



Transport
for NSW

Intelligent Transport Systems

Type Approval

Certificate No:	ITS-TAN000106
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Issued to:

BRAUMS Pty Ltd

For:

HPSM LED Traffic Signal Lantern			
RMS Specification:	TSI-SP-045	Version:	2.0

Summary Scope:

Sizes: **200mm**

Model: **Three Aspect Arrow**

Model Number: **BTLAA23N**

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

Evaluation Reference:	ITS-EV0236	Approver:	Manager TSI
Approver Signature:	<i>Raj J Roychoudhry</i>	Date:	8 Dec 2020

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

LED lantern 200mm Three-aspect Arrow (complete lantern models: BTLAA23N), comprising:

- Three section aluminium alloy housing, matt black powder coat finish;
- Black polycarbonate doors and tinted polycarbonate convex and diffused lens – UV stabilised;
- Red Arrow aspect RA0200; 8.41 Watts; 2 LEDs; HPSM LEDs: Osram Oslon LEDs – LJ CKBP
- Yellow Arrow aspect YA0200; 9.28 Watts; 3 LEDs; HPSM LEDs: Osram Oslon LEDs – LCY CLBP
- Green Arrow aspect GA0200; 8.46 Watts; 2 LEDs; HPSM LEDs: Osram Oslon LEDs – LV CQBP
- LED family – Futurled 6
- Aspect optical chamber ingress protection rating – IP65.

B) Summary of deviations from specified requirements:

Approved concessions include:

- i. Stepped dimming;
- ii. High power LED's applied in the signal aspects;
- iii. LED drive current is greater than 20mA.

C) Relevant Specifications, Drawings and Standards:

RMS Specification TSI-SP-045 specifies that the traffic signal lanterns shall comply with all the requirements of AS 2144, except as varied in TSI-SP-045.

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
1505-R3452-01	22/05/2015	n/a	1505-R3452-01 has been renewed and superseded by this certificate.
ITS-TAN000022		ITS-EV0065	ITS-TAN000022 has been renewed and Superseded by this certificate. LEDs were Osram Platinum Dragon, Futurled3R family.