



## High Lumen - High Efficiency

**Universal** Lighting's **ULTim8** family of high efficiency high ballast factor ballasts are ideal for new fixtures and T12 retrofits. With the application trend of fewer T8 lamps with more light and fluorescent replacing HID, **ULTim8** High Lumen ballasts cover both with a single product family.

High lumen T8 fixtures that incorporate four to eight lamps are replacing HID for many indoor applications, and the **ULTim8** high efficiency ballast provides the maximum energy savings for these installations. Energy savings of up to 50% is available with a higher quality and quieter light source that can be easily controlled.

De-lamping T12 fixtures during retrofits is becoming very common for certain applications. Three lamp and two lamp ballasts are available to make this an effective energy saving solution. **ULTim8** High Lumen ballasts maximize energy savings while also providing the benefits of universal input voltage.

### Features & Benefits

- 1.18 Ballast Factor for High Lumen Applications
  - High Bay Fluorescent Fixtures
  - 4-Lamp to 3 or 2-Lamp Retrofits
- Anti-Striation Circuitry
- THD < 10%
- Universal Voltage HEH
  - 120 to 277 Volt Input
  - 2 & 3 Lamp Models
  - Multiple Lamp Operation
    - F32T8 Lamps
    - 30, 28 & 25 Watt T8 Lamps
  - Parallel Lamp Operation
  - -20° Starting
- High Range Voltage HRVH
  - 347 to 480 Volt Input
  - 3 Lamp Model
  - Multiple Lamp Operation
    - F32T8 Lamps
    - 30, 28 & 25 Watt T8 Lamps
  - Series Lamp Operation
  - -20° Starting
- Meets new CEE and NEMA high performance T8 lighting ballast specifications



### Product Specifications

| Model Number | Input Voltage | Primary Lamp Qty | F32T8 Operation |                | THD  |
|--------------|---------------|------------------|-----------------|----------------|------|
|              |               |                  | Input Power     | Ballast Factor |      |
| B232IUNVHEHA | 120-277       | 2                | 74-73           | 1.18           | <10% |
| B332IUNVHEHA | 120-277       | 3                | 111-108         | 1.18           | <10% |
| B432I277HEH  | 277           | 4                | 145             | 1.18           | <10% |
| B332IHRVHB-E | 347-480       | 3                | 110-109         | 1.18           | <10% |

Ballasts are also listed for operating the energy saving F32T8 lamps; 30W, 28W & 25W  
 Visit Ballast Specs at [www.unvlt.com](http://www.unvlt.com) for details on these applications.



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## De-Lamp T12 to T8 Retrofit Savings

**Convert 4-Lamp T12 Fixtures to 3 or 2-Lamp T8 Fixtures with High Ballast Factor Ballasts**

- Increase or Maintain Lumen Levels While Saving Energy
- Reduces Overall Lamp Count
- Use of Reflectors May Improve Fixture Efficiencies for Increased Lumen Output

| Ballast Type | (Qty) Lamp Type | Mean Rated Lamp Lumens | Ballast Factor | Watts | Mean System Lumens | Mean LPW | Relative Mean System Lumens | Energy Savings (Watts) | Annual Energy Savings * |
|--------------|-----------------|------------------------|----------------|-------|--------------------|----------|-----------------------------|------------------------|-------------------------|
|--------------|-----------------|------------------------|----------------|-------|--------------------|----------|-----------------------------|------------------------|-------------------------|

### 4-Lamp Electromagnetic (Base System)

|                  |               |      |      |     |       |    |      |   |  |
|------------------|---------------|------|------|-----|-------|----|------|---|--|
| Energy Saving EM | (4) F34T12/CW | 2280 | 0.89 | 148 | 8,117 | 55 | 100% | 0 |  |
|------------------|---------------|------|------|-----|-------|----|------|---|--|

### De-Lamp Options

|              |           |      |      |     |       |    |      |    |         |
|--------------|-----------|------|------|-----|-------|----|------|----|---------|
| B332IUNVHEHA | (3) F32T8 | 2800 | 1.18 | 108 | 9,912 | 92 | 122% | 40 | \$12.80 |
| B232IUNVHEHA | (2) F32T8 | 2800 | 1.18 | 73  | 6,608 | 91 | 81%  | 75 | \$24.00 |

### 3-Lamp Electromagnetic (Base System)

|                  |               |      |      |     |       |    |      |   |  |
|------------------|---------------|------|------|-----|-------|----|------|---|--|
| Energy Saving EM | (3) F34T12/CW | 2280 | 0.89 | 118 | 6,088 | 52 | 100% | 0 |  |
|------------------|---------------|------|------|-----|-------|----|------|---|--|

### De-Lamp Option

|              |           |      |      |    |       |    |      |    |         |
|--------------|-----------|------|------|----|-------|----|------|----|---------|
| B232IUNVHEHA | (2) F32T8 | 2800 | 1.18 | 73 | 6,608 | 91 | 109% | 45 | \$14.40 |
|--------------|-----------|------|------|----|-------|----|------|----|---------|

Values are measure at 277V

Use of reflectors may increase delivered fixture lumens

\* Savings calculation based on 4,000 annual operating hours and \$0.08/KWH utility rate

Lamp Data shown is for an 800 Series F32T8 lamp

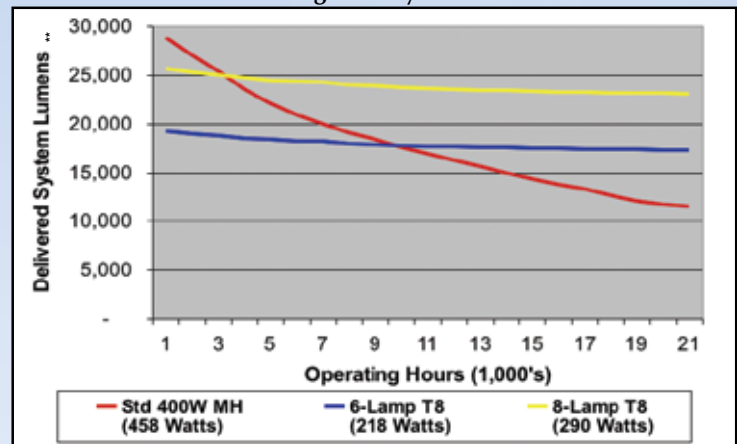
## 400 Watt Metal Halide HID to T8 Retrofit Savings

**Replace 400W HID Fixture with 6 or 8-Lamp Fixture**

- Increase or Maintain Lumen Levels While Saving Energy
- Quiet Operation
- No Warm-up or Re-strike Delay Time Issues
- Standardizes Lamps with Others Used Throughout Facilities
- Options for 120, 277, 347 and 480V Installations

### Fluorescent T8 Systems Provide Consistent Lumen Levels Over Time and Exceed HID Over Life

Delivered Light Analysis HID vs. T8



| Ballast Type | Input Voltage | (Qty) Lamp Type | Mean Lamp Lumens | Ballast Factor | Watts | Mean LPW | Fixture Efficiency | Mean System Lumens Delivered | Mean Lumen Comparison | Energy Savings (Watts) | Annual Energy Savings * |
|--------------|---------------|-----------------|------------------|----------------|-------|----------|--------------------|------------------------------|-----------------------|------------------------|-------------------------|
|--------------|---------------|-----------------|------------------|----------------|-------|----------|--------------------|------------------------------|-----------------------|------------------------|-------------------------|

### 400 Watt Metal Halide Base System

|                 |  |             |       |      |     |      |     |        |      |  |  |
|-----------------|--|-------------|-------|------|-----|------|-----|--------|------|--|--|
| Std Core & Coil |  | (1) 400W MH | 24000 | 1.00 | 458 | 52.4 | 80% | 19,200 | 100% |  |  |
|-----------------|--|-------------|-------|------|-----|------|-----|--------|------|--|--|

### Electronic T8 Options

|                  |           |           |      |      |     |      |     |        |      |     |         |
|------------------|-----------|-----------|------|------|-----|------|-----|--------|------|-----|---------|
| (2) B332IUNVHEHA | 120 - 277 | (6) F32T8 | 2800 | 1.18 | 216 | 91.8 | 92% | 18,238 | 95%  | 242 | \$77.44 |
| (2) B332IHRVHEHA | 347 - 480 | (6) F32T8 | 2800 | 1.18 | 226 | 87.7 | 92% | 18,238 | 95%  | 232 | \$74.24 |
| (2) B432I277HEH  | 277       | (8) F32T8 | 2800 | 1.18 | 290 | 91.1 | 92% | 24,317 | 127% | 168 | \$53.76 |

\* Savings calculation based on 4,000 annual operating hours and \$0.08/KWH utility rate

\*\*System Delivered Mean Lumens = Mean Lamp Lumens x # of Lamps x Ballast Factor x Fixture Efficiency

Lamp Data shown is for an 800 Series F32T8 lamp

*Data Subject to Change without Notice*