

TINA

Ø16.1 mm TIR-lenses for linear lighting, museums, reading lights, compact torches and head lamps compatible with up to 3535 size LED packages

TINA is a versatile family of single Ø16.1 mm lenses consisting of TINA, TINA2 and TINA3 subfamilies. All subfamilies have the same dimensions and come preassembled in lightweight durable holders with fastening tape that makes their installation fast and easy. TINA family has a wide selection of beams from narrow to wide flood.

TINA2

Variant with black holder

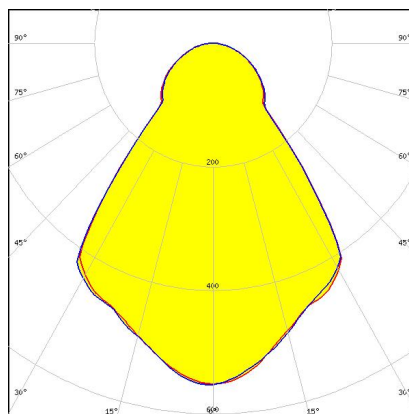


PRODUCTS:

C10449_TINA-W

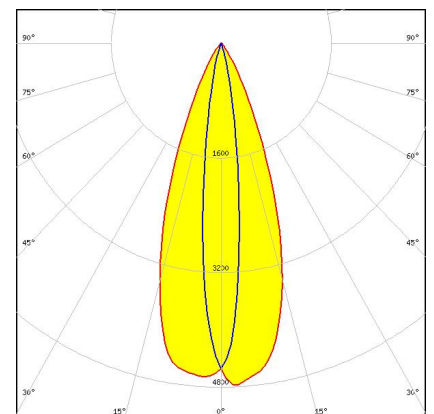
Dimensions: 16.0 mm x 16.0 mm
Height: 8.60 mm
~50° wide beam

C13253_TINA2-R-CLIP16



Dimensions: 16.1 mm x 16.1 mm
Height: 10.10 mm
Mini reflector with ~60° wide beam and clip installation

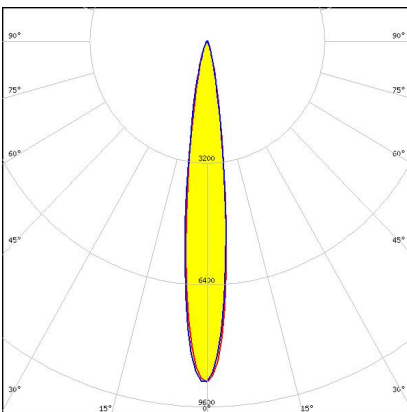
CA11052_TINA2-O



Dimensions: 16.1 mm x 16.1 mm
Height: 9.70 mm
~35° + 15° oval beam optimized for CREE XP-E. Assembly with holder and installation tape.

PRODUCTS:

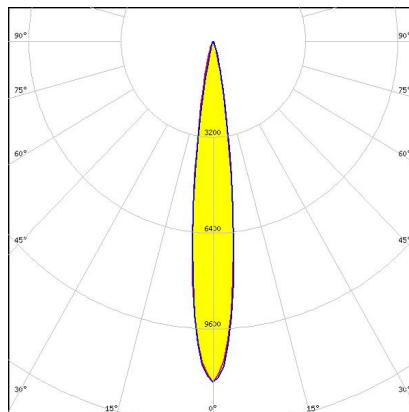
CP12671_TINA2-D



Dimensions: 16.1 mm x 16.1 mm
Height: 9.65 mm

~16° diffused spot beam optimized for CREE XB-D. Assembly with holder.

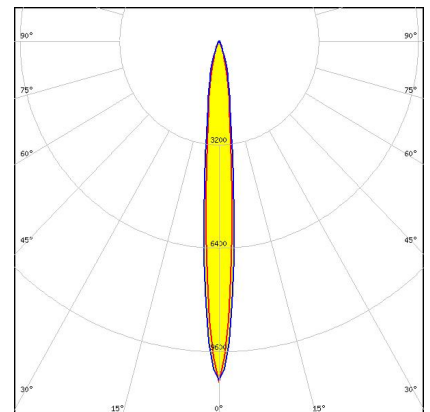
CA12346_TINA2-RS



Dimensions: 16.1 mm x 16.1 mm
Height: 9.50 mm

~14° spot beam optimized for Avago Jade. Assembly with holder and installation tape.

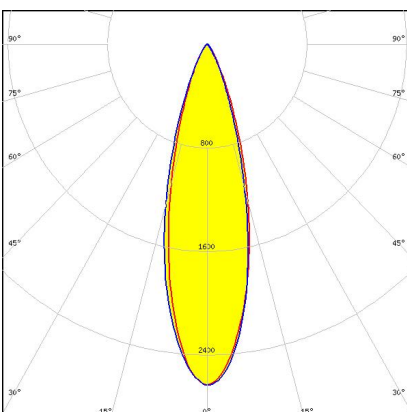
CP12688_TINA2-D



Dimensions: 16.1 mm x 16.1 mm
Height: 9.50 mm

~16° diffused spot beam optimized for Osram Oslon SSL80. Assembly with holder.

CA11021_TINA2-M



Dimensions: 16.1 mm x 16.1 mm
Height: 9.30 mm

~30° medium beam optimized for Nichia NCSxx19. Assembly with holder, installation tape and location pins.

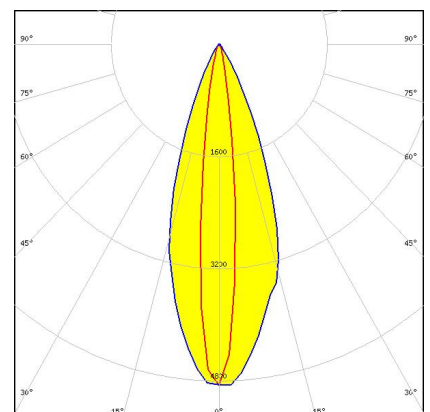
CA12403_TINA2-WW



Dimensions: 16.1 mm x 16.1 mm
Height: 10.50 mm

~60° wide beam optimized for Citizen CL-L400. Assembly with holder and installation tape.

CA12047_TINA2-O

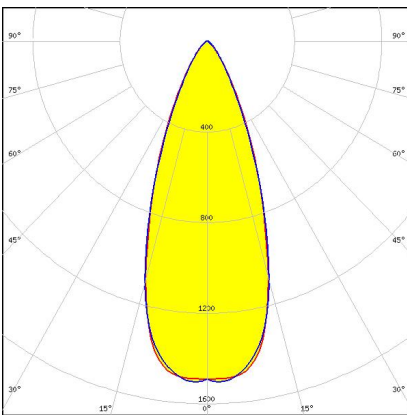


Dimensions: 16.1 mm x 16.1 mm
Height: 10.12 mm

~35° + 15° oval beam optimized for Osram Golden Dragon+. Assembly with holder and installation tape.

PRODUCTS:

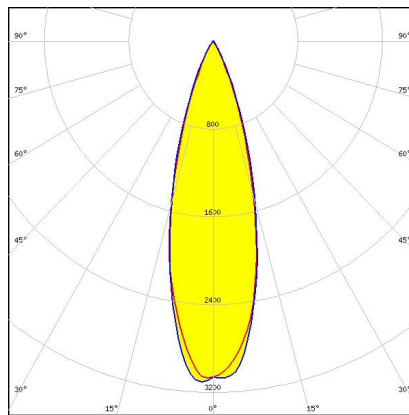
CP12686_TINA2-W



Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

~46° wide beam optimized for Nichia NS6x83. Assembly with holder.

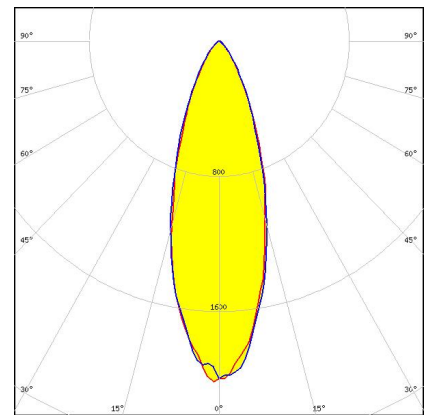
CA11017_TINA2-M



Dimensions: 16.1 mm x 16.1 mm
Height: 9.70 mm

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

CA12401_TINA2-M



Dimensions: 16.1 mm x 16.1 mm
Height: 10.50 mm

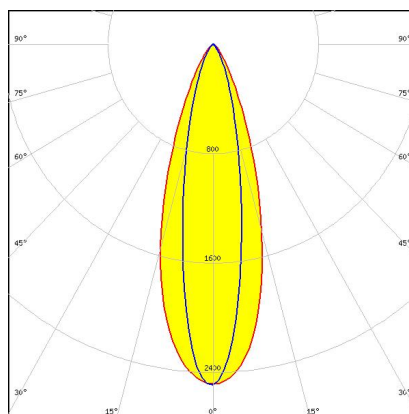
~30° medium beam optimized for Citizen CL-L400. Assembly with holder and installation tape.

CA11942_TINA2-D

Dimensions: 16.1 mm x 16.1 mm
Height: 9.30 mm

~16° diffused spot beam optimized for Nichia NCSxx19. Assembly with holder, installation tape and location pins.

CP12684_TINA2-O



Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

~35° + 15° oval beam optimized for Nichia NS6x83. Assembly with holder.

CA12399_TINA2-RS

Dimensions: 16.1 mm x 16.1 mm
Height: 10.50 mm

~14° spot beam optimized for Citizen CL-L400. Assembly with holder and installation tape.

PRODUCTS:

CA11847_TINA2-RS

Dimensions: 16.1 mm x 16.1 mm
Height: 10.10 mm

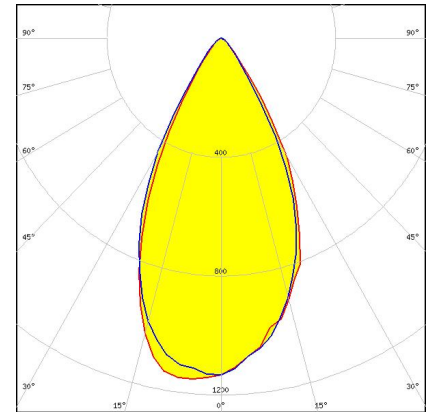
~14° spot beam optimized for Osram Golden Dragon+. Assembly with holder and installation tape.

CP12682_TINA2-RS

Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

~14° spot beam optimized for Nichia NS6x83. Assembly with holder.

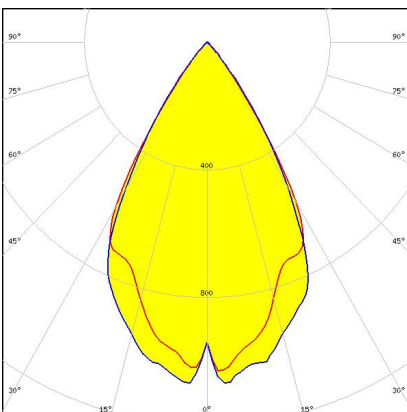
CA12378_TINA2-W



Dimensions: 16.0 mm x 16.0 mm
Height: 9.50 mm

~45° wide beam optimized for CREE XP-E. Assembly with holder, installation tape and location pins.

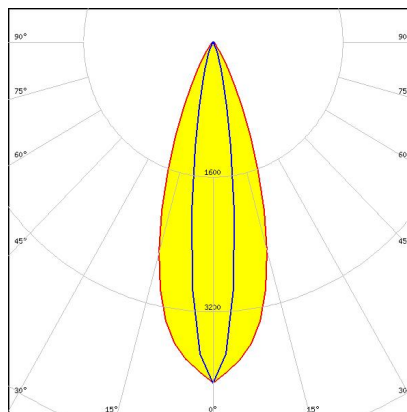
CA11176_TINA2-WW



Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

~60° wide beam optimized for Nichia NS6x83. Assembly with holder and installation tape.

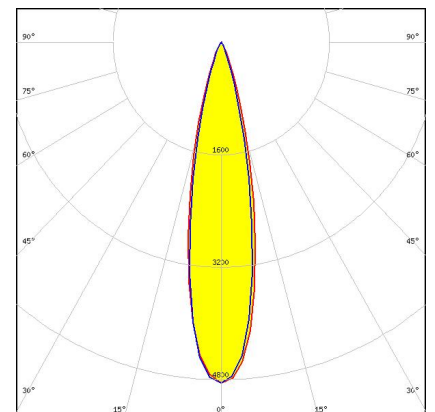
CP12680_TINA2-O



Dimensions: 16.1 mm x 16.1 mm
Height: 9.82 mm

~35° + 15° oval beam optimized for CREE XP-E. Assembly with holder.

CA12376_TINA2-SS

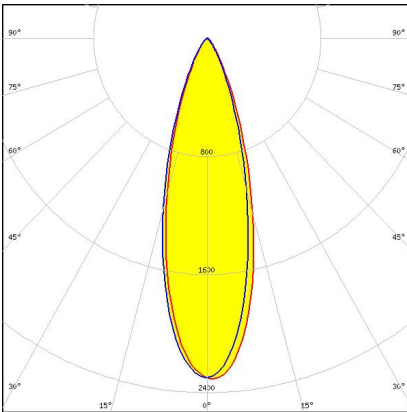


Dimensions: 16.0 mm x 16.0 mm
Height: 9.26 mm

~20° smooth spot beam. Assembly with holder, installation tape and location pins.

PRODUCTS:

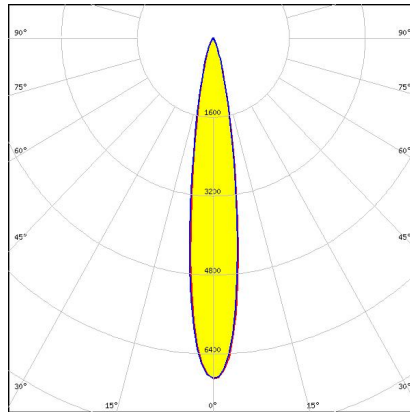
CA11174_TINA2-M



Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

~30° medium beam optimized for Nichia NS6x83. Assembly with holder and installation tape.

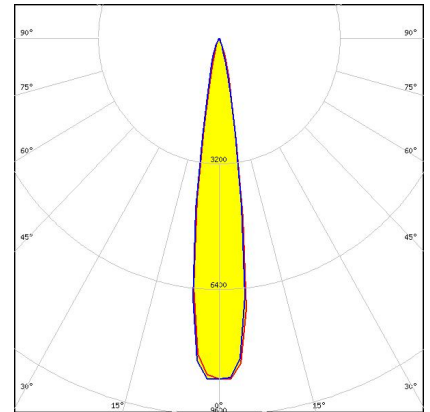
CP12678_TINA2-D



Dimensions: 16.1 mm x 16.1 mm
Height: 9.65 mm

~16° diffused spot beam optimized for CREE XP-E. Assembly with holder.

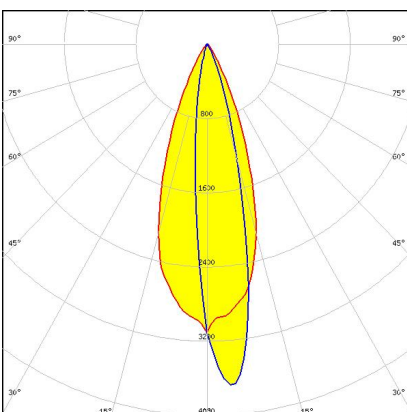
CA12374_TINA2-RS



Dimensions: 16.0 mm x 16.0 mm
Height: 9.50 mm

~14° spot beam. Assembly with holder, installation tape and location pins.

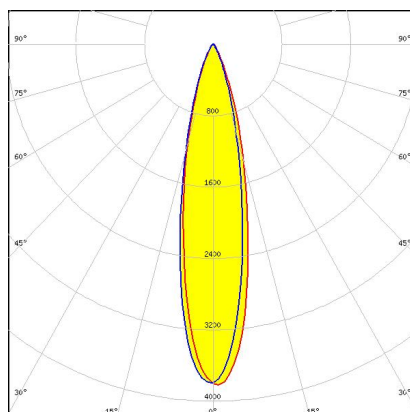
CA15536_TINA2-O-WAS



Dimensions: 16.1 mm x 16.1 mm
Height: 9.70 mm

Asymmetric beam for wall-washing. Assembly with black holder and installation tape.

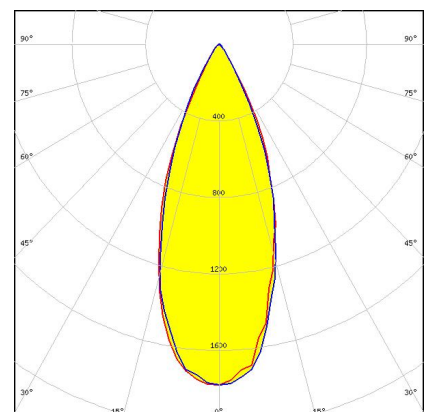
CA11172_TINA2-D



Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

~16° diffused spot beam optimized for Nichia NS6x83. Assembly with holder and installation tape.

CP12674_TINA2-W



Dimensions: 16.1 mm x 16.1 mm
Height: 9.65 mm

~45° wide beam optimized for CREE XB-D. Assembly with holder.

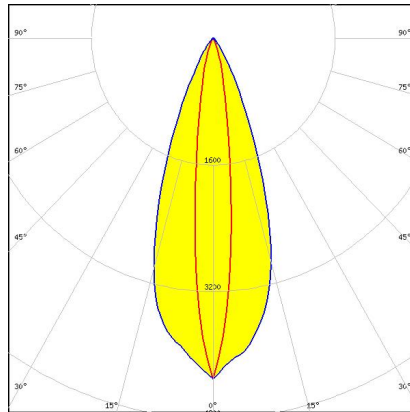
PRODUCTS:

CA12349_TINA2-O

Dimensions: 16.1 mm x 16.1 mm
Height: 9.50 mm

~35° + 15° oval beam optimized for Avago Jade. Assembly with holder and installation tape.

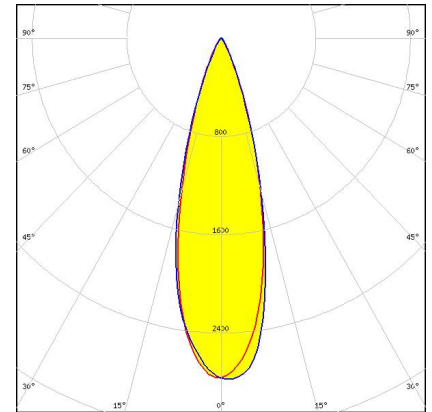
CA11053_TINA2-O



Dimensions: 16.1 mm x 16.1 mm
Height: 9.30 mm

~35° + 15° oval beam optimized for Nichia NCSxx19. Assembly with holder, installation tape and location pins.

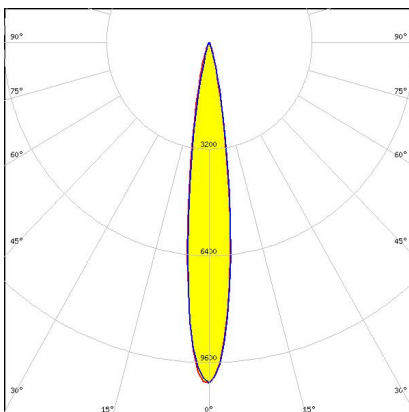
CP12672_TINA2-M



Dimensions: 16.1 mm x 16.1 mm
Height: 9.65 mm

~30° medium beam optimized for CREE XB-D. Assembly with holder.

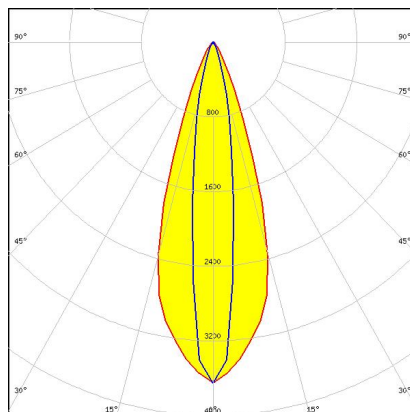
CA12347_TINA2-D



Dimensions: 16.1 mm x 16.1 mm
Height: 9.50 mm

~16° diffused spot beam optimized for Avago Jade. Assembly with holder and installation tape.

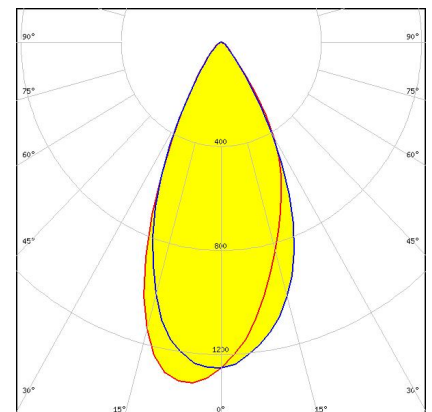
CP12689_TINA2-O



Dimensions: 16.1 mm x 16.1 mm
Height: 9.50 mm

~35° + 15° oval beam optimized for Osram Oslon SSL80. Assembly with holder.

CA11022_TINA2-W



Dimensions: 16.1 mm x 16.1 mm
Height: 9.30 mm

~45° wide beam optimized for Nichia NCSxx19. Assembly with holder, installation tape and location pins.

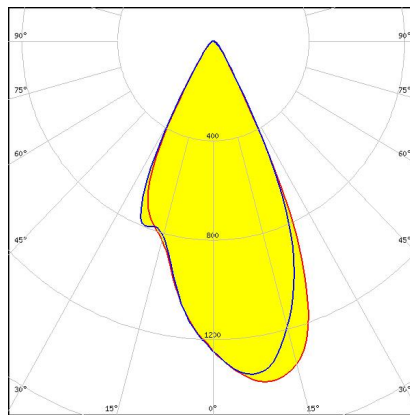
PRODUCTS:

CA12404_TINA2-O

Dimensions: 16.1 mm x 16.1 mm
Height: 10.50 mm

~35° + 15° oval beam optimized for Citizen CL-L400. Assembly with holder and installation tape.

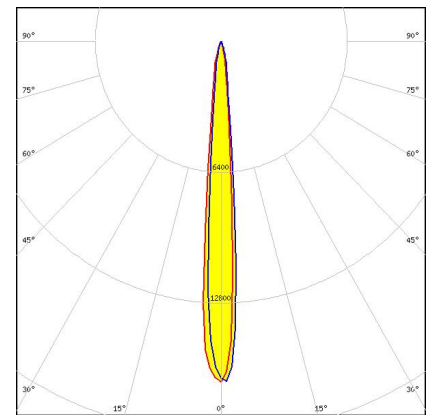
CA12056_TINA2-W



Dimensions: 16.1 mm x 16.1 mm
Height: 9.70 mm

~45° wide beam optimized for CREE XP-E. Assembly with holder and installation tape.

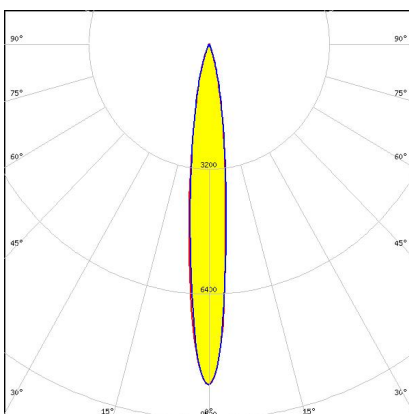
CP12687_TINA2-RS



Dimensions: 16.1 mm x 16.1 mm
Height: 9.50 mm

~14° spot beam optimized for Osram Oslon SSL80. Assembly with holder.

CA11020_TINA2-RS



Dimensions: 16.1 mm x 16.1 mm
Height: 9.30 mm

~14° spot beam optimized for Nichia NCSxx19. Assembly with holder, installation tape and location pins.

CA12402_TINA2-W

Dimensions: 16.1 mm x 16.1 mm
Height: 10.50 mm

~45° wide beam optimized for Citizen CL-L400. Assembly with holder and installation tape.

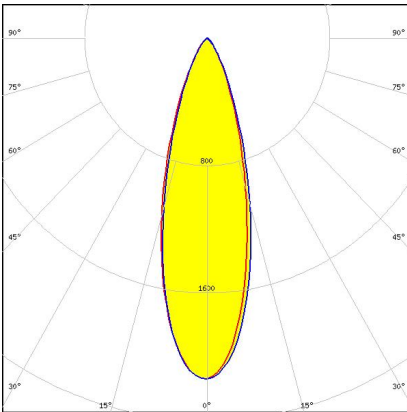
CA12046_TINA2-D

Dimensions: 16.1 mm x 16.1 mm
Height: 10.10 mm

~16° diffused spot beam optimized for Osram Golden Dragon+. Assembly with holder and installation tape.

PRODUCTS:

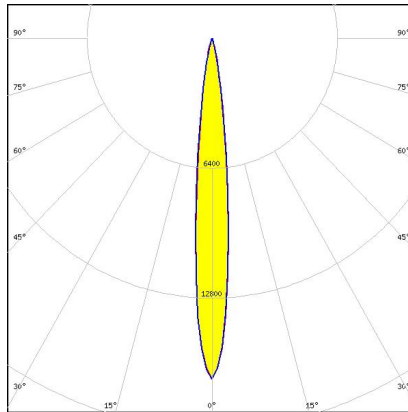
CP12685_TINA2-M



Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

~30° medium beam optimized for Nichia NS6x83. Assembly with holder.

CA11016_TINA2-RS



Dimensions: 16.1 mm x 16.1 mm
Height: 9.70 mm

~14° spot beam optimized for CREE XP-E. Assembly with holder and installation tape.

CA12400_TINA2-D

Dimensions: 16.1 mm x 16.1 mm
Height: 10.47 mm

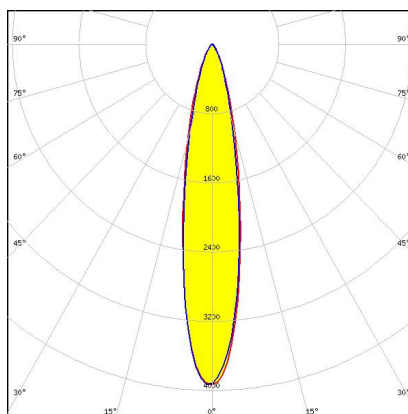
~16° diffused spot beam optimized for Citizen CL-L400. Assembly with holder and installation tape.

CA11848_TINA2-M

Dimensions: 16.1 mm x 16.1 mm
Height: 10.10 mm

~30° medium beam optimized for Osram Golden Dragon+. Assembly with holder and installation tape.

CP12683_TINA2-D



Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

~16° diffused spot beam optimized for Nichia NS6x83. Assembly with holder.

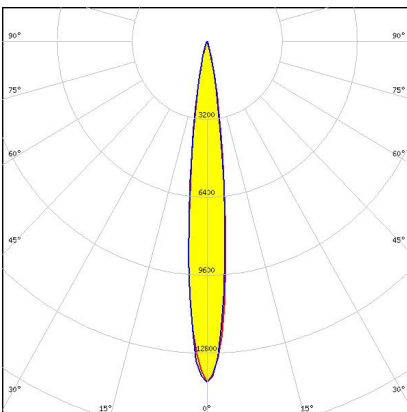
CA12379_TINA2-O

Dimensions: 16.0 mm x 16.0 mm
Height: 9.50 mm

~35° + 15° oval beam optimized for CREE XP-E. Assembly with holder, installation tape and location pins.

PRODUCTS:

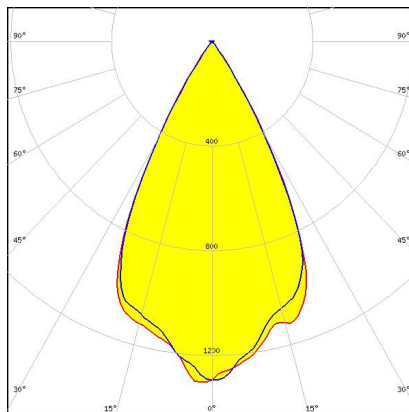
CA11420_TINA2-D



Dimensions: 16.1 mm x 16.1 mm
Height: 9.66 mm

~16° diffused spot beam optimized for CREE XP-E. Assembly with holder and installation tape.

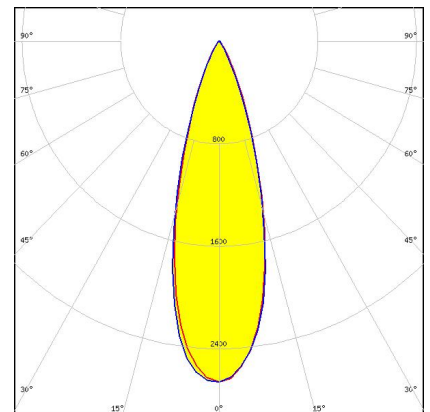
CP12681_TINA2-W



Dimensions: 16.1 mm x 16.1 mm
Height: 9.65 mm

~45° wide beam optimized for CREE XP-E. Assembly with holder.

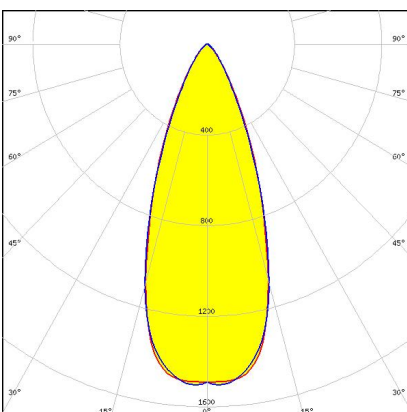
CA12377_TINA2-M



Dimensions: 16.0 mm x 16.0 mm
Height: 9.50 mm

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

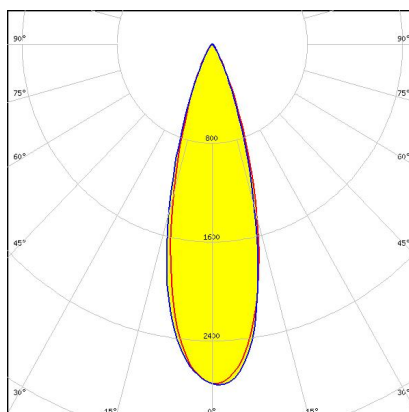
CA11175_TINA2-W



Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

~45° wide beam optimized for Nichia NS6x83. Assembly with holder and installation tape.

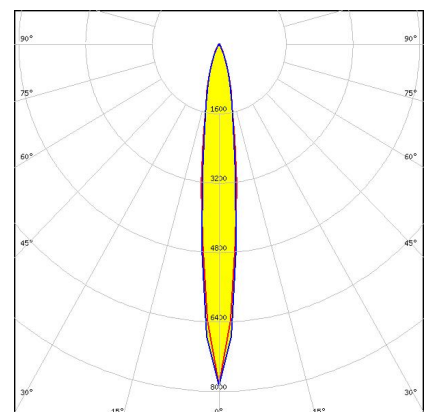
CP12679_TINA2-M



Dimensions: 16.1 mm x 16.1 mm
Height: 9.65 mm

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

CA12375_TINA2-D

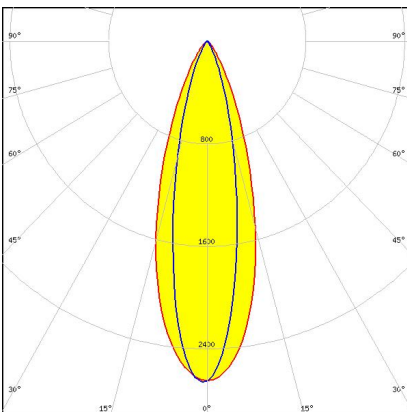


Dimensions: 16.0 mm x 16.0 mm
Height: 9.50 mm

~16° diffused spot beam optimized for CREE XP-E. Assembly with holder, installation tape and location pins.

PRODUCTS:

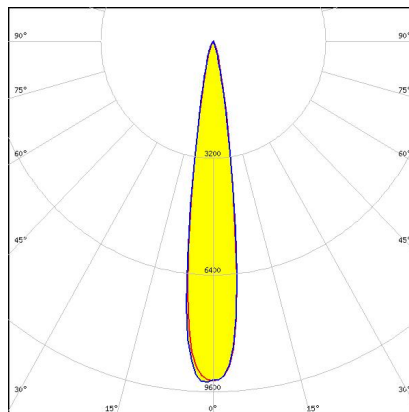
CA11173_TINA2-O



Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

~35° + 15° oval beam optimized for Nichia NS6x83. Assembly with holder and installation tape.

CP12677_TINA2-RS



Dimensions: 16.1 mm x 16.1 mm
Height: 9.65 mm

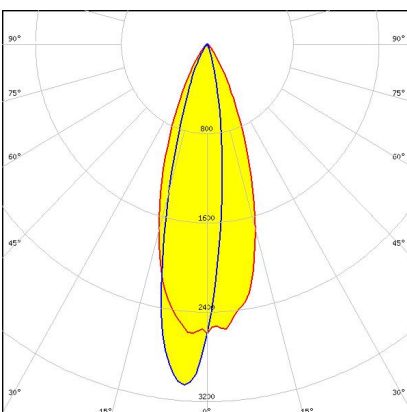
~14° spot beam optimized for CREE XP-E. Assembly with holder.

CA12350_TINA2-W

Dimensions: 16.1 mm x 16.1 mm
Height: 9.70 mm

~45° wide beam optimized for Avago Jade. Assembly with holder and installation tape.

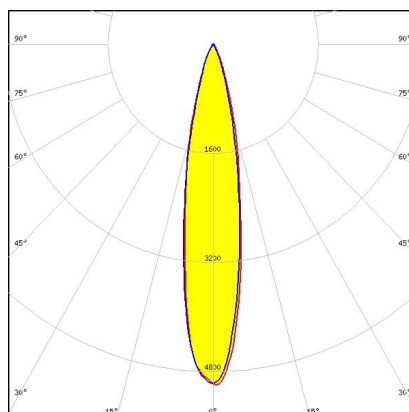
CA15365_TINA2-O-WAS



Dimensions: 16.0 mm x 16.0 mm
Height: 9.50 mm

Asymmetric beam for wall-washing. Assembly with black holder, installation tape and location pins.

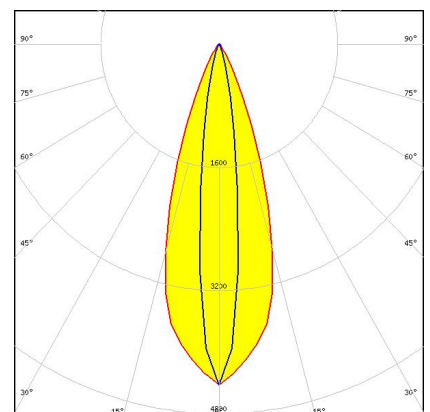
CA11171_TINA2-RS



Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

~14° spot beam optimized for Nichia NS6x83. Assembly with holder and installation tape.

CP12673_TINA2-O



Dimensions: 16.1 mm x 16.1 mm
Height: 9.65 mm

~35° + 15° oval beam optimized for CREE XB-D. Assembly with holder.

PRODUCTS:

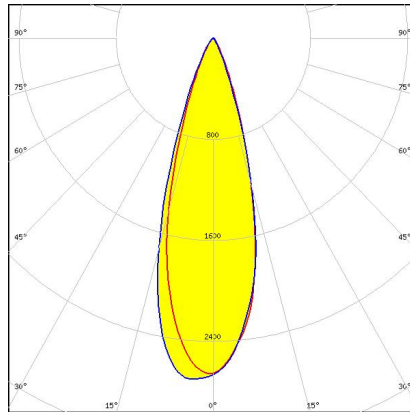
CA12348_TINA2-M

Dimensions: 16.1 mm x 16.1 mm

Height: 9.50 mm

~30° medium beam optimized for Avago
Jade. Assembly with holder and
installation tape.

CP12690_TINA2-M



Dimensions: 16.1 mm x 16.1 mm

Height: 9.50 mm

~30° medium beam optimized for Osram
Oslon SSL80. Assembly with holder.

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)