

## BIONIQ ROUND ADJUSTABLE TRIMLESS

### A35182-

base number    LED    Color    Finishes    Ceiling  
 Dimming    Temperature    (Diamond)    Thickness

- To build a product code in our configurator select the specify button on the base model # product page
- To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

#### GENERAL

Series: Bioniq  
 Subseries: Bioniq Round Adjustable  
 Brand: Prolicht  
 Division: Architectural  
 Mounting Type: Trimless  
 Mounting Location: Ceiling  
 Subcategory: Downlight

#### PHYSICAL

Shape: Round  
 Diameter (mm): 107  
 Diameter (in): 4 3/16  
 Height (mm): 112  
 Height (in): 4 7/16  
 Ceiling Thickness (mm): 10 / 12.5 / 15 / 25  
 Ceiling Thickness (in): 3/8 or 1/2 or 9/16 or 1  
 Min. Recessing Depth (mm): 130  
 Min. Recessing Depth (in): 5 1/8  
 Light Distribution: Adjustable / Downlight  
 Weight (kg): 0.596  
 Weight (lbs): 1.31  
 Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG / LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC / COM / ABZ / JAG / OBR / MOS / ROR  
 Fixture Material: Aluminum Die Cast  
 Cut-out Measurements: Ø 111mm / 4 3/8"  
 Upon Request: Unique Ceiling Thickness

#### ELECTRICAL

Lamp Type: LED (Zhaga Standard)  
 Input Wattage (W): 13.2 / 16.5  
 Total Output Wattage (W): 12.1 / 14.7  
 Dimming: Tri-Mode (Non-Dimming and Phase Dimming (120Vac only) and 0-10V Dimming)  
 Driver Included: No  
 Driver Location: Recessed Housing  
 Driver Type: Constant Current - Universal  
 Driver Class: Class 2  
 Housing: See components  
 Input Voltage (V): 120 - 277  
 Constant Current (MA): 350

#### LED

Number of LEDs: 1  
 Color Temperature (°K): 2700 / 3000 / 3500 / 4000  
 Max. Delivered Lumen (lm): 850 / 950 / 1019 / 1040  
 Nominal Lumen (lm): 960 / 1070 / 1156 / 1180  
 CRI: >90 CRI  
 Lamp Life (hrs): 50000  
 Upon Request: RGB-W Tunable White Special Color Temperature Special LED

#### OPTICAL

Reflector: 10  
 Adjustability: Rotational 355°; Tilt 30°  
 Upon Request: Special Beam Angles

#### RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards  
 Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com  
 IP Rating: IP20  
 Available for international specifications by adding "INT" at the end of the existing Model #. For assistance on 'custom' specifications, contact zteam@zaneen.com.  
 In a constant effort to supply the best product, we reserve the right to change specifications or materials without notice. The most recent specification sheets are found at zaneen.com



## BIONIQ ROUND ADJUSTABLE TRIMLESS

A35182-

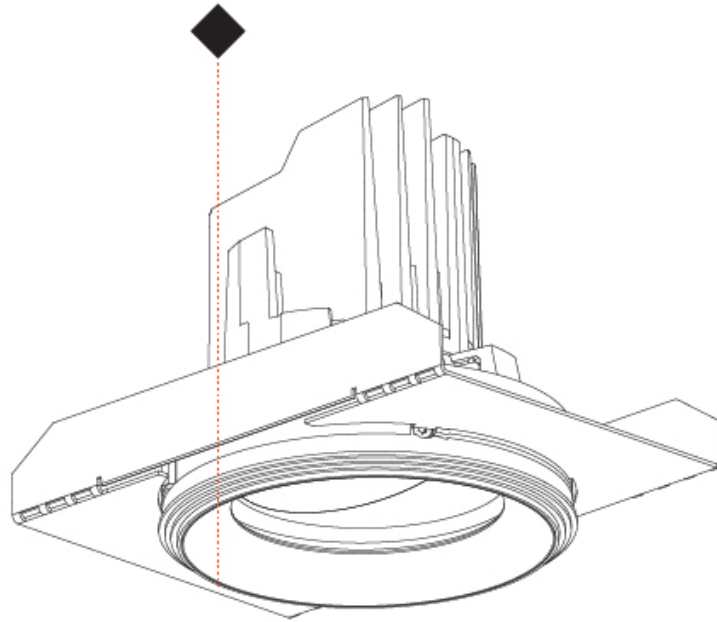
PROJECT

TYPE

SPECIFIER

QUANTITY

DATE



|           |  |
|-----------|--|
| PROJECT   |  |
| TYPE      |  |
| SPECIFIER |  |
| QUANTITY  |  |
| DATE      |  |

## BIONIQ ROUND SEMI ADJUSTABLE TRIMLESS

### A35203-

|             |             |           |           |
|-------------|-------------|-----------|-----------|
| base number | Color       | Finishes  | Ceiling   |
|             | Temperature | (Diamond) | Thickness |

- To build a product code in our configurator select the specify button on the base model # product page
- To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

#### GENERAL

Series: Bioniq  
 Subseries: Bioniq Round Semi Adjustable  
 Brand: Prolight  
 Division: Architectural  
 Mounting Type: Trimless  
 Mounting Location: Ceiling  
 Subcategory: Downlight

#### PHYSICAL

Shape: Round  
 Diameter (mm): 107  
 Diameter (in): 4 3/16  
 Height (mm): 112  
 Height (in): 4 7/16  
 Ceiling Thickness (mm): 10 / 12.5 / 15 / 25  
 Ceiling Thickness (in): 3/8 or 1/2 or 9/16 or 1  
 Min. Recessing Depth (mm): 130  
 Min. Recessing Depth (in): 5 1/8  
 Light Distribution: Adjustable / Downlight  
 Weight (kg): 0.624  
 Weight (lbs): 1.38  
 Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG / LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC / COM / ABZ / JAG / OBR / MOS / ROR  
 Fixture Material: Aluminum Die Cast  
 Cut-out Measurements: 111mm / 4 3/8"  
 Upon Request: Unique Ceiling Thickness

#### ELECTRICAL

Lamp Type: LED (Zhaga Standard)  
 Input Wattage (W): 13.2 / 16.5  
 Total Output Wattage (W): 12.1 / 14.7  
 Dimming: Tri-Mode (Non-Dimming and Phase Dimming (120Vac only) and 0-10V Dimming)  
 Driver Included: No  
 Driver Location: Recessed Housing  
 Driver Type: Constant Current - Universal  
 Driver Class: Class 2  
 Housing: See components  
 Input Voltage (V): 120 - 277  
 Constant Current (MA): 350

#### LED

Number of LEDs: 1  
 Color Temperature (°K): 2700 / 3000 / 3500 / 4000  
 Max. Delivered Lumen (lm): 850 / 950 / 1019 / 1040  
 Nominal Lumen (lm): 960 / 1070 / 1156 / 1180  
 CRI: >90 CRI  
 Efficiency (%): 88.5  
 Lamp Life (hrs): 50000  
 Upon Request: RGB-W Tunable White Special Color Temperature Special LED

#### OPTICAL

Reflector°: 10  
 Adjustability: Rotational 355°; Tilt 10°  
 Upon Request: Special Beam Angles

#### RATINGS AND CERTIFICATIONS

Zaneen Group Inc. © 2024, T 1800-388-3382, F 416-247-9319, www.zaneen.com  
 Certified By: Certified for North American Standards  
 Available for International specifications by adding "INT" at the end of the existing Model #. For assistance on 'custom' specifications, contact zteam@zaneen.com.  
 IP Rating: IP20  
 If a conflict occurs to supply the best product, we reserve the right to change specifications or materials without notice. The most recent specification sheets are found at zaneen.com



## BIONIQ ROUND SEMI ADJUSTABLE TRIMLESS

A35203-

PROJECT

TYPE

SPECIFIER

QUANTITY

DATE



|           |       |
|-----------|-------|
| PROJECT   | _____ |
| TYPE      | _____ |
| SPECIFIER | _____ |
| QUANTITY  | _____ |
| DATE      | _____ |

## BIONIQ ROUND ADJUSTABLE RECESSED

### A35224-

base number    Color \_\_\_\_\_    Finishes \_\_\_\_\_  
 Temperature    (Diamond)

- To build a product code in our configurator select the specify button on the base model # product page
- To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

#### GENERAL

Series: Bioniq  
 Subseries: Bioniq Round Adjustable  
 Brand: Prolicht  
 Division: Architectural  
 Mounting Type: Recessed  
 Mounting Location: Ceiling  
 Subcategory: Downlight

#### PHYSICAL

Shape: Round  
 Diameter (mm): 107  
 Diameter (in): 4 3/16  
 Height (mm): 112  
 Height (in): 4 7/16  
 Ceiling Thickness (mm): 10 / 12.5 / 15  
 Ceiling Thickness (in): 3/8 or 1/2 or 9/16  
 Min. Recessing Depth (mm): 130  
 Min. Recessing Depth (in): 5 1/8  
 Light Distribution: Adjustable / Downlight  
 Weight (kg): 0.47  
 Weight (lbs): 1.04  
 Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG / LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC / COM / ABZ / JAG / OBR / MOS / ROR  
 Fixture Material: Aluminum Die Cast  
 Cut-out Measurements: 98mm / 3 7/8"

#### ELECTRICAL

Lamp Type: LED (Zhaga Standard)  
 Input Wattage (W): 13.2 / 16.5  
 Total Output Wattage (W): 12 / 15  
 Dimming: Tri-Mode (Non-Dimming and Phase Dimming (120Vac only) and 0-10V Dimming)  
 Driver Included: No  
 Driver Location: Recessed Housing  
 Driver Type: Constant Current - Universal  
 Driver Class: Class 2  
 Housing: See components  
 Input Voltage (V): 120 - 277  
 Constant Current (MA): 350

#### LED

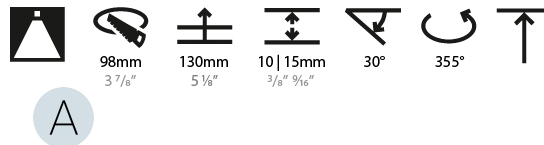
Number of LEDs: 1  
 Color Temperature (°K): 2700 / 3000 / 3500 / 4000  
 Max. Delivered Lumen (lm): 850 / 950 / 1019 / 1040  
 Nominal Lumen (lm): 960 / 1070 / 1156 / 1180  
 CRI: >90 CRI  
 Efficiency (%): 0.885  
 Lamp Life (hrs): 50000

#### OPTICAL

Reflector°: 10  
 Adjustability: Rotational 355°; Tilt 30°

#### RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards  
 IP rating: IP20



## BIONIQ ROUND ADJUSTABLE RECESSED

A35224-

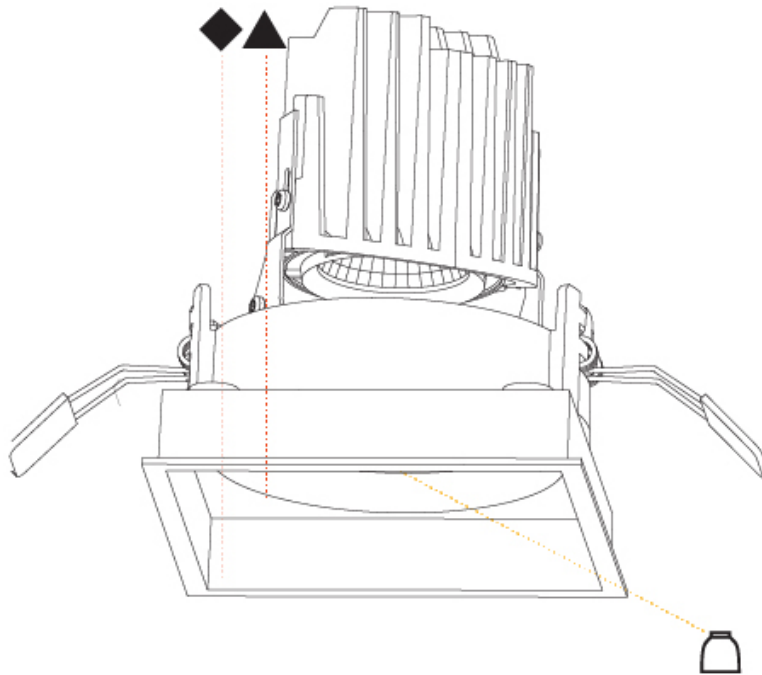
PROJECT \_\_\_\_\_

TYPE \_\_\_\_\_

SPECIFIER \_\_\_\_\_

QUANTITY \_\_\_\_\_

DATE \_\_\_\_\_



A

|           |       |
|-----------|-------|
| PROJECT   | _____ |
| TYPE      | _____ |
| SPECIFIER | _____ |
| QUANTITY  | _____ |
| DATE      | _____ |

## BIONIQ ROUND ADJUSTABLE RECESSED

### A35236-

base number    Color \_\_\_\_\_    Finishes \_\_\_\_\_  
 Temperature    (Diamond)

- To build a product code in our configurator select the specify button on the base model # product page
- To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

#### GENERAL

Series: Bioniq  
 Subseries: Bioniq Round Adjustable  
 Brand: Prolicht  
 Division: Architectural  
 Mounting Type: Recessed  
 Mounting Location: Ceiling  
 Subcategory: Downlight

#### PHYSICAL

Shape: Round  
 Diameter (mm): 107  
 Diameter (in): 4 3/16  
 Height (mm): 112  
 Height (in): 4 7/16  
 Ceiling Thickness (mm): 10 / 12.5 / 15  
 Ceiling Thickness (in): 3/8 or 1/2 or 9/16  
 Min. Recessing Depth (mm): 130  
 Min. Recessing Depth (in): 5 1/8  
 Light Distribution: Adjustable / Downlight  
 Weight (kg): 0.47  
 Weight (lbs): 1.04  
 Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG / LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC / COM / ABZ / JAG / OBR / MOS / ROR  
 Fixture Material: Aluminum Die Cast  
 Cut-out Measurements: 98mm / 3 7/8"

#### ELECTRICAL

Lamp Type: LED (Zhaga Standard)  
 Input Wattage (W): 13.2 / 16.5  
 Total Output Wattage (W): 12 / 15  
 Dimming: Tri-Mode (Non-Dimming and Phase Dimming (120Vac only) and 0-10V Dimming)  
 Driver Included: No  
 Driver Location: Recessed Housing  
 Driver Type: Constant Current - Universal  
 Driver Class: Class 2  
 Housing: See components  
 Input Voltage (V): 120 - 277  
 Constant Current (MA): 350

#### LED

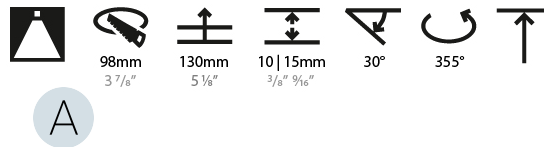
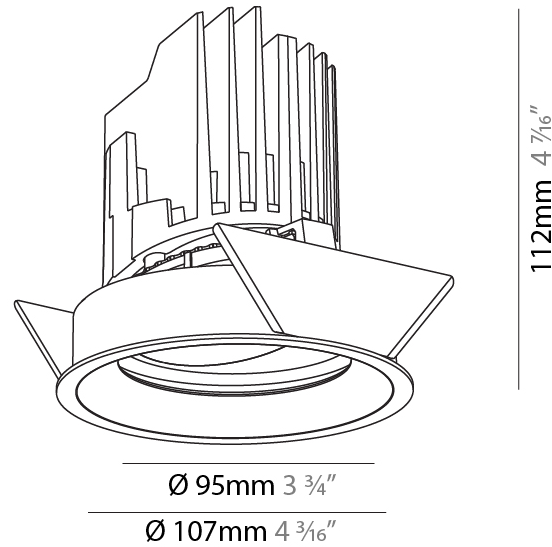
Number of LEDs: 1  
 Color Temperature (°K): 2700 / 3000 / 3500 / 4000  
 Max. Delivered Lumen (lm): 790 / 880 / 951 / 970  
 Nominal Lumen (lm): 960 / 1070 / 1156 / 1180  
 CRI: >90 CRI  
 Efficiency (%): 0.885  
 Lamp Life (hrs): 50000

#### OPTICAL

Reflector°: 10  
 Optic°: Lens Pack - No Lens  
 Adjustability: Rotational 355°; Tilt 30°

#### RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards  
 IP rating: IP20



## BIONIQ ROUND ADJUSTABLE RECESSED

A35236-

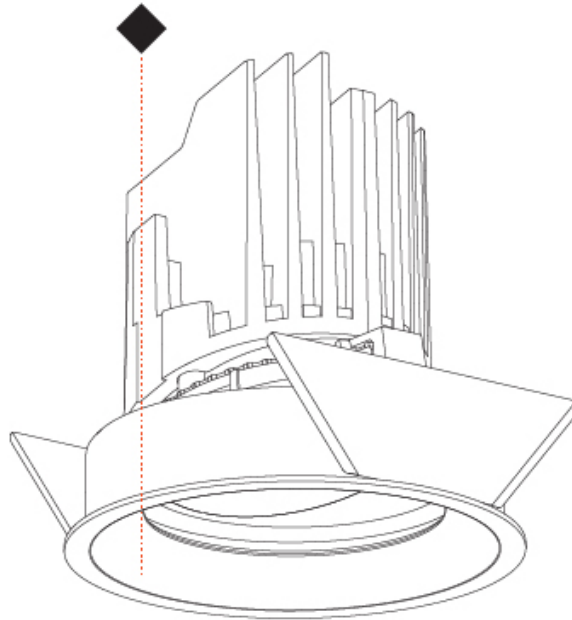
PROJECT

TYPE

SPECIFIER

QUANTITY

DATE





|           |       |
|-----------|-------|
| PROJECT   | _____ |
| TYPE      | _____ |
| SPECIFIER | _____ |
| QUANTITY  | _____ |
| DATE      | _____ |

## BIONIQ ROUND SEMI ADJUSTABLE RECESSED

### A35290-

base number    Color \_\_\_\_\_    Finishes \_\_\_\_\_  
 Temperature    (Diamond)

- To build a product code in our configurator select the specify button on the base model # product page
- To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

#### GENERAL

Series: Bioniq  
 Subseries: Bioniq Round Semi Adjustable  
 Brand: Prolicht  
 Division: Architectural  
 Mounting Type: Recessed  
 Mounting Location: Ceiling  
 Subcategory: Downlight

#### PHYSICAL

Shape: Round  
 Diameter (mm): 107  
 Diameter (in): 4 3/16  
 Height (mm): 112  
 Height (in): 4 7/16  
 Ceiling Thickness (mm): 10 / 12.5 / 15  
 Ceiling Thickness (in): 3/8 or 1/2 or 9/16  
 Min. Recessing Depth (mm): 130  
 Min. Recessing Depth (in): 5 1/8  
 Light Distribution: Adjustable / Downlight  
 Weight (kg): 0.488  
 Weight (lbs): 1.08  
 Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG / LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC / COM / ABZ / JAG / OBR / MOS / ROR  
 Fixture Material: Aluminum Die Cast  
 Cut-out Measurements: 98mm / 3 7/8"



#### ELECTRICAL

Lamp Type: LED (Zhaga Standard)  
 Input Wattage (W): 13.2 / 16.5  
 Total Output Wattage (W): 12 / 14  
 Dimming: Tri-Mode (Non-Dimming and Phase Dimming (120Vac only) and 0-10V Dimming)  
 Driver Included: No  
 Driver Location: Recessed Housing  
 Driver Type: Constant Current - Universal  
 Driver Class: Class 2  
 Housing: See components  
 Input Voltage (V): 120 - 277  
 Constant Current (MA): 350

#### LED

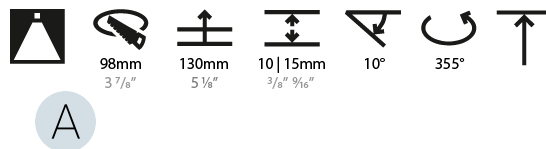
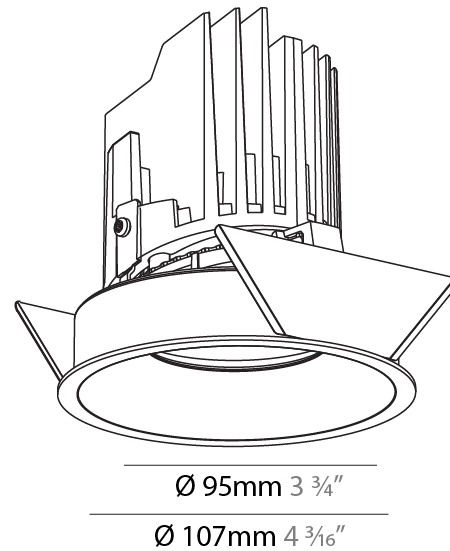
Number of LEDs: 1  
 Color Temperature (°K): 2700 / 3000 / 3500 / 4000  
 Max. Delivered Lumen (lm): 850 / 950 / 1029 / 1050  
 Nominal Lumen (lm): 960 / 1070 / 1156 / 1180  
 CRI: >90 CRI  
 Efficiency (%): 0.885  
 Lamp Life (hrs): 50000

#### OPTICAL

Reflector°: 10  
 Adjustability: Rotational 355°; Tilt 10°

#### RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards  
 IP rating: IP20



## BIONIQ ROUND SEMI ADJUSTABLE RECESSED

A35290-

PROJECT \_\_\_\_\_

TYPE \_\_\_\_\_

SPECIFIER \_\_\_\_\_

QUANTITY \_\_\_\_\_

DATE \_\_\_\_\_



A

## BIONIQ ROUND PINHOLE RECESSED

**A37861-** -

base number    Color    Finishes  
 Temperature    (Diamond)

- To build a product code in our configurator select the specify button on the base model # product page
- To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

### GENERAL

Series: Bioniq  
 Subseries: Bioniq Round Pinhole  
 Brand: Prolicht  
 Division: Architectural  
 Mounting Type: Recessed  
 Mounting Location: Ceiling  
 Subcategory: Downlight

### PHYSICAL

Shape: Round  
 Diameter (mm): 107  
 Diameter (in): 4 3/16  
 Height (mm): 112  
 Height (in): 4 7/16  
 Ceiling Thickness (mm): 10 / 12.5 / 15  
 Ceiling Thickness (in): 3/8 or 1/2 or 9/16  
 Min. Recessing Depth (mm): 130  
 Min. Recessing Depth (in): 5 1/8  
 Light Distribution: Adjustable / Downlight  
 Weight (kg): 0.473  
 Weight (lbs): 1.04  
 Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG / LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC / COM / ABZ / JAG / OBR / MOS / ROR  
 Fixture Material: Aluminum Die Cast  
 Cut-out Measurements: 98mm / 3 7/8"

### ELECTRICAL

Lamp Type: LED  
 Input Wattage (W): 13.2 / 16.5  
 Total Output Wattage (W): 12 / 15  
 Dimming: Tri-Mode (Non-Dimming and Phase Dimming (120Vac only) and 0-10V Dimming)  
 Driver Included: No  
 Driver Location: Recessed Housing  
 Driver Type: Constant Current - Universal  
 Housing: See components  
 Input Voltage (V): 120 - 277  
 Constant Current (MA): 350

### LED

Number of LEDs: 1  
 Color Temperature (°K): 2700 / 3000 / 3500 / 4000  
 Max. Delivered Lumen (lm): 850 / 950 / 1019 / 1040  
 Nominal Lumen (lm): 960 / 1070 / 1156 / 1180  
 CRI: >90 CRI  
 Lamp Life (hrs): 50000

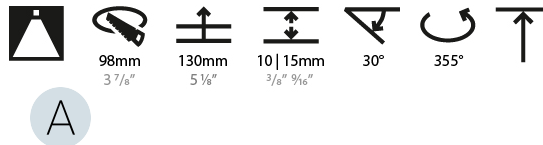
### OPTICAL

Reflector°: 10  
 Adjustability: Rotational 355°; Tilt 30°

### RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards  
 IP rating: IP20

|           |
|-----------|
| PROJECT   |
| TYPE      |
| SPECIFIER |
| QUANTITY  |
| DATE      |



## BIONIQ ROUND PINHOLE RECESSED

A37861-

PROJECT

TYPE

SPECIFIER

QUANTITY

DATE



|           |
|-----------|
| PROJECT   |
| TYPE      |
| SPECIFIER |
| QUANTITY  |
| DATE      |

### Fixture Finish



**Digital:** Not all screens are calibrated the same, and therefore, colors will appear differently between screens.

**Physical:** When texture is involved, there will be variations in color, character and tone within a product series and between product families.

**Gun Metal:** No Gun Metal finish is alike. It combines a mixture of transparent and black color particles which ensures a highly individual effect and no luminaire being identical.











**Champagne Cream, Copper Mine, Ancient Bronze + Jazz Gold:** These finishes have slight fading from specific powder coating production. Each luminaire will slightly vary.



### LEGEND

|  |   |   |  |   |  |
|--|---|---|--|---|--|
|    | floor-mounted   |    | pivotal  |    | special LED (upon request) RGB, RGBW, tunable, gold+, meat+, art+, fashion+                    |
|    | wall and ceiling: recessed and surface mounted            |    | rotating   |    | warm dim / natural dimming LED   |
|    | ceiling-mounted and wall-mounted                          |    | illuminate tilted  |    | rechargeable battery powered   |
|    | wall-mounted  |    | color of suspension cable                                    |    | fixture with natural vivid LED (upon request)  |
|    | omni-directional light distribution                       |    | length of suspension cable                                   |    | color rendering index  |
|    | direct light distribution                                 |    | reflector degree selection                                   |    | color temperature  |
|    | direct/indirect light distribution                        |    | super spot   |    | lumen (luminous flux)  |
|    | indirect light distribution                               |    | lens   |    | efficacy (lumens per watt)   |
|    | asymmetric light distribution                             |    | lens pack  |    | Unified Glare Rating (UGR) range from 5-40   |
|    | aura light distribution                                   |    | shine ring   |    | marine grade (AISI 316 stainless steel)  |
|    | round wall or ceiling cut-out                             |    | integrated shine ring with diffuser                          |    | walk on  |
|    | square wall or ceiling cut-out                            |    | free individual colors 01-29                                 |    | drive on   |
|    | the supplied jig specifies the cutout dimensions          |    | individual colors: 00 (free of charge), 01-25 (extra charge) |    | Dark Sky Compliance  |
|    | minimum distance (meters) lamp - object                   |    | luminaire part to be colored (F1)                            |    | Americans with Disabilities Act (less than 4" off the wall located between 27"-84" from floor) |
|    | recessed depth  |    | luminaire part to be colored (F2)                            |    | lamp protected against explosion   |
|   | ceiling thickness in mm                                   |   | luminaire part to be colored (F3)                            |   | blown glass using traditional methods by master glass blower                                   |
|  | ceiling thickness selection                               |  | luminaire part to be colored (F4)                            |  | acoustic material  |
|  | dimnable DP (phase), DV (0-10V), DD (dali), DS (step-dim) |  | luminaire part to be colored (F5)                            |  | protection class I, protection insulation  |
|  | included or excluded LED driver/transformer/control gear  |  | color of 3-circuit adaptor                                   |  | protection class II, protection insulation   |
|  | separately switchable                                     |  | indirect diffuser  |  | ETL Certified to UL and CSA Standards  |
|  | sensor  |  | direct diffuser  |  | UL Certified to UL and CSA Standards   |
|  | remote control  |  | ball-proof (upon request)                                    |  | CSA Certified to UL and CSA Standards  |
|  | available upon request                                    |  | accessory  |  | Certified for North American Standards   |

### IP RATING

|   |  |
|---|--|
|  | protected against ingress of solid bodies greater than 12.5mm (finger)   |
|  | protected against ingress of solid bodies greater than 2.5mm<br>protected against sprays of water up to 60 degrees from the vertical (rain)      |
|  | protected against ingress of solid bodies greater than 1mm (wire)<br>no protection against the ingress of moisture                               |
|  | protected against ingress of solid bodies greater than 1mm (wire)<br>protected against sprays of water up to 60 degrees from the vertical (rain) |
|  | protected against ingress of solid bodies greater than 1mm (wire)<br>protected against water splashed from all directions                        |
|  | protected against limited ingress of dust (wet rooms/covered outdoor areas)<br>protected against water splashed from all directions              |
|  | protected against ingress of dust<br>protected against jets of water   |
|  | protected against ingress of dust<br>protected against powerful jets of water or heavy seas  |
|  | protected against ingress of dust<br>protected against immersion of water between 15cm - 1m for 30 minutes                                       |
|  | protected against ingress of dust<br>protected against immersion of water under pressure for long periods  |

### IK RATING

|   |   |
|---|---|
|  | protected against 0.14 joules impact (equivalent to 0.25kg mass dropped from 56mm above the surface)  |
|  | protected against 0.2 joules impact (equivalent to 0.25kg mass dropped from 80mm above the surface)   |
|  | protected against 0.35 joules impact (equivalent to 0.25kg mass dropped from 140mm above the surface) |
|  | protected against 0.5 joules impact (equivalent to 0.25kg mass dropped from 200mm above the surface)  |
|  | protected against 0.7 joules impact (equivalent to 0.25kg mass dropped from 280mm above the surface)  |
|  | protected against 1 joules impact (equivalent to 0.25kg mass dropped from 400mm above the surface)    |
|  | protected against 2 joules impact (equivalent to 0.5kg mass dropped from 400mm above the surface)     |
|  | protected against 5 joules impact (equivalent to 1.7kg mass dropped from 300mm above the surface)     |
|  | protected against 10 joules impact (equivalent to 5.0kg mass dropped from 200mm above the surface)    |
|  | protected against 20 joules impact (equivalent to 5.0kg mass dropped from 400mm above the surface)    |