



Results of LightingEurope 2025 Online Mystery Shopper Exercise

Executive Summary

The latest edition of LightingEurope's Online Mystery Shopper Exercise confirms a persistent trend: non-compliance among products sold on online marketplaces in the EU remains alarmingly high.

Of the 442 offers analysed for compliance with information requirements online, 76% were found to be non-compliant. Applying a risk-based approach, 84 of these products were physically inspected to verify packaging and specific marking requirements. Of these, 95%, equivalent to 80 out of 84 products, were again found to be non-compliant. Furthermore, 9 of the 84 products were selected to test against relevant safety standards in an accredited laboratory. All tested products were found to be non-compliant.

The exercise covered seven online marketplaces across France, Germany, Italy, the Netherlands, Poland, Romania, and Sweden. Two lighting product categories were assessed: R7s lamps and self-contained emergency luminaires.

LightingEurope's findings raise serious concerns about the safety of European consumers, the competitiveness of the EU industry, and the effective enforcement of EU legislation.

Our Recommendations

The availability of non-compliant products not only puts customers' safety at risk. It also distorts the level playing field between the law-abiding companies that invest in compliance – up to 25% of annual turnover for some of LightingEurope's members.

We call for EU legislation to ensure that all products offered for online sale to EU customers comply with applicable EU rules. This includes **making sure that there is always a liable economic operator established in EU for product compliance. Liability must be clearly assigned not only for product safety, but for compliance with all product requirements (including adherence to ecodesign and energy labelling rules, as well as obligations related to waste recovery and recycling contributions).** The legal framework must also prevent the listing and re-listing of non-compliant products and implement more rigorous checks and penalties for non-compliant products, including

online. **The upcoming revision of the Market Surveillance Regulation constitutes a key opportunity to address this issue.**

Key Findings

LightingEurope's 2025 mystery shopper exercise reveals alarming rates of non-compliance among self-contained emergency luminaires sold online in the European market. **The study's findings highlight significant safety and regulatory concerns for luminaires sold in online product marketplace.**

LightingEurope conducted a mystery shopper exercise in 2025. The purpose of this exercise was to establish the rate of non-compliant lighting products sold online via marketplaces that make products available to European customers. For the second year in a row, in addition to inspecting mandatory product information to be provided online and on the product packaging, LightingEurope also picked products for safety testing conducted by an accredited laboratory (third party independent assessment). The full methodology is detailed in the Annex of this paper.

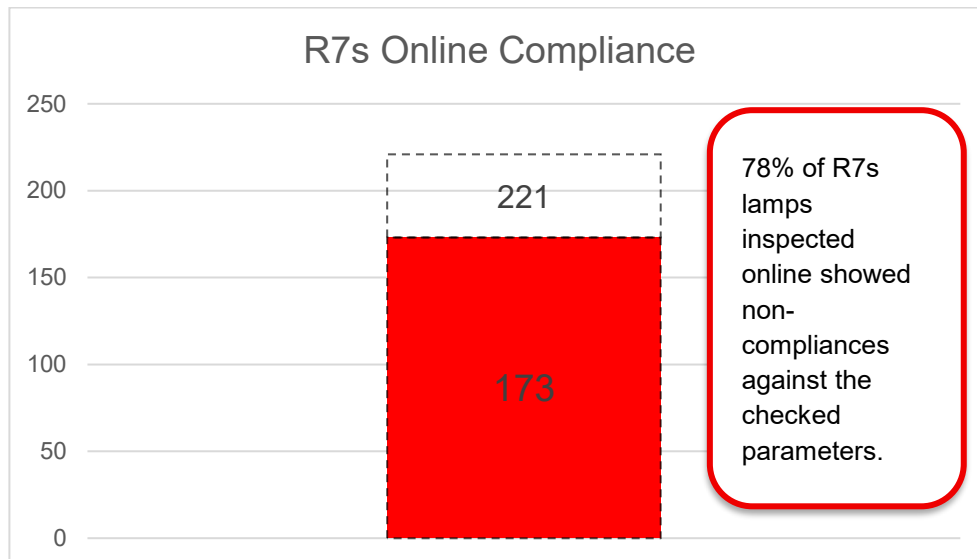
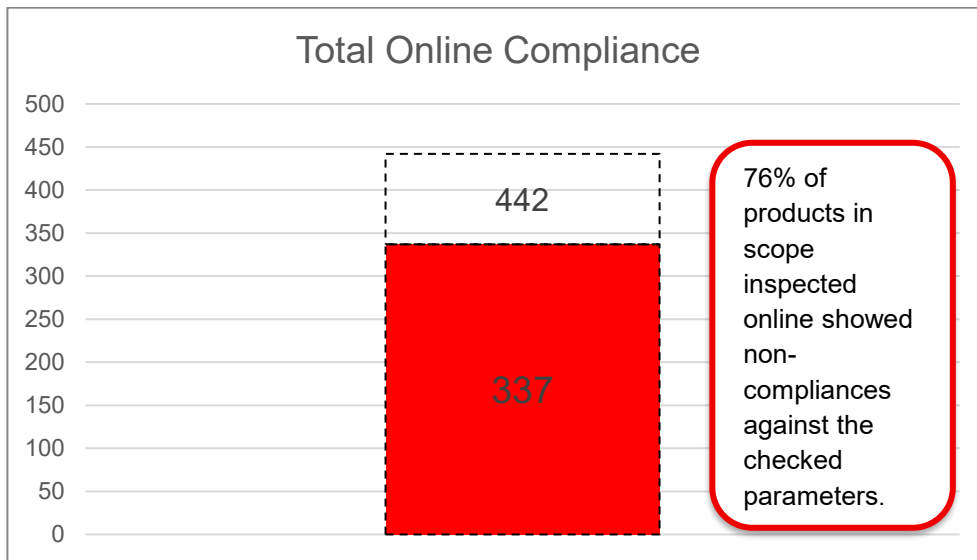
The exercise has been conducted over seven EU countries and seven online marketplaces, focusing on two distinct categories of products: self-contained emergency luminaires and R7s lamps.

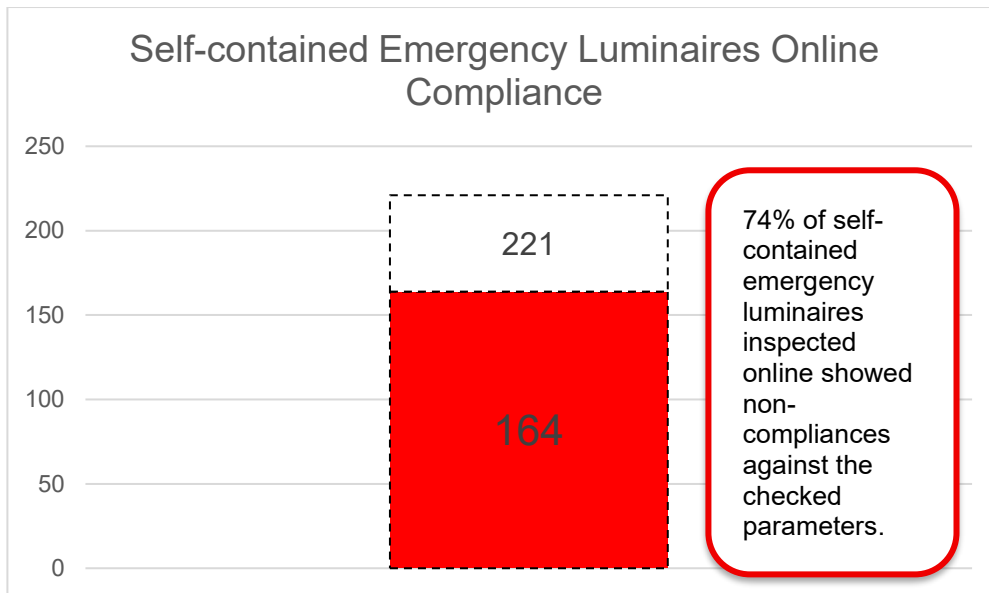
A total of 690 product offers were surveyed online (self-contained emergency luminaires and R7s lamps). Despite clear search key input, out of 690 offers checked online, 244 products were found not to match the search criteria (thus falling outside the scope of the study) and thus were not further analysed for compliance. Additionally, 5 offers disappeared 12 days after identification and before the full product analysis could be conducted. Finally, 16 duplicates or very similar offers were identified, those are not removed in the final count as they were included in separate offers on the online marketplace.

Out of the remaining 442 offers for analysis, 309 turned out non-compliant from a simple online inspection, meaning that 76% of the checked online product offers did not meet the necessary information requirements. Of the 221 R7s lamps analysed, 79 were halogens.

95% of the 82 products physically inspected were found to be non-compliant with the mandatory information requirements, and all 9 products tested, all of which were self-contained emergency luminaires, failed to comply with the relevant standards for safety (precise standard references are listed in the Annex).

The graphs below show those main results:





Non-Compliance Issues

1. **Mandatory Information Requirements: Many products failed to provide required information both online and on packaging such as:**
 1. Manufacturer address (Low Voltage Directive - 2014/35/EU)
 2. Product identifier (Low Voltage Directive - 2014/35/EU)
 3. WEEE registration (WEEE Directive – 2012/19/EU)
 4. Energy label (Energy Labelling Regulation – 2017/1369/EU), and more.
2. **Safety Standards: all products tested did not meet current safety standards.**
3. Several products did not meet the safety information requirements nor the ecodesign information requirements.
4. **Several products exempted from ecodesign and energy labelling regulations carried a fake energy label or had a reference to energy efficiency class in the listing on the online marketplace.**

Implications

1. **European Citizens Safety: The high rate of non-compliance for self-contained emergency luminaires is alarming, considering the importance that these products have for the safety of citizens in emergency situations.**
2. **Market Integrity: The prevalence of non-compliant products creates an unfair advantage over law-abiding manufacturers and sellers.**
3. **EU Net Zero ambition: missing or fake energy labelling information prevents consumers from making informed choices, taking energy efficiency into account.**
4. **Effectiveness of enforcement: lack of unique identification of product (manufacturer, brand, and module) prevents effective compliance and enforcement, which could tackle all offers containing the same product.**
5. **Violating consumer rights: lack of information about the trader may prevent consumers from executing their right of faulty product return.**
6. **Free riding: lack of WEEE information (in the offers targeting the countries requiring it) may be an indication of lack of WEEE registration and unpaid WEEE fees, with detrimental impact on the EU's circular economy.**

7. Regulatory gaps: The findings suggest **inadequate enforcement of EU regulations** in online marketplaces.

Detailed Findings for Self-contained Emergency Luminaires

The main target products were self-contained emergency luminaires, sold with the appropriate emergency exit pictogram(s). This kind of luminaire is installed in buildings all over the European Union and, when compliant and installed following the relevant standards, should allow for compliance with the Workplace Directive (89/654/EEC) and with the Signs Directive (92/58/EEC). The former lays down minimum requirements for safety and health at the workplace, while the latter lays down minimum requirements for the provision of safety and health signs at work. The specific safety standard of reference under the Low Voltage Directive (2014/35/EU) for this kind of products is the EN 60598-2-22, Luminaires - Part 2-22: Requirements - Luminaires for emergency lighting.

Among the 221 inspected self-contained emergency luminaire online offers, **164 (74%) turned out non-compliant in the online inspection**. Of the **37 products** that were **selected** from among those 164 **for physical inspection** (information checks on the packaging, on the product markings and on the manual), **35 (94%) resulted non-compliant**. Additionally, 37 non-compliant products across two different online marketplaces, were sponsored by the platforms themselves.

LightingEurope also found that for 47% of the 221 in scope self-contained emergency luminaire offers checked online, no registration could be found in the respective Member State national WEEE register, despite the country the offer was targeted at demanded such registration.

While, on average, the first 30 in-scope products per product category have been analysed per each platform, it is worth noting that there were thousands of those products on each platform. The sample analysed is representative for the platforms selected and the percentage of non-compliant products is relevant as a sample to demonstrate an overall trend.

It should be noted that self-contained emergency luminaires are exempted from ecodesign and energy labelling requirements.¹ **Notwithstanding this exemption, 25% of the products inspected online either presented an energy label or had a reference to their energy efficiency class in the online listing**. For the ones that presented an energy label, it turned out to **be fake, with the QR code not leading anywhere, or related to an entirely different product** (i.e., fridge). This is not only illegal under the Energy Labelling Framework Regulation, but it is also misleading for customers.²

¹ See Annex III paragraph 1 point (b) of the [Regulation EU 2019/2020](#) for Ecodesign and Annex IV paragraph 1 point (b) of [Regulation EU 2019/2015](#) for energy labelling.

² Article 6 point (d) of the [Energy Labelling Framework Regulation EU 2017/1369](#).

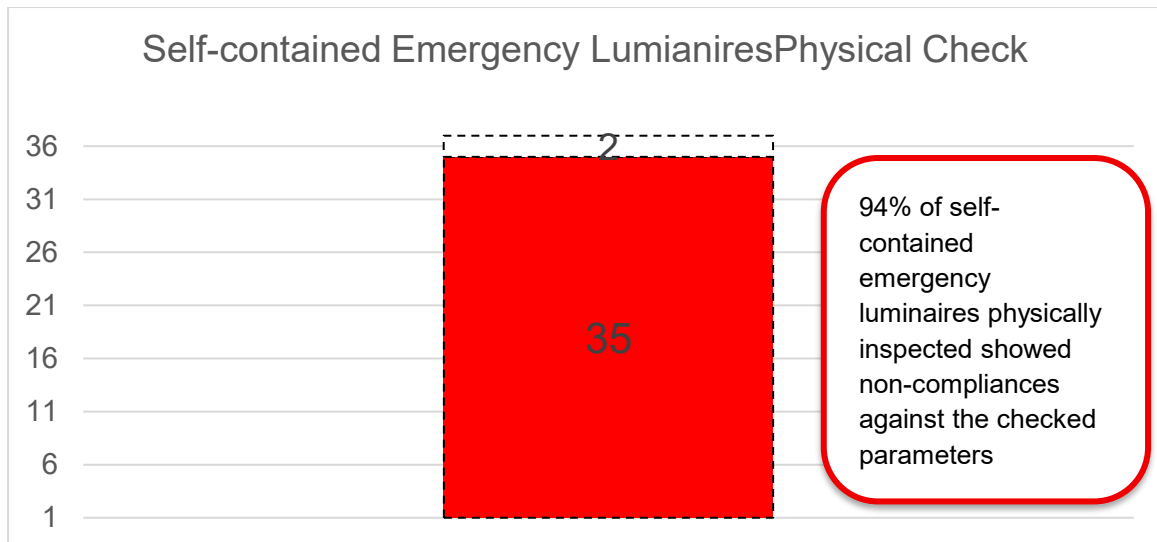


Figure 1 Examples of packaging and energy labels found on self-contained emergency luminaires.

The harmonized standards define requirements on marking to be put on emergency luminaires, including the format of the pictograms (exit signs) (EN 60598-2-22, EN1838), and well as the product marking, containing information about its safe operation (EN 60598-2-22).

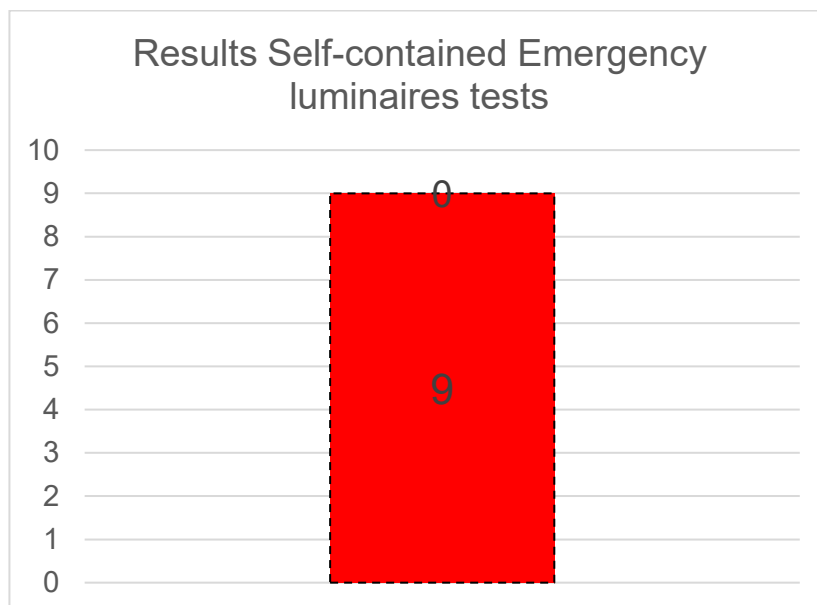


Figure 2 Examples of emergency exit signs the products were sold with. These signs are non-compliant with the relevant standard (EN 1838 Lighting applications - Emergency lighting for buildings)

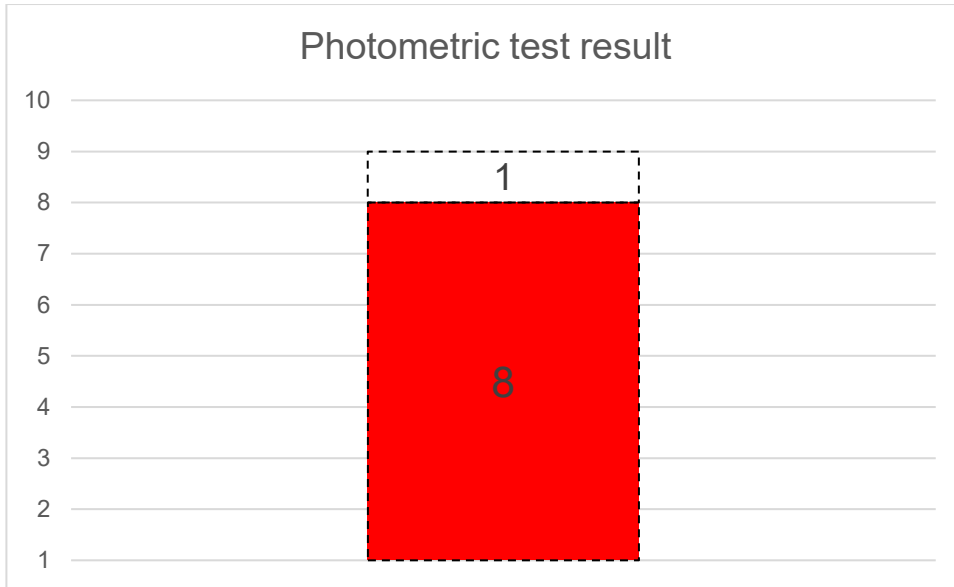


To support the industry and value chain in understanding the rules for emergency and for the proper use of relevant standards, which apply to emergency lighting, LightingEurope has prepared a dedicated [visual guide](#).

When tested, all products selected failed. The two most critical tests are the ones related to fire-resistance and to photometrics.



The photometric test is crucial as the luminance and colour contrast foreseen in the standard are key to maximize visibility under various conditions, including smoke-filled environments. Exit signs have a dedicated photometric design to ensure they are clearly visible.



The glow-wire test verifies the fire resistance of electrical components. During the test, the glow wire is put in contact with the product, which may drip and melt, but it must not ignite. Any flame or glowing of the sample must extinguish within 30 seconds of withdrawing the glow wire, and any burning or molten drop shall not ignite the underlying parts.

This is a key test to ensure that, in case of a fire, the emergency lighting system which is guiding people to safety does not itself melt or ignite.



Detailed Findings for R7s Lamps

The second product category that was checked in this year's exercise were R7s lamps. The term R7s refers to the socket these lamps use, which were originally used by halogens lamps.

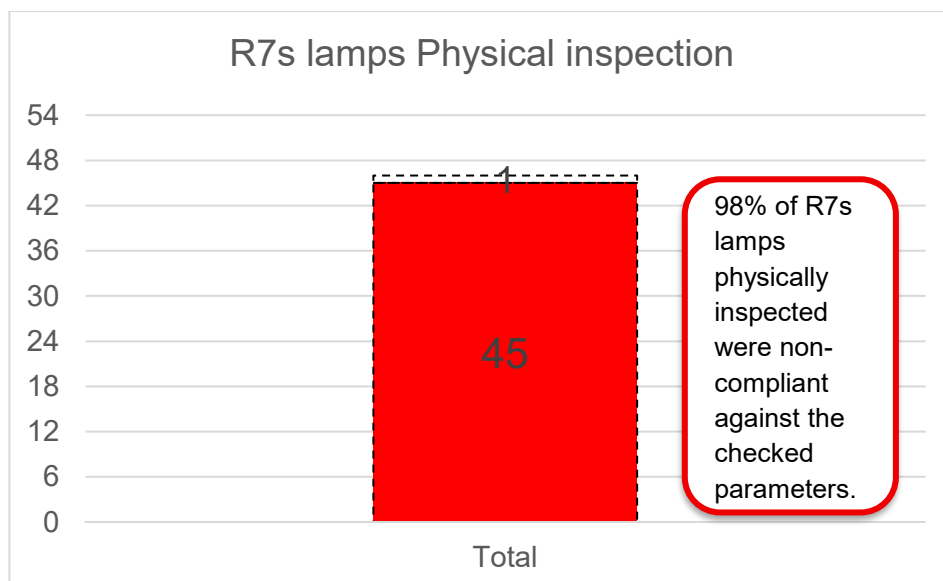
By law, LED-based R7s that fall within the scope of the Ecodesign Regulation need to fulfil the ecodesign requirements as well as the energy labelling requirements, meaning that they need to be registered in the European Product Registry for Energy Labelling database (EPREL) and display the new energy label online.

Halogen-based R7s lamps with lumen output of more than 2700 lumen cannot be made available on the market anymore (because they will not meet the minimum efficacy requirements), except for two cases:

- If they fall under an exemption.
- If they were placed on the market before September 1st, 2021.

The exemptions for R7s halogen lamps apply for lamps that have “a luminous flux > 12 000 lm, QXL, designed and marketed specifically for scene-lighting use in film studios, TV studios, and photographic studios, or for stage-lighting use in theatres, discos and during concerts or other entertainment events” or that have a correlated colour temperature equal or above “2 500 K, length not in the ranges 75-80 mm and 110-120 mm, specifically designed and marketed for industrial or professional electro-heating equipment (e.g. stretch blow-moulding process in PET-Industry, 3D-printing, gluing, inks, paint and coating hardening)”.³ These halogen lamps, while exempt from ecodesign requirements, are not exempt from energy labelling rules, this means that they need to carry an updated energy label which needs to be presented in the online offer. Furthermore, they should be specifically designed and marketed for their intended use. Among 87 halogen R7s lamp offers analyzed during online inspection, 24 did not carry an energy label, and only one of the 87 mentioned the exemptions. There is no way of checking based on the online offer when the product was placed on the EU market.

At the physical inspection, all but one product failed to comply with the parameters. 93% of the products did not carry an energy label and 84% missed the model identifier.



³ Annex III paragraph 1 points (m) and (t) of [Regulation 2019/2020](#).

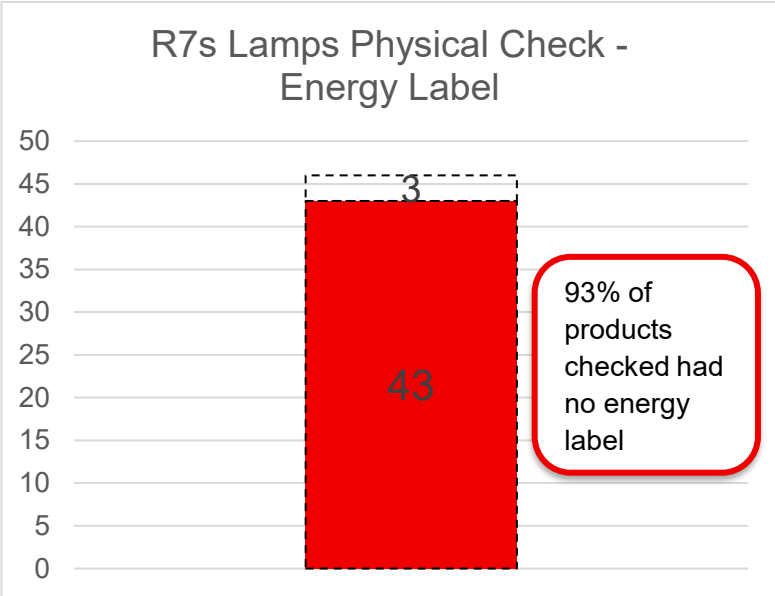
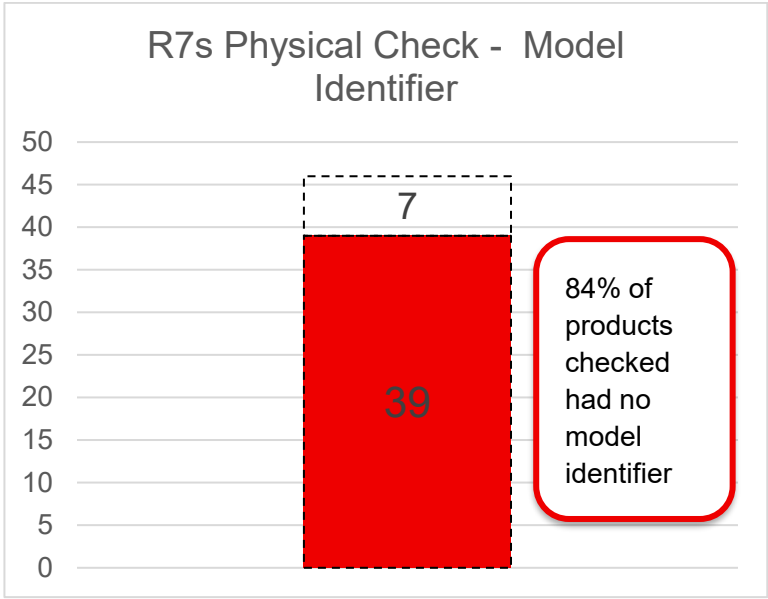


Figure 3 Samples of R7s lamps received. The packaging was often missing and, when present, was blank with no markings, no relevant safety information nor manufacturer's information.



Figure 4 Several products were shipped just wrapped in plastic. No markings nor identification information were present.

Examples of non-compliance found throughout the exercise.

- 77% of the 221 R7S lamp offers checked online carried an energy label, however 53% of them did not have an energy label matching an existing entry in the EPREL database.
- 93% of the 46 R7s lamps physically inspected did not have an energy label.
- 60% of the 46 R7s lamps physically inspected did not comply with LVD information requirements.

Contact

For further information on this topic, please contact Marion Ebel, Director of Corporate Affairs, through marion.ebel@lightingeurope.org or, Alfredo Menghini, Policy Officer, through alfredo.menghini@lightingeurope.org.

LightingEurope is the voice of the lighting industry, based in Brussels and representing 31 companies and national associations. Together these members account for over 1,000 European companies, a majority of which are small or medium-sized. They represent a total European workforce of over 100,000 people and an annual turnover exceeding 20 billion euro. LightingEurope is committed to promoting efficient lighting that benefits human comfort, safety and wellbeing, and the environment. LightingEurope advocates a positive business and regulatory environment to foster fair competition and growth for the European lighting industry. More information is available at www.lightingeurope.org.

Annex I

Methodology

To ensure transparency and correct reporting of the Mystery Shopper Exercise it is important to highlight that the exercise used a risk-based approach. This means that the products acquired and subsequently tested were the ones that were suspicious of non-compliance.

To also ensure fairness and comparability of results throughout the exercise, no filtering option was used to alter the search algorithms of the online marketplaces. A set of key words to input in the search bar was agreed and full trust was given to the marketplaces' algorithms. The exercise was conducted in 7 EU countries: France, Germany, Italy, the Netherlands, Poland, Romania, Sweden and 7 online marketplaces.

The process in which the mystery shopper exercise was carried out across the participating countries was:

- Enter the agreed term in the search function:
 - For Emergency lighting, the term “self-contained emergency luminaire battery pictogram” was entered translated in national language (Italian: apparecchio di illuminazione di emergenza a batteria con pittogramma; Dutch: noodverlichting pictogram; Polish: oprawa awaryjna; Swedish: Nödbelysning Batteri Pliktogram; German: Notleuchte Akku, Romania: corp de iluminat de urgenta verde).
 - For R7s lamps, the term “R7s lamp” was used.
- Selection of samples: take screenshots of the first 40 products to appear in the search results (selection done by the platform's algorithm). This parameter was not always respected, and some volunteers inspected more products. This was done to compensate for the number of out-of-scope products among the search results.
- Online inspection: check the webpage for information on each individual product for the first 30 products. This parameter was not always respected and some volunteers inspected up to 60 products. This was done to compensate for the number of out-of-scope products that emerged. In addition to checking if the lighting specific information was included as part of the online offer (e.g., energy label, product information sheet), it was also checked if the manufacturer, EU representative and safety information mandated by GPSR and the seller information mandated by DSA was included. In the countries having public WEEE registries, the registration was checked as well.
- Purchase the first 10 products that fail the online inspection. For self-contained emergency luminaires, due to budget constraints, less samples were bought.
- Physical inspection: check if the relevant mandatory information is displayed on the product's packaging, its documentation or on the product, as required.
- For the self-contained emergency luminaires, the products that were sold without a battery and without a pictogram for emergency exit, we considered out of scope. Out of the 690 products surveyed, 248 fell outside the scope, while 5 disappeared before a proper check could be made.

- For all intents and purposes, “online marketplaces” are defined as laid out in Article 4(1)(f) of Regulation EU 524/2013 on online dispute resolution for customer disputes.

The type of information requirements that were inspected depended on the product and was also divided into information that is inspected online or physically once the product was purchased, ordered, and delivered.

Below are some examples:

- Product brand
- Product Identifier
- Energy label
- Wattage (LVD/Ecodesign)
- CE Mark
- WEEE Marking
- WEEE information requirements (e.g., crossed out wheely bin logo)
- Energy class of the light source in the manual (EU 2019/2015)
- Repairability information on the packaging (EU 2019/2020)

Non-compliance vis-à-vis the relevant Regulations and standards

The samples for testing were selected on a risk-based approach: after the purchase and physical inspection, the samples that demonstrated the highest level of non-compliance were picked and tested.

The testing was conducted by an independent certified lab. The products were tested according to selected standards that are the ones applicable to test the safety of products as per the applicable regulation, more specifically the regulation that allows manufacturers to demonstrate conformity and affix the CE marking to products, which is the Low Voltage Directive 2014/35/EU. The harmonised standards used for testing were:

Self-contained emergency luminaires	Lighting Performance Services, Testing for specific section EN. 60598-2-22, Clauses: <ul style="list-style-type: none"> - Marking requirements – Clause 22.6 - Indicator requirements – Clause 22.7.7 - Glow wire test – Clause 22.16 - Photometric data – Clause 22.17 - High temperature operation – Clause 22.19 - Annex C (normative) Luminance measurements C.1
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On signage, in Figure 2, the EN 1838 Lighting applications - Emergency lighting for buildings is mentioned. This standard is the EN standard which prescribes to follow the requirements of ISO 3864-1 (colours), ISO 3864-3 (graphical symbols), and EN ISO 7010 (design). The European Commission published in December 2020 a binding guideline on the application of Directive 92/58/EEC on the minimum requirements for the provision of safety and/or health signs at work. In this guideline, the EC notes that the combination of a directional arrow (ISO 3864-3) with the emergency exit signs of ISO 7010 can be considered equivalent in meaning to the emergency exit / escape route signs in Directive

92/58/EEC. According to the volunteers, several products did not have the appropriate signage according to the standard. This was not, however, checked by the test house.

Below is a list of the relevant regulations for the products checked during this exercise. The list is:

1. Low Voltage Directive (EU) 2014/35
 - The LVD defines safety requirements to ensure conformity of products with the relevant associated standards and to affix CE marking when making products available on the European Market.
 - Non-compliant products fail to endure conformity with the relevant standards, as the round of testing proved.
2. Ecodesign Directive (EU) 2009/125
 - Sets energy efficiency standards for lighting products.
 - Non-compliant products often fail to meet minimum energy efficiency requirements.
 - Ecodesign Lighting Regulation (EU) 2019/2020
 - Sets higher performance thresholds for light sources.
 - Packaging Information Requirements: mandatory product information on packaging.
3. Energy Labelling Regulation (EU) 2017/1369
 - Requires proper energy efficiency labeling on products and packaging and imposes registration on the EPREL Database.
 - Many non-compliant products lack proper energy labels or use incorrect labels.
 - Packaging Information Requirements: mandatory product information on packaging.
 - Ecodesign Energy Labelling Lighting Regulation (EU) 2019/2015
 - Sets light sources specific energy label to supplement the regulation.
 - Non-compliant products fail to display the correct energy label.
4. CE Marking:
 - Mandatory for products sold in the European Economic Area.
 - Some non-compliant products lack the required CE mark.
5. WEEE (Waste Electrical and Electronic Equipment) Directive (EU) 2012/19:
 - Requires manufacturers to contribute to recycling costs.
 - Many non-compliant suppliers are not registered with national WEEE schemes.
6. Product Safety Requirements:
 - General safety standards for electrical products.
 - Some non-compliant products pose safety risks like electric shock or fire hazards.
7. Technical Documentation Requirements:
 - Mandates proper technical files and conformity documentation.
 - Many non-compliant products lack complete or accurate technical documentation.
8. Regulation (EU) 2023/988 on general product safety
 - Article 19: sellers did not add product warning and safety information.

Non-compliant products often lack the required information or have incorrect details.

These regulations aim to ensure energy efficiency, safety, and environmental sustainability of lighting products in the EU market. Non-compliance with these regulations not only poses risks to customers but also creates an unfair competitive advantage over law-abiding manufacturers and sellers.