

## 5 - Macrossan and Howard Streets, CBD – Comment on Trial LED Luminaires

### Luminaire

In both streets it is assumed the trial luminaire is a - Sylvania Urban - LED.

### Colour

This is a harsh white light assumed to be 4000K. While such harsh lighting may have a role in public space lighting in the CBD, it is not suitable for residential streets.

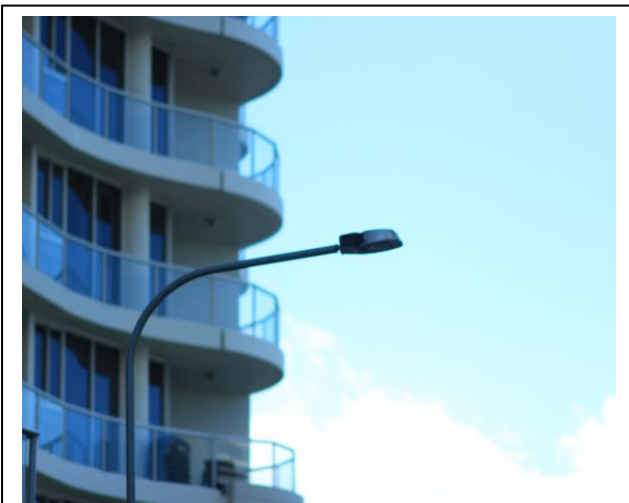
### Brightness

The lighting appears very bright and more than what would be required for a residential street. However, even though pedestrians may consider these luminaires to be excessively bright they may be appropriate for public open-space lighting.

### Glare

Even though this luminaire appears to have an Aeroscreen visor design it is very glary, particularly for pedestrians. There appears to be no shielding of the LED array in the 80° to 90° “glare zone”. Pedestrians may find they squint and avert their vision downwards when walking under these lights.

### Luminaire Installation

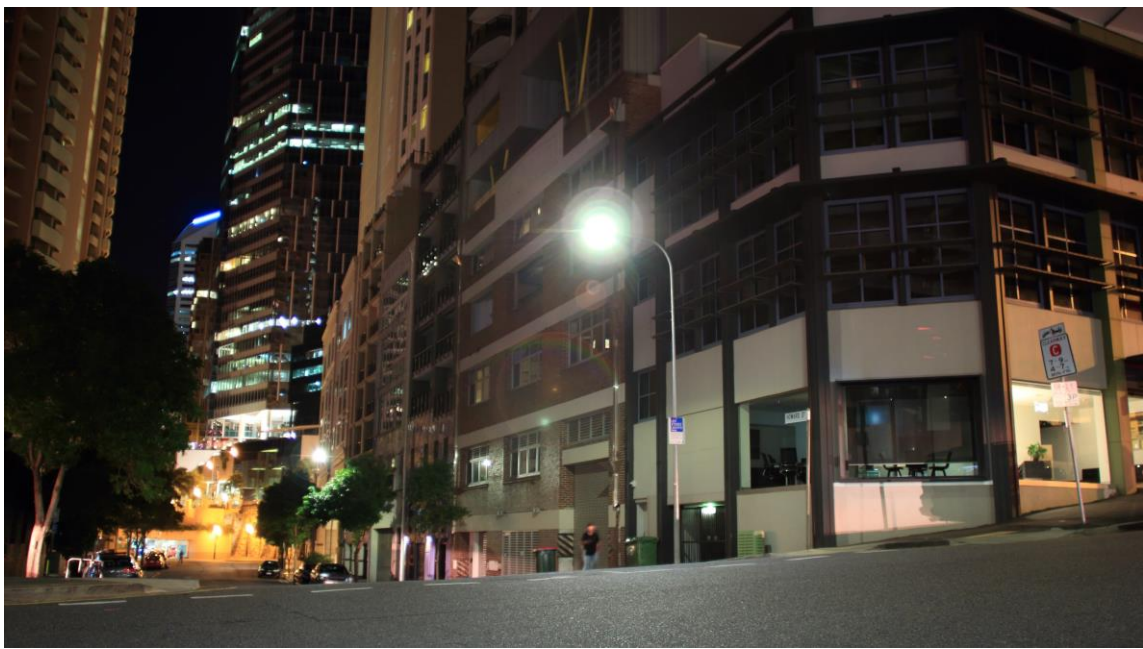


All the trial luminaires in these streets appeared to incorporate an up-tilt angle of about 10°.

These luminaires do not appear to incorporate any capacity for their installation angle to be adjusted relative to the bracket arm. As a result, all trial luminaires incorporate an angle of up-tilt, estimate at 10°, which is assumed will alter their illumination performance beyond their stated specification. Given that BCC-Energex are unlikely to modify existing bracket arms in any Brisbane-wide roll-out of LED lighting this luminaire has a serious design flaw.

### Light Distribution

These luminaires deliver excessive backward light trespass on to private property.



Even though these luminaires are installed with about a 10° up-tilt they still delivery excessive light trespass to the rear on to private properties.



These luminaires are very bright and excessively glary for use in residential streets.

### **Overall Assessment as a LED Luminaire for Brisbane-wide Roll-out**

These luminaires are considered too blue-rich, too bright, too glary, too difficult to install properly and generate too much light trespass on to private property. They are not assessed as suitable for a Brisbane-wide roll-out in residential streets.