

DOCKETED

Docket Number:	17-BSTD-02
Project Title:	2019 Title 24, Part 6, Building Energy Efficiency Standards Rulemaking
TN #:	222915
Document Title:	Won K. Henry Han Comments Title 24 amendment regarding the lighting section 140.6 and 140.7
Description:	*** THIS DOCUMENT SUPERSEDES TN 222909 ***
Filer:	System
Organization:	Won K. Henry Han
Submitter Role:	Public
Submission Date:	3/7/2018 12:32:11 PM
Docketed Date:	3/7/2018

Comment Received From: Won K. Henry Han

Submitted On: 3/7/2018

Docket Number: 17-BSTD-02

Title 24 amendment regarding the lighting section 140.6 and 140.7

SECTION 140.6 (a)-1

(Topic)

The interior spaces allow only single lighting system per room, except the areas of auditorium, convention center, conference room, multipurpose room, or a theater; and. And these rooms allow two interlocking lighting systems.

(Comments)

- Recommend adding the definition of "Lighting System" in this section. It is not clear if "Lighting System" refers to the type of lighting fixtures (ex. Recessed downlight, wall washer, sconces?) or more likely refer to the type of applications (ex, general lighting, lighting for features, the lighting for cleaning?) or for something else?
- Adverse opinion to limit out the quantity of the lighting system in the energy code. Isn't it enough to limit the total energy, as to not limit the number of lighting systems?
- There should be many other interior room types desiring more than a lighting system in addition to the listed 5 room types, such as "corridor/circulation (especially high-rise residential buildings)", toilets, laboratories, pantry area, broadcasting room, indoor swimming pool, and others for better lighting environment to meet the various living/working styles.

SECTION 140.6 (a)-3-S.

(Topic)

The definition of "Lighting for Signs" may be further clarified.

(Comments)

- In the recent sign lighting technology, the designers/architects often design "media wall lighting" with DMX controllable LED system in the architectural interior spaces. Further clarification may be needed for the definition of "Lighting for Signs".
- Some media wall system is truly designed for the advertising purposes, so it displays the product/brand's information. But, sometime, the system is also designed for the architectural feature lighting to display abstract dynamic lighting effects, so the designers consider them as "lighting for signs". Can this be also considered as "lighting for Sign"?

SECTION 140.6 (c)-3-G.

(Topic)

Wall display lighting luminaire mounting height clarification.

(Comments)

- It states the wall display lighting luminaire should be mounted greater than 10'-6" from the floor. What if the wall display case attached on the wall is lower than this height, but it has the internal wall display lights within the case?
- Can the architectural wall niche be considered as "wall displays" if it is designed for displaying some paints or objects within?
- It is unclear the definition of "Wall displays". Is this referring to some objects/products /artworks highlighted? Or does this also refer to architectural wall feature lighting, such as the special walls expressed by special architectural wall material, differently with other walls. Can the lighting for this feature wall be considered as "wall display lighting"?

- What if 6ft wide display object attached on 12ft wide wall and the entire wall is lit by the single lighting system. Can the lighting for full width of wall be considered as "wall display lighting" or only 6ft portion shall be considered for it?

SECTION 140.7 Table 140.7-B

(Topic)

Further research and discussion regarding the trend of facade lighting power allowance reduction

(Comments)

- We have seen newer lighting power codes (ASHRAE, Title24) have reduced the facade lighting power allowance year by year as the LED efficiency gets higher. This power saving trend is understandable and agreed for the general/functional lighting applications.

However, we also need to understand the current trend of facade lighting in urban environment. Client and people's demand and expectation regarding the facade lighting in the urban environment (Specially in Lighting Zone 4) gets more complex and greater thru time. With LED lighting technology, unlikely with the old facade lighting method which uses the flood lights, the current building facades can be lit as one of important urban component as "urban canvas" to express the project's identity to the city, and even sometimes it delivers the urban messages to people.

If we consider the facade lighting as "special lighting application" in the exterior lighting category, we may not consider the facade lighting as one of "general lighting" in the exterior lighting power allowance.

Likewise, Title 24 allows additional lighting power for "Qualified lighting systems" for the interior features or/and certain interior lighting system which is not used for the general lighting, we can also consider to allow additional power allowance for this facade lighting, especially in Lighting Zone 4, where the facade lighting is considered as one of important urban feature in the city.