

# A Tool for Lighting Space

If your goal is to light a human face you are talking about controlling light on about one square foot of surface area, if you are lighting head to toe, or even a small group, you are not talking about that much area. When you are trying to light a room you may be talking about thousands of cubic feet of space. The problems are not unrelated, but the solutions are going to be very different.

One of the most important tools in lighting people or product is the large light source. If you have a light source that is very large, and close to the subject, you can create soft shadowless light. The light seems to come from many directions, like the light on an overcast day. Of course this is because the light does come from every point on the surface of the light source, whether the light source is an umbrella, soft box or light panel. So lighting with a large light source can be relatively simple, since the position of the light is not as critical as with a small light source. As the subject gets bigger you need an increasingly large light source to accomplish the same thing. If you light a motorcycle a large light source might be about 20X9 feet. But if you are lighting a room a large light source would need to be approximately as big as the room.

Since I haven't seen a lot of soft boxes you could live in, or an umbrella that could keep the entire

Mormon Tabernacle Choir dry in a rainstorm, I think that the only way to achieve a large light source in an architectural setting is to bounce the light off a wall or ceiling. This will work quite well if the surface you bounce off is white or close to white. The other concern, with the ceiling, is to keep light off, or nearly off, any part of the ceiling that is in your shot. I suppose you could bounce light off a large piece of seamless paper if your walls or ceilings weren't white, but that sounds like it might be difficult to set-up. You could also repaint the room, but I don't think that this solution is very practical. A bounce light will also cause reflections, but reflections from large light sources are not as bright as those from small light sources.

Recently I saw the way one of my students used an umbrella on a room shot. She pointed a shoot



*The image with existing light*



*With one light using the modified umbrella*

through umbrella at the ceiling. There was light all over the room and the ceiling from just one light. Of course there was not as much light as one would like bouncing off the ceiling, because the light had to go through the umbrella. I wondered what it would look like if you could bounce light off the ceiling and get light from the side of an umbrella. So I modified a white umbrella, by putting a hole in the center. I had to sew around the edges of the hole. The hard light went through the center of the umbrella and the umbrella diffused the light on all sides. This is a 360° light, so you get bounce fill from all over the room. The light worked wonderfully well. I have attached a before and after photo.



*The set-up for the kitchen shot*

Of course I had to see what would happen with a portrait. The results on this test were less wonderful. The light needs to be placed precisely, because it works as a hard light. In addition, since there is more hard light than soft light, the result is not really flattering to all subjects. Still the catch lights looked very fine.



*This is the way the umbrella looks after the modification*



*The umbrella makes a nice catch light in the eyes*