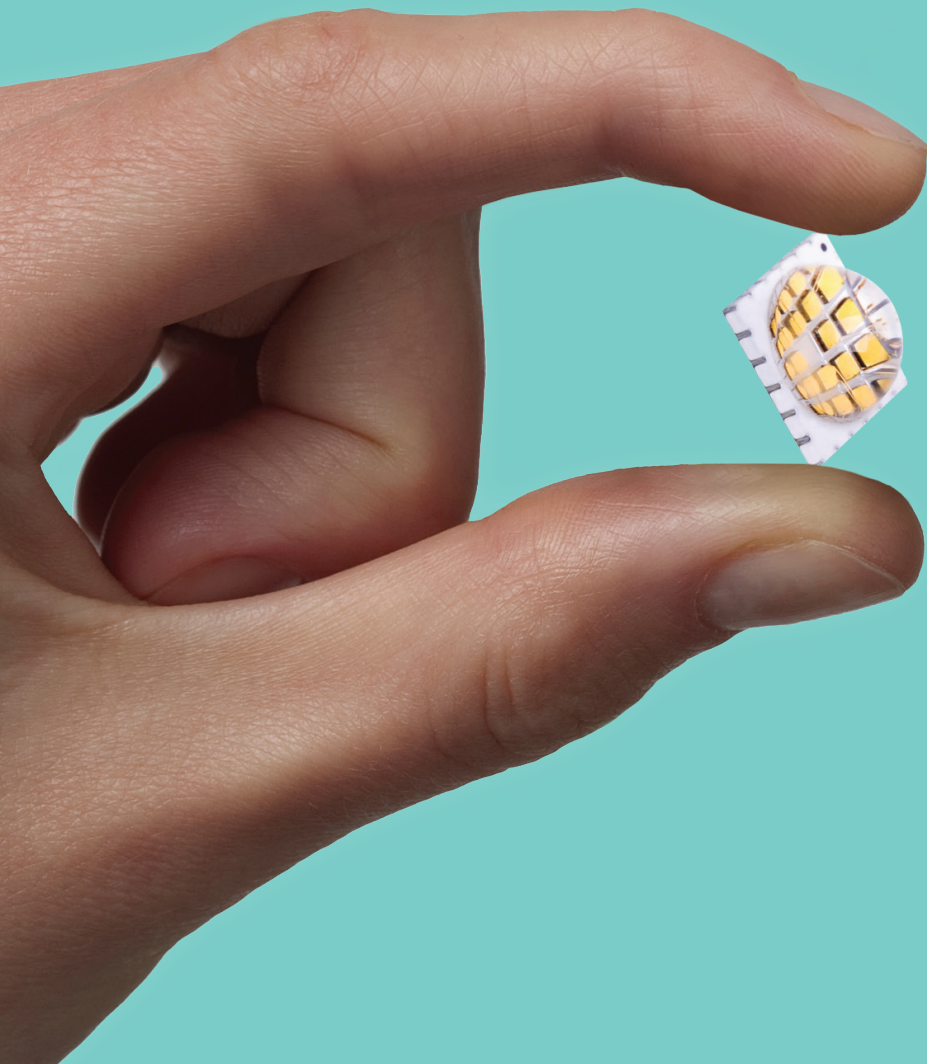


# Bright Light. Tiny Package.

**LuxiGen** Platform



ARCHITECTURAL LIGHTING  
CUSTOM SOLUTIONS  
ENTERTAINMENT LIGHTING  
HIGH-END INTERIOR SPACES  
HORTICULTURE  
HUMAN CENTRIC LIGHTING  
INFRARED ILLUMINATION  
UV CURING

**LED ENGIN**   
AN OSRAM BUSINESS

# Bright Light. Tiny Package.

The building blocks of light

The LuxiGen™ platform provides designers and engineers with the building blocks to create dynamic lighting experiences wherever high-flux density, directional light is required — from entertainment lighting and innovative architectural spaces, to high-end downlighting, UV curing, infrared illumination, specialty and industrial lighting sources.

LuxiTune™ series of tunable white light engine is a multi-award winning compact, single emitter solution which leverage our LuxiGen emitters and lenses with smart controls to deliver halogen-style dimming and CCT tuning, giving lighting designers unprecedented creative freedom for dynamic directional lighting applications.



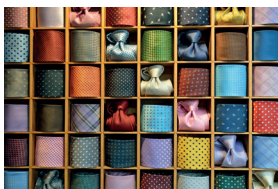
## ENTERTAINMENT LIGHTING

When high-intensity, tunable light for stage and studio is required, LuxiGen delivers. With a package that delivers more light to the source, ultimate flexibility in light beam quality and control, and light specifically tuned for skin tones and textiles color rendering, LuxiGen provides the ultimate viewing experience for fans.



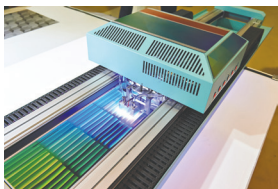
## ARCHITECTURAL LIGHTING

LuxiGen powered fixtures provide unlimited design flexibility for both interior and exterior architectural spaces with high quality in-source mixing. From vivid wall washing color to high-end effect lighting, the LuxiGen Platform provides the essential building blocks for amazing architectural experiences.



## HIGH-END INTERIOR SPACES

Retail and experiential interior environments demand high quality light and illumination. LuxiGen-powered single emitter solutions for down lighting, accent and decorative lighting offer superior color-rendering, color stability and control. Additionally, combination with our uniquely tailored TIR lens creates superior lux-on-target with a high lux, high-quality, well-controlled beam of light.



## UV CURING

High speed UV curing requires the ultimate in high flux density, extreme reliability and tunable wavelength options. LuxiGen's superior high power density performance provides significant savings in curing and processing times. LuxiGen emitters provide a robust and reliable, energy-efficient solution to handle the demanding environments of printing and curing applications.

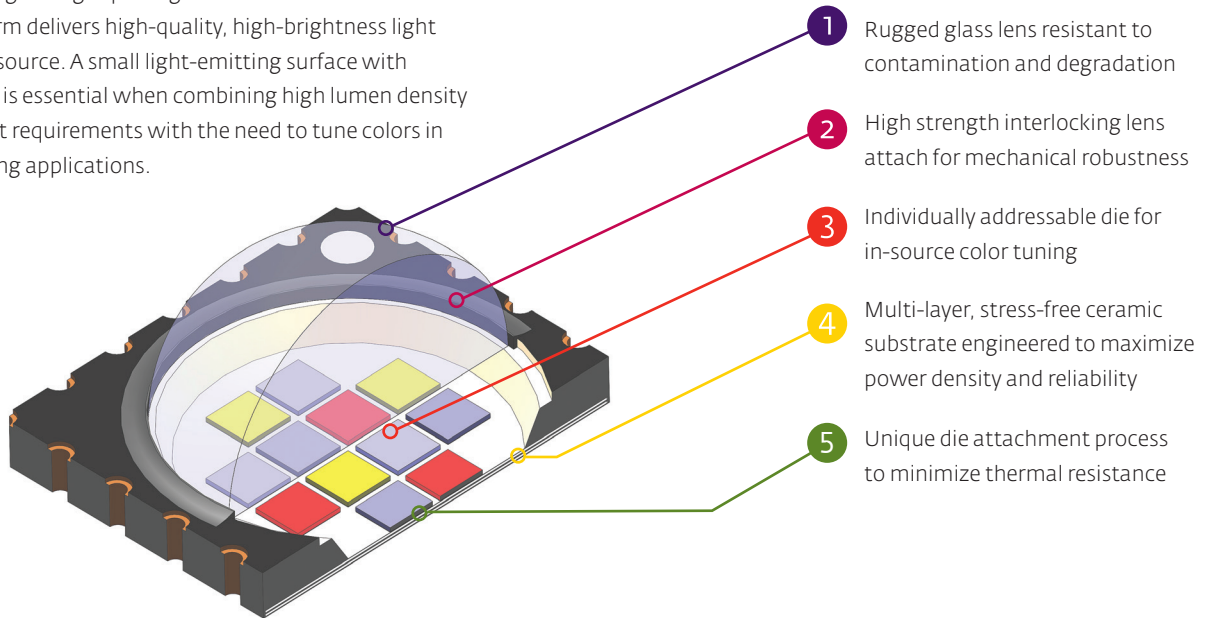


## INFRARED ILLUMINATION, HORTICULTURE & SPECIALTY

The highly flexible LuxiGen Platform is ideally suited to address the needs of specialized lighting industries such as infrared, horticulture, medical and food illumination. With extreme moisture resistance, heat resilience, and a full range of wavelengths – including the ability to mix within a single package, LuxiGen emitters are well suited for industrial environments.

## LuxiGen Packaging Technology

In demanding applications where dynamic directional light is required, choosing the right packaged LED solution is vital. The LuxiGen™ platform delivers high-quality, high-brightness light from a tiny light source. A small light-emitting surface with in-source mixing is essential when combining high lumen density and lux-on-target requirements with the need to tune colors in directional lighting applications.



## LuxiGen Family of Products

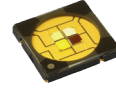
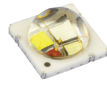
LuxiGen products benefit from a low thermal resistance, narrow binning options, multiple mounting options and an option for additional ESD protection. Further, the LuxiGen Platform includes a number of secondary optics designed specifically for LuxiGen emitters. These lenses offer superior color-mixing across the full color spectrum and allow for extremely well-controlled, high quality and uniform light.

	 LZ1-SERIES	 LZ4-SERIES	 LZ7-SERIES	 LZ9-SERIES	 LZC-SERIES	 LZP-SERIES
<b>NUMBER OF DIE</b>	1	4	7	9	12	24 or 25
<b>LIGHT EMITTING SURFACE (LES) mm</b>	3.2	6.2	3.4 x 3.4	6.2	8.2	10.5
<b>DIMENSIONS L x W, mm</b>	4.4 x 4.4	7.0 x 7.0	7.0 x 7.0	7.0 x 7.0	9.0 x 9.0	12.0 x 12.0
<b>MAXIMUM DRIVE CURRENT mA</b>	1500	3000	1000 – 3000	800	1200	1200
<b>THERMAL RESISTANCE °C/W</b>	4.2* / 6.0	0.9	0.8	1.3	0.7	0.5

\*For UV/DB

# LuxiGen Multi-Color Products

## LZ4 RGBW Series



TYPICAL PERFORMANCE LUMINOUS FLUX [ LUMENS ]	DOME LENS*		FLAT LENS		
	1000 mA	1200 mA	1000 mA	1500 mA	3000 mA
<b>RED</b> 623 nm dominant	180	215	110	160	240**
<b>GREEN</b> 523 nm dominant	215	235	180	220	380
<b>BLUE</b> 457 nm dominant	50	56	43	58	82
<b>WHITE</b> 6500K	315	360	285	370	630

\* Also available in RGBA and RGB options

\*\*Product performance at maximum rated current of 2500 mA

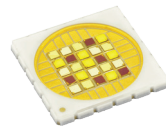
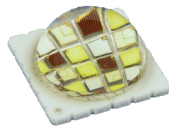
## LZC RGBW Series



TYPICAL PERFORMANCE LUMINOUS FLUX [ LUMENS ]	DOME LENS*
	1000 mA
<b>RED</b> 623 nm dominant	475
<b>GREEN</b> 523 nm dominant	560
<b>BLUE</b> 457 nm dominant	130
<b>WHITE</b> 6500K	780

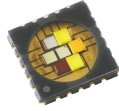
\*Also available in RGBA and RGB options

## LZP RGBW Series



TYPICAL PERFORMANCE LUMINOUS FLUX [ LUMENS ]	DOME LENS	FLAT LENS
	1000 mA	1000 mA
<b>RED</b> 623 nm dominant	1060	640
<b>GREEN</b> 523 nm dominant	1190	1060
<b>BLUE</b> 457 nm dominant	300	250
<b>WHITE</b> 6500K	2000	1900

## LZ7 Plus 60W 7-Die Emitter



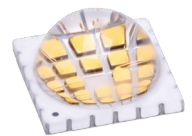
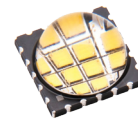
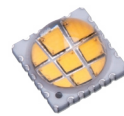
### TYPICAL PERFORMANCE AT MAXIMUM CURRENT

LUMINOUS FLUX [ LUMENS ]

<b>RED</b> 623 nm dominant	190 @2.5A
<b>GREEN</b> 523 nm dominant	340 @3.0A
<b>BLUE</b> 451 nm dominant	97 @3.0A
<b>PC AMBER</b> 590 nm dominant	182 @1.5A
<b>CYAN</b> 500 nm dominant	135 @1.0A
<b>PC LIME</b>	2X620 @2.0A

\*20W LZ7 version is also available

## LuxiGen White Products



### TYPICAL PERFORMANCE

LUMINOUS FLUX [ LUMENS ]

	LZ1-SERIES 1200 mA	LZ4-SERIES 1000 mA	LZ9-SERIES 700 mA	LZC-SERIES 1000 mA	LZP-SERIES 1000 mA
<b>COOL WHITE</b> 5500K/6500K; CRI 75	360	1050	1800	3000	5700
<b>GALLERY WHITE</b> 3000K; CRI 98, R9 99	—	650	1060	1800	3450

# LuxiGen Single Color Products

## LuxiGen UV Products

TYPICAL PERFORMANCE	LZ1-SERIES	LZ4-SERIES	LZC-SERIES	LZP-SERIES
RADIANT FLUX [ mW ]	1000 mA	1000 mA	1000 mA	1000 mA
UV 365 nm peak	1680	4600*	CONTACT LED ENGINE	
VIOLET 385, 395, 405 nm peak	1570	6200	18,000	34,000

\*Flat lens emitter

## LuxiGen Infrared Products

TYPICAL PERFORMANCE	LZ1-SERIES	LZ4-SERIES
RADIANT FLUX [ mW ]	1000 mA	1000 mA
INFRARED 850 nm peak	930 / 1350*	3600 / 5250*
INFRARED 940 nm peak	1350	5250

\*Single Junction / Dual Junction product performance

## LuxiGen Specialty Color Products









TYPICAL PERFORMANCE	LZ1-SERIES	LZ4-SERIES
RADIANT FLUX [ mW ]	1000 mA	1000 mA
DEEP RED 660 nm peak	1050	4100
FAR RED 740 nm peak	950	3600
DENTAL BLUE 460 nm peak	1100	4200

## LuxiGen Visible Color Products

TYPICAL PERFORMANCE	LZ1-SERIES	LZ4-SERIES
LUMINOUS FLUX [ LUMENS ]	1500 mA	1000 mA
RED 623 nm dominant	260	700
GREEN 523 nm dominant	270	835
BLUE 457 nm dominant	68	195
AMBER 590 nm dominant	132*	520

\*Product performance at maximum rated current of 1200 mA

## LuxiGen Mounting Options

	DESCRIPTION	DIMENSION mm	MCPCB THERMAL RESISTANCE °C/W	CHANNEL CONFIGURATION
	LZ1 Miniature	ø 11.5	2.0	1-channel
	LZ1 Star	ø 19.9	1.5	1-channel
	LZ4 Star	ø 19.9	1.1 / 0.1	1-channel / 4-channel
	LZ7 Circular	ø 50.0	0.1	7-channel
	LZ9 Star	ø 19.9	0.2	1-channel / 3-channel
	LZC Star	ø 28.3	0.6 / 0.1	1 to 3-channel / 4-channel
	LZP Star	ø 28.3	0.1	4-channel / 5-channel
	LZP Connectorized	ø 50.0	0.1	4-channel

## LuxiGen Lens Options

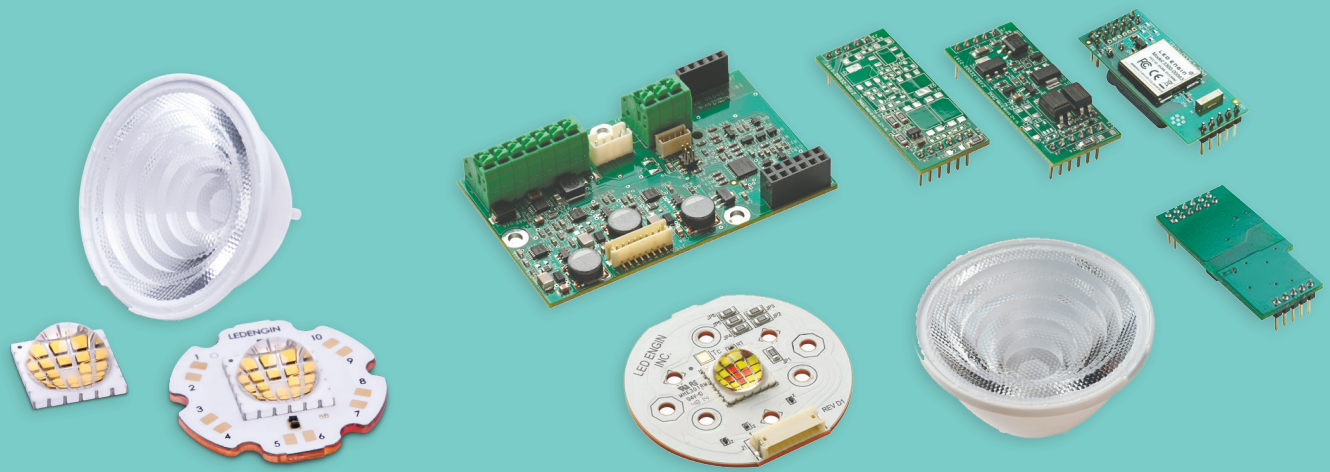


	LZ4-SERIES 4-die TIR lens options	LZ9-SERIES 9-die TIR lens options	LZC-SERIES 12-die TIR lens options	LZP-SERIES 25-die TIR lens options
NARROW SPOT	—	—	9°	10°
SPOT	14° / 18°	17°	13°	13°
NARROW FLOOD	22°	26°	20°	20° / 21°
FLOOD	40°	39°	32°	32° / 35°
WIDE FLOOD	—	—	50°	47°

\*For more lens options, please visit [www.osram.us/ledengin/products/lenses](http://www.osram.us/ledengin/products/lenses)

## LuxiGen Custom Solutions

In addition to our standard products, we also offer custom solutions tailored to specific needs and applications. Please contact [LEDE-Sales@osram.com](mailto:LEDE-Sales@osram.com) to discuss the best solution for your requirements.



**LuxiGen** High Power Emitters and Lenses

**LuxiTune** Dynamic White Light Engine



LED Engin, Inc., an OSRAM business based in California's Silicon Valley, specializes in ultra-bright, ultra-compact solid state lighting solutions allowing lighting designers & engineers the freedom to create uncompromised yet energy efficient lighting experiences.

LuxiGen™ emitters in combination with our secondary optics families deliver industry-leading flux density with beam angles ranging from 9 to 50 degree. Our product portfolio covers a large range of colors, including whites, multi-color, IR and UV LEDs in a unique patented compact ceramic package.

Our LuxiTune™ series of tunable white light engines combine LuxiGen emitter and secondary optics with smart controls to deliver dynamic color control by precisely tuning along the black body curve. LuxiGen emitter in-source mixing ensures high quality beam required in high-end lighting applications.

The small size, yet remarkably powerful beam output and superior in-source color mixing, allows for a previously unobtainable freedom of design wherever high-flux density, directional light is required.