



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## TINA2-R-CLIP16

Mini reflector with ~60° wide beam

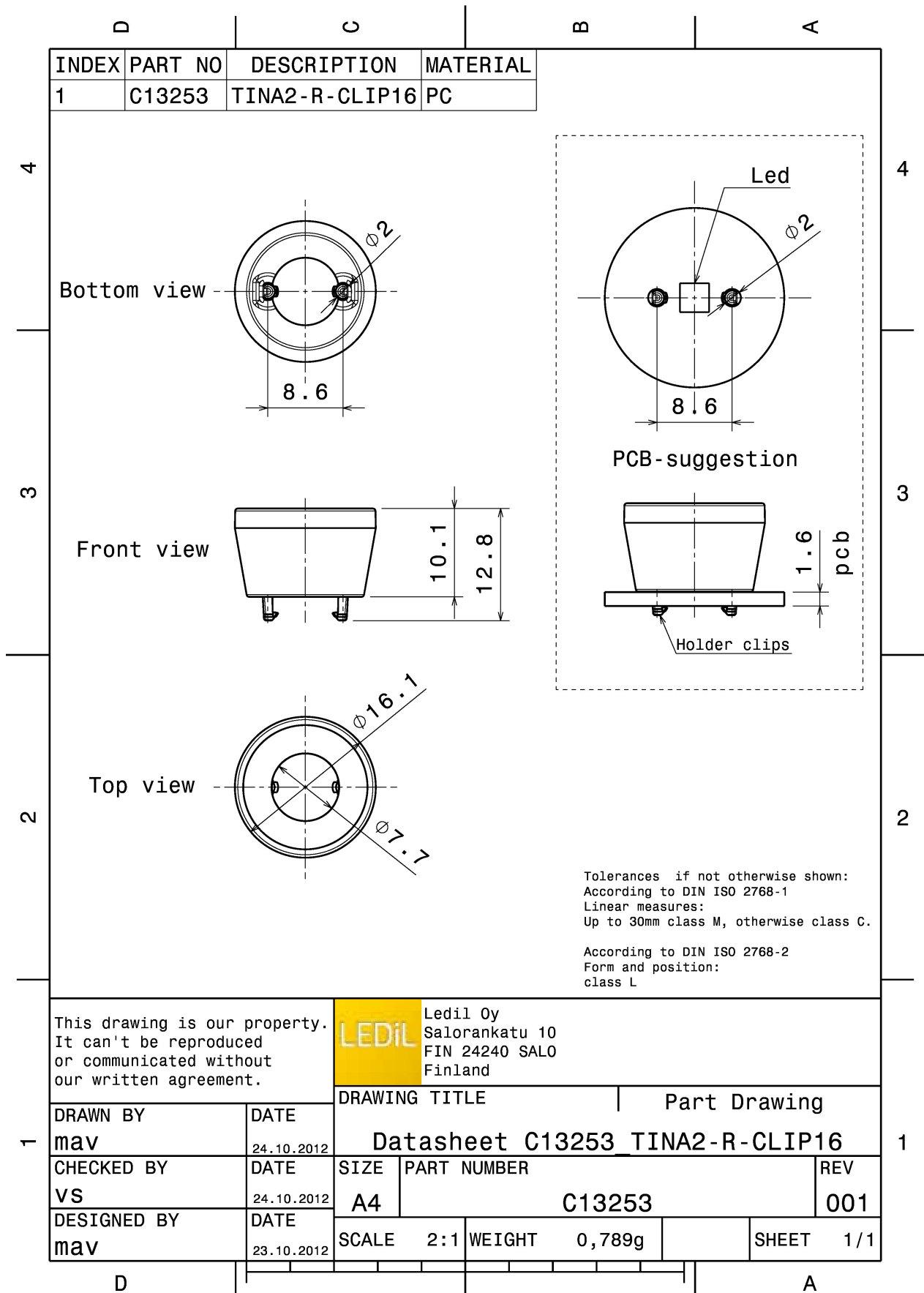
### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 16.1 mm
Height	10.1 mm
Fastening	clips
Colour	clear
Box size	
Box weight	3.8 kg
Quantity in Box	pcs
ROHS compliant	yes ⓘ



### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Coating
TINA2-R-CLIP16	Reflector	HRPC	clear	

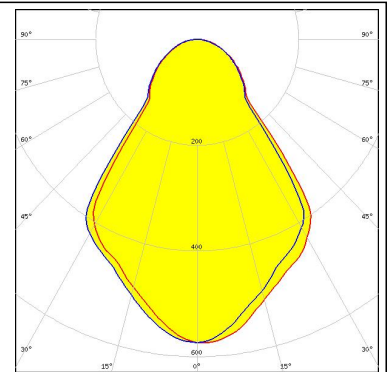




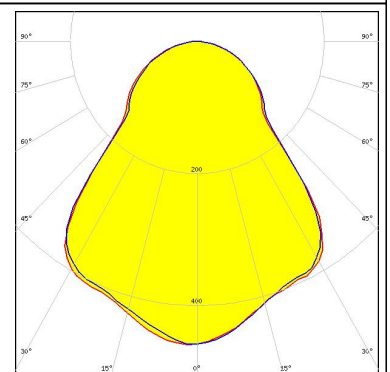
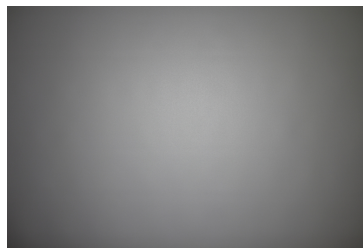
**PHOTOMETRIC DATA (MEASURED):**



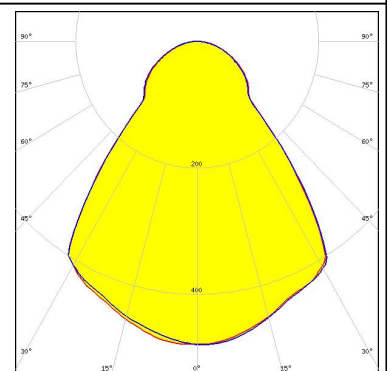
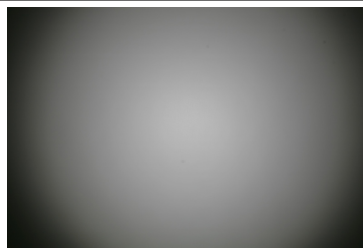
LED XB-D  
FWHM 73.0°  
Efficiency 90 %  
Peak intensity 0.575 cd/lm  
Required components:



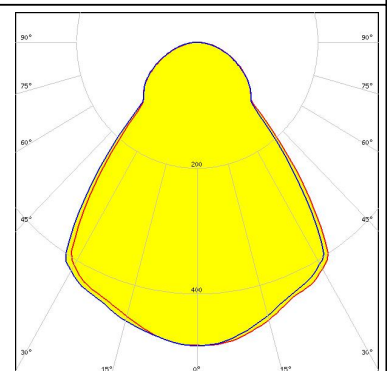
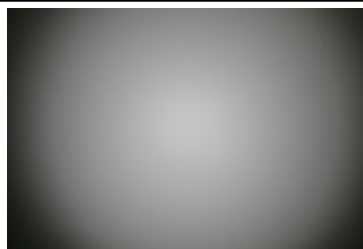
LED XB-H  
FWHM 81.0°  
Efficiency 92 %  
Peak intensity 0.460 cd/lm  
Required components:



LED XM-L  
FWHM 78.0°  
Efficiency 88 %  
Peak intensity 0.480 cd/lm  
Required components:



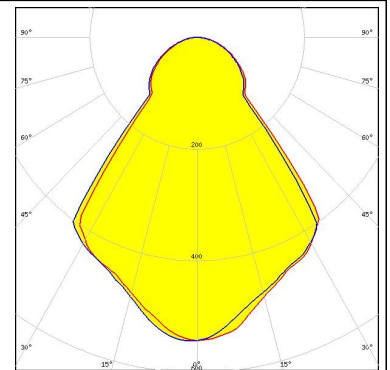
LED XM-L2  
FWHM 78.0°  
Efficiency 90 %  
Peak intensity 0.480 cd/lm  
Required components:



#### PHOTOMETRIC DATA (MEASURED):

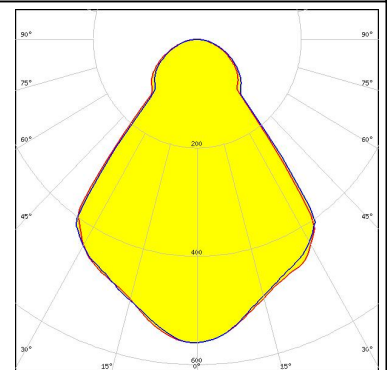
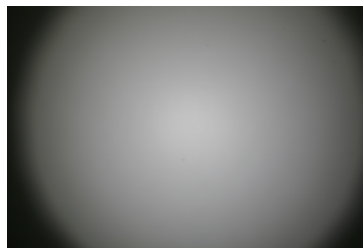
**CREE** 

LED XP-E  
FWHM 74.0°  
Efficiency 90 %  
Peak intensity 0.544 cd/lm  
Required components:



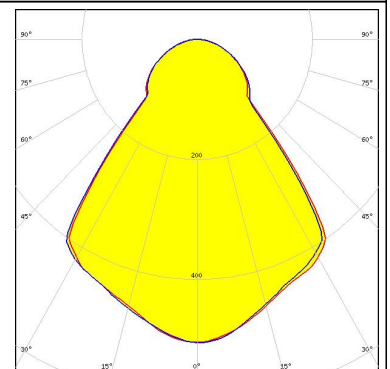
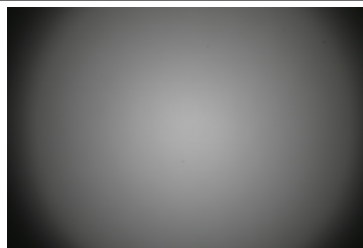
**CREE** 

LED XP-E2  
FWHM 74.0°  
Efficiency 90 %  
Peak intensity 0.560 cd/lm  
Required components:



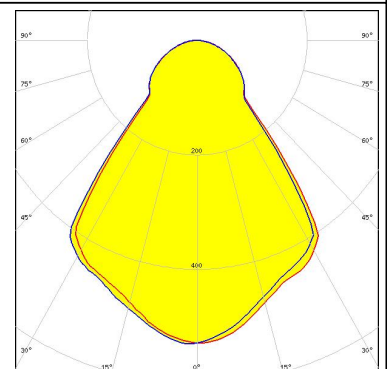
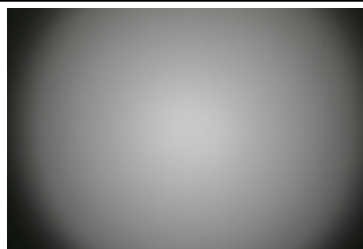
**CREE** 

LED XP-G  
FWHM 77.0°  
Efficiency 90 %  
Peak intensity 0.506 cd/lm  
Required components:



**CREE** 

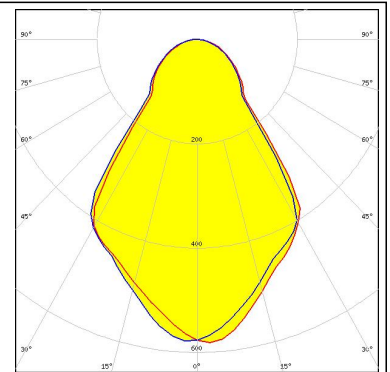
LED XP-G2  
FWHM 75.0°  
Efficiency 89 %  
Peak intensity 0.530 cd/lm  
Required components:



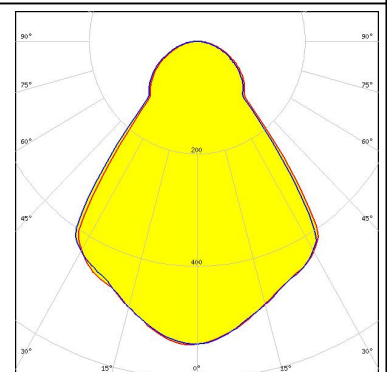
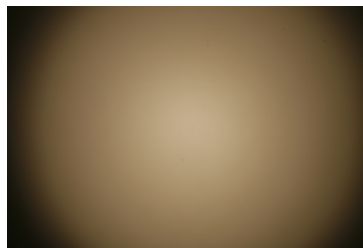
#### PHOTOMETRIC DATA (MEASURED):



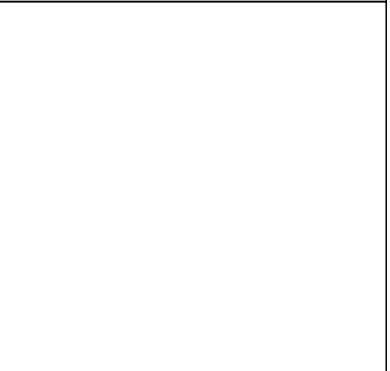
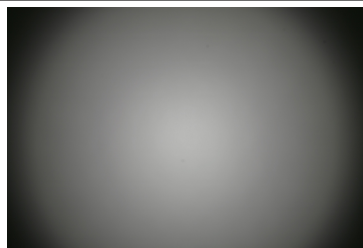
LED XT-E  
FWHM 71.0°  
Efficiency 87 %  
Peak intensity 0.585 cd/lm  
Required components:



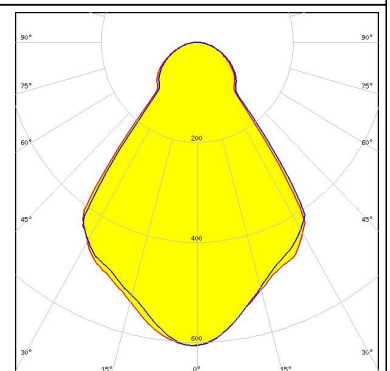
LED LUXEON A  
FWHM 75.0°  
Efficiency 91 %  
Peak intensity 0.540 cd/lm  
Required components:



LED LUXEON R  
FWHM 75.0°  
Efficiency 89 %  
Peak intensity 0.550 cd/lm  
Required components:



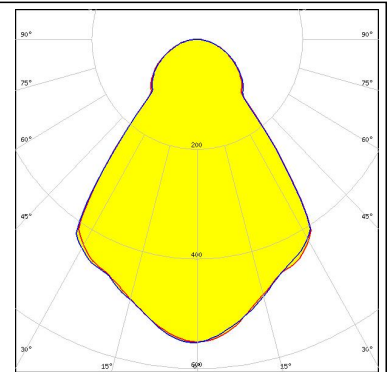
LED LUXEON Rebel  
FWHM 72.0°  
Efficiency 90 %  
Peak intensity 0.607 cd/lm  
Required components:



#### PHOTOMETRIC DATA (MEASURED):

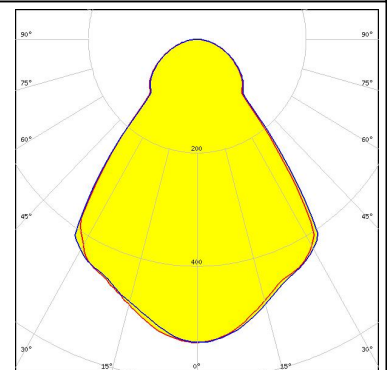
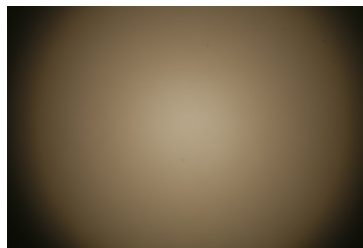
##### LUMILEDS

LED LUXEON Rebel ES  
 FWHM 74.0°  
 Efficiency 89 %  
 Peak intensity 0.550 cd/lm  
 Required components:



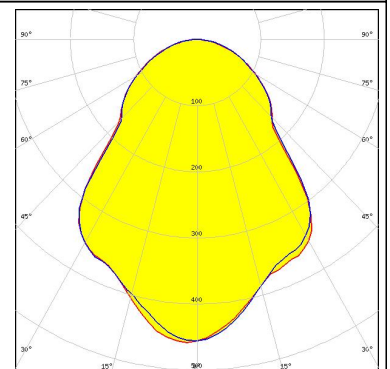
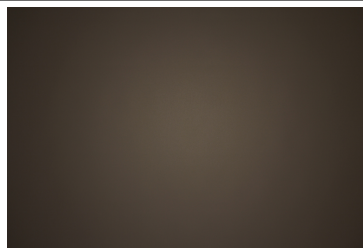
##### LUMILEDS

LED LUXEON T  
 FWHM 75.0°  
 Efficiency 89 %  
 Peak intensity 0.535 cd/lm  
 Required components:



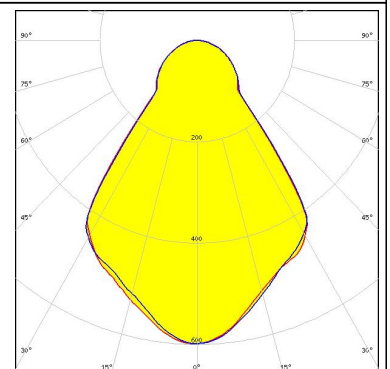
##### LUMILEDS

LED LUXEON TX  
 FWHM 81.0°  
 Efficiency 90 %  
 Peak intensity 0.500 cd/lm  
 Required components:



##### NICHIA

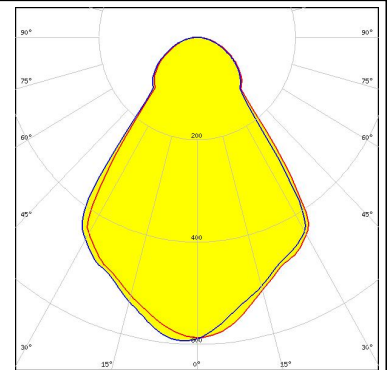
LED NCSxx19A  
 FWHM 72.0°  
 Efficiency 90 %  
 Peak intensity 0.600 cd/lm  
 Required components:



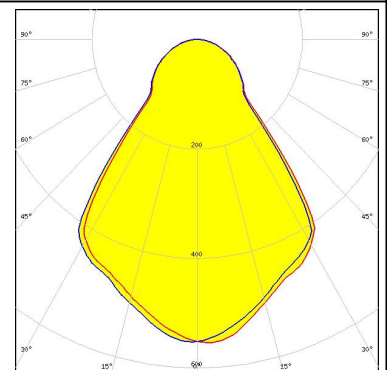
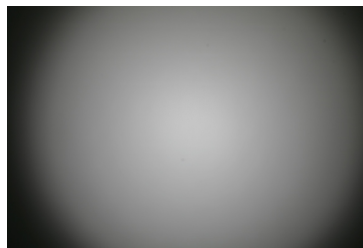
#### PHOTOMETRIC DATA (MEASURED):



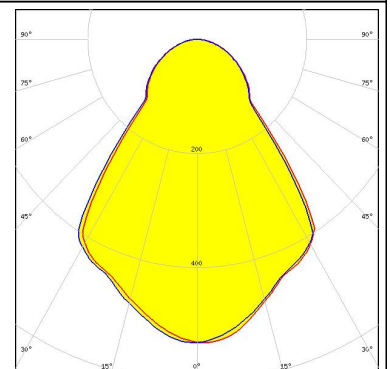
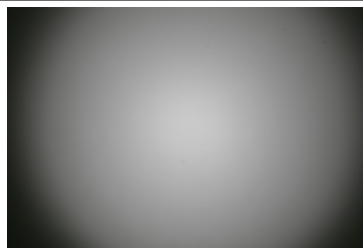
LED NF2x757A  
FWHM 72.0°  
Efficiency 92 %  
Peak intensity 0.595 cd/lm  
Required components:



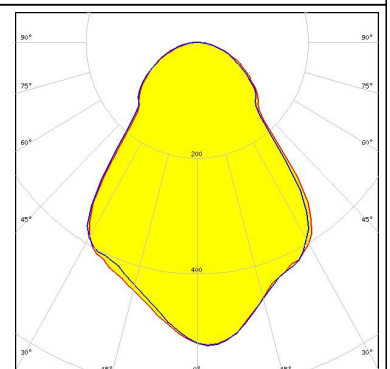
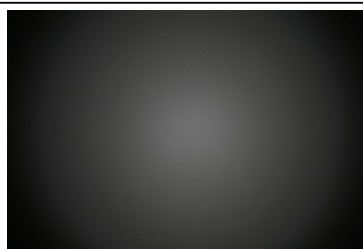
LED NVSxx19A  
FWHM 74.0°  
Efficiency 90 %  
Peak intensity 0.556 cd/lm  
Required components:



LED NVSxx19B/NVSxx19C  
FWHM 74.0°  
Efficiency 89 %  
Peak intensity 0.534 cd/lm  
Required components:


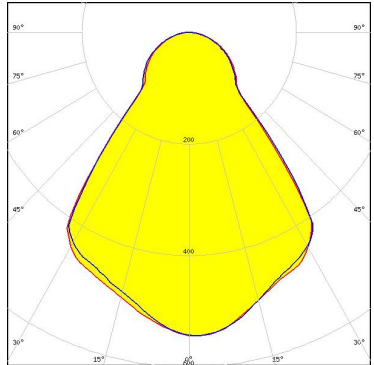
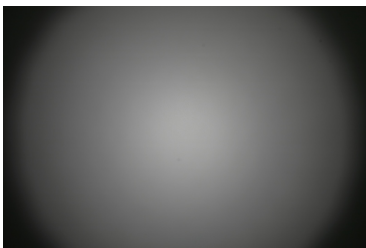
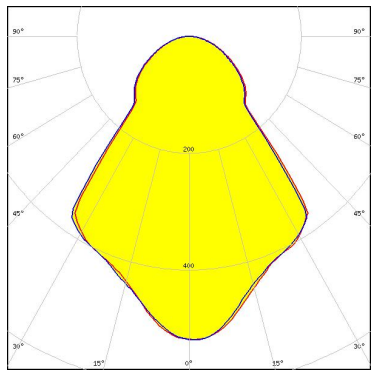

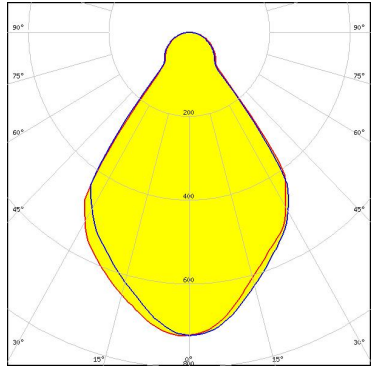

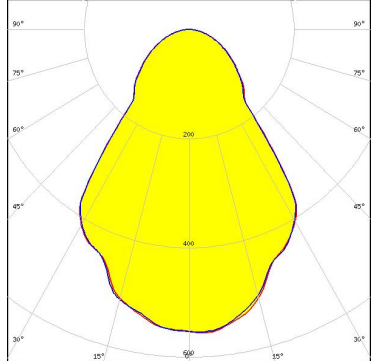


LED Duris S5 (2 chip)  
FWHM 76.0°  
Efficiency 91 %  
Peak intensity 0.500 cd/lm  
Required components:





**PHOTOMETRIC DATA (MEASURED):**

<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED            Oslon Square EC FWHM        75.0° Efficiency    91 % Peak intensity 0.545 cd/lm Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED            Oslon SSL 150 FWHM        75.0° Efficiency    88 % Peak intensity 0.520 cd/lm Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED            Oslon SSL 80 FWHM        71.0° Efficiency    91 % Peak intensity 0.725 cd/lm Required components:</p>		
<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED            Z8Y15 FWHM        72.0° Efficiency    90 % Peak intensity 0.557 cd/lm Required components:</p>		

## PHOTOMETRIC DATA (MEASURED):



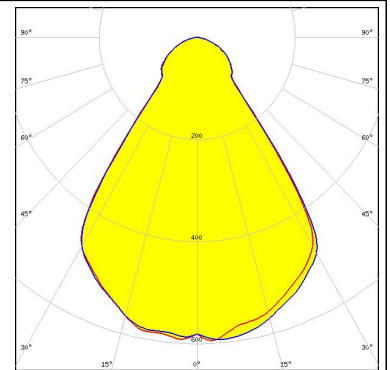
#### PHOTOMETRIC DATA (SIMULATED):

**OSRAM**  
Opto Semiconductors

LED Oslon Black  
FWHM 71.0°  
Efficiency 80 %  
Peak intensity 0.600 cd/lm

Required components:

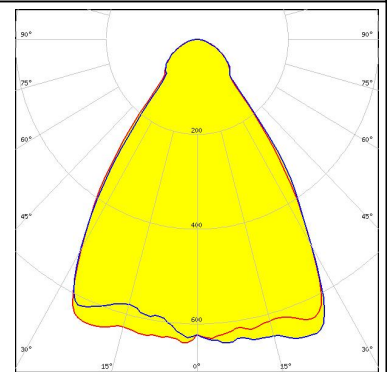
Undefined Manufacturer: Protective Plate, Glass



**OSRAM**  
Opto Semiconductors

LED Oslon Square Gen3  
FWHM 65.0°  
Efficiency 94 %  
Peak intensity 0.677 cd/lm

Required components:



#### GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

#### MATERIALS:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

#### PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

#### LEDiL Oy

Joensuunkatu 13  
FI-24240 SALO  
Finland

#### LEDiL Inc.

228 West Page Street  
Suite D  
Sycamore IL 60178  
USA

#### Local sales and technical support

[www.ledil.com/  
where\\_to\\_buy](http://www.ledil.com/where_to_buy)

#### Shipping locations

Salo, Finland  
Hong Kong, China

#### Distribution Partners

[www.ledil.com/  
where\\_to\\_buy](http://www.ledil.com/where_to_buy)