

# TEST REPORT

## TEST INFORMATION:

**Test Report Number:** L00010

**Test Type:** Yellowing Index for Optic Material (Refer to ASTM E313)

**Test Model:** Green Cobra Luminaire Light Engine Optic Material

**Test Material:** TARFLON LEV1700KL

## TEST PERFORMED BY:

**Company:** Idemitsu Kosan Co., Ltd.

**Address:** 1-1 Anesakikaigan, Ichihara-shi, Chiba 299-0193, Japan

**Test Conductor:** Yusuke Aobi

**Test Completion Date:** August 15, 2016



## **DESCRIPTION OF UNIT UNDER TEST:**

**Test Model:** Green Cobra Luminaire Light Engine Optic Material

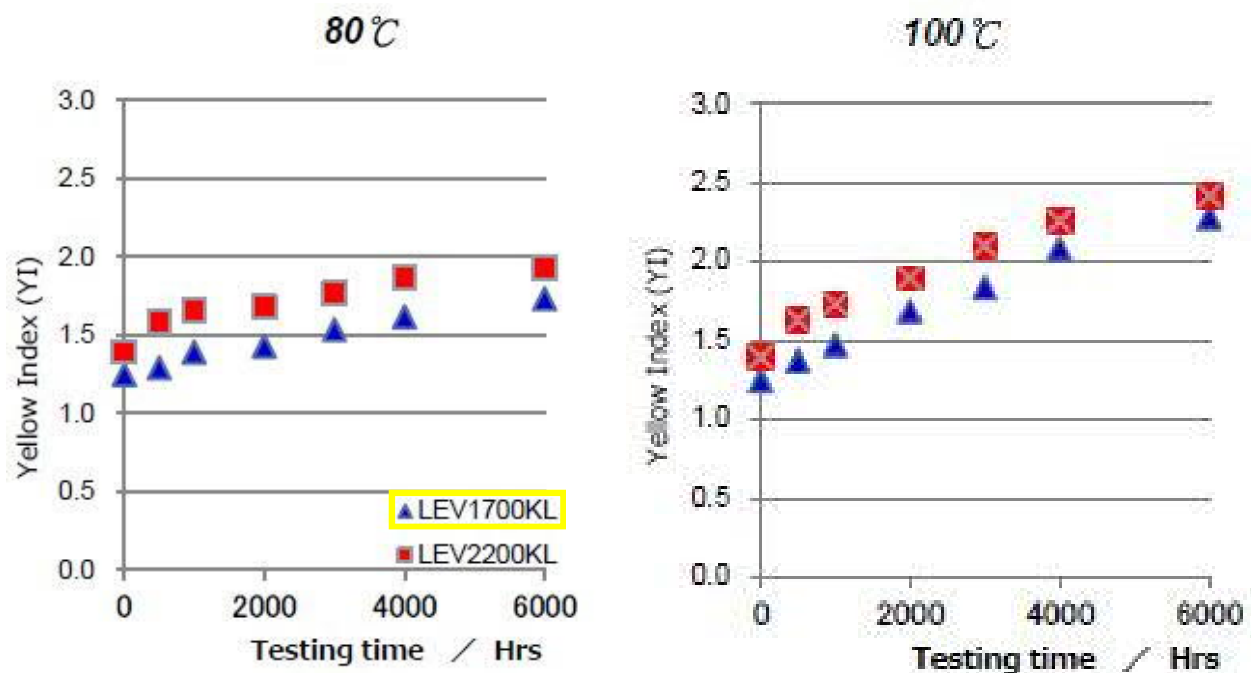
**Test Material:** TARFLON LEV1700KL

**Test Material Thickness:** 3.2mm

## **TEST DESCRIPTION:**

Multiple test samples underwent exposure to elevated temperature environment for 6,000 hours at 80C and 100C. Test samples were removed and inspected several times during temperature exposure for YI testing using a calibrated Gardner Spectrophotometer. The Yellowing Index of the LEV1700KL was measured according to ASTM D-1925, superseded by ASTM E313.

## **TEST DATA:**



**TEST RESULTS:**

The final Yellowing Index was measured to be less than 2 after 6,000 hours of elevated temperature exposure. At both temperatures, the YI data appears to be leveling off. A value of 2 is very low, especially when compared to the industry standard allowable of 30.

| Product   | Temperature (°C) | Time (hrs) | YI Value |
|-----------|------------------|------------|----------|
| LEV1700KL | 80               | 6,000      | 1.59     |
|           | 100              | 6,000      | 1.99     |