

# TECH TIPS: Lighting for POP, Displays, Signs and Exhibits

## A Check List of Lighting System Design Considerations

by William H. Siegel EE, LC, CLEP

Lighting is to a POP display what the band is to a parade! The human eye is naturally attracted to the brightest element in the environment. Lighting attracts the buyer's attention and creates excitement. Well lit displays simply sell more merchandise. A properly lit display is not an accident. It is the end result of a deliberate and focused collaboration between sales, creative design, product development, engineering, estimating, purchasing, and the lighting vendor.

Lighting is a specialty, combining art and science. The earlier in a project the lighting designer is brought in, the better the display will look, the less changes will have to be made, and the less the final system will cost. The most capable design and engineering staff acknowledge the need for outside help in the design, develop, and manufacture of a POP lighting system that is both high quality and economical. The lighting vendor usually fills this need.

The lighting vendor must be able to: review the display's requirements, make suggestions to improve lighting quality and system economics, refine the design concept, generate detailed specifications, and render meaningful cost estimates. Responding quickly to sample and prototype needs is a given.

The checklist on the back underscores the complexity of what can seem a deceptively simple component of a project. It can be used in many ways: as a design aid, to help generate complete and detailed lighting specifications, or as a means of quickly and easily communicating project requirements to a vendor. Drawings and actual physical samples always speed the process and insure a more accurate and timely response.



Mr. Siegel, a Lighting Certified (LC) graduate Electrical Engineer (EE), is President of Crownlite Mfg. Corp., a prime manufacturer of lighting systems for POP and Display. He holds memberships in the Illuminating Engineering Society of North America, where he contributed to two national committees: Luminaire Design and Light Control and Polarized Lighting, and the Institute of Electrical and Electronic Engineers. He is certified by the Association of Energy Engineers as a Lighting Efficiency Professional (CLEP), by the EPA as a Surveyor-Ally, and by Con-Edison. He has spent the last 25 years in the design and manufacture of lighting systems and luminaries, and in the education of others in the principles of good lighting.

EXHIBITOR

# **A Check List of Lighting System Design Considerations**

---

## **Basic Project Information**

- Contact name, title and position, address, phone, fax?
- Project name?
- Quantity required?
- Is this an estimate, bid, or a job ready to be bought?
- Is this a new product/program or has it been bought before?
- Will drawings, prototypes, samples, or a mock-up be required, or do they already exist? Are copies available to work from?
- Please give a brief description of the display as currently conceived. What is it expected to be accomplished?
- Where will the unit be placed? What is the environment like? Who will be looking at it?
- Permanent or semi-permanent?
- Describe the Graphic if one is being used.
- One sided or two sided?
- What type of display lighting is currently envisioned?

## **Lighting Quality and Optics**

- How critical is light output? Which lamp source is correct for this application?
- How important is color? Is a high color rendering source required?
- Should special reflectors be considered?
- Will lighting unit be visible or concealed within the display?
- Will lens, louvers, or other shielding media be required?

## **Mechanical Considerations**

- Which are the structural parts and which are only trim? Where must the strength be?
- Is temperature, humidity, or vibration a consideration?
- Is ventilation appropriate?
- Does the display move or have moving parts?
- Are there size or weight limitations?
- Will display be floor, counter, wall, ceiling, or suspended mounted?
- Are there any special mounting conditions? Would special holes, or hardware make assembly / Installation easier?
- Is there a need for corrosion protection or other special undercoating or finish?
- Will the display be accessible to public?
- How frequently will the display be repositioned in the field?
- Are the: tolerances and component specs shown on drawings firm or flexible?

## **Electrical Considerations**

- Is energy consumption important?
- How and when will maintenance be done?
- Are the ballast type, ballast factor, Voltage, and line frequency correct for the application?
- How will power be brought to display? How will it be distributed?
- Are Cordsets, switches, fuses, outlets, or 'Daisy chaining' required?
- Will sockets be pre-mounted or the lamps be pre-installed?

## **Safety and Liability Issues**

- What certifications are required and what codes need to be met? UL? CSA? CE?
- Do all units meet National Electrical Code requirements at a minimum?
- CSA listed or is listing the lighting fixture enough?
- Who will be doing the installation and maintenance?
- Is there a requirement that fixtures be Union made?

## **Packaging Requirements**

- Bulk pack or individual cartons?
- Will there be any special markings, or labeling?
- Is a reshipable carton required?
- Will the unit be shipped as a complete kit, part of larger packout, or be installed into the display before shipping?
- Is Warehousing or drop shipping required?

## **Items to be Included In Packout**

- Will an installation instruction sheet be used?
- Will a parts bag be required?
- Are there any other components needed?

## **Delivery Requirements**

- What is the estimated delivery schedule?
- Where will products be delivered to?
- Will they be picked up at the vendors factory, or Will direct ship? Is delivery free? Even if made via common carrier?

## **Environmental Concerns**

- At the end of the displays useful life, will there be a hazardous waste disposal or other

## **CROWNLITE MFG. CORP.**

1546 Ocean Avenue  
Bohemia, NY 11716  
631-589-1000