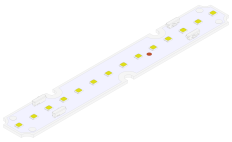


Fortimo Strip PR LV6

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 5.5in 550lm 927 LV6	9290 027 52113	120
FO Strip PR 5.5in 550lm 930 LV6	9290 027 52213	120
FO Strip PR 5.5in 550lm 935 LV6	9290 027 52313	120
FO Strip PR 5.5in 550lm 940 LV6	9290 027 52413	120

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
FO Strip PR 5.5in 550lm 9xx LV6	77	180	200	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*	180	160	125	90	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.

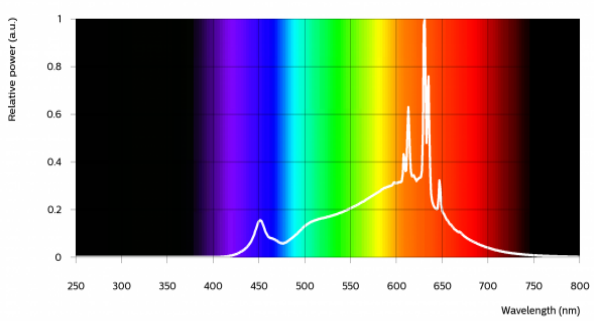
Optical characteristics - table per color (CCT)

FO Strip PR 5.5in 550lm 927 LV6

Parameter	Min	Typ	Max	Unit
Luminous flux	450	490	530	lm
Efficacy	150	167		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 62mA	Tc 25 °C	410	173
	Tc-nom 45 °C	400	171
	Tc-life 85 °C	370	163
I-nom 77mA	Tc 25 °C	500	170
	Tc-nom 45 °C	490	167
	Tc-life 85 °C	460	159
I-life 180mA	Tc 25 °C	1110	150
	Tc-nom 45 °C	1080	147
	Tc-life 85 °C	1010	140

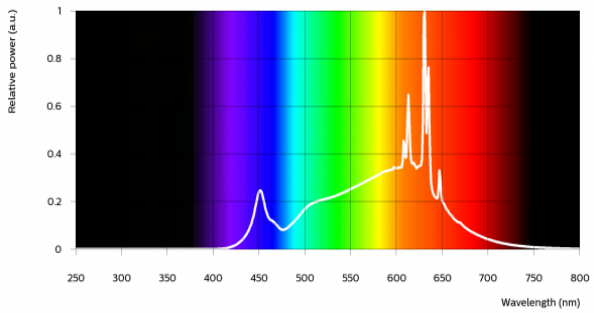


FO Strip PR 5.5in 550lm 930 LV6

Parameter	Min	Typ	Max	Unit
Luminous flux	480	520	560	lm
Efficacy	159	177		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 62mA	Tc 25 °C	430	184
	Tc-nom 45 °C	420	181
	Tc-life 85 °C	390	173
I-nom 77mA	Tc 25 °C	530	180
	Tc-nom 45 °C	520	177
	Tc-life 85 °C	490	169
I-life 180mA	Tc 25 °C	1180	159
	Tc-nom 45 °C	1150	156
	Tc-life 85 °C	1070	149

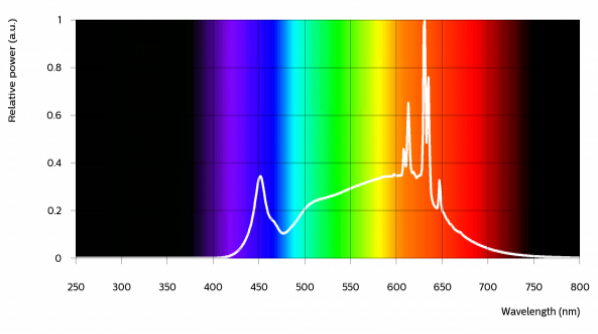


FO Strip PR 5.5in 550lm 935 LV6

Parameter	Min	Typ	Max	Unit
Luminous flux	480	520	560	lm
Efficacy	159	177		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 62mA	Tc 25 °C	430	184
	Tc-nom 45 °C	420	181
	Tc-life 85 °C	390	173
I-nom 77mA	Tc 25 °C	530	180
	Tc-nom 45 °C	520	177
	Tc-life 85 °C	490	169
I-life 180mA	Tc 25 °C	1180	159
	Tc-nom 45 °C	1150	156
	Tc-life 85 °C	1070	149

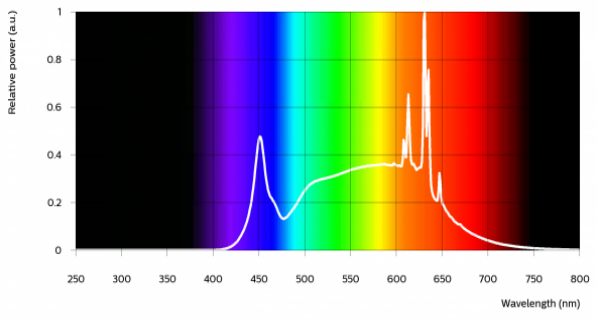


FO Strip PR 5.5in 550lm 940 LV6

Parameter	Min	Typ	Max	Unit
Luminous flux	500	540	580	lm
Efficacy	165	184		lm/W
Correlated color temperature (CCT)		4000		K
Color consistency			3	SDCM
CRI	90			
R9	50			

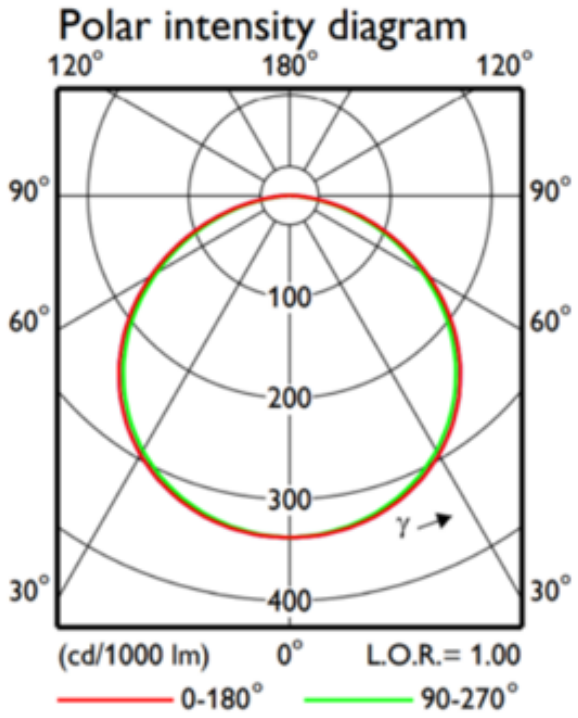
Measurement precision ± 5% for the flux data and ± 6% for the efficacy data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5 and R9 ± 3.

Operation point	940	lm	lm/W
80% I-nom 62mA	Tc 25 °C	450	192
	Tc-nom 45 °C	440	188
	Tc-life 85 °C	410	179
I-nom 77mA	Tc 25 °C	550	188
	Tc-nom 45 °C	540	184
	Tc-life 85 °C	510	175
I-life 180mA	Tc 25 °C	1220	166
	Tc-nom 45 °C	1190	162
	Tc-life 85 °C	1110	154



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		2.93		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

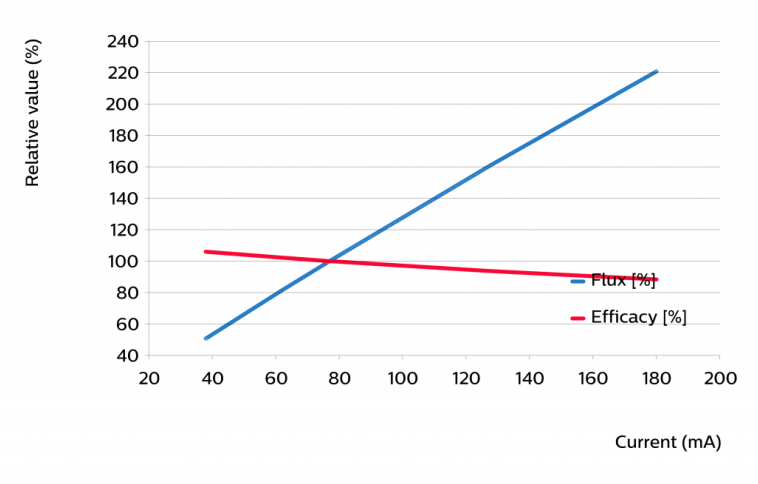
Total length (in)	Total current limit (mA)
44	1440
66	2060
88	1540

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

Tuning information

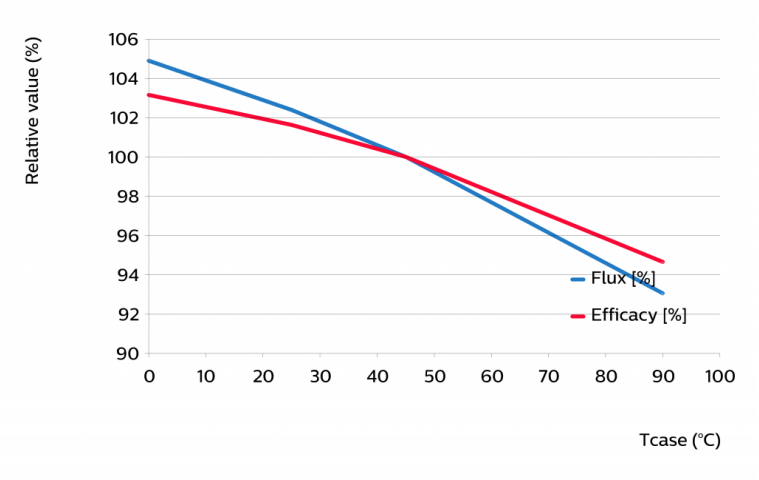
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
180	221	88
128	161	94
77	100	100
62	81	102
38	51	106



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

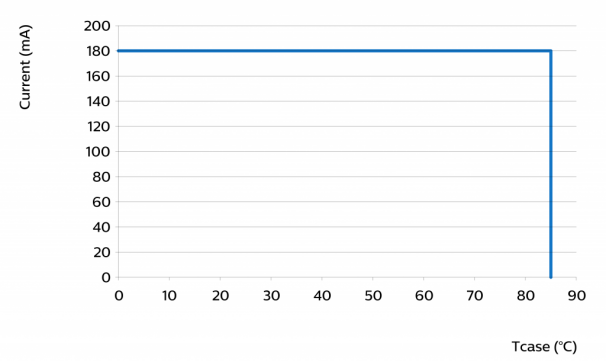
Tc [°C]	Flux [%]	Efficacy [%]
90	93	95
45	100	100
25	102	102
0	105	103



Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70 B50	L80 B50	L90 B50
80% I-nom 62mA	Ts nom 45°C	>60	>60	>36
	Ts 70°C	>60	>60	>36
	Ts-Ilife 85°C	>60	>60	>36
I-nom 77mA	Ts nom 45°C	>60	>60	>36
	Ts 70°C	>60	>60	>36
	Ts-Ilife 85°C	>60	>60	>36
I-life 180mA	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

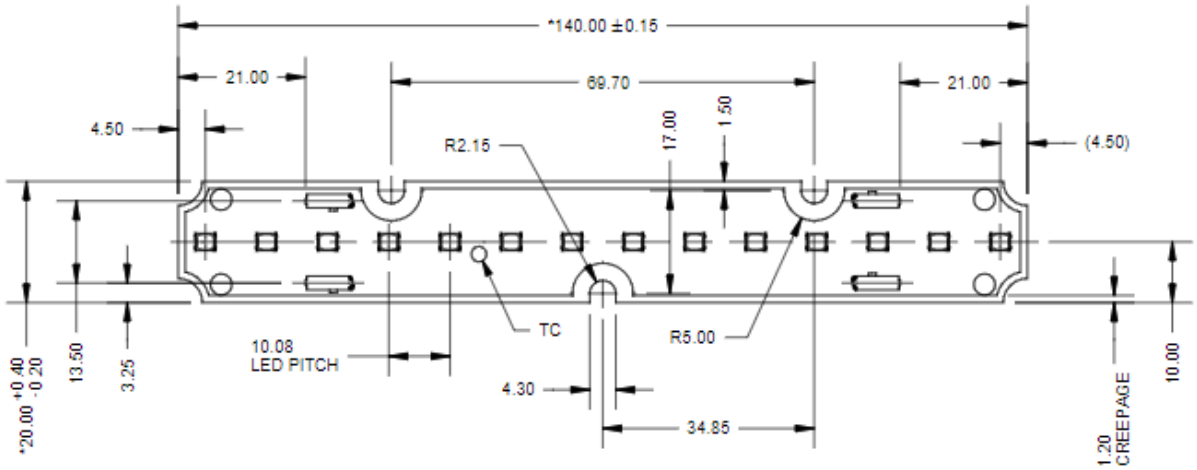
Case Temperature – Tc [°C]	Amount of Cycles
45 (or less)	>100,000
55	>100,000
65	>100,000
75	77,000
85	38,000
90	26,000

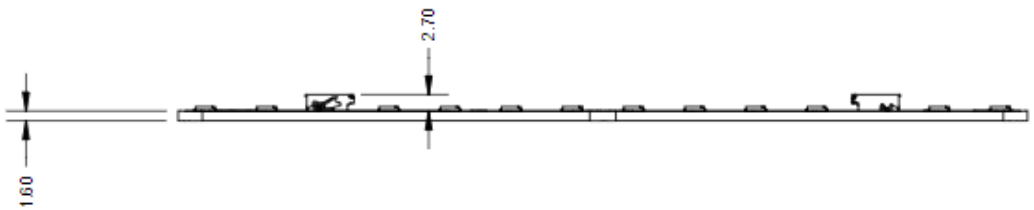
Wiring

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	139.8	140	140.2	mm
Width	19.85	20	20.15	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)		200	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.

Signify North America Corporation
200 Franklin Square Drive,
Somerset, NJ 08873
Telephone 855-486-2216

Signify Canada Ltd.
281 Hillmount Road,
Markham, ON
Canada L6C 2S3
Telephone 800-668-9008