



Natural Weathering Exposure Tests for Interior Trims/Materials

1 Introduction

Note: Nothing in this standard supercedes applicable laws and regulations.

Note: In the event of conflict between the English and domestic language, the English language shall take precedence.

1.1 Purpose. This test procedure describes procedures for conducting natural weathering exposure tests to evaluate the exposure tolerance of interior automotive materials, components and assemblies. The tests are conducted in climatic regions which offer extreme solar environments.

1.2 Applicability. Applicable to all parts within the vehicle interior which have surfaces visible to the customer.

1.3 Remarks. This test procedure was developed to create a common method for evaluating natural weathering.

2 References

Note: Only the latest approved standards are applicable unless otherwise specified.

2.1 External Standards/Specifications.

ISO 105-A02

ISO 2813

SAE J1545

2.2 GM Standards/Specifications.

GMW6992

GMW14444

3 Resources

3.1 Facilities.

3.1.1 Calibration. The test facilities and equipment shall be in good working order and shall have a valid calibration label.

3.1.2 Alternatives. Alternative test facilities and equipment may also be used. However, all measuring variables as specified in this standard shall be determined correctly with respect to their physical definition.

3.1.3 Test Location Area.

- Code L1 = Phoenix, Arizona, United States of America (USA).
- Code L2 = Miami or Southern Area, Florida, USA.

3.2 Equipment.

3.2.1 Solar Exposure Equipment.

3.2.2 Test Fixtures.

- Code F1 = High temperature limited, enclosed with operable vents, under glass, static box.
- Code F2 = High temperature limited, enclosed with operable vents, under glass, tracking box. See Figure 1, Figure 2, Figure 3, and Figure 4.
- Code F3 = High temperature limited, enclosed with operable vents, under glass, dual-axis tracking box, with upper and lower mirrors. See Figure 5.



Figure 1: Code F2 Test Fixture with Instrument Panel Trim Assembly



Figure 2: Code F2 Test Fixture with Floor Console Assembly



Figure 3: Code F2 Test Fixture with Floor Console Components

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Figure 4: Code F2 Test Fixture with Door Trim



Figure 5: Code F3 Test Fixture with Instrument Panel Upper Trim