

LUMEDIC 595X595MM SM 4600LM RA95 3000K GLASS/OPAL IP65 I CL. W IK09 47W

DETAILED CARD



TECHNICAL PARAMETERS

Index:	505706
Ingress protection:	IP65
Impact resistance:	IK09
Rated power of the luminaire [W]*:	47
Luminous flux [lm]*:	4600
Colour temperature [K]:	3000
Color rendering index (Ra) >:	95
Energy efficiency class:	F
Electrical protection class:	I
Material of the body:	powder coated steel

CHARACTERISTICS

Lumedic SM CRI95 this is a specialist cleanroom luminaire designed for cleanrooms with an air cleanliness class of ISO 3–9, in accordance with ISO 14644-1:2015 Cleanroom, and meeting stringent hygiene and sterility requirements. The design ensures ease of cleaning and high mechanical and environmental resistance. A robust steel housing with an IP65 rating on both the room side and the technical space side ensures complete airtightness in a sterile environment, whilst allowing free airflow above the suspended ceiling.

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 rendering of saturated red colours, is of key importance in medical diagnostics, surgery and laboratory analyses, where the 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 in standard LED luminaires.

The R13 parameter relates to the accurate rendering 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-stakes environments such as operating theatres, pharmaceutical laboratories and quality control rooms.

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

APPLICATION

Application

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

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TECHNICAL PARAMETERS TABLE

Index:	505706	Ring colour:	biały Ral 9003
EAN:	5905963505706	Dimensions (H/W/T/S) [mm]:	595/595/65
Light source:	LED module	Mounting dimensions [mm]:	600/600
Rated power of the luminaire [W]:	47	Impact resistance:	IK09
Supply voltage [V]:	220 - 240	Ingress protection:	IP65
Frequency [Hz]:	0/50/60	Mounting version:	recessed
Luminous flux [lm]:	4600	Working temperature [°C]:	from -20 to +35
Luminous efficacy [lm/W]:	98	Number on the palette [pcs]:	16
Energy efficiency class:	F	Net weight [kg]:	7.500
Electrical protection class:	I	Gross weight [kg]:	8.100
Colour temperature [K]:	3000	Photobiological safety:	RG0 - exempt (no photobiological hazard)
Color rendering index (Ra) >:	95	Warranty [years]:	5
Power factor:	0.95	CE certificate:	55/2026
Diffuser material:	szyba hartowana	ENEC Certificate:	0463/ENEC/25
Diffuser type:	Glass/Opal	PZH certificate:	B-BK-60112-0109/2026
Optics material:	PS	Environmental Product Declaration (EPD):	869/2025
Optics:	OPAL	Manual:	Download PDF
Material of the body:	powder coated steel	ISO Certificates:	9001:2015, 14001:2015, 45001:2018, 50001:2018, ISO 3 - 9 (ISO 14644-1:2015)
Colour of the body:	biały Ral 9003	Plik LDT:	Download
Ring material:	aluminium		

Card creation date: 07 May 2026

The company reserves the right to make design changes or upgrades in the presented product. Product data sheet does not constitute an offer. * Parameter tolerance is +/- 10%

 This product is a subject to electric and electronic waste equipment regulations (WEEE).

 Certificate CE - Nr: 55/2026