maxLED by MaxLite

MaxLite Lighting & Technology University

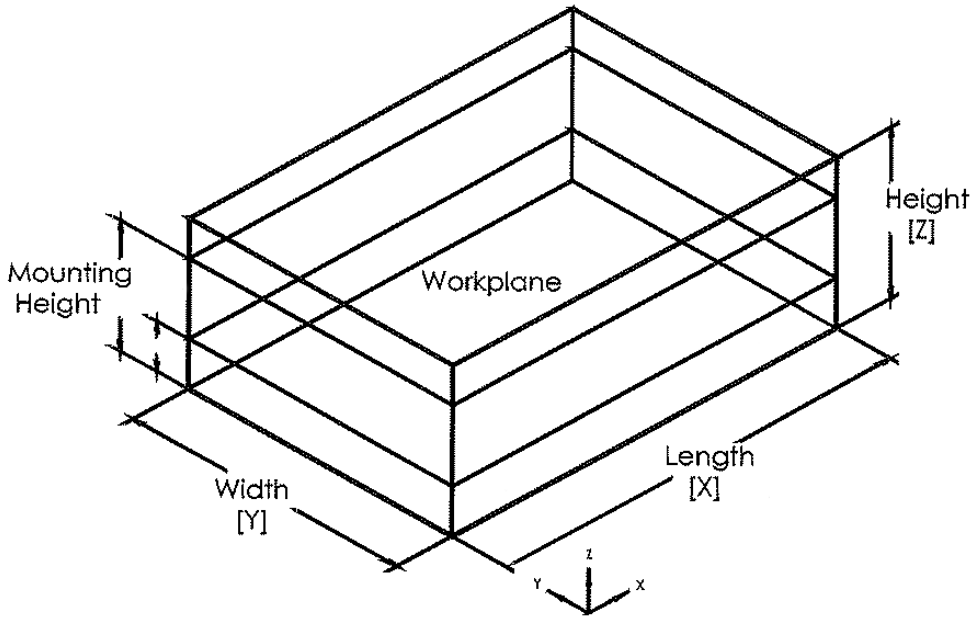
WELCOME
LED TROFFERS CAN COST LESS THAN FLUORESCENT!

- How light levels of LED troffers can meet or exceed fluorescent.
- How LED fixtures can be controlled for a faster ROI.
- Why LED is fast becoming the new standard for lay in applications.

Lumen Method Summary

Room

Length [X]	**60**	**ft**
Width [Y]	**30**	**ft**
Height [Z]	**10**	**ft**
RCR	**1.88**	
Ceiling	**80**	**%**
Walls	**50**	**%**
Floor	**20**	**%**
Workplane Height	**2.5**	**ft**



Lumen Method Summary

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Luminaire

Mounting Height	10 ft
Catalog Number	MLFP24DLCT35
Manufacturer	MAXLITE
IES File Name	IESFile_MLRT24D5535.IES
Lamp Description	
Number of Lamps	1
Lamp Lumens	4567.381
Light Loss Factor	0.96
Coefficient of Utilization	0.94

Luminaire

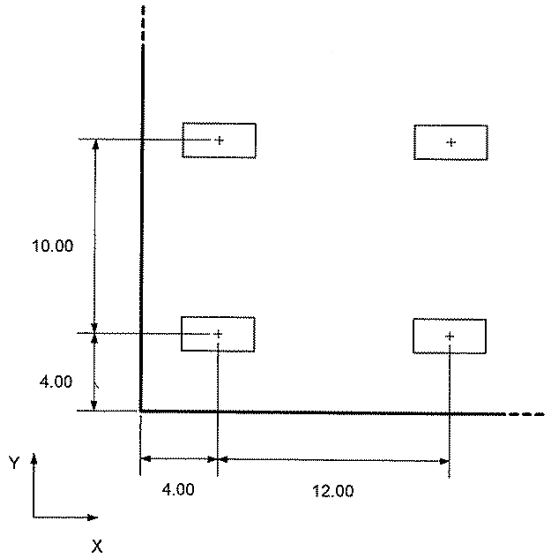
Mounting Height	10 ft
Catalog Number	2SP8 G 3 32 A12125 1/3 MVOLT SSR
Manufacturer	[illegible]
IES File Name	2SP8__G_3_32_A12125_1_3_MVOLT_SSR.ies
Lamp Description	THREE 32-WATT T8 LINEAR FLUORESCENT
Number of Lamps	3
Lamp Lumens	2850
Light Loss Factor	0.64
Coefficient of Utilization	0.71

Lumen Method Summary

LED

Output

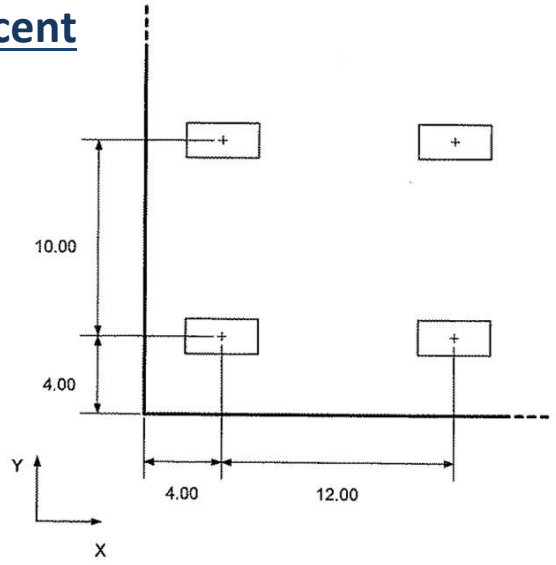
Illuminance		34	fc
Number of Luminaires		15	
Number of Columns	[X]	5	
Number of Rows	[Y]	3	
Column Spacing	[X]	12.00	ft
Row Spacing	[Y]	10.00	ft
Column Start	[X]	4.00	ft
Row Start	[Y]	4.00	ft
Power Density		0.47	W/ft²



Fluorescent

Output

Illuminance		32	fc
Number of Luminaires		15	
Number of Columns	[X]	5	
Number of Rows	[Y]	3	
Column Spacing	[X]	12.00	ft
Row Spacing	[Y]	10.00	ft
Column Start	[X]	4.00	ft
Row Start	[Y]	4.00	ft
Power Density		0.70	W/ft²



Lighting Layouts

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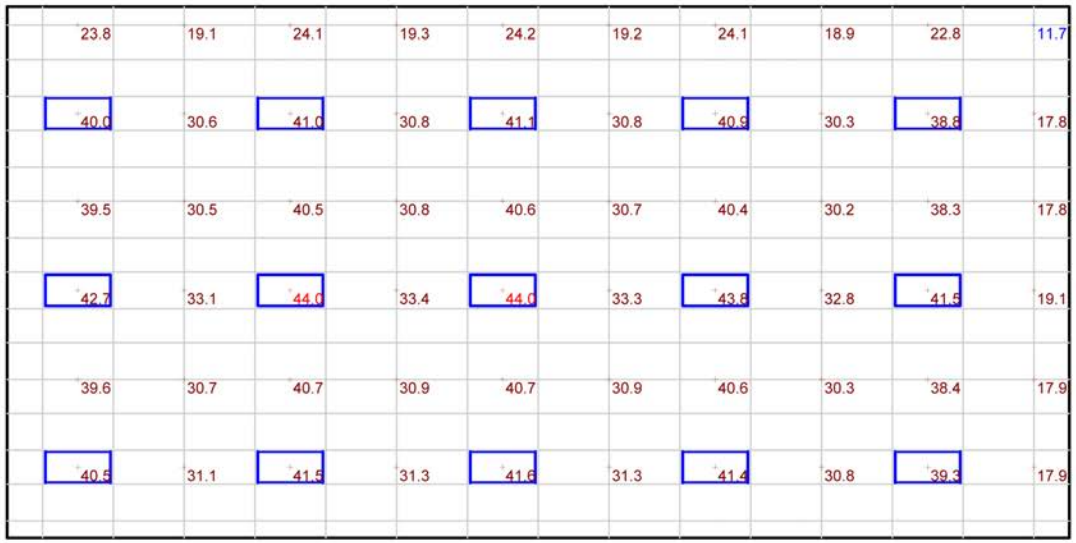
STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Workplane	+	32.4 fc	44.0 fc	11.7 fc	3.8:1	2.8:1

VISUAL

LUMINAIRE SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
	LM-1	15	2SP8 G 3 32 A12125 1/3 MVOLT SSR	SPECIFICATION PREMIUM TROFFER 2' X 4', THREE (3) LAMP T8, ACRYLIC PRISMATIC LENS .125" THICK IN STEEL DOOR FRAME, SPECULAR SILVER REFLECTIVE INSERTS, 1/3 MULTIVOLT ELECTRONIC BALLAST	THREE 32-WATT T8 LINEAR FLUORESCENT	2SP8__G_3_32_A12125_1_3_MVOLT_SSR.ies	2850	0.64	84



Plan View

Scale 1" = 8'

Lighting Layouts

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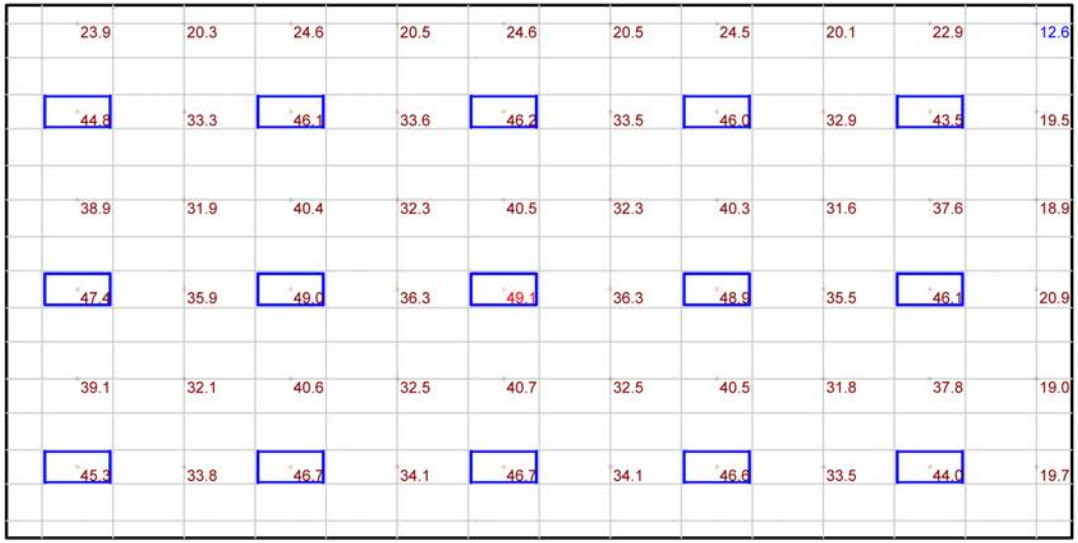
STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Workplane	+	34.6 fc	49.1 fc	12.6 fc	3.9:1	2.7:1

VISUAL

LUMINAIRE SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
	LM-1	15	MLFP24DLCT35	47-3/4"L. X 23-3/4"W. X 3-1/4"H. 2X4 RECESSED CEILING TROFFER 4 LED STRIPS, EACH STRIP HAS 44 3500K LEDS, WHITE REFLECTOR, PRISMATIC ACRYLIC LENS		IESFile_MLRT 24D5535.IES	Absolute	0.96	56



Plan View
Scale 1" = 8'

ROI

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	Old Wattage	Cost per KWH	Hours per day	Days Per Week	Cost per day	Cost Per week	Cost per Month	Cost over 5 Years: Electricity	Bulb replacements FL	Bulb replacements LED	Total
3 Lamp T8	84	$ 0.15	24	7	$ 0.30	$ 2.12	$ 9.17	$ 550.37	$2x45=$90		$ 640.37
	New Wattage	Cost per KWH	Hours per day		Cost per day						
MaxLite LED	56	$ 0.15	24	7	$ 0.20	$ 1.41	$ 6.12	$ 366.91		0	$ 366.91

QTY RETROFITTED	Savings Per Day	Savings Per Week	Savings Per Month
15	$ 1.51	$ 10.58	$ 45.86

Cost per Fixture/Bulb	Total Cost per project	ROI In Months
$200.00	$3,000.00	65.4

*** Blue numbers should be changed to reflect the actual job.
The green is your total daily savings for the job.

	Old Wattage	Cost per KWH	Hours per day	Days Per Week	Cost per day	Cost Per week	Cost per Month	Cost over 5 Years: Electricity	Bulb replacements FL	Bulb replacements LED	Total
3 Lamp T8	84	$ 0.15	24	7	$ 0.30	$ 2.12	$ 9.17	$ 550.37	$2x45=$90		$ 640.37
	New Wattage	Cost per KWH	Hours per day		Cost per day						
MaxLite LED	56	$ 0.15	24	7	$ 0.20	$ 1.41	$ 6.12	$ 366.91		0	$ 366.91

QTY RETROFITTED	Savings Per Day	Savings Per Week	Savings Per Month
15	$ 1.51	$ 10.58	$ 45.86

Cost per Fixture/Bulb	Total Cost per project	ROI In Months
$150.00	$2,250.00	49.1

*** Blue numbers should be changed to reflect the actual job.
The green is your total daily savings for the job.

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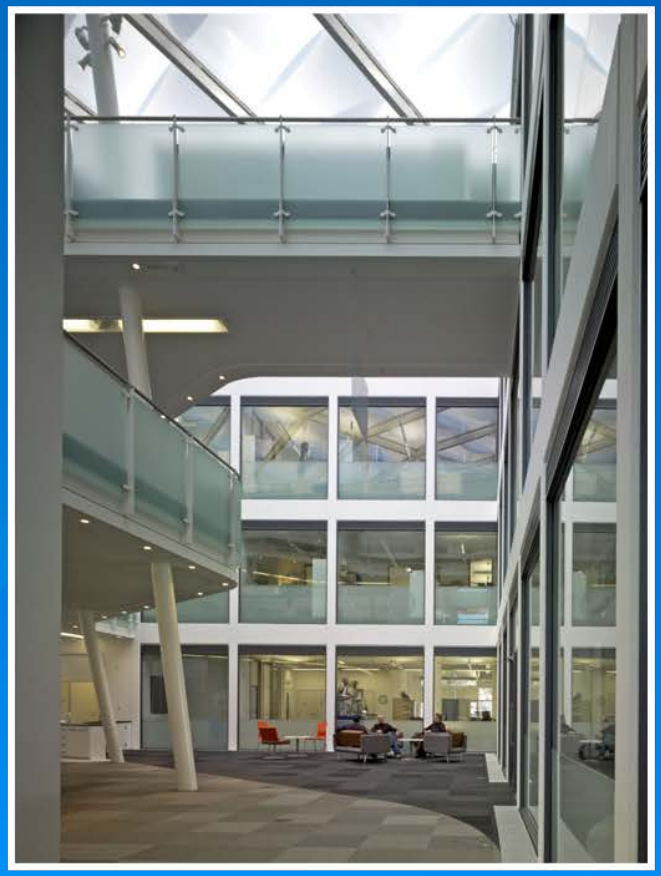
WHAT CONTROLS CAN DO FOR YOU

Controls

- Dimming LEDs saves energy at a roughly 1:1 ratio. This means that if you dim LEDs down to 50% of their light output you will save nearly 50% of your energy usage.
- Dimming LEDs also makes them run cooler, which should extend the life of the electronic components of the driver, as well as the phosphor on the LEDs. This will extend their life, some say doubling or tripling the LEDs lumen maintenance.
- Dimming any lamp enhances ambiance, so whether you are in a restaurant, theater or presentation space, you can create the environment that the lighting designer intended.
- Dimming control systems provide for space flexibility so that what may be an office space today could easily be converted into a call center tomorrow, or a gymnasium can be used as a theater or cafeteria just by adjusting the control of your lighting.
- Your home and your workplace should be designed to complement your needs. As your needs change throughout the day, your lighting should adapt as well; bright to read a book, but dim for computer use.
- Whether you are at home or at work, lighting control can create a comfortable atmosphere to support your activities throughout the day. Lighting controls also increases productivity allowing the user to select the level he/she needs to reduce eye strain and fatigue so that they can work at peak performance for more of the day, or so students can concentrate better and learn more at home or at school.

Daylight Harvesting



Using daylight to supplement light levels.
So the required light level is maintained, but the amount of LED light (power) is reduced.

Daylight Harvesting

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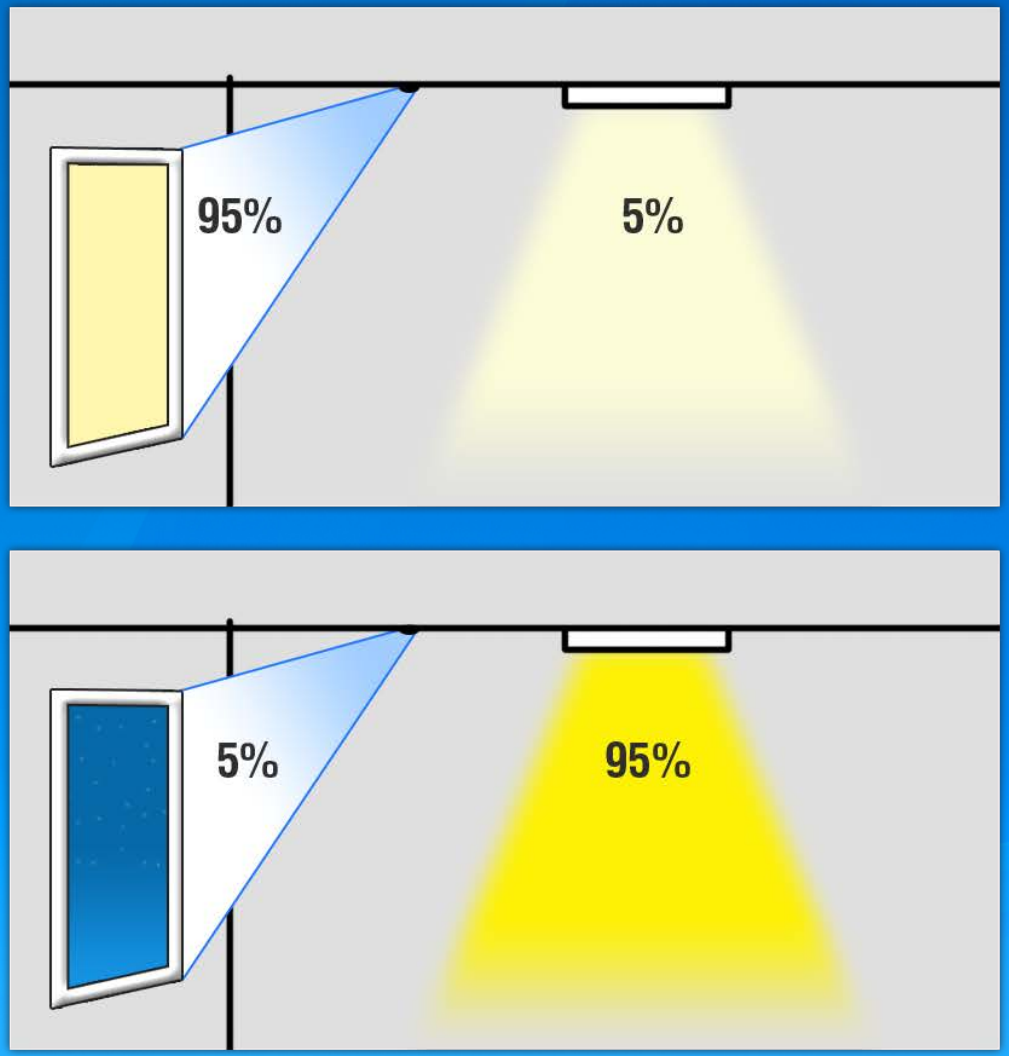
DAYLIGHT ADDED TO INTERIOR LIGHTING TO REACH DESIRED LIGHT LEVEL



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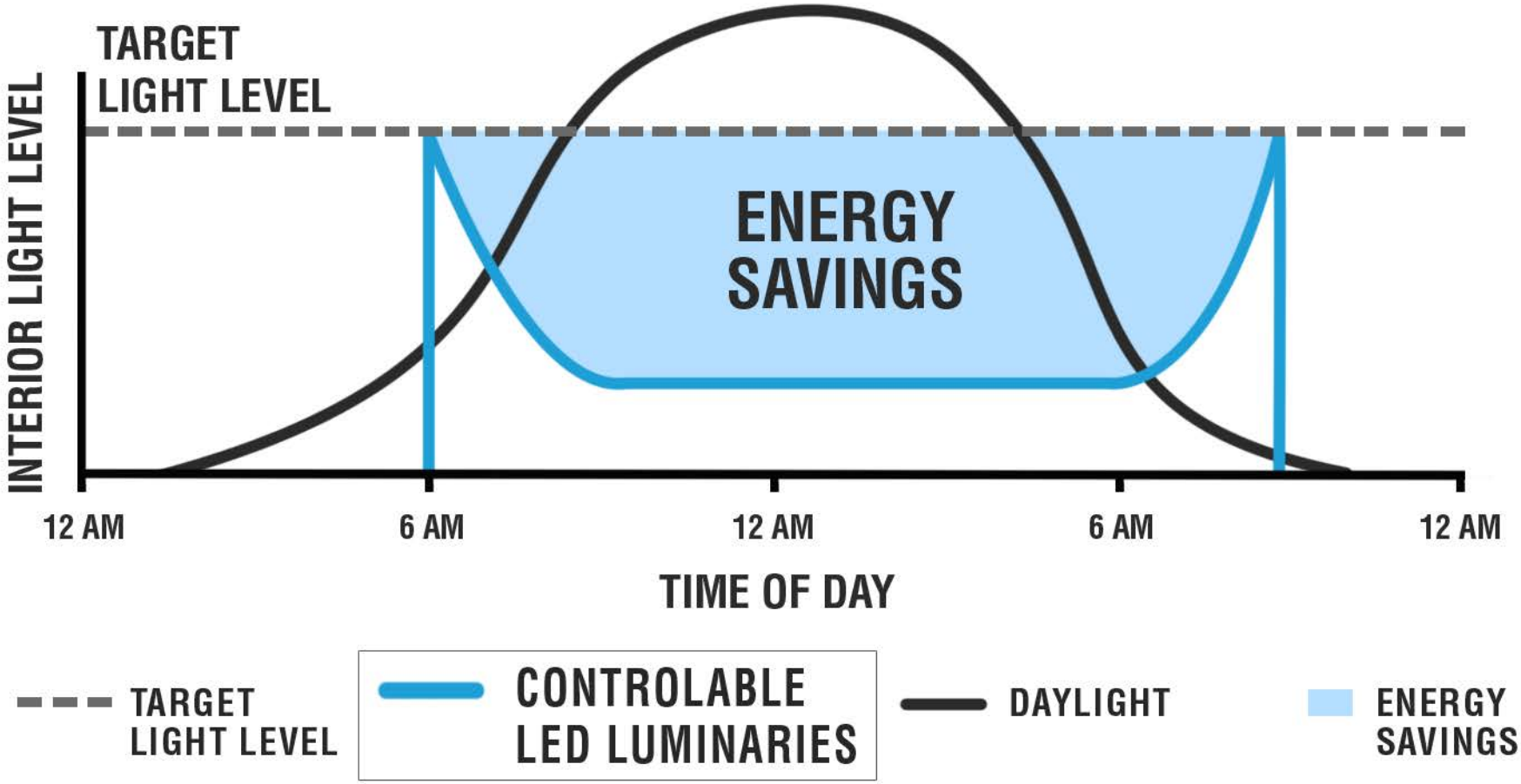
DAYLIGHT ADDED TO INTERIOR LED LIGHTING TO REACH DESIRED LIGHT LEVELS



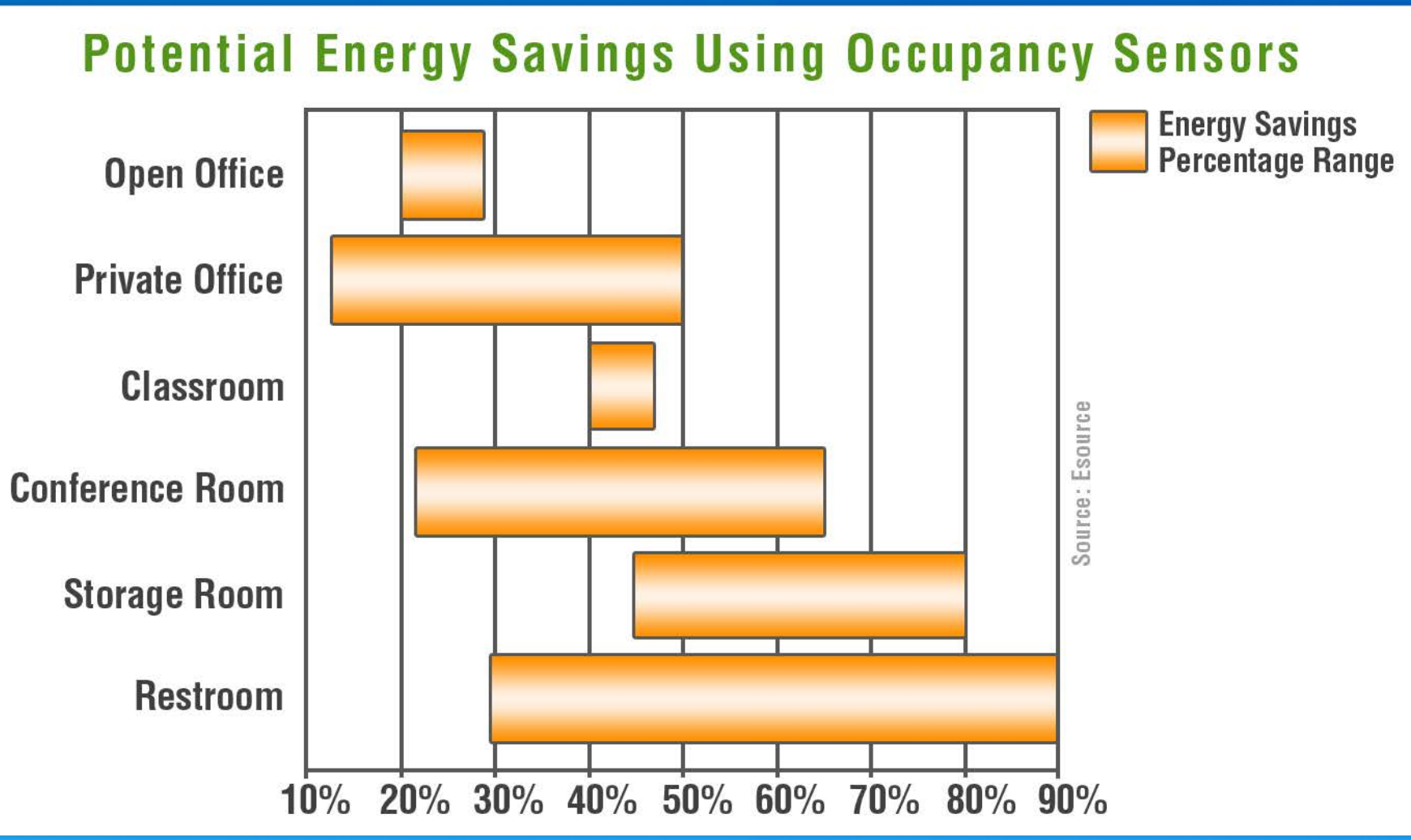
Shade Control

LED Lighting coupled with daylight harvesting to control light levels. Can be tied into HVAC shade controls.

Occupancy Sensors

LED lighting should be switching on in front of you and turning off behind you. One of the most effective features of controllable lighting.

Occupancy Sensors: Savings



MaxLite Webinars

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- To browse previous MaxLite Webinars, visit: http://www.maxlite.com/webinar

- Check/Subscribe to our YouTube channel

Class Is In Session!

- Visit the MaxLite Lighting & Technology University at: http://university.maxlite.com to learn about all of MaxLite's products and gain access to many other lighting resources!

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QUESTIONS & ANSWERS:

Thank you everyone for your attention.

This webinar session will be left open for the next 10 minutes to allow time for questions. We will answer as many questions as we have time for right now, but ALL questions will be answered via e-mail within the next 24 hours.

Thanks again for attending, and we hope to speak to you again, soon!

FOR MORE INFORMATION ABOUT OTHER MAXLITE PRODUCTS; OR FOR LIGHTING QUESTIONS IN GENERAL; PLEASE CONTACT:

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1-800-555-5629

Or contact your MaxLite Representative or MaxLite's Regional Sales Manager.