**TESTING AND MEASURING EQUIPMENT/ALLOWED SUBCONTRACTING**

**IEC 62612:2013+AMD1:2015**

**Self-ballasted LED lamps for general lighting services with supply voltages > 50 V   
– Performance requirements**

“R” Required

“S” May be subcontracted, see OD 2012

“SP” 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** | **Equipment Classification** |
| --- | --- | --- | --- |
| 6 | Dimensions | Calliper | **R** |
| 8 | Lamp input | Stabilized room, power supply, voltage meter, current meter, power meter, temperature measuring system | **R** |
| 9.1 | Luminous flux | Stabilized room, goniophotometer or integrating sphere, calibrated lamps, temperature measuring system | [LPCE-2(LMS-9000)](https://www.lisungroup.com/products/led-test-instruments/high-precision-spectroradiometer-integrating-sphere-system.html) |
| 9.2 | Luminous intensity distribution, peak intensity and beam angle | Stabilized room, goniophotometer, calibrated lamps, temperature measuring system | [LSG-1890B](https://www.lisungroup.com/products/goniophotometer/high-precision-rotation-luminaire-goniophotometer.html) |
| 10 | Colour nomenclature, variation and rendering | Integrating sphere with calibrated spectral measurement system or  Integrating sphere with spectroradiometer system | [LMS-6000](https://www.lisungroup.com/products/spectroradiometer/portable-ccd-spectroradiometer.html) |
| 11 | Lamp life | Temperature chamber(s), photometer (integrating sphere or goniophotometer system), timer, cycling controller | [GDJS-015B](https://www.lisungroup.com/products/environmental-test-chamber/high-and-low-temperature-humidity-chamber.html) |
| Annex C | Measurement of displacement factor | Harmonic distortion measurement system | [LS2050B](https://www.lisungroup.com/products/ac-and-dc-power-supply/digital-power-meter-high-accuracy-model.html) |