**Pauluhn™ DLL Series Linear LED for land-based rigs**

**Introduction:**
The Pauluhn DLL Linear LED by Eaton’s Crouse-Hinds is specifically designed to replace fluorescent T12, T8 and T5HO lighting on land-based and offshore drilling platforms. The rugged and durable design features the industry’s most versatile and flexible mounting options. The Pauluhn DLL is the ideal solution for high vibration, impact and hose down in drilling applications.

**Applications:**
Land-based and offshore rigs; areas include: derrick, mast, SCR house, top drive, operator’s house, power and pump stations.

**Key features & benefits:**
- Industry-leading efficacy: up to 130 LPW
- -40°C to +65°C ambient operating temperature
- Ultra slim (less than 3” height) low profile fixture
- Versatile ceiling/swivel, wall, flush, pole and pendant mounting options
- Standard wide and optional narrow optics for uniform illumination in control room and drill mast
- Four points of secondary retention and through feed wiring options
- Ability to withstand 2,000 psi of hose pressure from a 5 foot distance and 5G 3-axis vibration
- Emergency battery back-up (90 minutes) and surge protection options (up to 10kV)

**Certifications:**

- **NEC standards:**
  - Class I, Division 2, Groups A, B, C, D
  - Class II, Division 1, Groups F, G - pending
  - Class I, Zone 2
  - NEMA 4X; IP66
  - Marine and Wet Locations

- **UL standards:**
  - UL844 Electrical Fixture Hangers for Hazardous Locations
  - UL1598 Luminaire
  - UL1598A Luminaire for Installation on Marine Vessels
  - UL924 for Emergency Lighting - pending

- **CSA standard:**
  - C22.2 No. 137

**Materials:**

- **Housing:**
  - Copper-free aluminum
  - Optional Corro-free™ epoxy powder coat

- **Lens:**
  - Glass or polycarbonate
  - Diffused glass or polycarbonate

**Mounting:**

- Versatile mounting options:
  - Back mount (fixed/ceiling)
  - Back mount (swivel/ceiling)
  - Offset ceiling mount
  - Offset wall mount
  - Pole mount
  - Pendant mount

**Electrical specifications:**

<table>
<thead>
<tr>
<th>Voltage</th>
<th>2 ft.</th>
<th>4 ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wattage @ 120 VAC</td>
<td>29W typical</td>
<td>55W typical</td>
</tr>
<tr>
<td>Lumen output</td>
<td>3,600</td>
<td>7,100</td>
</tr>
<tr>
<td>Frequency</td>
<td>50/60 Hz</td>
<td>50/60 Hz</td>
</tr>
<tr>
<td>Power factor @ 100 VAC</td>
<td>0.90</td>
<td>0.95</td>
</tr>
<tr>
<td>THD</td>
<td>&lt;20%</td>
<td>&lt;20%</td>
</tr>
</tbody>
</table>

*Preliminary typical values; data subject to change.

Easily retrofit to:
- Existing Pauluhn DuraPro and MagnaPro fluorescent light fixtures
- Rig-A-Lite and Snelson C1D2 fluorescent lighting fixtures
## DLL4 N/UNV1 S903 TF P

The DLL4 series linear LED luminaire is cool white, 4 foot, 1-1/8" hubs, 80° narrow light pattern, 100-277 VAC driver, polycarbonate lens, through feed hubs, painted.

### Dimensions & mounting options:

<table>
<thead>
<tr>
<th>Mounting Type</th>
<th>Part Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offset wall</td>
<td>DP1052MTK</td>
<td></td>
</tr>
<tr>
<td>Flush ceiling</td>
<td>DP1057MTK</td>
<td></td>
</tr>
<tr>
<td>Offset ceiling</td>
<td>DP1053MTK</td>
<td></td>
</tr>
<tr>
<td>Ceiling/swivel</td>
<td>DP1050MTK</td>
<td></td>
</tr>
<tr>
<td>Ceiling and adapter</td>
<td>DP1054MTK KIT</td>
<td></td>
</tr>
<tr>
<td>Pole mount</td>
<td>PM KIT 1.25</td>
<td>Pole mount kit, 1.25&quot; conduct</td>
</tr>
<tr>
<td></td>
<td>PM KIT 2.0</td>
<td>Pole mount kit, 2.00&quot; conduct</td>
</tr>
<tr>
<td></td>
<td>PM KIT 2.5</td>
<td>Pole mount kit, 2.50&quot; conduct</td>
</tr>
<tr>
<td>Pendant mount</td>
<td>PEND HAZ KIT 2</td>
<td>Pendant mount kit for 2 ft. linear</td>
</tr>
<tr>
<td></td>
<td>PEND HAZ KIT 4</td>
<td>Pendant mount kit for 4 ft. linear</td>
</tr>
<tr>
<td>Safety chain kit</td>
<td>SS KIT</td>
<td></td>
</tr>
</tbody>
</table>

### Accessories (ordered separately)

<table>
<thead>
<tr>
<th>Accessory Type</th>
<th>Part Number</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mount back plate</td>
<td>DP1055MTK</td>
<td>Ceiling/wall mount (compatible with DuraPro)</td>
</tr>
<tr>
<td>Offset wall</td>
<td>DP1054MTK KIT</td>
<td>Ceiling mount bracket and adapter kit (compatible with MagnaPro)</td>
</tr>
<tr>
<td>Pole mount</td>
<td>PM KIT 1.25</td>
<td>Pole mount kit, 1.25&quot; conduct</td>
</tr>
<tr>
<td></td>
<td>PM KIT 2.0</td>
<td>Pole mount kit, 2.00&quot; conduct</td>
</tr>
<tr>
<td></td>
<td>PM KIT 2.5</td>
<td>Pole mount kit, 2.50&quot; conduct</td>
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<tr>
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<td>PEND HAZ KIT 2</td>
<td>Pendant mount kit for 2 ft. linear</td>
</tr>
<tr>
<td></td>
<td>PEND HAZ KIT 4</td>
<td>Pendant mount kit for 4 ft. linear</td>
</tr>
<tr>
<td>Safety chain kit</td>
<td>SS KIT</td>
<td>Safety chain kit</td>
</tr>
<tr>
<td>Driver replacement kit</td>
<td>VMVL/UNV1 80W 1A KIT</td>
<td>1 amp driver replacement kit 100-277 VAC for 4 ft. linear</td>
</tr>
<tr>
<td></td>
<td>VMVL/UNV1 80W 0.5A KIT</td>
<td>0.5 amp driver replacement kit 100-277 VAC for 2 ft. linear</td>
</tr>
<tr>
<td></td>
<td>VMVL/UNV34 80W 1A KIT</td>
<td>1 amp driver replacement kit 347-480 VAC for 4 ft. linear</td>
</tr>
<tr>
<td></td>
<td>VMVL/UNV34 80W 0.5A KIT</td>
<td>0.5 amp driver replacement kit 347-480 VAC for 2 ft. linear</td>
</tr>
</tbody>
</table>

### Specifications:

- **Series & Model:** DLL4
  - DLL: Pauluhn DLL series linear LED luminaire
  - N: Cool white LED
  - UNV1: 100-277 VAC; 108-250 VDC
  - S903: 20° narrow light pattern
  - TF: Through feed
  - P: Painted (gray, epoxy)

- **Finish:** BLANK, P: Natural aluminum, Painted (gray, epoxy)

- **Optics:** BLANK, N: Wide (120°), Narrow (80°)

- **Length & Lumens:**
  - 4 foot: 7,100 lumens
  - 2 foot: 3,600 lumens

- **Voltage:**
  - /UNV1: 100-277 VAC, 108-250 VDC
  - /UNV34: 347-480 VAC

- **Consult factory/customer service for availability**
  - EM1: EM 100-277 VAC, normal mode: 6,700 lumens, battery mode: 14% of full output
  - EM2: EM 100-277 VAC, normal mode: 6,600 lumens, battery mode: 14% of full output
  - EM3: EM 347-480 VAC, normal mode: 6,700 lumens, battery mode: 14% of full output
  - EM4: EM 347-480 VAC, normal mode: 6,600 lumens, battery mode: 14% of full output

- **EM1 UNV1 SRG:** Battery back-up 2 ft. LED kit, no cable/gland (loose ¾" entry hubs)
- **EM2 UNV3 SRG:** Battery back-up 4 ft. LED kit, no cable/gland (loose ¾" entry hubs)
- **EM4 UNV1 SRG:** Battery back-up 4 ft. LED kit, no cable/gland (loose ¾" entry hubs)
- **EM4 UNV34 SRG:** Battery back-up 4 ft. LED kit, no cable/gland (loose ¾" entry hubs)
- **SRG UNV1:** 10kV/KA surge protection kit for 100-277 VAC
- **SRG UNV34:** 10kV/KA surge protection kit for 347-480 VAC

- **EM2 UNV1:** Battery back-up 2 ft. LED kit, no cable/gland (loose ¾" entry hubs)
- **EM2 UNV34:** Battery back-up 4 ft. LED kit, no cable/gland (loose ¾" entry hubs)
- **EM4 UNV1:** Battery back-up 4 ft. LED kit, no cable/gland (loose ¾" entry hubs)
- **EM4 UNV34:** Battery back-up 4 ft. LED kit, no cable/gland (loose ¾" entry hubs)

- **EM1 UNV1 SRG:** Battery back-up 2 ft. LED with integral surge protector
- **EM2 UNV3 SRG:** Battery back-up 4 ft. LED with integral surge protector
- **EM4 UNV1 SRG:** Battery back-up 4 ft. LED with integral surge protector
- **EM4 UNV34 SRG:** Battery back-up 4 ft. LED with integral surge protector

- ** consult factory/customer service for availability**

- **EM1 UNV1 SRG:** Battery back-up 2 ft. LED with integral surge protector
- **EM2 UNV3 SRG:** Battery back-up 4 ft. LED with integral surge protector
- **EM4 UNV1 SRG:** Battery back-up 4 ft. LED with integral surge protector
- **EM4 UNV34 SRG:** Battery back-up 4 ft. LED with integral surge protector

- **EM2 UNV1:** Battery back-up 4 ft. LED with integral surge protector
- **EM2 UNV34:** Battery back-up 2 ft. LED with integral surge protector
- **EM4 UNV1:** Battery back-up 4 ft. LED with integral surge protector
- **EM4 UNV34:** Battery back-up 4 ft. LED with integral surge protector

- **SRG UNV1:** 10kV/KA surge protection kit for 100-277 VAC
- **SRG UNV34:** 10kV/KA surge protection kit for 347-480 VAC

### Ordering information:

**Part number example:** DLL4N/UNV1 S903 TF P

**DLL series linear LED, cool white, 4 foot, 1-1/8" hubs, 80° narrow light pattern, 100-277 VAC driver, polycarbonate lens, through feed hubs, painted.**