

Australian/New Zealand Standard™

Explosive atmospheres

**Part 35.2: Caplights for use in mines
susceptible to firedamp—Performance
and other safety-related matters**

STANDARDS
Australia



STANDARDS
NEW ZEALAND
PAEREA AOTEAROA



AS/NZS 60079.35.2:2012

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Australian Chamber of Commerce and Industry
Australian Coal Association
Australian Industry Group
Consult Australia
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Department of Mines & Petroleum, WA
Department of Trade and Investment, Regional Infrastructure and Services, NSW
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Australian/New Zealand Standard™

Explosive atmospheres

Part 35.2: Caplights for use in mines susceptible to fire and explosion—Performance and other safety-related matters

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-023, Electrical Equipment in Mines and Quarries.

This Standard details those performance and other safety features of caplights, including those with a point of connection for another equipment, not covered in AS/NZS 60079.35.1, but which are important for the safety and working conditions of the user. It may also be applied to caplights for use in mines not likely to be endangered by firedamp.

This Standard is identical with, and has been reproduced from IEC 60079-35-2, Ed. 1.0 (2011), *Explosive Atmospheres—Part 35-2: Caplights for use in mines susceptible to firedamp—Performance and other safety-related matters*

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number appears on the cover and title page while the International Standard number appears only on the cover.
- (b) In the source text ‘this part of IEC 60079-35’ should read ‘this Australian/New Zealand Standard’.
- (c) A full point substitutes for a comma when referring to a decimal number.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>	<i>Australian/New Zealand Standard</i>
IEC	AS/NZS
60079 Explosive atmospheres	60079 Explosive atmospheres
60079-35-1 Part 35-1: Caplights for use in mines susceptible to firedamp—General requirements—Construction and testing in relation to the risk of explosion	60079.35.1 Part 35.1: Caplights for use in mines susceptible to firedamp—General requirements—Construction and testing in relation to the risk of explosion

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

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AUSTRALIAN/NEW ZEALAND STANDARD

Explosive atmospheres

Part 35.2:

Caplights for use in mines susceptible to firedamp—Performance and other safety-related matters**1 Scope**

This part of IEC 60079-35 details those performance and other safety features of caplights, including those with a point of connection for another equipment, not covered in IEC 60079-35-1, but which are important for the safety and working conditions of the user. It may also be applied to caplights for use in mines not likely to be endangered by firedamp.

NOTE When this part of the standard is used as a "stand-alone" document for non-gassy mines, any relevant constructional requirements should be the subject of agreement between the supplier and the user and, where possible, be as described in IEC 60079-35-1.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-845, *International Electrotechnical Vocabulary (IEV) – Chapter 845: Lighting*

IEC 60983, *Miniature lamps*

IEC 60079-35-1, *Explosive atmospheres – Part 35-1: Caplights for use in mines susceptible to firedamp – General requirements – Construction and testing in relation to the risk of explosion*¹

ISO 80000-1, *Quantities and units – Part 1: General*

3 Terms and definitions

For the purposes of this document, the definitions of ISO 80000-1 and IEC 60050(845) and the following apply.

3.1**useful working period**

period in hours defined by the manufacturer, taking into account the current drawn by the main light source and if appropriate, the average current drawn by any accessories during that period, during which the main light source of the caplight may be continuously used and comply with the minimum luminous intensity requirements of this standard

4 Light output**4.1 Light sources**

4.1.1 Every headpiece shall have a minimum of two light sources, at least one of which shall be the main source and meet the requirements of this part of IEC 60079-35. Alternatively a

¹ To be published