

**Ordering number FA11208\_TINA-RS**

|                 |                |             |                  |
|-----------------|----------------|-------------|------------------|
| Family          | Tina           | FWHM        | 15 degrees       |
| Type            | Assembly       | Efficiency  | (simulated) 88 % |
| LED             | SFH 4715S (IR) | cd/Im       | -                |
| Color           | Black          | Gerber File | Available        |
| Diameter        | 16.1 mm        |             |                  |
| Height          | 9.5 mm         |             |                  |
| Style           | Round          |             |                  |
| Optic Material  | PMMA           |             |                  |
| Holder Material | PC             |             |                  |
| Fastening       | Pin, tape      |             |                  |
| Status          | Ready          |             |                  |

**Ordering number FA11205\_TINA-D**

|                 |                |             |                 |
|-----------------|----------------|-------------|-----------------|
| Family          | Tina           | FWHM        | 18 degrees      |
| Type            | Assembly       | Efficiency  | (simulated) 0 % |
| LED             | SFH 4715S (IR) | cd/Im       | -               |
| Color           | Black          | Gerber File | Available       |
| Diameter        | 16.1 mm        |             |                 |
| Height          | 9.5 mm         |             |                 |
| Style           | Round          |             |                 |
| Optic Material  | PMMA           |             |                 |
| Holder Material | PC             |             |                 |
| Fastening       | Pin, tape      |             |                 |
| Status          | Ready          |             |                 |

**Ordering number FA11206\_TINA-M**

|                 |                |             |                  |
|-----------------|----------------|-------------|------------------|
| Family          | Tina           | FWHM        | 28 degrees       |
| Type            | Assembly       | Efficiency  | (simulated) 86 % |
| LED             | SFH 4715S (IR) | cd/Im       | -                |
| Color           | Black          | Gerber File | Available        |
| Diameter        | 16.1 mm        |             |                  |
| Height          | 9.5 mm         |             |                  |
| Style           | Round          |             |                  |
| Optic Material  | PMMA           |             |                  |
| Holder Material | PC             |             |                  |
| Fastening       | Pin, tape      |             |                  |
| Status          | Ready          |             |                  |

**Ordering number FA11207\_TINA-W**

|                 |                |             |                  |
|-----------------|----------------|-------------|------------------|
| Family          | Tina           | FWHM        | 32 degrees       |
| Type            | Assembly       | Efficiency  | (simulated) 88 % |
| LED             | SFH 4715S (IR) | cd/Im       | -                |
| Color           | Black          | Gerber File | Available        |
| Diameter        | 16.1 mm        |             |                  |
| Height          | 9.5 mm         |             |                  |
| Style           | Round          |             |                  |
| Optic Material  | PMMA           |             |                  |
| Holder Material | PC             |             |                  |
| Fastening       | Pin, tape      |             |                  |
| Status          | Ready          |             |                  |

**Ordering number FA11027\_TINA-WW**

|                 |                |             |                 |
|-----------------|----------------|-------------|-----------------|
| Family          | Tina           | FWHM        | 36 degrees      |
| Type            | Assembly       | Efficiency  | (simulated) 0 % |
| LED             | SFH 4715S (IR) | cd/lm       | -               |
| Color           | Black          | Gerber File | Available       |
| Diameter        | 16.1 mm        |             |                 |
| Height          | 9.5 mm         |             |                 |
| Style           | Round          |             |                 |
| Optic Material  | PMMA           |             |                 |
| Holder Material | PC             |             |                 |
| Fastening       | Pin, tape      |             |                 |
| Status          | Ready          |             |                 |

**Ordering number FA11204\_TINA-O**

|                 |                |             |                  |
|-----------------|----------------|-------------|------------------|
| Family          | Tina           | FWHM        | 40+16 degrees    |
| Type            | Assembly       | Efficiency  | (simulated) 87 % |
| LED             | SFH 4715S (IR) | cd/lm       | -                |
| Color           | Black          | Gerber File | Available        |
| Diameter        | 16.1 mm        |             |                  |
| Height          | 9.5 mm         |             |                  |
| Style           | Round          |             |                  |
| Optic Material  | PMMA           |             |                  |
| Holder Material | PC             |             |                  |
| Fastening       | Pin, 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

### Tina series

last update 20/2/2013



#### GENERAL INFORMATION

- Product series especially designed & optimized for SFH 4715S (IR) 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. Allows use of high current and temperature conditions.

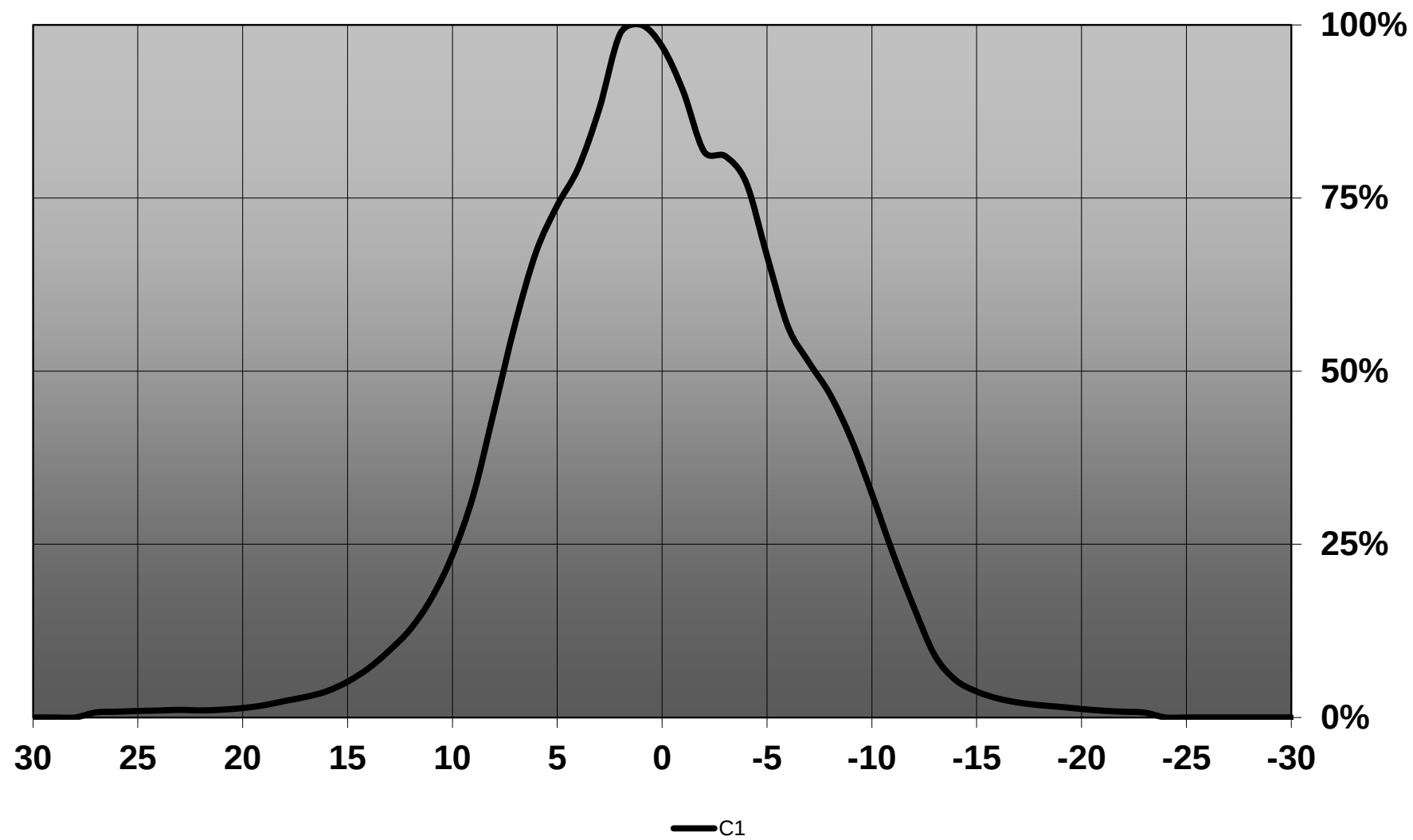
Please find more information about used material from below:

[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)

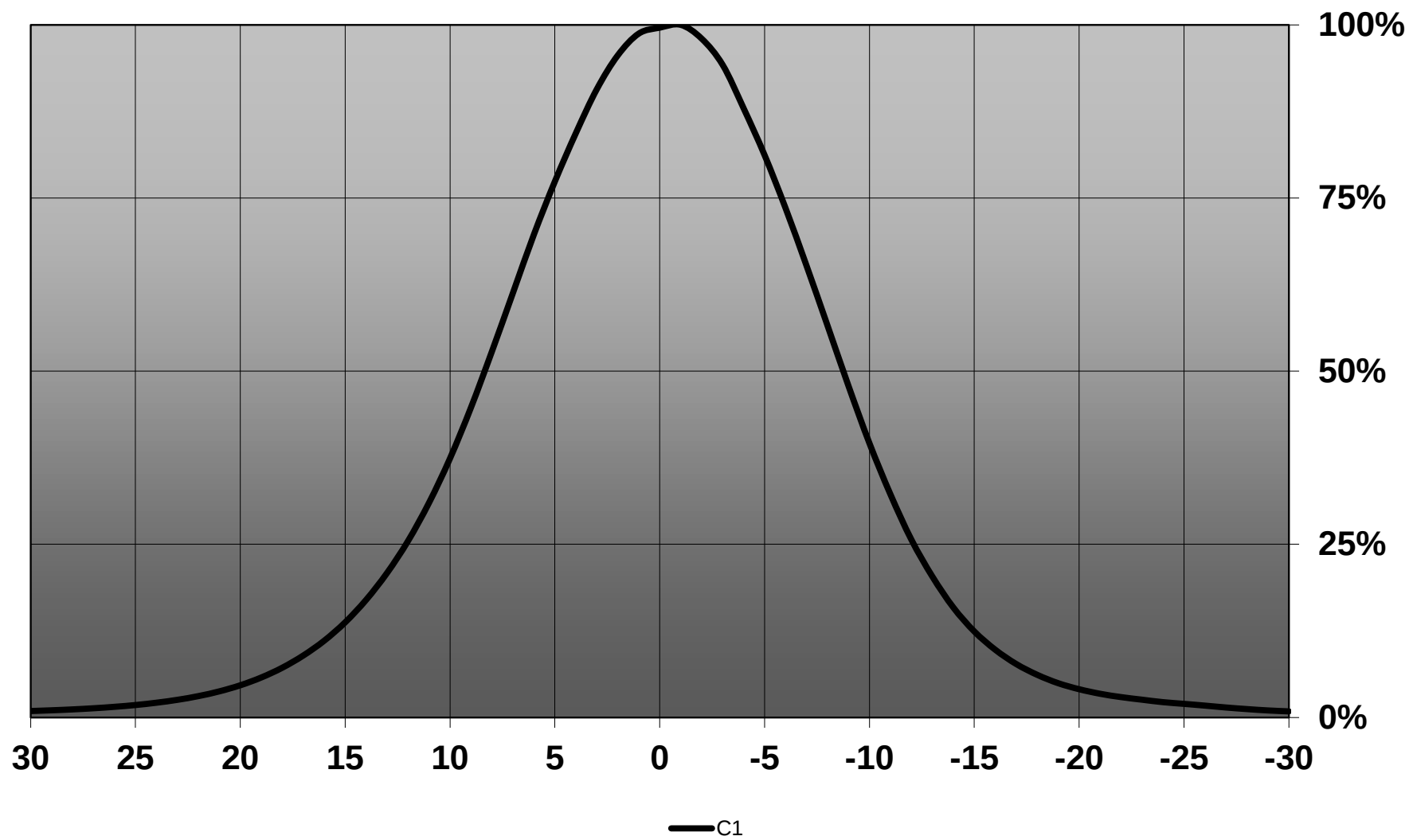
<http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20PLEXIGLAS-Datasheet.pdf>

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

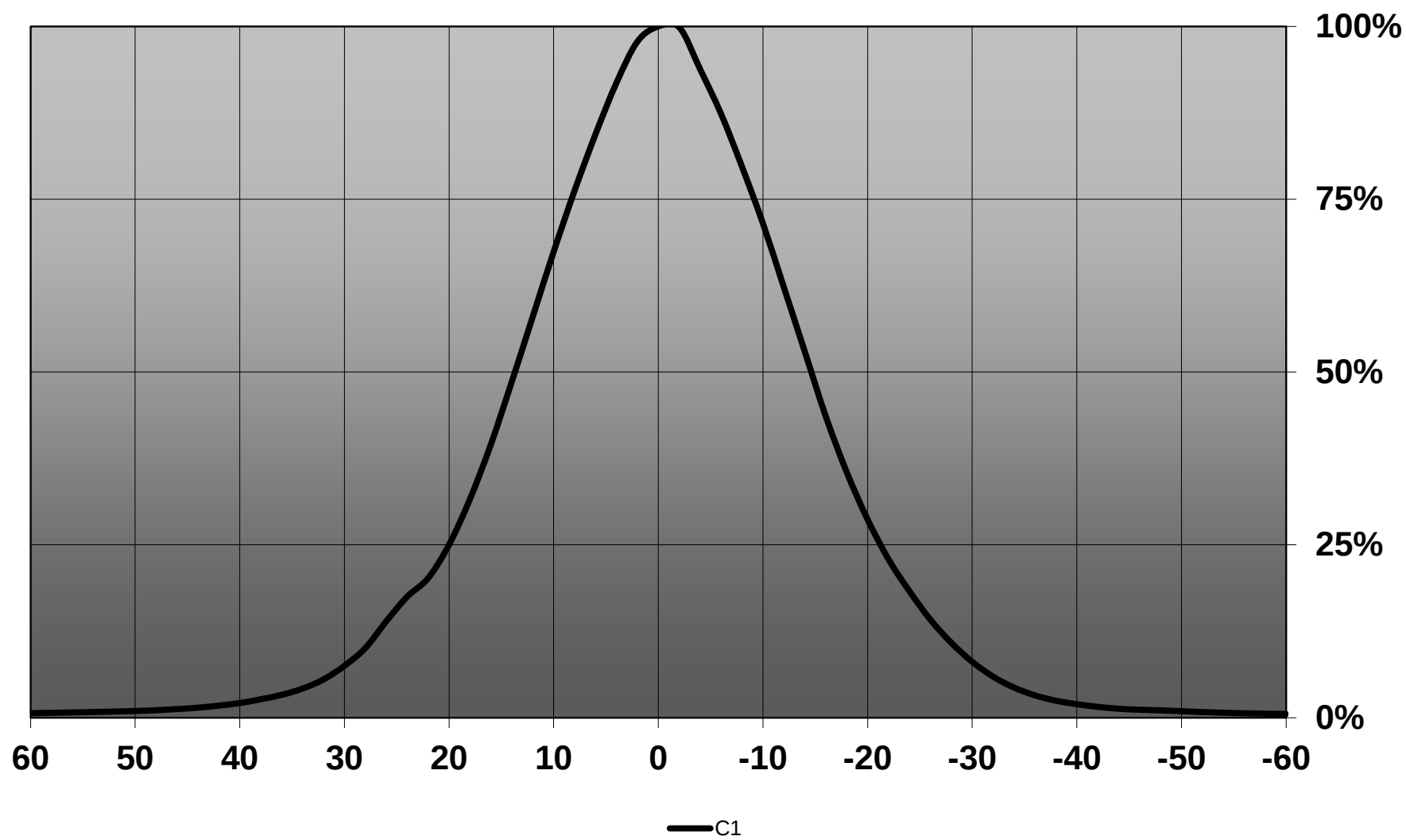
Relative intensity of FA11208\_TINA-RS\_SF4715S



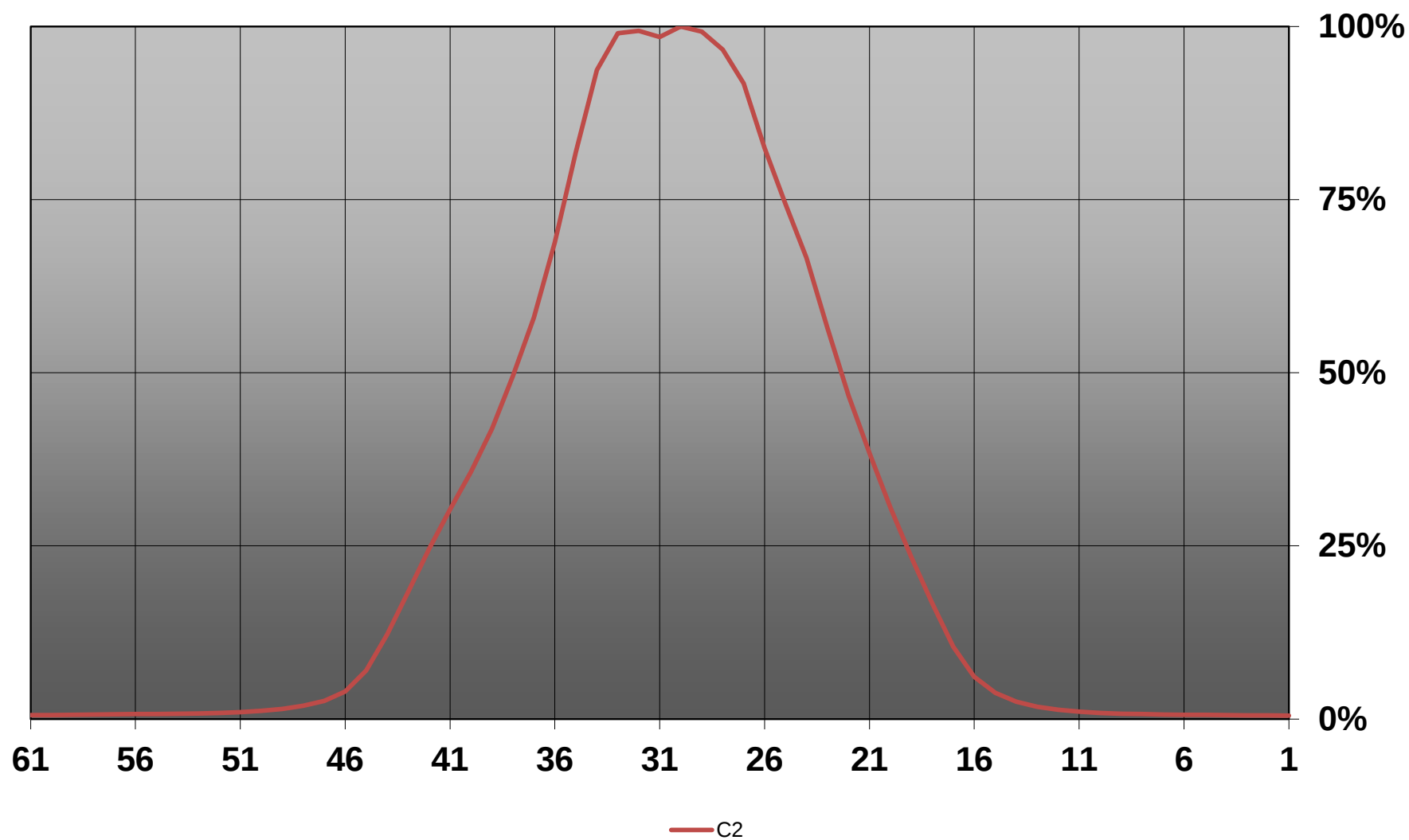
Relative intensity of FA11205\_TINA-D\_SF4715S



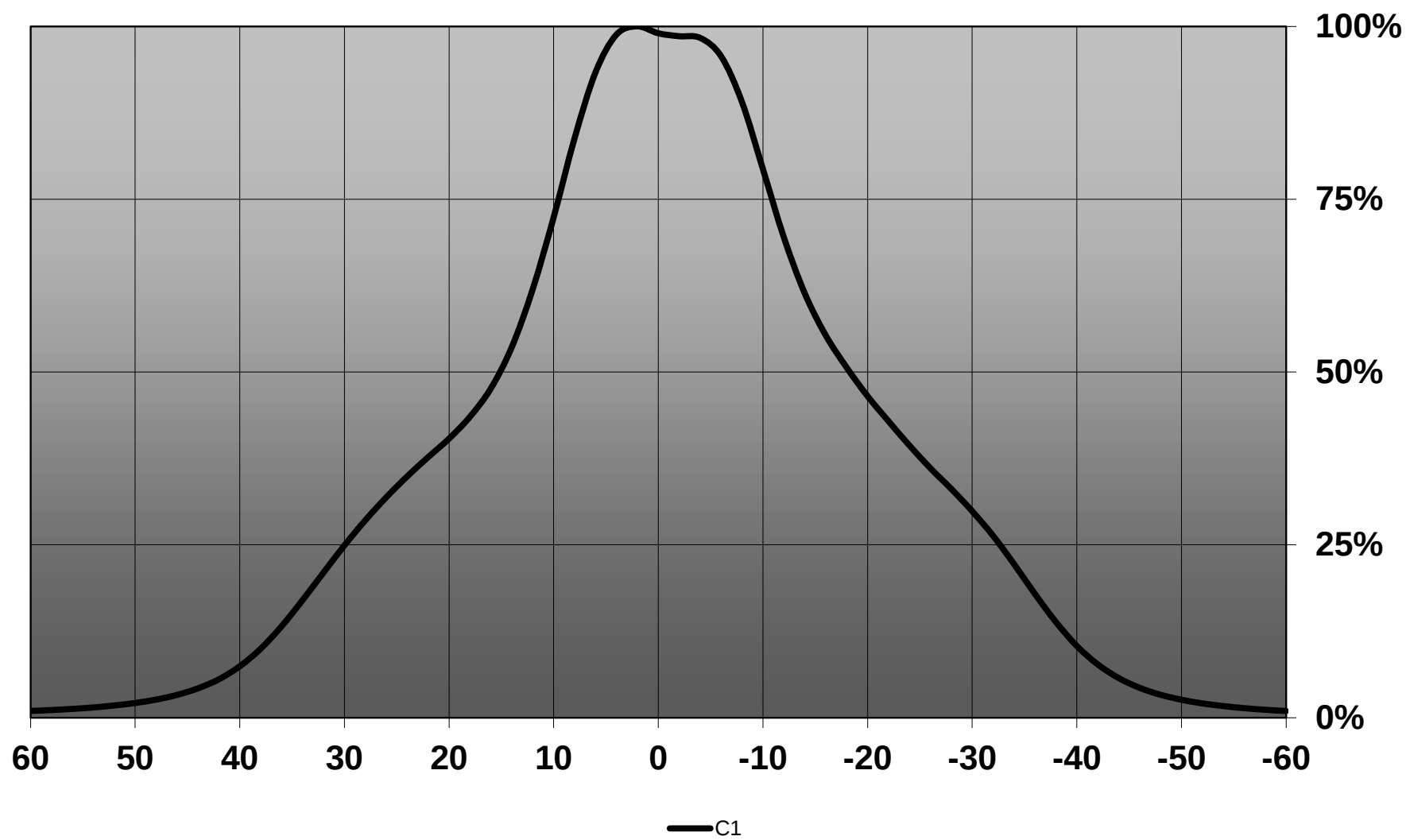
Relative intensity of FA11206\_TINA-M\_SF4715S



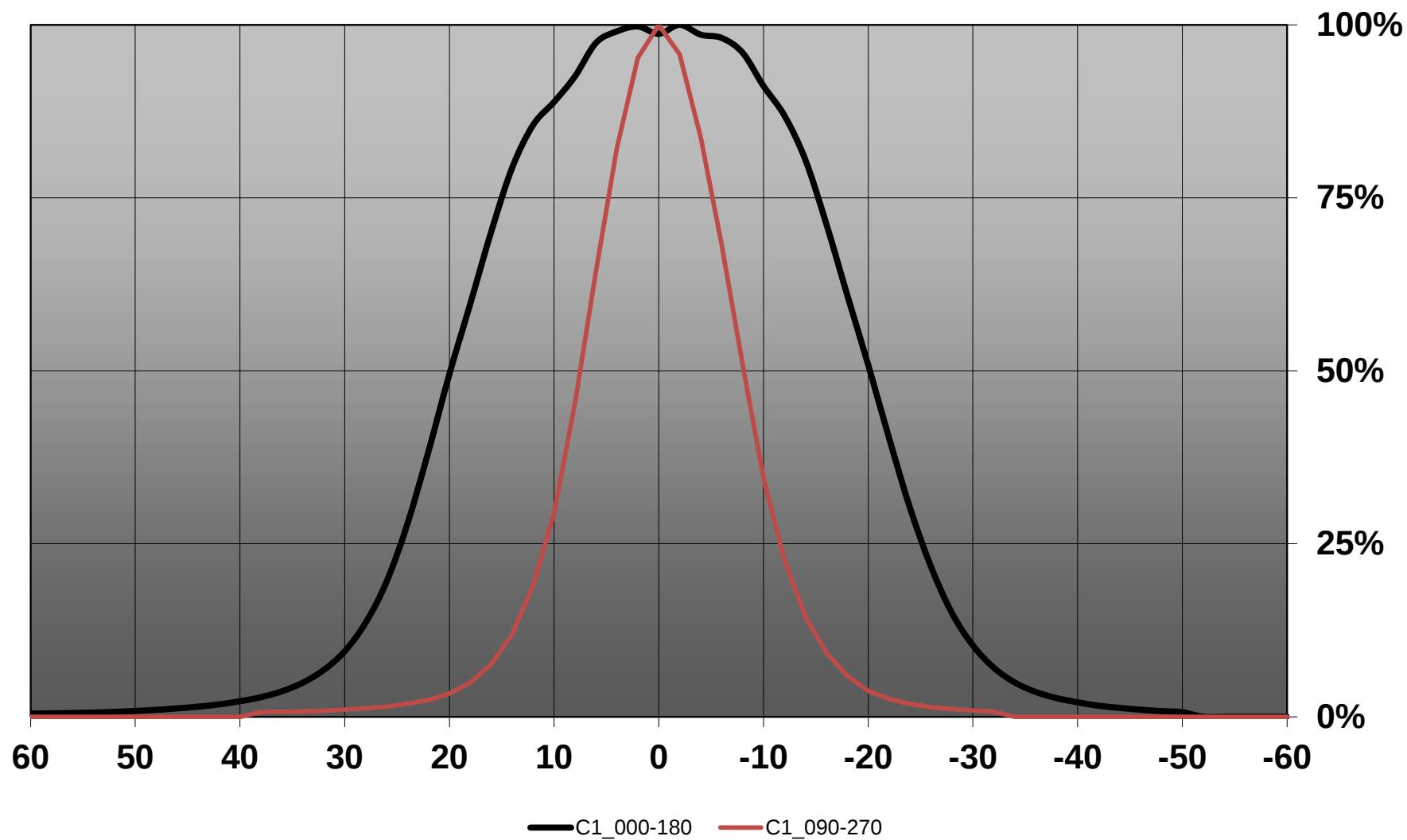
Relative intensity of FA11207\_TINA-W\_SF4715S



Relative intensity of FA11027\_TINA-WW\_SF4715S

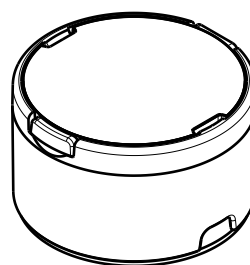


Relative intensity of FA11204\_TINA-O\_SF4715S



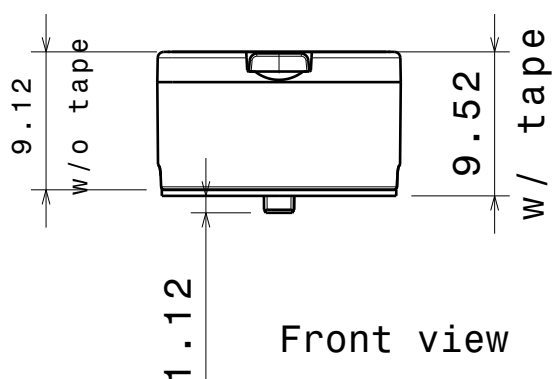
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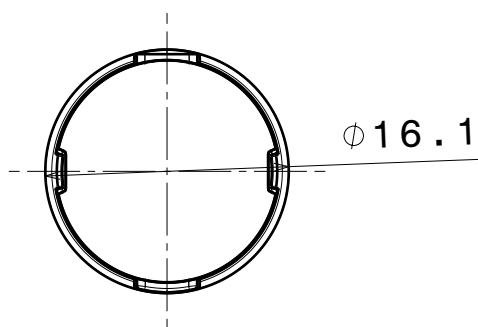


### Isometric view

Bottom view



### Front view



Top view

Materials  
Lens: PMMA  
Holder: PC  
Tape: PU Foam

Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

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