tc-life 85 °C	8140	141

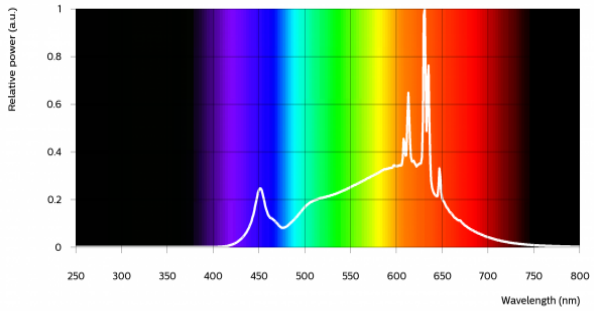


FO Strip PR 44in 4400lm 930 LV6

Parameter	Min	Typ	Max	Unit
Luminous flux	3830	4140	4450	lm
Efficacy	158	176		lm/W
Correlated color temperature (CCT)		3000		K
Color consistency			3	SDCM
CRI	90			
R9	50			

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

Operation point	930	lm	lm/W
80% I-nom 493mA	Tc 25 °C	3420	183
	Tc-nom 45 °C	3350	180
	Tc-life 85 °C	3140	172
I-nom 616mA	Tc 25 °C	4240	179
	Tc-nom 45 °C	4140	176
	Tc-life 85 °C	3890	168
I-life 1440mA	Tc 25 °C	9360	158
	Tc-nom 45 °C	9130	156
	Tc-life 85 °C	8560	148

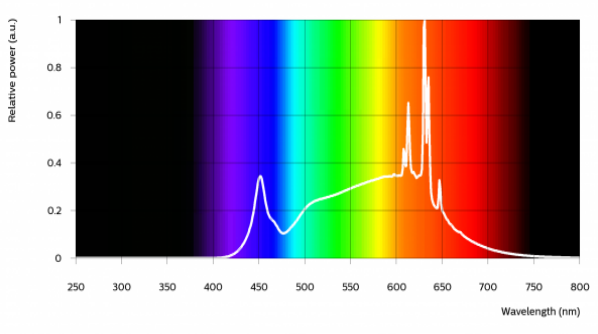


FO Strip PR 44in 4400lm 935 LV6

Parameter	Min	Typ	Max	Unit
Luminous flux	3870	4180	4490	lm
Efficacy	160	178		lm/W
Correlated color temperature (CCT)		3500		K
Color consistency			3	SDCM
CRI	90			
R9	50			

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

Operation point	935	lm	lm/W
80% I-nom 493mA	Tc 25 °C	3470	185
	Tc-nom 45 °C	3380	182
	Tc-life 85 °C	3160	173
I-nom 616mA	Tc 25 °C	4290	181
	Tc-nom 45 °C	4180	178
	Tc-life 85 °C	3910	169
I-life 1440mA	Tc 25 °C	9470	160
	Tc-nom 45 °C	9210	157
	Tc-life 85 °C	8600	149

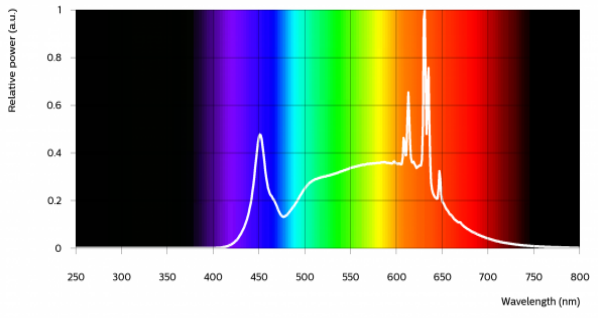


FO Strip PR 44in 4400lm 940 LV6

Parameter	Min	Typ	Max	Unit
Luminous flux	3990	4310	4630	lm
Efficacy	165	184		lm/W
Correlated color temperature (CCT)		4000		K
Color consistency			3	SDCM
CRI	90			
R9	50			

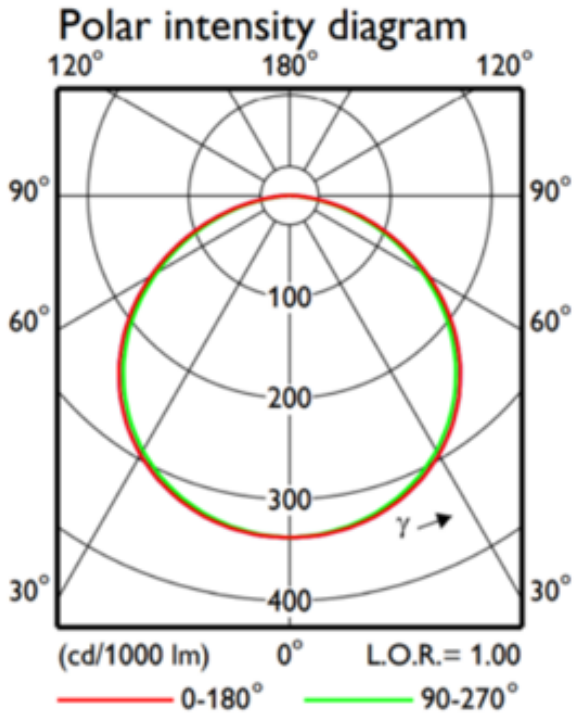
Measurement precision ± 5% for the flux data and ± 6% for the efficacy data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5 and R9 ± 3.

Operation point	940	lm	lm/W
80% I-nom 493mA	Tc 25 °C	3580	191
	Tc-nom 45 °C	3480	188
	Tc-life 85 °C	3260	179
I-nom 616mA	Tc 25 °C	4420	187
	Tc-nom 45 °C	4310	184
	Tc-life 85 °C	4030	175
I-life 1440mA	Tc 25 °C	9760	165
	Tc-nom 45 °C	9500	162
	Tc-life 85 °C	8870	153



Beam shape

The LED module has a Lambertian light distribution.



Electrical characteristics

Parameter	Min	Typ	Max	Unit
Forward voltage	37.8	38.1	38.8	V
Power consumption		23.5		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

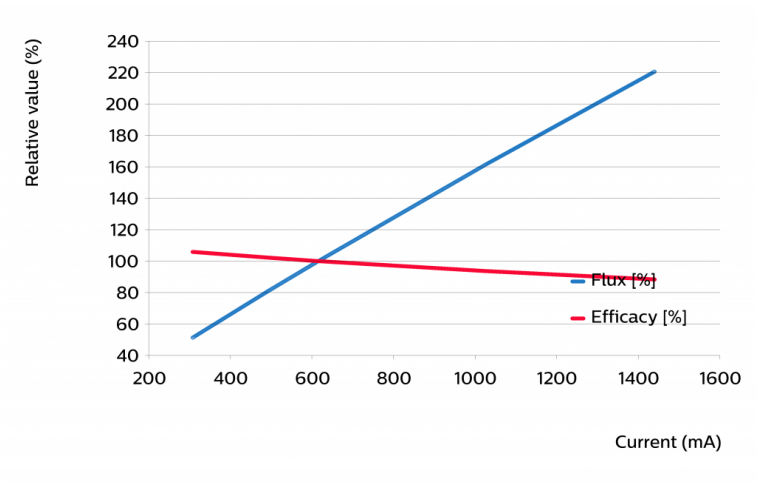
Total length (in)	Total current limit (mA)
88	1540
110	1250
176	780

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

Tuning information

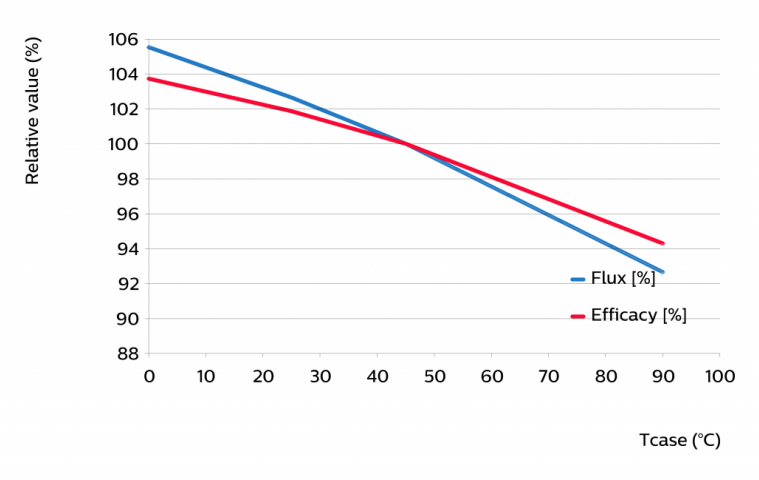
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
1440	220	88
1028	162	94
616	100	100
493	81	102
308	51	106



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

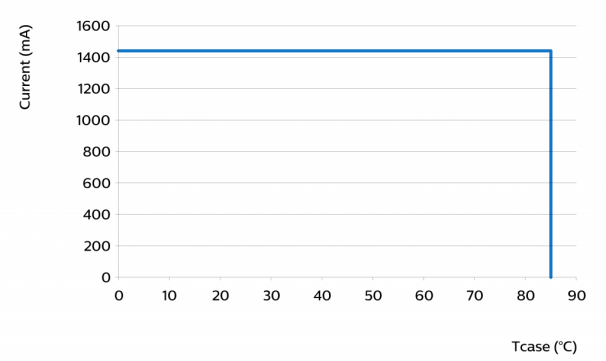
Tc [°C]	Flux [%]	Efficacy [%]
90	93	94
45	100	100
25	103	102
0	106	104



Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70 B50	L80 B50	L90 B50
80% I-nom 493mA	Ts nom 45°C	>60	>60	>36
	Ts 70°C	>60	>60	>36
	Ts-Ilife 85°C	>60	>60	>36
I-nom 616mA	Ts nom 45°C	>60	>60	>36
	Ts 70°C	>60	>60	>36
	Ts-Ilife 85°C	>60	>60	>36
I-life 1440mA	Ts nom 45°C	>60	>60	>36
	Ts 70°C	>60	>60	>36
	Ts-Ilife 85°C	>60	>60	>36

Performance Window



Thermal switching table

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

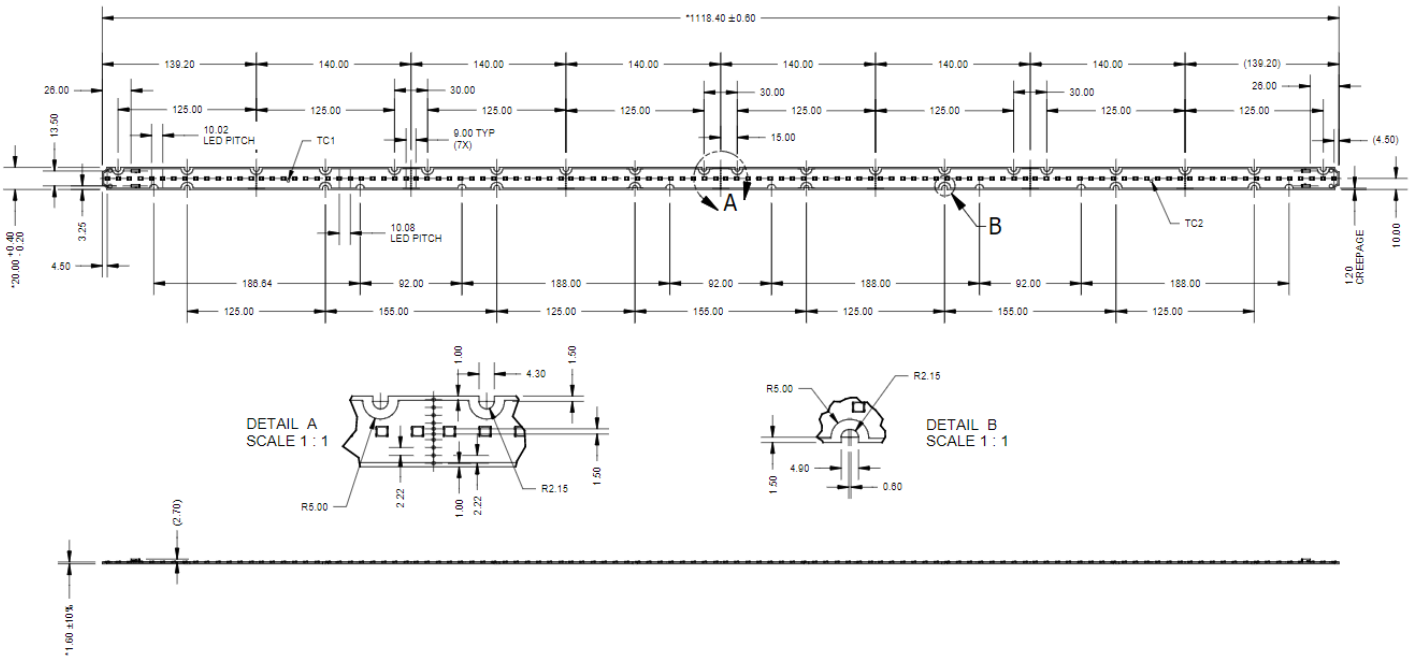
Case Temperature – Tc [°C]	Amount of Cycles
45 (or less)	>100,000
55	>100,000
65	>100,000
75	77,000
85	38,000
90	26,000

Wiring

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

Mechanical characteristics

Parameter	Min	Typ	Max	Unit
Length	1117.9	1118.4	1118.9	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)		1600	mA
Case temperature (Tc-max)		90	°C
ESD (direct contact)	8		kV
Working voltage		60	V_{dc}
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 for details and restrictions.

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