

## 6 - Malbon Streets, East, Eight Mile Plains – Comment on Trial LED Luminaires

This appears to be the same luminaire being trialed in Macrossan and Howard streets in the CBD. It is assumed the luminaires in all three streets have identical specifications. It is a different LED luminaire to that being trialed in the western end of this street.

### Luminaire

It is assumed this luminaire is a - Sylvania Urban - LED.

### Colour

This is a harsh white light assumed to be 4000K. Such harsh lighting is not necessary or suitable for residential streets.

### Brightness

The BCC LED Trial should publish test data for this luminaire to allow residents to know the extent of any over-illumination as per the Australian Standard for this category of street. This luminaire is considered to deliver a much higher level of illumination that is necessary in such low traffic volume and low pedestrian volume streets.

### Glare

Even though these luminaires appear to have an Aeroscreen visor design they are very glary, particularly for pedestrians. There appears to be no shielding of the LED array in the 80° to 90° “glare zone”. These luminaires are an uncomfortable source of light for pedestrians. Pedestrians may find they squint and avert their vision downwards when walking under these lights. They are too bright and glary for use in residential streets.

### Luminaire Installation



All of these trial luminaires in the eastern end of Malbon Street are installed with an up-tilt angle of at least 5° and some are up-tilted substantially more.

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 in this street have some degree of up-tilt, some excessively so. Given that BCC-Energex are unlikely to modify existing bracket arms in any Brisbane-wide roll-out this luminaire has a serious design flaw.

### Light Distribution

The control of trespass light to the rear of this luminaire is poor. If these luminaires had been installed in the correct horizontal position the rear light trespass would be even more of a problem. Their light distribution is not considered suitable for residential streets.



This luminaire projects considerable trespass light to the rear on to private properties. It is also excessively bright and glary for residential streets.

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

These luminaires are poorly suited for use in residential streets where street lighting is primary designed to meet the needs of pedestrians. These luminaires are an uncomfortable source of light for pedestrians. These luminaires should not be selected for deployment in a Brisbane-wide roll-out of LED luminaires.

## 7 - Malbon Streets, West, Eight Mile Plains – Comment on Trial LED

### Luminaires

This is an entirely different make and model of LED luminaire to that being trialed in the eastern end of this street.

#### Luminaire

It is assumed this luminaire is a - Pierlight GreenstreetLED.

#### Colour

This is a harsh white light assumed to be 4000K. Such harsh lighting is not necessary or suitable for residential streets.

#### Brightness

The combination of the lumen output of this luminaire, its angle of installation, its lack of shielding, its poor control of light distribution and its high colour temperature make this an excessively bright luminaire totally unsuited for use in residential streets.

#### Glare

The design of this luminaire appears to make no attempt to reduce glare. For all the reasons cited above this is an excessively glary luminaire and totally unsuited for use in residential streets.

Pedestrians will find this luminaire very uncomfortable to walk beneath. Pedestrians will find they need to squint and divert their gaze to the ground to protect their eyes from the glare and excessive brightness.

#### Luminaire Installation



All these trial luminaires have been installed with a significant up-tilt angle, some excessively so.

All these luminaires have been installed with an up-tilt angle. This may be a contributing factor in the excessive light trespass on to private property. This luminaire does not appear to have any capacity for its installation angle to be adjusted relative to the bracket arm. This is a serious design flaw.

#### Light Distribution

The lack of light trespass control to the rear and forward of this luminaire is appalling. Light is cast for many meters into private property and may annoy residents at some considerable distance from an installation.



Malbon street – west. Excessive rear light trespass.



Malbon street – west. Excessive rear light trespass.



Malbon street – west. Excessive forward light trespass.

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

This luminaire should never have been considered for inclusion in this trial and it should never be considered for Brisbane-wide roll-out. It is an insult to Brisbane residents.