

Last information update: June 2018

**extractable, adjustable, recessed LED luminaire - electronic control gear included****Product code**

Q232

Technical description

Extractable, adjustable, recessed luminaire for neutral white LED lamp. Passive heat dispersion system. Die-cast aluminium main body and frame; stainless steel rotation hinge. Rotation ring with safety cover in a high resistance thermoplastic material. Body adjusted with a manual manoeuvre device: internal 40° - external 65° - rotation on 355° axis. Reflector with high efficiency super-pure aluminium optic - spot beam angle. Die-cast aluminium lamp body closure ring. Tempered transparent glass screen. Electronic control gear supplied and connected to the luminaire.

Installation

recessed using steel springs in false ceilings with thicknesses starting at 1 mm; preparation hole Ø 125 mm

Dimension (mm)

Ø136x98

Colour

White (01)

Weight (Kg)

0,85

Mounting

ceiling recessed

Wiring

on control gear box with quick-coupling connections

Complies with EN60598-1 and pertinent regulations

IP20 **IP23** On the visible part of the product once installed

**Product configuration: Q232****Product characteristics**

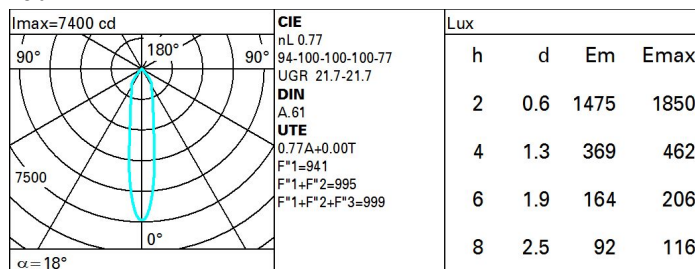
Total lighting output [Lm]: 2310
Total power [W]: 24.4
Luminous efficacy [Lm/W]: 94.7
Life Time: 50,000h - L80 - B10 (Ta 25°C)

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.) [%]: 77
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 21
Nominal luminous [Lm]: 3000
Lamp maximum intensity [cd]: /
Beam angle [°]: 18°

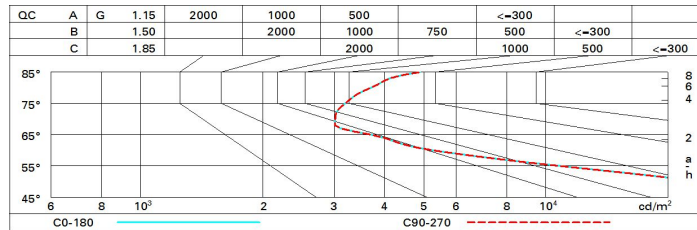
Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 3.4
Colour temperature [K]: 4000
CRI: 80
Wavelength [Nm]: /
MacAdam Step: 2

Polar

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	68	63	61	58	63	60	60	57	74
1.0	71	67	65	63	66	64	64	61	79
1.5	75	72	70	68	71	69	69	66	86
2.0	78	76	74	73	75	73	72	70	91
2.5	79	78	76	75	77	75	75	72	94
3.0	80	79	78	77	78	77	76	74	96
4.0	81	80	80	79	79	79	77	75	98
5.0	82	81	81	80	80	79	78	76	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	22.5	24.0	22.8	24.3	24.6	22.5	24.0	22.8	24.3	24.6
	3H	22.4	23.5	22.7	23.8	24.1	22.4	23.5	22.7	23.8	24.1
	4H	22.3	23.4	22.7	23.7	24.0	22.3	23.4	22.7	23.7	24.0
	6H	22.2	23.3	22.6	23.7	24.0	22.2	23.3	22.6	23.6	24.0
	8H	22.1	23.3	22.5	23.6	24.0	22.1	23.2	22.5	23.6	24.0
	12H	22.1	23.2	22.5	23.6	23.9	22.1	23.2	22.5	23.5	23.9
4H	2H	22.3	23.4	22.7	23.7	24.0	22.3	23.4	22.7	23.7	24.0
	3H	22.1	23.2	22.5	23.6	23.9	22.1	23.2	22.5	23.6	23.9
	4H	22.0	23.0	22.4	23.4	23.8	22.0	23.0	22.4	23.4	23.8
	6H	21.8	23.0	22.3	23.4	23.9	21.8	23.0	22.3	23.4	23.9
	8H	21.7	23.0	22.2	23.5	23.9	21.7	23.0	22.2	23.4	23.9
	12H	21.6	23.0	22.1	23.5	24.0	21.6	23.0	22.1	23.5	24.0
8H	4H	21.7	23.0	22.2	23.4	23.9	21.7	23.0	22.2	23.5	23.9
	6H	21.6	22.9	22.1	23.4	23.9	21.6	22.9	22.1	23.4	23.9
	8H	21.6	22.7	22.1	23.2	23.7	21.6	22.7	22.1	23.2	23.7
	12H	21.6	22.5	22.1	23.0	23.5	21.6	22.5	22.1	23.0	23.5
12H	4H	21.6	23.0	22.1	23.5	24.0	21.6	23.0	22.1	23.5	24.0
	6H	21.6	22.7	22.1	23.2	23.7	21.6	22.7	22.1	23.2	23.7
	8H	21.6	22.5	22.1	23.0	23.5	21.6	22.5	22.1	23.0	23.5
Variations with the observer position at spacing:											
S =	1.0H	3.8 / -10.2					3.8 / -10.2				
	1.5H	6.5 / -12.2					6.5 / -12.2				
	2.0H	8.5 / -12.7					8.5 / -12.7				