



CertaFlux LED Line

CertaFlux LED line 2 ft 2200 lm

The CertaFlux LED Line is a new and economy solution consists of linear white light LED modules with high value, and good energy efficiency for replacement for T8 linear fluorescent lamps. These cost effective systems are completed with the EBL drivers, which is optimized for a fast return on investment.

Benefits

- Good energy efficiency solution at attractive initial investment
- Good light quality
- A reliable linear LED system

Features

- Lumen levels up to 2200lm
- Efficiency levels surpassing T8 systems
- High quality white light

Applications

The Philips CertaFlux LED Line System is ideal for the replacement of T8 fluorescent, especially in the applications troffer, waterproof and battens, therefore CertaFlux LED Line systems can be used including offices, supermarket/hypermarkets and factories.

Commercial product name	EOC	12NC
CertaFlux Led Line 2ft 2200Lm 2 1R 840	9290 008 875	9290 008 87580
CertaFlux Led Line 2ft 2200Lm 2 1R 865	9290 008 876	9290 008 87680

Optical characteristics - table per CCT

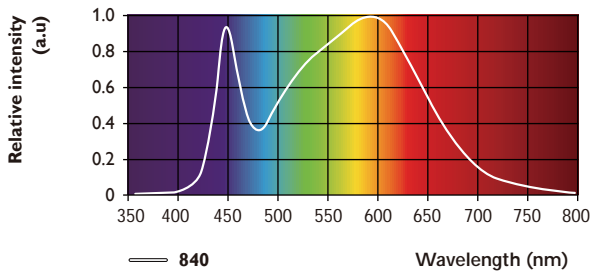
CertaFlux Led Line 2ft 2200Lm 2 1R 840

Parameter	Min	Typ	Max	Unit
Luminous flux	1980	2200	2420	lm
Module efficiency		118		lm/W
Correlated color temperature (CCT)*		4000		K
Color coordinates (CIEx, CIEy)		(0.3835, 0.3821)		-
Color consistency **			5	SDCM
CRI	80			-
Radiation angle		120		deg

Note: Tc nom = 55 °C I nom = 280 mA

* CCT for characterisation

** Note: 5 SDCM color consistency specification may not be sufficient for applications that are sensitive to color differences like wall washers, which typically require 2 SDCM.



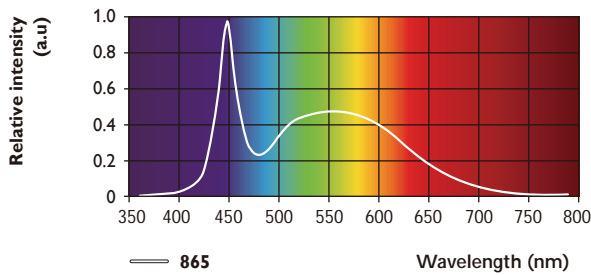
CertaFlux Led Line 2ft 2200Lm 2 1R 865

Parameter	Min	Typ	Max	Unit
Luminous flux	1980	2200	2420	lm
Module efficiency		118		lm/W
Correlated color temperature (CCT)*		6500		K
Color coordinates (CIEx, CIEy)		(0.3133, 0.3303)		-
Color consistency**			5	SDCM
CRI	80			-
Radiation angle		120		deg

Note: Tc nom = 55 °C I nom = 280 mA

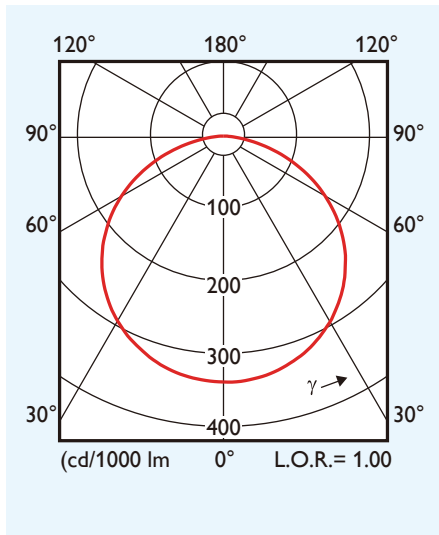
* CCT for characterisation

** Note: 5 SDCM color consistency specification may not be sufficient for applications that are sensitive to color differences like wall washers, which typically require 2 SDCM.



Beam shape

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



Electrical characteristics

Parameter	Min	Typ	Max	Unit
Forward voltage	66	68.0	69.0	V
Power consumption		18.9		W
Minimum dimming for performance		N/A		%
Number of parallel modules per chain			2	
Bins		N/A		

Note: T_c nom = 55 °C I nom = 280 mA

Lifetime

Parameter	Min	Typ	Max	Unit
Lumen maintenance B50L70	35,000			hrs
Δu/v at 6,000 hours			0.007	-
Critical failures			1.5	%

Note: T_c < 70 °C, I < 360 mA

Parameter	Nominal *	Life**	Max***
T _c [°C]	45	70	80
Current [mA]	280	360	360

* Nominal value at which performance is specified

** Value at which lifetime is specified

*** Maximum value for safety

Performance at I life and T _c life	Flux [lm]	Efficiency [lm/W]
4000 K	2200	118
6500 K	2240	118

Abs max ratings

Parameter	Min	Typ	Max	Unit
Current I _{max}			700	mA
Case temperature T _c max			80	°C
ESD (direct contact)			4	kV
ESD (air)			8	kV
Isolation breakdown voltage	500			V _{dc}
Ambient temperature	-20			°C

Wiring

Specification item	Value	Unit	Condition
Input wire cross-section	0.2...0.75	mm ²	Solid and fine stranded
	18...24	AWG	
Input wire strip length	6...7	mm	
Tested cable length*	4000	mm	Total length of wiring including LED modules, one way

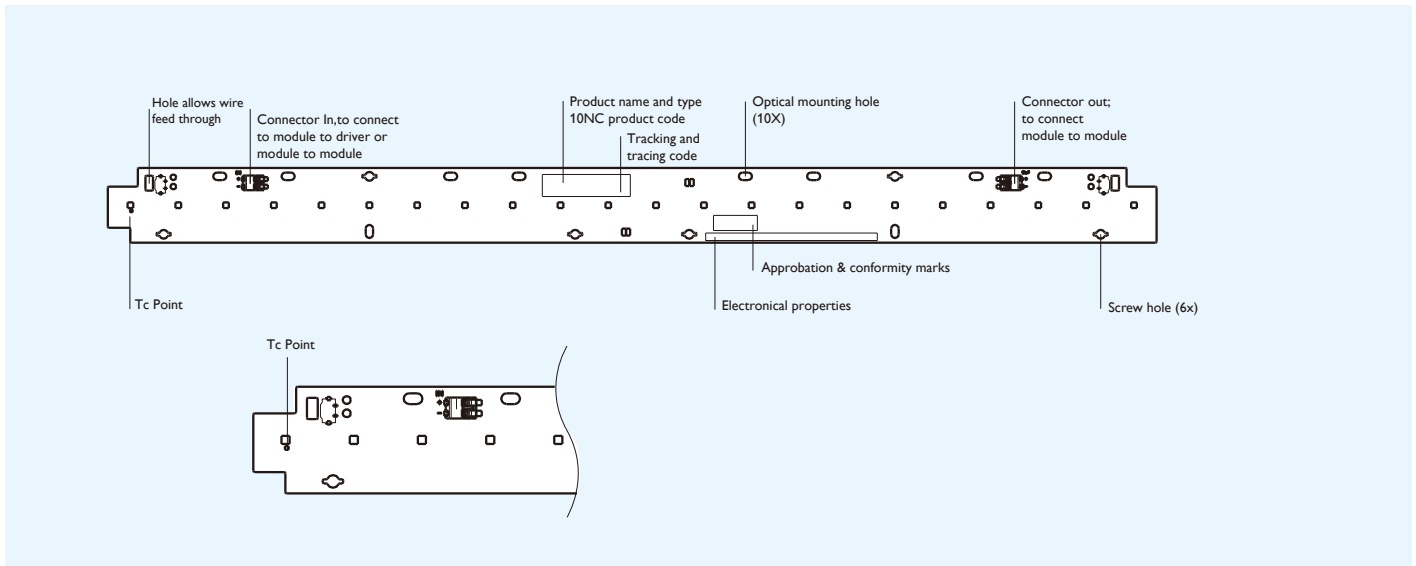
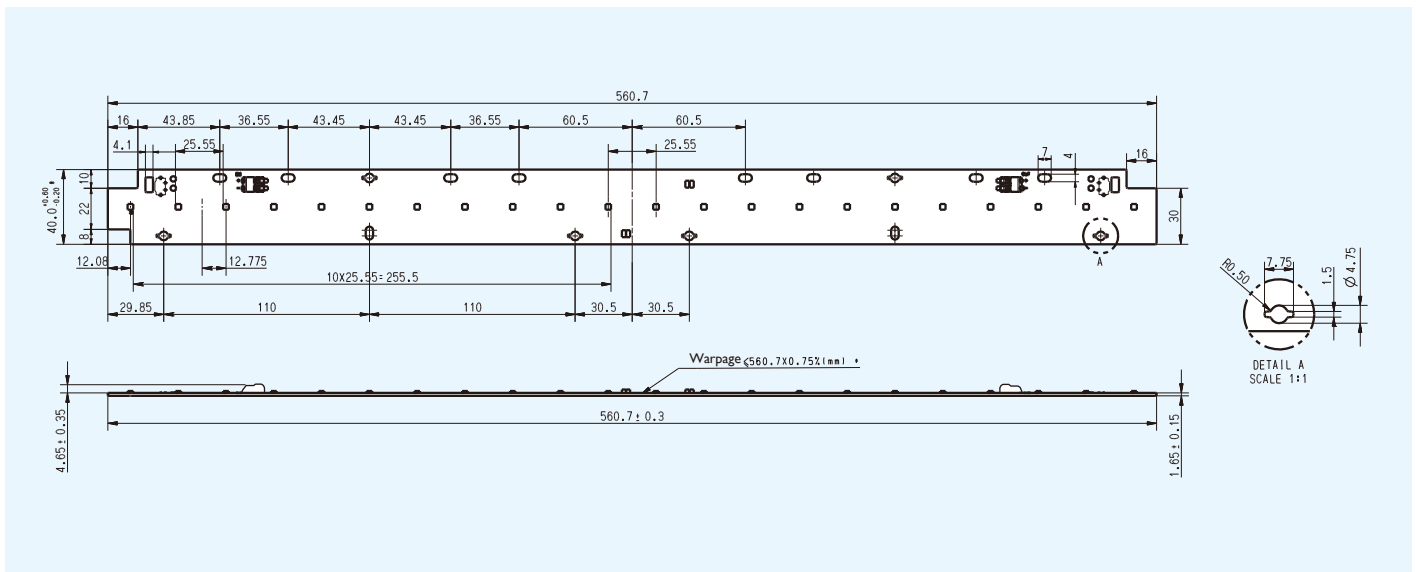
* Note: connector suited for robot wiring

Mechanical characteristics

Parameter	Min	Typ	Max	Unit
Length	560.4	560.7	561	mm
Width	39.8	40	40.6	mm
Height excl. connector	1.5	1.65	1.8	mm
Height incl. connector	5.65	6	6.35	mm
Warpage (IPC-TM-650)			4.2	mm

Note: Bow & Twist of the PCB after production tested and released according IPC-TM-650 2.4.22

Certaflux 2200



Application information

Compliance and approval

IEC / EN 62031, IEC / EN 62471, IEC / EN 62384, UL 8750 FCC Part15

Environmental

RoHS

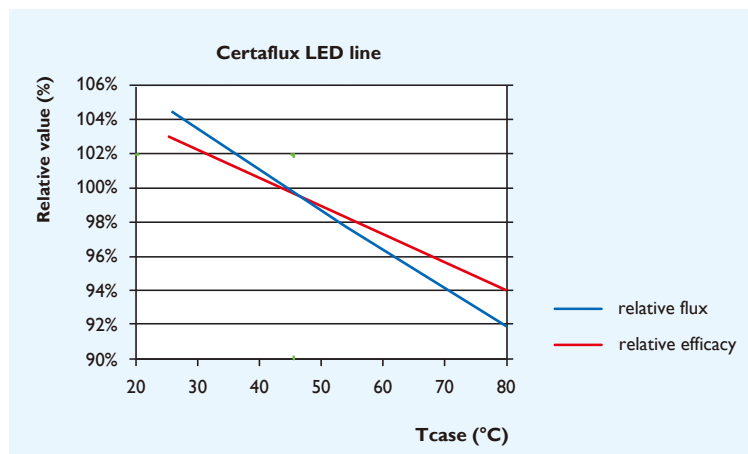
Application information

IP rating	IP 20
Overheating protection	No protection
Luminaire class	N/A

Tuning information

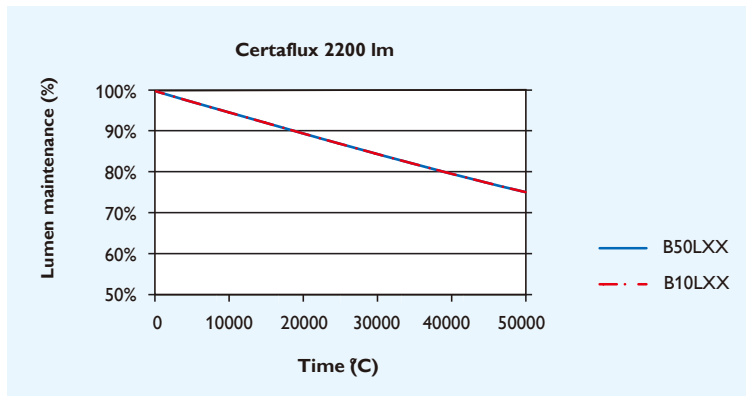
Flux and efficacy versus current and

Flux and efficacy versus temperature at Tc



Lumen maintenance

Lumen maintenance



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01/2014
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