

Retail Lighting/Display

Primary Goals:

- **Merchandising**

- Attract Customers
- Customer to Evaluate Merchandise
- Facilitate Sales

- **Display – window/Cases**

- Attracting Customers
- Interest in Merchandise

Retail Lighting/Display

Retail Lighting

Table 6: Light Source Selection by Lamp Color for Various Store/Merchandise Types

Lamp Type	Kelvin/CRI	Store/Merchandise Type
Line Voltage Halogen PAR20, PAR30, PAR38 (most frequently used types)	2900K/100CRI	Accent lighting and casework downlighting for chain stores, department stores, specialty stores, and designer boutiques. Also limited general and perimeter lighting.
Low Voltage Halogen MR11 and MR16	3050K/100CRI	Accent display and feature lighting in specialized and designer merchandise areas. Especially suited to jewelry, silverware, and crystal. Usually used in better upscale stores.
T12 and T8 Fluorescent 700 series phosphors	3000K/75CRI	General, perimeter lighting, and wall-washing in most moderate clothing and entry level department and chain stores when coupled with incandescent accent lighting.
	3500K /75CRI	Same as above for a <i>cooler look</i> and when used with MR16 accent and feature lighting.
	4100K/75CRI	For general, perimeter and casework lighting in grocery stores, supermarkets, warehouse stores, and other discount/entry level stores with high illuminance and little or no accent lighting.
T5, T8 and T12 Fluorescent 800 series phosphors	3000K/82CRI	General, perimeter, and casework lighting for better stores requiring premium color rendering and a balance with halogen feature/accent lighting.
T5 Compact Fluorescent (18W, 28W, 39W, 40W and 50/55 W)	3500K/82CRI	Same as above only <i>cooler</i> base lighting and blending with MR16 accent/feature lighting.
	4100K/82CRI	Where cool color and excellent color rendering is desired, such as jewelry stores and silverware/crystal merchandise.
T4 and T5 Compact Fluorescent	2700K/82CRI	For fluorescent match with conventional incandescent. Ideal for designer boutiques, lounge and other upscale areas.
Twin, Quad and Triple Tube (5W, 7W, 9W, 15W, 18W, 26W, 32W and 42W)	3000K /82CRI	Same as above but better blend with halogen incandescent lamps.
	3500K/82CRI	Same as above – blends well with MR16 halogen lamps.
	4100K/82CRI	Use when a cool hue is desired from a compact fluorescent lamp, or when coordinating with metal halide.
Metal Halide and Ceramic Metal Halide	3000K/80CRI	Use for a warm (incandescent) look with benefits of sparkle and focal ability similar to incandescent, but with longer lamp life and improved energy efficiency.
PAR20, PAR30, PAR38 (most frequently used types)	4300K/90CRI	Benefits of sparkle and focal ability similar to incandescent, but in a cool light source with longer lamp life and improved energy efficiency.

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Quality of the Visual Environment

Orientation and simple visual tasks. Visual performance is largely unimportant. These tasks are found in public spaces where reading and visual inspection are only occasionally performed. Higher levels are recommended for tasks where visual performance is occasionally important.

A	Public spaces	30 lx (3 fc)
B	Simple orientation for short visits	50 lx (6 fc)
C	Working spaces where simple visual tasks are performed	100 lx (10 fc)

Common visual tasks. Visual performance is important. These tasks are found in commercial, industrial and residential applications. Recommended illuminance levels differ because of the characteristics of the visual task being illuminated. Higher levels are recommended for visual tasks with critical elements of low contrast or small size.

D	Performance of visual tasks of high contrast and large size	300 lx (30 fc)
E	Performance of visual tasks of high contrast and small size, or visual tasks of low contrast and large size	500 lx (50 fc)
F	Performance of visual tasks of low contrast and small size	1000 lx (100 fc)

Special visual tasks. Visual performance is of critical importance. These tasks are very specialized, including those with very small or very low contrast critical elements. Recommended illuminance levels should be achieved with supplementary task lighting. Higher recommended levels are often achieved by moving the light source closer to the task.

G	Performance of visual tasks near threshold	2000 to 10,000 lx (300 to 1000 fc)
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* Expected accuracy in illuminance calculations are given in Chapter 9, Lighting Calculations. To account for both uncertainty in photometric measurements and uncertainty in space reflections, measured illuminances should be with $\pm 10\%$ of the recommended value. It should be noted, however, that the final illuminance may deviate from these recommended values due to other lighting design criteria.

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Sales Areas

Show Windows

Ancillary Spaces

Alteration Workrooms

Wrapping and Packing

Stock Rooms

Restroom

Lounges

Locker Rooms

Offices

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Basic Lighting – Mass Merchandising

Bright surfaces, exposed sources and industrial luminaires



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Higher End Retail – Specialty Stores

Lower ambient levels, more accent lighting, higher contrast/drama



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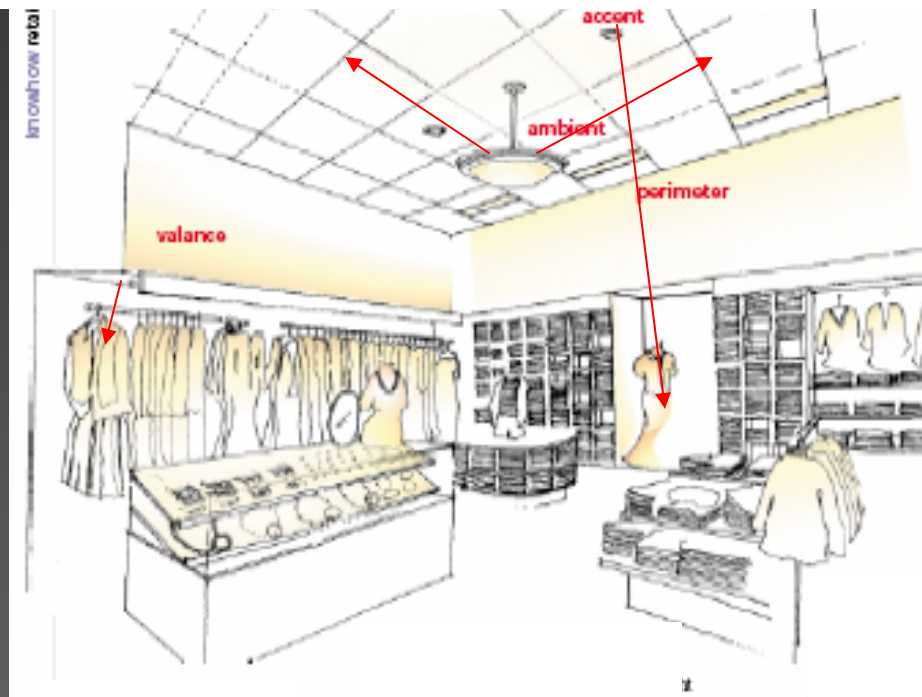
Intermediate Retail Store – Large Retail/Malls

More ambient lighting than exclusive shops with fewer accent lights



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Ambient Lighting – general even distribution

Accent Lighting – spotlighting important areas while providing contrast, texture, structure and color.

Perimeter/valance lighting – lighting the vertical surfaces

Shelf/case (display lighting) – small miniature sources to highlight display

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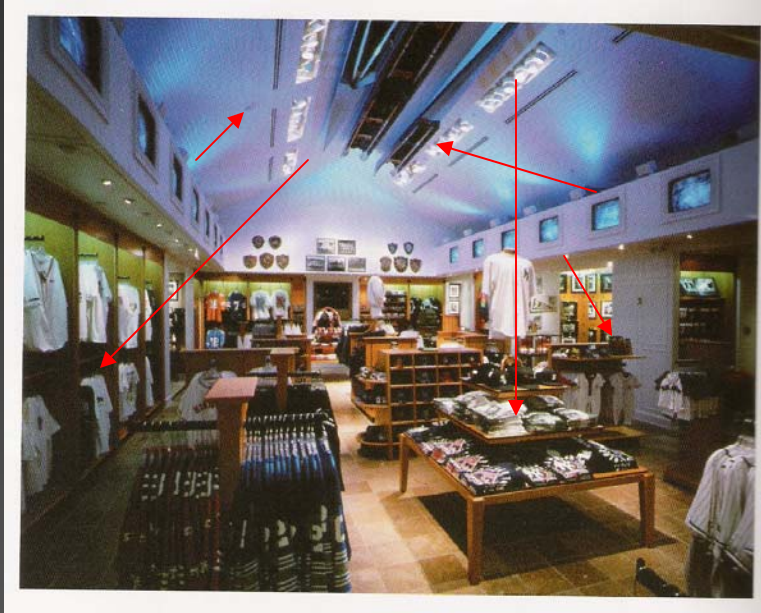


Reflected glare: on surfaces this is desirable be be aware!

This may result in disability glare.

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Bergdorf Goodman, NYC



Salvatore Ferragamo, NYC



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Diffusing panels help
cut down on glare!

Mall stores:

Window is brighter than
circulation area of mall.
Check out adjoining areas
lighting levels!



Retail Lighting/Display

Display/Showcase Lighting



color rendering



Retail Lighting/Display

Display/Showcase Lighting



Retail Lighting/Display

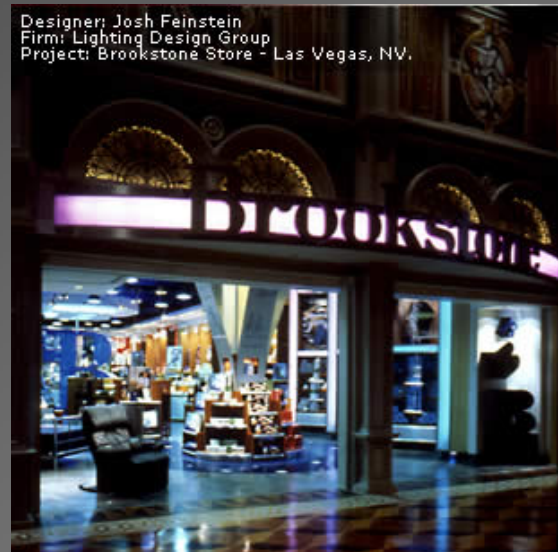
Display/Showcase Lighting



Designer: Josh Feinstein
Firm: Lighting Design Group
Project: Brookstone Store - Las Vegas, NV.

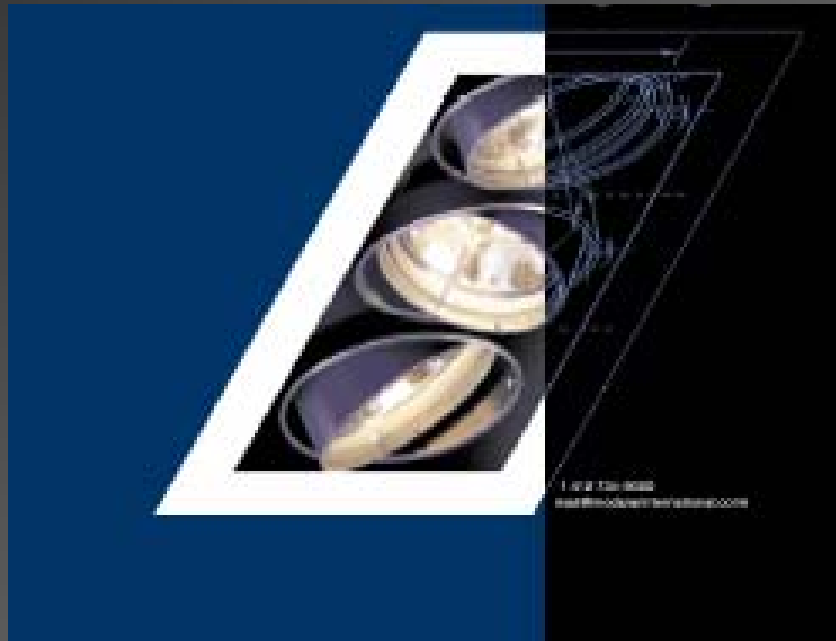


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Specialized Lighting Systems



<http://www.rsalighting.com/>
<http://www.modularinternational.com/>
<http://www.indylighting.com/>
<http://www.starfirelighting.com/>

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Specialized Lighting Systems



Open Shell System



Shelf System

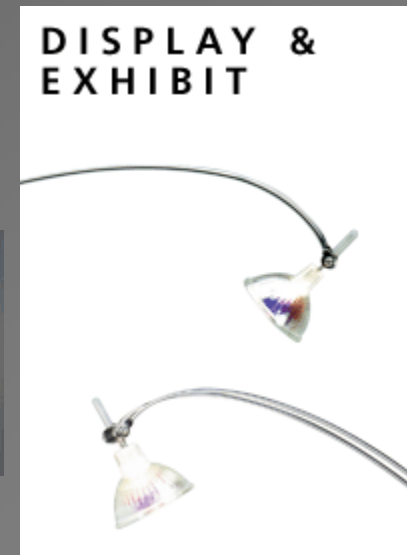
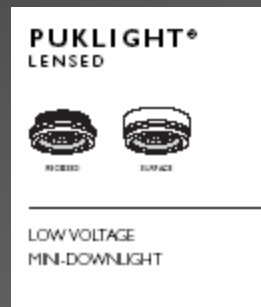


**Adjustable
Light Shelf**



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Specialized Lighting Systems



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<http://www.designlights.org/>

<http://www.ardeelighting.com/>

http://www.epl.com/index_flash.cfm

<http://www.junolighting.com/>

<http://www.luciferlighting.com/>

<http://www.designguide.com/>