



## Using ballast factor in lighting design.

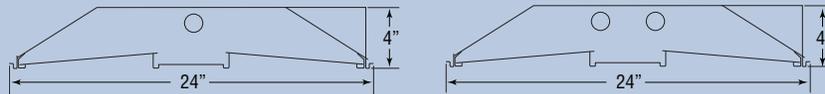
Ballast factor is one of the most important choices made by the designer. It impacts light level and energy, and also plays a role in fixture quantity and installation costs.

Use ballast factor to fine tune spacing, light levels, and energy use without affecting lamp life. With ballast life ratings between 60,000 and 90,000 hours, these are one-time adjustments made during project design and last for the life of the project.

Proper use of ballast factor can reduce project costs and simplify lighting controls.

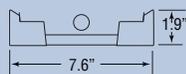
### Example - Open office with **recessed** luminaires

- 7,860 ft<sup>2</sup> open office space using recessed High Performance Recessed 2x4 luminaires.
- Design changes a 2T8 cross section with 0.88 BF to a 1T8 cross section with a 1.2 BF.



Luminaire	Fixture Quantity	Luminaire Spacing	Ballast Factor	Lamp Cross Section	Maintained Light Level	LPD w/ft <sup>2</sup>	# of Lamps
HPR-DCO	94	8x10	<b>0.88</b>	2T8	52 fc	0.66	126
HPR-DCO	94	8x10	<b>1.2</b>	1T8	36 fc	0.40	63

### Example - Open office with **pendant** luminaires



- Project design uses a Task-Vertical-Ambient approach.
- Ballast factor is used to adjust light and energy levels.

Luminaire	Fixture Quantity	Luminaire Spacing	Ballast Factor	Lamp Cross Section	Maintained Light Level	LPD w/ft <sup>2</sup>	# of Lamps
Series 16	544'	12' on center	<b>0.88</b>	1T8	38 fc	0.45	96
Series 16	544'	12' on center	<b>0.78</b>	1T8	34 fc	0.40	96
Series 16	372'	16' on center	<b>0.88</b>	1T8	30 fc	0.33	80