



IEC 61048 : 2006
TESTING AND MEASURING EQUIPMENT/ALLOWED SUBCONTRACTING
Auxiliaries for lamps – Capacitors for use in tubular fluorescent and other discharge lamp circuits
General and safety requirements

R=Required by Lab
S=May be subcontracted

| Clause | Measurement/testing | Testing / measuring equipment / material needed | Subcontracting |
|--------|--|---|----------------|
| 6 | Marking | Petroleum spirit / Water / Cloth | R |
| 7 | Terminations | Earthing test equipment | R |
| 8 | Creepage distances and clearances | Digital calliper (or equivalent) | R |
| 11 | Discharge resistor | Oscilloscope / AC Source | R |
| 13 | Sealing and heating test | Ventilation oven 40-150 °C Vessel hermetically sealed under pressure | R |
| 14 | High-voltage test | AC source, AC high voltage tester (0-5 kV), Voltage measurement instrument | R |
| 15 | Resistance to adverse operating conditions | Climatic chamber 40 °C ± 2 °C / 90 - 95 % HR AC source Capacitance and tangent of the loss angle meter instrument at 1 kHz Test circuit for current (discharge) test Variable inductor Oscilloscope with current and voltage probe | R |
| 16 | Resistance to heat, fire and tracking | Ball pressure test apparatus; Heating cabinet Glow-wire test apparatus Needle flame test apparatus Tracking test device | R |



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|--------|---------------------|--|----------------|
| 17 | Self-healing test | AC source Voltage measurement instrument Apparatus for detection of breakdowns (e.g. acoustic) | R |
| 18 | Destruction test | Thermal cycling test chamber AC source Voltage measurement instrument Temperature chamber (forced circulation) DC High voltage source Circuit for AC – DC conditioning Circuit for High RMS current test Variable inductor Oscilloscope with current and voltage probe | R |

Note: The presence of equipment alone does not indicate a satisfactory situation. Assessors must evaluate the equipment design, calibration, uncertainty and documentation to ensure compliance with the directions of the standard. The requirements of ISO Guide 25 regarding validation are applicable, as the tests of this standard are not standardised tests.