LED Lighting Solutions
PolyOne helps LED manufacturers develop innovative, lightweight luminaires that minimize total cost per lumen.

Material replacement is not a “drop-in” process. Our experience in metal and glass replacement strategies across a variety of end market applications including appliances, automotive and consumer goods makes us uniquely qualified to offer expertise and advice during each stage of the luminaire development process.

DESIGN ASSISTANCE
Accelerate speed to market with thermal modeling and mold flow analysis.

MATERIAL SELECTION
Offer unbiased recommendations through access to a wide range of materials from industry-leading suppliers.

PRODUCTION EFFICIENCY
Provide processing expertise and on-site engineering support.

We’ll help you explore creative designs while showing you how to simplify production and processing at the same time. We can analyze and filter our comprehensive solution set to find the best choices for your needs, then help you define the best part and tool designs.
Break free from design constraints with a portfolio of solutions that will transform your LED lighting systems.

**HOUSINGS**
Create attractive, long-lasting designs with excellent outdoor weatherability.

Consolidate parts, simplify production processing, and lower costs.

**Solutions:**
PC, PC/ABS, PVC or other engineered materials; color and additive concentrates

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**THERMAL MANAGEMENT**
Dissipate required heat without metal and avoid secondary operations.

Customize electrical conductivity or insulative properties as needed.

**Solutions:**
Thermally-conductive engineered materials

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**REFLECTORS**
Increase light output via reflective, heat and light-tolerant materials.

Eliminate plating and coating operations and minimize environmental concerns.

**Solutions:**
Reflective PBT, PVC, PC and acrylic

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**OPTICS**
Enhance light appearance by optimizing transmission and uniformity.

Extend longevity by improving heat and scratch resistance versus other polymers.

**Solutions:**
PC, PVC, copolyester or acrylic in diffusion grades; diffusion concentrates

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**THERMAL MANAGEMENT**

**REFLECTORS**

**OPTICS**

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**HOUSINGS**

**THERMAL MANAGEMENT**

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**OPTICS**

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