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# TEST REPORT

## SOUND ATTENUATION

## OF HEARING PROTECTORS

## BS EN 24869-1 : 1993

## ISO 4869-1 : 1990

| | |
|---|---|
| **CLIENT:** | INSPEC International Limited<br>56 Leslie Hough Way<br>Salford<br>Greater Manchester<br>M6 6AJ |
| **YOUR ORDER NO:** | 2/060707-1 |
| **TYPE OF HEARING PROTECTOR:** | Ear-muff |
| **MODEL:** | EM-501 |
| **DATE RECEIVED:** | 07 July 2006 |
| **DATE(s) OF TESTS:** | 12 & 13 July 2006 |

Signed: .....
A.Nelson
Test Engineer

Approved: .....
D.J. M$^{c}$Caul
Laboratory Manager

Model EM-501

Mode tested O-T-H

Attenuation results (values in dB) See below

Test Reference No. HP/06/07/03

| | | Frequency (Hz) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Subject | Sample | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
| N.A. | 01 | 12 | 15 | 14 | 24 | 30 | 36 | 42 | 32 |
| K.H. | 01 | 18 | 19 | 20 | 28 | 38 | 39 | 37 | 40 |
| M.A. | 01 | 17 | 14 | 16 | 22 | 37 | 32 | 40 | 35 |
| F.B | 01 | 17 | 16 | 16 | 24 | 32 | 36 | 42 | 37 |
| P.K. | 02 | 20 | 20 | 18 | 24 | 33 | 38 | 42 | 36 |
| S.H. | 02 | 16 | 15 | 21 | 26 | 34 | 35 | 34 | 29 |
| B.S. | 02 | 18 | 14 | 16 | 28 | 36 | 38 | 40 | 34 |
| C.W. | 02 | 14 | 14 | 18 | 27 | 32 | 32 | 41 | 36 |
| F.W. | 03 | 18 | 15 | 18 | 31 | 38 | 42 | 36 | 39 |
| C.N. | 03 | 18 | 16 | 22 | 28 | 36 | 36 | 39 | 34 |
| T.E. | 03 | 24 | 16 | 20 | 28 | 30 | 44 | 42 | 30 |
| D.W. | 03 | 20 | 16 | 16 | 30 | 40 | 30 | 38 | 39 |
| A.N. | 04 | 17 | 15 | 16 | 24 | 36 | 36 | 40 | 34 |
| S.W. | 04 | 18 | 20 | 16 | 27 | 36 | 40 | 42 | 32 |
| D.J.M. | 04 | 18 | 16 | 14 | 22 | 36 | 36 | 41 | 34 |
| G.T. | 04 | 14 | 22 | 20 | 30 | 38 | 39 | 46 | 38 |
| Mean Attenuation | | 17.4 | 16.4 | 17.6 | 26.4 | 35.1 | 36.8 | 40.1 | 34.9 |
| Standard Deviation | | 2.8 | 2.4 | 2.4 | 2.8 | 3.0 | 3.7 | 2.9 | 3.2 |
| Assumed Protection *SSV2* | | 14.6 | 14.0 | 15.2 | 23.6 | 32.1 | 33.1 | 37.2 | 31.7 |

Assumed Protection Value rounded to one decimal place.

**APPLICATION FORCE:**

The application force of each sample ear muff was measured as specified in Clause 4.6, at 145mm head width and 129mm head height. The measurements were recorded after a period of 2 minutes. The results are presented below:

| Sample | Force (N) |
|---|---|
| 01 | 11.4 |
| 02 | 12.4 |
| 03 | 11.7 |
| 04 | 12.8 |

**REPLACEABLE PARTS:**

1. Cushions

ATTENUATION VALUES CALCULATED FROM
UNIVERSITY OF SALFORD,
SCHOOL OF COMPUTING, SCIENCE AND ENGINEERING
REPORT NO: HP/06/15

| | | |
|---|---|---|
| H | = | 34 |
| M | = | 26 |
| L | = | 18 |
| SNR | = | 29 |