Proposal for Amendments to the Legal Inspection Requirements for Fixed Luminaires for General Indoor Lighting and 3 Other Luminaires

By the Bureau of Standards, Metrology and Inspection (BSMI), Ministry of Economic Affairs

Introduction:

With the development of the lighting industry, the design and variety of luminaires have become increasingly diverse, and international safety and electromagnetic compatibility standards have been updated successively. To protect consumer rights and ensure product safety, the BSMI proposes to update the inspection requirements for luminaires. Additional performance requirements for desk luminaires intended for study tasks will be introduced. Furthermore, motion-sensor luminaires, camping luminaires, and rechargeable luminaires are proposed to be included within the scope of mandatory inspection. The conformity assessment procedures will remain unchanged.

Proposed date of implementation: 1 July 2027.

Scope of covered products:

Item	Description of Goods	Inspection Standards (Note)	C.C.C. Code (the first 6 digits are the same as HS Code)(For reference)	Conformity Assessment Procedures
1	Fixed luminaires for general indoor lighting (inspection scope: limited to products with a rated voltage not exceeding 300V, including motionsensor luminaires)	1 CNS 14335: 2020 2 CNS 14335-2-1: 2022 or CNS 14335-2-2: 2017 or CNS 60598-2-20: 2017 or CNS 60598-2-21: 2022 or CNS 60598-2-23: 2022 3 CNS 14115: 2016 4 CNS 15663: 2013: Section 5 "Marking of presence" 5 Products with secondary lithium cells/batteries shall comply with the requirements specified in Note 2. 6 Products with non-replaceable light sources shall comply with the requirements specified in Note 3.	9405.11.00.00.0 9405.19.00.00.2 9405.41.90.00.5B 9405.42.90.00.4B 9405.49.90.00.7B	RPC Scheme (Modules II+III) or TABI Scheme
2	Portable luminaires for general indoor lighting (inspection scope: limited to products with a rated voltage not exceeding 300V, including motionsensor luminaires and camping luminaires)	 CNS 14335: 2020 CNS 14335-2-4: 2022 or CNS 60598-2-12: 2017 CNS 14115: 2016 CNS 15663: 2013: Section 5 "Marking of presence" Products with secondary lithium cells/batteries shall comply with the requirements specified in Note 2. Products with non-replaceable light sources shall comply with the requirements specified in Note 3. Products designed to provide lighting for reading and writing visual tasks, or that are claimed to have functions such as reading, eye protection, or anti-glare (hereinafter referred to as "desk luminaires for study tasks"), shall also comply with the relevant sections of 	9405.21.00.00.8 9405.29.00.00.0 9405.41.90.00.5E 9405.42.90.00.4E 9405.49.90.00.7E	RPC Scheme (Modules II+III) or TABI Scheme

		CNS16048: 2018 specified in Note 8.		
3	Lighting chains and rope lights (inspection scope: limited to products with a rated voltage not exceeding 300V, including motion-sensor luminaires and camping luminaires)	1 · CNS 14335: 2020 2 · CNS 60598-2-20: 2017 or CNS 60598-2-21: 2022 3 · CNS 14115: 2016 4 · CNS 15663: 2013 : Section 5 "Marking of presence" 5 · Products with secondary lithium cells/batteries shall comply with the requirements specified in Note 2.	9405.31.00.00.6 9405.39.00.00.8 9405.41.90.00.5F 9405.42.90.00.4F 9405.49.90.00.7F	RPC Scheme (Modules II+III) or TABI Scheme
4	Buddhistic lights for table (inspection scope: limited to products with a rated voltage not exceeding 300V)	1 CNS 14335: 2020 2 CNS 14335-2-1: 2022 or CNS 14335-2-2: 2017 or CNS 14335-2-4: 2022 or CNS 60598-2-23: 2022 3 CNS 14115: 2016 4 CNS 15663: 2013: Section 5 "Marking of presence" 5 Products with secondary lithium cells/batteries shall comply with the requirements specified in Note 2.	9405.41.90.00.5C 9405.42.90.00.4C 9405.49.90.00.7C	RPC Scheme (Modules II+III) or TABI Scheme

Note:

- 1. All listed products shall have power cords that conform to CNS 15767-1, "Plugs and socket-outlets for household and similar purposes Part 1: General requirements," or other relevant national standards for power cord sets. All listed products shall not be of Class 0 electrical construction.
- 2. All listed products with secondary lithium cells or batteries shall use cells (including those within the batteries) that conform to CNS 15364:2013, and batteries that conform to Sections 7.3.8.1 "vibration" and 7.3.8.2 "mechanical shock" of CNS 62133-2:2018 or meet the requirements of relevant newer versions of national or international standards of newer versions. Certificates issued by certification bodies or test reports issued by testing laboratories accredited by the Taiwan Accreditation Foundation (TAF) shall be provided.
- 3. The listed products under Items 1 and 2 with non-replaceable light sources shall comply with the requirements of IEC 61000-3-2:2024, and a test report issued by a laboratory accredited by the Taiwan Accreditation Foundation (TAF) shall be provided.
- 4. All listed products that use only a single replaceable light source, without dimming devices or electronic switching devices in their construction, and where the light source is a lamp (or tube) that has obtained a type approval certificate or RPC certificate issued by the BSMI, and the instruction manual specifies that replacement light sources shall conform to the inspection requirements of the BSMI, may be exempted from testing for CNS 14115:2016.
- All listed products with replaceable light sources using LED lamps (bulbs or tubes) that have obtained typeapproval or RPC certificates issued by the BSMI may be exempted from testing for Section 4.24 "Photobiological safety" of CNS 14335:2020.
- 6. Section 4.24.2 "Retinal blue light hazard" of CNS 14335:2020 is revised as follows: If the light source used in the luminaire is not excluded from retinal blue light hazard assessment under the applicable safety standard, the luminaire shall comply with the requirements of Section 7 of CNS 62471-7:2025.
- 7. All listed products using independent LED controlgear or built-in LED controlgear with protective enclosures shall comply with CNS 61347-1:2018 and CNS 61347-2-13:2019; however, those that have obtained an RPC certificate from the BSMI for other power supply devices shall not be subject to this requirement.
- 8. The listed products under Item 2 that are desk luminaires for study tasks shall comply with the following provisions of CNS 16048:2018:
 - (1) Section 5 "General requirements and test methods"

 Addition For desk luminaires with stepwise adjustable correlated color temperature (CCT), testing shall be conducted at all declared CCT settings. For desk luminaires with stepless CCT adjustment, testing shall be conducted at both the maximum and minimum declared CCT values.
 - (2) Section 5.2.1.1 "Illuminance and uniformity"

 Revised as follows Testing shall be conducted at the normal operating position of the luminaire and at the operating height above the desk surface as declared by the manufacturer.
 - (3) Section 5.2.1.2 "Shielding"

 Revised as follows Testing shall be conducted at the normal operating position of the luminaire and at the

- operating height above the desk surface as declared by the manufacturer.
- (4) Section 5.2.3 "Color Rendering Index"
- (5) Section 5.4.1 "Input Power"
- (6) Section 5.4.2 "Power Factor"
- (7) Section 5.4.3 "Flicker":
 - Revised as follows Regardless of the light output frequency, the desk luminaire shall comply with the following flicker limits: flicker index (FI) \leq 0.05, percent flicker (PF) \leq 5%.
- (8) Section 6 "Marking":
 - Addition The lamp body shall be marked with power factor, flicker index, and percent flicker.

Description of the two kinds of conformity assessment procedures

1. Registration of Product Certification (RPC) Scheme (Modules II+III)

Under this procedure, domestic manufacturers or importers must have their products type-tested by BSMI-designated testing laboratories in advance (Module II) before applying for registration of their products. Manufacturers or importers are also required to ensure by declaration that all products manufactured at their facilities or imported conform to the prototypes submitted for type testing at Module II stage, and this declaration procedure is called Module III (conformity-to-type declaration). The conformity-to-type declaration shall be prepared by the manufacturer or the authorized local representative, declaring that the mass-produced products comply with the prototype as described in the type-test report.

Products will be allowed to use the Commodity Inspection Mark with the letter 'R' and the identification number given by the BSMI after they are certified and registered with the BSMI. These products can then be cleared through customs directly without any further inspection, unless sampled under the RPC border-check procedure. The application fee and annual fee for RPC are both NT\$5,000 (about US\$170) for each certification, and the RPC certificates are valid for three years. For serial products, an additional NT\$3,000 (about US\$102) is charged for each application in each certificate.

The fees for type-testing vary by products and depend on the fee policies of the testing laboratories.

2. Type-Approved Batch Inspection (TABI) Scheme

Under this procedure, manufacturers or importers shall have their products type-tested by the BSMI or BSMI-designated testing laboratories, and file an application for Type Approval to the BSMI or its branches.

After manufacturers or importers obtain a Type Approval certificate, they are required to file an application for batch inspection to the BSMI each time before their products are released from the production premises or arrive at the port of entry. The BSMI will then review the application and the related documents while additional samples may be required for further testing if it is deemed necessary.

After the products have passed the inspection, they will be allowed to use the Commodity Inspection Mark with the letter 'T' and the identification number given by the BSMI. The application fee for the Type Approval is NT\$3,500, and a Type Approval certificate is valid for three years. The fees for type testing vary by products and depend on the fee policies of the testing laboratories.

*Further information on the scheme can also be found on the BSMI website: https://www.bsmi.gov.tw/wSite/lp?ctNode=9846&CtUnit=4208&BaseDSD=7&mp=2

Locations to apply for Type Testing:

The BSMI designated testing laboratories.

Locations to apply for Registration of Product Certification:

The BSMI or its branches.

Locations to apply for Batch Inspection:

1. Domestic manufacturers or consigned manufacturers: submit inspection applications to the BSMI or its branches according to the location of the production premises. If necessary, cross-jurisdictional inspections

- may be requested.
- 2. Importers or entrusted importers: apply to the BSMI or its branches for inspection according to the jurisdiction of the port of entry. If necessary, cross-jurisdictional inspections may be requested.

Time required for Registration of Product Certification:

14 working days. (This period does not include the time for corrective actions by the applicant due to deficiencies in the documents or samples. An additional 7 working days may be required if additional tests are necessary.)

Related requirements:

- 1. These Legal Inspection Requirements do not apply to products with any of the following conditions:
 - (1) The product has a USB port, with a rated input voltage of DC 5V, is not equipped with an AC to DC adaptor, and is not powered by secondary cells/batteries;
 - (2) The product is powered solely by automotive power, is equipped with an automotive cigarette lighter plug, and is not powered by secondary cells/batteries;
 - (3) The product is powered solely by three-phase system;
 - (4) The product is powered solely by primary batteries; or
 - (5) The product is a toy subject to legal inspection as announced by the BSMI.
- 2. For products newly added to the legal inspection scope, both imported and domestically manufactured products will be subject to inspection beginning on 1 July 2027. From the announcement date, the BSMI will accept applications for Type Approval Batch Inspection and Registration of Product Certification.
- 3. The inspection standards in the version listed above (including Notes 1 through 8) will come into force from the date of announcement, and the previous version will be invalid beginning on 1 July 2027.
- 4. Applications for TABI or RPC will be processed in accordance with the following upon the date of adoption:
 - (1) For products that have been certified:
 - Type approval certificates and RPC certificates obtained before 30 June 2027 may continue to be used until their expiration date. During the validity period, additional series products may be added in accordance with the original inspection requirements.
 - Applicants who apply for a certificate extension to the BSMI before 30 June 2027 may proceed based on the original inspection documentation or provide type test reports based on the revised inspection standards (including Notes 1 through 8) and technical documents. From 1 July 2027, applicants shall provide type test reports based on the revised inspection standards (including Notes 1 through 8) and technical documents. The extended certificate will be valid for three years from the day after the expiry of the original certificate.

(2) For new applicants:

For products listed in the inspection scope before these amendments: Applicants who apply to the BSMI before 30 June 2027 may provide type test reports based on either the original or the revised inspection standards (including Notes 1 through 8), technical documents, documents indicating the location of the "Marking of Presence," samples of the "Marking of Presence" (see Tables 1 and 2), and the "Declaration of the Presence Condition of the Restricted Substances Marking." From 1 July 2027, applicants shall provide type test reports based on the revised inspection standards (including Notes 1 through 8), along with the technical documents and marking-related documentation listed above. Certificates shall be valid for three years from the date of issuance.

- For products newly added to the legal inspection scope: Applicants shall provide type test reports based on the revised inspection standards (including Notes 1 through 8), technical documents, documents indicating the location of the "Marking of Presence," samples of the "Marking of Presence" (see Tables 1 and 2), and the "Declaration of the Presence Condition of the Restricted Substances Marking" when applying for a certificate. Certificates obtained before 1 July 2027 will be valid from 1 July 2027 to 30 June 2030, while those obtained on or after 1 July 2027 will be valid for three years from the date of issuance.
- 5. The technical documents required for type testing shall comply with the requirements specified in the "Directions Governing Type Approval of Electrical and Electronic Commodities."
- 6. Fees for product type-testing: Charged in accordance with the fee regulations of the BSMI's designated testing laboratory.
- 7. Fees for product registration of product certification and type approval batch-by-batch inspection: Charged in accordance with the relevant provisions of the "Regulations Governing Fees for Commodity Inspection."
- 8. The inspection standards of the products listed in the table shall be the version published in this announcement. If any updated version is available, the BSMI shall publish the implementation date of the updated version in a further announcement.
- 9. The above-listed products should indicate the presence of restricted substances in accordance with Section 5, "Labeling," of CNS 15663 (2013) (the example format shown in Table 1 and Table 2) on the body, packaging, label, or instructions. However, for products that provide (or disclose) the presence of restricted substances via a webpage, the URL link should be clearly stated on the body, packaging, label, or instructions. The location of the indication is not subject to the provisions of Section 5.3 of CNS 15663.
- 10. After the above-listed products are approved by the BSMI for the issuance of certificate, the labeling requirements are as follows:
 - (1) Based on "Regulations Governing the Use of Commodity Inspection Mark," the Commodity Inspection Mark shall be printed by the certificate holders. The identification number of the Commodity Inspection Mark consists of "a Letter (R)," "a designated code (5 digits)," and "the presence conditions of the restricted substances" (e.g., RoHS or RoHS (XX,XX)).
 - (2) The identification number shall be placed below or immediately next to the graphic symbol and "the presence conditions of the restricted substances" shall be indicated in the second row.
 - (3) The Commodity Inspection Mark is not subject to a fixed size but shall be displayed proportionally in a prominent location on the product. It shall be made of durable materials, with clear and legible content that is not easily worn, and it shall be affixed permanently.
 - (4) For RPC scheme, the examples of the Commodity Inspection Mark are listed below:



(5) For TABI scheme, the examples of the Commodity Inspection Mark are listed below:



(6) "RoHS" indicates "the content of restricted substance(s), other than exemptions stated in CNS 15663, does not exceed the reference percentage value of presence condition.

"RoHS(XX,XX)" indicates the content of restricted substance(s) (element XX, element XX, ...), other than exemptions stated in CNS 15663, exceeds the reference percentage value of presence condition.

Restricted substances: Pb, Cd, Hg, Cr+6, PBB, and PBDE.

Examples:

RoHS (Pb) indicates that the percentage content of Pb in certain parts of the commodity exceeds the reference percentage value specified in Annex A to CNS 15663.

RoHS (Cd, Cr+6, PBB) indicates that the percentage content of Cd, Cr+6, and PBB in certain parts of the commodity exceeds the respective reference percentage value specified in Annex A to CNS 15663.

- (7) For products newly added to the legal inspection scope that obtained an RPC before 30 June 2027, they may print the product inspection mark themselves in accordance with the above regulations starting from the date of obtaining the certificate.
- 11. The C.C.C. Codes listed in the table are used for reference only. The commodity shall still comply with the requirements before entering into the market, even though its C.C.C. Code is identified differently by the Customs Administration, Ministry of Finance or International Trade Administration, Ministry of Economic Affairs.
- 12. The import regulation code for the listed products is C02.
- 13. Commodities with combined features or multifunctional products shall comply with the respective inspection standards and conformity assessment procedures of RPC scheme.

Table 1. Example of markings for the presence conditions of the restricted substances exceeds the reference percentage value of presence conditions

Equipment name: Desk lamp: XXX (Note)						
	Restricted substances and its chemical symbols					
11	Lead	Mercury	Cadmium	Hexavalent	Polybrominated	Polybrominated
Unit				Chromium	Biphenyls	Diphenyl Ethers
	(Pb)	(Hg)	(Cd)	(Cr^{+6})	(PBB)	(PBDE)
Power cord and	Exceeding					
internal wiring	0.1 wt %	0	0	0	0	0
Enclosure and	_				_	_
plastic materials	0	0	0	0	0	0
Circuit board	d –	Exceeding	0	0	0	
Circuit board		0.1 wt %				0
Light source and						
lampshade	0	0	0	0	0	0
Switch and	0	0	Exceeding	0	0	Exceeding
components			0.01 wt %			0.1 wt %

Note 1: "Exceeding 0.1 wt %" and "exceeding 0.01 wt %" indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.

Note 2: "o" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

Note 3: The "-" indicates that the restricted substance corresponds to the exemption.

Table 2. Example of markings for the content of the restricted substances other than exemption do not exceed the reference percentage value of presence condition

Equipment name: Desk lamp: XXX (Note)							
	Restricted substances and its chemical symbols						
Unit	Lead	Mercury	Cadmium	Hexavalent	Polybrominated	Polybrominated	
Oint				chromium	biphenyls	diphenyl ethers	
	(Pb)	(Hg)	(Cd)	(Cr^{+6})	(PBB)	(PBDE)	
Power cord and	0	0	0	0	0	0	
internal wiring	0	O	J	O	0	Ŭ	
Enclosure and							
plastic materials	0	0	0	0	0	0	
Circuit board	1	0	0	0	0	0	
Light source and							
lampshade	0	0	0	0	0	0	
Switch and	0		0	0			
components	0	0	0	0	0	0	

Note 1: "o" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

Note 2: The "-" indicates that the restricted substance corresponds to the exemption.

Note: If the position of the label clearly indicates the relationship with the product, the column for device name and model number may be omitted above the label. Additionally, if the label applies to multiple models, their numbers can be listed in the same column.