Australian Standard®

Automatic fire detection and alarm systems—Method of test for actuating devices

Method 23: Weathering test

1 SCOPE This Standard sets out the method for evaluating the operation of actuating devices after subjecting them to a weathering test.

2 APPLICATION This Standard is intended to be used in conjunction with the performance requirements in the appropriate device Standard.

3 PRINCIPLE The actuating device is subjected to a specific weathering test, checked for damage and monitored for abnormal operation.

4 APPARATUS The apparatus shall consist of water-cooled, 6000 W xenon arc equipment with 960 mm nominal diameter specimen rack with automatic control of temperature, humidity and cycles. The lamp assembly shall be capable of maintaining a minimum of 3 $\mu W/cm^2$ per 3 nm bandpass at 330 nm at sample distance. This output shall be periodically monitored.

5 PROCEDURE The procedure shall be as follows:

(a) Mount the actuating device in the apparatus which shall be set to operate at a temperature of 48 ±2°C and a relative humidity of 33 ±5 percent.

(b) Expose the actuating device to a series of cycles for a period of 1000 h. Each cycle shall consist of 1 h radiation and 30 min water spray.

(c) At the conclusion of the weathering test, carry out a frangible element test in accordance with AS 2362.24.

6 TEST REPORT The following shall be reported:

(a) Information identifying the actuating device.

(b) Whether the actuating device generated a fault or initiated an alarm signal during the tests.

(c) Reference to this Australian Standard, i.e. AS 2362.23.