

Last information update: May 2018



adjustable luminaire - Ø 96 mm - warm white - medium optic - minimal

Product code
Q987

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 without rim for mounting flush with ceiling. 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

Installation flush with the ceiling is for false ceilings 12.5 mm thick

Dimension (mm)
Ø93x134

Colour
Aluminium (12)

Weight (Kg)
0.49

Mounting

ceiling recessed

Wiring

Product complete with DALI components

Complies with EN60598-1 and pertinent regulations

IP20



Product configuration: Q987

Product characteristics

Total lighting output [Lm]: 665
Total power [W]: 16.3
Luminous efficacy [Lm/W]: 40.8
Life Time: > 50,000h - L80 - B10 (Ta 25°C)

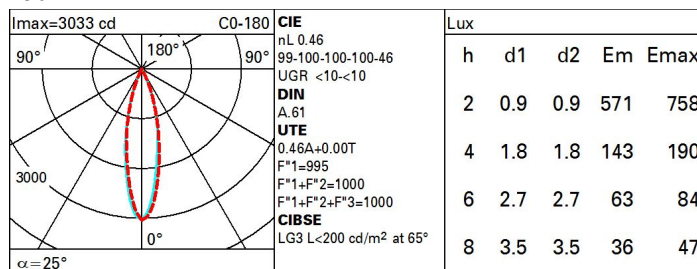
Total luminous flux at or above an angle of 90° [Lm]: 0
Emergency luminous flux [Lm]: /
Voltage [V]: -
Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 46
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 14
Nominal luminous [Lm]: 1450
Lamp maximum intensity [cd]: /
Beam angle [°]: 25°

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 2.3
Colour temperature [K]: 2700
CRI: 90
Wavelength [Nm]: /
MacAdam Step: 2

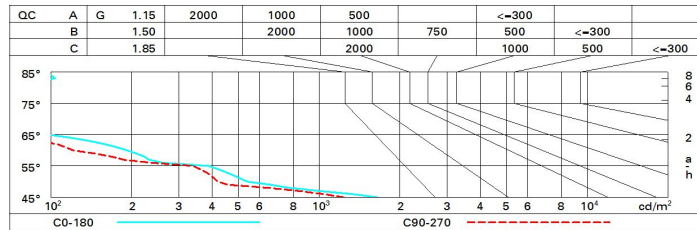
Polar



Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	41	39	38	37	39	37	37	36	78
1.0	43	41	40	39	41	40	39	38	83
1.5	45	44	43	42	43	42	42	41	88
2.0	47	46	45	44	45	44	44	43	93
2.5	48	47	46	46	46	46	45	44	96
3.0	48	48	47	47	47	46	46	45	98
4.0	49	48	48	48	48	47	47	46	99
5.0	49	49	48	48	48	48	47	46	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 1450 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	0.2	2.4	0.6	2.7	3.1	-0.1	2.0	0.3	2.4	2.7
	3H	0.1	1.8	0.5	2.1	2.4	-0.2	1.4	0.1	1.8	2.1
	4H	0.0	1.4	0.4	1.8	2.1	-0.3	1.1	0.1	1.4	1.8
	6H	-0.0	1.1	0.4	1.4	1.8	-0.3	0.7	0.1	1.1	1.4
	8H	-0.0	1.0	0.4	1.3	1.7	-0.4	0.7	0.0	1.0	1.4
	12H	-0.1	0.9	0.3	1.3	1.7	-0.4	0.6	-0.0	1.0	1.3
4H	2H	0.0	1.4	0.4	1.8	2.1	-0.3	1.1	0.1	1.4	1.8
	3H	-0.1	0.9	0.3	1.3	1.7	-0.4	0.6	-0.0	1.0	1.3
	4H	-0.2	0.8	0.2	1.2	1.6	-0.5	0.4	-0.1	0.8	1.2
	6H	-0.6	1.1	-0.1	1.6	2.0	-0.9	0.8	-0.4	1.2	1.7
	8H	-0.7	1.2	-0.2	1.7	2.2	-1.0	0.9	-0.5	1.3	1.8
	12H	-0.8	1.2	-0.3	1.7	2.2	-1.1	0.8	-0.6	1.3	1.8
8H	4H	-0.7	1.2	-0.2	1.7	2.2	-1.0	0.9	-0.5	1.4	1.9
	6H	-0.8	1.0	-0.3	1.5	2.0	-1.1	0.7	-0.6	1.2	1.7
	8H	-0.8	0.8	-0.3	1.3	1.9	-1.2	0.5	-0.6	1.0	1.5
	12H	-0.7	0.4	-0.1	0.9	1.5	-1.0	0.1	-0.5	0.6	1.1
12H	4H	-0.8	1.2	-0.3	1.7	2.2	-1.1	0.9	-0.6	1.3	1.9
	6H	-0.8	0.8	-0.3	1.3	1.8	-1.2	0.5	-0.6	1.0	1.5
	8H	-0.7	0.4	-0.2	0.9	1.5	-1.0	0.1	-0.5	0.6	1.1
Variations with the observer position at spacing:											
S =	1.0H	3.9 / -8.6					4.4 / -9.8				
	1.5H	6.7 / -13.5					7.2 / -11.8				
	2.0H	8.6 / -13.5					9.2 / -14.1				