



You make downlights.

We'll make your downlights shine –
with high efficacy, uniform color and
cost effectiveness.

PHILIPS
LUMILEDS

Downlights

Durable and effective LEDs you rely on



Application requirements

- Uniform and less than 3-step MacAdam Ellipse LED to LED consistency
- High efficiency for professional downlight market
- Enabling low system costs for consumer downlight solutions
- Broad portfolio with CCTs from 2700K to 5000K with 80 and 90 CRI minimum

“Philips Lumileds really enables an easy downlight design with their LEDs and their supporting ecosystem.”

Philips Lumileds enables the highest efficacy LED downlight solution with the fastest return on investment. Philips Lumileds LEDs outperform conventional lighting

	System Efficacy	Reliability
CFL	60-80 lm/W	15,000 hrs
Philips Lumileds LEDs	80-100 lm/W	50,000 hrs

LUXEON Quality of Light



Color Spectrum and Rendering
CRI>80



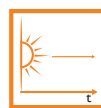
Color Consistency between Sources
<3 SDCM



Color in Application
Tested at 85°C_{Tj}









Color Consistency over Beam
<10 points on U^v scale



Color Consistency over Lifetime
<5 SDCM



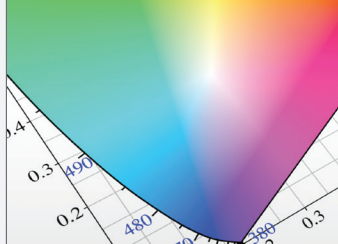
	Type/Product	Key Benefits	Source Type	System Efficacy	Cost Efficient	CCT Accuracy
Directional Array Solutions	 <p>LUXEON CoB</p>	<ul style="list-style-type: none"> Highest uniformity and efficiency in a small LES (Light Emitting Surface) • Up to 8000 lumens • 120 lm/W @ 3000K, 80 CRI at 85°C 	Array	+++	+++	3-Step/ 5-Step
Directional Emitter Solutions	 <p>LUXEON T</p>	<ul style="list-style-type: none"> • Same solder footprint as LUXEON Z ES • Best efficiency emitter 	Emitter	+++	++	3-Step/ 5-Step
	 <p>LUXEON Z ES</p>	<ul style="list-style-type: none"> • Same solder footprint as LUXEON T • Best Quality of Light 	Emitter	++	+++	3-Step
Omnidirectional Solutions	 <p>LUXEON 3535L</p>	<ul style="list-style-type: none"> • High efficiency mid-power LED 	Emitter	+++	++	ANSI
	 <p>LUXEON 3535 2D</p>	<ul style="list-style-type: none"> • Excellent reliability 	Emitter	++	+++	ANSI
High-Efficiency Remote Phosphor	 <p>LUXEON K 8-up and LUXEON K 16-up</p>	<ul style="list-style-type: none"> • Highest system efficiency array 	Array	+++	+	3-Step

Ecosystem



Select pre-qualified, off-the-shelf components to aid in complete system design.

LED Spectrum Mixer



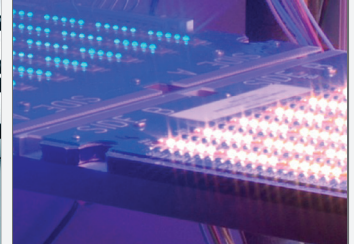
Calculate the color (white or color) that will be achieved by combining different LEDs into one application

System Calculator



Calculate the overall system performance based on design inputs.

LM-80 Reports



Generate LM-80 reports for specific Lumileds LEDs.

Please check out our growing ecosystem support at www.philipslumileds.com/designtools

Company Information

Philips Lumileds is a leading provider of LEDs for everyday lighting applications. The company's records for light output, efficacy and thermal management are direct results of the ongoing commitment to advancing solid-state lighting technology and enabling lighting solutions that are more environmentally friendly, help reduce CO₂ emissions and reduce the need for power plant expansion. Philips Lumileds LUXEON® LEDs are enabling never before possible applications in outdoor lighting, shop lighting, home lighting, digital imaging, display and automotive lighting.

Philips Lumileds is a fully integrated supplier, producing core LED material in all three base colors, (Red, Green, Blue) and white. Philips Lumileds has R&D centers in San Jose, California and in the Netherlands, and production capabilities in San Jose, Singapore and Penang, Malaysia. Founded in 1999, Philips Lumileds is the high flux LED technology leader and is dedicated to bridging the gap between solid-state technology and the lighting world. More information about the company's LUXEON LED products and solid-state lighting technologies can be found at www.philipslumileds.com.



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