

# Solace

## 3" Shallow Square Downlights

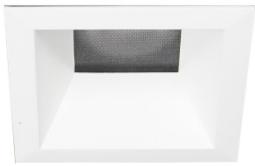


### Features

Solace 3" Downlights are the complete downlight family for any ceiling surface and low plenum ceiling. Round or Square apertures, available as downlight, adjustable or wallwash. Optional Solite lensing provides whisper quiet aesthetics. The trim options available as trimmed, trimless or millwork. The pinhole and shower pinhole trim makes this a complete a downlight to design the entire space with the same look.

### Product Overview

|                   |  |
|-------------------|--|
| Type:             | Shallow Square Downlight                                 |
| Wattage:          | 8, 12, 17  |
| Max Lumen Output: | 1649 lm; 98.1 lm/W (Flood optics)                        |
| CBCP:             | 7639 (Flood optics)                                      |
| Color Temp:       | 2700K, 3000K, 3500K, 4000K                               |
| CRI:              | 83 typ.<br>90+ typ.<br>CrispWhite & 3K Class A available |
| Dimming:          | TRIAC & ELV - 5% Dim<br>0-10V - 1% Dim                   |



Downlight  
(shown with Solite lens)



Downlight Trimless

### PROJECT:



Pinhole Downlight



Pinhole Downlight  
Trimless



Pinhole Downlight Shower

### TYPE:

#### Fixture Type

| Round/Square | New Construction | Trimmed | Trimless | Millwork |
|--------------|------------------|---------|----------|----------|
| Yes          | Yes              | Yes     | Yes      | Yes      |

See separate spec sheet for Round trim fixture

#### Performance Chart (see page 5 for full breakdown)

| Watts | Delivered Lumens | LPW | CBCP | Color Temp |
|-------|------------------|-----|------|------------|
| 8     | 874              | 104 | 4049 | 3000K-83   |
| 12    | 1286             | 103 | 5958 | 3000K-83   |
| 17    | 1649             | 98  | 7639 | 3000K-83   |

Data is based on 3000K-83 IES files available on website.

Data is Flood optic (no Solite). See page 6-7 for other beam spreads.

#### Electrical Data

|      | 8W           |       | 12W          |       | 17W          |       |
|------|--------------|-------|--------------|-------|--------------|-------|
|      | System Watts | Amps  | System Watts | Amps  | System Watts | Amps  |
| 120V | 8            | 0.067 | 12           | 0.10  | 17           | 0.142 |
| 277V | 8            | 0.029 | 12           | 0.043 | 17           | 0.061 |

Electronic constant current LED driver



# Solace Square Downlights

3" Shallow Square Downlights



## PROJECT:

## TYPE:

### Housing/Frame Ordering Information

| 1   | 2   | 3   | 4  | 5  | 6   | 7  | 8  |
|---|---|---|--|--|---|--|--|
| <p><b>1</b> <u>Model</u><br/> <b>SOL-SD-NC</b> (New Construction &amp; Insulated Ceiling (IC rated))<br/> <b>SOL-SD-CP</b> (Chicago Plenum (CCEA) housing)<br/> <b>SOL-SD-IC</b> (Insulated Ceiling (IC rated) &amp; Air Tight)</p> | <p><b>2</b> <u>Style</u><br/> <b>T</b> - trimmed, 2" max ceiling thickness<br/> <b>TL</b> - trimless, 5/8" max ceiling thickness<br/> <b>MWK</b> - millwork (for 1/2" - 11/16" ceiling thickness)<br/> <b>MWK1</b> - millwork (for 3/4" - 1-1/2" ceiling thickness)<br/> <b>MWK2</b> - millwork (for 1-1/2" - 2" ceiling thickness)</p> | <p><b>3</b> <u>Wattage</u> (3000K-83, FL beam. See pg 5 for performance table)<br/> <b>8</b> (874 lm)<br/> <b>12</b> (1286 lm)<br/> <b>17</b> (1649 lm)</p> | <p><b>4</b> <u>Voltage</u><br/> <b>120/277</b> - universal voltage</p> | <p><b>5</b> <u>Beam Spreads</u><br/> <b>SP</b> - spot, 15°<br/> <b>FL</b> - flood, 25°<br/> <b>WF</b> - wide flood, 36°<br/> <b>VWF</b> - very wide flood, 55°</p> | <p><b>6</b> <u>Color Temp</u><br/> <b>83 CRI</b>                      <u>90+ CRI</u><br/> <b>27</b> - 2700K-83      <b>279</b> - 2700K-90+      <b>CRISP*</b> - CrispWhite<br/> <b>30</b> - 3000K-83      <b>309</b> - 3000K-90+      <b>3CLA*</b> - 3K Class A<br/> <b>35</b> - 3500K-83      <b>359</b> - 3500K-90+<br/> <b>40*</b> - 4000K-83      <b>409*</b> - 4000K-90+<br/> <b>* Consult factory for lead time</b></p> | <p><b>7</b> <u>Driver</u> (for non-dimming, select LE/TE option)<br/> <b>LE/TE</b> - TRIAC/ELV, 5% dim<br/> <b>0-10V</b> - 0-10V, 1% dim</p> | <p><b>8</b> <u>Options</u><br/> <b>HB49</b> - hanger bars from min 29" to max 49" (26" hanger bars included as default option)</p> |

### Trim Ordering Information

| 1   | 2   | 3   | 4   |
|---|---|---|---|
| <p><b>1</b> <u>Model</u><br/> <b>SOL-SD</b> (downlight)<br/> <b>SOL-SPD</b> (pinhole downlight)<br/> <b>SOL-SPDSHW</b> (pinhole downlight shower)</p> | <p><b>2</b> <u>Style</u><br/> <b>T</b> - trimmed<br/> <b>TL</b> - trimless (not available for use with shower trims)<br/> <b>MWK</b> - millwork (not available for use with shower trims)</p> | <p><b>3</b> <u>Finish - SD trim</u><br/> <u>Trimmed</u><br/> <b>MBW</b> - matte black, white flange<br/> <b>MWW</b> - matte white, white flange<br/> <b>SLVW</b> - matte silver, white flange<br/> <b>MBB</b> - matte black, black flange<br/> <b>SLVS</b> - matte silver, silver flange<br/> <u>Finish - SPD/SPDSHW trims (Trimmed/Trimless/Millwork)</u><br/> <b>MB</b> - matte black<br/> <b>MW</b> - matte white<br/> <b>SLV</b> - matte silver</p> | <p><b>4</b> <u>Options/Accessories</u><br/> <b>SOL</b> - solite beam softening lens (comes standard with SPDSHW trim)</p> |

# Solace Square Downlights

3" Shallow Square Downlights



## PROJECT:

## TYPE:

### Specifications

#### Application

Retail and commercial ambient and task lighting

#### Housing Construction

20 ga. steel painted matte black  
Extruded aluminum heatsink  
Formed aperture plate with 5/8" lip (GB-standard)  
Cast aluminum plaster frame with perforated face (for trimless option)  
Integral adjustable locking mounting bars  
Inherently protected

#### Reflector Trim Construction

Die-cast reflector  
Pinhole trim features die cast faceplate and baffle  
Pinhole shower trim features solite glass lens and silicone flange gasket

#### Optical

Beam spreads: Spot, 15°; Flood, 25°; Wide Flood, 36°;  
Very Wide Flood, 55°  
Optional **SOL** - solite beam softening lens (up to ~5° widening of beam)

#### LED

Color Temp Options: 2700K, 3000K, 3500K, 4000K  
CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)  
90+ typ. (2700K, 3000K, 3500K, 4000K)  
CrispWhite\* & Class A\*\* 3000K (high gamut) available  
R9 Values: 11 (83 CRI), 55 (92 CRI)  
Binning: 3 MacAdam (SDCM)  
Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

*\*CrispWhite: CrispWhite Technology delivers the warmth of colors expected from a high 90 CRI solution but also creates the natural crisp white color that is pleasing to the eye. It creates the most impactful lighting ever available, by revealing the richest whites and vibrant colors that pop.*

*\*\*Class A LED: Class A LED's have a CRI > 80 and a GAI > 80. CRI defines color "Naturalness" and GAI defines color "Saturation." Both being high delivers rich colors and pure whites.*

#### Electrical

Wattage: 8, 12, 17  
Electronic constant current LED driver, 120/277VAC input  
**This product complies with IEEE C62.41 for surge endurance up to 2.5KV. Amerlux® recommends using additional surge protection with this unit (supplied by others), surge and over voltage damage is not covered under warranty.**  
Emergency option available through circuiting/inverter only

#### Drivers

LE/TE - Leading Edge, TRIAC, forward phase/Trailing Edge, ELV, reverse phase (standard)  
0-10V also available  
See pages 8-9 for more dimming information

#### Finish (Trim)

Powder coat paint

#### Mounting

26" Hanger bars included. Side brackets allow for rigid conduit pipe mounting along with additional 1/2" adjustment of housing vertical position  
Optional **HB49** - hanger bars from min 29" to max 49" available  
**Trimmed Fixture:**  
For use in grid or sheetrock ceilings, 5/8" - 2" standard  
**Trimless Fixture (not available with Shower trim):**  
For use in sheetrock ceilings, max ceiling thickness 5/8"  
For sheetrock ceilings beyond 5/8" consult factory  
**Millwork Fixture:**  
Millwork extension collars are based on ceiling material specifications and thickness. Provides flush trim appearance level with ceiling material. Max thickness 2"

#### Certifications

CSA damp as tested to UL 1598 standards  
Wet location (SHW trim) - for indoor, high humidity/moisture from below applications only  
IC/AT rated

#### Warranty

5 year limited warranty

#### Weight

Housing and trim - 5 lbs.

# Solace Square Downlights

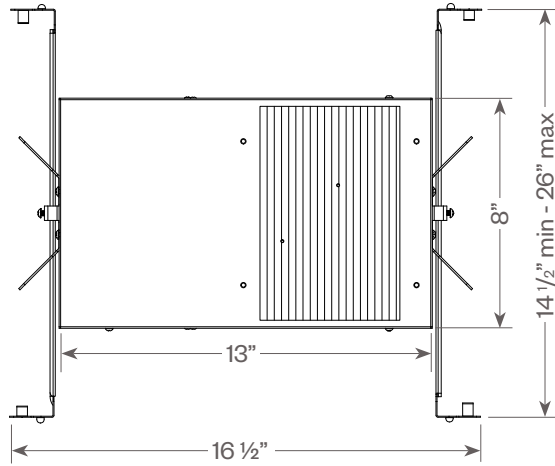
3" Shallow Square Downlights



## PROJECT:

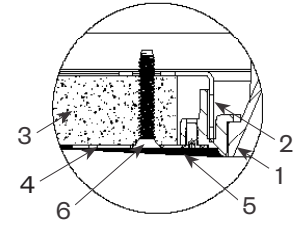
## TYPE:

### Solace Square Downlights



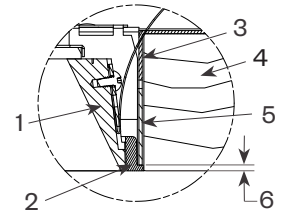
### Plaster Frame Installation Detail (for trimless fixture only)

1. Reflector Trim
2. Aperture plate
3. Ceiling 5/8"
4. Cast Aluminum Plaster Frame
5. Plaster Skim Coat (by others)
6. 6-32 Type F Thread Cutting Screw



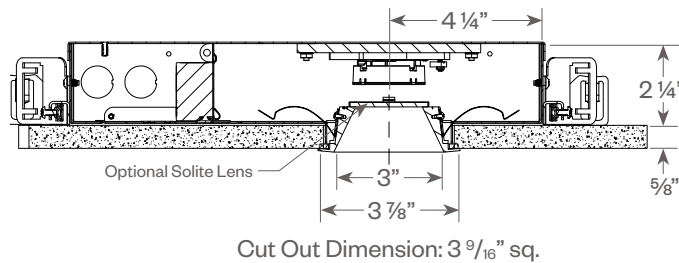
### Millwork Detail

1. Reflector Trim
2. Millwork Ring
3. Aperture Plate
4. Wood Ceiling 2" Max
5. Extension collar (see ordering information for ceiling thicknesses)
6. 1/16" required for trim to be flush with ceiling

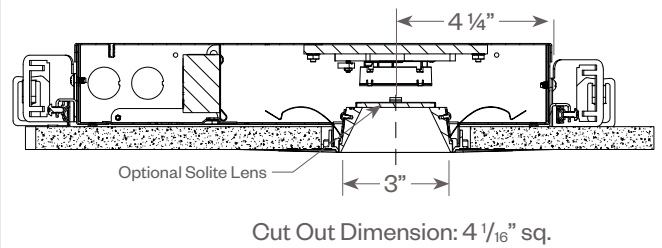


## Square Downlight

### Trimmed

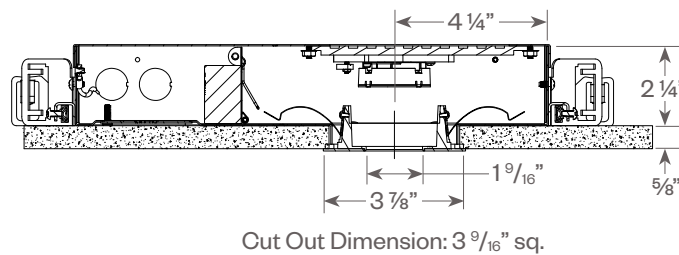


### Trimless

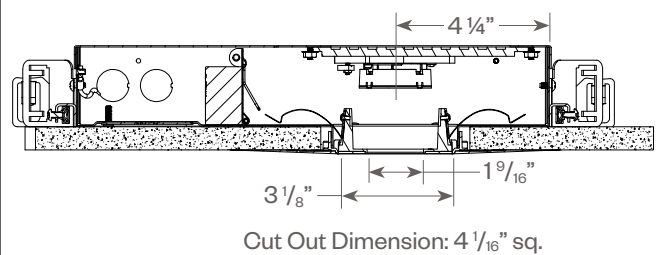


## Square Pinhole Downlight

### Trimmed

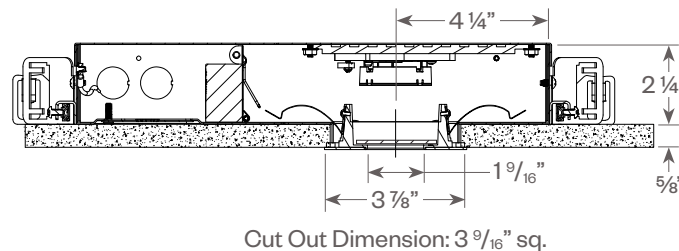


### Trimless

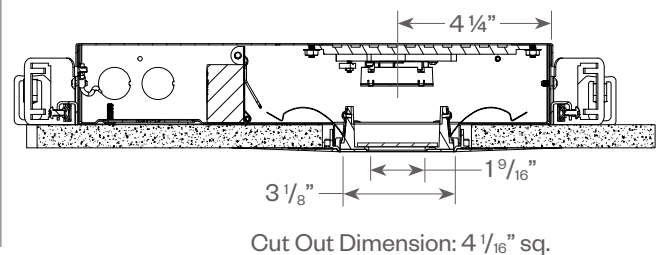


## Square Pinhole Downlight Shower

### Trimmed



### Trimless



# Solace Square Downlights

3" Shallow Square Downlights



PROJECT:

TYPE:

## Solace Round Downlights Performance Breakdown (no Solite)

| Wattage | Color Temp | SP (15°) |     | FL (25°) |     | WF (36°) |     | VWF (55°) |     | Pinhole Spot (15°) |     |
|---------|------------|----------|-----|----------|-----|----------|-----|-----------|-----|--------------------|-----|
|         |            | Lumens   | LPW | Lumens   | LPW | Lumens   | LPW | Lumens    | LPW | Lumens             | LPW |
| 8W      | 27         | 818      | 97  | 856      | 102 | 785      | 93  | 839       | 100 | 419                | 50  |
|         | 30         | 835      | 99  | 874      | 104 | 801      | 95  | 856       | 102 | 428                | 51  |
|         | 35         | 851      | 101 | 891      | 106 | 817      | 97  | 873       | 104 | 436                | 52  |
|         | 40         | 876      | 104 | 918      | 109 | 841      | 100 | 899       | 107 | 449                | 53  |
|         | 279        | 701      | 83  | 734      | 87  | 673      | 80  | 719       | 86  | 359                | 43  |
|         | 309        | 726      | 86  | 760      | 91  | 697      | 83  | 745       | 89  | 372                | 44  |
|         | 359        | 751      | 89  | 787      | 94  | 721      | 86  | 770       | 92  | 385                | 46  |
|         | 409        | 751      | 89  | 787      | 94  | 721      | 86  | 770       | 92  | 385                | 46  |
|         | CRISP      | 543      | 65  | 568      | 68  | 521      | 62  | 556       | 66  | 278                | 33  |
|         | 3CLA       | 584      | 70  | 612      | 73  | 561      | 67  | 599       | 71  | 300                | 36  |
| 12W     | 27         | 1204     | 96  | 1260     | 101 | 1155     | 92  | 1235      | 99  | 617                | 49  |
|         | 30         | 1229     | 98  | 1286     | 103 | 1179     | 94  | 1260      | 101 | 630                | 50  |
|         | 35         | 1253     | 100 | 1312     | 105 | 1202     | 96  | 1285      | 103 | 642                | 51  |
|         | 40         | 1290     | 103 | 1351     | 108 | 1238     | 99  | 1323      | 106 | 661                | 53  |
|         | 279        | 1032     | 83  | 1080     | 86  | 990      | 79  | 1058      | 85  | 529                | 42  |
|         | 309        | 1069     | 86  | 1119     | 90  | 1025     | 82  | 1096      | 88  | 548                | 44  |
|         | 359        | 1106     | 88  | 1158     | 93  | 1061     | 85  | 1134      | 91  | 567                | 45  |
|         | 409        | 1106     | 88  | 1158     | 93  | 1061     | 85  | 1134      | 91  | 567                | 45  |
|         | CRISP      | 799      | 64  | 836      | 67  | 766      | 61  | 819       | 66  | 409                | 33  |
|         | 3CLA       | 860      | 69  | 900      | 72  | 825      | 66  | 882       | 71  | 441                | 35  |
| 17W     | 27         | 1544     | 92  | 1616     | 96  | 1481     | 88  | 1583      | 94  | 791                | 47  |
|         | 30         | 1575     | 94  | 1649     | 98  | 1511     | 90  | 1615      | 96  | 807                | 48  |
|         | 35         | 1607     | 95  | 1682     | 100 | 1541     | 92  | 1647      | 98  | 823                | 49  |
|         | 40         | 1654     | 98  | 1731     | 103 | 1587     | 94  | 1696      | 101 | 848                | 50  |
|         | 279        | 1323     | 79  | 1385     | 82  | 1269     | 76  | 1357      | 81  | 678                | 40  |
|         | 309        | 1370     | 81  | 1435     | 85  | 1315     | 78  | 1405      | 84  | 702                | 42  |
|         | 359        | 1418     | 84  | 1484     | 88  | 1360     | 81  | 1454      | 86  | 727                | 43  |
|         | 409        | 1418     | 84  | 1484     | 88  | 1360     | 81  | 1454      | 86  | 727                | 43  |
|         | CRISP      | 1024     | 61  | 1072     | 64  | 982      | 58  | 1050      | 62  | 525                | 31  |
|         | 3CLA       | 1103     | 66  | 1154     | 69  | 1058     | 63  | 1131      | 67  | 565                | 34  |

# Solace Square Downlights

3" Shallow Square Downlights



**PROJECT:**

**TYPE:**

**FIXTURE DATA:** (Complete photometric data (.ies format) available upon request)

**MULTIPLYING FACTORS:** (Multiplying Factor is based on 3000K-83 120V IES file on website)

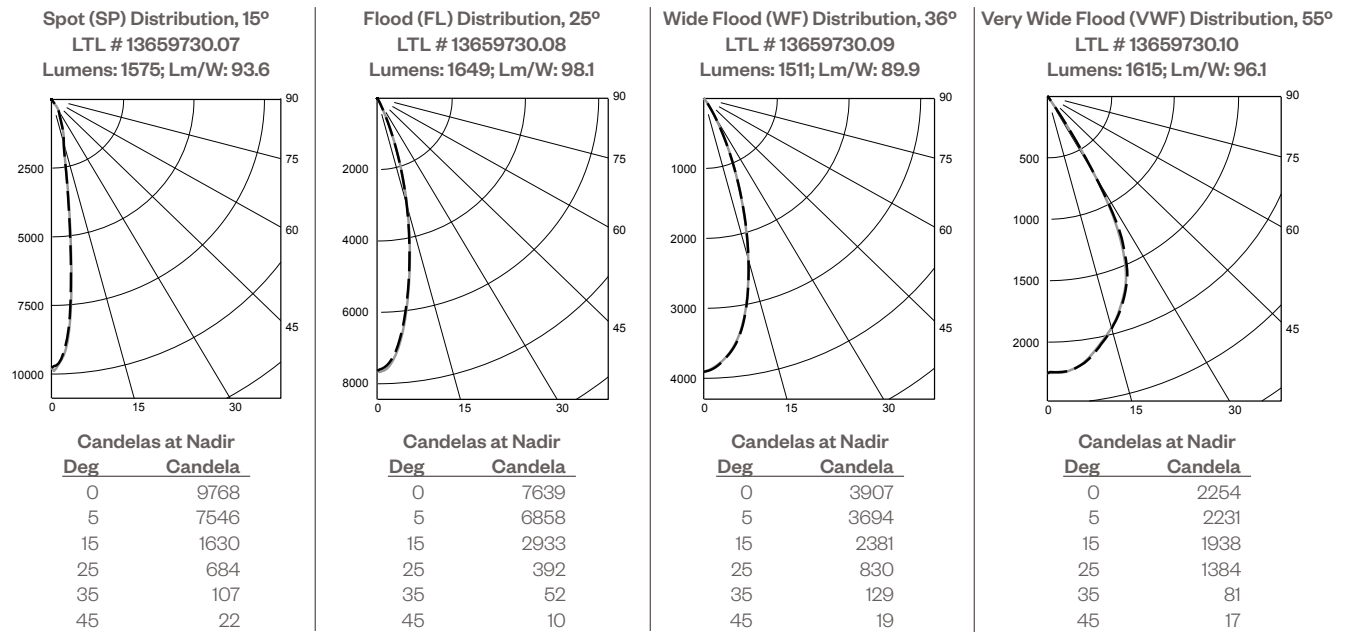
| Wattage: | 8W   | 12W  | 17W |
|----------|------|------|-----|
| Factor:  | 0.53 | 0.78 | 1.0 |

| Lens:   | Solite |
|---------|--------|
| Factor: | 0.95   |

| CCT:    | 2700K-83 | 3000K-83 | 3500K-83 | 4000K-83 |
|---------|----------|----------|----------|----------|
| Factor: | 0.98     | 1.0      | 1.02     | 1.05     |

| CCT:    | 2700K-90+ | 3000K-90+ | 3500K-90+ | 4000K-90+ | CRISP | 3CLA |
|---------|-----------|-----------|-----------|-----------|-------|------|
| Factor: | 0.84      | 0.87      | 0.90      | 0.90      | 0.65  | 0.70 |

**Solace Square Downlight (SOL-SD) - 17W, 3000K-83**



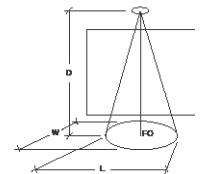
**Application Data:**

0° Aiming Angle  
Horizontal  
Footcandles

|                 | D     | FC  | L    | W    |
|-----------------|-------|-----|------|------|
| Spot            | 5.0'  | 391 | 1.3  | 1.3  |
|                 | 7.5'  | 174 | 1.9  | 1.9  |
|                 | 10.0' | 98  | 2.8  | 2.8  |
|                 | 12.5' | 63  | 3.4  | 3.4  |
| Flood           | 5.0'  | 306 | 2.1  | 2.1  |
|                 | 7.5'  | 136 | 3.2  | 3.2  |
|                 | 10.0' | 77  | 4.3  | 4.3  |
|                 | 12.5' | 49  | 5.4  | 5.4  |
| Wide Flood      | 5.0'  | 157 | 2.9  | 2.9  |
|                 | 7.5'  | 70  | 4.4  | 4.4  |
|                 | 10.0' | 39  | 5.7  | 5.7  |
|                 | 12.5' | 25  | 7.2  | 7.2  |
| Very Wide Flood | 5.0'  | 91  | 4.4  | 4.4  |
|                 | 7.5'  | 40  | 6.6  | 6.6  |
|                 | 10.0' | 23  | 8.9  | 9.0  |
|                 | 12.5' | 15  | 11.1 | 11.3 |

**Notes and Definitions:**

- Beam spread is to 50% center beam candlepower (CBCP).
- D=Distance to floor or wall.
- FC=Footcandles on floor or wall at center beam aiming location.
- L=Effective Visual Beam length in feet (50% of maximum footcandle level).
- W=Effective Visual Beam width in feet (50% of maximum footcandle level).
- CB=Distance across or down to center beam location.



# Solace Square Downlights

3" Shallow Square Downlights



## PROJECT:

## TYPE:

**FIXTURE DATA:** (Complete photometric data (.ies format) available upon request)

**MULTIPLYING FACTORS:** (Multiplying Factor is based on 3000K-83 120V IES file on website)

| Wattage: | 8W   | 12W  | 17W |
|----------|------|------|-----|
| Factor:  | 0.53 | 0.78 | 1.0 |

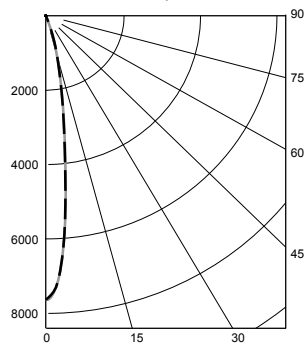
| Lens:   | Solite |
|---------|--------|
| Factor: | 0.95   |

| CCT:    | 2700K-83 | 3000K-83 | 3500K-83 | 4000K-83 |
|---------|----------|----------|----------|----------|
| Factor: | 0.98     | 1.0      | 1.02     | 1.05     |

| CCT:    | 2700K-90+ | 3000K-90+ | 3500K-90+ | 4000K-90+ | CRISP | 3CLA |
|---------|-----------|-----------|-----------|-----------|-------|------|
| Factor: | 0.84      | 0.87      | 0.90      | 0.90      | 0.65  | 0.70 |

### Solace Square Pinhole Downlight (SOL-SPD) - 17W, 3000K-83

Spot (SP) Distribution, 15°  
LTL # 13659730.11  
Lumens: 807; Lm/W: 48



#### Candelas at Nadir

| Deg | Candela |
|-----|---------|
| 0   | 7636    |
| 5   | 5557    |
| 15  | 1062    |
| 25  | 45      |
| 35  | 10      |
| 45  | 4       |

### Application Data:

| Spot  | 0° Aiming Angle<br>Horizontal<br>Footcandles |     |     |   |
|-------|--|-----|-----|---|
|       | D  | FC  | L   | W |
| 5.0'  | 305  | 1.3 | 1.3 |   |
| 7.5'  | 136  | 1.9 | 1.9 |   |
| 10.0' | 77   | 2.7 | 2.7 |   |
| 12.5' | 49   | 3.3 | 3.3 |   |

#### Notes and Definitions:

Beam spread is to 50% center beam candlepower (CBCP).

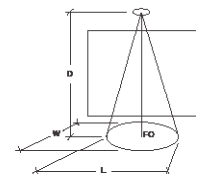
**D**=Distance to floor or wall.

**FC**=Footcandles on floor or wall at center beam aiming location.

**L**=Effective Visual Beam length in feet (50% of maximum footcandle level).

**W**=Effective Visual Beam width in feet (50% of maximum footcandle level).

**CB**=Distance across or down to center beam location.



# Solace Square Downlights

3" Shallow Square Downlights



**PROJECT:**

**TYPE:**

**DIMMING COMPATIBILITY:**

Amerlux® Solace fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc) may affect dimming performance.

**--- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---**

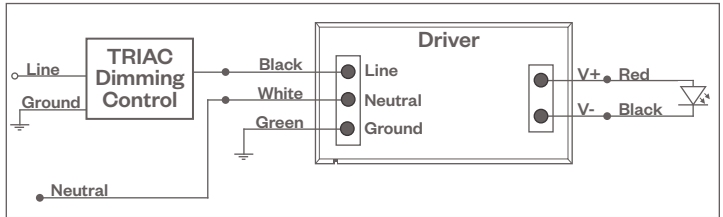
**TRIAC (Forward Phase) DIMMING (Standard)**

Utilizes "Standard" incandescent dimmers that are in wide use in installations across the US. Best for retrofit applications where TRIAC dimmers are installed.

**Notes:**

- 120VAC or 277VAC\*
- Dims down to less than 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements per dimming manufacturer

**TRIAC Wiring Diagram**



**Compatible Dimmers†:**

| Wall Box (Incandescent Style, Wattage as required) |                  | Central System       |
|--|------------------|----------------------|
| Lutron "Diva"                                      | Lutron "Vareo"   | Lutron "GP" Panel    |
| Lutron "Nova-T"                                    | Lutron "Skylark" | Lutron Grafik Eye QS |
| Lutron "Maestro"                                   |                  |                      |

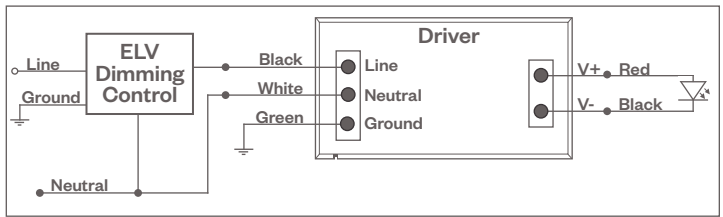
**ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)**

Utilizes specialized "ELV" dimmers.

**Notes:**

- 120VAC or 277VAC\*
- Dims down to less than 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements

**ELV Wiring Diagram**



**Compatible Dimmers†:**

| Wall Box (ELV Style) |                    | Central System                              |
|----------------------|--------------------|---|
| Lutron "Diva"        | Leviton "Surslide" | Lutron "GP" Panel with PHPM-PA Interface    |
| Lutron "Nova-T"      | Leviton "Vizio"    | Lutron Grafik Eye QS with PHPM-PA Interface |
| Lutron "Maestro"     |                    |   |
| Lutron "Vareo"       |                    |   |
| Lutron "Skylark"     |                    |   |

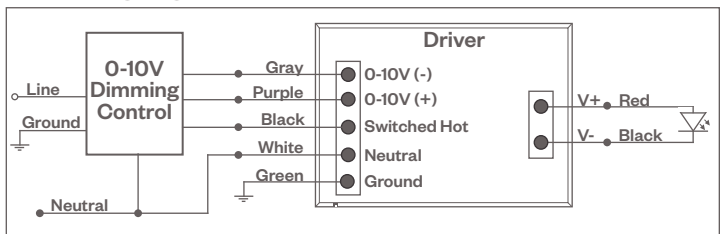
**0-10V - DIMMING (-0-10V Option)**

Integrates into a variety of building management and daylighting controls

**Notes:**

- 120VAC or 277VAC\*
- Dims down to 1% light output
- Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

**0-10V Wiring Diagram**



**Compatible Dimmers†:**

| Wall Box                                    | Central System                           |
|---|--|
| Lutron "Diva" - DVTV with PP-120H Interface | Leviton Renoir II 0-10V                  |
|   | Lutron Grafik Eye with GRX-TVI Interface |

**Notes:**

\* Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer installation instructions for 277VAC wiring diagrams.

† The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.