

ANSI C78.389--2004 (R2018)

Consolidation and Revision:

ANSI C78.386-1989, C78.387-1990, C78.388-1989 and all Supplements/Amendments

American National Standard

Approved: June 8, 2018

Secretariat: ANSLG-- National Electrical Manufacturers Association

for electric lamps—

High Intensity Discharge—
Methods of Measuring Characteristics

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American National Standard

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Foreword (This foreword is not part of ANSI C78.389-2004.)

Suggestions for improvement of this standard should be submitted to the Secretariat C78, American National Standard Lighting Group, 1300 North 17th Street, Suite 1847, Rosslyn VA 22209.

This standard was processed and approved by Accredited Standards Committee on Electric Lamps, C78, and its Working Group, C78 WG 04 for High-Intensity Discharge Lamps. Committee approval of the standard does not necessarily imply that all committee members voted for that approval.

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ANSI C78.389-1989 (S2018)

Table of Contents

Introduction.....	7
1. Scope and purpose	7
2. Normative references	7
3. Measurement of Lamp Voltage, Current, and Power	9
3.1. General.....	9
3.2. Power supply.....	9
3.2.1. Harmonic content	9
3.2.2. Voltage regulation	9
3.2.3. Source Impedance	9
3.3. Ambient condition.....	9
3.4. Ballasts	9
3.5. Circuits and equipment grounding.....	10
3.6. Lamp position.....	11
3.7. Lamp stabilization.....	11
3.7.1. General	11
3.7.2. Stabilization requirements	11
3.8. Instruments	13
3.8.1. Accuracy	13
3.8.2. Impedance limitations	13
3.8.3. Root-mean-square measurements	13
3.9. Corrections to compensate for presence of instruments in the lamp circuit	13
3.9.1. General	13
3.9.2. Restoration-of-light method	14
3.9.3. Correction for lamp ammeter reading	14
3.9.4. Correction for lamp voltmeter reading	15
3.9.5. Correction for lamp wattmeter reading	15
3.10. Measurement of lamp amperes and volts at nominal lamp wattage	15
3.10.1. Preferred method	15
3.10.2. Alternate Method	16

4.	Measurement of lamp current crest factor	16
4.1.	General.....	16
4.1.1	Methods of measurement	16
4.1.2	Measurement of lamp current crest factor during lamp warm-up	16
5.	Measurement of lamp starting.....	17
5.1.	General.....	17
5.2.	Conditioning of lamps for starting test.....	17
5.3.	Test equipment and power supply.....	17
5.3.1.	General	17
5.4	Procedures	18
5.4.1.	Procedure A for lamps not requiring a starting pulse.....	18
5.4.2.	Procedure A for lamps requiring a starting pulse	19
6	Measurement of warm-up time	19
6.1.	General.....	19
6.2.	Test conditions.....	19
6.3.	Selection and handling of lamps.....	20
6.4.	Procedure	20
7.	Testing lamps at maximum peak voltage across terminals	20
7.1.	General.....	20
7.2.	Circuit for measurement.....	20
7.2.1.	Circuit for testing lamps not requiring a starting pulse	20
7.2.2.	Circuit for testing pulse-start lamps at maximum peak voltage across lamp terminals.....	21
7.3.	Procedures	21
7.3.1.	Procedure for testing lamps not requiring a starting pulse.....	21
7.3.2.	Procedure for testing pulse start lamps.....	21
	Measurement of maximum bulb and base temperature.....	21
8.1.	General.....	22
8.2.	Procedure	22
8.2.1.	Thermocouple method for bulb temperature.....	22
8.2.2.	Thermocouple method for base temperature	23

ANSI C78.389-1989 (S2018)

8.2.3.	Infrared-radiation method for bulb temperature.....	23
9.	Measurement of lamp reignition voltage spike	23
9.1.	General.....	23
9.2.	Test circuit and equipment.....	23
9.3.	Procedure	24
10.	Measurement of lamp reignition voltage (V_r)	24
10.1.	General	24
10.2.	Test circuit and equipment.....	24
10.3.	Procedure	24
11.	Measurement of luminaire effect on lamp voltage rise.....	25
11.1.	General	25
11.2.	Test conditions	25
11.3.	Procedure	25
Annex A (normative):... Containment testing procedure for metal halide lamps with quartz arc tubes.....		33
Annex B (normative):.Containment testing procedure for metal halide lamps with ceramic arc tubes.....		37
Annex C (informative): Procedures for measurement of lamp starting.....		40
C.1	Procedure B for lamps not requiring a starting pulse	40
C.1.1	Metal Halide lamps	40
C.1.2	High-pressure Sodium and Mercury Lamps	40
C.2	Procedure B for lamps requiring a starting pulse.....	41
C.2.1	Metal Halide lamps	41
C.2.2	High-pressure Sodium lamps	42

Introduction

This standard is a consolidation of three previous Method of Measurement standards:

C78.386, Mercury Lamps – Methods of Measuring Characteristics

C78.387, Metal Halide Lamps – Methods of Measuring Characteristics

C78.388, High-Pressure Sodium Lamps – Methods of Measuring Characteristics.

The reason for the consolidation is that in most cases the method of measurement is identical for all three High Intensity Discharge (HID) lamp types. However, some statements refer to only one or two of the three types. When reference to one or two lamp types is necessary the given lamp type discussed is either given a separate sub-clause or the name of the lamp type is shown in bold text.

1. Scope and purpose

This standard describes the procedures to be followed and the precautions to be observed in measuring the electrical characteristics of high intensity discharge lamps as specified in the American National Standard Specifications for Mercury (Hg), High-pressure Sodium (HPS) and Metal Halide (MH) Lamps, as referenced in clause 2, Normative references.¹

It is the purpose of this standard to outline methods of measurement that will make it possible to obtain reproducible and accurate measurements of High Intensity Discharge lamp characteristics.

Deviations from the procedures given in this standard are permissible for production or other testing, provided that the methods used give results in substantial agreement with the methods given herein. In cases of doubt, reference shall be made to the methods specified in the appropriate American National standard, referenced in clause 2, to establish the validity of the results obtained by any alternate procedure.

¹ In the absence of an appropriate lamp standard, consult with particular lamp manufacturer offering the lamp in question