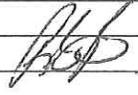




Capital Environmental, LLC

Environmental Engineers and Scientists

| | |
|------------|--|
| TO: | Mr. Roger Calarese, Calarese Properties, Inc. |
| FROM: | Robert S. Berger, LSP, Capital Environmental, LLC.  |
| DATE: | August 28, 2025 |
| PROJECT #: | 2679 |
| LOCATION: | Residence & Blueberry Farm, 543 Union Street, Franklin, Massachusetts |

Memorandum Number 1 **Environmental Concerns from the Proposed Housing Subdivision**

The subject property, 543 Union Street, Franklin, Massachusetts, is the site of a residential home and a well-established blueberry farm. The subject site is referenced by the Town of Franklin as Parcel ID 304-016-000.

Based on interviews with the owner of the blueberry farm in April, 2025, the operation of the blueberry farm routinely utilized herbicides and pesticides on a limited basis. The herbicides and pesticides were appropriately utilized as prescribed on the product label. Fertilizers were also incorporated into the operation of the blueberry farm. On a farm of this nature, blueberry bushes are fertilized with products providing ammonium-based nitrogen, such as ammonium sulfate, urea, or cottonseed meal, to maintain the necessary low soil pH. Blueberries require their nitrogen in ammonium form, not nitrate, because nitrate is harmful to them and can cause injury.

- **Ammonium Sulfate:** A common choice for maintaining soil acidity.
- **Urea:** Another source of ammonium nitrogen, which rapidly converts to the ammonium form in the soil.
- **Cottonseed Meal:** An organic option that also provides nitrogen in the preferred form.

With the discontinuing operation of the blueberry farm and discontinued routine use of fertilizer products, herbicides, pesticides, and other farm products, the natural environment at the subject property will no longer be associated with these items. Please note that these products were legally utilized and no hazardous materials issues exist.

Additional environmental benefits of the discontinuation of the blueberry farm operations are the discontinued pumping of groundwater for copious farm irrigation activities and seasonal heavy traffic of blueberry picking customers in the Union Street neighborhood.

Furthermore, it is important to understand that residential lawn fertilizers and pest control products are used at a much lower concentration and smaller quantities than any commercial products used on farms. Therefore, the overall redevelopment of the property as a housing development will be beneficial to the natural environment and the neighborhood at large.

In closing, the proposed residential development at this location is a positive measure for the community and the environment.



Capital Environmental, LLC

Environmental Engineers and Scientists

April 23, 2025

Mr. Roger Calarese
Calarese Properties, Inc.
34 Russet Hill Road
Franklin, MA 02038

RE: Environmental Assessment, Sampling and Testing Services, Residential and Blueberry Farm Property, 543 Union Street, Franklin, MA.

Dear Roger:

Based on several verbal discussions relevant to the above listed property, Capital Environmental LLC (Capital) has performed the following assessment measures upon your authorization:

Scope:

- 1) Excavate eight shallow test pits in the blueberry field on the property. Analytical testing performed for herbicides and pesticides on a soil sample collected from each test pit.
- 2) Conduct a demolition asbestos survey on the residential building.
- 3) Conduct local Town of Franklin and State of Massachusetts records review.
- 4) Review spill and underground storage tank records for the subject area.

Test Pit Laboratory Data:

| | |
|--------------|---|
| TP-1 (0-6"): | Pesticides (None Detected) Herbicides 23.1 ug/kg Glyphosate |
| TP-2 (0-6"): | Pesticides (None Detected) Herbicides 22.5 ug/kg Glyphosate |
| TP-3 (0-6"): | Pesticides 4-4' DDE 0.013 mg/kg & 4-4' DDT 0.012 mg/kg Herbicides 22.7 ug/kg Glyphosate |
| TP-4 (0-6"): | Pesticides (None Detected) Herbicides 23.5 ug/kg Glyphosate |
| TP-5 (0-6"): | Pesticides 4-4' DDE 0.013 mg/kg Herbicides 23.3 ug/kg Glyphosate |
| TP-6 (0-6"): | Pesticides 4-4' DDT 0.010 mg/kg Herbicides 22.3 ug/kg Glyphosate |
| TP-7 (0-6"): | Pesticides 4-4' DDE 0.010 mg/kg Herbicides 21.9 ug/kg Glyphosate |
| TP-8 (0-6"): | Pesticides (None Detected) Herbicides 22.6 ug/kg Glyphosate |

These detections do not exceed the published standard for S-1 soils of 7.0 mg/kg for DDE& DDT, and 1,000 mg/kg Glyphosate (Round Up).

Copies of the laboratory analytical data sheets are attached to this document.

Asbestos Survey (Residence):

Samples of suspect asbestos containing building materials (ACBM) were collected on March 21, 2025 at 543 Union St. Franklin MA. A total of twenty-two (22) bulk samples were collected from the different accessible suspect ACBM. The samples were analyzed using polarized light microscopy (PLM) to determine possible asbestos content. Table 1 below provides a summary of the sample results. Please note that although PLM is the method currently recognized in State regulations for asbestos identification in bulk samples, some industry studies have found that PLM may not be sensitive enough to detect all the asbestos fibers in certain materials.

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(508) 393-5550 ▲ (508) 393-5567 Fax
www.capital-enviro.com



From Delta Drive Facing Abutter



Wire Detail

543 Union Street Utility Pole Location



Utility Pole Electric Lines



Lumec RoadFocus LED cobra head luminaires feature a sleek design that provides seamless replacement of existing HID luminaires. RoadFocus is available in three sizes, offers multiple lumen packages, and a complete array of optical distributions, making it an outstanding solution for all types of roadway applications. Includes Service Tag, innovative way to provide assistance throughout the life of the product.

Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Lumens: _____ Qty: _____
 Notes: _____

Ordering guide

example: RFS-35W16LED4K-G2-R2M-UNV-DMG-HS-PH8-RCD7-GY3

| Series | LED module | CCT | Generation | Distribution | Voltage | Options | | | | Finish |
|---------------------|--|--|--------------------|---|------------------------------------|---|--|--|---|--------|
| | | | | | | Controls ⁴ | Options | | | |
| RFS | | | G2 | | | | | | | |
| RFS RoadFocus small | 15W12LED 20W12LED 25W12LED 25W16LED 30W16LED 35W16LED 45W16LED 50W16LED 54W16LED 60W16LED ⁷ 20W20LED ¹³ 40W20LED ¹³ 65W20LED ¹³ 35W32LED 55W32LED 60W32LED 72W32LED 108W32LED ⁷ 35W40LED ¹³ 50W40LED ¹³ 55W40LED ¹³ 65W40LED ¹³ 80W40LED ¹³ 100W40LED ^{7,13} | 4K 4000K 3K 3000K 2.7K ¹¹ 2700K 2.2K ¹¹ 2200K | G2 Generation 2 | Type 2 Type II short (ASYM) Type 2M Type II Medium (ASYM) Type 3 Type III short (ASYM) Type 3M Type III Medium (ASYM) Type 4 Type IV (ASYM) Type 5 Type V (SYMM) | UNV 120-277V HVV 347-480V | D4I ¹⁵ Zhaga-D4i certified DALI ¹ Digitally addressable lighting interface DMG ⁵ 0-10V SRD ¹ Sensor ready driver, standard configuration SRD1 ¹ Sensor ready driver, alternate configuration | API FAWS ⁷ CSS ^{2,14} FSS ^{2,14} HS ^{2,14} LSS ^{2,14} RSS ^{2,14} NRC ⁸ NYBC OMS ¹⁶ PH8 ^{1,10} PH8/347 ^{10,12} PH8/480 ^{10,12} PHXL ^{1,10} PH9 ¹⁰ RCD ^{3,9} RCD7 ^{3,5} SP2 TLRSR ⁶ BAC ¹⁷ | Factory installed NEMA label, ANSI C136.15-2015 compliant Field adjustable wattage selector Cul-de-Sac Shield Front Side Shield House Side Shield Left Side Shield Right Side Shield No receptacle 4-position terminal block Outdoor Multisensor Twist-lock photoelectric cell, UNV (120-277VAC) Twist-lock photoelectric cell (347VAC) Twist-lock photoelectric cell (480VAC) Twist-lock photoelectric cell, extended life, UNV (120-277VAC) Shorting cap Tool less receptacle for twist-lock photocell or shorting cap, 5-pin (optional) Tool less receptacle for twist-lock photocell or shorting cap, 7-pin (standard) 20kV / 10kA Surge protector SR receptacle Meets the requirements of the Buy American Act of 1933 (BAA) | BK Black BR Bronze GY3 Gray WH White | |

¹ Not available with HVU.
² Refer to Accessories section to confirm compatibility of shields with optical distribution.
³ Use of photoelectric cell or shorting cap is required to ensure proper illumination.
⁴ Select either DALI or DMG or SRD or SRD1 mandatory option.
⁵ Please note this integrated feature come standard with RoadFocus.
⁶ Only available with SRD or SRD1 Driver Options.
⁷ Only available with DMG Driver Options.
⁸ Not available with PH8, PH8/347, PH8/480, PHXL, PH9, DALI, SRD or SRD1 Driver Options.
⁹ Not available with SRD Driver Options.
¹⁰ Either RCD or RCD7 must be selected for this option.
¹¹ Extended lead-time may apply. Consult factory.
¹² Not available with UNV.
¹³ Only available with R2M or R3M distributions.
¹⁴ 1 shield provided per LED light engine.
¹⁵ TLRSR must be selected with D4I
¹⁶ TLRSR and D4I must be selected with OMS
¹⁷ Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.



RFS RoadFocus

LED Cobra head (small)

Shielding accessories¹ (must be ordered as separate line item – quickly and easily installed in the field)

Interact City connector node (Contact the factory for additional support when connected lighting or additional services are desired.)

| Description | Luminaire Option Code | Accessory Ordering Code | | Shield vs Distribution Compatibility | | | | | |
|-------------------|-----------------------|-------------------------|--------------------|--------------------------------------|-----|-----|-----|-----|-----|
| | | 12/16 LED version* | 20 LED version* | R2M | R2S | R3M | R3S | 4 | 5 |
| Cul-de-sac shield | CSS | ACC-LG66V16LED-CSS | ACC-LG66V20LED-CSS | Yes | Yes | Yes | Yes | Yes | Yes |
| Front side shield | FSS | ACC-LG66V16LED-FSS | ACC-LG66V20LED-FSS | Yes | Yes | Yes | Yes | No | Yes |
| House side shield | HS | ACC-LG66V16LED-HS | ACC-LG66V20LED-HS | Yes | Yes | Yes | Yes | Yes | No |
| Left side shield | LSS | ACC-LG66V16LED-LSS | ACC-LG66V20LED-LSS | Yes | Yes | Yes | Yes | Yes | Yes |
| Right side shield | RSS | ACC-LG66V16LED-RSS | ACC-LG66V20LED-RSS | Yes | Yes | Yes | Yes | Yes | Yes |

* Refer to Wattage table to confirm light engine configuration. Example, if configuration is 2x16LED, 2 of the desired shields must be ordered per luminaire.

Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11 Addendum B. Published L₇₀ hours limited to 6 times actual LED test hours.

| Ambient Temperature °C | L ₇₀ per TM-21 | Lumen Maintenance % at 60,000 hrs |
|------------------------|---------------------------|-----------------------------------|
| 25°C | >60,000 hours | >97.6% |

LED Wattage values

| Ordering Code | Total LEDs | Light Engine Configuration | Average System Watts ² | Wattage label ³ |
|---------------|------------|----------------------------|-----------------------------------|----------------------------|
| RFS-15W12LED | 12 | 1x12LED | 14 | 10 |
| RFS-20W12LED | 12 | 1x12LED | 19 | 20 |
| RFS-25W12LED | 12 | 1x12LED | 25 | 20 |
| RFS-25W16LED | 16 | 1x16LED | 24 | 20 |
| RFS-30W16LED | 16 | 1x16LED | 29 | 30 |
| RFS-35W16LED | 16 | 1x16LED | 38 | 40 |
| RFS-45W16LED | 16 | 1x16LED | 45 | 50 |
| RFS-50W16LED | 16 | 1x16LED | 50 | 50 |
| RFS-54W16LED | 16 | 1x16LED | 53 | 50 |
| RFS-60W16LED | 16 | 1x16LED | 61 | 60 |
| RFS-20W20LED | 20 | 1x20LED | 20 | 20 |
| RFS-40W20LED | 20 | 1x20LED | 40 | 40 |
| RFS-35W32LED | 32 | 2x16LED | 37 | 40 |
| RFS-55W32LED | 32 | 2x16LED | 53 | 50 |
| RFS-60W32LED | 32 | 2x16LED | 59 | 60 |
| RFS-72W32LED | 32 | 2x16LED | 73 | 70 |
| RFS-108W32LED | 32 | 2x16LED | 108 | 110 |
| RFS-35W40LED | 40 | 2x20LED | 35 | 40 |
| RFS-50W40LED | 40 | 2x20LED | 49 | 50 |
| RFS-55W40LED | 40 | 2x20LED | 54 | 50 |
| RFS-65W40LED | 40 | 2x20LED | 66 | 70 |
| RFS-80W40LED | 40 | 2x20LED | 79 | 80 |
| RFS-100W40LED | 40 | 2x20LED | 101 | 100 |

1. Consult Signify to confirm whether specific accessories are BAA-compliant.
2. Typical values, rounded.
3. As per ANSI C136.15-2015. Consult factory for other labelling needs.

RFS RoadFocus

LED Cobra head (small)

4000K LED Lumen values, multiply values by 0.769 for 2.2K

| Ordering Code | Color Temp. | Type R2M | | | Type R2S | | | Type R3M | | | Type R3S | | | Type 4 | | | Type 5 | | |
|---------------|-------------|--------------|----------------|------------|--------------|----------------|------------|--------------|----------------|------------|--------------|----------------|------------|--------------|----------------|------------|--------------|----------------|------------|
| | | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating |
| 15W12LED | 4000 | 1,863 | 132 | B1-U0-G1 | 1,940 | 138 | B1-U0-G1 | 1,858 | 132 | B1-U0-G1 | 1,882 | 134 | B1-U0-G1 | 1,849 | 131 | B1-U0-G1 | 1,924 | 137 | B1-U0-G1 |
| 20W12LED | 4000 | 2,525 | 130 | B1-U0-G1 | 2,629 | 136 | B1-U0-G1 | 2,518 | 130 | B1-U0-G1 | 2,552 | 132 | B1-U0-G1 | 2,506 | 129 | B1-U0-G1 | 2,606 | 134 | B1-U0-G1 |
| 25W12LED | 4000 | 2,887 | 116 | B1-U0-G1 | 3,005 | 121 | B1-U0-G1 | 2,878 | 116 | B1-U0-G1 | 2,916 | 117 | B1-U0-G1 | 2,864 | 115 | B1-U0-G1 | 2,978 | 120 | B1-U0-G1 |
| 25W16LED | 4000 | 3,323 | 137 | B1-U0-G1 | 3,458 | 143 | B1-U0-G1 | 3,312 | 137 | B1-U0-G1 | 3,357 | 139 | B1-U0-G1 | 3,296 | 136 | B1-U0-G1 | 3,429 | 142 | B1-U0-G1 |
| 30W16LED | 4000 | 3,764 | 130 | B1-U0-G1 | 3,918 | 136 | B1-U0-G1 | 3,752 | 130 | B1-U0-G1 | 3,802 | 132 | B1-U0-G1 | 3,735 | 129 | B1-U0-G1 | 3,884 | 135 | B1-U0-G1 |
| 35W16LED | 4000 | 4,810 | 127 | B1-U0-G1 | 5,007 | 132 | B1-U0-G1 | 4,795 | 126 | B1-U0-G1 | 4,859 | 128 | B1-U0-G1 | 4,772 | 126 | B1-U0-G1 | 4,964 | 131 | B1-U0-G1 |
| 45W16LED | 4000 | 5,497 | 121 | B1-U0-G1 | 5,722 | 126 | B1-U0-G1 | 5,480 | 121 | B1-U0-G1 | 5,554 | 123 | B1-U0-G1 | 5,454 | 121 | B1-U0-G1 | 5,673 | 125 | B1-U0-G1 |
| 50W16LED | 4000 | 5,825 | 116 | B2-U0-G1 | 6,064 | 121 | B2-U0-G1 | 5,807 | 116 | B2-U0-G1 | 5,885 | 117 | B2-U0-G1 | 5,780 | 115 | B2-U0-G1 | 6,012 | 120 | B2-U0-G1 |
| 54W16LED | 4000 | 6,356 | 120 | B2-U0-G1 | 6,616 | 125 | B2-U0-G1 | 6,336 | 120 | B2-U0-G1 | 6,421 | 121 | B2-U0-G1 | 6,306 | 119 | B2-U0-G1 | 6,560 | 124 | B2-U0-G1 |
| 60W16LED | 4000 | 6,929 | 113 | B2-U0-G1 | 7,213 | 118 | B2-U0-G1 | 6,907 | 113 | B2-U0-G1 | 7,000 | 115 | B2-U0-G1 | 6,875 | 113 | B2-U0-G1 | 7,151 | 117 | B2-U0-G1 |
| 20W20LED | 4000 | 2,553 | 130 | B1-U0-G1 | N/A | N/A | N/A | 2,567 | 131 | B1-U0-G1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 40W20LED | 4000 | 5,083 | 128 | B1-U0-G1 | N/A | N/A | N/A | 5,110 | 129 | B1-U0-G1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 65W20LED | 4000 | 7,827 | 122 | B2-U0-G2 | N/A | N/A | N/A | 7,869 | 123 | B2-U0-G2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 35W32LED | 4000 | 5,197 | 141 | B1-U0-G1 | 5,410 | 146 | B1-U0-G1 | 5,181 | 140 | B1-U0-G1 | 5,250 | 142 | B1-U0-G1 | 5,156 | 139 | B1-U0-G1 | 5,364 | 145 | B1-U0-G1 |
| 55W32LED | 4000 | 7,528 | 141 | B2-U0-G1 | 7,836 | 147 | B2-U0-G1 | 7,504 | 140 | B2-U0-G1 | 7,605 | 142 | B2-U0-G1 | 7,469 | 140 | B2-U0-G1 | 7,770 | 145 | B2-U0-G1 |
| 60W32LED | 4000 | 7,630 | 130 | B2-U0-G1 | 7,943 | 136 | B2-U0-G1 | 7,607 | 130 | B2-U0-G1 | 7,709 | 132 | B2-U0-G1 | 7,571 | 129 | B2-U0-G1 | 7,875 | 134 | B2-U0-G1 |
| 72W32LED | 4000 | 9,408 | 129 | B2-U0-G2 | 9,794 | 134 | B2-U0-G2 | 9,379 | 128 | B2-U0-G2 | 9,505 | 130 | B2-U0-G2 | 9,336 | 128 | B2-U0-G2 | 9,711 | 133 | B2-U0-G2 |
| 108W32LED | 4000 | 13,025 | 121 | B3-U0-G2 | 13,559 | 126 | B3-U0-G2 | 12,984 | 120 | B3-U0-G2 | 13,158 | 122 | B3-U0-G2 | 12,924 | 120 | B3-U0-G2 | 13,443 | 124 | B3-U0-G2 |
| 35W40LED | 4000 | 5,472 | 155 | B1-U0-G1 | N/A | N/A | N/A | 5,502 | 156 | B1-U0-G1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 50W40LED | 4000 | 7,319 | 150 | B2-U0-G2 | N/A | N/A | N/A | 7,359 | 151 | B2-U0-G2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 55W40LED | 4000 | 7,675 | 141 | B2-U0-G2 | N/A | N/A | N/A | 7,716 | 142 | B2-U0-G2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 65W40LED | 4000 | 9,024 | 137 | B2-U0-G2 | N/A | N/A | N/A | 9,073 | 137 | B2-U0-G2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 80W40LED | 4000 | 10,546 | 133 | B2-U0-G2 | N/A | N/A | N/A | 10,603 | 134 | B2-U0-G2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 100W40LED | 4000 | 12,861 | 127 | B3-U0-G3 | N/A | N/A | N/A | 12,930 | 128 | B3-U0-G2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

3000K LED Lumen values

| Ordering Code | Color Temp. | Type R2M | | | Type R2S | | | Type R3M | | | Type R3S | | | Type 4 | | | Type 5 | | |
|---------------|-------------|--------------|----------------|------------|--------------|----------------|------------|--------------|----------------|------------|--------------|----------------|------------|--------------|----------------|------------|--------------|----------------|------------|
| | | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating |
| 15W12LED | 3000 | 1,748 | 124 | B1-U0-G1 | 1,820 | 129 | B1-U0-G0 | 1,743 | 124 | B1-U0-G1 | 1,766 | 125 | B0-U0-G0 | 1,735 | 123 | B0-U0-G1 | 1,805 | 128 | B1-U0-G0 |
| 20W12LED | 3000 | 2,369 | 122 | B1-U0-G1 | 2,466 | 127 | B1-U0-G0 | 2,362 | 122 | B1-U0-G1 | 2,394 | 123 | B1-U0-G1 | 2,351 | 121 | B1-U0-G1 | 2,445 | 126 | B2-U0-G1 |
| 25W12LED | 3000 | 2,708 | 109 | B1-U0-G1 | 2,819 | 113 | B1-U0-G0 | 2,700 | 108 | B1-U0-G1 | 2,736 | 110 | B1-U0-G1 | 2,687 | 108 | B1-U0-G1 | 2,795 | 112 | B2-U0-G1 |
| 25W16LED | 3000 | 3,117 | 129 | B1-U0-G1 | 3,244 | 134 | B1-U0-G0 | 3,107 | 128 | B1-U0-G1 | 3,149 | 130 | B1-U0-G1 | 3,092 | 128 | B1-U0-G1 | 3,217 | 133 | B2-U0-G1 |
| 30W16LED | 3000 | 3,531 | 122 | B1-U0-G1 | 3,676 | 127 | B1-U0-G0 | 3,520 | 122 | B1-U0-G1 | 3,567 | 124 | B1-U0-G1 | 3,504 | 121 | B1-U0-G1 | 3,644 | 126 | B2-U0-G1 |
| 35W16LED | 3000 | 4,512 | 119 | B1-U0-G1 | 4,697 | 124 | B1-U0-G1 | 4,498 | 118 | B1-U0-G1 | 4,558 | 120 | B1-U0-G1 | 4,477 | 118 | B1-U0-G1 | 4,657 | 123 | B3-U0-G1 |
| 45W16LED | 3000 | 5,157 | 114 | B1-U0-G1 | 5,368 | 119 | B1-U0-G1 | 5,141 | 114 | B1-U0-G1 | 5,210 | 115 | B1-U0-G1 | 5,117 | 113 | B1-U0-G2 | 5,322 | 118 | B3-U0-G1 |
| 50W16LED | 3000 | 5,465 | 109 | B1-U0-G1 | 5,689 | 113 | B1-U0-G1 | 5,448 | 109 | B1-U0-G1 | 5,521 | 110 | B1-U0-G1 | 5,422 | 108 | B1-U0-G2 | 5,640 | 112 | B3-U0-G1 |
| 54W16LED | 3000 | 6,963 | 113 | B2-U0-G1 | 6,207 | 117 | B2-U0-G1 | 5,944 | 112 | B1-U0-G1 | 6,024 | 114 | B1-U0-G1 | 5,916 | 112 | B1-U0-G2 | 6,154 | 116 | B3-U0-G1 |
| 60W16LED | 3000 | 6,500 | 106 | B2-U0-G1 | 6,767 | 111 | B2-U0-G1 | 6,480 | 106 | B2-U0-G1 | 6,567 | 107 | B1-U0-G2 | 6,450 | 106 | B1-U0-G2 | 6,709 | 110 | B3-U0-G1 |
| 20W20LED | 3000 | 2,427 | 124 | B1-U0-G1 | N/A | N/A | N/A | 2,440 | 124 | B1-U0-G1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 40W20LED | 3000 | 4,833 | 122 | B1-U0-G1 | N/A | N/A | N/A | 4,859 | 122 | B1-U0-G1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 65W20LED | 3000 | 7,442 | 116 | B2-U0-G2 | N/A | N/A | N/A | 7,482 | 117 | B2-U0-G2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 35W32LED | 3000 | 4,875 | 132 | B1-U0-G1 | 5,075 | 137 | B1-U0-G1 | 4,860 | 131 | B1-U0-G1 | 4,925 | 133 | B1-U0-G1 | 4,837 | 131 | B1-U0-G1 | 5,032 | 136 | B3-U0-G1 |
| 55W32LED | 3000 | 7,062 | 132 | B2-U0-G1 | 7,351 | 137 | B2-U0-G1 | 7,040 | 132 | B2-U0-G1 | 7,134 | 133 | B1-U0-G2 | 7,007 | 131 | B1-U0-G2 | 7,289 | 136 | B3-U0-G1 |
| 60W32LED | 3000 | 7,158 | 122 | B2-U0-G1 | 7,452 | 127 | B2-U0-G1 | 7,136 | 122 | B2-U0-G1 | 7,232 | 123 | B1-U0-G2 | 7,103 | 121 | B1-U0-G2 | 7,388 | 126 | B3-U0-G1 |
| 72W32LED | 3000 | 8,826 | 121 | B2-U0-G2 | 9,188 | 126 | B2-U0-G1 | 8,799 | 121 | B2-U0-G2 | 8,917 | 122 | B1-U0-G2 | 8,758 | 120 | B2-U0-G2 | 9,110 | 125 | B3-U0-G2 |
| 108W32LED | 3000 | 12,219 | 113 | B3-U0-G2 | 12,720 | 118 | B3-U0-G2 | 12,181 | 113 | B2-U0-G2 | 12,344 | 114 | B2-U0-G2 | 12,124 | 112 | B2-U0-G2 | 12,611 | 117 | B4-U0-G2 |
| 35W40LED | 3000 | 5,203 | 147 | B1-U0-G1 | N/A | N/A | N/A | 5,231 | 148 | B1-U0-G1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 50W40LED | 3000 | 6,959 | 143 | B2-U0-G2 | N/A | N/A | N/A | 6,996 | 144 | B2-U0-G1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 55W40LED | 3000 | 7,297 | 134 | B2-U0-G2 | N/A | N/A | N/A | 7,336 | 135 | B2-U0-G2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 65W40LED | 3000 | 8,580 | 130 | B2-U0-G2 | N/A | N/A | N/A | 8,626 | 131 | B2-U0-G2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 80W40LED | 3000 | 10,027 | 127 | B2-U0-G2 | N/A | N/A | N/A | 10,081 | 128 | B2-U0-G2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 100W40LED | 3000 | 12,228 | 121 | B3-U0-G3 | N/A | N/A | N/A | 12,294 | 122 | B3-U0-G2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at signify.com/outdoorluminaire. Consult DLC QPL to confirm your specific fixture selection is DLC approved. Note: Some data may be scaled based on tests of similar but not identical luminaires.

RFS RoadFocus

LED Cobra head (small)

2700K LED Lumen values

| Ordering Code | Color Temp. | Type R2M | | | Type R2S | | | Type R3M | | | Type R3S | | | Type 4 | | | Type 5 | | |
|---------------|-------------|--------------|----------------|------------|--------------|----------------|------------|--------------|----------------|------------|--------------|----------------|------------|--------------|----------------|------------|--------------|----------------|------------|
| | | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating | Lumen Output | Efficacy (LPW) | BUG Rating |
| 15W12LED | 2700 | 1,603 | 114 | B1-U0-G1 | 1,669 | 119 | B1-U0-G0 | 1,598 | 113 | B1-U0-G1 | 1,619 | 115 | B0-U0-G0 | 1,591 | 113 | B0-U0-G1 | 1,655 | 118 | B1-U0-G0 |
| 20W12LED | 2700 | 2,172 | 112 | B1-U0-G1 | 2,261 | 117 | B1-U0-G0 | 2,166 | 112 | B1-U0-G1 | 2,195 | 113 | B1-U0-G1 | 2,156 | 111 | B1-U0-G1 | 2,242 | 116 | B2-U0-G1 |
| 25W12LED | 2700 | 2,483 | 100 | B1-U0-G1 | 2,585 | 104 | B1-U0-G0 | 2,476 | 99 | B1-U0-G1 | 2,509 | 101 | B1-U0-G1 | 2,464 | 99 | B1-U0-G1 | 2,563 | 103 | B2-U0-G1 |
| 25W16LED | 2700 | 2,858 | 118 | B1-U0-G1 | 2,975 | 123 | B1-U0-G0 | 2,849 | 118 | B1-U0-G1 | 2,888 | 119 | B1-U0-G1 | 2,835 | 117 | B1-U0-G1 | 2,950 | 122 | B2-U0-G1 |
| 30W16LED | 2700 | 3,238 | 112 | B1-U0-G1 | 3,371 | 117 | B1-U0-G0 | 3,228 | 112 | B1-U0-G1 | 3,271 | 113 | B1-U0-G1 | 3,213 | 111 | B1-U0-G1 | 3,342 | 116 | B2-U0-G1 |
| 35W16LED | 2700 | 4,138 | 109 | B1-U0-G1 | 4,307 | 113 | B1-U0-G1 | 4,125 | 109 | B1-U0-G1 | 4,180 | 110 | B1-U0-G1 | 4,105 | 108 | B1-U0-G1 | 4,271 | 112 | B3-U0-G1 |
| 45W16LED | 2700 | 4,729 | 104 | B1-U0-G1 | 4,923 | 109 | B1-U0-G1 | 4,714 | 104 | B1-U0-G1 | 4,778 | 106 | B1-U0-G1 | 4,692 | 104 | B1-U0-G2 | 4,880 | 108 | B3-U0-G1 |
| 50W16LED | 2700 | 5,012 | 100 | B1-U0-G1 | 5,217 | 104 | B1-U0-G1 | 4,996 | 100 | B1-U0-G1 | 5,063 | 101 | B1-U0-G1 | 4,972 | 99 | B1-U0-G2 | 5,172 | 103 | B3-U0-G1 |
| 54W16LED | 2700 | 5,468 | 103 | B2-U0-G1 | 5,692 | 107 | B2-U0-G1 | 5,451 | 103 | B1-U0-G1 | 5,524 | 104 | B1-U0-G1 | 5,425 | 102 | B1-U0-G2 | 5,643 | 106 | B3-U0-G1 |
| 60W16LED | 2700 | 5,961 | 98 | B2-U0-G1 | 6,205 | 102 | B2-U0-G1 | 5,942 | 97 | B2-U0-G1 | 6,022 | 99 | B1-U0-G2 | 5,915 | 97 | B1-U0-G2 | 6,152 | 101 | B3-U0-G1 |
| 20W20LED | 2700 | 2,218 | 113 | B1-U0-G1 | N/A | N/A | N/A | 2,230 | 114 | B1-U0-G1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 40W20LED | 2700 | 4,416 | 111 | B1-U0-G1 | N/A | N/A | N/A | 4,440 | 112 | B1-U0-G1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 65W20LED | 2700 | 6,800 | 106 | B2-U0-G2 | N/A | N/A | N/A | 6,837 | 107 | B2-U0-G1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 35W32LED | 2700 | 4,470 | 121 | B1-U0-G1 | 4,654 | 126 | B1-U0-G1 | 4,457 | 121 | B1-U0-G1 | 4,516 | 122 | B1-U0-G1 | 4,436 | 120 | B1-U0-G1 | 4,614 | 125 | B3-U0-G1 |
| 55W32LED | 2700 | 6,476 | 121 | B2-U0-G1 | 6,741 | 126 | B2-U0-G1 | 6,456 | 121 | B2-U0-G1 | 6,542 | 122 | B1-U0-G2 | 6,426 | 120 | B1-U0-G2 | 6,684 | 125 | B3-U0-G1 |
| 60W32LED | 2700 | 6,564 | 112 | B2-U0-G1 | 6,834 | 117 | B2-U0-G1 | 6,544 | 112 | B2-U0-G1 | 6,632 | 113 | B1-U0-G2 | 6,514 | 111 | B1-U0-G2 | 6,775 | 116 | B3-U0-G1 |
| 72W32LED | 2700 | 8,094 | 111 | B2-U0-G2 | 8,426 | 115 | B2-U0-G1 | 8,069 | 111 | B2-U0-G2 | 8,177 | 112 | B1-U0-G2 | 8,031 | 110 | B2-U0-G2 | 8,354 | 114 | B3-U0-G2 |
| 108W32LED | 2700 | 11,205 | 104 | B3-U0-G2 | 11,664 | 108 | B3-U0-G2 | 11,170 | 103 | B2-U0-G2 | 11,320 | 105 | B2-U0-G2 | 11,118 | 103 | B2-U0-G2 | 11,565 | 107 | B4-U0-G2 |
| 35W40LED | 2700 | 4,754 | 135 | B1-U0-G1 | N/A | N/A | N/A | 4,780 | 135 | B1-U0-G1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 50W40LED | 2700 | 6,359 | 131 | B2-U0-G2 | N/A | N/A | N/A | 6,393 | 131 | B2-U0-G1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 55W40LED | 2700 | 6,667 | 123 | B2-U0-G2 | N/A | N/A | N/A | 6,703 | 123 | B2-U0-G1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 65W40LED | 2700 | 7,840 | 119 | B2-U0-G2 | N/A | N/A | N/A | 7,882 | 119 | B2-U0-G2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 80W40LED | 2700 | 9,162 | 116 | B2-U0-G2 | N/A | N/A | N/A | 9,211 | 117 | B2-U0-G2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 100W40LED | 2700 | 11,173 | 111 | B2-U0-G2 | N/A | N/A | N/A | 11,233 | 111 | B2-U0-G2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

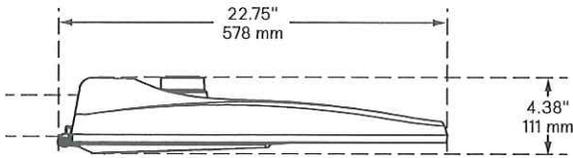
Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at signify.com/outdoorluminaires. Consult DLC QPL to confirm your specific fixture selection is DLC approved.
 Note: Some data may be scaled based on tests of similar but not identical luminaires.

RFS RoadFocus

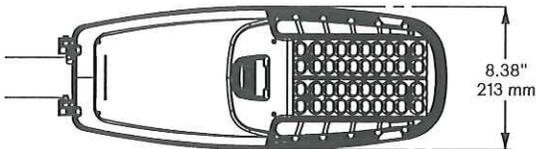
LED Cobra head (small)

Dimensions

Side View



Bottom View



Weight: 9.4 lbs
EPA: 0.52 sq. feet

Field Adjustable Wattage (FAWS) Multiplier Chart

| FAWS Position | Typical Delivered Lumens Multiplier | Typical System wattage |
|---------------|-------------------------------------|------------------------|
| 1 | 0.31 | 0.28 |
| 2 | 0.53 | 0.50 |
| 3 | 0.62 | 0.58 |
| 4 | 0.70 | 0.67 |
| 5 | 0.78 | 0.75 |
| 6 | 0.83 | 0.81 |
| 7 | 0.89 | 0.87 |
| 8 | 0.92 | 0.91 |
| 9 | 0.96 | 0.95 |
| 10 | 1.00 | 1.00 |

Note: Typical value accuracy +/- 5%

Specifications

Housing

Made of a low copper die cast Aluminum alloy (A360), 0.100" (2.5mm) minimum thickness. Fits on a 1.66" (42mm) O.D. (1.25" NPS), 1.9" (48mm) O.D. (1.5" NPS) or 2 3/8" (60mm) O.D. (2" NPS) by 5 1/2" (140mm) minimum long tenon. Comes with a zinc plated clamp fixed by 2 zinc plated hexagonal bolts 3/8 16 UNC for ease of installation. Provides an easy step adjustment of +/- 5° tilt in 2.5° increments. Includes integral bubble level standard (always included). A quick release, tool less entry, single latch, hinged, removable door opens downward to provide access to electronic components and to a terminal block. Door is secured to prevent accidental dropping or disengagement. A clearance of 13" (330mm) at the rear is required in order to remove the door. Complete with a bird guard protecting against birds and similar intruders and an ANSI label as per C136.15-2015 to identify wattage and source (both included in box). Housing (including electrical compartment) rated IP54 per ANSI C136.37.

Light Engine

Composed of 4 main components: LED Module / Optical System / Heat Sink / Driver.

Electrical components are RoHS compliant, IP66 sealed light engine equipped LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines in compliance with EPA ENERGY STAR, extrapolations in accordance with IESNA TM-21. Metal core board ensures greater heat transfer and longer lifespan.

LED Module: Composed of high-performance white LEDs. Color temperature as per ANSI/ NEMA bin 2700 Kelvin nominal (2725 ±145K), 3000 Kelvin nominal (3045K +/- 175K) or 4000 Kelvin nominal (3985K +/- 275K), CRI 70 Min. 75 Typical. Other CCT/CRI also available, consult factory.

Optical System: Composed of high performance UV stabilized optical grade polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance. 0% uplight and U0 per IESNA TM-15.

Heat Sink: Built in the housing, designed to ensure high efficacy and superior cooling by natural vertical convection air flow pattern always close to LEDs and driver optimising their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling). Wide openings enable natural cleaning and removal of dirt and debris. Entire luminaire is rated for operation in ambient temperature of -40°C / -40°F up to +50°C / +122°F.

Driver: High power factor of 90% min. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class I or 2, THD of 20% max.

DMG: Dimming compatible 0-10 volts. The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

Integrated Features

DMG: Dimmable driver 0-10V.

RCD7*: Tool less orientable receptacle with 7 pins enabling dimming and additional functionality (to be determined), can be used with a twist lock Interact City node or photoelectric cell or a shorting cap.

Please note: Additional hardware will be required to utilize the additional 2 pins on this receptacle.

SP1: Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA.

Please note that these integrated features always come with RoadFocus luminaire.

* Use of photoelectric cell or shorting cap is required to ensure proper illumination.

RFS RoadFocus

LED Cobra head (small)

Specifications (continued)

Driver and Luminaire Options

D4i: Zhaga-D4i certified fixture

DALI: Pre-set driver compatible with the DALI control system.

SRD: Sensor Ready Driver including SR communication (used for dimming and other functionalities), 24V auxiliary supply and a logical signal input (LSI) connected to the top NEMA twist lock receptacle and bottom

TLRSR receptacle, if this option included/chosen. This configuration is compatible with Interact City controllers.

SRD1: Sensor Ready Driver including SR communication (used for dimming and other functionalities) but with 24V auxiliary supply and a logical signal input (LSI) not connected to the top NEMA twist lock. If TLRSR receptacle option included, standard SR communication, 24V auxiliary supply and LSI are connected to the TLRSR receptacle.

OMS: Outdoor Multisensor

FAWS: Field Adjustable Wattage Selector, pre-set to the highest position, can be easily switched in the field to the required position. This reduces total luminaire wattage consumption and reduces the light level – see the FAWS multiplier chart for more details.

Note: It is not recommended to use FAWS with other dimming or controls; if you do, set the switch to position 10 (maximum output) to enable the other dimming or controls. Switching FAWS to any position other than 10 will disable the other dimming or controls.

NRC: No Receptacle. Fixture is shipped with a cap instead of a receptacle.

NYBC: 4-position terminal block

SP2: 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

RCD*: Tool Less orientable receptacle with 5 pins enabling dimming, can be used with a twist lock Interact City or photoelectric cell or a shorting cap.

TLRSR: SR Sensor connector, installed in fixture door. Shipped with protective cover.

PH8: Twist-lock photoelectric cell, UNV (120-277VAC).

PH8/347: Twist-lock photoelectric cell, UNV (120-277VAC).

PH8/480: Twist-lock photoelectric cell, UNV (120-277VAC).

PHXL: Twist-lock Photoelectric Cell, extended life, UNV (120-277VAC).

PH9*: Shorting cap.

API: Factory Installed NEMA label, ANSI C136.15-2015 compliant. Consult factory for other labeling needs.

* Use of photoelectric cell or shorting cap is required to ensure proper illumination.

Factory Installed Shield Options

(One per Light Engine)

CSS: Cul-de-Sac Shield. Shields light output on the left and right side of fixture.

FSS: Front Side Shield. Shields light output on the front side of fixture.

HS: House Side Shield. Shields light output to the back side of fixture.

LSS: Left Side Shield. Shields light output on the left side of fixture.

RSS: Right Side Shield. Shields light output on the right side of fixture.

Luminaire Useful Life

Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, System Reliability Tool, Advance data and LED manufacturer LM-80/TM-21 data, expected to reach 100,000 + hours with >L70 lumen maintenance @ 25°C. Luminaire Useful Life accounts for LED lumen maintenance AND all of these additional factors including: LED life, driver life, PCB substrate, solder joints, on/off cycles, burning hours and corrosion.

Wiring

The connection of the luminaire is done using a terminal block connector 600V, 85A for use with #2 14 AWG. wires from the primary circuit, located inside the housing. Due to the inrush current that occurs with electronic drivers, recommend using a 10Amp time-delay fuse to avoid unwanted fuse blowing (false tripping) that can occur with normal or fast acting fuses.

Hardware

All exposed screws shall be complete with Ceramic primer seal to reduce seizing of the parts, also offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

Finish

Color in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

The surface treatment achieves a minimum of 5000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

LED products manufacturing standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

Vibration Resistance

The RFS meets the ANSI C136.31-2018, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications. (Tested for 3G over 100,000 cycles by independent lab)

Certifications and Compliance

cULus Listed for Canada and USA. Luminaire meets DOE and MSSLC Model Specification for LED Roadway Luminaires. Most versions of RoadFocus LED Cobrahead luminaires are DesignLights Consortium qualified, consult DLC QPL to confirm your specific fixture selection is approved. CCTs 3000K and warmer are Dark Sky Approved. Luminaire complies with or exceeds the following ANSI C136 standards: .2, .3, .10, .14, .15, .22, .25, .31, .37, .41.

Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away.

For more details visit: signify.com/servicetag

Limited Warranty

10-year limited warranty. See signify.com/warranties for details and restrictions.

Brackets/Arms

For brackets / arms available with this luminaire, see Lumec 3D for details.



MRP LED

LED Area Luminaire



Catalog
Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

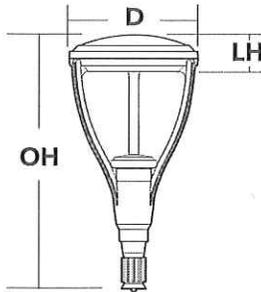
- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL[®] controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability¹
- This luminaire is part of an A+ Certified solution for ROAM[®] control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background¹

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: [Link to Roam](#); [Link to DTL DLL](#)

Specifications

| | |
|--------------------------|--|
| EPA: | 1.125 ft ² (0.105 m ²) |
| Luminaire Height: | 6-3/8" (16.2 cm) |
| Overall Height: | 32" (81.3 cm) |
| Diameter: | 18" (45.7 cm) |
| Weight (max): | 37.5 lbs (17 kg) |



A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: MRP LED 42C 700 40K SR5 MVOLT DDBXD

| MRP LED | | Drive current | | Color temperature | | Distribution | | Voltage | | Mounting | |
|---------|--------------------------|---------------|-------------|-------------------|-------|--------------|----------|--------------------|------------------|--|---|
| Series | LEDs | | | | | | | | | | |
| MRP LED | 42C 42 LEDs (one engine) | 350 | 350mA | 30K | 3000K | SR2 | Type II | MVOLT ¹ | 277 ² | Shipped included (blank) Fits 4" OD round pole | Shipped separately³ MRPT30 3-1/2" tenon slipfitter |
| | | 530 | 530mA | 40K | 4000K | SR3 | Type III | 120 ² | 347 ² | | |
| | | 700 | 700mA | 50K | 5000K | SR4 | Type IV | 208 ² | 480 ² | | |
| | | 1000 | 1000mA (1A) | | | SR5 | Type V | 240 ² | | | |
| | | | | | | | | | | MRPT25 2-7/8" tenon slipfitter | MRPF5 5" OD round pole adapter ⁴ |

| Control options | | Other options | | Finish (required) | | | | | |
|--------------------------|--|---------------|--|-------------------|---|-------|------------------|--------|---------------------------|
| Shipped installed | | | | | | | | | |
| PER | NEMA twist-lock receptacle only (control ordered separate) | DMG | 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) ⁶ | SF | Single fuse (120, 277, 347V) ² | DDBXD | Dark bronze | DDBTXD | Textured dark bronze |
| PER5 | Five-wire receptacle only (control ordered separate) ³ | | | DF | Double fuse (208, 240, 480V) ² | DBLXD | Black | DBLBXD | Textured black |
| PER7 | Seven-wire receptacle only (control ordered separate) ³ | | | | | DNAXD | Natural aluminum | DNATXD | Textured natural aluminum |
| | | | | | | DWHXD | White | DWHGXD | Textured white |



Ordering Information

Accessories

Ordered and shipped separately.

| | |
|--------------------|--|
| DLL127F 1.5 JU | Photocell - SSL twist-lock (120-277V) ⁷ |
| DLL347F 1.5 CUL JU | Photocell - SSL twist-lock (347V) ⁷ |
| DLL480F 1.5 CUL JU | Photocell - SSL twist-lock (480V) ⁷ |
| DSHORT SBK U | Shorting cap ⁷ |
| MRPT20 DDBXD U | 2-3/8" tenon slipfitter (specify finish) |
| MRPT25 DDBXD U | 2-7/8" tenon slipfitter (specify finish) |
| MRPT30 DDBXD U | 3-1/2" tenon slipfitter (specify finish) |
| MRPT35 DDBXD U | 4" tenon slipfitter (specify finish) |
| MRPF3 DDBXD U | 3" OD round pole adapter (specify finish) |
| MRPF5 DDBXD U | 5" OD round pole adapter (specify finish) ¹ |

For more control options, visit [DTL](#) and [ROAM](#) online.

NOTES

- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Also available as a separate accessory, see Accessories information at left.
- Maximum pole wall thickness is 0.156".
- If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls.
- DMG not available with PER, PER5 or PER7.
- Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item.

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

| LEDs | Drive Current (mA) | System Watts | Dist. Type | 30K | | | | | 40K | | | | | 50K | | | | |
|------------------|--------------------|--------------|------------|--------|---|---|---|-----|--------|---|---|---|-----|--------|---|---|---|-----|
| | | | | Lumens | B | U | G | LPW | Lumens | B | U | G | LPW | Lumens | B | U | G | LPW |
| 42C (42 LEDs) | 530 | 75W | SR2 | 5,456 | 1 | 2 | 1 | 73 | 6,605 | 1 | 2 | 1 | 88 | 6,671 | 1 | 2 | 1 | 89 |
| | | | SR3 | 5,436 | 1 | 1 | 1 | 72 | 6,581 | 1 | 1 | 2 | 88 | 6,647 | 1 | 1 | 2 | 89 |
| | | | SR4 | 5,399 | 1 | 1 | 1 | 72 | 6,537 | 1 | 1 | 2 | 87 | 6,602 | 1 | 1 | 2 | 88 |
| | | | SR5 | 5,748 | 3 | 1 | 3 | 77 | 6,959 | 3 | 1 | 3 | 83 | 7,029 | 3 | 1 | 3 | 94 |
| | 700 | 100W | SR2 | 6,630 | 1 | 2 | 1 | 66 | 8,026 | 2 | 2 | 2 | 80 | 8,106 | 2 | 2 | 2 | 81 |
| | | | SR3 | 6,605 | 1 | 1 | 2 | 66 | 7,997 | 1 | 2 | 2 | 80 | 8,077 | 1 | 2 | 2 | 81 |
| | | | SR4 | 6,561 | 1 | 1 | 2 | 66 | 7,943 | 1 | 2 | 2 | 79 | 8,022 | 1 | 2 | 2 | 80 |
| | | | SR5 | 6,985 | 3 | 1 | 3 | 70 | 8,456 | 3 | 2 | 3 | 85 | 8,541 | 3 | 2 | 3 | 85 |
| | 1000 | 151W | SR2 | 8,165 | 2 | 2 | 2 | 54 | 9,885 | 2 | 2 | 2 | 65 | 9,983 | 2 | 2 | 2 | 66 |
| | | | SR3 | 8,135 | 1 | 2 | 2 | 54 | 9,848 | 2 | 2 | 2 | 65 | 9,947 | 2 | 2 | 2 | 66 |
| | | | SR4 | 8,080 | 2 | 2 | 2 | 54 | 9,782 | 2 | 2 | 2 | 65 | 9,880 | 2 | 2 | 2 | 65 |
| | | | SR5 | 8,602 | 3 | 2 | 3 | 57 | 10,414 | 4 | 2 | 4 | 70 | 10,518 | 4 | 2 | 4 | 70 |

| Control | PER (3 wire) | PER Table | | | | |
|-------------------------------------|--------------|---------------|----------------------------------|---------------|----------------------------------|-----------------------------|
| | | PER5 (5 wire) | PER7 (7 wire) | | | |
| | | | Wire 4/Wire 5 | Wire 4/Wire 5 | Wire 6/Wire 7 | |
| Photocontrol Only (On/Off) | ✓ | ⚠ | Wired to dimming leads on driver | ⚠ | Wired to dimming leads on driver | Wires Capped inside fixture |
| ROAM | ⊘ | ✓ | Wired to dimming leads on driver | ⚠ | Wired to dimming leads on driver | Wires Capped inside fixture |
| ROAM with Motion (ROAM on/off only) | ⊘ | ⚠ | Wired to dimming leads on driver | ⚠ | Wired to dimming leads on driver | Wires Capped inside fixture |
| Futureproof* | ⊘ | ⚠ | Wired to dimming leads on driver | ✓ | Wired to dimming leads on driver | Wires Capped inside fixture |
| Futureproof* with Motion | ⊘ | ⚠ | Wired to dimming leads on driver | ✓ | Wired to dimming leads on driver | Wires Capped inside fixture |

✓ Recommended

⊘ Will not work

⚠ Alternate

*Futureproof means: Ability to change controls in the future.

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

| Ambient | | Lumen Multiplier |
|---------|-------|------------------|
| 0°C | 32°F | 1.06 |
| 10°C | 50°F | 1.04 |
| 20°C | 68°F | 1.01 |
| 25°C | 77°F | 1.00 |
| 30°C | 86°F | 0.99 |
| 40°C | 104°F | 0.96 |

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the MRP LED 42C 700 platform in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

| Operating Hours | 0 | 25,000 | 50,000 | 100,000 |
|--------------------------|-----|--------|--------|---------|
| Lumen Maintenance Factor | 1.0 | 0.96 | 0.92 | 0.85 |



COMMERCIAL OUTDOOR

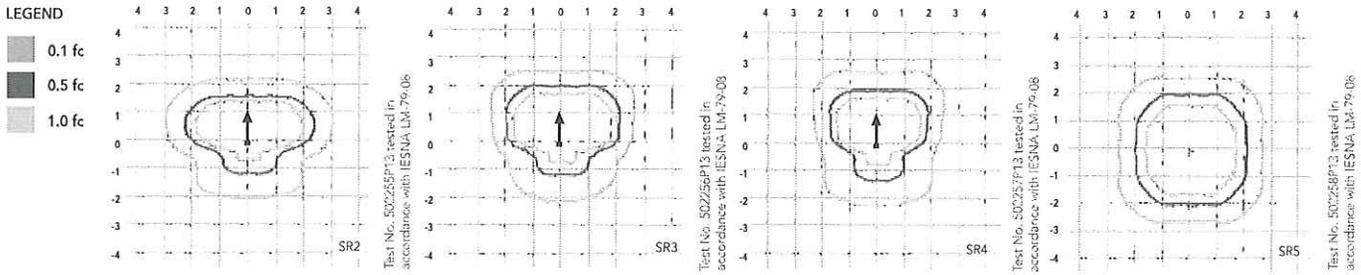
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MRP-LED
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Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's MRP LED homepage.

Isofootcandle plots are considered to be representative of available optical distributions.



FEATURES & SPECIFICATIONS

INTENDED USE

Streets, walkways, parking lots and surrounding areas.

CONSTRUCTION

Single-piece die-cast aluminum housing with nominal wall thickness of .012". Die-cast top access doorframe has impact-resistant, tempered glass lens (3/16" thick). Doorframe is fully gasketed with one-piece tubular silicone.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum and white. Available in textured and non-textured finishes.

OPTICS

Precision acrylic refractive optics for optimum light distribution through the flat glass lens. Light engines are available in standard 3000K (70 CRI) or optional 4000K (70 CRI) or 5000K (70 CRI) configurations.

ELECTRICAL

Light engine consists of 42 high-efficacy LEDs mounted to a metal-core circuit board and aluminum heat sink, ensuring optimal thermal management and long life. Class 1 electronic driver has a power factor >90%, THD <20%, and has an expected life of 100,000 hours with <1% failure rate. Easily-serviceable surge protection device meets a minimum Category C Low for operation (per ANSI/IEEE C62.41.2).

INSTALLATION

Standard post-top mounting configuration fits into a 4" OD open pole top (round pole only). Multiple options and accessories are available for other mounting needs.

LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. Rated for -40°C minimum ambient. **U.S. Patent No. D556,357.**

GOVERNMENT PROCUREMENT

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:

www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



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MRP-LED
Rev. 03/26/24