

# LUMINAIRE CLASSIFICATION GUIDANCE

## LIGHT TECHNICAL BRIEF

### Issue

Lighting Council Australia members have been receiving various advice from different test laboratories and certification organisations regarding the correct class classification for a single product that combines a separate LED driver and separate LED luminaire head.

### Implications

The lack of clarity in this area is causing confusion in the market between LED suppliers, test laboratories and certifiers. It may also be causing confusion for product specifiers and installers.

Problems arise for product suppliers when an incorrect class classification is included on test reports or certificates.

### Electrical Regulators' view

Lighting Council Australia sought clarity from the Electrical Regulatory Authorities Council (ERAC) Electrical Equipment Working Group (EEWG) regarding the correct class classification (i.e. Class I, II or III) for a combined LED driver and LED luminaire head for the case where:

- The LED driver is Class II<sup>1</sup> and Separated/Safety Extra Low Voltage (SELV) meeting the requirements of AS/NZS 61347.2.13 and certified;
- The LED luminaire head is Class III<sup>2</sup> (i.e. requiring SELV power supply);
- The attachment method between the two devices can be any combination of type x<sup>3</sup>, y<sup>4</sup> or z<sup>5</sup>. That is, the attachment method between driver and head can be any type of permanent or non-permanent attachment.

The ERAC EEWG responded as follows:

- The combined product (as described above) is classified as Class II.
- The attachment type (i.e. permanent or non-permanent attachment between driver and luminaire head) is irrelevant.

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<sup>1</sup> Class II products rely on double insulation layers and do not require a protective earth connection.

<sup>2</sup> A class III appliance is supplied from a separated/safety extra-low voltage power supply that will not cause an electric shock.

<sup>3</sup> Type x attachment does not require a special tool or preparation (i.e. quick connect attachment)

<sup>4</sup> A type y attachment requires the use of a special purpose tool.

<sup>5</sup> A type z attachment (i.e. permanent attachment) is such that the flexible cable cannot be replaced without destroying the integrity of the accessory.