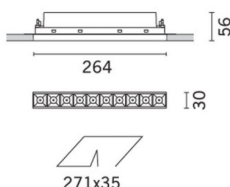


Last information update: May 2018



10 cell Frameless Recessed luminaire - Tunable White - Flood optic

Product code
P190

Technical description

Minimal rectangular 10 optic element recessed miniaturised luminaire. Using LED lamps at different colour temperatures allows them to be modulated. This variation is achieved by mixing the emission of 5 x 2700K high CRI LEDs and 5 x 5700K high CRI LEDs. The colour temperature remains uniform and constant even when different size products are used together and with an uneven number of warm and cold LEDs. Main body with die-cast aluminium radiant surface; frameless version for mounting flush with the ceiling. Metallised thermoplastic high definition optics - flood beam - set back from the black anti-glare screen; the structure of the optical system prevents a pinpoint effect, allowing precise, circular light distribution and emission with controlled glare. Supplied with an integrated (basic) power system that allows the colour temperature to be varied, without using any extra components, but simply by pressing the buttons (max 4 products). Using the 6170 + M630 codes you can obtain a simple and intuitive DALI programmable solution with touch-screen. There are also other control systems available with different codes for large systems that require specialised technicians for their programming: the MH97 + MH93 + MI02 group can be used for a DALI / KNX programmable solution - the MH97 + MH93 + M618 group can be used to extend the control of the system to remote supports such as tablets and smart phones.

Installation

recessed with steel wire springs on the specific adapter (included) which allows flush-mounting with the ceiling. Adapter for fitting luminaire to false ceilings (12.5 mm thick) with self-tapping screws; subsequent filling and smoothing operations; insertion of luminaire body and stylish finishing. Preparation hole 35 x 271

Dimension (mm)

264x30x56

Colour

Black (04)

Weight (Kg)

0.93

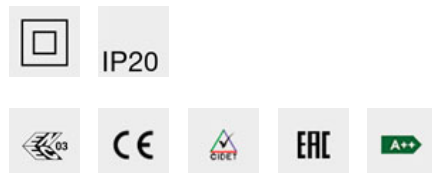
Mounting

wall recessed|ceiling recessed

Wiring

Power units included. Various management solutions are available with a separate code. For technical data, properties and connection modes see the instruction sheet.

Complies with EN60598-1 and pertinent regulations



Product configuration: P190

Product characteristics

Total lighting output [Lm]: 1396.7
Total power [W]: 26
Luminous efficacy [Lm/W]: 53.7
Life Time: 50,000h - L90 - B10 (Ta 25°C)

Total luminous flux at or above an angle of 90° [Lm]: 0
Emergency luminous flux [Lm]: /
Voltage [V]: -
Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 80
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 18
Nominal luminous [Lm]: 1750
Lamp maximum intensity [cd]: /
Beam angle [°]: 30°

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 8
Colour temperature [K]: /
CRI: /
Wavelength [Nm]: /
MacAdam Step: /

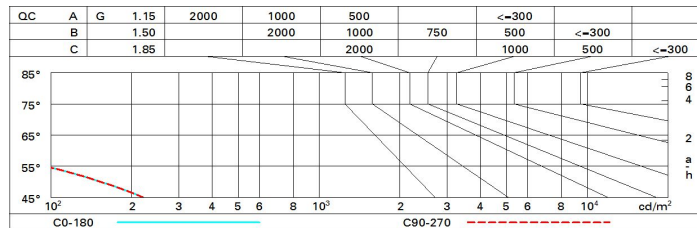
Polar

	Imax=5030 cd	CIE nL 0.80 100-100-100-100-80 UGR <10-<10 DIN A.61 UTE 0.80A+0.00T F*1=999 F*1+F*2=1000 F*1+F*2+F*3=1000 CIBSE LG3 L<200 cd/m ² at 65° BZ1	Lux				
				h	d	Em	Emax
				2	1.1	980	1257
				4	2.1	245	314
				6	3.2	109	140
		8	4.3	61	79		

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	72	68	66	64	68	65	65	63	78
1.0	75	72	70	68	71	69	69	66	83
1.5	79	76	75	73	76	74	73	71	89
2.0	81	80	78	77	78	77	76	74	93
2.5	83	82	80	80	80	79	79	76	96
3.0	84	83	82	81	82	81	80	78	98
4.0	85	84	84	83	83	82	81	79	99
5.0	85	85	84	84	84	83	82	80	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 1750 lm bare lamp luminous flux)											
Reflect.:		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
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	-6.0	-5.5	-5.7	-5.3	-5.0	-6.0	-5.5	-5.7	-5.3	-5.0
	3H	-6.1	-5.7	-5.8	-5.4	-5.1	-6.1	-5.7	-5.8	-5.4	-5.1
	4H	-6.2	-5.8	-5.9	-5.5	-5.2	-6.2	-5.8	-5.9	-5.5	-5.2
	6H	-6.2	-5.9	-5.9	-5.5	-5.2	-6.3	-5.9	-5.9	-5.6	-5.2
	8H	-6.3	-5.9	-5.9	-5.6	-5.2	-6.3	-5.9	-6.0	-5.6	-5.3
	12H	-6.3	-5.9	-5.9	-5.6	-5.3	-6.4	-6.0	-6.0	-5.7	-5.3
4H	2H	-6.2	-5.8	-5.9	-5.5	-5.2	-6.2	-5.8	-5.9	-5.5	-5.2
	3H	-6.3	-6.0	-6.0	-5.6	-5.3	-6.3	-5.9	-5.9	-5.6	-5.3
	4H	-6.4	-6.1	-6.0	-5.7	-5.3	-6.4	-6.1	-6.0	-5.7	-5.3
	6H	-6.5	-6.2	-6.0	-5.8	-5.4	-6.5	-6.2	-6.0	-5.8	-5.4
	8H	-6.5	-6.2	-6.0	-5.8	-5.4	-6.5	-6.3	-6.1	-5.8	-5.4
	12H	-6.5	-6.3	-6.1	-5.9	-5.4	-6.6	-6.3	-6.1	-5.9	-5.4
8H	4H	-6.5	-6.3	-6.1	-5.8	-5.4	-6.5	-6.2	-6.0	-5.8	-5.4
	6H	-6.6	-6.4	-6.1	-5.9	-5.4	-6.6	-6.3	-6.1	-5.9	-5.4
	8H	-6.6	-6.4	-6.1	-6.0	-5.5	-6.6	-6.4	-6.1	-6.0	-5.5
	12H	-6.6	-6.5	-6.1	-6.0	-5.5	-6.6	-6.5	-6.1	-6.0	-5.5
12H	4H	-6.6	-6.3	-6.1	-5.9	-5.4	-6.5	-6.3	-6.1	-5.9	-5.4
	6H	-6.6	-6.4	-6.1	-6.0	-5.5	-6.6	-6.4	-6.1	-5.9	-5.4
	8H	-6.6	-6.5	-6.1	-6.0	-5.5	-6.6	-6.5	-6.1	-6.0	-5.5
Variations with the observer position at spacing:											
S =	1.0H	6.4 / -8.9					6.4 / -8.9				
	1.5H	9.2 / -10.1					9.2 / -10.1				
	2.0H	11.2 / -10.6					11.2 / -10.6				