

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™-TL92-27

ON: Acoustical Vision Light Panel
Model Number STC389227

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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 STC389227. 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 glazed 19 mm (0.75 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 7 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 102 kg (224 lbs). The total weight of the unit (including 4-sided frame, glass and glazing) was 181 kg (400 lbs) an average of 92.8 kg/m² (19.0 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 21°C (70±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	32	0.26	0	800	33	0.30	7
125	32	0.42	0	1000	33	0.31	8
160	32	0.32	0	1250	39	0.23	3
200	32	0.35	0	1600	43	0.22	0
250	33	0.35	0	2000	46	0.17	0
315	33	0.36	1	2500	49	0.16	0
400	36	0.39	1	3150	51	0.13	0
500	36	0.30	2	4000	54	0.11	0
630	36	0.34	3	5000	56	0.10	0

STC = 38

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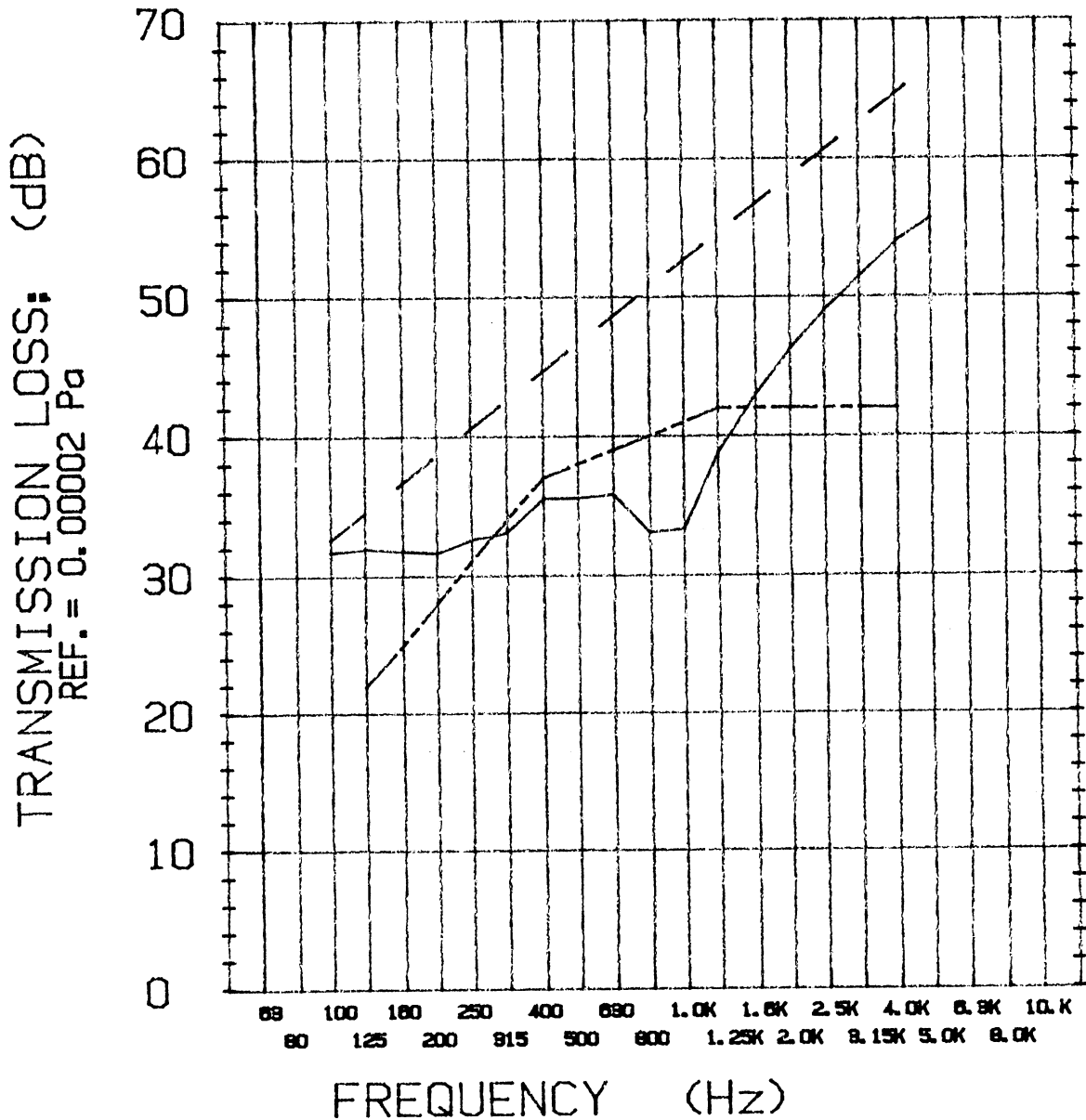
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- TRANSMISSION LOSS
- - - - SOUND TRANSMISSION CLASS CONTOUR
- . - . MASS LAW CONTOUR

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