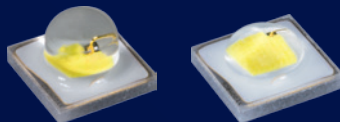# OSLON® SSL 80 and 150

The first power LED duo with optimized beam angles

The OSLON® SSL 80 and 150 offer a new and innovative way of maximizing the efficiency of your lighting products. As the first on the market of their kind, these remarkably compact LEDs offer beam angles optimized for use with lenses and reflectors. This revolutionary feature, combined with a broad range of color temperatures and color rendering indexes, opens up new possibilities for cost-effective, sustainable lighting solutions – whatever the application.

NEXT
GENERATION

OSRAM
Opto Semiconductors

OSLON® SSL 80 and 150 – Putting light where it's needed most

Indoor lighting

Architectural lighting

Advantages

Compact
With a footprint of only 3 x 3 mm, the OSLON® SSL is one of the smallest high-power lensed LED on the market today, thus enabling compact LED arrays and maximizing flux over area.

Powerful
OSLON® SSL can be driven up to 1000 mA while OSRAM's latest power chip technology remains efficient even at the highest drive currents. A low thermal resistance of 7 K/W ensures cool running and a highly efficient product.

Long lasting
With reasonable thermal management, a lifetime of more than 50,000 hours is easily obtainable, even at high drive currents.

Features

- The first power LED with sophisticated beam angles (80°/150°)
- Ultra-compact footprint for high-density arrays saving space and simplifying color mixing (only 3 x 3 mm)
- Neutral to warm white, capable of high power up to 0.8 A, cool white and all colors up to 1 A
- Compact and symmetrical, allowing dense clustering for high-flux packages
- Thermal resistance of R_{thJS} (typ.) 7 K/W
- Lifetime of more than 50,000 hours, depending on application conditions
- Different versions (LCW.CC, LCW.EC, LCW.PC, LUW) for various application requirements
- Broad color portfolio: red, green, blue, and other colors
- Light recycling by reflective layer of the package, using every single lumen

OSLON® SSL 80 at a glance

- The OSLON® SSL 80 offers a prefocused radiation pattern (80°) to efficiently couple in secondary optics, or for direct lighting without secondary optics.
- The package is ideal for spot lights.

OSLON® SSL 150 at a glance

- The OSLON® SSL 150 provides a wide radiation pattern (150°). It allows perfect interaction with reflectors of various designs. This makes solutions possible that are more efficient than competing products.
- Its optical distribution makes it easier to mix the color of LED clusters. The flat form of the lens avoids internal shading effects in tight clusters.

Applications

Interior lighting
(home, office, shop & hospitality)
- Retrofits & fixtures (e.g., fluorescent replacement)
- Spotlights
- Task lights
- Shelf lighting
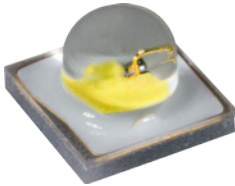- Downlights

Outdoor lighting
- Street
- Tunnels
- Parking lots
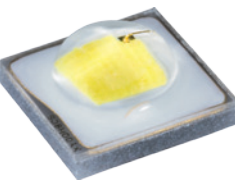- Pedestrian areas

Architecture and entertainment
- Color changing fixtures (colored, white, decorative, etc.)
- Entertainment
- Stage and studio lighting

OSLON® SSL White Versions

HOT STABILIZED

	LCW.CC Color Champ	LCW.EC Eco Champ	LCW.PC Power Champ	LUW
Product Benefit	Maximized light quality	Ideal balance of CRI and luminous flux	Maximized luminous flux	Maximized luminous flux
CCT range	2700 K - 4000 K warm/neutral white	2700 K - 5000 K warm/neutral white	4000 K - 5000 K neutral white	5700 K - 6500 K cool white
CRI	95 (typ.)	80 (min.)	70 (typ.)	70 (typ.)
Applications				
	Premium interior lighting, e.g., shop	Various indoor lighting, e.g., office	Outdoor lighting, industrial lighting	Outdoor lighting, architectural lighting

Color rendering can be traded in favor of luminous flux and vice versa. OSRAM Opto Semiconductors have employed this technique to bring you a choice of CRI and flux combinations for OSLON® SSL, giving you the option to choose the LED best suited to your application.
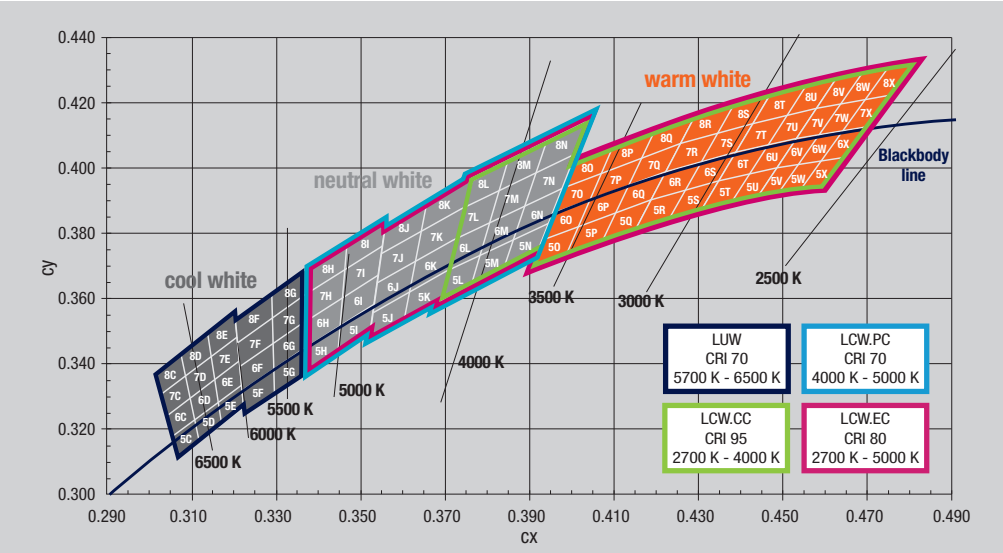

OSLON® SSL Types

Type 80	Type 150	Color	CRI	CCT/Wavelength	Typ. Luminous flux (350 mA)
LCW CQ7P.CC	LCW CQDP.CC	warm/neutral white	95 (typ.)	2700 K - 4000 K	76 lm @ 3000 K 81 lm @ 4000 K
LCW CR7P.EC	LCW CRDP.EC	warm/neutral white	80 (min.)	2700 K - 5000 K	105 lm @ 3000 K 111 lm @ 4000 K
LCW CR7P.PC	LCW CRDP.PC	neutral white	70 (typ.)	4000 K - 5000 K	122 lm @ 4000 K 128 lm @ 5000 K
LUW CQ7P	LUW CQDP	cool white	70 (typ.)	5700 K - 6500 K	128 lm @ 6000 K
LD CQ7P	LD CQDP	deep blue		449 nm - 461 nm	515 mW
LB CP7P	LB CPDP	blue		446 nm - 476 nm	28 lm
LT CP7P	LT CPDP	true green		513 nm - 537 nm	93 lm
LY CP7P	LY CPDP	yellow		583 nm - 595 nm	56 lm
LA CP7P	LA CPDP	amber		612 nm - 624 nm	80 lm
LR CP7P	LR CPDP	red		620 nm - 632 nm	58 lm
LH CP7P	LH CPDP	hyper red		644 nm - 666 nm	355 mW

OSLON® SSL 80

OSLON® SSL 150

OSLON® SSL white binning

OSLON® SSL LED are available in different color temperatures from warm white 2700 K up to cool white 6500 K. OSRAM Opto Semiconductors' fine bin system is based on a three-step MacAdams ellipse to ensure color consistency in any lighting application.

OSLON® SSL on the Internet:
www.osram-os.com/oslon-ssl

For further information on the available
products please visit our product catalog
at http://catalog.osram-os.com

More information about LED in
General Lighting:

LED Light Site
ledlight.osram-os.com

LED Light for you Network
www.ledlightforyou.com

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