

## PRODUCT DATASHEET

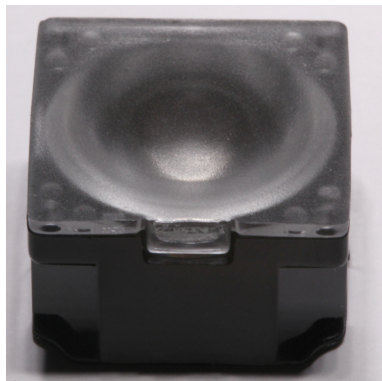
### Laura-XP series



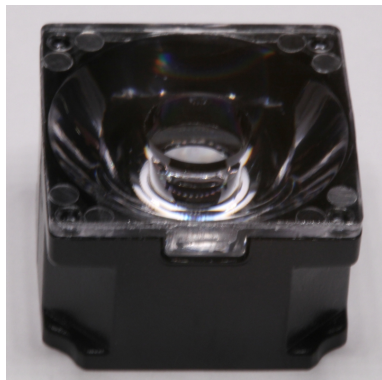
|                        |                                  |             |           |
|------------------------|----------------------------------|-------------|-----------|
| <b>Ordering number</b> | <b>CA11365</b>                   |             |           |
| <b>Description</b>     | <b>CA11365-Laura-O-XP-G-tape</b> |             |           |
| Family                 | Laura                            | FWHM        | 0 degrees |
| Type                   | Lens                             | Efficiency  | -         |
| LED                    | XP-G                             | cd/Im       | -         |
| Color                  | Black                            | Gerber File | Available |
| Diameter               | 21.6 mm                          |             |           |
| Height                 | 13.1 mm                          |             |           |
| Style                  | Square                           |             |           |
| Optic Material         | PMMA                             |             |           |
| Holder Material        | PC                               |             |           |
| Fastening              | Tape                             |             |           |
| Status                 | Ready                            |             |           |



|                        |                                       |             |           |
|------------------------|---------------------------------------|-------------|-----------|
| <b>Ordering number</b> | <b>CA11525</b>                        |             |           |
| <b>Description</b>     | <b>CA11525_Laura-Refl-W-XP-G-tape</b> |             |           |
| Family                 | Laura                                 | FWHM        | 0 degrees |
| Type                   | Reflector                             | Efficiency  | -         |
| LED                    | XP-G                                  | cd/Im       | -         |
| Color                  | Black                                 | Gerber File | Available |
| Diameter               | 21.6 mm                               |             |           |
| Height                 | 13.1 mm                               |             |           |
| Style                  | Square                                |             |           |
| Optic Material         | PC                                    |             |           |
| Holder Material        | PC                                    |             |           |
| Fastening              | Tape                                  |             |           |
| Status                 | Ready                                 |             |           |



|                        |                                  |             |           |
|------------------------|----------------------------------|-------------|-----------|
| <b>Ordering number</b> | <b>CA11355</b>                   |             |           |
| <b>Description</b>     | <b>CA11355-Laura-M-XP-G-tape</b> |             |           |
| Family                 | Laura                            | FWHM        | 0 degrees |
| Type                   | Lens                             | Efficiency  | -         |
| LED                    | XP-G                             | cd/Im       | -         |
| Color                  | Black                            | Gerber File | Available |
| Diameter               | 21.6 mm                          |             |           |
| Height                 | 13.1 mm                          |             |           |
| Style                  | Square                           |             |           |
| Optic Material         | PMMA                             |             |           |
| Holder Material        | PC                               |             |           |
| Fastening              | -                                |             |           |
| Status                 | Ready                            |             |           |



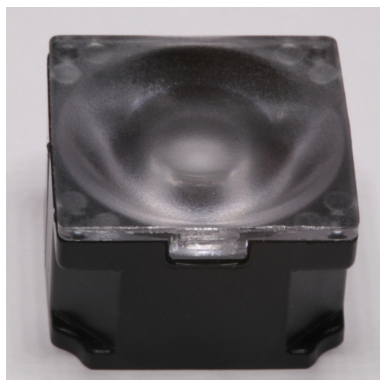
|                        |                                   |             |            |
|------------------------|-----------------------------------|-------------|------------|
| <b>Ordering number</b> | <b>CA11353</b>                    |             |            |
| <b>Description</b>     | <b>CA11353_Laura-RS-XP-G-tape</b> |             |            |
| Family                 | Laura                             | FWHM        | 11 degrees |
| Type                   | Lens                              | Efficiency  | -          |
| LED                    | XP-G                              | cd/Im       | -          |
| Color                  | Black                             | Gerber File | Available  |
| Diameter               | 21.6 mm                           |             |            |
| Height                 | 13.1 mm                           |             |            |
| Style                  | Square                            |             |            |
| Optic Material         | PMMA                              |             |            |
| Holder Material        | PC                                |             |            |
| Fastening              | -                                 |             |            |
| Status                 | Ready                             |             |            |

# PRODUCT DATASHEET

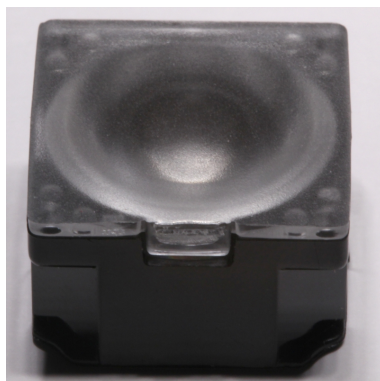
## Laura-XP series



|                        |                                   |             |            |
|------------------------|-----------------------------------|-------------|------------|
| <b>Ordering number</b> | <b>CA11643</b>                    |             |            |
| <b>Description</b>     | <b>CA11643_Laura-SS-XP-G-tape</b> |             |            |
| Family                 | Laura                             | FWHM        | 11 degrees |
| Type                   | Lens                              | Efficiency  | -          |
| LED                    | XP-G                              | cd/Im       | -          |
| Color                  | Black                             | Gerber File | Available  |
| Diameter               | 21.6 mm                           |             |            |
| Height                 | 13.1 mm                           |             |            |
| Style                  | Square                            |             |            |
| Optic Material         | PMMA                              |             |            |
| Holder Material        | PC                                |             |            |
| Fastening              | Tape                              |             |            |
| Status                 | Ready                             |             |            |



|                        |                                  |             |            |
|------------------------|----------------------------------|-------------|------------|
| <b>Ordering number</b> | <b>CA11360</b>                   |             |            |
| <b>Description</b>     | <b>CA11360-Laura-D-XP-G-tape</b> |             |            |
| Family                 | Laura                            | FWHM        | 16 degrees |
| Type                   | Lens                             | Efficiency  | -          |
| LED                    | XP-G                             | cd/Im       | -          |
| Color                  | Black                            | Gerber File | Available  |
| Diameter               | 21.6 mm                          |             |            |
| Height                 | 13.1 mm                          |             |            |
| Style                  | Square                           |             |            |
| Optic Material         | PMMA                             |             |            |
| Holder Material        | PC                               |             |            |
| Fastening              | Tape                             |             |            |
| Status                 | Ready                            |             |            |



|                        |                                        |             |            |
|------------------------|----------------------------------------|-------------|------------|
| <b>Ordering number</b> | <b>CA12131</b>                         |             |            |
| <b>Description</b>     | <b>CA12131_Laura-M-XP-G-tape-white</b> |             |            |
| Family                 | Laura                                  | FWHM        | 30 degrees |
| Type                   | Lens                                   | Efficiency  | -          |
| LED                    | XP-G                                   | cd/Im       | -          |
| Color                  | White                                  | Gerber File | Available  |
| Diameter               | 21.6 mm                                |             |            |
| Height                 | 13.1 mm                                |             |            |
| Style                  | Square                                 |             |            |
| Optic Material         | PMMA                                   |             |            |
| Holder Material        | PC                                     |             |            |
| Fastening              | -                                      |             |            |
| Status                 | Ready                                  |             |            |

|                        |                                 |             |            |
|------------------------|---------------------------------|-------------|------------|
| <b>Ordering number</b> | <b>CA11766</b>                  |             |            |
| <b>Description</b>     | <b>CA11766_Laura-WW-XP-tape</b> |             |            |
| Family                 | Laura                           | FWHM        | 64 degrees |
| Type                   | Lens                            | Efficiency  | 86 %       |
| LED                    | XP-G                            | cd/Im       | -          |
| Color                  | Black                           | Gerber File | Available  |
| Diameter               | 21.6 mm                         |             |            |
| Height                 | 13.1 mm                         |             |            |
| Style                  | Square                          |             |            |
| Optic Material         | PMMA                            |             |            |
| Holder Material        | PC                              |             |            |
| Fastening              | Tape                            |             |            |
| Status                 | Ready                           |             |            |



## PRODUCT DATASHEET

### Laura-XP series

|                 |                           |             |            |
|-----------------|---------------------------|-------------|------------|
| Ordering number | CA11766                   |             |            |
| Description     | CA11766_Laura-WW-XPG-tape |             |            |
| Family          | Laura                     | FWHM        | 64 degrees |
| Type            | Lens                      | Efficiency  | 86 %       |
| LED             | XP-G                      | cd/lm       | -          |
| Color           | Black                     | Gerber File | Available  |
| Diameter        | 21.6 mm                   |             |            |
| Height          | 13.1 mm                   |             |            |
| Style           | Square                    |             |            |
| Optic Material  | PMMA                      |             |            |
| Holder Material | PC                        |             |            |
| Fastening       | Tape                      |             |            |
| Status          | Ready                     |             |            |

**NOTE:** The typical divergence will be changed by different color, chip size and chip position tolerance. The typical total divergence is the full angle measured where the luminous intensity is half of the peak value.



## PRODUCT DATASHEET

### Laura-XP series

#### GENERAL INFORMATION

- Product series especially designed & optimized for XP-G series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PMMA with high UV and temperature resistance (105 degrees of Celcius / 220 degrees of Fahrenheit). Allows use of high current and temperature conditions.

Please find more information about used material from below:

[http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20UL94\\_Yellow%20Card.pdf](http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20UL94_Yellow%20Card.pdf)

<http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20PLEXIGLAS-Datasheet.pdf>

- Lens material optical grade PC with high UV and temperature resistance (120 degrees of Celcius / 248 degrees of Fahrenheit). Allows use of high current and temperature conditions.

Please find more information about used materials from below:

[http://ledil.fi/sites/default/files/Documents/Technical/Material/PC%20Makrolon%202400\\_2407\\_2456\\_2458-UL.pdf](http://ledil.fi/sites/default/files/Documents/Technical/Material/PC%20Makrolon%202400_2407_2456_2458-UL.pdf)

- Reflector is made of aluminium coated PC (120 degrees of Celcius / 248 degrees of Fahrenheit) with protective lacquer (110 degrees of Celcius / 230 degrees of Fahrenheit).

- Optic holder molded by high quality PC material (120 degrees of Celcius / 248 degrees of Fahrenheit).

- Fastening to heat sink with a PU foam adhesive tape of automotive grade. Please find fastening details by clicking link: [http://www.ledil.com/datasheets/DataSheet\\_TAPE.pdf](http://www.ledil.com/datasheets/DataSheet_TAPE.pdf)

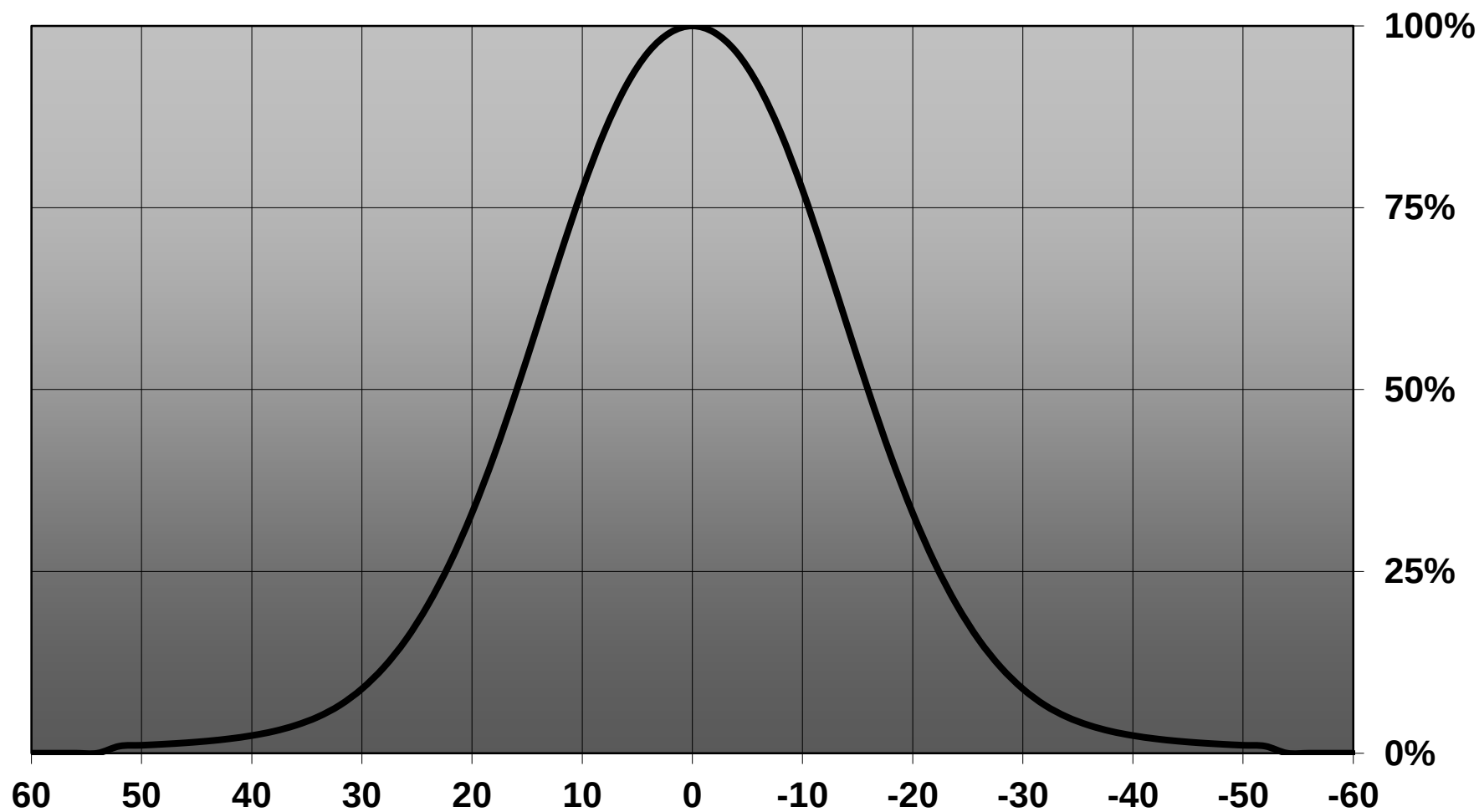
**NOTE 1: We advise customer to ensure the suitability and sufficiency of the bond in the end product. For example, mechanical stress, vibration and holes on the surface of the circuit board weaken the strength of the tape.**

**NOTE 2: Assembly to the surface must be made straight, so the tape bonds constant and balanced with fastening surface. Slanted assembly might cause unbalanced bond to the surface. All surfaces where tape is applied must be clean, dry and free from grease and dirt.**

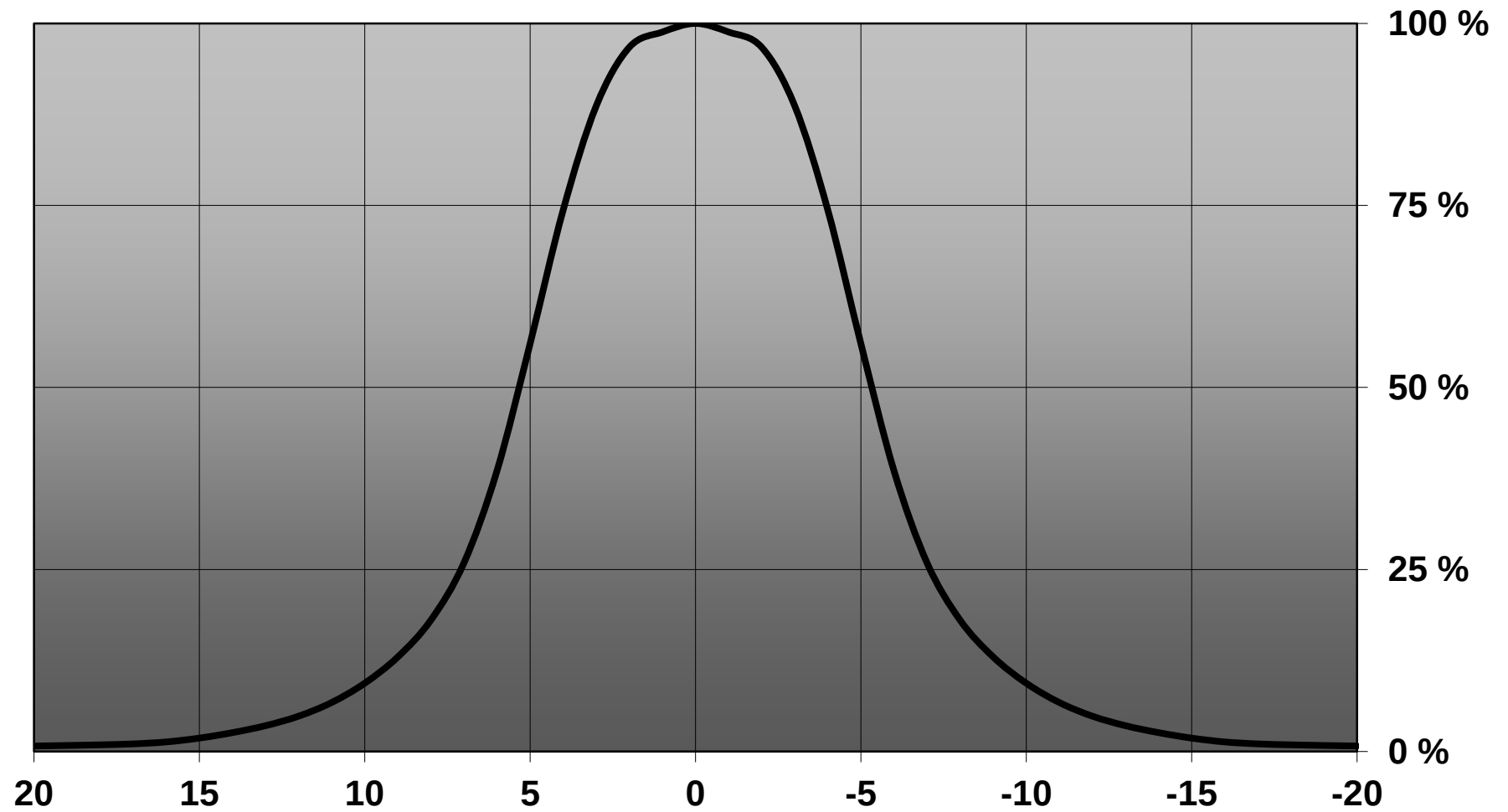
**If cleaning of PCB surfaces is needed, please follow strictly the cleaning instructions of your LED manufacturer - this is important as cleaning shall under no circumstances damage LEDs or other electronics components on the PCB.**

**Further note that optical components shall not be cleaned with any chemicals - only micro fiber cloth may be used to remove fingerprints or other traces from handling.**

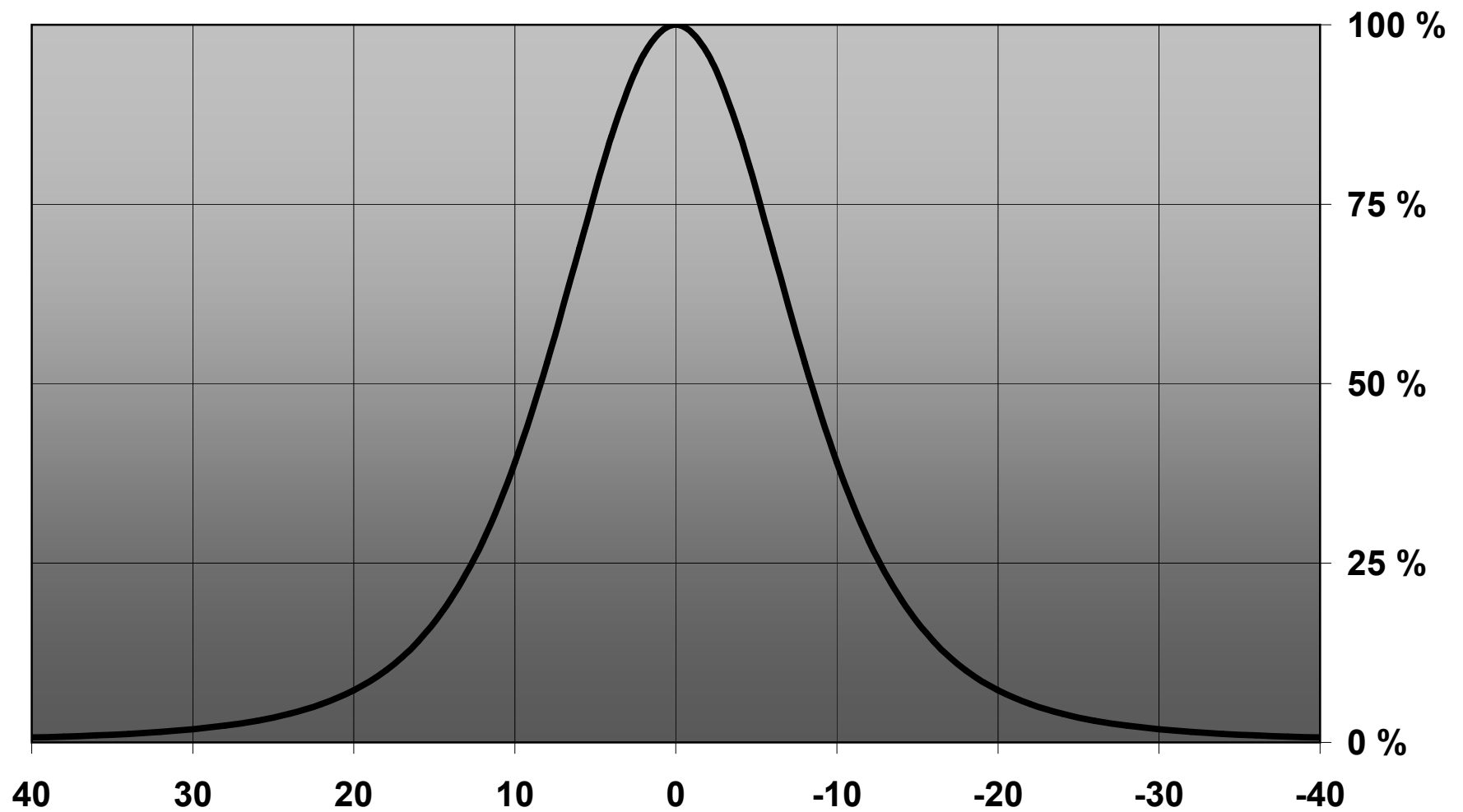
Relative intensity of CA11837\_Laura-M-Pin-XP-G-tape



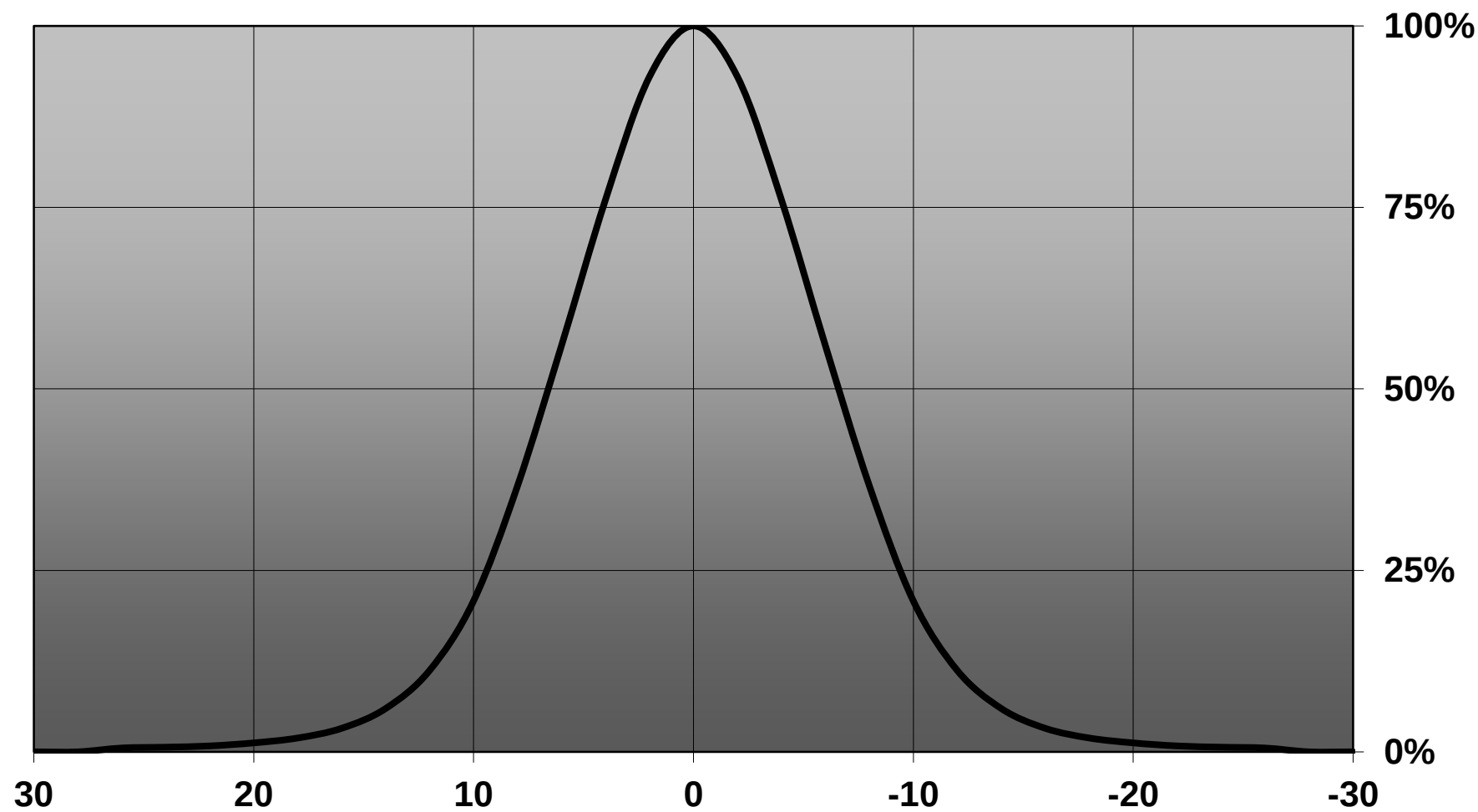
Relative Intensity of CA11959\_Laura-RS-Pin-XP-G-tape



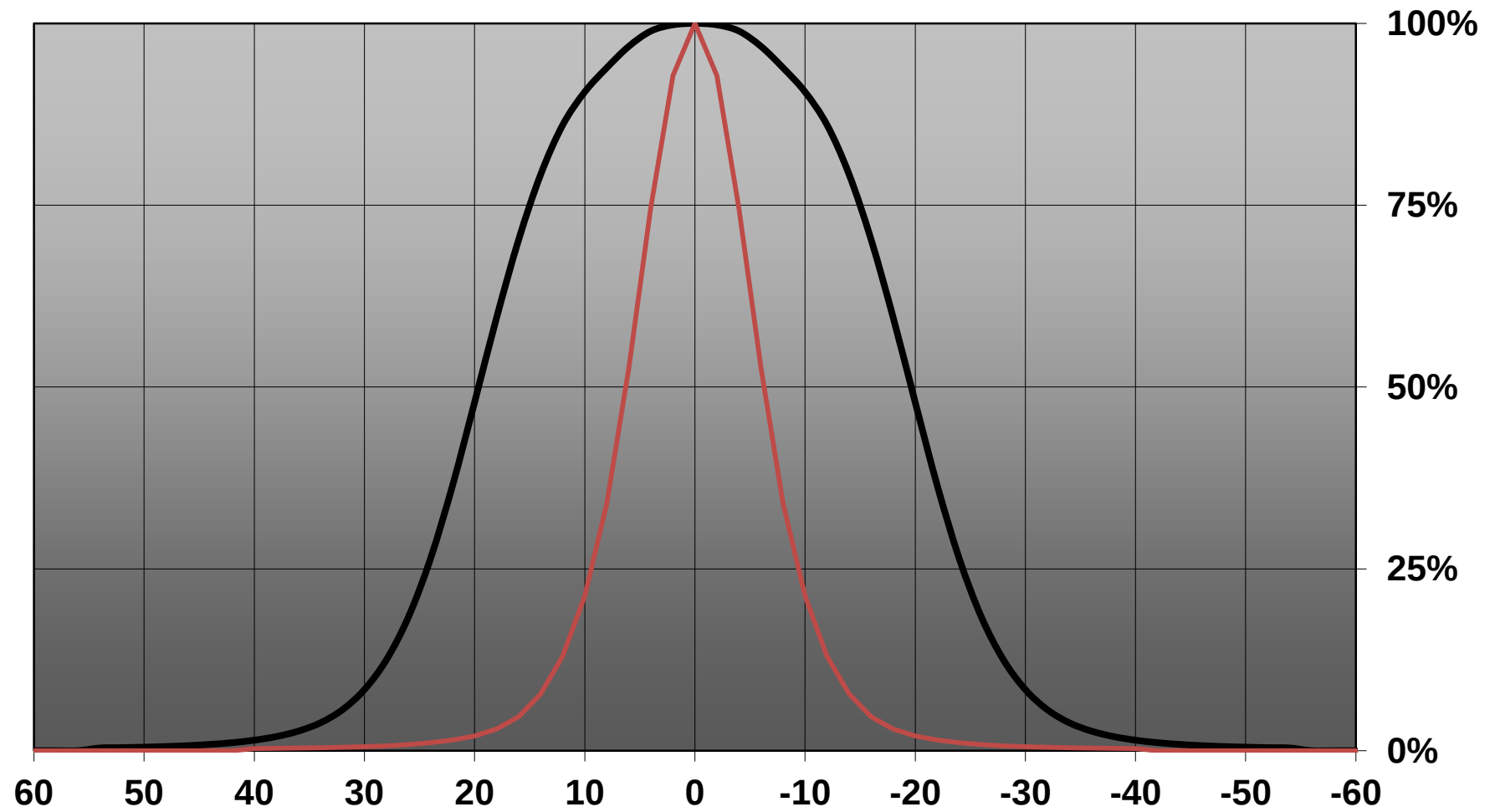
**Relative intensity of CA11361\_Laura-D-XP-G-tape**

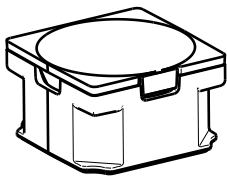


**Relative intensity of CA12011\_Laura-SS-Pin-XP-G-tape**

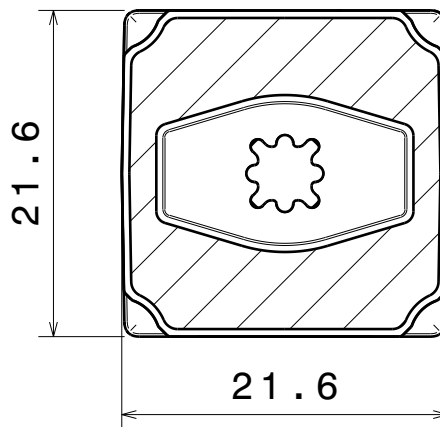


Relative intensity of CA12012\_Laura-O-Pin-XP-G-tape

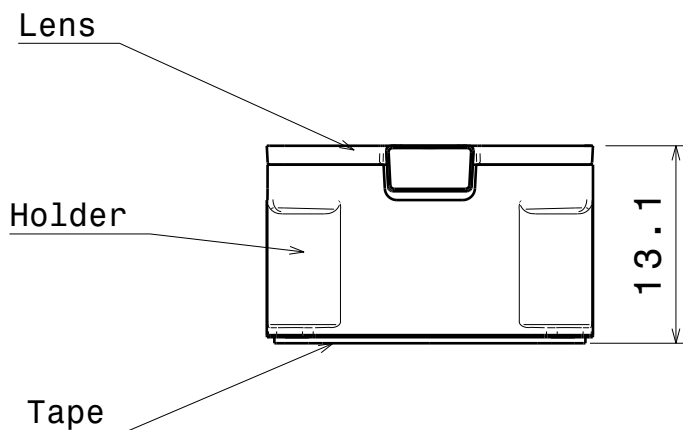




Isometric view  
Scale: 1:1



Bottom view



Front view

Materials  
lens: PMMA  
holder: PC, black  
Tape: PU Foam

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or communicated without  
our written agreement.



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#### DRAWING TITLE

Datasheet Laura-tape series assy

DRAWN BY

p

DATE

11.06.2010

CHECKED BY

h

DATE

25.01.2010

DESIGNED BY

hh

DATE

21.01.2010

SIZE

A4

DRAWING NUMBER

CA11353

REV

1

SCALE

2:1

WEIGHT (g)

SHEET

1/1

D

A