

DESCRIPTION

Recessed 6-inch LED lens downlight is available in various distributions, lumen and CRI/CCT options. Suitable for commercial construction and can be used for both new or renovation work. Insulation must be kept 3" from top and sides of housing. Use for general area lighting where high efficiency and visual comfort are required.

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

SPECIFICATION FEATURES

MECHANICAL

Frame

Boat shaped galvanized steel frame with adjustable plaster lip accommodates ceilings up to 1/2" - 2" thick. May be used for new construction or remodeling installations. Provided with (2) remodel clips to secure frame when installed from below the ceiling.

Mounting Brackets

Bar hanger receivers adjust 2" vertically from above the ceiling or thru the aperture. Use with No Fuss™ bar hangers or with 1/2" EMT. Removable to facilitate installation from below the ceiling.

No Fuss™ Bar Hangers

Captive preinstalled bar hanger locks to tee grid with a screwdriver or pliers. Centering mechanism allows consistent positioning of fixtures.

OPTICAL

LED Module

Proximity phosphors over chip on board LEDs provide a uniform source with high efficiency and no pixilation. Available in 80 or 90 CRI minimum, accuracy within 3 SDCM provides color uniformity. See ordering information for available CRI / CCT options. Passive thermal management achieves L70 at 50,000 hours in non IC applications. Integral diffuse lens provides visual shielding. Integral connector allows quick connection to housing flex.

Reflector

One piece parabolic aluminum reflector provides cutoff for a visually comfortable optic. Attaches to LED module with (3) speed clamps minimizing light leaks to lens. Self-flanged standard with an optional white painted flange.

Trim Retention

Reflectors are retained with two torsion springs holding the flange tightly to the finished ceiling surface.

ELECTRICAL Junction Box

(6) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs. Listed for (12) #12 AWG (six in, six out) 90°C conductors and feed thru branch wiring.

Driver

Integral UNV 120 - 277V 50/60 Hz constant current driver provides noise free operation. For 347V input use Halo transformer H347 or H347200. Continuous, flicker-free dimming from 100% to 10% with leading or trailing edge phase cut at 120V or 0 -10V analog control.

Emergency Option

Provides 90 minutes of standby lighting meeting most life safety codes for egress lighting. Available with both integral or remote charge indicator and test switch.

Compliance

- cULus listed for wet location
- cCSAus listed for wet location
- IP66 Ingress Protection Rated
- Insulation must be kept 3" from top and sides.
- Airtight per ASTM-E283.
- Optional City of Chicago environmental air (CCEA) marking for plenum applications.
- EMI/RFI emissions per FCC 47CFR Part 18 non-consumer limits.
- 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 to comply with California Title 24 Non-Residential Lighting Controls requirements as a LED Luminaire.
- ENERGY STAR® listed for commercial applications, reference database for current listings.



PD612
PD618

PDM6

61V

1,200 & 1,800
Lumen Series

LED

6-Inch Aperture
Lens Downlight

| Lumens | 1200 Series | |
|----------------|-------------|--------|
| Input Voltage | 120V | 277V |
| Input Current | 0.19A | 0.1A |
| Input Power | 23 W | 23.2 W |
| Efficiency | 73 LpW | 73 LpW |
| Inrush Current | 2.14A | 4.1A |

| Lumens | 1800 Series | |
|----------------|-------------|--------|
| Input Voltage | 120V | 277V |
| Input Current | 0.24A | 0.12A |
| Input Power | 29.5 W | 29.4 W |
| Efficiency | 70 LpW | 70 LpW |
| Inrush Current | 2.88A | 6.94A |

| |
|-----------------------|
| THD: ≤ 20% |
| PF: ≥ 0.90 |
| T Ambient -30 - +40°C |
| Sound Rating ≤ 22dba |

ORDERING INFORMATION

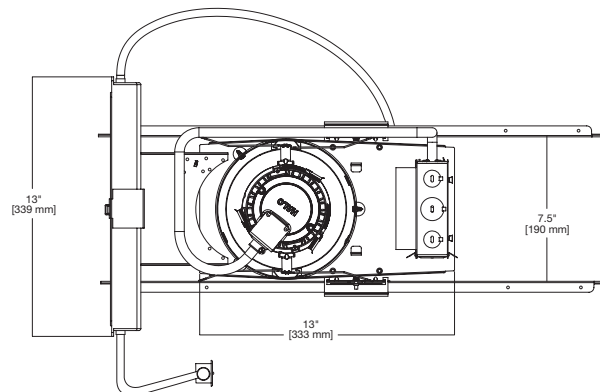
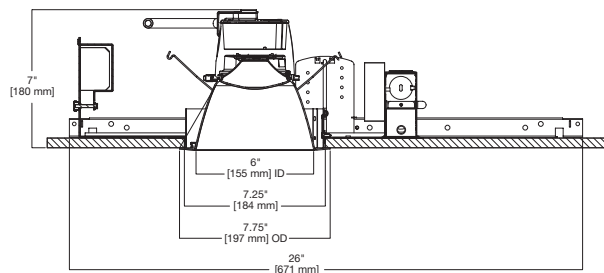
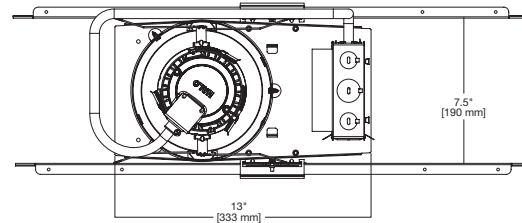
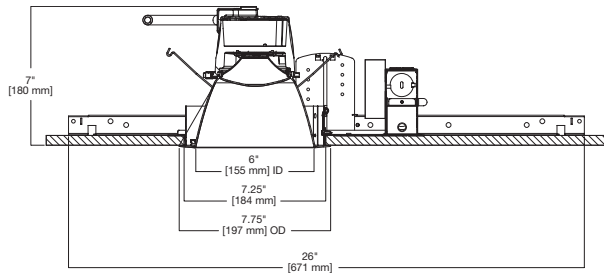
SAMPLE NUMBER: PD612ED010REM-PDM6827-61VC

A complete luminaire consists of a housing, LED module and reflector, order separately.

| Housing | Lumens | Driver | Options | LED Module | CRI/CCT |
|---|--|---|---|--|--|
| PD6 = 6" aperture LED downlight PD6CP = 6" aperture LED downlight, CCEA listed for City of Chicago plenum requirements | 12 = 1,200 lumens (nominal) 18 = 1,800 lumens (nominal) | ED010 = 120-277V 50/60Hz, 0-10V and LE/ TE phase cut dimming | REM = Emergency operation with remote indicator and test switch IEM = Emergency operation with integral indicator and test switch, 60 Hz only (REM and IEM options not available with PD6CP housing) | PDM6 = Downlight LED module for PD6 housing, provides 1,200 or 1,800 lumens (nominal) depending on connected housing type | 827 = 80 CRI, 2700K CCT 927 = 90 CRI, 2700K CCT 830 = 80 CRI, 3000K CCT 930 = 90 CRI, 3000K CCT 835 = 80 CRI, 3500K CCT 935 = 90 CRI, 3500K CCT 840 = 80 CRI, 4000K CCT 940 = 90 CRI, 4000K CCT |

| Reflector | Finish Option | Flange Option | Accessories |
|--|--|--|--|
| 61V = 6" vertical parabolic reflector 61VEM = 6" vertical parabolic reflector for IEM | C = Specular clear G = Specular gold H = Semi-specular clear W = White (white flange) BB = Black baffle (white flange) WB = White baffle (white flange) | Blank = Polished flange standard with C, G & H reflector finishes Blank = White flange standard with W, BB, & WB WF = White flange option available with C, G, & H reflector finishes | HB128APK = L channel hanger bar, 26", 'No-Fuss', pair (replacement) RMB22 = 22" long wood joist mounting bars, pair H347 = Step down transformer for 347V input H347 = Step down transformer for 347V input, 75VA max H347200 = Step down transformer for 347V input, 200VA max |

DIMENSIONS



COMPLIANCE TABLE

1200 LUMEN

| 80 CRI | | | | | | | | |
|-----------|----------------------|-----|----------------------|-----|----------------------|-----|----------------------|-----|
| Catalog # | PD612ED010 - PDM6827 | | PD612ED010 - PDM6830 | | PD612ED010 - PDM6835 | | PD612ED010 - PDM6840 | |
| | LUMENS | LPW | LUMENS | LPW | LUMENS | LPW | LUMENS | LPW |
| 61VC | 1528 | 66 | 1589 | 69 | 1644 | 71 | 1673 | 73 |
| 61VCWF | 1538 | 67 | 1600 | 70 | 1655 | 72 | 1684 | 73 |
| 61VG | 1519 | 66 | 1580 | 69 | 1635 | 71 | 1663 | 72 |
| 61VGWF | 1483 | 64 | 1542 | 67 | 1596 | 69 | 1623 | 71 |
| 61VH | 1410 | 61 | 1467 | 64 | 1518 | 66 | 1544 | 67 |
| 61VHWF | 1412 | 61 | 1469 | 64 | 1520 | 66 | 1546 | 67 |
| 61VW | 1397 | 61 | 1453 | 63 | 1503 | 65 | 1530 | 67 |
| 61VWB | 1495 | 65 | 1555 | 68 | 1609 | 70 | 1637 | 71 |
| 61VBB | 1363 | 59 | 1417 | 62 | 1467 | 64 | 1492 | 65 |

| 90 CRI | | | | | | | | |
|-----------|----------------------|-----|----------------------|-----|----------------------|-----|----------------------|-----|
| Catalog # | PD612ED010 - PDM6927 | | PD612ED010 - PDM6930 | | PD612ED010 - PDM6935 | | PD612ED010 - PDM6940 | |
| | LUMENS | LPW | LUMENS | LPW | LUMENS | LPW | LUMENS | LPW |
| 61VC | 1186 | 52 | 1274 | 55 | 1379 | 60 | 1378 | 60 |
| 61VCWF | 1193 | 52 | 1283 | 56 | 1388 | 60 | 1388 | 60 |
| 61VG | 1179 | 51 | 1267 | 55 | 1371 | 60 | 1370 | 60 |
| 61VGWF | 1150 | 50 | 1236 | 54 | 1338 | 58 | 1338 | 58 |
| 61VH | 1094 | 48 | 1176 | 51 | 1273 | 55 | 1272 | 55 |
| 61VHWF | 1096 | 48 | 1178 | 51 | 1275 | 55 | 1274 | 55 |
| 61VW | 1084 | 47 | 1165 | 51 | 1261 | 55 | 1260 | 55 |
| 61VWB | 1160 | 50 | 1247 | 54 | 1349 | 59 | 1348 | 59 |
| 61VBB | 1057 | 46 | 1136 | 49 | 1230 | 53 | 1229 | 53 |

1800 LUMEN

| 80 CRI | | | | | | | | |
|-----------|----------------------|-----|----------------------|-----|----------------------|-----|----------------------|-----|
| Catalog # | PD618ED010 - PDM6827 | | PD618ED010 - PDM6830 | | PD618ED010 - PDM6835 | | PD618ED010 - PDM6840 | |
| | LUMENS | LPW | LUMENS | LPW | LUMENS | LPW | LUMENS | LPW |
| 61VC | 1856 | 63 | 1936 | 66 | 2009 | 68 | 2045 | 69 |
| 61VCWF | 1868 | 63 | 1949 | 66 | 2022 | 69 | 2058 | 70 |
| 61VG | 1845 | 63 | 1925 | 65 | 1997 | 68 | 2032 | 69 |
| 61VGWF | 1801 | 61 | 1879 | 64 | 1949 | 66 | 1984 | 67 |
| 61VH | 1713 | 58 | 1787 | 61 | 1854 | 63 | 1887 | 64 |
| 61VHWF | 1715 | 58 | 1789 | 61 | 1856 | 63 | 1889 | 64 |
| 61VW | 1697 | 58 | 1770 | 60 | 1836 | 62 | 1869 | 63 |
| 61VWB | 1816 | 62 | 1894 | 64 | 1965 | 67 | 2000 | 68 |
| 61VBB | 1655 | 56 | 1727 | 59 | 1791 | 61 | 1823 | 62 |

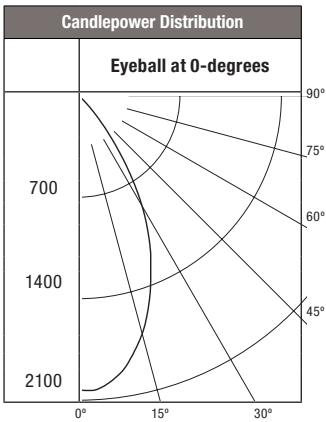
| 90 CRI | | | | | | | | |
|-----------|----------------------|-----|----------------------|-----|----------------------|-----|----------------------|-----|
| Catalog # | PD618ED010 - PDM6927 | | PD618ED010 - PDM6930 | | PD618ED010 - PDM6935 | | PD618ED010 - PDM6940 | |
| | LUMENS | LPW | LUMENS | LPW | LUMENS | LPW | LUMENS | LPW |
| 61VC | 1448 | 49 | 1555 | 53 | 1679 | 57 | 1701 | 58 |
| 61VCWF | 1457 | 49 | 1566 | 53 | 1690 | 57 | 1712 | 58 |
| 61VG | 1439 | 49 | 1546 | 52 | 1669 | 57 | 1691 | 57 |
| 61VGWF | 1405 | 48 | 1509 | 51 | 1629 | 55 | 1650 | 56 |
| 61VH | 1336 | 45 | 1435 | 49 | 1549 | 53 | 1569 | 53 |
| 61VHWF | 1338 | 45 | 1437 | 49 | 1552 | 53 | 1572 | 53 |
| 61VW | 1324 | 45 | 1422 | 48 | 1535 | 52 | 1555 | 53 |
| 61VWB | 1416 | 48 | 1522 | 52 | 1642 | 56 | 1664 | 56 |
| 61VBB | 1291 | 44 | 1387 | 47 | 1497 | 51 | 1517 | 51 |

ES, T24 ES = ENERGY STAR® Qualified
T24 = Can be used to comply with California Title 24 Non-Residential

PHOTOMETRY

PD612ED010- PDM6835-61VC

Spacing Criteria = 0.84
Lumens per Watt = 71.5 LpW
Test No. P113874
Test Model: PD612ED010- PDM6835-61VC



| Candela Distribution | |
|----------------------|---------|
| Degrees Vertical | Candela |
| 0* | 2031 |
| 5 | 2012 |
| 15 | 1700 |
| 25 | 1175 |
| 35 | 546 |
| 45 | 103 |
| 55 | 11 |
| 65 | 3 |
| 75 | 0 |
| 85 | 0 |
| 90 | 0 |

*CBCP

| Luminance | |
|-----------------------------------|-------------------|
| (Average Candela/M ²) | |
| Degree | Avg. 0° Luminance |
| 45 | 7993 |
| 55 | 1032 |
| 65 | 428 |
| 75 | 0 |
| 85 | 0 |

| Cone of Light Footcandles | | | |
|-------------------------------|---------------------------|------------|---------|
| Distance to Illuminated Plane | Initial Nadir Footcandles | Beam (ft.) | |
| | | L Length | W Width |
| 5.5' | 67.1 | 4.4 | 4.4 |
| 7' | 41.4 | 5.8 | 5.8 |
| 8' | 31.7 | 6.6 | 6.6 |
| 9' | 25.1 | 7.4 | 7.4 |
| 10' | 20.3 | 8.2 | 8.2 |
| 12' | 14.1 | 10 | 10 |

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.
Footcandle values are initial, apply appropriate light loss factors where necessary.

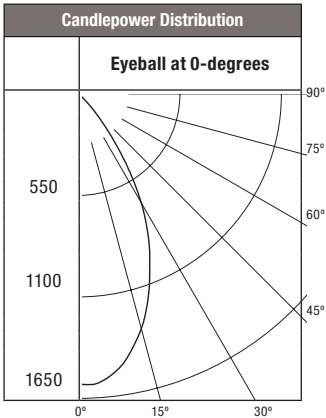
| Zonal Lumen Summary | | |
|---------------------|--------|-----------|
| Zone | Lumens | % Fixture |
| 0-30 | 1193 | 72.5 |
| 0-40 | 1535 | 93.3 |
| 0-60 | 1638 | 99.6 |
| 0-90 | 1644 | 100 |

Scaling factor for the Battery back up:

- 1800 Lumen = 0.33
- 1200 Lumen = 0.27

PD612ED010- PDM6930-61VC

Spacing Criteria = 0.84
Lumens per Watt = 55.4 LpW
Test No. P113877
Test Model: PD612ED010- PDM6930-61VC



| Candela Distribution | |
|----------------------|---------|
| Degrees Vertical | Candela |
| 0* | 1574 |
| 5 | 1559 |
| 15 | 1317 |
| 25 | 910 |
| 35 | 423 |
| 45 | 80 |
| 55 | 8 |
| 65 | 2 |
| 75 | 0 |
| 85 | 0 |
| 90 | 0 |

*CBCP

| Luminance | |
|-----------------------------------|-------------------|
| (Average Candela/M ²) | |
| Degree | Avg. 0° Luminance |
| 45 | 6194 |
| 55 | 803 |
| 65 | 324 |
| 75 | 0 |
| 85 | 0 |

| Cone of Light Footcandles | | | |
|-------------------------------|---------------------------|------------|---------|
| Distance to Illuminated Plane | Initial Nadir Footcandles | Beam (ft.) | |
| | | L Length | W Width |
| 5.5' | 52 | 4.4 | 4.4 |
| 7' | 32.1 | 5.8 | 5.8 |
| 8' | 24.6 | 6.6 | 6.6 |
| 9' | 19.4 | 7.4 | 7.4 |
| 10' | 15.7 | 8.2 | 8.2 |
| 12' | 10.9 | 10 | 10 |

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.
Footcandle values are initial, apply appropriate light loss factors where necessary.

| Zonal Lumen Summary | | |
|---------------------|--------|-----------|
| Zone | Lumens | % Fixture |
| 0-30 | 924 | 72.5 |
| 0-40 | 1189 | 93.3 |
| 0-60 | 1269 | 99.6 |
| 0-90 | 1274 | 100 |

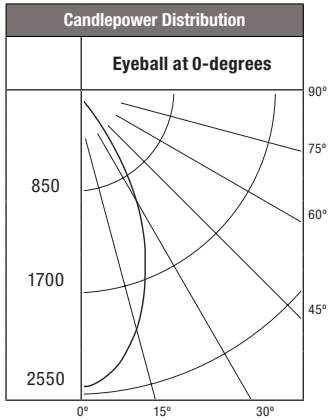
Scaling factor for the Battery back up:

- 1800 Lumen = 0.33
- 1200 Lumen = 0.27

PHOTOMETRY

PD618ED010- PDM6835-61VC

Spacing Criteria = 0.84
Lumens per Watt = 68.1 LpW
Test No. P113858
Test Model: PD618ED010- PDM6835-61VC



| Candela Distribution | |
|----------------------|---------|
| Degrees Vertical | Candela |
| 0* | 2481 |
| 5 | 2457 |
| 15 | 2077 |
| 25 | 1435 |
| 35 | 667 |
| 45 | 126 |
| 55 | 13 |
| 65 | 4 |
| 75 | 0 |
| 85 | 0 |
| 90 | 0 |

*CBCP

| Luminance | |
|-----------------------------------|-------------------|
| (Average Candela/M ²) | |
| Degree | Avg. 0° Luminance |
| 45 | 9761 |
| 55 | 1271 |
| 65 | 519 |
| 75 | 0 |
| 85 | 0 |

| Cone of Light Footcandles | | | |
|-------------------------------|---------------------------|------------|---------|
| Distance to Illuminated Plane | Initial Nadir Footcandles | Beam (ft.) | |
| | | L Length | W Width |
| 5.5' | 79 | 4.4 | 4.4 |
| 7' | 48.8 | 5.8 | 5.8 |
| 8' | 37.4 | 6.6 | 6.6 |
| 9' | 29.5 | 7.4 | 7.4 |
| 10' | 23.9 | 8.2 | 8.2 |
| 12' | 16.6 | 10 | 10 |

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot. Footcandle values are initial, apply appropriate light loss factors where necessary.

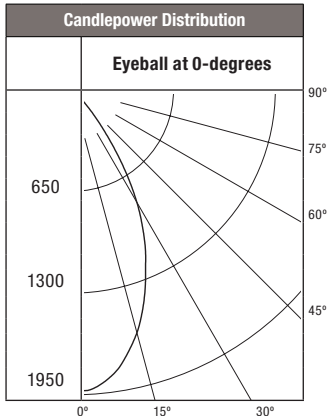
| Zonal Lumen Summary | | |
|---------------------|--------|-----------|
| Zone | Lumens | % Fixture |
| 0-30 | 1457 | 72.5 |
| 0-40 | 1875 | 93.3 |
| 0-60 | 2001 | 99.6 |
| 0-90 | 2009 | 100 |

Scaling factor for the Battery back up:

- 1800 Lumens = 0.33
- 1200 Lumens = 0.27

PD618ED010- PDM6930-61VC

Spacing Criteria = 0.84
Lumens per Watt = 52.7 LpW
Test No. P113861
Test Model: PD618ED010- PDM6930-61VC



| Candela Distribution | |
|----------------------|---------|
| Degrees Vertical | Candela |
| 0* | 1921 |
| 5 | 1902 |
| 15 | 1608 |
| 25 | 1111 |
| 35 | 516 |
| 45 | 98 |
| 55 | 10 |
| 65 | 3 |
| 75 | 0 |
| 85 | 0 |
| 90 | 0 |

*CBCP

| Luminance | |
|-----------------------------------|-------------------|
| (Average Candela/M ²) | |
| Degree | Avg. 0° Luminance |
| 45 | 7559 |
| 55 | 984 |
| 65 | 402 |
| 75 | 0 |
| 85 | 0 |

| Cone of Light Footcandles | | | |
|-------------------------------|---------------------------|------------|---------|
| Distance to Illuminated Plane | Initial Nadir Footcandles | Beam (ft.) | |
| | | L Length | W Width |
| 5.5' | 63.5 | 4.4 | 4.4 |
| 7' | 39.2 | 5.8 | 5.8 |
| 8' | 30 | 6.6 | 6.6 |
| 9' | 23.7 | 7.4 | 7.4 |
| 10' | 19.2 | 8.2 | 8.2 |
| 12' | 13.3 | 10 | 10 |

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot. Footcandle values are initial, apply appropriate light loss factors where necessary.

| Zonal Lumen Summary | | |
|---------------------|--------|-----------|
| Zone | Lumens | % Fixture |
| 0-30 | 1128 | 72.5 |
| 0-40 | 1452 | 93.3 |
| 0-60 | 1550 | 99.6 |
| 0-90 | 1555 | 100 |

Scaling factor for the Battery back up:

- 1800 Lumens = 0.33
- 1200 Lumens = 0.27