

<b>Training Package</b>	Entertainment (CUE03)/Screen and Media (CUF07)	<b>HSC Requirements and Advice</b>
<b>Unit code</b>	<b>Unit title</b>	<b>HSC Indicative Hours</b>
<b>CUFLGT302A</b>	<b>Record and operate standard lighting cues</b>	<b>30</b>

<b>Competency field</b>	Media and entertainment production – Lighting
<b>Unit descriptor</b>	This unit describes the performance outcomes, skills and knowledge required to operate a lighting console by plotting and modifying standard lighting cues. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.
<b>Application of the unit</b>	Lighting technicians or lighting assistants in the film, television or live performance industries apply the skills and knowledge described in this unit. In this largely operational role, lighting assistants are required to plot, record and modify lighting cues based on a lighting plan supplied to them by a supervising senior lighting technician or lighting designer. Operators must be familiar with the functions and set up of lighting consoles and associated peripheral equipment. Skills associated with operating more complex cues and working with advanced equipment are covered in: <ul style="list-style-type: none"> <li>• CUFLGT402A Set up, record and operate lighting cues and effects.</li> </ul>
<b>Prerequisite units</b>	Nil
<b>Employability skills</b>	This unit contains employability skills.

### 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.

<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<b>Context of and specific resources for assessment</b>	<b>Method of assessment</b>
<p>Evidence of the following is <u>essential</u>:</p> <ul style="list-style-type: none"> <li>• ability to record and reproduce accurately lighting cues to instruction in a given timeframe</li> <li>• knowledge of lighting terminology</li> <li>• correct patching of required cabling and peripherals</li> <li>• collaborative approach to work.</li> </ul>	<p>Assessment <u>must</u> ensure:</p> <ul style="list-style-type: none"> <li>• practical demonstration of skills through the use of a lighting console on multiple occasions for multiple productions</li> <li>• use of industry-standard equipment</li> <li>• access to appropriate learning and assessment support when required</li> <li>• the use of culturally appropriate processes, and techniques appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.</li> </ul>	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> <li>• direct questioning combined with review of portfolios of evidence and third party workplace reports of on the job performance</li> <li>• direct observation of the candidate operating a lighting console during productions</li> <li>• direct observation of lighting effects produced by the candidate during a production</li> </ul>

		Method of assessment cont/d
		<ul style="list-style-type: none"> <li>• verbal or written questioning to assess knowledge of console features and functions.</li> </ul> <p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> <li>• CUFLGT101A Apply a general knowledge of lighting to work activities.</li> </ul>

<b>Required Skills and Knowledge</b> This section describes the skills and knowledge <u>required</u> for this unit.	
<b>Required skills</b> <ul style="list-style-type: none"> <li>• communication, literacy and teamwork skills sufficient to:               <ul style="list-style-type: none"> <li>- work effectively with other technicians and designers</li> <li>- interpret lighting plan requirements</li> <li>- interpret equipment and production documentation, including back up systems used in conjunction with lighting control</li> </ul> </li> <li>• problem solving skills sufficient to identify operational problems with lighting consoles</li> <li>• technical skills sufficient to:               <ul style="list-style-type: none"> <li>- operate computer based lighting consoles</li> <li>- undertake routine maintenance of lighting consoles and peripherals</li> </ul> </li> <li>• self management skills sufficient to work within production deadlines</li> <li>• numeracy skills sufficient to complete simple mathematical calculations and recall numbers for channel selection.</li> </ul>	<b>Required knowledge</b> <ul style="list-style-type: none"> <li>• general lighting terms, including:               <ul style="list-style-type: none"> <li>- how terms may vary between different systems</li> <li>- how different terms can refer to the same functions on different systems</li> </ul> </li> <li>• industry terminology and protocols in relation to the operation of lighting in the relevant industry environment</li> <li>• lighting control concepts used in a range of lighting systems</li> <li>• features and operations (optical and mechanical) of the main types of lanterns, eg:               <ul style="list-style-type: none"> <li>- profile</li> <li>- fresnel</li> <li>- PC</li> <li>- flood</li> <li>- PAR (parabolic aluminised reflector) lamps</li> <li>- lantern accessories</li> </ul> </li> <li>• understanding of the basic elements of lighting design</li> <li>• colour recognition in display equipment</li> <li>• DMX distribution techniques, including allocation of channels</li> <li>• basic understanding of electricity and safe electrical work practices</li> <li>• OHS legislation and regulations as they apply to operations associated with lighting activities.</li> </ul>

Element	Performance Criteria	Range Statement
1 Record, modify and replay lighting cues.	1.1 Identify the functions of controls on consoles, including function of the unit displaying data and controls to produce text.	<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. <b><i>Bold italicised</i></b> wording, if used in the performance criteria, is detailed below.</p> <p>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.</p> <p><b><i>Lighting plan</i></b> may include:</p> <ul style="list-style-type: none"> <li>• colour sheet</li> <li>• computer generated</li> <li>• cue synopsis/sheet</li> <li>• equipment list</li> <li>• focus details</li> <li>• magic sheet</li> <li>• manually written</li> <li>• patch sheet.</li> </ul>
	1.2 Undertake channel selection and intensity setting, then identify on display unit and make appropriate modifications.	
	1.3 Record cue numbers and fade/wait times according to <b><i>lighting plan</i></b> , identify these on display unit and make appropriate modifications.	
	1.4 Identify recorded cues on display unit after playing them in correct sequence and time.	
	1.5 Create, modify and replay group and sub groups in correct sequence and time using relevant controls correctly and then identify on display unit.	
2 Test facilities in preparation for plotting lighting cues.	2.1 Ensure that working area is clear, tidy, properly illuminated, and relevant <b><i>documentation</i></b> is easily accessible.	<p><b><i>Documentation</i></b> may include:</p> <ul style="list-style-type: none"> <li>• accident reports</li> <li>• call sheet</li> <li>• colour coding schedules</li> <li>• equipment manuals/lists/instructions</li> <li>• fault reports</li> <li>• floor sheets</li> <li>• lantern schedules</li> <li>• power requirements</li> <li>• production schedule</li> <li>• running sheet</li> <li>• script</li> <li>• venue procedures/layout plans.</li> </ul>

Element	Performance Criteria	Range Statement
	2.2 Check <i>communication equipment</i> and ensure that it is in working order.	<p><i>Communication equipment</i> may include:</p> <ul style="list-style-type: none"> <li>• headphones</li> <li>• mobile phones</li> <li>• standard intercoms</li> <li>• two way radios.</li> </ul>
	2.3 Power up <i>dimmers, control desk</i> and <i>control desk peripherals</i> using safe working practices.	<p><i>Dimmers</i> may include:</p> <ul style="list-style-type: none"> <li>• analogue dimmers</li> <li>• multiplexed analogue dimmers</li> <li>• multiplexed digital dimmers, e.g. DMX512</li> <li>• MUX and DMUX units, eg analogue conversion</li> <li>• single unit (follow spot) dimmers, e.g. Model 1, Monopak</li> <li>• small self contained dimmable controllers, eg Fourpack, Quadpak.</li> </ul> <p><i>Control desks</i> may include:</p> <ul style="list-style-type: none"> <li>• controlled lighting effects</li> <li>• manual/memory desks</li> <li>• manually operated desks.</li> </ul> <p><i>Control desk peripherals</i> may include:</p> <ul style="list-style-type: none"> <li>• back up units</li> <li>• control cables</li> <li>• desk lamp</li> <li>• effects unit</li> <li>• external memory storage</li> <li>• monitors</li> <li>• printers</li> <li>• riggers' controls.</li> </ul>
	2.4 Use appropriate <i>test equipment</i> to ensure <i>lights and accessories</i> and general operating environment meets manufacturer operational and safety specifications.	<p><i>Test equipment</i> may include:</p> <ul style="list-style-type: none"> <li>• analogue and digital multimeters</li> <li>• continuity tester</li> <li>• DMX, cable testers</li> <li>• test meters.</li> </ul> <p><i>Lights and accessories</i> may include:</p> <ul style="list-style-type: none"> <li>• accessories:</li> <li>• animation discs</li> <li>• architectural fixtures, eg wall lights</li> <li>• colour frames</li> <li>• cookies</li> </ul>

Element	Performance Criteria	Range Statement
		<ul style="list-style-type: none"> <li>• cut outs</li> <li>• flags</li> <li>• flood mechanisms</li> <li>• fresnel/PC barn doors</li> <li>• gobos/gobo holders/rotators</li> <li>• outside broadcast units</li> <li>• profile shutters</li> <li>• snoots</li> <li>• studio and theatre based units.</li> </ul>
	<p>2.5 Test <i>lighting instruments</i>, accessories and other <i>lighting elements</i> to ensure all items are in correct working order.</p>	<p><i>Lighting instruments</i> may include:</p> <ul style="list-style-type: none"> <li>• digital moving (intelligent) lights</li> <li>• special effects units</li> <li>• theatre based units.</li> </ul> <p><i>Lighting elements</i> may include:</p> <ul style="list-style-type: none"> <li>• electrical/electronic props</li> <li>• floor electrics</li> <li>• pracs, eg functional lamp as prop</li> <li>• special effects</li> <li>• strobe lights</li> <li>• mirror balls and motors</li> <li>• smoke machines</li> <li>• fog machines</li> <li>• ultraviolet lights</li> <li>• chasers</li> <li>• haze machines</li> <li>• effects projectors</li> <li>• optic fibre lights.</li> </ul>
	<p>2.6 Test <i>venue lighting</i> to ensure it is fully operational and in a safe condition.</p>	<p><i>Venue lighting</i> may include:</p> <ul style="list-style-type: none"> <li>• aisle lights</li> <li>• backstage lights</li> <li>• blue light</li> <li>• cleaner lights</li> <li>• display/advertising lights</li> <li>• exit lights</li> <li>• general lights</li> <li>• house lights</li> <li>• orchestra lights</li> <li>• panic lights</li> </ul>

Element	Performance Criteria	Range Statement
		<ul style="list-style-type: none"> <li>• task lights</li> <li>• work lights.</li> </ul>
	2.7 Identify problems with equipment promptly and take appropriate action, or refer to <i>relevant personnel</i> as required.	<p><i>Relevant personnel</i> may include:</p> <ul style="list-style-type: none"> <li>• choreographer</li> <li>• director</li> <li>• director of photography</li> <li>• gaffer</li> <li>• lighting designer</li> <li>• producer</li> <li>• production manager</li> <li>• senior lighting technician</li> <li>• stage manager</li> <li>• supervisor</li> <li>• technical director</li> <li>• other technical/specialist staff.</li> </ul>
3 Plot and operate lighting cues.	<p>3.1 Check instructions and lighting plan to verify practicality before plotting and check again once plotted.</p> <p>3.2 Test line of sight needed for visual cues for feasibility during performance.</p> <p>3.3 Action cues without delay according to directions and production needs.</p> <p>3.4 Complete cue modifications according to instructions and accurately update appropriate documentation.</p> <p>3.5 Establish suitable back up lighting states in the event of the failure of those recorded.</p> <p>3.6 Store recorded lighting cues and other data electronically on device external to main lighting console.</p> <p>3.7 Identify and rectify problems safely and according to venue procedures, or refer to relevant personnel.</p>	

Element	Performance Criteria	Range Statement
4 Conduct basic troubleshooting procedures.	4.1 Identify the nature of faults and locate promptly.	
	4.2 Assess the need for remedial action taking into consideration safety issues and the need for uninterrupted performance.	
	4.3 Follow manufacturer diagnostic and remedial procedures according to enterprise policy.	
	4.4 Report fault to relevant personnel if fault cannot be immediately rectified, providing relevant information.	
	4.5 Liaise with relevant personnel to identify back up alternatives if fault cannot be rectified before next <b>production</b> deadline.	<p><b>Productions</b> may include:</p> <ul style="list-style-type: none"> <li>• animations</li> <li>• documentaries</li> <li>• feature films</li> <li>• interactive media productions</li> <li>• live concert performances, eg rock concerts, open air concerts/events</li> <li>• music videos</li> <li>• stage productions, eg plays, musicals</li> <li>• television productions, eg drama, sport, comedy.</li> </ul>
5 Carry out post performance procedures.	5.1 Correctly power down equipment or set to standby between performances as required.	
	5.2 Store and/or cover controls according to enterprise procedures.	
	5.3 Make accurate changes to documentation and file according to enterprise procedures.	