## **ASTM E648**

# **CRITICAL RADIANT FLUX**

### **GENERAL PRINCIPLE**

This procedure is designed to measure the critical radiant flux at flame out, of horizontally mounted floor covering systems exposed to a flaming ignition in a test chamber which provides a graded radiant heat energy environment. The imposed radiant flux simulates the thermal radiation levels likely to impinge on the floors of a building whose upper surfaces are heated by flames of compartment. The test result is an average critical radiant flux (watts/square cm) which indicates the level of radiant heat energy required to sustain flame propagation in the flooring system. Theoretically, if a room fire does not impose a radiant flux that exceeds this critical level on a corridor floor covering system, flame spread will not occur.

### TEST RESULTS

AVERAGE CRITICAL RADIANT FLUX 0.4 watts/square cm

### **INTERPRETATION OF THE RESULTS**

In this case, the average critical radiant flux is 0.4 watts/square cm. so, if the room fire does not expose a radiant flux that exceeds 0.4 watts/square cm on a corridor floor covering system, flame spread will not occur.

The most meaningful interpretation is to compare the Critical Radiant Flux results of all NOTRAX<sup>®</sup> Floor Matting products.

All testing of NOTRAX<sup>®</sup> Floor Matting has been performed by an independent testing laboratory.

