

Politecnico di Torino - Dipartimento Energia

Efficiency Assessment

Test No.:	5015	Petitioner:	Aerosol Technology Lab
Date:	14/03/2024	Medium:	n ° 4 - PANCO15CNC 3
Measurement no.:	2	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]:	478
Sampling cycle time [s]:	45	Air flow rate entering OPC [cm³/min]:	94
Dilution factor:	1	Correlation ratio:	984-03/14/2024 3:35:50 PM-Masc
Neutralizer:		OPC:	TSI 3340
Conditioned / Discharged	No	Test environment:	23.2 °C /33% /98400Pa
Remarks:	TSI OPS3340A 0.452m³/h 7.5l/min Adattore Diameter 40mm 10cm/s. Delta P=478 Pa Pressione all'interno del condotto= 67Pa		

Size class [µm]	Particle concentration [#/dm³]		Efficiency [%]	Deviation [+/-]	Uncertainty [+/-]	Meaningful cycles
	Upstream	Downstream				
90 - 100 nm	24 440	461	97.94	0.42	0.44	6
100 - 120 nm	22 170	775	95.62	0.29	0.31	6
120 - 150 nm	24 770	931	96.08	0.24	0.25	6
150 - 200 nm	35 287	1 113	96.74	0.36	0.38	6
200 - 250 nm	33 313	1 078	96.62	0.50	0.52	6
250 - 300 nm	27 530	768	97.11	0.41	0.43	6
300 - 400 nm	47 816	1 366	96.99	0.33	0.35	6
400 - 550 nm	40 288	1 033	97.31	0.38	0.40	6
550 - 700 nm	19 945	440	97.70	0.35	0.36	6
700 - 1000 nm	27 056	492	98.10	0.11	0.12	6
1000 - 1300 nm	7 287	85	98.81	0.23	0.24	6
1300 - 1600 nm	6 387	47	99.23	0.38	0.39	6
1600 - 2200 nm	25 370	137	99.45	0.12	0.12	6
2200 - 3000 nm	8 428	17	99.81	0.16	0.17	6
3000 - 4000 nm	2 367	0	100.00	0.00	0.00	6
4000 - 5500 nm	1 248	0	100.00	0.00	0.00	6
5500 - 7000 nm	91	0	100.00	0.00	0.00	6
7000 -10000 nm	6	0	100.00	0.00	0.00	5

