

Calibration Certificate

Customer:	CCSTEC	City: Oeynhausen
Customer ID:	C77	
Report number:	1501582	
Manufacturer:	Lighthouse	
Model:	Solair 3100	
Serial no.:	130404002	

This certifies the above named instrument conforms to the original specifications in effect at time of calibration. Calibration of the above stated instrument has been accomplished by size calibration as defined by ISO 21501-4. The accuracy of the standards and equipment used in the calibration are traceable to National Institute of Standards and Technology or have been derived from acceptable values of natural physical constants. All work performed is in accordance with Lighthouse Worldwide Solutions Benelux, Master Calibration Document: I7C.001 and is recorded and maintained as such.

	Calibration date:	February 2, 2015	<i>Calibration conditions</i>
Next calibration on this instrument is due:	February, 2016	Temperature:	22.4 °C
		Humidity:	30.8 %

Threshold Voltage Settings

Particle size: 0.3 µm	Lot # 43715	Due: 01-09-2017	Channel 1 Threshold Voltage: 56 mV
Particle size: 0.5 µm	Lot # 43116	Due: 01-04-2017	Channel 2 Threshold Voltage: 634 mV
Particle size: 0.7 µm	Lot # 41548	Due: 30-12-2015	Channel 3 Threshold Voltage: 1383 mV
Particle size: 1 µm	Lot # 42596	Due: 01-10-2016	Channel 4 Threshold Voltage: 1700 mV
Particle size: 2 µm	Lot # 41569	Due: 31-01-2016	Channel 5 Threshold Voltage: 2828 mV
Particle size: 3 µm	Lot # 42940	Due: 01-02-2017	Channel 6 Threshold Voltage: 3498 mV
Particle size: 5 µm	Lot # 43188	Due: 01-04-2017	Channel 7 Threshold Voltage: 3789 mV
Particle size: 10 µm	Lot # 43005	Due: 01-03-2017	Channel 8 Threshold Voltage: 4633 mV

Measurements

Flow rate:	27.8 ltr/min	Limit 26,9 – 29,7ltr/min
False count rate:	Observed counts in 5 min	0 Counts
Counting efficiency:	Size: 0.3 µm	42%
Counting efficiency:	Size: 0.5 µm	106%
Size resolution:	First channel	2.44%

Standards and reference equipment used for this calibration

Model	S/n	Due to	Certificate no.
Solair 2010+	081299001	30-06-2015	1412033
TSI Mass Flowmeter 4043	40431138006	16-09-2015	n/a
Fluke-175	12170245	06-05-2015	1278865
MCA8000A	2456	21-02-2015	MCA-025-A0
Control Company 14-649-11	130436923	31-07-2015	1045-5258888

Name: Eric Witzel
 Calibration engineer

Signature: 
 Calibration engineer

