LABORATORIO OFICIAL J. M. MADARIAGA

(1) EC-TYPE EXAMINATION CERTIFICATE

(2) Equipment or protective system intended for use in potentially explosive atmospheres
Directive 94/9/EC

(3) EC-Type Examination Certificate number: **LOM 02ATEX2018 X**

(4) Equipment or Protection System: Luminaries
Type AB50.. / SPG1N

(5) Applicant: Cooper, Crouse-Hinds Division, CEAG
CEAG Nortem, S.A.

(6) Address: Avda. Santa Eulalia, 290
08223 TARRASA (BARCELONA)
SPAIN

(7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein refered to.

(8) Laboratorio Oficial J.M. Madariaga (LOM), notified body number 0163 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.
The examination and test results are recorded in confidential report nr. **LOM 01.292 SP**

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
– Standards **EN 50014:1997 + A1:1999 + A2:1999**
EN 50018:2000
EN 50019:2000

(10) If the sign X is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in this certificate schedule.

(11) This EC-Type Examination Certificate relates only to the design and construction of this specified equipment or protective system in accordance with the Directive 94/9/EC. Further requirements of the Directive applies to the manufacture and supply of this equipment or protective system. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following:

Ex II 2 G EEx d IIC T3..T6 / EEx de IIC T3..T6

Ta: -20 °C / +55 °C

Madrid, 10 May 2002

Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY

OFICIAL LABORATORIO J.M. MADARIAGA LOM

Angel Vega Remesal
Head of ATEX area

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ENAC INSPECCIÓN Nº 23/E037

UNIVERSIDAD POLITÉCNICA DE MADRID
ENSAYOS E INVESTIGACIONES DE MATERIALES Y EQUIPOS PARA ATMÓSFERAS EXPLOSIVAS Y MINERÍA
(Real Decreto 334/1992 de 3 de Abril - BOE 1992-04-29 -)

Alenza, 2 - 28003-MADRID • ☎ (34) 91 4421366/ 91 3367009 • Fax.(34) 91 4419933 • ✉ lom@lom.upm.es

(A1) SCHEDULE

(A2) EC-Type Examination Certificate: **LOM 02ATEX2018 X**

(A3) Description of equipment or protective system

Suspension or portable bulb luminaires are intended to incandescent lamps, incandescent halogens or compact PL with lamp holder type GLS.

Denominación:

Type	Cable entry	Type of protection	Utilization
AB50 IT	Direct, top entrance	EEx d	Suspension
AB50 IU	Direct, lateral entrance	EEx d	
AB50 IW	Indirect With auxiliary box, top entrance	EEx d	
AB50 IWM		EEx de	
AB50 IX	Indirect With auxiliary box, lateral entrance	EEx d	
AB50 IXM		EEx de	
SPG1N	Direct, lateral entrance	EEx d	Portable

Temperature class:

Type Lamp	Power (W)	Temperature class	
		Ta: -20 °C / +40 °C	Ta: -20 °C / +55 °C
Fluorescent PL	11	T6	T6
Incandescence	60	T4	T3
	100	T3	T3
Halogen	75	T4	T3
	100	T3	T3
	150	T3	T3

Rated Voltage: to 250 V

(A4) Test report: nº **LOM 01.292 SP**

(A5) Special conditions for safe use

Power supply cable shall have a continuous service temperature greater or equal to:

Lamp power	Ta: 40 °C	Ta: 55 °C
60-75 W	100 °C	115 °C
100 W	105 °C	120 °C
150 W	130 °C	145 °C

when it is used with direct cable entry.

OFICIAL LABORATORIO J.M. MADARIAGA LOM

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(A1) **SCHEDULE**

(A2) EC-Type Examination Certificate: **LOM 02ATEX2018 X**

(A6) Essential Health and Safety Requirements

Each manufactured unit must be submitted to a static pressure test of 890 kPa, according to paragraph 15.3.1 of EN 50018:2000.

Explosion safe requirements are covered by application of the standards indicated in page 1/3 of this certificate.

(A7) Descriptive documents:

		Rev.	Date
Description nr.	AB50&SPG1N.doc (5 pp)	1	2002-05-09
Drawings nr.:	N511112A0002	A	2001-07-06
	N511112A0003	A	2001-07-06
	N511112A0004	A	2001-07-06
	N511114B0014	B	2002-05-03
	N511114B0015	B	2002-05-03

OFICIAL LABORATORIO J.M. MADARIAGA

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(1) EC-TYPE EXAMINATION CERTIFICATE SUPPLEMENT

(2) Equipment or protective system intended for use in potentially explosive atmospheres.
Directive 94/9/EC

(3) Supplement nr. **1** to EC-Type Examination Certificate number: **LOM 02ATEX2018 X**

(4)	Equipment or Protection System	Suspension bulb luminaries Type AB50... / SPG1N
(5)	Applicant	Cooper, Crouse-Hinds Division, CEAG CEAG Nortem, S.A.
(6)	Address	Avda. Santa Eulalia, 290 08223 TARRASA (BARCELONA) SPAIN

(7) This certificate supplement increases the scope of certificate LOM 03ATEX2018 X to include variants as specified in the annex to this certificate supplement and listed documents.

(8) The examination and test results are recorded in confidential report nr. **LOM 03.059 RP**

This supplement must be an inseparable part together with base certificate.

Madrid, 6 May 2003

Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY

OFICIAL LABORATORIO J.M. MADARIAGA LOM

Angel Vega Remesal
Head of ATEX area

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(A1) **ANNEX**

(A2) Supplement nr. **1** to EC-Type Examination Certificate number: **LOM 02ATEX2018 X**

(A3) Variations included in this supplement

To extend the application of the luminaries type AB50... / SPG1N to combustible dust atmospheres by assessment of the standard **EN 50281-1-1:1998 + A1:2002**

Lamp type	Power (W)	Temperature class		Surface temperature	
		Ta: -20 °C / +40 °C	Ta: -20 °C / +55 °C	Ta: -20 °C / +40 °C	Ta: -20 °C / +55 °C
Fluorescente PL	11	T6	T6	T85 °C	T85 °C
Incandescencia	60	T4	T3	T91 °C	T106 °C
	100	T3	T3	T130 °C	T145 °C
Halógena	75	T4	T3	T120°C	T135°C
	100	T3	T3	T126°C	T141°C
	150	T3	T3	T161°C	T176°C

(A4) Marking variations

Ex II 2 GD EEx de IIC T* IP66 T* (* = according type)

(A5) Test report nr: **LOM 03.059 RP**

(A6) Essential Health and Safety Requirements

No change

(A7) Descriptive documents

		Rev.	Date
Drawings nr.	N511114C0014	C	2002-10-07
	N511114C0015	C	2002-10-07

OFICIAL LABORATORIO J.M. MADARIAGA LOM

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LABORATORIO OFICIAL J. M. MADARIAGA

(1) EC-TYPE EXAMINATION CERTIFICATE SUPPLEMENT

(2) Equipment or protective system intended for use in potentially explosive atmospheres.
Directive 94/9/EC

(3) Supplement nr. **2** of EC-Type Examination Certificate: **LOM 02ATEX2018 X**

(4) Equipment or protective system: Suspension bulb luminaries
Type AB50... / SPG1N

(5) Applicant: Cooper Crouse-Hinds, S.A.

(6) Address: Avda. Santa Eulalia, 290
08223 TARRASA (BARCELONA)
SPAIN

(7) Test report: **LOM 04.651 XP**

(8) Variations included in this certificate

- To increase the use for an ambient temperature Ta: -50 °C /+55 °C

(9) Marking changes

Change to the marking: Ta: -50 °C /+55 °C

(10) Change in individual tests

Each manufactured unit must be submitted to overpressure test of 1360 kPa according paragraph 15.1.3 of EN 50018:2000.

(11) Descriptive documents

	Rev.	Date
- Description nr. Low temperature AB150&SPG1N.doc	-	2004-12-21

Madrid, 23th February 2005

OFICIAL LABORATORIO J.M. MADARIAGA LOM

Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY

Angel Vega Remesal
Head of ATEX area

This supplement must be an inseparable part together with the base certificate **LOM 02ATEX2018 X**

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ENAC INSPECCIÓN Nº 23/E1037

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LABORATORIO OFICIAL J. M. MADARIAGA

(1) EC-TYPE EXAMINATION CERTIFICATE SUPPLEMENT

(2) Equipment or protective system intended for use in potentially explosive atmospheres.
Directive 94/9/EC

(3) Supplement nr. 3 of EC-Type Examination Certificate: **LOM 02ATEX2018 X**

(4) Equipment or protective system: Suspension bulb luminaries
Type AB50... / SPG1N

(5) Applicant: Cooper Crouse-Hinds, S.A.

(6) Address: Avda. Santa Eulalia, 290
08223 TARRASA (BARCELONA)
SPAIN

(7) Test report: **LOM 04.651 XP**

(8) Variations included in this certificate

To exclude individual over-pressure tests to have submitted the prototype at four times the reference pressure.
This exclusion is only valid for enclosures having an ambient temperature Ta:-20 ºC /+55 ºC

(9) Marking changes

None

(10) Change in individual tests

Over-pressure tests are excluded

(11) Descriptive documents

	Rev.	Date
- Description nr. Ext.Nr.3 AB50.doc	-	2005-04-07

Madrid, 31st May 2005

OFICIAL LABORATORIO J.M. MADARIAGA LOM

Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY

Angel Vega Remesal
Head of ATEX area

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ENAC INSPECCIÓN Nº 23/EI037

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LABORATORIO OFICIAL J. M. MADARIAGA

(1) EC-TYPE EXAMINATION CERTIFICATE SUPPLEMENT

(2) Equipment or protective system intended for use in potentially explosive atmospheres.
Directive 94/9/EC

(3) Supplement nr. **4** of EC-Type Examination Certificate: **LOM 02ATEX2018 X**

(4) Equipment or protective system: Bulb luminarie
Type AB50../SPG1N

(5) Applicant: Cooper Crouse-Hinds, S.A.

(6) Address: Avda. Santa Eulalia, 290
08223 TARRASA (BARCELONA)
SPAIN

(7) Test report: **LOM 04.648 UP**

(8) Variations included in this certificate

To include a variant foreseen as illuminator for level measurement. This variant contains a lamp of 25 W and its transparent part is partially painted .

(9) Marking changes

Temperature class T6

(10) Descriptive documents

	Rev.	Date
- Description nr. Ext.Nr.4 AB50	0	2005-04-14
- Drawing nr. N511112-0139	-	2005-04-13

OFICIAL LABORATORIO J.M. MADARIAGA LOM

Madrid, 23th June 2005

Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY

Angel Vega Remesal
Head of ATEX area

This supplement must be an inseparable part together with the base certificate **LOM 02ATEX2018 X**

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LABORATORIO OFICIAL J. M. MADARIAGA

(1) EC-TYPE EXAMINATION CERTIFICATE SUPPLEMENT

(2) Equipment or protective system intended for use in potentially explosive atmospheres.
Directive 94/9/EC

(3) Supplement nr. **5** of EC-Type Examination Certificate: **LOM 02ATEX2018 X**

(4) Equipment or protective system: Luminarie
Type AB50.. / SPG1N

(5) Applicant: COOPER Crouse-Hinds

(6) Address: Avda. Santa Eulalia, 290
08223-TERRASSA (BARCELONA)
SPAIN

(7) Test report nr.: **LOM 08.234 SP**

(8) Variations included in this certificate

1 Assessment update to the standards EN 60079-0:2006, EN 60079-1:2007, EN 60079-7:2007 EN 61241-0:2006 and EN 61241-1:2004
2 Update of the manufacturer/applicant name

(9) Changes in marking

II 2 G Ex d IIC T3..T6 / Ex de IIC T3..T6
Ex tD A21 IP66 T...ºC

Temperature classes, surface temperatures and ambient temperature ranges are indicated in the base certificate and previous supplements.

(10) Descriptive documents

		Rev.	Date
- Description nr.	Ext varios	-	2008-05-19
- Drawings nr.:	CCH-0805004	0	2008-05-19
	CCH-0805006	0	2008-05-19

OFICIAL LABORATORIO J.M. MADARIAGA LOM

Madrid, 3rd March, 2009

Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY

Angel Vega Remesal
Head of ATEX area

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RCPCER 07.4/3
Rev. 0

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