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Report No.: 38764
Order No.: AE38764
Client Reference: Quote #: N/A
Date: October 18, 2018

**HEMISPHERICAL SPECTRAL REFLECTANCE
TEST REPORT**

prepared for:

THE ULTIMATE COATINGS COMPANY

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presented by:

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This report contains 3 pages

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**HEMISPHERICAL SPECTRAL REFLECTANCE
TEST REPORT****1.0 INTRODUCTION**

This report presents results of spectral reflectance on the following five painted specimens coded:

1. Thermo-Seal 1500M "White"
2. Thermo-Seal 1500 "Rustic Taupe"
3. Thermo-Seal 1500 "Broome Camel"
4. Eco-Therm 2500 Elastomeric "Federal Spec # Olive 14255"
5. Eco-Therm 2500 Elastomeric "Light Grey"

2.0 TEST METHODS AND PROCEDURES

Hemispherical spectral reflectance measurements were performed in accordance with ASTM Standard Test Method E903. The measurements were performed with a PerkinElmer Lambda 950 Spectrophotometer utilizing an integrating sphere (Fig X1.3 of E903). Total reflectance measurements were obtained in the solar spectrum from 2500nm to 250nm at an incident angle of 8°. The measurements employ a detector-baffled, wall-mounted integrating sphere that precludes the necessity of employing a reference standard except to define the instrument's 100% line. The measurements are properly denoted as being 'hemispherical spectral reflectance'.

Total Solar reflectance was obtained by integrating the spectral data against Air Mass 1.5 direct (ASTM G173). All spectral data are submitted herewith in the original.

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3.0 OBSERVATIONS, DEVIATIONS, AND WAIVERS

Measurements were made on the coated side of the specimens.

With all test methods, there typically is a level of uncertainty for the test data due to the acceptable operating tolerances of the instrumentation and variation caused by the test method. The estimated tolerances are expected to be less than plus or minus 2% for most materials tested to ASTM E903.

4.0 RESULTS

| Specimen Code | % Solar Reflectance |
|--|---------------------|
| 1. Thermo-Seal 1500M "White" | 87.6 |
| 2. Thermo-Seal 1500 "Rustic Taupe" | 64.6 |
| 3. Thermo-Seal 1500 "Broome Camel" | 56.1 |
| 4. Eco-Therm 2500 Elastomeric "Federal Spec # Olive 14255" | 27.1 |
| 5. Eco-Therm 2500 Elastomeric "Light Grey" | 72.1 |