

## SANDRA-12-O

~40° + 20° oval beam

## SPECIFICATION:

|                |         |
|----------------|---------|
| Dimensions     | Ø 67.0  |
| Height         | 11.1 mm |
| Fastening      | pin     |
| ROHS compliant | yes ⓘ   |

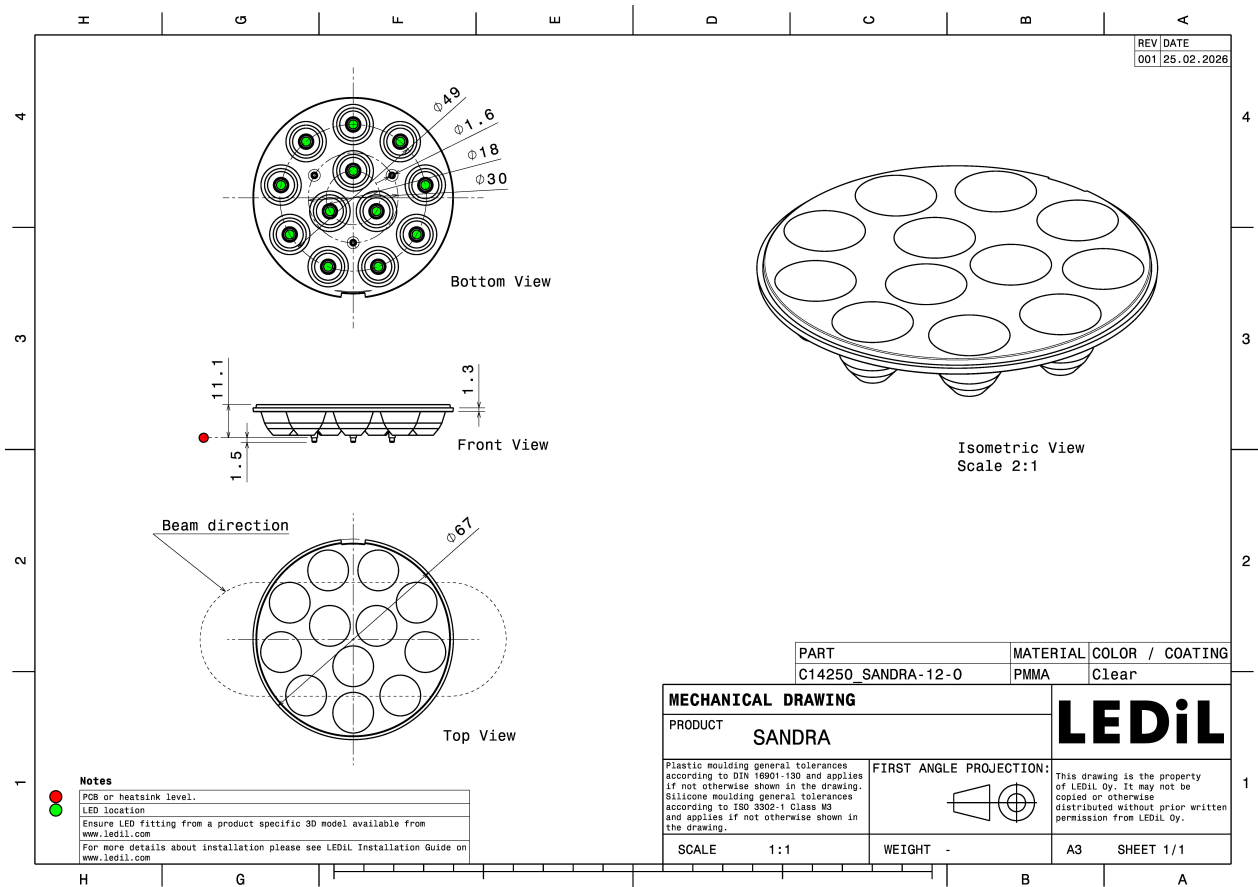
## MATERIALS:

| Component                      | Type       | Material | Colour | Finish | Length (mm) |
|--------------------------------|------------|----------|--------|--------|-------------|
| SANDRA-12-O                    | Multi-lens | PMMA     | clear  |        |             |
| » Box size: 480 x 280 x 300 mm |            |          |        |        |             |



## ORDERING INFORMATION:

| Component          | Type       | Qty in box | MOQ | MPQ | Box weight (kg) |
|--------------------|------------|------------|-----|-----|-----------------|
| C14250_SANDRA-12-O | Multi-lens | 306        |     | 18  | 7.4             |

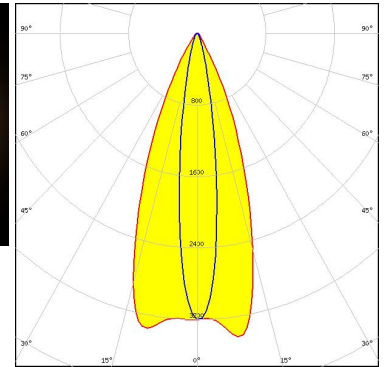
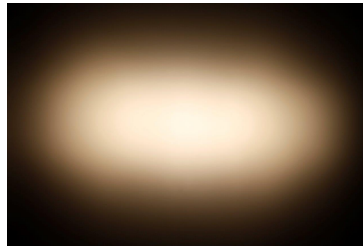


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

### OPTICAL RESULTS (MEASURED):



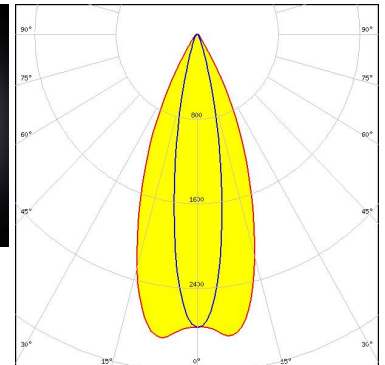
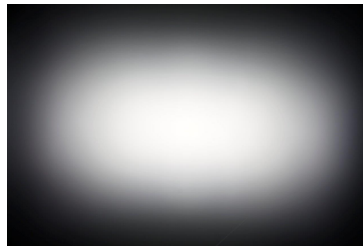
LED XP-E2  
FWHM / FWTM 40.0 + 15.0°  
Efficiency 91 %  
Peak intensity 3.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED XP-G2  
FWHM / FWTM 42.0 + 19.0° / 41.0 + 70.0°  
Efficiency 90 %  
Peak intensity 2.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

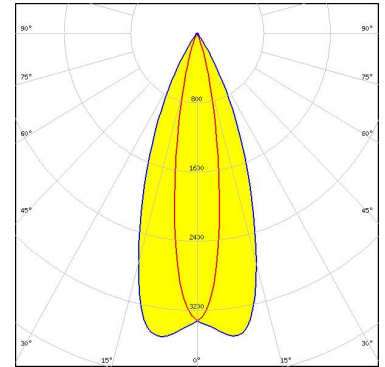


Light distribution files

### OPTICAL RESULTS (SIMULATED):



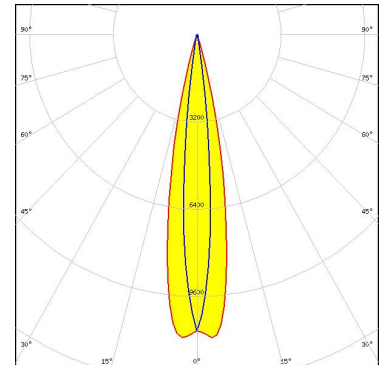
LED J Series 3030C  
FWHM / FWTM 18.0 + 41.0° / 36.0 + 64.0°  
Efficiency 97 %  
Peak intensity 3.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



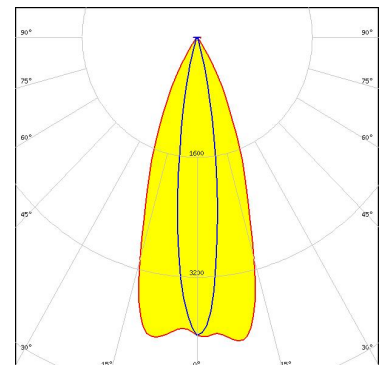
LED XB-D  
FWHM / FWTM 22.0 + 10.0° / 32.0 + 20.0°  
Efficiency 83 %  
Peak intensity 11.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED XB-D  
FWHM / FWTM 16.0 + 38.0° / 30.0 + 62.0°  
Efficiency 97 %  
Peak intensity 4.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

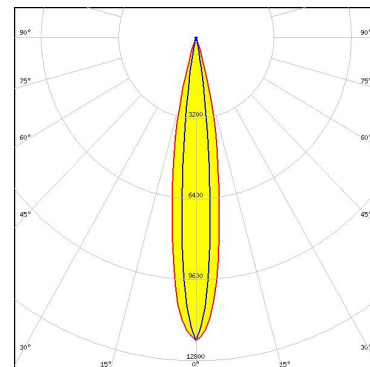


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



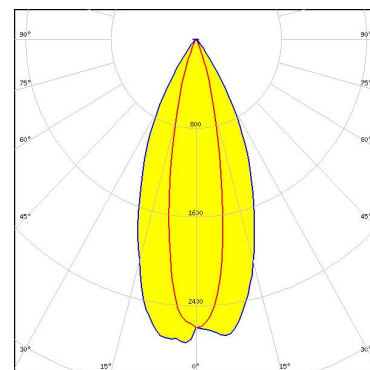
LED XD16  
 FWHM / FWTM 18.0 + 11.0° / 33.0 + 20.0°  
 Efficiency 94 %  
 Peak intensity 12 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



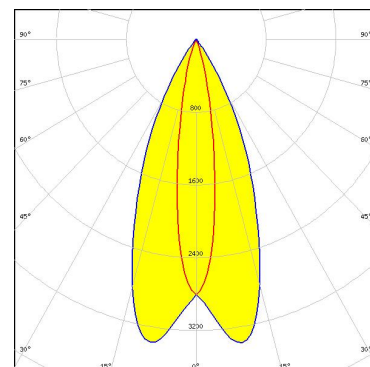
LED XP-G3  
 FWHM / FWTM 44.0 + 21.0° / 71.0 + 40.0°  
 Efficiency 94 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XP-G4  
 FWHM / FWTM 18.0 + 44.0° / 35.0 + 68.0°  
 Efficiency 97 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

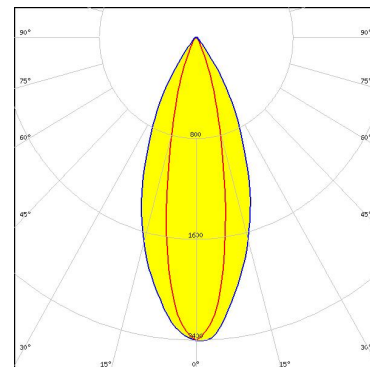


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



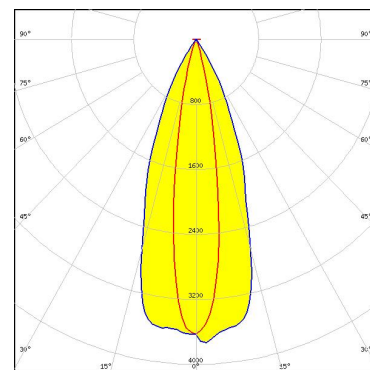
LED XP-L2  
 FWHM / FWTM 22.0 + 42.0° / 47.0 + 72.0°  
 Efficiency 94 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



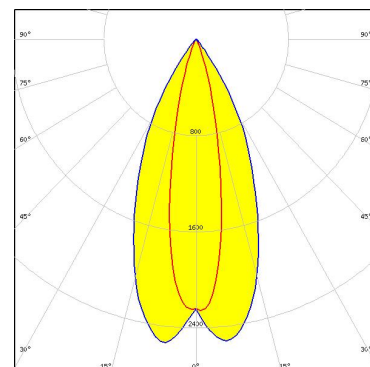
LED XT-E  
 FWHM / FWTM 39.0 + 17.0° / 65.0 + 32.0°  
 Efficiency 92 %  
 Peak intensity 3.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LUXEON HL2X  
 FWHM / FWTM 22.0 + 46.0° / 40.0 + 74.0°  
 Efficiency 95 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

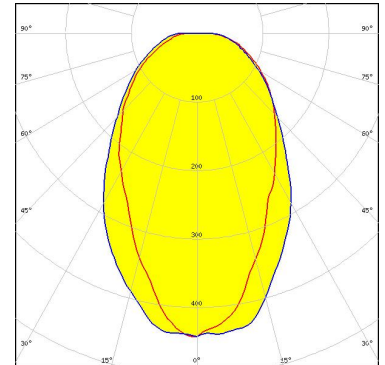


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



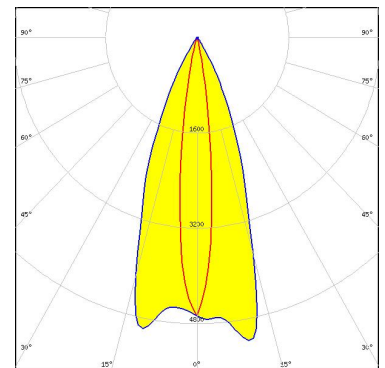
LED LUXEON HL2X-P  
 FWHM / FWTM 65.0 + 75.0° / 159.0 + 166.0°  
 Efficiency 86 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



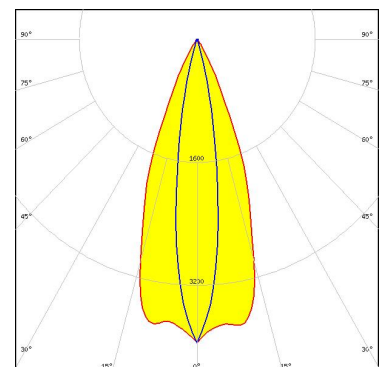
LED OSOLON SSL 150  
 FWHM / FWTM Asymmetric  
 Efficiency 98 %  
 Peak intensity 5.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED SFH 4715AS  
 FWHM / FWTM 40.0 + 16.0° / 58.0 + 28.0°  
 Efficiency 94 %  
 LEDs/each optic 1  
 Light colour/type IR  
 Required components:

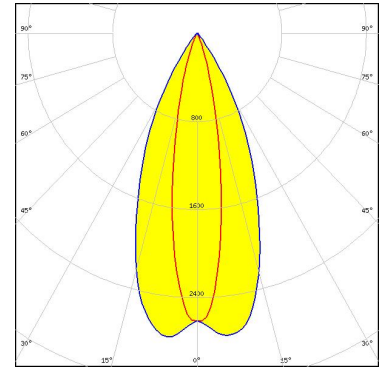


Light distribution files

### OPTICAL RESULTS (SIMULATED):

#### SAMSUNG

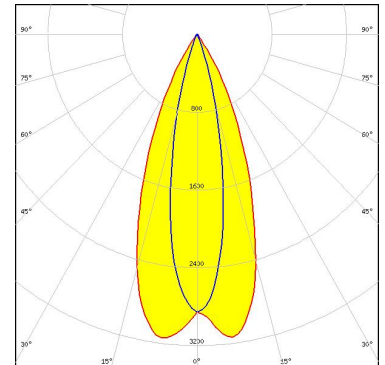
|                      |                             |
|----------------------|-----------------------------|
| LED                  | LH351C                      |
| FWHM / FWTM          | 20.0 + 46.0° / 39.0 + 71.0° |
| Efficiency           | 96 %                        |
| Peak intensity       | 2.8 cd/lm                   |
| LEDs/each optic      | 1                           |
| Light colour/type    | White                       |
| Required components: |                             |



Light distribution files



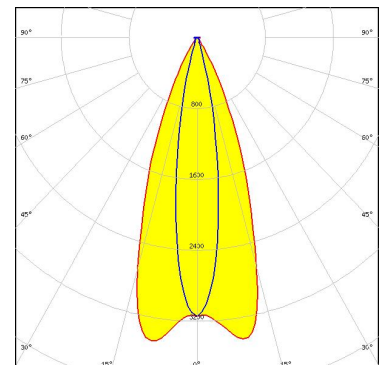
|                      |                             |
|----------------------|-----------------------------|
| LED                  | Z5M4                        |
| FWHM / FWTM          | 22.0 + 42.0° / 40.0 + 66.0° |
| Efficiency           | 95 %                        |
| Peak intensity       | 3.1 cd/lm                   |
| LEDs/each optic      | 1                           |
| Light colour/type    | White                       |
| Required components: |                             |



Light distribution files



|                      |                             |
|----------------------|-----------------------------|
| LED                  | Z8Y19                       |
| FWHM / FWTM          | 18.0 + 40.0° / 34.0 + 60.0° |
| Efficiency           | 93 %                        |
| Peak intensity       | 3.5 cd/lm                   |
| LEDs/each optic      | 1                           |
| Light colour/type    | White                       |
| Required components: |                             |



Light distribution files

### OPTICAL RESULTS (SIMULATED):



### 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:

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