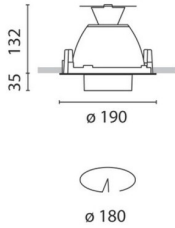


Last information update: May 2018



**Recessed DALI extractable-control gear**

**Product code**  
MS16

**Technical description**

Die-cast aluminium and thermoplastic material, recessed luminaire complete with C.O.B technology LED lamp in a 3000K warm white colour tone with high color rendering index. Luminaire with wide flood optic complete with high level light output and uniform distribution OPTIBEAM reflector. The product permits an internal rotation around the 335° vertical axis and the 65° horizontal plane with continuous friction (only on this rotation). Product complete with a DALI driver separate from the luminaire.

**Installation**

Recessed in false ceilings, with thicknesses starting from between 1 mm and 20 mm, using special steel torsion springs and hinged brackets.

**Dimension (mm)**  
Ø190x132

**Colour**  
White (01)

**Weight (Kg)**  
1.46

**Mounting**  
ceiling recessed

**Wiring**  
product complete with DALI components

**Notes**

For compliance with the NFC 20-455 standard use an optional filter code MW57 for each optical assembly

Complies with EN60598-1 and pertinent regulations



**Product configuration: MS16**

**Product characteristics**

Total lighting output [Lm]: 1973  
Total power [W]: 25.1  
Luminous efficacy [Lm/W]: 78.6  
Life Time: > 50,000h - L80 - B10 (Ta 25°C)

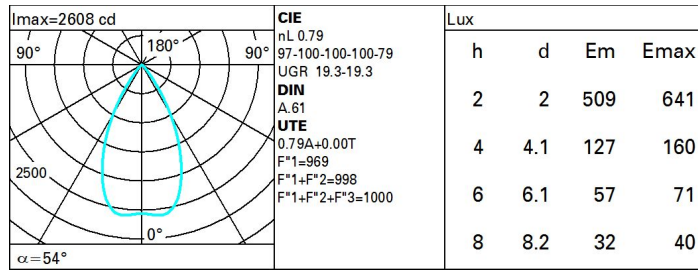
Total luminous flux at or above an angle of 90° [Lm]: 0  
Emergency luminous flux [Lm]: /  
Voltage [V]: -  
Number of optical assemblies: 1

**Optical assembly Characteristics Type 1**

Light Output Ratio (L.O.R.) [%]: 79  
Lamp code: LED  
ZVEI Code: LED  
Nominal power [W]: 22  
Nominal luminous [Lm]: 2500  
Lamp maximum intensity [cd]: /  
Beam angle [°]: 54°

Number of lamps for optical assembly: 1  
Socket: /  
Ballast losses [W]: 3.1  
Colour temperature [K]: 3000  
CRI: 90  
Wavelength [Nm]: /  
MacAdam Step: 2

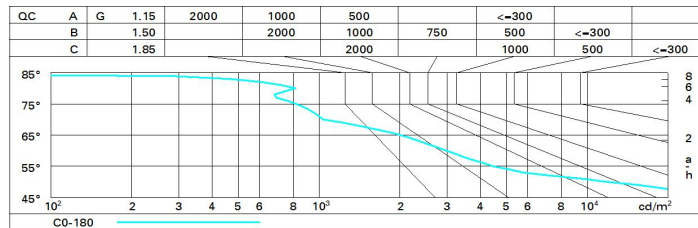
**Polar**



**Utilisation factors**

R	77	75	73	71	55	53	33	00	DRR
K0.8	70	66	64	61	66	63	63	60	76
1.0	74	70	67	66	69	67	67	64	81
1.5	78	75	73	71	74	72	71	69	87
2.0	80	78	77	75	77	76	75	73	92
2.5	82	80	79	78	79	78	77	75	95
3.0	83	82	81	80	80	80	78	76	97
4.0	84	83	82	82	81	81	80	78	99
5.0	84	84	83	83	82	82	81	79	100

**Luminance curve limit**



**UGR diagram**

Corrected UGR values (at 2500 lm bare lamp luminous flux)											
Reflect.:		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
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	19.9	20.5	20.2	20.8	21.0	19.9	20.5	20.2	20.8	21.0
	3H	19.8	20.3	20.1	20.6	20.9	19.8	20.3	20.1	20.6	20.9
	4H	19.7	20.2	20.0	20.5	20.8	19.7	20.2	20.0	20.5	20.8
	6H	19.6	20.1	20.0	20.4	20.8	19.6	20.1	20.0	20.4	20.8
	8H	19.6	20.1	20.0	20.4	20.7	19.6	20.1	20.0	20.4	20.7
	12H	19.6	20.0	19.9	20.3	20.7	19.6	20.0	19.9	20.3	20.7
4H	2H	19.7	20.2	20.0	20.5	20.8	19.7	20.2	20.0	20.5	20.8
	3H	19.6	20.0	19.9	20.3	20.7	19.6	20.0	19.9	20.3	20.7
	4H	19.5	19.9	19.9	20.2	20.6	19.5	19.9	19.9	20.2	20.6
	6H	19.4	19.7	19.8	20.1	20.5	19.4	19.7	19.8	20.1	20.5
	8H	19.3	19.7	19.8	20.1	20.5	19.3	19.7	19.8	20.1	20.5
	12H	19.3	19.6	19.8	20.0	20.5	19.3	19.6	19.8	20.0	20.5
8H	4H	19.3	19.7	19.8	20.1	20.5	19.3	19.7	19.8	20.1	20.5
	6H	19.3	19.5	19.7	20.0	20.4	19.3	19.5	19.7	20.0	20.4
	8H	19.2	19.4	19.7	19.9	20.4	19.2	19.4	19.7	19.9	20.4
	12H	19.2	19.3	19.7	19.8	20.3	19.2	19.3	19.7	19.8	20.3
12H	4H	19.3	19.6	19.8	20.0	20.5	19.3	19.6	19.8	20.0	20.5
	6H	19.2	19.4	19.7	19.9	20.4	19.2	19.4	19.7	19.9	20.4
	8H	19.2	19.3	19.7	19.8	20.3	19.2	19.3	19.7	19.8	20.3
Variations with the observer position at spacing:											
S =	1.0H	5.4 / -14.3					5.4 / -14.3				
	1.5H	8.2 / -16.7					8.2 / -16.7				
	2.0H	10.2 / -18.9					10.2 / -18.9				