



## ข้อกำหนดการจัดทำเครื่องหมายจราจรบนผิวทาง

# รายชื่อมาตรฐานและองค์กร

- ASTM E1710 : Standard Test Method for Measurement of Retroreflective Pavement Marking Materials with CEN-Prescribed Geometry Using a Portable Retroreflectometer (RL 30 meters)
- ASTM E2177 : Standard Test Method for Measuring the Coefficient of Retroreflected Luminance (RL) of Pavement Markings using the Bucket Method in a Condition of Wet Recovery (RL Wet)
- ASTM E2302 : Standard Test Method for Measurement of the Luminance Coefficient Under Diffuse Illumination of Pavement Marking Materials Using a Portable Reflectometer (Qd)

# รายชื่อมาตรฐานและองค์กร

- ASTM E2832 : Standard Test Method for Measuring the Coefficient of Retroreflected Luminance of Pavement Markings in a Standard Condition of Continuous Wetting (RL-2) (RL Rain)
- EN 1436 : Road marking materials - Road marking performance for road users and test methods (RL & Qd 30 Meters)
- มอก. 415 – 2548 : สีจราจร (Traffic Paint)
- มอก. 542 – 2549 : กำหนดหลักเกณฑ์เฉพาะในการตรวจสอบเพื่ออนุญาตสำหรับผลิตภัณฑ์อุตสาหกรรมวัสดุเทอร์โมพลาสติกสะท้อนแสงสำหรับทำเครื่องหมายบนผิวทาง

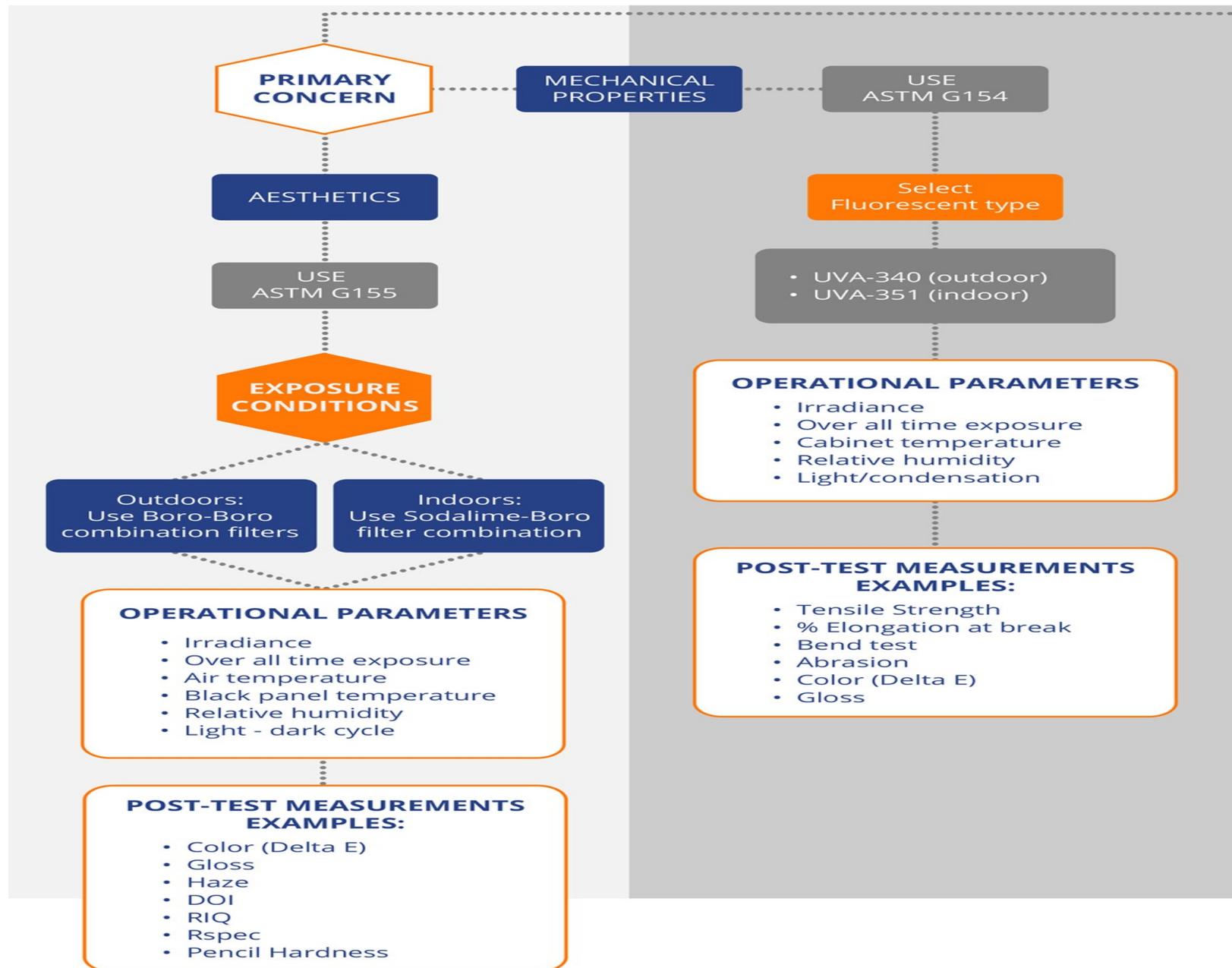
# Typical Test Conditions for ASTM D4587

Parameters	Specifications
Conditioning condition	23 ± 2°C (73 ± 3°F)
Conditioning period	24h (Baked and radiation-cured coatings) 7 days (All other coatings)
Exposure period	Baked coating : 24 hrs. Radiation-cured coatings : 24 hrs. All other coatings : 7 days
Test cycles	Cycle 1 (Automotive coatings) Cycle 2 (Industrial maintenance coatings) Cycle 3 (Exterior wood coatings) Cycle 4 (General metal coatings)

# Typical Test Conditions for ASTM D4587

**TABLE 1 Test Cycles Commonly Used for Fluorescent UV–Condensation Exposure Testing of Paints and Related Coatings<sup>A</sup>**

Cycle Number	Cycle Description	340 nm Irradiance <sup>B,C</sup>	Black Panel Temperature <sup>D</sup>	Typical Uses <sup>E</sup>
1	8 h UV 4 h condensation Repeated continuously	0.83 W/(m <sup>2</sup> ·nm) dark period	70 ± 2.5°C (158 ± 5°F) 50 ± 2. °C (122 ± 5°F)	Automotive coatings <sup>F</sup>
2	4 h UV 4 h condensation Repeated continuously	0.89 W/(m <sup>2</sup> ·nm) dark period	60 ± 2.5 (140 ± 5°F) 50 ± 2.5 (122 ± 5°F)	Industrial maintenance coatings <sup>G</sup>
3	4 h UV 20 h condensation Repeated continuously	0.89 W/(m <sup>2</sup> ·nm) dark period	60 ± 2.5 (140 ± 5°F) 50 ± 2.5 (122 ± 5°F)	Exterior wood coatings
4	8 h UV 4 h condensation Repeated continuously	0.89 W/(m <sup>2</sup> ·nm) dark period	60 ± 2.5 (140 ± 5°F) 50 ± 2.5 (122 ± 5°F)	General metal coatings



## UV Test Standard / Practices

- [ASTM G154](#) “Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials”
- [ASTM G155](#) “Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials”
- ASTM D7869 “Standard Practice for Xenon Arc Exposure Test with Enhanced Light and Water Exposure for Transportation Coatings”
- [ASTM D2565](#) “Standard Practice for Xenon-Arc Exposure of Plastics Intended for Outdoor Applications”
- [ASTM D5208](#) “Standard Practice for Fluorescent Ultraviolet (UV) Exposure of Photodegradable Plastics”
- [ASTM D5894](#) “Standard Practice for Cyclic Salt Fog/UV Exposure of Painted Metal (Alternating Exposures in a Fog/Dry Cabinet and a UV/Condensation Cabinet)”

## UV Test Standard / Practices

- [ASTM D6695](#) “Standard Practice for Xenon-Arc Exposures of Paint and Related Coatings”
- [ISO 4892-2](#) “Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps”
- [ISO 4892-3](#) “Plastics — Methods of exposure to laboratory light sources — Part 3: Fluorescent UV lamps”
- [SAE J2412](#) “Accelerated Exposure of Automotive Interior Trim Components Using a Controlled Irradiance Xenon-Arc Apparatus”
- [SAE J2527](#) “Performance Based Standard for Accelerated Exposure of Automotive Exterior Materials Using a Controlled Irradiance Xenon-Arc Apparatus”
- [ASTM D4329](#) “Standard Practice for Fluorescent Ultraviolet (UV) Lamp Apparatus Exposure of Plastics”
- [ASTM D4459](#) “Standard Practice for Xenon-Arc Exposure of Plastics Intended for Indoor Applications”