

## Lighting Technology Application Guide - April 30, 2003

Technology	Important Characteristics	Typical Applications	Typical Locations	Best Replacement for
High Performance T8s	Best efficacy, great color rendering. Most choices of color temperatures. Great lumen maintenance.	General illumination 8' to 20' mounting height.	Commercial spaces; office, retail, stairwells. Industrial spaces; manufacturing areas, warehouse. Indoor & outdoor signage, parking garages.	T12 fluorescent
Hardwired CFLs	Good efficacy, great color rendering. Shorter life than T8s. Good lumen maint.	General illumination up to 15' mounting height.	Hallways, foyers, bathrooms, closets, task lighting, table & floor lamps, wall packs & sconces.	Incandescent or Mercury vapor.
Ceramic Metal Halide	Good efficacy, excellent color rendering. Good color temps. Dimmable to 50 percent	Spot, flood, and general illumination Directional Display lighting.	Retail display, lobbies, atriums, foyers, museums, art galleries, anywhere light quality is important.	Directional incandescent - track lighting Recessed, surface or pendant mount.
Screw-in CFLs	Good efficacy, great color rendering. Lower life than T8s. Good lumen maint.	General illumination up to 15' mounting height.	Hallways, foyers, bathrooms, closets, task lighting, table & floor lamps, wall packs & sconces.	Non-directional incandescent.
LED or Cold Cathode	Super Long Life. Low wattage.	Exit Signs	Over outside doors or pointing toward exit paths.	Incandescent exit signs.
Induction Lamps	Super Long Life, great color rendering. 3000K & 4000K color temp choices.	Places where it is expensive to change bulbs.	Street, Roadway, Parking lot, and Area Lighting. Over machinery & other difficult locations.	Mercury vapor or Incandescent.
High Output Fluorescent T8, T5, CFL	Great efficacy, great color rendering. Great lumen maintenance.	General illumination 15' to 45' mounting height.	Industrial & Commercial. Gymnasiums, Ice rinks. Indoor & outdoor signage, parking garages.	Mercury vapor, T12HO & T12VHO Probe start metal halide.
Pulse Start Metal Halide	High wattages have high initial efficacy. Poor lumen maintenance.	General illumination over 40' mounting height.	Industrial high bay general illumination. Industrial high bay task illumination.	Mercury vapor or Probe start metal halide.
Occupancy Sensors	Cycles lamps on and off. Use program start ballasts or instant start lamps.	Infrequently occupied areas.	Conference rooms, copy rooms, individual offices. Warehouse space, storage areas, closets, etc..	Manual wall switches.