

LUMEDIC 595X595MM SM 6450LM RA95 4000K GLASS/OPAL MB IP65/IP50 I CL. W IK09 R 86W

DETAILED CARD



TECHNICAL PARAMETERS

Index:	789885
Ingress protection:	IP65
Impact resistance:	IK09
Rated power of the luminaire [W]*:	86
Luminous flux [lm]*:	6450
Colour temperature [K]:	4000
Color rendering index (Ra) >:	95
Energy efficiency class:	G
Electrical protection class:	I
Material of the body:	powder coated steel

CHARACTERISTICS

Lumedic SM R is a specialist Cleanroom luminaire designed for clean rooms with increased hygiene and sterility requirements. Its design ensures ease of cleaning and high mechanical and environmental resistance. A robust steel housing with IP65 protection on the room side and IP50 on the technical side ensures complete tightness in a sterile environment, while allowing free air flow above the suspended ceiling. Service access is provided from the technical side (top inspection), allowing maintenance without interfering with the clean room.

The luminaire is characterised by very high colour rendering quality (CRI > 95), with high values for the R9 = 94.7 and R13 = 98.9 components. The R9 parameter, responsible for the reproduction of saturated red colours, is crucial in medical diagnostics, surgery and laboratory analyses, where precise differentiation of shades of blood, tissues and biological materials is critical. A high R9 value indicates the use of light sources with a full, continuous spectrum, which is not available for standard LED luminaires.

The R13 parameter refers to the faithful reproduction of skin tones and materials with light, pastel shades. An R13 value of 98.9 ensures a natural appearance of work surfaces, hands and staff faces, reducing eye strain and the risk of visual misjudgement in high-responsibility environments such as operating theatres, pharmaceutical laboratories and quality control rooms.

The front of the luminaire is made of aluminium and 4 mm thick tempered glass, resistant to impact (IK09 class) and chemicals. The modular shutter system (Glass / Opal / PRM) allows you to select the appropriate optical characteristics depending on the application requirements — from uniform, diffused light to precise directional distribution. The SM R version is designed for installation in modular ceilings.

APPLICATION

- laboratories (microbiological, pharmaceutical, chemical),
- hospitals (operating theatres, intensive care units, diagnostic laboratories),
- food and pharmaceutical industry,
- cleanrooms in electronics and semiconductor manufacturing.

LUMEDIC 595X595MM SM 6450LM RA95 4000K GLASS/OPAL MB IP65/IP50 I CL. W IK09 R 86W

DETAILED CARD

TECHNICAL PARAMETERS TABLE

Index:	789885	Ring material:	aluminium
EAN:	5905963789885	Ring colour:	biały Ral 9003
Light source:	LED module	Dimensions (H/W/T/S) [mm]:	595/595/65
Rated power of the luminaire [W]:	86	Mounting dimensions [mm]:	600/600
Supply voltage [V]:	220 - 240	Impact resistance:	IK09
Frequency [Hz]:	0/50/60	Ingress protection:	IP65
Luminous flux [lm]:	6450	Mounting version:	recessed
Luminous efficacy [lm/W]:	75	Working temperature [°C]:	from -20 to +35
Energy efficiency class:	G	LED lifespan L70B50 [h]:	200000
Electrical protection class:	I	LED lifespan L80B20 [h]:	100000
Colour temperature [K]:	4000	LED lifespan L90B10 [h]:	50000
Color rendering index (Ra) >:	95	Number on the palette [pcs]:	16
Power factor:	0.95	Net weight [kg]:	11
Diffuser material:	szyba hartowana	Photobiological safety:	RG0 - exempt (no photobiological hazard)
Diffuser type:	Glass/Opal	Warranty [years]:	5
Optics material:	PS	CE certificate:	151/2025
Optics:	OPAL	Manual:	Download PDF
Material of the body:	powder coated steel	ISO Certificates:	9001:2015, 14001:2015, 45001:2018, 50001:2018
Colour of the body:	biały Ral 9003	Plik LDT:	Download