

 <p style="text-align: center;">State of Ohio Weatherization Program Standards</p>	Section	<b>HIGH-RISE/CENTRALLY HEATED MULTI-FAMILY INSPECTION</b>
	Subject	<b>Lighting</b>

*LIGHTING 1006*

Determine the incandescent watts/unit to be replaced. **incandescents lamps**  
1006-1.1

Survey and note all interior lighting fixtures. Note the location, existing wattage and number of bulbs per fixture and whether this is common lighting or tenant lighting. Determine the hours per day the fixture is on from interviewing the client. **survey existing lighting**  
1006-1.2a

Using the information gathered and the replacement chart (see 1506-6), determine which bulbs may be replaced and note that on the inspection form. **determine replacements**  
1006-1.2b

The customer’s specific needs and habits must be considered in the replacement decision. Light quality must not be compromised. Fluorescent bulbs must not be installed in fixtures equipped with dimmers unless the bulb manufacturer specifically allows for it. **customer needs**  
1006-1.3a

Lumen output at the lamp should be sufficient to assure these illuminance levels *at the working surface*. **lumen output**  
1006-1.3b

<u>Activity</u>	<u>Foot-candle Level</u>
General or ambient lighting	5-20
Task lighting (non-critical)	20-50
Reading or close work	50-100

Lumen output is measured at 1 foot from the source and is the total output in all directions. Foot-candles measured at the surface considers light output, distance from the light source and reflectance of the surrounding surfaces.

Approximate lumen output of incandescent lamps.

<u>Watts</u>	<u>Lumens</u>
42	505
54	800
62	870
77	1190
92	1620
100	1750

**consumer education**  
1006-1.4

Consumer education must be provided concerning matters such as:

- a. Fluorescent bulbs are most cost-effective in applications where the light remains on for long periods of time.
- b. Fluorescent bulbs may take 60-90 seconds to reach full brightness.
- c. Fluorescent bulbs last approximately 10 times longer and are therefore beneficial in hard to reach places.
- d. Fluorescent bulbs are applicable where safety is an issue, such as fixtures where incandescent bulbs exist that are overrated for the wattage of the fixture and therefore create a fire hazard.