

### CARMEN

High precision lenses with black reflectors providing sharp cutoff ideal for non-glare premium quality retail lighting. Compatible with LEDiL HEKLA. Available also in white.

CARMEN optics consist of high precision lenses and black reflectors ideal for non-glare retail lighting. Sharp cutoff and minimized spill light provides a high contrast between the highlighted objects and their surroundings. In addition the closed design protects the COB from tampering and dust. Compared to metal coated reflectors this results in improved optical performance and outstanding lighting. Compatible with LEDiL HEKLA using Holder-C and 3rd party connectors using Holder-B. Available also in white.

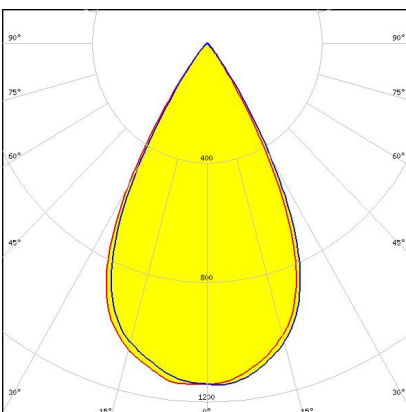
### CARMEN-70

Ø70 mm variant for up to 11 mm LES size COBs



### PRODUCTS:

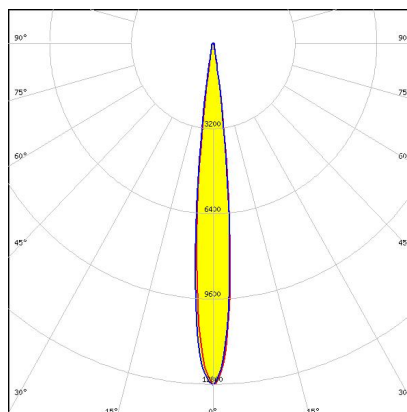
#### CP15313\_CARMEN-W-B



**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 36.26 mm**

~55° wide beam. Assembly with holder B compatible with Ø40 mm BJB and B+W connectors.

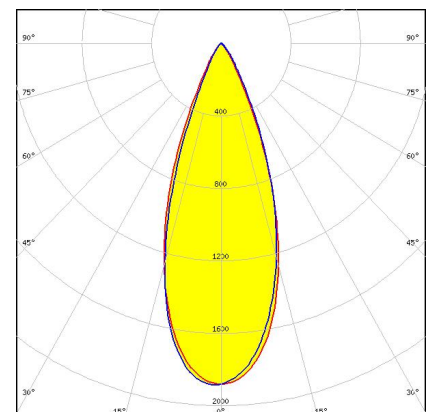
#### CP16940\_CARMEN-RS-C-WHT



**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 41.50 mm**

~10° spot beam. Assembly with holder C compatible with LEDiL HEKLA. White version.

#### CP15215\_CARMEN-M-B

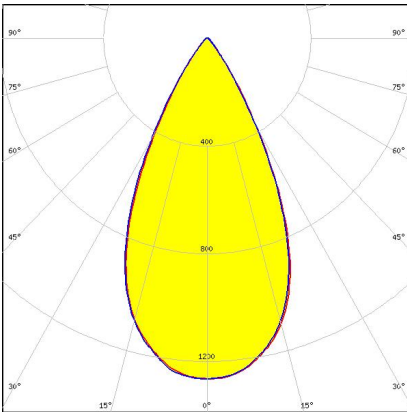


**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 36.26 mm**

~35° medium beam. Assembly with holder B compatible with Ø40 mm BJB and B+W connectors.

### PRODUCTS:

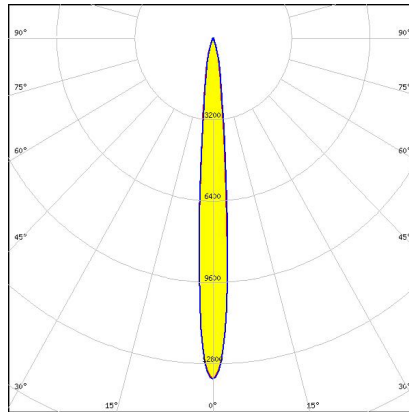
#### CP16939\_CARMEN-W-C-WHT



**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 41.50 mm**

~55° wide beam. Assembly with holder C compatible with LEDiL HEKLA. White version.

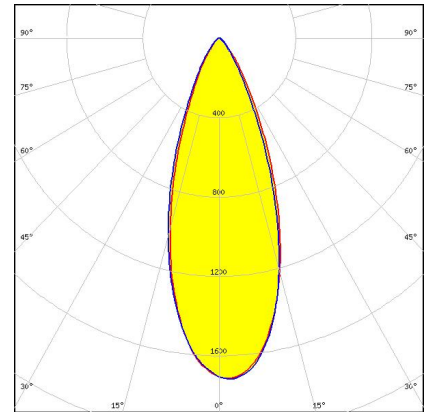
#### CP15212\_CARMEN-S-B



**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 36.26 mm**

~14° spot beam. Assembly with holder B compatible with Ø40 mm BJB and B+W connectors.

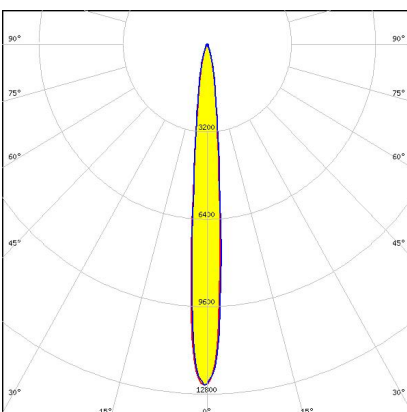
#### CP16938\_CARMEN-M-C-WHT



**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 41.50 mm**

~35° wide beam. Assembly with holder C compatible with LEDiL HEKLA. White version.

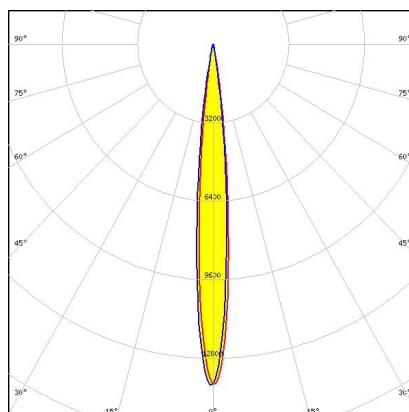
#### CP16937\_CARMEN-S-C-WHT



**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 41.50 mm**

~14° spot beam. Assembly with holder C compatible with LEDiL HEKLA. White version.

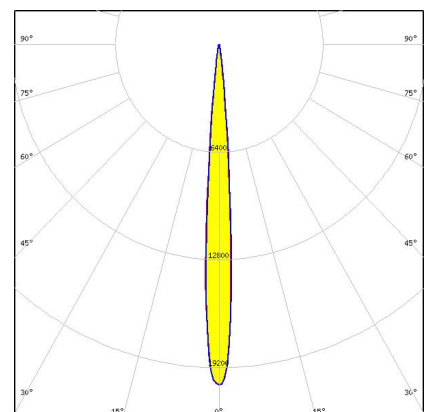
#### CP16601\_CARMEN-SS-C



**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 41.50 mm**

~12° smooth spot beam. Assembly with holder C compatible with LEDiL HEKLA. Updated version with good colour mixing capability.

#### CP15916\_CARMEN-RS-C

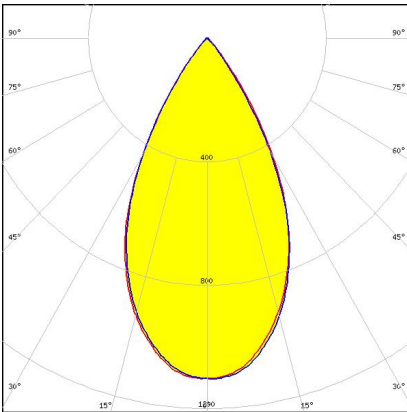


**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 41.50 mm**

~10° spot beam. Assembly with holder C compatible with LEDiL HEKLA.

### PRODUCTS:

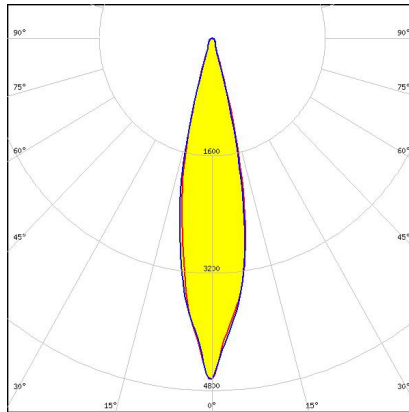
#### CP15776\_CARMEN-W-C



**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 41.50 mm**

~55° wide beam. Assembly with holder C compatible with LEDiL HEKLA.

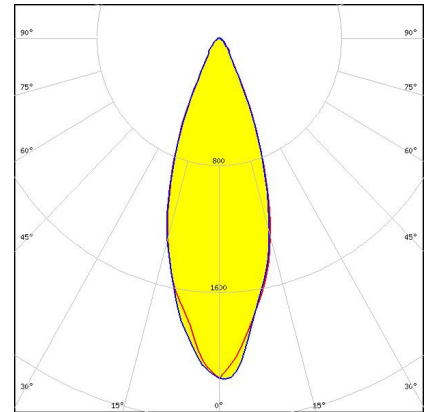
#### CP17138\_CARMEN-M2-C-WHT



**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 41.50 mm**

~25° wide beam. Assembly with holder C compatible with LEDiL HEKLA. White version.

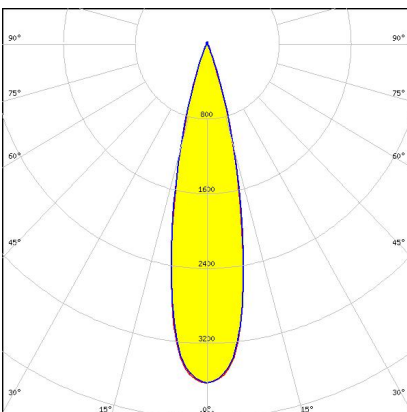
#### CP15775\_CARMEN-M-C



**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 41.50 mm**

~35° medium beam. Assembly with holder C compatible with LEDiL HEKLA.

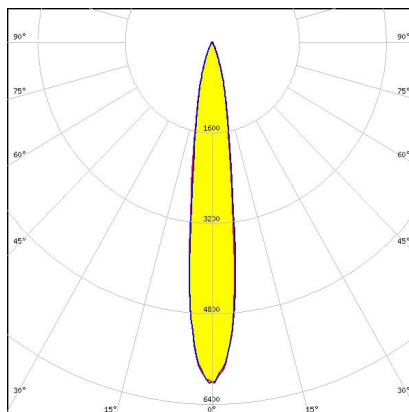
#### CP17137\_CARMEN-M2-C



**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 41.50 mm**

~25° medium beam. Assembly with holder C compatible with LEDiL HEKLA.

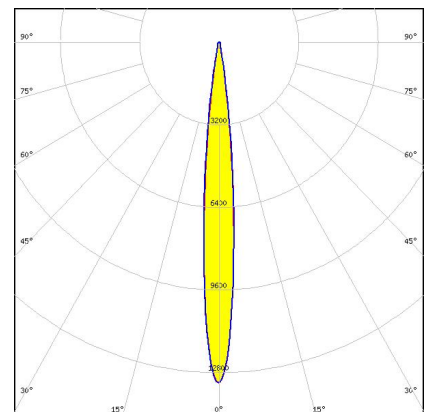
#### CP15774\_CARMEN-S-C



**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 41.50 mm**

~14° spot beam. Assembly with holder C compatible with LEDiL HEKLA.

#### CP16941\_CARMEN-SS-C-WHT



**Dimensions: 69.5 mm x 69.5 mm**  
**Height: 41.50 mm**

~12° smooth spot beam. Assembly with holder C compatible with LEDiL HEKLA. White version.

### 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:

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.

### PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

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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