

PRODUCT TECHNICAL SPECIFICATION

MANTA optics PMO

Doc.

Rev. 06/21

Description: LED recessed luminaire, direct and indirect emission, suitable for several types of false ceilings:

- "lay-in" installation on modular false ceilings with "T" visible structure. No fixing brackets are required;
- into plasterboard false ceilings, installation "from below". Installation using fixing brackets supplied.

Body: sheet steel body powder coated with white (RAL9003 opaque) epoxy powders thermosetting at 180°C, after degreasing, phosphatizing and washing treatment. Other colors according to the RAL range are available on request.

Optical group: PMO optics composed by:

- upper aluminum reflectors, parabolic profile, color white, fixed to the body tool-less in order to make easier installation and maintenance;
- central carter, powder coated in white color. The carter is equipped, at its 2 sides, with two opal polycarbonate diffusers to allow the indirect light emission;
- micro prismatic polycarbonate diffuser in conformity with glow-wire test at 850°C, fixed to the body tool-less.

Optics with controlled lighting emission with luminance values $<3000 \text{ cd/m}^2$ for emission angles over 65° on all the planes (UGR<19), suitable for installation in the presence of visual display units and in conformity with UNI EN 12464-1 regulations. Glow-wire test resistance at 850°C.

Protection degree: IP40 (IP20 recessed part).

Wiring: feeding 220-240V 50/60Hz with rigid cable (section 0.50 mm²) and PVC-HT sheathing resistant at 90°C according at CEI 20-20. Terminal board with maximum wire section allowed 2,5 mm². Insulation class I. It is suitable to be installed on normally flammable surfaces.

- LED version with electronic driver (ON/OFF), included.
- LED DALI dimmable version, digital standard DALI, with electronic driver, included. Versions with emergency kit (1/3 hours of autonomy) are available on request.
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Luminous source: High efficiency LEDs arranged on rigid modules, colour rendering CRI>80 (CRI>90 available on request), colour temperature 3000K and 4000K (LED diodes selected 3 MacAdam ellipses to ensure a perfect uniform chromaticity).

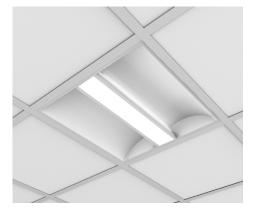
LED TUNABLE WHITE 2700-6500K versions available on request.

Life of the sources in normal conditions: over 50,000 hours L80 / B10 at Ta = 25 ° C.

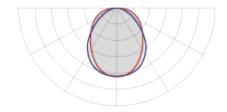
Regulations: luminaire in conformity with:

- EN 61547
- EN 55015
- EN 61000-3-2
- EN 61000-3-3
- EN 61347-1
- EN 61347-2-13

- IEC/TR 62471-2
- EN 60061-1
- EN 62031
- EN 62493
- EN 60598-1
- EN 60598-2-1



Demonstration image



Photometric curve

- EN 60598-2-2
- EN 62471 (risk class 0)
- EN 62560
- EN 60968
- CEI 76-10
- EN 60529

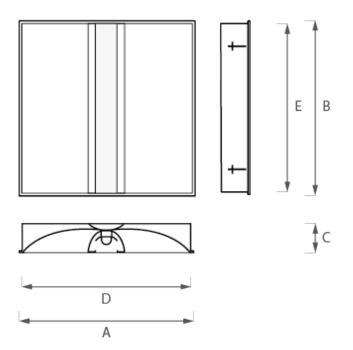


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						Dimensions [mm]				Code / Wiring		
Power [W]	Color temperature [K]	CRI	Effective flux [lm] *	Efficiency [lm/W]	Energetic class	A	В	С	D	E	LED	LED DALI
42	3000	>80	3570	85	A++	595	595	100	580	580	147100121	147100122
42	4000	>80	3906	93	A++	595	595	100	580	580	147100135	147100136
50	3000	>80	4250	85	A++	595	595	100	580	580	147100123	147100124
50	4000	>80	4650	93	A++	595	595	100	580	580	147100125	147100126
64	3000	>80	5440	85	A++	595	595	100	580	580	147100127	147100128
64	4000	>80	5952	93	A++	595	595	100	580	580	147100129	147100130
63	3000	>80	5355	85	A++	295	1195	100	1180	1180	147100131	147100132
63	4000	>80	5859	93	A++	295	1195	100	1180	1180	147100133	147100134

^{*} Actual flow may have a tolerance of \pm 10%.