

TYPE OF PRODUCTS

Compact recessed LED luminaires, IP65, access from below. Wide range of powers and dimensions. Installation in false ceiling with cut-out.

MECHANICAL CONSTRUCTION

Luminaire structure made of 0.8 mm steel, LaserWeld waterproof assembling technology, powder coated with KilBac white RAL 9003, certified qualicoat class 1 and antibacterial. White lacquered aluminium frame fixed to the housing by 4 stainless steel screws, closed by overlapping. Screwless frame available in option (SV).

LED MODULES

Zagha LED modules Book7, L28W6, with an energy efficiency until 185 Lm/W, rated AA+. Assembled on a 2 mm aluminium plate to ensure an optimal heat dissipation for the lifespan of the LEDs. Low chromatic distortion: 3SDCM. Colour rendering index over 90. Expected luminous flux : L80 at 70.000 h.

Light spectra : white 4000K, white gradation (TW), inactinic amber 590nm, inactinic red 640nm.

OPTICS

- **TRPC/30** : intensive optics (30°), microlenses installed directly on the LED module. Transparent polycarbonate diffuser.
- **TRPC/60** : intensive optics (60°), microlenses installed directly on the LED module. Transparent polycarbonate diffuser.
- **OPPC** : opal polycarbonate diffuser, high impact resistance.
- **OPMI** : opal diffuser in PMMA, high chemical resistance.
- **MPPC** : polycarbonate micro prismatic diffuser which reduce luminance to achieve UGR lower than 19.
- **MPVR** : optics made of hardened laminated glass and an internal microprism diffuser which reduce luminance to achieve UGRs lower than 19. Excellent resistance to hydrogen peroxide.

CONTAMINATION CONTROL

Reduced risk of microbial growth :

>> **KilBac** technology, broad spectrum antibacterial finish with silver ions (BioCote, validated according to ISO 22196).

>> **CleanSeal** technology, use of two-component antimicrobial seals according to VDI-6022 and DIN EN ISO 846.

The mechanical construction of the luminaire ensures a particle emission class 3 according to ISO 14644-14. This range is made without silicone.

H₂O₂ RESISTANCE

The components that may come into contact with hydrogen peroxide during the decontamination process were tested by cyclic, direct and prolonged contact with a 35% H₂O₂ solution.

TEMPERATURE AND HUMIDITY

Reference ambient temperature : 20°C / 68°F. Operating temperature range : 5 to 25°C / 41 to 77°F (the temperature affects the lifetime of the LEDs). For environments with a moisture content of more than 70%, we recommend the use of lacquered INOX 304 for the housing, in option.

POWER SUPPLY

Luminaires supplied with European-branded electronic driver. Rated voltage 220-240 V 50/60 Hz. Access to the luminaire from the bottom. Rated voltage from 220 to 240 V. DALI dimming (GDA) available in option.

INSTALLATION

Installation of the housing in false ceiling with cut-out, from 13 to 80 mm thickness :

- **By clamping** (supplied with the luminaire) which allow an installation from the inside of the luminaire with the **IsoFlex** system, which ensure the watertightness.
- **By suspension** with threaded rods (not supplied) fixed to the housing.
- **By optional mounting brackets.**

WIRING

Wieland waterproof connector RST20i male + female on HO7RNE 3G1.5 cord.



OPTIONS



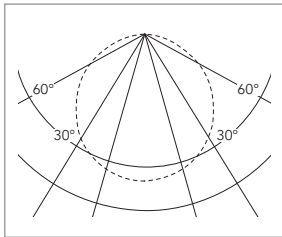
KS3 emergency kit

Philips Trustsight BASIC kit, 3.6 V 4000 mAh NiMH battery, power supply 3 W for 3 h, approx. 300 Lm.

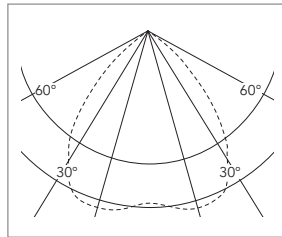
Frame without screws (SV)

The 4 INOX screws are replaced by internal springs.

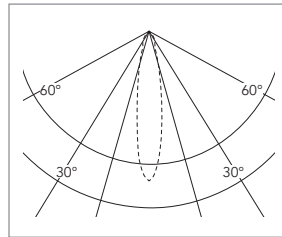
PHOTOMETRY



Opal



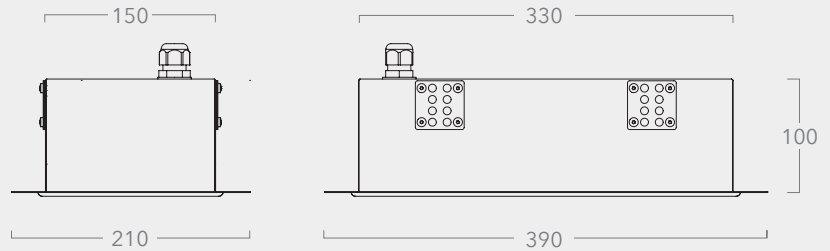
Optics 60°



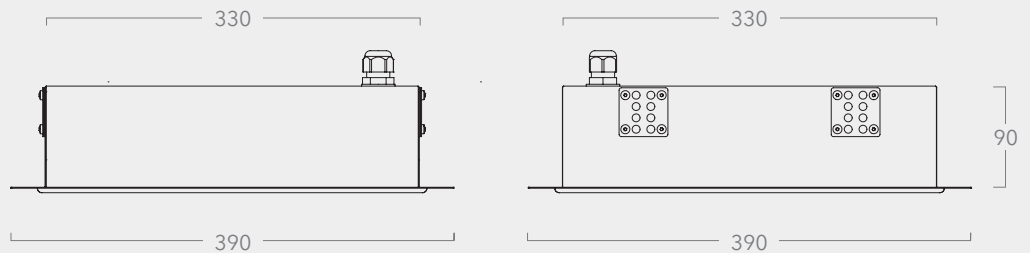
Optics 30°

DIMENSIONS (mm)

TYPE A

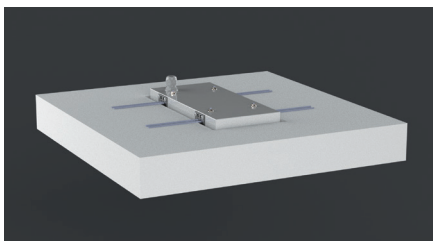


TYPE B

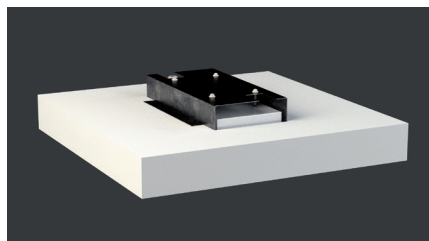


DETAILS

STANDARD CLAMPING



OPTIONAL CLAMPING
A1067ACC - DRACO STRIPPER 2139



For models 210x390mm

REFERENCES AND FEATURES

CODE	REFERENCE	Type	Cut-out (mm)	P (W)	Emitted flux (Lm)	UGR	4-point fixing (mm)	Weight (Kg)
TRPC/30 optics - Intensive 30° - Polycarbonate								
EDO2021EPF	DRACO TRPC/30 LED 390/390 4500/4 35/840 EPF	B	350x350	35	4500	<19	187x187	4,5
EDO2022EPF	DRACO TRPC/30 LED 390/390 9200/4 76/840 EPF	B	350x350	76	9200	<19	187x187	4,5
TRPC/60 optics - Opening 60° - Polycarbonate								
EDO2023EPF	DRACO TRPC/60 LED 390/390 4500/4 35/840 EPF	B	350x350	35	4500	<19	187x187	4,5
EDO2024EPF	DRACO TRPC/60 LED 390/390 9200/4 76/840 EPF	B	350x350	76	9200	<19	187x187	4,5
OPPC optics - Polycarbonate opal								
EDO2013EPF	DRACO OPPC LED 210/390 1450/2 14/840 EPF	A	170x350	14	1450		101x187	2,5
EDO2014EPF	DRACO OPPC LED 210/390 2900/2 33/840 EPF	A	170x350	33	2900		101x187	2,5
EDO2025EPF	DRACO OPPC LED 390/390 3400/5 31/840 EPF	B	350x350	31	3400		187x187	4,5
EDO2026EPF	DRACO OPPC LED 390/390 4500/5 44/840 EPF	B	350x350	44	4500		187x187	4,5
OPMI optics - PMMA opal diffuser								
EDO2092EPF	DRACO OPMI LED 210/390 1700/2 14/840 EPF	A	170x350	14	1700		101x187	2,5
EDO2093EPF	DRACO OPMI LED 210/390 3300/2 33/840 EPF	A	170x350	33	3300		101x187	2,5
EDO2094EPF	DRACO OPMI LED 390/390 3950/5 31/840 EPF	B	350x350	31	3950		187x187	4,5
EDO2095EPF	DRACO OPMI LED 390/390 5300/4 44/840 EPF	B	350x350	44	5300		187x187	4,5
EDO2108EPF	DRACO OPMI LED 390/390 9900/5 89/840 EPF	B	350x350	89	9900		187x187	4,5
MPPC optics - Polycarbonate micro-prismatic								
EDO2086EPF	DRACO MPPC LED 390/390 3700/5 36/840 EPF	B	350x350	36	3700	<19	187x187	4,5
EDO2087EPF	DRACO MPPC LED 390/390 5100/5 44/840 EPF	B	350x350	44	5100		187x187	4,5
EDO2100EPF	DRACO MPPC LED 390/390 9200/5 89/840 EPF	B	350x350	89	9200		187x187	4,5
MPVR optics - Laminated tempered glass and micro-prismatic diffuser								
EDO2185EPF	DRACO MPVR LED 390/390 3800/5 38/840 EPF	B	350x350	38	3800	<19	187x187	5,5
EDO2186EPF	DRACO MPVR LED 390/390 5200/5 48/840 EPF	B	350x350	48	5200	<19	187x187	5,5
White gradation (TW) - MPPC optics - Polycarbonate micro-prismatic								
EDO2087GDATW	DRACO MPPC LED 390/390 5100/5 44/TW GDA	B	350x350	44	5100		187x187	4,5
590 nm amber inactinic light - OPMI optics								
EDO2384EPF	DRACO OPMI HP2 390/390 3000/4 40/590 EPF	B	350x350	40	3000		187x187	4,5
640 nm red inactinic light - OPMI optics								
EDO2208EPF	DRACO OPMI LED 390/390 1000/2 38/640 EPF	B	350x350	38	1000		187x187	4,5

Light and power output tolerance $\pm 10\%$

Standards and warranty

Compliance : information on the compliance of our products with the relevant standards and directives is available on our website.

Warranty : our warranty conditions are indicated in our general terms and conditions of sale. There are special conditions depending on the product range. These conditions can be checked on our website : www.isoone-cleanroom-lighting.com/conditions-generales-de-vente/

Temperature and switches on : the operating temperature and the number of daily switches have an influence on the lifetime of the products. Our luminaires are designed to withstand at least 15.000 switches on following EU 1194/2012.

Please consult us for more information.

Note

ISOONE reserves the right to modify or update this document at any time within the framework of the technological evolution and the updating of our technical documentation. Despite the care taken in the design and the updating of this card, it can not under any circumstances constitute a contractual document.

UE Declaration of Conformity

LA MANUFACTURE DE FRANCE SAS
18 rue Jean Monnet
31240 Saint-Jean

CERTIFIES,
under its own responsibility, that the ISOONE luminaires **DRACO**

EDO2021EPF	EDO2024EPF	EDO2025EPF	EDO2093EPF	EDO2108EPF	EDO2100EPF	EDO2087GDATW
EDO2022EPF	EDO2013EPF	EDO2026EPF	EDO2094EPF	EDO2086EPF	EDO2185EPF	EDO2384EPF
EDO2023EPF	EDO2014EPF	EDO2092EPF	EDO2095EPF	EDO2087EPF	EDO2186EPF	EDO2208EPF

are designed and manufactured in accordance with the following harmonized directives and standards :

SECURITY

2014/35/UE (26/02/2014)	Electrical equipment designed for use within certain voltage limits.
EN 60598-1 : 2015	Luminaires - Part 1 : General requirements and tests.
EN 60598-2-2 : 2012	Luminaires - Part 2-1 : Particular requirements - Fixed luminaires for general lighting.
EN 62493 : 2015	Assessment of lighting equipment related to human exposure to electromagnetic Field.
EN 62471 : 2008	Photobiological safety of lamps and devices using lamps.

ELECTROMAGNETIC COMPATIBILITY

2014/30/UE (26/02/2014)	European « EMC » Directive.
EN 55015 : 2013 + A1 : 2015	Limits and methods of measurement of electrical radio interference from electrical lighting and similar equipment.
EN 61000-3-2 : 2019	Electromagnetic compatibility (EMC) - Part 3-2 : Limits - Limits for harmonic current emissions (current drawn by equipment ≤ 16 A per phase).
EN 61000-3-3 : 2014	Electromagnetic compatibility (EMC) - Part 3-3 : Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection.
EN 61547 : 2009	General purpose lighting equipment - EMC immunity requirements.

ECO-CONCEPTION

2009/125/CE (21/10/2009) + 2019/2020 (01/10/2019)	European « ErP » directive + regulation.
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RESTRICTION OF DANGEROUS SUBSTANCES

2011/65/UE (08/06/2011)	European directive « RoHS ».
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Certificate issued on Mach 15th 2024

President, Frédéric Colombo

