

# LIGHT GUIDE

The evolution of exterior lighting you've been waiting for





INNOVATE | INTEGRATE | ILLUMINATE

## **Discover more**

### **Evolution not Revolution with TRT Light Guide.**

Designed to help urban space designers and public lighting teams create environments that deliver a better 'user' experience, Light Guide technology takes away the discomfort glare and alters the perception of the environment a person is in.

Light Guide replaces the conventional light engine with a new low glare, comfortable light source that has been specifically designed to enhance user experience of the lit application and provide an effective alternative to indirect lighting.

#### Discover more in each of our sections

#### What is Light Guide?

**Product Features** 

**Technical Specifications** 





## Why Light Guide?

### Light Guide technology provides the **perfect lighting solution** for areas such as **promenades**, **market squares**, **college campuses and town plazas**.

As the government strives to keep walking and cycling at the rates it has been in recent years, people need to feel comfortable and safe. Lighting is a big part of the solution however it can often create discomfort when the source luminance is bright.

Lighting options for areas where people walk, convene, and socialise are traditionally lit in a direct style with contemporary amenity luminaires that utilise diffusers, or indirect lighting, to reduce discomfort glare. Light Guide technology provides a solution that is an efficient alternative with a homogenously lit, relatively low luminance light source that is more visually comfortable than alternative technologies and solutions. No point source or intense light sources are visible when the Light Guide is illuminated.

Chalis



Why Light Guide?

What is Light Guide?

**Product Features** 

**Technical Specifications** 

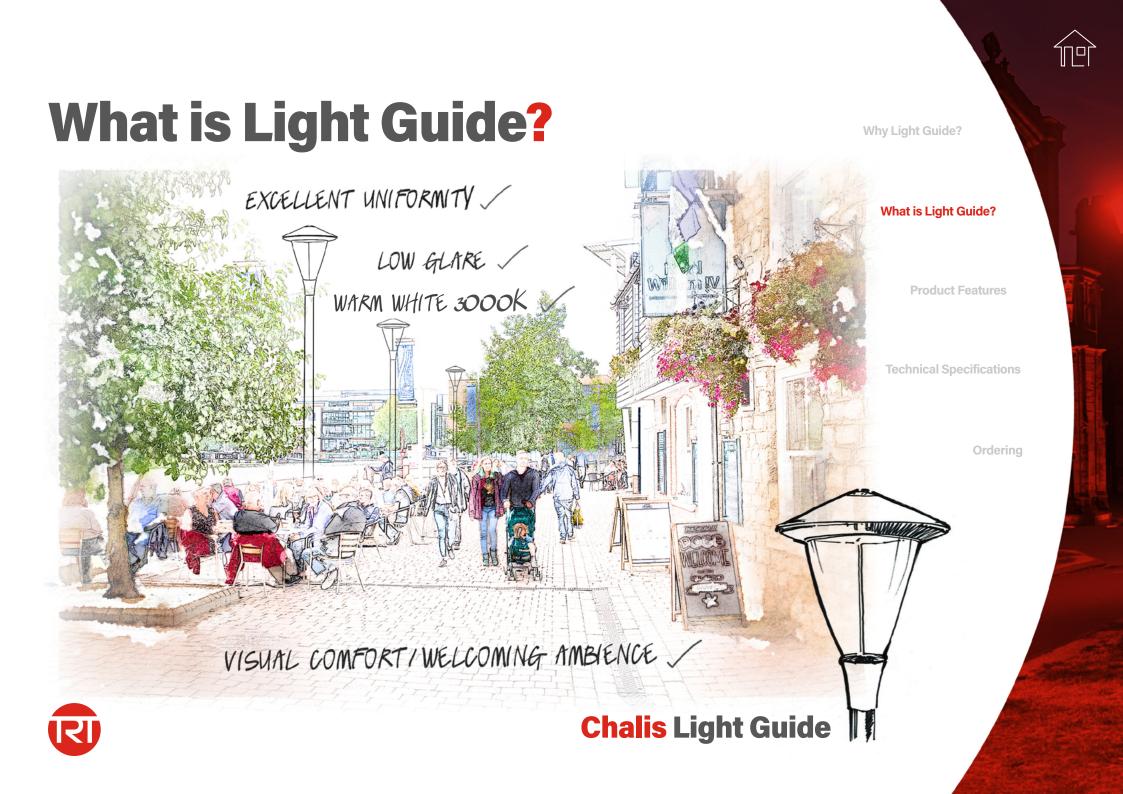
**Circa** Curved Glass

## What is Light Guide?

Why Light Guide?



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### **Product Features**

Light Guide technology has a relatively large light emitting, homogenously illuminated surface area when powered - providing high levels of visual comfort for the user of the lit environment.

The operation of a Light Guide panel LED **Technical Specifications** С LED **Light enters fitting Light enters fitting** Diffuser



What is Light Guide?

Why Light Guide?

**Product Features** 

### **Product Features.**

Light Guide provides similar benefits to those of diffusers and indirect optics with improved efficiency and control. Paired with a sympathetic colour temperature of 3000K, the Circa and Chalis Light Guide luminaire ranges are the perfect solution to high pedestrian traffic areas.

As TRT's Light Guide lanterns utilise the latest LED technology, the electronic control gear used to power them is the same as that used in standard LED luminaires. This means that the full range of LED luminaire features available across TRT products such as programmed dimming and connection to Central Management Systems (CMS) remains available.

Both the Chalis and Circa Light Guide luminaire ranges can accommodate a range of externally mounted NEMA and Zhaga book 18 sockets to allow full CMS or individual NEMA photocell operation.

**Chalis** Light Guide

Why Light Guide?

What is Light Guide?

#### **Product Features**

**Technical Specifications** 

Ordering

**Chalis Light Guide** 



## **Technical Specifications**

### **Circa** Light Guide

### **Electrical Characteristics**

Туре	Circa ASY LGP Flat Glass	Circa SYM LGP Flat Glass	Circa ASY Curved Glass	Circa SYM Curved Glass				
System Power	25-47W							
LED CCT	3000K							
LED CRI		>7(	0					
Lumen Output	Up to 5,757lm	Up to 5,643lm	Up to 5,772lm	Up to 5,607lm				
Lumen Maintenance		Projected L80 afte	er 100,000 hours					
Drive Current	504-960mA							
Driver Output	Constant current output with AM dimming							
Power Factor (Full Load/Half Load)	0.95/0.90							
Operational Voltage	220-240VAC rms							
Operating Frequency	50/60Hz							
Inrush Current (Apk/50%-µS)	54A/190µS							
Running Current (max)	0.200A max							
Surge Protection (COM/DIF)	10kV/6kV							
Additional Surge Protection (on request)	10kV/10kA							
Lighting Controls Options	NEMA 7, Zhaga book 18 (SR) socket, PND and CMS compatible							
Dimming Protocols	DALI							

Why Light Guide?

What is Light Guide?

**Product Features** 

**Technical Specifications** 



### **Technical Specifications.**

### **Circa** Light Guide

### **Mechanical Characteristics**

Туре	Circa
Housing Material	High quality high pressure die cast LM6 aluminium components
Housing Finish	Chromate free pre-treatment, polyester powder coat, light grey (RAL9006), dark grey (RAL7022), black (RAL9005)
Cover Material	Toughened safety glass
Lens Material	РММА
Ingress Protection Rating	IP66
Weight	9.5kg
Wind Area	0.08m <sup>2</sup>
Impact Resistance Rating	IK08 cover/IK10 top
Mounting Methods	Post top 60mm or 76mm/side entry 34mm, 42mm, 60mm or 76mm
Mounting Inclination	Rotational freedom in 5° steps

Why Light Guide?

What is Light Guide?

**Product Features** 

**Technical Specifications** 



## **Technical Specifications**

### **Chalis Light Guide**

### **Electrical Characteristics**

Туре	Chalis SYM LGP	Chalis ASY LGP					
System Power	25-47W						
LED CCT	3000K						
LED CRI	>70						
Lumen Output	Up to 4,749lm	Up to 4,808lm					
Lumen Maintenance	Projected L80 afte	r 100,000 hours					
Drive Current	504-96	0mA					
Driver Output	Constant current output with AM dimming						
Power Factor (Full Load/Half Load)	0.95/0.90						
Operational Voltage	220-240VAC rms						
Operating Frequency	50/60Hz						
Inrush Current (Apk/50%-µS)	54A/190µS						
Running Current (max)	0.200A	max					
Surge Protection (COM/DIF)	10kV/6	δkV					
Additional Surge Protection (on request)	10kV/10kA						
Lighting Controls Options	NEMA 3, 7, Miniature photocell, Zhaga book 18 (SR) socket, PND and CMS compatible						
Dimming Protocols	DALI						

Why Light Guide?

What is Light Guide?

**Product Features** 

**Technical Specifications** 



### Technical Specifications. Chalis Light Guide

### **Mechanical Characteristics**

Туре	Chalis
Housing Material	High quality high pressure die cast LM6 aluminium components
Housing Finish	Chromate free pre-treatment, polyester powder coat light grey (RAL9006), dark grey (RAL7022), black (RAL9005)
Bowl Material	UV stabilised polycarbonate
Lens Material	РММА
Ingress Protection Rating	IP66
Weight	8kg
Wind Area	0.14m <sup>2</sup>
Impact Resistance Rating	IK10 bowl/IK08 top
Mounting Methods	Post top 76mm

What is Light Guide?

Why Light Guide?

**Product Features** 

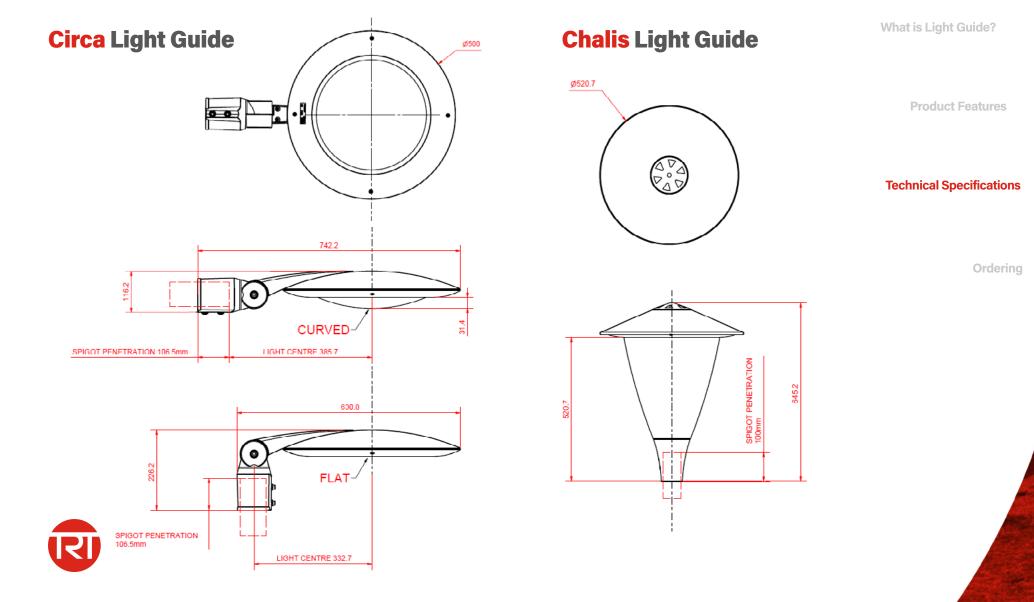
**Technical Specifications** 



### **Technical Specifications.**

### **Dimensions**

Why Light Guide?



## **Ordering Circa Light Guide.**

Why Light Guide?

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<b>Step 1:</b> Select Product Variant	Step2: Select Power Level	Step 3: Select Distribution	Step 4: Select LED CCT	<b>Step 5:</b> Select Paint Colour	<b>Step6</b> : Select Cover Type	<b>Step 7:</b> Select Mounting	Step 8: Select Accessories	What is Light Guide?
<b>CIL</b> (Standard Circa Light Guide) <b>CILP</b> (Circa Light Guide with PowerSet)	25 30 35 39 42 45 47	<b>ASY</b> = Asymmetric	3K =	<b>LG</b> = Light grey	<b>FG</b> = Flat glass	<b>76UK =</b> 76mm UK pivot with stainless steel inserts	<b>NEM7 =</b> 7 pin NEMA socket <b>NEM7C =</b> 7 pin NEMA socket with 35/18 NEMA photocell	Product Features Technical Specifications
CILC (Circa Light Guide with Constant Light Output (CLO)) CILPC (Circa Light Guide with PowerSet & Constant Light Output (CLO))	24 29 33 37 40 43 45	SYM = Symmetric	3000K	DG = Dark grey B = Black	<b>CG =</b> Curved glass	U76 = 76mm UK pivot with stainless steel inserts and 42mm extruder	XMARC1.5 = Xm of Arctic 1.5mm² cable ZB18 = Zhaga book 18 socket	Ordering

#### Example

Product	Power (W)	Distribution	LED CCT	Paint Colour	Cover Type	Pivot	Accessories
CIL	25	ASY	3K	LG	FG	76UK	8MARC1.5



## **Ordering Chalis Light Guide.**

Why Light Guide?

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<b>Step 1:</b> Select Product Variant	Step2: Select Power Level	Step 3: Select Distribution	Step 4: Select LED CCT	<b>Step 5:</b> Select Paint Colour	<b>Step6</b> : Select Cover Type	<b>Step 7:</b> Select Mounting	Step 8: Select Accessories	What is Light Guide?
CHL (Standard Chalis Light Guide) CHLP (Chalis Light Guide with PowerSet) CHLC (Chalis Light Guide with Constant Light Output (CLO)) CHLPC (Chalis Light Guide with PowerSet & Constant Light Output (CLO))	25 30 35 39 42 45 47 24 29 33 37 40 43 45	<b>ASY</b> = Asymmetric <b>SYM</b> = Symmetric	<b>3K</b> = 3000K	LG = Light grey DG = Dark grey B = Black	<b>PB</b> = Polycarbonate bowl	<b>76UK =</b> 76mm UK pivot with stainless steel inserts	MC10 = 35/18 Minicell NEM3 = 3 in NEMA socket NEM7 = 7 pin NEMA socket NEM3C = 3 pin NEMA socket with 35/18 NEMA photocell NEM7C = 7 pin NEMA socket with 35/18 NEMA photocell XMARC1.5 = Xm of Arctic 1.5mm² cable ZB18 = Zhaga book 18 socket	Product Features Technical Specifications Ordering

#### Example

Product	Power (W)	Distribution	LED CCT	Paint Colour	Cover Type	Pivot	Accessories
CHL	24	ASY	3K	LG	PB	76UK	MC10, 8MARC1.5



### PowerSet.

#### **Circa and Chalis PowerSet Settings**

Standard	CLO
25W	24W
30W	29W
35W	33W
39W	37W
42W	40W
45W	43W
47W	45W

Why Light Guide?

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Ordering





### Working with TRT

TRT Lighting evolved from Thorlux Lighting in 2012 as a specialist division of the FW Thorpe Group with a core focus on developing innovative lighting products for streets, roads and tunnels using only LED technology.

**Culture of transparency** – we provide clear, honest information designed to be useful so clients have a clear understanding of what can be expected from the product and the company.

**Sustainability** – we are a  $CO_2$  neutral supplier with strong roots in British manufacturing dating back to 1936.

**Locally supported** – we manufacture our luminaires in Redditch, Worcestershire and are proud members of the official Made in Britain campaign and their Green Growth programme.

#### For more information

+44 (0) 1527 521 162
www.trtlighting.co.uk











