

FE-LSXXBP8XX28024

Linear LED light engine



exclusive

CRI > 80 280mm x 24mm 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 24mm FR4 PCB populated with 18 or 36 LEDs
- 3-step MacAdam binning
- Colour temperatures 3000K and 4000K
- Luminous flux range from: 911 – 1908 lm
- Up to 155lm/W
- Long life-time – up to 60,000 hours
- Simple connection with poke-in connectors for ease of assembly



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Part Numbering

FE - LS XX BP 8XX 28024

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-LS18BP83028024	3000	18	911	17.63	350	65	6.16	148
FE-LS36BP83028024		36	1821	35.26			12.34	148
FE-LS18BP84028024	4000	18	954	17.63			6.16	155
FE-LS36BP84028024		36	1908	35.26			12.34	155
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-LS18BP8XX28024	440mA	20.43 V
FE-LS36BP8XX28024	440mA	40.85 V

Colour Temperature Range

3000K – (3045 ± 175K)

4000K – (3985 ± 275K)

Binned in accordance to ANSI C78.377A

Standard Driver Options – AcTEC

FE-LS18BPXXX28024

	350mA
LCS-350mA-40W	4S

Where: 4S = 4 PCBs connected in series

FE-LS36BPXXX28024

	350mA
LCS-350mA-40W	2S

Where: 2S = 2 PCBs connected in series

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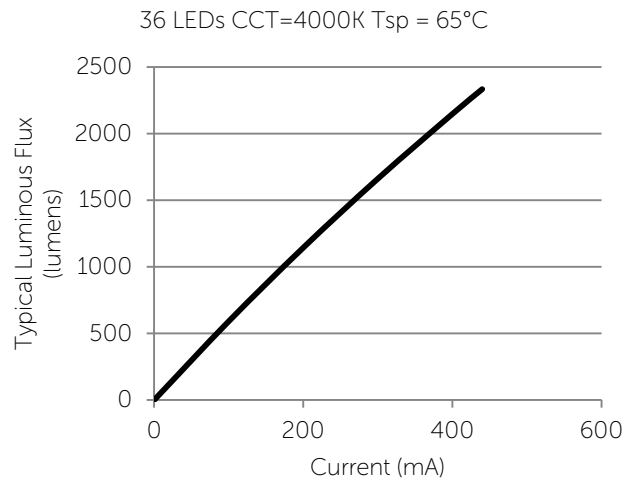
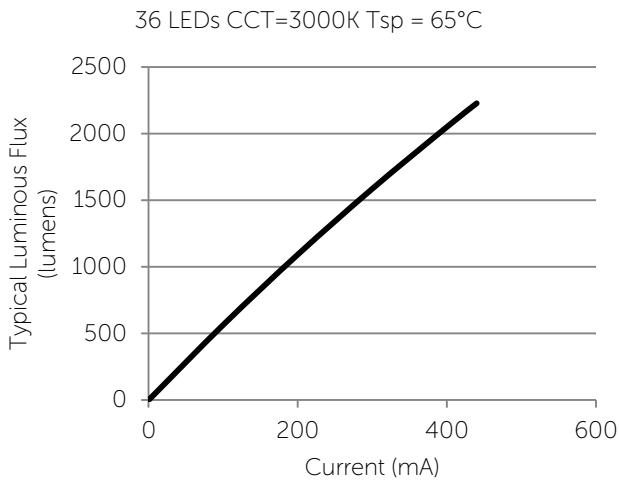
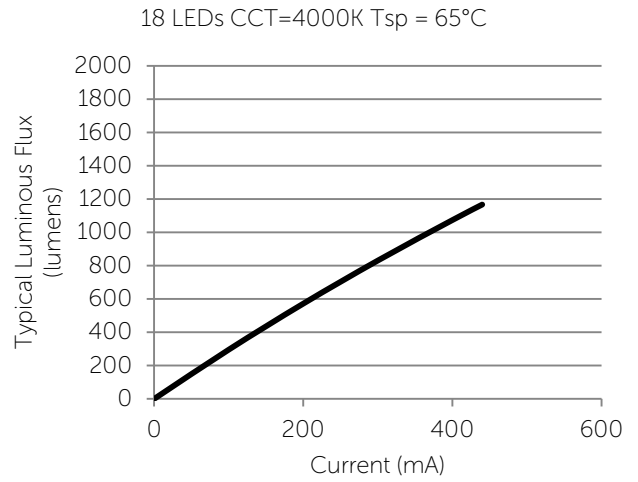
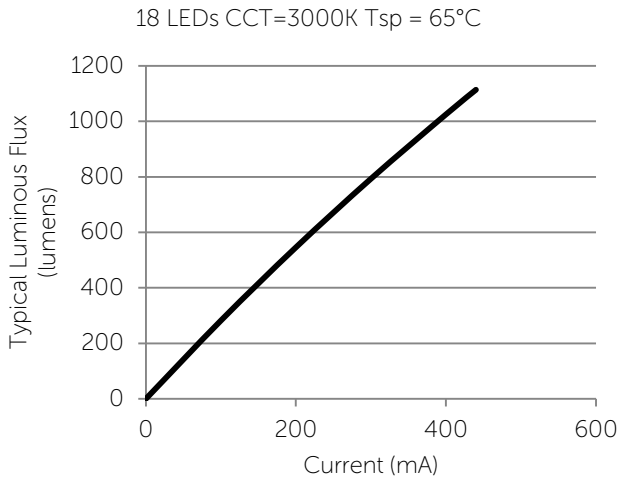
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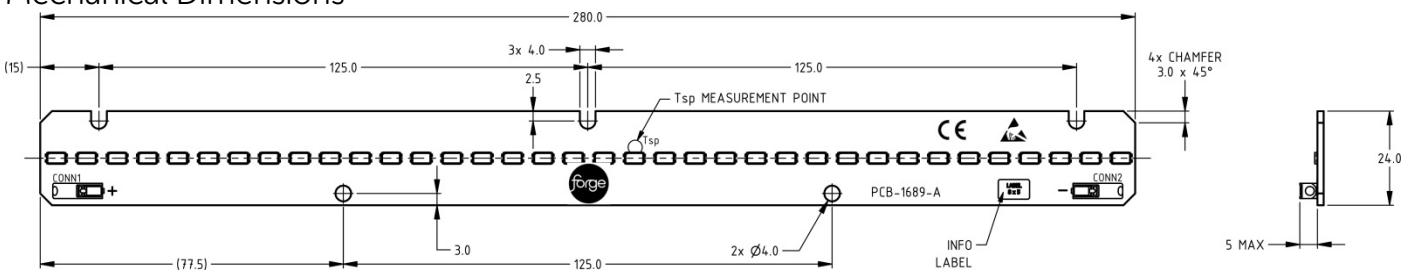
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Typical Flux vs. Current



Mechanical Dimensions



All dimensions in mm

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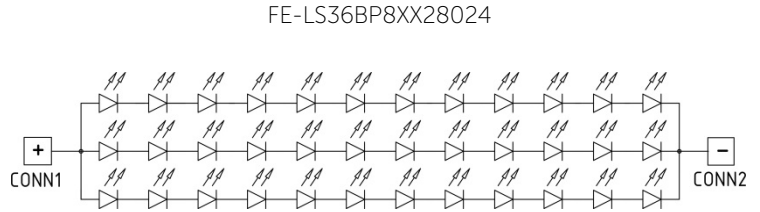
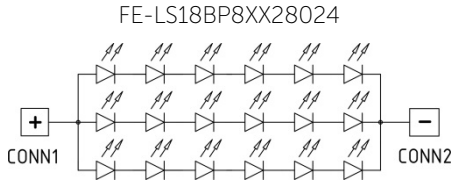
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Circuit Schematics



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-LS18BP8XX28024	350mA	117mA	65°C	>60,000 hours
FE-LS36BP8XX28024	350mA	117mA		>60,000 hours

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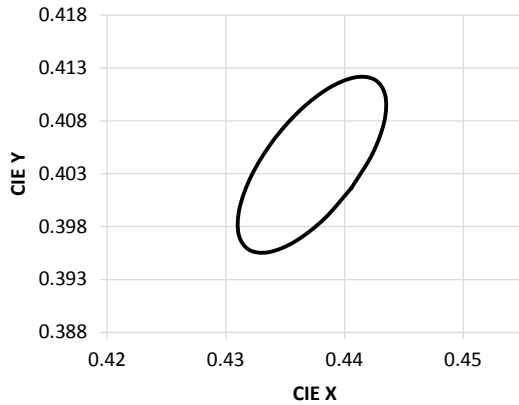
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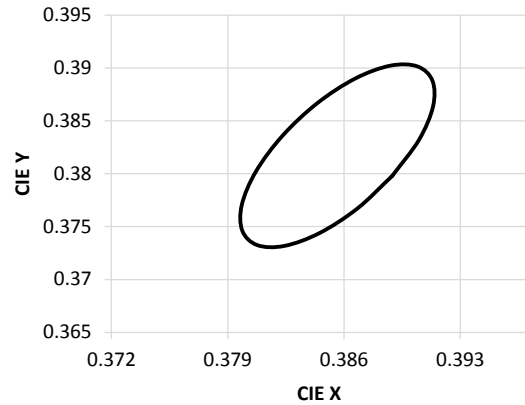
Photometric Characteristics

Colour Tolerances

3000K – 3-Step MacAdam

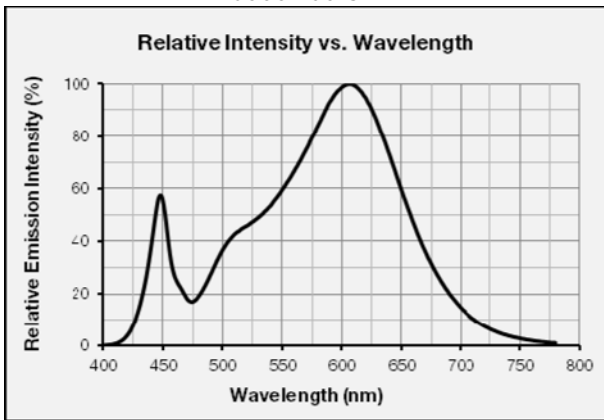


4000K – 3-Step MacAdam

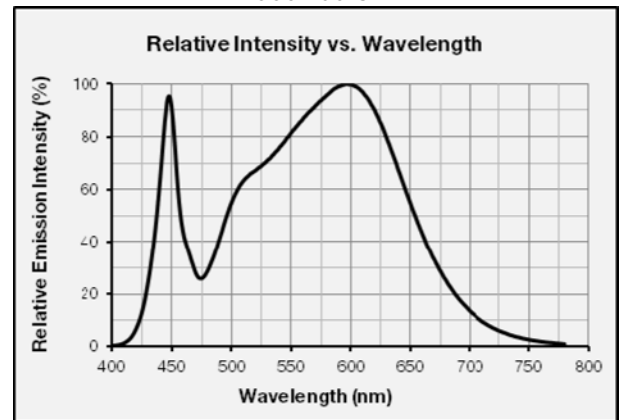


Spectral Power Distribution

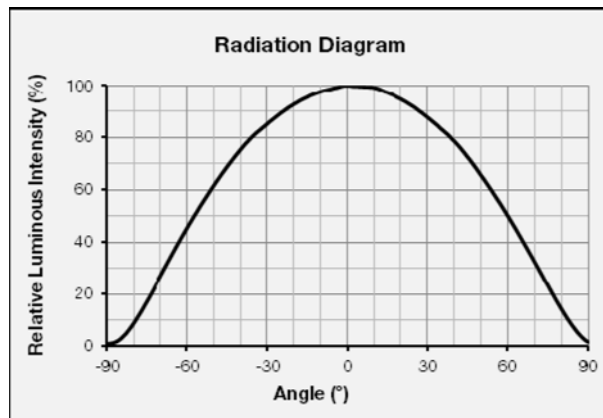
3000K 80 CRI



4000K 80 CRI



Light Distribution



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

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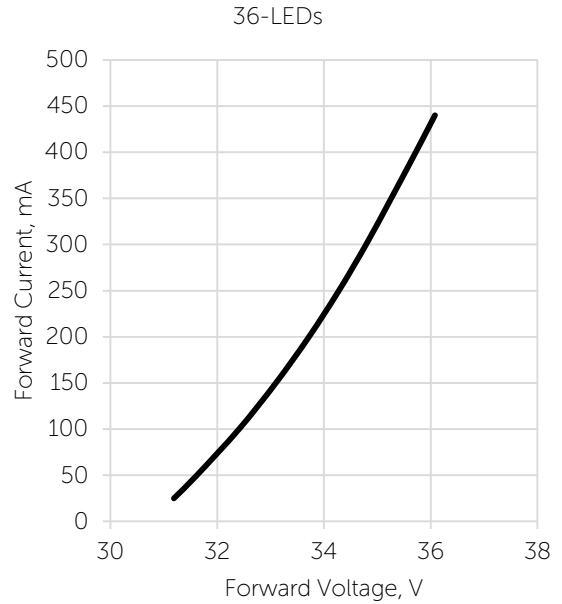
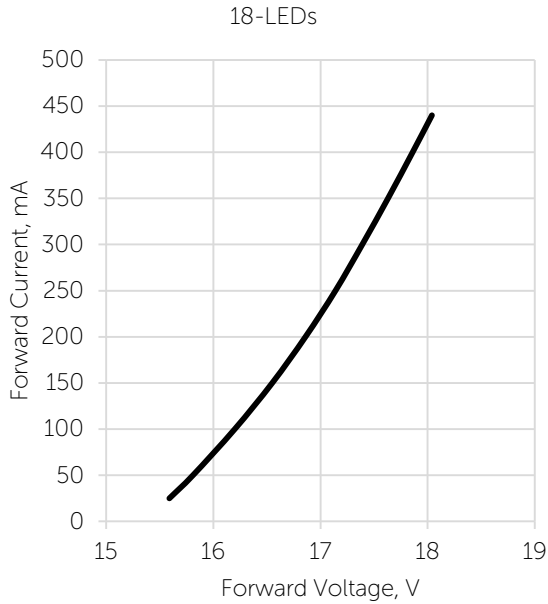


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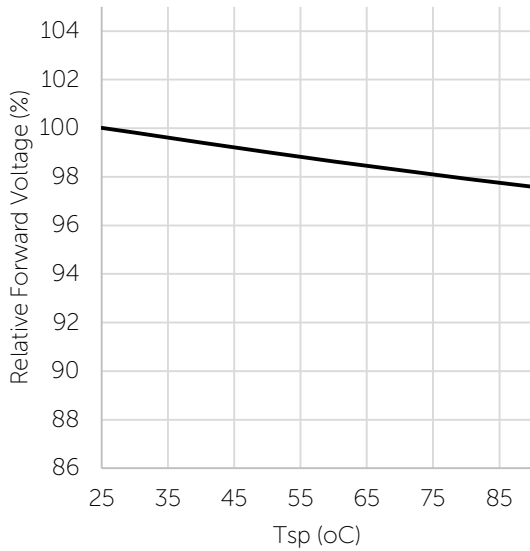
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Electrical Values

Typical Forward Voltage vs. forward current



Relative Forward voltage vs. Tsp temperature



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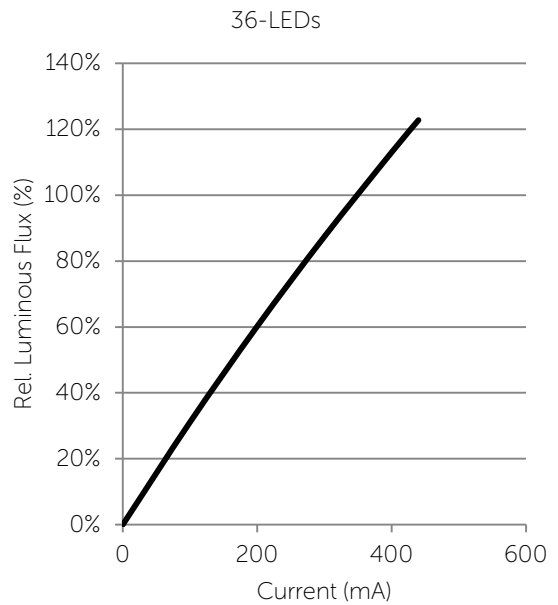
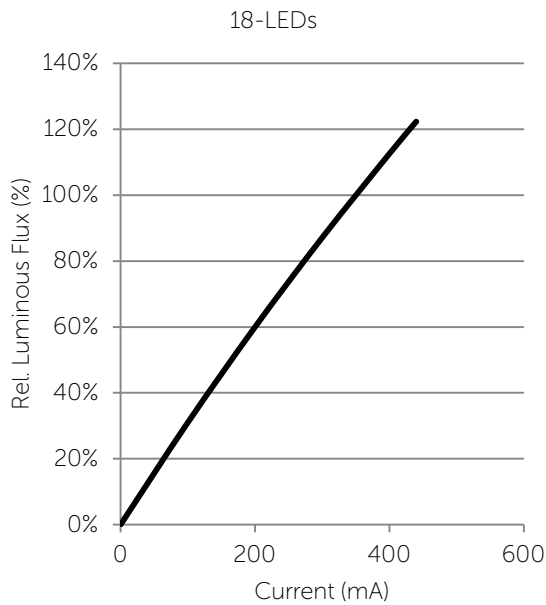
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Relative luminous flux vs. operating current



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