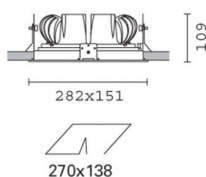


Last information update: June 2018



rectangular recessed luminaire with 2 optical assemblies - warm white passive dissipation LEDs - integrated electronic control gear - wide flood

Product code
Q213

Technical description

Multiple recessed adjustable removable luminaire for LED lamp with passive heat dissipation system. Sheet steel perimeter frame. Main structure made of die-cast aluminium. Steel rotation hinges. Die-cast aluminium lamp bodies 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 rings. Reflectors with high efficiency super-pure aluminium optic - wide flood beam angle. Bodies adjusted using manually operated device: internal 29° - external 75° - rotation about axis 355°. During adjustment and rotation the lamp bodies are subject to some limitations. Consult the instruction sheet. Supplied with electronic control gear units connected to the luminaire. Warm white high efficiency LED.

Installation

recessed: preparation slot 138 x 270 mm; perimeter frame preliminary fixing on false ceiling (min. thickness 1 mm) with adjustable metal brackets; main structure inserted and mechanically locked on the frame

Dimension (mm)

282x151x109

Colour

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

Weight (Kg)

1.9

Mounting

ceiling recessed

Wiring

on control gear box with quick-coupling connections; each lamp body has a specific ballast, allowing separate switch ons

Notes

the configuration of the lamp bodies causes some limitations during angling and rotation; consult the instruction leaflet

Complies with EN60598-1 and pertinent regulations



IP20



Product configuration: Q213

Product characteristics

Total lighting output [Lm]: 4676
Total power [W]: 51
Luminous efficacy [Lm/W]: 91.7
Life Time: > 50,000h - L80 - B10 (Ta 25°C)

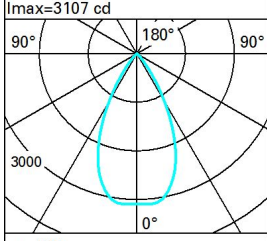
Total luminous flux at or above an angle of 90° [Lm]: 0
Emergency luminous flux [Lm]: /
Voltage [V]: -
Number of optical assemblies: 2

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 78
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 22
Nominal luminous [Lm]: 3000
Lamp maximum intensity [cd]: /
Beam angle [°]: 54°

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 3.5
Colour temperature [K]: 3000
CRI: 80
Wavelength [Nm]: /
MacAdam Step: 2

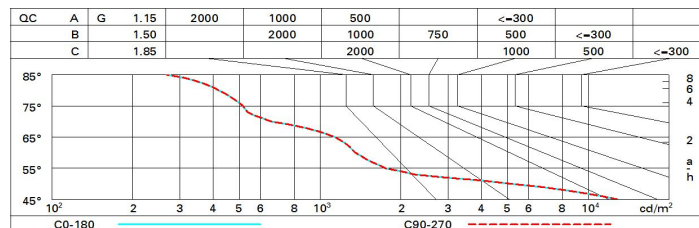
Polar

$I_{max}=3107\text{ cd}$		CIE nL 0.78 97-100-100-100-78 UGR 16.4-16.4		Lux			
		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°		h	d	Em	E _{max}
				2	2	600	773
				4	4.1	150	193
				6	6.1	67	86
				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.: ceiling/cav walls work pl. Room dim x y		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30	0.30
		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30	0.30
		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
		viewed crosswise					viewed endwise					
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				