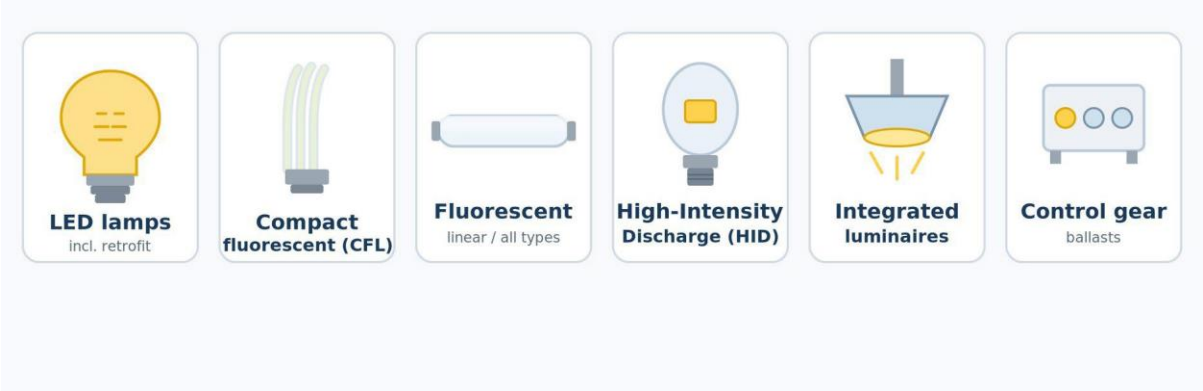
STATE OF KUWAIT

Public Authority for Industry (PAI)

Importer & Exporter Guideline

Energy Efficiency, Functionality & Labelling Requirements for Lighting Products

Technical Regulations KWS 1902-1:2024 (Part 1) and KWS 1902-2:2024 (Part 2)



For traders importing and exporting lighting products to the State of Kuwait

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1. Purpose of this Guideline

This guideline explains how importers, exporters and manufacturers of lighting products can comply with Kuwait's energy-efficiency regulations before placing products on the Kuwaiti market. It is issued for publication by the **Public Authority for Industry (PAI)** so that traders can quickly understand the scope, the products covered, the registration and labelling steps, and the key compliance dates.

It is based on two mandatory Kuwaiti technical regulations adopted by **Ministerial Decree No. 19/2025** (published in the Official Gazette *Al-Kuwait Al-Youm*, issue 1752, 17 August 2025):

- **KWS 1902-1:2024** - Energy Efficiency, Functionality and Labelling Requirements for Lighting Products - Part 1
- **KWS 1902-2:2024** - Energy Efficiency, Functionality and Labelling Requirements for Lighting Products - Part 2

Both regulations are aligned with the Saudi technical regulations **SASO 2870** (Part 1) and **SASO 2902** (Part 2), and with the GCC Standardization Organization framework. Traders already familiar with the SASO energy-efficiency programme and its online registration model will find the Kuwaiti requirements closely comparable.

> *At a glance: If you import or export any general-lighting lamp, luminaire or control gear into Kuwait, the product must be registered with PAI, tested against the applicable requirements, and carry a PAI energy-efficiency label printed on its packaging.*

2. Scope - Which Products Are Covered

The two regulations together cover general-lighting products with a luminous flux above 60 lumens. Part 1 addresses mainstream retail lamps (LED and compact fluorescent up to 12,000 lumens); Part 2 covers the remaining professional and high-output products, integrated luminaires and control gear.

Scope at a glance - what the two Kuwaiti regulations cover

IN SCOPE - must register & label

- LED lamps (incl. incandescent & halogen retrofit)
- Compact fluorescent lamps (CFLi & CFLni)
- Fluorescent lamps - all types (linear etc.)
- High-Intensity Discharge (HID): mercury,
- sodium, metal-halide, ceramic metal-halide
- Integrated luminaires (non-replaceable lamps)
- Control gear / ballasts operating these lamps *(Exempted from Labelling)*

Luminous flux > 60 lumens. Part 1 covers LED/CFLi 60-12,000 lm; Part 2 covers CFLni, fluorescent, HID, luminaires, control gear & high-output lamps ≥ 12,000 lm.

EXEMPT from efficiency / labelling*

- Traffic & signal lamps: vehicle, aircraft, train & watercraft
- Infrared heating lamps (comfort, industrial, animal rearing, healthcare)
- Special-purpose: pool, aquarium, anti-insect, disinfection, horticulture, stage/photo
- Lamps for battery operation (exempted from labelling only)
- Lamps built into a product whose main purpose is not lighting, e.g. oven, fridge (exempted from labelling only)
- Lamps sold with a luminaire, not meant to be removed by the user (exempted from labelling only)
- Explosive-atmosphere, decorative & solar-powered luminaires

*Still subject to hazardous-substance limits and special-purpose marking. ALL products in scope - including exempt ones - must still be registered.

1. Products in scope (must be registered and labelled)

Part 1 - KWS 1902-1:2024 covers direct and indirect general light sources with a luminous flux above 60 lumens and below 12,000 lumens:

- Compact fluorescent lamps with integrated ballast (CFLi)
- LED lamps - incandescent-retrofit types
- LED lamps - halogen-retrofit types

Part 2 - KWS 1902-2:2024 covers lamps, control gears and integrated luminaires with a luminous flux above 60 lumens:

- Compact fluorescent lamps with integrated ballast (CFLi) at or above 12,000 lumens
- Compact fluorescent lamps without integrated ballast (CFLni)
- Fluorescent lamps - all types (e.g. linear fluorescent)
- High-Intensity Discharge (HID) lamps: mercury vapour, high/low-pressure sodium, quartz metal-halide and ceramic metal-halide
- LED lamps (including retrofit LED lamps) at or above 12,000 lumens
- Control gears (ballasts) able to operate the above lamps, even when integrated into other products (No Label, registration only).
- Integrated luminaires with non-replaceable lamps - directional and non-directional

Note on luminaires: For luminaires, the scope of Part 2 is limited to **integrated luminaires** (those supplied with non-replaceable light sources).

2. Products that are exempted

Certain products are exempted from parts of the requirements — energy efficiency, functionality and/or marking. Read each exemption carefully: an exemption from these rules does NOT remove the obligation to comply with hazardous-substance limits, and it does NOT remove the obligation to register the product with PAI. Registration with PAI is mandatory for every product in scope, with no exceptions — including all exempted and excluded products listed below.

- **Exempt from energy efficiency, functionality and marking - special end-use lamps:** still subject to hazardous substance limits. Covers traffic/signal lamps (signal lamps; aviation/aircraft lighting for runways and all exterior applications; train lighting; watercraft lighting; automotive lamps); infrared heating lamps (comfort heating indoor and outdoor, industrial, animal-rearing, healthcare); luminaires not connected to the mains such as solar-powered luminaires.
- **"Special purpose" lamps - exempt from energy efficiency, functionality and marking except the special-purpose marking itself:** lamps for swimming pools; lamps emitting light as an agent in chemical or biological processes (pet care/aquarium/terrarium, anti-insect, disinfection, tanning, polymerization, photodynamic therapy, horticulture); display optic lamps below 12,000 lumens (stage/studio, theatre, TV/studio, photo/flashlight, projection); and light sources that do not meet the white-light-source definition used in household appliances (oven, refrigerator, sewing-machine, temperature, mirror lamps).
- **Non-primary-lighting products - exempt from energy efficiency, functionality and marking:** products intended for uses other than general lighting or built into products without a general-lighting function, including chemical/biological-process lighting, image capture and projection (camera flashlights, photocopiers, video projectors); lamps for potentially explosive

atmospheres; emergency lighting luminaires, emergency sign luminaires and the control gear designed to operate them in emergency mode; luminaires for potentially explosive atmospheres and medical devices; and integrated luminaires intended for decorative purposes.

- **Exempt from energy-labelling only:** lamps marketed for operation with batteries only; lamps marketed as part of a luminaire and not intended to be removed by the end-user; and lamps marketed as part of a product whose primary purpose is not lighting (e.g. oven, fridge, sewing-machine lamps) - unless offered for sale, hire or displayed separately (e.g. as spare parts), in which case the lamp falls back into full scope.
- **Exempt from energy efficiency, functionality and marking for technical:** certain blended high-intensity-discharge lamps with defined UV/visible radiation profiles or a UVA/UVB radiation peak; double-capped fluorescent lamps of specific diameters and wattages (e.g. T2 ≤ 7 mm; T5 with P ≤ 13 W or P > 80 W; specific T12 variants); single-capped T5 2G11 4-pin fluorescent lamps with defined chromaticity coordinates; high-intensity discharge lamps with a correlated colour temperature above 7,000 K, a specific effective UV output above 2 mW/klm, or without lamp cap E27, E40 or PGZ12; and light sources that do not meet the white-light-source definition.
- **Limited-labelling exemption for project use:** lighting products intended to be used in projects and not displayed or sold through a point-of-sale, may carry a special project label generated by the PAI registration system instead of the standard energy label, provided they are not displayed and/or sold at retail.
- **Exempt from hazardous-substance limits only:** luminaires and control gears are exempt from the hazardous-substance requirements of Clause 4.5, although the content of hazardous substances must still be declared as information during registration.

Important: All products within the scope of these regulations - including exempted and excluded ones - must still be registered with PAI under Clause 5 of Part 2.

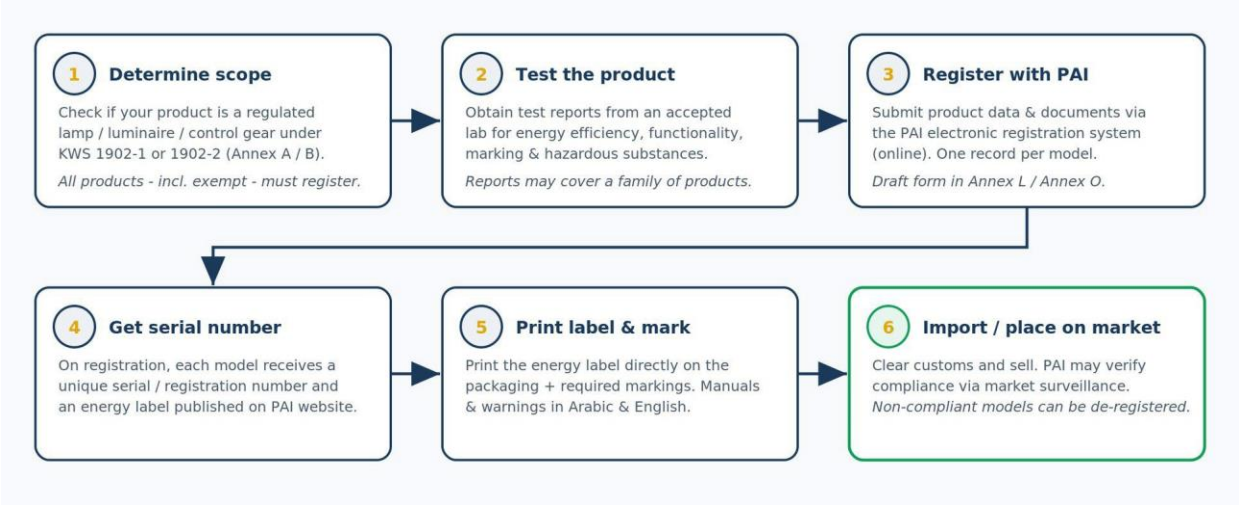
3. Key Obligations for Traders

Before a covered lighting product can be imported into, or placed on, the Kuwaiti market, the trader (importer, exporter or manufacturer) must meet four core obligations:

Obligation	What it means
Registration	Register every product model in the PAI electronic system and obtain a unique serial / registration number per model.
Energy efficiency	Meet the minimum energy-efficiency index (EEI) and be assigned an energy class from A (best) to G, verified by test reports.
Functionality & marking	Meet functionality and endurance requirements; provide required markings. Instruction manuals and safety warnings must be in Arabic and English.
Labelling	Print the PAI energy-efficiency label directly on the individual product packaging, fixed and non-removable.
Hazardous substances	Comply with the maximum limits for hazardous substances (e.g. mercury, lead) - this applies even to most exempt products.

4. Step-by-Step Registration & Labelling Process

The process below applies to both Part 1 and Part 2 products. Registration is mandatory and is completed electronically through the PAI website.



Step 1 - Determine scope

Confirm whether your product is covered by KWS 1902-1 or KWS 1902-2 using the product lists in Annex A and the exemptions in Annex B. Remember that all in-scope products, including exempt ones, must be registered.

Step 2 - Test the product

Obtain test reports (or acceptable evidence) demonstrating energy efficiency, functionality, marking and hazardous-substance compliance from an accepted laboratory. Test reports may cover a defined family of products rather than every single model, provided the family is defined by shared minimum performance (efficacy, lumen maintenance, lifetime, colour-rendering index Ra, luminous flux and the same country of origin).

Products in a family must share the same energy class and must not exceed the minimum declared lifetime by more than 10% or the minimum declared luminous flux by more than 25%. If one model in a registered family fails, the registration of all models in that family is automatically cancelled.

Step 3 - Register with PAI

Submit the product information and supporting documents electronically through the PAI registration system. A draft registration form is provided in Annex L (Part 1) / Annex O (Part 2); the final form is the one on the PAI website. The documents typically required are summarized below.

Product type	Energy-efficiency evidence required
Lamps	Test report for each model (or a representative model of the family with a family specification overview).
Luminaires	Factory test report for a representative model of the family, including a family specification overview.
Control gear	Test report (or self-declaration for a representative model, with a family specification overview).

These documents are additional to other documents PAI require (e.g. electromagnetic compatibility and safety).

Step 4 - label

The corresponding energy-efficiency label is generated and automatically published on the PAI website after final registration.

Step 5 - Print label and apply markings

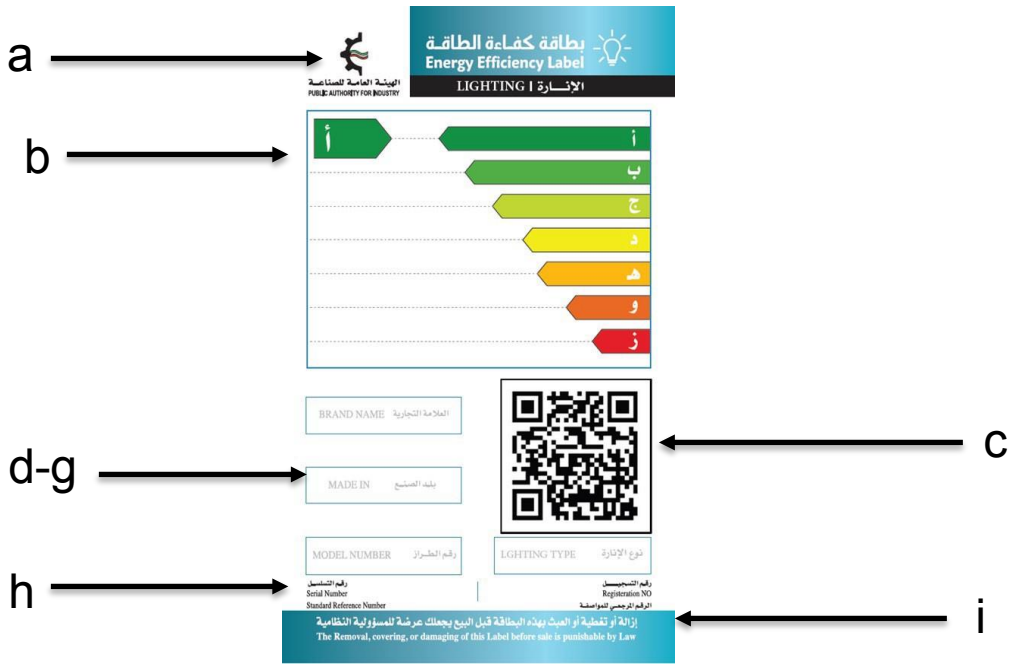
Print the energy label directly on the individual packaging and apply all required markings. Instruction manuals and any safety warnings must be provided in Arabic and English; internationally accepted pictograms may be used.

Step 6 - Import and place on the market

Once registered and labelled, the product may be cleared through customs and sold. PAI may verify compliance through market surveillance; models found non-compliant can be de-registered.

5. The PAI Energy-Efficiency Label

The standard energy-efficiency label shall measure 43 mm in width by 75 mm in height. If applying the standard label would cover more than 70% of the surface area of the largest side of the individual packaging, the alternative label measuring 43 mm in width by 45 mm in height shall be used. For individual packaging with dimensions smaller than 43 mm in width and 45 mm in height, the small-packaging label design shall be printed on one side and resized only as necessary to fit the packaging. In addition, the separate QR code generated by the PAI registration system shall be printed on the individual packaging without alteration.



Energy classes run from A (most efficient) to G, shown as colour-coded bars. For labelling purposes, the Arabic letters are used; *English letters are for information only.*

The label carries the fields below:

Field	Content
a	Logo of the Public Authority for Industry (PAI).
b	Energy-efficiency class attained by the product (A-G), based on its energy-efficiency index (EEI).
c	QR code linking to the product's registered characteristics (manufacturer, model, country of origin, luminous flux, lifetime, rated/equivalent power, EEI, efficacy, annual electricity consumption).
d-g	Brand name (d), country of origin (e), model number (f) and lighting type (g).
h	Registration number and standard reference number.
i	Legal statement.

6. Energy-Efficiency Classes

The energy class is determined from the energy-efficiency index (EEI). The thresholds below apply to indirect lamps under Part 1 (direct lamps and Part 2 products use their own tables in the standards, on the same A-G scale).

Energy-efficiency index (EEI)	Class (Arabic Alphabet Mandatory)	Equivalent English Class
EEI ≤ 0.11	أ	A
0.11 < EEI ≤ 0.13	ب	B
0.13 < EEI ≤ 0.18	ج	C
0.18 < EEI ≤ 0.24	د	D
0.24 < EEI ≤ 0.50	هـ	E
0.50 < EEI ≤ 0.95	و	F
0.95 < EEI ≤ 1.75	ز	G

Note: For labelling, the Arabic class letters are used; English letters are for information only.

Maximum allowable EEI

For both non-directional and directional lamps, the maximum allowable EEI is 0.24 for CFLni, linear and other fluorescent lamps and LED lamps, and 0.50 for High-Intensity Discharge lamps.

Under KWS 1902-1:2024, lamps with G9 and R7 caps have a minimum energy-performance standard (MEPS) of EEI 0.95.

Minimum efficacy for integrated luminaires

Luminaires rated below 15 W must achieve at least 65 lm/W; luminaires rated at 15 W or above must achieve at least 70 lm/W.

7. Compliance Timeline & Effective Date

Ministerial Decree No. 19/2025 was issued on **31 July 2025** and published in the Official Gazette on **17 August 2025**. Under Article 4 of the decree, the regulations become effective **one year after publication** - i.e. on or around **17 August 2026**. From the effective date, registration and labelling of in-scope lighting products are mandatory, and each model must carry a unique serial number printed on its packaging.

The decree also repeals the earlier Decree No. 93/2024, which had adopted an earlier version of the same two regulations. Traders should ensure existing product registrations and packaging are updated to the **2024 editions** of KWS 1902-1 and KWS 1902-2 before the effective date.

8. Trader Compliance Checklist

1. Identify each product and confirm whether it is in scope of KWS 1902-1 or KWS 1902-2 (Annex A / B).
2. Obtain valid test reports (3 years validity from the end of testing date) for energy efficiency, functionality, marking and hazardous substances (family-based where

allowed).

3. Register every model in the PAI electronic system and obtain the certificate.
4. Download the PAI-generated energy label for each model from the PAI website.
5. Print the label directly on the individual packaging.
6. Provide instruction manuals and safety warnings in Arabic and English.
7. Confirm hazardous-substance limits are met, including for exempt products (declaration is accepted)
8. Keep documentation available for PAI market-surveillance checks.

9. References

- **KWS 1902-1:2024** - Energy Efficiency, Functionality and Labelling Requirements for Lighting Products - Part 1 (Public Authority for Industry, State of Kuwait).
- **KWS 1902-2:2024** - Energy Efficiency, Functionality and Labelling Requirements for Lighting Products - Part 2 (Public Authority for Industry, State of Kuwait).
- **Ministerial Decree No. 19/2025** - adoption of the two Kuwaiti technical regulations (Al-Kuwait Al-Youm, issue 1752, 17 August 2025).

Disclaimer: This guideline is a plain-language summary prepared to help traders. In case of any discrepancy, the official texts of KWS 1902-1:2024, KWS 1902-2:2024 and Ministerial Decree No. 19/2025 prevail. Always use the current registration form and requirements published on the PAI website.