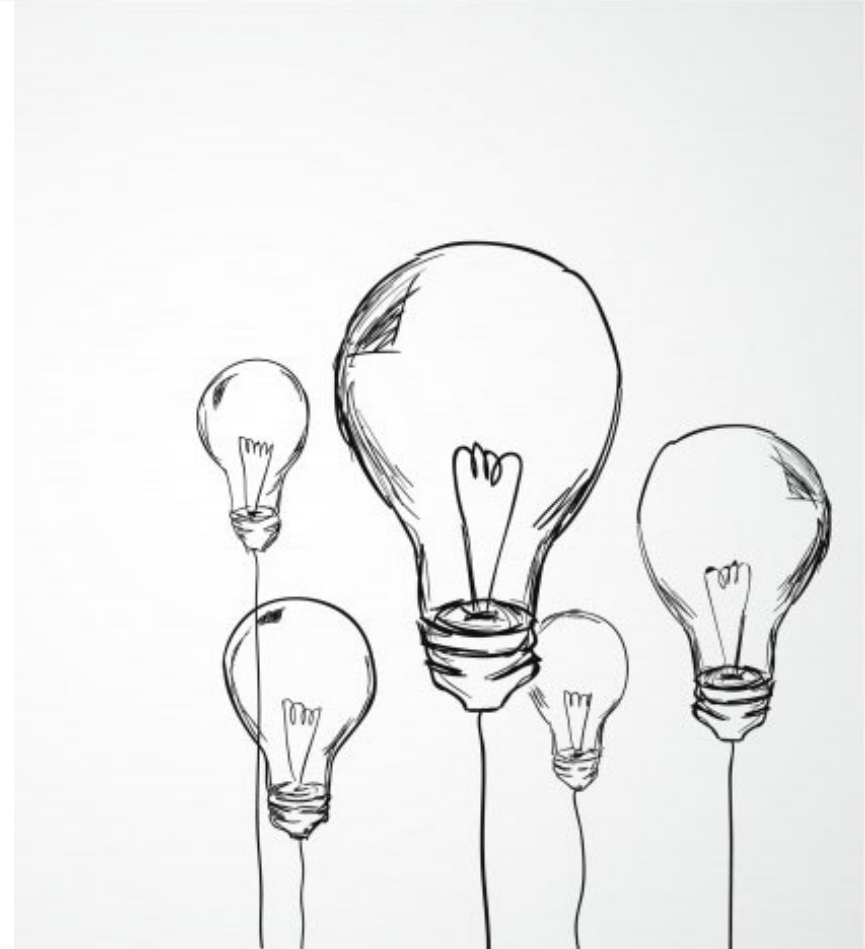


”

PRACTICAL APPROACH TO  
LIGHTING DESIGN

# Garden Lighting Workshop Switched on space strategies

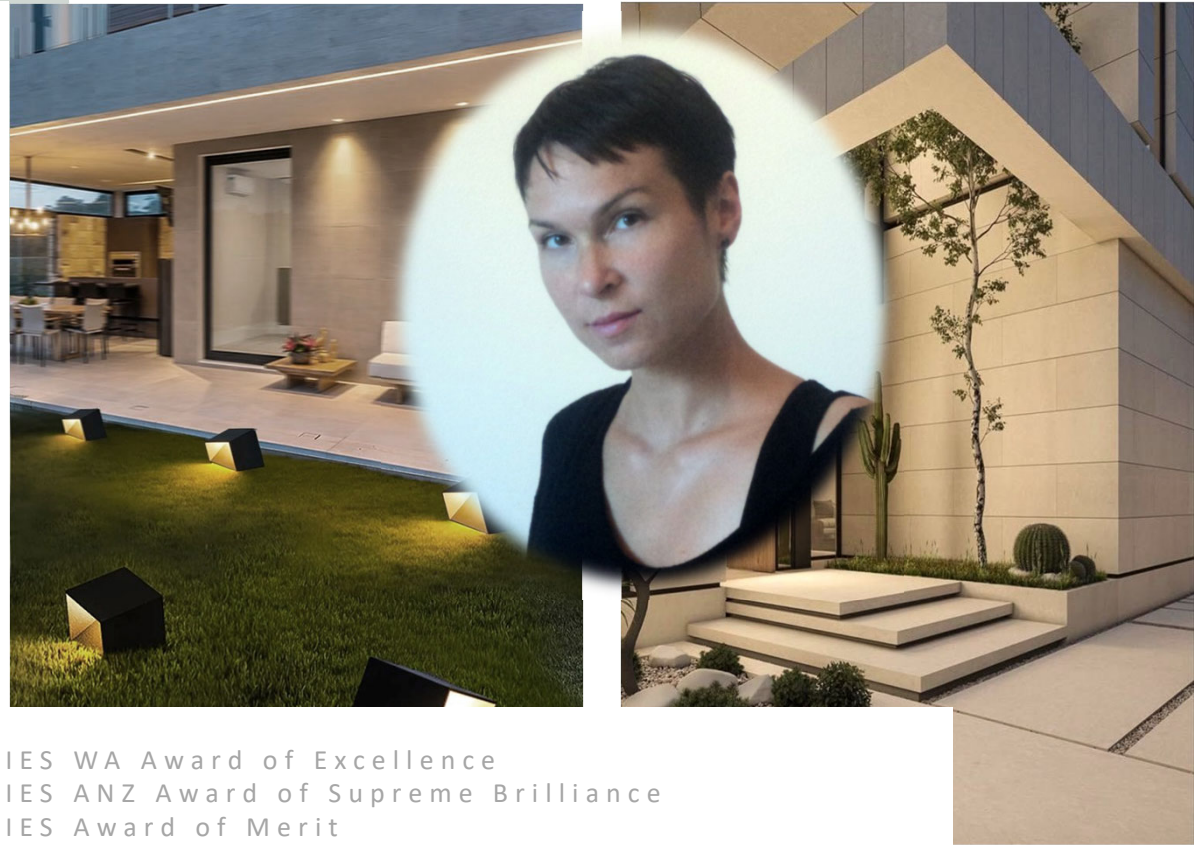
For  
Sunshine Coast Libraries



”

Lucka Slatner

M.Eng Arch  
MIES  
Associate IALD  
Certified Lighting Designer (CLD)  
Member of CMC for IES QLD  
Vice president of IESANZ



IES WA Award of Excellence  
IES ANZ Award of Supreme Brilliance  
IES Award of Merit  
IALD Award of Merit



”



Grqã#eh#liudg#w#eh#kh#glrw#  
lg#kh#urp 1

Ii |rx grq#w xqghuwdqg vrp hwkqj/  
rggv dñ rkhuw grq#w hñkhuñ Dqg  
ehqj wk glrwq wk urp frxqg hqg  
xs ehqj dq dfwri vñuylfh iru rkhuwñ

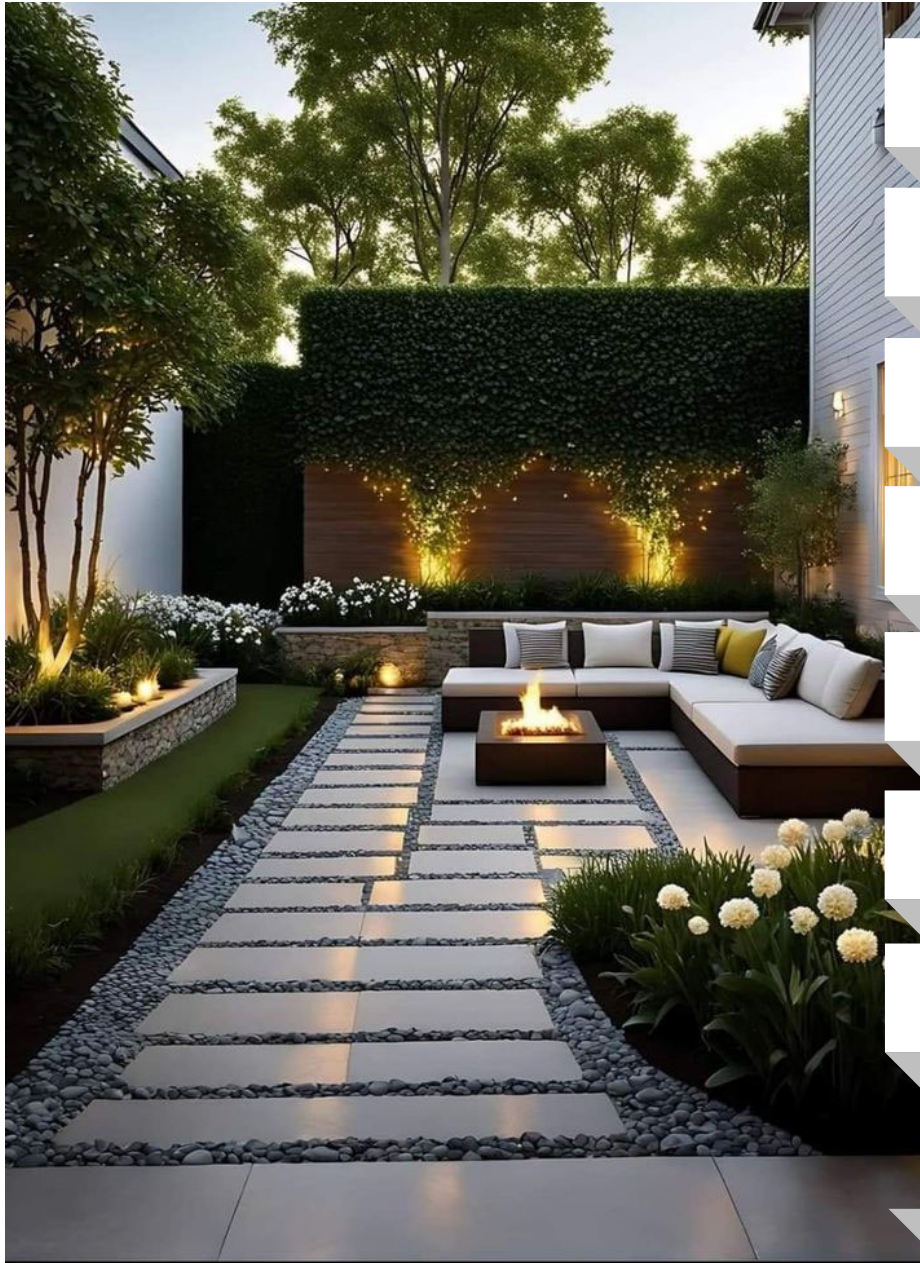
*-Ap rq Vqhn,*



Not all light is created equal



Garden Lighting Workshop



## Agenda

### 01. Light Fittings, the attributes

*Basic attributes of light fittings*

### 02. Basic Light Fittings

*Tools of the trade.*

### 03. Types of Lighting

*Types of lighting we know*

### 04. Layering Light

*From theory to practice. How to light an area of your garden.*

### 05. Practical Application

*How to light a feature*

### 06. Q&A

*Ask away!*

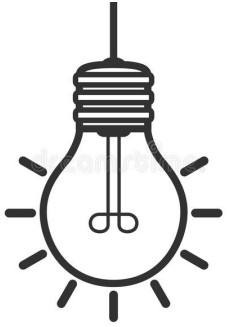
WHAT DO WE KNOW ABOUT LIGHT FITTINGS

# Light Fittings

*The attributes*

01





01

### Voltage

Is the pressure from the electrical circuit.  
Garden lighting in Australia requires low voltage fittings only

02

### Wattage

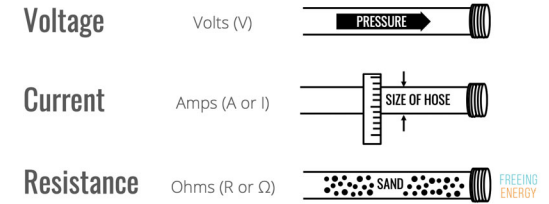
Is the amount of power an electric device consumes.

03

### Lumens = LIGHT OUTPUT

Is a measure of total amount of visible light from a lamp or light source.  
The conversion from Watts to Lumens is described as "efficacy".

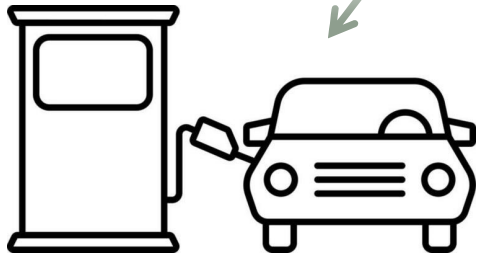
### Electricity is like a water hose

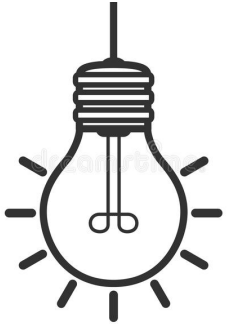


Comparing light to energy					
Lumens	220+	400+	700+	900+	1300+
Incandescent	25w	40w	60w	75w	100w
LED	4w	6w	10w	13w	18w

Watts

Lumens





04

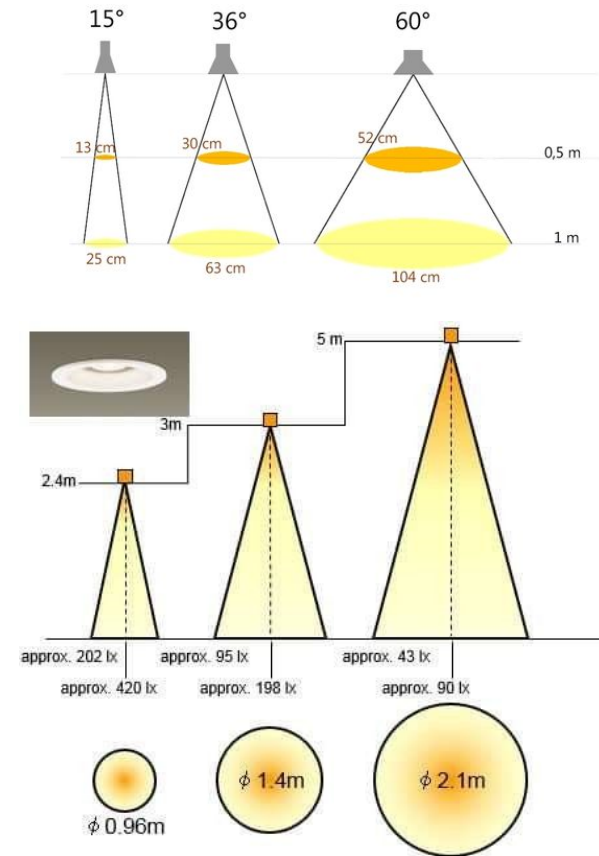
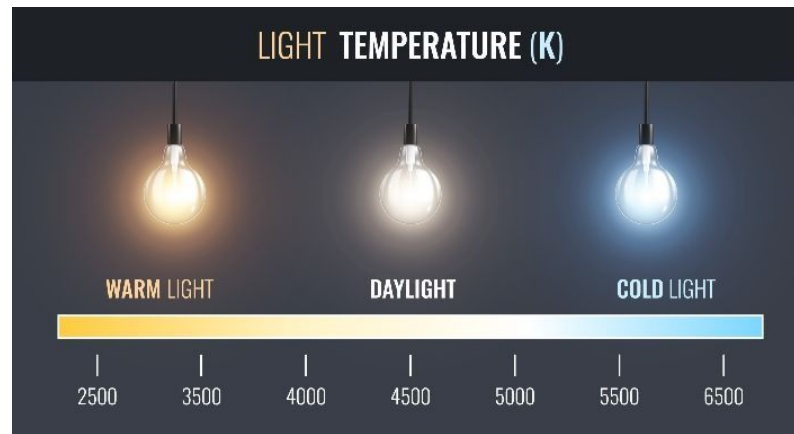
### Beam angle

Is the angle at which light spreads from the light fitting.

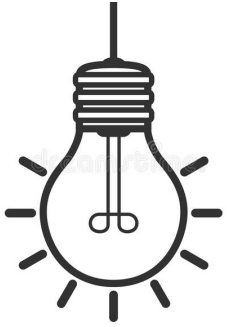
05

### Colour Temperature

Is a way to describe the apparent colour of light provided by light fixture or bulb. It is expressed in degrees Kelvin.







X qghu#bz q lq j #U p lq #IS87

06

### IP rating

This number describes water and dust ingress protection. IP20 being the lowest, IP68 the highest.

07

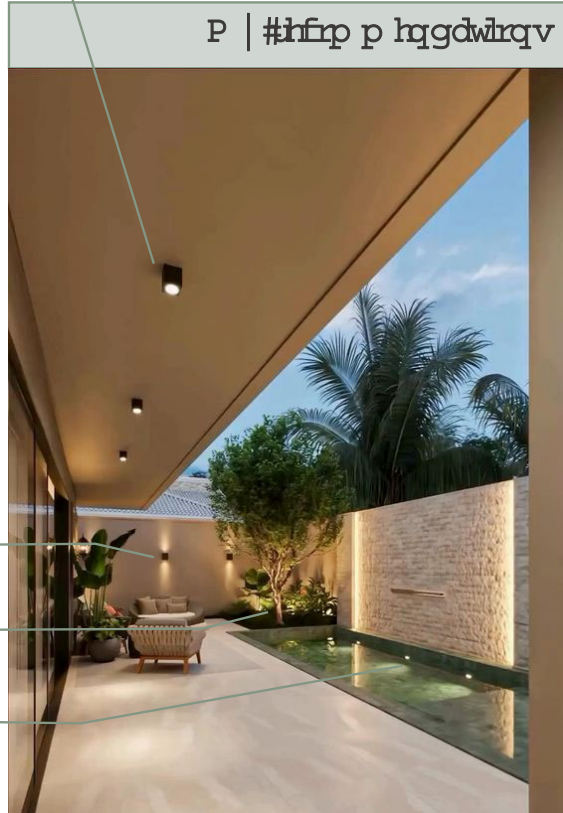
### Environmental protection

Protection against elements like salinity, UV and other factors. UV protection rating, "drive-over", IK rating and marine grade finish.

H {srvg#E dtdgh#U p lq #IS9 :

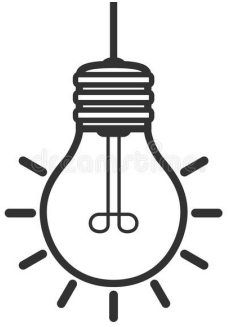
J dughq#E hg#U p lq lp d#IS9 :

Z dhu#hdwuh#U IS9 ;  
n#xep huvled#srod#ljkwlqj ,



## IP RATINGS

1ST DIGIT: SOLID OBJECT PENETRATION			2ND DIGIT: WATER INGRESS		
1ST DIGIT	SUMMARY OF PROTECTION		2ND DIGIT	SUMMARY OF PROTECTION	
0	No protection		0	No protection	
1	Protected against solid foreign objects of 50 mm diameter and greater		1	Protected against vertically falling water drops	
2	Protected against solid foreign objects of 12.5 mm diameter and greater		2	Protected against vertically falling water drops when enclosure tilted up to 15°	
3	Protected against solid foreign objects of 2.5 mm diameter and greater		3	Protected against spraying water 60° from vertical	
4	Protected against solid foreign objects of 1 mm diameter and greater		4	Protected against splashing water from any direction	
5	Dust-protected		5	Protected against water jets	
6	Completely dust-tight		6	6 Protected against powerful water jets	
<small>Cleaning processes carried out by professionals are not covered by the IP rating data. If necessary, manufacturers are advised to provide relevant cleaning process information. This is in accordance with the recommendations on professionally executed cleaning processes as stated in IEC 60529.</small>			7	Protected against the effects of temporary immersion in water of a depth between 15cm and 1m	
<small>Information source is IEC 60529:1989 + A1:2000. The full latest version can be obtained from <a href="http://www.cenelec.eu/">http://www.cenelec.eu/</a></small>			8	Protection against long periods of immersion: max depth and duration specified by manufacturer	



08

## Wildlife protection

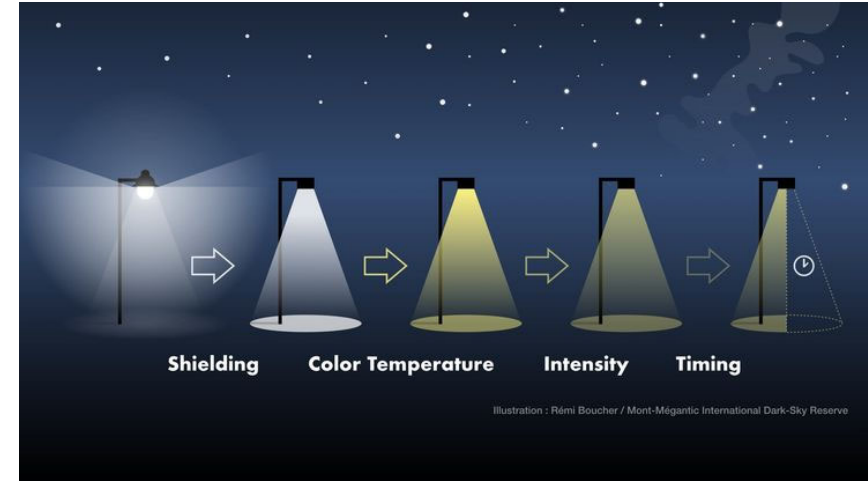
Protection of our environment from harmful aspects of artificial light



Minimizing light exposure and selecting appropriate colours to prevent disruption to wildlife.



Dark Sky and Light Pollution



WHAT' S WHAT

# Basic Light Fittings

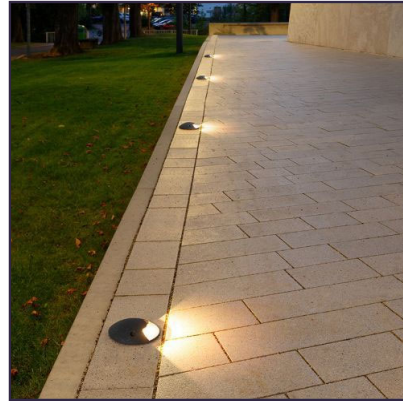
# 02



Light Fittings



# Basic garden lights – what is what



WHAT IS LINEAR LED

# Linear LED

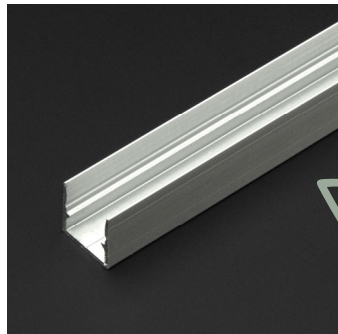
Aluminium extrusion



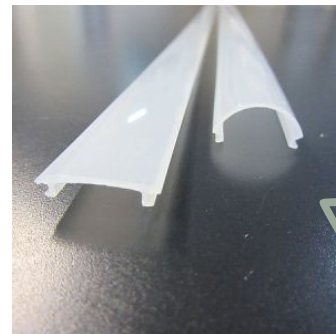
Diffuser



LED striplight



Dissipates heat



Blurs the "dots"



LAYERING LIGHT AND LIGHT MAPPING

# Types of Lighting

*Tools of the trade*

03



Types of Lighting



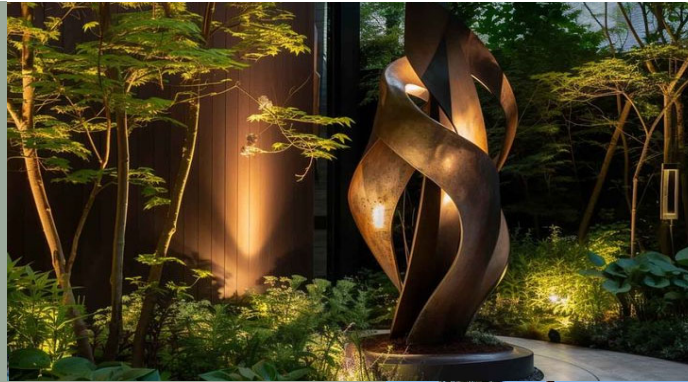
WHAT ARE THE TYPES OF LIGHTING

# Types of Lighting



## TASK LIGHTING

Task lighting is direct lighting used specifically for certain tasks, such as reading, writing, cooking, or other work.



## ACCENT LIGHTING

Accent lighting, or highlighting, is used to draw attention or to emphasize. It accentuates objects by directing light specifically onto them.



## GENERAL LIGHTING

General lighting, provides an area with overall, non-specific illumination. It enables us to see and orientate in space.





Drama is welcome.  
Shadows are your friend.





LAYERING LIGHT AND LIGHT MAPPING

# Layering Light

# 04



Layering Light



PAINTING WITH LIGHT

BACKGROUND  
or BACKDROP

FOREGROUND

MIDDLE





Layering Light

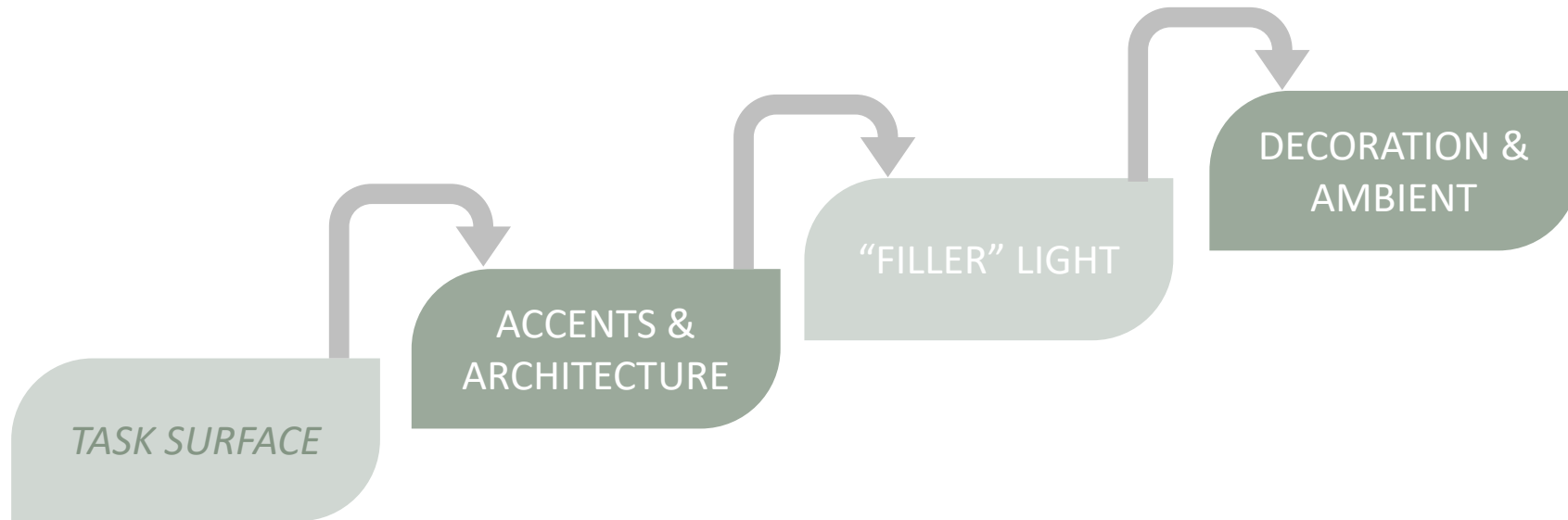


Garden Lighting Workshop

STEP BY STEP

# How to light a garden

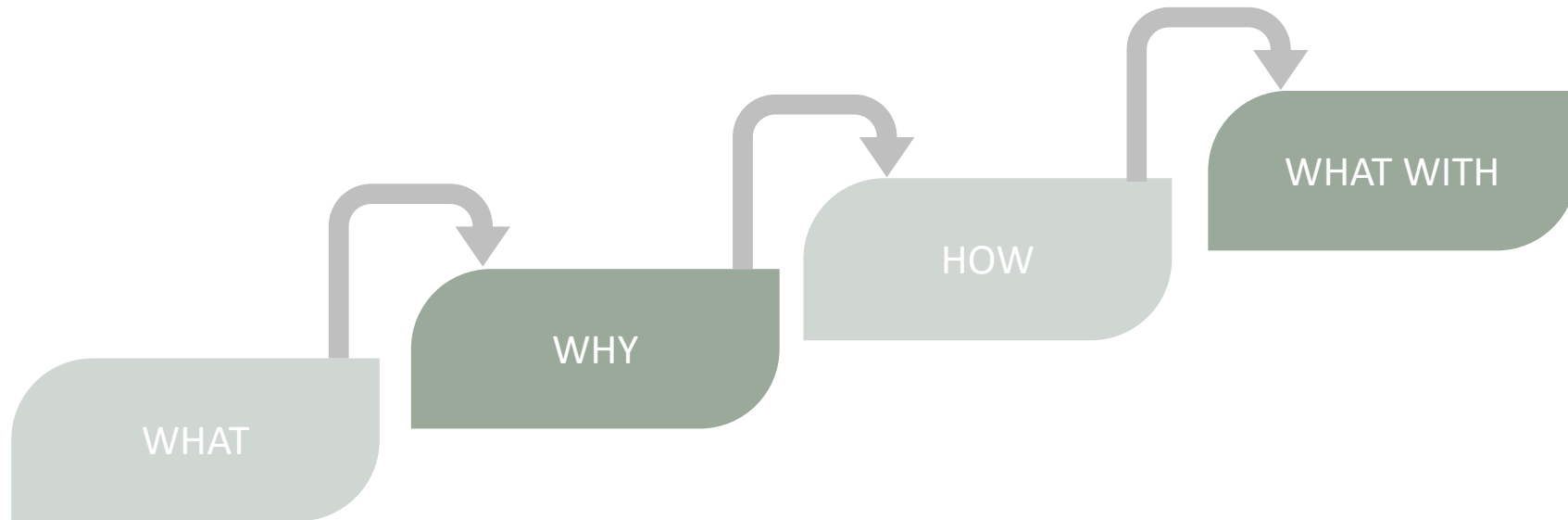
Or anything else for that matter...



Don't be afraid to leave some areas darker...

STEP BY STEP

# How to light a garden



And what NOT to light...



Layering Light



Garden Lighting Workshop



Layering Light



Garden Lighting Workshop

CASE STUDY

# Practical Application

# 05



Practical Application





HOW TO ...

# Lighting a Tree

CASE STUDY



CONSIDERATIONS TO START WITH

DECIDUOUS  
*CONIFERUS*

HEIGHT

CANOPY SHAPE

GROWTH SPEED





### Scenario 1

Illuminating a tree from the front makes it appear flatter. The further away the floodlight is from the tree, the flatter it appears. The possibility of the viewer being dazzled can be ruled out with this type of illumination. Floodlights or in-ground luminaires can be used here.



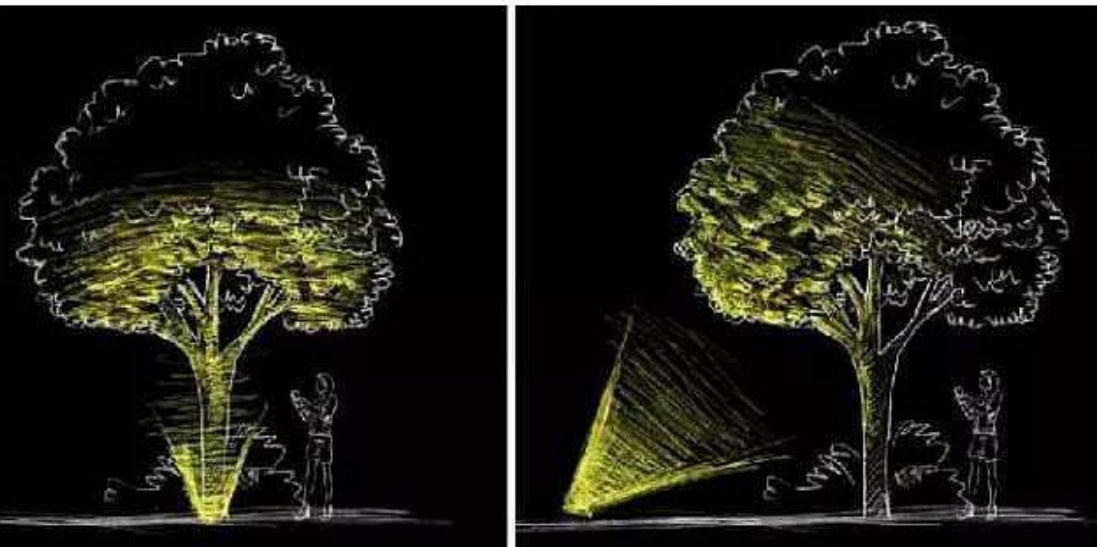
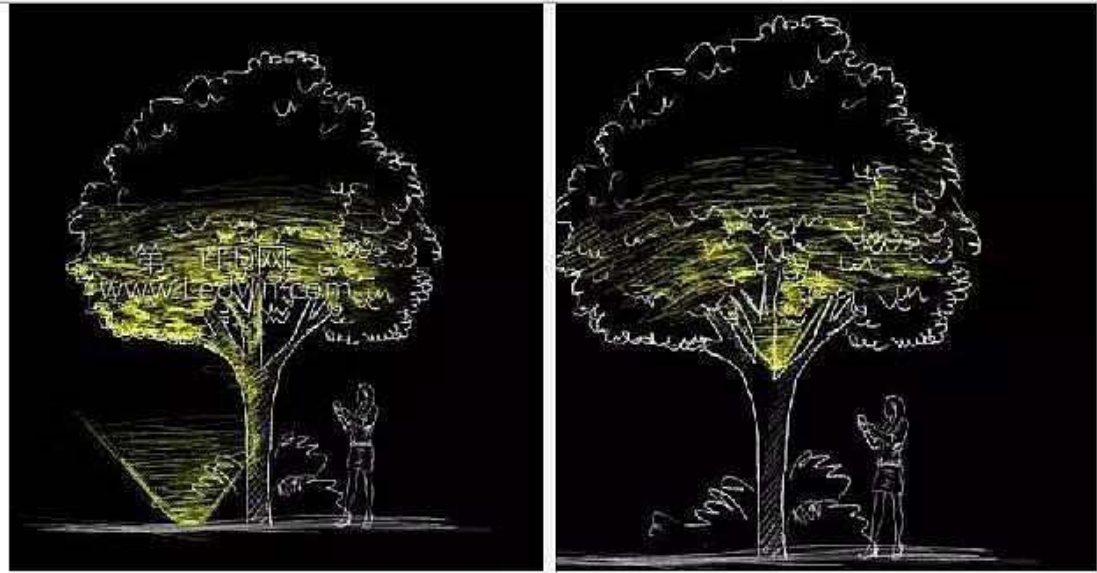
### Scenario 2

If only the crown of the tree is to be illuminated, it is practical to position two in-ground floodlights behind the tree trunk, as seen from the point of view of the viewer. The light characteristic of these luminaires is wide beam. It is important to ensure that the viewer is not dazzled. In-ground floodlights with asymmetrical wide beam or adjustable light distribution are most suitable.



### Scenario 3

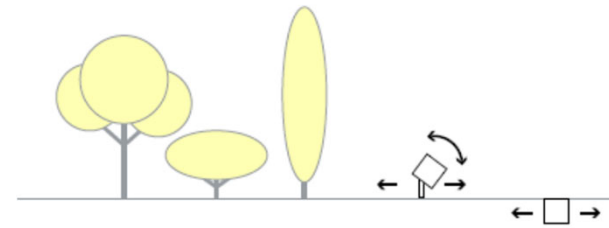
Fig. 3 shows the tree illumination with a floodlight installed directly in front of the tree trunk. The light of this luminaire is very narrow beam and shines along the tree trunk. Excessively high light output should not be used here, since this can lead to selective light overspill near the luminaire. If the tree can be seen from several sides on account of the way the paths are routed, we recommend the use of several floodlights with very narrow beam light distribution around the trunk. Additionally, two adjustable in-ground floodlights are placed at the sides of the trunk at a distance of about 2 to 3 m



Lighting a tree

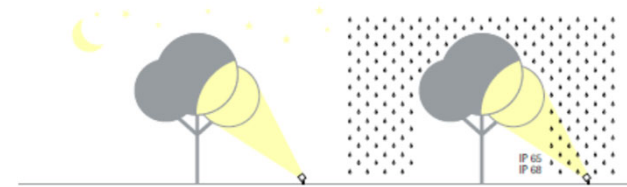
POSITION OF LIGHT SOURCE

BEAM ANGLE



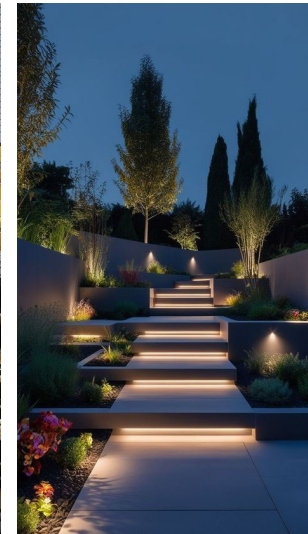
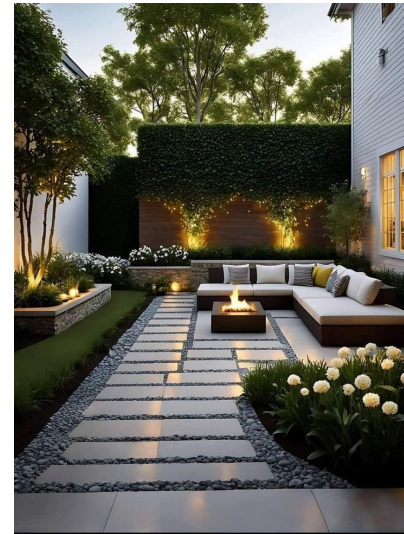
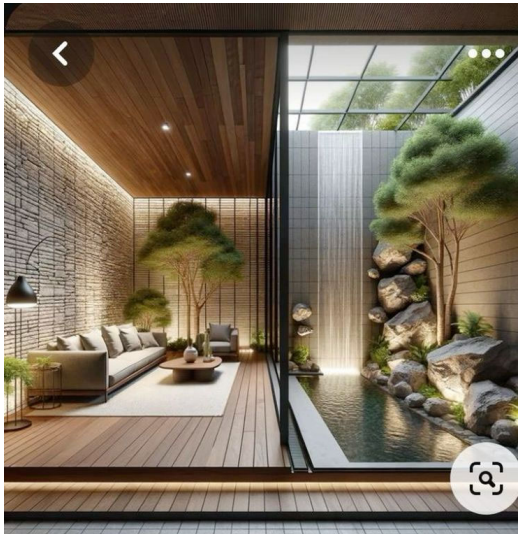
Select the light distribution matching the shape of tree

Decide on a suitable luminaire position



Think about the environment

Plan with weather resistant luminaires



## KEY POINTS OF GOOD GARDEN LIGHTING

- **Light with Purpose** – Highlight key features, pathways, and seating areas.
- **Layer Your Lighting** – Use a mix of uplights, downlights, and ambient glow for depth.
- **Soft & Subtle** – Avoid harsh glare; think warm, inviting tones.
- **Focus on Safety** – Light up steps, edges, and pathways without overdoing it.
- **Create Atmosphere** – Use shadows and contrast to add drama and mood.
- **Energy Smart** – Go for LED and solar where possible.
- **Less is More** – Keep it natural; don't turn your garden into a stadium.
- **Weatherproof & Durable** – Choose fittings that can handle the elements.

QUESTIONS PLEASE!

Q&A

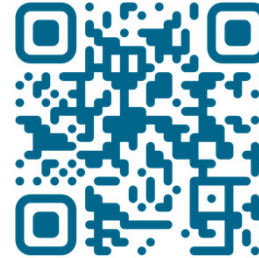
06



# Q&A



Lucka Slatner:  
[Lucka@Lightatelier.com.au](mailto:Lucka@Lightatelier.com.au)  
M: 0468 945 213



[www.Lightatelier.com.au](http://www.Lightatelier.com.au)



[www.hunzalighting.com](http://www.hunzalighting.com)



[www.lightculture.com.au](http://www.lightculture.com.au)

