

INTERNATIONAL ELECTROTECHNICAL COMMISSION
COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

IEC 60825-12
Edition 3.0 2022-12

IEC 60825-12
Édition 3.0 2022-12

SAFETY OF LASER PRODUCTS

Part 12: Safety of free space optical
communication systems used for transmission
of information

SÉCURITÉ DES APPAREILS À LASER

Partie 12: Sécurité des systèmes de
communication optique en espace libre utilisés
pour la transmission d'informations

C O R R I G E N D U M 2

Corrections to the French version appear after the English text.

Les corrections à la version française sont données après le texte anglais.

ITEH Standards
(<https://standards.iteh.ai>)

Table 1 – Measurement aperture diameters and distances for the default (simplified) evaluation

Delete, in footnote a, the following text:

"This is represented by a 3,5 mm aperture stop at a distance of 35 mm or 14 mm from the end of the fibre. The aperture stop diameter of 3,5 mm (rather than 7 mm) is used because magnifying optics would only be used in a situation where there is sufficient light, and thus the pupil would be constricted. Also note that when multimode fibres having large core diameters are used for OFCSs, the mitigating effect of the large angular subtense may be considered."

Replace the last footnote b with footnote c.

4.3 Access level 1 and 1M

Replace the 2nd paragraph with the following:

"For wavelengths between 302,5 nm and 4 000 nm, if the accessible emission is:

- less than or equal to the AEL of Class 1 for Condition 1, and Condition 2 and Condition 3, then the FSOCS is assigned to access level 1."*

8.1 General

Replace, in the 4th paragraph, the last sentence with the following:

"This is because access level is a feature of the (end-to-end) FSOCS, and depends on system wide features such as APR and IPS."

Table 4 – Marking requirements

Replace, in the row for access level 2M, the warning text with the following:

"CAUTION

ACCESS LEVEL 2M LASER RADIATION ^b

DO NOT STARE INTO BEAM OR VIEW

DIRECTLY WITH NON-ATTENUATING OPTICAL INSTRUMENTS"

Replace, in the row for access level 3R, the warning text with the following:

"CAUTION

ACCESS LEVEL 3R LASER RADIATION ^b

AVOID DIRECT EYE EXPOSURE"

8.4 Warning for invisible radiation

Replace, in the first paragraph, the first sentence with the following:

"If the output of the laser is outside the wavelength range 400 nm to 700 nm, the wording 'laser radiation' in the markings in Table 4 shall be modified to read 'invisible laser radiation', or if the output is at wavelengths both inside and outside this wavelength range, to read 'visible and invisible laser radiation'."

Annex A Rationale

[IEC 60825-12:2022/COR2:2026](https://standards.iec.ch/IEC/60825-12:2022/COR2:2026)

<https://standards.iec.ch/IEC/60825-12:2022/COR2:2026> Replace, in the third paragraph, the last sentence with the following: 18af9e/iec-60825-12-2022-cor2-2026

"These access levels are defined as access level 1, 1M, 2, 2M, 3R, 3B and 4, in a manner similar to (but not identical with) the product classification procedure described in IEC 60825-1:2014."