





# FLORENCE-1R-MAXI-WG Wall-grazing object for high power LEDs

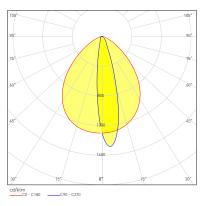
#### F14487 FLORENCE-1R-MAXI-WG

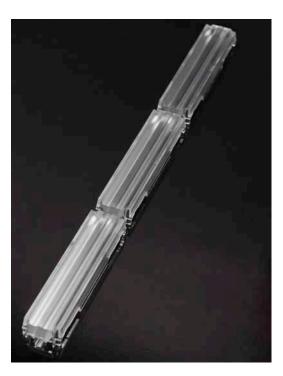
- Dimensions 22 x 286 mm
- Height 11 mm
- Asymmetric oval light pattern
- Efficiency 94%

Precision-molded from optical grade PMMA -

UL94 HB rated material with operating rating -40°C to +80°C

- Can be fastened with FLORENCE-CLIPs
- Compatible with range of high power LEDs from brands like Cree, Philips Lumileds, Nichia and Osram









#### High power LED types



Single unit with XP-E2 (x12 LED) PCB

- Good color balance
- Uniform wall performance with optimal vertical depth and horizontal wideness
- Allows illumination starting already from mounting level
- Can be used as single unit to highlight a certain zone of the wall or as contiunuous lamp line for overall wall wash illumination
- Compatible with range of high power LEDs up to XP-E2 size including common brands like Cree XP-E2 / XP-G, Philips Lumileds Luxeon-T / Rebel ES, Nichia NCSx19B and Osram OSL80. Please check tested LED types from www.ledil.com

#### Mid power LED types



Single unit with Fortimo\_LED\_line\_1ft\_1100lm\_840\_1R\_LV2 4000K PCB

- Mid power LED color over angle behavior differs from high power LED types and typically more yellowish nuance can be noticed when running through secondary optics
- With mid power LEDs F14487\_ FLORENCE-1R-MAXI-WG provides adequate color balance with minimal of minor yellow nuance. Please check tested LED types from www.ledil.com
- Environment color, exact LED color temperature chosen are also important to consider when using FLORENCE-1R-MAXI-WG with mid power LEDs as eye reacts in different way to white and dark background and warm white vs. white color temperatures.

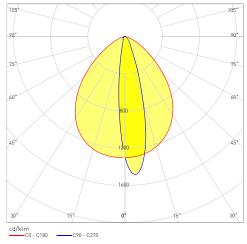




# Performance difference between high power and mid power use

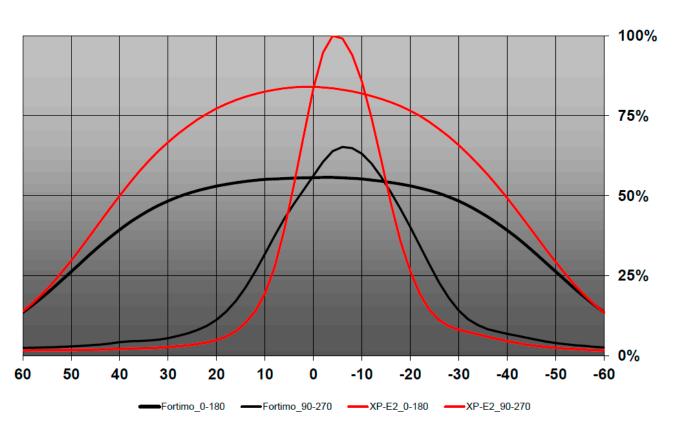
Typically using high power LED allows better CD/LM peak result with FLORENCE-1R-MAXI-WG optic. On the other hand only minor differences on total efficiency.

In practice CD/LM difference can be noticed on vertical illumination depth in wall washing applications.



FLORENCE-1R-MAXI-WG with XP-E2 LED

XP-E2 comparisons to Fortimo 1R LED lines as follows, typically mid power LED peak ~70% from XP-E2 LED type:







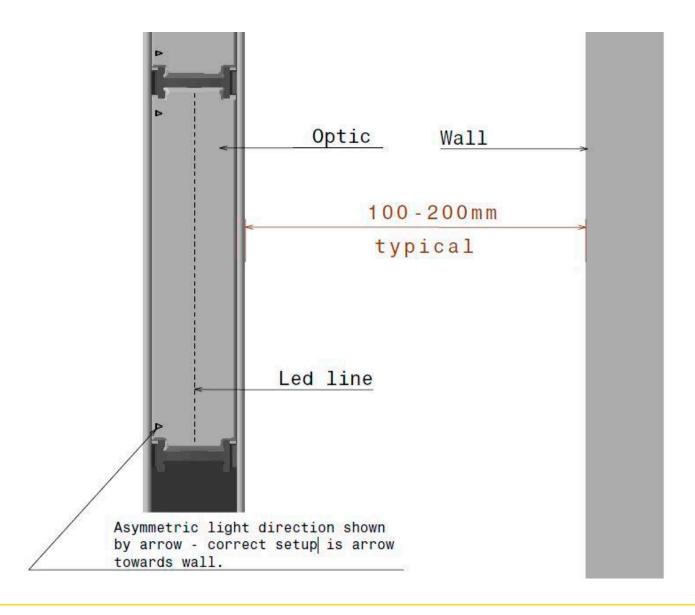
#### Distance to wall

Typical starting point for creating wall washing setup for 2-3 meter wall is to place F14487\_FLORENCE-1R-MAXI-WG in 10...20 cm distance from the wall taking in account asymmetric light direction (shown by arrow in actual lens).

Tilting light fixture is not needed as the shape of asymmetric photometry is especially designed to wash wall from flat assembled position.

Optimal distance between optic and wall depends on

- exact wall height
- desired illumination balance between roof and floor areas. For example 20 cm setup allows more open and vertically deeper light appearance while 10 cm provides higher max lux level.
- interior decoration requirements for lamp placing
- preferred atmosphere in the room (adjusting vertical depth of illumination)



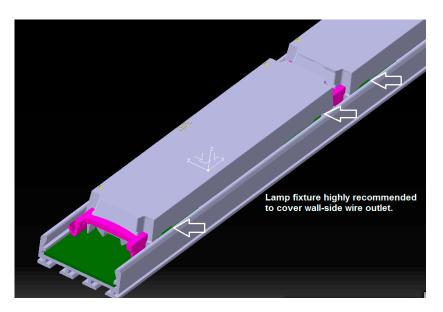




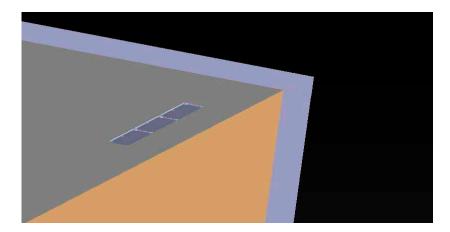
# Reflections from components and light fixture design

As shape of the photometry allows very close (10-20 cm) installation distance to wall, reflections from components inside lens and wire holes are recommended to be taken care by light fixture design. Recommended examples as follows:

 Wall side component and wiring outlet covered by lighting fixture

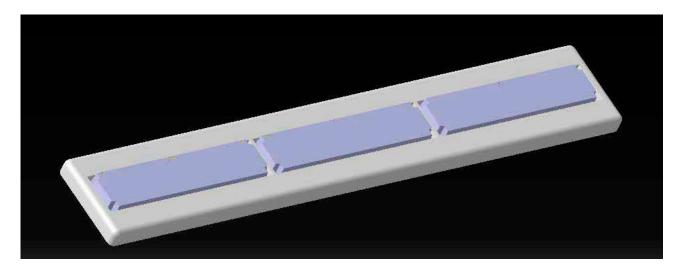


 Wall side component and wire outlet covered by recessed mounting

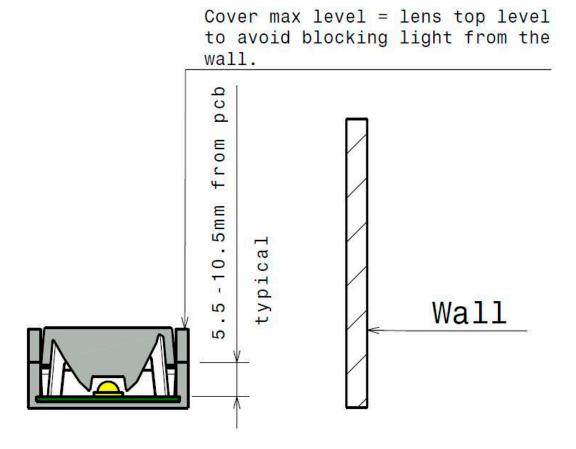




• Wall side component and wire hole outlet covered by surrounding frame-holder



• Reflection cover dimension recommendation



• Before assembling the product ensure that mounting surface is even and not causing pressure on the light fixture



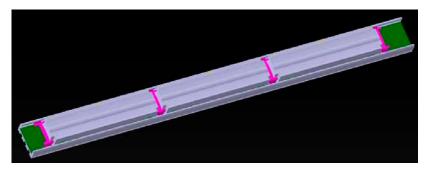


# Optional assembly parts by LEDiL

#### C14409 FLORENCE-1R-CLIP-B

For example Klus Giza profile compatible of customer's own fixture design







#### C14353\_FLORENCE-1R-CLIP-A

For example Fortimo\_LED\_line\_1ft\_1100lm\_840\_LV2 compatible or customer's own PCB design



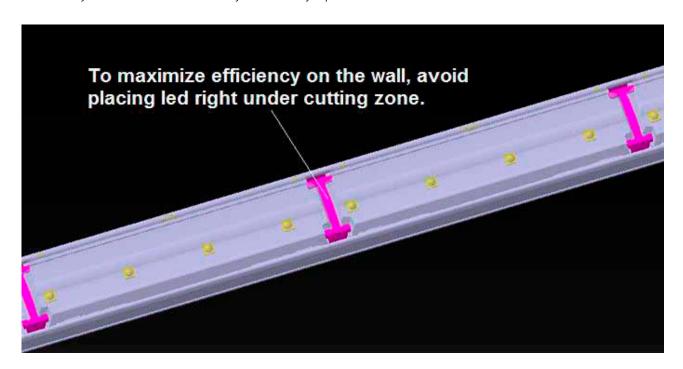




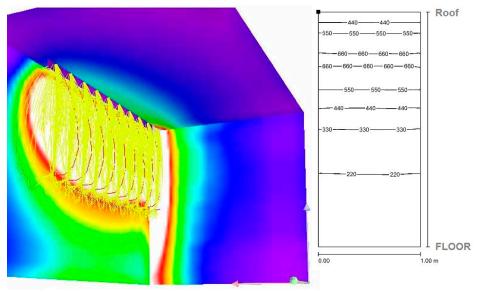


### PCB suggestion

As a guideline following led arragement provides best efficiency on the wall (obviously not always possible):



#### Application example



- Room height 2.4 m
- Optics placed 15 cm distance from the wall as continuous lamp line
- Each unit driven by 1000 lm
- Uniformity 0.439
- E<sub>av</sub> 372 lx
- E<sub>max</sub> 680 lx