



**BSR/ASHRAE Addendum a to  
ANSI/ASHRAE Standard 185.2-2014**

**Public Review Draft**

**Proposed Addendum a to Standard  
185.2-2014, Method of Testing  
Ultraviolet Lamps for Use in HVAC&R  
Units or Air Ducts to Inactivate  
Microorganisms on Irradiated Surfaces**

**First Public Review (March 2020)  
(Draft shows Proposed Changes to Current Standard)**

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**FOREWORD**

This proposed change fixes an error in the original document. The intended airflow rate was 2000 cfm (500 fpm). For unknown reasons, the value was put into the document incorrectly. This removes the unintended value and replaces it with the correct one.

**[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]**

**Proposed changes:**

**4.3.2** Test duct shall be capable of providing three test temperatures of 12.78°C, 23.89°C, and 48.89°C ± 2.2°C (55°F, 75°F, and 120°F ± 4°F). Relative humidity shall be 50% ± 5%, and air velocity shall be ~~2.39 ± 0.05 mps (470 ± 10 fpm)~~ 2.54 ± 0.05 m/s (500 ± 10 fpm).

**4.4.2.4** Start airflow through the duct and set the appropriate test conditions for the measurements. Air velocity shall be 2.54 ± 0.05 m/s (500 ± 10 fpm), ~~2.39 ± 0.05 mps (470 ± 10 fpm)~~, and relative humidity shall be 50% ± 10%, for every test. Measurements are to be conducted at each of three air temperatures: 12.8°C (55°F), 23.9°C (75°F), and 48.9°C (120°F).

**TABLE 5-1 System Qualification Measurement Requirements**

Parameter	Control Limits
Air velocity uniformity is based on traverse measurements over a nine-point cross-sectional grid at the test flow rate. The velocity measurements shall be made with an instrument having an accuracy of 10% with 0.05 meter per second resolution.	CV* < 10%
Test velocity shall be <del>0.05 mps (470 ± 10 fpm)</del>	<u>2.54 ± 0.05 m/s (500 ± 10 fpm)</u> <del>2.39 ±</del>
Duct leakage Ratio of leak rate to test flow rate.	Ratio < 1.0%
Determined by sealing the duct at inlet filter bank and at the ASME flow nozzle locations followed by metering in air to achieve a steady duct pressure. The flow rate of the metering air (equal to the leakage flow) is measured for a range of duct pressures.	

\*CV = coefficient of variance