## TINA-D

**~16° diffused spot beam optimized for LUXEON Rebel. Assembly with holder, installation tape and location pins.**



### SPECIFICATION:

| | |
|---|---|
| Dimensions | Ø 16.1 mm |
| Height | 9.4 mm |
| Fastening | tape, pin |
| ROHS compliant | yes ⓘ |

### MATERIALS:

| Component | Type | Material | Colour | Finish |
|---|---|---|---|---|
| TINA-D | Single lens | PMMA | clear | |
| TINA-H-TAPE-RE-BLK | Holder | PC | black | |
| TINA-TAPE3 | Tape | Acrylic foam | black | |

### ORDERING INFORMATION:

| Component | | Qty in box | MOQ | MPQ | Box weight (kg) |
|---|---|---|---|---|---|
| FA11209_TINA-D | Single lens | 2016 | 288 | 144 | 4.0 |

» Box size:

Tape

Ø2

8.6 c/c

5.67

Bottom view

Isometric view

9.01 w/o tape

9.41 w/ tape

0.98

Front view

Ø16.1

Top view

Materials
Lens: PMMA
Holder: PC
Tape: Acrylic foam
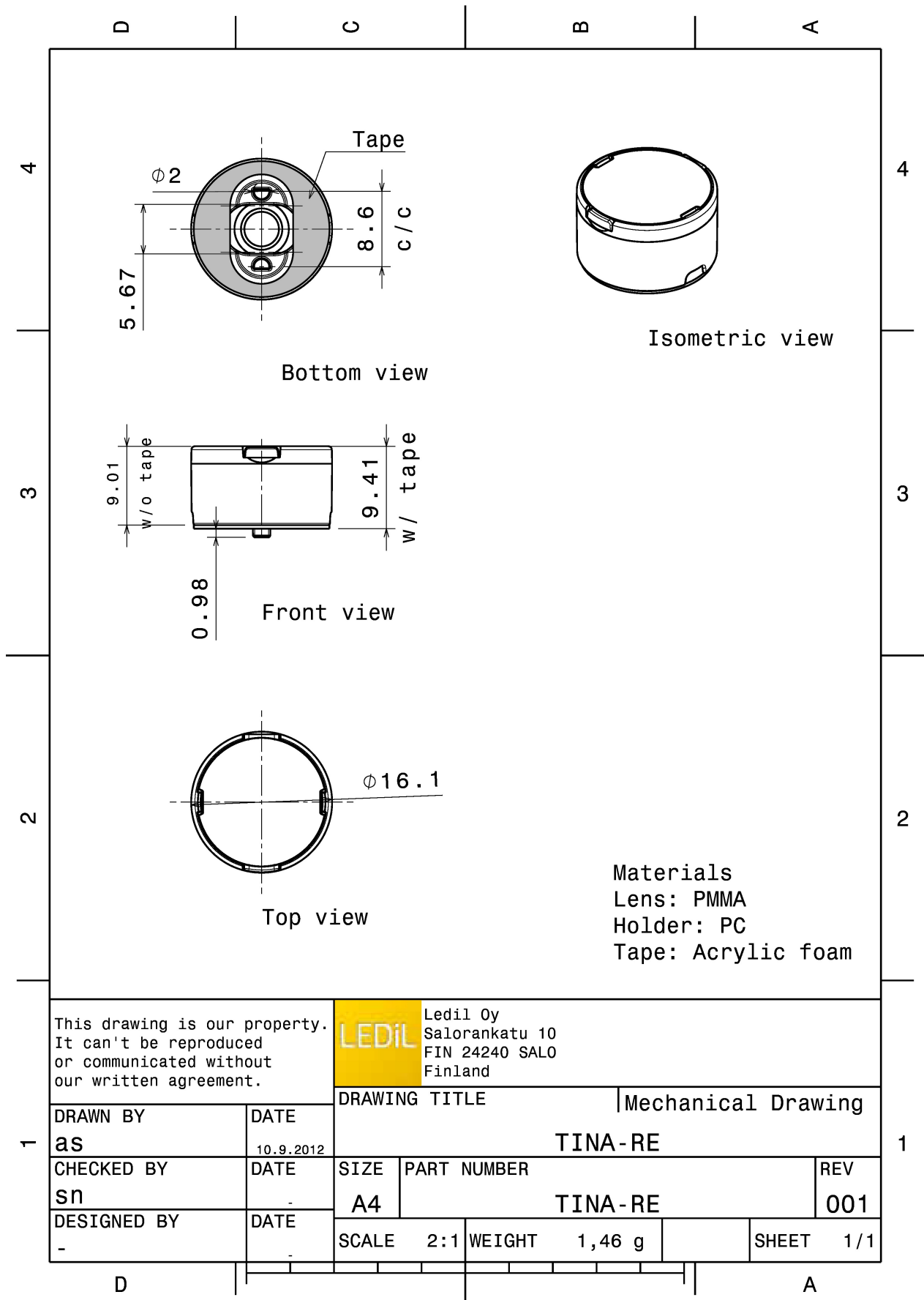
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Ledil Oy
Salorankatu 10
FIN 24240 SALO
Finland

| | | DRAWING TITLE | Mechanical Drawing |
|---|---|---|---|
| DRAWN BY | DATE | | |
| as | 10.9.2012 | | TINA-RE |
| CHECKED BY | DATE | SIZE | PART NUMBER | REV |
| sn | - | A4 | TINA-RE | 001 |
| DESIGNED BY | DATE | | | |
| - | - | SCALE 2:1 | WEIGHT 1,46 g | SHEET 1/1 |

See also our general installation guide: www.ledil.com/installation_guide
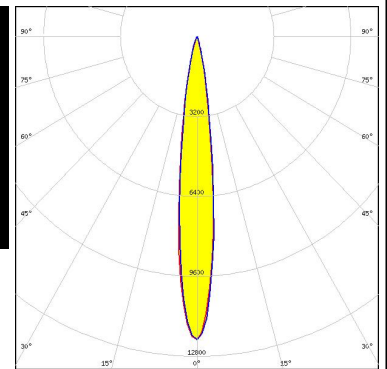
## OPTICAL RESULTS (MEASURED):

### CREE LEDs

| | |
|---|---|
| LED | XB-H |
| FWHM / FWTM | 17.0° / 35.0° |
| Efficiency | 87 % |
| Peak intensity | 7.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



### LUMILEDS
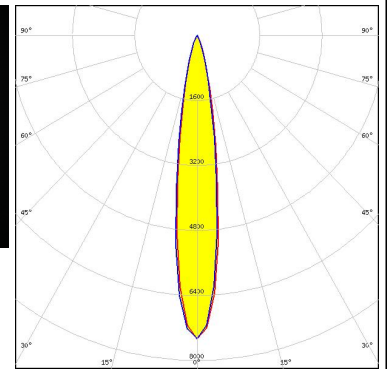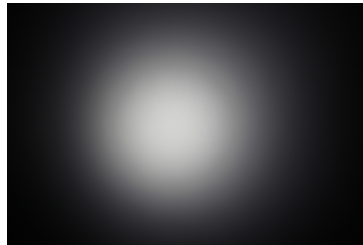
| | |
|---|---|
| LED | LUXEON Rebel |
| FWHM / FWTM | 15.0° / 34.0° |
| Efficiency | 92 % |
| Peak intensity | 5.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

### LUMILEDS

| | |
|---|---|
| LED | LUXEON Z ES |
| FWHM / FWTM | 14.0° / 28.0° |
| Efficiency | 89 % |
| Peak intensity | 12 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



FA11209_TINA-D_(Luxeon_Z_ES)

## OPTICAL RESULTS (SIMULATED):

### CREE LEDs

| | |
|---|---|
| LED | XB-D |
| FWHM / FWTM | 18.0° / 34.0° |
| Efficiency | 89 % |
| Peak intensity | 7.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



### LUMILEDS
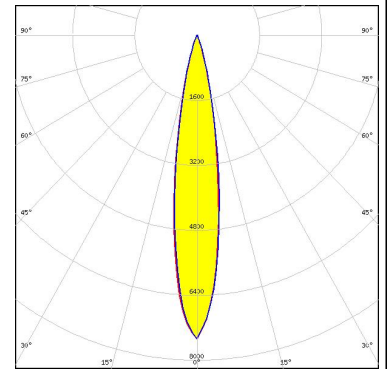
| | |
|---|---|
| LED | LUXEON HL1Z |
| FWHM / FWTM | 10.0° / 20.0° |
| Efficiency | 90 % |
| Peak intensity | 21.9 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



### OSRAM Opto Semiconductors
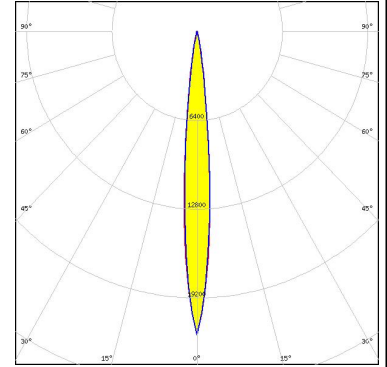
| | |
|---|---|
| LED | Duris E 2835 |
| FWHM / FWTM | 17.0° / 34.0° |
| Efficiency | 92 % |
| Peak intensity | 7.6 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



### OSRAM Opto Semiconductors
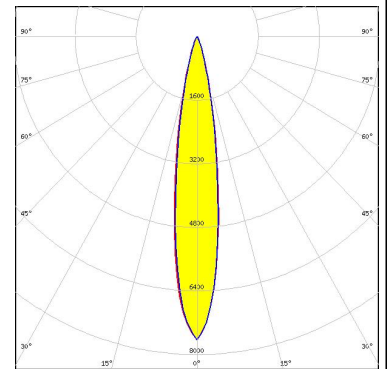
| | |
|---|---|
| LED | OSLON Signal |
| FWHM / FWTM | 12.0° / 26.0° |
| Efficiency | 92 % |
| Peak intensity | 13.8 cd/lm |
| LEDs/each optic | 1 |
| Light colour | Blue |
| Required components: | |
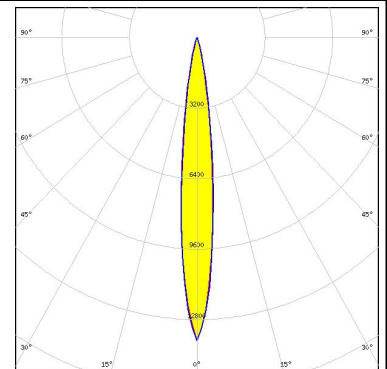
## OPTICAL RESULTS (SIMULATED):

**OSRAM** Opto Semiconductors

| | |
|---|---|
| LED | OSLON Square CSSRM2/CSSRM3 |
| FWHM / FWTM | 15.0° / 30.0° |
| Efficiency | 92 % |
| Peak intensity | 9.6 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |
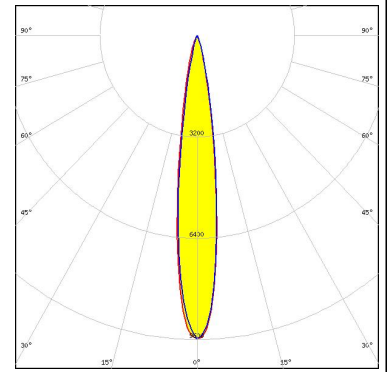


**OSRAM** Opto Semiconductors

| | |
|---|---|
| LED | OSLON SSL 80 |
| FWHM / FWTM | 12.0° / 30.0° |
| Efficiency | 90 % |
| Peak intensity | 10.6 cd/lm |
| LEDs/each optic | 1 |
| Light colour | Far Red |
| Required components: | |