

JUNO®

Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

5" TC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

TC20LED (G4 09LM) RECESSED HOUSING



WALL WASH TRIMS



PRODUCT DESCRIPTION

Dedicated LED new construction housing with integral light engine • Shallow housing allows for fit in 2 x 6 construction • TC housing design for use in non-insulated areas • If installed where insulation is present, the insulation must be pulled back 3" from all sides of the TC housing • LED housing is designed to provide 50,000 hours of life and is compatible with many standard Juno trims • 5 year limited warranty on LED components.

ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT

- No harmful ultraviolet or infrared wavelengths
- No lead or mercury
- Comparable light output to 26W compact fluorescent while consuming only 18W*

PRODUCT SPECIFICATIONS

LED Light Engine LED array integrated to one piece high purity aluminum, thermally conductive housing provides uninterrupted heat transfer to ensure long life of the LED • Replaceable light engine mounts directly to housing and incorporates the latest generation, high lumen output LED array • LEDs are binned within a 3-Step MacAdam Ellipse exceeding ENERGY STAR® requirements yielding superior fixture to fixture color uniformity • 2700K, 3000K, 3500K or 4000K color temperatures available • 90 CRI minimum.

Optical System Painted white scoop is designed to work with computer-optimized reflector design to direct light toward wall uniform illumination on vertical surfaces while concealing LED optic assembly and minimizing glare • LEDs are concealed by high transmission diffusing lens • Retention bar holds scoop assembly to trim • White or black baffle available.

Aesthetic Trim Selections Low profile scoop wall wash trim • Shadow free, knife edge design blends seamlessly into ceiling.

LED Driver Universal voltage drivers that accommodate input voltage from 120-277 volts AC at 50/60Hz are available and dimmable with the use of most 0-10V wall box dimmers • Power factor > 0.9 at 120V input • Optional Lutron Hi-Lume® A- Series driver accommodates 120-277 volts AC at 50/60Hz • Mounted between the j-box and housing for easy access and cool operation • For a list of compatible dimmers, see [JUNOTCLED-DIM](#).

Emergency Battery Option Battery factory assembled to housing with remote mounted test switch included • Drives LED array for 90 minutes to meet Life Safety Code (NFPA-LSC), National Electrical Code (NEC) and UL requirements • Provides 50% light output in emergency mode.

Life Rated for 50,000 hours at 70% lumen maintenance.

Labels UL listed for U.S. and Canada through-branch wiring, damp locations • Union made • UL and cUL listed.

Testing All reports are based on published industry procedures; field performance may differ from laboratory performance.

Specifications subject to change without notice.

HOUSING FEATURES

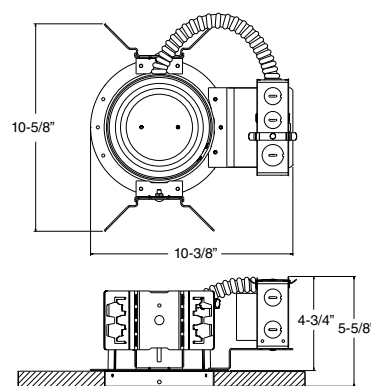
Housing Designed for use in TC applications (non-insulated) • Aluminum housing • Housing is vertically adjustable to accommodate up to a 2" ceiling thickness.

Junction Box Pre-wired junction box provided with (5) 1/2" and (1) 3/4" knockouts and ground wire, UL listed and cUL listed for through-branch wiring, maximum 8 No. 12 AWG 90° C branch circuit conductors (4 in, 4 out) • Junction box provided with removable access plates • Knockouts equipped with pryout slots.

Mounting Frame 16-gauge galvanized steel mounting ring equipped with vertically adjustable mounting brackets that accept 1/2" conduit or "C" channels (HB26 or HB50), linear flat bars (LB27) or Patented (US Patent D552,969) Real Nail® 3 bar hangers (HB1).

*Nominal input wattage with universal voltage driver under stable operating conditions

DIMENSIONS



5 5/8" CEILING CUTOUT

ELECTRICAL DATA

STANDARD UNIVERSAL VOLTAGE DRIVER

(MVOLT EZ10, MVOLT ZT10, MVOLT EZ1 and MVOLT ZT1)

| | 120V | 277V |
|-----------------------|--|--|
| Input Power | 16.1W (+/-5%) | 16.9W (+/-5%) |
| Input Current - Max | 0.14A | 0.06A |
| Frequency | 50/60Hz | 50/60Hz |
| EMI/RFI | FCC Title 47 CFR, Part 15, Class B (residential) | FCC Title 47 CFR, Part 15, Class B (residential) |
| Minimum starting temp | -20°C (-40°F) | -20°C (-40°F) |

UNIVERSAL VOLTAGE DRIVER WITH EMERGENCY OPTION

(MVOLT ZT10 BR, EZ10 BR, ZT1 BR and EZ1 BR)

| | 120V | 277V |
|-----------------------|---|---|
| Input Power | 18.9W (+/-5%) | 19.6W (+/-5%) |
| Input Current - Max | 0.16A | 0.07A |
| Frequency | 50/60Hz | 50/60Hz |
| EMI/RFI | FCC Title 47 CFR, Part 15, Class A (Commercial) | FCC Title 47 CFR, Part 15, Class A (Commercial) |
| Minimum starting temp | 0°C (32°F) | 0°C (32°F) |

LUTRON HI-LUME® LED DRIVER (ECOS3)

| | 120V | 277V |
|-----------------------|---|---|
| Input Power | 17.8W (+/-5%) | 17.8W (+/-5%) |
| Input Current - Max | 0.15A | 0.06A |
| Frequency | 50/60Hz | 50/60Hz |
| EMI/RFI | FCC Title 47 CFR, Part 15, Class A (Commercial) | FCC Title 47 CFR, Part 15, Class A (Commercial) |
| Minimum starting temp | 0°C (32°F) | 0°C (32°F) |

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TC20LED (G4 09LM) RECESSED HOUSING WALL WASH TRIMS

ORDERING INFORMATION Housing and trim can be ordered together or separate, but will always ship separately.

Example: TC20LED G4 09LM 27K 90CRI MVOLT ZT BR

| Series | Generation | Lumens | Color Temperature | CRI | Voltage/Driver |
|---|-----------------|-------------------------|-------------------|---------------|--|
| TC20LED 5" LED Downlight Non-IC Housing | G4 Generation 4 | 09LM 900 Nominal Lumens | 27K 2700K | 90CRI 90+ CRI | MVOLT ZT10 Multi-Volt (120-277), 0-10V, 10% dim |
| | | | 30K 3000K | | MVOLT ZT1 Multi-Volt (120-277), 0-10V, 1% dim |
| | | | 35K 3500K | | MVOLT EZ10 Multi-Volt (120-277), eidoLED 0-10V, 10% dim |
| | | | 40K 4000K | | MVOLT EZ1 Multi-Volt (120-277), eidoLED 0-10V, 1% dim |
| | | | | | MVOLT ECOS3 Multi-Volt (120-277), Lutron Hi-Lume A series 3 wire fluorescent controls and Lutron Ecosystem |

| Emergency Battery | Territory |
|----------------------|-------------------|
| BR Emergency Battery | CP Chicago Plenum |

Note: Chicago Plenum (CP) is not available with emergency option (BR)
Note: Lutron driver (MVOLT ECOS3) is not available with emergency battery pack (BR)



A+ Capable options indicated by this color background

Trim/Description



213G3 WWH 5" Wall Wash Scoop Trim - White Baffle, White Trim Ring
213G3 BWH 5" Wall Wash Scoop Trim - Black Baffle, White Trim Ring

Trim Size: 6 1/4" O.D.

Note: In Canada, when insulation is present, Type IC fixtures must be used

Accessories (ordered separately)

| Catalog Number | Description |
|----------------|--|
| HB1 | Two 13 1/2" - 25" Real Nail® 3 bar hangers |
| HB26 | Two 26" C-channel bar hangers |
| HB50 | Two 50" C-channel bar hangers |
| LB27 | Two 27" linear bar hangers |

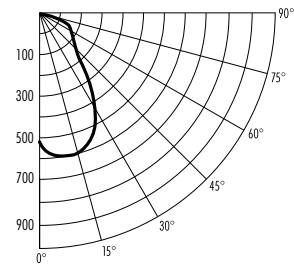
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PHOTOMETRICS

PHOTOMETRIC REPORT

Test Report #: PT101124054R
Catalog No: TC20LED G4 09LM 35K 90CRI
MVOLT with 213G3 WWH Wall Wash Trim
Luminaire Spacing Criterion @ 90°: 1.00
Luminaire LPW: 41



CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees | Vertical | 0° |
|---------|----------|----|
| 0 | 543 | |
| 5 | 596 | |
| 10 | 610 | |
| 15 | 602 | |
| 20 | 570 | |
| 25 | 518 | |
| 30 | 440 | |
| 35 | 330 | |
| 40 | 225 | |
| 45 | 169 | |
| 50 | 137 | |
| 55 | 118 | |
| 60 | 103 | |
| 65 | 92 | |
| 70 | 81 | |
| 75 | 60 | |
| 80 | 37 | |
| 85 | 21 | |
| 90 | 0 | |

Multiplier: 27K - 0.93
30K - 0.99
40K - 1.01

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 315 | N/A | 47.6 |
| 0-40° | 442 | N/A | 66.9 |
| 0-60° | 584 | N/A | 88.3 |
| 0-90° | 661 | N/A | 100.0 |

LUMINANCE (Average cd/m²)

| Degrees | Average Luminance |
|---------|-------------------|
| 45 | 18825 |
| 55 | 16135 |
| 65 | 17098 |
| 75 | 18123 |
| 85 | 18909 |

FOOTCANDLES ON WALL FROM MULTIPLE FIXTURES

| Fixture Distance to Wall | 2' | | | | | | 3' | | | | | |
|---------------------------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 2' | | | 3' | | | 3' | | | 4' | | |
| Fixture Centers (spacing) | 2' | 2' | 2' | 3' | 3' | 3' | 3' | 3' | 3' | 4' | 4' | 4' |
| 1' | 21 | 20 | 21 | 16 | 12 | 16 | 8 | 8 | 8 | 7 | 6 | 7 |
| 2' | 28 | 28 | 29 | 21 | 18 | 21 | 13 | 13 | 14 | 12 | 9 | 11 |
| 3' | 32 | 30 | 30 | 23 | 20 | 23 | 14 | 14 | 14 | 12 | 11 | 12 |
| 4' | 30 | 30 | 30 | 23 | 20 | 23 | 14 | 14 | 15 | 12 | 11 | 12 |
| 5' | 25 | 25 | 25 | 16 | 18 | 16 | 15 | 15 | 15 | 13 | 12 | 13 |
| 6' | 20 | 20 | 20 | 14 | 14 | 14 | 14 | 15 | 14 | 12 | 12 | 11 |
| 7' | 15 | 15 | 15 | 12 | 12 | 12 | 13 | 13 | 13 | 11 | 11 | 9 |
| 8' | 13 | 13 | 13 | 9 | 9 | 9 | 11 | 12 | 11 | 8 | 9 | 8 |
| 9' | 9 | 9 | 9 | 7 | 7 | 7 | 9 | 9 | 9 | 7 | 7 | 7 |

*For 262G3 BWH trim, use 0.90 multiplier.

*Note: Multipliers are provided for estimating purposes only. Use IES photometric files for precise photometric information.