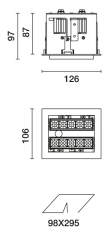
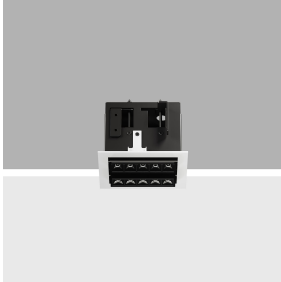


Last information update: April 2025

Product configuration: PH89

PH89: Frame adjustable 2 x 5-cell recessed luminaire - LED DALI dimmable power supply



Product code

PH89: Frame adjustable 2 x 5-cell recessed luminaire - LED DALI dimmable power supply

Technical description

Recessed rectangular luminaire with LEDs. Shaped steel sheet structural compartment with outer rim. The two linear elements with 5 lighting cells, in die-cast aluminium and independently adjustable, can be used to direct the emission with a tilting adjustability of +/- 20°. Metallised thermoplastic high definition optics, integrated in a rear position in the black anti-glare screen; the structure of the optical system prevents a pinpoint effect, allowing precise, circular light distribution and controlled glare emission. Supplied with DALI dimmable power supply connected to the luminaire.

Installation

recessed with mechanical blocking system for false ceilings from 1 to 25 mm; can be installed on ceilings and walls (vertical + horizontal)

Colour

White (01) | Black / Black (43) | Black / White (47) | White/Gold (41)* | Grey / Black (74)* | White / burnished chrome (E7)*

Weight (Kg)

0.93

* Colours on request

Mounting

wall recessed|ceiling recessed

Wiring

on power supply box: screw connections.

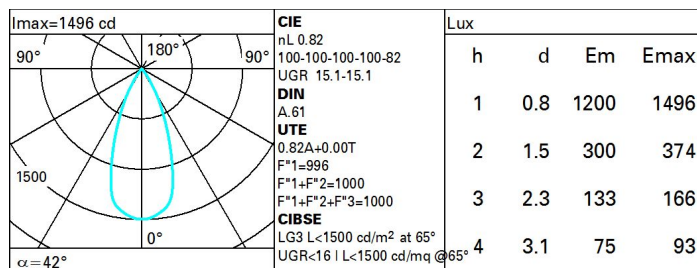
Complies with EN60598-1 and pertinent regulations



Technical data

Im system:	1542	CRI (minimum):	90
W system:	16.5	Colour temperature [K]:	3500
Im source:	940	MacAdam Step:	3
W source:	7	Life Time LED 1:	> 50,000h - L90 - B10 (Ta 25°C)
Luminous efficiency (Im/W, real value):	93.4	Lamp code:	LED
Im in emergency mode:	-	Number of lamps for optical assembly:	1
Total light flux at or above an angle of 90° [Lm]:	0	ZVEI Code:	LED
Light Output Ratio (L.O.R.) [%]:	82	Number of optical assemblies:	2
Beam angle [°]:	42°	Control:	DALI-2

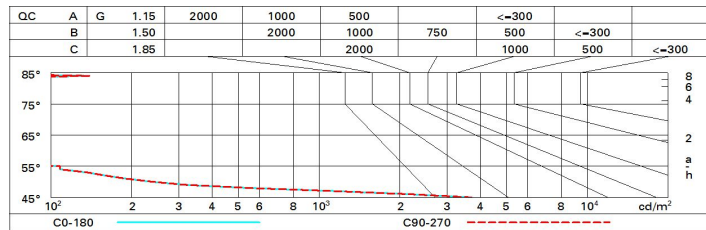
Polar



Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	74	70	68	65	70	67	67	64	78
1.0	77	74	71	70	73	71	70	68	83
1.5	81	78	76	75	78	76	75	73	89
2.0	84	82	80	79	81	79	78	76	93
2.5	85	84	83	82	83	82	81	78	96
3.0	86	85	84	84	84	83	82	80	98
4.0	87	86	86	85	85	85	83	81	99
5.0	88	87	87	87	86	85	84	82	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 940 lm bare lamp luminous flux)											
Reflect.:		viewed crosswise					viewed endwise				
ceiling/cav		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
walls		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
work pl.		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Room dim		viewed crosswise					viewed endwise				
x	y										
2H	2H	15.7	16.2	15.9	16.4	16.7	15.7	16.2	15.9	16.4	16.7
	3H	15.5	16.0	15.8	16.3	16.5	15.5	16.0	15.8	16.3	16.5
	4H	15.5	15.9	15.8	16.2	16.5	15.5	15.9	15.8	16.2	16.5
	6H	15.4	15.8	15.7	16.1	16.4	15.4	15.8	15.7	16.1	16.4
	8H	15.4	15.7	15.7	16.1	16.4	15.4	15.7	15.7	16.1	16.4
12H	15.3	15.7	15.7	16.0	16.4	15.3	15.7	15.7	16.0	16.4	
4H	2H	15.5	15.9	15.8	16.2	16.5	15.5	15.9	15.8	16.2	16.5
	3H	15.3	15.7	15.7	16.0	16.4	15.3	15.7	15.7	16.0	16.4
	4H	15.2	15.6	15.6	15.9	16.3	15.2	15.6	15.6	15.9	16.3
	6H	15.1	15.4	15.6	15.8	16.2	15.1	15.4	15.6	15.8	16.2
	8H	15.1	15.4	15.5	15.8	16.2	15.1	15.4	15.5	15.8	16.2
12H	15.0	15.3	15.5	15.7	16.2	15.0	15.3	15.5	15.7	16.2	
8H	4H	15.1	15.4	15.5	15.8	16.2	15.1	15.4	15.5	15.8	16.2
	6H	15.0	15.2	15.5	15.7	16.1	15.0	15.2	15.5	15.7	16.1
	8H	14.9	15.1	15.4	15.6	16.1	14.9	15.1	15.4	15.6	16.1
	12H	14.9	15.0	15.4	15.5	16.1	14.9	15.0	15.4	15.5	16.1
12H	4H	15.0	15.3	15.5	15.7	16.2	15.0	15.3	15.5	15.7	16.2
	6H	14.9	15.1	15.4	15.6	16.1	14.9	15.1	15.4	15.6	16.1
	8H	14.9	15.0	15.4	15.5	16.1	14.9	15.0	15.4	15.5	16.1
Variations with the observer position at spacing:											
S =	1.0H	6.3 / -34.2					6.3 / -34.2				
	1.5H	9.1 / -35.8					9.1 / -35.8				
	2.0H	11.1 / -37.1					11.1 / -37.1				