



Australian Government

**UEENEEG183A Provide advice on the
application of energy efficient lighting for
ambient and aesthetic effect**

Release: 2

UEENEEG183A Provide advice on the application of energy efficient lighting for ambient and aesthetic effect

Modification History

Not applicable.

Unit Descriptor

Unit Descriptor

1) Scope:

1.1) Descriptor

This unit covers advising customers on energy efficient lighting for ambient and aesthetic effects. It encompasses a basic knowledge of lighting principles, light source types, effects of colour, visual perception and interpreting manufacturers' technical data and documenting advice given.

Application of the Unit

Application of the Unit 2)

This unit is intended as an additional competency to relevant competencies needed to effectively respond to inquiries in the retail and wholesale lighting sectors.

Licensing/Regulatory Information

License to practice 3)

The skills and knowledge described in this unit do not require a license to practice in the workplace. However 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 regulations directly related to occupational health and safety and where applicable contracts of training such as apprenticeships.

Pre-Requisites

Prerequisite Unit(s) 4)

Competencies 4.1)

Granting competency in this unit shall be made only after competency in the following unit has been confirmed.

UEENEG18 Provide advice on lighting products
1A

UEENEEG1 Engage with customers to supply lighting
82A products for domestic and small
commercial applications

Literacy and numeracy skills 4.2)

Participants are best equipped to achieve competency in this unit if they have reading, writing and numeracy skills indicated by the following scales. Description of each scale is given in Volume 2, Part 3 'Literacy and Numeracy'

Reading 5 Writing 5 Numeracy 5

Employability Skills Information

Employability Skills 5)

The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The Employability Skills Summary of the qualification in which this unit of competency is packaged will assist in identifying Employability Skill requirements.

Elements and Performance Criteria Pre-Content

- 6) Elements describe the essential outcomes of a competency standard unit
Performance Criteria describe the required performance needed to demonstrate achievement of the element.
Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

- | | |
|--|---|
| 1 Prepare to provide advice on lighting products | 1.1 OHS procedures for a given work area are identified, obtained and understood. |
| | 1.2 Appropriate questioning and active listening are used, drawing on basic knowledge of lighting to determine the nature of the enquiry. |
| | 1.3 Lighting documentations/files that will assist in providing the necessary advice are reviewed and understood |
| 2 Provide advice on lighting products | 2.1 OHS risk control work measures and procedures are followed. |
| | 2.2 Basic knowledge of lighting, colour, CRI and creation of 'effects' is applied to providing the necessary advice. |
| | 2.3 Higher technical or costing inquiries are referred to an appropriate person of higher authority. |
| | 2.4 Inquiries and how they were responded to are documented in accordance with routine procedures. |

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

8) This describes the essential skills and knowledge and their level, required for this unit.

Evidence shall show that a basic knowledge has been acquired of lighting, light sources and luminaries.

The knowledge and skills shall be contextualised to current industry standards, technologies and practices.

KS01-EG183A

Lighting effects

Evidence shall show an understanding of lighting effects to an extent indicated by the following aspects:

T1 Colour of light sources

T2 Colour rendering index

T3 Effects of surface texture

T4 Visual perception

T5 Effects of indirect light encompassing:

- pelmet lighting
- reflected light

T6 Diffused light

T7 Psychology of lighting, perception and mood encompassing:

- colour temperature
- space and confinement

T8 Function of ambience

T9 Control of lighting levels encompassing:

- use of electrical or electronic control
- use of natural (daylight) lighting control

Evidence Guide

EVIDENCE GUIDE

9) This provides essential advice for assessment of the unit. It must be read in conjunction with the performance criteria and the range statement of the unit and the Training Package Assessment Guidelines.

The Evidence Guide forms an integral part of this unit. It must be used in conjunction with all parts of the unit and performed in accordance with the Assessment Guidelines of this Training Package.

Overview of Assessment 9.1)

Longitudinal competency development approaches to assessment, such as Profiling, require data to be reliably gathered in a form that can be consistently interpreted over time. This approach is best utilised in Apprenticeship programs and reduces assessment intervention. It is the industry-preferred model for apprenticeships. However, where summative (or final) assessment is used it is to include the application of the competency in the normal work environment or, at a minimum, the application of the competency in a realistically simulated work environment. It is recognised that, in some circumstances, assessment in part or full can occur outside the workplace. However, it must be in accordance with industry and regulatory policy.

Methods chosen for a particular assessment will be influenced by various factors. These include the extent of the assessment, the most effective locations for the assessment activities to take place, access to physical resources, additional safety measures that may be required and the critical nature of the competencies being assessed.

The critical safety nature of working with electricity, electrical equipment, gas or any other hazardous substance/material carries risk in deeming a person competent. Sources of evidence need to be 'rich' in nature to minimise error in judgment.

Activities associated with normal everyday work have a bearing on the decision as to how much and how detailed the data gathered will contribute to its 'richness'. Some skills are more critical to safety and operational requirements while the same skills may be more or less frequently practised. These points are raised for the assessors to consider when choosing an assessment method and developing assessment instruments. Sample assessment instruments are included for Assessors in the Assessment Guidelines of this Training Package.

**Critical aspects
of evidence
required to
demonstrate
competency in
this unit** 9.2)

Before the critical aspects of evidence are considered all prerequisites must be met.

Evidence for competence in this unit shall be considered holistically. Each element and associated performance criteria shall be demonstrated on at least two occasions in accordance with the 'Assessment Guidelines – UEE11'. Evidence shall also comprise:

- A representative body of performance criteria demonstrated within the timeframes typically expected of the discipline, work function and industrial environment. In particular this shall incorporate evidence that shows a candidate is able to:
 - Implement Occupational Health and Safety workplace procedures and practices, including the use of risk control measures as specified in the performance criteria and range statement
 - Apply sustainable energy principles and practices as specified in the performance criteria and range statement
 - Demonstrate an understanding of the essential knowledge and associated skills as described in this unit. It may be required by some jurisdictions that RTOs provide a percentile graded result for the purpose of regulatory or licensing requirements.
 - Demonstrate an appropriate level of skills enabling employment
 - Conduct work observing the relevant Anti Discrimination legislation, regulations, policies and workplace procedures
- Demonstrated consistent performance across a representative range of contexts from the prescribed items below:
 - Providing advice on the application of lighting for ambient and aesthetic effect as described in 8) and including:
 - A Determining the nature of the advice required
 - B Reviewing appropriate lighting documentation and providing appropriate advice
 - C Applying basic knowledge of lighting effects to provide relevant advice

D

Referring high technical and costing inquiries to an appropriate person.

E Documenting inquiries and responses in accordance with routine procedures.

Context of and specific resources for assessment 9.3)

This unit should be assessed as it relates to normal work practice using procedures, information and resources typical of a workplace. This should include:

OHS policy and work procedures and instructions.

Suitable work environment, facilities, equipment and materials to undertake actual work as prescribed in this unit.

These should be used in the formal learning/assessment environment.

Note:

Where simulation is considered a suitable strategy for assessment, conditions for assessment must be authentic and as far as possible reproduce and replicate the workplace and be consistent with the approved industry simulation policy.

The resources used for assessment should reflect current industry practices in relation to providing advice on the application of energy efficient lighting for ambient and aesthetic effect.

Method of assessment 9.4)

This unit shall be assessed by methods given in Volume 1, Part 3 'Assessment Guidelines'.

Note:

Competent performance with inherent safe working practices is expected in the Industry to which this unit applies. This requires that the specified essential knowledge and associated skills are assessed in a structured environment which is primarily intended for learning/assessment and incorporates all necessary equipment and facilities for learners to develop and demonstrate the essential knowledge and skills described in this unit.

Concurrent assessment and relationship with other units 9.5)

There are no concurrent assessment recommendations for this unit.

Range Statement

RANGE STATEMENT

10) This relates to the unit as a whole providing the range of contexts and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

This unit shall be demonstrated in providing the accurate and clear advice on lighting with respect to at least three of the following;

- A home theatre
- Hotel and club dining rooms
- Domestic entertainment areas
- A semi-covered alfresco dining area
- A lobby and gathering area
- Special requirements for a reception centre

Generic terms used throughout this Vocational Standard shall be regarded as part of the Range Statement in which competency is demonstrated. The definition of these and other terms that apply are given in Volume 2, Part 2.1.

Unit Sector(s)

Not applicable.

Competency Field

Competency Field 11)

Electrical