

Last information update: May 2018



Fixed circular recessed luminaire - Ø153 mm - warm white - medium optic - UGR<19

Product code
Q976

Technical description

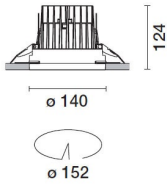
Fixed round luminaire designed to use a LED lamp with C.O.B. technology. Version without rim for mounting flush with ceiling. Reflector vacuum-metallised with aluminium vapours with an anti-scratch protective layer. Die-cast aluminium body and passive dissipation system. Product complete with LED lamp in warm white colour tone CRI 90 (2700K). General light emission, with controlled luminance UGR<19 1500 cd/m² α>65° medium optic.

Installation

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

Dimension (mm)

Ø140x124



Colour

Aluminium (12)

Weight (Kg)

1.32

Mounting

ceiling recessed

Wiring

product complete with DALI components

Complies with EN60598-1 and pertinent regulations

IP20 IP54



Product configuration: Q976

Product characteristics

Total lighting output [Lm]: 2516
Total power [W]: 30.9
Luminous efficacy [Lm/W]: 81.4
Life Time: > 50,000h - L80 - B10 (Ta 25°C)

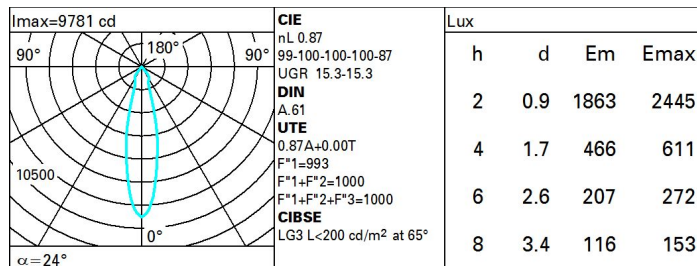
Total luminous flux at or above an angle of 90° [Lm]: 0
Emergency luminous flux [Lm]: /
Voltage [V]: -
Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 87
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 28
Nominal luminous [Lm]: 2900
Lamp maximum intensity [cd]: /
Beam angle [°]: 24°

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 2.9
Colour temperature [K]: 2700
CRI: 90
Wavelength [Nm]: /
MacAdam Step: 2

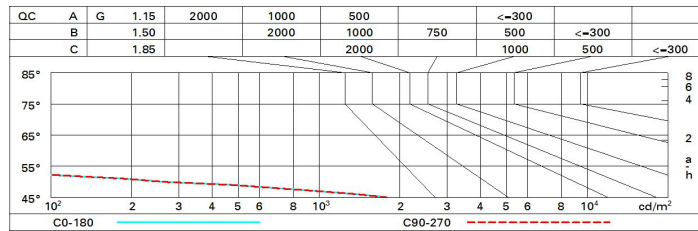
Polar



Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	78	74	71	69	73	71	70	68	78
1.0	82	78	75	73	77	75	74	72	83
1.5	86	83	81	79	82	80	79	77	88
2.0	88	86	85	83	85	84	83	80	93
2.5	90	89	87	86	87	86	85	83	96
3.0	91	90	89	88	89	88	87	85	98
4.0	92	91	91	90	90	89	88	86	99
5.0	93	92	92	91	91	90	89	87	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 2900 lm bare lamp luminous flux)											
Reflect.:		viewed crosswise					viewed endwise				
ceillcav		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	16.2	18.0	16.6	18.3	18.6	16.2	18.0	16.6	18.3	18.6
	3H	16.1	17.4	16.4	17.7	18.0	16.1	17.4	16.4	17.7	18.0
	4H	16.0	17.1	16.4	17.5	17.8	16.0	17.1	16.4	17.5	17.8
	6H	15.9	17.0	16.3	17.3	17.7	15.9	17.0	16.3	17.3	17.7
	8H	15.9	16.9	16.3	17.3	17.6	15.9	16.9	16.3	17.3	17.6
	12H	15.8	16.9	16.2	17.2	17.6	15.8	16.9	16.2	17.2	17.6
4H	2H	16.0	17.1	16.4	17.5	17.8	16.0	17.1	16.4	17.5	17.8
	3H	15.8	16.9	16.2	17.2	17.6	15.8	16.9	16.2	17.2	17.6
	4H	15.7	16.7	16.1	17.1	17.5	15.7	16.7	16.1	17.1	17.5
	6H	15.5	16.8	15.9	17.2	17.7	15.5	16.8	15.9	17.2	17.7
	8H	15.3	16.8	15.8	17.3	17.7	15.3	16.8	15.8	17.3	17.7
	12H	15.2	16.8	15.7	17.3	17.8	15.2	16.8	15.7	17.3	17.8
8H	4H	15.3	16.8	15.8	17.3	17.7	15.3	16.8	15.8	17.3	17.7
	6H	15.2	16.7	15.7	17.2	17.7	15.2	16.7	15.7	17.2	17.7
	8H	15.2	16.5	15.7	17.0	17.5	15.2	16.5	15.7	17.0	17.5
	12H	15.2	16.2	15.7	16.7	17.2	15.2	16.2	15.7	16.7	17.2
12H	4H	15.2	16.8	15.7	17.3	17.8	15.2	16.8	15.7	17.3	17.8
	6H	15.2	16.5	15.7	17.0	17.5	15.2	16.5	15.7	17.0	17.5
	8H	15.2	16.2	15.7	16.7	17.2	15.2	16.2	15.7	16.7	17.2
Variations with the observer position at spacing:											
S =	1.0H	5.1 / -31.3					5.1 / -31.3				
	1.5H	7.9 / -31.6					7.9 / -31.6				
	2.0H	9.9 / -31.8					9.9 / -31.8				