

Politecnico di Torino - Dipartimento Energia

Efficiency Assessment

Test No.: 5015 Petitioner: Aerosol Technology Lab
Date: 19/03/2024 Medium: n° 9 - PANCO 3
Measurement no.: 6 Manufacturer: USP-Sao Carlos
Area [m²]: 0.001 Medium type: polyacrylonitrile + castor oil
Filter class: Lot:
Aerosol: DEHS Air flow rate through filter: 0.000125556[m³/s] (0.452[m³/h])
Sampling cycles: 6 Filter air flow resistance [Pa]: 730
Sampling cycle time [s]: 45 Air flow rate entering OPC [cm³/min]: 1000
Dilution factor: 1 Correlation ratio: 986-03/19/2024 4:22:53 PM-Mas
Neutralizer: OPC: OPS 3330 ip121
Conditioned / DischargedNo Test environment: 24.6 °C /36% /98400Pa
Remarks: TSI OPS3330 0.452m³/h 7.5l/min
Adattore Diameter 40mm 10cm/s. Delta P=730 Pa
Pressione all'interno del condotto=7 Pa

Size class [µm]	Particle concentration [#/dm³]		Efficiency [%]	Deviation [+/-]	Uncertainty [+/-]	Meaningful cycles
	Upstream	Downstream				
0.30 - 0.40 µm	37 825	8 168	77.92	2.55	2.67	6
0.40 - 0.55 µm	26 448	5 343	79.16	2.68	2.82	6
0.55 - 0.70 µm	15 882	3 147	79.57	2.54	2.67	6
0.70 - 1.00 µm	21 921	3 674	82.72	2.33	2.44	6
1.00 - 1.30 µm	7 319	1 013	85.46	2.13	2.24	6
1.30 - 1.60 µm	11 339	1 259	88.35	1.60	1.68	6
1.60 - 2.20 µm	11 485	760	92.96	1.77	1.86	6
2.20 - 3.00 µm	3 426	90	97.19	0.96	1.01	6
3.00 - 4.00 µm	1 141	10	99.07	0.62	0.65	6
4.00 - 5.50 µm	224	1	99.67	0.36	0.38	6
5.50 - 7.00 µm	16	0	97.80	5.38	5.64	6
7.00 - 10.00 µm	8	0	100.00	0.00	0.00	6

