



**TESTING AND MEASURING EQUIPMENT/ALLOWED SUBCONTRACTING
IEC 61048:2006 – AMD1:2015**

**Auxiliaries for lamps – Capacitors for use in tubular fluorescent and other discharge lamp circuits
General and safety requirements**

PROVISIONAL

- “R” Required
- “S” May be subcontracted, see OD 2012
- “SF” Specialized Facility, see IECEE 02-2
- “W” Witness testing in the categories “MED” and “MEAS”
- “3PPS” Three Phase Power Supply required

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

Clause	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
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
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