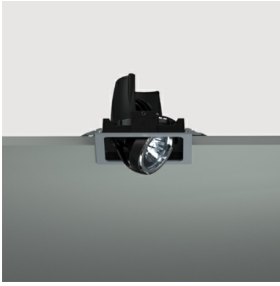


Last information update: June 2018



square recessed luminaire - neutral white passive dissipation - integrated electronic control gear - wide flood

Product code
Q199

Technical description

Recessed adjustable removable luminaire for LED lamp with passive heat dissipation system. Square sheet steel perimeter frame. Main structure made of die-cast aluminium. Steel rotation hinges. Die-cast aluminium lamp body with shaped surface for high level radiant effect for effectively reducing the temperature and keeping the long-term LED lamp performance unchanged. Chrome-plated aluminium lamp body closing ring. Reflector with high efficiency super-pure aluminium optic - wide flood beam angle. Body adjusted using manually operated device: internal 29° - external 75° - rotation about axis 355°. Supplied with electronic control gear connected to the luminaire. Neutral white high efficiency LED.

Installation

recessed using steel springs for false ceilings with thicknesses starting at 1 mm; preparation slot 142 x 142 mm

Dimension (mm)

151x151x96

Colour

White/Aluminium (39) | Grey/Black/Aluminium (E1)

Weight (Kg)

0.95

Mounting

ceiling recessed

Wiring

on control gear box with quick-coupling connections

Complies with EN60598-1 and pertinent regulations



IP20



pending

Product configuration: Q199**Product characteristics**

Total lighting output [Lm]: 2338
Total power [W]: 24.7
Luminous efficacy [Lm/W]: 94.7
Life Time: > 50,000h - L80 - 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.) [%]: 78
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 21
Nominal luminous [Lm]: 3000
Lamp maximum intensity [cd]: /
Beam angle [°]: 54°

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 3.7
Colour temperature [K]: 4000
CRI: 80
Wavelength [Nm]: /
MacAdam Step: 2

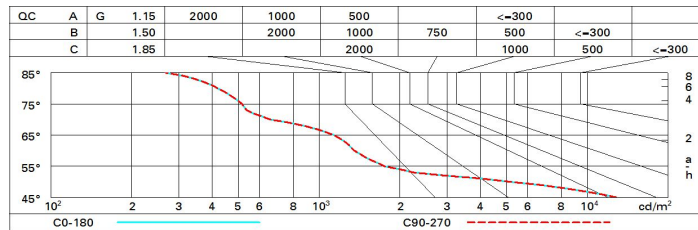
Polar

Imax=3107 cd	CIE nL 0.78 97-100-100-100-78 UGR 16.4-16.4 DIN A.61 UTE 0.78A+0.00T F*1=965 F*1+F*2=997 F*1+F*2+F*3=1000 CIBSE LG3 L<1500 cd/m² at 65° UGR<19 L<1500 cd/mq @65°	Lux			
		h	d	Em	Emax
90°		2	2	600	773
3000		4	4.1	150	193
		6	6.1	67	86
α=54°		8	8.2	38	48

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	69	65	63	60	65	62	62	59	76
1.0	72	69	66	65	68	66	66	63	81
1.5	76	74	72	70	73	71	70	68	87
2.0	79	77	75	74	76	75	74	71	92
2.5	80	79	78	77	78	77	76	74	95
3.0	81	80	80	79	79	78	77	75	97
4.0	83	82	81	81	80	80	79	77	98
5.0	83	82	82	82	81	81	79	78	99

Luminance curve limit



UGR diagram

Corrected UGR values (at 3000 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											
x	y										
2H	2H	17.0	17.6	17.2	17.8	18.1	17.0	17.6	17.2	17.8	18.1
	3H	16.8	17.4	17.1	17.7	17.9	16.8	17.4	17.1	17.7	17.9
	4H	16.8	17.3	17.1	17.6	17.9	16.8	17.3	17.1	17.6	17.9
	6H	16.7	17.2	17.0	17.5	17.8	16.7	17.2	17.0	17.5	17.8
	8H	16.7	17.1	17.0	17.4	17.8	16.6	17.1	17.0	17.4	17.8
12H	16.6	17.1	17.0	17.4	17.7	16.6	17.1	17.0	17.4	17.7	
4H	2H	16.8	17.3	17.1	17.6	17.9	16.8	17.3	17.1	17.6	17.9
	3H	16.6	17.1	17.0	17.4	17.8	16.6	17.1	17.0	17.4	17.8
	4H	16.5	16.9	16.9	17.3	17.7	16.5	16.9	16.9	17.3	17.7
	6H	16.4	16.8	16.9	17.2	17.6	16.4	16.8	16.9	17.2	17.6
	8H	16.4	16.7	16.8	17.1	17.6	16.4	16.7	16.8	17.1	17.6
12H	16.4	16.6	16.8	17.1	17.5	16.4	16.6	16.8	17.1	17.5	
8H	4H	16.4	16.7	16.8	17.1	17.6	16.4	16.7	16.8	17.1	17.6
	6H	16.3	16.6	16.8	17.0	17.5	16.3	16.6	16.8	17.0	17.5
	8H	16.3	16.5	16.7	16.9	17.4	16.3	16.5	16.7	16.9	17.4
	12H	16.2	16.4	16.7	16.9	17.4	16.2	16.4	16.7	16.9	17.4
12H	4H	16.4	16.6	16.8	17.1	17.5	16.4	16.6	16.8	17.1	17.5
	6H	16.3	16.5	16.7	16.9	17.4	16.3	16.5	16.7	16.9	17.4
	8H	16.2	16.4	16.7	16.9	17.4	16.2	16.4	16.7	16.9	17.4
Variations with the observer position at spacing:											
S =	1.0H	5.1 / -13.5					5.1 / -13.5				
	1.5H	7.9 / -14.7					7.9 / -14.7				
	2.0H	9.9 / -15.9					9.9 / -15.9				