LIGHT POLLUTION – who, me?

Look towards the horizon any dark evening and you may see an intense orange glow stretching upwards and outwards to cover a large proportion of the sky. Much of this is caused by light pollution from orange sodium street lighting. Hopefully this will reduce over the coming years as most local authorities are replacing their orange sodium street lights with LED lighting. The main reason they are doing this is to reduce power consumption of street lights and therefore reduce operating costs. A useful side effect of installing LED street lighting is the very significant reduction in light pollution as the LED street lights, or “luminaires” as they are known, point most of their light downwards where it is needed. The older orange sodium luminaires scatter light in just about all directions. The diagram below shows how street luminaires should direct light so that it is directed only to where it is needed and how upward light, spill light, back light and reflected light should be minimized.

We can all help reduce the annoyance of light pollution by ensuring our own outdoor lighting is properly installed to conform to the above diagram. Many of us buy cheap floodlights from our local DIY superstore and then fit them assuming that they should point outwards at an angle between 45 and 90 degrees. Unfortunately this wastes light by directing it where it isn't needed and can give the wrong result – see diagrams below. (see also: http://www.darkwrightskies.com/files/)

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