



COLOR EVALUATION REPORT

Rendered to:

VELUX AMERICA, INC.

PRODUCT: Reflective Tunnel Liners

Report No: A4005.02-106-31
Report Date: 11/15/10
Expiration Date: 10/26/14

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COLOR EVALUATION REPORT

Rendered to:

VELUX AMERICA, INC.
P.O. Box 5001
Greenwood, South Carolina 29648

Report No: A4005.02-106-31
Test Date: 10/07/10
Report Date: 11/15/10
Expiration Date: 10/26/14

Product: Reflective Tunnel Liners

Project Summary: Architectural Testing, Inc. was contracted by VELUX America, Inc. to evaluate five reflective tunnel liners for their color characteristics. Each specimen was evaluated in accordance with ASTM D 2244-09a, *Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates* using CIELab, D₆₅, 10° settings inclusive of the specular component.

Five product samples ranging in measurement from approximately 4.5" to 6.5" wide and 3.5" to 7.5" long were supplied directly to Architectural Testing. Protective liners were removed from the surface of each specimen as necessary immediately prior to testing. The specimen color characteristics were measured as follows in comparison to the white reference tile:

Sample	ΔL^*	Δa^*	Δb^*
Almeco Vega 198	brighter	redder	bluer
3M 99%	brighter	redder	bluer
Alanod AV08 98%	brighter	greener	bluer
Flexible Tunnel	darker	redder	bluer
VELUX Original	darker	greener	bluer

Complete color descriptions are provided in the Test Results section.

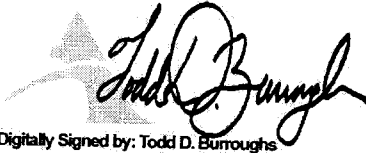
Test Results: A GretagMacbeth Color iQC5 spectrophotometer (ATI# 004725) with Illuminant D₆₅, 10° observer and CIE Lab settings was used to obtain L*, a* and b* values. Prior to testing, the measurement unit was calibrated. The L* value utilizes a scale ranging from 0% (black) to 100% (white). Both a* and b* scales range between -60 to +60 where -60 on the a* scale represents Pure Green, +60 on the a* scale represents Pure Red, -60 on the b* scale represents Pure Blue and +60 on the b* scale represents Pure Yellow. The calculation for color was conducted automatically by the control computer and reported directly on screen. The following table shows the values obtained.

Color Comparison Table

Sample	L*	a*	b*	ΔL*	Δa*	Δb*	ΔE
White Reference Tile	95.55	-0.33	2.57	N/A	N/A	N/A	N/A
Almeco Vega 198	99.71	-0.28	0.23	4.16 brighter	0.05 redder	-2.34 bluer	4.77
3M 99%	100.35	0.53	-2.48	4.79 brighter	0.86 redder	-5.04 bluer	7.01
Alanod AV08 98%	99.67	-0.59	0.97	4.12 brighter	-0.26 greener	-1.60 bluer	4.43
Flexible Tunnel	87.61	-0.07	0.67	-7.94 darker	0.26 redder	-1.90 bluer	8.17
VELUX Original	94.34	-0.43	-0.77	-1.22 darker	-0.10 greener	-3.34 bluer	3.56

Data sheets, representative samples of test specimens, a copy of this report, or other pertinent project documentation will be retained by Architectural Testing, Inc. for a period of four years from the original test date. At the end of this retention period, such materials shall be discarded without notice and the service life of this report will expire. Results obtained are tested values and were secured by using the designated test methods. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimens tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC.:



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Digitally Signed by: Gary Hartman

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TDB:tdb/nlb