



ANSI C82.77-5-2023

*American National Standard for Lightning Equipment—  
Voltage Surge Requirements*

Secretariat

**National Electrical Manufacturers Association**

Approved: August 4, 2023

**American National Standards Institute, Inc.**

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**Foreword** (This foreword is not part of ANSI C82.77-5-2023.)

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

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## Preface

In order to minimize overlapping requirements and to streamline compliance with standards, a joint effort between the C136 and C82 committees has been undertaken to align some of the requirements of the following documents:

ANSI C136.2-2018	<i>American National Standard for Roadway and Area Lighting Equipment—Dielectric Withstand and Electrical Transient Immunity Requirements</i>
ANSI C82.77-5-2017	<i>American National Standard for Lighting Equipment—Voltage Surge Requirements</i>

While both standards cover voltage surge limits and testing requirements, ANSI C136.2 specifically focuses on roadway and area lighting applications while ANSI C82.77-5 covers all types of lighting applications. Along with other updates and corrections, this latest edition of ANSI C82.77-5 incorporates verbiage from ANSI C136.2 specifically for roadway and outdoor area lighting to align the requirements.

Furthermore, the following clarifications and additions are new to this edition:

- Addition of Section 1.6, “Test Methods and Requirements,” to standardize test methodology across all luminaire applications.
- Addition of Section 2.1, “General,” to standardize Ring Wave and Combination Wave surge tests.
- Tables 5 through 18 were rearranged for better clarity.