

Wireless Connected Lighting

DESIGN GUIDE NON-INTEGRATED CORRIDOR

WaveLinx Connected Lighting

Office Corridor

example

	Manually Switched ON / OFF	Manual Dimmer	Manual ON / Auto OFF	Occupancy Sensor	Daylighting Control	Lumen Maintenance Control	Tuning Control	Receptacle Control	Demand Response
IECC 2018	•		•			•			
ASHRAE 90.1 - 2019	•	•	•	•		•	•		•
T24 2019	•	•		•		•	•	•	
NECB 2017		•		•		•			

Wallstation 🗲 🖥 WAC-POE Wireless Area Controller

Sequence of Operations

Lighting

- 0-10V lighting loads
- Up to 3 dimmable zones
- Individually addressable luminaires (IECC only)
- Out of the box 75% high end

Daylighting

- · Continuous dimming to off
- Individual luminaire daylight dimming to approximately
- Daylighting not required for indoor spaces without windows
- Not required in spaces without windows or that are less than 150W (120W for ASHRAE / Title 24)

Occupancy

- Automatic auto on to 50%
- Optional vacancy mode
- Optional auto on to scene
- Plug load turns on with occupancy
- Automatic off of lighting and plug load on vacancy

Manual Controls

- Programmable scenes
- Dominant button is 50% light
- Manual on/off
- Scene raise / Scene lower
- All off

Additional Features

- · Energy calculations (available through Trellix)
- Automatic demand response through wireless area controller
- Scheduling of partial off light levels from wireless area controller

Typical Wiring Detail

UL924 emergency control capabilities via luminaire battery backup or fixture integrated transfer device (consult fixture spec sheet)

Bill of Material

Catalog # Description Quantity WAC-POE 1 Wireless Area Controller WaveLinx Wallstation 2 W4S-RL-W 24EN-LD2-34-UNV-L835-CD1-WAA-U Encounter 2x4 with WaveLinx Sensor 6

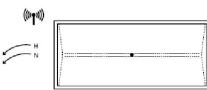
PoE Network Switch











24EN-LD2-34-UNV-L835-CD1-WAA-U Encounter 2x4 recessed light fixture with 0-10V dimming

Design Consideration	Best Practice	Maximum
Gateway / Wireless Area Controller range	150 ft LOS	300 ft LOS
Number of interior walls	2 walls	3 walls
Distance from Wireless Area Controller to 1st WaveLinx device	150 ft	200 ft
Distance between WaveLinx devices	75 ft	150 ft
Number of hops from Wireless Area Controller	4 hops	5 hops
Number of areas per Wireless Area Controller	15 + 1 con	struction area
Number of zones per area	3	16
Number of scenes per area	16	16

	Local Control	Manual ON	Partial ON	Bilevel Lighting	Daylight Side	Daylight Top	Partial OFF	Automatic OFF	Scheduled OFF	Receptacle Control	Energy Monitoring	Parking Garage	Functional Testing	Demand Response	Enhanced Digital
IECC 2018	C405.2.5	C405.2.5	C405.2.2.1.2		C405.2.3.2	C405.2.3.3	C405.2.1.3	C405.2.1.1.1	C405.2.2	C405.2.4		C405.2.6	C408.3		C406. 4
ASHRAE 90.1-2019	9.4.1 (a)	9.4.1.1 (b)	9.4.1.1 (c)	9.4.1.1 (d)	9.4.1.1 (e)	9.4.1.1 (f)	9.4.1.1 (g)	9.4.1.1 (h)	9.4.1.1 (i)	8.4.2	8.4.3.2	9.4.1.2	9.4.3		
T24 2019	130.1 (a)(b)	130.1 (a)(b)	130.1 (b)		130.1 (d)	130.1 (d)	130.1 (c).6	130.1 (c).5	130.1 (c)	130.5 (d)	130.5 (b)	130.1 (d)	130.4	130.1 (e) 130.1 (e)	
NECB 2017	4.2.2.1.(3)	4.2.2.1.(3). 4.2.2.1.(6)	4.2.2.1 (8)	4.2.2.1.(9)	4.2.2.1.(10)	4.2.2.1.(13)	4.2.4.1. (16-17)	4.2.2.1. (18-19)	4.2.2.1. (20-23)			4.2.2.2 4.2.2.4			