

Standard Method of Test for LIGHT SENSITIVITY OF TRAFFIC PAINT¹



ASTM Designation: D 712 - 47

ADOPTED, 1946; REVISED, 1947.²

This Standard of the American Society for Testing Materials is issued under the fixed designation D 712; the final number indicates the year of original adoption as standard or, in the case of revision, the year of last revision.

Scope

1. This method of test is intended for determining the color change produced by sunlight on paint material intended for use as traffic or pavement-marking paint.

Preparation of Test Panels

2. (a) *Preferred*.—Two test films of the traffic paint to be tested and two films of a mutually agreed upon standard paint shall be prepared. The films shall be prepared on clean, smooth plate glass panels. The paint films shall be at least $1\frac{1}{2}$ by 3 in. and of uniform and sufficient thickness to provide complete hiding. It is recommended that the films be applied by a Bradley or other suitable mechanical spreader. Following application, the films shall be dried for a period of 24 hr. under normal room conditions (approximately 25 C. and 50 per cent relative humidity).

(b) *Alternate*.—Two test films of the traffic paint to be tested shall be applied to panels with a flat opaque diffusing

surface. The films shall be at least $1\frac{1}{2}$ by 3 in. and of uniform and sufficient thickness to provide complete hiding. The films shall be applied and dried as described in Paragraph (a).

Procedure

3. (a) *Preferred*.—One test panel of the paint to be tested and of the mutually agreed upon standard paint prepared as described in Section 2 (a) shall be exposed without water spray for a period of 4 hr. at equal distances (15 or 18 in.) from a carbon-arc light source conforming to the Tentative Recommended Practice for Characteristics of Standard Carbon Arc Accelerated Weathering Unit (A.S.T.M. Designation: E 42) of the American Society for Testing Materials.³ Immediately after completion of the exposure, each exposed film shall be compared for change in brightness or discoloration with the corresponding duplicate unexposed film. The test paint shall not show greater loss in brightness nor greater discoloration than the standard.

(b) *Alternate*.—One of the test panels prepared as described in Section 2 (b)

¹ Under the standardization procedure of the Society, this method is under the jurisdiction of the A.S.T.M. Committee D-1 on Paint, Varnish, Lacquer, and Related Products.

² Prior to adoption as standard, this method was published as tentative from 1943 to 1946.

³ See p. 1311.