



Intelligent Transport Systems

Type Approval

Certificate No:	ITS-TAN000014
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Issued to:

Aldridge Electrical Industries Pty Ltd

For:

LED Traffic Signal Lantern			
RMS Specification:	R3452	Version:	1.0

Summary Scope:

Sizes: **200mm**

Model: **Three Aspect Arrow**

Model Number: **RA453AL**

Note: Conditions of approval are on the reverse side of this certificate.

Evaluation Reference:	ITS-EV00076	Approver:	Manager TSI
Approver Signature:	<i>Raj J Rajchoudhery</i>	Date:	18/09/2018

A) Description and itemisation of the equipment covered by the type approval:

LED lantern 200mm Three-aspect Roundel (complete lantern models: RA453AL), comprising:

- Three section 5052 grade aluminium alloy housing, matt black powder coat finish;
- Black polycarbonate doors and tinted polycarbonate convex lens – UV stabilised;
- Red Roundel aspect RA453AL RED, 5.3 Watts and 90 LEDs (5mm LEDs: Nichia Corporation NSPR510GT);
- Yellow Roundel aspect RA453AL AMBER, 5.8 Watts and 90 LEDs (5mm LEDs: Nichia Corporation NSPA510BS);
- Green Roundel aspect RA453AL GREEN, 5.6 Watts and 90 LEDs (5mm LEDs: Nichia Corporation NSPE510DS);
- Aspect optical chamber ingress protection rating – IP65.

B) Summary of deviations from specified requirements:

Reference: AS2144:2002 Clause 6.2 Signal Switching Response Times

- i. Yellow aspect – “Off to On” is 12.5±3ms over the 60ms of steady state ≥50% requirement;
- ii. Green aspect – “Off to On” is 11.0±5ms over the 60ms of steady state ≥50%; and, “Off to On” is 12.7ms over the 120ms of steady state ≥95% requirements.

C) Relevant Specifications, Drawings and Standards:

RMS Specification R3452 specifies that the traffic signal lanterns shall comply with all the requirements of AS 2144:2002, except as varied in R3452.

D) Conditions of use:

Certificate users shall verify with RMS whether this certificate is current, valid, and applies to the latest RMS specification version, when using in situations where current validity is required.

Individual aspects may be swapped into within the lantern housing, so long as each aspect is approved, to support configurations listed in Traffic Signal Design – Appendix B (RMS/Pub. 08.092).

E) Related Certification History:

Certificate Number	Issued	EV Number	Description or change details
1410-R3452-A200	8/10/2014	n/a	1410-R3452-A200 has been renewed and superseded by this certificate.