



**BSR/ASHRAE Addendum a to
ANSI/ASHRAE Standard 185.1-2015**

Public Review Draft

**Proposed Addendum a to Standard
185.1-2015, Method of Testing UV-C
Lights for Use in Air-Handling Units
or Air Ducts to Inactivate Airborne
Microorganisms**

**First Public Review (May 2019)
(Draft shows Proposed Changes to Current Standard)**

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FOREWORD: The liquid that is used in generating a bioaerosol will provide different levels of protection for the microorganism. For the tests to be repeatable, the generation of the bioaerosol must result in equal levels of protection. Thus, we have added the requirement for the liquid to be the same.

[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.]

Change Section 6.1.2 as follows:

6.1.2 Bioaerosol Preparation and Generation. Preparation of the test organism suspension for the aerosolization requires that the test organism be grown in the laboratory and the suspension prepared for aerosol generation in the test duct. The microbial challenge suspensions are prepared by inoculating the test organism onto solid or into liquid media, incubating the culture until mature, ~~wiping~~harvesting organisms from the surface of the pure culture (if solid media), and ~~eluting~~suspending them into sterile fluid to a known concentration to serve as a stock solution. The organism preparation is then diluted into the nebulizing fluid for Collison preparation. The nebulizing liquid shall be sterile DI water. The nebulizing fluid is quantified on agar plates to enumerate the number of test organisms in the suspension. The number of culturable organisms shall be at least 10^6 CFU per mL.