



TSANA

Luminaire design: Eclatec

Does the design of **TSANA** square the circle?

With **TSANA**, today's technical solutions marry an intangible, immutable form, all contained within the magic ratio of a perfect circle.

Compact and discrete, the silhouette of **TSANA**, enriched by combinations heightening its sober geometry, becomes urban. Available in the most simple of trim, **TSANA** is also suitable for applications where functionality dominates.



ORALD MODULE



BLS STRIPS



BLS STRIPS



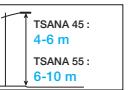
Tsana top



Tsana on Chrome bracket



Tsana on plate



TSANA 45 With ORALED module



TSANA 55 With BLS STRIPS



APPLICATIONS

- Mounting: top, bitop and side entry
- Tsana 45: Pedestrian areas, cycle paths, residential areas, street lighting
Tsana 55: Roads, secondary urban and inter-urban streets
- Recommended heights: Tsana 45: 4 to 6 m / Tsana 55: 6 to 10 m

DESCRIPTION

- Luminaire available in 2 sizes: Tsana 45 and Tsana 55
- Body and frame in injected die-cast aluminium
- Spun aluminium dome
- Polyester powder coating, any colour available
- IP66
- ORALED 1,2: IK08, BLS STRIPS: IK10
- Class I or II
- **ORALED** modules with **ORALENS** lenses,
ORALED 1,2 module painted 2150 or 2900 sanded grey
BLS STRIPS: holder painted 2900 sanded grey
- Colour temperature: 4000 K and 3000 K
- Luminaire eligible for Energy Saving Certificates

CITIZEN REFERENCE POINTS

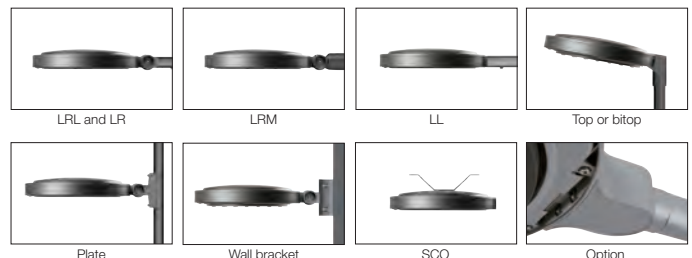
- Materials used:
 - Tsana 45: Aluminium 84%, Other 9%, Steel 4%, Plastic 3%
 - Tsana 55: Aluminium 86%, Other 7%, Steel 4%, Plastic 3%
- Complies with the RoHS directive
- ULR <math>< 1\%</math>
- High recyclability rate

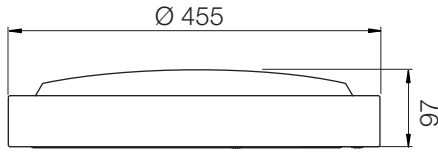
WATERPROOFING

- IP66 waterproofing in accordance with the standard EN 60 529
- Pneumatic silicone gasket
- Cable gland with anchoring device
- Breathing system with activated carbon filter

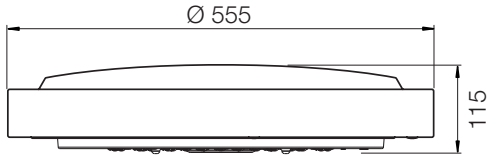
MECHANICAL INTERFACES

- LRL: Tsana Side entry with plain swivel joint coupled with sleeve for bracket end with external \varnothing 60mm Tilts from -90° to $+90^\circ$ (see page 246 - E, F)
- LRM: Tsana Smooth Lateral Ball with wrapping sleeve for the end of the cross-arm \varnothing 60 mm and \varnothing 42 mm outside
- LR: Tsana side entry with swivel joint and \varnothing $\frac{3}{4}$ " thread for female boss welded onto pole or bracket. Tilts from -90° to $+90^\circ$ (see page 246 - G)
- LL: Tsana side entry coupled with sleeve for bracket end with external \varnothing 60mm (see page 246 - E, F)
- Top or Bitop fitting for pole \varnothing 60/62mm / l=100 mm
For pole \varnothing 76mm top, optional spigot A (see page 246)
Luminaire tilted at 0° and 10°
- Tsana on cast aluminium plate (see page 246 - J)
- Tsana on cast aluminium wall bracket
- SCO: Tsana catenary version. Fixation on 5 to 14mm diameter mechanical cable
- Option: specific trim in die cast aluminium for tube exterior \varnothing 60mm





Tsana 45 - BLS STRIPS



Tsana 55 - ORALED

KEY POINTS

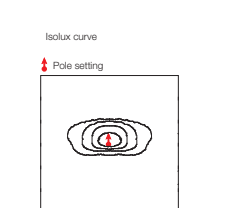
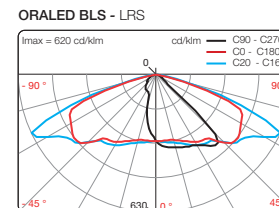
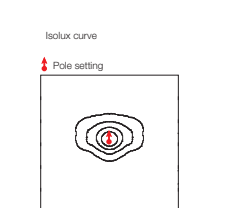
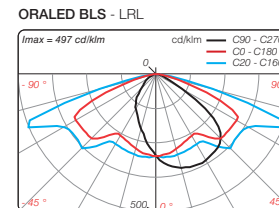
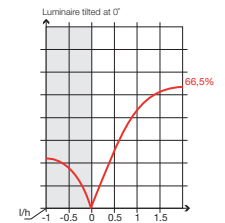
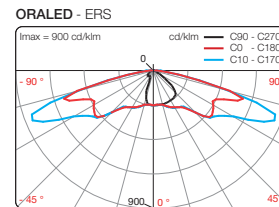
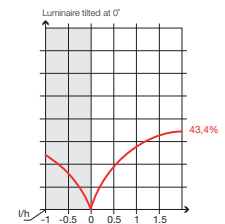
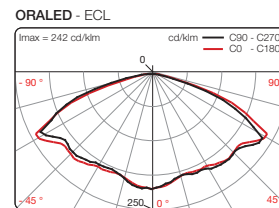
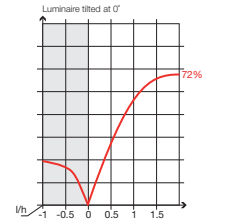
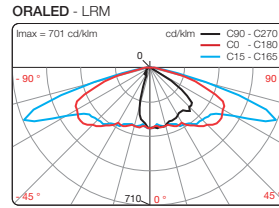
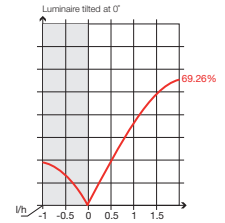
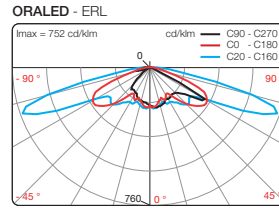
	TSANA 45	TSANA 55	
Applications	Pedestrian areas, cycle paths, residential areas, street lighting	Roads, secondary urban and inter-urban streets	
Recommended heights	4 to 6 m	6 to 10 m	
Mounting	Top, bitop and side entry		
Dimensions	\varnothing 455 mm height 115 mm / 97 mm	555 mm 115 mm / 97 mm	
Weight	9,9 kg	13,7 kg	
Windage area	0,05 m ²	0,06 m ²	
Sources	ORALED 1 BLS STRIPS	ORALED 2 BLS STRIPS	
Sources access	Removable ORALED modules		
Optics and light distribution options ⁽¹⁾	ORALED 1: ECL, ERS, ERL, LRM ORALED 1 BLS: ERS, ERL, ECa, LRS, LRL, ERE, ETS, PFA, EPD, EPG	ORALED 2: ERS, ERL, LRM, LRE ORALED 2 BLS: ERS, ERL, ECa, ERE, LRS, LRL, PFA	
Power supply current (mA)	ORALED 1 und 2: 100 bis 700 mA BLS STRIPS: Fest 700 mA ohne optionen oder 100 bis 700 mA		
OPTIONS	POLEDRIVE (set in the bottom of the pole)	<input type="radio"/>	<input type="radio"/>
	Dimming 5 (preset)	<input type="radio"/>	<input type="radio"/>
	Motion (setting on site)	<input type="radio"/>	-
	Motion P (set in the bottom of the pole)	<input type="radio"/>	<input type="radio"/>
	Motion DALI (set in the bottom of the pole)	<input type="radio"/>	-
	Motion 5 (setting on site)	<input type="radio"/>	-
	Motion COM (setting on site)	<input type="radio"/>	-
	DALI (preset)	<input type="radio"/>	<input type="radio"/>
FC (preset)	Compatible with standard version, Dimming 5, Motion 5 or DALI option		

(1) Rearward light spill cover optional except for EPD, EPG and level 1 of the luminaires concerned * Option only available with BLS STRIPS

Glossary:

- Standard
- Option
- Not available

E/L/P: Lighting/Luminance/Projection, **R/C/T/F/P:** Road/Circulation/Path/Beam/Pedestrian walkway, **E/S/L/A/D/G:** Narrow/Standard/Wide/Asymmetric/Right/Left, **POLEDRIVE:** preset at the bottom of the pole / night diming calculator with 2 configurable thresholds, set in the bottom of the pole, **Dimming 5:** night diming calculator with 5 configurable thresholds, **Motion:** moving sensor, **Motion P:** Configurable offset presence detector at the foot of the pole, **Motion DALI:** Detector integrated to the luminaire, adjustable at pole base, **Motion 5:** Motion sensor and dimming calculator, **Motion COM:** Wireless detection and communication, **DALI:** compatible with the DALI protocol, **FC:** Compensated flux



MAINTENANCE

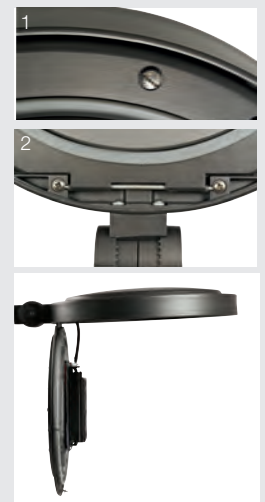
Opening and closing

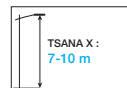
Opening of the luminaire by 3 quarter-turn screws. {1}
The ORALED module swivels around a hinge in aluminium. {2}

ORALED maintenance

Direct access to ORALED module, removable.

Power supply by quick connectors.





TSANA X



APPLICATIONS

- Mounting: top, bitop and side entry
- Recommended heights: Tsana X: 7 to 10 m
- Tsana X: Roads, secondary urban and inter-urban streets

DESCRIPTION

- Body, cover paddles and module in die-cast aluminium
- Thermally tempered glass bowl
- Polyester powder coating, any colour available
- IP66
- IK08
- Class I or II
- **ORALENS** mono lenses
- Colour temperatures: 4000 K and 3000 K
- Luminaire eligible for Energy Saving Certificates

CITIZEN REFERENCE POINTS

- Materials used: Aluminium 67%, Glass 10%, Steel 5%, Plastic 2%, Other 16%
- Complies with the RoHS directive
- ULR <math>< 1\%</math>
- High recyclability rate

WATERPROOFING

- IP66 waterproofing in accordance with the standard EN 60 529
- Extruded silicone seal
- Cable gland
- Breathing system with activated carbon filter

MECHANICAL INTERFACES

- LRL: Tsana X Side entry with plain swivel joint coupled with sleeve for bracket end with external \varnothing 60mm Tilts from -90° to $+90^\circ$ (see page 246 - E, F)
- LRM: Tsana X Smooth Lateral Ball with wrapping sleeve for the end of the cross-arm \varnothing 60 mm and \varnothing 42 mm outside
- LR: Tsana X side entry with swivel joint and \varnothing $\frac{3}{4}$ " thread for female boss welded onto pole or bracket. Tilts from -90° to $+90^\circ$ (see page 246 - G)
- LL: Tsana X side entry coupled with sleeve for bracket end with external \varnothing 60mm (see page 246 - E, F)
- Top or Bitop fitting for pole \varnothing 60/62mm / l=100 mm
For pole \varnothing 76mm top, optional spigot A (see page 246)
Luminaire tilted at 0° and 10°
- Tsana X on cast aluminium plate (see page 246 - J)
- Tsana X on cast aluminium wall bracket
- SCO: Tsana X catenary version. Fixation on 5 to 14mm diameter mechanical cable
- Option: specific trim in die cast aluminium for tube exterior \varnothing 60mm



LRL et LR



LRM



LL



Top ou bitop



Patin



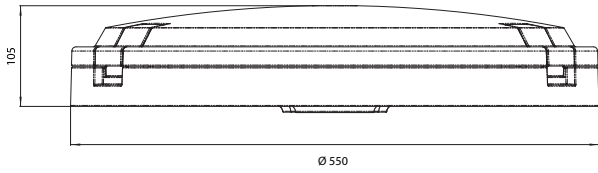
Applique murale



SCO



Option



KEY POINTS

		TSANA X
Applications		Roads, secondary urban and inter-urban streets
Recommended heights		7 to 10 m
Mounting		See mechanical interfaces
Dimensions	\varnothing height	555 mm 105 mm
Weight		12 kg
Windage area		0,05 m ²
Sources		BLS strips
Sources access		Device or LED module opened and replaced without tools
Optics and light distribution options (1)		ERS, ERL, ECa, ERE, LRS, LRL, PFA
OPTIONS	POLEDRIVE (set in the bottom of the pole)	○
	Dimming 5 (preset)	○
	Motion (setting on site)	-
	Motion P (set in the bottom of the pole)	○
	Motion DALI (set in the bottom of the pole)	-
	Motion 5 (preset)	-
	DALI (preset)	○
	FC (preset)	Compatible with standard version, Dimming 5 or DALI option

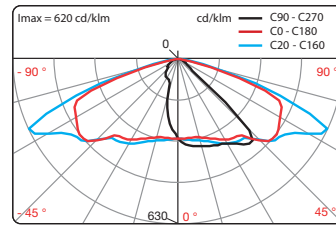
(1) Rearward light spill cover optional except for EPD, EPG and level 1 of the luminaires concerned

Glossary:

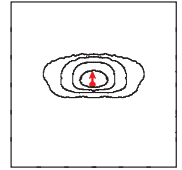
● Standard ○ Option - Not available

E/L/P: Lighting/Luminance/Projection, **R/C/T/F/P:** Road/Circulation/Path/Beam/Pedestrian walkway, **E/S/L/A/D/G:** Narrow/Standard/Wide/Asymmetric/Right/Left, **POLEDRIVE:** preset at the bottom of the pole / night dimming calculator with 2 configurable thresholds, set in the bottom of the pole, **Dimming 5:** night dimming calculator with 5 configurable thresholds, **Motion:** moving sensor, **Motion P:** Configurable offset presence detector at the foot of the pole, **Motion DALI:** Detector integrated to the luminaire, adjustable at pole base, **Motion 5:** Motion sensor and dimming calculator, **Motion COM:** Wireless detection and communication, **DALI:** compatible with the DALI protocol, **FC:** Compensated flux

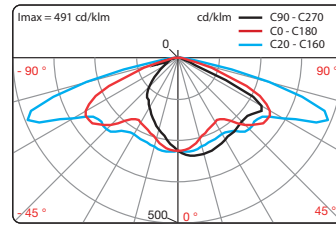
TSANA 55 X - LRS



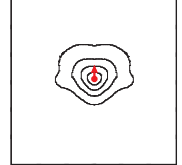
Isolux curve
↑ Pole setting



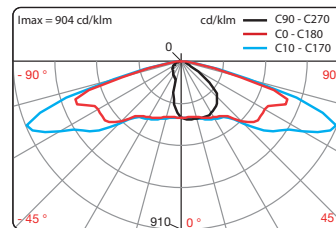
TSANA 55 X - ERL



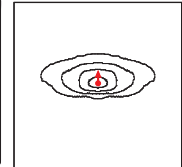
Isolux curve
↑ Pole setting



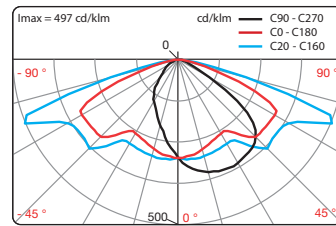
TSANA 55 X - ERS



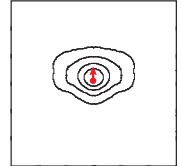
Isolux curve
↑ Pole setting



TSANA 55 X - LRL



Isolux curve
↑ Pole setting



MAINTENANCE

Opening and closing

The luminaire cover can be opened without tools using the 2 flaps {1}

The luminaire is held in the open position by a safety prop. {2}



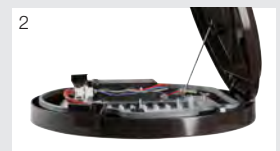
Source maintenance

Automatic cutting of the power supply when the luminaire is opened by a dedicated ECLATEC connector

Quick electrical disconnection without tools.

Equipment circuit board removable onsite without tools

Complete LED module removable onsite without tools {3,4}





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Houten lichtmasten

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Lichtzuilen

Kiosken

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