

FE-LCXXEXXBP9XX200

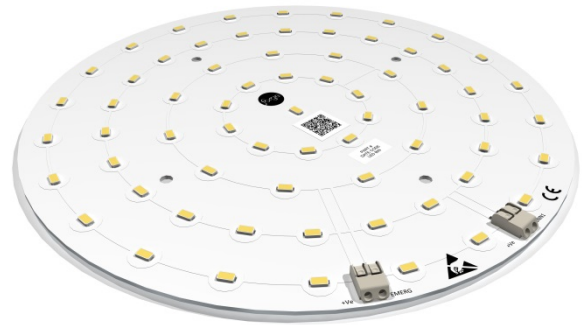
Round LED light engine



exclusive

CRI > 90 200mm Ø LED light engine

- Designed for use in ceiling-mounted and wall-mounted luminaires
- Ideal cost-effective, uniform illumination
- Suitable for office, retail and industrial applications
- Ideal for bulkhead fixtures
- 200mm Ø FR4 PCB populated with 33, 66 or 99 LEDs
- 3-step MacAdam binning
- Emergency circuit option available
- Colour temperatures 3000K and 4000K
- Luminous flux range from:
 - 33 LED 1348 – 1428 lm
 - 66 LED 1988 – 2105 lm
 - 99 LED 2797 – 4283lm
- Up to 136lm/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 - LC XX E XX BP 9XX 200

No. Main LEDs

No. EM LEDs

LED Variant

Photometric Code

PCB Size

930 – 3000K

940 – 4000K

Technical Data

Part Number – No Emergency LEDs	CCT	No. of LEDs	Typ. Luminous Flux	Typ. Forward Voltage	Test Current	Test T _{SP}	Typ. Power Consumption	Typ. Efficacy
FE-LC33E00BP930200	3000	33	1348	32.31	350	65°C	11.31	119
FE-LC66E00BP930200		66	1988	31.40	500		15.70	127
FE-LC99E00BP930200		99	2797	31.23	700		21.86	128
			4045	32.31	1050		33.92	119
FE-LC33E00BP940200	4000	33	1428	32.31	350		11.31	126
FE-LC66E00BP940200		66	2105	31.40	500		15.70	134
FE-LC99E00BP940200		99	2962	31.23	700		21.86	136
			4283	32.31	1050		33.92	126
Units	K	-	lm	V	mA	°C	W	lm/W

For Emergency LED variants replace E00 with appropriate number of LEDs. See Overleaf for details.

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-LC33EXXBP9XXXXX	440mA	37.43V
FE-LC66EXXBP9XXXXX	830mA	37.22V
FE-LC99EXXBP9XXXXX	1230mA	37.18V

Colour Temperature Range

3000K – (3045 ± 175K)

4000K – (3985 ± 275K)

Binned in accordance to ANSI C78.377A

Standard Driver Options – AcTEC

	350mA	500mA	700mA	1050mA
Q7H-350mA-15W	1S	-	-	-
Q7H-500mA-20W	-	1S	-	-
Q7H-700mA-30W	-	-	1S	-
Q3-1050mA-40W	-	-	-	1S

Where: 1S = 1 PCB connected in series

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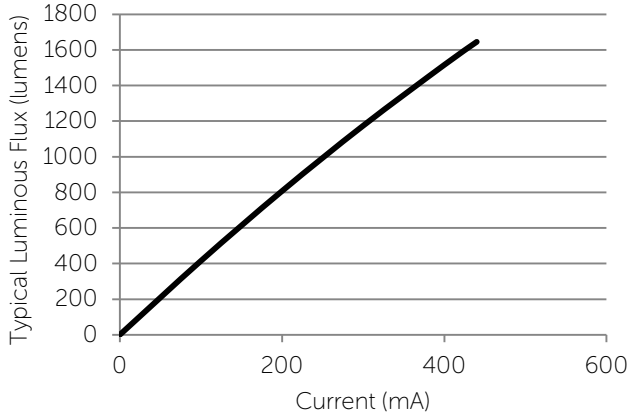


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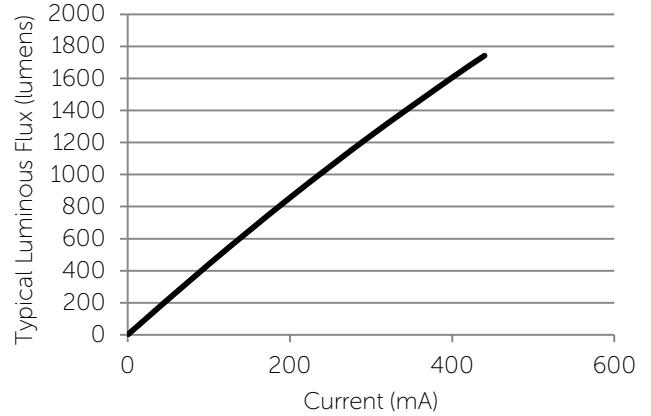
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Typical Flux vs. Current

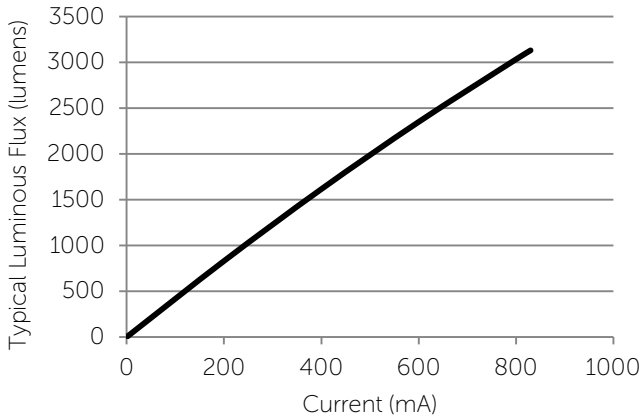
33 LEDs CCT=3000K Tsp = 65°C



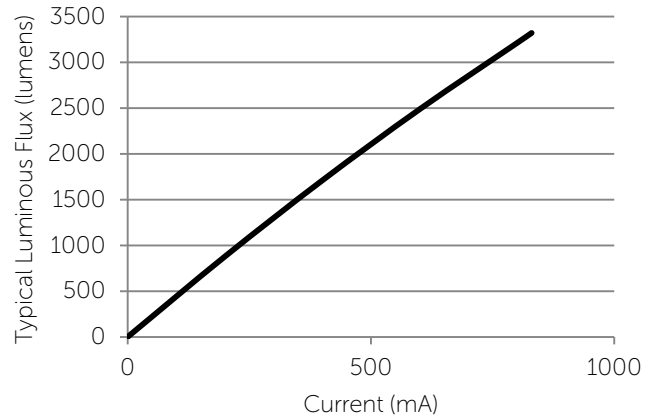
33 LEDs CCT=4000K Tsp = 65°C



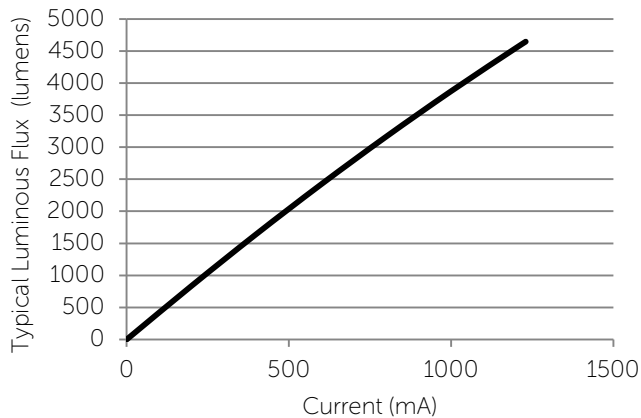
66 LEDs CCT=3000K Tsp = 65°C



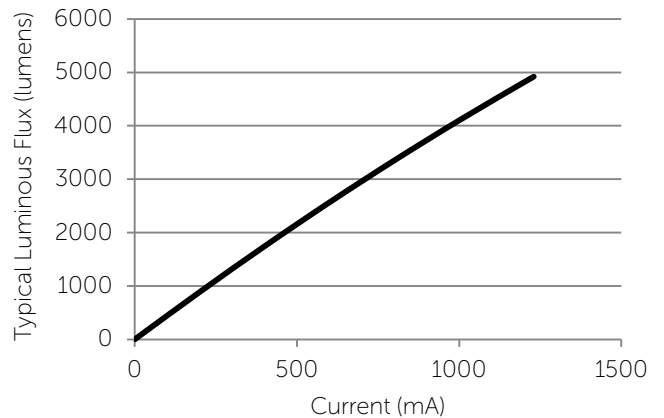
66 LEDs CCT=4000K Tsp = 65°C



99 LEDs CCT=3000K Tsp = 65°C



99 LEDs CCT=4000K Tsp = 65°C



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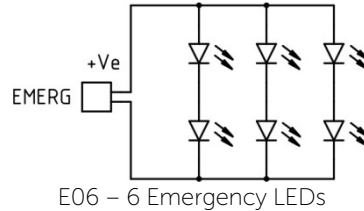
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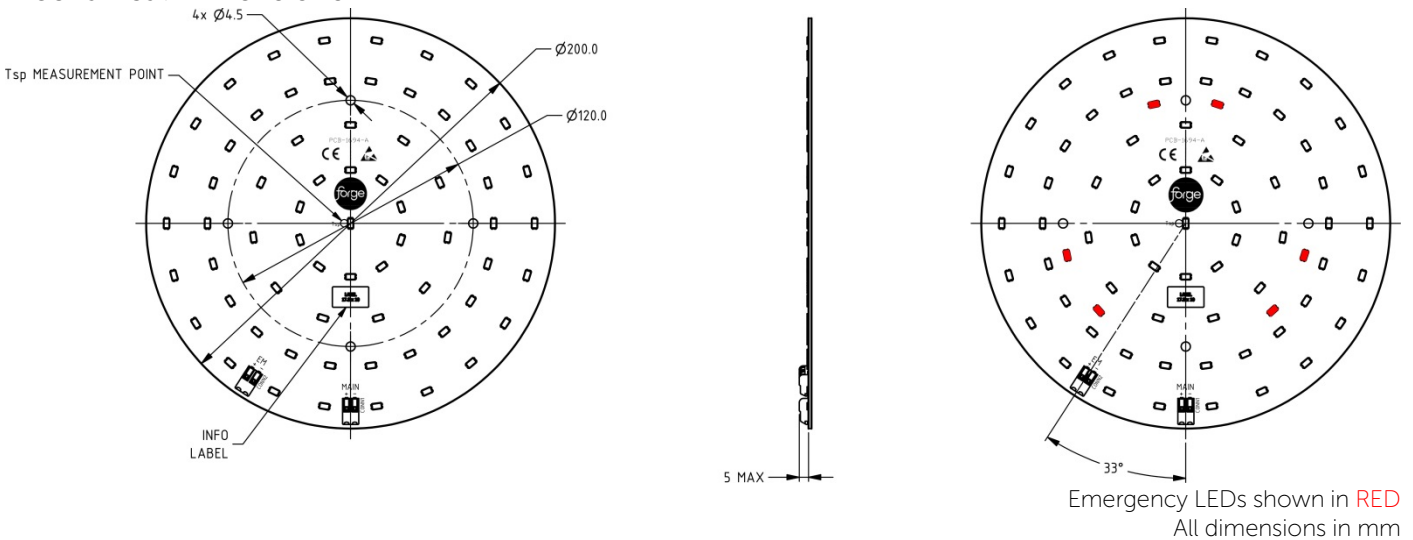
Emergency Circuit Configuration



Part Number – For Emergency LEDs	CCT	No. of LEDs	Typ. Luminous Flux	Typ. Forward Voltage	Test Current	Test T _{SP}	Typ. Power Consumption	Typ. Efficacy
FE-LCXXE06BP930200	3000	6	245	5.88	350	65	2.06	119
FE-LCXXE06BP940200	4000	6	260	5.88	350		2.06	126
Units	K	-	lm	V	mA	°C	W	lm/W

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

Mechanical Dimensions

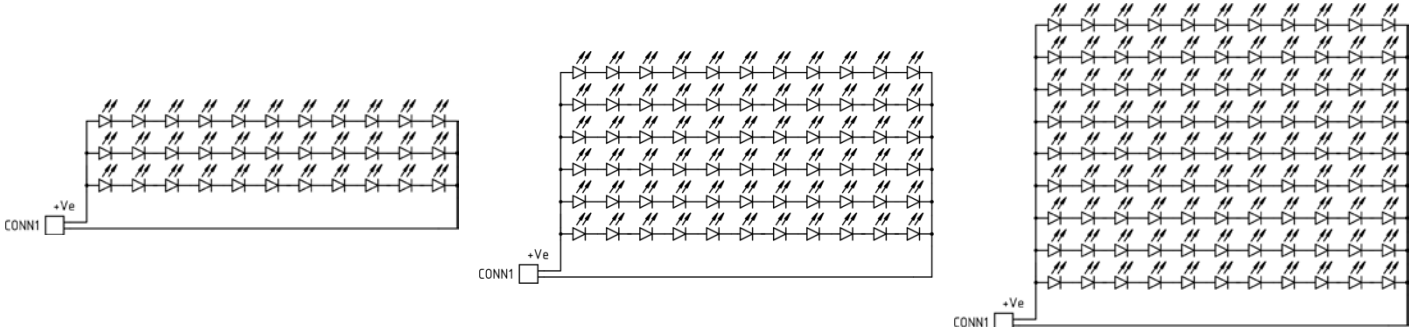


Circuit Schematics

FE-LC33E00BP9XX200

FE-LC66E00BP9XX200

FE-LC99E00BP9XX200



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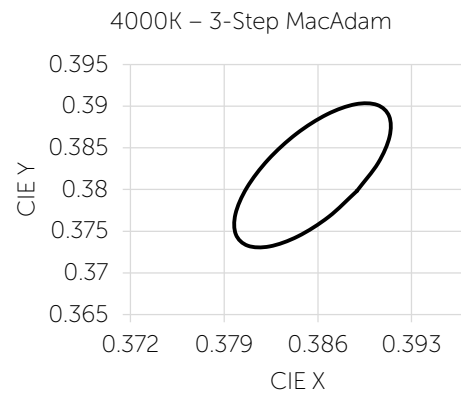
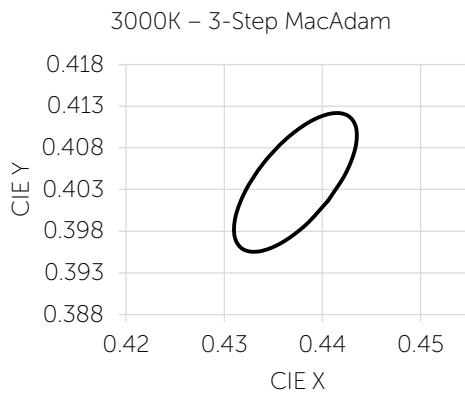
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Lumen Maintenance

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

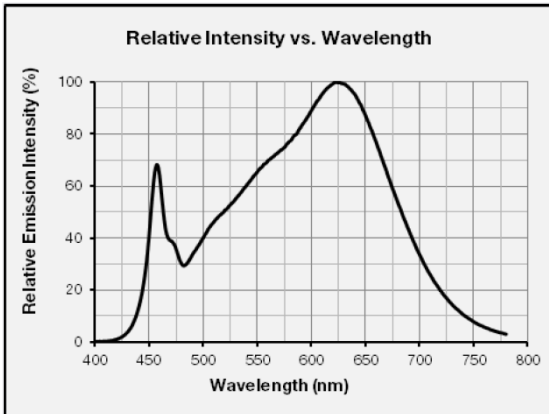
Part Number	PCB Input Current	LED I _F	T _{SP} Temp.	Reported L70 (10k)
FE-LC33E00BP9XX200	350mA	117mA	65°C	>60,000 hours
FE-LC66E00BP9XX200	500mA	83mA		>60,000 hours
FE-LC99E00BP9XX200	700mA	78mA		>60,000 hours
	1050mA	117mA		>60,000 hours

Photometric Characteristics Colour Tolerances

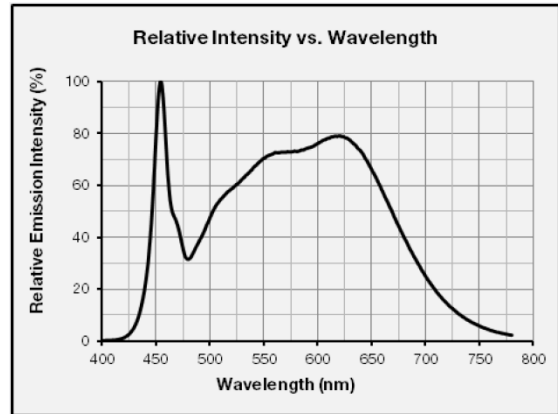


Spectral Power Distribution

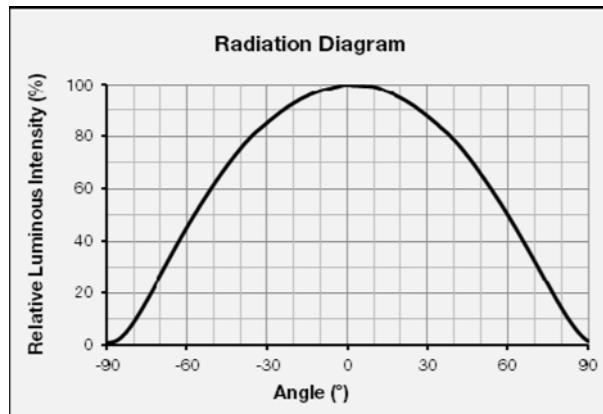
3000K 90 CRI



4000K 90 CRI



Light Distribution



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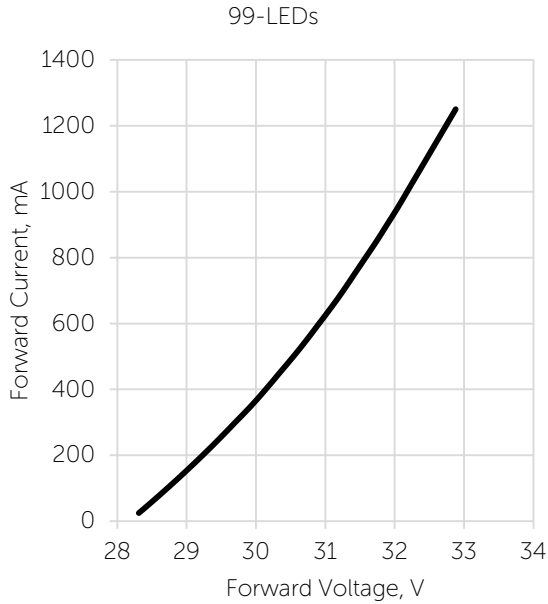
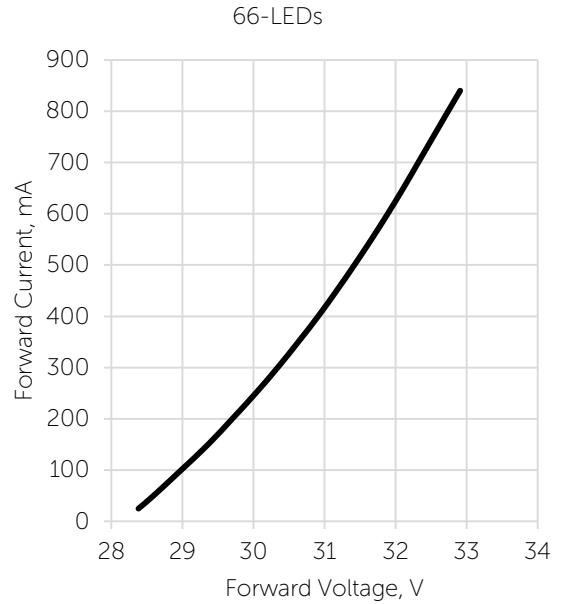
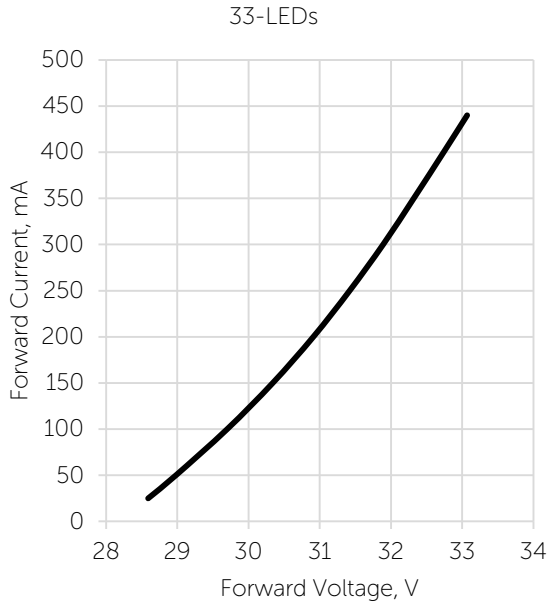


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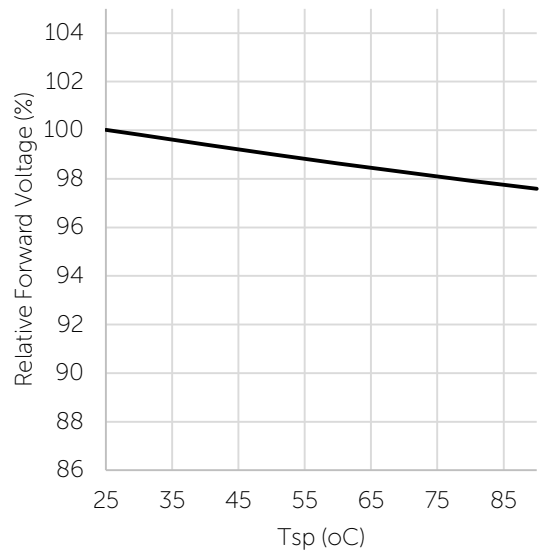
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Electrical Values

Typical forward voltage vs. forward current



Relative Forward voltage vs. Tsp temperature



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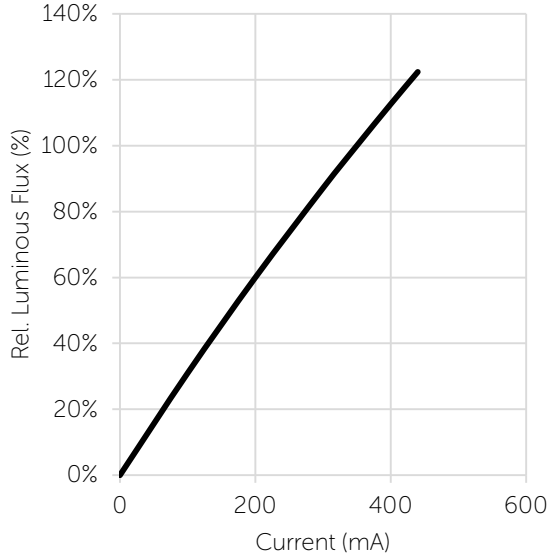


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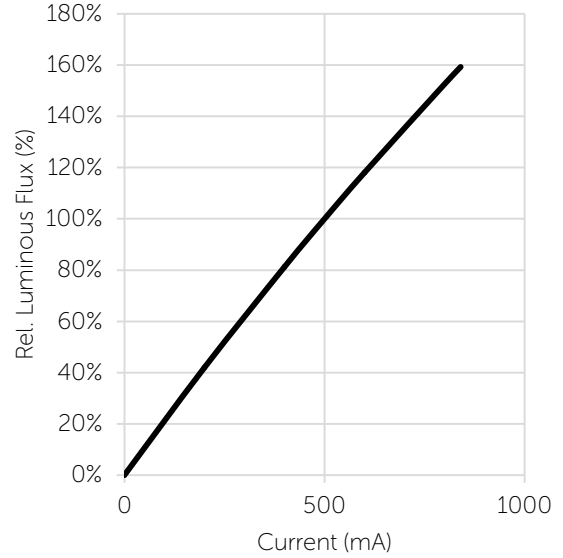
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Relative luminous flux vs. operating current

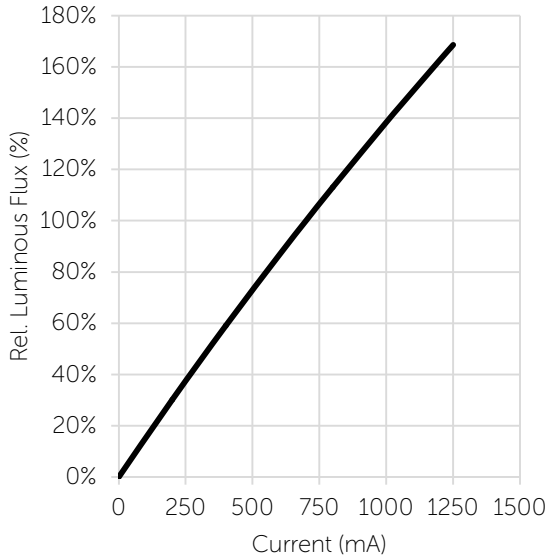
33-LED



66-LED



99-LED



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