

<b>Replace Halogen Floodlight Luminaire; Residential Only</b>	<b>Activity No.</b>
	<b>L3</b>

## 1. ACTIVITY SPECIFIC DEFINITIONS

**Luminaire** means apparatus which distributes, filters or transforms the light transmitted from one or more lamps and which includes, except the lamps themselves, all the parts necessary for fixing and protecting the lamps and, where necessary, circuit auxiliaries together with the means for connecting them to the electric supply

## 2. ACTIVITY DESCRIPTION (SUMMARY)

Replace a halogen floodlight luminaire with an LED luminaire. Note that lamp-only replacements and modifications to existing luminaires are not included.

## 3. ACTIVITY ELIGIBILITY REQUIREMENTS

- (1) All equipment that is replaced must be in working order immediately prior to removal.
- (2) Replaced equipment must be a linear halogen floodlight.
- (3) Replaced equipment must not be a portable floodlight - it shall be hard-wired into the premises.
- (4) Replaced equipment (lamp) must be rated > 100W.

## 4. INSTALLED PRODUCT REQUIREMENTS

The installed product shall:

- (1) Be installed at the time of removal of the existing equipment.
- (2) Have a measured average initial luminous flux of at least the corresponding\* value in column 2 of the table below (verified by test report utilising test procedures as required by one of the programs below). \*Note that this should correspond to the class of replaced luminaire.
- (3) Have a measured average minimum initial luminous efficacy of 70 lm/W.
- (4) Provide a minimum 2 years replacement warranty.
- (5) Either
  - (a) Be approved by the NSW ESS scheme; or
  - (b) meet either the US Energy Star specification for luminaires V1.2 or Designlights Technical Requirements Table v2.1 by providing current proof of program certification.

## 5. MINIMUM INSTALLATION REQUIREMENTS

- (1) A person or entity undertaking this activity shall use best endeavours to ensure that any replacements are targeted at high usage luminaires in the first instance.
- (2) All equipment replaced shall be removed from the premises and not re-used.
- (3) Installed equipment shall not be connected to a transformer, dimmer, timer, motion sensor, daylight switch or other automated switch or control (or combination thereof) unless specified by the manufacturer as being compatible with such device or combinations of devices.

- (4) If connected to a dimmer, the installer shall test the equipment through its full dimming range to ensure that the equipment works to the satisfaction of the customer.
- (5) Where installed equipment causes sub-optimal operation, the installer shall either reinstall equipment equivalent to the original equipment or replace any components of the equipment that are causing the installation not to operate, at no expense to the resident. Such a request for reinstatement must be acted upon if made within 20 business days of the installation of the new equipment.
- (6) The Activity must be performed by a licensed electrical worker under the supervision of a licensed electrical contractor.

## 6. NORMALISED REPS GIGAJOULES

The normalised REPS gigajoules achieved (per unit installed) from undertaking this activity is equal to:

Normalised REPS Gigajoules = The relevant Productivity factor (as per table below) x REPS Transition Factor (as per table below).

### ACTIVITY L3 – PRODUCTIVITY FACTORS

P = power of existing luminaire (W)	Min. Luminaire Light Output (lm)	Replacement Luminaire Efficacy Range					
		70-89 Lm/W	90-109 Lm/W	110-129 Lm/W	130-149 Lm/W	150-169 Lm/W	170 + Lm/W
100 < P < 150W	1500	0.260	0.576	0.778	0.917	1.019	1.097
150 ≤ P < 200W	2500	0.299	0.826	1.161	1.394	1.564	1.694
200 ≤ P < 300W	3500	0.337	1.075	1.545	1.870	2.109	2.291
300 ≤ P < 500W	5700	0.341	1.543	2.308	2.838	3.226	3.523
500 ≤ P	10000	0.386	2.495	3.837	4.766	5.448	5.969

### ACTIVITY L3 – REPS TRANSITION FACTORS

Year of Installation	REPS Transition Factor
2021	<b>2</b>
2022	<b>1.5</b>
2023	<b>1</b>
2024	<b>1</b>
2025 onwards	<b>1</b>

## **7. GUIDANCE NOTES (INFORMATIVE ONLY – NOT MANDATORY)**

All reasonable endeavours should be undertaken to recycle removed equipment.

Designlights requirements are available at:

[www.designlights.org/Content/QPL/ProductSubmit/CategorySpecifications](http://www.designlights.org/Content/QPL/ProductSubmit/CategorySpecifications)

Transition factors have been applied to certain REPS activities to provide a pathway to transition the REPS toward delivery of a preferred mix of activities over the first five-year stage. Application of these factors provides a phased trajectory for retailers that addresses both the challenge of managing the downgrading of deemed gigajoules for lighting activities due to reducing additionality, as well as the pivot toward business models to deliver deeper retrofit activities and demand response activities