

Figure S1. Experimental set-up developed in the laboratory to perform the tests

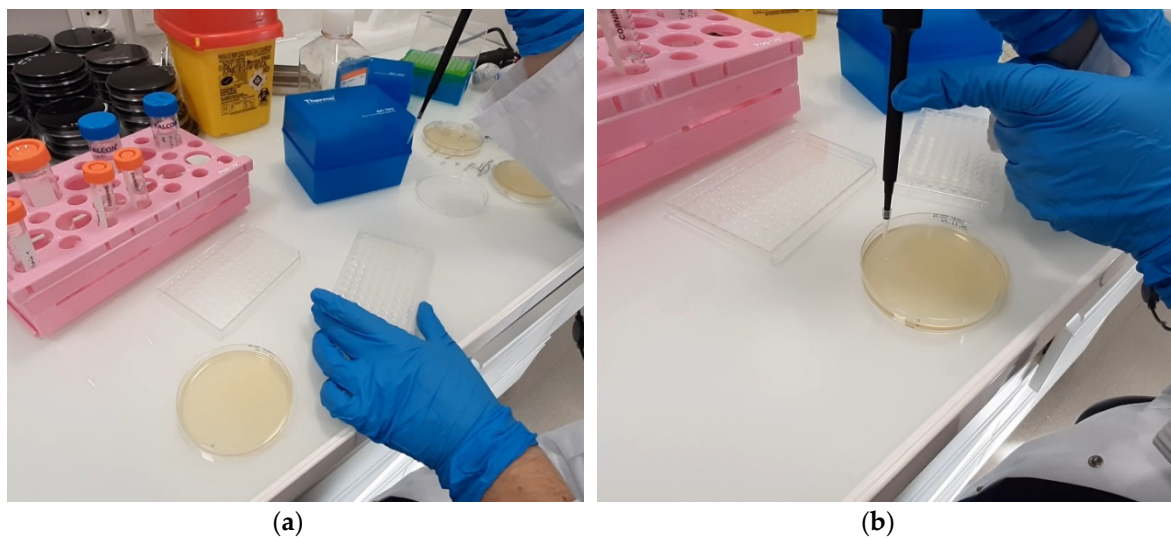


Figure S2. (a) Dilution of the phage solution to be titrated from 10^{-1} to 10^{-12} in 96 well plates. (b) Deposit on bacterial culture of successive dilutions of the viral solutions collected by the Coriolis.

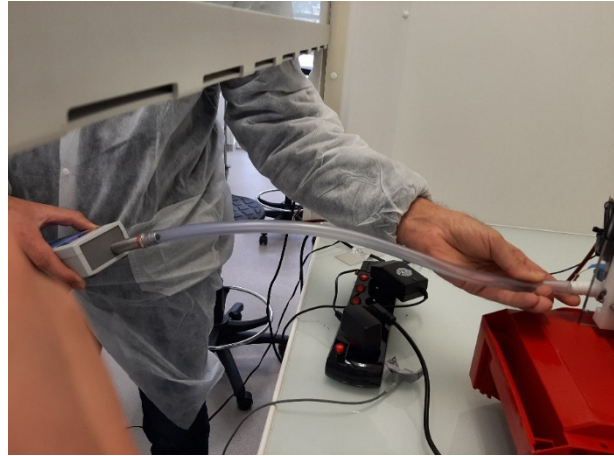
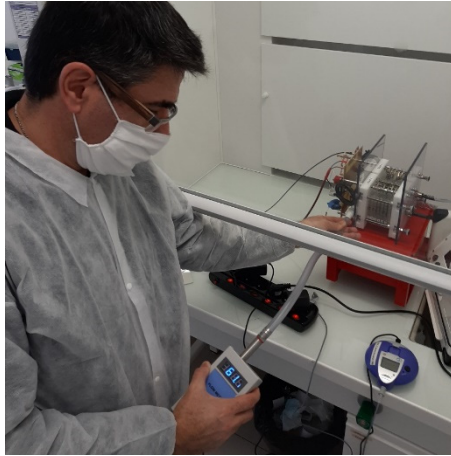


Figure S3. Measurement of the air flow in the purifier before each of the experiments.

Table S1. Complete table with experimental results showing for the different operating conditions: nebulization duration, flow rate at the inlet of the air cleaner, total nebulized volume, viral load nebulized, bioaerosol volume collected by the Coriolis® device, concentration of virus in the Coriolis® jar, and virus load collected by the Coriolis® device.

		Nebulization duration (s)	Airflow air cleaner (L/min)	Nebulized volume (ml)	Amount of virus nebulized (PFU)	Volume recovered by the Coriolis (ml)	[phage] on the Coriolis (PFU/ml)	Amount of virus collected by the Coriolis (PFU)
Reference condition with the air purifier turned off	N=1	155	62.8	2.054	4.11E+10	2.773	1.00E+06	2.77E+06
	N=2	180	63.4	2.115	4.23E+10	2.673	3.00E+05	8.02E+05
	N=3	162	63.1	1.925	3.85E+10	2.648	2.00E+05	5.30E+05
	N=4	136	63.3	1.962	3.92E+10	2.613	1.00E+05	2.61E+05
	N=5	138	62.8	1.988	3.98E+10	2.766	1.00E+05	2.77E+05
Mean		154	63.1	2.009	4.02E+10	2.695	3.40E+05	9.29E+05
Standard deviation		18	0.3	0.076	1.52E+09	0.072	3.78E+05	9.43E+05
"Optimal" 6-module test condition	N=1	160	63.3	2.072	4.14E+10	2.776	0.00E+00	0.00E+00
	N=2	155	61.2	1.931	3.86E+10	2.842	0.00E+00	0.00E+00
	N=3	135	61.3	1.970	3.94E+10	2.762	0.00E+00	0.00E+00
	N=4	115	61.4	1.930	3.86E+10	2.526	0.00E+00	0.00E+00
	N=5	155	61.5	1.972	3.94E+10	2.758	0.00E+00	0.00E+00
Mean		144	61.7	1.975	3.95E+10	2.733	0.00E+00	0.00E+00
Standard deviation		19	0.9	0.058	1.15E+09	0.12	0.00E+00	0.00E+00
"Reduced" 3-module test condition	N=1	135	61.4	1.938	3.88E+10	2.685	0.00E+00	0.00E+00
	N=2	135	N/A	2.057	4.11E+10	2.720	1.00E+01	2.72E+01
	N=3	155	61.1	1.943	3.89E+10	2.689	0.00E+00	0.00E+00
Mean		142	61.3	1.979	3.96E+10	2.698	3.33E+00	9.07E+00
Standard deviation		12	0.2	0.067	1.35E+09	0.02	5.77E+00	1.57E+01