

# 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

Sound Transmission Loss  
Test RAL™-TL92-273

ON: Acoustical Vision Light Panel  
Model Number STC3492273

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CONDUCTED: 14 September 1992

### 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 STC3492273. The overall dimensions of the specimen (less adaptor frame) as measured were 914 mm (36 in.) wide by 2.13 m (84 in.) high and 203 mm (8 in.) deep. The specimen was placed directly in the client's adaptor frame and tested in the 1.22 m (4 ft) by 2.44 m (8 ft) test opening and was sealed on the periphery (both sides) with a dense mastic. The manufacturer's description of the specimen was as follows: A single glazed, fixed window unit that consisted of one 6.4 mm (0.25 in.) thick laminated light mounted in a composite frame assembly that incorporated neoprene seals with a 14 gauge solid steel jamb, 16 gauge loose stops, plus loose stop mud boxes. A manufacturer's detailed drawing file number 0667, page 2 of 13 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 specimen (glass and glazing only) as calculated was 32.7 kg (72 lbs). The total weight of the unit (including 4-sided frame, glass and glazing) was 57.2 kg (126 lbs) an average of 23.8 kg/m<sup>2</sup> (4.8 lbs/ft<sup>2</sup>). The transmission area used in the calculations was 1.95 m<sup>2</sup> (21 ft<sup>2</sup>). The source and receiving room temperatures at the time of the test were 24°C (76±2°F) and 60±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.



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### 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.

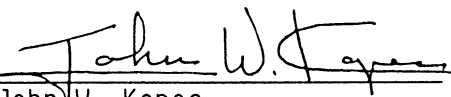
<u>FREQ.</u>	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>	<u>FREQ.</u>	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>
100	26	0.34	0	800	35	0.29	1
125	27	0.31	0	1000	36	0.30	1
160	26	0.42	0	1250	37	0.26	1
200	25	0.35	0	1600	38	0.20	0
250	25	0.40	2	2000	37	0.18	1
315	26	0.39	4	2500	36	0.16	2
400	28	0.36	5	3150	37	0.14	1
500	29	0.35	5	4000	40	0.11	0
630	32	0.33	3	5000	43	0.09	0

STC = 34

### 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

Submitted by   
Peter E. Straus  
Experimentalist

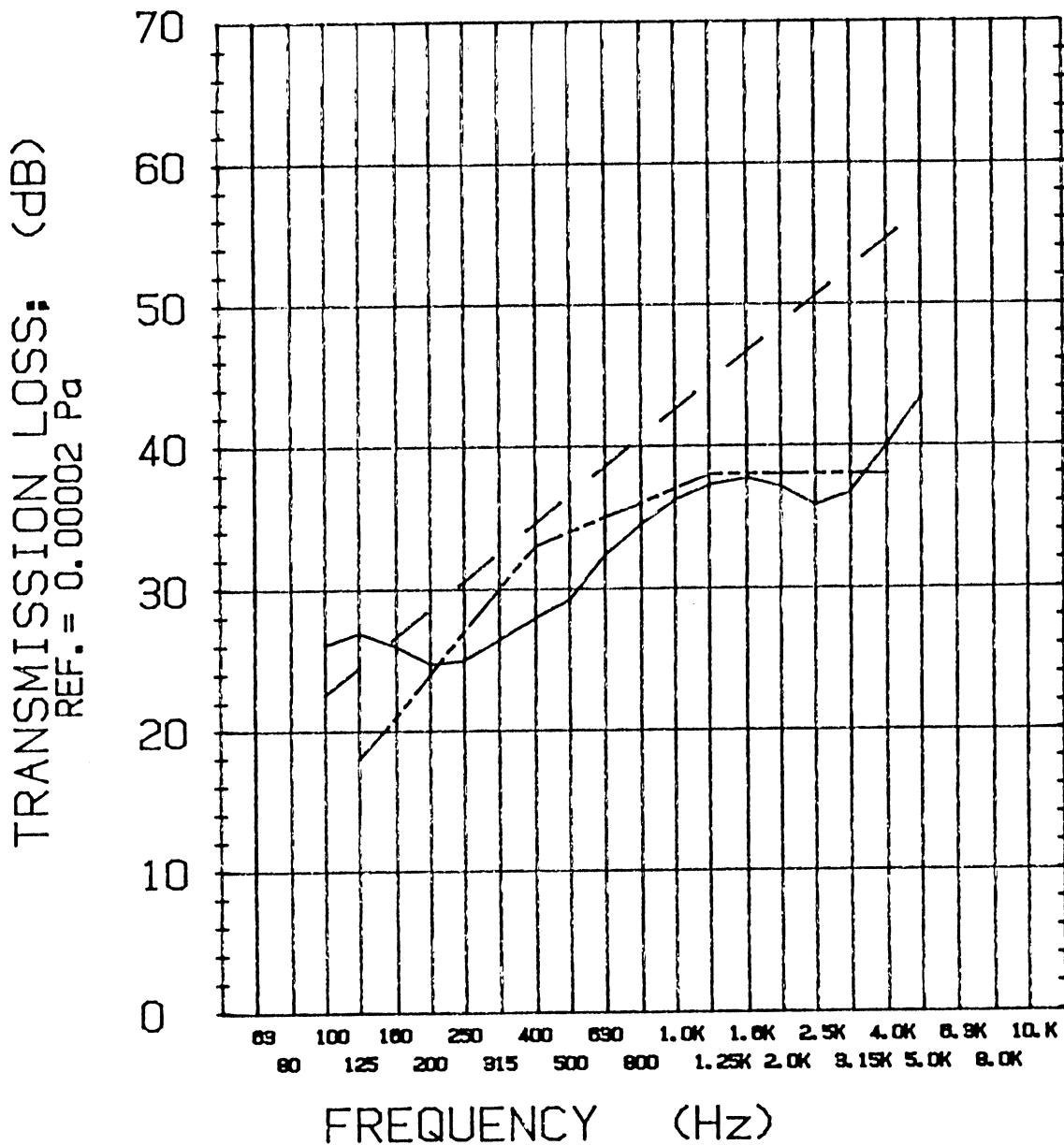
Reviewed by   
John W. Kopec  
Supervisor, Riverbank  
Acoustical Laboratories

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

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