

# 6" LED Retrofit Downlight

## RLBP6

LED Downlight 800-1500 Lumens 120-277V AC 0-10V/Triac/ELV Dimming 800/1100 IC Rated 1500 Non-IC Rated

| RETR       | OFICÎENT | 6" |
|------------|----------|----|
| PROJECT:   |          |    |
| FIRM NAME: |          |    |
| DATE:      | TYPE:    |    |





Aperture: Nominal 6 Ceiling Cutout: 67/8" Maximum Ceiling Thickness: 11/2" For conversion to millimeters,

multiply inches by 25.4 Not to Scale

### **APPLICATIONS:**

LiteBox Plus Retroficient® is designed for use with the RLBP6 recessed housings. Three lumen output levels that are comparable to 26 and 32 watt CFL, while consuming only 10-20 watts respectively. Suitable for use with continuous room side ambient temperature up to 25°C. Flicker-free dimming to 5% with most standard dimmers. (See Dimming Notes).

### **HOUSING:**

Galvanized steel housing construction. Housing adjusts from  $\frac{1}{2}$ " to 1-  $\frac{1}{2}$ " thick ceiling. Notched mounting frame for easy alignment. Housing includes universal J-box with removable cover, 1/2" knock outs and grounding pigtail. Installation uses adjustable slide bars that lock unit securely to ceiling.

High efficacy LED light engine, 2700K to 4000K, 90 CRI, integrated with durable aluminum heat sink for excellent thermal management. System designed for optimal life and lumen maintenance (60,000 hours at 70% lumen maintenance per TM-21).

### LENS/REFLECTOR:

All LiteBox Plus LED modules are provided standard with a diffused optical grade acrylic lens for uniform illumination and superior glare control. Reflector options include clear anodized and powder coat finishes which create aesthetic ceiling appearance and visually comfortable 55° cutoff.

### **LED DRIVER:**

Integral high efficiency LED driver 120-277V 50/60Hz with >0.9 power factor. The driver is compatible with 120 through 277 input voltage, as well as either 0-10V low voltage control or 120V Triac control. (See Dimming Notes for recommended dimmers.) Output over-voltage, over-current, and short circuit protection. Life expectancy of 60,000 hours minimum at recommended ambient temperatures.

### **INSTALLATION:**

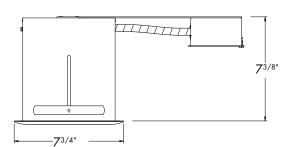
For Retrofit Application: Use with Prescolite's RLBP6 LED housings. Quick connector mates directly to housing connector without a screw base adapter for California Title 24 compliance. Rapid installation of trim with driver quick connect system, and standard retention springs.

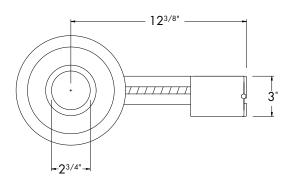
### **CERTIFICATIONS:**

CSA certified to US and Canadian safety standards. Suitable for wet locations. Approved for through wiring. 8L and 11L outputs are IC rated, 15L output is Non-IC rated. ENERGY STAR qualified and can be used to comply with California Title 24 nonresidential usage.

### **WARRANTY:**

5 year warranty See www.prescolite.com for details.





See page 3 for trim lineart.

EXAMPLE: RLBP6-6LBP15L30KWH CATALOG NUMBER:

| HOUSING                      | - | TRIM                                    | OUTPUT   | LED COLOR   | CRI | TRIM COLOR                                 | TRIM OPTIONS                      | - | ACCESSORIES  |
|------------------------------|---|---|--|---|-----|--|-----------------------------------|---|--|
| □ RLBP6<br>6" LED<br>Housing |   | 6LBP<br>6" LED<br>Downlight<br>120-277V | ■ 8L<br>800 Lumen<br>■ 11L<br>1100<br>Lumen<br>■ 15L <sup>2</sup><br>1500<br>Lumen | □ 27K 2700 Kelvin 30K 3000 Kelvin 35K 3500 Kelvin 40K 4000 Kelvin | CRI | WH White AZ Clear Annodized BL Black Z Zet | □ Blank Downlight □ ww³ Wall Wash |   | □ <b>UFO-LED25¹</b> Dual-Lite 25 Watt Recessed Mounted Battery Back Up |

- 1 See www.dual-lite.com for details. 2 15L option is Non-IC rated.
- 3 WW kicker color iwll be white regardless of trim color.



## PHOTOMETRIC DATA Litebox Plus LED- 6" LED Retrofit Downlight and Wall Wash

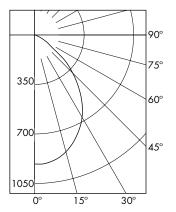
| ELECTRICAL DATA            | 6LBP15L  | 6LBP15LWW | 6LBP11L                | 6LBP11LWW                   | 6LBP8L | 6LBP8LWW |
|----------------------------|--|-----------|------------------------|-----------------------------|--------|----------|
| INPUT VOLTAGE              |  |           | 120                    | D-277V                      |        |          |
| INPUT FREQUENCY            |  |           | 50,                    | /60Hz                       |        |          |
| INPUT CURRENT 120V         | 0.17A  | 0.17A     | 0.10A                  | 0.10A                       | 0.09A  | 0.09A    |
| INPUT CURRENT 277V         | 0.07A  | 0.07A     | 0.04A                  | 0.04A                       | 0.04A  | 0.04A    |
| INPUT POWER                | 20.2W  | 20.2W     | 12.0W                  | 12.0W                       | 10.4W  | 10.4W    |
| CONSTANT CURRENT OUTPUT    | 500mA  | 500mA     | 300mA                  | 300mA                       | 250mA  | 250mA    |
| DELIVERED LUMENS           | 1539   | 1336      | 1050                   | 936                         | 808    | 712      |
| EFFICACY (LUMENS PER WATT) | 76.2   | 66.1      | 87.5                   | 78.0                        | 77.7   | 68.5     |
| POWER FACTOR               |  |           | >                      | 0.90                        |        |          |
| THD                        |  |           | <                      | 20%                         |        |          |
| emi filtering              |  |           | FCC 47CFR Part 15, Cla | ass B (120V) Class A (277V) |        |          |
| OPERATING TEMPERATURE      | -30°C  | to 25°C   | -30℃                   | C to 35°C                   | -30°C  | to 35°C  |
| DIMMING                    | 0-10V & TRIAC (See Dimming Notes for more information) |           |                        |                             |        |          |

Over-voltage, over-current, short circuit protected

### RLBP6 6LBP15L30KWH

LED Light Engine: 3000K 92 CRI System Wattage: 20.2W Fixture delivered lumens: 1539

Fixture Efficacy: 76.2 Spacing Criteria: 1.1



| CANDELA DISTRIBUTION |        |  |  |  |  |  |  |  |  |
|----------------------|--------|--|--|--|--|--|--|--|--|
| DEG                  | CANDEL |  |  |  |  |  |  |  |  |
| 0                    | 912    |  |  |  |  |  |  |  |  |
| 5                    | 911    |  |  |  |  |  |  |  |  |
| 15                   | 855    |  |  |  |  |  |  |  |  |
| 25                   | 742    |  |  |  |  |  |  |  |  |
| 35                   | 584    |  |  |  |  |  |  |  |  |
| 45                   | 381    |  |  |  |  |  |  |  |  |
| 55                   | 144    |  |  |  |  |  |  |  |  |
| 65                   | 53     |  |  |  |  |  |  |  |  |
| <i>7</i> 5           | 12     |  |  |  |  |  |  |  |  |
| 85                   | 4      |  |  |  |  |  |  |  |  |
| 90                   | 0      |  |  |  |  |  |  |  |  |
|                      |        |  |  |  |  |  |  |  |  |

| Toct | NIa  | 16  | $\cap$ 1 | 320 |
|------|------|-----|----------|-----|
| iest | INO. | 10. | U I      | 320 |

Tested at 25°C Ambient in accordance to IESNA LM-79-2008

| Single Unit, Initial Footcandles, 30" Work Plane |    |          | Ceiling to Floor | oor Multiple Units, Initial Footcandles, 30" Work Plan |    |          | rk Plane    |  |     |   |          |   |       |
|--|----|----------|------------------|--|----|----------|-------------|--|-----|---|----------|---|-------|
| Nadir  |    | 10°      |                  | 20°  |    | 30°      | Height (ft) | Spacing is Maximum Over Work Plane, SMH= |     |   | SMH= 1.1 |   |       |
| FC   | FC | Dia (ft) | FC               | Dia (ft)   | FC | Dia (ft) |             | Fixture Spacing (ft)                     | RCR | 2 | RCR      | 5 | RCR 7 |
| 74   | 67 | 1        | 52               | 3  | 33 | 4        | 6           | 4.0                                      | 95  |   | 72       | ! | 60    |
| 30   | 27 | 2        | 21               | 4  | 13 | 6        | 8           | 6.0                                      | 39  |   | 29       | 1 | 24    |
| 14   | 13 | 3        | 10               | 6  | 6  | 9        | 10.5        | 9.0                                      | 18  |   | 14       |   | 12    |
| 10   | 9  | 3        | 7                | 7  | 4  | 11       | 12          | 10.0                                     | 13  |   | 10       | 1 | 8     |

| ZONAL LUMEN SUMMARY |        |            |  |  |  |  |  |  |  |
|---------------------|--------|------------|--|--|--|--|--|--|--|
| ZONE                | LUMENS | %LUMINAIRE |  |  |  |  |  |  |  |
| 0-30                | 668    | 43.4       |  |  |  |  |  |  |  |
| 0-40                | 1031   | 67.0       |  |  |  |  |  |  |  |
| 0-60                | 1467   | 95.3       |  |  |  |  |  |  |  |
| 0-90                | 1539   | 100.0      |  |  |  |  |  |  |  |

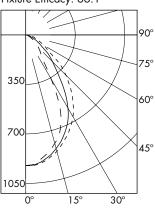
### **COEFFICIENTS OF UTILIZATION**

Zonal Cavity Method

|                   |       | % Effective Ceiling Cavity Reflectance |      |     |         |         |     |       |      |      |
|-------------------|-------|--|------|-----|---------|---------|-----|-------|------|------|
| ξ                 |       | 80%   70%   50%   30%                  |      |     |         |         |     |       |      |      |
| Cavity            |       | 20% Effective Floor Cavity Reflectance |      |     |         |         |     |       |      |      |
| Room Cav<br>Ratio |       |  |      | % \ | Wall Re | eflecta | nce |       |      |      |
| Ro                | 70    | 50                                     | 30   | 10  | 70      | 30      | 50  | 30    | 50   | 30   |
| 1                 | 112   | 108                                    | 105  | 102 | 109     | 103     | 102 | 100   | 98   | 96   |
| 3                 | 97    | 89                                     | 82   | 77  | 95      | 81      | 85  | 80    | 82   | 78   |
| 5                 | 84    | 74                                     | 66   | 61  | 82      | 66      | 71  | 65    | 69   | 63   |
| 7                 | 74    | 62                                     | 55   | 49  | 72      | 54      | 60  | 53    | 58   | 53   |
| 9                 | 65    | 53                                     | 46   | 41  | 64      | 46      | 51  | 45    | 50   | 45   |
| RLBP              | 6 6LB | P15L                                   | 30KW | Ή   |         |         | Tes | t No. | 16.0 | 1320 |

### RLBP6 6LBP15L30KWHWW

LED Light Engine: 3000K 92 CRI System Wattage: 20.2W Fixture delivered lumens: 1336 Fixture Efficacy: 66.1



### **CANDELA DISTRIBUTION**

| -          |             |     |     |
|------------|-------------|-----|-----|
| DEG        | 0           | 90  | 180 |
| 0          | 923         | 923 | 923 |
| 5          | 920         | 914 | 903 |
| 15         | 852         | 831 | 794 |
| 25         | <i>7</i> 36 | 696 | 575 |
| 35         | 583         | 475 | 209 |
| 45         | 401         | 268 | 129 |
| 55         | 194         | 134 | 69  |
| 65         | 105         | 66  | 28  |
| <i>7</i> 5 | 59          | 29  | 18  |
| 85         | 6           | 3   | 6   |
| 90         | 0           | 0   | 0   |
|            |             |     |     |

| 7.5°     | 5 | 920  | 914   |  |
|----------|---|------|-------|--|
| / \// \/ | 9 | , 20 | / ! - |  |

| DEG        | 0           | 90  | 180 |
|------------|-------------|-----|-----|
| 0          | 923         | 923 | 923 |
| 5          | 920         | 914 | 903 |
| 15         | 852         | 831 | 794 |
| 25         | <i>7</i> 36 | 696 | 575 |
| 35         | 583         | 475 | 209 |
| 45         | 401         | 268 | 129 |
| 55         | 194         | 134 | 69  |
| 65         | 105         | 66  | 28  |
| <i>7</i> 5 | 59          | 29  | 18  |
| 85         | 6           | 3   | 6   |
| 90         | 0           | 0   | 0   |
|            |             |     |     |

Tested at 25°C Ambient in accordance to IESNA LM-79-2008

| LUMINANCE DATA IN CANDELA/SQ. METER |       |        |         |  |  |  |  |  |  |
|-------------------------------------|-------|--------|---------|--|--|--|--|--|--|
| Angle in Vertical                   | 0 DEG | 90 DEG | 180 DEG |  |  |  |  |  |  |
| 45°                                 | 31077 | 20770  | 9997    |  |  |  |  |  |  |
| 55°                                 | 18535 | 12803  | 6592    |  |  |  |  |  |  |
| 65°                                 | 13615 | 8558   | 3631    |  |  |  |  |  |  |
| 75°                                 | 12492 | 6140   | 3811    |  |  |  |  |  |  |
| 85°                                 | 3773  | 1886   | 3773    |  |  |  |  |  |  |

|   | 3' DIS | TANC | E FIX |          |          | D OUT FRO |    |    | IRFACE |    |    |
|---|--------|------|-------|----------|----------|-----------|----|----|--------|----|----|
|   | _      | •    | •     | <u> </u> | <b>V</b> |           | V  | V  | V      | •  | •  |
| 1 | 6      | 5    | 3     | 2        | 1        | 10        | 9  | 10 | 8      | 7  | 8  |
| 2 | 12     | 10   | 6     | 3        | 1        | 18        | 18 | 18 | 15     | 12 | 15 |
| 3 | 16     | 14   | 9     | 4        | 2        | 25        | 26 | 25 | 20     | 19 | 20 |
| 4 | 13     | 12   | 9     | 5        | 3        | 26        | 25 | 26 | 20     | 19 | 20 |
| 5 | 10     | 9    | 7     | 5        | 3        | 23        | 23 | 22 | 17     | 17 | 17 |
| 6 | 7      | 7    | 6     | 4        | 3        | 19        | 19 | 19 | 14     | 14 | 14 |
| 7 | 5      | 5    | 4     | 4        | 3        | 15        | 15 | 15 | 12     | 12 | 12 |
| 8 | 4      | 4    | 3     | 3        | 2        | 13        | 13 | 12 | 10     | 10 | 10 |
| 9 | 3      | 3    | 3     | 2        | 2        | 10        | 10 | 10 | 8      | 8  | 8  |

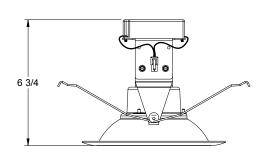
Refer to www.prescolite.com for additional photometric tests (IES Files).

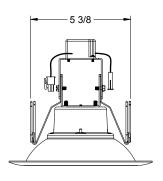


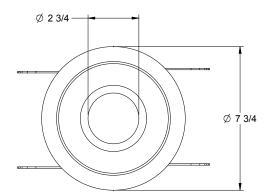
Test No. 16.01324



# Litebox Plus LED- 6" LED Retrofit Downlight and Wall Wash







**6LBP** 

### **DIMMING NOTES:**

LiteBox Plus LED modules are designed to be compatible with many dimmer controls. Incandescent type dimmers are not recommended. The following is a list of known compatible dimmer controls:

### **ELV DIMMERS**

| <u>Manufacturer</u> | Part Number           |
|---------------------|-----------------------|
| Lutron              | Diva Series DVELV-300 |
| Leviton             | Renior II AWRMG-EAW   |

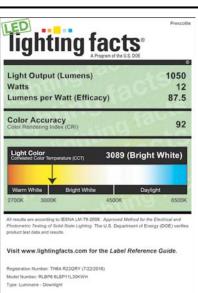
### 0-10V DIMMERS

| <u>Manufacturer</u> | Part Number |
|---------------------|-------------|
| Lutron              | NTFTV       |
| Leviton             | AWSMT-7     |
| Wattstopper         | ADF-120277  |

Dimming capabilities will vary depending on the dimmer control, load, and circuit installation. Always refer to dimmer manufacturer instructions or a controls specialist for specific requirements.

Dimmer control brand names where identified above are tradenames or registered trademarks of each respective company.







R6LBP8L

R6LBP11L R6LBP15L



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