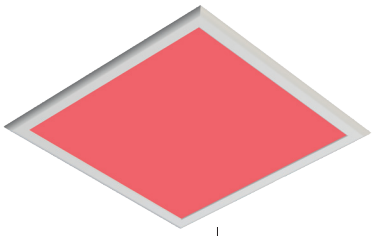
ISOONE
Cleanroom lighting

LED

LED INACTINIC Panels IP65

H1_Evo_WR



LED

L 80 50.000h

3 SDCM

0 RISQUE PHOTO-BIOLOGIQUE

1 14644

IP65

IK06

650° OPMI

CE

TYPE OF PRODUCTS
Very slim LED Panels (11mm), especially made for cleanrooms. **IP65 from the top and the bottom**, resistant to hydrogen peroxide. Combined 4000 K white or inactinic RED (640 nm) illumination via separate supply circuits.

MECHANICAL CONSTRUCTION
Extruded aluminium frame welded and white powder-coated with high covering power to maintain the frame's heat dissipation capacity, RAL 9016. Double silicone gasket on top and bottom, cable gland and EPDM gasket fixed on the top part to ensure a reinforced seal. Top clamping plate in 0,8 mm galvanized steel.

LED MODULES
LED PCB placed inside the aluminium edge. High efficiency LEDs encapsulated on a medium power Epistar chip size 26*46 mil to obtain a better efficiency and increase reliability. White light with a colour temperature of 4000 K and red light with a wavelength of 640 nm.

OPTICS
Optical unit made with a reflective sheet incorporating Toray Lumirror technology, a Mitsubishi PMMA light guide and a white chimei PMMA diffuser film.

CONTAMINATION CONTROL
A set of technical seals ensures waterproofness, prevents the proliferation of bacteria, and reduces gas exchanges : **air cleanliness Class 1 in compliance with ISO 14644-14**. Certified by **Fraunhofer IPA** laboratory. The free ceiling space of clean rooms class 1 to 5 can be limited by the HVAC system.

H_2O_2 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% H_2O_2 solution, see resistance in the reference table.

TEMPERATURE
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).

POWER SUPPLY
Luminaires with two circuits. External electronic power supply (EPF) from European brand. Nominal voltage 220/240 V 50/60 Hz. DALI dimming (GDA) available in option.

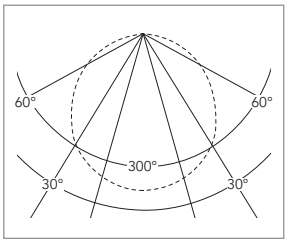
INSTALLATION
H1_Evo_WR is available in several versions :
- **/C installation by clips** on metal ceiling.
- **/TF installation through threaded rod** for laminate panel.

WIRING
Connection on the external power supply, with a traction stop system to be tightened and closed (accessories included). Foresee a reservation in the plenum for the power supply.

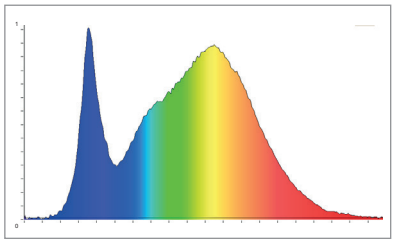
OPTION

DALI GDA

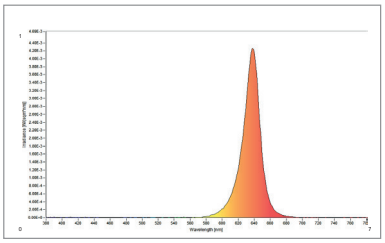
PHOTOMETRY



LIGHT SPECTRA

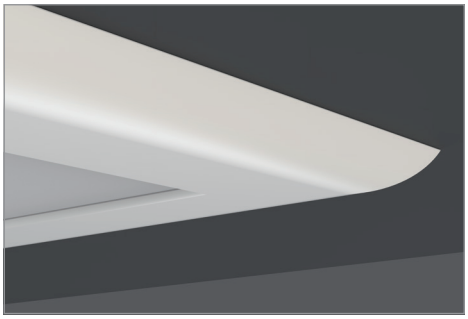


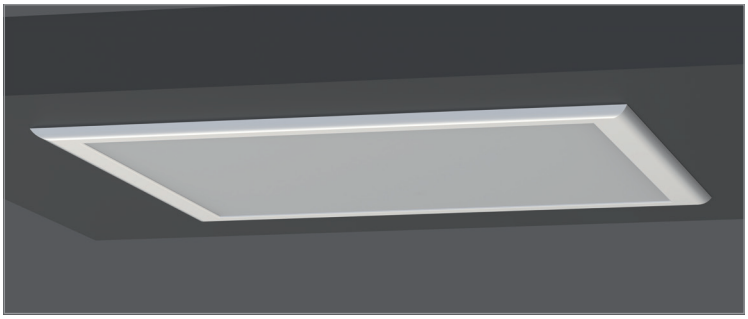
WHITE 4000 K



INACTINIC RED (620-640 nm)

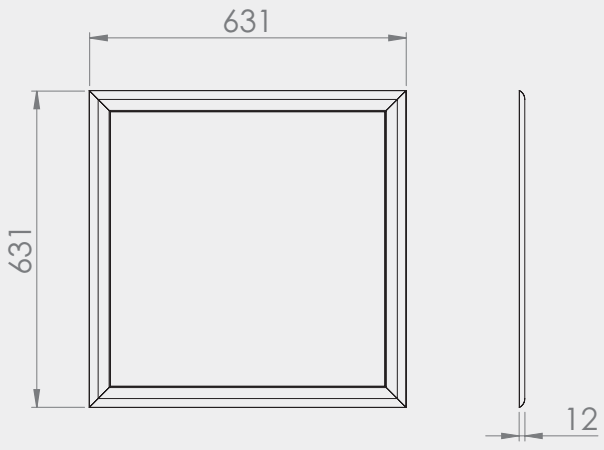
DETAILS





DIMENSIONS (mm)

TYPE **A**



REFERENCES AND FEATURES

CODE	REFERENCE	Colour (K) temperature	Type	P (W)	Emitted flux 4000 K (Lm)	Emitted flux 625 nm (Lm)	H_2O_2
Surface-mounting by clips through 8 points on 0,6 mm plate (sandwich panels)							
SUR1252EPF	H1 EVO-C OP W/R LED 631/631 4300/1 36/940 EPF	4000	A	40+20	3800	1000	●
Surface-mounting, direct tightening by screw							
SUR1253EPF	H1 EVO-V OP W/R LED 631/631 4300/1 36/940 EPF	4000	A	40+20	3800	1000	●

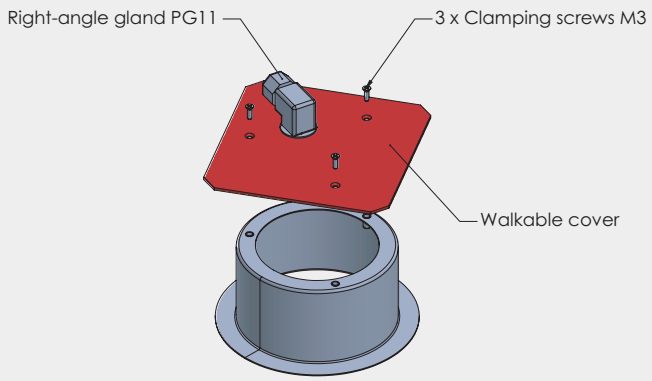
Light and power output tolerance ± 10%

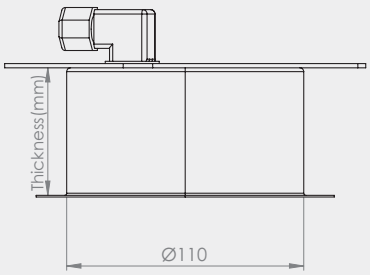
ACCESSORIES

CODE	REFERENCE		CODE	REFERENCE	
Drilling template					
A1009ACC	H1/C - Drilling template 600/600				
Extension cables and cords		L(m)			L(m)
A1198ACC	Extension cable H1 WR 1500 4P M+F	1,5	A1200ACC	Cord H1 WR 1500 4P F	1,5
A1199ACC	Extension cable H1 WR 3000 4P M+F	3	A1201ACC	Cord H1 WR 3000 4P F	3
TRU - Panel feed-through accessory		Thickness(mm)			Thickness(mm)
A1202ACC	TRU H1 E70mm D110mm	70	A1204ACC	TRU H1 E80mm D110mm	80
A1203ACC	TRU H1 E60mm D110mm	60	A1181ACC	TRU H1 E100mm D110mm	100

TRU - H1 CABLE ENTRY ACCESSORY SANDWICH PANEL

TRU - H1



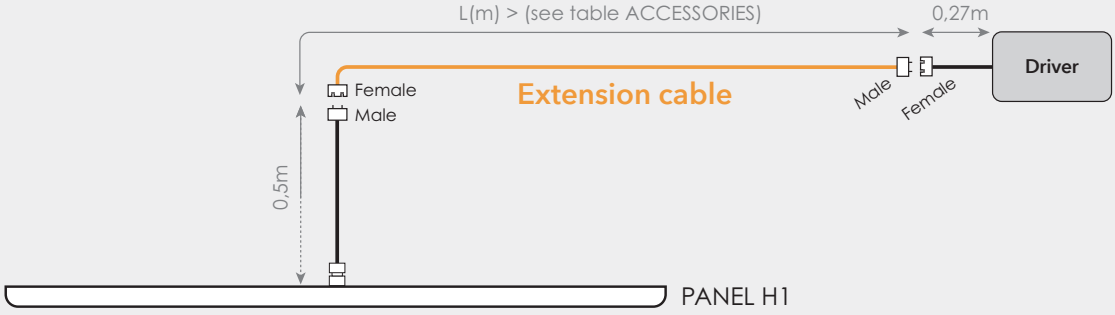


Thickness(mm) > (see table ACCESSORIES)

EXTENSION CABLES ET CORDS

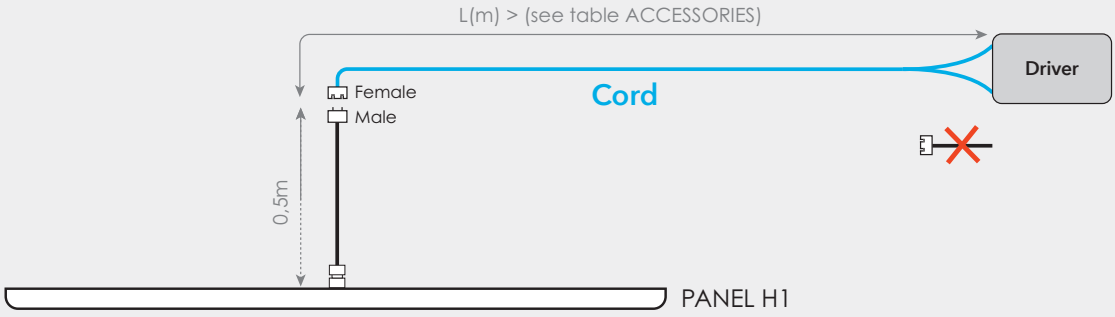
EXTENSION CABLES

Extension cable with male and female connectors, enabling you to extend the power supply by 3m without having to replace the cords.



CORDS

1.5 m or 3 m cord to replace the female cord originally fitted to the power supply, fitted with a female connector at one end and stripped at the other, enabling the cord to be cut to the required size before being reconnected to the power supply.



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.

ISOONE
Cleanroom lighting

ANNEX

H1_Evo_WR

UE Declaration of Conformity

ISOONE Cleanroom lighting

UE Declaration of Conformity

Certificate N° **CE_H1_Evo_WR_20240402**

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

CERTIFIES,
under its own responsibility, that the ISOONE luminaires H1_Evo_WR

SUR1252EPF
SUR1253EPF

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.

RESTRICTION OF DANGEROUS SUBSTANCES

2011/65/UE (08/06/2011)	European directive « RoHS ».

Certificate issued on Mach 15th 2024

President, Frédéric Colombo