

## 16 - Playford Street, Bracken Ridge – Comment on Trial LED Luminaires

It is assumed this luminaire is a - Austeknis LL17025

### Colour

This is an extremely harsh white light, assumed to be 6000K, that emits a high proportion of blue wavelength light that is unnecessary in this residential street. Research indicates such blue-rich light may create a glare and driving hazard for drivers aged over 65 years.

### Brightness

This is a very bright luminaire and delivers task area illumination that may substantially exceed the minimum requirement of the Australian Standard for this category of residential street. Roadway illumination of this intensity is unnecessary for this street.

### Glare

This is an intensely glary luminaire. The problem may be exacerbated by the extremely high colour temperature causing discomfort-glare for pedestrians. The lack of LED array shielding and up-tilt angle of this luminaire may also exacerbate the glare problem.

### Installation



Just one trial luminaire appears to be installed at near horizontal all others have a significant up-tilt, in some cases approaching  $10^{\circ}$ .

This luminaire does not appear to have any internal capacity to adjust the installation angle to horizontal.

### Light Distribution

This luminaire creates an unnecessarily bright primary beam area below the pole and excessive light trespass particularly to the rear. It also casts a wide glare zone along the street and to the rear and forward above the primary light trespass area.



Substantial rear light trespass from this luminaire.



Substantial forward light trespass and glare zone nuisance light on to private properties.

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

This luminaire should never have been trialed in a residential street such as this. The potential for glare and harsh unpleasant illumination should have been recognized just by the correlated colour temperature and lack of shielding. This luminaire is unsuitable for Brisbane-wide roll-out.