

# BIOSCIENCE INTERNATIONAL

Innovative Microbiology Products  
 11333 Woodglen Drive • Rockville, Maryland 20852  
 301.231.7400 • www.biosci-intl.com • fax: 301.231.7277

## CERTIFICATE OF CALIBRATION

Model:	SAS Duo 360 - Right Head
Air Sampler Serial #:	21-D-17136
Air Sampler Head Serial #:	52444
Customer:	Aerobiology Laboratory
Customer Asset ID #:	n/a
Calibration performed at:	Woodglen site (see address above)

Cal. Date:	8 Jul 2021
Cal. Due:	8 Jul 2022 (12 months)
Procedure:	EOP-030
Certificate #:	21-D-17136-2385
Volume sampled (L):	1000
Calibrated w/media type:	BBL TSA Petri
Plate Lot #:	1077581
Plate Exp Date:	9/1/2021

	As Found	In Tolerance	As Left	In Tolerance	Acceptable Range
Battery output (Volts):	n/a	n/a	13.9	n/a	>13.0
Temperature (F°):	n/a	n/a	75.1	n/a	59 - 95
Barometric pressure (in. HG):	n/a	n/a	30.0	n/a	n/a
Time to sample 1000 Liters (min)	n/a	n/a	5.55	n/a	n/a
Temp. & Pressure Standardization Factor:	n/a	n/a	0.99	n/a	n/a
Air velocity reading (ft/min)	n/a	n/a	101.0	n/a	n/a
Air velocity reading (m/sec)	n/a	n/a	0.513	n/a	n/a
Standardized air velocity reading (m/sec)	n/a	n/a	0.509	n/a	n/a
Standardized Air Flow (L/min)	n/a	n/a	180.2	Yes	171 - 189

Additional heads inspected and determined to be within +/-2%: n/a  
 Additional service, preventative maintenance, or calibration notes: n/a

*Bioscience International certifies that the above described instrument conforms to the original manufacturer's tolerances for the parameters listed (not applicable to As Found data) & has been calibrated in accordance with ISO 17025:2017 guidelines using standards whose accuracies are traceable to the U.S. National Institute of Standards & Technology, have been verified with respect to instrumentation whose accuracy is traceable to NIST, or are derived from accepted values of physical constants. CMC test uncertainty is +/-2.2%. Instruments are calibrated with a test uncertainty ratio of 4:1 or greater whenever possible, with uncertainty defined as within a 95% confidence interval using a coverage factor of k = 2. In all cases, statistical methods are used to minimize uncertainty using the best commercially available methods. In Tolerance conditions are based on test results falling within the Acceptable Range. Measurement uncertainty is provided separately & independent of the decision rule. Voltage readings are for preventative maintenance purposes & not part of the calibration; values other than voltage, temperature, pressure, & air velocity are calculated values. Calibration results relate only to the items listed above; e.g., the instrument should be recalibrated prior to switching to a different media size (e.g., from 90mm Petri dishes to 55mm contact plates or vice versa).*

<u>Measurement Standards</u>				
ID	Description	Last Cal.	Cal. Due	
W-T95451906004	Velocity	11/19/2020	11/19/2021	
W-6530-200391171	Temperature & Pressure	7/1/2020	7/1/2022	

Work performed by / date: BIMBIZLA FERNANDO / 08 JUL 2021 Reviewed by / date: Michael Trosky / 10 JUL 2021

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## CERTIFICATE OF CALIBRATION

Model:	SAS Duo 360 - Left Head
Air Sampler Serial #:	21-D-17136
Air Sampler Head Serial #:	52443
Customer:	Aerobiology Laboratory
Customer Asset ID #:	n/a
Calibration performed at:	Woodglen site (see address above)


Cal. Date:	8 Jul 2021
Cal. Due:	8 Jul 2022 (12 months)
Procedure:	EOP-030
Certificate #:	21-D-17136-2385
Volume sampled (L):	1000
Calibrated w/media type:	BBL TSA Petri
Plate Lot #:	1077581
Plate Exp Date:	9/1/2021

	As Found	In Tolerance	As Left	In Tolerance	Acceptable Range
Battery output (Volts):	n/a	n/a	14.2	n/a	>13.0
Temperature (F°):	n/a	n/a	74.8	n/a	59 - 95
Barometric pressure (in. HG):	n/a	n/a	30.0	n/a	n/a
Time to sample 1000 Liters (min)	n/a	n/a	5.55	n/a	n/a
Temp. & Pressure Standardization Factor:	n/a	n/a	0.99	n/a	n/a
Air velocity reading (ft/min)	n/a	n/a	101.0	n/a	n/a
Air velocity reading (m/sec)	n/a	n/a	0.513	n/a	n/a
Standardized air velocity reading (m/sec)	n/a	n/a	0.509	n/a	n/a
Standardized Air Flow (L/min)	n/a	n/a	180.3	Yes	171 - 189

Additional heads inspected and determined to be within +/-2%:	n/a
Additional service, preventative maintenance, or calibration notes:	n/a

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Work performed by / date: BIMBELA FERNANDO / 08 July 2021 Reviewed by / date:  / 08/14/2021