

Politecnico di Torino - Dipartimento Energia

Efficiency Assessment

Test No.: 5015 Petitioner: Aerosol Technology Lab
Date: 19/03/2024 Medium: n ° 7 - PAN 6
Measurement no.: 5 Manufacturer: USP-Sao Carlos
Area [m²]: 0.001 Medium type: Polyacrylonitrile
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]: 800
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: 24.5 °C /35% /98400Pa
Remarks: TSI OPS3330 0.452m3/h 7.5l/min
Adattore Diameter 40mm 10cm/s. Delta P=800 Pa
Pressione all'interno del condotto= 5 Pa

Size class [µm]	Particle concentration [#/dm³]		Efficiency [%]	Deviation [+/-]	Uncertainty [+/-]	Meaningful cycles
	Upstream	Downstream				
0.30 - 0.40 µm	36 026	5 252	82.44	0.87	0.91	6
0.40 - 0.55 µm	25 353	3 276	84.30	0.98	1.03	6
0.55 - 0.70 µm	15 277	1 790	85.78	0.94	0.98	6
0.70 - 1.00 µm	21 291	1 789	89.84	0.55	0.58	6
1.00 - 1.30 µm	7 016	370	93.52	0.38	0.40	6
1.30 - 1.60 µm	11 010	366	95.93	0.22	0.23	6
1.60 - 2.20 µm	11 120	109	98.79	0.11	0.12	6
2.20 - 3.00 µm	3 291	5	99.82	0.18	0.18	6
3.00 - 4.00 µm	1 080	0	99.96	0.11	0.11	6
4.00 - 5.50 µm	216	0	100.00	0.00	0.00	6
5.50 - 7.00 µm	15	0	100.00	0.00	0.00	6
7.00 - 10.00 µm	6	0	100.00	0.00	0.00	6

