

FE-LSXXBP9XX28055

Linear LED light engine



exclusive

CRI > 90 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:
1348 – 1428 lm
- Up to 126lm/W
- Long life-time – up to 60,000 hours
- Simple connection with poke-in connectors for ease of assembly
- High colour rendering CRI >90



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Part Numbering

FE - LS XX BP 9XX 28055

No. LEDs Photometric Code PCB Size

930 – 3000K
940 – 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-LS33BP93028055	3000	33	1348	32.32	350	65	11.31	119
FE-LS33BP94028055	4000		1428	32.32			11.31	126
Units	K	-	lm	V	mA	°C	W	lm/W

Key Characteristics

Beam Angle	120°
Storage Temperature, T _{STG}	-40 ~ +120°C
Operating Temperature, T _{OP}	-40 ~ +85°C
Max. Solder Point Temp., T _{SP}	90°C
Type of Protection	IP00

Maximum Rated Values

Part Number	Forward Current	Forward Voltage
FE-LS33BP9XX28055	440mA	37.45V

Colour Temperature Range

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

Binned in accordance to ANSI C78.377A

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

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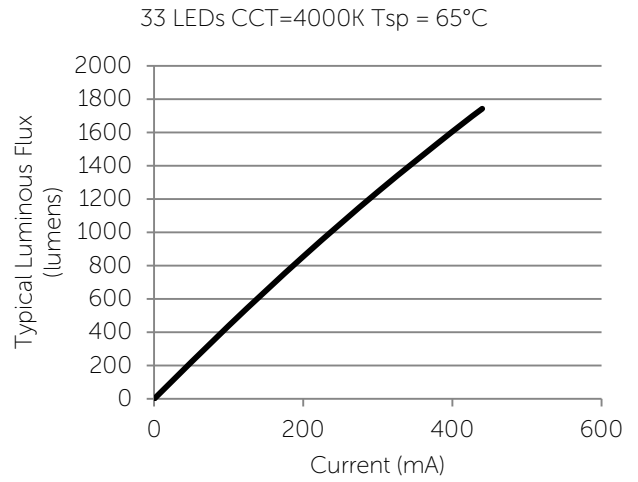
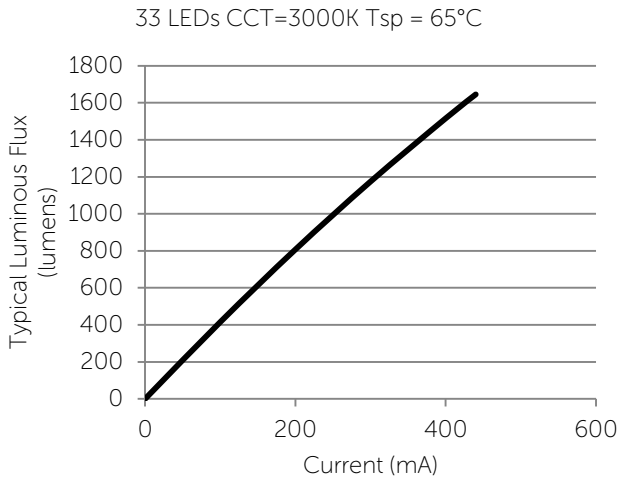
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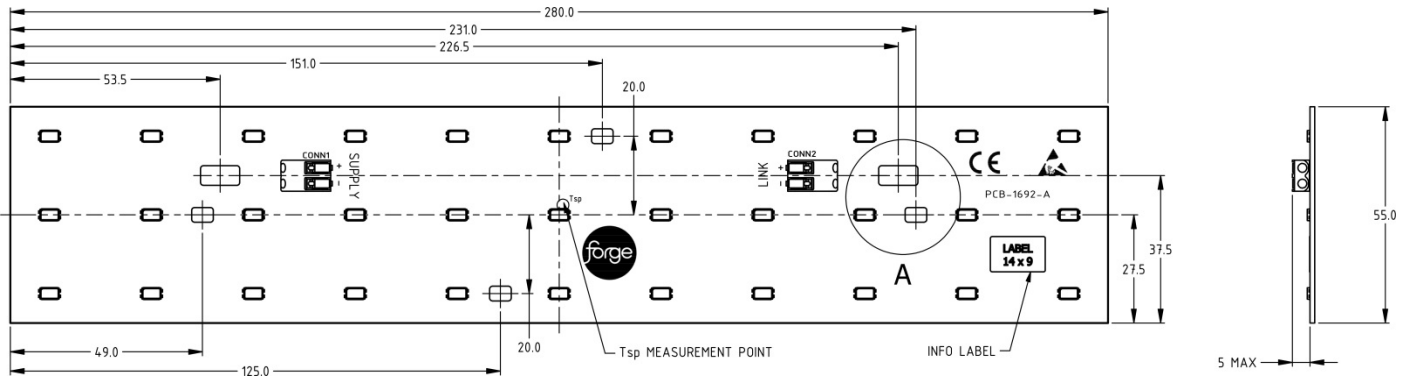
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Typical Flux vs. Current



Mechanical Dimensions



All dimensions in mm

Lumen Maintenance

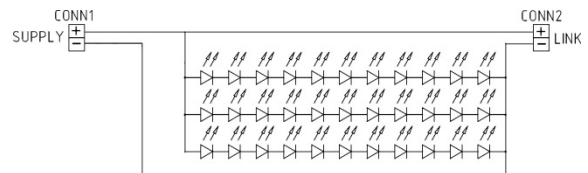
Lifetime statements are for information only and represent no warranty claim.

Part Number	PCB Input Current	LED I _F	T _{SP} Temp.	Reported L70 (10k)
FE-LS33BP9XX28055	350mA	117mA	65°C	>60,000 hrs

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

Circuit Schematic

FE-LS33BP9XX28055



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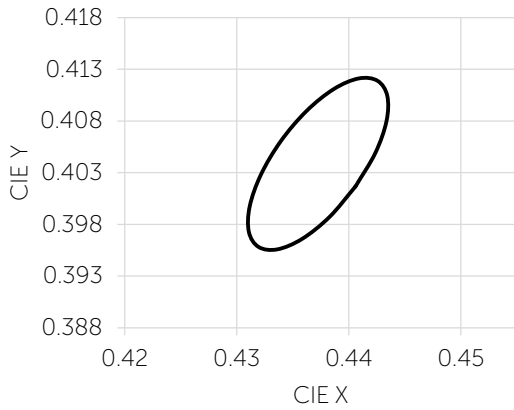
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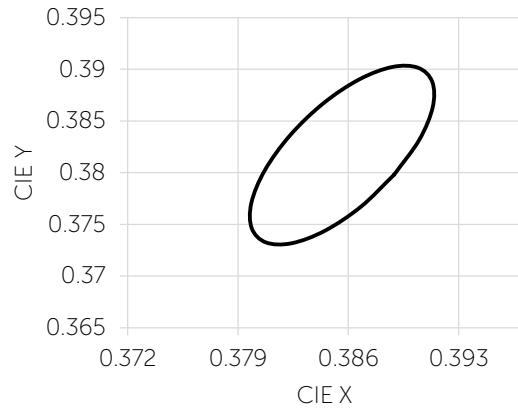
Photometric Characteristics

Colour Tolerances

3000K – 3-Step MacAdam

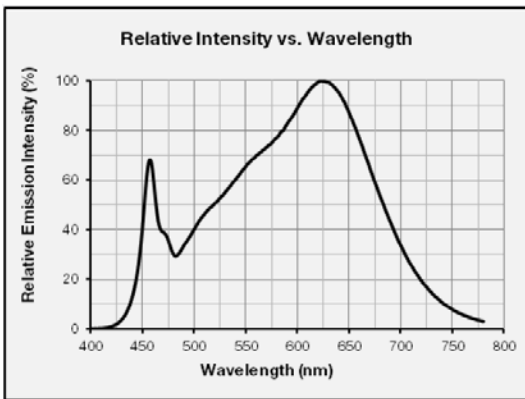


4000K – 3-Step MacAdam

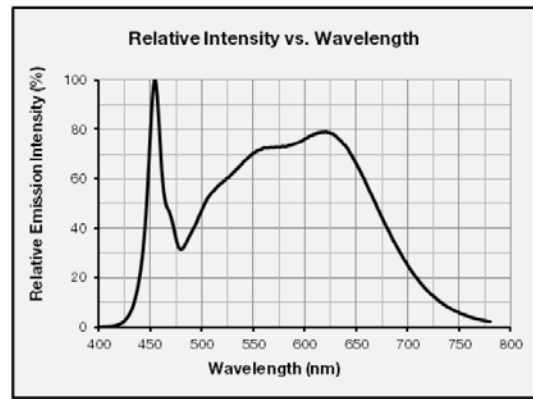


Spectral Power Distribution

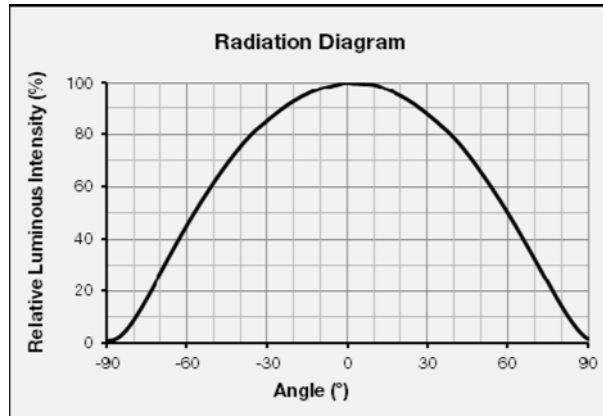
3000K 90 CRI



4000K 90 CRI



Light Distribution



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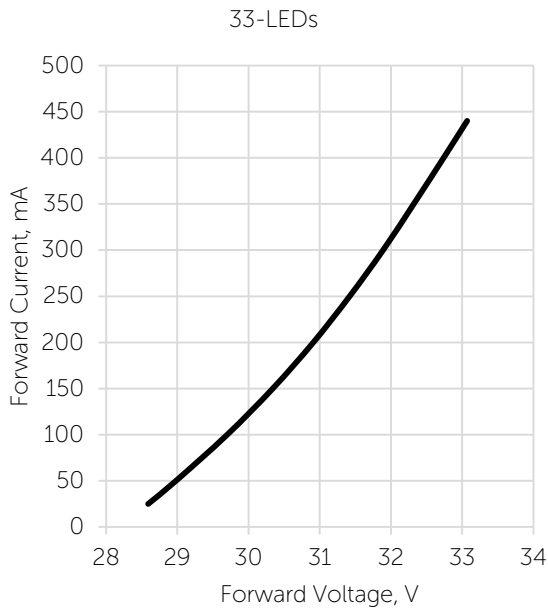


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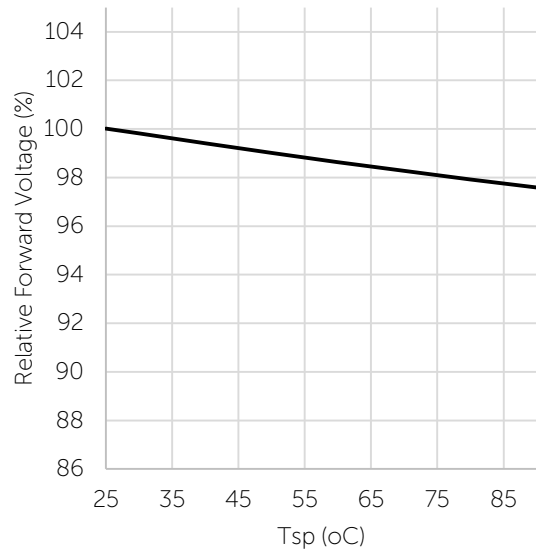
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Electrical Values

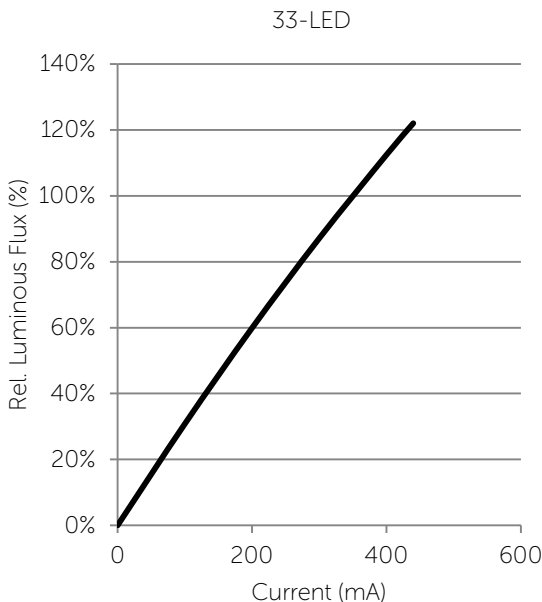
Typical Forward Voltage vs. forward current



Relative Forward voltage vs. Tsp temperature



Relative luminous flux vs. operating current



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