

# 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™-TL92-29

ON: Acoustical Vision Light Panel  
Model Number STC379229

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CONDUCTED: 17 January 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 792729.

### DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as an acoustical vision light panel Model number STC379229. The overall dimensions of the vision light as measured were nominally 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 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 both sides with a dense mastic. The manufacturer's description of the specimen was as follows: A single 13 mm (0.50 in.) laminated, sealed light that was isolated mounted with neoprene seals and held in place with 16 gauge long and short loose stops. The viewing area was 873 mm (34.375 in.) wide by 2.09 m (82.375 in.) high. A visual inspection verified the manufacturer's description of the specimen. A manufacturer's description and detailed drawing file number 0608, page 6 of 9 are 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 and glazing as calculated was 63 kg (139 lbs). The total weight of the unit (including 4-sided frame, glass and glazing) was 143 kg (315 lbs) an average of 73.3 kg/m<sup>2</sup> (15.0 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 21°C (69±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	35	0.39	0	800	37	0.34	2
125	30	0.42	0	1000	37	0.38	3
160	29	0.33	0	1250	33	0.30	8
200	29	0.40	0	1600	36	0.21	5
250	32	0.36	0	2000	40	0.18	1
315	31	0.43	2	2500	43	0.18	0
400	33	0.40	3	3150	46	0.14	0
500	34	0.35	3	4000	49	0.11	0
630	36	0.35	2	5000	51	0.07	0

STC = 37

### 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

Reviewed by Diane C. Perrone Submitted by John W. Kopec  
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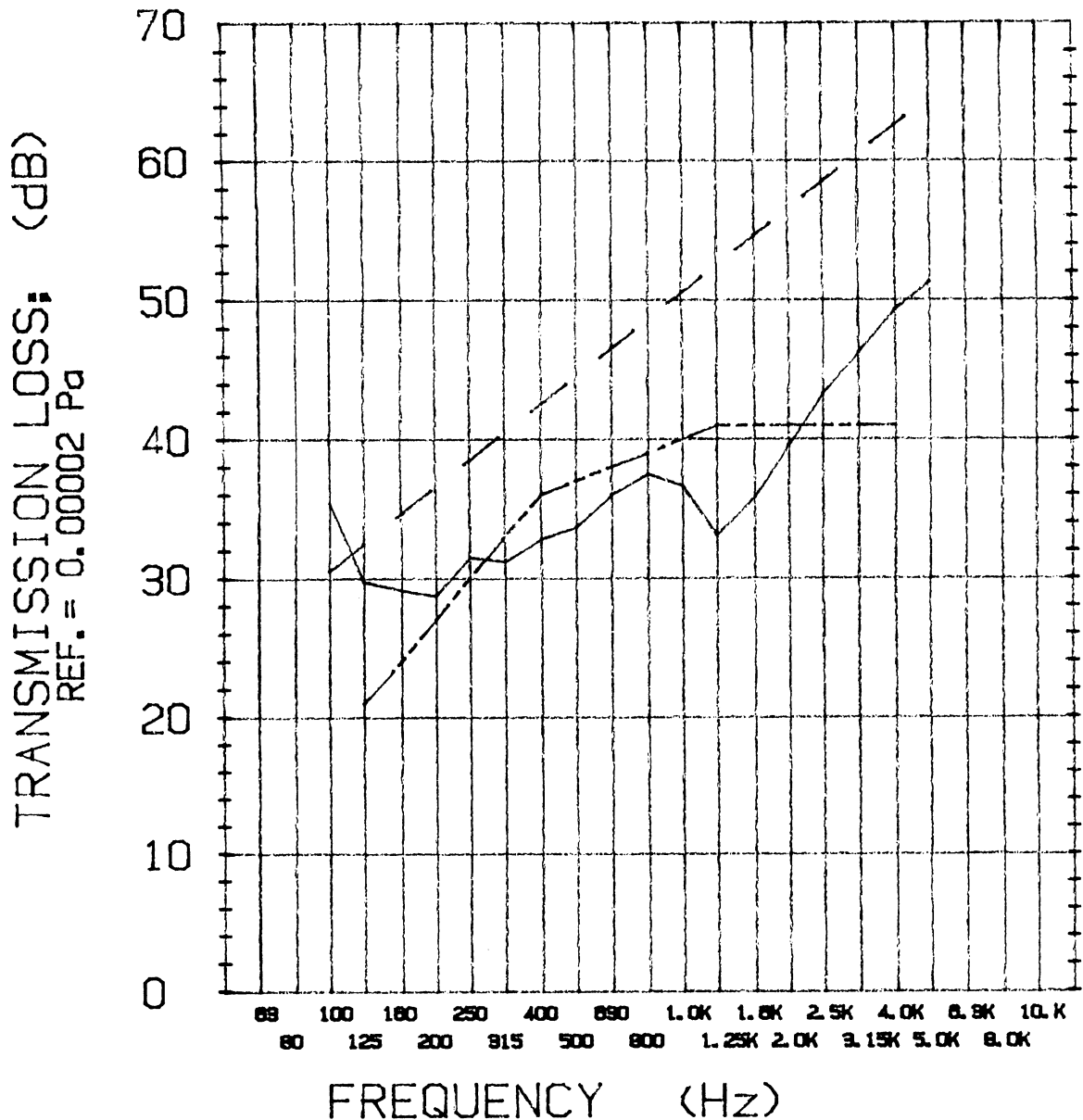
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- SOUND TRANSMISSION CLASS CONTOUR
- . - . MASS LAW CONTOUR

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