

Last information update: May 2018



adjustable luminaire - Ø 125 mm - warm white - medium optic - frame

Product code
Q989

Technical description

Round adjustable luminaire designed to use an LED lamp with C.O.B. technology in a warm white colour tone 2700K (CRI 90). Version with rim for surface-mounting. Painted, die-cast aluminium body. Lower reflector vacuum-metallised with aluminium vapours with an anti-scratch protective layer. Anodised aluminium upper reflector. Black, zinc-plated sheet steel bracket. The luminaire can be rotated 30° relative to the horizontal plane and 358° about the vertical axis. The luminaire is fitted with mechanical locks for light beam aiming. Painted extruded aluminium dissipater.

Installation

Recessed using torsion springs which allow easy installation in false ceilings with thickness ranging from 1 mm to 25 mm.

Dimension (mm)
Ø144x137

Colour
White/Aluminium (39)

Weight (Kg)
0.8

Mounting
ceiling recessed

Wiring
Product complete with DALI components

Complies with EN60598-1 and pertinent regulations

IP20



Product configuration: Q989

Product characteristics

Total lighting output [Lm]: 872
Total power [W]: 18.9
Luminous efficacy [Lm/W]: 46.1
Life Time: > 50,000h - L80 - B10 (Ta 25°C)

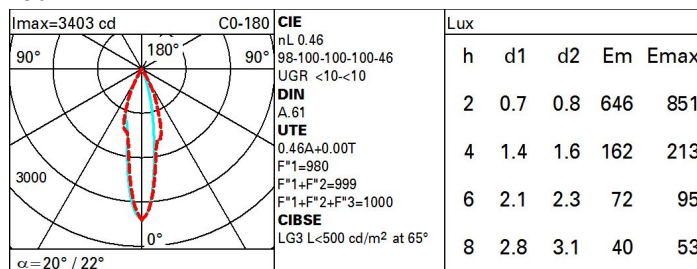
Total luminous flux at or above an angle of 90° [Lm]: 0
Emergency luminous flux [Lm]: /
Voltage [V]: -
Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 46
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 17
Nominal luminous [Lm]: 1900
Lamp maximum intensity [cd]: /
Beam angle [°]: 20° / 22°

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 1.9
Colour temperature [K]: 2700
CRI: 90
Wavelength [Nm]: /
MacAdam Step: 2

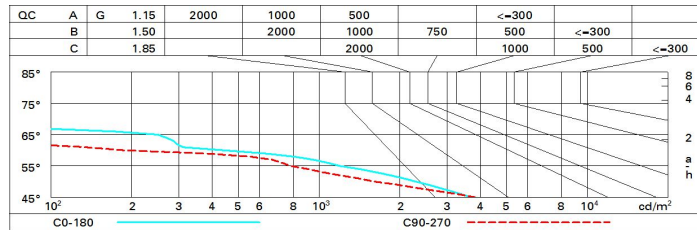
Polar



Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	41	39	37	36	38	37	37	35	77
1.0	43	41	40	38	40	39	39	37	82
1.5	45	44	43	42	43	42	42	40	88
2.0	47	46	45	44	45	44	44	42	92
2.5	47	47	46	45	46	45	45	44	95
3.0	48	48	47	47	47	46	46	45	97
4.0	49	48	48	48	47	47	46	45	99
5.0	49	49	48	48	48	48	47	46	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 1900 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	2.4	3.0	2.7	3.2	3.4	6.6	7.2	6.9	7.4	7.7
	3H	2.3	2.8	2.6	3.1	3.4	6.5	7.0	6.8	7.3	7.6
	4H	2.2	2.7	2.6	3.0	3.3	6.5	6.9	6.8	7.2	7.5
	6H	2.2	2.6	2.5	2.9	3.2	6.4	6.8	6.7	7.1	7.4
	8H	2.1	2.6	2.5	2.9	3.2	6.3	6.8	6.7	7.1	7.4
	12H	2.1	2.5	2.5	2.8	3.2	6.3	6.7	6.7	7.0	7.4
4H	2H	2.3	2.7	2.6	3.0	3.3	6.4	6.9	6.8	7.2	7.5
	3H	2.2	2.6	2.5	2.9	3.2	6.3	6.7	6.7	7.0	7.4
	4H	2.1	2.4	2.5	2.8	3.2	6.2	6.6	6.6	6.9	7.3
	6H	2.0	2.3	2.4	2.7	3.1	6.1	6.4	6.5	6.8	7.2
	8H	1.9	2.2	2.4	2.6	3.1	6.1	6.4	6.5	6.8	7.2
	12H	1.9	2.2	2.3	2.6	3.0	6.0	6.3	6.5	6.7	7.2
8H	4H	1.9	2.2	2.4	2.6	3.1	6.1	6.4	6.5	6.8	7.2
	6H	1.8	2.1	2.3	2.5	3.0	6.0	6.2	6.5	6.7	7.1
	8H	1.8	2.0	2.3	2.5	3.0	5.9	6.1	6.4	6.6	7.1
	12H	1.8	1.9	2.3	2.4	2.9	5.9	6.1	6.4	6.5	7.1
12H	4H	1.9	2.1	2.3	2.6	3.0	6.0	6.3	6.5	6.7	7.2
	6H	1.8	2.0	2.3	2.5	3.0	5.9	6.1	6.4	6.6	7.1
	8H	1.8	1.9	2.3	2.4	2.9	5.9	6.1	6.4	6.5	7.1
Variations with the observer position at spacing:											
S =	1.0H	3.0 / -7.9					3.9 / -9.4				
	1.5H	4.7 / -8.8					6.0 / -18.0				
	2.0H	6.6 / -13.5					8.6 / -19.7				