

FE-LSXXN8XX28055

Linear LED light engine



select

CRI > 80 280mm x 55mm LED light engine

- Ideal for luminaires currently using T8/T5 fluorescent tube technology
- Enables the modular construction of gear tray solutions
- Suitable for office, retail and industrial applications
- Ideal for linear and panel lights
- 280mm x 55mm FR4 PCB populated with 33 LEDs
- 3-step MacAdam binning
- Colour temperatures 3000K and 4000K
- Luminous flux range from: 1416 – 1491 lm
- Up to 129lm/W
- Long life-time – up to 50,000 hours
- Simple connection with poke-in connectors for ease of assembly



Technical data page 2

Mechanical dimensions page 3

Photometric characteristics page 4

FE-LSXXN8XX28055

Linear LED light engine



select

CRI > 80 280mm x 55mm LED light engine

Part Numbering

FE - LS XX N 8XX 28055

No. LEDs Photometric Code PCB Size

830 – 3000K
840 – 4000K

Technical Data

Part Number	CCT	No. of LEDs	Typ. Luminous Flux	Typ. Forward Voltage	Test Current	Test T _{SP}	Typ. Power Consumption	Typ. Efficacy
FE-LS33N83028055	3000	33	1416	32.93	350	65	11.53	123
FE-LS33N84028055	4000		1491	32.93			11.53	129
Units	K	-	lm	V	mA	°C	W	lm/W

Key Characteristics

Storage Temperature, T _{STG}	-40 ~ +120°C
Operating Temperature, T _{OP}	-40 ~ +85°C
Max. Solder Point Temp., T _{SP}	90°C

Colour Temperature Range

3000K – (3045 ± 175K)
4000K – (3985 ± 275K)

Binned in accordance to ANSI C78.377A

Maximum Rated Values

Part Number	Forward Current	Forward Voltage
FE-LS33N8XX28055	390mA	35.65V

Standard Driver Options – AcTEC

	350mA
Q7H-350mA-15W	1S
Q7H-700mA-30W	2P
LCS-1400mA-60W	4P

Where: 1S = 1 PCB in series; 2P = 2 PCBs in parallel;
4P = 4 PCBs in parallel

FE-LSXXN8XX28055

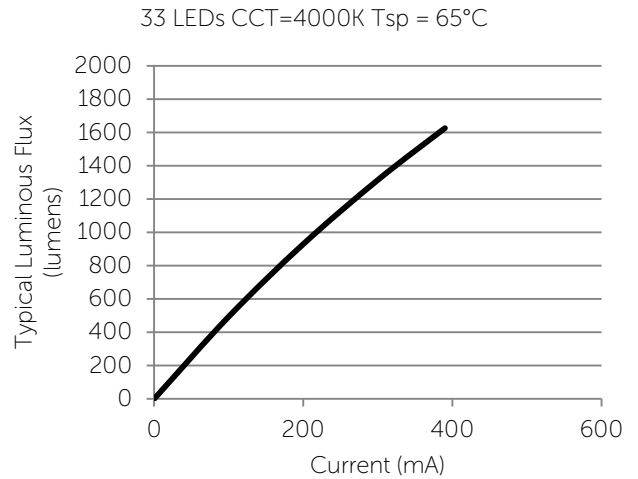
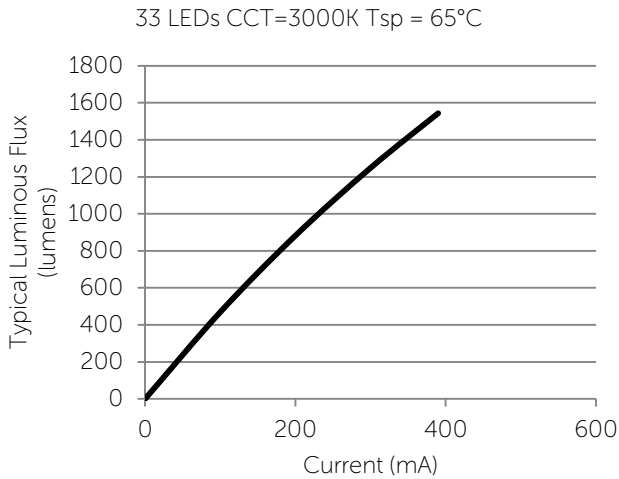
Linear LED light engine



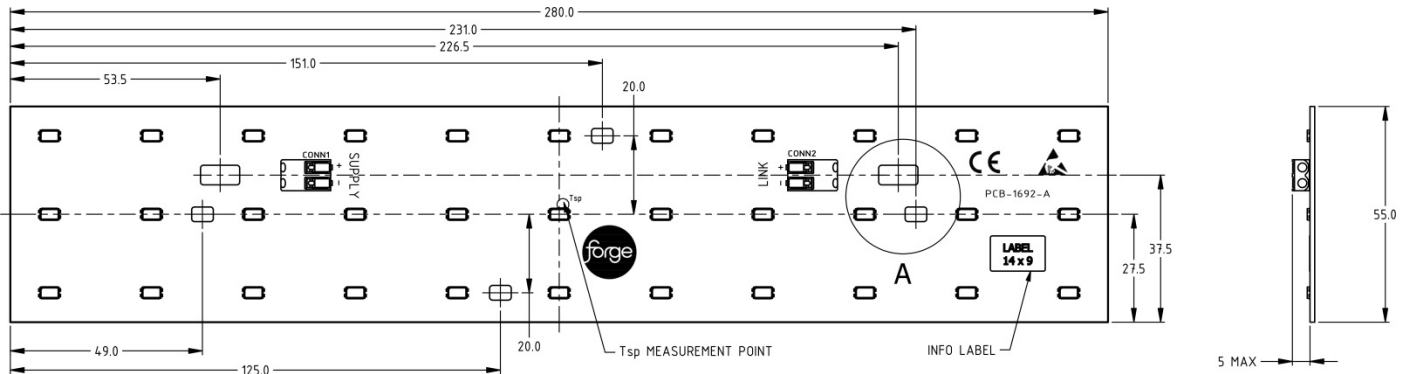
select

CRI > 80 280mm x 55mm LED light engine

Typical Flux vs. Current



Mechanical Dimensions



All dimensions in mm

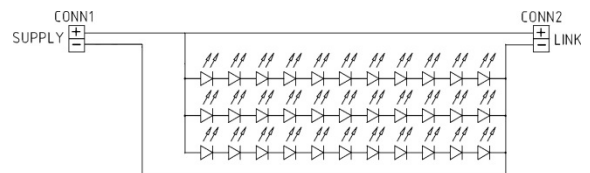
Lumen Maintenance

Lifetime statements are for information only and represent no warranty claim.

Part Number	PCB Input Current	LED I _F	T _{SP} Temp.	Reported L70 (10k)
FE-LS33N8XX28055	350mA	117mA	65°C	50,000 hrs

Circuit Schematic

FE-LS33N8XX28055



It is the responsibility of the customer to verify the suitability of the product for the application.

FE-LSXXN8XX28055

Linear LED light engine

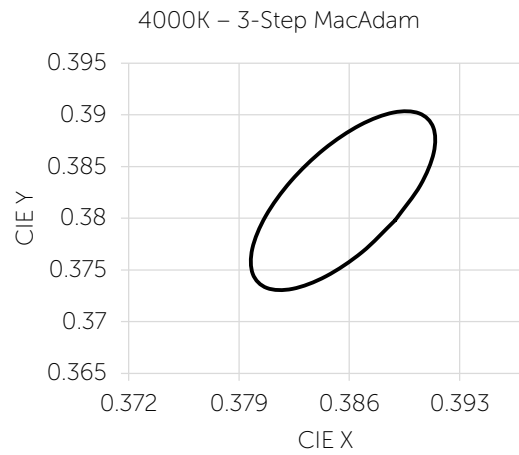
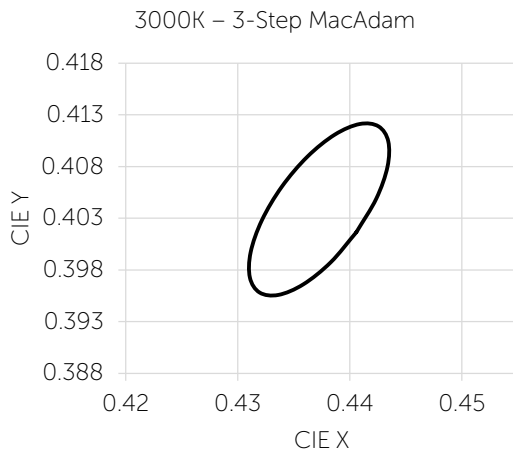


select

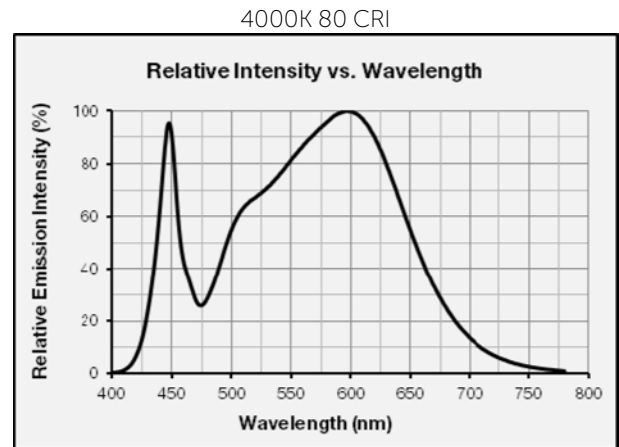
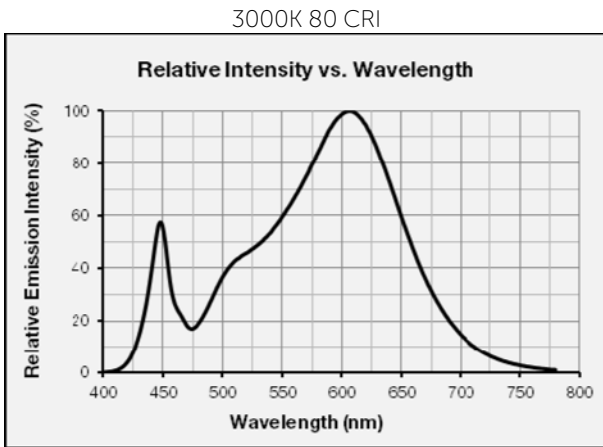
CRI > 80 280mm x 55mm LED light engine

Photometric Characteristics

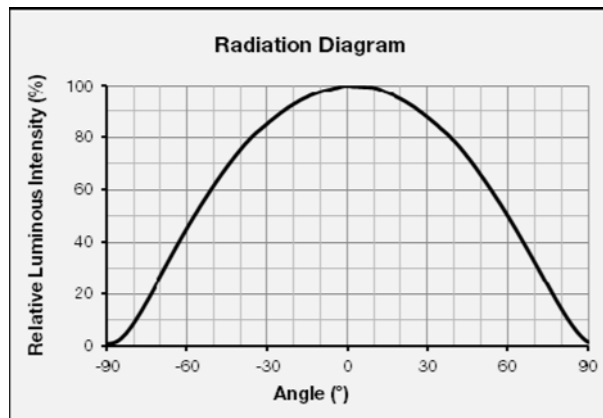
Colour Tolerances



Spectral Power Distribution



Light Distribution



FE-LSXXN8XX28055

Linear LED light engine

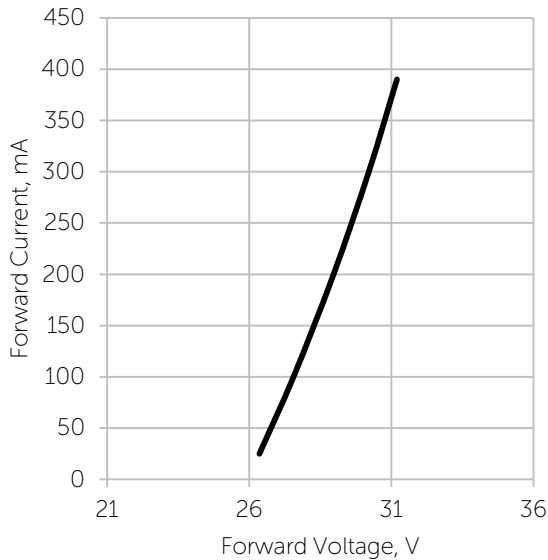


select

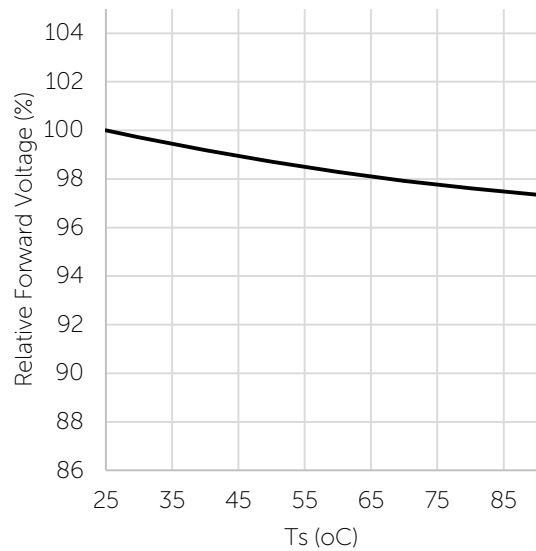
CRI > 80 280mm x 55mm LED light engine

Electrical Values

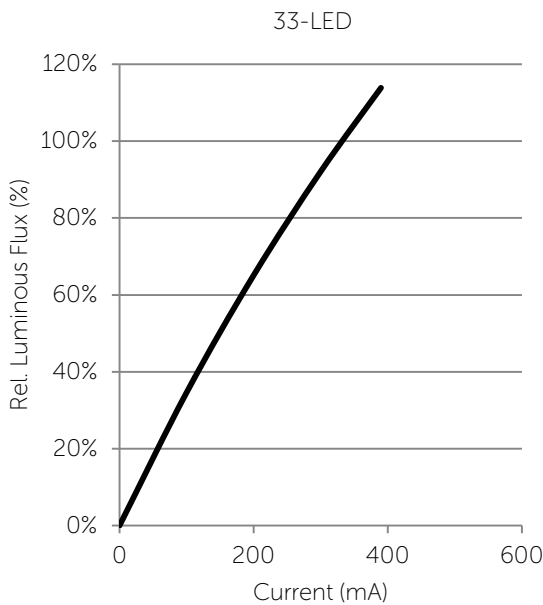
Typical Forward Voltage vs. forward current



Relative Forward voltage vs. Tsp temperature



Relative luminous flux vs. operating current



Disclaimer

No representation, warranty, responsibility or liability is or will be accepted by Forge Europa Limited in relation to the accuracy or completeness of any information it provides. It is the responsibility of the customer to verify the suitability of the product for its application. All design work supplied by Forge Europa Limited is to be assumed confidential and is the sole property of Forge Europa Limited. It must not be used, copied or disclosed to any third party without the prior written consent of Forge Europa Limited. All contracts are subject to Forge Europa Limited's General Terms and Conditions of Trading which can be found at www.forge-europa.co.uk. E&OE