

American National Standard for Electric Lamps— Specifications for the Chromaticity of Fluorescent Lamps

Secretariat:

**National Electrical Manufacturers Association** 

Approved: May 6, 2021

American National Standards Institute, Inc.

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Foreword (This foreword is not part of ANSI C78.376-2014 (R2021).)

This is a reaffirmation of the previous Standard.

Suggestions for improvement of this standard are welcome. They should be sent to:

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This standard was developed and approved for submittal to ANSI by Accredited Committee C78. Approval of this standard is not meant to imply that all Committee members voted to approve it.

ANSI C78.376-2014 modified specifications for the chromaticity of fluorescent lamps in ANSI C78.376-2001. It updated and partially harmonized this ANSI standard with the IEC chromaticity color point objectives and chromaticity tolerance in IEC60081, Annex D. The major changes:

- a) The color chromaticity mean shall be within a 4-step MacAdam ellipse of the objective chromaticity.
- b) 95% of samples shall be within a 5-step MacAdam ellipse of the objective chromaticity.
- c) The 3500K objective chromaticity shall be changed to the IEC 3500K objective chromaticity.

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#### 1 Scope

This standard covers the objectives and tolerances for the chromaticity of fluorescent lamps at their normal 100 hour rating point. The colors included are 2700K, 3000 K/warm white, 3500K/white, 4000K/4100K/cool white, 5000K, and 6500K/daylight. The lamp under test shall be operated under reference conditions as specified in ANSI C78.375, *Guide for Operation of Fluorescent Lamps*, and in the relevant C78 lamp standard. For lamps with non-standardized chromaticity coordinates, the rated x and y values shall be assigned by the manufacturer or responsible vendor.