

HOJA TÉCNICA CLAVE: HM3013

Michael & Associates, Inc.

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Hearing Protective Device Test Report Number

Date of Report: 10/4/13 Sample Receipt: 9/25/13 Test Dates: 9/26/13-10/3/13

Lab Code 100427-0

Attenuation measurements have been performed according to the American National Standards Institute ANSI S3.19-1974, on the DOGOTULS code HM3013 insert-type hearing protector

. For the attenuation testing, the specified threshold measurement data were obtained using ten normally-hearing listeners, six male and four female.

The attenuation measurements were made in a room designed for this purpose. All acoustic characteristics of the room meet the requirements outlined in ANSI S3.19-1974. The ambient noise levels in this room are below the limits specified in ANSI S3.19-1974, and open ear thresholds are used on a continuing basis to monitor the background noise levels. An automatic recording attenuator was used to record both open and occluded ear thresholds.

Each subject was tested at each of nine test frequencies. The attached Tables show grand mean attenuation values in decibels (dB) for each test signal along with group attenuation values. Standard deviations (S.D.) for each of the seven test frequencies are also given. The results presented in this report pertain to the samples tested only.

Michael & Associates is accredited by the United States National Institute of Standards and Technology (NIST) National Voluntary Laboratory Accreditation Program (NVLAP) for tests performed according to American National Standards Institute (ANSI) S3.19-1974, ANSI S12.6-2008, Standards Australia AS/NZ S1270:2002 and EN 352 parts 1-8. These accreditation criteria encompass the requirements of ISO 17025. This report may only be reproduced or transmitted electronically in its' entirety. This report shall not be used to claim product endorsement by NVLAP or by any agency of the U.S. Government. All measurement equipment are calibrated with instrumentation traceable to the NIST.

Use these laboratory-derived attenuation data for comparison purposes only. The amount of protection afforded in field use is often significantly lower depending on how the protectors are fitted and worn.

Kevin Michael, Ph.D.
President

10/4/13

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Individual and Summary Attenuation Data for Hearing Protective Devices

Test Method: ANSI S3.19-1974 Position: Insert Manufacturer Date: 10/4/13

Model: DOGOTULS code HM3013 Test ID #

model: pode	71013 6006	- 1 11013013		FREQUENCY IN HERTZ					
SUBJECT	125	250	500	1000	2000	3150	4000	6300	8000
	37	33	39	45	44	40	42	44	43
1	35	32	38	38	41	40	40	44	45
	38	34	43	42	43	42	41	45	47
	34	34	39	38	38	41	41	52	51
2	30	31	37	35	37	43	44	52	49
	29	30	34	33	35	44	45	49	49
	41	35	41	39	45	47	48	48	45
3	38	34	37	39	45	48	46	46	45
	38	36	39	40	46	48	48	47	45
	36	37	40	40	40	50	49	54	50
4	30	35	43	43	40	50	50	52	50
	36	34	43	39	37	52	44	52	50
	40	36	45	40	40	43	44	53	59
5	37	39	47	37	37	48	48	53	55
	37	38	44	41	43	48	44	49	58
	34	33	40	40	37	44	55	50	46
6	37	34	38	34	35	46	54	49	48
	32	33	39	41	37	49	51	47	47
	31	32	39	40	37	45	50	47	44
7	32	30	39	41	38	45	50	48	42
	30	28	38	37	38	44	49	44	43
	25	31	35	40	44	42	41	47	51
8	31	32	37	37	37	40	41	48	49
	31	32	37	40	44	43	46	46	51
	41	37	45	43	45	49	45	50	52
9	39	38	46	41	38	50	51	47	51
	38	36	48	43	43	46	42	48	49
	35	33	42	43	40	50	55	51	49
10	36	35	42	45	40	49	54	50	52
	33	33	41	` 44	40	49	55	49	49
MEANS	34.6	33.7	40.3	39.9	40.1	45.8	47.1	48.7	48.8
STD. DEV.	3.8	2.5	3.6	2.9	3.3	3.5	4.7	2.9	4.0

NRR = 33 dB

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HOJA TÉCNICA CLAVE: HM3013

Manufacturer:

Date:

10/4/13

Model: DOGOTULS code HM3013

Test ID:

Position: Insert

Measurements were made according to American National Standards Institute Specifications ANSI S3.19-1974.

Center Frequency in Hz	Mean Attenuation in dB	Group Attenuation in dB	Standard Deviation in dB
125	34.6	68.3	3.8
250	33.7		2.5
500	40.3		3.6
1000	39.9		2.9
2000	40.1	213.3	3.3
3150	45.8		3.5
4000	47.1		4.7
6300	48.7	97.4	2.9
8000	48.8		4.0

Test Item: Q3047A

AA

These data were obtained through measurements made at the laboratories of Michael & Associates, Inc., State College, PA, USA. Michael & Associates, Inc., is accredited to test to ANSI S3.19-1974, ANSI S12.6-2008, ANSI S12.42-2010, EN352 parts 1-8 and AS/NZ S1270:2002 by the National Institute of Standards and Technology (NIST) National Voluntary Laboratory Accreditation Program (NVLAP).

Kevin L. Michael, Ph.D.

Date

10/4/13

President

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