

9 - Emma Street, Holland Park West – Comment on Trial LED Luminaires

Luminaire

It is assumed this luminaire is a - Pecan Ledway Road Lighting NXT.

Colour

The emitted light is a harsh white that is unnecessary for this residential street.

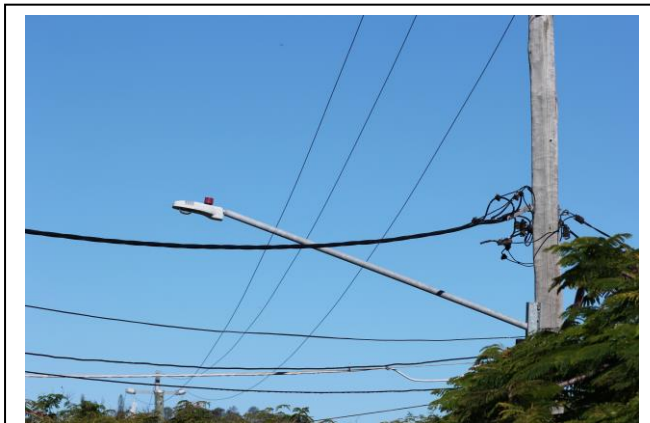
Brightness

This luminaire appears very bright and delivers a level of illumination well in excess of that in neighboring streets. A resident of this street could easily read a book while walking under these lights – is that the design objective of this trial? It is assumed the lighting in neighboring streets was designed to meet the minimum illumination required by the Australian Standard. This level of illumination in Emma Street may exceed that specified by the Australian Standard for this category of street. If this is so, why is this high level of illumination being trialed?

Glare

The semi cut-off design and lack of shielding make this a very glary luminaire and uncomfortable for pedestrians. It is likely the glare and light trespass is causing annoyance to some residents in this street.

Luminaire Installation



Some luminaires in this street appear to have been installed with an up-tilt angle in excess of 10°.

None of the trial luminaires in this street have been installed with the LED array aligned horizontal. Some appear to have about a 12° up-tilt and the luminaire appears to lack any internal mechanism for adjusting the installation angle. It is difficult to understand why the BCC LED Trial would install luminaires with such a large up-tilt. Are BCC-Energex actually trialing the implications of various up-tilt angles or is this just part of a poorly designed trial? If this is intentional BCC-Energex should make public the assessment criteria being used to evaluate

the performance of this and other non-horizontal luminaires.

Light Distribution

The luminaire appears to be designed to project a very wide lateral beam along a street, however, this results in making the LED array very glary and a light trespass nuisance. The BCC LED Trial should include a range of luminaires with a progression of light distribution patterns that may best suit narrow or wider streets. This luminaire seems best suited to very wide streets where the rear private property boundary is set back some considerable distance from the mounting pole.



This luminaire delivers a very wide field of illumination and substantial rear light trespass.



Even though Emma Street is wide this luminaire still causes forward light trespass.

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

This luminaire is not suitable for a Brisbane-wide roll-out. It is too bright, too glary, directs light too broadly to allow good control and minimize light trespass and appears to be difficult to install horizontal.