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Unwanted reflections from the active and inactive areas of display surfaces visible during use



National foreword

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Unwanted reflections from the active and inactive areas of display surfaces visible during use

Réflexions non désirées des zones actives et inactives des surfaces de l'écran visibles durant l'utilisation



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Foreword

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The committee responsible for this document is ISO/TC 159, *Ergonomics*, Subcommittee SC 4, *Ergonomics* of human-system interaction.

Unwanted reflections from the active and inactive areas of display surfaces visible during use

1 Scope

This Technical Report provides users a summary of the existing knowledge about ergonomics requirements for unwanted reflections on electronic displays. The document furthermore provides some guidance on specification of unwanted reflections.

NOTE ISO 9241 contains normative requirements related to unwanted reflections. It is possible that the information contained in this Technical Report will be used for a future update of ISO 9241.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1

asthenopia

weakness or tiring of the eyes accompanied by pain, headache, and dim vision

Note 1 to entry: Symptoms include pain in or around the eyes; headache, usually aggravated by using the eyes for close work; fatigue; vertigo; and reflex symptoms such as nausea, twitching of facial muscles, or migraine.

[SOURCE: Taber's Medical Dictionary]

2.2

disability glare

glare that impairs the vision of objects without necessarily causing discomfort

2.3

direct glare

glare caused by self-luminous objects located in the visual field, especially near the line of sight

2.4

discomfort glare

glare that causes discomfort without necessarily impairing the vision of objects

2.5

glare

condition of vision in which there is discomfort or a reduction in the ability to see details or objects, caused by an unsuitable distribution or range of luminance, or by extreme contrasts

2.6

glare by reflection

glare produced by reflections, particularly when the reflected images appear in the same or nearly the same direction as the object viewed

2.7

gloss (of a surface)

mode of appearance by which reflected highlights of light sources of objects are perceived as superimposed on the surface due to the directionally selective properties of that surface

2.8

glossmeter

instrument for measuring the various photometric properties of a surface giving rise to gloss