

# WELCOME

**HOW TO INTRODUCE  
LED LIGHTING INTO YOUR  
ENVIRONMENT; WITHOUT  
SACRIFICING THE QUALITY  
OF LIGHT, WHILE ADDING  
FUNCTIONALITY!**



# Today we want to talk about how to do this for customers through LED Flat Panels



**IT'S EASY TO GET INTEREST BECAUSE OF:**

# **LED MANIA**

**Everyone is buzzing  
about LEDs**

# **MERCURY HYSTERIA**





**Unfounded but real.**

**So the sales opportunity is there...**



# THE MYTH OF LEDs NOT BEING READY SHOULD BE DISPELLED

## LUMINAIRE SCHEDULE

| Symbol  | Label | Qty | Catalog Number     | Description  | Lamp                                 | Lumens | LLF  | Watts |
|---|-------|-----|--------------------|--|--------------------------------------|--------|------|-------|
|  | A     | 3   | MLFP2x2            | MaxLite LED Flat Panel, 2ft x 2ft, 120 to 277V, 60 Watts, 3150 lm, 3000 or 5000K | MaxLite LED Architect 2x2 Flat Panel | 3150   | 1.00 | 60    |
|  | B     | 3   | 2AV G 3 17 SBL 1/3 | 2x2; 3 lamp T8 17 watt   | Three 17-Watt T8 Linear Fluorescent  | 1325   | 1.00 | 47    |
|  | C     | 2   | MLFP2x4            | MaxLite LED Flat Panel, 2ft x 4ft, 120 to 277V, 90 Watts, 5000 lm, 3000 or 5000K | MaxLite LED Architect 2x4 Flat Panel | 5000   | 1.00 | 90    |
|  | D     | 2   | 2AV G 3 32 MDR ASR | 2x4; 3 lamp T8 32 watt. Aluminum Stepped Reflector                               | Three 32-Watt T8 Linear Fluorescent  | 2850   | 1.00 | 88    |

## STATISTICS

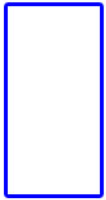
| Description     | Symbol | Avg     | Max     | Min     | Max/Min | Avg/Min |
|-----------------|--------|---------|---------|---------|---------|---------|
| Fluorescent 2x2 | +      | 55.0 fc | 65.0 fc | 40.0 fc | 1.6:1   | 1.4:1   |
| Fluorescent 2x4 | +      | 48.7 fc | 64.3 fc | 33.7 fc | 1.9:1   | 1.4:1   |
| LED 2x2         | +      | 63.9 fc | 74.5 fc | 46.6 fc | 1.6:1   | 1.4:1   |
| LED 2x4         | +      | 70.0 fc | 90.9 fc | 50.0 fc | 1.8:1   | 1.4:1   |

All rooms are 15 ft (length) by 12 ft (width) by 9 ft (height) and have reflectances of 80% on all surfaces.



# LED TO FLUORESCENT COMPARISON

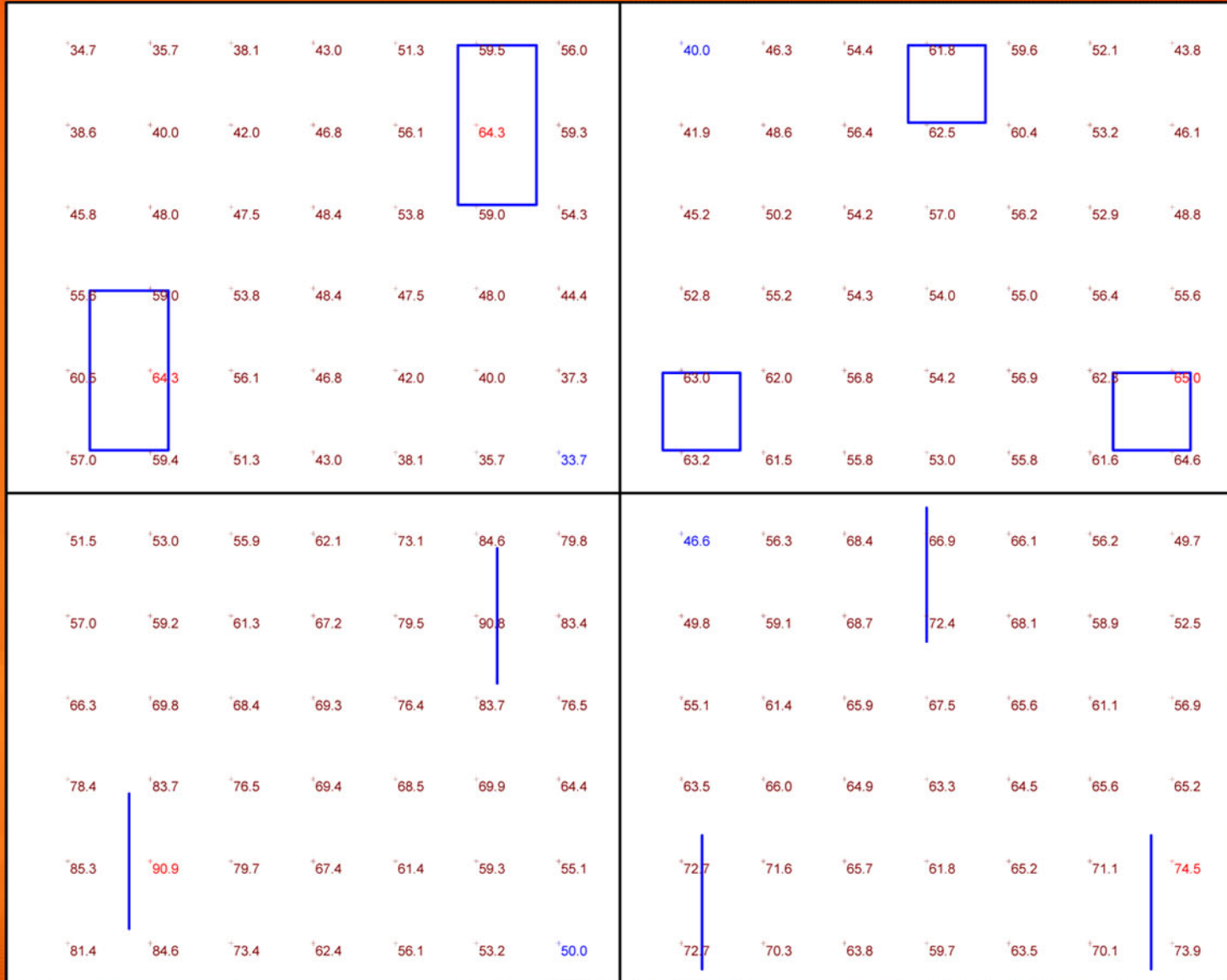
KEY:



2x4  
Fluorescent  
32W T8



2x4 90W  
Flat Panel



2x2  
Fluorescent  
17W T8



2x2 60W  
Flat Panel



The major interest point for all these opportunities is control of the light. The customer wants to:

**INTRODUCE LED LIGHTING INTO THEIR ENVIRONMENT WITHOUT SACRIFICING THE QUALITY OF LIGHT, WHILE AT THE SAME TIME, ADDING FUNCTIONALITY.**

**THE SOLUTION IS:**

**CONTROLS **WITH** CONTROLLABLE LED's**

**MaxLite doesn't sell controls, but is compatible with:**

- Building Automation
- Dimming
- Occupancy Sensors
- Daylight Harvesting
- Shade Controls



# POSSIBLE USERS OF THE NEW LIGHTING SYSTEMS:



**Health care facilities**



**Municipalities and Government**



**Large Corporations**



**Schools and Colleges**



**Projects involving LEED certification & Utility projects**



# BENEFITS OVER FLUORESCENTS IN: HEALTHCARE FACILITIES, LABORATORIES, AND CLEAN ROOM FACILITIES

- No Mercury
- No lamp changing
- No broken tubes
- Solid surface so no collection of dust & particles
- No growth of mold and other contaminants



# BENEFITS OVER FLUORESCENTS IN: MRI FACILITIES

- Dimmable
- Low glare
- Long life



# The secret - VISUAL ACUITY

The ability to provide 100% light levels where required, coupled with the ability to reduce levels down to 10% where required, either on demand or automatically through controls...



# THE SECRET IS: NOT ALL LED PRODUCTS ARE COMPATIBLE WITH CONTROLS

## **Building Automation**

Requires Master/Remote arrangement and compatibility with automation protocols.

## **Dimming**

In some simple dimming processes, efficacy is lost as the fixture is dimmed.



# HOW DOES THIS AFFECT ROI?

## ENERGY COST PER MONTH:

| <b>BASELINE:</b>  | <b>Wattage</b>          | <b>Cost Per kWh</b>           | <b>Hours Per Day</b> | <b>Days Per Week</b>     | <b>Cost Per Month</b> |
|---|-------------------------|-------------------------------|----------------------|--------------------------|-----------------------|
| 3 Lamp T8 2x4   | 85                      | \$ 0.15                       | 24                   | 7                        | \$9.28                |
| <b>OPTIONS:</b>   | <b>Wattage</b>          | <b>Cost Per kWh</b>           | <b>Hours Per Day</b> | <b>Days Per Week</b>     | <b>Cost Per Month</b> |
| No Controls / 3 Lamp LED T8 2x4                         | 69                      | \$ 0.15                       | 24                   | 7                        | \$7.53                |
| Occupancy Sensor / Compatible LED                       | 72                      | \$ 0.15                       | 6                    | 7                        | \$1.97                |
| Daylight Harvesting & Occupancy Sensor / Compatible LED | 28                      | \$ 0.15                       | 6                    | 7                        | \$0.76                |
| <b>SAVINGS PER MONTH:</b>                               | <b>QTY RETROFITTED</b>  |                               |                      | <b>Savings Per Month</b> |                       |
| No Controls / 3 Lamp LED T8 2x4                         | 385                     |                               |                      | \$672.67                 |                       |
| Occupancy Sensor / Compatible LED                       | 385                     |                               |                      | \$2,816.81               |                       |
| Daylight Harvesting & Occupancy Sensor / Compatible LED | 385                     |                               |                      | \$3,279.28               |                       |
|   | <b>Cost Per Fixture</b> | <b>Total Cost Per Project</b> |                      | <b>ROI In Months</b>     |                       |
| No Controls / 3 Lamp LED T8 2x4                         | \$180.00                | \$69,300.00                   |                      | <b>103</b>               |                       |
| Occupancy Sensor / Compatible LED                       | \$522.00                | \$200,970.00                  |                      | <b>71</b>                |                       |
| Daylight Harvesting & Occupancy Sensor / Compatible LED | \$531.00                | \$204,435.00                  |                      | <b>62</b>                |                       |



# MaxLite offers a wide range of FLAT PANEL products all with full control capability



**2X4 Flat Panel**



**2X2 Flat Panel**



**1X4 Flat Panel**



**Round Pendant**



**Decorative  
Pendant**



**Surface Mount**



**MRI Model For  
Healthcare  
Facilities**



**Remote  
Driver  
Models**



# LED FLAT PANELS COMPARED TO OTHER FLAT PANELS & T8's

|                                      | UL | MEETS<br>CODE<br>NATIONALLY | SUPPLIED<br>REMOTE<br>DIMMING | LIGHTING FOR<br>TOMORROW<br>WINNER | FULLY<br>COMPATIBLE |
|--------------------------------------|----|-----------------------------|-------------------------------|------------------------------------|---------------------|
| MAXLITE ARCHITECT<br>LED FLAT PANELS | ✓  | ✓                           | ✓                             | ✓                                  | ✓                   |
| NORTH CAROLINA<br>LED FLAT PANEL     | ✓  | ✓                           | ✗                             | ✗                                  | ✓                   |
| LED T8'S                             | ✓  | ✗                           | ✗                             | ✗                                  | ✗                   |

**KEY:** ✓ = Yes      ✗ = No      ✓ = Some Exceptions



# WHEN COMPARING FLAT PANELS, LOOK FOR THESE FEATURES:

- Dimmibility compatible with common protocols (not built in)
- CALiPER tested
- Compatible with a full range of control devices
- Fixture to fixture communication
- Master/Remote capability
- IES and Photometric Files availability



# MAXLITE LED FLAT PANEL



- **Winner of Lighting For Tomorrow  
(Not dots of light but even distribution)**
- **CALiPER tested**
- **Unlimited control capability**
- **IES and Photometrics available**
- **5 Year Warranty**





## QUESTIONS & ANSWERS:

Thank you everyone for your attention.

This webinar session will be left open for the next 20 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 FLAT PANELS; OTHER MAXLITE PRODUCTS; OR FOR LIGHTING QUESTIONS IN GENERAL; PLEASE CONTACT:**

**info@maxlite.com**

**www.maxlite.com**

**973-244-7300**

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

