

ISO 14644-12:2018 (E)

Cleanrooms and associated controlled environments — Part 12: Specifications for monitoring air cleanliness by nanoscale particle concentration

Contents

| | |
|---------|--|
| | Foreword |
| | Introduction |
| 1 | Scope |
| 2 | Normative references |
| 3 | Terms and definitions |
| 3.1 | General |
| 3.2 | Size |
| 3.3 | Airborne particles |
| 3.4 | Occupancy states |
| 3.5 | Measuring apparatus |
| 4 | Monitoring |
| 4.1 | General |
| 4.2 | Principle |
| 4.3 | Methods |
| 5 | Test report |
| Annex A | (informative) Reference method for monitoring by condensation particle counting |
| A.1 | Principle |
| A.2 | Apparatus requirements |
| A.2.1 | CPC instrument |
| A.2.2 | Condensation particle counter (CPC) |
| A.2.3 | Instrument calibration |
| A.3 | Particle counting efficiency and particle size cut-off |
| A.4 | Pretest conditions |
| A.4.1 | Preparation for testing |
| A.4.2 | Pretest equipment setup |
| A.5 | Sampling |
| A.5.1 | Establishment of sampling locations |
| A.5.2 | Sampling procedure for CPC |
| A.6 | Recording of results: Average concentration of particles at each sampling location |
| A.7 | Interpretation of results — requirements |
| Annex B | (informative) Particle counting efficiency and particle size cutoff |
| B.1 | Counting efficiency |
| B.2 | Particle size cutoff device |
| B.3 | Nanoscale particle size distribution |

Page count: 11