

Wireless Connected Lighting

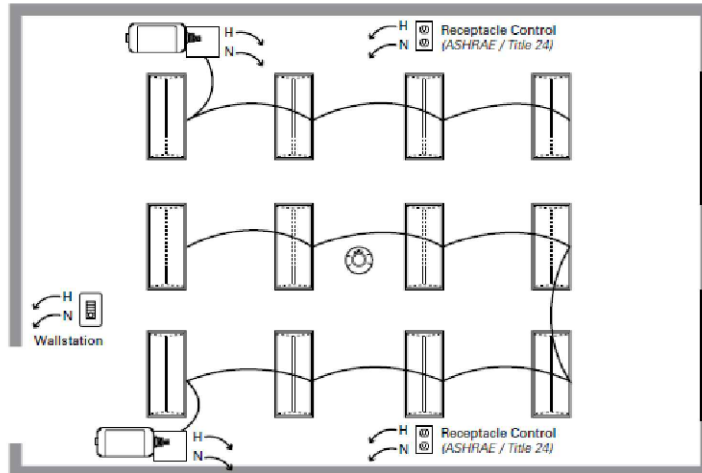
WaveLinx Connected Lighting

Classroom

example 1



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



Sequence of Operations

Lighting

- 0-10V lighting loads
- Up to 3 dimmable zones
- Daylight dimming zones of no more than eight luminaires (IECC only)
- Out of the box 75% high end trim

Daylighting

- Continuous dimming to off
- 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 level
- Scene raise / Scene lower
- All off

Additional Features

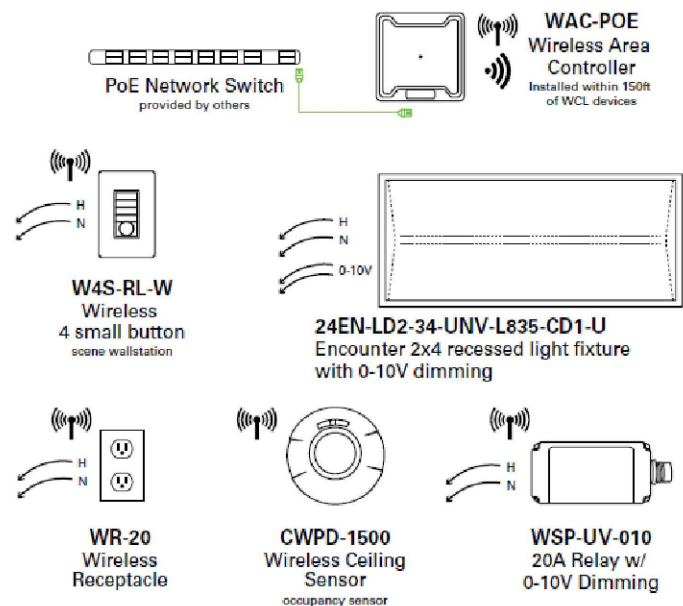
- Energy calculations (available through Trellix)
- Automatic demand response through wireless area controller
- Scheduling of partial off light levels from wireless area controller
- UL924 emergency control capabilities via luminaire battery backup or CEPC-2-D for entire switchpack circuit when emergency panels are deployed

Bill of Material

Quantity	Catalog #	Description
1	WAC-POE	Wireless Area Controller
2	WSP-UV-010	Universal Voltage Dimming Switchpack
1	CWPD-1500	WaveLinx ceiling sensor
1	W4S-RL-W	WaveLinx Wallstation
1	WR-20	WaveLinx Receptacle (ASHRAE / Title 24)
12	24EN-LD2-34-UNV-L835-CD1-U	Encounter 2x4

Design Consideration	Best Practice	Maximum
Gateway / Wireless Area Controller range	150ft 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 construction area	
Number of zones per area	3	16
Number of scenes per area	16	16

Typical Wiring Detail



	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		C406.4
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			