

# FE-LTXXN8XX270270

Wide area LED light engine



## select

CRI > 80 270mm x 270mm LED light engine

- Designed for use recessed and surface mounted ceiling fixtures
- Versatile solution to create energy efficient low-glare lighting
- Suitable for open areas such as offices, classrooms and corridors
- 270mm x 270mm FR4 PCB populated with 32 or 64 LEDs
- 3 step MacAdam binning
- Colour temperatures 3000K and 4000K
- Luminous flux range from:  
585 – 1233 lm
- Up to 173lm/W
- Long life-time – up to 50,000 hours
- Simple connection with poke-in connectors for ease of assembly
- Optional thermistor and associated connector can be fitted for temperature monitoring



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### Part Numbering

FE - LS XX N 8XX 270270

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 <sub>SP</sub>	Typ. Power Consumption	Typ. Efficacy
FE-LT32N830270270	3000	32	585	10.98	350	65	3.84	152
FE-LT64N830270270		64	610	10.61	350		3.71	164
			1171	10.98	700		7.68	152
FE-LT32N840270270	4000	32	617	10.98	350		3.84	161
FE-LT64N840270270		64	642	10.61	350		3.71	173
			1233	10.98	700		7.68	161
Units	K	-	lm	V	mA	°C	W	lm/W

### Key Characteristics

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

### Maximum Rated Values

Part Number	Forward Current	Forward Voltage
FE-LT32NXXX270270	1000mA	12.91V
FE-LT64NXXX270270	1950mA	12.87V

### Colour Temperature Range

3000K – (3045 ± 175K)

4000K – (3985 ± 275K)

Binned in accordance to ANSI C78.377A

### Standard Driver Options – AcTEC

	350mA	700mA
Q7H-350mA-20W	4S	-
Q7H-700mA-30W	-	2S

Where: 2S = 2 PCBs in series, 4S = 4 PCBs in series

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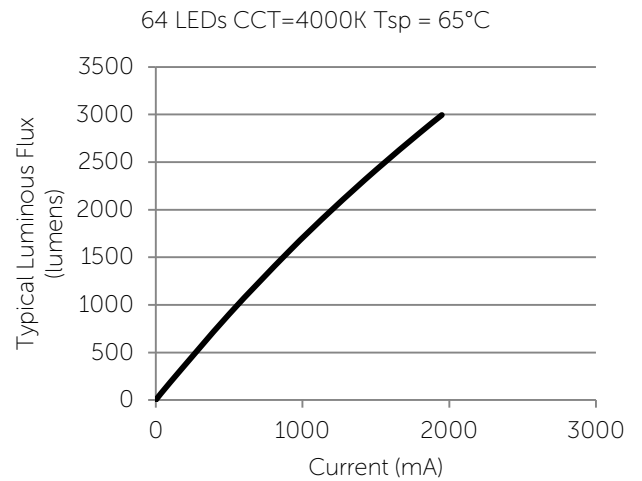
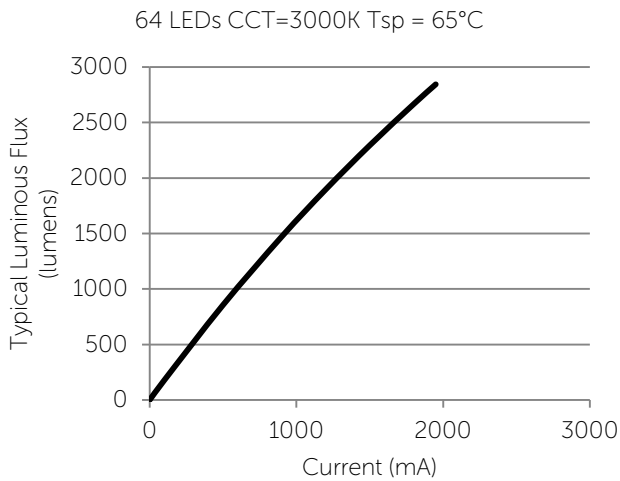
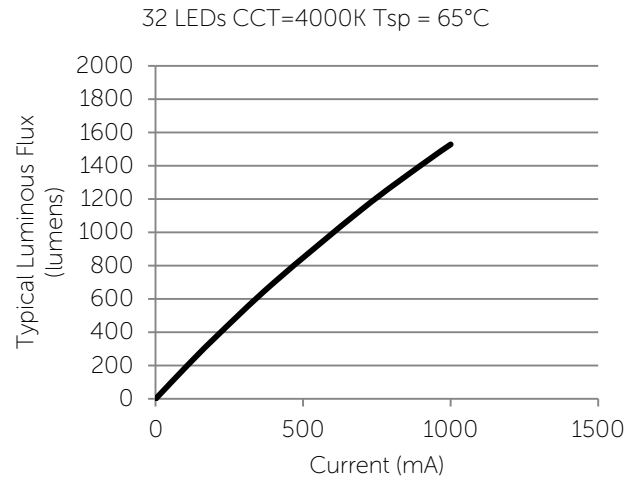
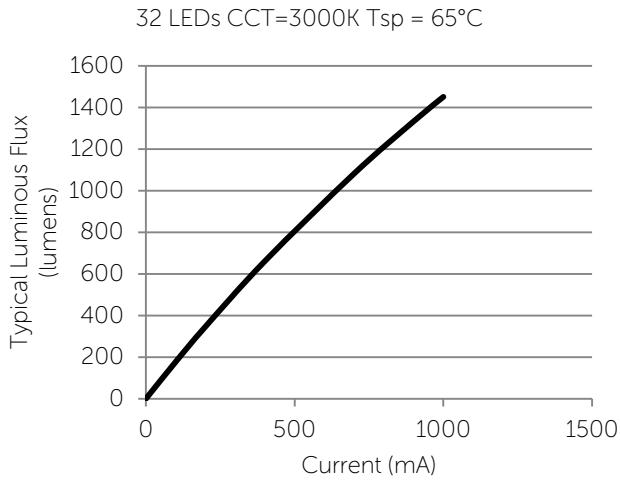
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### Typical Flux vs. Current



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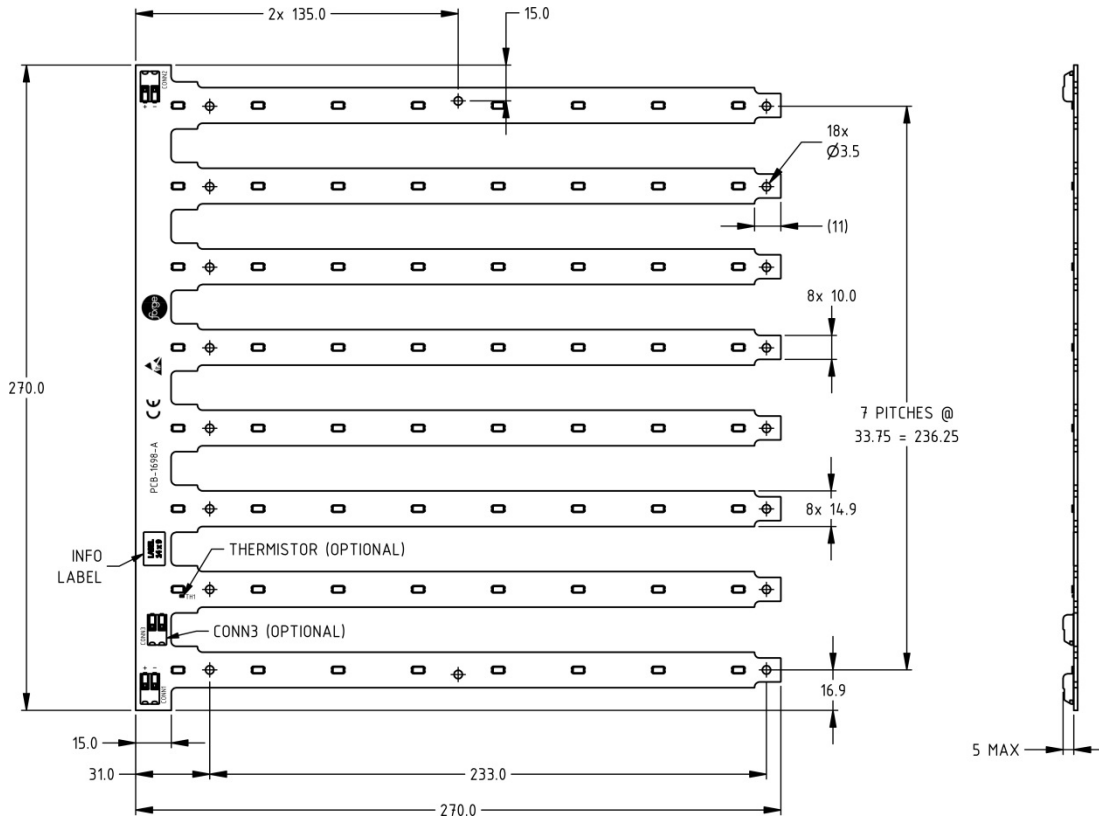
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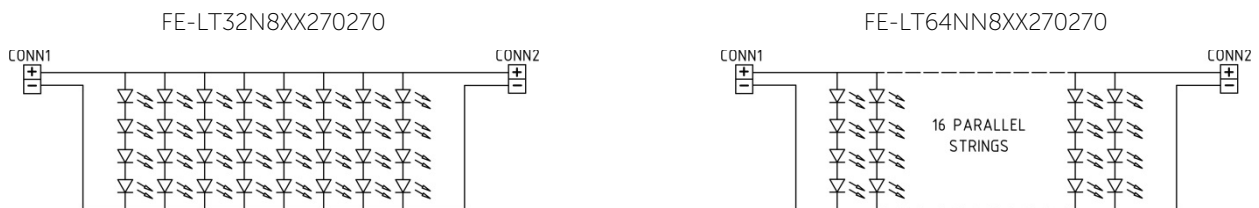
## Mechanical Dimensions



All dimensions in mm

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

## 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-LT32N8XX270270	350mA	44mA	65°C	>60,000 hours
FE-LT64N8XX270270	350mA	22mA		>60,000 hours
	700mA	44mA		>60,000 hours

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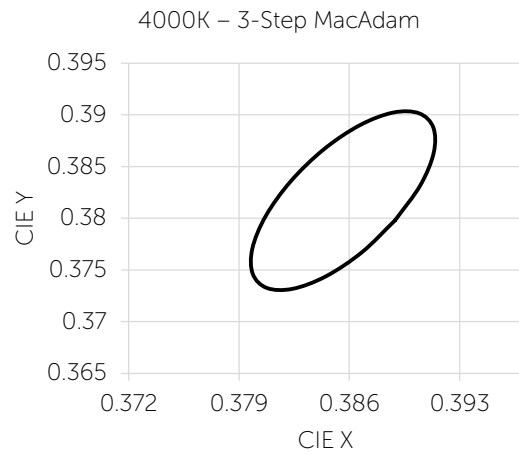
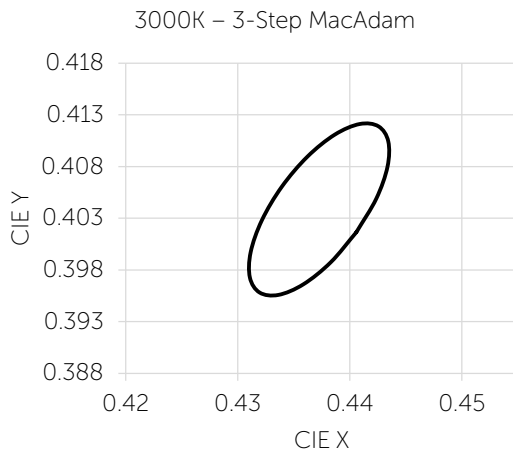


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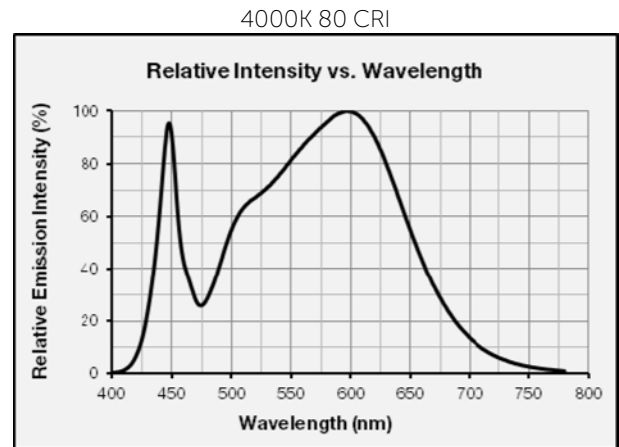
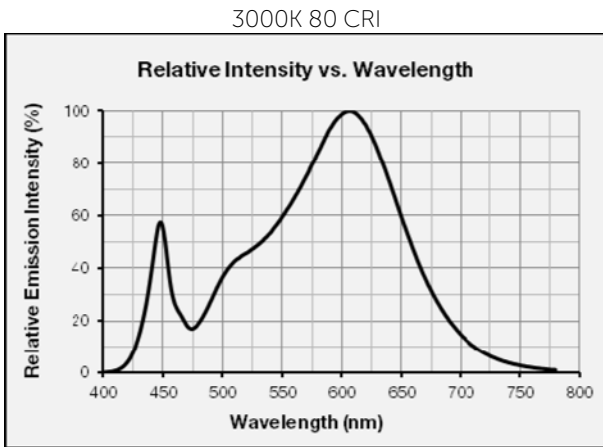
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### Photometric Characteristics

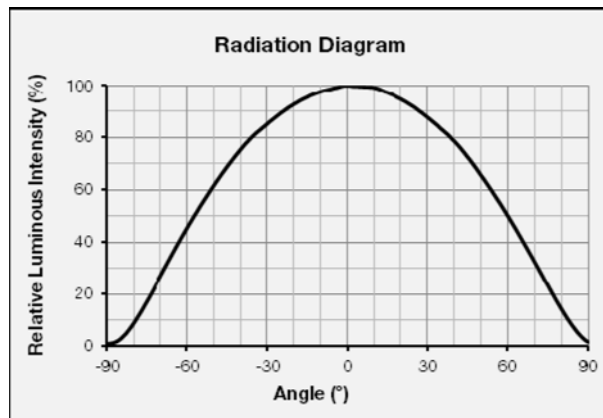
#### Colour Tolerances



#### Spectral Power Distribution



#### Light Distribution



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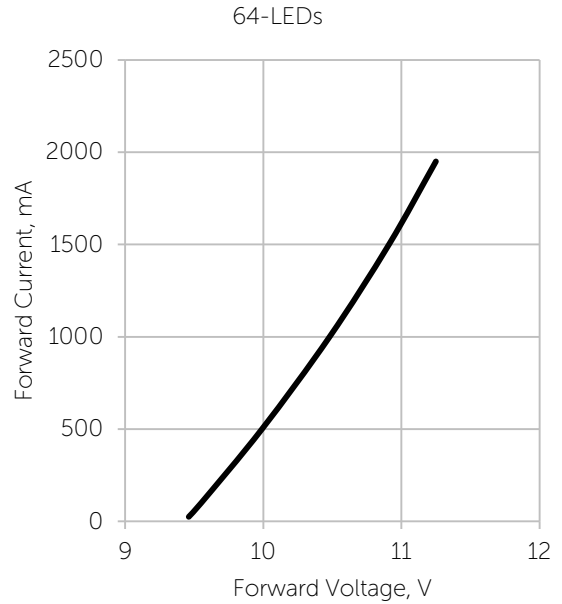
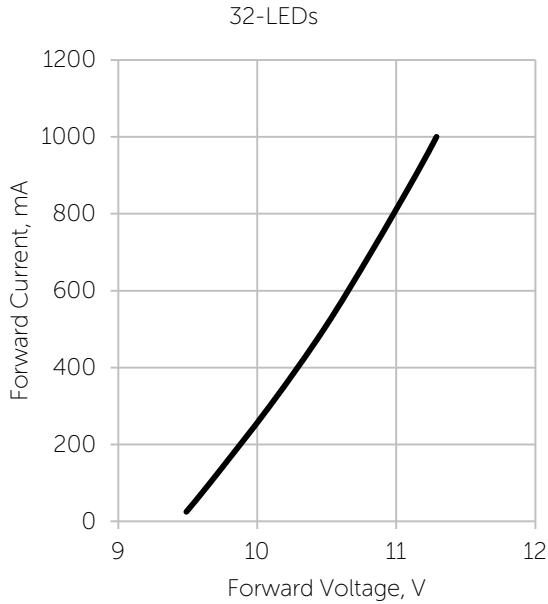


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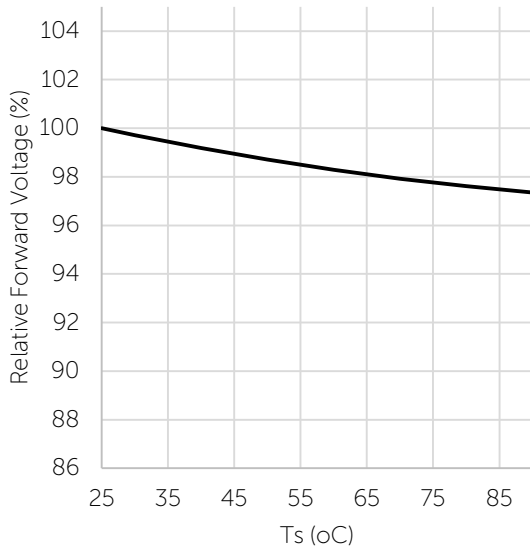
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### Electrical Values

Typical Forward Voltage vs. forward current



Relative Forward voltage vs. Tsp temperature



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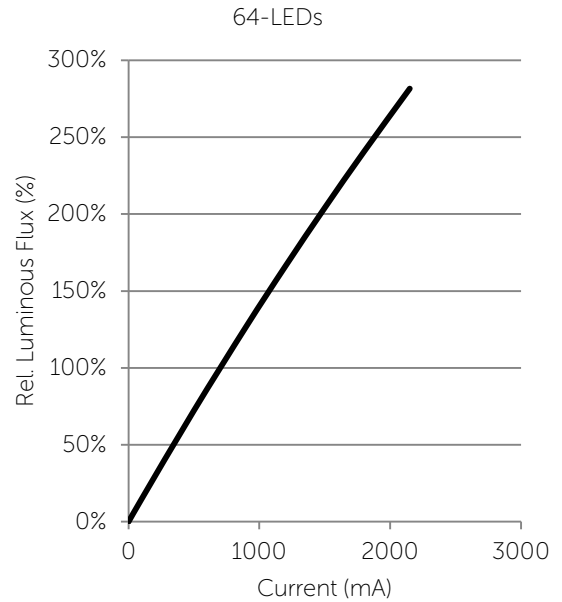
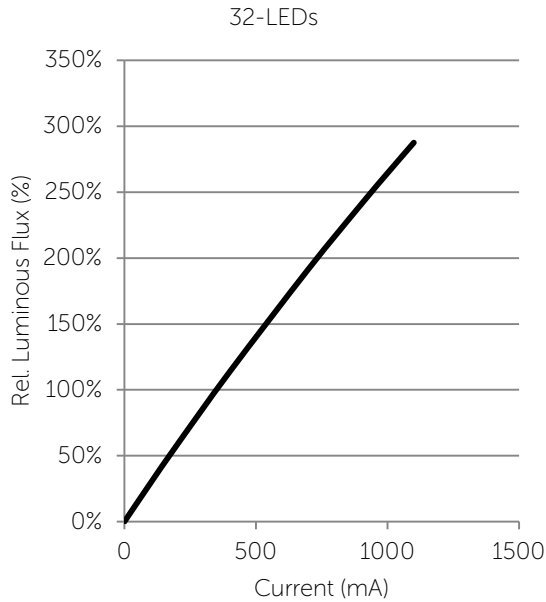
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Relative luminous flux vs. operating current



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