EXAMPLES OF SOME COMMON LIGHTING FIXTURES

POOR

Typical "Wall Pack"

Typical "Yard Light"

Area Flood Light

GOOD

Typical "Shoe Box" (forward throw)

Opaque Reflector (lamp inside)

Area Flood Light with Hood
EXAMPLES OF SOME COMMON LIGHTING FIXTURES

POOR

Ground-mounted Billboard Floodlights

GOOD

Top-mounted Billboard Floodlights (carefully focused onto billboard)

Post-style Lamp (more than 1,800 lumens)

Post-style Lamp (lamp set in opaque top)
MODIFYING EXISTING FIXTURES

FLOODLIGHT

WALL PACK

YARD LIGHT

OPAQUE REFLECTOR

SHOE BOX
2. It uses "fully-shielded" lighting fixtures, fixtures that control the light output in order to keep the light in the intended area.

Such fixtures have minimum glare from the light-producing source. "Fully-shielded" means that no light is emitted above the horizontal. (High-angle light output from ill-designed fixtures is mostly wasted, doing no good in lighting the ground but still capable of causing a great deal of glare. Of course, all the light going directly up is totally wasted.)

Fully-shielded light fixtures are more effective and actually increase safety, since they have very little glare. Glare can dazzle and considerably reduce the effectiveness of the emitted light.

3. It has the lighting fixtures carefully installed to maximize their effectiveness on the targeted property and minimize their adverse impact beyond the property borders.

Positioning of fixtures is very important. Even well-shielded fixtures placed on tall poles at a property boundary can cast a lot of light onto neighboring properties. This "light trespass" greatly reduces and invades privacy, and is difficult to resolve after the installation is complete.

Fixtures should be positioned to give adequate uniformity of the illuminated area. A few bright fixtures (or ones that are too low to the ground) can often create bright "hot spots" that make the less-lit areas in-between seem dark. This can create a safety problem. When lighting signs, position the lights above and in front of the sign, and keep the light restricted to the sign area; overtly lit signs are actually harder to read. Buildings ought to be similarly lit in a way to offer an attractive, safe environment without overkill.

4. It uses fixtures with high-efficiency lamps, while still considering the color and quality as essential design criteria.

High-efficiency lamps used for lighting not only save energy — which is good for a cleaner environment — but reduce operating costs. Most high-efficiency lamps last a long time, reducing costly maintenance. Highly-efficient fixtures usually cost more initially, but the payback time is very short, and such fixtures will save you lots of money in a short time.

Balancing against high efficiency, though, is the quality of the light emitted. In some applications, the yellow light cast by low-pressure (LPS) or high-pressure (HPS) sodium lamps may not be as desirable as a less-efficient, but much whiter, compact-fluorescent, metal-halide, or even incandescent light source. In other applications, color is not of importance, and LPS or HPS lamps do a very good job at very low cost. Well-designed shielded lights can usually be lower in wattage, saving even more energy and money. They will actually light an area better than unshielded lights of higher output, because they make use of all the light rather than wasting some (or much) of it.

Why are these characteristics so important? How do they factor into a design?

Good lighting means that we save energy and money, and we avoid hassles. A quality lighting job makes us a "good neighbor." And we have a safer and more secure nighttime environment.

Always remember that lighting should benefit people. Controlled, effective, efficient lighting at a home or business will enhance the beauty, while providing visibility, safety, and security. Poorly-installed, bright lighting is offensive and gives a very poor image.