

**Certificate No.**      **NESA-S112**      **Version No. 1.0**

**Approval date**      18 October 2024

**Approved by**      Manager Engineering Services

*This certificate is issued to*

**Supplier**      UGL Limited  
3 George Young Street, Auburn  
NSW, Australia 2144

*In respect of*

**Manufacturer**      UGL Limited

**Product description**      UGL Limited LED signal light units

**Item identification**

1.      UGL DC AL8 Extended Range Mainline
2.      UGL Tricolour Standard Range Mainline
3.      UGL Mk2 212mm Standard Range Mainline
4.      UGL Mk2 127mm Subsidiary

**Application**      ARTC Network Wide

**Relevant Standards**      ESA-04-01 – Colourlight signals and Indicators

**Conditions of Approval**

1.      LEDs suitable for wayside signals only.
2.      Not suitable for use in tunnels.
3.      All main signal head at a site (included in the same circuit book), which use LED signal light units, shall use units from one supplier's range.
4.      All unused connections in the plug coupler on the light unit shall be blanked with discrimination pins.
5.      Unless otherwise specified, items with approvals for earlier versions still valid may be retained and reinstalled in existing installations, or upgraded to any later version with the relevant updating of site installation records
6.      UGL to label the inside of each case/equipment with the corresponding part number.

*A general condition of approval is that the supplier remains accredited to ISO 9001 specifically for these products and ARTC is advised on a 12 monthly basis that accreditation is current. ARTC reserves the right to conduct its own audit of the manufacture and supply of these components to AS 19011.*

*Any subsequent change to the design, materials or manufacturing process is not covered by this approval. The manufacturer should notify ARTC of any modification or changes in order to obtain a valid certificate.*

**Note/Comments**

**Issue date**      18/10/2024      **Expiry date**      N/A

**Issued by**      **Manager Engineering Services**

Approved Item list - Certificate No. NESA-S112

UGL Catalogue No.	Approved Version	Catalogue No. (Legacy)	Aspect (mm)	Voltage	Description	Product Version Description (PVD) No.	Notes	Conditions of Use
<b>DC AL8 Extended Range Mainline</b>								<b>Sighting distance &gt; 2.3km</b>
1000010755	5.X	R999-X1449 1000010782	212	12 Vdc	LED MODULE (White) AL8 12VDC 212MM* <sup>1</sup>	01-06-42-04 Rev 1.0		'Lamp proving' sensing element min. drop away value > 1.3A.
1000010756	5.X	R999-X1052 1000010163	212	12 Vdc	LED MODULE (Red) AL8 12VDC 212MM* <sup>1</sup>	01_06_42_02 Rev 1.0		'Lamp proving' sensing element min. drop away value > 1.3A.
1000010162	5.X	R999-X1051	212	12 Vdc	LED MODULE (Yellow) AL8 12VDC 212MM *I&• <sup>2</sup>	01_06_42_03 Rev 1.0		'Lamp proving' sensing element min. drop away value > 1.3A.
1000010161	5.X	R999-X1050	212	12 Vdc	LED MODULE (Green) AL8 12VDC 212MM *I&• <sup>2</sup>	01_06_42_01 Rev 1.0		'Lamp proving' sensing element min. drop away value > 1.3A.
<b>Tricolour Standard Range Mainline</b>								<b>Sighting distance &gt; 0.5km</b>
1000010559	10.X	R999-X1066	212	120 Vac	SIGNAL TRI-COLOURED LED (MEDIUM) RYG-FOP-PTC	01_08_42_01 Rev 2.0	Contains Tricolour 120 Vac LED Module 1000009963	Red aspect must be double switched. Power pack to be issue 3 or later. Cable length feeding light unit < 1km
1000009963	10.X	R999-X0685	212	120 Vac	SIGNAL TRI-COLOURED LED (MEDIUM) RYG MODULE	01_08_42_01 Rev 2.0		LED Module only
<b>Mk2 Standard Range Mainline 120V AC</b>								<b>Sighting distance &gt; 0.5km</b>
1000010073	9.X	R999-X0916	212	120 Vac	LED MODULE (Red) MK2 120VAC 212MM	01_02_42_01 Rev 2.0		
1000010074	9.X	R999-X0917	212	120 Vac	LED MODULE (Yellow) MK2 120VAC 212 MM	01_02_42_02 Rev 2.0		
1000010075	9.X	R999-X0918	212	120 Vac	LED MODULE (Green) MK2 120VAC 212MM	01_02_42_03 Rev 2.0		

\*1 'Lamp proving' circuitry shall be series relay coil or current transformer based. Light unit feed circuit shall be entirely mechanically switched (relay based).

\*2 Subject to acceptance of test documentation confirming current consumption, visibility, chromaticity and intensity of the light output.

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<b>Mk2 Standard Range Mainline 12V DC</b>								<b>Sighting distance &gt; 0.5km</b>
1000429704	9.X	-	212	12 Vdc	LED MODULE (Green) MK2 12VDC 212MM MICROLOK	01_02_42_06 Rev 2.0		For use with Microlok interlockings. LED module only.
1000429705	9.X	-	212	12 Vdc	LED MODULE (Yellow) MK2 12VDC 212MM MICROLOK	01_02_42_05 Rev 2.0		For use with Microlok interlockings. LED module only.
1000429706	9.X	-	212	12 Vdc	LED MODULE (Red) MK2 12VDC 212MM MICROLOK	01_02_42_04 Rev 2.0		For use with Microlok interlockings. LED module only.
1000429703	9.X	-	212	12 Vdc	LED MODULE (White) MK2 12VDC 212MM MICROLOK	-		For use with Microlok interlockings. LED module only.
1000010847	9.X	-	212	12 Vdc	LED MODULE (White) MK2 12VDC 212MM MICROLOK	-		For use with Microlok interlockings. LED module only.
1000010174	9.X	R999-X1081	212	12 Vdc	LED RETRO KIT (Green) 212MM 12VDC MLK UGL	01_02_42_06 Rev 2.0	Contains Green 12 Vdc LED module 1000429704	For use with Microlok interlockings. Retrofit kit including LED module and module mounting hardware for UGL signal case.
1000010175	9.X	R999-X1082	212	12 Vdc	LED RETRO KIT (Yellow) 212MM 12VDC MLK UGL	01_02_42_05 Rev 2.0	Contains Yellow 12 Vdc LED module 1000429705	For use with Microlok interlockings. Retrofit kit including LED module and module mounting hardware for UGL signal case.
1000010176	9.X	R999-X1083	212	12 Vdc	LED RETRO KIT (Red) 212MM 12VDC MLK UGL	01_02_42_04 Rev 2.0	Contains Red 12 Vdc LED module 1000429706	For use with Microlok interlockings. Retrofit kit including LED module and module mounting hardware for UGL signal case.
<b>Mk2 Subsidiary Aspect 120V AC</b>								<b>Sighting distance &gt; 150m</b>
1000010076	7.X	R999-X0919	127	120 Vac	LED MODULE (Red) MK2 120VAC 127MM	01_15_42_01 Rev 3.0		
1000010077	7.X	R999-X0920	127	120 Vac	LED MODULE (Yellow) MK2 120VAC 127MM	01_15_42_02 Rev 2.0		

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1000010078	7.X	R999-X0921	127	120 Vac	LED MODULE (Green) MK2 120VAC 127MM	01_15_42_03 Rev 2.0		
10000100931	7.X	R999-X0941	127	120 Vac	LED MODULE (L/White) MK2 120VAC 127MM	01_15_42_04 Rev 2.0		
<b>Mk2 Subsidiary Aspect 12V DC</b>								<b>Sighting distance &gt; 150m</b>
1000010843	7.X	R999-X1524	127	12Vdc	LED MODULE (Green) MK2 12VDC 127MM MICROLOK	01_15_42_08 Rev 2.0		For use with Microlok interlockings. LED module only.
1000010844	7.X	R999-X1525	127	12Vdc	LED MODULE (Yellow) MK2 12VDC 127MM MICROLOK	01_15_42_07 Rev 2.0		For use with Microlok interlockings. LED module only.
1000010845	7.X	R999-X1526	127	12Vdc	LED MODULE (Red) MK2 12VDC 127MM MICROLOK	01_15_42_06 Rev 2.0		For use with Microlok interlockings. LED module only.
1000010846	7.X	R999-X1527	127	12Vdc	LED MODULE (White) MK2 12VDC 127MM MICROLOK	01_15_42_09 Rev 2.0		For use with Microlok interlockings. LED module only.
1000455875	7.X	-	127	12Vdc	LED MODULE (Light Blue) MK2 12VDC 127MM MICLCK	-		For use with Microlok interlockings. LED module only.
1000010242	7.X	R999-X1190	127	12Vdc	LED RETROKIT (Green) 127MM 12VDC MLK UGL	01_15_42_08 Rev 2.0	Contains Green 12 Vdc LED module 1000010843	For use with Microlok interlockings. Retrofit kit including LED module and module mounting hardware for UGL signal case.
1000010243	7.X	R999-X1191	127	12Vdc	LED RETROKIT (Yellow) 127MM 12VDC MLK UGL	01_15_42_07 Rev 2.0	Contains Yellow 12 Vdc LED module 1000010844	For use with Microlok interlockings. Retrofit kit including LED module and module mounting hardware for UGL signal case.
1000010244	7.X	R999-X1192	127	12Vdc	LED RETROKIT (Red) 127MM 12VDC MLK UGL	01_15_42_06 Rev 2.0	Contains Red 12 Vdc LED module 1000010845	For use with Microlok interlockings. Retrofit kit including LED module and module mounting hardware for UGL signal case.
1000010245	7.X	R999-X1193	127	12Vdc	LED RETROKIT (White) 127MM 12VDC MLK UGL	01_15_42_09 Rev 2.0	Contains White 12 Vdc LED module 1000010846	For use with Microlok interlockings. Retrofit kit including LED module and module mounting hardware for UGL signal case.
1000010434	7.X	R999-X1272	127	12Vdc	LED RETRO KIT (Red) 127MM 12V ALDRIDG MICROLCK	01_15_42_06 Rev 2.0	Contains Red 12 Vdc LED module 1000010845	For use with Microlok interlockings. Retrofit kit including LED module and module mounting hardware for Aldridge signal case.
1000389911	7.X	-	127	12Vdc	LED RETRO KIT (Yellow) 127MM 12V	01_15_42_07 Rev 2.0	Contains Yellow 12 Vdc LED	For use with Microlok interlockings. Retrofit kit including LED module and module

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					ALDRIDG.MICROLC		module 1000010844	mounting hardware for Aldridge signal case.
1000455954	7.X	-	127	12Vdc	LED RETRO KIT (Light Blue) 127MM 12V MIC ALDR	-	Contains Light Blue 12 Vdc LED module 1000455875	For use with Microlok interlockings. Retrofit kit including LED module and module mounting hardware for Aldridge signal case.
1000475322	7.X	-	127	12Vdc	LED RETRO KIT (White Arrow) 127MM 12VDC MICKL UGL	01_15_42_09 Rev 2.0	Contains White 12 Vdc LED module 1000010846	For use with Microlok interlockings. Retrofit kit including LED module and module mounting hardware for UGL signal case.