

**INTERPRETATION IC 90.1-2016-15 OF
ANSI/ASHRAE/IES STANDARD 90.1-2016
Energy Standard for Buildings Except Low-Rise Residential Buildings**

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Request from: Scott Ziegenfus, Hubbell Lighting Inc., 701 Millennium Blvd., Greenville, SC 29607.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IES Standard 90.1-2016, Section 9.4.1.1(c) Automatic Daylighting Responsive Controls, regarding independent control of Primary and Secondary sidelighted areas.

Background: Section 9.4.1.1(c) for daylighting states “General lighting in the secondary sidelighting area shall be controlled independently of the general lighting in the primary sidelighting areas”. While the control of both primary and secondary sidelighting is required to be separate or independent the capability of today’s control systems allows for the independent control from separate “logical” daylight sensors associated to the primary and secondary daylight zones using a single physical photocell as an input for the daylight contribution. While the daylight contribution comes in through a single physical device the control does provide a separate or independent control of the primary and secondary areas per the intent of 9.4.1.1(c).

Interpretation: Use of a single physical photocell as an input for “logically” separate daylight sensor controls for independent control of primary and secondary daylighting zones does comply with the requirement for primary and secondary areas to be controlled independently.

Question: Is this interpretation correct?

Answer: Yes, this a correct interpretation of Section 9.4.1.1(e).

Comments: Note the request incorrectly referenced section 9.4.1.1(c) instead of Section 9.4.1.1(e) which includes the phrase: “*General lighting in the secondary sidelighted area shall be controlled independently of the general lighting in the primary sidelighted area.*”

This Section describes the functional requirements of automatic daylight responsive controls which indicate that these controls must be a photocontrol (i.e. light sensing), and lighting in primary and secondary sidelighted zones are controlled independently.

The Standard does not have any requirements for a dedicated sensor for each zone; this is intentional. Many daylighting systems are able to take the measured light from a single sensor and apply it to different control zones by applying different control settings that represent the relative percentage of daylight in the different control zones. These systems are compliant with the intent of Section 9.4.1.1(e). What is not allowed is a control that has a single photosensor input and has no way of generating different daylight responsive control signals to the primary sidelighted zone separately from the secondary sidelighted zone.