



Australian Government

Department of Education, Employment and Workplace Relations

CUELGT09B Apply a general knowledge of lighting to work activities

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit provides the foundation knowledge required to complete a range of general lighting-related tasks in a live venue environment. It includes the need for an understanding of the role of the lighting technician, overall lighting system layout and basic equipment recognition. Tasks would generally be completed under supervision.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

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Application of the Unit

Not applicable.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

This unit underpins and has linkages to general technical units and all other lighting units and combined assessment and/or training with those units may be appropriate, eg:

CUFSAF01B Follow health, safety and security procedures

CUETGE11B Handle physical elements safely during bump in/bump out.

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Employability Skills Information

This unit contains employability skills.

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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where **bold italicised** text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

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Elements and Performance Criteria

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Element	Performance Criteria
1 Make preparations for lighting set up.	1.1 Extract key information from lighting plans and confirm requirements with supervisor. 1.2 Correctly identify appropriate rigging and positioning points for lighting equipment. 1.3 Correctly identify cables used to connect different lighting components. 1.4 Correctly identify and sort equipment and accessories in preparation for set up, ensuring appropriate handling and taking account of equipment differences.
2 Complete tasks using lighting equipment.	2.1 Correctly use the lighting desk to bring up channels for focussing. 2.2 Correctly and safely power up dimmers and set up patch location. 2.3 Match light beam control accessories to lights and use in accordance with instructions. 2.4 Correctly handle cables, including rolling/unrolling, storage and safe manual handling. 2.5 Identify any problems with equipment promptly, take action within the scope of individual

responsibility or report to supervisor.

- 2.6 Communicate appropriately with other technicians, performers or customers during the completion of tasks.

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills:

requirements for storage of lighting equipment

literacy skills sufficient to interpret lighting plans, understand use of scale, lighting symbols and notation conventions

numeracy skills sufficient to count and sort equipment and use numerical features of lighting desks.

Required knowledge:

the general scope and potential of lighting operations within different live production contexts, eg theatre, music, corporate

the relationship between lighting operations and other technical and performance areas, including audio, vision systems and performance

typical roles and responsibilities of the lighting technicians in different context, including career paths

lighting system options in a range of venue types

specialised terminology that applies to lighting operations

general features of lanterns and accessories, dimmers and control systems

overview of different types of automated lights and the special requirements of this type of technology, including rigging orientation, powering, requirement for data supply and fixture addressing

overview of appropriate use of standard pump propelled glycol-based atmospheric (smoke) effects

organisational and legislative occupational health and safety legislation in particular relation to lighting operations, eg electrical restrictions

knowledge of colour recognition.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The following evidence is critical to the judgement of competence in this unit:

- recognition of lighting equipment,, including key features and purpose
- completion of lighting-related tasks in accordance with health and safety procedures.

Context of and specific resources for assessment

The assessment context must provide for:

- practical demonstration of skills through the completion of a range of preparatory and set up tasks with industry-current lighting equipment
- project or work activities that allow knowledge to be applied to specific production contexts and situations.

Method of assessment

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- direct observation of the candidate completing lighting-related tasks
- evaluation of equipment which has been set up by the candidate
- oral or written questioning to assess knowledge of equipment types
- review of portfolios of evidence or third party workplace reports of on-the-job performance by the candidate.

Assessment methods should closely reflect workplace demands and the needs of particular groups (eg people with disabilities,

and people who may have literacy or numeracy difficulties such as speakers of languages other than English, remote communities and those with interrupted schooling).

Assessment of this unit requires access to:

- a range of lighting equipment as identified in the Range Statement
- an environment in which lighting can be set up and operated
- lighting plan for interpretation.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. **Bold italicised** wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Use of **lighting desk** must include:

manual preset operation

single scene submaster operation (a single set of channel levels being stored in a fader for later use)

submaster cue stacking and playback (a series of cues, namely sets of channel levels and fade times, stored in sequence and recalled later)

theatrical cue set up and playback.

Use of **dimmer** and **patch** system layouts may include:

automated lighting requirements - direct power and data lines required (no dimmer)

distributed dimming - dimmers located where required

distributed patch - patch lines from a single dimmer location to destination lights

dual systems - combination of the above two systems.

Conventional **lights** to be used must include:

floods and PARS and cyc lights

fresnel and pebbled convex (PC) lanterns
profile, ellipsoidal profile.

Light beam control accessories may include:

barn doors

black wrap

doughnuts and top hats

gel types and gel frames

gobos and gobo holders

iris

shutters

spun.

Use of conventional **lights** must include:

awareness of how heat is dissipated by a lantern

awareness of the different types of lamp bases

correct bubble handling techniques

finding out the correct replacement lamp and wattage of the lantern

when incorrect orientation of a lamp may reduce filament and lantern life.

Unit Sector(s)

Not applicable.