
STATUTORY INSTRUMENTS

2010 No. 1140

**The Control of Artificial Optical
Radiation at Work Regulations 2010**

Assessment of the risk of adverse health effects to the eyes or skin created by exposure to artificial optical radiation at the workplace

3.—(1) Where—

- (a) the employer carries out work which could expose any of its employees to levels of artificial optical radiation that could create a reasonably foreseeable risk of adverse health effects to the eyes or skin of the employee; and
- (b) that employer has not implemented any measures to either eliminate or, where this is not reasonably practicable, reduce to as low a level as is reasonably practicable, that risk based on the general principles of prevention set out in Schedule 1 to the 1999 Regulations,

the employer must make a suitable and sufficient assessment of that risk for the purpose of identifying the measures it needs to take to meet the requirements of these Regulations.

(2) The employer must as part of that risk assessment assess, and if necessary, measure or calculate, the levels of artificial optical radiation to which employees are likely to be exposed.

(3) In carrying out the assessment, measurement or calculation, the employer must follow the following standards or recommendations—

- (a) for laser radiation, the standards of the IEC; or
- (b) for non-coherent radiation, the standards of the IEC and the recommendations of the CIE and the CEN.

(4) In exposure situations which are not covered by those standards or recommendations, the assessment, measurement or calculation must follow national or international science-based guidelines.

(5) The assessment must also include consideration of—

- (a) the level, wavelength and duration of exposure;
- (b) the exposure limit values;
- (c) the effects of exposure on employees or groups of employees whose health is at particular risk from exposure;
- (d) any possible effects on the health and safety of employees resulting from interactions between artificial optical radiation and photosensitising chemical substances;
- (e) any indirect effects of exposure on the health and safety of employees such as temporary blinding, explosion or fire;
- (f) the availability of alternative equipment designed to reduce levels of exposure;
- (g) appropriate information obtained from health surveillance, including where possible published information;
- (h) multiple sources of exposure;

- (i) any class 3B or 4 laser that is classified in accordance with the relevant IEC standard that is in use by the employer and any artificial optical radiation source that is capable of presenting the same level of hazard; and
 - (j) information provided by the manufacturers of artificial optical radiation sources and associated work equipment in accordance with the relevant European Union Directives.
- (6) The risk assessment must be reviewed regularly if—
- (a) there is reason to suspect that it is no longer valid; or
 - (b) there has been a significant change in the work to which the assessment relates.
- (7) The employer must record—
- (a) the significant findings of the risk assessment as soon as is practicable after it is made or changed; and
 - (b) the measures which have been taken and which the employer intends to take to meet the requirements of regulation 4 and 5.
- (8) In paragraphs (3) and (4)—
- (a) a reference to standards or recommendations is a reference to standards or recommendations as revised or re-issued from time to time;
 - (b) “CEN” means the European Committee for Standardisation;
 - (c) “CIE” means the International Commission for Illumination; and
 - (d) “IEC” means the International Electrotechnical Commission.
- (9) In paragraph (5)(a) “level” means the combination of irradiance, radiant exposure and radiance to which an employee is exposed.