

Australian Standard™

Cleanrooms, workstations, safety cabinets and pharmaceutical isolators—Methods of test

Method 11: Determination of airflow parallelism in laminar flow cleanrooms

1 SCOPE This Standard sets out the method for determining the parallelism of airflow throughout the work zone of a laminar flow cleanroom and the capability of the room to limit the dispersion of internally generated contamination.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

1386 Cleanrooms and clean workstations

1386.1 Part 1: Principles of clean space control

1807 Cleanrooms, workstations, safety cabinets and pharmaceutical isolators—
Methods of test

1807.0 Part 0: List of methods and apparatus

3 DEFINITIONS For the purpose of this Standard the definitions given in AS 1386.1 and AS 1807.0 apply.

4 PRINCIPLE Smoke is generated within the work zone at a point source and the degree of dispersion is mapped. From the data so obtained, a diagram is prepared showing the parallelism and dispersion pattern.

5 APPARATUS The following apparatus as specified in AS 1807.0 is required:

- (a) Smoke generator.
- (b) Dispersion markers.

6 PROCEDURE The procedure shall be as follows:

- (a) Divide the entrance plane of the work zone into grids of equal area having approximate dimensions of 2 m × 2 m or smaller, as appropriate for the area(s) to be tested.

NOTE: For the purpose of this test, the entrance plane is parallel to and 600 mm downstream from the filter face.

- (b) Set up the smoke generator outlet tube at the centre of one grid of the workzone entrance plane, with the outlet tube pointing in the direction of airflow.

The smoke generator itself should be downstream and outside of this grid area.

- (c) Introduce smoke isokinetically into the work zone.