

Politecnico di Torino - Dipartimento Energia

Efficiency Assessment

Test No.: 5015 Petitioner: Aerosol Technology Lab
Date: 19/03/2024 Medium: n ° 4 - PANCO15CNC 3
Measurement no.: 3 Manufacturer: USP-Sao Carlos
Area [m²]: 0.001 Medium type: Polyacrylonitrile+castor oil+cell. nanocrystals
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]: 518
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: 24.4 °C /36% /98400Pa
Remarks: TSI OPS3330 0.452m3/h 7.5l/min
Adattore Diameter 40mm 10cm/s. Delta P=518 Pa
Pressione all'interno del condotto=87 Pa

Size class [µm]	Particle concentration [#/dm³]		Efficiency [%]	Deviation [+/-]	Uncertainty [+/-]	Meaningful cycles
	Upstream	Downstream				
0.30 - 0.40 µm	44 720	1 402	96.81	0.15	0.16	6
0.40 - 0.55 µm	31 241	897	97.06	0.14	0.15	6
0.55 - 0.70 µm	18 960	461	97.50	0.25	0.26	6
0.70 - 1.00 µm	26 114	523	97.96	0.15	0.16	6
1.00 - 1.30 µm	8 518	106	98.71	0.10	0.10	6
1.30 - 1.60 µm	13 455	98	99.25	0.12	0.12	6
1.60 - 2.20 µm	13 514	47	99.63	0.10	0.10	6
2.20 - 3.00 µm	3 979	3	99.92	0.05	0.05	6
3.00 - 4.00 µm	1 331	0	99.98	0.04	0.05	6
4.00 - 5.50 µm	265	0	99.89	0.27	0.28	6
5.50 - 7.00 µm	20	0	100.00	0.00	0.00	6
7.00 - 10.00 µm	6	0	100.00	0.00	0.00	6

