



Test Report T8553-01-1 Issue 1  
ANSI S3.19-1974  
RPB Safety LLC  
18-322 RPB Bell – Ear Plugs with  
Nova 3-700-50 Blast Respirator  
11 November 2013

Prepared by:

A handwritten signature in black ink that reads "Shelley Brady". The signature is written in a cursive style and is positioned above a horizontal line.

Shelley Brady  
Laboratory Administrator

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- b) The contents of this test report are confidential. Reproduction of the report is prohibited except in full, unless approved in writing by ICS Laboratories, Inc.
- c) Unless otherwise indicated, test results contained in this report apply only to the samples tested and not to lots or batches from which they were taken.
- d) Where applicable, test data provided by subcontractor is uniquely identified in the test report.

Issued to: RPB Safety LLC  
 2807 Samoset Road  
 Royal Oak, MI 48073  
 USA

Date: 11 November 2013  
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**Objective:**

Contract testing according to ANSI S3.19-1974 “Method for the Measurement of Real-Ear Protection of Hearing Protectors & Physical Attenuation of Ear Muffs”

**Sample(s):**

Model No./Name:	RPB Bell (18-322)
Product Type:	Disposable Ear Plugs
Quantity:	50pr.
Date(s) Submitted:	25 October 2013
Model No./Name:	RPB Nova 3 (NV3-700-50)
Product Type:	Blasting Respirator
Quantity:	2
Date(s) Submitted:	25 October 2013

**Summary:**

Test Report:	*	Q3092A Revision 0 (3 pages)
Date of Report:		07 November 2013
Date(s) of Test:		01 November 2013 – 06 November 2013
Test Subjects Used:		10
Tested Position:		Dual
Rating Calculation (NRR):		33 dB

\*The attached test report provided by Michael & Associates, Inc.  
 Michael & Associates, Inc. is accredited by the National Institute of Standards and Technology (NIST) National Voluntary Laboratory Accreditation Program (NVLAP).

## Hearing Protective Device Test Report Number Q3092A Revision 0

ICS  
Attn: Shelley Brady  
1072 Industrial Parkway North  
Brunswick, OH 44212

Date of Report: 11/7/13  
Sample Receipt: 10/29/13  
Test Dates: 11/1/13-11/6/13



Lab Code 100427-0

Attenuation measurements have been performed according to the American National Standards Institute ANSI S3.19-1974, on the 18-322 w/ Nova 3-700-50 blast respirator as submitted by ICS Labs (test ID Q3092A). 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, AS/NZ S1270:2002 and EN352 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.*

A handwritten signature in black ink, appearing to read 'Kevin Michael', is written over a horizontal line.

Kevin Michael, Ph.D.  
President

A handwritten date '11/7/13' in black ink is written over a horizontal line.

Date

**Individual and Summary Attenuation Data for  
Hearing Protective Devices**

Test Method: ANSI S3.19-1974

Position: Dual

Manufacturer: ICS Client

Date: 11/7/13

Model: 18-322 w/ Nova 3-700-50 Blast Resp.

Test ID # Q3092A

FREQUENCY IN HERTZ

SUBJECT	125	250	500	1000	2000	3150	4000	6300	8000
1	30	34	40	34	58	65	68	71	78
	28	38	35	37	50	62	73	70	73
	28	32	33	40	50	60	67	67	75
	33	32	36	41	60	70	80	88	86
2	32	31	38	44	58	67	80	90	86
	34	34	37	43	62	70	80	87	87
	38	36	35	42	55	69	73	83	81
3	36	35	35	40	57	68	72	82	79
	39	34	34	40	56	69	74	85	77
	31	31	38	43	48	75	78	82	93
4	36	36	37	48	51	71	80	90	86
	38	40	41	44	53	64	81	84	92
	39	37	47	47	57	75	81	84	80
5	40	36	41	39	57	75	83	83	84
	40	36	45	43	61	77	81	87	85
	40	40	42	48	58	75	78	84	84
6	39	39	43	50	56	74	76	88	85
	39	39	42	49	57	73	77	82	81
	33	33	40	42	53	72	72	74	75
7	33	36	40	40	51	69	71	74	74
	32	35	38	41	49	71	70	73	75
	33	41	39	42	55	70	75	80	77
8	30	30	30	35	51	68	74	77	78
	31	33	35	37	55	68	76	76	78
	35	29	33	39	54	65	72	76	79
9	31	34	33	45	53	68	72	77	81
	37	35	38	36	57	66	70	78	80
	32	34	33	37	47	70	73	80	78
10	28	29	32	36	49	74	77	78	77
	26	29	32	37	50	73	74	77	79
MEANS	34.0	34.6	37.4	41.3	54.2	69.7	75.3	80.2	80.6
STD. DEV.	4.2	3.3	4.1	4.3	4.0	4.1	4.3	6.0	5.1

NRR = 33 dB

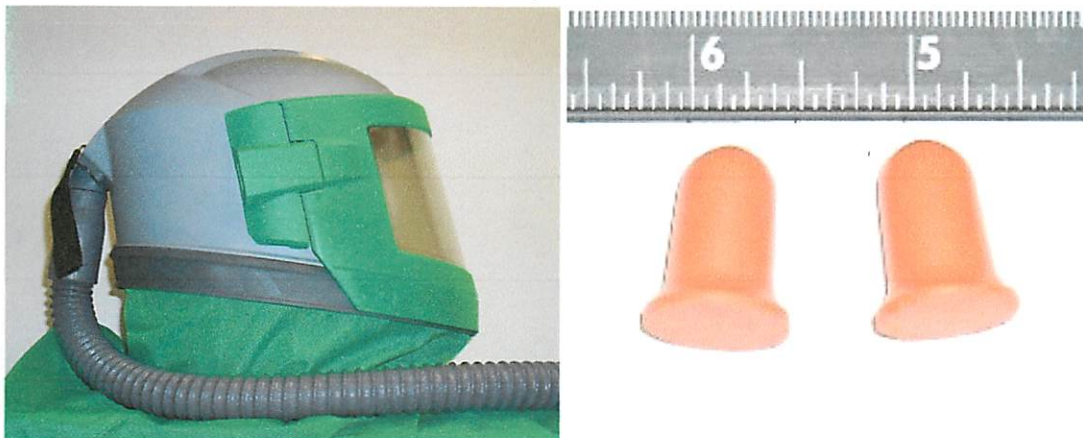
*Use these laboratory-derived data for comparison purposes only. The amount of protection afforded in field use is often significantly lower depending on how the protectors are fitted and worn.*

Manufacturer: ICS Client Date: 11/7/13  
 Model: 18-322 w/ Nova 3-700-50 Blast Resp. Test ID: Q3092A  
 Position: Dual

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	34.0	68.5	4.2
250	34.6		3.3
500	37.4		4.1
1000	41.3		4.3
2000	54.2	277.9	4.0
3150	69.7		4.1
4000	75.3		4.3
6300	80.2	160.8	6.0
8000	80.6		5.1

Test Item: Q3092A



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.  
 President

  
 Date

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