

Modify Division 26, Section 26 50 00 "Interior Lighting" per the following (deletions are shown struck through and additions are double underlined). Remainder of section is unchanged.

26 51 00 INTERIOR LIGHTING

.01 Lighting Design

A. Utilize LED source for all general lighting, discuss luminaire application with Engineering Services. Certain areas such as Mechanical, Electrical, and Telecom may use T8 lamping. Minimize the use of different lamp styles and wattages. Maximize the use of the 48 inch T8 lamp as this source has the best combination of efficiency (about 100 lumens/watt), life (exceeding 50,000 hours for major manufacturers), and low cost. The use of this lamp LED will save energy, reduce material sent to recycling, decrease maintenance costs, eliminate Mercury use, and save money on lamp replacements.

~~B. Investigate the use of LED luminaires as a replacement to linear fluorescent. Once dimming/daylight harvesting is added to the design, LED becomes a cost-competitive and preferable source. This is due to extending the diode life and LED's better native dimming capability.~~

~~C.B.~~ The professional shall submit ~~two (2) PDF copies of~~ computer generated point-by-point calculations of most interior spaces to Engineering Services for review. The use of certain "typical" rooms shall be acceptable except when the amount of fenestration or the room orientation changes. Show calculations for each space without daylight contribution as well as with daylight contribution and lighting controls. Point levels shall be legible, shown on a scaled d drawing. All pertinent calculation parameters shall be indicated, ~~and highlighted~~ where the design is non-IES compliant. Engineering Services will provide direction and variance where deemed adequate. Utilize AGI-32 full calculation mode or similar program, as approved by Engineering Services.

C. The Illuminating Engineers Society Lighting Handbook, current edition, shall be used as a standard for lighting levels. Provide a spreadsheet showing all room names and numbers along with target illumination levels. For television studios and classrooms used for TV production, consult Engineering Services for guidelines.

D.1. Refer to 26 00 01 .10 – B Elevator Service and Support for applicable illumination requirements.

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~~E. Discuss the use of LED technology with Engineering Services where applications exist. LED shall be used for downlights and decorative luminaires. CFL shall no longer be specified on projects.~~

~~F.D. Medium and high bays in shops, lobbies, etc. should take into account lamp life, lamp replacement, and controllability. Investigate the use of T8 fluorescent lamps (with high ballast factor ballast) versus T5HO in these applications, and discuss options with Engineering Services shall be LED. Ballasts Drivers must be rated for high temperature environment.~~

~~G.E. Provide two (2) a copies PDF copy of a lightthe Luminaire fixture cutsheets booklet with any every review submittal showing lighting layouts. Booklet shall be in color and include the light fixture schedule as well as target illumination levels and proposed lighting controls.~~

~~H.F. Specify the proper disposal of mercury containing lamps per PSU Policy SY-31 and PCB ballasts per PSU Policy SY-26 for all renovation work.~~

~~I.G. Include the luminaire fixture schedule within the drawings, not within the specifications. As-built drawings shall include final installed luminaire information.~~

END of revision

Update Commentary:

Section was updated primarily for the following reasons:

- 1) Add reference to Elevator Service section that notes minimum illumination levels.
- 2) Revise general lighting source to LED.