

Epact 2005 & Create Change

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Hubbell Lighting Inc.

Topics

- **EPAct 2005 – Overview**
- **What's next?**
- **Columbia – Create Change campaign**



The Energy Policy Act of 2005 (EPAct)

- Maximum tax deductions up to \$1.80 per square foot.
 - Lighting systems 60¢ per square foot.
 - HVAC & Hot water systems - 60¢
 - Building envelope (Windows, doors & insulation) - 60¢
- Must maintain light levels to IES recommendations
 - Office: 30-50FCs
 - Retail (Merchandise): 100FCs
 - Warehouse (open storage): 10-20 FCs
 - Warehouse (Vertical illumination): 20-50 FCs



The Energy Policy Act of 2005 (EPAAct)

Lighting Deduction

- **Exceed ASHRAE 90.1, 2001 LPD* levels by 25%-40%**

- Offices 1.3W/ft² (sliding scale)
- Schools 1.5W/ft² (sliding scale)
- Retail 1.9W/ft² (sliding scale)
 - Reduce by 25% & get 30¢ per sq ft
 - Reduce by 40% & get 60¢ per sq ft.
- Warehouses 1.2W/ft²
 - Reduce by 50% (60¢)

*LPD – Lighting power density



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The Energy Policy Act of 2005 (EPAct)

- Controls required
 - Bi-level switching
 - Dimming
 - ON/OFF switching does not qualify
- Project must be certified by PE or Licensed EC
 - Must be 3rd party to design and installation
- EPAct extended through 2008 tax year
 - Most likely extend through 2013 (Legislation pending)
 - Must pass both House & Senate
 - Signed into law by President - ?



The Energy Policy Act of 2005 (EPAct)

Claiming Tax Deduction

- Option 1
 - IRS form 4562, Depreciation & Amortization
- Option 2
 - Form 1120 for corporations, Form 1120-S for S corporation, Form 1065 for partnerships
 - Include the deduction in the amount entered in the "Other deductions" line
 - Attach item list of all deductions included in the "Other deductions" line



The Energy Policy Act of 2005 (EPAct)

•Lighting is low Hanging fruit.

SINGLE-TECHNOLOGY PROJECTS

AVERAGE SINGLE PROJECT	PAYBACK PERIOD (Years)	AVERAGE ROI (%)
Lighting	2.2	45%
Controls	2.3	43%
Motors & Drives	2.4	42%
HVAC	3.6	28%
Building Automation	5.9	17%

Source: ECSC



The Energy Policy Act of 2005 (EPAct)

Resources:

Hubbellighting.com/epact



Navigation:

- Understanding Epact
- Hubbell Solutions
- Savings Examples
- Savings Calculation
- Energy Tips



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The Energy Policy Act of 2005 (EPAct)

Office Example - Microsoft Internet Explorer

Address: <http://www.hubbellighting.com/epact/Office.php>

EPAct 2005

THE ENERGY EFFICIENT COMMERCIAL BUILDINGS DEDUCTION

Understanding EPAct | Hubbell Solutions | **Savings Examples** | Savings Calculation | Energy Tips

NEW CONSTRUCTION

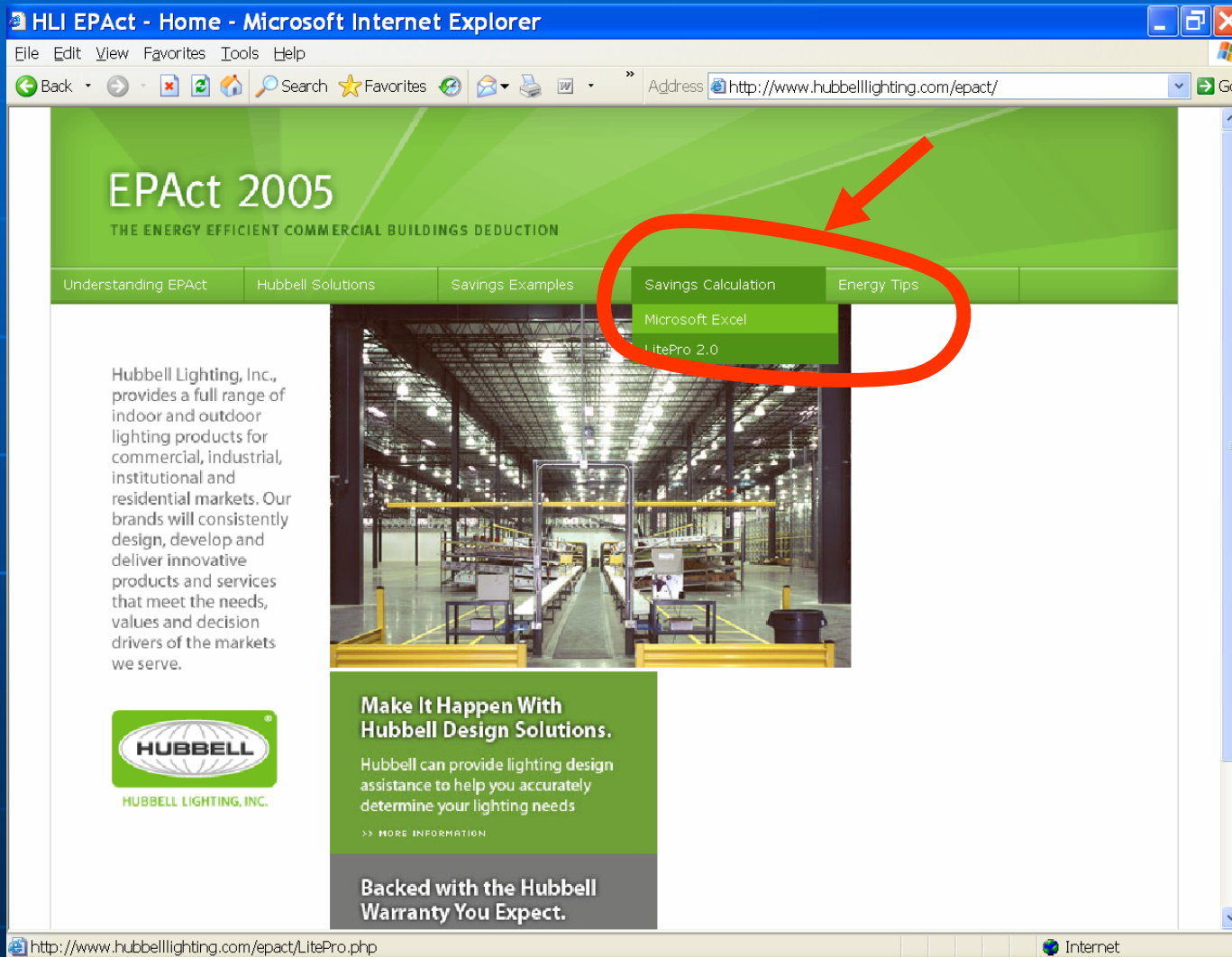
		CONVENTIONAL SYSTEM	PROPOSED SYSTEM
		Conventional 3-lamp parabolic 2' x 4'	Columbia EnergyMax 2-lamp high-performance parabolic
LAYOUT	Fixture Mounting Height	10'	10'
LAMP & FIXTURE DATA	Initial lamp lumens	2,800	2,800
	Number of lamps	3	2
	Initial fixture lumens	8,400	5,600
	Ballast factor	0.88	1.11
	Initial fixture lumens (ballast corrected)	7,392	6,216
	Lamp lumen depreciation	0.95	0.95
	Luminaire dirt depreciation	0.88	0.88
	Fixture efficiency	0.72	0.86

Screenshot of Savings EXAMPLES



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The Energy Policy Act of 2005 (EPAct)



Screenshot of
Savings
CALCULATORS

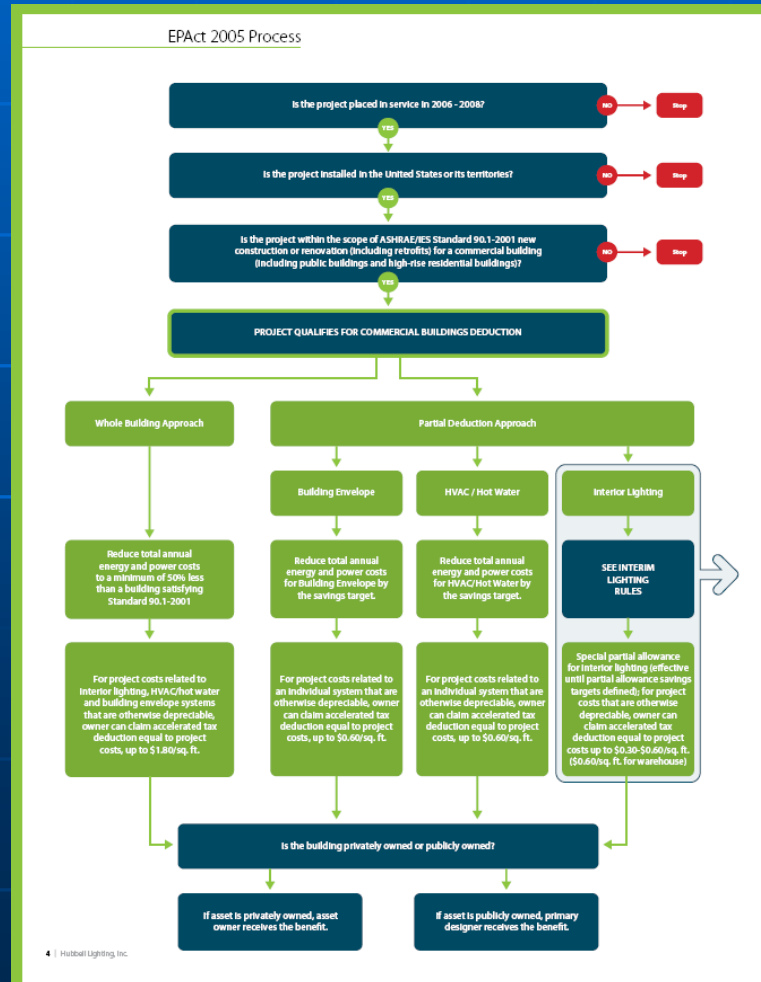
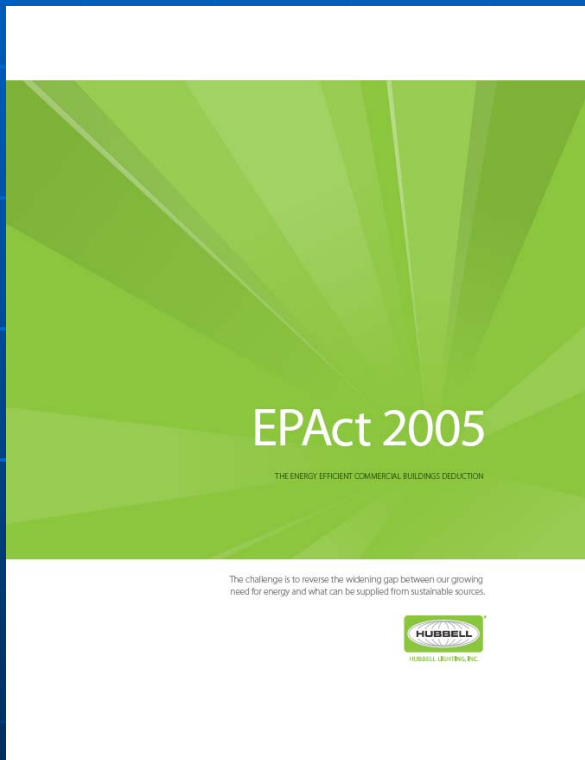


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The Energy Policy Act of 2005 (EPAct)

Resource: Hubbell Literature

STEP by STEP process on “how to” implement and capitalize on EPact 2005



The Energy Policy Act of 2005 (EPAct)

ADDITIONAL RESOURCES:

www.lightingtaxdeduction.org



- Introduction to EPAct
- Commercial Bldg Deduction
- Project certification
- Claiming the deduction



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....NEXT UP....

Energy Independence & Securities Act of 2007

- On December 19, President Bush signed H.R. 6, the Energy Independence and Security Act of 2007, into law (Public Law 110-140).
- Law will effect METAL HALIDE systems starting JAN 1, 2009
- Metal Halide 150w – 500w probe start will virtually be eliminated from OEM HID system must be 94% efficient
- Law will effect INCANDESCENT / HALOGEN lamps starting JAN 1, 2012 Incandescent must 30% more efficient by 2012
- Resource – ABOUTLIGHTINGCONTROLS.COM



COLUMBIA

create**change**

C O L U M B I A E N E R G Y S O L U T I O N S R O A D S H O W



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Columbia – Create Change

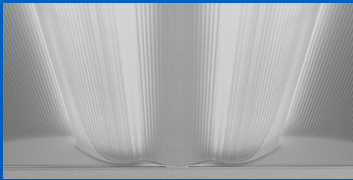
- It's a solution strategy...
 - to deliver a clear and concise message about energy management
 - to put useful information in our partners hands
 - to position Columbia Lighting and our distributors as the "go to" source for energy solutions

Columbia – Create Change

Four Products to Deliver the message

- ZPT
- Energy-Max
- Intersect
- Versabay

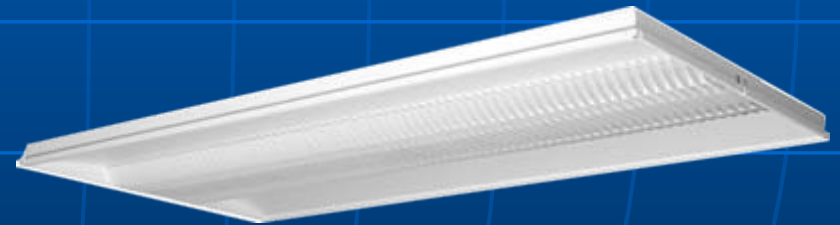
Columbia – Create Change ZPT



Lens



Flush Curved
Baffle



Perforated
Basket



ZPT - Financial Benefits

	3-Lamp Parabolic	ZPT 1.0 BF	ZPT .95 BF
Input watts	85	64	60
Watts/ft ² (LPD) (ASHRAE Office standard=1.3)	1.06	0.80	0.75
% beyond ASHRAE (must be >25%)	18%	38%	42%
EPAct deduction/ft ²	\$ -	\$ 0.56	\$ 0.60
Deduction/fixture, 80 sq ft/fixture	\$ -	\$ 44.80	\$ 48.00
Annual energy savings/fixture*	-	\$ 8.74	\$ 10.40

* 16 hours/day, 5 days/week, \$0.10/kWh



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Columbia – Create Change

ENERGY MAX & Intersect

- TUNED SYSTEM – 2 LAMP Fixture
- 88% fixture efficiency yields same light output as 3 lamp parabolic
- Bi-Level Switching
- MIRO 5 LOUVER (E-max)
- White Perforated louver (Intersect)



Columbia – Create Change

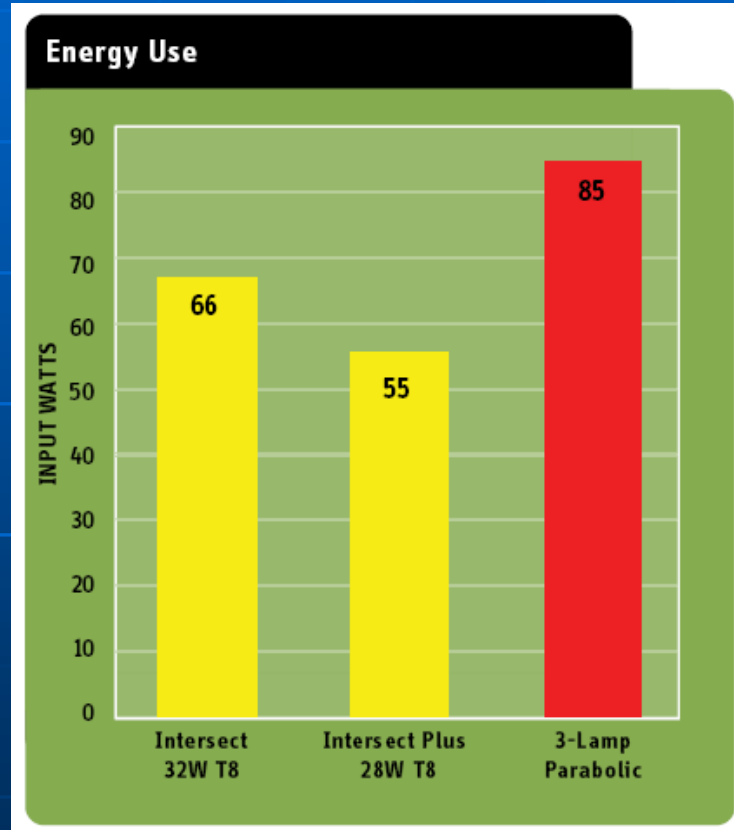
ENERGY MAX & INTERSECT

- 32w T8 - 25% Energy Savings over standard 3 lamp T8

- 28w T8 - 35% Energy Savings over standard 3 lamp T8

- MIRO 5 LOUVER (E-max)

- White Perforated louver (Intersect)



ENERGY MAX – Financial Benefits

Example for office space

	3-Lamp Parabolic	EMX	EMX+
Input watts	85	67	56
Watts/ft ² (LPD) (ASHRAE Office standard=1.3)	1.06	0.84	0.70
% beyond ASHRAE (must be >25%)	18%	36%	46%
EPAct deduction/ft ²	\$ -	\$ 0.52	\$ 0.60
Deduction/fixture, 80 sq ft/fixture	\$ -	\$ 41.60	\$ 48.00
Annual energy savings/fixture*	-	\$ 7.49	\$ 12.06
Payback in years*	N/A	1.9	1.5

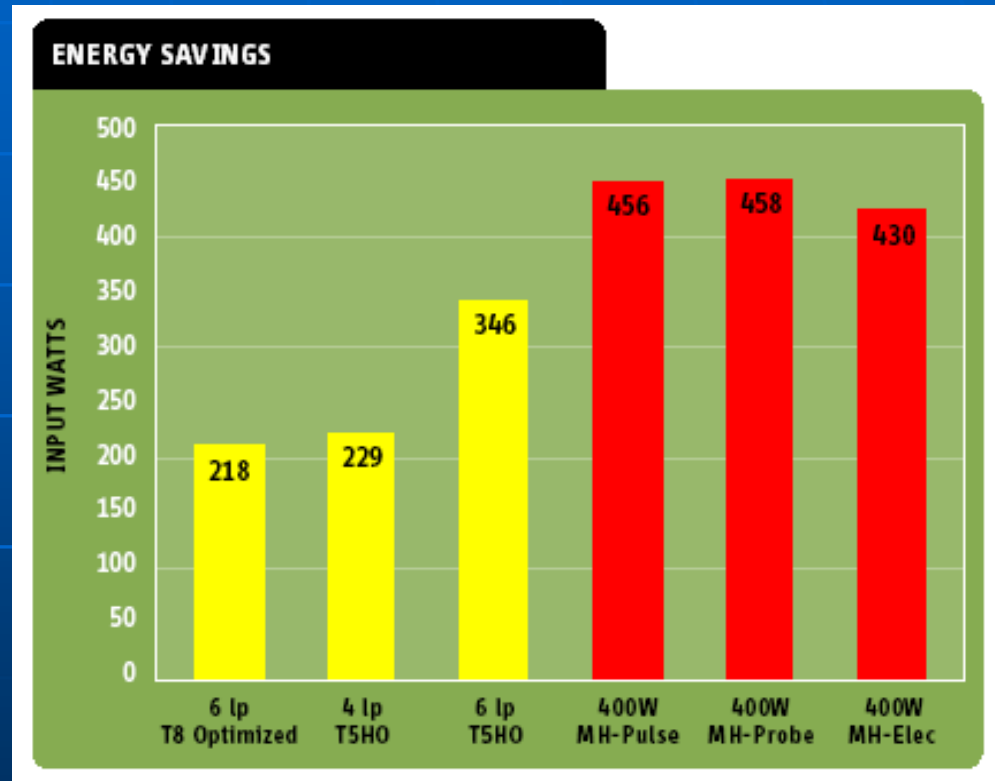
* 16 hours/day, 5 days/week, \$0.10/kWh

Columbia – Create Change VersaBay



Columbia – Create Change VersaBay

- Substantial energy savings Over HID
- Instant On
- High Color Rendering
- New Advance Thermal management
- Controllable light source



VersaBay – Financial Benefits

Example for Warehouse space

	400 Watt MH	6 Lamp T8	6 Lamp T5HO	4 Lamp T5HO
Input watts	458	218	346	229
Watts/sq ft (LPD) (warehouse = 1.2)	0.74	0.35	0.56	0.37
% beyond EAct (must be >50%)	38%	71%	53%	69%
EAct deduction/ft2	\$ -	\$ 0.60	\$ 0.60	\$ 0.60
Deduction/fixture, 560 sq ft/fixture	\$ -	\$ 369.60	\$ 369.60	\$ 369.60
Annual energy savings/fixture*	-	\$ 139.78	\$ 65.23	\$ 133.37
Payback in years*	N/A	0.2	0.5	0.1

* 16 hours/day, 7 days/week, \$0.10/kWh



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....Promote TODAY....

This program may end after 2008

Who qualifies:

- Private owner – claims deduction
- Public project – Designer claims deduction
- Deduction can not exceed total cost of project (Labor & material).
- Project is certified by licensed contractor or PE
- New system must be in service by end of 2008
- HubbellLighting.com and click on EPAAct icon



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THANK YOU



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