



Luminaire Level Lighting Controls (LLLC) with Networked Embedded Controls by nLight®

A step-by-step guide to help you in addressing Luminaire Level Lighting Controls (LLLC) requirements.

Luminaires with networked embedded controls by nLight are designed, manufactured, tested, and shipped with occupancy, daylight sensors and control devices pre-installed. This simplifies design layouts and eliminates field installation of these devices, while addressing building and energy codes.

nLight wired or wireless networked control devices, occupancy sensors and ambient light/daylight sensors, address the requirements of Luminaire Level Lighting Controls (LLLC), as defined by Design Lights Consortium (DLC), International Energy Conservation Code (IECC) versions 2018 and 2021, and Northwest Energy Efficiency Alliance (NEEA). For additional information, refer to: <https://nlight.acuitybrands.com/networked-embedded-controls-lllc>

Option 1: Wired networked embedded controls by nLight

Specify Acuity Brands luminaires available with wired networked embedded controls by nLight. A nLight Wired control device, occupancy sensor and/or ambient light/daylight sensor embedded within this luminaire.

- Choose from over 700 luminaire families available with networked embedded controls by nLight, see <https://www.acuitybrands.com/products/luminaires-with-embedded>

OR for non-Acuity Brands luminaires - Specify luminaires available with wired networked embedded controls by nLight. A nLight Wired control device, occupancy sensor and/or ambient light/daylight sensor embedded within this luminaire.

- For more details regarding luminaires available from other manufacturers, please contact your local lighting agent <https://www.acuitybrands.com/support/how-to-buy>

Option 2: Wireless networked embedded controls by nLight

Specify Acuity Brands luminaires available with wireless networked embedded controls by nLight. A nLight AIR control device, occupancy sensor and/or ambient light/daylight sensor embedded within this luminaire.

- Choose from over 700 luminaire families available with networked embedded controls by nLight, see <https://www.acuitybrands.com/products/luminaires-with-embedded>

OR for non-Acuity Brands luminaires - Specify luminaires available with wireless networked embedded controls by nLight. A nLight AIR control device, occupancy sensor and/or ambient light/daylight sensor embedded within this luminaire.

- For more details regarding luminaires available from other manufacturers, please contact your local lighting agent <https://www.acuitybrands.com/support/how-to-buy>

Option 3: For luminaires where occupancy and ambient light sensors cannot be embedded due to form factor

For individually addressable downlights with DALI® driver, **specify DALI-2 certified nPS 80 DALI**, providing nLight devices with the ability to control DALI drivers. *Note: in this application, downlights with DALI driver require external sensor(s), whether field installed or embedded within adjacent luminaire(s).*

- For more details regarding the nPS 80 DALI, see <https://www.acuitybrands.com/products/detail/1801992/nlight/nps-80-dali/nlight-controller-with-dali-protocol>

OR for individually addressable downlights available with networked embedded controls devices, **specify downlights available with nIO or rIO** by nLight, providing individual luminaire control and digital dimming capabilities. *Note: In this application, downlights with embedded controls devices, require external sensor(s), whether field installed or embedded within adjacent luminaire(s).*

For “Is it always possible to address the exact requirements of LLLC? What about downlights?” refer to the article available at: <https://www.acuitybrands.com/resources/featured-technologies/empowering-technologies>

Did you know?

nLight lighting controls platform provides interface capabilities to DALI or DMX.

For applications with individually addressable luminaires with DALI drivers

Specify DALI-2 certified nPS 80 DALI, providing nLight devices with the ability to control DALI drivers.

- For more details regarding the nPS 80 DALI, see <https://www.acuitybrands.com/products/detail/1801992/nlight/nps-80-dali/nlight-controller-with-dali-protocol>

For applications requiring communication via DMX

Specify nLight Snapshot Controller, providing two-way communication between DMX and nLight.

- For more details regarding the nLight Snapshot Controller, see <https://www.acuitybrands.com/products/detail/1743347/nlight/nlightr-snapshot-controller/dmx512-and-sacn-controller-npwwdmx>

Did you know?

nLight lighting controls platform provides integration capabilities to third-party interfaces and building management systems.

Specify nLight® ECLYPSE™ APEX, providing BACnet/IP, BACnet MS/TP and documented RESTful API for IP-based data integration into third-party interfaces.

- For more details regarding the nLight® ECLYPSE™ APEX, see <https://www.acuitybrands.com/products/detail/1717090/nlight/nlightr-eclypset-apex/nlight-system-controller>

For typicals and product references, get IECC, ASHRAE, Title 24 and more Application Code Guides available at <https://nlight.acuitybrands.com/resources/app-guides>

For additional information, visit <https://nlight.acuitybrands.com/> or contact your local lighting agent <https://www.acuitybrands.com/support/how-to-buy>

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