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!

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Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

HB-2X2-WW

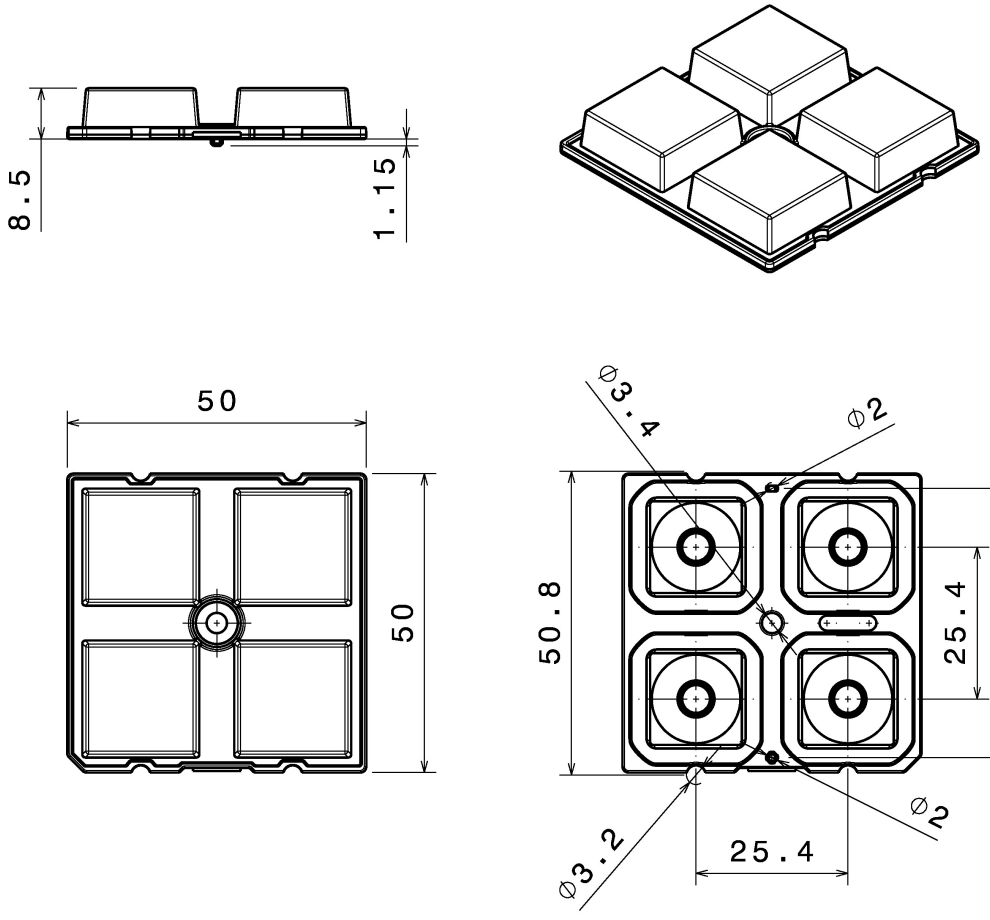
~65° wide beam

TECHNICAL SPECIFICATIONS:

Dimensions	50x50 mm
Height	8.5 mm
Fastening	screw, pin, glue
Colour	clear
Box size	480 x 280 x 300 mm
Box weight	9.5 kg
Quantity in Box	800 pcs
ROHS compliant	yes

MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour
HB-2X2-WW	Lens array	PMMA	clear



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	C13232	HB-2x2-WW	PMMA	

Tolerances if not otherwise shown
According to DIN ISO 2768-1
Linear measures:
up to 30mm class M, otherwise class C
According to DIN ISO 2768-2
Form and position: class L

Ledil Oy
Salorankatu 10
FIN 24240 SALO
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE
C13232_HB-2x2-WW

SIZE A4

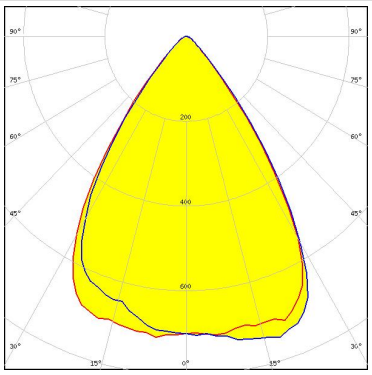
PART NUMBER
C13232

SCALE 1:1 WEIGHT 10,8 g SHEET 1/1

PHOTOMETRIC DATA (MEASURED):

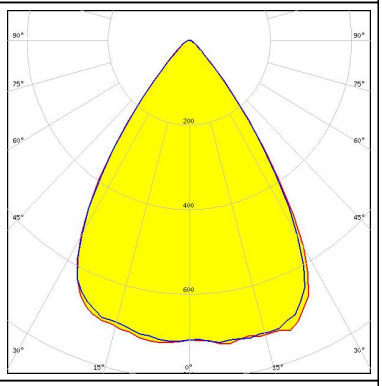
CREE

LED	XP-G
FWHM	69.0°
Efficiency	91 %
Peak intensity	0.800 cd/lm
Required components:	



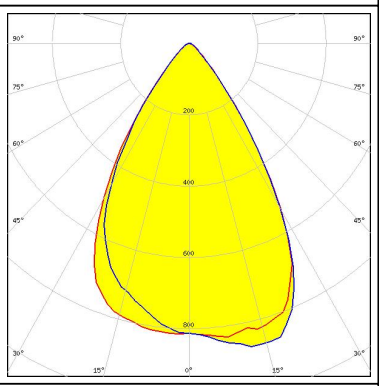
CREE

LED	XP-G2
FWHM	69.0°
Efficiency	91 %
Peak intensity	0.700 cd/lm
Required components:	



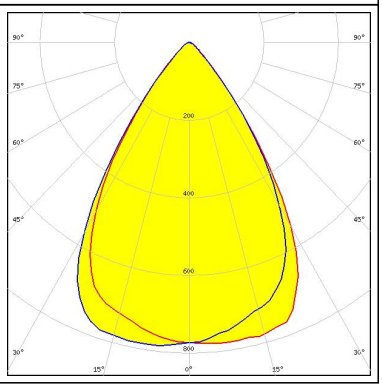
CREE

LED	XT-E
FWHM	65.0°
Efficiency	91 %
Peak intensity	0.900 cd/lm
Required components:	



LG Innotek

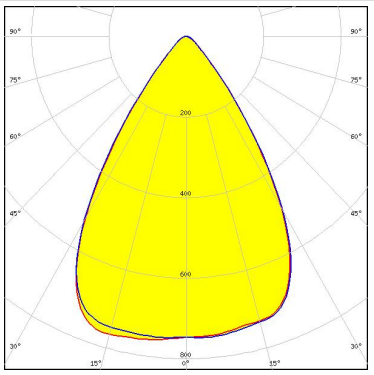
LED	H35C1 (LEMWA33)
FWHM	68.0°
Efficiency	89 %
Peak intensity	0.800 cd/lm
Required components:	



PHOTOMETRIC DATA (MEASURED):

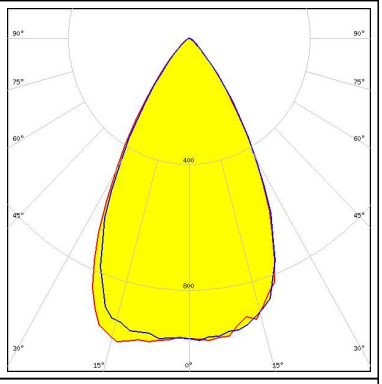
LUMILEDS

LED	LUXEON Q
FWHM	67.0°
Efficiency	91 %
Peak intensity	0.800 cd/lm
Required components:	



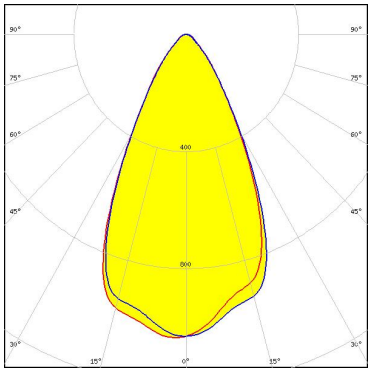
LUMILEDS

LED	LUXEON Z ES
FWHM	59.0°
Efficiency	90 %
Peak intensity	1.000 cd/lm
Required components:	



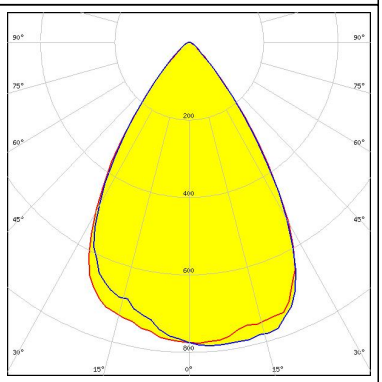
NICHIA

LED	NVSxE21A
FWHM	54.0°
Efficiency	94 %
Peak intensity	1.050 cd/lm
Required components:	



NICHIA

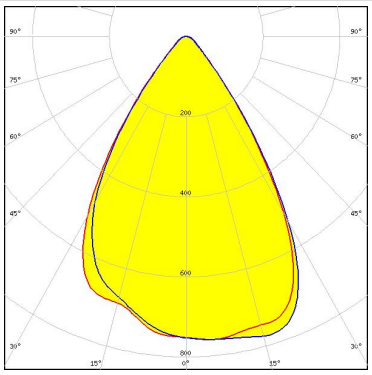
LED	NVSxx19B/NVSxx19C
FWHM	67.0°
Efficiency	91 %
Peak intensity	0.800 cd/lm
Required components:	



PHOTOMETRIC DATA (MEASURED):

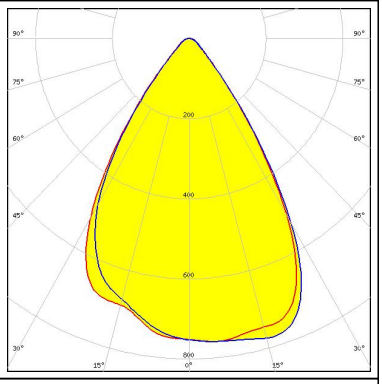
OSRAM

LED	PrevaLED Brick DC 2x8
FWHM	67.0°
Efficiency	92 %
Peak intensity	0.790 cd/lm
Required components:	



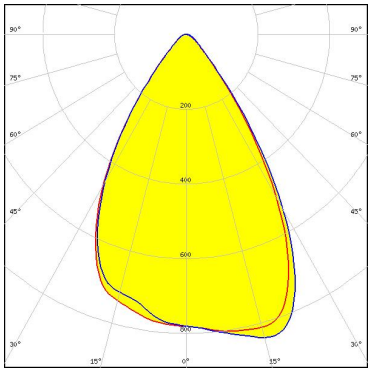
OSRAM
Opto Semiconductors

LED	Oslon Square Gen3
FWHM	67.0°
Efficiency	92 %
Peak intensity	0.790 cd/lm
Required components:	



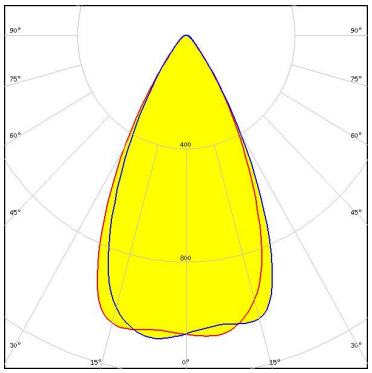
OSRAM
Opto Semiconductors

LED	Oslon Square PC
FWHM	63.0°
Efficiency	91 %
Peak intensity	0.863 cd/lm
Required components:	



OSRAM
Opto Semiconductors

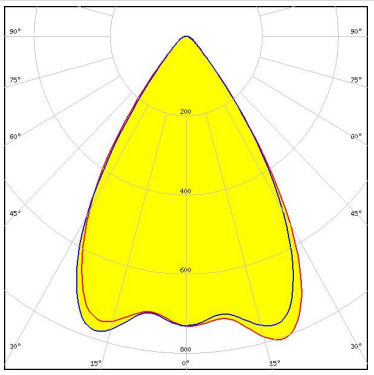
LED	Oslon SSL 80
FWHM	54.0°
Efficiency	92 %
Peak intensity	1.080 cd/lm
Required components:	



PHOTOMETRIC DATA (MEASURED):

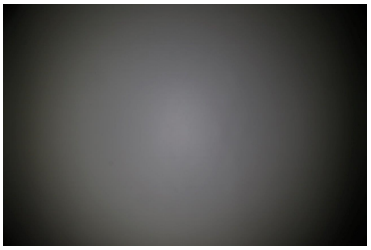
SAMSUNG

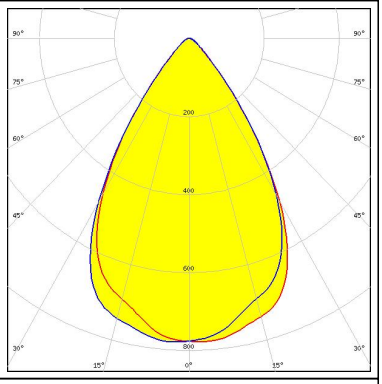
LED	LH351A(3535)
FWHM	68.0°
Efficiency	92 %
Peak intensity	0.800 cd/lm
Required components:	



SAMSUNG

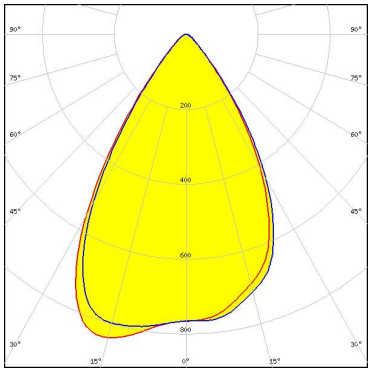
LED	LH351B
FWHM	65.0°
Efficiency	89 %
Peak intensity	0.780 cd/lm
Required components:	





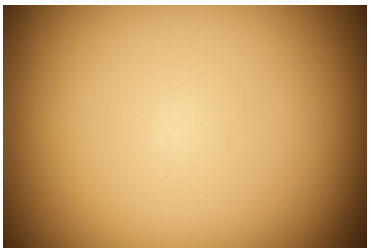
SAMSUNG

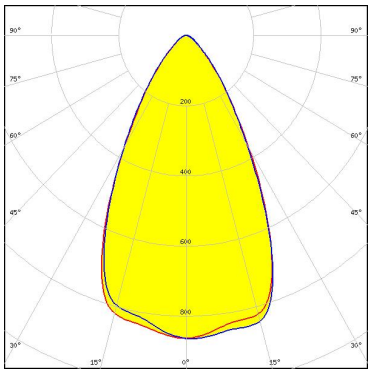
LED	LH351Z
FWHM	63.0°
Efficiency	89 %
Peak intensity	0.860 cd/lm
Required components:	



SEOUL SEMICONDUCTOR

LED	Z8Y15
FWHM	56.0°
Efficiency	85 %
Peak intensity	0.870 cd/lm
Required components:	

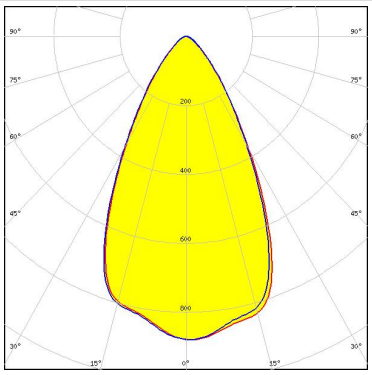




PHOTOMETRIC DATA (MEASURED):

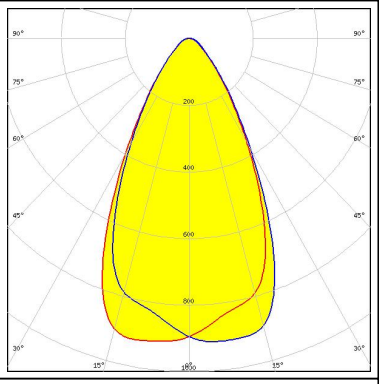
SEOUL SEMICONDUCTOR

LED	Z8Y19
FWHM	56.0°
Efficiency	85 %
Peak intensity	0.880 cd/lm
Required components:	



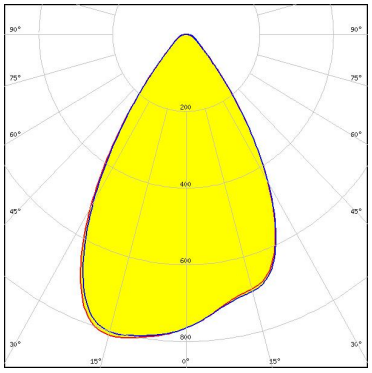
SEOUL SEMICONDUCTOR

LED	Z8Y22
FWHM	55.0°
Efficiency	94 %
Peak intensity	0.950 cd/lm
Required components:	



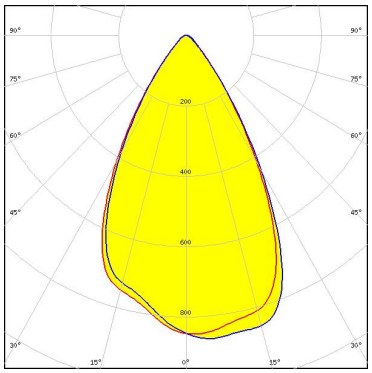
SEOUL SEMICONDUCTOR

LED	Z8Y22P
FWHM	65.0°
Efficiency	94 %
Peak intensity	0.850 cd/lm
Required components:	



TOSHIBA
Leading Innovation

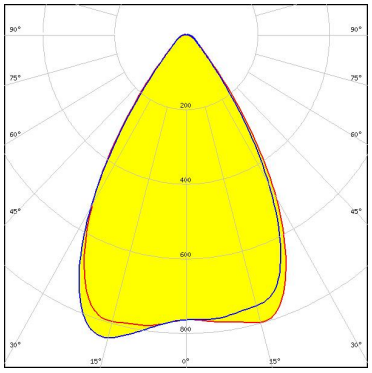
LED	TL1L4
FWHM	60.0°
Efficiency	84 %
Peak intensity	0.870 cd/lm
Required components:	



PHOTOMETRIC DATA (MEASURED):

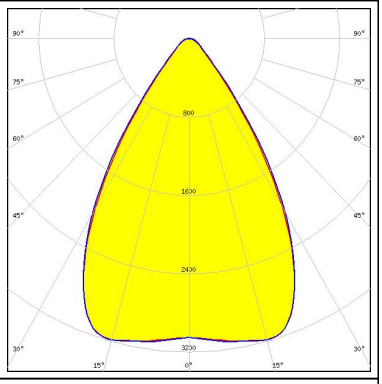
TRIDONIC

LED RLE G1 49x121mm 2000lm xxx EXC OTD
FWHM 67.0°
Efficiency 94 %
Peak intensity 0.850 cd/lm
Required components:



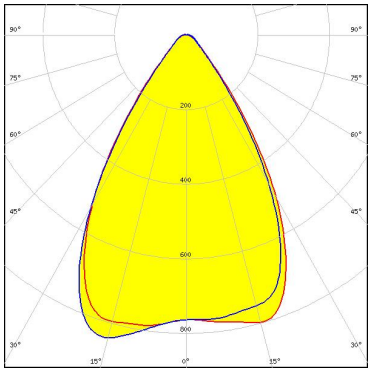
TRIDONIC

LED RLE G1 49x133mm 2000lm xxx EXC OTD
FWHM 67.0°
Efficiency 94 %
Peak intensity 0.850 cd/lm
Required components:



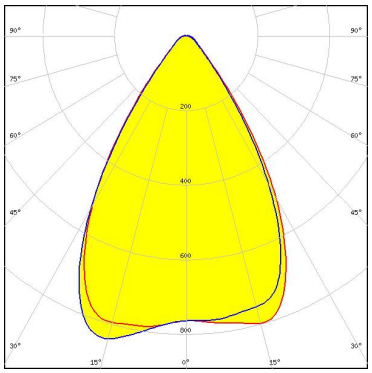
TRIDONIC

LED RLE G1 49x223mm 4000lm xxx EXC OTD
FWHM 67.0°
Efficiency 94 %
Peak intensity 0.850 cd/lm
Required components:



TRIDONIC

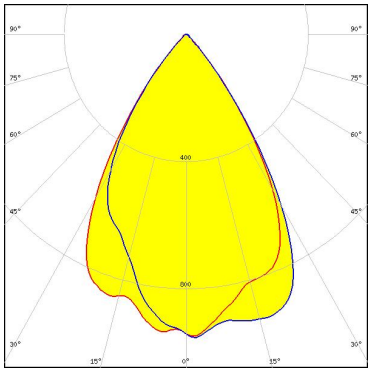
LED RLE G1 49x245mm 4000lm xxx EXC OTD
FWHM 67.0°
Efficiency 94 %
Peak intensity 0.850 cd/lm
Required components:



PHOTOMETRIC DATA (SIMULATED):

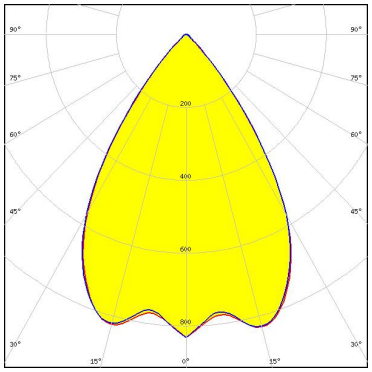
LUMILEDS

LED	LUXEON 3030 2D (Round LES)
FWHM	64.0°
Efficiency	94 %
Peak intensity	0.960 cd/lm
Required components:	



LUMILEDS

LED	LUXEON C
FWHM	65.0°
Efficiency	94 %
Peak intensity	0.840 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.

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