

Sensing is life

ami OSRAM

# OSLON<sup>®</sup> Square Batwing

Product Presentation

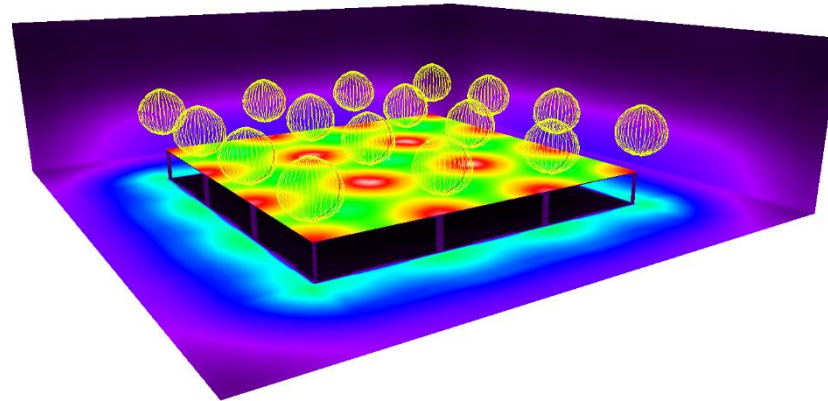
17-Sep-2021

# OSLON® Square Batwing

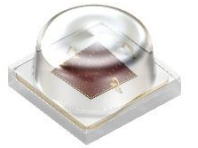
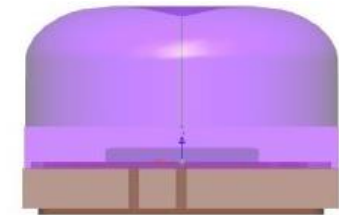
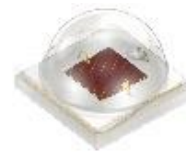
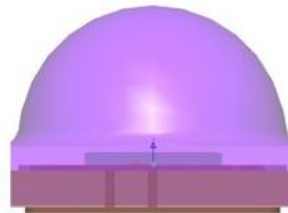
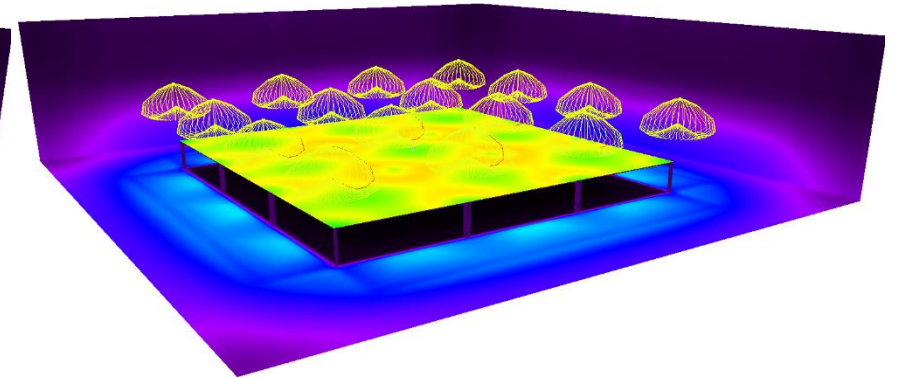
## The Why

- More uniform illumination of the plant area without additional optics
- Larger distances between the luminaires lead to a reduced amount of luminaires in a greenhouse
- Shorter distances between plants and luminaires enable lower greenhouses or easier upgrade of existing greenhouses
- Better uniformity helps in reducing fixture power levels/LEDs
- Enables narrow luminaires to minimize shadowing effects

At a Pitch to Distance ratio of 2:1 the Lambertian emission leads to hotspots

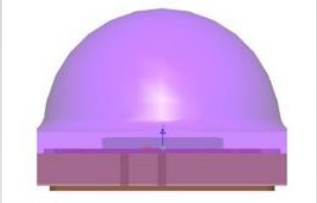
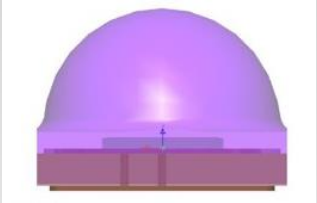
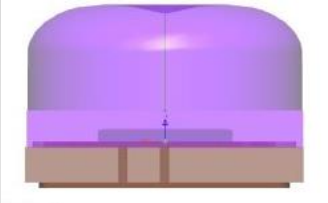
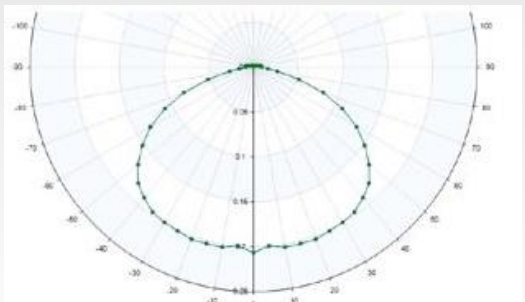
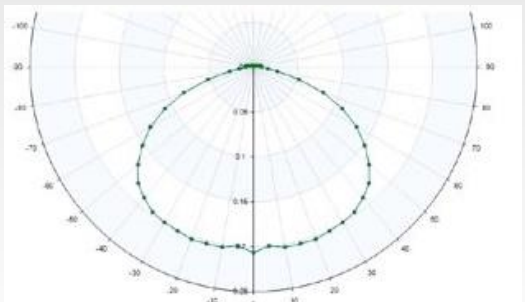
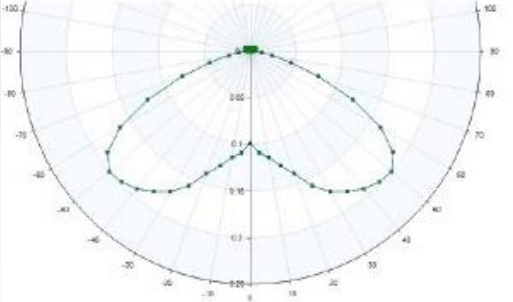


At a Pitch to Distance ratio of 2:1 the Batwing emission leads to a uniform illumination



# OSLON<sup>®</sup> Square Batwing

## Product Offering

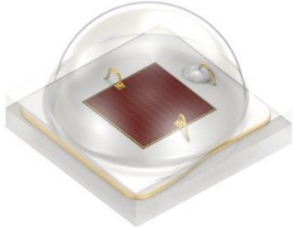
Product Overview	Molding Lens	GIANT Lens	Batwing Lens
<ul style="list-style-type: none"><li>▪ Ceramic package</li><li>▪ Offered in 4 colors<ul style="list-style-type: none"><li>○ Hyper Red</li><li>○ Deep Blue</li><li>○ Far Red</li><li>○ Horti White</li></ul></li></ul>	<p>Lens Shape</p> 		
<p>Radiation Pattern</p>	<p>Radiation Pattern</p> 		

# OSLON® Square Batwing

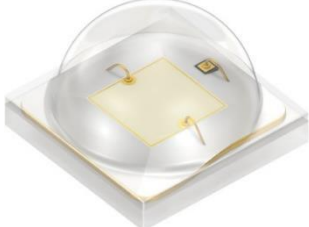
Device images highlighting the unique lens design

OSLON® Square  
OSLON® SSL\*

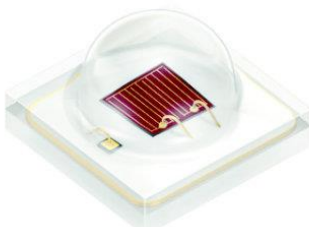
Hyper Red



Deep Blue



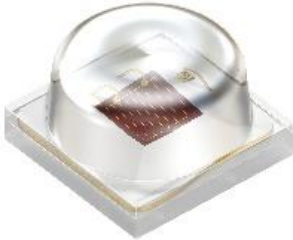
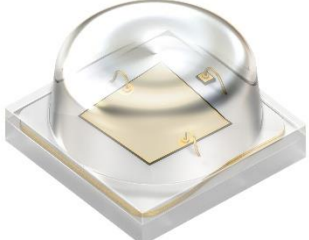
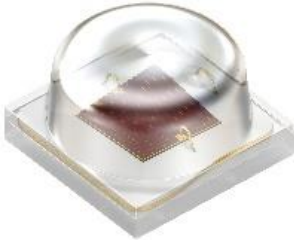
Far Red\*



Horti White

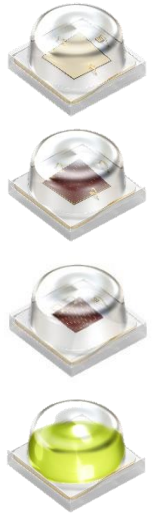





OSLON® Square Batwing



# OSLON® Square Batwing

Device images highlighting the unique lens design

	<p><b>1 – 5W High-Power LEDs</b> Available in Hyper Red, Deep Blue, Far Red and Horti White</p> <ul style="list-style-type: none"> <li>▪ Ceramic package for superior robustness</li> <li>▪ Innovative lens design for uniform distribution</li> <li>▪ Compact 3.0 x 3.0 mm<sup>2</sup> ceramic package</li> <li>▪ 140° beam angle</li> <li>▪ Excellent lumen maintenance and lifetime (Q90 &gt;60k hrs)</li> <li>▪ Best in class Hot/Cold factor</li> <li>▪ ESD: 8 kV acc. to ANSI/ESDA/JEDEC JS-001 (HBM, Class 3B)</li> </ul>	<p><b>Applications: Greenhouses</b></p> 
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Type	L dom	Color	Binning (mA)	Typ. Vf (V)	Typ. Power (W)	Typ. Output	Typ. Eff	
GD CSBRM2.14	450nm		Deep Blue	700	2.90	2.0	1490mW	73%
GH CSBRM4.24	660nm		Hyper Red	700	2.00	1.5	1040mW	74%
GF CSBPM2.24	730nm		Far Red	350	1.90	1.5	352mW	53%
GW CSBRM3.HW*	-		Horti White	700	2.90	2.0	1125mW	55%

\* H3 bin used for reference

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Thank you

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