

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™-TL92-274

ON: Acoustical Vision Light Panel
Model Number STC5392274

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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 STC5392274. The overall dimensions of the specimen (less adaptor frame) were 1.07 m (42 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 dual glazed, fixed window unit that consisted of a 9.5 mm (0.375 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 0667, page 3 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 80.7 kg (178 lbs). The total weight of the unit (including 4-sided frame, glass and glazing) was 126 kg (278 lbs) an average of 52.5 kg/m² (10.6 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 23°C (74±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.

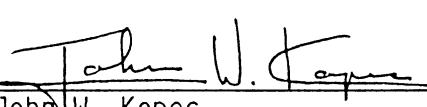
<u>FREQ.</u>	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>	<u>FREQ.</u>	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>
100	32	0.31	0	800	55	0.35	0
125	40	0.41	0	1000	56	0.32	0
160	36	0.33	4	1250	57	0.27	0
200	39	0.44	4	1600	57	0.20	0
250	41	0.42	5	2000	60	0.21	0
315	44	0.37	5	2500	62	0.18	0
400	46	0.39	6	3150	65	0.13	0
500	49	0.34	4	4000	68	0.11	0
630	52	0.37	2	5000	69	0.09	0

STC = 53

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

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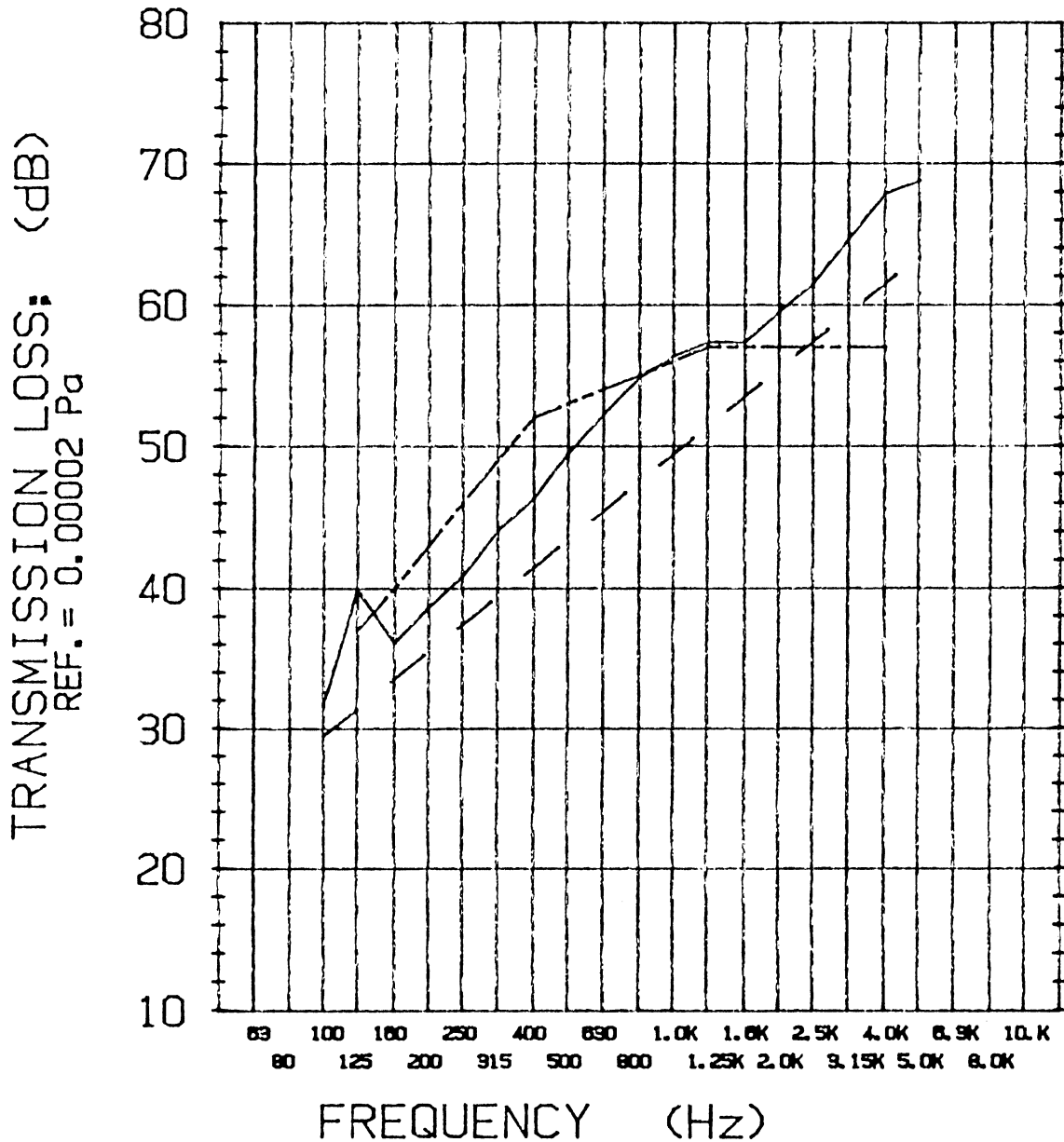
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- TRANSMISSION LOSS
- - - - SOUND TRANSMISSION CLASS CONTOUR
- . - . MASS LAW CONTOUR

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