

ENERGY STAR® Compact Fluorescent Light Bulb QUALIFICATION FORM: FULL INITIAL INDOOR REFLECTORS

Please submit a completed copy of this form with each model to be reviewed for ENERGY STAR Qualification and a copy of the packaging artwork for approval. Incomplete forms that are submitted will slow down the qualification process. ENERGY STAR CFL specification available at http://www.energystar.gov/products/cfls. Submit completed forms to D&R International, Ltd., 1300 Spring Street, Suite 500, Silver Spring, Maryland 20910, or fax (301) 588-0854 or cfl@energystar.gov.

PART 1: To be completed by manufacturer for medium or candelabra based screw-in bulb with integral ballast.		
Company:		
Contact:		
Address:		
City:		State: Zip Code:
Country:		Phone Number:
Fax Number:		E-mail Address:
Web Site:		Countries Sold in:
Please complete entire form. Description to appear on http://www.energystar.gov/CFLs . To list additional packaging please complete and submit the Supplemental Packaging Form.		
Brand Name:		Model Number:
Wattage: (watts)		Light Output: (lumens)
Bulb Life: (hours)		Warranty: (years) Commercial ≥ 1 yr Residential ≥ 2 yrs Minimum Start Temperature:
Color Temperature: (Kelvin <i>mark one</i>)	□ 2700K 3000K 3	500K 4100K 5000K 6500K (to be specified on packaging)
Model Type/Design: (Mark one)	☐ Covered- reflector R ☐ Covered- reflector R ☐ Covered- reflector R	Other: (please indicate)
Special Features/ Uses: (Mark all that apply)	☐ Dimmable ☐ 3-Way ☐ Recessed can ☐ Ceiling Fan ☐ Ceiling Mounted Fix	Outdoor Flood Other: (please indicate)
Amalgam Mercury?	Yes No	Base Type Medium (E-26) Candelabra (E-12)
Position Restriction? Base up Base Down □ This lamp complies with NEMA voluntary limits on mercury content. Image: Content of the properties of the propertie		
Signature	cturer Contact	Date

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PART 2: To be completed and signed by a **NVLAP-accredited testing facility**. For a list of accredited facilities visit the National Institute for Standards and Technology (NIST) site at http://ts.nist.gov/ts/htdocs/210/214/214.htm. Please attach all supporting data reports. **Model Number:** Manufacturer: Report Date: Month/Day/Year **Report Number: NVLAP-Certified Testing** Facility: AVG BASE-UP Lamp efficacy: **Specification** Must meet or exceed minimum listed lumens per watt. 10 samples required Lamp power < 20 = 33 lm/wIndoor Reflector: Lamp power > 20 watts = 40 lm/w**Specification Test Sample Averages** (Elevated Temperature tests must follow test procedures outlined in Appendix B of the 4.0 criteria) **Starting Time:** \leq 1.00 second (to the mSec) **Color Quality:** $CRI \ge 80.0$ (no more than 3 samples can be below 77) Run-up Time: ≤ 3.0 minutes amalgam < 1.0 minute non-amalgam (seconds) **Correlated Color** 9/10 lamps must fall within a 7-step ANSI MacAdam Ellipse Kelvin of one of the following CCT at 100 hours: 2700K, 3000K, **Temperature:** (Kelvin) (Please include Appendix C 3500K, 4100K, 5000K, 6500K chromaticity data) **Power Factor:** > 0.50 **Operating Frequency:** > 40.0 kHz **Transient Protection:** 7 strikes Pass Fail Cycle times must be 5 min. on, 5 min. off; lamp will be cycled once **Rapid Cycle Stress** Cvcles Pass Fail for every 2 hours of rated life. At least 5 lamps must meet or exceed Endured: Test: (out of 6 samples) the minimum number of cycles. 1 unit per sample, base up position must meet the minimum **Initial Elevated** 25 °C 50°C requirement of maintaining 90% of initial rated light output. **Temperature Light** Pass Fail **Output Ratio: Elevated Temperature** Average lumen output measurement of 10 sample lamps must be > 90% of initial (100-hour) lumen output when measured 1,000-hour Lumen at 1,000-hours, and no more than 3 samples can have lumen **Maintenance:** output of < 85%. Average lumen output measurement of 10 sample lamps must **Elevated Temperature** be > 80% of initial (100-hour) lumen output when measured **Lumen Maintenance** at 40% of rated life, and no more than 3 samples can have at 40% of Rated Life: lumen output of < 75%. 100-hour Light Baseline measurement for calculating lumen maintenance **Output: Elevated Temp** At 40% of rated life two sample failures require explanation. Sample failures at 40% of life: **Interim Life Test:** Three sample failures will not qualify. out of 10 Date Test Began: **Elevated Temp Life** > 6,000 hours as declared by the manufacturer packaging # of Models that met Rated Life: **Testing:** out of 10 Signature: Date: **NVLAP** Laboratory Technician