



## RELATIVE INTENSITY OF SUNLIGHT AT THE PLANETS

It is easy to forget that the farther a planet lies from its “parent” star, the less light falls on it. Our own Solar System provides a good example of how the amount of light the Sun delivers over a “unit area” can differ vastly from planet to planet.

| PLANET                   | AVERAGE DISTANCE TO SUN (Earth=1) | SUNLIGHT INTENSITY (Earth =1) | INTENSITY IN LUX           | APPROXIMATE EQUIVALENCE IN “EARTH” TERMS WITH OTHER BENCHMARKS   |
|--------------------------|-----------------------------------|-------------------------------|----------------------------|--|
| Mercury                  | 0.387                             | 6.677                         | 667,700<br>300,000         | One Meter Away from a Bright Hospital Operating-Room Spotlight.<br><br>Bright “Earth” Day.<br><br>Typical “Earth” Day.<br>In the Shade on Bright “Earth” Day.<br><br>Some Hospital Operating Rooms.<br>Bright Television Studios.<br>Typical Business Office.<br>Typical “Earth” Sunrise or Sunset.<br><br>Typical Living Room.<br>Typical Public Bathroom.<br><br>Typical Night-Lit Sidewalk.<br><br>Night Under a Full Moon.<br>Night Under a Quarter Moon.<br>Night with No Moon. |
| Venus                    | 0.723                             | 1.913                         | 191,300                    |  |
| Earth                    | 1.000                             | 1.000                         | 100,000                    |  |
| Mars                     | 1.524                             | 0.431                         | 43,000<br>30,000           |  |
| Jupiter                  | 5.203                             | 0.037                         | 3,700<br>1,500             |  |
| Saturn                   | 9.539                             | 0.011                         | 1,100<br>350               |  |
| Uranus                   | 19.18                             | 0.0027                        | 270                        |  |
| Neptune                  | 30.06                             | 0.0011                        | 110<br>80                  |  |
| Pluto*                   | 39.53                             | 0.00064                       | 64<br>20                   |  |
| 2003 UB <sub>313</sub> * | 97.56                             | 0.00011                       | 11<br>0.2<br>0.02<br>0.001 |  |

\* dwarf planet

Note: some of these figures may seem deceiving at first, but that is because the human eye is capable of adapting to an impressive range of light intensities.