

Malaki XLS Comfort



ENEC



CB Certificate



NOM



AENOR



ISSOP



CE



UKCA



Community Member
Zhaga Consortium

Malaki XLS Comfort

High-Impact Tropicalized Transparent Thermo-Polymer T5



Lighting performance superior to glass, and 200 times more resistant.

Chemical polishing for maximum transparency and transmittance.

Exceeds impact tests above 50 joules –more than twice the standard set by IK EN 62262–

Reinforced Engineering Technical Polymer S7



Immune to corrosion and degradation caused by atmospheric agents.

Withstands tropical storms, constant humidity, electrocution, salt exposure, and even fire.

The material has been subjected to 3000 hours of UV radiation without showing any color alteration.

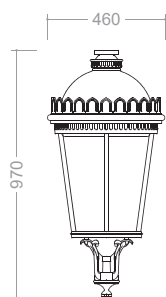
Malaki XLS Comfort



Standard colors (*)



Dimensions



Power configurations

LED15	LED25	LED35
LED55	LED75	LED100

Technical characteristics

Maximum recommended height	8 m
Weight	8.5 kg
Wind surface	2560 cm ²
Coupling	-
Insulation class	Class II
Full warranty	10 years
IK protection rating	IK10
IP protection rating	IP66+IPX9
Laminar Heatsink®	Yes
Photocell option	Yes
Zhaga / Nema compatible connector	Yes
Diffuser type	Comfort Diffuser®

Optics (**)

A4 FHS: 1.52%	A5 FHS: 2.39%	A7 FHS: 2.48%	A9 FHS: 2.22%
A12 FHS: 2.53%	S2 FHS: 1.53%	A11 FHS: N/D	A10 FHS: N/D
A30 FHS: N/D			

Color temperature / CRI

1800 K / IRC 70	2200 K / IRC 70
2700 K / IRC 70	3000 K / IRC 70
4000 K / IRC 70	PC AMBAR / IRC 58

* OTHER COLORS AVAILABLE ON REQUEST
 ** OTHER OPTIONS AVAILABLE ON REQUEST

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Certificates and Approvals

Technical	Values
Manufacturing materials	Non-conductive and stainless housing materials, resistant to 3,000 hours in a UV chamber (according to UNE 53104) without showing any color alteration. Tropicalized transparent high-impact T5 polymer diffuser, UV-stabilized. Confort® Diffuser specially designed to prevent LED glare issues.
Dimensions	460 x 460 x 995
Isolation class	Electrical insulation level of the luminaire: Class II according to UNE-EN 60598 standard.
Upward flux fraction (UFF)	2.53%
Lifetime	Luminaire lifespan of 100,000 hours when operating at an average ambient temperature of 25°C.
Operating temperature range	Operating temperature range from -30 to +35°C.
IP degree	Protection rating of the entire enclosure, including the optical assembly, IP66 + IPX9 (15°C) according to UNE-EN 60598 standard.
IK degree	IK10 rating across the entire luminaire, resistant to 20-joule impacts according to UNE-EN 62262 standard.
Light source	Light source with high-power LEDs.
Available optics	A4, A5, A7, A9, A12, S2, A11, A10, A30
CCT and CRI	1800 K IRC>70, 2200 K IRC>70, 2700 K IRC>70, 3000 K IRC>70, 4000 K IRC>70, PC AMBAR IRC>58
Certifications	CE, UKCA, NOM, N, IECEE, ENEC, ISSOP, Zhaga, NEMA

	European Conformity Mark.		NOM: Official Mexican Standards.
	N: Spanish Association for Standardization and Certification.		IECEE CB: IIEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (Conformity assessment of systems for electronic equipment and components).
	ENEC: European Norms Electrical Certification.		UK Conformity Assessed
	ISSOP: Seal (Sustainable Innovation without Planned Obsolescence).		Zhaga Community Member.

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Technical specifications

Non-conductive and stainless housing materials, resistant to 3,000 hours in a UV chamber (according to UNE 53104) without showing any color alteration. Tropicalized transparent high-impact T5 polymer diffuser, UV-stabilized. Confort® Diffuser specially designed to prevent LED glare issues. One-piece truncated cone diffuser that provides a complete seal over the LED optics. Tool-free luminaire opening. IK10 rating across the entire luminaire, resistant to 20-joule impacts according to UNE-EN 62262 standard. Protection rating of the entire enclosure, including the optical assembly, IP66 + IPX9 (15°C) according to UNE-EN 60598 standard. Electrical insulation level of the luminaire: Class II according to UNE-EN 60598 standard. Seamless polyurethane gasket without degradable adhesive. Minimum diffuser thickness of 3.5 mm or greater in all areas. Connection system using double-insulated (reinforced insulation) cable of 2x0.75 mm² or 2x1.5 mm² upon request. At the end, an IP68 watertight connector compliant with International Standard IEC 60529, UNE-EN 60598-1, or equivalent ANSI standard. Stainless steel screws. Luminaire external dimensions: 460 x 460 x 995 mm (Length x Width x Height). Minimum luminaire efficiency: 80.57. Upper hemisphere flux (FHS) lower than 2.53%. Photometric information available in American electronic format (IES) or European format (LDT). 100% recyclable luminaire. Standard available color temperatures and CRI: 1800 K IRC>70, 2200 K IRC>70, 2700 K IRC>70, 3000 K IRC>70, 4000 K IRC>70, PC AMBAR IRC>58. Light source with high-power LEDs. Luminaire lifespan of 100,000 hours when operating at an average ambient temperature of 25°C. Operating temperature range from -30 to +35°C. LED module luminous flux maintenance: L90 > 100,000h at 25°C ambient temperature and drive currents of 700mA or lower. Standard available optics: A4, A5, A7, A9, A12, S2, A11, A10, A30. Nominal input voltage range: 220~240VAC (supports

198~264VAC). Line frequency: 50/60Hz. Power factor: ≥0.98 (@ 230VAC). THD (@ 230VAC) < 8%. LED drive current: constant current. Programmable electronic control gear. Constant current driver capable of storing a profile to autonomously regulate the luminaire's power. This profile can be modified either through external programming via PWM pulses by accessing the column junction box, or from the control panel using network pulses, allowing the behavior of all luminaires connected to the same line to be changed. Surge protection of 6kV/3kA in differential mode (between line and neutral) in accordance with EN 61547-5-7 standard. CE, UKCA, NOM, N, IECEE, ENEC, ISSOP, Zhaga, NEMA Node with a Zhaga/NEMA-based telemanagement system inside the luminaire; it does not alter the product certifications since there is no modification to the luminaire's enclosure, and it provides additional protection for the node. The polymer enclosure does not interfere with radio frequency or Bluetooth communication systems.

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Photometric data

Fluxes and power @ 1800 K - IRC 70 (A5)	LED15	LED25	LED35	LED55	LED75	LED100
Total luminous flux at 25°C (Lm)	1333 Lm	2221 Lm	3422 Lm	4522 Lm	5527 Lm	9045 Lm
Luminaire efficacy (Lm/W)	80.80 Lm/W	82.26 Lm/W	90.06 Lm/W	85.33 Lm/W	73.70 Lm/W	88.68 Lm/W
Total luminaire power (W)	16.5 W	27.0 W	38.0 W	53.0 W	75.0 W	102.0 W
Number of LED modules	12 LED	12 LED	24 LED	24 LED	24 LED	48 LED
LED driving current	400 mA	700 mA	500 mA	700 mA	980 mA	700 mA

Fluxes and power @ 2200 K - IRC 70 (A5)	LED15	LED25	LED35	LED55	LED75	LED100
Total luminous flux at 25°C (Lm)	1605 Lm	2635 Lm	3999 Lm	5332 Lm	7022 Lm	10663 Lm
Luminaire efficacy (Lm/W)	97.30 Lm/W	97.58 Lm/W	105.23 Lm/W	100.60 Lm/W	93.62 Lm/W	104.54 Lm/W
Total luminaire power (W)	16.5 W	27.0 W	38.0 W	53.0 W	75.0 W	102.0 W
Number of LED modules	12 LED	12 LED	24 LED	24 LED	24 LED	48 LED
LED driving current	400 mA	700 mA	500 mA	700 mA	980 mA	700 mA

Fluxes and power @ 2700 K - IRC 70 (A5)	LED15	LED25	LED35	LED55	LED75	LED100
Total luminous flux at 25°C (Lm)	1747 Lm	2836 Lm	4319 Lm	5740 Lm	7552 Lm	11480 Lm
Luminaire efficacy (Lm/W)	105.91 Lm/W	105.03 Lm/W	113.67 Lm/W	108.31 Lm/W	100.69 Lm/W	112.55 Lm/W
Total luminaire power (W)	16.5 W	27.0 W	38.0 W	53.0 W	75.0 W	102.0 W
Number of LED modules	12 LED	12 LED	24 LED	24 LED	24 LED	48 LED
LED driving current	400 mA	700 mA	500 mA	700 mA	980 mA	700 mA

Fluxes and power @ 3000 K - IRC 70 (A5)	LED15	LED25	LED35	LED55	LED75	LED100
Total luminous flux at 25°C (Lm)	1864 Lm	3052 Lm	4677 Lm	6215 Lm	8152 Lm	12429 Lm
Luminaire efficacy (Lm/W)	112.99 Lm/W	113.04 Lm/W	123.07 Lm/W	117.26 Lm/W	108.69 Lm/W	121.86 Lm/W
Total luminaire power (W)	16.5 W	27.0 W	38.0 W	53.0 W	75.0 W	102.0 W
Number of LED modules	12 LED	12 LED	24 LED	24 LED	24 LED	48 LED
LED driving current	400 mA	700 mA	500 mA	700 mA	980 mA	700 mA

Fluxes and power @ 4000 K - IRC 70 (A5)	LED15	LED25	LED35	LED55	LED75	LED100
Total luminous flux at 25°C (Lm)	1894 Lm	3090 Lm	4705 Lm	6291 Lm	8237 Lm	12581 Lm
Luminaire efficacy (Lm/W)	114.77 Lm/W	114.44 Lm/W	123.82 Lm/W	118.69 Lm/W	109.83 Lm/W	123.35 Lm/W
Total luminaire power (W)	16.5 W	27.0 W	38.0 W	53.0 W	75.0 W	102.0 W
Number of LED modules	12 LED	12 LED	24 LED	24 LED	24 LED	48 LED
LED driving current	400 mA	700 mA	500 mA	700 mA	980 mA	700 mA

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Photometric data

Fluxes and power @ PC AMBAR - IRC 58 (A5)	LED15	LED25	LED35	LED55	LED75	LED100
Total luminous flux at 25°C (Lm)	1215 Lm	1968 Lm	2961 Lm	4007 Lm	5134 Lm	8014 Lm
Luminaire efficacy (Lm/W)	73.61 Lm/W	72.89 Lm/W	77.92 Lm/W	75.60 Lm/W	68.45 Lm/W	78.57 Lm/W
Total luminaire power (W)	16.5 W	27.0 W	38.0 W	53.0 W	75.0 W	102.0 W
Number of LED modules	12 LED	12 LED	24 LED	24 LED	24 LED	48 LED
LED driving current	400 mA	700 mA	500 mA	700 mA	980 mA	700 mA



10-year warranty immune to corrosion street lighting



Quality
Management



Environmental
Management



Occupational Health and
Safety Management

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