# nLiGHT ECLYPSE BACnet Object System Controller User Guide



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Contents



## Instruction

The **nLight ECLYPSE™** controller is a BACnet Building Controller **(B-BC)** certified device that acts as the IP interface for an nLight lighting control system, including support for both nLight and nLight AIR devices. It provides a BACnet interface (optional) that is BACnet Testing Laboratories **(BTL)** listed for system integration to a building management system through BACnet/IP and BACnet MS/TP.

The following chart provides the available BACnet object types and description of each object.

| Object Name | Type | Units | Range | Read | Write | COV | Inactive State (0) | Active State (1) | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Occupied (Px) | BI | – | – | X | – | X | Unoccupied | Occupied | The occupancy state provides feedback on whether an occupancy sensor is occupied or unoccupied (e.g. nCM PDT 9, rCMS, rCMSB).For multi-pole occupancy sensors (e.g. nCM 9 2 P), two BACnet objects will be available. |
| Relay State (Px) | BV | – | – | X | X | X | Relay Open | Relay Closed | The relay state provides feedback on whether the relay in a device is open or closed (e.g. nPP16 D, rPP20 D, rLSXR). |
| Dimming Output Level (Px) | AV | Percentage | 0 – 100 | X | X | X | – | – | The dimming output level provides the intensity of a dimming devices (e.g. nPP16 D, nLight Enabled Fixture, nSP5 PCD, nIO D, rPP20 D, rLSXR). |
| Measured Light Level | AI | Foot-Candles | 0 – 212 | X | – | X | – | – | The measured light level provides an analog foot-candle reading from a device with a photocell (e.g. nCM ADCX, rES 7, rCMS, rCMSB, rLSXR). |

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|---|---|---|---|---|---|---|---|---|---|
| Photocell Inhibiting (Px) | BI | – | – | X | – | X | Not Inhibiting | Inhibiting | When a photocell device is programmed to turn lights off or inhibit lights from turning on, photocell inhibiting provides indication when the photocell has provided this “off/inhibit” command. This point is available with nLight devices only (e.g. nCM PC, rCMS, rCMSB). |
| Active Load | AI | Watts | 0 – 4432 | X | – | X | – | – | The active load provides an analog power consumption reading of the lighting load connected to a device with the current monitoring feature (e.g. nPP16 IM, rPP20 D IM, rLSXR, rSBOR). |
| Dimming Input Level | AI | Percentage | 0 – 100 | X | – | X | – | – | The dimming input level provides an analog reading of the input percentage on the signal to an input device. This point is available with nLight devices only (e.g. nIO 1S). |
| Online | BI | – | – | X | – | X | Device Offline | Device Online | The online status provides indication whether a device is communicating with nLight ECLYPSE controller or not. |
| System Profile1 | BV | – | – | X | X | X | Profile Inactive | Profile Active | The system profile object provides feedback on whether a profile is active/inactive. |

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|---|---|---|---|---|---|---|---|---|---|
| Channel Occupied 1 | BI | – | – | X | – | X | Unoccupied | Occupied | Aggregate state of all occupancy sensors broadcasting on an occupancy channel: Unoccupied = all occupancy sensors on the channel are unoccupied. Occupied = one or more occupancy sensors on the channel are occupied. |
| Channel Relay State1 | BV | – | – | X | X | X | Inactive | Active | The channel relay state provides feedback on whether the relays in a channel are open or closed. |
| Channel Dimming Output Level1 | AV | Percentage | 0 – 100 | X | X | X | – | – | This value represents the average of all dimming output levels on the respective switch channel. Writing to this value is the equivalent of sending an nLight switch “go to level” command. |
| Automated Demand Response Level | MS | Level | 1 – 4 | X | – | X | – | – | This setting is only exposed if a valid license for ADR has been added to an ECLYPSE. This value represents the current status of a system responding to demand response. |
| System Input State | BV | – | – | X | – | X | Inactive | Active | The system input state represents the current status of a dry contact output that has been connected to an input device. |
| System Input Level | AV | – | 0-100 | X | – | X | – | – | The system input level represents the current status of an analog output that has been connected to an input device. |

**Px:** Indicates device pole. Most devices only have a single pole **(P1),** devices with secondary pole will display P1 and P2.

**COV:** Object is capable of providing “Change of Value” notification
**MS:** Multistate

**BV** = Binary Value
**BI** = Binary Input
**AV** = Analog Value
**AI** = Analog Inp

**NOTE**
A BACnet object is available after a user has completed programming of the initial artifact (profile, channel, etc.).

For additional information on nLight ECLYPSE BACnet integration, please see the **nLight ECLYPSE B-BC PICS** document.

## Documents / Resources

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|---|---|
|  | nLiGHT ECLYPSE BACnet Object System Controller [pdf] User Guide<br>ECLYPSE BACnet, ECLYPSE BACnet Object System Controller, Object System Controller, System Controller |

## References

- Acuity Brands | Lighting, Controls, and Building Management Solutions