micronAir® Cabin Air Filter - Real World Testing Preconditions & Technical Requirements

VIAQ 18-07

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Cabin Air Filter - Real World Testing - Preconditions



General preconditions and settings see also VIAQ 17-10.

- All test data to be measured online (particles & gases)
- Test data to be tracked:
 - General weather conditions, e.g. sunny, cloudy, wind, rain, snow,...
 - Temperature outside & inside car
 - Relative humidity outside & inside car
 - Absolute pressure outside & inside car
 - Traffic conditions: Drive speed, drive route, volume of traffic
- Positioning of sampling ports outside & inside car, use of multiple sampling ports
- Before testing, the car should be in a clean environment and the HVAC has to run on max
 blower speed for 5 minutes with open doors, to remove all contaminents from the air inlet tubes



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Cabin Air Filter - Real World Testing – Technical Requirements

General technical requirements see also VIAQ 17-10.

- Isokinetic sampling
- Measurement interval as short as possible, short response time of measuring devices
- Inside sampling positions at the central air outlet of the dashboard <u>and</u> at the passenger head (this will result in two different values: with/without contamination from the interior materials and the passengers themselves)
- Particle size range: 50 nm to 500 nm (MPPS range for all types of cabin air filters)
- HVAC in manual fresh air mode, no automatic modes, specified air flow



