



Australian Government

UEEEL0009 Evaluate and modify low voltage lighting circuits, equipment and controls

Release: 2

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Modification History

Release 2. This is the second release of this unit of competency in the UEE Electrotechnology Training Package.

Workplace evidence requirements updated in Performance Evidence and Assessment Conditions.

Assessor requirements updated in Assessment Conditions.

Error in Knowledge Evidence corrected.

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Application

This unit involves the skills and knowledge required to evaluate and modify low voltage (LV) lighting circuits, equipment and controls.

It includes working safely, identifying faults in luminaires and associated control equipment, repairing/replacing luminaire and control equipment components, ensuring all work complies with relevant Australian Standards and legislation, and completing work and documenting activities.

The skills and knowledge described in this unit require a licence or permit to practice in the workplace where work is carried out on electrical installations which are designed to operate at voltages greater than 50 volt (V) alternating current (a.c.) or 120 V direct current (d.c.).

Competency development activities in this unit are subject to regulations directly related to licensing. Where a licence or permit to practice is not held, a relevant contract of training, such as an Australian Apprenticeship, may be required.

Additional and/or other conditions may apply in some jurisdictions subject to regulations related to electrical work. Practice in the workplace and during training is also subject to work health and safety (WHS)/occupational health and safety (OHS) regulations.

Pre-requisite Unit

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

UEECD0019 Fabricate, assemble and dismantle utilities industry components

UEECD0020 Fix and secure electrotechnology equipment

UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications

UEEEL0019 Solve problems in direct current (d.c.) machines

UEEEL0021 Solve problems in magnetic and electromagnetic devices

UEEEL0020 Solve problems in low voltage a.c. circuits

UEEEL0023 Terminate cables, cords and accessories for low voltage circuits

and

UEECD0043 Solve problems in direct current circuits

or

UEECD0044 Solve problems in multiple path circuits

UEECD0046 Solve problems in single path circuits

Competency Field

Electrical

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes

1 Prepare to work on lighting circuits

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element

- 1.1** Scope of work is obtained from relevant documentation, electrical drawings or relevant person/s
- 1.2** WHS/OHS requirements and workplace procedures for a given work area are identified and applied
- 1.3** Hazards are identified, risks are assessed and control measures are implemented
- 1.4** Advice is sought from work supervisor to ensure the work is coordinated effectively with others
- 1.5** Sources of materials required for work are determined in accordance with workplace procedures
- 1.6** Tools, equipment and testing devices required to carry out work are obtained and checked for correct operation and safety

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| 2 Evaluate and modify lighting circuits | 2.1 Equipment and circuits are checked and arrangement identified |
| | 2.2 Circuits are checked and isolated in accordance with workplace procedures and regulatory requirements |
| | 2.3 The need to test or measure live work is determined in accordance with WHS/OHS requirements and when necessary conducted in accordance with workplace procedures |
| | 2.4 Fault/s and probable cause/s are identified from measured and calculated values as they apply to lighting equipment |
| | 2.5 Required components are identified and replaced in accordance with manufacturer specifications and industry standards |
| | 2.6 Unexpected situations are dealt with safely and with the approval of relevant person/s |
| 3 Complete work and document activities | 3.1 WHS/OHS work completion risk control measures and workplace procedures are followed |
| | 3.2 Worksite is cleaned and made safe in accordance with workplace procedures |
| | 3.3 Justification for solutions used to modify circuits and equipment is documented |
| | 3.4 Work completion is documented and an appropriate person/s notified in accordance with workplace procedures |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Evaluating and modifying lighting circuits, equipment and controls must be demonstrated in two of the following settings:

- commercial
- industrial
- domestic.

Unit Mapping Information

No equivalent unit

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>