

Lane Cove Creative Photography 2023

Essential Skills

Lighting Your Subject

Photography is literally “drawing with light”, so understanding how to use and control lighting is critical for all aspects of Image making.

“I am forever chasing light. Light turns the ordinary into the magical.”

– Trent Parke

Essential Skills

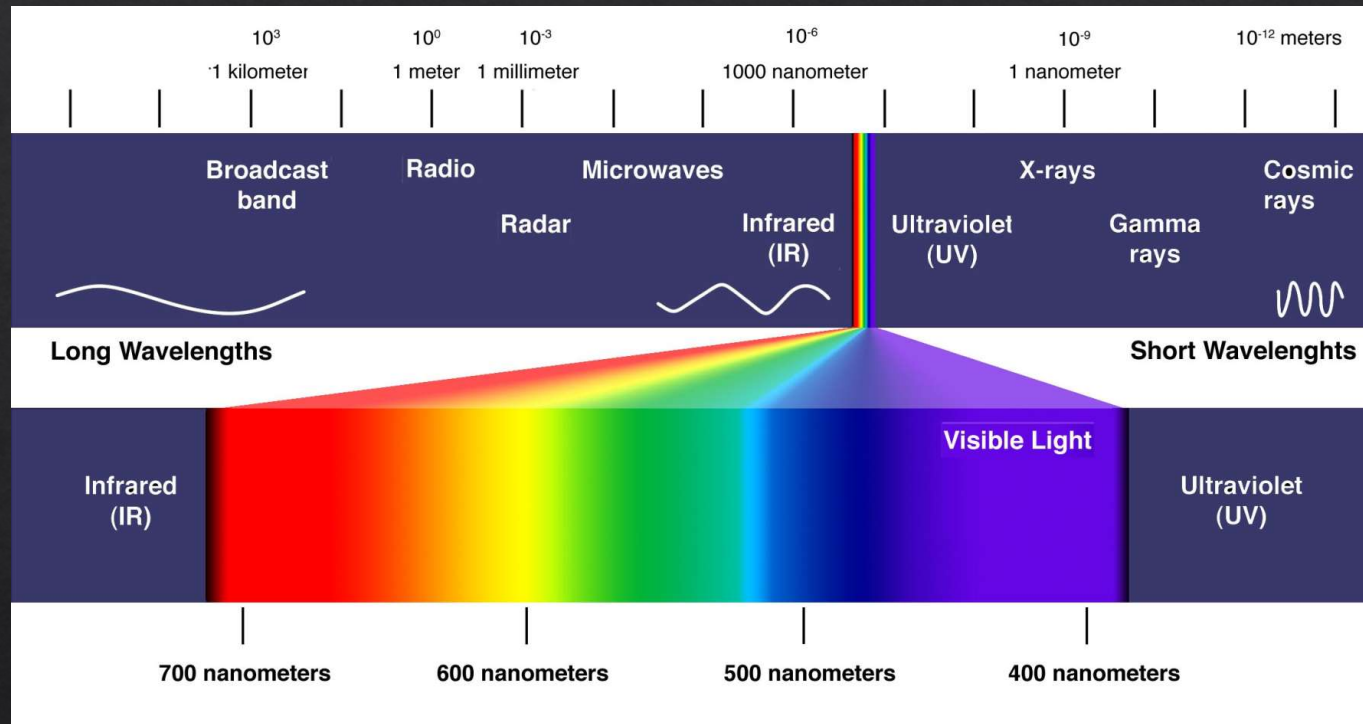
What is Light?

It is the visible part of the electromagnetic spectrum

It is the (very) small amount of that spectrum we can see

Light from the sun can be split into the spectrum of colours we know

What is light?



Essential Skills

Lighting your subject

- **Types of light**
- **Characteristics of light**
- **Light modifiers**
- **Lighting techniques**

Types of light

- **Available light** – the light that is there
- **Artificial light** – the light we bring along
- **Supplementary light** – light added to other light

Available Light

Natural Light:

- Sun
- Moon
- Street lights
- Room lights



Natural light comes in many forms





Artificial Light

Introduced Light:

- Incandescent flood lamps
- LED photo lights
- Flash
- Torch
- Candle





Introduced light



Portrait using strong side lighting



Supplementary Light

Supplementary Light:

- Reflector
- Fill flash
- Bounce flash





Fill flash





Reflectors, diffusers or bounce flash

LED lighting with
coloured gels



LED lighting with
coloured gels



Single LED
side lighting

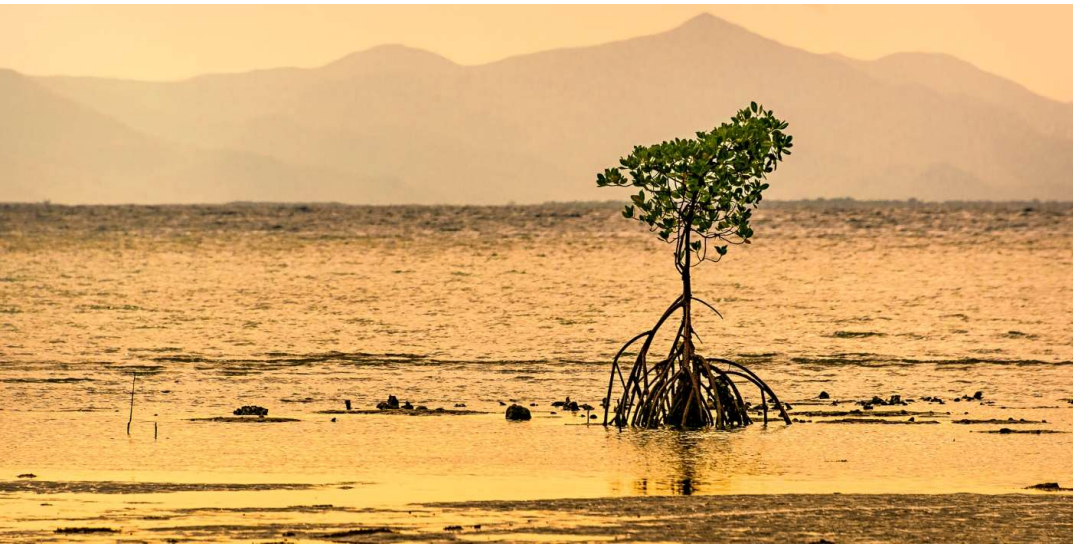


Part 2 continues...

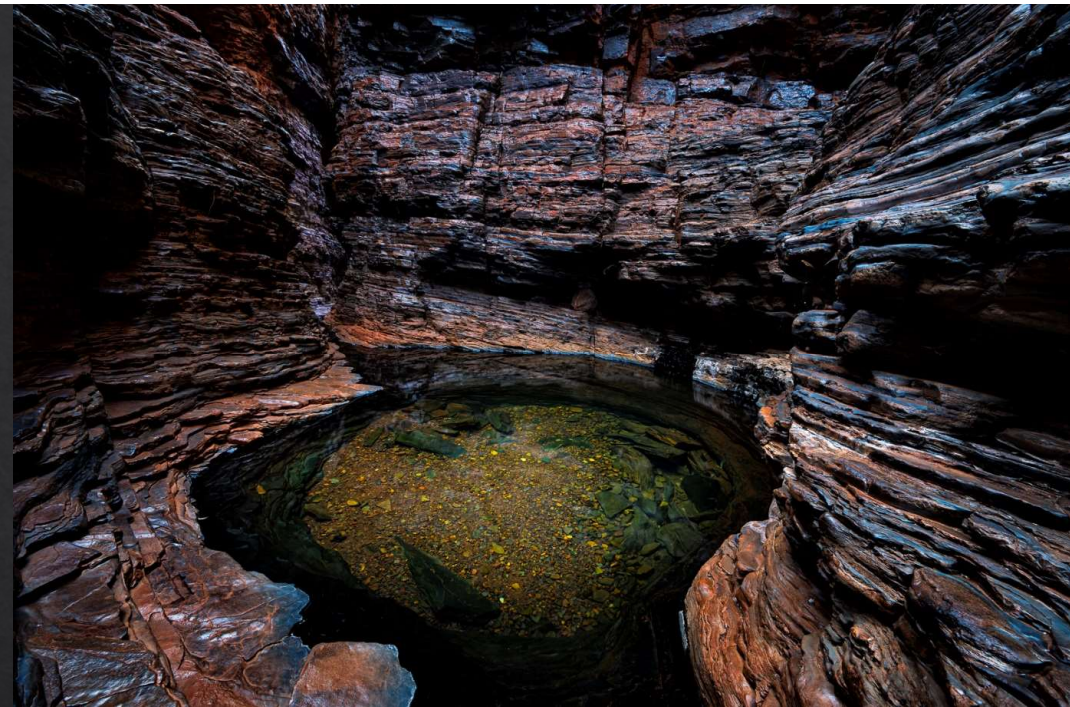
Characteristics of Light

Qualities

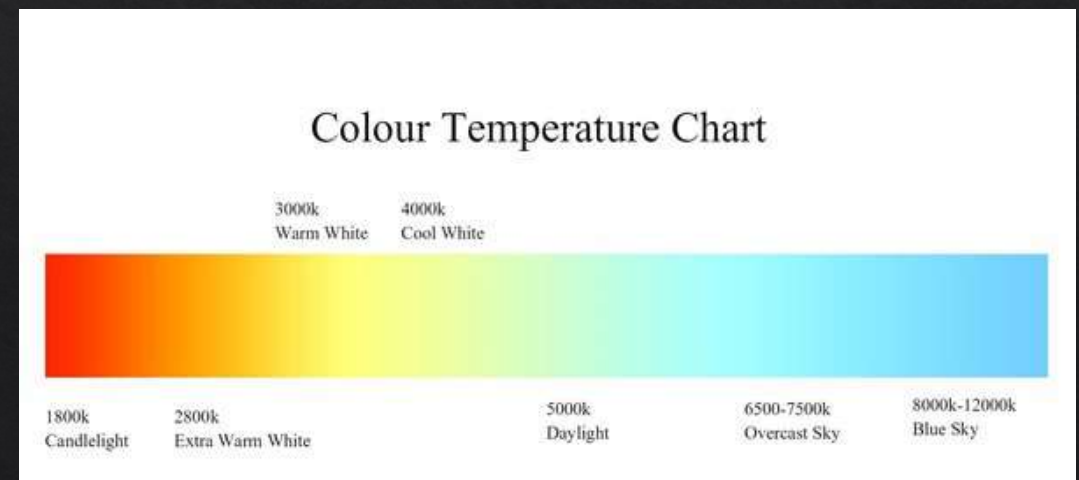
- **Hue – the colour of the light – colour temperature**
- **Intensity**
- **Luminosity**
- **Direction**
- **Colour cast**
- **Light source – point or diffuse**
- **Natural or artificial**



The colour of the light - colour temperature – warm at the edge of the day and cool in the shadows.



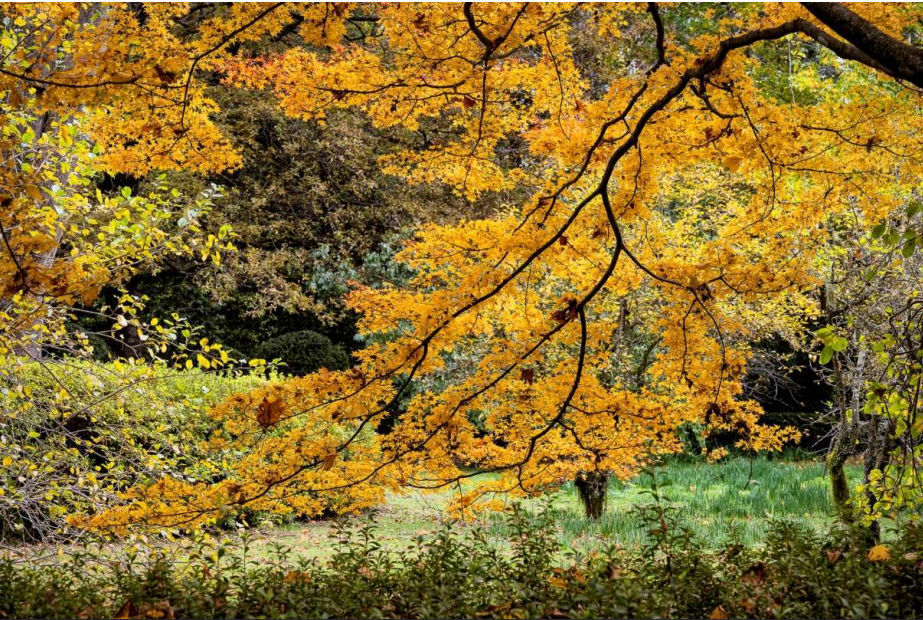
“Daylight” is normally 6500 Kelvin, but this is an overcast sky at noon, too blue for most uses. 5000K to 5500K is more “Natural”





Intensity – high in the middle of the day,
low at or after sunset





Luminosity and direction

The brightness is how much light there is

Direction is where the light is hitting your subject.





Colour cast – excessive differences in the colour of the light will fool the camera's auto white balance

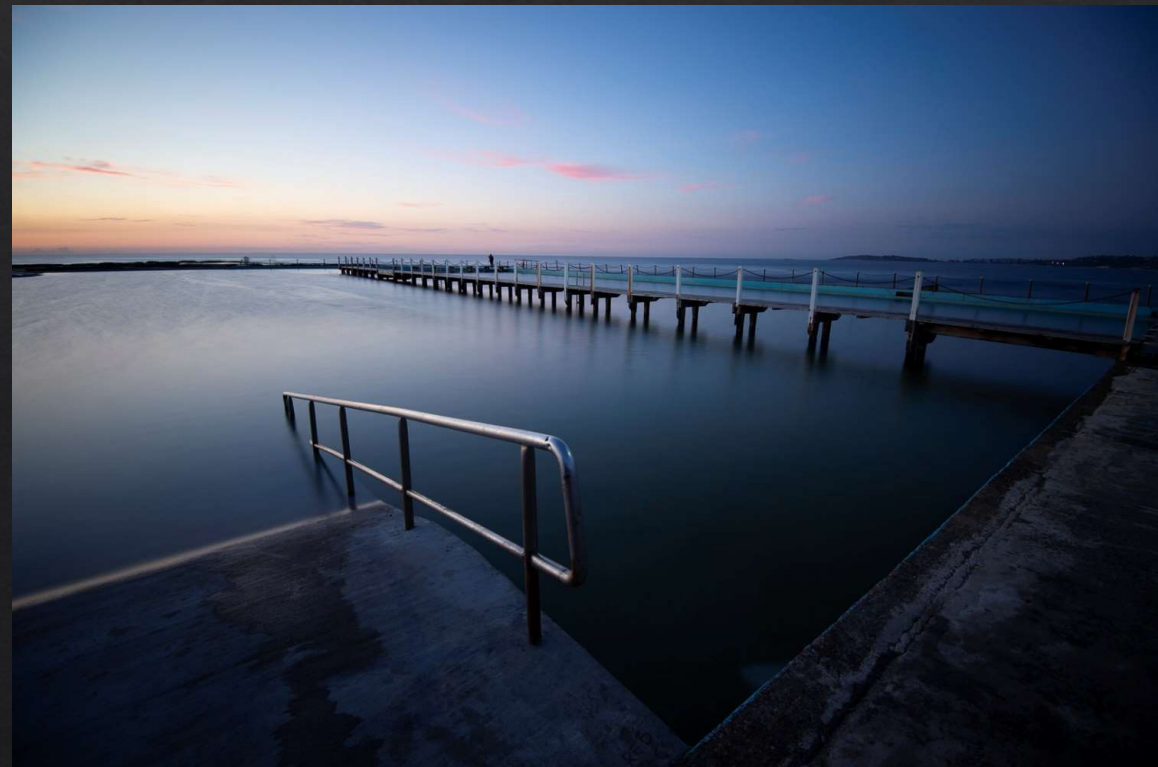
Here the excess of greens has shifted the white balance into magenta.





Colour cast - early morning light is blue in areas not illuminated.

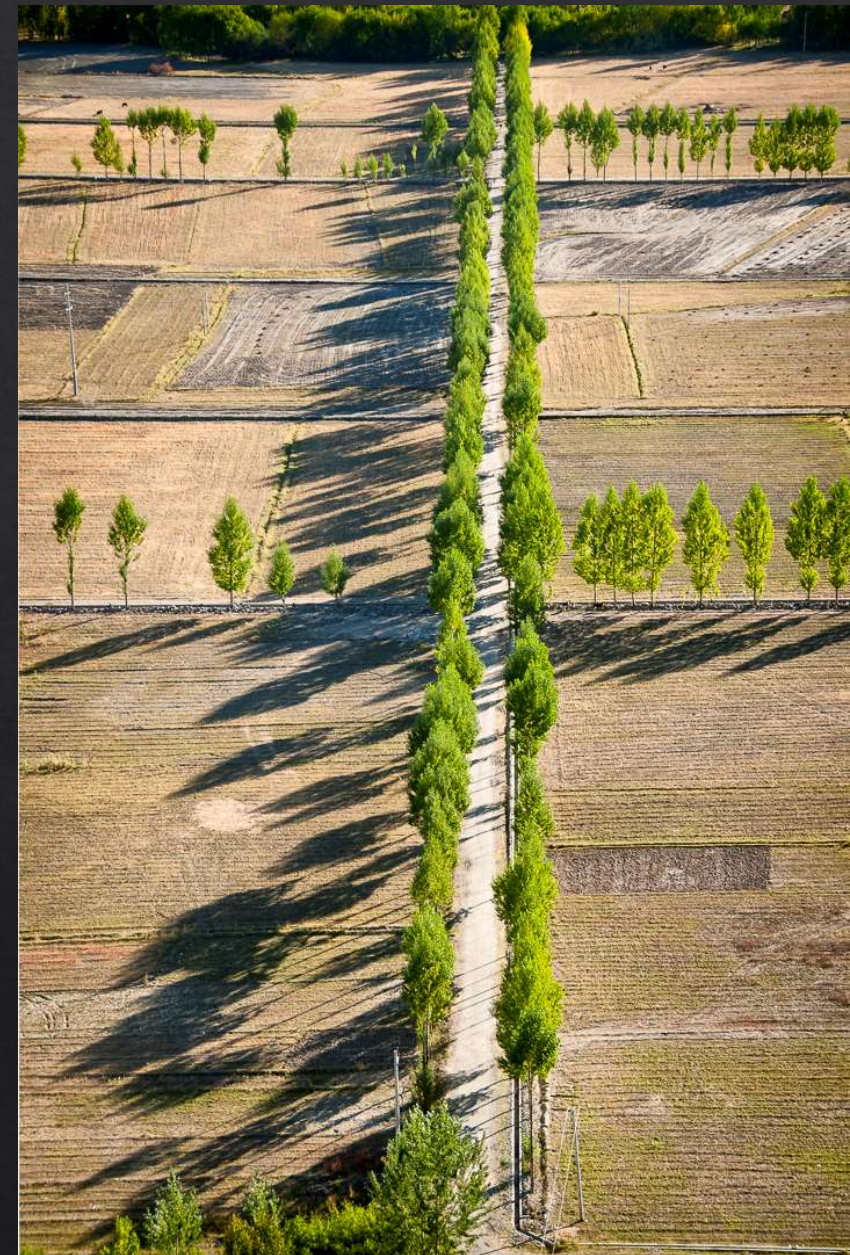
“Correct” colour is what looks right to you.



Light source – point or diffuse

Point source light (the sun) casts strong shadows

Diffuse light through clouds or mist gives weak shadows





Natural or artificial light sources

Artificial light has a colour cast –
should it be “corrected”?



Light Modifiers

- **Reflectors**
- **Diffusers and scrims**
- **Barn doors and cutters**
- **Flash – fill or sole source**
- **Bounce flash**
- **Continuous light sources**

Flash as only light source or as fill flash



Studio Flash with soft
box attached and
reflection from white
walls



Lighting Techniques

- **Backlighting**
- **Backlighting plus fill flash/reflector**
- **Side lighting**
- **Side lighting plus reflectors**
- **Front lighting**
- **Top lighting**
- **Controlling flash**
- **Metering for different conditions**



Backlighting plus fill flash



Backlighting



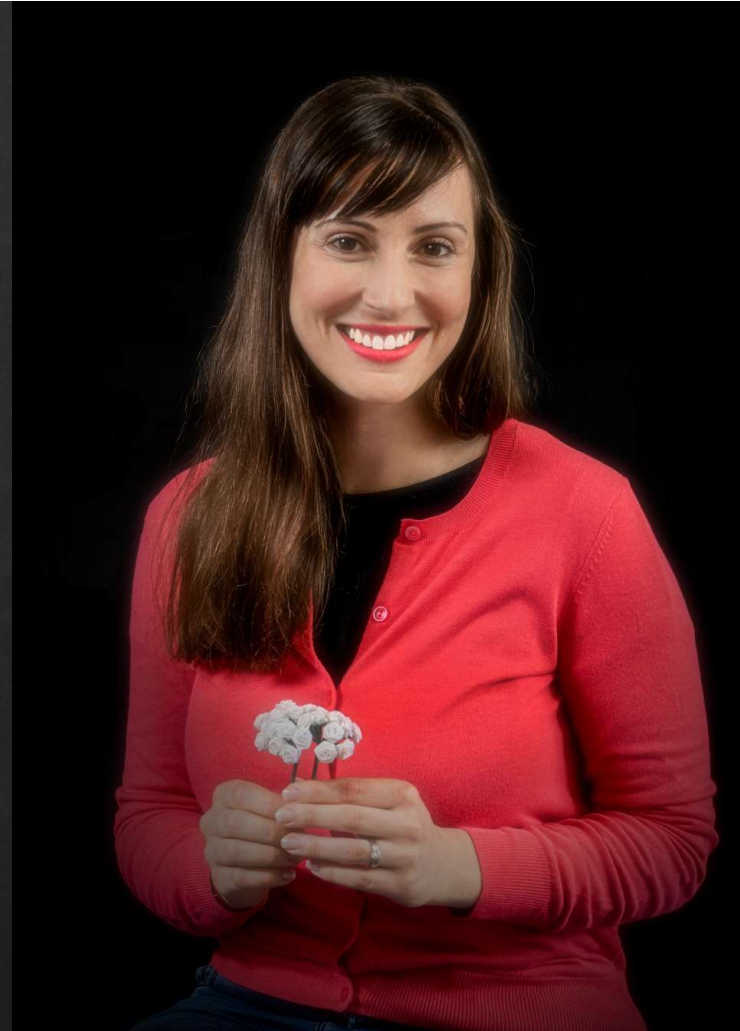
Side lighting



Top lighting



Front lighting



Formal style portraiture using two umbrella flash units

Controlling flash



Background exposure – no flash



Balanced fill flash



Balanced fill flash – background underexposed



On camera flash – flash exposure is controlled separately from background exposure – ideal for fill flash

Controlling flash



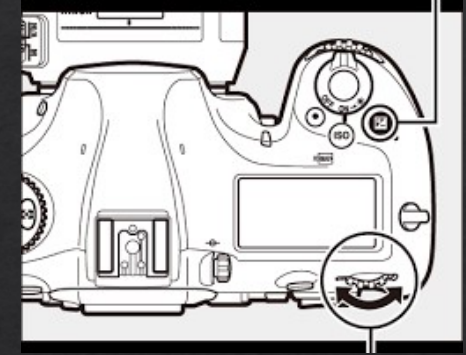
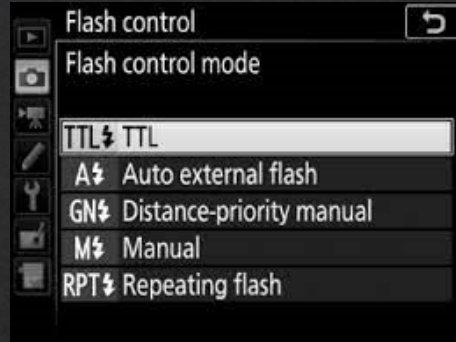
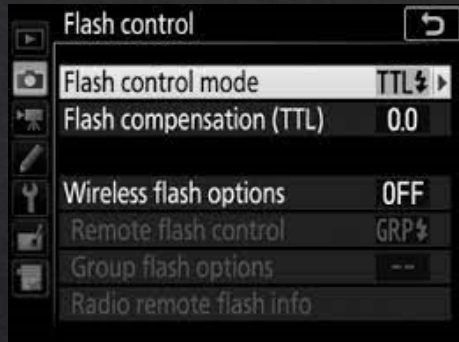
On camera flash and slow sync to show movement

Controlling flash



Off camera flash – more flexibility for side and back lighting – controlled by the camera and background exposure measured separately.

Controlling flash



Flash output is controlled separately from the background
And

The only factor determining flash exposure is the aperture
(provided you are within the flash sync range)

i.e. to change the background exposure – change the
shutter speed only.

Exposure metering for different conditions



For “average” scenes use matrix or pattern metering

For back lit or subject matter with a dark background – use centre or spot.
If using fill flash use matrix/pattern with flash compensation as needed

