



Transport  
for NSW

Intelligent Transport Systems

# Type Approval

<b>Certificate No:</b>	<b>ITS-TAN000110</b>
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Issued to:

**BRAUMS Pty Ltd**

For:

<b>HPSM LED Traffic Signal Lantern</b>			
<b>RMS Specification:</b>	<b>TSI-SP-045</b>	<b>Version:</b>	<b>2.0</b>

Summary Scope:

Sizes: **300mm**

Model: **Three Aspect Roundel**

Model Number: **BTLAV33N**

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

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

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

LED lantern 300mm Three-aspect Roundel (complete lantern models: BTLAV33N), comprising:

- Three aluminium alloy housing, matt black powder coat finish;
- Black polycarbonate doors and tinted polycarbonate convex and diffused lens – UV stabilised;
- Red Roundel aspect RV0300; 10.12 Watts; 3 LEDs; HPSM LEDs: Osram Oslon Signal LEDs – LJ CKBP
- Yellow Roundel aspect YV0300; 10.65 Watts; 3 LEDs; HPSM LEDs: Osram Oslon Signal LEDs – LCY CLBP
- Green Roundel aspect GV0300; 11.21 Watts; 3 LEDs; HPSM LEDs: Osram Oslon Signal 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1505-R3452-01	22/05/2015	n/a	1505-R3452-01 has been renewed and superseded by this certificate.
ITS-TAN000024		ITS-EV00065	ITS-TAN000024 has been renewed and superseded by this certificate. LEDs were Osram Platinum Dragon, Futurled3R family.