**TESTING SERVICES, INC.**
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# TEST REPORT

| | | | |
|---|---|---|---|
| **CLIENT:** | Display Products Inc<br>800 Fabric Xpress Way<br>Dallas TX 75234 | **REPORT NUMBER:**<br>**LAB TEST NUMBER:**<br>**DATE:** | 31661B<br>1644-3271<br>September 1, 2005 |

**SUBJECT:** Testing Services Inc was instructed by the client to perform testing to determine the specific optical density of smoke generated by solid materials and assemblies mounted in a vertical position.

**TEST PROCEDURE:** **ASTM E 662: *Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials, also complies with NFPA 258.***

**SCOPE OF TEST:** This test method employs an electrically heated radiant-energy source where the test specimens are exposed to either flaming or non-flaming (or both modes) conditions within a closed chamber. A photometric system with a vertical light path is used to measure the varying light transmission as smoke accumulates. The light transmittance measurements are used to calculate specific optical density of the smoke generated during the time period to reach the maximum value.

**SAMPLE ID:** RasterPrint™ Carpet

**CHAMBER CONDITIONS:**

| | |
|---|---|
| Radiometer Output: | 8.1 MV |
| Furnace Voltage: | 117 V |
| Pressure: | Positive Under Three Inches of Water |
| Irradiance: | 2.5 watts/cm.$^2$ |
| Burner Fuel: | Propane |

**TEST DATA:**

| | FLAMING | | | NON-FLAMING | | |
|---|---|---|---|---|---|---|
| **Specimen Number:** | **1** | **2** | **3** | **1** | **2** | **3** |
| Time to Attain TM (Minutes) | 5.8 | 5.3 | 5.8 | 13.2 | 10.8 | 18.96 |
| Specific Optical Density (Ds) at 1.5 min. | 38 | 47 | 13 | 3 | 3 | 2 |
| Specific Optical Density (Ds) at 4.0 min. | 90 | 119 | 76 | 67 | 80 | 57 |
| Maximum Specific Optical Density ($D_M$) | 96 | 129 | 81 | 333 | 230 | 291 |
| Clear Beam (DC) | 13 | 12 | 11 | 15 | 4 | 9 |
| DMC (Corrected $D_M$) | 83 | 117 | 70 | 318 | 226 | 282 |

**TEST RESULTS:**

| | FLAMING | NON-FLAMING |
|---|---|---|
| Average $D_s$, 1.5 Min. | 33 | 3 |
| 6.5Average $D_s$, 4.0 Min. | 95 | 68 |
| 62A47v55erage $D_M$ | 102 | 285 |
| Average272 316$D_M$, (Corrected) | 90 | 275 |

**Erle Miles, Jr. VP**
**Testing Services Inc**