

RIVERBANK ACOUSTICAL LABORATORIES

1512 BATAVIA AVENUE
GENEVA, ILLINOIS 60134

OF
IIT RESEARCH INSTITUTE

708/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

REPORT

FOR: Overly Manufacturing Company
ON: Acoustical Vision Light Panel
Model Number STC559511

Sound Transmission Loss
Test RAL™-TL95-11

Page 1 of 3

CONDUCTED: 10 January 1995

TEST METHOD

Unless otherwise designated, the measurements reported below were made with all facilities and procedures in explicit conformity with the ASTM Designations E90-90 and E413-87, as well as other pertinent standards. Riverbank Acoustical Laboratories has been accredited by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP) for this test procedure. A description of the measuring technique is available separately. The microphone used was a Bruel & Kjaer serial number 1330658.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as an acoustical vision light panel Model number STC559511. The overall dimensions of the specimen were 914 mm (36 in.) wide by 2.13 m (84 in.) high and 138 mm (5.44 in.) thick. The specimen was placed directly in the manufacturer's adapter frame and tested in the 1.22 m (4 ft) by 2.44 m (8 ft) test opening. The adapter frame was sealed on the surface faces and periphery (both sides) with a dense mastic. The manufacturer's description of the specimen was as follows: A dual glazed, fixed window unit that consisted of a 30 mm (1.188 in.) and a 6.4 mm (0.25 in.) thick laminated glass array mounted in a composite frame assembly that incorporated neoprene seals with a 14 gauge solid steel jamb, 16 gauge loose outer stops, plus loose stop mud boxes. The vision light assembly was equipped with a dual purging port system to eliminate condensation between the glass. A manufacturer's detailed drawing, File Number II099, page 5 of 7, is maintained on file. At the request of the manufacturer the details of the construction were purposely withheld from this report in order that the manufacturer may control full proprietary rights regarding the product. The weight of the glass as measured was 191.4 kg (422 lbs) an average of 98.2 kg/m² (20.1 lbs/ft²). The total weight of the unit (including 4-sided frame, glass, stops and glazing) was 215.9 kg (476 lbs) an average of 110.7 kg/m² (22.7 lbs/ft²). The transmission area used in the calculations was 1.95 m² (21 ft²). The source and receiving room temperatures at the time of the test were 19°C (67±2°F) and 54±2% relative humidity.

THE RESULTS REPORTED ABOVE APPLY ONLY TO THE SPECIFIC SAMPLE SUBMITTED FOR MEASUREMENT. NO RESPONSIBILITY IS ASSUMED FOR PERFORMANCE OF ANY OTHER SPECIMEN.



ACCREDITED BY DEPARTMENT OF COMMERCE, NATIONAL VOLUNTARY LABORATORY
ACCREDITATION PROGRAM FOR SELECTED TEST METHODS FOR ACOUSTICS.
THE LABORATORY'S ACCREDITATION OR ANY OF ITS TEST REPORTS IN NO WAY CONSTITUTES
OR IMPLIES PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NIST

RIVERBANK ACOUSTICAL LABORATORIES

1512 BATAVIA AVENUE
GENEVA, ILLINOIS 60134

OF
IIT RESEARCH INSTITUTE

708/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

REPORT

Overly Manufacturing Company

RAL™-TL95-11

10 January 1995

Page 2 of 3

TEST RESULTS

Sound transmission loss values are tabulated at the eighteen standard frequencies. A graphic presentation of the data and additional information appear on the following pages. The precision of the TL test data are within the limits set by the ASTM Standard E90-90.

<u>FREQ.</u>	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>	<u>FREQ.</u>	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>
100	32	0.16	0	800	*61	0.31	0
125	*42	0.19	0	1000	63	0.28	0
160	41	0.33	0	1250	66	0.22	0
200	41	0.27	3	1600	67	0.21	0
250	46	0.29	2	2000	69	0.17	0
315	43	0.37	8	2500	73	0.17	0
400	46	0.40	8	3150	75	0.11	0
500	48	0.36	7	4000	*79	0.10	0
630	55	0.41	1	5000	*79	0.06	0

STC = 55

ABBREVIATION INDEX

FREQ. = FREQUENCY, HERTZ, (cps)

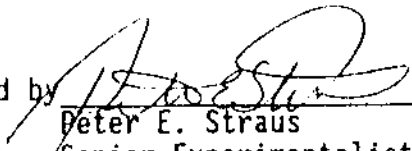
T.L. = TRANSMISSION LOSS, dB

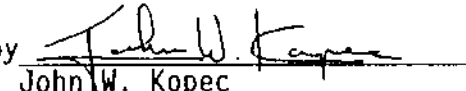
C.L. = UNCERTAINTY IN dB, FOR A 95% CONFIDENCE LIMIT

DEF. = DEFICIENCIES, dB<STC CONTOUR

STC = SOUND TRANSMISSION CLASS

* = INDICATES A CORRECTION WAS APPLIED TO THE SPECIMEN TL BECAUSE THE SPECIMEN TL EXCEEDED THE LIMITATIONS OF THE TEST OPENING

Submitted by 
Peter E. Straus
Senior Experimentalist

Reviewed by 
John W. Kopec
Laboratory Manager

THE RESULTS REPORTED ABOVE APPLY ONLY TO THE SPECIFIC SAMPLE SUBMITTED FOR MEASUREMENT. NO RESPONSIBILITY IS ASSUMED FOR PERFORMANCE OF ANY OTHER SPECIMEN.



ACCREDITED BY DEPARTMENT OF COMMERCE, NATIONAL VOLUNTARY LABORATORY
ACCREDITATION PROGRAM FOR SELECTED TEST METHODS FOR ACOUSTICS.
THE LABORATORY'S ACCREDITATION OR ANY OF ITS TEST REPORTS IN NO WAY CONSTITUTES
OR IMPLIES PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NIST

RIVERBANK ACOUSTICAL LABORATORIES

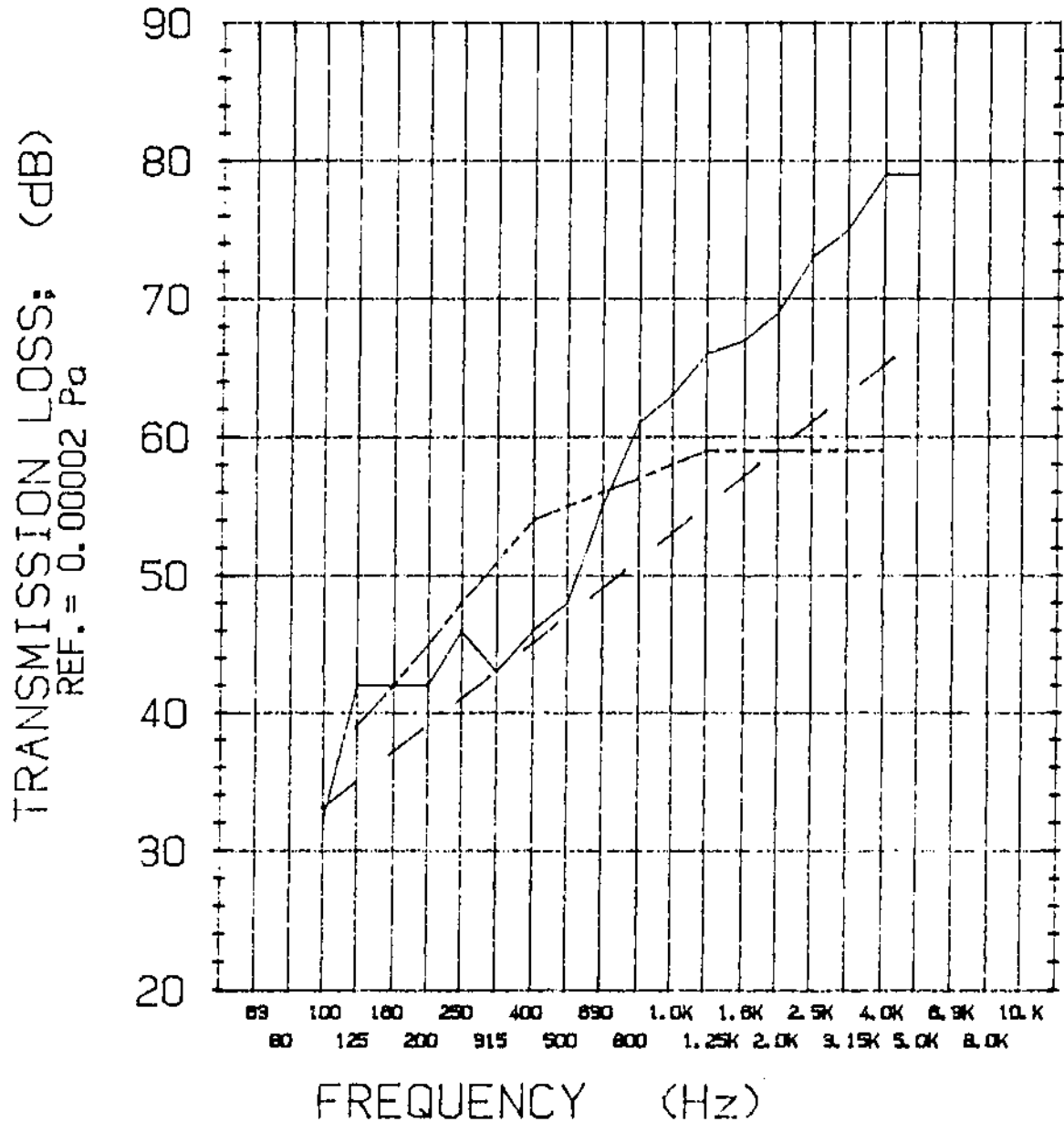
1512 BATAVIA AVENUE
GENEVA, ILLINOIS 60134

OF
IIT RESEARCH INSTITUTE

708/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

REPORT

TRANSMISSION LOSS REPORT RAL-TL95-11 Page 3 of 3



- TRANSMISSION LOSS
- - - SOUND TRANSMISSION CLASS CONTOUR
- . - MASS LAW CONTOUR

THE RESULTS REPORTED ABOVE APPLY ONLY TO THE SPECIFIC SAMPLE SUBMITTED FOR MEASUREMENT. NO RESPONSIBILITY IS ASSUMED FOR PERFORMANCE OF ANY OTHER SPECIMEN.



ACCREDITED BY DEPARTMENT OF COMMERCE, NATIONAL VOLUNTARY LABORATORY
ACCREDITATION PROGRAM FOR SELECTED TEST METHODS FOR ACOUSTICS.
THE LABORATORY'S ACCREDITATION OR ANY OF ITS TEST REPORTS IN NO WAY CONSTITUTES
OR IMPLIES PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NIST