PHILIPS

Fortimo

LED

FastFlex 2x6 DPX G4

Datasheet

Optical differentiation with third party IP lenses

FastFlex 2x6 DPX G4

Applications
- Road lighting
- Urban street lighting
- Flood and Area lighting
- Tunnel lighting

Key features and benefits
- Enables OEM optical differentiation with lenses from third party portfolios matching every project's needs
- Enables unparalleled efficacy while reducing fixture cost via third party IP lenses
- Best in class reliability testing for OME peace of mind
- Philips system warranty
- Best in class current and thermal operating range
- Temperature and driving current designed for fixture optimization
- Patented module surge protection
- Optical flexibility via third party IP lenses
- Flexible lumen output
- Range of CCT and CRI versions

March 2017

Ordering data

Commercial product name	EOC	12NC	Box quantity
Fortimo Fastflex LED 2x6/730 DPX G4	8718696 724019 00	9290 015 73306	25
Fortimo Fastflex LED 2x6/740 DPX G4	8718696 725108 00	9290 015 73406	25

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
FastFlex 2x6 DPX G4	530	see operating window	1500	mA

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T_c (case temperature at T_c point)	80	see operating window	105	°C

* Nominal value at which typical performance is specified

** Value at which life time is specified

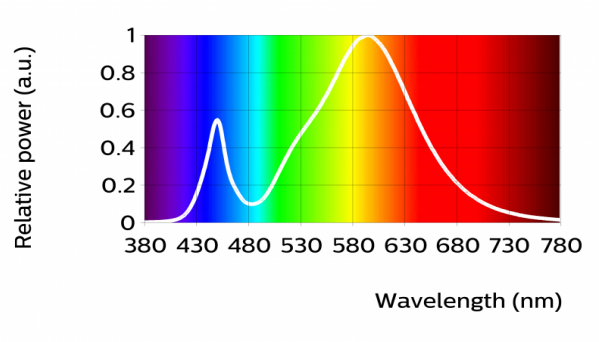
*** Maximum value for safe operation, do not operate above this value

Optical characteristics - table per color (CCT)

Fortimo Fastflex LED 2x6/730 DPX G4

Parameter	Min	Typ	Max	Unit
Luminous flux	2491	2767	3044	lm
Module efficacy	125	156		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.434, 0.403)		-
Color consistency			4	SDCM
CRI	70			

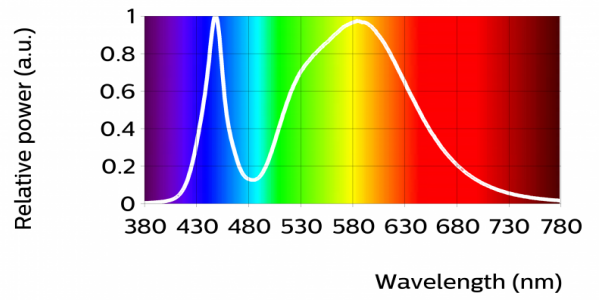
Above data are initial data.
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5
A maximum color shift of 7 SDCM is specified for 55000 h at reference operating conditions.



Fortimo Fastflex LED 2x6/740 DPX G4

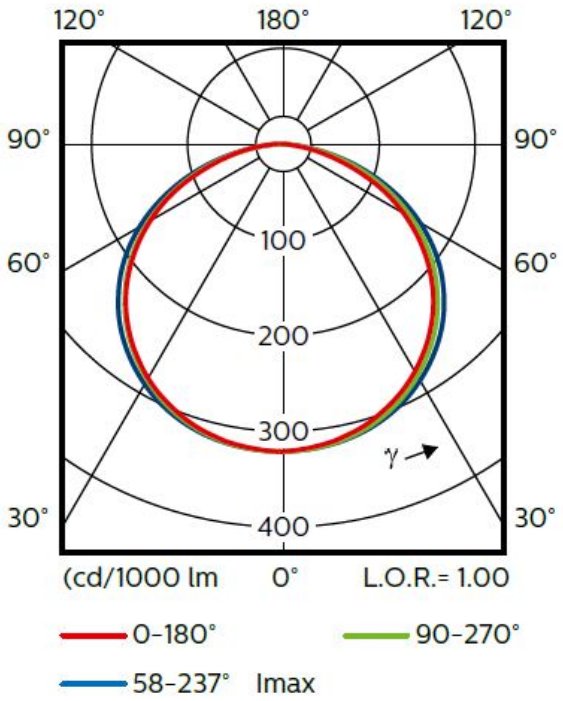
Parameter	Min	Typ	Max	Unit
Luminous flux	2622	2913	3204	lm
Module efficacy	132	165		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.382, 0.380)		-
Color consistency			4	SDCM
CRI	70			

Above data are initial data.
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5
A maximum color shift of 7 SDCM is specified for 55000 h at reference operating conditions.



Beam shape

The Philips LED module generates a Lambertian beam shape, which is a pragmatic starting point for OEMs wishing to design secondary optics.



Electrical characteristics

Fortimo Fastflex LED 2x6/730 DPX G4
Fortimo Fastflex LED 2x6/740 DPX G4

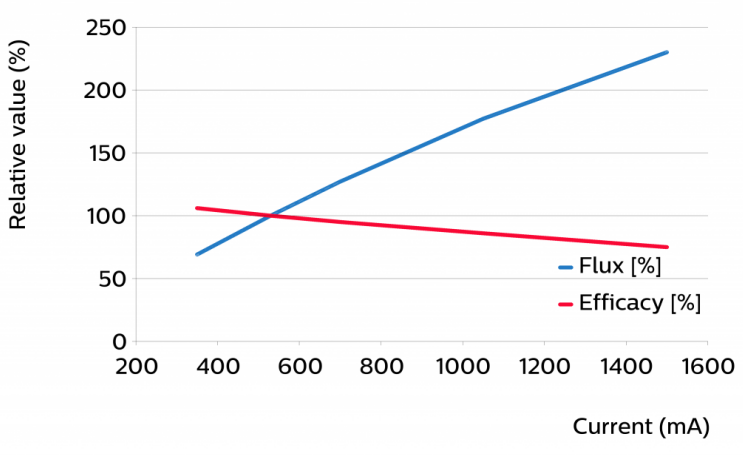
Parameter	Min	Typ	Max	Unit
Forward voltage	31.7	33.4	36.0	V
Power consumption		17.7	19.2	W

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 [%]
350	69	106
530	100	100
700	127	95
1050	177	86
1500	230	75



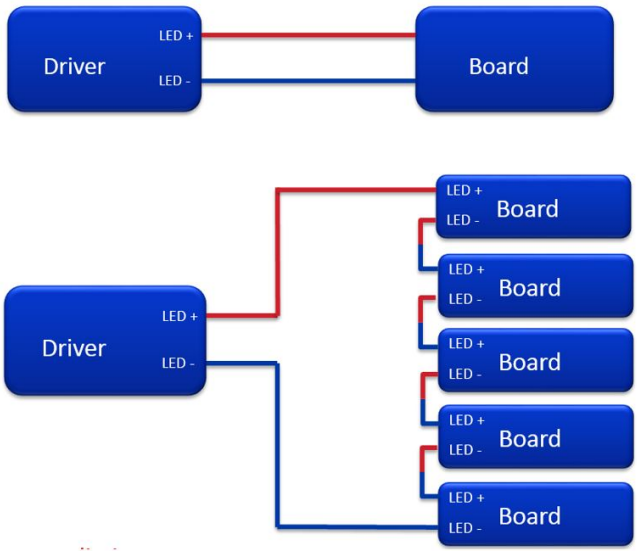
Lumen maintenance

Parameter	Value	Unit
C10 at Tc life	55000	hours

Charts presenting module's Tc and current vs expected lifetime (Up to 120,000 hours), as well as module's Tc and current vs expected lumen depreciation (L70 and above) are available via your sales representative.

Wiring

Specification item	Value	Unit	Condition
Input wire cross-section	0.25...0.75	mm^2	solid wire
	18...24	AWG	solid wire
Input wire strip length	7.5...8.5	mm	
Input wire cross-section	0.33...0.5	mm^2	stranded wire
	20...22	AWG	stranded wire
Input wire strip length	7.5...8.5	mm	



Mechanical characteristics

Fortimo Fastflex LED 2x6/730 DPX G4
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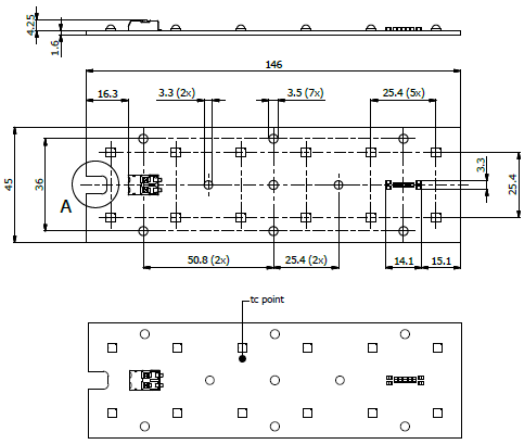
Parameter	Min	Typ	Max	Unit
Length		146		mm
Width		45		mm
Height excl.connector		1.6		mm
Height incl. connector		5.85		mm



Absolute ratings

Parameter	Min	Typ	Max	Unit
Current through the LED module (I-max)			1500	mA
Case temperature (Tc-max)			105	°C
Power at rated Vf-max and I-max			40.2	W
ESD (direct contact)			8	kV
ESD (air)			15	kV
Working voltage			575	V_{dc}
Ambient temperature	-40		50	°C

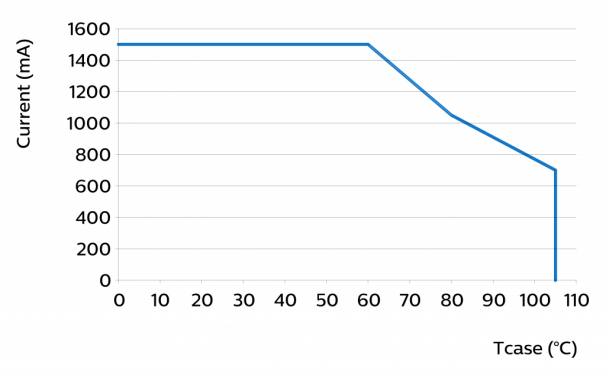
Surge capability at module level up to 6kV when operating in combination with a Xitanium outdoor driver.

Application information

Certificates and Standards
UL 8750
CE
ENEC

Application	
IP rating	No IP-rating
Overheating protection	No
Luminaire class	IEC Class I and Class II
Dimming	Yes

Operating Window



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