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American National Standard for Electric Lamps—Fluorescent Lamps—Guide for Electrical Measures

Secretariat:

National Electrical Manufacturers Association

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American National Standards Institute

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Foreword [This foreword is not part of American National Standard C78.375A-2014 (R2020).]

Suggestions for improvement of this Standard are welcome. They should be sent to the Secretary, ASC C78, National Electrical Manufacturers Association, 1300 North 17th Street, Suite 900, Rosslyn, Virginia 22209.

This Standard was processed and approved for submittal to ANSI by Accredited Standards Committee on Electric Lamps, C78. Approval of the Standard is not meant to imply that all Committee Members voted to approve it.

CONTENTS

Figures

1 Scope

This Standard describes the procedures to be followed and the precautions to be observed in obtaining uniform and reproducible measurements of the electrical characteristics of fluorescent lamps under Standard conditions when operated on alternating current (ac) circuits. These methods are applicable both to lamps having hot cathodes—switch-start (preheat-start), rapid-start (continuously heated cathodes), or instant-start— and to lamps of the cold-cathode variety.

The electrical characteristics usually measured are lamp current, lamp voltage, and lamp power. In the case of rapid-start lamps, the power measurements may include both the arc watts[1] and the cathode watts. Total lamp power is the sum of arc watts and cathode watts. The methods noted in this Standard apply to fluorescent lamps operated at common power-line frequencies (50 and 60 Hz) or high frequency.

[1] Arc watts is the term used for the power consumed by the discharge only and does not refer to any power that may be supplied to the lamp cathodes from a separate voltage source.