

# Tesis – The benchmark in the outdoor area

## **An innovative archetype in outdoor lighting**

Tesis has long been a regular feature in the outdoor range. In a completely upgraded version, it now delivers an entirely new level of performance. Innovative photometrics ensure maximum brilliance and efficiency. The robust polymer housing is fully corrosion-resistant and designed to ensure long life and ease of use. Be it directional luminaire, uplight or wallwasher, Tesis sets the benchmark in outdoor lighting.





## Structure and characteristics

The features described here are typical of products in this range. Special versions may offer additional or varying features. A comprehensive description of the features of individual products can be found on our website.

### 1 ERCO Spherolit lens

- Directional spotlight light distributions: narrow spot, spot, flood or oval flood
  - Uplight light distribution: wide flood
- or

### Lens wallwasher

- Optical cut-off 40° from horizontal
- ERCO lens system: wallwash
- Wallwasher reflector: metal or polymer, aluminized, silver, textured, partially coated black, with diffuser on lower side

### 2 ERCO LED-module

- High-power LEDs: warm white (3000K) or neutral white (4000K)
- Collimating lens made of optical polymer
- Directional spotlight pivotable through 0°-30°

### 3 Cover ring

- Covered or flush mounting detail
- Stainless steel
- Safety glass: 9/19" / 15mm, transparent

### 4 Housing

- Polymer, black
- Longitudinally watertight cable AWG 14, L 31 1/2" / 800mm
- Installation with separate connection sleeve
- Mounting is possible without mounting enclosure
- Installation in mounting enclosure: driveable, can be driven over by vehicles with air-filled tyres. Load 4500lb.wt / 20kN or 11240lb.wt / 50kN
- Hollow floor installation only with overlapping installation detail: Fixing set to be ordered separately

### 5 Control gear

- Switchable or 0-10V dimmable

### Suitable for wet location (IP68)

Dust-proof. Protected against the results of continuous submersion up to a depth of max. 3m.

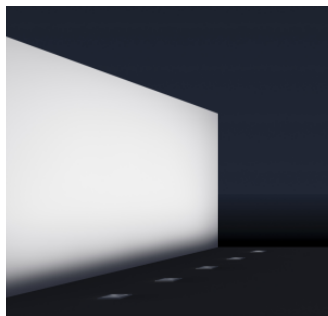
### Variants on request

- High-power LEDs: 3000K 97 or 2700K, 3500K, 4000K with CRI 92
  - Cover ring: V4A stainless steel
  - Anti-slip safety glass
- Please contact your ERCO consultant.



Design and application:  
[www.erco.com/tesis](http://www.erco.com/tesis)




# Tesis In-ground luminaires













**Improved visual comfort**  
 ERCO has developed luminaires with special housing designs and high-quality optical components specifically for demanding visual tasks to provide enhanced visual comfort.




**Outstanding uniformity**  
 To meet the stringent standards of vertical illuminance, ERCO has developed luminaires specifically to produce exceptionally uniform levels of illuminance.

**Large luminaire spacing**  
 For some wallwashers, the luminaire spacing may be up to 1.5 times the offset from the wall. Corresponding details are provided in the wallwasher tables in the catalog or the product data sheets. Computerized beam calculations are recommended to check potential intersections with side walls.

Special characteristics	
	Improved visual comfort
	Outstanding uniformity
	Wide luminaire spacing with wallwashing

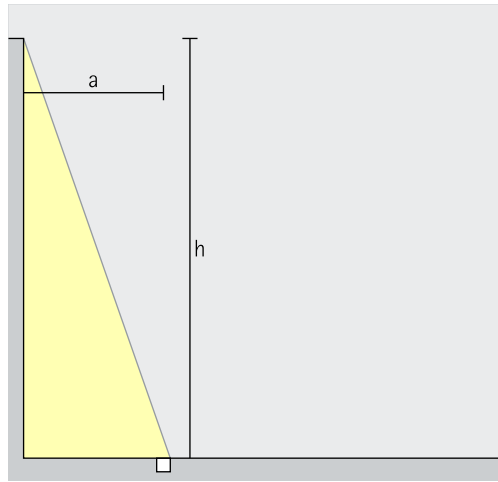
	ERCO high-power LEDs
	Efficient Spherolit technology
	Optical cut-off 40° from horizontal
	Different light distributions
	Different light colors

	Excellent thermal management
	EMC-optimized
	Various construction sizes
	Flush or covered mounting detail
	Wet location

	Switchable
	Trailing edge dimmable
	0-10V dimmable

# Tesis In-ground luminaires – Luminaire arrangement

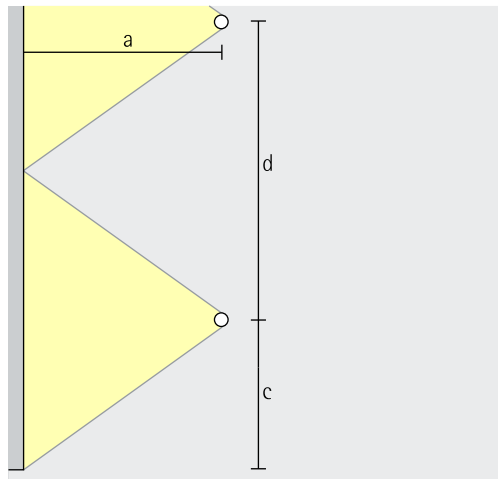
## Lens wallwashers Wallwash



### Wallwashing

Uniform vertical illuminance in the outdoor area defines spatial borders. Here, the distance (a) of Tesis lens wallwashers from the wall should be around one third of the room height (h).

Arrangement:  $a = 1/3 \times h$



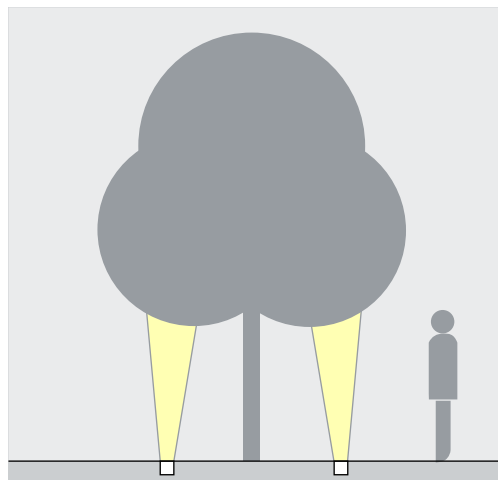
For good longitudinal uniformity, the spacing (d) of round Tesis lens wallwashers may be up to 1.3 times the offset from the wall (a).

Arrangement:  $d \leq 1.3 \times a$

The optimal wall offset and luminaire spacing for each product are indicated in the wallwasher tables in the catalogue and the product data sheets.

## Uplights

Spot, Flood, Wide flood, Oval flood

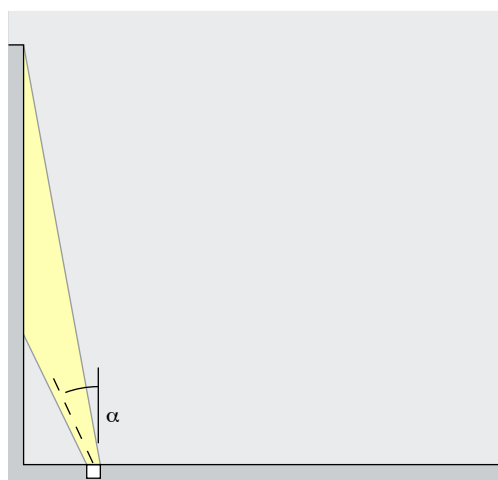


### Accentuation

Tesis uplights used for the accentuation of objects such as treetops or cantilever roofs need to be accurately positioned and aligned to ensure that the light arrives precisely and only on the target surface to avoid light pollution.

## Directional luminaires

Narrow spot, Spot, Flood, Oval flood



### Accentuation

Experience has shown the ideal angle of tilt (a) for accent lighting with Tesis directional luminaires to be 25°. This ensures good modeling without excessive grazing light.

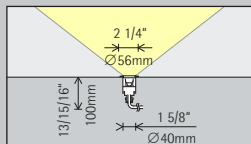
Arrangement:  $\alpha = 25^\circ$

Anzac Memorial,  
Sydney. Archi-  
tecture: JPW -  
Johnson Pilton  
Walker. Light-  
ing design: Arup  
Sydney. Photogra-  
phy: Jackie Chan,  
Sydney.



# Tesis In-ground luminaires

Construction size Size 2



LED module  
Maximum value at 4000K CRI 82

3.1W/369lm

Light color

	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 82
	3000K CRI 97 *		4000K CRI 92 *

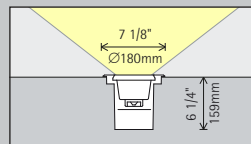
Light distribution

Lens wallwasher
Wallwash
Uplights
Spot
Flood
Wide flood
Oval flood

Control

0-10V	0-10V
	Switchable

Construction size Size 3



8.1W/1048lm

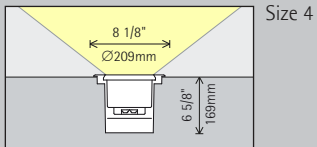
	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 82
	3000K CRI 97*		4000K CRI 92 *

Lens wallwasher
Wallwash
Uplight
Wide Flood







	Switchable
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





Accessories


	Connection sleeve		Mounting kit
	Recessed housing		Installation unit



16.2W/2096lm	2W/262lm (Narrow spot)
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	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 82
	3000K CRI 97 *		4000K CRI 92 *

Lens wallwasher		Directional luminaire	
	Wallwash		Narrow spot
Uplights			Spot
	Wide Flood		Flood
			Oval flood

0-10V	0-10V
	Switchable **

\* available on request  
 \*\* Only for narrow spot light distribution

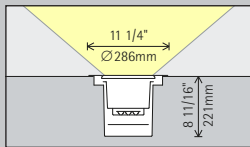
Article numbers and planning data:  
[www.erco.com/015146-us](http://www.erco.com/015146-us)

Design and application:  
[www.erco.com/tesis](http://www.erco.com/tesis)



# Tesis In-ground luminaires

Construction size Size 5



LED module  
Maximum value at 4000K CRI 82



Light color

	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 82
	3000K CRI 97 *		4000K CRI 92 *

	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 82
	3000K CRI 97 *		4000K CRI 92 *

Light distribution

Directional luminaire
Narrow spot

Lens wallwasher	Directional luminaire
Wallwash	Spot
Uplight	Flood
Wide Flood	Oval flood

Control

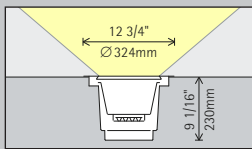
0-10V	0-10V
	Switchable

0-10V	0-10V
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Accessories







	Connection sleeve		Mounting kit
	Recessed housing		Installation unit











Size 7

32.3W/4192lm	8.1W/1048lm (Narrow spot)
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	2700K CRI 92 *		3500K CRI 92 *
	3000K CRI 92		4000K CRI 82
	3000K CRI 97 *		4000K CRI 92 *

Lens wallwasher		Directional luminaire	
	Wallwash		Narrow spot
Uplight			Spot
	Wide Flood		Flood
			Oval flood

0-10V	0-10V
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\* available on request

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Parliament,  
Stockholm. Photo-  
graphy: Johan  
Elm.

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Stockholm. Photo-  
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