

Politecnico di Torino - Dipartimento Energia

Efficiency Assessment

Test No.: 5015 Petitioner: Aerosol Technology Lab
Date: 15/03/2024 Medium: n ° 5 - PAN0.4CNF 3
Measurement no.: 5 Manufacturer: USP-Sao Carlos
Area [m²]: 0.001 Medium type: Polyacrylonitrile+cellulose nanofibrils
Filter class: Lot:
Aerosol: DEHS Air flow rate through filter: 0.000125[m³/s] (0.45[m³/h])
Sampling cycles: 6 Filter air flow resistance [Pa]: 618
Sampling cycle time [s]: 60 Air flow rate entering OPC [cm³/min]: 94
Dilution factor: 1 Correlation ratio: 985-03/15/2024 3:10:46 PM-Masc
Neutralizer: OPC: TSI 3340
Conditioned / DischargedNo Test environment: 22.5 °C /38% /98400Pa
Remarks: TSI OPS3340A 0.452m3/h 7.5l/min
Adattore Diameter 40mm 10cm/s. Delta P=618 Pa
Pressione all'interno del condotto=65 Pa

Size class [nm]	Particle concentration [#/dm³]		Efficiency [%]	Deviation [+/-]	Uncertainty [+/-]	Meaningful cycles
	Upstream	Downstream				
90 - 100 nm	19 318	722	96.76	1.83	1.92	6
100 - 120 nm	20 497	998	94.99	0.64	0.67	6
120 - 150 nm	23 391	1 278	94.34	0.43	0.45	6
150 - 200 nm	34 357	1 892	94.36	0.35	0.37	6
200 - 250 nm	32 418	1 771	94.29	0.61	0.64	6
250 - 300 nm	26 707	1 473	94.11	0.42	0.44	6
300 - 400 nm	46 853	2 273	94.87	0.33	0.34	6
400 - 550 nm	39 161	1 596	95.68	0.34	0.35	6
550 - 700 nm	19 699	787	95.94	0.47	0.49	6
700 - 1000 nm	27 070	637	97.60	0.27	0.28	6
1000 - 1300 nm	7 008	126	98.11	0.73	0.76	6
1300 - 1600 nm	6 131	74	98.76	0.43	0.45	6
1600 - 2200 nm	24 585	225	99.07	0.09	0.10	6
2200 - 3000 nm	8 489	37	99.59	0.16	0.17	6
3000 - 4000 nm	2 527	2	99.92	0.20	0.20	6
4000 - 5500 nm	1 290	0	100.00	0.00	0.00	6
5500 - 7000 nm	97	0	100.00	0.00	0.00	6
7000 -10000 nm	12	0	100.00	0.00	0.00	5

