

Last information update: June 2018

**extractable, adjustable, recessed LED luminaire - electronic control gear included****Product code**
MU65**Technical description**

Extractable, adjustable, recessed luminaire for warm 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 - wideflood 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 195 mm

Dimension (mm)
Ø205x152**Colour**
White (01)**Weight (Kg)**
1.7**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: MU65****Product characteristics**

Total lighting output [Lm]: 3945
Total power [W]: 36.8
Luminous efficacy [Lm/W]: 107.2
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.) [%]: 79
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 32
Nominal luminous [Lm]: 5000
Lamp maximum intensity [cd]: /
Beam angle [°]: 48°

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 4.8
Colour temperature [K]: 3000
CRI: 80
Wavelength [Nm]: /
MacAdam Step: 2

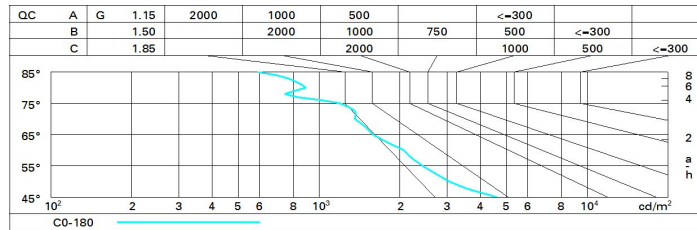
Polar

Imax=6438 cd	CIE nL 0.79 99-100-100-100-79 UGR 15.6-15.6 DIN A.61 UTE 0.79A+0.00T F*1=988 F*1+F*2=997 F*1+F*2+F*3=1000 CIBSE LG3 L<3000 cd/m² at 65° UGR<16 L<3000 cd/mq @65°	Lux			
		h	d	Em	E _{max}
90°	180°	2	1.8	1273	1610
6000	0°	4	3.6	318	402
α=48°		6	5.3	141	179
		8	7.1	80	101

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	71	67	65	63	67	64	64	61	78
1.0	74	71	68	67	70	68	67	65	82
1.5	78	75	73	72	74	73	72	70	88
2.0	80	78	77	76	77	76	75	73	93
2.5	82	80	79	78	79	78	77	75	95
3.0	83	82	81	80	81	80	79	77	97
4.0	84	83	83	82	82	81	80	78	99
5.0	84	84	83	83	82	82	81	79	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 5000 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	16.1	16.7	16.4	16.9	17.1	16.1	16.7	16.4	16.9	17.1
	3H	16.0	16.5	16.3	16.8	17.0	16.0	16.5	16.3	16.7	17.0
	4H	15.9	16.4	16.3	16.7	17.0	15.9	16.4	16.2	16.7	17.0
	6H	15.8	16.3	16.2	16.6	16.9	15.8	16.3	16.2	16.6	16.9
	8H	15.8	16.2	16.2	16.6	16.9	15.8	16.2	16.2	16.5	16.9
	12H	15.8	16.2	16.1	16.5	16.9	15.8	16.2	16.1	16.5	16.8
4H	2H	15.9	16.4	16.2	16.7	17.0	15.9	16.4	16.3	16.7	17.0
	3H	15.8	16.2	16.2	16.5	16.9	15.8	16.2	16.2	16.5	16.9
	4H	15.7	16.1	16.1	16.4	16.8	15.7	16.1	16.1	16.4	16.8
	6H	15.6	15.9	16.0	16.3	16.7	15.6	15.9	16.0	16.3	16.7
	8H	15.6	15.9	16.0	16.3	16.7	15.6	15.9	16.0	16.3	16.7
	12H	15.5	15.8	16.0	16.2	16.7	15.5	15.8	16.0	16.2	16.7
8H	4H	15.6	15.9	16.0	16.3	16.7	15.6	15.9	16.0	16.3	16.7
	6H	15.5	15.7	16.0	16.2	16.6	15.5	15.7	16.0	16.2	16.6
	8H	15.4	15.6	15.9	16.1	16.6	15.4	15.6	15.9	16.1	16.6
	12H	15.4	15.6	15.9	16.0	16.6	15.4	15.6	15.9	16.0	16.6
12H	4H	15.5	15.8	16.0	16.2	16.7	15.5	15.8	16.0	16.2	16.7
	6H	15.4	15.6	15.9	16.1	16.6	15.4	15.6	15.9	16.1	16.6
	8H	15.4	15.6	15.9	16.0	16.6	15.4	15.6	15.9	16.0	16.6
Variations with the observer position at spacing:											
S =	1.0H	6.1 / -11.5					6.1 / -11.5				
	1.5H	8.9 / -12.3					8.9 / -12.3				
	2.0H	10.9 / -13.0					10.9 / -13.0				