



**Job Title:** Mechatronic Engineer

**Reports to:** Engineering Manager

**Location:** Position is offered in our Glendale, AZ Headquarters

*Barron Lighting Group, Inc., a manufacturer of commercial and industrial lighting products located in Glendale, AZ, is the parent company to EXITRONIX, its emergency lighting division, TRACE\*LITE, its commercial and industrial lighting division, SpecialtyLED, which offers commercial and decorative LED products, and Growlite, which specializes in lighting solutions for the indoor horticultural industry. As a result of our continued growth, Barron Lighting Group has an exciting new opportunity for a mechatronic engineer.*

## **SUMMARY**

**The engineering position is to design, develop, validate and introduce to production new product designs and product improvements. Design scope will include mechanical and electrical/ electronic components as well as the LED luminaires for commercial and industrial lighting applications.**

- Develop performance specifications based upon marketing and regulatory requirements
- Design parts and assemblies to meet the project performance specifications
- Design and plan the layout of electrical assemblies
- Examine, prepare and verify technical drawings and specifications of Electrical System to ensure that installation and operations conform to standards
- Conduct analyses, experiments and design reviews to verify the designed parts fulfill specifications
- Ensure design progression via three-dimensional modeling, thermal, optical and mechanical analysis, drawing release, testing plan and third-party compliance
- Coordinate with purchasing to ensure vendors are identified, quotations are being obtained and quality documents are being supplied
- Act as liaison with existing and potential suppliers to ensure project tooling budget, product performance and product cost requirements are being met
- Conduct design reviews as well as the Design and Process Failure Mode Effect Analysis (DFMEA, PFMEA) sessions to identify project risks and develop response plans
- Initiate drawings, engineering changes, samples/ prototype requests and other necessary tasks to complete project assignments





- Interact with other department team members to complete projects such as process improvements, quality improvements, cost reductions, and inventory control; helping to problem solve while ensuring design integrity
- Perform engineering and prototype builds as required
- Collaborate with manufacturing on product design, tooling development, and manufacturing processes for assigned projects, and conduct pilot run and first article inspections
- Recommend and implement corrective actions for deviations, suggestions, special orders and engineering change notices
- Assist in patent searches, do necessary calculations, select materials, determine and coordinate tests, review and analyze costs, and solve design related problems

#### **TYPICAL DAILY TASKS**

- Create drawings and assemblies in Solidworks
- Design and review electrical assemblies
- Construct luminaires to meet customer specifications
- Coordinate technical requirements with suppliers and manufacturing
- Validate product designs through experimentation and testing
- Communicate project updates

#### **KNOWLEDGE AND SKILL REQUIREMENTS**

**EDUCATION:** Engineering Degree: ME, Mechatronic, Electro-Mechanical or EE

**EXPERIENCE:** 5 years of product design experience or 3 years of product design in the lighting field; LED experience a plus

#### **REQUIRED SKILLS**

- Ability to interpret standards
- Knowledge of Solidworks software designing and rendering
- Knowledge of OrCAD or equivalent software to generate schematics and Gerber files.
- Knowledge of injection molded plastic, die-cast and sheet metal designs
- Knowledge of manufacturing methods and processes
- Strong analytics and decision making
- Ability to manage design project and lead team members





**PREFERRED SKILLS**

- Knowledge of relational database such as Microsoft and MAS 500
- Knowledge of UL and IEC standards
- CSWP Certified

**Interested candidates, please follow this link:**

[https://workforcenow.adp.com/jobs/apply/posting.html?client=barronltg&jobId=160420&lang=en\\_US&source=CC3](https://workforcenow.adp.com/jobs/apply/posting.html?client=barronltg&jobId=160420&lang=en_US&source=CC3)

Thank you for your interest in Barron Lighting Group, an equal opportunity employer.

**EXITRONIX**<sup>®</sup>  
emergency lighting

**specialtyLED**<sup>®</sup>  
commercial & decorative lighting

**TRACE** \* **LITE**<sup>®</sup>  
commercial & industrial lighting

**growlite**<sup>®</sup>  
BY BARRON LIGHTING GROUP

7885 N Glen Harbor Blvd • Glendale, Arizona 85307 • 800.533.3948 • 623.580.3948 • barronltg.com