

August 16, 2004

## Line-voltage Socket and Ballast Housing Design Competition

### Requirement specifications

<b>Detailed Technical Requirements</b>	<b>Mandatory</b>
1. Assembly	Assembly should be easy. Fixture manufacturer should be able to use the socket in fixtures already designed for incandescent lamp socket
2. Socket size	Smaller is better, so it can fit in various fixture types (e.g., table lamp, floor lamps, wall sconce, chandelier, surface mounted, recessed). Diameter = 4.5 cm or smaller.
3. Socket mounting	Should allow for flexibility. Must consider multiple mounting positions inside the fixtures, i.e., horizontal, vertical, back.
4. Ease of use for consumers	Product must have simple and durable (strong enough to support heavy glass) connections with ballast and be of sturdy material.
5. Simplicity	Simplicity of manufacturing and integration of available components.
6. Patent	The product should hold have an open protocol, available to the public.
7. Market availability	Product should be available in the market within 6 months of selection.
8. Cost	Cost of manufacturing (lamp holder only) should be low and add no extra cost to the fixture, compared to similar solutions.
9. Time to implementation	The product should be available within a year of design approval.
10. Universal socket	Product must be able to work with existing connections within the fixtures.
11. Voltage/Wattage	Product must comply with industry voltage

12. Safety	and wattage requirements . In North America, minimum of 120VAC, 60Hz  Basic socket/base system must be UL, CSA or ETL listed.
13. Engineering Design Specifications	Mandatory submission of detailed engineering drawings and other critical information for the design for both the base and socket/ballast housing that includes: 1- list of all materials used (type of plastic, flame rating, temp. rating); must be UL recognized materials 2- table of all dimensions referenced to the appropriate drawing 3- table of dimensional tolerances referenced to the appropriate drawing 4- multiple drawing views to properly depict all dimensions in detail