

When it comes to electrical safety testing your lighting and LED components it is important to meet specific testing standards. Whether you're production testing or design testing, our testers are here to help your products pass their tests. Refer to the safety standards and suggested solutions below.

PRODUCTION TESTING

18 Factory Production Tests

18.1 DIELECTRIC VOLTAGE-WITHSTAND

Test voltage = 1200 V AC between primary circuit and accessible dead metal chassis

Test time = 1 sec

No insulation breakdown

18.2 GROUNDING CONTINUITY

Test current passed between earthing contact point and accessible conductive parts

No load voltage ≤ 12 V AC or DC

Impedance of ground circuit $\leq .1\Omega$

PRODUCTION TESTING SOLUTION

Hypot® 3865

WithStand™



DESIGN TESTING

17.1 Dielectric Voltage-Withstand Test (The Hipot Test) REQUIREMENT

Test voltage = 1000 V AC for incandescent luminaries

Test voltage = $1000 + 2 * \text{Rated Voltage}$ for all other luminaries and Test time = 60 sec

PASS CRITERIA

No breakdown on product insulation

If DUT enclosure is a non-conductive, use metal foil as conductive medium for return point

17.2 Bonding Circuit Impedance (The Ground Bond Test) REQUIREMENT

Test current - 30 A passed between earthing contact point and accessible conductive parts

No load voltage ≤ 12 V AC or DC

Test time = 60 -120 sec (Refer to clause 17.2.4)

PASS CRITERIA

Impedance protective earthing circuit on the DUT ≤ 100 m Ω

17.5 Insulation Resistance Test (The IR Test - Mexico Only) REQUIREMENT

Test voltage = 500 V DC

IR value measured between live parts of opposite polarity and live parts of DUT enclosure

PASS CRITERIA

Minimum insulation resistance ≥ 2 M Ω

DESIGN TESTING SOLUTION

HypotULTRA®
7804

WithStand™

