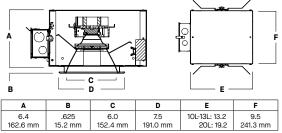


# **Spectrum Lighting**

# ZHAGA COMPLIANT PASSIVE ALUMINUM HEAT SINK LED MODULE DRIVER/J-BOX REFLECTOR ACCESS 20 GA GALVANIZED STEEL 063 ALUMINUM LENS

SELF-FLANGE TRIM





# **6" ROUND IC DOWNLIGHT**

# XT SERIES / 2000 LUMENS MAX



# RDFI6XT - TRIM FLANGE / IC RATED

#### APPLICATION

Versatile 6" Round aperture recessed LED downlight for Insulated Ceiling installations with a wide range of lumens and optical controls.

#### **FEATURES**

Two-stage optical system for smooth light distribution and focus control. Quick change LED module with interchangeable optics for job site adjustment and fixture maintenance. Shallow plenum design. Tool-less driver and j-box access. Posi-lock trim retention torsion springs.

### TRIM FINISH

LOCATION

A variety of architectural powdercoat and anodized finishes are available. Matte white flange is standard.

#### **ELECTRONICS**

LED system features Xicato LED module with proprietary phosphor technology that provides consistent, stable color with CCT control of +/- 100K over life of the light engine. Base CRI is 83 with 2-step MacAdam Ellipse binning. High CRI is 98 with 1×2-step MacAdam Ellipse binning. Variety of electronic 120V/277V and dimming drivers.

Housing/frame constructed of #20 ga. galvanized steel to resist corrosion. Self-Flanged one piece trim spun from 0.063" thick high purity aluminum and finished to specification.

#### **CODE COMPLIANCE**

BAA Compliant. IC rated. ETL certified to meet US and Canadian standards. Suitable for dry or damp locations. Optional Wet location. Manufactured and tested to UL standards No. 1598/8750.

| WATTAGE TO LUMENS UPDATE       |                                 |  |                               |                                  |                 |     |  |  |  |
|--------------------------------|---------------------------------|--|-------------------------------|----------------------------------|-----------------|-----|--|--|--|
| CURRENT PART<br>NUMBER EXAMPLE | PREVIOUS PART<br>NUMBER EXAMPLE |  | SOURCE<br>LUMENS <sup>1</sup> | DELIVERED<br>LUMENS <sup>2</sup> | SYSTEM<br>WATTS | LPW |  |  |  |
| RDFI6XT10L                     | RDFI6LEDXI15W                   |  | 1000                          | 754                              | 11.1            | 68  |  |  |  |
| RDFI6XT13L                     | RDFI6LEDXI20W                   |  | 1300                          | 1015                             | 15.0            | 68  |  |  |  |
| RDFI6XT20L                     | RDFI6LEDXI33W                   |  | 2000                          | 1562                             | 23.7            | 66  |  |  |  |

| SERIES  | LU  | IMENS <sup>1</sup> | C    | CT    | ОРТ             | ICS | DR    | RIVER / DIMMING / VOLTA     | GE | 4    |       | OPTIONS <sup>5</sup>      | TRIM    |                  | FINISH                |                   | TRIM OPTIONS <sup>11</sup> |
|---------|-----|--------------------|------|-------|-----------------|-----|-------|-----------------------------|----|------|-------|---------------------------|---------|------------------|-----------------------|-------------------|----------------------------|
|         |     |                    |      |       |                 |     |       |                             |    |      |       |                           |         |                  |                       |                   |                            |
| RDFI6XT |     | 83                 | CRI  |       | XN <sup>3</sup> | 12° | E_    | Electronic Driver           | 1  | 120V | BH276 | 27" Solid Bars            | RD6FXT8 | SG <sup>9</sup>  | Semi-Diffuse          | SOX12             | Micro Prism Solite™ Lens   |
|         | 10L | 1000 Lm            | 27K  | 2700K | ND              | 27° | DS10_ | 10% 0-10V                   | 2  | 277V | H12   | 12" - 24" Expandable Bars |         | HZ               | Haze Full Diffuse     | GLX <sup>13</sup> | Clear Glass Lens           |
|         | 13L | 1300 Lm            | 30K  | 3000K | MD              | 46° | DO10_ | 1% 0-10V                    |    |      | H06   | 6" - 12" Expandable Bars  |         | MW               | Matte White           | PGX               | Prismatic Glass Lens       |
|         | 20L | 2000 Lm            | 35K  | 3500K | WD              | 50° | DS2W1 | 1%, ELV/MLV, 120V           |    |      | CB24  | 24" C-Channel Bars        |         | МВ               | Matte Black           | FGX               | Frosted Glass Lens         |
|         |     |                    | 40K  | 4000K | XW              | 52° | DL3E_ | 1% Lutron® EcoSystem®, Fade |    |      | EMRM  | Remote Emergency          |         | PT               | Platinum Silver       |                   |                            |
|         |     |                    |      |       |                 |     | EL10_ | 1%, eldoLED                 |    |      |       | Battery Pack              |         | ОВ               | Oil Rubbed Bronze     | sow               | Micro Prism Solite™ Lens   |
|         |     |                    |      |       |                 |     | ED01_ | 0.1%, eldoLED               |    |      | FS    | Fusing                    |         | CH               | Charcoal              |                   | Wet Location               |
|         |     |                    |      |       |                 |     | DALI_ | DALI Control                |    |      | EB    | Black Housing             |         | AC               | Anodic Champagne      | GLW               | Clear Glass Lens           |
|         |     | 98                 | CRI  |       |                 |     |       |                             |    |      | CR    | Corrosion Resistant       |         | AS               | Anodic Sapphire       |                   | Wet Location               |
|         | 10L | 1000 Lm            | 27HK | 2700K |                 |     |       |                             |    |      | PR7   | Deep Ceiling Extension    |         | AM               | Anodic Malachite      | PGW               | Prismatic Glass Lens       |
|         | 13L | 1300 Lm            | зонк | 3000K |                 |     |       |                             |    |      | GR    | Goof Ring                 |         | SN               | Sun Gold              |                   | Wet Location               |
|         | 20L | 2000 Lm            | 35HK | 3500K |                 |     |       |                             |    |      | CCEA  | Chicago Ceiling           |         | CO               | Copper Metallic       | FGW               | Frosted Glass Lens         |
|         |     |                    | 40HK | 4000K |                 |     |       |                             |    |      |       | Plenum Rated              |         | GH               | Graphite              |                   | Wet Location               |
|         |     |                    |      |       |                 |     |       |                             |    |      | AMB   | Anti Microbial Finish     |         | AMB              | Anti Microbial Finish | PF <sup>14</sup>  | Polished Flange            |
|         |     |                    |      |       |                 |     |       |                             |    |      |       |                           |         | CC <sup>10</sup> | Custom Color          |                   |                            |

# **EXAMPLE:** RDFI6XT10L35KMDE1/BH27/RD6FXTMWSOX

HOUSING

1 Nominal Source Lumens at Any CCT 2 Nominal Delivered Lumens 83 CRI at Any CCT with WD-SG-SOX 3 XN 13L Max at 83 and 98 CRI 4 Contact Factory for Additional Options 5 See Product Options Page for Details 6 Standard Bar Hangers 7 Contact Factory 8 "F" Indicates Self-Flange Trim, Matte White Standard 9 Standard Finish 10 Contact Factory for Special Finishes 11 Contact factory for Special Lenses/Louvers 12 Standard Lens for MD, WD, XW 13 Standard Lens for XN and ND 14 Flange and Reflector Same Finish

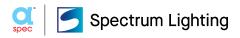
| PROJECT:  |       |
|-----------|-------|
| QUANTITY: | TYPE: |





# **6" ROUND IC DOWNLIGHT**

# IC RATED / PHOTOMETRIC DATA



### NARROW BEAM - RDxx6XT-20LxxKNDE1-RD6xSGGLX

Note: xxK indicates all available CCT's have same lumen output

Filename: RDxx6XT-20LxxKNDE1-RD6x5GGLX Manufacturer: Spectrum Lighting Luminaire: 6" aperture, Narrow Beam

> Lamp: N/A, Min. 83 CRI Lamp Cat: N/A

Lamp Output: Total luminaire Lumens: 1734.3

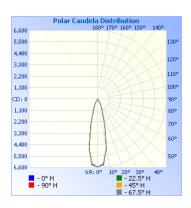
Max Candela: 6,547.7 at Horizontal: 0°, Vertical: 0° Input Wattage: 23.7

Luminous Opening: Point

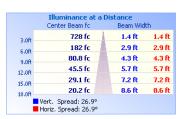
Test: SP-00476 7 M-20L Test Date: Thu Jun 25 2015

# Zonal Lumen Summary

| Zone  | Lumens  | % Luminaire |
|-------|---------|-------------|
| 0-30  | 1,644.3 | 94.8%       |
| 0-40  | 1,731.3 | 99.8%       |
| 0-60  | 1,734.0 | 100%        |
| 60-90 | 0.3     | 0%          |
| 0-90  | 1,734.3 | 100%        |



| Ca | ındela | Table |      |      |      |
|----|--------|-------|------|------|------|
|    | 0      | 22.5  | 45   | 67.5 | 90   |
| 0  | 6548   | 6548  | 6548 | 6548 | 6548 |
| 5  | 6251   | 6367  | 6323 | 6333 | 6384 |
| 10 | 4798   | 4805  | 4744 | 4786 | 4744 |
| 15 | 2589   | 2592  | 2577 | 2607 | 2607 |
| 20 | 1263   | 1265  | 1261 | 1260 | 1254 |
| 25 | 782    | 773   | 786  | 777  | 785  |
| 30 | 476    | 472   | 482  | 478  | 476  |
| 35 | 58     | 57    | 58   | 58   | 56   |
| 40 | 6      | 7     | 7    | 6    | 6    |
| 45 | 2      | 2     | 2    | 2    | 2    |
| 50 | 1      | 1     | 1    | 1    | 1    |
| 55 | 0      | 0     | 0    | 0    | 0    |
| 60 | 0      | 0     | 0    | 0    | 0    |
| 65 | 0      | 0     | 0    | 0    | 0    |
| 70 | 0      | 0     | 0    | 0    | 0    |
| 75 | 0      | 0     | 0    | 0    | 0    |
| 80 | 0      | 0     | 0    | 0    | 0    |
| 85 | 0      | 0     | 0    | 0    | 0    |



| Flood Summary |            |         |                      |                    |  |  |  |  |
|---------------|------------|---------|----------------------|--------------------|--|--|--|--|
|               | Efficiency | Lumens  | Horizontal<br>Spread | Vertical<br>Spread |  |  |  |  |
| Field (10%):  | 90.6%      | 1,570.9 | 54.2                 | 54.1               |  |  |  |  |
| Beam (50%):   | 47.5%      | 823.9   | 26.9                 | 26.9               |  |  |  |  |
| Total:        | 100.6%     | 1,745.4 |                      |                    |  |  |  |  |

SPACING RATIO: 0.46

## MEDIUM BEAM - RDxx6XT-20LxxKMDE1-RD6xSGSOX

Note: xxK indicates all available CCT's have same lumen output

### Filename: RDxx6XT-20LxxKMDE1-RD6xSGS0X

Manufacturer: Spectrum Lighting

Luminaire: 6" aperture, Medium Beam

Luminaire Cat: RDxx6LEDXT-20L-xxK-MD-E1-RD6x-SG-SOX

Lamp: N/A, Min. 83 CRI

Lamp Cat: N/A

Lamp Output: Total luminaire Lumens: 1510.2

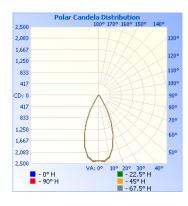
Max Candela: 2,451.7 at Horizontal: 45°, Vertical: 5°

Input Wattage: 23.7 Luminous Opening: Point

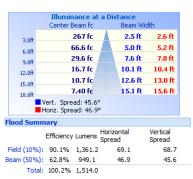
Test: SP-00476 4 M-20L

Test Date: Fri Jun 19 2015

| Zona  | Lumen   | Summary     |
|-------|---------|-------------|
| Zone  | Lumens  | % Luminaire |
| 0-30  | 1,242.9 | 82.3%       |
| 0-40  | 1,410.3 | 93.4%       |
| 0-60  | 1,508.8 | 99.9%       |
| 60-90 | 1.4     | 0.1%        |
| 0-90  | 1,510.2 | 100%        |



| Ca | ındel | a Tab | le   |      |      |
|----|-------|-------|------|------|------|
|    | 0     | 22.5  | 45   | 67.5 | 90   |
| 0  | 2399  | 2399  | 2399 | 2399 | 2399 |
| 5  | 2422  | 2408  | 2452 | 2411 | 2447 |
| 10 | 2294  | 2269  | 2296 | 2311 | 2303 |
| 15 | 1982  | 1983  | 1975 | 1972 | 1958 |
| 20 | 1539  | 1531  | 1535 | 1538 | 1531 |
| 25 | 1060  | 1068  | 1062 | 1055 | 1083 |
| 30 | 607   | 605   | 608  | 603  | 605  |
| 35 | 205   | 206   | 209  | 207  | 210  |
| 40 | 94    | 93    | 95   | 94   | 91   |
| 45 | 85    | 82    | 83   | 82   | 84   |
| 50 | 71    | 71    | 70   | 71   | 70   |
| 55 | 42    | 43    | 42   | 40   | 44   |
| 60 | 4     | 3     | 3    | 3    | 3    |
| 65 | 1     | 1     | 0    | 0    | 1    |
| 70 | 0     | 0     | 0    | 0    | 0    |
| 75 | 0     | 0     | 0    | 0    | 0    |
| 80 | 0     | 0     | 0    | 0    | 0    |
| 85 | 0     | 0     | 0    | 0    | 0    |
| 90 | 0     | 0     | 0    | 0    | 0    |



SPACING RATIO: 0.76

# WIDE BEAM - RDxx6XT-20LxxKWDE1-RD6xSGSOX

Note: xxK indicates all available CCT's have same lumen output

## Filename: RDxx6XT-20LxxKWDE1-RD6x5G50X

Manufacturer: Spectrum Lighting

Luminaire: 6" aperture, Wide Beam Luminaire Cat: RDxx6LEDXT-20L-xxK-WD-E1-RD6x-SG-SOX

Lamp: N/A, Min. 83 CRI

Lamp Cat: N/A

Lamp Output: Total luminaire Lumens: 1551.4

Max Candela: 2,196.8 at Horizontal: 0°, Vertical: 10°

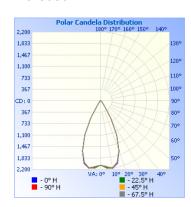
Input Wattage: 23.7 Luminous Opening: Point

Test: SP-00476 3 M-20L

Test Date: Fri Jun 19 2015

### Zonal Lumon Sun

| Zonai | Lumen   | Summary     |
|-------|---------|-------------|
| Zone  | Lumens  | % Luminaire |
| 0-30  | 1,294.7 | 83.5%       |
| 0-40  | 1,468.2 | 94.6%       |
| 0-60  | 1,549.9 | 99.9%       |
| 60-90 | 1.4     | 0.1%        |
| 0-90  | 1,551.4 | 100%        |



| Candela Table |      |      |      |      |      |  |  |  |
|---------------|------|------|------|------|------|--|--|--|
|               | 0    | 22.5 | 45   | 67.5 | 90   |  |  |  |
| 0             | 2065 | 2065 | 2065 | 2065 | 2065 |  |  |  |
| 5             | 2112 | 2170 | 2121 | 2132 | 2148 |  |  |  |
| 10            | 2197 | 2181 | 2171 | 2182 | 2196 |  |  |  |
| 15            | 2082 | 2032 | 2039 | 2047 | 2059 |  |  |  |
| 20            | 1710 | 1702 | 1698 | 1707 | 1714 |  |  |  |
| 25            | 1213 | 1199 | 1189 | 1205 | 1205 |  |  |  |
| 30            | 648  | 643  | 643  | 636  | 632  |  |  |  |
| 35            | 211  | 214  | 211  | 211  | 213  |  |  |  |
| 40            | 95   | 91   | 93   | 92   | 92   |  |  |  |
| 45            | 68   | 67   | 65   | 69   | 68   |  |  |  |
| 50            | 55   | 55   | 55   | 54   | 54   |  |  |  |
| 55            | 33   | 35   | 34   | 34   | 34   |  |  |  |
| 60            | 3    | 3    | 3    | 3    | 3    |  |  |  |
| 65            | 1    | 1    | 1    | 0    | 1    |  |  |  |
| 70            | 0    | 0    | 0    | 0    | 0    |  |  |  |
| 75            | 0    | 0    | 0    | 0    | 0    |  |  |  |
| 80            | 0    | 0    | 0    | 0    | 0    |  |  |  |
| 85            | 0    | 0    | 0    | 0    | 0    |  |  |  |
| 90            | 0    | 0    | 0    | 0    | 0    |  |  |  |
| 90            | 0    | 0    | 0    | 0    | 0    |  |  |  |

Condula Table

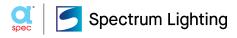
|        | Illuminance at a l |          |         |  |  |  |  |
|--------|--------------------|----------|---------|--|--|--|--|
|        | Center Beam fc     | Beam Wid | lth     |  |  |  |  |
| 3.0A   | 229 fc             | 2.9 ft   | 2.7 ft  |  |  |  |  |
| 6.0A   | 57.3 fc            | 5.9 ft   | 5.3 ft  |  |  |  |  |
| 9.08   | 25.5 fc            | 8.8 ft   | 8.0 ft  |  |  |  |  |
| 12.0ft | 14.3 fc            | 11.7 ft  | 10.7 ft |  |  |  |  |
| 15.08  | 9.18 fc            | 14.6 ft  | 13.4 ft |  |  |  |  |
| 18.0A  | 6.37 fc            | 17.6 ft  | 16.0 ft |  |  |  |  |
|        |                    |          |         |  |  |  |  |
| 18.0ft |                    |          |         |  |  |  |  |

| Flood Sumn   | nary       |         |                      |                    |
|--------------|------------|---------|----------------------|--------------------|
|              | Efficiency | Lumens  | Horizontal<br>Spread | Vertical<br>Spread |
| Field (10%): | 92%        | 1,427.2 | 68.5                 | 69.8               |
| Beam (50%):  | 70.6%      | 1,095.1 | 48.1                 | 52                 |
| Total:       | 100.2%     | 1 554 1 |                      |                    |

SPACING RATIO: 0.88

# **6" ROUND IC DOWNLIGHT**

# IC RATED / PHOTOMETRIC DATA



# XTRA WIDE BEAM - RDxx6XT-20LxxKXWE1-RD6xSGSOX

Note: xxK indicates all available CCT's have same lumen output

Filename: RDxx6XT-20LxxKXWE1-RD6xSGS0X Manufacturer: Spectrum Lighting

Luminaire: 6" aperture, Xtra Wide Beam

Luminaire Cat: RDxx6LEDXT-20L-xxK-XW-E1-RD6x-SG-SOX Lamp: N/A, Min. 83 CRI

Lamp Cat: N/A

Lamp Output: Total luminaire Lumens: 1580.8

Max Candela: 2,202.5 at Horizontal: 0°, Vertical: 5°

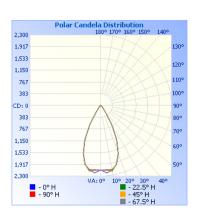
100%

Input Wattage: 23.7 Luminous Opening: Point

Test: SP-00476\_2\_M-20L Test Date: Fri Jun 19 2015

Zonal Lumen Summary
Zone Lumens % Luminaire 0-30 1,284.6 81.3% 0-40 1,491.2 94.3% 0-60 1,579.4 99.9% 60-90 1.4 0.1%

0-90 1,580.8



| Ci | Candela Table |      |      |      |      |  |  |  |  |
|----|---------------|------|------|------|------|--|--|--|--|
|    | 0             | 22.5 | 45   | 67.5 | 90   |  |  |  |  |
| 0  | 2099          | 2099 | 2099 | 2099 | 2099 |  |  |  |  |
| 5  | 2202          | 2115 | 2122 | 2120 | 2099 |  |  |  |  |
| 10 | 2135          | 2168 | 2146 | 2108 | 2126 |  |  |  |  |
| 15 | 1979          | 1974 | 1977 | 1982 | 1989 |  |  |  |  |
| 20 | 1660          | 1654 | 1645 | 1661 | 1668 |  |  |  |  |
| 25 | 1212          | 1225 | 1219 | 1210 | 1230 |  |  |  |  |
| 30 | 708           | 702  | 709  | 709  | 713  |  |  |  |  |
| 35 | 272           | 270  | 267  | 272  | 272  |  |  |  |  |
| 40 | 120           | 123  | 124  | 122  | 120  |  |  |  |  |
| 45 | 82            | 81   | 78   | 80   | 81   |  |  |  |  |
| 50 | 51            | 50   | 48   | 48   | 49   |  |  |  |  |
| 55 | 29            | 31   | 32   | 31   | 29   |  |  |  |  |
| 60 | 3             | 3    | 3    | 3    | 3    |  |  |  |  |
| 65 | 1             | 1    | 1    | 0    | 0    |  |  |  |  |
| 70 | 0             | 0    | 0    | 0    | 0    |  |  |  |  |
| 75 | 0             | 0    | 0    | 0    | 0    |  |  |  |  |
| 80 | 0             | 0    | 0    | 0    | 0    |  |  |  |  |
| 85 | 0             | 0    | 0    | 0    | 0    |  |  |  |  |
| 90 | 0             | 0    | 0    | 0    | 0    |  |  |  |  |

| Illuminance at a Distance                       |                |            |         |  |  |  |  |
|---|----------------|------------|---------|--|--|--|--|
|   | Center Beam fc | Beam Width |         |  |  |  |  |
| 3.0 <del>0</del>                                | 233 fc         | 2.9 ft     | 2.9 ft  |  |  |  |  |
| 6.0R  | 58.3 fc        | 5.9 ft     | 5.8 ft  |  |  |  |  |
| 9.0R  | 25.9 fc        | 8.8 ft     | 8.7 ft  |  |  |  |  |
| 12.0R   | 14.6 fc        | 11.8 ft    | 11.6 ft |  |  |  |  |
| 15.0R   | 9.33 fc        | 14.7 ft    | 14.5 ft |  |  |  |  |
| 18.0 <del>R</del>                               | 6.48 fc        | 17.6 ft    | 17.3 ft |  |  |  |  |
| ■ Vert. Spread: 52.2°<br>■ Horiz. Spread: 51.4° |                |            |         |  |  |  |  |

| Flood Summary |            |         |                      |                    |  |  |  |  |
|---------------|------------|---------|----------------------|--------------------|--|--|--|--|
|               | Efficiency | Lumens  | Horizontal<br>Spread | Vertical<br>Spread |  |  |  |  |
| Field (10%):  | 92.1%      | 1,455.4 | 72.8                 | 73.4               |  |  |  |  |
| Beam (50%):   | 68%        | 1,075.0 | 51.4                 | 52.2               |  |  |  |  |
| Total         | 100 2%     | 1 583 8 |                      |                    |  |  |  |  |

SPACING RATIO: 0.88