



1 EU-TYPE EXAMINATION CERTIFICATE

- 2 Equipment or protective systems Intended for use in Potentially Explosive Atmospheres – Directive 2014/34/EU
- 3 EU-Type Examination Certificate Number **LOM 21ATEX1057X** **Issue: 2**
- 4 Product Flashlight/Handtorch
Types ADALIT L-90*
- 5 Manufacturer ADARO TECNOLOGIA S. A.
- 6 Address Jimena Fdez. de la Vega, 38
Parque Científico y Tecnológico de Gijón – Edificio Adaro Tecnología
33203 – Gijón – Asturias
SPAIN
- 7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8 Laboratorio Oficial J.M. Madariaga (LOM), Notified Body No. 0163, in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential Report **LOM 23.335V**
- 9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

- Standards **EN IEC 60079-0:2018** **EN 60079-11:2012**

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.
- 10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- 11 This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- 12 The marking of the product shall include the following:



II 1G Ex ia IIC T4 Ga
II 2D Ex ib IIIC T135°C Db
I M1 Ex ia Ma

Getafe,
Electronically signed by:

Certification Committee

RCPCR 25.7/8

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Page 1/3





LABORATORIO OFICIAL J. M. MADARIAGA

13 ANEXO

14 EU-Type Examination Certificate Number: **LOM 21ATEX1057X**

Issue: 2

15 Description of product

Flashlight/Hand torch with an antistatic plastic casing containing rechargeable battery or non-rechargeable cells, electronic control circuit and LED-based light sources. It has a cover for accessing the batteries.

Battery primary cells are LR6 (AA) size alkaline batteries.

Battery secondary cells are Li-ION.

Variants

Optics type	With alkaline primary elements		With secondary cells LI-ION	
	Yellow color	Black color (*)	Yellow color	Black color (*)
Standard	L-90	L-90B	L-90R	L-90RB
Power	L-90POWER	L-90BPOWER	L-90RPOWER	L-90RBPOWER
Essential	L-90e	-	L-90Re	-

(*) Variants in black color are not suitable for group III

Models with Standard and Power optics have two main LEDs, one main LED in the case of Essential optic

Parameters of the type of protection for rechargeable variant: Um: 12 V

Changes in this issue

- Redesign of the enclosure
- Group III is included for explosive dust environments, except L-90B* variants.
- Group I is included.

16 Report **LOM 23.335V**

17 Specific conditions of use

- Batteries cannot be charged or replaced in hazardous area
- Batteries and alkaline cells may only be of the type and brand indicated by the manufacturer
- When used in group I the equipment can only be in locations with low risk of impact.

18 Essential health and safety requirements

Met by compliance with the requirements mentioned in item 9.

19 Drawings and Documents

Number	Sheets	Issue	Date	Description
L-90 Family	35	02	2023-10-31	*Technical description
524	1	E	2016-04-11	LEDs electric schematic
527	1	02	2016-04-11	LEDs PCB
559	1	01	2016-12-21	LEDs electric schematic
560	1	01	2016-09-27	LEDs PCB
798	1	01	2022-01-27	Serial number label
800	1	06	2023-11-02	*Threaded cover drawing
801	1	04	2023-11-02	*Main body drawing
802	1	03	2021-07-13	Hook drawing
803	1	05	2023-11-02	*Bottom cover drawing
810	1	04	2023-11-02	*Threaded cover drawing
812	1	04	2023-11-02	*Main body drawing
815	1	07	2023-05-19	Electric schematic
816	1	06	2022-09-09	Control circuit PCB



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3 ANEXO

14 EU-Type Examination Certificate Number: **LOM 21ATEX1057X**

Issue: 2

19 Drawings and Documents (continued)

Number	Sheets	Issue	Date	Description
817	1	00	2020-07-21	LED electric schematic
818	1	00	2019-11-28	LED PCB
819	1	04	2023-11-02	*Main body drawing
820	1	05	2023-07-03	*Marking drawing
820A	1	05	2023-10-05	*Marking drawing
821	1	05	2023-07-03	*Marking drawing
821A	1	05	2023-10-05	*Marking drawing
821B	1	02	2023-07-03	*Marking drawing
822	1	02	2023-07-03	*Marking drawing
822A	1	03	2023-10-05	*Marking drawing
823	1	02	2023-07-03	*Marking drawing
823A	1	03	2023-10-05	*Marking drawing
823B	1	02	2023-07-03	*Marking drawing
837	1	00	2020-11-05	Auxiliary LEDs electric schematic
838	1	00	2020-11-17	Auxiliary LEDs PCB
1009	1	02	2022-11-24	Battery electric schematic
1014	1	00	2022-11-25	Battery electric schematic
EP-DF-37.3	1	5	2023-07	*Instructions manual
EP-DF-38.3	1	5	2023-07	*Instructions manual
EP-DF-41.3	1	6	2023-10	*Instructions manual
EP-DF-42.3	1	6	2023-10	*Instructions manual
EP-DF-43.3	1	5	2023-07	*Instructions manual

Note: An * is included before the title of documents that are new or revised.

20 History of variation

Issue	Date	Report number	Description
0	2021-10-27	LOM 20.424J	First certificate
1	2023-08-10	LOM 23.280N	- The standard EN 60079-28:2015 is not in the scope. The marking is changed - Updates of electronic circuits and PCB. - LIFE versions with LiFePo4 battery are not included.