

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

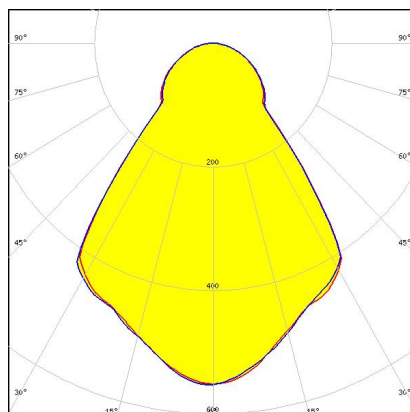


PRODUCTS:

C10449_TINA-W

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

C13253_TINA2-R-CLIP16



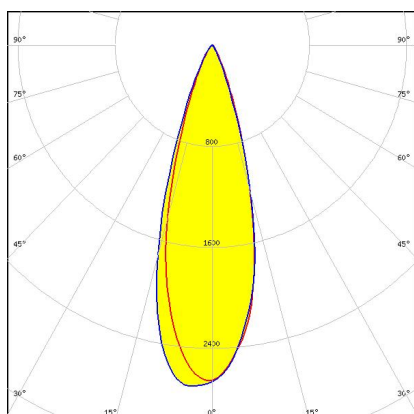
Dimensions: 16.1 mm x 16.1 mm
Height: 10.10 mm
Mini reflector with ~60° wide beam and clip installation

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.

PRODUCTS:

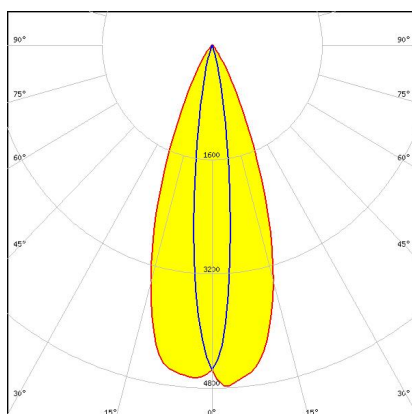
CP12690_TINA2-M



Dimensions: 16.1 mm x 16.1 mm
Height: 9.50 mm

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

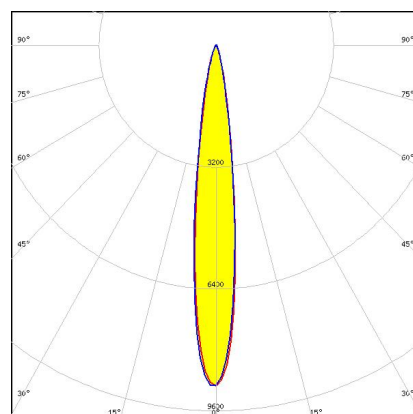
CA11052_TINA2-O



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.

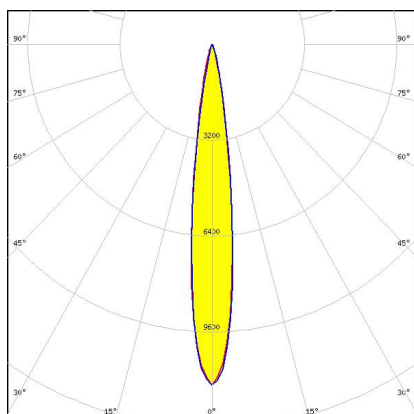
CP12671_TINA2-D



Dimensions: 16.1 mm x 16.1 mm
Height: 9.65 mm

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

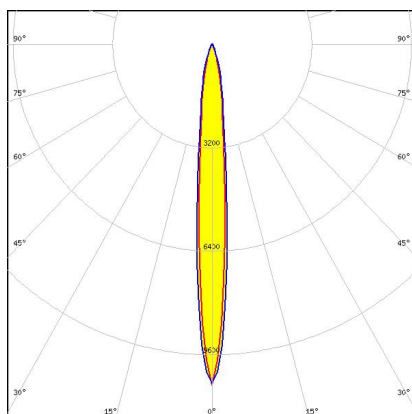
CA12346_TINA2-RS



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.

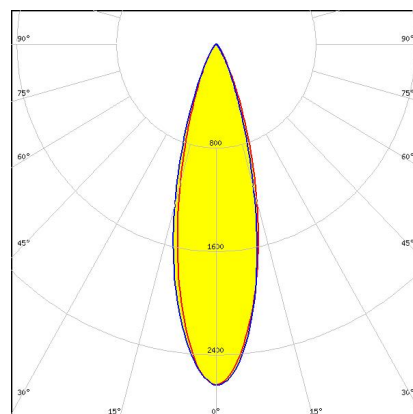
CP12688_TINA2-D



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.

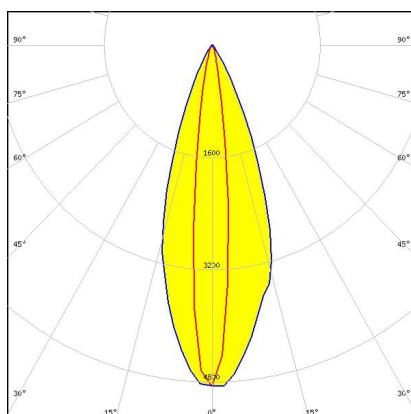
PRODUCTS:

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.

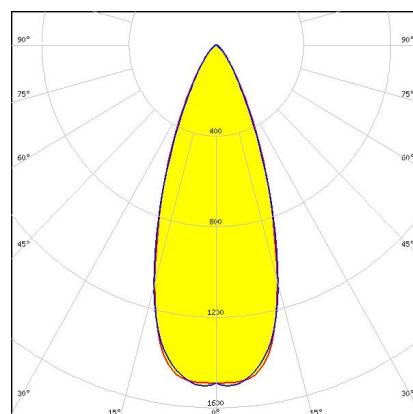
CA12047_TINA2-O



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.

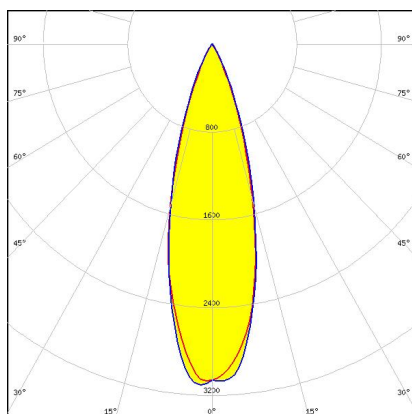
CP12686_TINA2-W



Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

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

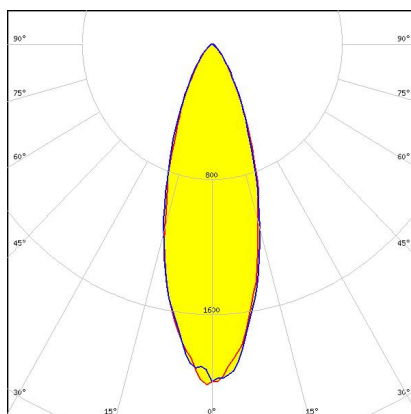
CA11017_TINA2-M



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.

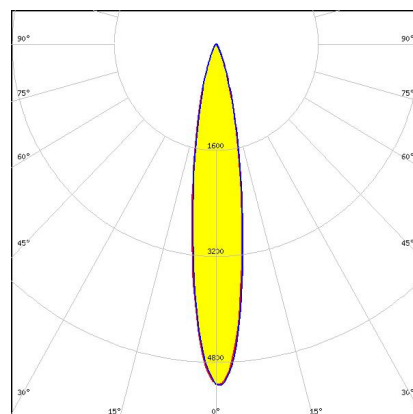
CA12401_TINA2-M



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

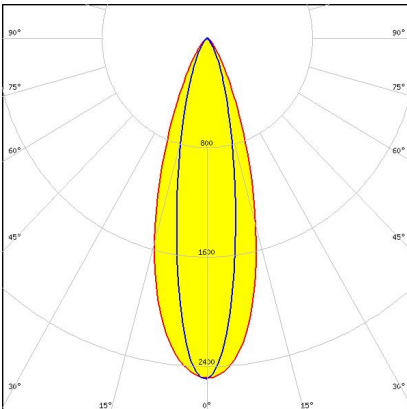


Dimensions: 16.1 mm x 16.1 mm
Height: 9.30 mm

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

PRODUCTS:

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.

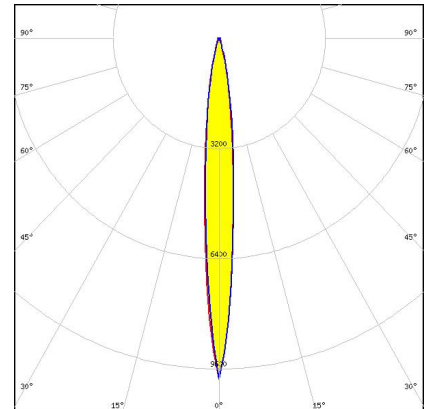
CA12399_TINA2-RS



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.

CA11847_TINA2-RS

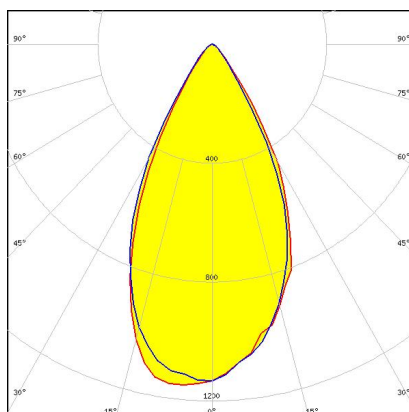


Dimensions: 16.1 mm x 16.1 mm
Height: 10.10 mm

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

CP12682_TINA2-RS

CA12378_TINA2-W



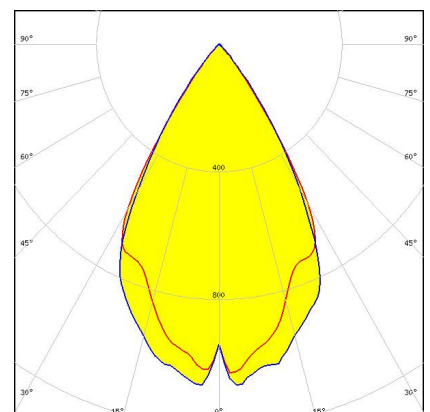
Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

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

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

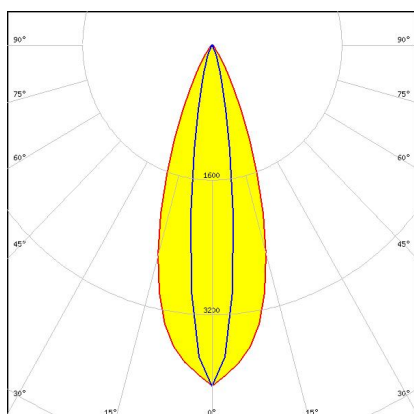


Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

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

PRODUCTS:

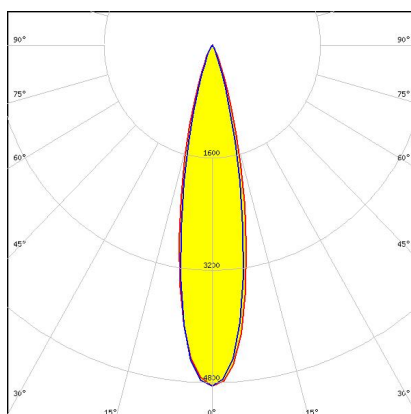
CP12680_TINA2-O



Dimensions: 16.1 mm x 16.1 mm
Height: 9.82 mm

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

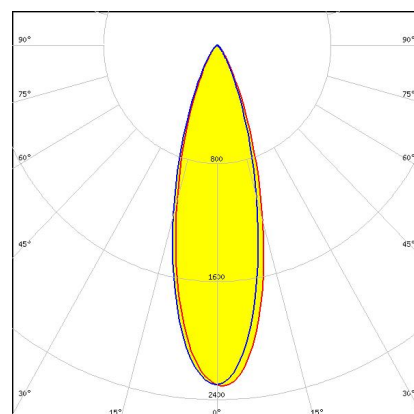
CA12376_TINA2-SS



Dimensions: 16.0 mm x 16.0 mm
Height: 9.26 mm

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

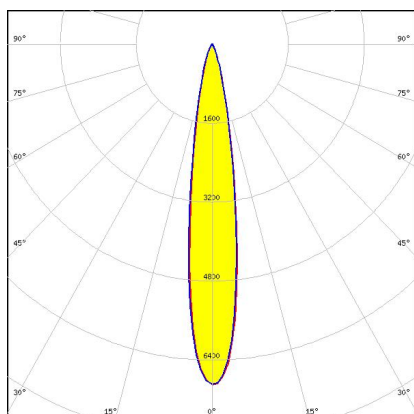
CA11174_TINA2-M



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.

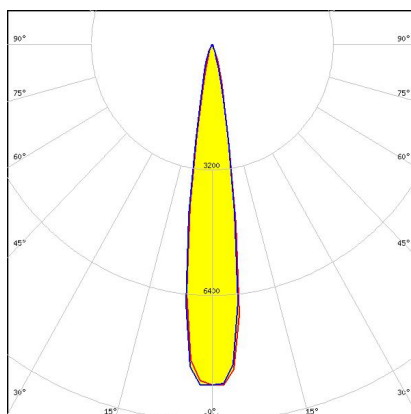
CP12678_TINA2-D



Dimensions: 16.1 mm x 16.1 mm
Height: 9.65 mm

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

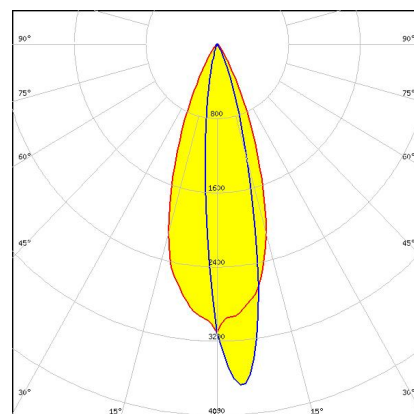
CA12374_TINA2-RS



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

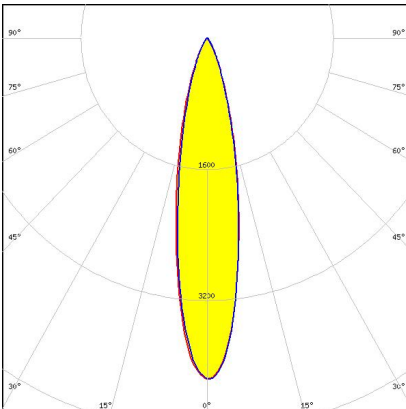


Dimensions: 16.1 mm x 16.1 mm
Height: 9.70 mm

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

PRODUCTS:

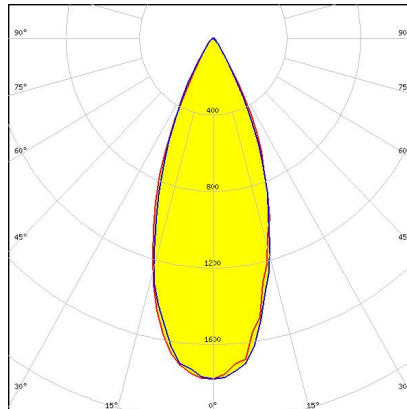
CA11172_TINA2-D



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

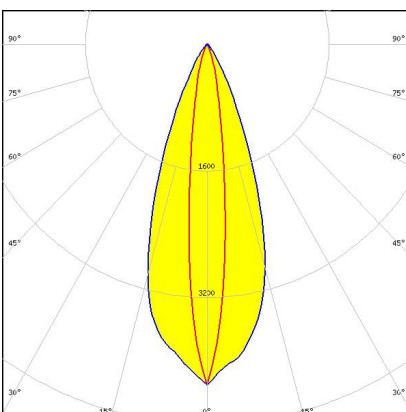
~45° wide beam optimized for CREE XB-D. Assembly with holder.

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.

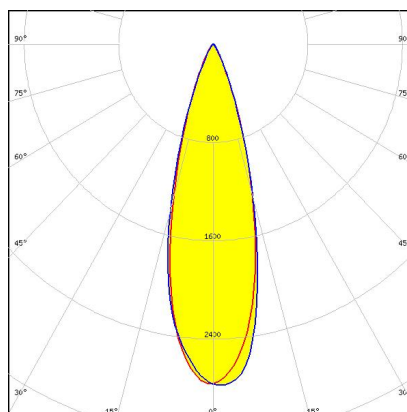
CA11053_TINA2-O



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.

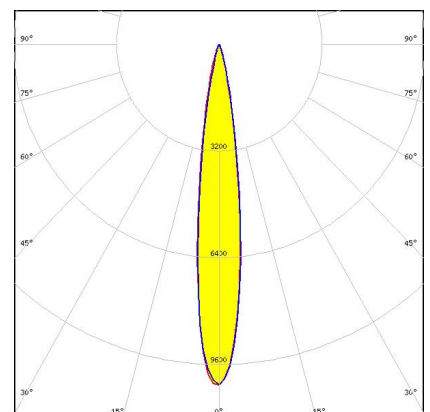
CP12672_TINA2-M



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

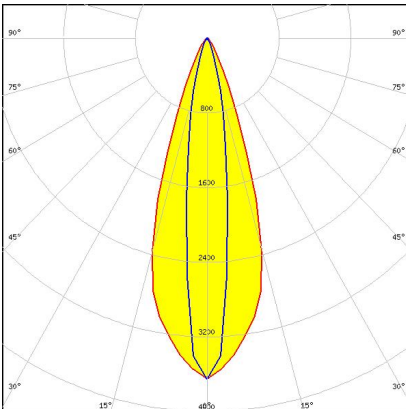


Dimensions: 16.1 mm x 16.1 mm
Height: 9.50 mm

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

PRODUCTS:

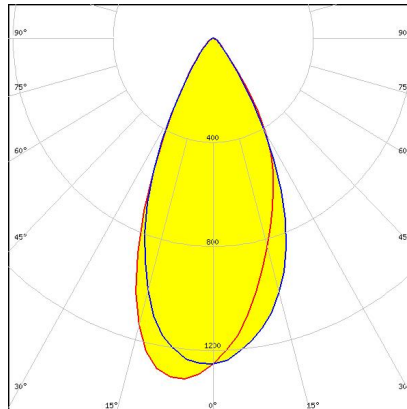
CP12689_TINA2-O



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

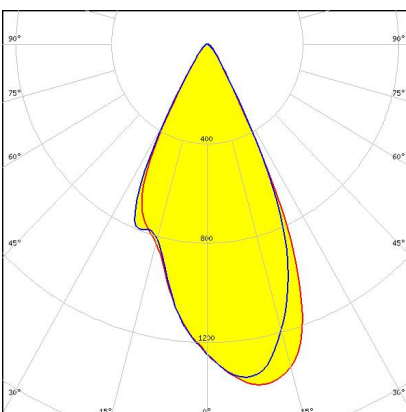
~45° wide beam optimized for Nichia NCSxx19. Assembly with holder, installation tape and location pins.

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.

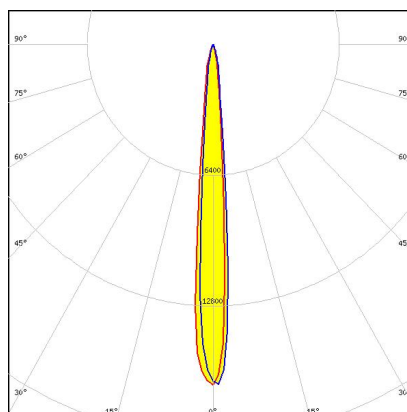
CA12056_TINA2-W



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.

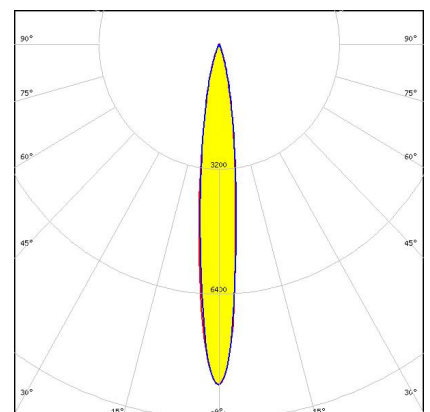
CP12687_TINA2-RS



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.

PRODUCTS:

CA12402_TINA2-W

Dimensions: 16.1 mm x 16.1 mm
Height: 10.50 mm

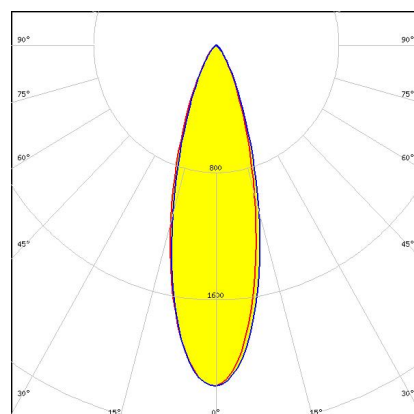
~45° wide beam optimized for Citizen CL-L400. Assembly with holder and installation tape.

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.

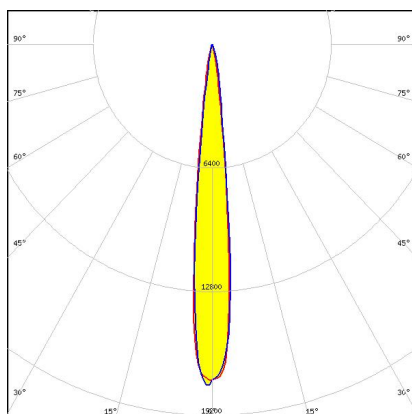
CP12685_TINA2-M



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

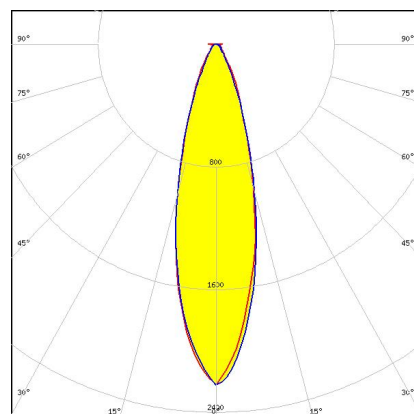
~14° spot beam optimized for CREE XP-E. Assembly with holder and installation tape.

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

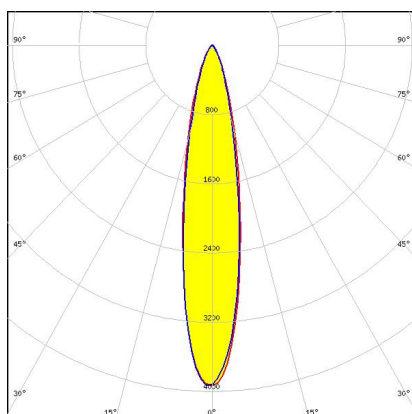


Dimensions: 16.1 mm x 16.1 mm
Height: 10.10 mm

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

PRODUCTS:

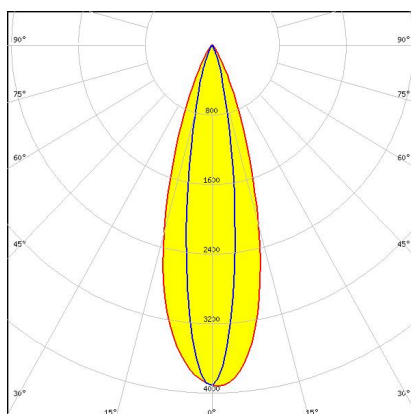
CP12683_TINA2-D



Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

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

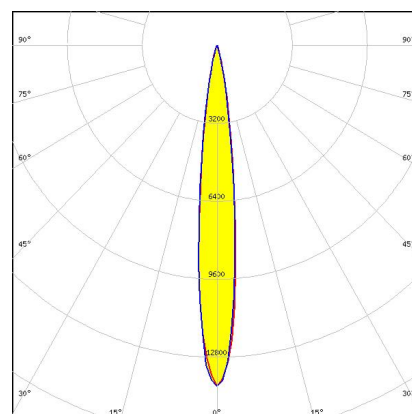
CA12379_TINA2-O



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.

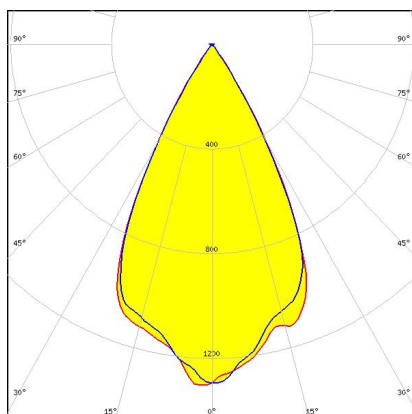
CA11420_TINA2-D



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.

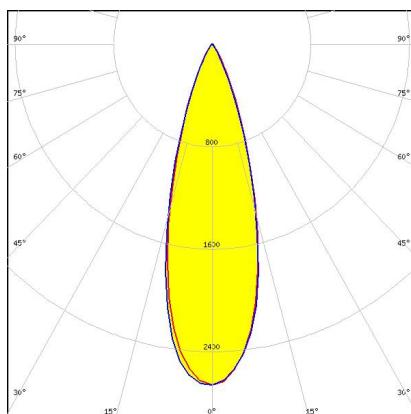
CP12681_TINA2-W



Dimensions: 16.1 mm x 16.1 mm
Height: 9.65 mm

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

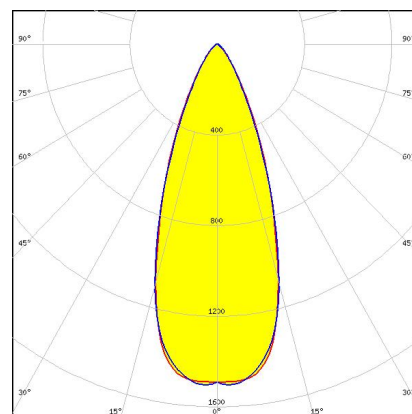
CA12377_TINA2-M



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

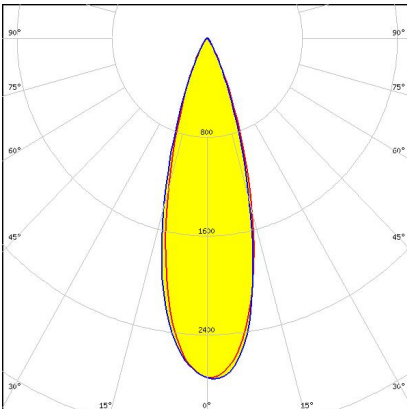


Dimensions: 16.1 mm x 16.1 mm
Height: 11.00 mm

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

PRODUCTS:

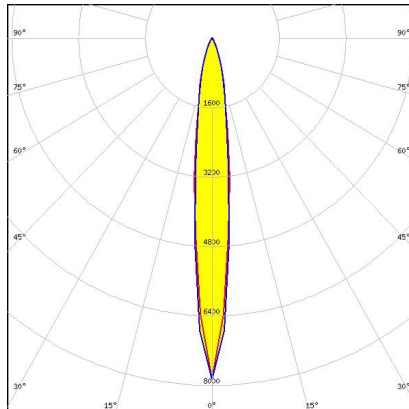
CP12679_TINA2-M



Dimensions: 16.1 mm x 16.1 mm
Height: 9.65 mm

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

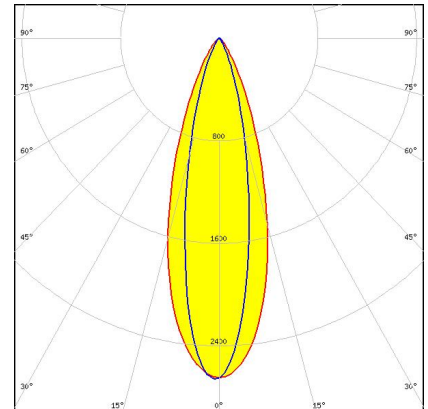
CA12375_TINA2-D



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.

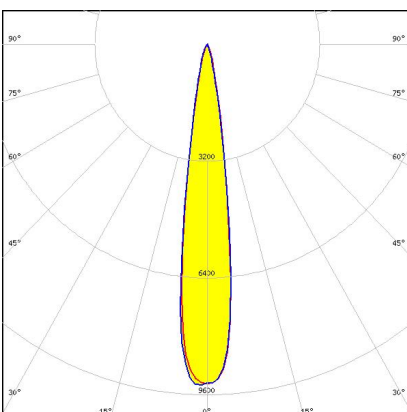
CA11173_TINA2-O



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.

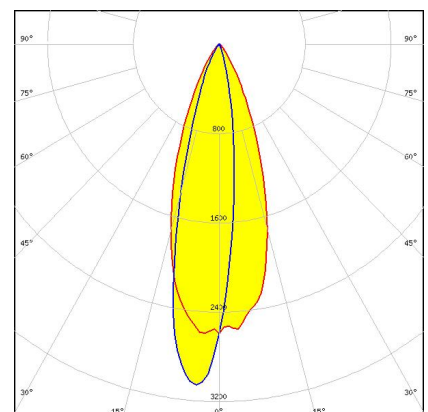
CA12350_TINA2-W



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

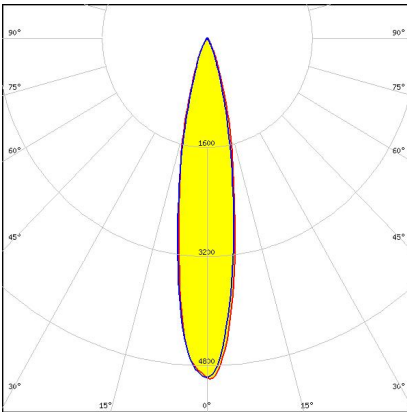


Dimensions: 16.0 mm x 16.0 mm
Height: 9.50 mm

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

PRODUCTS:

CA11171_TINA2-RS

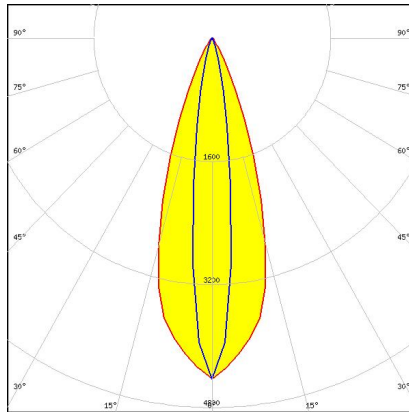


Dimensions: 16.1 mm x 16.1 mm

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.

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.

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