## **TEST REPORT**

DATE: 01-08-2014 TEST NUMBER: 0204342

CLIENT	Masland Carpets
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	ASTM E662 Smoke Density (Non-Flaming) Standard Test Method for
TEST METHOD CONDUCTED	Specific Optical Density of Smoke Generated by Solid Materials also
	referenced as NFPA 258



	DESCRIPTION OF TEST SAMPLE
IDENTIFICATION	T7863
COLOR	68304
LOT NUMBER	958804
CONSTRUCTION	Multi-Level Cut & Loop Pile
BACKING	Thermoplastic

## **GENERAL PRINCIPLE**

This procedure is designed to measure the specific optical density of smoke generated by the test specimen within a closed chamber. Each specimen is exposed to an electrically heated radiant-energy source positioned to provide a constant irradiance level of 2.5 watts/square cm on the specimen surface. Measurements are recorded through a photometric system employing a vertical beam of light and a photo detector positioned to detect the attenuation of light transmittance caused by smoke accumulation within the chamber. The light transmittance measurements are used to calculate specific optical density, a quantitative value which can be factored to estimate the smoke potential of materials. Two burning conditions can be simulated by the test apparatus. The radiant heating in the absence of ignition is referred to as the Non-Flaming Mode. A flaming combustion in the presence of supporting radiation constitutes the Flamina Mode.

CONDITIONS						
PREDRYING OF TEST SAMPLE	24 Hours at 140° F					
CONDITIONING OF TEST SAMPLE	24 Hours at 70° F and 50% Relative Humidity					
TESTING CONDITION	As Received					
FURNACE VOLTAGE	118 V	IRRADIANCE	2.5 watts/sq cm			
CHAMBER TEMPERATURE	95° F	CHAMBER PRESSURE	3" H <sub>2</sub> O			
TEST MODE	Non-Flaming					

AVERAGE MAXIMUM DENSITY CORRECTED (Dr	nc)	NON-FLAMING	410
AVERAGE SPECIFIC OPTICAL DENSITY AT 4.0 MINUTES			56
	Specimen 1	Specimen 2	Specimen 3
Maximum Density (Dm)	422.0	408.0	416.0
Time to Dm (minutes)	14.0	14.0	14.5
Clear Beam (Dc)	8.0	2.0	6.0
Corr. Max Density (Dmc)	414.0	406.0	410.0
Density at 1.5 minutes	1.0	1.0	1.0
Density at 4.0 minutes	66.0	48.0	53.0
Time to 90% Dm (minutes)	12.0	11.5	12.5
Specimen Weight (grams)	29.3	28.0	27.1

<sup>\*</sup> This sample PASSES the requirements of 450 or less.

APPROVED BY:

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714 Glenwood Place Dalton, GA 30721 Phone: 706-226-3283 Fax: 706-226-6787 email: protest@optilink.us