MEPNN Supplier Scouting Opportunity Synopsis

Section 1: General Information

Scouting Number	2026-647
Item to be Scouted	BABA: Indoor LED Lighting
Days to be scouted	14
Response Due By	11/25/2026
Description	Indoor multifamily lighting consists of electrical lighting fixtures, luminaires, and associated components designed to provide illumination throughout apartment buildings, condominiums, and other multi-unit residential developments. These spaces, and building amenity areas.

Section 2: Technical Information

Type of supplier being sought	Manufacturer
Reason	BABA
Describe the manufacturing processes (elaborate to provide as much detail as possible)	Lighting systems commonly utilize light-emitting diode (LED) technology due to its energy efficiency, extended service life, reduced maintenance requirements, and lower electrical consumption compared to traditional incandescent and fluorescent lighting systems. Manufacturing processes typically include metal stamping, aluminum extrusion, die casting, plastic injection molding, LED circuit board assembly, electronic driver manufacturing, optical component fabrication, electrical wiring, and final fixture assembly. Finished products undergo electrical safety, photometric, thermal, and operational testing to verify performance, efficiency, durability, and compliance with applicable industry standards. Typical indoor multifamily lighting products include recessed downlights, surface-mounted ceiling fixtures, pendant lights, wall sconces, vanity lights, under-cabinet lighting, linear fixtures, strip lights, stairwell fixtures, and indoor multifamily LED lighting fixtures are available in various shapes, sizes, configurations, including recessed downlights, surface-mounted fixtures, wall sconces, vanity lights, pendant fixtures, linear lighting, wall sconces, and emergency lighting assemblies. LED lighting fixtures generally consist of an LED light source, driver or power supply, heat sink, optical diffuser or lens, housing, mounting hardware, and electrical connections. Depending on the fixture design, product may incorporate dimming capabilities, occupancy sensors, LED drivers, integrated emergency battery backups, and smart lighting controls. Electrical specifications typically include 120 VAC or 120–277 VAC operation, 60 Hz frequency, and fixture wattages ranging from approximately 5W to 100W for residential applications. Color temperatures generally range from 2700K to 5000K, with color rendering indexes of 80 or higher. Typical lighting efficiency ranges from approximately 80 to 130 lumens per watt, depending on fixture design and LED technology. Lumen output varies by fixture type, with recessed downlights typically producing 500 to 1,200 lumens, surface-mounted fixtures producing 1,000 to 3,000 lumens, and linear LED fixtures producing approximately 2,000 to 8,000 lumens. Manufacturing tolerances vary according to fixture materials and production methods. Typical tolerances range from ±0.005 to ±0.030 inches for molded plastic components, metal housings, mounting brackets, and optical assemblies. Products must meet applicable electrical safety, photometric, thermal, and durability requirements. Performance characteristics include lumen maintenance, color consistency, power factor, dimming compatibility, thermal management, electrical insulation, and appropriate environmental ratings. Applicable standards may include UL 1598, UL 8750, IES LM-79, IES LM-80, IES TM-21, ANSI C78.377, NFPA 70, and applicable ENERGY STAR and DesignLights Consortium (DLC) requirements.
Provide dimensions / size / tolerances / performance specifications for the item	Typical fixture dimensions range from 4 to 7 inches in diameter for recessed downlights, 10 to 16 inches for surface-mounted fixtures, 18 to 36 inches for linear lighting, and 2 to 8 feet in length for linear LED fixtures.
List required materials needed to make the product, including materials of product	1. Primary Raw Materials Material Application / Component Aluminum Fixture housings, heat sinks, mounting frames, and structural

components	components. Steel Mounting brackets, fixture frames, support plates, and fasteners. Stainless steel Corrosion-resistant hardware and specialty fixture components. Copper Electrical wiring, conductors, terminals, and circuit connections. Brass Electrical terminals, connectors, and grounding components. Polycarbonate Lenses, diffusers, protective covers, and fixture housings. Acrylic (PMMA) Optical lenses, light diffusers, and decorative covers. Nylon Electrical connectors, mounting components, and insulating parts. Silicone Seals, gaskets, insulation, and thermal interface materials. Glass Decorative fixture covers and specialty optical components. Ceramic Electrical insulation and certain high-temperature components. Flame-resistant thermoplastics Electrical housings, driver enclosures, and internal insulation. 2. LED Lighting Electrical and Electronic Components Component Required Materials LED chips / semiconductor dies Gallium nitride (GaN), sapphire or silicon-based substrates, and related semiconductor materials. LED circuit boards Aluminum-core PCBs or fiberglass-based FR-4 circuit boards with copper conductors. LED driver Semiconductor components, capacitors, resistors, inductors, transformers, and circuit boards. Electrical wiring Copper conductors with PVC, silicone, or other approved insulation. Electrical terminals Copper, brass, and plated conductive metals. Connectors Copper alloy contacts and flame-resistant plastic housings. Power supply components Electronic switching components, capacitors, diodes, and transformers. Dimming controls Electronic circuitry, semiconductors, and control components. Occupancy sensors Infrared sensors, electronic circuit boards, and optical components, where applicable. Emergency battery backup Lithium-ion, nickel-metal hydride, or other approved battery technologies, depending on design. 3. Optical and Light-Distribution Materials Material Application Polycarbonate Diffusers and protective LED lenses. Acrylic Light distribution panels and decorative lenses. Optical-grade silicone Specialized lenses and encapsulation. Reflective aluminum Internal reflectors and light distribution surfaces. White reflective coatings Improving light distribution and fixture efficiency. Phosphor materials Converting blue LED emissions into white light. Optical films Controlling glare and improving light distribution. 4. Thermal Management Materials LED lighting fixtures require thermal management components to dissipate heat and maintain LED performance and service life. - Aluminum heat sinks. - Thermal interface materials. - Thermal grease and conductive pads. - Silicone-based thermal compounds. - Metal-core circuit boards. - Heat-resistant insulating materials. 5. Fasteners, Mounting, and Installation Components - Steel mounting brackets. - Galvanized or stainless steel screws. - Metal mounting clips. - Electrical junction boxes or compatible mounting hardware. - Wire nuts and approved electrical connectors. - Grounding screws and grounding conductors. - Ceiling mounting frames. - Recessed fixture housings and support brackets. 6. Additional Materials for Specialized Fixtures Fixture Type Additional Required Materials

	Recessed LED downlights Aluminum heat sinks, reflector cones, trim rings, and insulation-compatible housings. Surface-mounted fixtures Steel or aluminum mounting plates, diffusers, and decorative housings. LED vanity lights Aluminum or steel frames, glass/acrylic lenses, and mounting hardware. Linear LED fixtures Aluminum extrusions, LED strips, diffusers, and end caps. Pendant fixtures Steel suspension cables, decorative metal housings, and optical diffusers. Emergency lighting Rechargeable batteries, charging circuitry, emergency drivers, and backup electronics. Exit signs LED modules, acrylic or polycarbonate panels, electronic drivers, and backup batteries.
Are there applicable certification requirements?	Yes
Certification(s) required	UL
Are there applicable regulations?	No
Are there any other stndards, requirements, etc.?	Yes
Details	ASTM E283 – Air Leakage Testing May apply to recessed lighting fixtures when airtightness is required by the applicable energy code. NEMA SSL 7A – Phase-Cut Dimming for LED Drivers Addresses compatibility and performance of LED drivers with phase-cut dimmers. FCC Part 15 Applies to electronic lighting equipment that generates radio-frequency emissions, including certain LED drivers and wireless lighting controls. DOE Energy Conservation Standards Certain covered lamps and lighting products must comply with applicable federal energy-efficiency requirements.
Additional Technical Comments	

Section 4: Business Information

Estimated potential business volume	Proper lighting per code for a 6 story, 92-unit multifamily project with amenity spaces and underground parking.
Estimated target price / unit cost information (if unavailable explain)	To ensure we deliver an accurate and compliant proposal that meets the National Institute of Standards and Technology (NIST) specifications, we require additional details before finalizing our pricing. Specifically, we are currently awaiting clarification on: - Exact lumen output, color temperature (CCT), dimming capabilities, or specific fixture dimensions required for the facility. - A finalized bill of materials (BOM), total fixture counts, or site survey/ceiling grid measurements. - Confirmation of specific federal compliance requirements (such as Buy American Act / TAA compliance) or current manufacturer lead times and component pricing updates.
When is it needed by?	Immediate
Describe packaging requirements	Palletized and individually wrapped
Where will this item be shipped?	Minneapolis, MN

Additional Comments

Is there other information you would like to include?	Funding: MHFA; Minnesota Housing Finance Agency POC: Nick Hoelscher; Nick.H@noorcompanies.com