



**IEC 60921: ED. 2 (2004)**  
**TESTING AND MEASURING EQUIPMENT/ALLOWED SUBCONTRACTING**  
**Ballasts for tubular fluorescent lamps – Performance requirements**

R=Required by Lab

S=May be subcontracted

Clause	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
6	Voltage at terminations of lamp or starter	Supply, resistors, voltmeter, oscilloscope	R
7 (A.5)	Pre-heating conditions	Supply, resistors, amperometer	R
8 (A.6)	Lamp power and current	Test circuit according to fig. 6 or 7: supply, reference ballast, reference lamp, voltmeter, amperometer, wattmeter , integrator, light meter	R
9	Circuit power factor	Test circuit according to fig. 2: supply, amperometer, voltmeter, wattmeter, reference lamps	R
10	Supply current	Supply, reference lamp, amperometer, voltmeter	R
11 (A.7)	Maximum current in any lead to a cathode	Test circuit according to fig. 8: supply, equivalent resistors, reference lamp, voltmeter, amperometer	R
12 (A.8)	Current waveform	Test circuit according to fig. 9: supply, reference lamp, oscilloscope, selective voltmeter or wave analyzer	R
13	Magnetic screening	Supply, steel plate, amperemeter, voltmeter	R
14 (A.9)	Impedance at audio-frequencies	Test circuit according to fig. 10: supply, a.c. generator, resistance bridge, spectrum analyser	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.