

#### TINA2-M

~30° medium beam optimized for CREE XP-E. Assembly with holder and installation tape.

#### **TECHNICAL SPECIFICATIONS:**

Dimensions Ø 16 mm
Height 9.5 mm
Fastening tape, pin
Colour black

Box size 451 x 241 x 298 mm

Box weight 8.3 kg

Quantity in Box 4140 pcs

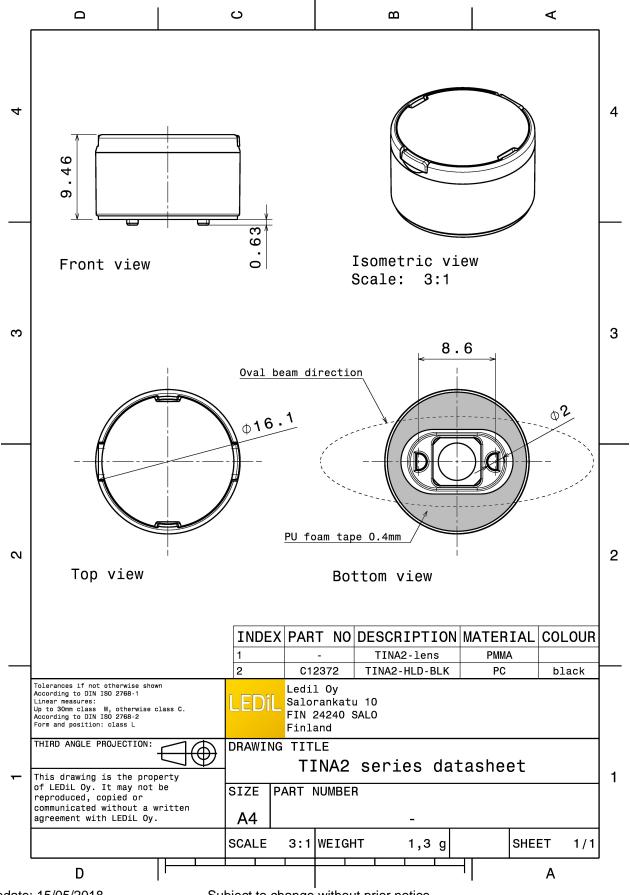
ROHS compliant yes 1



#### **MATERIAL SPECIFICATIONS:**

Component	Туре	Material	Colour
TINA2-XP-M	Lens	PMMA	clear
TINA2-HLD-BLK	Holder	PC	black
TINA-TAPE3	Tape	PU tape	black



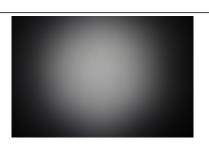


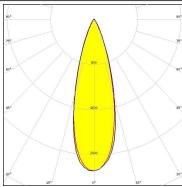
## PHOTOMETRIC DATA (MEASURED):

## CREE 💠

LED XB-H FWHM 31.0° Efficiency 85 %

Peak intensity 2.700 cd/lm Required components:





## CREE 🚓

LED XQ-E
FWHM 29.0°
Efficiency 84 %
Peak intensity 3.200 cd/lm

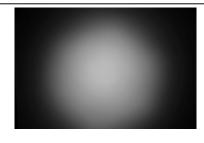
Required components:

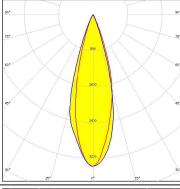


## **MILEDS**

LED LUXEON CZ

FWHM 28.0° Efficiency 89 % Peak intensity 3.400 cd/lm Required components:



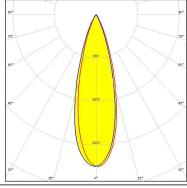


## **DESCRIPTION** LUMILEDS

LED LUXEON TX

FWHM 30.0°
Efficiency 86 %
Peak intensity 2.800 cd/lm
Required components:





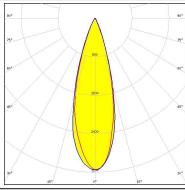
## PHOTOMETRIC DATA (MEASURED):

#### **MUMILEDS**

LED LUXEON Z ES

FWHM 31.0°
Efficiency 88 %
Peak intensity 3.200 cd/lm
Required components:





#### **WNICHIA**

LED NVSxx19B/NVSxx19C

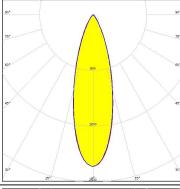
FWHM 29.0°
Efficiency 85 %
Peak intensity 2.700 cd/lm
Required components:

## **WNICHIA**

LED NWSx229A

FWHM 26.0°
Efficiency 86 %
Peak intensity 2.200 cd/lm
Required components:



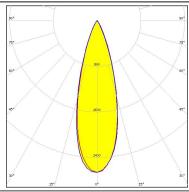


#### OSRAM Opto Semiconductors

LED Oslon Square EC

FWHM 30.0°
Efficiency 85 %
Peak intensity 2.200 cd/lm
Required components:







#### PHOTOMETRIC DATA (MEASURED):

OSRAM Opto Semiconductors

LED Oslon Square PC

FWHM 29.0°
Efficiency 86 %
Peak intensity 2.400 cd/lm
Required components:

OSRAM Opto Semiconductors

LED Oslon SSL 150

FWHM 30.0°
Efficiency 87 %
Peak intensity 2.500 cd/lm
Required components:

OSRAM Opto Semiconductors

Opto Semiconductor

LED Oslon SSL 80

FWHM 31.0°
Efficiency 84 %
Peak intensity 2.280 cd/lm
Required components:

OSRAM Opto Semiconductors

Opto Semiconducto

LED SFH 4715S FWHM 28.0°

Efficiency %
Peak intensity cd/lm
Required components:



## PHOTOMETRIC DATA (MEASURED):

OSRAM Opto Semiconductors

LED SFH 4725S

FWHM 27.0°
Efficiency %
Peak intensity cd/lm
Required components:

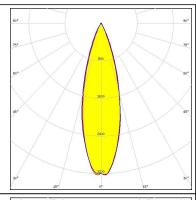
## PHOTOMETRIC DATA (SIMULATED):

## CREE 💠

LED XQ-E HI FWHM 29.0° Efficiency 90 %

Peak intensity 3.200 cd/lm

Required components:



#### **MUMILEDS**

LED LUXEON C FWHM 30.0°

Efficiency 93 % Peak intensity 2.900 cd/lm

Required components:

## **DESCRIPTION** LUMILEDS

LED LUXEON IR Compact

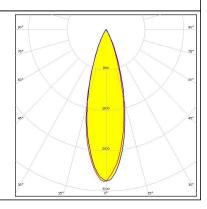
FWHM 29.0° Efficiency 83 % Peak intensity 0.000 cd/lm

Required components:

## **WNICHIA**

LED NFSx757G FWHM 29.0° Efficiency 90 % Peak intensity 3.010 cd/lm

Required components:



## PHOTOMETRIC DATA (SIMULATED):

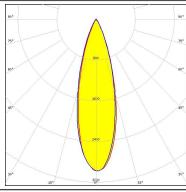
#### OSRAM Opto Semiconductore

LED Duris S5 (2 chip)

FWHM 29.0° Efficiency 92 % Peak intensity 2.980 cd/lm

Required components:



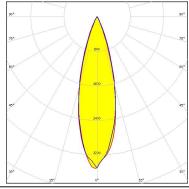


#### OSRAM Opto Semiconductore

LED Oslon Black Flat

FWHM 28.0°
Efficiency 91 %
Peak intensity 3.500 cd/lm

Required components:



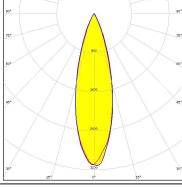
#### OSRAM Opto Semiconductors

LED Oslon Square Flat

FWHM 29.0°
Efficiency 89 %
Peak intensity 3.130 cd/lm

Required components:





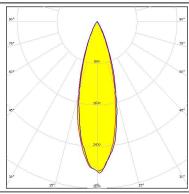
#### OSRAM Opto Semiconductors

Opto Semiconducto

LED Oslon Square Gen3

FWHM 29.0°
Efficiency 90 %
Peak intensity 2.935 cd/lm

Required components:



## PHOTOMETRIC DATA (SIMULATED):

OSRAM Opto Semiconduct

LED SFH 4770S

FWHM 27.0°

Efficiency 85 % Peak intensity 3.200 cd/lm

Required components:

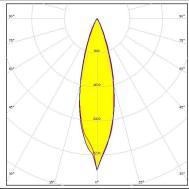
OSRAM Opto Semiconductors

LED Synios P2720 1 mm

FWHM 27.0° Efficiency 91 %

Peak intensity 3.560 cd/lm

Required components:



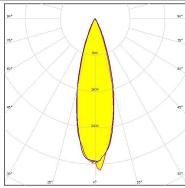
OSRAM Opto Semiconductors

LED

Synios P2720 1/2 mm

FWHM 29.0° Efficiency 93 % Peak intensity 3.370 cd/lm

Required components:



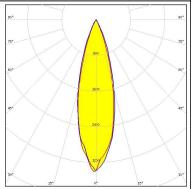
OSRAM Opto Semiconductors

LED

Synios P2720 1/4 mm

FWHM 28.0°
Efficiency 91 %
Peak intensity 3.140 cd/lm

Required components:





## PHOTOMETRIC DATA (SIMULATED):

## **SAMSUNG**

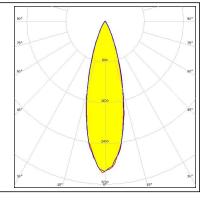
LED LH181B FWHM 29.0°

Peak intensity 3.000 cd/lm

90 %

Required components:

Efficiency





#### **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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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.

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