

The ASHRAE/IES 90.1-2001 Standard is defined as the standard as in effect on April 2, 2003. This means that the published lighting power densities in the Standard's Table 9.3.1.1 (building area method) and Table 9.3.1.2 (space-by-space method) are in effect as far as the tax deduction is concerned.

Understanding what version of the Standard applies is important because after April 2, 2003, Standard 90.1-2001 was amended with Addendum g, which reduced the lighting power densities to values that are now adopted in 90.1-2004. States that adopt Standard 90.1-2001 may do so with amendments or without. For the purpose of claiming the tax deduction, Standard 90.1-2001 without Addendum g applies. The below table shows minimum LPD values specified by ASHRAE/IES 90.1-2001, with 1989, 1999 and 2004 standards shown for comparison, courtesy of OSRAM SYLVANIA, Inc.

| Building Area Method | Lighting Power Densities | | | |
|-----------------------------|--------------------------|------|------|------|
| | 1989 | 1999 | 2001 | 2004 |
| Automotive Facility | 0.96 | 1.5 | 1.5 | 0.9 |
| Convention Center | 2.07 | 1.4 | 1.4 | 1.2 |
| Court House | 1.44 | 1.4 | 1.4 | 1.2 |
| Dining: Bar Lounge/Leisure | 1.37 | 1.5 | 1.5 | 1.3 |
| Dining: Cafeteria/Fast Food | 1.37 | 1.8 | 1.8 | 1.4 |
| Dining: Family | 1.37 | 1.9 | 1.9 | 1.6 |
| Dormitory | 1.15 | 1.5 | 1.5 | 1.0 |
| Exercise Center | 2.07 | 1.4 | 1.4 | 1.0 |
| Gymnasium | 2.07 | 1.7 | 1.7 | 1.1 |
| Healthcare Clinic | 1.44 | 1.6 | 1.6 | 1.0 |
| Hospital | 1.44 | 1.6 | 1.6 | 1.2 |
| Hotel | 1.15 | 1.7 | 1.7 | 1.0 |
| Library | 1.29 | 1.5 | 1.5 | 1.3 |
| Manufacturing Facility | 0.96 | 2.2 | 2.2 | 1.3 |
| Motel | 1.15 | 2.0 | 2.0 | 1.0 |
| Motion Picture Theater | 2.07 | 1.6 | 1.6 | 1.2 |
| Multi-Family | 1.15 | 1.0 | 1.0 | 0.7 |
| Museum | 2.07 | 1.6 | 1.6 | 1.1 |
| Office | 1.26 | 1.3 | 1.3 | 1.0 |
| Parking Garage | 1.03 | 0.3 | 0.3 | 0.3 |
| Penitentiary | 1.44 | 1.2 | 1.2 | 1.0 |
| Performing Arts Theatre | 2.07 | 1.5 | 1.5 | 1.6 |
| Police/Fire Station | 1.44 | 1.3 | 1.3 | 1.0 |
| Post Office | 1.44 | 1.6 | 1.6 | 1.1 |
| Religious Building | 2.07 | 2.2 | 2.2 | 1.3 |
| Retail | 2.25 | 1.9 | 1.9 | 1.5 |
| School/University | 1.29 | 1.5 | 1.5 | 1.2 |
| Sports Arena | 2.07 | 1.5 | 1.5 | 1.1 |
| Town Hall | 1.44 | 1.4 | 1.4 | 1.1 |
| Transportation | 2.07 | 1.2 | 1.2 | 1.0 |
| Warehouse | 1.03 | 1.2 | 1.2 | 0.8 |
| Workshop | 0.96 | 1.7 | 1.7 | 1.4 |

Individual systems

EPA Act 2005 instructs the Secretary of the Treasury, in consultation with the Secretary of Energy, to develop an energy-savings target for each type of system covered (interior lighting, HVAC/hot water, building envelope). Meeting any of the three targets will be another route building owners can take to demonstrate qualification for the deduction.

If a property does not qualify for the \$1.80 tax deduction, but one of the qualifying systems meets its designated energy-savings target, then the property will be eligible for a partial tax deduction. Therefore, if a commercial building property does not meet the requirement, but the interior lighting system meets its own energy-savings target, then a partial tax deduction may be allowed. This deduction/system is the lesser of: 1) \$0.60/sq.ft. or 2) the costs incurred or paid for the energy-efficient system.

Interim rules for lighting systems

EPA Act 2005 establishes interim rules for lighting systems effective until the Secretary of the Treasury issues the final regulations defining the energy-savings target for lighting systems.

The Interim Rules for Lighting Systems define the lighting system energy-savings target to be a lighting power density that is 25-40% lower than the minimum requirements in Table 9.3.1.1 (building area method) or Table 9.3.1.2 (space-by-space method) (not including additional interior lighting power allowances) of Standard 90.1-2001. For warehouses, the lighting power density must be 50% lower than the minimum requirements of Standard 90.1-2001.

The below table defines various savings targets on a 25-40% scale, with associated maximum allowable tax deduction:

| | | | | | | | | | | | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| % of LPD reduction beyond Standard 90.1-2001 | 25% | 26% | 27% | 28% | 29% | 30% | 31% | 32% | 33% | 34% | 35% | 36% | 37% | 38% | 39% | 40% | >40% |
| Amount of Eligible Tax Deduction/ sq.ft. | \$0.30 | \$0.32 | \$0.34 | \$0.36 | \$0.38 | \$0.40 | \$0.42 | \$0.44 | \$0.46 | \$0.48 | \$0.50 | \$0.52 | \$0.54 | \$0.56 | \$0.58 | \$0.60 | \$0.60 |

Below are examples of maximum allowable tax deductions for office, school/university, retail and warehouse buildings according to various levels of exceeding Standard 90.1-2001 requirements (building area method):

| | | ASHRAE/IES 90.1-1999 and 90.1-2001 | | Tax Deduction | | |
|----------------|-------------------|------------------------------------|----------------|------------------------|---------------|-----------|
| | | | | Interim Lighting Rules | | |
| Office | School/University | Retail | Warehouse | LPD | Non-Warehouse | Warehouse |
| LPD (W/sq.ft.) | LPD (W/sq.ft.) | LPD (W/sq.ft.) | LPD (W/sq.ft.) | Reduction | \$/sq.ft. | \$/sq.ft. |
| 1.3 | 1.5 | 1.9 | 1.2 | 0% | \$0.00 | \$0.00 |
| 0.975 | 1.125 | 1.425 | 0.900 | 25% | \$0.30 | \$0.00 |
| 0.910 | 1.050 | 1.330 | 0.840 | 30% | \$0.40 | \$0.00 |
| 0.845 | 0.975 | 1.235 | 0.780 | 35% | \$0.50 | \$0.00 |
| 0.780 | 0.900 | 1.140 | 0.720 | 40% | \$0.60 | \$0.00 |
| 0.715 | 0.825 | 1.045 | 0.660 | 45% | \$0.60 | \$0.00 |
| 0.650 | 0.750 | 0.950 | 0.600 | 50% | \$0.60 | \$0.60 |

(Note again that for warehouses, the lighting power density must be 50% lower than the minimum requirements of Standard 90.1-2001 to claim a tax deduction.)