

What is...

THE MEANING OF °K ON LAMPS

Kelvin – (k) is the colour temperature of the light.

Daylight is between 5000k – 6000k however this does not mean that it is suitable for use at night, generally what do you do on a bright sunny day? You put on sun glasses to reduce the glare!

Halogen = 3200k

Xenophot (used in Lightforce products) = 3350k

HID (High Intensity Discharge) from 4200k – 6000k (Lower and higher Kelvin is achievable in HID however not suitable for most applications).

LED (Light Emitting Diode) 5000k – 6000k.

So what does that mean in the real world? -

As you go higher in Kelvin the whiter the light becomes up until 5000k / 6000k beyond this it really starts to get a blue hue. You should also understand that the higher in Kelvin the less contrast / definition you will have. If you want less eye strain and to be able to see more detail on the road ahead of you like rocks and pot holes or greater definition in shrub **STAY AWAY** from 6000k and above!

It is also important to understand the following, as you go higher in Kelvin (colour temperature) you decrease light output (Lumen) **FACT!**

Lumen – (lm) is the measurement of light intensity at the source (bulb) this does not take into account the size or shape of the reflector just the amount of light emitted from the bulb.

4200k has more lumen output than 5000k, 5000k has more lumen output than 6000k and so on **FACT!** The difference in lumen output from 4200k to 5000k is minimal however the gap increases from 4200k to 6000k.

What is...

Lux - (Lx) is the measurement of light spread over any given area, treat it as the surface that the light hits at any given distance One Lux is equal to one lumen per square meter.

A given amount of light will illuminate a surface less if it is spread over a larger area, so luminance is inversely proportional to area.

This is where Kelvin and lumen combined with the size, shape of the reflector and focal point of the bulb determines the overall light output.



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