

LIGHTING

Tips for Meeting Virginia Residential Energy Code

The lighting industry has been transformed by compact fluorescent lamp (CFL) and light-emitting diode (LED) technologies because of their high performance and energy efficiency. Not only should CFLs and LEDs be considered for building lighting solutions, but N1104.1 (R404.1) of the 2015 Virginia Residential Code requires that at least 75% of the permanently installed lighting fixtures contain only high-efficacy lamps or that 75% of the lamps in permanently installed fixtures be high-efficacy.

The visual below shows the common way to meet the code for lighting equipment: using CFLs and/or LEDs for at least half of a home's bulbs.



LED



CFL

≥ 75%

Combination of both



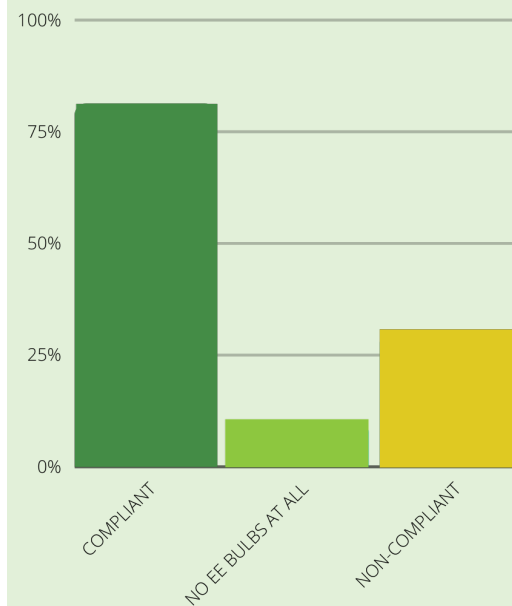
Incandescent

≤ 25%

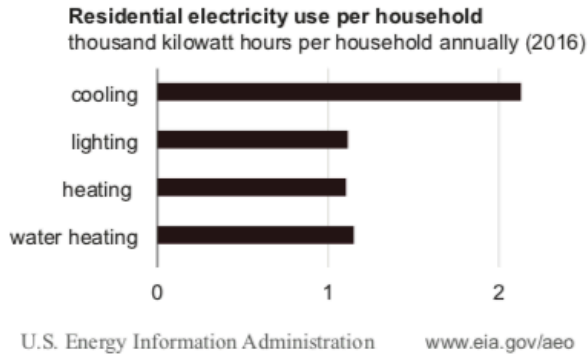
Incandescents







Baseline Field Study Results

High-Efficacy Lighting 2017-2018 Virginia Residential Field Study results



Enforcing lighting code requirements is important and easy to do:



| |  |  |  |
|--------------------------------|---|---|---|
| 800 Lumens | 60W | 14W | 13W |
| Avg. 20-year cost | \$326 | \$88 | \$61 |
| # of bulbs per location | 23 | 3 | 1 |
| |  |  |  |
| | NON-COMPLIANT | COMPLIANT | COMPLIANT |

Note: Cost comparison is based on a 20-year life and takes into account power consumption, hours of use per day, residential electricity cost, bulb cost and replacement cost. For detailed cost calculations and a full pro/con list, visit <http://Lighting.MnCERTs.org>.

MAKE LIGHTING INSPECTIONS EASIER:

- Look for the ENERGY STAR label
- Use a **lighting ballast discriminator**, an electronic sensor that indicates if lighting is energy efficient.



A lighting ballast discriminator can detect the frequency of a bulb's ballast with the simple push of a button, telling you what type of bulb is present. A green light indicates a CFL or an LED, while a red light indicates an incandescent.



Contact Viridiant with any questions or comments via: admin@viridiant.org or (804) 225-9843