



Intelligent Transport Systems

# Type Approval

**Certificate No:**

**ITS-TAN000049**

Issued to:

**TYCO Traffic and Transportation**

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: **200mm**

Models: **Three Aspect Arrow**

Model Number: **8959 105 00130**

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

<b>Evaluation Reference:</b>	<b>ITS-EV00072</b>	<b>Approver</b>	<b>Manager TSI</b>
<b>Approver Signature:</b>	<i>Steven Shaw</i>	<b>Date</b>	<b>03/08/2018</b>

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

LED lantern 200mm Three-aspect Arrow (complete lantern models: 8959 105 00130), comprising:

- Three section 5251 grade aluminium housing, matt black powder coat finish;
- Black polycarbonate doors and tinted polycarbonate convex and diffused lens – UV stabilised;
- Red Arrow aspect TSL-08R-IL6-A-C2, 11 Watts and 4 high power LEDs (LEDs: Nichia NCSR219BT-V1);
- Yellow Arrow aspect TSL-08Y-IL6-A-C2, 11 Watts and 4 high power LEDs (LEDs: Nichia NCSA219BT-V1);
- Green Arrow aspect TSL-08G-IL6-A-C2, 10 Watts and 3 high power LEDs (LEDs: Nichia NCSE219BT-V1);
- Aspect optical chamber ingress protection rating – IP65;
- The arrow mask is formed on the exterior lens using black UV paint.

**B) Summary of deviations from specified requirements:**

Nil.

**C) Relevant Specifications, Drawings and Standards:**

RMS Specification TSI-SP-045 V2.0 specifies that the traffic signal lanterns shall comply with all the requirements of AS 2144, except as varied in TSI-SP-045 V2.0.

**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 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