

ANSI Z80.28-2017

American National Standard

*for Ophthalmics –
Methods of Reporting
Optical Aberrations of Eyes*



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Z80.28-2017
Revision of
ANSI Z80.28-2010

American National Standard
for Ophthalmics –

Methods for Reporting
Optical Aberrations of Eyes

Secretariat
The Vision Council

Approved March 27, 2017
Published August 21, 2017

American National Standards Institute, Inc.

American National Standard

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Developed by

The Accredited Committee Z80 for Ophthalmic Standards -

The Vision Council
Z80 Secretariat
225 Reinekers Lane
Suite 700
Alexandria, VA 22314

Published by

The Vision Council
225 Reinekers Lane
Suite 700
Alexandria, VA 22314

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Foreword (This foreword is not part of American National Standard ANSI Z80.28-2017.)

This American National Standard addresses the communication of aberrations of the eye. With the dramatic increase in applications associated with aberrations, it is important to have uniform methods for reporting data so that it is understandable across applications.

ANSI Z80.28-2017 was adapted by a group of experts within the ANSI Instruments and Low Vision Devices Subcommittee under the chair of William L. Brown, O.D., Ph.D. It is a performance standard.

The major change made in this edition of the standard is a clarification of 5.2 that 1) changes the term "wavefront gradient fields" to "wavefront ray deflection", and 2) places the emphasis of the clause on describing the direction of propagation of rays that are the normals to the wavefront error surface being measured.

Suggestions for improvement of this standard will be welcome. They should be sent to the Vision Council, 225 Reinekers Lane, Suite 700, Alexandria, VA 22314.

This standard was processed and approved for submittal to ANSI by the Accredited Standards Committee on Ophthalmic Optics, Z80. Committee approval of this standard does not necessarily imply that all committee members voted for its approval. At the time of approval of this standard, the Z80 Committee consisted of the following members:

Thomas White, M.D., Chair
Quido Cappelli, Vice-Chair
William Benjamin, Secretary
Michael Vitale, Secretariat

<i>Organization Represented</i>	<i>Name of Representative</i>
Abbott Medical Optics.....	Leonard Bormann
Advance Medical Technologies Association	Michael Pfleger
American Academy of Ophthalmology	Thomas C. White
American Academy of Optometry.....	David S. Loshin
American Ceramic Society	Lyle Rubin
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Optical Laboratory Association.....	Steve Sutherlin
Sunglass Association of America	Tibor Gross
The Vision Council.....	Michael Vitale
US ISO TC 172/SC7.....	Michael Vitale

The Subcommittee on Instruments and Low Vision Devices, which modified this American National Standard, had the following members:

William L. Brown, O.D., Ph.D., Chair

Michael Belin	David Luce
Donald Calogero	Nick Mileti
Charles E. Campbell	Sharon Miller
Bruce Drum	Eli Peli
Matthew Everett	Michael Pflieger
Thomas Garrido	Robert Rosenberg
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Priya Janakiraman	John Townsend
Tony Ko	Michael Vitale
Stephen Klyce	Thomas White

American National Standard
for Ophthalmics –

Methods for Reporting Optical Aberrations of Eyes

1. Scope

This standard specifies standardized methods for reporting the optical aberrations of eyes.

2. Normative References

The following standards contain provisions which, through reference in this text, constitute provisions of this American National Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

ISO 8429: 1986, *Optics and Optical Instruments – Ophthalmology – Graduated Dial Scale*