LED Retrofit Kit

Most Flexible and Reliable Design

5 YEAR WARRANTY

Application:
- Wall pack
- Street light
- High bay
- Canopy
- Shoebox

Overview

An elegant new design with 2nd-generation retrofit kit, utilizes CREE XTE LED luminous source and high reliable MEAN WELL HLG Series LED driver, accepts 90-305VAC, consumes 40W to 400W and produces light intensity equivalent to 150W to 1000W MH fixtures. The RTUV retrofit kit comes pre-fit your existing fixture, allowing fast and easy change out.

Martek Industries, Inc
The Experts in Responsible Lighting
600 Deer Rd, Bldg 8
Cherry Hill, NJ 08034
www.marteklighting.com 856-427-9411
**Product Benefits**

- High performance **LG 3030**, market available high performance CREE LEDs
- **MEANWELL** driver, all range WL-RTUV utilizing MEANWELL HLG series high-end driver, great luminaire stability, lifespan and optimal performance status. Made in Taiwan, real warranty 5-year
- **Sunon® LED fan**, DR Megles series, +50,000 hours life. Equipped with strain relief clamp, electrical cables and soldering points can be well protected.
- Equipped with **Wago® quick disconnect** between LED driver and LED module. Easily and fast connect.
- Professional and clean design with **Wago® SMD PCB connector**
- **Thermal protector** can automatically dim down or switch off LED module is over heat detected and automatically switch on LED module when it cools down.
- **Die casting aluminum heat sink**. One piece die casting aluminum heat sink ensures heat dissipation of LED module. Available finish color: silver, white

**Flexible Installation**

- **Horizontal Mount with L-Braket**
- **Vertical Mount with I-Bracket**
- **Pre-Plate**

Instead of mounting by mogul base, WL-RTUV is mounted by "L" bracket which fits mogul base location inside of most conventional fixtures. The "L" bracket is made of one piece metal plate with variable pre-drilled holes to fit existing mogul base location, and can be secured by
## Ordering Information

<table>
<thead>
<tr>
<th>MODEL (Optional)</th>
<th>DESCRIPTION</th>
<th>OPTICS</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ML-RTUVSVFN</td>
<td>Silver finish (Default Color)</td>
<td>45D</td>
<td>45Deg.Lens</td>
</tr>
<tr>
<td>ML-RTUVWHFN</td>
<td>White Finish</td>
<td>120D</td>
<td>No Lens</td>
</tr>
<tr>
<td>ML-RTUVHM</td>
<td>Horizontal Mount(L)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ML-RTUVVM</td>
<td>Vertical Mount(I)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ML-RTUVCP</td>
<td>Custom Plate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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### Installation Instruction

1. **Remove existing ballast, bulb, socket and reflector.**
2. **Fix LED driver using screws via mounting brackets of driver within the fixture at ballast location.** Connect input end of driver to AC power source inside existing fixture.
3. **Mount provided “L” bracket (“I” bracket optional) at existing socket location.**
   Fix LED module with “L” bracket (“I” bracket optional) inside the fixture using provided screws and position LED module for maximum light output. You may customize a mounting plate to fix LED module.
4. **Connect LED module and LED driver using the provided connector.**

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### MODEL (Optional)

<table>
<thead>
<tr>
<th>MODEL</th>
<th>LED WATTAGE</th>
<th>VOLTAGE</th>
<th>LED Q'ty</th>
<th>REPLACEMENT S</th>
<th>BEAM ANGLE</th>
<th>LUMENS</th>
<th>CRI</th>
<th>DIMENSIONS (L×W×H)</th>
<th>CCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ML-RTUV-040</td>
<td>40W</td>
<td>90-305VAC /47-63Hz</td>
<td>88</td>
<td>125W MH</td>
<td>120° 45°</td>
<td>5000</td>
<td>70</td>
<td>D120×H62mm</td>
<td>5000K</td>
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<tr>
<td>ML-RTUV-060</td>
<td>60W</td>
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<td>88</td>
<td>175W MH</td>
<td>120° 45°</td>
<td>5000</td>
<td>70</td>
<td>D120×H62mm</td>
<td>5500K</td>
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<tr>
<td>ML-RTUV-080</td>
<td>80W</td>
<td></td>
<td>144</td>
<td>250W MH</td>
<td>120° 45°</td>
<td>10000</td>
<td>70</td>
<td>180×140×78mm</td>
<td>5700K</td>
</tr>
<tr>
<td>ML-RTUV-100</td>
<td>100W</td>
<td></td>
<td>144</td>
<td>350W MH</td>
<td>120° 45°</td>
<td>12500</td>
<td>70</td>
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<td>180</td>
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<td>ML-RTUV-150</td>
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<td>220</td>
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<td>ML-RTUV-240</td>
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<td>360</td>
<td>800W MH</td>
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<td>30000</td>
<td>70</td>
<td>265×160×79mm</td>
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<tr>
<td>ML-RTUV-320</td>
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<td></td>
<td>480</td>
<td>1000W MH</td>
<td>120° 45°</td>
<td>40000</td>
<td>70</td>
<td>320×237×85mm</td>
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</tr>
</tbody>
</table>
**Specification**

**ELECTRICAL MEASUREMENTS**
- Input voltage: 90-305VAC, 47-63 Hz
- Input wattage: 40W
- Input current: 0.43A
- Equivalent wattage: 125W MH
- Power factor: 0.90min
- Total harmonic distortion: 20% max.
- Operating temp.: “-40°C to +45°C”

**PHOTOMETRIC CHARACTERISTICS**
- Initial Lumens Output: 5000Lm
- Initial Lumen Efficacy: 125 lm/W
- CCT: 5000K/5500K/5700K
- CRI: >70
- Optics: 120 deg./45 deg. (optional)

**LUMINOUS INTENSITY DISTRIBUTION**
- Center beam:
  - Candlepower: 1276cd
  - Beam angle: 114.7°/45°

**PHYSICAL SPECIFICATION**
- Diameter: 4.72” (120mm)
- Height: 2.44” (62mm)
- Housing material: Die cast aluminum
- Finish: Silver
- Module Weight: 680g
- Driver Weight: 658g
- Packing Type: 1 unit/white box, 4 boxes/ctn.
- Packing Dimension: 410*295*150mm/425*310*320mm
- Packing Weight: 1.88kg/7.5kg

**MOUNTING AND WIRING**
- Mounting:
  - Horizontal mounting
  - Or vertical mounting
  - Or custom plate mounting

*Photometric values based upon tests performed in compliance*
**Specification**

**ELECTRICAL MEASUREMENTS**

Input voltage 90-305VAC, 47-63 Hz
Input wattage 60W
Input current 0.64A
Equivalent wattage 175W MH
Power factor 0.90min
Total harmonic distortion 20% max.
Operating temp. "-40°C to +45°C"

**PHOTOMETRIC CHARACTERISTICS**

Initial Lumens Output 7500Lm
Initial Lumen Efficacy 125Lm/W
CCT 5000K/5500K/5700K
CRI >70
Optics 120 deg./45 deg. (optional)

**LUMINOUS INTENSITY DISTRIBUTION**

Center beam candlepower 1738cd
Beam angle 115.1° /45°

**PHYSICAL SPECIFICATION**

Diameter 4.72" (120mm)
Height 2.44" (62mm)
Housing material Die cast aluminum
Finish Silver
Module Weight 680g
Driver Weight 658g
Packing Type 1 unit/white box, 4 boxes/ctn.
Packing Dimension 410*295*150mm/425*310*320mm
Packing Weight 1.88kg/7.5kg

**MOUNTING AND WIRING**

Mounting Horizontal mounting
Or vertical mounting
Or custom plate mounting

*Photometric values based upon tests performed in compliance with LM-79.*

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www.marteklighting.com 856-427-9411
**Specification**

**ELECTRICAL MEASUREMENTS**

- **Input voltage**: 90-305VAC, 47-63 Hz
- **Input wattage**: 80W
- **Input current**: 0.80A
- **Equivalent wattage**: 250W MH
- **Power factor**: 0.90min
- **Total harmonic distortion**: 20% max.
- **Operating temp.**: 
  $-40 \degree C$ to $+45 \degree C$

**PHOTOMETRIC CHARACTERISTICS**

- **Initial Lumens Output**: 10000Lm
- **Initial Lumen Efficacy**: 125Lm/W
- **CCT**: 5000K/5500K/5700K
- **CRI**: >70
- **Optics**: 120 deg./45 deg. (optional)

**LUMINOUS INTENSITY DISTRIBUTION**

- **Center beam candlepower**: 2619cd
- **Beam angle**: 113.2° /45°

**PHYSICAL SPECIFICATION**

- **Length**: 7.08” (180mm)
- **Width**: 5.51” (140mm)
- **Height**: 3.07” (78mm)
- **Housing material**: Die cast aluminum
- **Finish**: Silver
- **Module Weight**: 1182g
- **Driver Weight**: 793g
- **Packing Type**: 1 unit/white box,4 boxes/ctn.
- **Packing Dimension**: 300*275*130mm/315*290*540mm
- **Packing Weight**: 2.5kg/10kg

**MOUNTING AND WIRING**

- **Mounting**: Horizontal mounting
  Or vertical mounting
  Or custom plate mounting

*Photometric values based upon tests performed in compliance with UL standards.*
**Specification**

<table>
<thead>
<tr>
<th>ELECTRICAL MEASUREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input voltage</td>
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<tr>
<td>Input wattage</td>
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<tr>
<td>Input current</td>
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<tr>
<td>Equivalent wattage</td>
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<tr>
<td>Power factor</td>
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<tr>
<td>Total harmonic distortion</td>
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<tr>
<td>Operating temp.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>PHOTOMETRIC CHARACTERISTICS</th>
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</thead>
<tbody>
<tr>
<td>Initial Lumens Output</td>
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<tr>
<td>Initial Lumen Efficacy</td>
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<tr>
<td>CCT</td>
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<tr>
<td>CRI</td>
</tr>
<tr>
<td>Optics</td>
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</table>

<table>
<thead>
<tr>
<th>LUMINOUS INTENSITY DISTRIBUTION</th>
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</thead>
<tbody>
<tr>
<td>Center beam candlepower</td>
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<tr>
<td>Beam angle</td>
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</table>

<table>
<thead>
<tr>
<th>PHYSICAL SPECIFICATION</th>
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<tbody>
<tr>
<td>Length</td>
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<tr>
<td>Width</td>
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<tr>
<td>Height</td>
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<td>Housing material</td>
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<tr>
<td>Finish</td>
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<tr>
<td>Module Weight</td>
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<td>Driver Weight</td>
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<td>Packing Type</td>
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<tr>
<td>Packing Dimension</td>
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<tr>
<td>Packing Weight</td>
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</tbody>
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<table>
<thead>
<tr>
<th>MOUNTING AND WIRING</th>
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</thead>
<tbody>
<tr>
<td>Mounting</td>
</tr>
<tr>
<td>Or vertical mounting</td>
</tr>
<tr>
<td>Or custom plate mounting</td>
</tr>
</tbody>
</table>

*Photometric values based upon tests performed in compliance*
**Specification**

**ELECTRICAL MEASUREMENTS**
- Input voltage: 90-305VAC, 47-63 Hz
- Input wattage: 120W
- Input current: 1.40A
- Equivalent wattage: 400W MH
- Power factor: 0.90min
- Total harmonic distortion: 20% max.
- Operating temp.: 
  -40°C to +45°C

**PHOTOMETRIC CHARACTERISTICS**
- Initial Lumens Output: 15000Lm
- Initial Lumen Efficacy: 125 lm/W
- CCT: 5000K/5500K/5700K
- CRI: >70
- Optics: 120 deg./45 deg. (optional)

**LUMINOUS INTENSITY DISTRIBUTION**
- Center beam candlepower: 3367cd
- Beam angle: 118.3°/45°

**PHYSICAL SPECIFICATION**
- Length: 7.08” (180mm)
- Width: 5.51” (140mm)
- Height: 3.07” (78mm)
- Housing material: Die cast aluminum
- Finish: Silver
- Module Weight: 1182g
- Driver Weight: 1016g
- Packing Type: 1 unit/white box, 4 boxes/ctn.
- Packing Dimension: 300*275*130mm/315*290*540mm
- Packing Weight: 2.75kg/11kg

**MOUNTING AND WIRING**
- Mounting: Horizontal mounting
- Or vertical mounting
- Or custom plate mounting

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## Specification

### ELECTRICAL MEASUREMENTS
- **Input voltage**: 90-305VAC, 47-63 Hz
- **Input wattage**: 150W
- **Input current**: 1.70A
- **Equivalent wattage**: 450W MH
- **Power factor**: 0.90min
- **Total harmonic distortion**: 20% max.
- **Operating temp.**: 
  - 
  
### PHOTOMETRIC CHARACTERISTICS
- **Initial Lumens Output**: 18750Lm
- **Initial Lumen Efficacy**: 125lm/W
- **CCT**: 5000K/5500K/5700K
- **CRI**: 72.7
- **Optics**: 120 deg./45 deg. (optional)

### LUMINOUS INTENSITY DISTRIBUTION
- **Center beam candlepower**: 4072cd
- **Beam angle**: 113.3° /45°

### PHYSICAL SPECIFICATION
- **Length**: 7.08” (180mm)
- **Width**: 5.51” (140mm)
- **Height**: 3.07” (78mm)
- **Housing material**: Die cast aluminum
- **Finish**: Silver
- **Module Weight**: 1182g
- **Driver Weight**: 1060g
- **Packing Type**: 1 unit/white box, 4 boxes/ctn.
- **Packing Dimension**: 300*275*130mm/315*290*540mm
- **Packing Weight**: 3kg/12kg

### MOUNTING AND WIRING
- **Mounting**: Horizontal mounting, Or vertical mounting, Or custom plate mounting

*Photometric values based upon tests performed in compliance with LM-79.*

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**Photometric Data**

- **Polar Candela Distribution**
  - 3.000
  - 2.500
  - 2.000
  - 1.500
  - 1.000
  - 500
  - 100
  - 50
  - 0

- **10° 20° 30° 40°**
  - - 0° H
  - - 22.5° H
  - - 45° H
  - - 67.5° H

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### Specification

#### ELECTRICAL MEASUREMENTS
- **Input voltage**: 90-305VAC, 47-63 Hz
- **Input wattage**: 185W
- **Input current**: 2.10A
- **Equivalent wattage**: 600W MH
- **Power factor**: 0.90min
- **Total harmonic distortion**: 20% max.
- **Operating temp.**: 
  
#### PHOTOMETRIC CHARACTERISTICS
- **Initial Lumens Output**: 23125 Lm
- **Initial Lumen Efficacy**: 125 Lm/W
- **CCT**: 5000K/5500K/5700K
- **CRI**: 73.1
- **Optics**: 120 deg./45 deg. (optional)

#### LUMINOUS INTENSITY DISTRIBUTION
- **Center beam candlepower**: 5056cd
- **Beam angle**: 112.7° /45°

#### PHYSICAL SPECIFICATION
- **Length**: 10.43" (265mm)
- **Width**: 6.30" (160mm)
- **Height**: 3.07" (78mm)
- **Housing material**: Die cast aluminum
- **Finish**: Silver
- **Module Weight**: 1965g
- **Driver Weight**: 1060g
- **Packing Type**: 1 unit/white box, 4 boxes/ctn.
- **Packing Dimension**: 410*295*150mm/430*620*330mm
- **Packing Weight**: 4.2kg/16.80kg

#### MOUNTING AND WIRING
- **Mounting**: Horizontal mounting
- **Or vertical mounting**
- **Or custom plate mounting**

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*Photometric values based upon tests performed in compliance with LM-79.*
**Specification**

**ELECTRICAL MEASUREMENTS**
- Input voltage: 90-305VAC, 47-63 Hz
- Input wattage: 240 W
- Input current: 4.00A
- Equivalent wattage: 800W MH
- Power factor: 0.90min
- Total harmonic distortion: 20% max.
- Operating temp.: -40°C to +45°C

**PHOTOMETRIC CHARACTERISTICS**
- Initial Lumens Output: 30000Lm
- Initial Lumen Efficacy: 125 Lm/W
- CCT: 5000K/5500K/5700K
- CRI: >70
- Optics: 120 deg./45 deg. (optional)

**LUMINOUS INTENSITY DISTRIBUTION**
- Center beam candlepower: 6473 cd
- Beam angle: 113.9° /45°

**PHYSICAL SPECIFICATION**
- Length: 10.43" (265mm)
- Width: 6.30" (160mm)
- Height: 3.07" (78mm)
- Housing material: Die cast aluminum
- Finish: Silver
- Module Weight: 1965g
- Driver Weight: 1185g
- Packing Type: 1 unit/white box, 2 boxes/ctn.
- Packing Dimension: 410*295*150mm/425*310*320mm
- Packing Weight: 4kg/8kg

**MOUNTING AND WIRING**
- Mounting: Horizontal mounting
  - Or vertical mounting
  - Or custom plate mounting

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*Photometric Data*

**Polar Candela Distribution**

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**Specification**

### ELECTRICAL MEASUREMENTS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input voltage</td>
<td>90-305VAC, 47-63 Hz</td>
</tr>
<tr>
<td>Input wattage</td>
<td>320 W</td>
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<tr>
<td>Input current</td>
<td>3.50A</td>
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<td>Equivalent wattage</td>
<td>1000W MH</td>
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<tr>
<td>Power factor</td>
<td>0.90min</td>
</tr>
<tr>
<td>Total harmonic distortion</td>
<td>20% max.</td>
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<td>Operating temp.</td>
<td>-40°C to +45°C</td>
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### PHOTOMETRIC CHARACTERISTICS

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<th>Value</th>
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### LUMINOUS INTENSITY DISTRIBUTION

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<tr>
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### PHYSICAL SPECIFICATION

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<td>3360g</td>
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<tr>
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<tr>
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### MOUNTING AND WIRING

<table>
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<th>Value</th>
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</thead>
<tbody>
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<td>Horizontal mounting</td>
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<tr>
<td></td>
<td>Or vertical mounting</td>
</tr>
<tr>
<td></td>
<td>Or custom plate mounting</td>
</tr>
</tbody>
</table>

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