

# eW Profile Powercore gen4

Date: \_\_\_\_\_  
Type: \_\_\_\_\_  
Firm Name: \_\_\_\_\_  
Project: \_\_\_\_\_

4000 K, 120 VAC, 489 mm (19.25 in)

## Interior under-cabinet ultra-low profile workspace and accent lighting luminaire with single temperature white light

Profile gen4 brings advanced under-cabinet lighting to today's sophisticated kitchens. Thanks to its ultra-low profile, Profile gen4 fits seamlessly into any kitchen—from galley to grand, including retrofits and new construction. To create the right ambiance, it offers four popular color temperatures (2700 K, 3000 K, 3500 K, or 4000 K). A choice of luminaire lengths and a wide range of accessories keep installation fast and easy. Exceptional energy efficiency can generate rebates right from the start, and deliver dramatic energy savings over many years of reliable use.



- Exceptional illumination—Profile gen4 delivers exceptional light with an impressive CRI of 90+, so it's brighter and better. Optibin, our proprietary binning optimization process, guarantees uniformity and consistency of hue and color temperature.
- Flexible integration—Profile gen4's ultra-low profile lets it fit discretely into almost any layout, from simple to elaborate, making it suitable for installation within closet storage spaces and under cabinets.
- Smart power—Patented Powercore® technology provides precision output to Profile gen4 luminaires directly from line voltage, enabling longer run lengths and eliminating the need for bulky, hard-to-hide power supplies.
- Ambiance options—Four popular color temperature options offer a range of light, from warm to cool—Warm (2700 K), White (3000 K), Neutral (3500 K), and Cool (4000 K).
- Smooth dimming capability—Patented DIMand® technology offers smooth dimming capability with the DM-1000 0-10 V ELV Dimmer or select reverse-phase ELV-type dimmers.
- Rebate eligibility—Profile gen4 is EnergyStar® listed, as well as a California Title T24 high-efficiency residential listed product, creating rebate opportunities in selected areas.
- Energy cost savings—Profile gen4 consumes less than 3 W of energy per foot, and can support continuous runs of up to 15.3 m (50 ft). Profile gen4 luminaires use 40% less energy than comparable fluorescent sources, and 80% less energy than incandescent sources. No off-state power consumption increases energy savings even further.
- Easy installation—Contractor-friendly installation dramatically simplifies installation and lowers total system cost. Available in 279 mm (11 in), 533 mm (21 in), and 1,041 mm (41 in) fixture lengths with multiple jumper cable and connector options to accommodate a wide range of projects. UL rated for dry and damp environments.
- 5-year warranty—Profile gen4 delivers a long, useful light. A 5-year warranty exceeds that of other manufacturers, providing a high degree of confidence to consumers.

For detailed product information, please refer to the Profile Product Guide at [www.colorkinetics.com/global/products/essentialwhite/ew-profile-powercore-gen4/](http://www.colorkinetics.com/global/products/essentialwhite/ew-profile-powercore-gen4/)

# Specifications

Due to continuous improvements and innovations, specifications may change without notice.

## Output

|                     |             |
|---------------------|-------------|
| Color Temperature * | 4000 K      |
| Beam Angle          | 105° x 100° |
| Lumens †            | 417         |
| Efficacy (lm/W)     | 87.9        |
| CRI                 | 97          |

## Electrical

|   |  |
|---|--|
| Input Voltage   | 120 VAC  |
| Power Consumption<br>(Maximum at full output, steady state) | 5 W  |
| Power Factor  | 0.97 @ 120 VAC   |
| Surge Limits ¶  | 0.5 kV maximum differential (L to N)<br>1 kV maximum common (L to Gnd or N to Gnd) |

For additional Surge Protection Requirements for LED Lighting Systems, please refer to [www.colorkinetics.com/KB/surge-protection](http://www.colorkinetics.com/KB/surge-protection).

## Control

### Dimmer ‡

Compatible with selected commercially available reverse-phase ELV-type dimmers

## Lumen Maintenance

| Threshold§      | Ambient Temperature |       | Reported ¶¶ | Calculated ¶¶ |
|-----------------|---------------------|-------|-------------|---------------|
|                 | 25 °C               | 50 °C |             |               |
| L <sub>90</sub> | 25 °C               | 50 °C | 41,000      | 41,000        |
|                 | 25 °C               | 50 °C | 30,000      | 30,000        |
| L <sub>80</sub> | 25 °C               | 50 °C | > 60,000    | 86,000        |
|                 | 25 °C               | 50 °C | > 60,000    | 65,000        |
| L <sub>70</sub> | 25 °C               | 50 °C | > 60,000    | > 100,000     |
|                 | 25 °C               | 50 °C | > 60,000    | > 100,000     |
| L <sub>50</sub> | 25 °C               | 50 °C | > 60,000    | > 100,000     |
|                 | 25 °C               | 50 °C | > 60,000    | > 100,000     |

\* Color temperatures conform to nominal CCTs as defined in ANSI Chromaticity Standard C78.377A.

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† Lumen output measurements comply with IES LM-79-08 testing procedures.

‡ Refer to [www.colorkinetics.com/support/appnotes/](http://www.colorkinetics.com/support/appnotes/) for more information.

§ L<sub>xx</sub> = xx% lumen maintenance (when light output drops below xx% of initial output). All values are given at B10, or the median value where 90% of the LED population is better than the reported or calculated lumen maintenance measurement.

¶ Minimum surge limits per IEC 61547, tested in accordance with IEC 61000-4-5.

¶¶ Lumen maintenance figures are based on lifetime prediction graphs supplied by LED source manufacturers. Whenever possible, figures use measurements that comply with IES LM-80-08 testing procedures. In accordance with TM-21-11, Reported values represent the interpolated value based on six times the LM-80-08 total test duration (in hours). Calculated values represent time durations that exceed six times the total test duration.

## Physical

|  |  |
|--|--|
| Dimensions<br>(Height x Width x Depth) | 22 x 489 x 43 mm (0.88 x 19.25 x 1.7 in)       |
| Weight                                 | 369 g (13 oz)                                  |
| Housing Material                       | Extruded aluminium, white powder-coated finish |
| Lens                                   | Polycarbonate                                  |
| Luminaire Connections                  | Integral male/female connectors                |

### Temperature Ranges

-20 to 50 °C (-4 to 122 °F) Operating  
 -20 to 50 °C (-4 to 122 °F) Startup  
 -40 to 80 °C (-40 to 176 °F) Storage

Humidity 0 to 95%, non-condensing

### Thermal Protection enabled

For additional Thermal Protection information, please refer to <https://colorkinetics.helpdocs.io/article/sh301ducix>

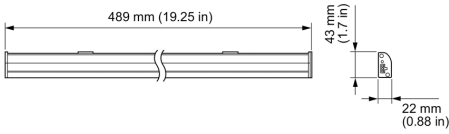
### Luminaire Run Lengths

Up to 15.3 m (50 ft) of luminaires in a single run. To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from [www.colorkinetics.com/support/install\\_tool/](http://www.colorkinetics.com/support/install_tool/)

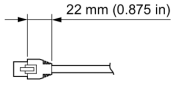
## Certification and Safety

|                |   |
|----------------|---|
| Approbation    | UL/cUL, FCC Class B                                   |
| Certifications | ENERGY STAR   |
| Environment    | Dry/Damp Location, IP50 California Title 24 Compliant |

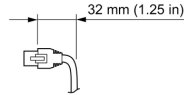
# Dimensions



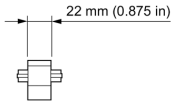
Jumper / Leader Cable



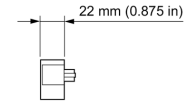
Jumper / Leader Cable



End-to-End Connector



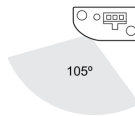
Terminator



# Photometrics 4000 K, 489 mm (19.25 in)

Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at [www.colorkinetics.com/global/support/ies](http://www.colorkinetics.com/global/support/ies).

|                 |             |
|-----------------|-------------|
| Beam Angle      | 105° x 100° |
| LED             | 4000 K      |
| Lumens          | 417.0       |
| Efficacy (lm/W) | 87.9        |



## Illuminance at Distance

| Distance (ft) | Center Beam fc |      | Beam Width |       |
|---------------|----------------|------|------------|-------|
|               | Center         | Edge | Inner      | Outer |
| 0.7           | 331.88         | 1.7  | 1.6        | 1.7   |
| 1.3           | 82.97          | 3.5  | 3.2        | 3.5   |
| 2             | 36.88          | 5.2  | 4.8        | 5.2   |
| 2.7           | 20.74          | 6.9  | 6.4        | 6.9   |
| 3.3           | 13.28          | 8.7  | 8          | 8.7   |
| 4             | 9.22           | 10.4 | 9.5        | 10.4  |

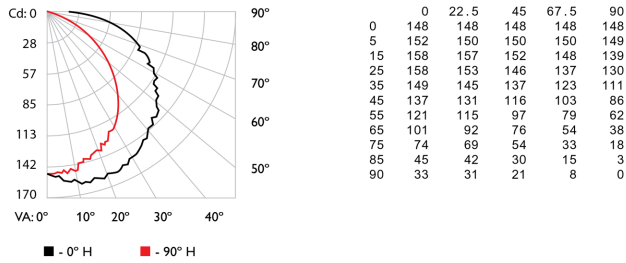
## Zonal Lumen

| Zone   | Lumens | % Luminaire |
|--------|--------|-------------|
| 0-30   | 112.1  | 26.90%      |
| 0-40   | 181.1  | 43.40%      |
| 0-60   | 311.3  | 74.70%      |
| 60-90  | 95.3   | 22.90%      |
| 70-100 | 54.3   | 13%         |
| 90-120 | 10     | 2.40%       |
| 0-90   | 406.7  | 97.60%      |
| 90-180 | 10.2   | 2.40%       |
| 0-180  | 416.9  | 100%        |

12.12 ft (3.7 m) 1 fc maximum distance  
 Vert. Spread: 104.8°  
 Horiz. Spread: 100.1°

For lux multiply fc by 10.7

## Polar Candela Distribution



## Coefficients of Utilization - Zonal Cavity Method

| RCC % | Effective Floor Cavity Reflectance: 20% |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|       | 80                                      |      |      |      | 70   |      |      |      | 50   |      |      |      |      |      |      |      |
| RW %  | 70                                      | 50   | 30   | 0    | 70   | 50   | 30   | 0    | 50   | 30   | 20   | 50   | 30   | 20   | 0    |      |
| 0     | 1.18                                    | 1.18 | 1.18 | 1.18 | 1.15 | 1.15 | 1.15 | 0.98 | 1.1  | 1.1  | 1.1  | 1.05 | 1.05 | 1.05 | 1    |      |
| 1     | 1.07                                    | 1.02 | 0.98 | 0.94 | 1.04 | 1.06 | 0.81 | 0.95 | 0.92 | 0.88 | 0.91 | 0.88 | 0.85 | 0.87 | 0.84 | 0.82 |
| 2     | 0.97                                    | 0.89 | 0.82 | 0.76 | 0.95 | 0.87 | 0.8  | 0.68 | 0.83 | 0.77 | 0.73 | 0.79 | 0.75 | 0.71 | 0.76 | 0.72 |
| 3     | 0.89                                    | 0.78 | 0.7  | 0.63 | 0.86 | 0.76 | 0.69 | 0.57 | 0.73 | 0.66 | 0.61 | 0.7  | 0.64 | 0.59 | 0.67 | 0.62 |
| 4     | 0.81                                    | 0.69 | 0.6  | 0.53 | 0.79 | 0.68 | 0.59 | 0.5  | 0.65 | 0.58 | 0.52 | 0.62 | 0.56 | 0.51 | 0.6  | 0.54 |
| 5     | 0.75                                    | 0.62 | 0.53 | 0.46 | 0.73 | 0.61 | 0.52 | 0.43 | 0.58 | 0.51 | 0.45 | 0.56 | 0.49 | 0.44 | 0.54 | 0.48 |
| 6     | 0.69                                    | 0.56 | 0.47 | 0.4  | 0.67 | 0.55 | 0.46 | 0.38 | 0.53 | 0.45 | 0.39 | 0.51 | 0.44 | 0.39 | 0.49 | 0.43 |
| 7     | 0.64                                    | 0.51 | 0.42 | 0.36 | 0.62 | 0.5  | 0.41 | 0.34 | 0.48 | 0.4  | 0.35 | 0.46 | 0.4  | 0.35 | 0.45 | 0.39 |
| 8     | 0.6                                     | 0.46 | 0.38 | 0.32 | 0.58 | 0.45 | 0.37 | 0.3  | 0.44 | 0.37 | 0.31 | 0.42 | 0.36 | 0.31 | 0.41 | 0.35 |
| 9     | 0.56                                    | 0.42 | 0.34 | 0.29 | 0.54 | 0.42 | 0.34 | 0.28 | 0.4  | 0.33 | 0.28 | 0.39 | 0.33 | 0.28 | 0.38 | 0.32 |
| 10    | 0.52                                    | 0.39 | 0.31 | 0.26 | 0.51 | 0.39 | 0.31 | 0.25 | 0.37 | 0.3  | 0.26 | 0.36 | 0.3  | 0.25 | 0.35 | 0.29 |

# Luminaire and Accessories

Use Item Number when ordering in North America

## Luminaire

|   | Item Number   | Item 12NC    |
|---|---------------|--------------|
| eW Profile Powercore gen4, 4000 K, 120 VAC, 489 mm (19.25 in)<br>Includes mounting clips and end-to-end connector | 523-000027-97 | 912400135970 |

## Accessories

|   |               |              |
|---|---------------|--------------|
| Permanent Wiring Compartment and Terminator (Requires Jumper Cable for luminaire connection), White | 120-000065-00 | 910503700270 |
| Switched Portable Leader Cable and Terminator, 3 m (10 ft), White                                   | 108-000034-00 | 910503700258 |
| Switched Permanent Wiring Compartment and Terminators, White  | 120-000065-04 | 910503701022 |
| End-to-End Connector, Quantity 5, 22 mm (.875 in), White  | 108-000035-10 | 910503700368 |
| Jumper Cable, 152 mm (6 in), White  | 108-000035-00 | 910503700260 |
| Jumper Cable, 305 mm (12 in), White   | 108-000035-01 | 910503700261 |
| Jumper Cable, 457 mm (18 in), White   | 108-000035-02 | 910503700262 |
| Jumper Cable, 1.5 m (5 ft), White   | 108-000035-03 | 910503700263 |
| "Y" Jumper Cable and Terminator, 419 mm (16.5 in), White  | 108-000035-04 | 910503700264 |
| Mounting Track, 25 @ 229 mm (9 in), White   | 120-000064-02 | 910503700273 |
| Mounting Track, 25 @ 483 mm (19 in), White  | 120-000064-00 | 910503700271 |
| Mounting Track, 24 @ 991 mm (39 in), White  | 120-000064-01 | 910503700272 |
| DM-1000 0-10 V ELV Dimmer   | 109-000036-00 | 912400135916 |
| Right Handed Terminators, Bag of 10   | 120-000063-02 | 910503700730 |

