



MicroBio Serial Number	010815140	<b>PASS</b>
Certificate Number	CC010815140 - 4	
		

# MicroBio - Factory Calibration & Inspection Certificate

## General Information

Product Owner	Majaseen LLC	Calibration Date	6 Jan 2020	Approved Signatory	 S Plumridge Engineering Director
		Address	Ravila 14a-2019 Tartu 50411		
Country	Estonia	Calibrated By	SP		
		Distributor		Customer PO/ Contact Name	
		Calibration Methods	P0001W002 P0001W008*	CO/RMA Number	RMA-00288
		Equipment Asset Number			

## Model / Configuration

Model	MB2-HiFlow
Head	A/A 400 x 1.0mm (HiFlow Only)
Plate Fitted	90 mm Petri dish
Total Volume (if known)	1000
Total Samples (if known)	1

## Calibration Conditions

Parameter	Reference Conditions	Units
Allowed deviation	5% ±	
$T$ lab temperature	293.75	K
$\rho$ lab air pressure	1012.8	mbar
$T_n$ standard temperature	293.15	K
$\rho_n$ standard air pressure	1013.25	mbar
$K_n$ compensation factor	0.9975	$\rho T_n / \rho_n T$

## Visual inspection

Sampling head	OK
Battery box lid	OK
Battery contact springs	OK
Keypad surface / buttons	OK
Plate springs	OK
Head spring	OK
Enclosure	OK

## AV2 Calibration System Details / Flow Conversion [Note 4]

Parameter	Value	Units
AV2 100 L/min set-point	2.02	m/s
AV2 180 L/min set-point	3.7	m/s
$Q_s$	180.00	L.min <sup>-1</sup>
$V_a$ (AV2 @ $Q_s$ )	3.7	m/s
$K_{AV2}$	48.65	L / ms.min
$T$	20.00	°C
$\rho_n$	1013.25	mbar
Serial Number	71341	
Calibration Date	22 Oct 2019	
Calibration Due Date	21 Oct 2020	
Certificate Number	CR 2281 (MPB Ltd)	
Accuracy	2% ±	

## Measurements

Laboratory Temperature (T) [Note 3]	20.6	°C
Air pressure (p) [Note 2]	1012.8	mbar
Parameter	Mean Air Velocity (m.s <sup>-1</sup> )	Volumetric Flow (L.min <sup>-1</sup> )
Target	3.700	
Inspection Test	3.740	181.9
After adjustment		

## Calibration Results (95% Confidence Interval)

	Inspection	After Adjustment
Measured	181.9 L.min <sup>-1</sup>	L.min <sup>-1</sup>
Error	1.07%	
Result	<b>PASS</b>	

## Notes / Recommendations

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Note 1: P0001W002 amended by P0001W008 - See <https://www.cantiumscientific.com/support/mb1-and-mb2-calibration-procedure/>. (Available to registered service agents only or upon request).  
 Note 2: Greisinger GPB 3300 Digital Barometer  
 Note 3: Greisinger GTH 1170 Digital Precision Quick Response Thermometer + Type-K Thermocouple probe  
 Note 4: Airflow Development Limited AV2 air velocity meter + Cantium Scientific Limited air sampler calibration flow rig (see Note 1 - P0001W002)