

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

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:			Title:							
Address:										
City:				State:			Zip Cod	e:		
Country:				Phone Number:						
Fax Number:				E-mail Address:						
Web Site:				Counti	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)			Li	Light Output: (lumens)						
Bulb Life: (hours)				Warranty: (years) Commercial ≥ 1 Residential ≥ 2 Minimum Start Temperature:						
Color Temperature: ☐ 2700K 3000K (Kelvin mark one)			350	3500K 4100K 5000K 6500K (to be specified on packaging)						
Model Type/Design: (Mark one) □ Bare- spiral □ Bare- circline □ Bare- twin/triple/q □ Covered- reflector □ Covered- Globe										
Uses: (Mark all that apply) □ Table/Floor lamp to Dimmable □ 3-Way □ Ceiling Fan □ Decorative/Vanity □ Ceiling Mounted F □ Pendant Fixture			,	 ☐ Outdoor Enclosed Fixture ☐ Indoor Enclosed Fixtures ☐ Wall Sconce ☐ Available as bug light 						
Amalgam Mercury? Yes No				Base Type: Medium (E-26) Candelabra (E-12)						
Position Restriction? Base up Base Down Other (Please indicate)			/n	II.	☐ This lamp complies with NEMA voluntary limits on mercury content. ☐ mg Estimated Hg Content					
Signature										
•	Manufacturer Contact			Date (Month/Day/Year)						

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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 Number:** Report Date: Month/Day/Year **NVLAP-Certified Testing Facility: Specification** AVG BASE-AVG BASE Must meet or exceed minimum listed lumens per watt. UP **DOWN** Lamp efficacy: (10 units, 5 base up/5 base down, unless specific position is noted) (specify alternative position) < 10 watts = 50.0 lm/wBare: $10 \le \text{lamp power} < 15 \text{ watts} = 55 \text{ lm/w}$ > 15 watts = 65 lm/w< 15 watts = 50 lm/wBare Dimmable/ 2-way/3-way: > 15 watts = 60 lm/w \leq 7 watts = 40 lm/w (candelabra base exception: 35 lm/w) 7 < lamp power < 15 watts = 45 lm/w**Covered:** (no reflector) $15 \le \text{lamp power} < 25 = 50 \text{ lm/w}$ Lamp power > 25 watts = 60 lm/w **Outdoor Reflector:** Lamp power < 20 = 33 lm/wNOTE: Indoor Reflectors require Lamp power ≥ 20 watts = 40 lm/w different qualification form **Specification Test Sample Averages Starting Time:** < 1.00 second (to the mSec) **Color Quality:** $CRI \ge 80.0$ (no more than 3 samples can be below 77) Run-up Time: (seconds) < 3.0 minutes amalgam < 1.0 minute non-amalgam **Correlated Color** 9/10 lamps must fall within a 7-step ANSI MacAdam Kelvin Ellipse of one of the following CCT at 100 hours: 2700K, (Please include Appendix C **Temperature:** (Kelvin) 3000K, 3500K, 4100K, 5000K, 6500K chromaticity data) **Power Factor:** > 0.50 **Operating Frequency:** > 40.0 kHz7 strikes **Transient Protection:** Pass Fail Cycle times must be 5 min. on, 5 min. off; lamp will be cycled Cycles Pass Fail **Rapid Cycle Stress Test:** once for every 2 hours of rated life. At least 5 lamps must meet or Endured: (out of 6 samples) exceed the minimum number of cycles. 100-hour Light Output: Baseline measurement for calculating lumen maintenance Average lumens: (lumens) Average lumen output of 10 lamps must be > 90% of 100 1000-hour Lumen hour lumen average. No more than 3 samples can have < Average lumens: **Maintenance:** (lumens) 85% lumens. 40% Rated Life Lumen Must be 80% of initial (100-hour) rating. No more than 3 Average lumens: lamps can have < 75% of initial rating. **Maintenance:** Sample failures at 40% of life: At 40% of rated life two sample failures require **Interim Life Test:** explanation. Three sample failures will not qualify. out of 10 Date Test Began: **Average Rated Lamp** \geq 6,000 hours as declared by the manufacturer packaging # of Models that met Rated Life: Life: out of 10 Signature: Date: **NVLAP** Laboratory Technician

PART 2: To be completed and signed by a **NVLAP-accredited testing facility**. For a list of accredited facilities visit the