

17 - Weenga Street, Geebung – Comment on Trial LED Luminaires

Luminaire

It is assumed this luminaire is a - Austeknis LL17025 and is also being trialed in Playford Street, Bracken Ridge.

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 intensely bright luminaire and delivers task area illumination that is unnecessary for this street. Light is cast a long way laterally along the street and this also contributes to the very bad glare problem.

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 also exacerbates the glare problem. Pedestrians will find they must squint strongly under this luminaire and avert their vision downwards for glare protection. The intense glare may create a safety risk for pedestrians as shadow areas are accentuated and line-of-sight is directed down and away from these luminaires.

Residents interviewed in this street complained about excessive glare and brightness.

Installation



Trial luminaire installed with an up-tilt angle estimated at 17°.

At appears none of the trial luminaires have been installed horizontal. The up-tilt of some luminaires is extreme and estimated at 17°. BCC-Energex should make public and explain its luminaire performance evaluation criteria and provide an explanation as to why such an extreme up-tilt angle is being trialed. Such an up-tilt angle is likely to make control of forward light trespass impossible.

Light Distribution

The intense glare zone of this luminaire is a major design weakness. The extent of rear light trespass, in particular, also makes this luminaire a poor choice for residential streets. The excessive brightness of the primary beam and glare also make this luminaire an uncomfortable light source for pedestrians.



Light trespass in Bayview Terrace caused by light cast along the length of Weenga Street.



Excessive rear light trespass on to private property.

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. This luminaire is unsuitable for Brisbane-wide roll-out.