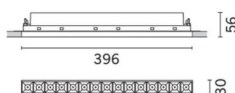
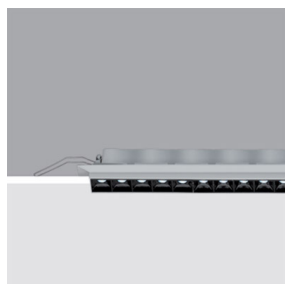


Last information update: May 2018



**15 cell Frameless Recessed luminaire - Tunable White - Wide Flood optic**

**Product code**  
P193

**Technical description**

Minimal rectangular 15 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 8 x 2700K high CRI LEDs and 7 x 5700K high CRI LEDs. Despite the disparity of the lamps when the two end channels are used - 2700K and 5700K - the intensity of the flux emitted is the same. The colour temperature also remains uniform and constant even when different size products are used together. Main body with die-cast aluminium radiant surface; frameless version for mounting flush with the ceiling. Metallised thermoplastic high definition optics - wide 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 404

**Dimension (mm)**

396x30x56

**Colour**

Black (04)

**Weight (Kg)**

1.3

**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: P193**

**Product characteristics**

Total lighting output [Lm]: 2114  
Total power [W]: 34.4  
Luminous efficacy [Lm/W]: 61.5  
Life Time: 50,000h - L90 - B10 (Ta 25°C)

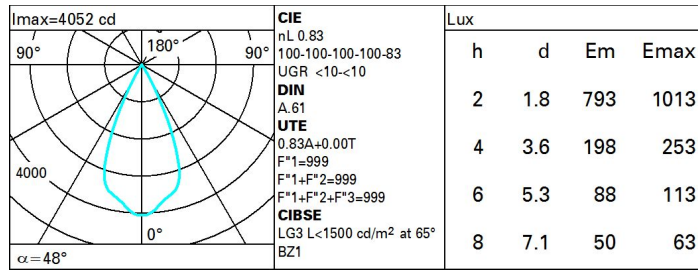
Total luminous flux at or above an angle of 90° [Lm]: 0  
Emergency luminous flux [Lm]: /  
Voltage [V]: -  
Number of optical assemblies: 1

**Optical assembly Characteristics Type 1**

Light Output Ratio (L.O.R.) [%]: 83  
Lamp code: LED  
ZVEI Code: LED  
Nominal power [W]: 27  
Nominal luminous [Lm]: 2550  
Lamp maximum intensity [cd]: /  
Beam angle [°]: 48°

Number of lamps for optical assembly: 1  
Socket: /  
Ballast losses [W]: 7.4  
Colour temperature [K]: /  
CRI: /  
Wavelength [Nm]: /  
MacAdam Step: /

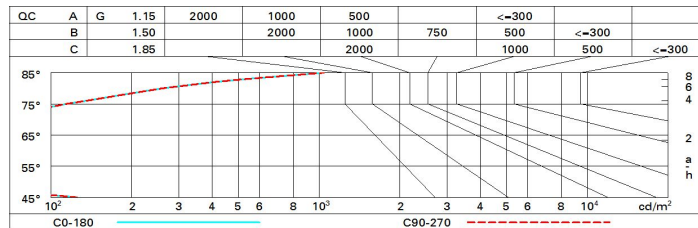
**Polar**



**Utilisation factors**

R	77	75	73	71	55	53	33	00	DRR
K0.8	75	71	68	66	70	68	68	65	78
1.0	78	75	72	70	74	72	71	69	83
1.5	82	79	77	76	78	77	76	73	89
2.0	85	83	81	80	81	80	79	77	93
2.5	86	85	84	83	83	82	82	79	96
3.0	87	86	85	85	85	84	83	81	98
4.0	88	87	87	86	86	86	84	82	99
5.0	89	88	88	87	87	86	85	83	100

**Luminance curve limit**



**UGR diagram**

Corrected UGR values (at 2550 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	3.1	3.5	3.3	3.8	4.0	3.1	3.5	3.3	3.8	4.0
	3H	2.9	3.4	3.2	3.6	3.9	2.9	3.4	3.2	3.6	3.9
	4H	2.9	3.3	3.2	3.6	3.8	2.8	3.3	3.2	3.5	3.8
	6H	2.8	3.2	3.1	3.5	3.8	2.8	3.1	3.1	3.5	3.8
	8H	2.8	3.2	3.2	3.5	3.8	2.7	3.1	3.1	3.4	3.8
	12H	2.9	3.3	3.3	3.6	3.9	2.7	3.0	3.1	3.4	3.7
4H	2H	2.8	3.3	3.2	3.5	3.8	2.9	3.3	3.2	3.6	3.8
	3H	2.7	3.0	3.1	3.4	3.7	2.7	3.1	3.1	3.4	3.7
	4H	2.6	2.9	3.0	3.3	3.7	2.6	2.9	3.0	3.3	3.7
	6H	2.6	2.8	3.0	3.2	3.7	2.5	2.8	3.0	3.2	3.6
	8H	2.6	2.9	3.0	3.3	3.7	2.5	2.7	2.9	3.2	3.6
	12H	2.8	3.0	3.3	3.5	3.9	2.4	2.7	2.9	3.1	3.6
8H	4H	2.5	2.7	2.9	3.2	3.6	2.6	2.9	3.0	3.3	3.7
	6H	2.5	2.7	2.9	3.1	3.6	2.6	2.8	3.0	3.2	3.7
	8H	2.6	2.7	3.0	3.2	3.7	2.6	2.7	3.0	3.2	3.7
	12H	3.0	3.1	3.5	3.6	4.1	2.6	2.7	3.1	3.2	3.7
12H	4H	2.4	2.7	2.9	3.1	3.6	2.8	3.0	3.3	3.5	3.9
	6H	2.4	2.6	2.9	3.1	3.6	2.9	3.1	3.4	3.5	4.0
	8H	2.6	2.7	3.1	3.2	3.7	3.0	3.1	3.5	3.6	4.1
Variations with the observer position at spacing:											
S =	1.0H	5.9 / -5.4					5.9 / -5.4				
	1.5H	8.6 / -5.5					8.6 / -5.5				
	2.0H	10.6 / -5.9					10.6 / -5.9				