Lighting Design and Industry Responsibility

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Introduction

The lighting industry has changed rapidly over the past 20 years. Technical advancements continue to provide new tools and techniques for lighting specifiers and research is providing new insight on the value of effective lighting to help people see better, work better and feel better. As a result, our understanding of the requirements for good lighting practice has evolved.

When I began my education in architectural lighting; there were no "lighting design" courses, only electrical engineering classes and courses in architecture and interior design that touched on lighting design education. Now, there are two-year degrees offered in the practice of lighting design. Architectural lighting specifications in the early days were basically a study of electrical systems, understanding how lights were to be integrated into ceiling systems, and footcandle calculations. Selecting decorative lighting or stylistic questions were also part of the process.

Today, of course, there are *many* more considerations involved in providing the right lighting for a project; energy efficiency, knowledge of lighting quality issues, daylighting integration, psychological response, visual comfort, economics and environmental criteria are all essential to good lighting practice. A host of issues need to be explored in the Q and A of the first phase of the design and then applied to the lighting solutions to achieve what is recognized as 'best practice' results.

In North America, the IESNA Handbook has a chapter on the Quality of the Visual Environment (QVE), page 10-3. It reveals a short summary of how our understanding of the practice of lighting design has changed;

"… *lighting specifiers often mistook the IESNA system of recommended illuminances as the primary or even the sole criterion for lighting design. This edition of the IESNA Lighting Handbook introduces a new, formal system for considering a wide range of design criteria. If followed, the recommended design criteria will increase the quality of the visual environment throughout North America. In engineering terms, the goal is to raise the minimum standard of care required by lighting designers."*

The QVE Lighting Design Guide addresses many of the issues required by lighting designers. These continue to evolve as research and education provides new information to improve our understanding. In addition, there is a design 'process', found in most modern lighting textbooks, that is essential and must be provided by the 'lighting designer', to help guarantee best practice results.

Titles that define our roles

This appreciation of quality lighting has not been limited to those within the profession. Many architects and owners now are beginning to recognize that good lighting is an essential part of their projects' success. But the irony is that while those *outside* the lighting community have come to value good lighting, professional lighting designers have struggled to distinguish themselves from other professionals in our industry. We have not developed a vocabulary that honestly describes the services provided from our industry. The terms "lighting design" and "lighting designer" are used by most anyone who wishes to, if they are involved in any lighting decisions on a project. This has created confusion and misunderstandings within and outside the lighting community.

Some may label themselves a lighting designer or indicate that they will provide a 'lighting design' service to aid their sales effort. They know that they can increase sales by offering a "free" design services. This may result from an 'old school' understanding of what lighting design is (providing footcandle calculation and specifications), or it may be done as a product sales incentive with the sales person or company knowing full well that what they do is not truly lighting design. In this case, it is unethical and yet our industry just tolerates it. 'Sales consultant' or lighting specifier would be a more appropriate and truthful title for persons selling equipment.

Other professionals may have broad experience and an understanding of current design practice that qualifies them in the practice of lighting design. If an electrical engineer for example, has made a *career* of lighting design, attends continuing lighting education programs, has attained an LC by passing the North American NCQLP exam and provides a complete design service as defined in the QVE Lighting Design Guide and is involved throughout the entire project process, *then* he or she would certainly use the title "lighting designer" to describe their role on a project team. However, I have met many EE's who do not practice lighting design by this standard or are not involved in the design process and yet use this title to describe what they do with their clients. Again, 'lighting specifier' or electrical engineer may be a more suitable title for industry professionals that are not involved in the whole project process.

There is also confusion in our marketplace about the use of the North American LC credential. Obtaining LC based on a technical exam does not necessarily mean that that person is a professional lighting designer or offers this comprehensive service, yet it is sometimes represented (or mis-represented) that way.

In my call for clarity, I represent a small but growing group of career professional lighting designers. Many of us are members of IALD or PLD to help distinguish our services. Some of my clients have expressed dismay that there are practitioners in the lighting industry use misleading titles, especially after they learn of the benefits that independent, professional lighting design services offer to their projects. Some have even expressed anger that for so long they believed that an electrical engineer or sales representative they had been working with provided the same or similar level of expertise as a professional lighting designer. They simply were not made aware of the difference.

Potential liability

You may be wondering, why does any of this really matter? Is it really just exercise in semantics? The issue is not simply a matter of aesthetics or cost. A project that doesn't meet current standards could be a potential liability:

"Anyone who is involved in lighting specifications or changes to the specifications that is required by contract to meet current standards, faces liability if the design or specifications fall short of that standard. It is very important for architects to understand this as they are the ones with the contract commitment to the owner for providing designs and services that meet current recommended practices."

Mark Eby, business attorney, Ann Arbor Michigan

The consequences of ignoring a design process may some day be… due process. First is the breach of contract liability. Many times RFPs and contract documents in construction projects require design professionals (architects and engineers for example) to apply the "highest standards" to their work. Some RFPs may include subjective requirements such as ergonomics designs and designs that facilitate worker productivity.

If a lighting specification or installation does not take into account"new school" standards, it may be interpreted by a project owner or property manager as a failure to meet contract commitments. In that context, the lighting specifier would be responsible for damages equal to the cost of correcting the problem. Those could include the cost of removing the deficient lighting, and re-designing, purchasing and installing a new lighting system.

In most cases, the suit would start with the architect and then most likely involve all of the design team, contractors and suppliers, all of whom will need to defend themselves and prove that they have applied the highest standards to their work in specifying and supplying the lighting.

Lighting specifiers may also face professional malpractice suits for deficient lighting. While currently there is no recognized legal claim for personal injury damages arising out of poor lighting design, it is not hard to imagine such a claim being filed, especially in an extreme case where there may be multiple plaintiffs whose maladies are traceable to a poor lighting design.

The bottom line regarding professional liability exposure is that lighting specifiers and the sellers of lighting equipment must realize that modern lighting projects involve more than the "old school" approach and equipment sales opportunities.

The standards of practice in our industry have evolved and continue to evolve to new levels. Anyone who is involved in lighting specifications or changes to the specifications that is required by contract to meet current standards, faces liability if the design or specifications fall short of that standard. *It is very important for architects to understand this as they are the ones with the contract commitment to the owner for providing designs and services that meet current recommended practices.*

Now what?

What can we do, as an industry, to be sure that established recommended lighting practice standards are established? How do we begin to communicate our roles more effectively within and outside of our industry? First, I would like to suggest that the IESNA should establish a committee to address this issue and help provide title definitions for use by persons in our industry.

Meanwhile, in our firm, there are a number of things that we do with our clients to clarify the services we provide as well as those that we do not provide. We discuss this early in the project and also send the information in the body of our design agreement. This communication is important to raise the awareness and understanding of the client and design team.

For example, I do not want a client to think that we provide the services an electrical engineer provides (in some cases they misunderstand this), so my design agreement clearly states that we are not PEs and that the services of a professional engineer are required. In addition, after we are contracted, we send a form letter to the project team, which defines our role, the services we will provide and how we will interface with the architect, engineer, interior designer and contractors.

I would like to see manufacturer representatives' help create clarity and support within our industry. Some rep firms provide lighting plans and photometric studies for the lines they represent. This is a value added service to some projects and common in our industry today. I would like these firms to consider putting on their web site and onto their drawings the following statement: *"(name of rep firm) provides lighting specifications and photometric studies for the manufacturers represented by our firm. We do not provide lighting design or electrical engineering services. These professional services are the responsibility of the architect or owner's representative*." This would be a great show of support to professional specifiers, help raise awareness and may relieve them of liability if a job goes wrong in the end.

A "waiver of liability" statement is also part of our specifications at Illuminart, to be signed by the lighting supplier, if they try to change the lighting specifications with alternates that are not approved. This raises their awareness of how important the specifications are to the project and how serious it may be for them to do business in the 'usual manner'. We suggest that rep firms ask their clients to sign a liability waiver when asked to provide specifications. This will help protect them in the event of a lawsuit over bad lighting. Contractors being asked to change the lighting to reduce costs should protect themselves also.

We also carry malpractice liability insurance (errors and omissions insurance) to protect us in the event of legal action for deficient lighting design that has caused damage to the claimant. This could result if a client and his attorney prove that there was a breach of duty resulting in damages. The lighting designer may not be at fault in such a case. The design may have been changed by others without our knowledge (so-called value engineering?) but we still would need to defend ourselves against such claims.

Liability issues aside, we must embrace attributes that are essential for excellence in our industry: honesty, clarity, truth and ethical behavior. I suggest we start by calling a duck a duck and clearly communicate the services we provide to those we are working with. If these attributes and ideas are valuable to you also, then consider how you can become part of the solution …and not part of the problem.

We appreciate PLD Magazine's dedication to our profession and help in commutating the benefits of independent professional lighting designers world wide.