LITHONIA LIGHTING®

| Catalog Number | |
|---|---|
| Notes | |
| Type | |

# FEATURES & SPECIFICATIONS

**INTENDED USE —** The RT8RT relight assembly is the ideal solution for renovating obsolete lensed troffer or parabolic systems, delivering improved quality of light and refreshing the space. RT8RT volumetric lighting eliminates the "cave effect" by delivering the ideal amount of light to walls, work surfaces, and people.

The RT8RT relight assembly is recommended for schools, offices, hospitals and other general lighting applications. **Certain airborne contaminants can diminish integrity of acrylic.**

**Click here for Acrylic Environmental Compatibility table for suitable uses.**

**CONSTRUCTION —** Universal end brackets containing the pre-wired ballast and sockets are constructed of 20-gauge powder-painted steel and are secured to the host fixture with provided TEK screws. A splice box is provided to enclose electrical connections, and a ballast disconnect plug system is provided as standard.

The reflector system uses a highly reflective white finish for optimum efficiency and attaches securely to the end brackets with quarter-turn fasteners. A one-piece trim assembly serves as the instrument that delivers the light. Molded and recyclable PETE (polyethylene) reflector is firmly attached to the universal bracket via reliable hinge and latch assembly. Included as part of the trim assembly are two linear prismed acrylic refractors with light-diffusing finish for even illumination and lamp obscuration. Trim kit to cover side reveals (if necessary) is provided as standard.

Splice box replaces the typical wireway by providing a cover for the connections of incoming supply wire and is attached to the host fixture with two TEK screws.

**OPTICS —** Luminous characteristics are carefully managed at high angles, providing just enough intensity to develop the volumetric effect. Regressed, one-piece refractive system obscures and softens the lamp and smoothly washes the reflector with light. Linear faceted reflectors soften and distribute light into the space, and minimize the contrast between the fixture and the ceiling. Mechanical cutoff across the reflector and fresnel refraction along the reflector provide high-angle shielding and a quiet ceiling.

Sloped endplates provide a balanced fixture-to-ceiling ratio while enhancing the perception of the fixture depth.

**ELECTRICAL —** Standard ballast is high-efficiency, CEE (Consortium for Energy Efficiency) qualified, instant start, <10% THD, universal voltage and sound rated A. Suggested lamps are high-lumen, long-life super T8 lamps which contribute to optimizing system performance. Optional program start and step-dim bi-level ballasts are available as well as several ballast factor options to maximize energy savings and to allow the amount of light to be balanced to the application.

**INSTALLATION —** Trim hinges from either side. Lamp access by hinging trim down to 90°, providing hands-free access to lamps. For hands-free ballast access, continue process by removing two quarter-turn latches and remove reflectors.

**LISTINGS —** UL/CUL Classified. Labeled for use in both static and air-handling fixtures. Does not impact existing fixture UL listing. NYC approved (#49192).

**WARRANTY —** Fixture guaranteed for one year against mechanical defects in manufacture. System lamp (24 months) and ballast (60 months) warranty is pro vided by lamp and ballast manufacturer.

Protected by one or more of US Patent Nos. 7,229,192; D541,467; D541,468; D544,633; D544,634; D544,992; D544,933 and additional patents pending.

*Specifications subject to change without notice.*

RT8™ VOLUMETRIC RECESSED LIGHTING

RELIGHT

**Relight Volumetric Lighting**

# 2RT8RT

**FLUORESCENT**
2' X 2' Relight
2 Lamp
High-performance T8

SIMPLY5™ LIGHTING INTELLIGENCE

***Specifications***

*Intended to be installed in most existing lensed troffer or parabolic recessed fixtures:*

Weight: 20 lbs.

**ORDERING INFORMATION** For shortest lead times, configure products using **bolded options**.

**Example:** 2RT8RT 217 BSNP

| 2RT8RT | 217 | | | |
|---|---|---|---|---|
| **Series** | **Lamp type** | **Voltage** | **Ballast** | **Options** |
| **2RT8RT** Recessed relight | **217** 2-lamp, 17W T8 (24") | **(blank)** MVOLT[2]<br>347 347V | BILP IS, high efficiency, .81 bf (low)<br>**BINP** IS, high efficiency, .90 bf (normal)<br>**BIHP** IS, high efficiency, .1.24 bf (high)[3]<br>BSNP PS, step dimming, high efficiency, .90 bf (normal) | **JP24** Job packaging - 24 kits |

**Notes**

1 Lamps not included. Must be ordered separately.
2 MVOLT standard for 120V-277V applications.
3 Not available in high-efficiency 347V.
4 Not available in 347V.

# **2RT8RT** Volumetric Recessed Lighting 2' x 2'

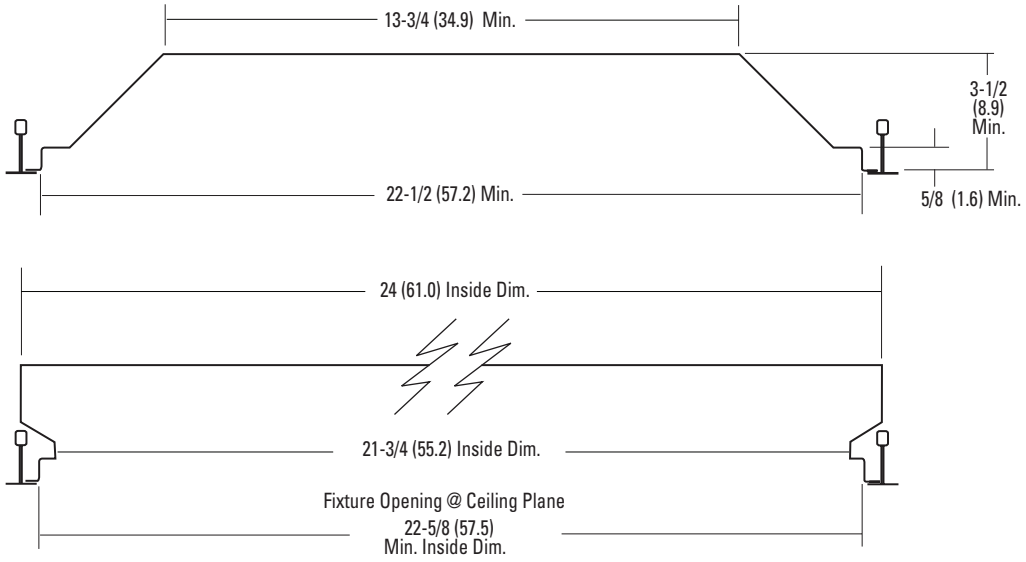
| ENERGY AND LIGHT LEVEL COMPARISON | | | | | | | |
|---|---|---|---|---|---|---|---|
| System | Light level | Input watts | Watts/SF | Watts saved | % Savings | $ Savings per year | LER |
| Parabolic, (2) 2700 lumen U31W lamps .88 bf | TBD | 60 | 0.92 | Base | Base | Base | 52 |
| RT8RT, (2) 1400 lumen T8 lamps, 1.24 bf | TBD | 41 | 0.51 | 19 | 32% | $6.08 | 71 |

Light level in footcandles is calculated based on 8x10 mounting centers, 9 foot ceilings, 60 x 60 room, 80/50/20 reflectances, .95 LLD, .90 LDD, horizontal light level on 2.5 foot work-plane height.

Annual savings based on 4000 operating hours, $.08/kwh. Luminaire Efficacy Rating (LER) is fixture lumen output divided by fixture input wattage.

**FIT COMPATIBILITY**

The 2RT8RT relight assembly was engineered to upgrade lensed troffer or parabolic fixtures from all major manufacturers conforming to the following dimensions:

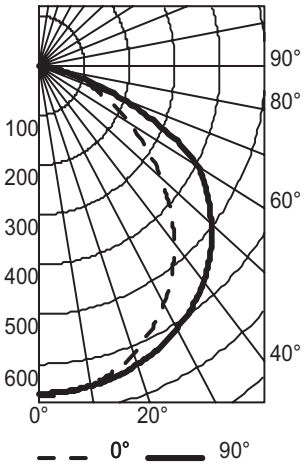



Dimensions are inches (centimeters).

In addition to conforming to the dimensions above, Lithonia Lighting recommends a trial installation prior to purchasing project quantities.

## PHOTOMETRICS

**2RT8RT 217,** 1400 lumens per lamp, Test No. LTL18461




**CP Summary**

| | 0° | 90 |
|---|---|---|
| 0° | 662 | 662 |
| 5° | 662 | 658 |
| 15° | 637 | 648 |
| 25° | 586 | 626 |
| 35° | 511 | 591 |
| 45° | 411 | 535 |
| 55° | 292 | 454 |
| 65° | 174 | 308 |
| 75° | 78 | 95 |
| 85° | 15 | 11 |
| 90 | 1 | 0 |

**Coefficients of Utilization**

| | pf | 20% | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | pc | 80% | | | 70% | | | 50% | | |
| | pw | 70% | 50% | 30% | 50% | 30% | 10% | 50% | 30% | 10% |
| RCR | 0 | 83 | 83 | 83 | 82 | 82 | 82 | 78 | 78 | 78 |
| | 1 | 77 | 73 | 70 | 72 | 69 | 67 | 69 | 67 | 65 |
| | 2 | 70 | 64 | 59 | 63 | 58 | 55 | 60 | 56 | 53 |
| | 3 | 63 | 56 | 50 | 55 | 50 | 45 | 53 | 48 | 45 |
| | 4 | 58 | 50 | 43 | 49 | 43 | 38 | 47 | 42 | 38 |
| | 5 | 53 | 44 | 38 | 43 | 37 | 33 | 42 | 37 | 33 |
| | 6 | 49 | 40 | 33 | 39 | 33 | 29 | 38 | 32 | 28 |
| | 7 | 45 | 36 | 30 | 35 | 29 | 25 | 34 | 29 | 25 |
| | 8 | 42 | 33 | 27 | 32 | 26 | 22 | 31 | 26 | 22 |
| | 9 | 39 | 30 | 24 | 30 | 24 | 20 | 29 | 24 | 20 |
| | 10 | 37 | 28 | 22 | 27 | 22 | 18 | 27 | 22 | 18 |

**Zonal Lumen Summary**

| Zone | Lumens | % Lamp | % Fixture |
|---|---|---|---|
| 0° - 30° | 524 | 18.7 | 26.7 |
| 0° - 40° | 869 | 31.0 | 44.2 |
| 0° - 60° | 1575 | 56.2 | 80.2 |
| 0° - 90° | 1964 | 70.1 | 100.0 |
| 90° - 180° | 0 | 0.0 | 0.0 |
| 0° - 180° | 1964 | 70.1 | 100.0 |

Efficiency: 70.1%

LITHONIA LIGHTING®
An AcuityBrands Company

2RT8RT-2X2

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