



FLORENCE-3R-IP

PC optics with up to IP67 protection for moist and dusty environments

LEDiL's well established FLORENCE family is also available in a rugged IP-version. The FLORENCE-3R-IP has an integrated silicone gasket providing ingress protection against water and dust. The 3x11 optics layout is compatible with Zhaga book 7 light engines and mid power LEDs. The surface eliminates the bright spots from the LEDs resulting in uniform surface brightness and also makes modules suitable for tunable white applications.



FEATURES

- Integrated silicone gasket for up to IP67 ingress protection
- Perfect solution for industrial halls affected by moisture and constant dust
- 90°, 60° and oval beams similar to original FLORENCE-3R
- Sturdy fastening with screws
- Highly efficient modular lighting with mid power LEDs

TYPICAL APPLICATIONS

- Industrial lighting
- Indoor lighting
- Low bay applications
- Halls

DESIGN EXAMPLE

Application:	Car washing
Optics:	FLORENCE-3R-IP-Z90
Room width:	7.7 m
Room height:	4.9 m
Luminaire rows:	2
Distance between rows:	7.5 m
Row distance from floor:	4 m
No. of luminaires in a row:	7 pcs
No. of optics in luminaire:	5 pcs
Luminaire spacing (c to c):	2.5 m
Luminous flux (Luminaire):	4900 lm
Power (Luminaire):	41.5 W
Total load:	581 W
Luminous efficacy:	118 lm/W
Efficiency:	89 %*

*Transmittance at 3.2-mm thickness (standard D 1003) 88%. Thinner thickness has better efficacy. Measured using white PCB with good reflectance.

RESULTS: calculation surface at 1.6m height

Average:	326 lx
Min:	255 lx
Max:	395 lx
u0:	0.78



FLORENCE-3R-IP Application note



FLORENCE-3R-IP FAMILY

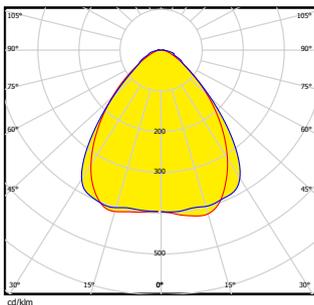
DIMENSIONS

- Dimensions: 321x79 mm
- Height: 10,5mm

COMPATIBILITY

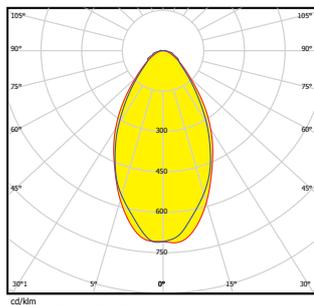
- Compatible with Zhaga book 7 three-row (L28W6) modules and similar

FLORENCE-3R-IP-Z90



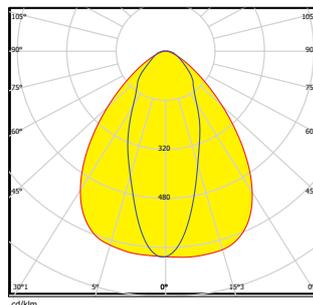
Typical efficiency: 89%

FLORENCE-3R-IP-Z60



Typical efficiency: 86%

FLORENCE-3R-IP-0



Typical efficiency: 86%



FLORENCE-3R-IP Application note

DESIGN EXAMPLE

Application: Industrial hall lighting

Optics used: FLORENCE-3R-IP-Z90

Mounting height: 4 m

Distance between luminaires (c to c): 2x2 m

No. of luminaires: 16 pcs

No. of optics in luminaire: 5 pcs

Luminous flux (luminaire): 4455 lm

Power (luminaire): 38 W

Total load: 608 W

Luminous efficacy: 117 lm/W

Efficiency: 89 %*

*Transmittance at 3.2-mm thickness (standard D 1003) 88%. Thinner thickness has better efficacy. Measured using white PCB with good reflectance.

RESULTS: calculation surface at 0.8m height

Average:	708 lx
Min:	482 lx
Max:	859 lx
u0:	0.68

ORDERING INFORMATION

Consult www.ledil.com for ordering codes and latest product specifications, which may vary by LED.