## **OLODUM ROUND RECESSED**

### E1010019-

base number

Color Temperature

1.To build a product code in our configurator select the specify button on the base model # product page

2. 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: Olodum               |  |
|------------------------------|--|
| Subseries: Olodum Round      |  |
| Brand: Side                  |  |
| Division: Exterior           |  |
| Mounting Type: Recessed      |  |
| Mounting Location: In-Ground |  |
| Subcategory: Uplight         |  |

#### PHYSICAL

| PHYSICAL                          |
|-----------------------------------|
| Shape: Round                      |
| Diameter (mm): 76                 |
| Diameter (in): 3                  |
| Height (mm): 62                   |
| Height (in): 2 1/16               |
| Light Distribution: Uplight       |
| Weight (kg): 0.3                  |
| Weight (lbs): 0.66                |
| Diffuser: Clear tempered glass    |
| Gasket: Silicon rubber            |
| Fixture Finish: SSS               |
| Fixture Material: Stainless Steel |
|                                   |

### ELECTRICAL

Lamp Type: LED (Zhaga Standard)

Total Output Wattage (W): 3.5

Dimming: Non-Dimming / Phase Dimming (120Vac only) / 0-10V

Dimming

Driver Included: No

Driver Location: Remote

Driver Type: Constant Current - 120 / 277Vac

Driver Class: Class 2

Input Voltage (V): 120 - 277

Constant Current (MA): 350

### LED

Color Temperature (°K): 3000 / 4000

Max. Delivered Lumen (lm): 285 / 300

CRI: >80 CRI

Lamp Life (hrs): 50000

## OPTICAL

Reflector°: Polycarbonate Metallized Reflector Optic°: 45

Upon Request: Dimming requires 2 fixture minimum

### RATINGS AND CERTIFICATIONS

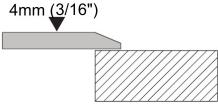
Certified By: Certified for North American Standards

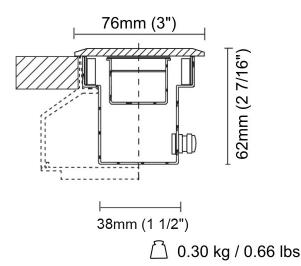
IP rating: IP67

IK Rating: IK07

| PROJECT   |  |
|-----------|--|
| ТҮРЕ      |  |
| SPECIFIER |  |
| QUANTITY  |  |
| DATE      |  |





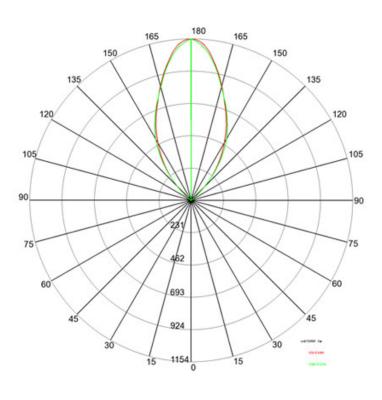


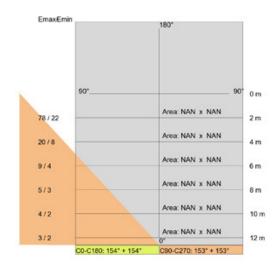


## **OLODUM ROUND RECESSED**

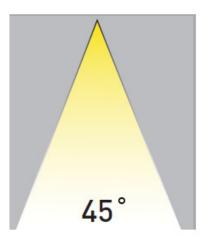
E10I0019-

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











### **OLODUM ROUND RECESSED**

### E1010093-

base number

Temperature

1.To build a product code in our configurator select the specify button on the base model # product page

2. 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: Olodum Subseries: Olodum Round Brand: Side Division: Exterior Mounting Type: Recessed Mounting Location: In-Ground

Subcategory: Walk Over **PHYSICAL** Shape: Round Diameter (mm): 65 Diameter (in): 2 % Height (mm): 62 Height (in): 2 1/16 Light Distribution: Uplight Weight (kg): 0.3 Weight (lbs): 0.66 Load Resistance (kg): 500 Load Resistance (lbs): 1102 Diffuser: Clear tempered glass Gasket: Silicon rubber Fixture Finish: SSS Fixture Material: Stainless Steel **ELECTRICAL** 

Lamp Type: LED (Zhaga Standard) Input Wattage (W): 3.5 Total Output Wattage (W): 3 Driver Included: No Input Voltage (V): 120 Constant Current (MA): 350

## LED

Number of LEDs: 1

Color Temperature (°K): 3000 / 4000 Max. Delivered Lumen (lm): 285 / 300

CRI: >80 CRI

### OPTICAL

Reflector°: Polycarbonate metallized reflector

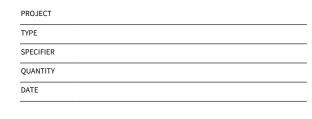
Optic°: 45

### **RATINGS AND CERTIFICATIONS**

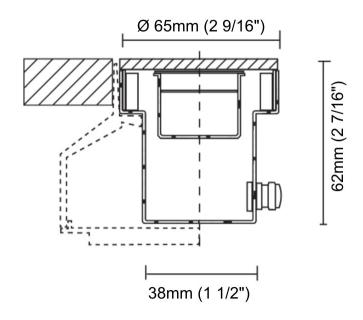
Certified By: Certified for North American Standards

IP rating: IP67

IK Rating: IK07







△ 0.3kg / 0.66lbs



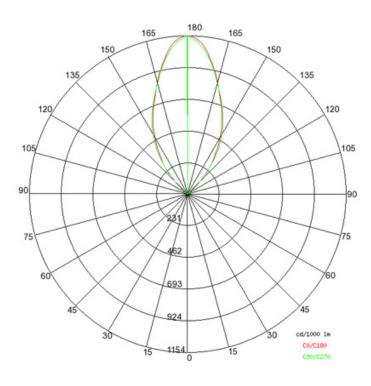
Page 3/12

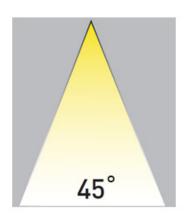


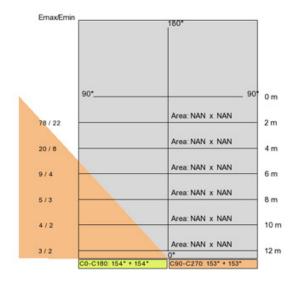
## **OLODUM ROUND RECESSED**

E10I0093-

| PROJECT   |
|-----------|
| ТҮРЕ      |
| SPECIFIER |
| QUANTITY  |
| DATE      |









## **OLODUM SQUARE RECESSED**

### E1010094-

base number

Temperature

1.To build a product code in our configurator select the specify button on the base model # product page

2. 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: Olodum               |  |
|------------------------------|--|
| Subseries: Olodum Square     |  |
| Brand: Side                  |  |
| Division: Exterior           |  |
| Mounting Type: Recessed      |  |
| Mounting Location: In-Ground |  |
| Subcategory: Walk Over       |  |

| Mounting Type: Recessed  Mounting Location: In-Ground  Subcategory: Walk Over  PHYSICAL  Shape: Square  Width (mm): 76  Width (in): 3  Height (mm): 62  Height (in): 2 <sup>7</sup> / <sub>16</sub> Light Distribution: Uplight  Weight (kg): 0.3  Weight (lbs): 0.66  Load Resistance (kg): 500  Load Resistance (lbs): 1102  Diffuser: Clear tempered glass  Gasket: Silicon rubber  Fixture Finish: SSS  Fixture Material: Stainless Steel  ELECTRICAL | Division: Exterior                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Subcategory: Walk Over  PHYSICAL  Shape: Square  Width (mm): 76  Width (in): 3  Height (mm): 62  Height (in): 2 $\frac{7}{16}$ Light Distribution: Uplight  Weight (kg): 0.3  Weight (lbs): 0.66  Load Resistance (kg): 500  Load Resistance (lbs): 1102  Diffuser: Clear tempered glass  Gasket: Silicon rubber  Fixture Finish: SSS  Fixture Material: Stainless Steel                                                                                  | Mounting Type: Recessed           |
| PHYSICAL Shape: Square Width (mm): 76 Width (in): 3 Height (mm): 62 Height (in): 2 7/16 Light Distribution: Uplight Weight (kg): 0.3 Weight (lbs): 0.66 Load Resistance (kg): 500 Load Resistance (lbs): 1102 Diffuser: Clear tempered glass Gasket: Silicon rubber Fixture Finish: SSS Fixture Material: Stainless Steel                                                                                                                                 | Mounting Location: In-Ground      |
| Shape: Square  Width (mm): 76  Width (in): 3  Height (mm): 62  Height (in): 2 <sup>7</sup> / <sub>16</sub> Light Distribution: Uplight  Weight (kg): 0.3  Weight (lbs): 0.66  Load Resistance (kg): 500  Load Resistance (lbs): 1102  Diffuser: Clear tempered glass  Gasket: Silicon rubber  Fixture Finish: SSS  Fixture Material: Stainless Steel                                                                                                      | Subcategory: Walk Over            |
| Width (mm): 76 Width (in): 3 Height (mm): 62 Height (in): 2 $\frac{7}{1_{16}}$ Light Distribution: Uplight Weight (kg): 0.3 Weight (lbs): 0.66 Load Resistance (kg): 500 Load Resistance (lbs): 1102 Diffuser: Clear tempered glass Gasket: Silicon rubber Fixture Finish: SSS Fixture Material: Stainless Steel                                                                                                                                          | PHYSICAL                          |
| Width (in): 3  Height (mm): 62  Height (in): 2 <sup>7</sup> / <sub>1s</sub> Light Distribution: Uplight  Weight (kg): 0.3  Weight (lbs): 0.66  Load Resistance (kg): 500  Load Resistance (lbs): 1102  Diffuser: Clear tempered glass  Gasket: Silicon rubber  Fixture Finish: SSS  Fixture Material: Stainless Steel                                                                                                                                     | Shape: Square                     |
| Height (mm): 62 Height (in): 2 7/16 Light Distribution: Uplight Weight (kg): 0.3 Weight (lbs): 0.66 Load Resistance (kg): 500 Load Resistance (lbs): 1102 Diffuser: Clear tempered glass Gasket: Silicon rubber Fixture Finish: SSS Fixture Material: Stainless Steel                                                                                                                                                                                     | Width (mm): 76                    |
| Height (in): 2 7/16 Light Distribution: Uplight Weight (kg): 0.3 Weight (lbs): 0.66 Load Resistance (kg): 500 Load Resistance (lbs): 1102 Diffuser: Clear tempered glass Gasket: Silicon rubber Fixture Finish: SSS Fixture Material: Stainless Steel                                                                                                                                                                                                     | Width (in): 3                     |
| Light Distribution: Uplight Weight (kg): 0.3 Weight (lbs): 0.66 Load Resistance (kg): 500 Load Resistance (lbs): 1102 Diffuser: Clear tempered glass Gasket: Silicon rubber Fixture Finish: SSS Fixture Material: Stainless Steel                                                                                                                                                                                                                         | Height (mm): 62                   |
| Weight (kg): 0.3 Weight (lbs): 0.66 Load Resistance (kg): 500 Load Resistance (lbs): 1102 Diffuser: Clear tempered glass Gasket: Silicon rubber Fixture Finish: SSS Fixture Material: Stainless Steel                                                                                                                                                                                                                                                     | Height (in): 2 1/16               |
| Weight (lbs): 0.66  Load Resistance (kg): 500  Load Resistance (lbs): 1102  Diffuser: Clear tempered glass  Gasket: Silicon rubber  Fixture Finish: SSS  Fixture Material: Stainless Steel                                                                                                                                                                                                                                                                | Light Distribution: Uplight       |
| Load Resistance (kg): 500 Load Resistance (lbs): 1102 Diffuser: Clear tempered glass Gasket: Silicon rubber Fixture Finish: SSS Fixture Material: Stainless Steel                                                                                                                                                                                                                                                                                         | Weight (kg): 0.3                  |
| Load Resistance (lbs): 1102 Diffuser: Clear tempered glass Gasket: Silicon rubber Fixture Finish: SSS Fixture Material: Stainless Steel                                                                                                                                                                                                                                                                                                                   | Weight (lbs): 0.66                |
| Diffuser: Clear tempered glass Gasket: Silicon rubber Fixture Finish: SSS Fixture Material: Stainless Steel                                                                                                                                                                                                                                                                                                                                               | Load Resistance (kg): 500         |
| Gasket: Silicon rubber Fixture Finish: SSS Fixture Material: Stainless Steel                                                                                                                                                                                                                                                                                                                                                                              | Load Resistance (lbs): 1102       |
| Fixture Finish: SSS Fixture Material: Stainless Steel                                                                                                                                                                                                                                                                                                                                                                                                     | Diffuser: Clear tempered glass    |
| Fixture Material: Stainless Steel                                                                                                                                                                                                                                                                                                                                                                                                                         | Gasket: Silicon rubber            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Fixture Finish: SSS               |
| ELECTRICAL                                                                                                                                                                                                                                                                                                                                                                                                                                                | Fixture Material: Stainless Steel |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ELECTRICAL                        |

ELECTRICAL

Lamp Type: LED (Zhaga Standard)

Input Wattage (W): 3.5

Total Output Wattage (W): 3.5

Driver Included: No

Input Voltage (V): 120

Constant Current (MA): 350

### LED

Number of LEDs: 1 Color Temperature (°K): 3000 / 4000

Max. Delivered Lumen (lm): 285 / 300

CRI: >80 CRI

### OPTICAL

Reflector°: Polycarbonate metallized reflector Optic°: 45

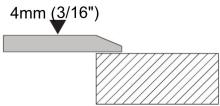
### **RATINGS AND CERTIFICATIONS**

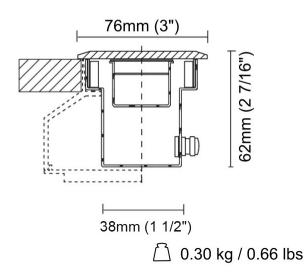
Certified By: Certified for North American Standards

IP rating: IP67
IK Rating: IK07

| PROJECT   |  |
|-----------|--|
| ТҮРЕ      |  |
| SPECIFIER |  |
| QUANTITY  |  |
| DATE      |  |





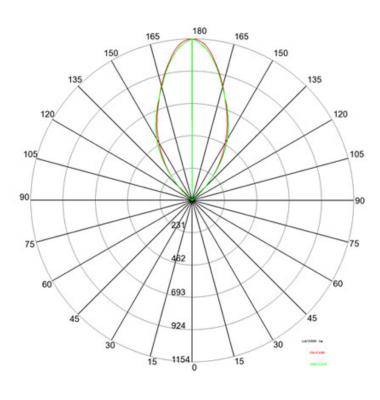


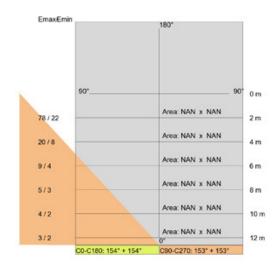


## **OLODUM SQUARE RECESSED**

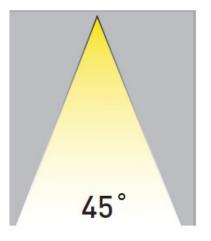
E10I0094-

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











## **OLODUM ROUND RECESSED**

## E10Q0034-

base number

Color Temperature

 $1. To \ build\ a\ product\ code\ in\ our\ configurator\ select\ the\ specify\ button\ on\ the\ base\ model\ \#\ product\ page$ 

2. 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: Olodum             |
|----------------------------|
| Subseries: Olodum Round    |
| Brand: Side                |
| Division: Exterior         |
| Mounting Type: Recessed    |
| Mounting Location: Ceiling |
| Subcategory: Downlight     |
|                            |

| DIVISION, EXCENSI                 |
|-----------------------------------|
| Mounting Type: Recessed           |
| Mounting Location: Ceiling        |
| Subcategory: Downlight            |
| PHYSICAL                          |
| Shape: Round                      |
| Diameter (mm): 76                 |
| Diameter (in): 3                  |
| Height (mm): 58                   |
| Height (in): $2\frac{5}{16}$      |
| Min. Recessing Depth (mm): 63     |
| Min. Recessing Depth (in): 2 ½    |
| Light Distribution: Direct        |
| Weight (kg): 0.4                  |
| Weight (lbs): 0.88                |
| Diffuser: Clear tempered glass    |
| Gasket: Silicon rubber            |
| Fixture Finish: SSS               |
| Fixture Material: Stainless Steel |
| ELECTRICAL                        |
|                                   |

| ELECTRICAL                                                            |
|-----------------------------------------------------------------------|
| Lamp Type: LED (Zhaga Standard)                                       |
| Input Wattage (W): 4.4                                                |
| Total Output Wattage (W): 3.1                                         |
| Dimming: Non-Dimming / Phase Dimming (120Vac only) / 0-10V<br>Dimming |
| Driver Included: No                                                   |
| Driver Location: Remote                                               |
| Driver Type: Constant Current - 120 / 277Vac                          |
| Driver Class: Class 2                                                 |
| Input Voltage (V): 120 - 277                                          |
| Constant Current (MA): 350                                            |

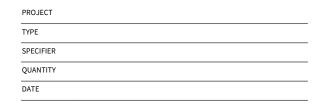
| LED                                  |
|--------------------------------------|
| Color Temperature (°K): 3000 / 4000  |
| Max. Delivered Lumen (lm): 285 / 300 |
| Nominal Lumen (lm): 350 / 380        |
| CRI: >80 CRI                         |
| Lamp Life (hrs): 50000               |
| OPTICAL                              |

Optic°: 45

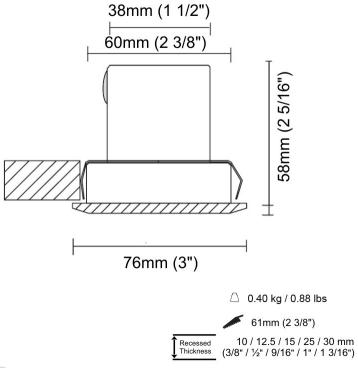
### RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards

IP rating: IP67
IK Rating: IK07







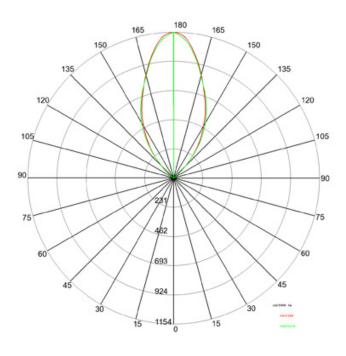




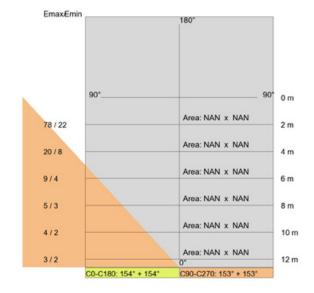
## **OLODUM ROUND RECESSED**

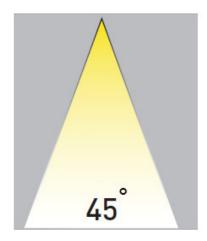
E10Q0034-

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











## **OLODUM SQUARE RECESSED**

## E10Q0036-

base number

Color Temperature

1.To build a product code in our configurator select the specify button on the base model # product page

2. 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: Olodum             |  |
|----------------------------|--|
| Subseries: Olodum Square   |  |
| Brand: Side                |  |
| Division: Exterior         |  |
| Mounting Type: Recessed    |  |
| Mounting Location: Ceiling |  |
| Subcategory: Downlight     |  |

| Mounting Type: Recessed                     |  |
|---------------------------------------------|--|
| Mounting Location: Ceiling                  |  |
| Subcategory: Downlight                      |  |
| PHYSICAL                                    |  |
| Shape: Square                               |  |
| Length (mm): 76                             |  |
| Length (in): 3                              |  |
| Width (mm): 76                              |  |
| Width (in): 3                               |  |
| Height (mm): 58                             |  |
| Height (in): 2 <sup>5</sup> / <sub>16</sub> |  |
| Min. Recessing Depth (mm): 63               |  |
| Min. Recessing Depth (in): 2 ½              |  |
| Light Distribution: Downlight               |  |
| Weight (kg): 0.4                            |  |
| Weight (lbs): 0.88                          |  |
| Diffuser: Clear tempered glass              |  |
| Gasket: Silicon rubber                      |  |
| Fixture Finish: SSS                         |  |
| Fixture Material: Stainless Steel           |  |
|                                             |  |

### **ELECTRICAL**

| Lamp Type: LED (Zhaga Standard)                      |
|------------------------------------------------------|
| Total Output Wattage (W): 3.5                        |
| Dimming: 0-10V Dimming / Phase Dimming (120Vac Only) |
| Driver Included: No                                  |
| Driver Location: Remote                              |
| Driver Type: Constant Current - 120 / 277Vac         |
| Input Voltage (V): 120 - 277                         |
| Constant Current (MA): 350                           |
|                                                      |

### LED

| Color Temperature (°K): 3000 / 4000  |
|--------------------------------------|
| Max. Delivered Lumen (lm): 285 / 300 |
| Nominal Lumen (lm): 250 / 380        |
| CRI: >80 CRI                         |
| Lamp Life (hrs): 50000               |
|                                      |

### OPTICAL

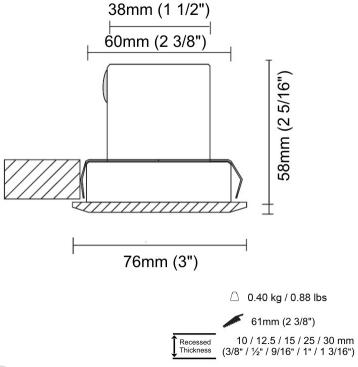
Optic°: 45

### **RATINGS AND CERTIFICATIONS**

| Certified By: Certified for North American Standards |  |  |  |  |
|------------------------------------------------------|--|--|--|--|
| IP rating: IP67                                      |  |  |  |  |
| IK Rating: IK07                                      |  |  |  |  |

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





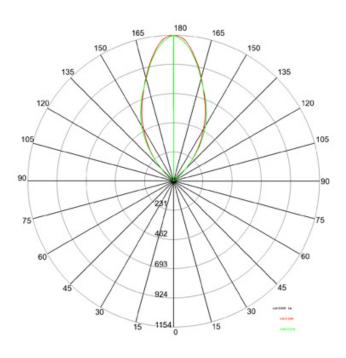




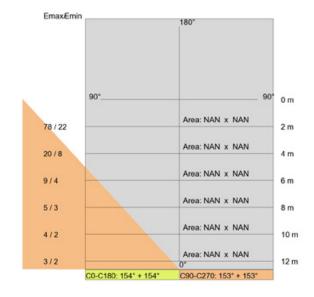
## **OLODUM SQUARE RECESSED**

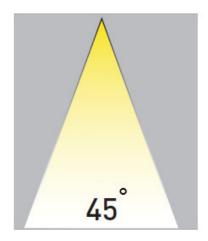
E10Q0036-

| PROJECT   |  |
|-----------|--|
| ТҮРЕ      |  |
| SPECIFIER |  |
| QUANTITY  |  |
| DATE      |  |













## **OLODUM**

| 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.





## **OLODUM**

## **LEGEND**

| 100                  |                                                              |          |                                                              | -                | 1 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                                                        |
|----------------------|--------------------------------------------------------------|----------|--------------------------------------------------------------|------------------|------------------------------------------------------------------------------------------------|
| <u></u>              | floor-mounted                                                | ¥        | pivotable                                                    | ⊛                | special LED (upon request) RGB, RGBW, tunable,<br>gold+, meat+, art+, fashion+                 |
| 7                    | wall and ceiling: recessed and surface mounted               | C        | rotating                                                     | 0                | warm dim / natural dimming LED                                                                 |
| $\uparrow$           | ceiling-mounted and wall-mounted                             | Œ        | illuminate tilted                                            | 0                | rechargeable battery powered                                                                   |
| $\rightarrow$        | wall-mounted                                                 | I        | color of suspension cable                                    | in the second    | fixture with natural vivid LED (upon request)                                                  |
| Y                    | omni-directional light distribution                          | 1        | length of suspension cable                                   | CRI              | color rendering index                                                                          |
| À                    | direct light distribution                                    | Δ        | reflector degree selection                                   | (K)              | color temperature                                                                              |
| X                    | direct/indirect light distribution                           | s s      | super spot                                                   | (LM)             | lumen (luminous flux)                                                                          |
| Y                    | indirect light distribution                                  | *        | lens                                                         | ₩                | efficacy (lumens per watt)                                                                     |
|                      | asymmetric light distribution                                | 8        | lens pack                                                    | UGR              | Unified Glare Rating (UGR) range from 5-40                                                     |
| $\overline{\Lambda}$ | aura light distribution                                      | 0        | shine ring                                                   | *                | marine grade (AISI 316 stainless steel)                                                        |
| R                    | round wall or ceiling cut-out                                | $\odot$  | integrated shine ring with diffuser                          | 30               | walk on                                                                                        |
| $\Box$               | square wall or ceiling cut-out                               |          | free individual colors 01-29                                 | <b>②</b>         | drive on                                                                                       |
| 4                    | the supplied jig specifies the cutout dimensions             | Ĉ        | individual colors: 00 (free of charge), 01-25 (extra charge) | DSC              | Dark Sky Compliance                                                                            |
| <b>□</b> ←,→         | minimum distance (meters) lamp - object                      | <b>♦</b> | luminaire part to be colored (F1)                            | Ġ                | Americans with Disabilities Act (less than 4" off the wall located between 27"-84" from floor) |
| $\hat{\pm}$          | recessed depth                                               |          | luminaire part to be colored (F2)                            |                  | lamp protected against explosion                                                               |
| <u></u>              | ceiling thickness in mm                                      |          | luminaire part to be colored (F3)                            | 4                | blown glass using traditional methods by master glass blower                                   |
| 1                    | ceiling thickness selection                                  |          | luminaire part to be colored (F4)                            | <b>(</b> )       | acoustic material                                                                              |
|                      | dimmable 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/<br>control gear | •        | color of 3-circuit adaptor                                   |                  | protection class II, protection insulation                                                     |
| 8                    | separately switchable                                        | $\odot$  | indirect diffuser                                            |                  | ETL Certified to UL and CSA Standards                                                          |
| <b>•</b>             | sensor                                                       | 0        | direct diffuser                                              | շ <b>(</b> Մ) սո | UL Certified to UL and CSA Standards                                                           |
|                      | remote control                                               | 1        | ball-proof (upon request)                                    | <b>(II</b> )     | CSA Certified to UL and CSA Standards                                                          |
| 9                    | available upon request                                       | O        | accessory                                                    | <b>Z</b>         | Certified for North American Standards                                                         |

## **IP RATING**

| IP20 | protected against ingress of solid bodies greater than 12.5mm (finger)                                                                        |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| IP33 | protected against ingress of solid bodies greater than 2.5mm<br>protected against sprays of water up to 60 degrees from the vertical (rain)   |
| IP40 | protected against ingress of solid bodies greater than 1mm (wire) no protection against the ingress of moisture                               |
| IP43 | protected against ingress of solid bodies greater than 1mm (wire) protected against sprays of water up to 60 degrees from the vertical (rain) |
| IP44 | protected against ingress of solid bodies greater than 1mm (wire) protected against water splashed from all directions                        |
| IP54 | protected against limited ingress of dust (wet rooms/covered outdoor areas) protected against water splashed from all directions              |
| IP65 | protected against ingress of dust<br>protected against jets of water                                                                          |
| IP66 | protected against ingress of dust<br>protected against powerful jets of water or heavy seas                                                   |
| IP67 | protected against ingress of dust<br>protected against immersion of water between 15cm - 1m for 30 minutes                                    |
| IP68 | protected against ingress of dust protected against immersion of water under pressure for long periods                                        |

## **IK RATING**

above the surface)

| 100000 | 288 (400 C) - 26 5 (100 C) - 26 5 ( |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IK02   | protected against 0.2 joules impact (equivalent to 0.25kg mass dropped from 80mm above the surface)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| ІКОЗ   | protected against 0.35 joules impact (equivalent to 0.25kg mass dropped from 140mm above the surface)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| IK04   | protected against 0.5 joules impact (equivalent to 0.25kg mass dropped from 200mm above the surface)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| IK05   | protected against 0.7 joules impact (equivalent to 0.25kg mass dropped from 280mm above the surface)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| IK06   | protected against 1 joules impact (equivalent to 0.25kg mass dropped from 400mm above the surface)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| IK07   | protected against 2 joules impact (equivalent to 0.5kg mass dropped from 400mm above the surface) $$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| IK08   | protected against 5 joules impact (equivalent to 1.7kg mass dropped from 300mm above the surface)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| IK09   | 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)

protected against 0.14 joules impact (equivalent to 0.25kg mass dropped from 56mm