

ANGELA-XW

White version with ~70° wide beam

TECHNICAL SPECIFICATIONS:

Dimensions Ø 119.5 mm

Height 74.3 mm

Fastening socket

Colour white

Box size 480 x 280 x 300 mm

Box weight 8.1 kg

Quantity in Box 180 pcs

ROHS compliant yes 1

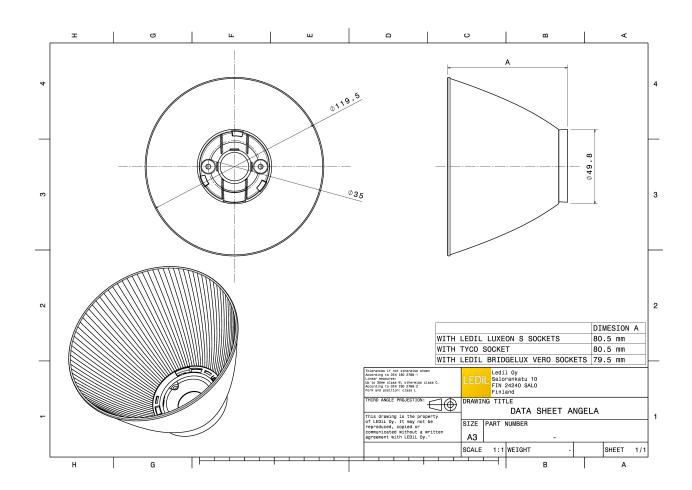


MATERIAL SPECIFICATIONS:

Component Type Material Colour Coating

ANGELA-XW Reflector HRPC white





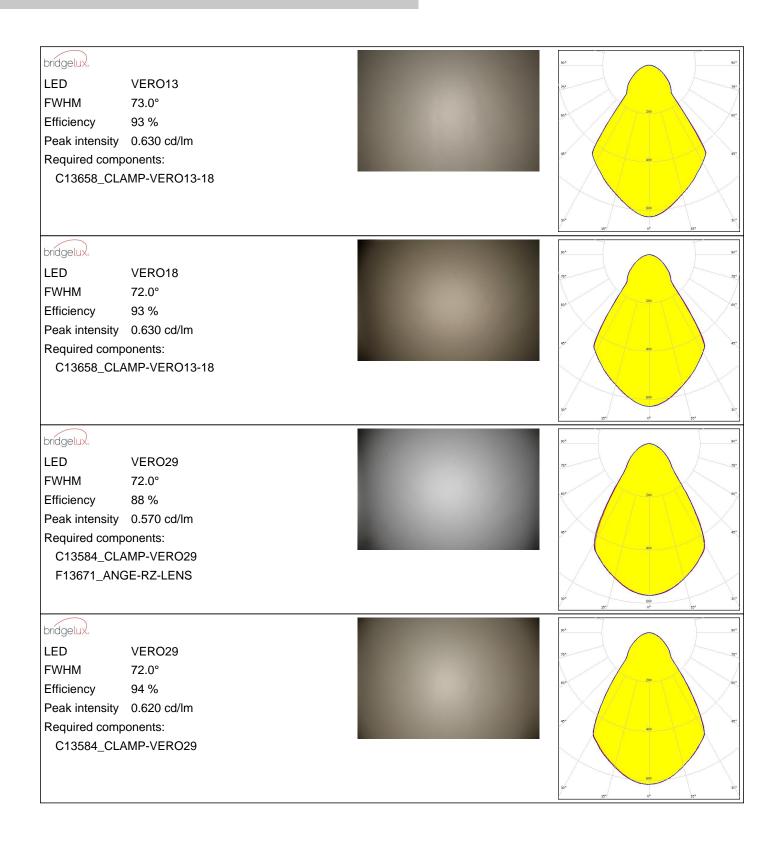


PHOTOMETRIC DATA (MEASURED):





PHOTOMETRIC DATA (MEASURED):





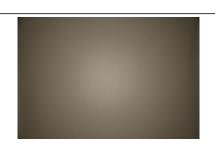
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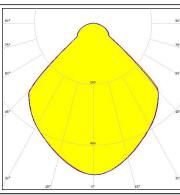
CITIZEN

LED CLL02x/CLU02x (LES10)

FWHM 72.0°
Efficiency 93 %
Peak intensity 0.640 cd/lm
Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1





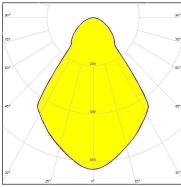
CITIZEN

LED CLL03x/CLU03x

FWHM 72.0°
Efficiency 93 %
Peak intensity 0.630 cd/lm
Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 433 Typ L1





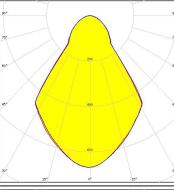
CITIZEN

LED CLL03x/CLU03x

FWHM 70.0°
Efficiency 93 %
Peak intensity 0.700 cd/lm
Required components:

IDEAL: 50-2103CT + 50-2100AN





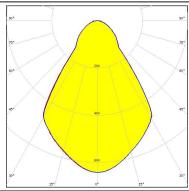
CITIZEN

LED CLL04x/CLU04x

FWHM 70.0°
Efficiency 93 %
Peak intensity 0.640 cd/lm
Required components:
C13584_CLAMP-VERO29

Bender Wirth: 431 Typ L3







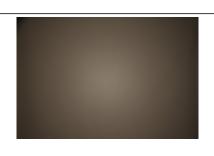
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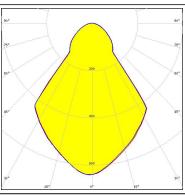
CITIZEN

LED CLU700/701

FWHM 73.0°
Efficiency 93 %
Peak intensity 0.640 cd/lm
Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1





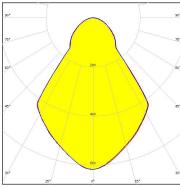
CITIZEN

LED CLU720/721

FWHM 72.0°
Efficiency 93 %
Peak intensity 0.620 cd/lm
Required components:

TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



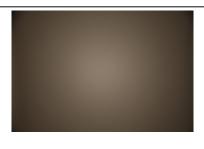


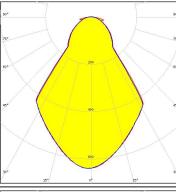
CITIZEN

LED CLU720/721

FWHM 70.0°
Efficiency 94 %
Peak intensity 0.640 cd/lm
Required components:

IDEAL: 50-2103CT + 50-2100AN



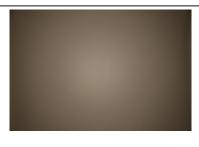


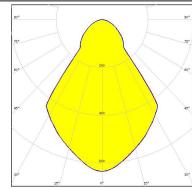
CITIZEN

LED CLU720/721

FWHM 72.0°
Efficiency 93 %
Peak intensity 0.640 cd/lm
Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 433 Typ L1







PHOTOMETRIC DATA (MEASURED):

CREE 💠

LED CMA2550

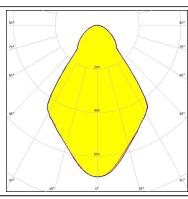
FWHM 71.0° Efficiency 94 %

Peak intensity 0.690 cd/lm

Required components:

C14036_CLAMP_CXA25-30





CREE 🚓

LED CMA3090

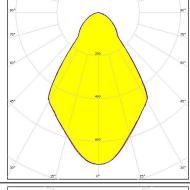
FWHM 70.0° Efficiency 94 %

Peak intensity 0.700 cd/lm

Required components:

C14036_CLAMP_CXA25-30





CREE \$

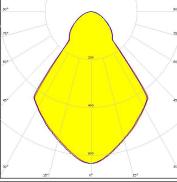
LED CXA/B 15xx

FWHM 73.0° Efficiency 93 % Peak intensity 0.630 cd/lm

Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 441 Typ L1





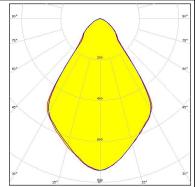
CREE \$

LED CXA/B 1816 & CXA/B 1820 & CXA 1850

FWHM 72.0°
Efficiency 94 %
Peak intensity 0.740 cd/lm
Required components:

C14123_CLAMP-CXA15-18







PHOTOMETRIC DATA (MEASURED):

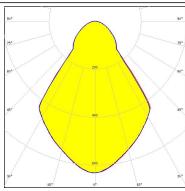
CREE 🚓

LED CXA/B 1816 & CXA/B 1820 & CXA 1850

FWHM 72.0°
Efficiency 92 %
Peak intensity 0.630 cd/lm
Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 437 Typ L1





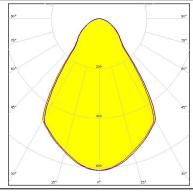
CREE &

LED CXA/B 3590

FWHM 72.0°
Efficiency 94 %
Peak intensity 0.610 cd/lm
Required components:

IDEAL: 50-2303CR + 50-2300AN





Published: 30/04/2018

8/23

EVERLIGHT

LED CHI3030 19W

FWHM 71.0°
Efficiency 91 %
Peak intensity 0.500 cd/lm
Required components:

C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 468 Typ L3



EVERLIGHT

LED CHI3030 29W

FWHM 71.0°
Efficiency 90 %
Peak intensity 0.600 cd/lm
Required components:

C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 468 Typ L3





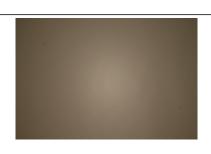
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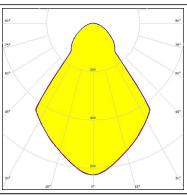


LED LUXEON CoB 1202/1203

FWHM 73.0° Efficiency 93 % Peak intensity 0.600 cd/lm Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 438 Typ L1

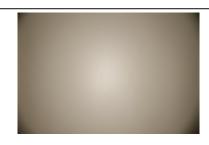


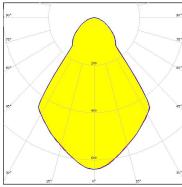


M LUMILEDS

LED LUXEON CoB 1204/1205

FWHM 72.0° 93 % Efficiency Peak intensity 0.600 cd/lm Required components:





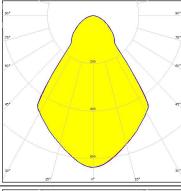
MUMILEDS

LED LUXEON CoB 1208

FWHM 71.0° Efficiency 93 % Peak intensity 0.600 cd/lm Required components:

TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



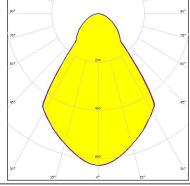


M LUMILEDS

LED LUXEON CoB 1211

FWHM 72.0° 93 % Efficiency Peak intensity 0.630 cd/lm Required components: C13584_CLAMP-VERO29 Bender Wirth: 431 Typ L3







PHOTOMETRIC DATA (MEASURED):

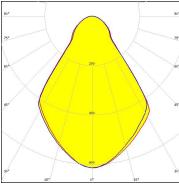


LED LUXEON K12

FWHM 72.0°
Efficiency 89 %
Peak intensity 0.600 cd/lm
Required components:
F13671_ANGE-RZ-LENS

TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1





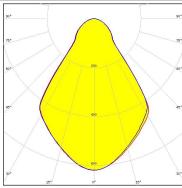
MUMILEDS

LED LUXEON K16

FWHM 72.0°
Efficiency 88 %
Peak intensity 0.600 cd/lm
Required components:
F13671_ANGE-RZ-LENS

TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1





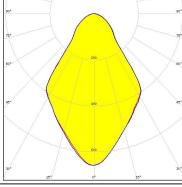
ELUMINUS

LED CDM-14 (Dim-To-Warm)

FWHM 71.0°
Efficiency 87 %
Peak intensity 0.660 cd/lm
Required components:

C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 491 Typ L2





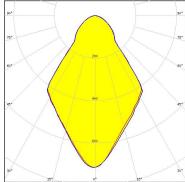
LUMINUS

LED CDM-14 (Dim-To-Warm)

FWHM 71.0°
Efficiency 92 %
Peak intensity 0.700 cd/lm
Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 491 Typ L2







PHOTOMETRIC DATA (MEASURED):

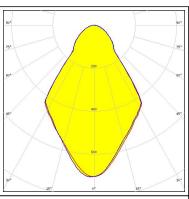


LED CDM-18 (Dim-To-Warm)

FWHM 70.0°
Efficiency 93 %
Peak intensity 0.700 cd/lm
Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 491 Typ L2





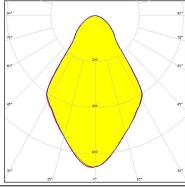
LUMINUS

LED CDM-18 (Dim-To-Warm)

FWHM 70.0°
Efficiency 88 %
Peak intensity 0.660 cd/lm
Required components:

C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 491 Typ L2





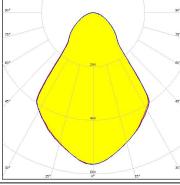
ELUMINUS

LED CDM-9 (Dim-To-Warm)

FWHM 73.0°
Efficiency 86 %
Peak intensity 0.560 cd/lm
Required components:

C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 490 Typ L1





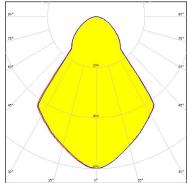
LUMINUS

LED CDM-9 (Dim-To-Warm)

FWHM 73.0°
Efficiency 92 %
Peak intensity 0.600 cd/lm
Required components:

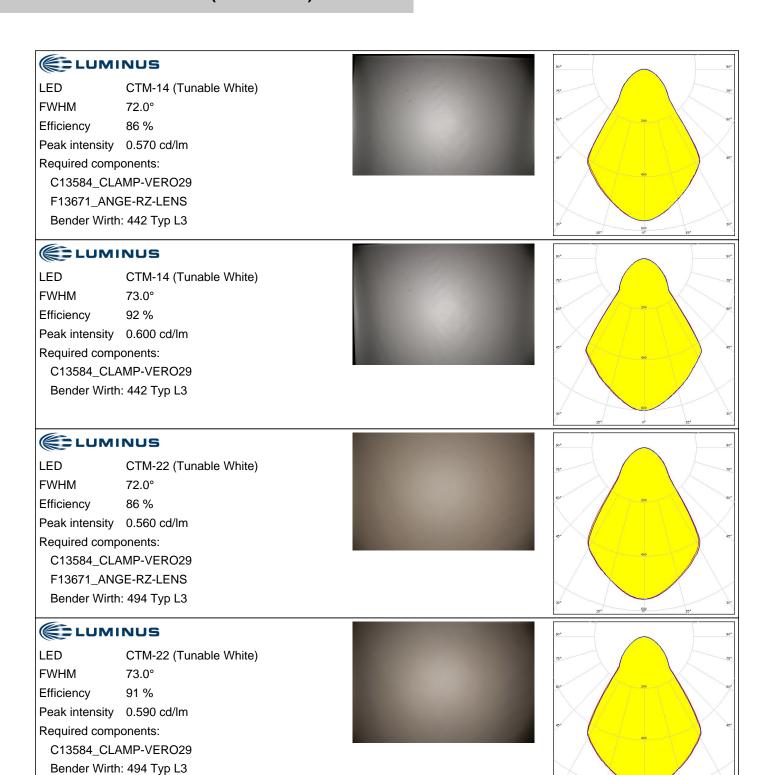
C13658_CLAMP-VERO13-18 Bender Wirth: 490 Typ L1







PHOTOMETRIC DATA (MEASURED):





PHOTOMETRIC DATA (MEASURED):



LED CXM-14

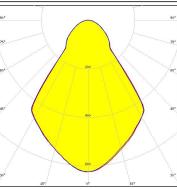
FWHM 72.0° Efficiency 93 %

Peak intensity 0.630 cd/lm

Required components:

TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



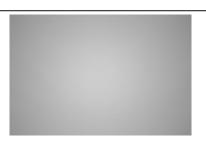


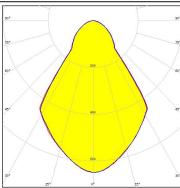
WNICHIA

LED COB J-Type

FWHM 71.0° 91 % Efficiency Peak intensity 0.650 cd/lm Required components:

IDEAL: 50-2103NC + 50-2100AN





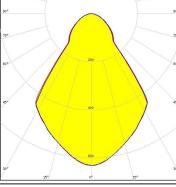
WNICHIA

LED COB J-Type

FWHM 72.0° Efficiency 93 % Peak intensity 0.630 cd/lm Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 463 Typ L2





WNICHIA

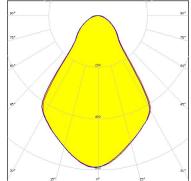
LED COB J-Type

FWHM 71.0° 87 % Efficiency Peak intensity 0.590 cd/lm Required components:

F13671_ANGE-RZ-LENS

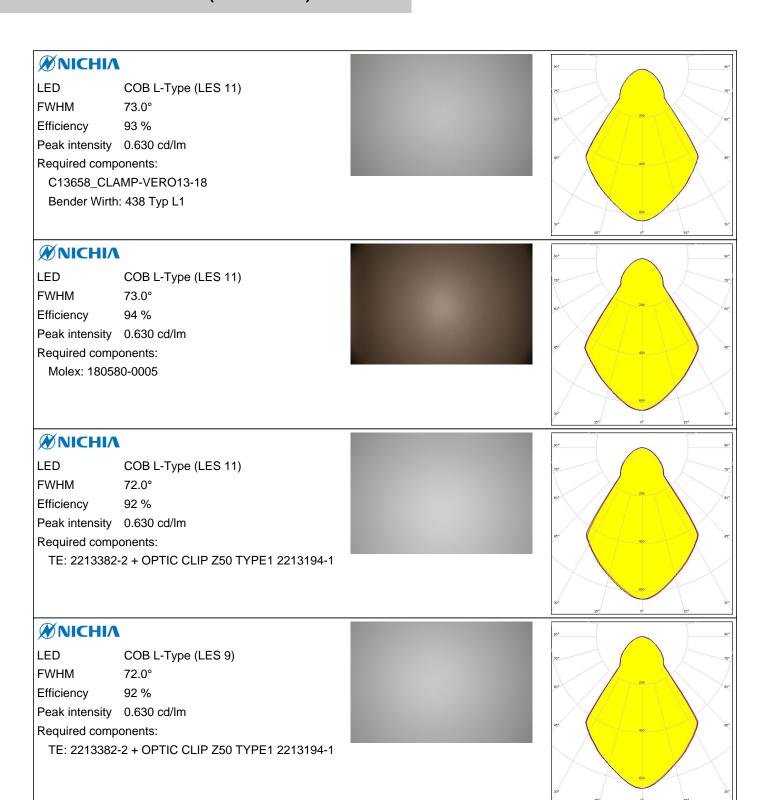
IDEAL: 50-2103NC + 50-2100AN







PHOTOMETRIC DATA (MEASURED):





PHOTOMETRIC DATA (MEASURED):

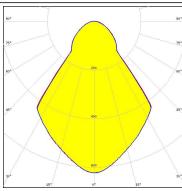
WNICHIA

LED COB L-Type (LES 9)

FWHM 73.0° Efficiency 94 % Peak intensity 0.620 cd/lm Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 438 Typ L1



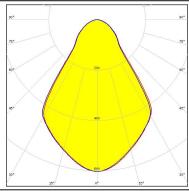


LED PrevaLED Core Z4 LES19

FWHM 71.0° 88 % Efficiency Peak intensity 0.600 cd/lm Required components: F13671_ANGE-RZ-LENS

TE: OPTIC CLIP Z50 TYPE1 2213194-1





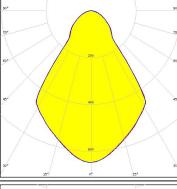
OSRAM

LED PrevaLED Core Z4 LES19

FWHM 71.0° Efficiency 93 % Peak intensity 0.650 cd/lm Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1





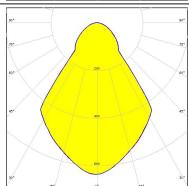
OSRAM Opto Semiconductors

LED

Soleriq S13 **FWHM** 72.0° 93 % Efficiency Peak intensity 0.640 cd/lm Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 437 Typ L1







PHOTOMETRIC DATA (MEASURED):

OSRAM

LED Soleriq S13

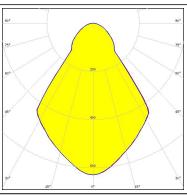
FWHM 72.0° Efficiency 93 %

Peak intensity 0.630 cd/lm

Required components:

TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1





OSRAM Opto Semiconductors

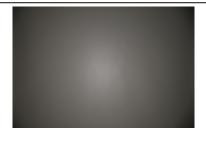
LED Soleriq S19

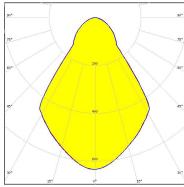
FWHM 71.0° Efficiency 92 %

Peak intensity 0.630 cd/lm

Required components:

C13584_CLAMP-VERO29 Bender Wirth: 462 Typ L3





OSRAM Opto Semicondi

Opto Semiconductors
LED

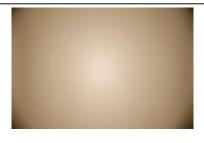
Soleriq S19

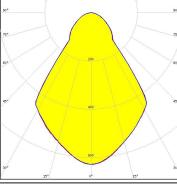
FWHM 72.0° Efficiency 92 %

Required components:

Peak intensity 0.630 cd/lm

TE: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1





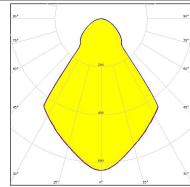
PHILIPS

LED Fortimo SLM L09 Standard

FWHM 72.0°
Efficiency 92 %
Peak intensity 0.630 cd/lm
Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1







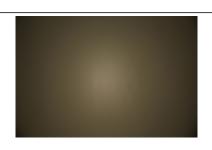
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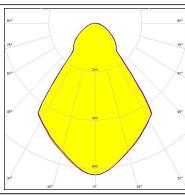
PHILIPS

LED Fortimo SLM L13 Standard

FWHM 72.0° Efficiency 92 % Peak intensity 0.630 cd/lm Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1



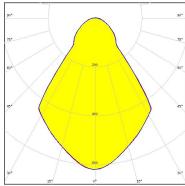


LED Fortimo SLM L15 Standard

FWHM 72.0° 90 % Efficiency Peak intensity 0.620 cd/lm Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1





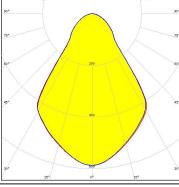
PHILIPS

LED Fortimo SLM L15 Standard

FWHM 72.0° 87 % Efficiency Peak intensity 0.600 cd/lm Required components: F13671_ANGE-RZ-LENS

TE: OPTIC CLIP Z50 TYPE1 2213194-1





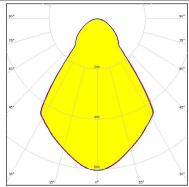
PHILIPS

LED Fortimo SLM L19 Standard

FWHM 72.0° 89 % Efficiency Peak intensity 0.600 cd/lm Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1







PHOTOMETRIC DATA (MEASURED):

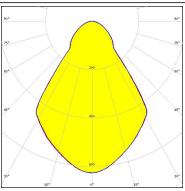
SAMSUNG

LED LC026B / 033B / 040B

FWHM 72.0°
Efficiency 92 %
Peak intensity 0.630 cd/lm
Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 450 Typ L2

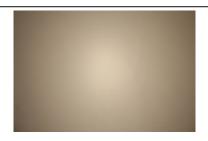


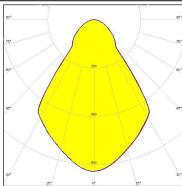


SAMSUNG

LED LC026B / 033B / 040B

FWHM 72.0°
Efficiency 93 %
Peak intensity 0.630 cd/lm
Required components:





SAMSUNG

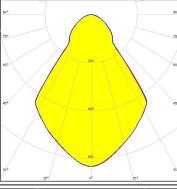
LED LC040C

FWHM 72.0° Efficiency 92 %

Peak intensity 0.630 cd/lm Required components:

TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1





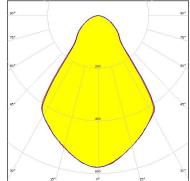


LED AC Zhaga COB

FWHM 72.0°
Efficiency 87 %
Peak intensity 0.580 cd/lm
Required components:
F13671_ANGE-RZ-LENS

Optosource: SEHSMJD-A







PHOTOMETRIC DATA (MEASURED):

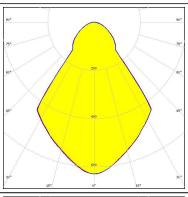
TRIDONIC

LED SLE G5 LES11

FWHM 73.0°
Efficiency 92 %
Peak intensity 0.630 cd/lm
Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1





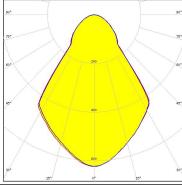
LIGHTING SOLUTIONS

LED WU-M-461
FWHM 72.0°
Efficiency 92 %
Peak intensity 0.600 cd/lm

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1





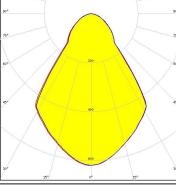
LIGHTING SOLUTIONS

LED WU-M-462 FWHM 72.0° Efficiency 92 %

Peak intensity 0.600 cd/lm

Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1





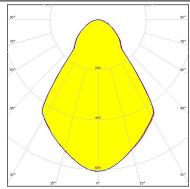
LIGHTING SOLUTIONS

LED WU-M-464 FWHM 73.0° Efficiency 92 %

Peak intensity 0.600 cd/lm Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1







PHOTOMETRIC DATA (MEASURED):



LED WU-M-484

FWHM 73.0° Efficiency

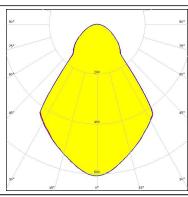
92 %

Peak intensity 0.608 cd/lm

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1





5 LIGHTING SOLUTIONS

LED WU-M-485

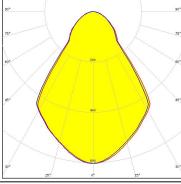
FWHM 73.0° 92 % Efficiency

Peak intensity 0.600 cd/lm

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1





LIGHTING

LED WU-M-486

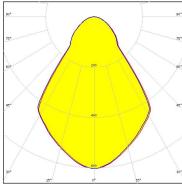
FWHM 73.0° Efficiency 92 %

Peak intensity 0.600 cd/lm

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1







PHOTOMETRIC DATA (SIMULATED):

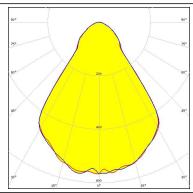
bridgelux

LED V10 Gen7
FWHM 72.0°
Efficiency 86 %

Peak intensity 0.580 cd/lm

Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1



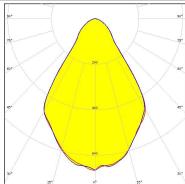
bridgelux.

LED V13 Gen7
FWHM 69.0°
Efficiency 86 %

Peak intensity 0.667 cd/lm

Required components:

IDEAL: 50-2103CT + 50-2100AN

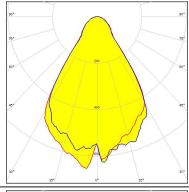


bridgelux

LED V22 Gen7
FWHM 66.0°
Efficiency 80 %
Peak intensity 0.658 cd/lm

Required components:

IDEAL: 50-2204-CT + 50-2100AN



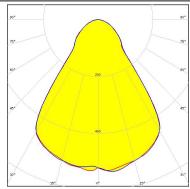
CREE 🕏

LED CXA/B 1830

FWHM 73.0°
Efficiency 88 %
Peak intensity 0.540 cd/lm

Required components:

TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1





PHOTOMETRIC DATA (SIMULATED):

ELUMINUS

LED CXM-14 FWHM 72.0° Efficiency 93 %

Peak intensity 0.630 cd/lm

Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 433 Typ L1

ELUMINUS

LED CXM-9 FWHM 72.0° Efficiency 93 %

Peak intensity 0.640 cd/lm

Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1

SEOUL SEMICONDUCTOR

LED ZC12/18
FWHM 72.0°
Efficiency 93 %
Peak intensity 0.630 cd/lm

Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 433 Typ L1

SEOUL SEMICONDUCTOR

LED ZC4/6 FWHM 72.0° Efficiency 93 %

Peak intensity 0.640 cd/lm

Required components:

C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1



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.

Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.

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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Last update: 28/05/2018 Subject to change without prior notice Published: 30/04/2018 23/23