

Institut für Energie- und  
Umwelttechnik e.V. (IUTA)

Air Quality & Filtration  
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Germany



## IUTA certificate

### Filter performance for 3 nm particles

**Customer:** Philips Investment Co. China,  
Ling Shi Road No. 718, Shanghai, 200072 P.R. China

**IUTA report:** UN2-180705-T5599900-076

**Certificate number:** UN2-180705-T5599900-076

**Tested filter product:** **Philips FY2422**

According to the current statement of Philips Shanghai the tested filter FY2422 is installed in the Philips Air Purifier AC2885, AC2887, AC2889 and AC2892 models.

#### Test parameters

**Test aerosol:** NaCl aerosol, 5 nm geometric mean diameter, classified at 3 nm with nanometer differential mobility analyzer (nano DMA)

**Air Flow:** 380 m<sup>3</sup>/h

**Aerosol instrumentation:** Classifier (model 3080) with nano DMA (model 3085) and Ultrafine Condensation Particle Counter (UCPC, model 3776), all TSI Inc.

**Test set up:** According to DIN 71460/ISO 11155


#### Test results

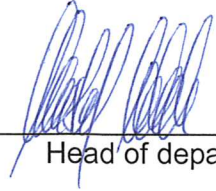
The 3 nm particle removal efficiency of the tested filters FY2422 was **>99.985 %** (see table).

Filter	Filtration efficiency for 3 nm particles* (%)
FY2422; Filter nr. 1	99.991
FY2422; Filter nr. 2	99.996
FY2422; Filter nr. 3	99.985

\*Due to the low number of particles counted downstream of the filters the values in the table correspond to the minimum value of the 95 % confidence interval.

Duisburg, 22<sup>nd</sup> August 2018

  
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Managing Director

  
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Head of department