Simple, Efficient, Low Maintenance Lighting for Hazardous Locations

Appleton™ FELED Series Linear Luminaire
Technology and Application Guide.
See the future of nonmetallic explosionproof linear lighting.

The luminaires you choose today will make the difference in plant safety, worker comfort and maintenance costs for years to come. Emerson™ lights your way forward with the Appleton™ FELED Series of linear LED luminaires for rugged Zone 1 and 21 applications.

Certified for use in IECEx and ATEX installations, these nonmetallic explosionproof luminaires equal or exceed the lighting output, quality and distribution of our FE Series fluorescent luminaires, already the proven industry standard. Using the same footprint and mounting hardware as the FE Series, with a wide range of lumen outputs that allow for an easy retrofit of any fluorescent installation, the FELED Series’ low profile design and functional simplicity suit practically any task or general purpose application requirement and mounting height.

For best-in-class corrosion resistance, durability and performance, look to the brand you trust. Appleton™ FELED Series luminaires, only from Emerson™.
The Simple Way To Light Your Way Forward

FELED Luminaires make it easy to replace existing fluorescent fixtures because they feature the same housing and mounting accessories as original FE fluorescent luminaires. Luminaires are available in light output from 2,500 to 7,000 lumens. In the rare event maintenance is needed, the lens can be quickly removed to access the internal components, while the specially designed hinged cover speeds up the process of replacing drivers, or diffusers.

Easy To Specify
FELED luminaires are available in a wide range of lumen outputs to suit a variety of Zone 1 and 21 task and general purpose lighting requirements. Compared to fluorescent luminaires, they deliver increased energy efficiency, lower maintenance costs and greater operational uptime. With a 3-hour emergency option available on the FELED5 versions, the FELED Series provides assurance that your hazardous locations will be safely illuminated.

Easy To Install
For sites that already have Appleton™ Zone 1 fluorescent installations, the FELED Series retrofits into the existing mounting hardware. Luminaires can be mounted vertically or horizontally, using pole, wall, ceiling, hinged or chain mount options. The terminal block provides ample working room, with screw type terminals for simple, secure wiring.

Easy To Maintain
Maintenance access requires only a hex key and straight blade screwdriver. The patented release mechanism and hinged cover are designed to ensure hassle-free maintenance and installation. Positive safety switch disconnects power to LED’s and driver upon unlocking the lens to allow maintenance in hazardous locations. Our LEDs are rated for 60,000 hours of operation at 55 °C (131 °F), and last far longer at lower temperatures. Field-replaceable parts are available to extend performance even further.
The Illumination You Need, The Quality You Expect

Retrofitting Made Easy

The FELED Series includes models that provide illuminance and lighting distribution comparable to our FE Series fluorescent luminaires, with additional models that offer even more application possibilities. Choose the diffuser option for the greatest uniformity, least amount of glare, best vertical illumination and safest photobiological rating.

Light Distribution Comparison

The lighting simulation below compares three rooms, each with a single luminaire mounted at 4.5 m (15 ft): a fluorescent 1.39 m (4.56 ft), a 0.79 m (2.58 ft) FELED4, and a 1.39 m (4.56 ft) FELED5. The photometric simulated color rendered images below demonstrate the seamless transition with either size luminaire.

The FELED Series saves energy while maintaining equivalent required illuminance levels and uniformity to the FE Series fluorescent luminaires.

Lighting Performance

<table>
<thead>
<tr>
<th>Luminaire</th>
<th>Size (Meters)</th>
<th>Size (Feet)</th>
<th>Power Consumption (Watts)</th>
<th>Light Output (Lumens)</th>
<th>Eav (Lux) Floor</th>
<th>Emin (Lux) Floor</th>
<th>Emax (Lux) Floor</th>
<th>Emin / Emax</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEB236BUSA</td>
<td>1.39</td>
<td>4.56</td>
<td>72</td>
<td>4423</td>
<td>31</td>
<td>16</td>
<td>55</td>
<td>0.53</td>
</tr>
<tr>
<td>FELED4CBDSAD</td>
<td>0.79</td>
<td>2.58</td>
<td>32</td>
<td>3600</td>
<td>28</td>
<td>11</td>
<td>73</td>
<td>0.40</td>
</tr>
<tr>
<td>FELED5CBDSAD</td>
<td>1.39</td>
<td>4.56</td>
<td>38</td>
<td>4650</td>
<td>30</td>
<td>12</td>
<td>77</td>
<td>0.41</td>
</tr>
</tbody>
</table>

The table below provides a cross reference between the FE Series fluorescent luminaires and the FELED Series luminaires.

Fluorescent to LED Retrofit Guide

<table>
<thead>
<tr>
<th>FE Series Fluorescent</th>
<th>Lamp Used</th>
<th>Lamp Output (Lumens)</th>
<th>System Efficiency</th>
<th>System Output (Lumens)</th>
<th>Effective LED Output Required for Replacement (Lumens)</th>
<th>Normalized Output (Lumens)</th>
<th>FELED Series</th>
<th>FELED Series (Lumens)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEB218BUSA</td>
<td>2X 18 W</td>
<td>2400</td>
<td>85%</td>
<td>2040</td>
<td>1836</td>
<td>1800</td>
<td>FELED3C</td>
<td>2850</td>
</tr>
<tr>
<td>FEB318BUSA</td>
<td>3X 18 W</td>
<td>3600</td>
<td>68%</td>
<td>2448</td>
<td>2203</td>
<td>2200</td>
<td>FELED3C</td>
<td>2850</td>
</tr>
<tr>
<td>FEB136BUSA</td>
<td>1 X 36 W</td>
<td>2750</td>
<td>89%</td>
<td>2448</td>
<td>2203</td>
<td>2200</td>
<td>FELED3C</td>
<td>2850</td>
</tr>
<tr>
<td>FEB236BUSA</td>
<td>2 X 36 W</td>
<td>5500</td>
<td>80%</td>
<td>4400</td>
<td>3960</td>
<td>4000</td>
<td>FELED4C / FELED5C</td>
<td>3600 / 4650</td>
</tr>
<tr>
<td>FEB158BUSA</td>
<td>1 X 58 W</td>
<td>4325</td>
<td>87%</td>
<td>3763</td>
<td>3386</td>
<td>3300</td>
<td>FELED5C</td>
<td>4650</td>
</tr>
<tr>
<td>FEB258BUSA</td>
<td>2 X 58 W</td>
<td>8650</td>
<td>77%</td>
<td>6661</td>
<td>5994</td>
<td>6000</td>
<td>FELED7C</td>
<td>7050</td>
</tr>
<tr>
<td>FEB358BUSA</td>
<td>3 X 58 W</td>
<td>12975</td>
<td>66%</td>
<td>8564</td>
<td>7707</td>
<td>7500</td>
<td>FELED7C</td>
<td>7050</td>
</tr>
</tbody>
</table>
Fluorescent To LED: The Smart Upgrade

Energy Savings
LED luminaires provide far greater lighting efficacy compared to traditional lighting sources, including fluorescent luminaires, the previous efficiency leader.

Maintenance Savings
Fluorescent lamps last an average of 13,000 hours, or 1.48 years, in continuous use. By contrast, LED luminaires are rated for 60,000 hours and can exceed 200,000 hours depending on ambient temperature.

Safety
LED luminaires provide instant-on and cold-start capabilities without end-of-life degradation or premature failures due to frequent cycling, with a photobiological safety rating of RG0.

Energy Comparison
Compared to the FE Series fluorescent luminaires, the FELED Series saves as much as 57% in energy costs.

<table>
<thead>
<tr>
<th>FE Series Fluorescent</th>
<th>Lamp Used</th>
<th>Power Consumption (Watts)</th>
<th>FELED Series</th>
<th>Power Consumption (Watts)</th>
<th>% Energy Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEB218BUSA 2 x 18 W</td>
<td>36</td>
<td>FELED3</td>
<td>27</td>
<td></td>
<td>25%</td>
</tr>
<tr>
<td>FEB318BUSA 3 x 18 W</td>
<td>54</td>
<td>FELED3</td>
<td>27</td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>FEB136BUSA 1 x 36 W</td>
<td>36</td>
<td>FELED3</td>
<td>27</td>
<td></td>
<td>25%</td>
</tr>
<tr>
<td>FEB236BUSA 2 x 36 W</td>
<td>72</td>
<td>FELED5</td>
<td>38</td>
<td></td>
<td>47%</td>
</tr>
<tr>
<td>FEB158BUSA 1 x 58 W</td>
<td>58</td>
<td>FELED5</td>
<td>38</td>
<td></td>
<td>34%</td>
</tr>
<tr>
<td>FEB258BUSA 2 x 58 W</td>
<td>116</td>
<td>FELED7</td>
<td>63</td>
<td></td>
<td>46%</td>
</tr>
<tr>
<td>FEB358BUSA 3 x 58 W</td>
<td>174</td>
<td>FELED7</td>
<td>63</td>
<td></td>
<td>64%</td>
</tr>
</tbody>
</table>

Dramatically Reduce Your Lighting Costs
When retrofitting a 2 lamp FEB236BUSA, you can achieve break even on your investment in approximately 8 months. When evaluating lighting systems, consider both the total system power consumption and the expected luminaire life, in order to evaluate energy and maintenance costs and savings.

5 Year Cumulative

<table>
<thead>
<tr>
<th>Luminaire</th>
<th>Power Consumption (Watts)</th>
<th>Light Output (Lumens)</th>
<th>Yearly Energy Costs</th>
<th>Lamp Life (Hours)</th>
<th>Yearly Maintenance Costs</th>
<th>Yearly Total Costs</th>
<th>Yearly LED Savings</th>
<th>Yearly Savings Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEB236BUSA</td>
<td>72 W</td>
<td>4423</td>
<td>35 €</td>
<td>13,000</td>
<td>23 €</td>
<td>58 €</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>FELED5</td>
<td>38 W</td>
<td>4650</td>
<td>18 €</td>
<td>100,000</td>
<td>0 €</td>
<td>18 €</td>
<td>40 €</td>
<td>69%</td>
</tr>
</tbody>
</table>

Energy Costs = Watts x 24 (hr / day) x 365 (days / yr) / 1000 (kWh / yr) x 0.055 (Euro / kWh)
Maintenance Costs = ([2 (fluorescent lamps) x 8 (euro each)] + 22.5 (euro for installation cost for one worker)) x 3 (replacements in 5 years) / 5 (years)
Labor cost = 45 euro / hour/worker
Walkways: Ensure Optimal and Uniform Light Dispersion

Use Appleton™ FELED in any application where you would have specified explosionproof linear fluorescent lighting in the past.

Walkway lighting is a common application in almost every industry. These heavily trafficked areas must be illuminated evenly and sufficiently to ensure safe passage, especially with regard to changes of direction, level, stairs or any obstructions that may be present. Vertical illumination is an important consideration in process areas that require monitoring of instrumentation. Walkway lighting must also be designed with adequate overhead clearance for safe passage of people and equipment. In the event of a power disruption, an emergency backup system provides for safe egress. FELED Series luminaires provide:

• A wide range of lumen outputs, meeting or exceeding the output of FE Series fluorescent luminaires
• Pole and other mounting options to suit any walkway configuration and luminaire height
• A low profile design to maximize headroom even in confined spaces
• Rugged, corrosion resistant durability to withstand harsh onshore and offshore environments
• A 3-hour emergency version is available in the 5000 lm, 1.39 m (4.56 ft) luminaire
Walkway Application Simulation

FELED Series luminaires provide similar or higher lumen output and greater lighting uniformity compared to FE Series fluorescent luminaires. In walkway applications, they offer the potential to achieve illumination targets with fewer luminaires, higher mounting heights or reduced wattage luminaires.

In the application simulation below, three FELED5 luminaires provide sufficient illumination for the walkway with good uniformity and vertical illumination.

<table>
<thead>
<tr>
<th>Sample Application</th>
<th>Luminaire Height</th>
<th>Type Of Mount</th>
<th>Luminaire Spacing</th>
<th>Targeted Illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walkway 1 m (3 ft) Wide</td>
<td>3 m (10 ft)</td>
<td>15° Pole Mount</td>
<td>5 m (16 ft)</td>
<td>50-75 Lux</td>
</tr>
</tbody>
</table>

Lighting Performance

<table>
<thead>
<tr>
<th>Luminaire</th>
<th>Size (Meters)</th>
<th>Size (Feet)</th>
<th>Power Consumption (Watts)</th>
<th>Light Output (Lumens)</th>
<th>Eav (Lux) Floor</th>
<th>Emin (Lux) Floor</th>
<th>Emax (Lux) Floor</th>
<th>Emin / Emax</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEB236BUS A</td>
<td>1.39</td>
<td>4.56</td>
<td>72</td>
<td>4423</td>
<td>70</td>
<td>51</td>
<td>82</td>
<td>0.62</td>
</tr>
<tr>
<td>FELED5CBDSAD</td>
<td>1.39</td>
<td>4.56</td>
<td>38</td>
<td>4650</td>
<td>74</td>
<td>52</td>
<td>86</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Optical Radiation and Photobiological Safety Requirements in Lighting

Photobiology is the study of the interaction of optical radiation with living organisms. Optical radiation, another term for light, can be visible and invisible and is comprised of UV, IR and blue light emissions. It is strongly absorbed in tissue, with the skin and eyes of the human body most at risk of exposure. All visible light (380 nm to 780 nm) can, in principle, only damage the eye by thermal or photochemical effects.

The purpose of photobiological safety standards is to protect users from the harmful effects caused by optical radiations emitted by lighting devices. Within the European Union, the standards in the field of photobiological safety are IEC / EN 62471 and the more recent Technical Report IEC / TR 62778. The American standard in the field of photobiological safety is ANSI IESNA RP 27. These standards define values for levels of risk ranging from Risk Group Exempt (RG0) (lamp / LED does not pose any photobiological hazard) to Group 3 (high risk) (lamp / LED may pose a hazard even for momentary or brief exposure). Appleton™ FELED diffused luminaires are rated RG0, Risk Group Exempt.
Area Illumination: Safe, Efficient Lighting

For proper illumination in extreme conditions, you need a lighting manufacturer who engineers their luminaires to ensure optimal light dispersion, creating more usable light.

Upgrading from our fluorescent to LED is seamless with a one-to-one installation retrofit. Effective lighting is critical for worker safety and productivity; particularly when flammable gases, vapors and dusts are present. Midstream natural gas compressor stations are a prime example. Appleton™ FELED Series luminaires provide:

• Certification for use in Zone 1 and 21 hazardous locations
• Easy retrofitting to the FE fluorescent mounting hardware and footprint already in extensive use in these facilities
• A lumen output range suitable for everything from task, tunnel and walkway lighting to expansive spaces and higher mounting requirements
• A low profile that provides clearance in confined spaces and withstands high winds and jets of water in weather-exposed installations
• 60,000+ hours of operation with no lamps to change, minimizing maintenance costs and maximizing operational uptime
Compressor Room Application Simulation

Oil and gas facilities incorporate both expansive areas and confined spaces, requiring a wide range of lumen outputs and mounting options to provide optimum lighting in every workspace. FELED Series achieves these goals with a single luminaire that is easy to retrofit into the existing fluorescent footprint.

Compressor Room Comparison

In the application simulation below, 18 symmetrically spaced luminaires were ceiling mounted at 3.5 meters (12 feet). The targeted illumination is 300 lux with maximum uniformity and minimum glare.

<table>
<thead>
<tr>
<th>Sample Application</th>
<th>Luminaire Height</th>
<th>Type Of Mount</th>
<th>Luminaire Spacing</th>
<th>Targeted Illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>15m x 9 m (50 ft x 30 ft)</td>
<td>3.5 m (12 ft)</td>
<td>Ceiling</td>
<td>18 Luminaires Symmetrically Spaced</td>
<td>300 Lux</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Luminaire</th>
<th>Size (Meters)</th>
<th>Size (Feet)</th>
<th>Power Consumption (Watts)</th>
<th>Light Output (Lumens)</th>
<th>Emin (Lux) Floor</th>
<th>Emax (Lux) Floor</th>
<th>Emin / Emax</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEB236USA</td>
<td>1.20</td>
<td>3.94</td>
<td>72</td>
<td>4431</td>
<td>330</td>
<td>231</td>
<td>0.70</td>
</tr>
<tr>
<td>FELED4CBDSAD</td>
<td>0.60</td>
<td>1.97</td>
<td>32</td>
<td>3600</td>
<td>294</td>
<td>188</td>
<td>0.64</td>
</tr>
<tr>
<td>FELED5CBDSAD</td>
<td>1.20</td>
<td>3.94</td>
<td>38</td>
<td>4650</td>
<td>351</td>
<td>223</td>
<td>0.64</td>
</tr>
</tbody>
</table>

This simulation shows that the FELED4 diffused and FELED5 diffused provides a very similar light output, spread and uniformity to the FE Series fluorescent luminaires. In addition, glare was reduced with the diffused LED solutions. This provides two options depending on luminaire length requirements.
# Mounting Options

## Easy To Retrofit

Appleton™ FELED Series luminaires use the same footprint and mounting accessories as our FE Series fluorescent luminaires. Mounting accessories are available in gray painted aluminum, zinc plated steel, galvanized steel and 316 stainless steel.

### Mounting Hardware Available

<table>
<thead>
<tr>
<th>Fixing Bracket for Surface Mounting</th>
<th>Brackets for Surface Mounting</th>
<th>M8 Ring Bolts</th>
<th>Half Clamp Brackets for Pole Mounting</th>
<th>Hinged Brackets for Adjusting the Luminaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEFBZ (Zinc Plated Steel)</td>
<td>FESBS (316 Stainless Steel)</td>
<td>FERBM8Z (Zinc Plated Steel)</td>
<td>FEHC49Z (42 mm - 49 mm; Zinc Plated Steel)</td>
<td>FEHBA (Aluminum) FEBH (316 Stainless Steel)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FEHC49S (42 mm - 49 mm; 316 Stainless Steel)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FEHC60Z (60 mm; Zinc Plated Steel)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FEHC60S (60 mm; 316 Stainless Steel)</td>
<td></td>
</tr>
</tbody>
</table>

### Mounting Heights, Lumen Outputs and Lux

<table>
<thead>
<tr>
<th>Luminaire</th>
<th>Lens</th>
<th>Mounting Height (Meters)</th>
<th>Max Lux on Ground</th>
<th>Vertical Throw in Meters (along length of luminaire)</th>
<th>Horizontal Throw in Meters (along width of luminaire)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 Lux</td>
<td>5 Lux</td>
<td>10 Lux</td>
</tr>
<tr>
<td>FELED3CBDXXD</td>
<td>Diffused</td>
<td>10</td>
<td>7</td>
<td>9.0</td>
<td>4.0</td>
</tr>
<tr>
<td>FELED4CBDXXD</td>
<td>Diffused</td>
<td>9</td>
<td>9</td>
<td>11.0</td>
<td>6.0</td>
</tr>
<tr>
<td>FELED5CBDXXD</td>
<td>Diffused</td>
<td>11</td>
<td>11</td>
<td>12.0</td>
<td>7.0</td>
</tr>
<tr>
<td>FELED7CBDXXD</td>
<td>Diffused</td>
<td>18</td>
<td>18</td>
<td>15.0</td>
<td>10.0</td>
</tr>
<tr>
<td>FELED3CBDXXD</td>
<td>Diffused</td>
<td>5</td>
<td>27</td>
<td>8.0</td>
<td>6.0</td>
</tr>
<tr>
<td>FELED4CBDXXD</td>
<td>Diffused</td>
<td>35</td>
<td>35</td>
<td>10.0</td>
<td>7.0</td>
</tr>
<tr>
<td>FELED5CBDXXD</td>
<td>Diffused</td>
<td>44</td>
<td>44</td>
<td>10.0</td>
<td>7.0</td>
</tr>
<tr>
<td>FELED7CBDXXD</td>
<td>Diffused</td>
<td>70</td>
<td>70</td>
<td>14.0</td>
<td>9.0</td>
</tr>
<tr>
<td>FELED3CBDXXD</td>
<td>Diffused</td>
<td>3</td>
<td>78</td>
<td>7.5</td>
<td>5.0</td>
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<td>FELED4CBDXXD</td>
<td>Diffused</td>
<td>98</td>
<td>98</td>
<td>8.0</td>
<td>6.0</td>
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<tr>
<td>FELED5CBDXXD</td>
<td>Diffused</td>
<td>121</td>
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<td>8.5</td>
<td>6.5</td>
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<td>FELED7CBDXXD</td>
<td>Diffused</td>
<td>195</td>
<td>195</td>
<td>10.0</td>
<td>7.5</td>
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<td>FELED3CBDXXD</td>
<td>Diffused</td>
<td>2</td>
<td>175</td>
<td>7.0</td>
<td>5.0</td>
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<td>FELED4CBDXXD</td>
<td>Diffused</td>
<td>221</td>
<td>221</td>
<td>7.0</td>
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<td>FELED5CBDXXD</td>
<td>Diffused</td>
<td>273</td>
<td>273</td>
<td>7.5</td>
<td>5.5</td>
</tr>
<tr>
<td>FELED7CBDXXD</td>
<td>Diffused</td>
<td>436</td>
<td>436</td>
<td>8.0</td>
<td>6.0</td>
</tr>
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① All values displayed reflect 5000K CCT.
Specifications

<table>
<thead>
<tr>
<th>Standard Versions</th>
<th>Emergency Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage Range</td>
<td>BD: 100 to 240 Vac, 50/60 Hz</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>BD: 27, 32, 38, 63, 44 Watts</td>
</tr>
<tr>
<td>Correlated Color</td>
<td>BD: 5000K, 4000K, 5000K, 4000K, 5000K, 4000K, 5000K, 4000K, 5000K, 4000K</td>
</tr>
<tr>
<td>Temperature (CCT)</td>
<td>BD: &gt;70, &gt;80, &gt;70, &gt;80, &gt;70, &gt;80, &gt;70, &gt;80, &gt;70, &gt;80</td>
</tr>
<tr>
<td>Lumen Output</td>
<td>BD: 2850, 2500, 3600, 3200, 4650, 4150, 7050, 6550, 980, 810</td>
</tr>
<tr>
<td>Efficacy (lm / w)</td>
<td>BD: 105, 95, 114, 101, 122, 110, 111, 103, —, —</td>
</tr>
<tr>
<td>T-Rating (in horizontal position)</td>
<td>BD: T5 @ 55 °C, T6 @ 55 °C, T6 @ 55 °C, T6 @ 55 °C, T6 @ 55 °C, T6 @ 55 °C, T6 @ 50 °C, —, —</td>
</tr>
<tr>
<td>Luminaire Length</td>
<td>BD: 0.8 m (2.6 ft), 0.8 m (2.6 ft), 1.4 m (4.6 ft), 1.4 m (4.6 ft), 1.4 m (4.6 ft)</td>
</tr>
<tr>
<td>Luminaire Weight</td>
<td>BD: 6 kg (13.2 lbs), 6 kg (13.2 lbs), 9 kg (19.8 lbs), 11 kg (24.3 lbs), 11.5 kg (25.4 lbs)</td>
</tr>
</tbody>
</table>

Standard Materials
- Housing: Fiberglass Reinforced Polyester
- Lens: Polycarbonate
- Gasket: Elastomer
- Internal Reflector: Highly Reflective White Powder Coated Aluminum

Options
- Emergency (5K Lumen Versions)
- Diffuser / Lens / LED Driver / Inverter

Luminaire Lifetime (LM-79) 60,000+ Hours
Warranty 5 Years

Note: All values typical +/- 10%

ATEX and IECEx Certifications
- EU Declaration of Conformity: 50317
- ATEX Certificate: LCIE 16 ATEX 3048X
- IECEx Certificate: LCIE 16.0038X
- Ingress Protection, EN / IEC 60529: IP66/67
- Impact Resistance (Shock): IK10
- Photobiological Safety, IEC 62778 & IEC 62471: RG0

Product Ordering Guide

<table>
<thead>
<tr>
<th>FELED</th>
<th>Series 3</th>
<th>Lumen Output ①: 3-3K Lumen Output 4-4K Lumen Output 5-5K Lumen Output 7-7K Lumen Output</th>
<th>Color Temperature: C - Cool, 5000K N - Neutral, 5000K</th>
<th>Voltage: BD - 100 to 240 Vac 50/60 Hz</th>
<th>Mounting Version: S - Surface / Suspension Mount Standard Wiring (single Phase) L - Surface / Suspension Mount Dual Loop In / Out Through Wiring (Single Phase)</th>
<th>Cable Entry Type: A - Armored M20 ② N - Unarmored M25 ③</th>
<th>Options: D - Diffused E - 3H Emergency (Combined) ④</th>
</tr>
</thead>
</table>

① All values displayed reflect typical values.
② Must order armored cable glands separately.
③ Cable glands provided in luminaires with unarmored hub entries.
④ Available for 5K lumen models only.
Example: FELED3CBDSAD FELED Series luminaire, 3K lumen output, universal voltage, surface mount, armored cable entry, diffused lens.

Learn More. The future is reliable LED lighting that saves energy and maintenance costs while delivering superior illumination. The future is FELED. See it clearly. Contact your local Appleton™ representative or visit www.masteringled.com today.
Maximize usable light enabling you to comfortably and safely work in harsh or hazardous environments.

Appleton™ is the cornerstone brands of Emerson’s Electrical Apparatus and Lighting business; trusted worldwide to make electrical installations safer, more productive and more reliable.

United States (Headquarters)
Appleton™ Grp LLC
9377 W. Higgins Road
Rosemont, IL 60018
United States
T +1 800 621 1506

Australia Sales Office
Bayswater, Victoria
T +61 3 9721 0348

Canada
ECS Electrical Group Canada Ltd.
99 Union Street
Elmira ON, N3B 3L7
Canada
T +1 888 765 2226

China Sales Office
Shanghai
T +86 21 3338 7000

Chinese Sales Office
Dammam, Saudi Arabia
T +966 13 510 3702

Middle East Sales Office
Dammam, Saudi Arabia
T +966 13 510 3702

Korea Sales Office
Seoul
T +82 2 3483 1555

Europe
ATX SAS
Espace Industriel Nord
35, rue André Durocuez,
CS 98017
80084 Amiens Cedex 2, France
T +33 3 2254 1390

Europe
ATX SAS
Espace Industriel Nord
35, rue André Durocuez,
CS 98017
80084 Amiens Cedex 2, France
T +33 3 2254 1390

Europe
ATX SAS
Espace Industriel Nord
35, rue André Durocuez,
CS 98017
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T +33 3 2254 1390

Europe
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Espace Industriel Nord
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CS 98017
80084 Amiens Cedex 2, France
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Europe
ATX SAS
Espace Industriel Nord
35, rue André Durocuez,
CS 98017
80084 Amiens Cedex 2, France
T +33 3 2254 1390

Asia Pacific
EGS Electrical Group Canada Ltd.
99 Union Street
Elmira ON, N3B 3L7
Canada
T +1 888 765 2226

Asia Pacific
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99 Union Street
Elmira ON, N3B 3L7
Canada
T +1 888 765 2226

Asia Pacific
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Elmira ON, N3B 3L7
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T +1 888 765 2226

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Asia Pacific
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99 Union Street
Elmira ON, N3B 3L7
Canada
T +1 888 765 2226

Asia Pacific
EGS Electrical Group Canada Ltd.
99 Union Street
Elmira ON, N3B 3L7
Canada
T +1 888 765 2226

Latin America
EGS Comercializadora Mexico S de RL de CV
Calle 10 N°145 Piso 3
Col. San Pedro de los Pinos
Del. Álvaro Obregon
Ciudad de México. 01180
T +52 55 5809 9049

India Sales Office
Chennai
T +91 44 3919 7300

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