

OSHA FALL PROTECTION TEST REPORT

Rendered to:

CIRALIGHT, INC.

SERIES/MODEL: SuntrackerOne

PRODUCT TYPE: Fixed Skylight

Report No: 72202.01-109-44
Revision 1: 04/13/07
Test Date: 03/19/07
Report Date: 04/12/07
Expiration Date: 03/19/11

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CIRALIGHT, INC.
6420 N. Business Park Loop Rd., Unit C
Park City, Utah 84098

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Project Summary: Architectural Testing, Inc. (ATI) was contracted by Nature's Lighting Distribution to perform tests on a Series/Model SuntrackerOne, fixed curb mount skylight. The test specimen description and results are reported herein. The test specimen was supplied by the client.

Test Specification: The test specimen was evaluated in accordance with Occupational Safety and Health Administration/U.S. Department of Labor Regulations (Standards- 29 CFR)-1910.23(e)(8). A 200 lbf weight was placed on the center of the glass and then dropped from varying heights above the skylight starting at 2' until failure was achieved. The highest impact load was recorded at failure.

Test Specimen Description:

Series/Model: SuntrackerOne

Product Type: Fixed Skylight

Overall Size: 1295 mm wide by 1295 mm high (51" x 51")

Fixed Daylight Opening Size: 1172 mm wide by 1172 mm high (46-1/8" x 46-1/8")

Overall Area: 14.77 ft²

Finish: All aluminum was anodized, and all steel was galvanized.

Test Specimen Description: (Continued)

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Custom rubber seal	1 Row	Perimeter of the glazing retainer

Glazing Detail: The skylight dome utilized a single 0.135" thick polycarbonate sheet that was placed against a custom rubber seal, and secured to the glazing retainer with an extruded aluminum cover piece secured with a #6 x 5/8" self-tapping screw, 6" in from each corner, and 12" on center.

Glazing Construction: The glazing retainer was constructed out of extruded aluminum with mitered and weld corners. The glazing retainer was secured to the curb with #6 x 5/8" self-tapping screws, 6" in from the corners, and 12" on center.

Curb Construction: The curb was constructed out of roll-formed galvanized steel with mitered and welded corners. The interior perimeter of the curb utilized a 1-1/4" thick piece of insulation. The curb had an overall height of 12-1/2" and incorporated a 3" flange at the base.

Test Results:

The results are tabulated as follows:

<u>Test Method</u>	<u>Impact Location</u>	<u>Results</u>
OSHA Safety Drop Test		
200 lbf-ft (applied)	Center of dome	No damage
400 lbf-ft (2' drop height)	Center of dome	No damage
800 lbf-ft (4' drop height)	Center of dome	Permanent deformation of the polycarbonate sheet
1200 lbf-ft (6' drop height)	Center of dome	See Note # 1

Note #1: At the 6' drop height, the polycarbonate sheet broke, and the weight did drop through the skylight.

Detailed drawings, 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 specimen(s) tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC:

Aaron M. Shultz
Technician

Michael D. Stremmel, P.E.
Senior Project Engineer

AMS:cmd

Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
0	04/12/07	N/A	Original report issue
1	04/13/07	Cover page, Page 1	Corrected customer name and address
		Page 2	Corrected self-taping to self-tapping screw(s)