

## SLOVENSKI STANDARD SIST EN ISO 24157:2008/oprA1:2019

01-maj-2019

Očesna optika in instrumenti - Postopek prikaza aberacije človeškega očesa - Dopolnilo A1 (ISO 24157:2008/DAmd 1:2019)

Ophthalmic optics and instruments - Reporting aberrations of the human eye - Amendment 1 (ISO 24157:2008/DAmd 1:2019)

Augenoptik und ophthalmische Instrumente - Verfahren zur Darstellung von Abbildungsfehlern des menschlichen Auges -Änderung 1 (ISO 24157:2008/DAmd 1:2019)

Optique et instruments ophtalmiques - Méthodes de présentation des aberrations de l'oeil humain - Amendement 1 (ISO 24157:2008/DAmd 1:2019)

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11.040.70 Oftalmološka oprema Ophthalmic equipment

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## Ophthalmic optics and instruments — Reporting aberrations of the human eye

#### **AMENDMENT 1**

Optique et instruments ophtalmiques — Méthodes de présentation des aberrations de l'oeil humain AMENDEMENT 1

ICS: 11.040.70

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This document was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 7, *Ophthalmic optics*.

This Draft Amendment amends first edition (ISO 24157:2008)

The additions compared to the previous edition are as follows:

- Term 3.1 line of sight revised;
- Symbol N in table 1 added;
- Correction of Zernicke coefficients in Annex E, Table E.1.

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# Ophthalmic optics and instruments — Reporting aberrations of the human eye

#### **AMENDMENT 1**

Replace term 3.1 by

#### 3.1

#### line of sight

ray path from the point of interest (i.e. point of fixation) in object space to the centre of the entrance pupil of the eye and its continuation in image space from the centre of the exit pupil to the retinal point of fixation (generally the foveola)

Note 1 to entry These two parts of the ray path are distinct and separate segments.

[SOURCE: ISO 13666:2019, 3.2.24]

*In Table 1 – Symbols, add the following line:* 

Symbol	Name (child prat	Definition given in
N	Number of sample points	-

In Annex E, Table E.1: replace  $row(Z_5^{-3})$  to  $row(Z_5^{3})$  by the following:

#### Table 1

Symbol	Polar form	Cartesian form	Common name
$Z_5^{-3}$	$\sqrt{12(5\rho^5-4\rho^3)}$ sin $(3\theta)$	$\sqrt{12(15x^4y + 10x^2y^3 - 12x^2y - 5y^5 + 4y^3)}$	
$Z_5^{-1}$	$\sqrt{12(10\rho^5-12\rho^3-3\rho)}\sin(\theta)$	$\sqrt{12(10x^4y + 20x^2y^3 + 10y^5 - 12x^2y - 12y^3 + 3y)}$	
$Z_5^1$	$\sqrt{12(10\rho^5-12\rho^3-3\rho)\cos(\theta)}$	$\sqrt{12(10x^5+20x^3y^2+10xy^4-12xy^2-12x^3+3x)}$	
$Z_5^3$	$\sqrt{12(5\rho^5 - 4\rho^3)\cos(3\theta)}$	$\sqrt{12(5x^5-10x^3y^2+12xy^2-15xy^4-4x^3)}$	