

# 10 Things You Need to Learn to Become Effective Lighting Designer

By: Nelca Roco

# Trying to become effective lighting designer?

## Here are the 10 things you need to learn to become one.

1. Appreciate Light
2. Learn the Standards
3. Learn the Software
4. Learn Basic Electrical Engineering
5. Learn Basic Architecture
6. Learn Basic Psychology
7. Learn Basic Physics
8. Learn Sustainability
9. Learn How to Collaborate
10. Learn How to Explain Your Design

# 1. Appreciate Light



Nothing can beat the person (in terms of lighting design) who knows how to appreciate light both artificial and natural or daylight.

If you know how to appreciate light, how it works, what is the effect, how to play with it, then you are guaranteed to become an effective lighting designer.

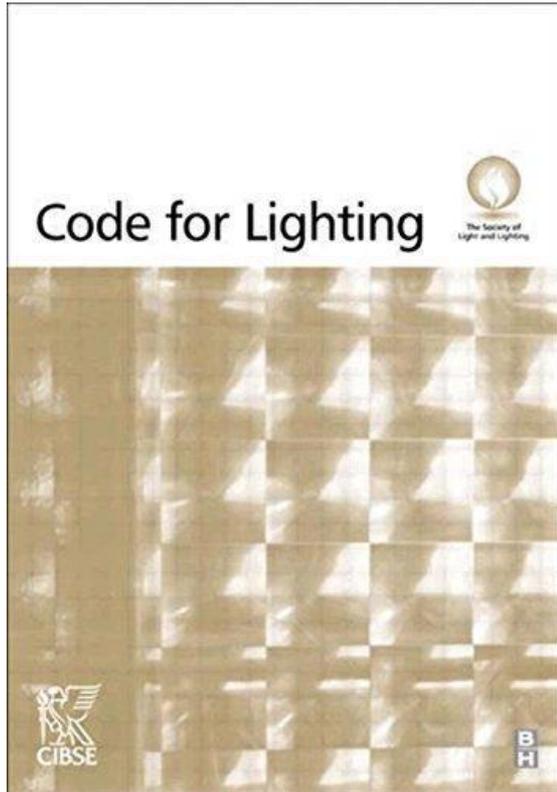
If you don't appreciate it yet, try the following activities to improve it.

**a. Look at your surroundings.** Look for both light and shadow. See how the light affects the room or area. Imagine how you will improve it or see what is wrong with it, or what is good about it.

**b. Criticize the existing luminaire.** If you are sitting in a restaurant or in an office, try looking at the light fittings. How they mount it. Is it the ceiling or at the floor. Look at the effect, is it spotlighting or washing?

**c. Figure out which lamp they use.** You may wonder which lamp they use to get the effect. Is it LED, metal halide, compact fluorescent lamp or sodium lamp? Is there any reflector? color filter maybe?

# 2. Learn the Standards



## Lighting Guide 4: Sports lighting

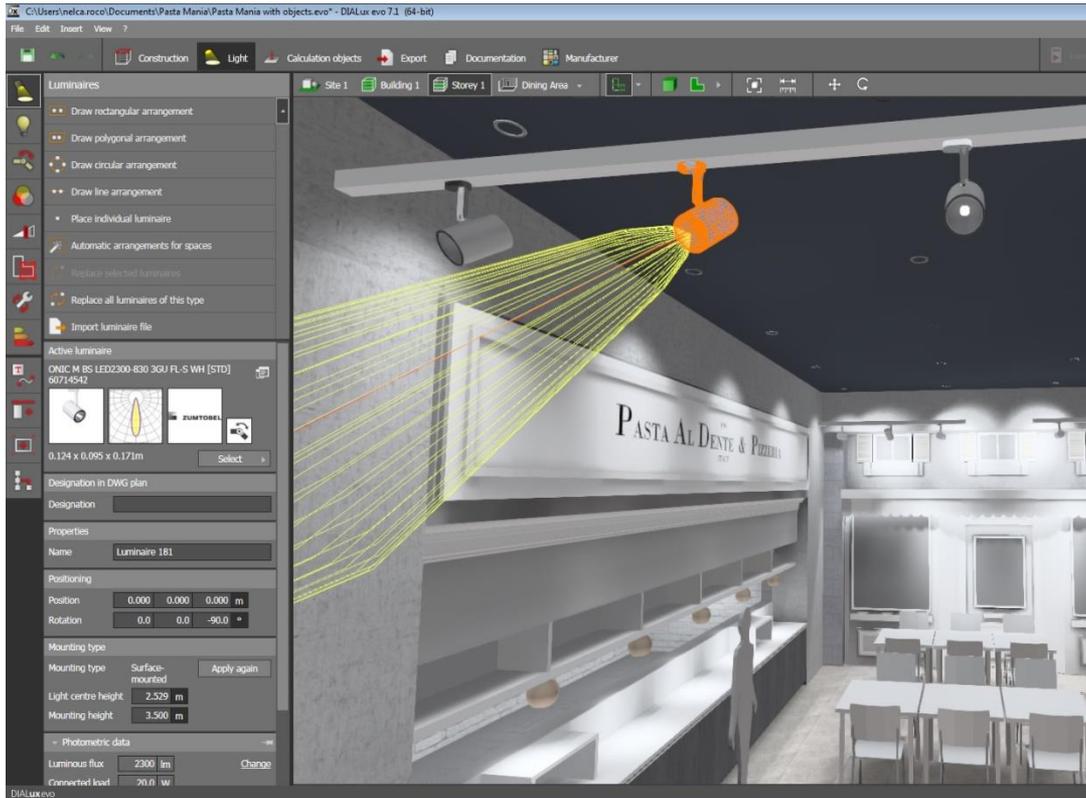
Section 7 has been superseded; see addendum 7a, pages 51a to 51f



By learning the lighting design standards, you will know what is good and what is not, and what is acceptable by majority. You can learn these standards by doing the following:

- a. Read books.** These are books published by lighting designers. One of my favorite books "Lighting Design Basics" by: Karlen.
- b. Read lighting design manuals.** These books are published by lighting organizations like CIBSE and IESNA. My favorite book are the collections of Lighting Guide from CIBSE.
- c. Read lighting handbooks.** These are published by lighting manufacturers. Of course, one my favorite is the [lighting design handbook](#) of Zumtobel Group. It has complete information about light and lighting applications.
- d. Attend seminars.** Attending seminars will allow you to know the latest trends about lighting. A little costly, but you may find some seminars about lighting which are free.
- e. Join blogs and forums.** Similar to seminars, joining blogs and forums will update you about what is happening both in the professions, current technology, and market of lighting.
- f. Follow famous lighting designers.** You can do this by following them in their social media accounts like LinkedIn and Twitter. I dont have favorites but I have many to follow. I preferred to follow in LinkedIn than in Twitter.

# 3. Learn the Software



You cannot defend your design if you cannot run it in software to verify. Computer skills is a must now in lighting design. You need to learn at least one the software in each category. These are:

## A. Lighting Design Software

- Dialux
- Dialux evo
- Relux
- AGI32
- Lighting Reality

## B. Drawing Software

- AutoCAD
- Revit
- Solid Works

## C. Image Editing Software

- Photoshop
- Paintshop Pro
- Picasa
- Lightroom

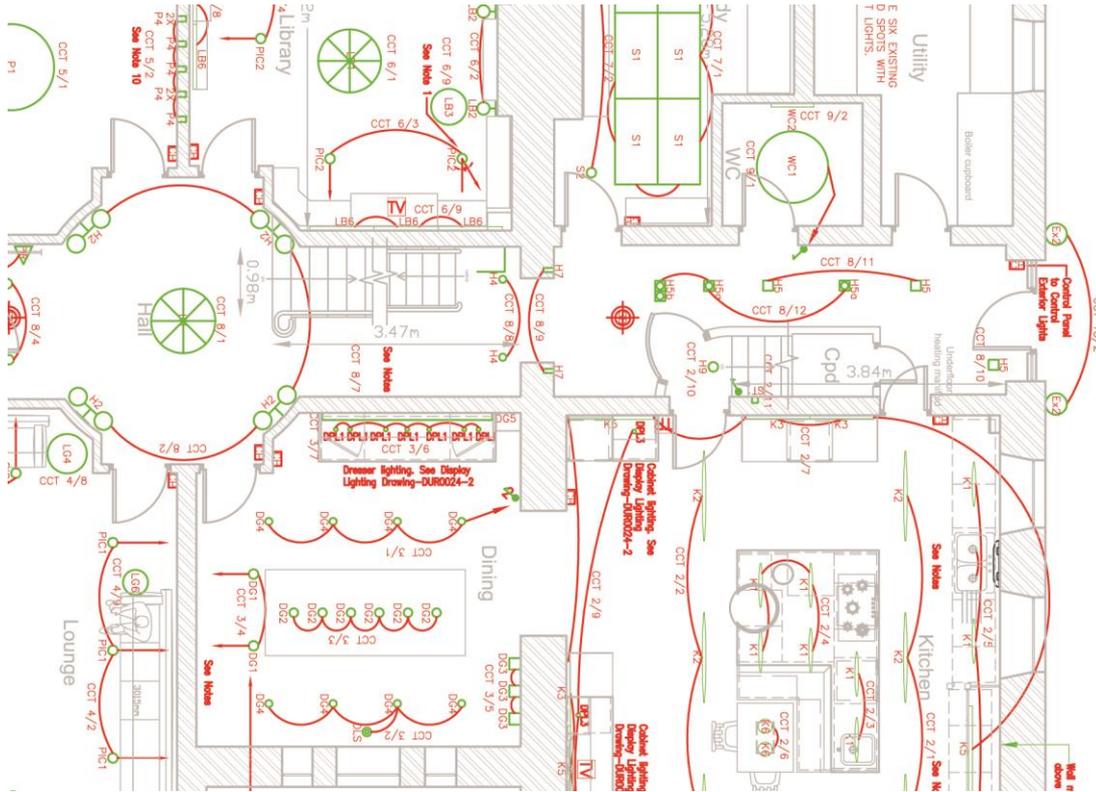
## D. 3D Modelling Software

- Sketchup
- 3D MAX
- P-con Planner

## E. Microsoft Basic Software (Mandatory to learn all these three)

- Word
- Excel
- Powerpoint

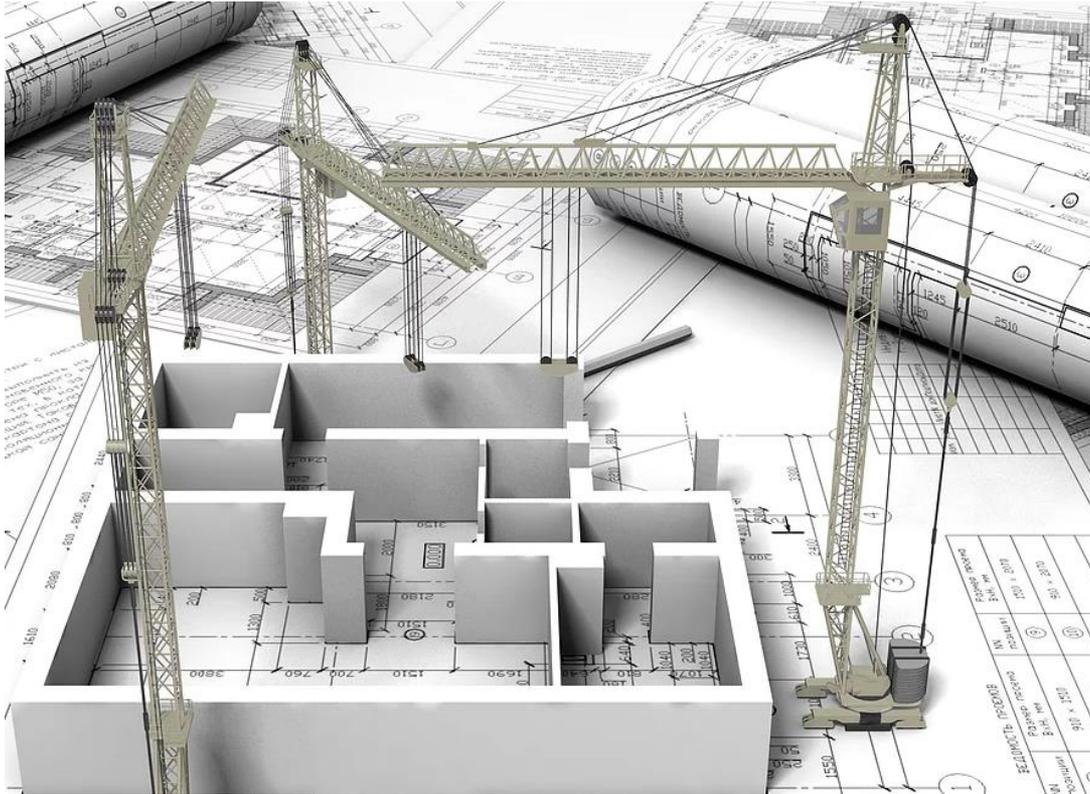
# 4. Learn Basic Electrical Engineering



Lighting belongs mostly to electricity. Therefore, knowing the basic terms in electrical engineering is a must for a lighting designer. Here are the list of information you need to understand.

- A. Lamps**
- B. Ballasts**
- C. Luminaire**
- D. Wiring**
- E. Controls**
- F. Basic Terms, like: Lux, Illuminance, Lumen/watt, etc.**

# 5. Learn Basic Architecture



This is crucial because this is all where it comes from. Artificial and daylighting are all connected to structure or architecture. Being a lighting designer, you need to understand architecture and design.

Here are some basic information which you need to learn:

**A. Understanding the drawings.** Some of these are the Floor Plans, Reflected Ceiling Plan, Elevations, and Sections. No lighting designers can move forward if they don't understand the drawing. Therefore, it is a must.

**B. Understand the word "concept".** This is widely used by Architects and Designers.

**C. Colors/ Texture/ Materials**

**D. Detailed drawings**

**E. Character of the building**

**F. Basic Terms**, like: RCP, Layout, Perspective views, etc.

# 6. Learn Basic Psychology



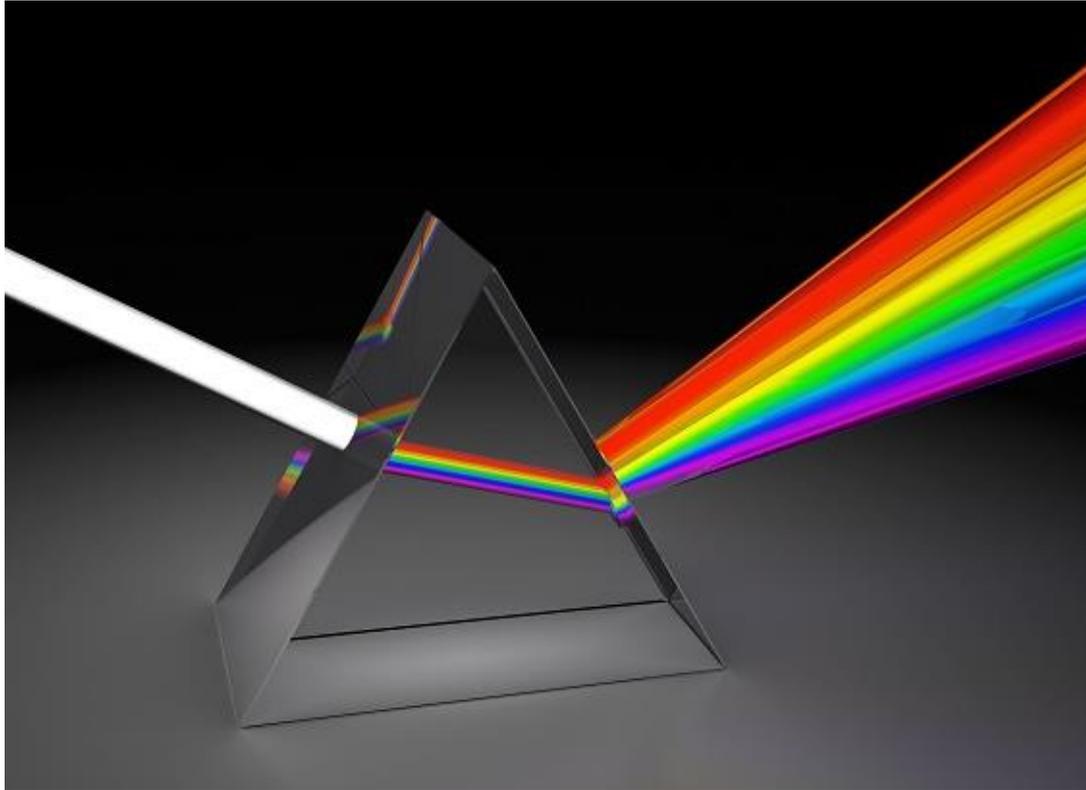
Finding the effect of light to human mind and body will therefore involve psychology.

Understanding emotion and feelings thru light will improve your lighting design decisions. That is why the lighting design for office is different from the lighting design of a restaurant.

Here are some topics of lighting which involve psychology:

- A. Color effect to human**
- B. Light effect to human**
- C. Character of light**
- D. Threshold of pain**
- E. Glare and discomfort**

# 7. Learn Basic Physics



Light spectrum and human eye is part of this topic. Here are some information you need to learn from Physics:

- A. Human eye**
- B. Wavelength**
- C. Frequency**
- D. Spectrum**
- E. Transmittance**

# 8. Learn Sustainability



Lighting designers must ethically responsible to promote sustainability by understanding the following topics:

- A. Efficiency**
- B. Energy saving**
- C. Recycling**
- D. Light pollution**
- E. Material extraction**

# 9. Learn How to Collaborate



A successful lighting designer knows how to collaborate with the following:

- A. Other professionals** like Architect, MEP Engineers, Interior Designer, etc.
- B. Installers**
- C. Contractors**
- D. Salesman**
- E. Manufacturers**
- F. and of course, Client**

# 10. Learn How to Explain Your Design



This is always your end goal - to explain your design with clarity and confidence. No matter how beautiful your design if you don't know how to explain the reasoning behind and how it is going to happen will be useless.

Explaining your design properly will automatically come to you once you get the knowledge and experience from the first 9 items.

Let me repeat this. Try to learn the first 9 and this skill will come to you automatically.

I hope you learn something from this article  
and if you want to know more, visit  
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and [Facebook page](#).

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