| Project | | Catalog # | | Type | |
|---|---|---|---|---|---|
| Prepared by | | Notes | | Date | |

# HALO

## SMD6 Series

6" Round and Square Surface Mount Downlight
SMD6R & SMD6S

**Typical Applications**
Residential

## Interactive Menu

## Product Certification

ENERGY STAR

Can be used for
IECC
International Energy
Conservation Code
High Efficacy
Compliance

Efficiency Standards
T24
Can be used to comply
with 2016 Title 24 Part 6
LED Enclosed Light
Source Requirements JA8

UL CERTIFIED

RoHS COMPLIANT

Refer to ENERGY STAR® Certified Products List.
Can be used to comply with California Title 24 High Efficacy requirements.
Certified to California Appliance Efficiency Database under JA8.

## Product Features

5 seleCCTable colors
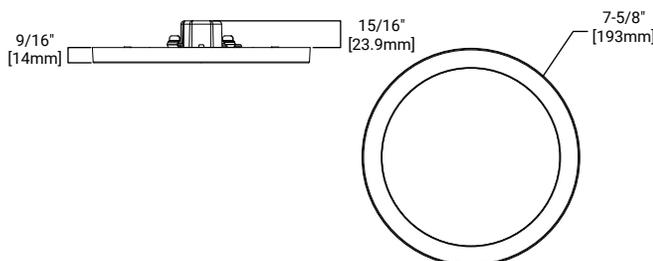2700K • 3000K • 3500K
4000K • 5000K
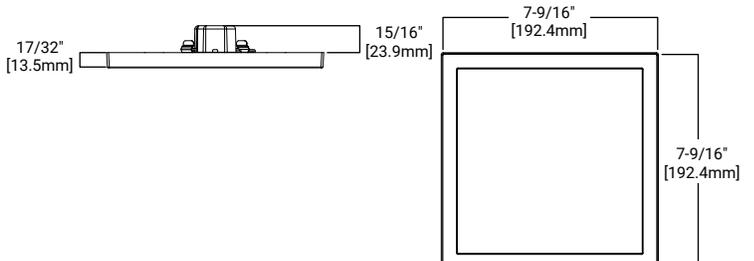
air Tite™

Showerlight

## Top Product Features

- Ultra-low profile surface luminaire with wide distribution
- Ceiling or wall mounting in compatible junction boxes
- 600 & 1200 lumen; 2700K, 3000K, 3500K, 4000K or 5000K field selectable CCT; 90 CRI
- 120V only and Universal Voltage 120V – 277V options
- Dimmable with 120V dimmers
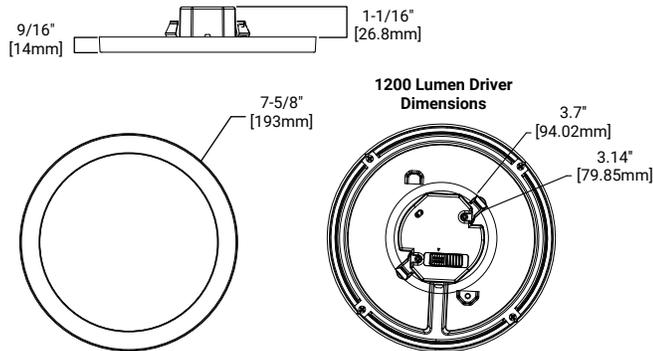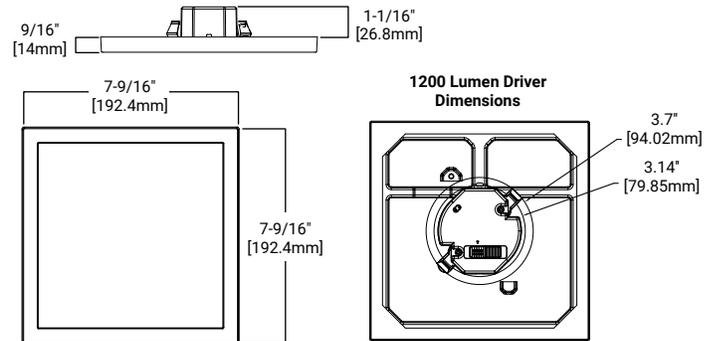
## Dimensional and Mounting Details

**SMD6R69SWH**

9/16"
[14mm]

15/16"
[23.9mm]

7-5/8"
[193mm]

**SMD6S69SWH**

17/32"
[13.5mm]

15/16"
[23.9mm]

7-9/16"
[192.4mm]

7-9/16"
[192.4mm]

additional product diagrams

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## Dimensional and Mounting Details (continued)

**SMD6R129SWH**
**SMD6R129SWHE**

9/16" [14mm]

1-1/16" [26.8mm]

7-5/8" [193mm]

**1200 Lumen Driver Dimensions**

3.7" [94.02mm]

3.14" [79.85mm]

**SMD6S129SWH**
**SMD6S129SWHE**

9/16" [14mm]

1-1/16" [26.8mm]

7-9/16" [192.4mm]

7-9/16" [192.4mm]

**1200 Lumen Driver Dimensions**

3.7" [94.02mm]

3.14" [79.85mm]

**Note:** Ensure junction box (provided by others) internal dimension supports driver dimension.

## Ordering Information

**SAMPLE NUMBER: SMD6R69SWH** = 6" Round Surface Mount Downlight, 600 lumen, 90CRI, Selectable CCT, White, 120V
**Junction Box Installation:** Order junction box separately, as supplied by others, to complete installation.
**Recessed Installation:** Order HALO recessed housing and SMD6ACCKIT separately to complete installation.

| Models | Lumens | CRI/CCT | Finish | Voltage |
|---|---|---|---|---|
| **Models** | **Lumens** | **CRI/CCT** | **Finish** | **Voltage** |
| **SMD6R** = 6" Round Surface Mount Downlight<br>**SMD6S** = 6" Square Surface Mount Downlight | **6** = 600 lumen series (120V only)<br>**12** = 1200 lumen series [1] | **9S** = 90CRI, 2700K - 5000K Field Selectable CCT | **WH** = Matte White | **Blank** = 120V standard<br>**E** = UNV Universal 120-277V [2] |
| **Notes** | **Notes** | **Notes** | **Notes** | **Notes** |
| | (1) 1200 lumen series requires use of 4" square junction box or similar to support driver. | | | (2) UNV voltage configuration is offered only in the 1200 lumen series |

| Accessories |
|---|
| **Accessories** |
| **Designer Trims**<br>**SMD6RTRMSN** = 6" Round SMD Satin Nickel<br>**SMD6RTRMTBZ** = 6" Round SMD Tuscan Bronze<br>**SMD6RTRMWH** = 6" Round SMD White (paintable)<br>**SMD6RTRMMB** = 6" Round SMD Matte Black<br>**SMD6STRMSN** = 6" Square SMD Satin Nickel<br>**SMD6STRMTBZ** = 6" Square SMD Tuscan Bronze<br>**SMD6STRMWH** = 6" Square SMD White (paintable)<br>**SMD6STRMMB** = 6" Square SMD Matte Black<br><br>**T24HWKIT** = Title 24 Cable harness kit used to convert incandescent and low voltage housings to LED<br><br>**SMD6ACCKIT** = SMD6 accessory kit includes friction clips, torsion sprigs and a Edison screwbase adapter for recessed housing installation. |
| **Notes** |

## Accessories

### Designer Trims

**SMD6RTRMWH**
round, white (paintable)

**SMD6RTRMSN**
round, satin nickel

**SMD6RTRMTBZ**
round, tuscan bronze

**SMD6RTRMMB**
round, matte black

**SMD6STRMWH**
square, white (paintable)

**SMD6STRMSN**
square, satin nickel

**SMD6STRMTBZ**
square, tuscan bronze

**SMD6STRMMB**
square, matte black

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## JUNCTION BOX COMPATIBILITY

**\*Note:** SMD 1200 lumen 120V configuration is only compatible with junction boxes 4" x 2-1/8" deep. Square junction box is required for 1200 lumen version.



**TP316\***
for non-metallic cable
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)



**TP317\***
for metal clad cable
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)



**4" octagon light fixture/fan steel box\***
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)



**4" octagon steel box**
4" x 4" x 1-1/2"
(102mm x 102mm x 38mm)



**4" square deep steel box\***
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)



**4" square standard steel box**
4" x 4" x 1-1/2"
(102mm x 102mm x 38mm)



**4" round new work non-metallic light fixture/fan box**
4" diameter x 2-3/16"
(102mm x 56mm)



**3-1/2" round new work non-metallic ceiling box**
3-1/2" diameter x 2-3/4"
(89mm x 70mm)



**4" round surface mount box**
4" diameter x 1-1/2"
(102mm x 38mm)
Requires SLD6RAD adapter



**4" round new work non-metallic box with hanger bar assembly**
4" diameter x 2-3/16" (102mm x 56mm)

This is a representative list of compatible junction boxes only. Information contained in this literature about other manufacturers' products is from published information made available by the manufacturer and is deemed to be reliable, but has not been verified. Cooper Lighting Solutions makes no specific recommendation on product selection and there are no warranties of performance or compatibility implied. Installer must determine that site conditions are suitable to allow proper installation of the mounting bracket in the box.

## Product Specifications

### Housing
- Non-electrically conductive polycarbonate frame.
- High impact diffuse polystyrene lens provides shielding to the light guide with no pixilation
- Stamped aluminum housing provides thermal cooling achieving L70 at 50,000 hours in IC and non-IC applications

### Gaskets
- Closed cell gasket achieves restrictive airflow and wet location requirements without additional caulking

### Optics
- Precision acrylic light guide organizes source flux into wide distribution with 1.2 – 1.4 spacing criteria useful for general area illumination

### LED
- Mid power LED array provide a uniform source with high efficiency and long life
- Available in 90 CRI minimum, R9 greater than 50 and color accuracy within 3 SDCM provide color accuracy and uniformity

### Driver
**SMD 120V**
- Integral 120V 50/60Hz constant current driver provides noise free operation
- Continuous, flicker-free dimming from 100% to 5% with select leading or trailing edge 120V phase cut dimmers
- Dimming to 5% is best assured using dimmers with low end trim adjustment. Consult dimmer manufacturer for compatibility and conditions of use. (Note some dimmers require a neutral in the wallbox.)
- Inline electrical quick connect and E26 adapter (provided) provides mains connections

**SMD 120-277V**
- Integrated 120-277V 60Hz constant current driver provides noise free operation
- SMD Universal Voltage (120-277V) configurations are recommended for use with compatible 0-10V DC
- low voltage dimmers only

### Mounting/Retention
- Adjustable spider plate allows for quick installation into both junction boxes and recessed housings
- Torsion springs and friction blades included

### Electrical Junction Box Mounting
- The SMD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation
- Suitable for installation in many 3-1/2" and 4" square, octagon, and round electrical junction boxes
  **Note:** SMD120-277V UNV is only compatible with junction boxes that provide minimum depth of 2-1/8"
- Installer must ensure compatibility of fit, wiring and proper mounting in the electrical junction box. This includes all applicable national and local electrical and building coded

### Recessed Housing Mounting
**Note:** Use the SMDACCKIT which includes torsion springs and Edison base adapter. (SOLD SEPERATELY)
- May be installed in IC recessed housings in direct contact with insulation
  **Note:** Not for use in recessed housing in direct contact with spray foam insulation. Refer to NEMA LSD 57-2013

### Designer Skins
### (Sold Separately)
- SMD skins are accessory rings in both round and square. These skins attach to the SMD for a permanent finish. Refer to the SMD accessories specification sheet for details
  – Matte White (Paintable)
  – Satin Nickel
  – Tuscan Bronze

### Compliance
- cULus Certified for use with Halo housings and for use with other's housings, , when used with SMDACCKIT (Sold Seperately) see instruction sheet for conditions of acceptability
- Wet and Damp Location listed, airtight per ASTM-E283
- Suitable for use in closets, compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5)
- EMI/RFI emissions per FCC 47CFR Part 15B
- Contains no mercury or lead and RoHS compliant.
- Photometric testing in accordance with IES LM-79-08
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11
- Can be used for State of California Title 24 high efficacy luminaire compliance, reference the California Energy Commission Title 20 Appliance Efficiency Database for current listings
- Can be used for International Energy Conservation Code (IECC) and high efficiency luminaire compliance
- ENERGY STAR® listed, reference database for current listings

### Warranty
- Five year limited warranty, consult website for details. www.cooperlighting.com/warranty

## Energy Data

### SMD6R6 / SMD6S6

| | Round | Square |
|---|---|---|
| Lumens (5000K models) | 777 | 800 |
| Input Power | 9 W | 9 W |
| Input Current | 0.085 A | 0.085 A |
| Efficiency | 86 lm/W | 85 lm/W |
| THDi | 8 | 8 |
| Input Voltage | 120V | |
| Frequency | 60 Hz | |
| CRI | 90 CRI | |
| Power Factor | 0.98 | |
| T Ambient | -30 - +40°C | |
| Sound Rating | Class A | |

### SMD6R12 / SMD6S12

| | Round | Square |
|---|---|---|
| Lumens (5000K models) | 1271 | 1345 |
| Input Power | 15 | 15 |
| Input Current | 0.129 A | 0.129 A |
| Efficiency | 85 lm/W | 88 lm/W |
| THDi | 12.6 | 12.6 |
| Input Voltage | 120V | |
| Frequency | 60 Hz | |
| CRI | 90 CRI | |
| Power Factor | 0.98 | |
| T Ambient | -30 - +40°C | |
| Sound Rating | Class A | |

### SMD6R12-E / SMD6S12-E

| | Round | Square |
|---|---|---|
| Lumens (5000K models) | 1357 | 1364 |
| Input Power | 14.5 | 14.5 |
| Input Current | 0.125 A (120V) 0.058 A (277V) | 0.125 A (120V) 0.058 A (277V) |
| Efficiency | 94 lm/W | 94 lm/W |
| THDi | 12.8 | 12.8 |
| Input Voltage | 120 - 277V | |
| Frequency | 60 Hz | |
| CRI | 90 CRI | |
| Power Factor | 0.99 (120V) 0.94 (277V) | |
| T Ambient | -30 - +40°C | |
| Sound Rating | Class A | |

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## Photometric Data
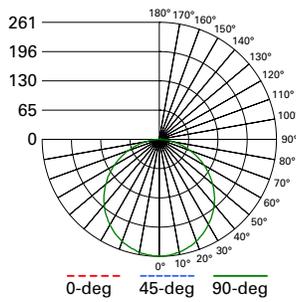


**SMD6R69SWH - 3000K.IES**

Spacing criterion: (0-180) 1.26
(90-270) 1.26
(Diagonal) 1.38

Beam Angle: 112°
Lumens: 757
Input Watts: 8.9 W
Efficacy: 85 LPW
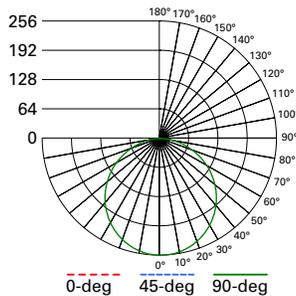Test Report:
SMD6R69SWH - 3000K.IES

| Zonal Lumen | Lumens | % Lumens |
|---|---|---|
| 0-30 | 201 | 26.6 |
| 0-40 | 330 | 43.6 |
| 0-60 | 585 | 77.4 |
| 0-90 | 752 | 99.4 |

CCT - Range of 2700K- 5000K

112°
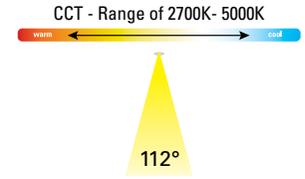
| SMD6R69SWH | CCT | Watts | Lumens | LPW | CRI |
|---|---|---|---|---|---|
| 600 Lumen 6" Round Selectable CCT | 2700K | 9.2 | 704 | 76.6 | 93 |
| | 3000K | 9.2 | 716 | 77.8 | 93 |
| | 3500K | 9.2 | 729 | 79.2 | 94 |
| | 4000K | 9.2 | 742 | 80.5 | 94 |
| | 5000K | 9.2 | 756 | 82.0 | 93 |

### PRODUCT SPECIFICATIONS

| | |
|---|---|
| **Lumens** | 716 |
| **Watts** | 9.2 |
| **Lumens Per Watt** (Efficacy) | 77.8 |
| **Color Accuracy** (CRI) | 93 |
| **Light Color (CCT)** Correlated Color Temperature (CCT) | 3000K |

warm white | soft white | bright white
2700K | 3000K | 4500K | 6500K

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**SMD6S69SWH - 3000K.IES**

Spacing criterion: (0-180) 1.28
(90-270) 1.28
(Diagonal) 1.40

Beam Angle: 113°
Lumens: 752
Input Watts: 9.2 W
Efficacy: 82 LPW
Test Report:
SMD6S69SWH - 3000K.IES

| Zonal Lumen | Lumens | % Lumens |
|---|---|---|
| 0-30 | 199 | 26.4 |
| 0-40 | 326 | 43.4 |
| 0-60 | 580 | 77.2 |
| 0-90 | 748 | 99.5 |

CCT - Range of 2700K- 5000K

113°
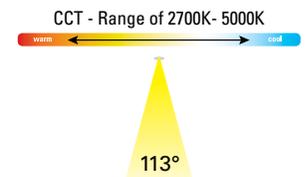
| SMD6S69SWH | CCT | Watts | Lumens | LPW | CRI |
|---|---|---|---|---|---|
| 600 Lumen 6" Square Selectable CCT | 2700K | 9.6 | 720 | 75.3 | 93 |
| | 3000K | 9.6 | 735 | 76.7 | 93 |
| | 3500K | 9.6 | 750 | 78.2 | 94 |
| | 4000K | 9.6 | 764 | 79.5 | 94 |
| | 5000K | 9.6 | 774 | 80.7 | 92 |

### PRODUCT SPECIFICATIONS

| | |
|---|---|
| **Lumens** | 735 |
| **Watts** | 9.6 |
| **Lumens Per Watt** (Efficacy) | 76.6 |
| **Color Accuracy** (CRI) | 93 |
| **Light Color (CCT)** Correlated Color Temperature (CCT) | 3000K |

warm white | soft white | bright white
2700K | 3000K | 4500K | 6500K

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## Photometric Data

### SMD6R129SWH - 3000K.IES



| | 0-deg | 45-deg | 90-deg |
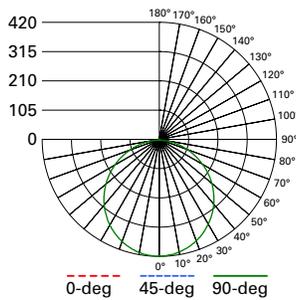
Spacing criterion: (0-180) 1.26
(90-270) 1.26
(Diagonal) 1.38

Beam Angle: 112°
Lumens: 1221
Input Watts: 14.9 W
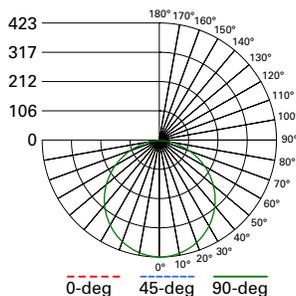Efficacy: 82 LPW
Test Report:
SMD6R129SWH - 3000K.IES

| Zonal Lumen | Lumens | % Lumens |
|---|---|---|
| 0-30 | 325 | 26.6 |
| 0-40 | 533 | 43.6 |
| 0-60 | 945 | 77.4 |
| 0-90 | 1215 | 99.5 |

CCT - Range of 2700K- 5000K



112°
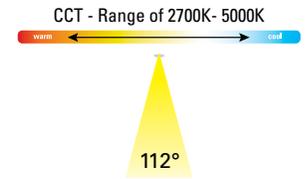
| SMD6R129SWH | CCT | Watts | Lumens | LPW | CRI |
|---|---|---|---|---|---|
| 1200 Lumen 6" Round Selectable CCT | 2700K | 15.2 | 1135 | 74.7 | 92 |
| | 3000K | 15.2 | 1156 | 76.1 | 93 |
| | 3500K | 15.2 | 1178 | 77.5 | 94 |
| | 4000K | 15.2 | 1198 | 78.8 | 95 |
| | 5000K | 15.2 | 1226 | 80.7 | 93 |

### PRODUCT SPECIFICATIONS

| | |
|---|---|
| **Lumens** | **1156** |
| **Watts** | **15.2** |
| **Lumens Per Watt (Efficacy)** | **76.1** |
| **Color Accuracy (CRI)** | **93** |
| **Light Color (CCT)** Correlated Color Temperature (CCT) | **3000K** |

| warm white | soft white | bright white |
|---|---|---|
| 2700K | 3000K 4500K | 6500K |

### SMD6S129SWH - 3000K.IES



| | 0-deg | 45-deg | 90-deg |

Spacing criterion: (0-180) 1.26
(90-270) 1.26
(Diagonal) 1.40

Beam Angle: 113°
Lumens: 1241
Input Watts: 14.9 W
Efficacy: 83 LPW
Test Report:
SMD6S129SWH - 3000K.IES

| Zonal Lumen | Lumens | % Lumens |
|---|---|---|
| 0-30 | 329 | 26.5 |
| 0-40 | 539 | 43.5 |
| 0-60 | 960 | 77.3 |
| 0-90 | 1237 | 99.6 |

CCT - Range of 2700K- 5000K



113°
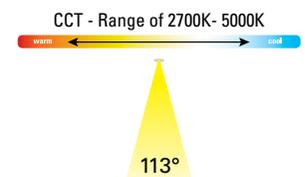
| SMD6S129SWH | CCT | Watts | Lumens | LPW | CRI |
|---|---|---|---|---|---|
| 1200 Lumen 6" Square Selectable CCT | 2700K | 15.5 | 1153 | 74.4 | 92 |
| | 3000K | 15.5 | 1177 | 75.9 | 93 |
| | 3500K | 15.5 | 1206 | 77.8 | 95 |
| | 4000K | 15.5 | 1224 | 79.0 | 95 |
| | 5000K | 15.4 | 1256 | 81.6 | 93 |

### PRODUCT SPECIFICATIONS

| | |
|---|---|
| **Lumens** | **1177** |
| **Watts** | **15.5** |
| **Lumens Per Watt (Efficacy)** | **75.9** |
| **Color Accuracy (CRI)** | **93** |
| **Light Color (CCT)** Correlated Color Temperature (CCT) | **3000K** |

| warm white | soft white | bright white |
|---|---|---|
| 2700K | 3000K 4500K | 6500K |

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## Photometric Data
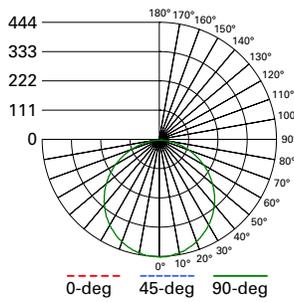
### SMD6R129SWHE - 3000K.IES



**Spacing criterion:** (0-180) 1.24
(90-270) 1.24
(Diagonal) 1.38

**Beam Angle:** 112°
**Lumens:** 1289
**Input Watts:** 14.5 W
**Efficacy:** 89 LPW
**Test Report:**
SMD6R129SWHE - 3000K.IES

| Zonal Lumen | Lumens | % Lumens |
|---|---|---|
| 0-30 | 343 | 26.6 |
| 0-40 | 562 | 43.6 |
| 0-60 | 997 | 77.3 |
| 0-90 | 1282 | 99.5 |

CCT - Range of 2700K- 5000K

112°
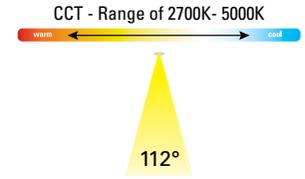
| SMD6R129SWHE | CCT | Watts | Lumens | LPW | CRI |
|---|---|---|---|---|---|
| 1200 Lumen 6" Round Selectable CCT 120-277V | 2700K | 14.7 | 1237 | 84.1 | 92 |
| | 3000K | 14.7 | 1262 | 85.9 | 93 |
| | 3500K | 14.7 | 1289 | 87.7 | 95 |
| | 4000K | 14.7 | 1311 | 89.2 | 95 |
| | 5000K | 14.7 | 1306 | 88.8 | 93 |

### PRODUCT SPECIFICATIONS

| | |
|---|---|
| **Lumens** | 1262 |
| **Watts** | 14.7 |
| **Lumens Per Watt (Efficacy)** | 85.9 |
| **Color Accuracy (CRI)** | 93 |
| **Light Color (CCT)** Correlated Color Temperature (CCT) | 3000K |

warm white | soft white | bright white
2700K | 3000K | 4500K | 6500K
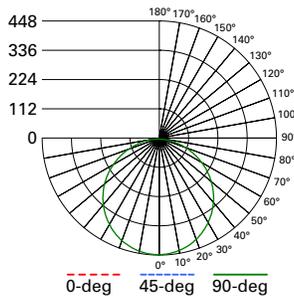
### SMD6S129SWHE - 3000K.IES



**Spacing criterion:** (0-180) 1.26
(90-270) 1.26
(Diagonal) 1.40

**Beam Angle:** 114°
**Lumens:** 1312
**Input Watts:** 14.7 W
**Efficacy:** 89 LPW
**Test Report:**
SMD6S129SWHE - 3000K.IES

| Zonal Lumen | Lumens | % Lumens |
|---|---|---|
| 0-30 | 348 | 26.5 |
| 0-40 | 570 | 43.5 |
| 0-60 | 1014 | 77.3 |
| 0-90 | 1307 | 99.6 |

CCT - Range of 2700K- 5000K

114°
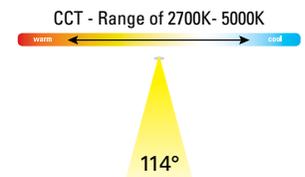
| SMD6S129SWHE | CCT | Watts | Lumens | LPW | CRI |
|---|---|---|---|---|---|
| 1200 Lumen 6" Square Selectable CCT 120-277V | 2700K | 15.1 | 1225 | 81.1 | 92 |
| | 3000K | 15.1 | 1251 | 82.8 | 93 |
| | 3500K | 15.1 | 1277 | 84.6 | 95 |
| | 4000K | 15.1 | 1299 | 86.0 | 95 |
| | 5000K | 15.1 | 1327 | 87.9 | 93 |

### PRODUCT SPECIFICATIONS

| | |
|---|---|
| **Lumens** | 1251 |
| **Watts** | 15.1 |
| **Lumens Per Watt (Efficacy)** | 82.8 |
| **Color Accuracy (CRI)** | 93 |
| **Light Color (CCT)** Correlated Color Temperature (CCT) | 3000K |

warm white | soft white | bright white
2700K | 3000K | 4500K | 6500K