

DOE 2009 Energy Regulations:

Halogen Lamp Calculator

Summary: Halogen PAR lamps including PAR38, PAR30 and PAR20 within the 40–205 watt range are being regulated by minimum Lumen per Watt (LPW) standards

Effective date: July 14, 2012

Impact: Standard PAR Halogen lamps in all categories are eliminated. GE PAR Halogen IR Plus lamps meet standard. HIR PAR lamps are borderline, some current products pass, others fail narrowly. None of the existing PAR20 lamps meet the requirement. Redesign required. All 130V lamps are likely to be eliminated.



PAR Lamp Lumen per Watt (LPW) Standard will vary by lamp diameter, voltage and wattage

Minimum LPW Examples:

- Standard PAR38, 120 Volt: LPW Standard = $5.9 \times P^{.27}$ (P=Lamp Wattage)
- 60 Watt PAR38: LPW = $5.9 \times 60^{.27} = 17.8$ Lumens Per Watt*

*For modified spectrum lamps, like GE Reveal®, LPW requirements are approximately 15% lower.

Content provided by GE Corp. To calculate the minimum LPW standards for other Halogen PAR lamps, visit GE's Halogen LPW Calculator at the GE Environmental Information Center:

www.gelighting.com/DOEregs

Examples of lamps not impacted by these LPW regulations include, but are not limited to: Lamps under 40 watts, lamps over 205 watts, colored, rough /vibration service, shatter resistant and heat lamps

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