

# LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT VERIFICATION PROCEDURE

## THIN FILM OVEN

### Equipment

1. Ruler, readable to 1/8 inch.
2. Timer, readable to 0.1 second.

### Procedures

1. Open the oven door. Measure and record the distance from the shelf to the bottom of the thermometer bulb. Measure and record two distance along the shelf radius from the shelf's outer edge to the thermometer and from the thermometer to the shelf's center.
2. Perform the test according to AASHTO T179 or ASTM D1754. After placing the test samples in the oven, record the time needed for the oven to recover to test temperature.
3. Record the number of shelf rotations in one minute.
4. Record the oven temperature at half-hour intervals until the test is complete.

EQUIPMENT VERIFICATION RECORD

Inspected By: \_\_\_\_\_ Date \_\_\_\_\_

Apparatus: THIN-FILM OVEN (T179)(D1754) Make: \_\_\_\_\_

Identification No.: \_\_\_\_\_ Verification Freq. \_\_\_\_\_ MO.

Previous Verification Date: \_\_\_\_\_ Next Due Date: \_\_\_\_\_

Verification Equipment Used: \_\_\_\_\_

Verification Procedure: \_\_\_\_\_

Distance from the shelf to bottom of thermometer bulb: \_\_\_\_\_  
(6.4 mm; ¼ in)

Distance from the shelf outer edge to the thermometer: \_\_\_\_\_

Distance from the thermometer to the shelf's center: \_\_\_\_\_

Time needed for the oven to recover to test temperature: \_\_\_\_\_  
(within 15 min.)

Number of shelf rotations in one minute: \_\_\_\_\_ (5.5 ± 1 rpm)

Oven temperature at half hour intervals: \_\_\_\_\_ : \_\_\_\_\_ :  
\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ :  
\_\_\_\_\_ : \_\_\_\_\_ : (162 ± 1°C; 325 ± 2°F.)

Action Recommended: Repair \_\_\_\_\_ Replace \_\_\_\_\_ None \_\_\_\_\_

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CC: ENGINEERING TECHNICIAN MANAGER, EQUIPMENT TESTING