FLAAR Reports

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Westcott Spiderlites

Advantages of Fluorescent Lighting For Digital Photography
Westcott Spiderlites

Observations by Nicholas Hellmuth

FLAAR has specialized in the photography of tropical flora and fauna of Central America and the photography of pre-Columbian art and architecture of ancient Mesoamerica for over 36 years. FLAAR is a university-based institute dedicated to research on how to improve the quality and quantity of photography of Latin American anthropological heritage and associated eco-systems.

Once these aspects are photographed, we dedicate our resources also to researching what are the viable means of publishing this material in a digital format. Publication is how we provide education and show the results of our research. But we mean much more than publication in a traditional book. Today a publication can include a poster at a museum, in a greenhouse of a botanical garden, or outside in an archaeological park. Nowadays you can easily print on waterproof materials that would hold up to being either outside in a park, or inside a greenhouse. But no matter what kind of publication, one crucial ingredient is the quality of the photographs of the flowers, animals, artifacts, or architectural remains of the pre-Hispanic civilizations of Mexico, Belize, Honduras, Guatemala, and El Salvador.

Most museum curators to not allow flash, strobe, or hot tungsten lighting in their museums. So if you need to photograph delicate works of art, then you need cool lights. This implies using either fluorescent lights or HID/CD lighting.

Most traditional photographers do not yet understand the pros and cons of fluorescent lighting. The first mistake is to associate fluorescent lights for your studio with the lights in a library or corporate building. No, fluorescent lights for digital photography do not flicker, and they are not sickly colors. Besides, you can balance for white (or balance for gray) and get flawless color temperature with a digital camera system. This was not easy using fluorescent lighting with Ektachrome or Fujichrome film.

The fluorescent lights used for digital photography today are evolved from professional lighting used in video and TV studios. CNN and all the other networks use fluorescent lighting (it is cool, so does not melt the people being filmed).

The other misunderstanding is relative to the power of fluorescent lighting. If you have never used fluorescent lighting before, and if you come from the world of strobes and tungsten lights, you will immediately notice that fluorescent lights are not as powerful. But remember, because fluorescent lights are not hot, you can place them directly alongside whatever you intend to photograph. Besides, having a soft subdued light can have advantages.

So if you read articles about fluorescent lighting, if they were written by someone not familiar with the advantages of fluorescent lighting, take the review with a grain of salt.

Since FLAAR has spent more than 40 years photographing in museums in Australia, Switzerland, England, across Canada, throughout the USA, and in Mexico, Honduras, Belize, and Guatemala, we have some experience in what lights work best in museums. Fluorescent lighting is ideal, it keeps things cool (including the museum curator).

FLAAR has also experienced that fluorescent lighting is ideal for photographing plants and flowers, in greenhouses. So we would recommend that botanists consider using fluorescent lighting for photographing specimens in their botanical gardens.

The present report is a first installment on a long-range evaluation of fluorescent lighting for digital photography, especially for scientific photography (in museums, both art museums, as well as natural history museums).

As we continue to use these lights we will update this report with additional examples of applications.

Evaluation Procedure

A full formal evaluation of an item of equipment begins the moment the box arrives in a FedEx or UPS truck. The box is unpacked to judge the manner in which the equipment is protected for shipping, and to document how easy the equipment is to assemble. Most manufacturers tell us they appreciate this effort on our part, because they say that no one before has ever provided them an independent critique on how the equipment is viewed by the photographer the first time.

We all know that first impressions make the difference.

Appendix A: Unpacking

The Spiderlites arrived in one large box and one smaller, lighter box. We started by removing the packing slip and the heavy white plastic bands around the large box, followed by cutting the packing tape and opening the box itself.

The large box had a piece of cardboard on top to probably protect the contents from a razor while opening. Once the piece of cardboard was removed there were two large black bags and a layer of bubble wrap. We removed both bags form the box and unzipped one of them. Once unzipped I found another zippered case as well as two soft box pouches and two well secured light stands and an instructional DVD. Every piece except the soft box supports is individually wrapped.

Everything in the carrying bag is easily accessed and the instructional DVD was right on top. Under the smaller zippered case were the two light stands which were well secured with Velcro and some nylon covered foam that is stitched into the case itself.

The soft box pouches have handles for easy carrying and Velcro shut. Inside the pouch is the soft box itself, four support rods, a Ziploc bag containing the diffuser and inner baffle. Also in the pouch is a tri fold 8 ½ x 11 piece of paper with directions which was almost not noticed. The kit included a large soft box and a smaller one, both are identical.

The second zippered case has carrying handles and is made of nylon. Inside it are two Spiderlites, two mounting brackets and two sets of easy to follow directions, one under each light as well as a carrying strap and some packing foam. Each piece is individually wrapped in plastic.

Inside the smaller lighter box we found lots of bubble wrap and two fluorescent bulbs for the Spiderlites and two small white boxes. Inside the one of the white boxes were five more fluorescent lamps. Inside the other white box were five more for a total of twelve.

Nothing seems to be missing except the rest of the light bulbs. Four light fixtures, each with space for five tubes, would need a total of 20 lamps.

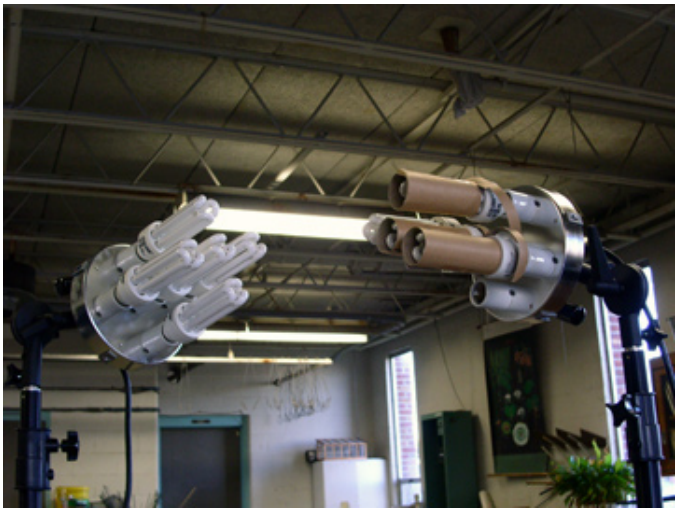
One thing I will also mention is that the light stands that came with the Westcott lights were better quality than I would expect to find in a standard kit. Usually the light stands are what a lighting company will skimp on. The light stands that came with the Spiderlite kits were the same high quality as you would expect from the best class of Manfrotto or Bogen light stands.

For Further Information

If you want to learn more about these particular fluorescent lights, you can see the Westcott Spiderlites in action at PhotoPlus trade show or at PMA trade show every year. You can also visit the manufacturer's website, www.FJwestcott.com.

Assembly

Setting up the Spiderlites themselves was not hard. There were directions, but there was not really a need for any though. Setting the lights on the light stands was also very easy. Some of the bulbs went in a little crooked, but it was only minor.



Setting up the soft boxes by following the directions was not easy. The directions tell you to insert the support rods into the soft box and then to insert the rods into the “speed ring” which they fail to tell you that the “speed ring” is already installed in the Spiderlite assembly. If I had set up soft boxes before I would have had a better idea on what to do. I called tech support and they politely informed me that the “speed ring” is already in the Spiderlite. The support rods were extremely difficult to install to a point where I thought they were going to break. As a precautionary measure I removed the bulbs in case a support rod snapped and broke one. After some wrestling with the soft boxes they turned out fine and we decided to not dissemble them. We had a large soft box and a smaller one and surprisingly the smaller one was much easier to assemble than the larger one.

Once the lights were on the stands and ready to go we took them into the greenhouse being careful not to catch them on anything. They performed very well. The only glitch was one loose bolt (we did not have pliers) which made positioning one of the lights a little difficult. With a pair of pliers this could be fixed immediately.

Other than the assembly of the soft boxes, everything went very smoothly and we were pleased with the lights. The flowers probably appreciated the gentle fluorescent light also: tungsten lighting would have seared the flowers, wilted the leaves, and caused the temperature to rise for the photography team as well. So fluorescent lights have plenty of benefits.

The unpacking and assembly, and its write up, was done by Vincent Gargiulo, Co-op Intern, Visual Communications Technology, BGSU, College of Technology.

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Nicholas M. Hellmuth and Karalynn Repie February 2006

Recent Additional Testing & Evaluation of the Westcott Spiderlites

Karalynn Repie photographs plants and models using a system of the MegaVision E4 camera on a Manfrotto tripod head, a Gitzo tripod, and Westcott Spiderlites.