



**Fiberoptics Technology Inc. Starscape Star Ceiling Series**  
Specification for:  
**Star Ceiling Small Area LED Kit System**

**PART 1 GENERAL**

**1.1 SYSTEM DESCRIPTION:**

A. Aesthetic Requirements: Small Area LED Kit Fiber Optic System shall be aesthetically pleasing in appearance with no visible defects in parts and workmanship for harness, specified star light bundles, and selected light source (selection). Connections of star bundles to harness will be terminated and incorporate boots, clamps or end tips for easy interconnectivity. 24, 48 72, and 96 square footage kits with 25 foot leads, star density, and add-on effects shall be accommodated as per the detail.

B. Performance requirements:

1. UL fire rating on PMMA fiber optic.
2. Harness will be PMMA fiber optic with medical grade silicone sheath and aluminum or brass end tips.
3. Add-on effects (shooting star or twinkle) will incorporate the same fiber optic material as the harness, and light sources will incorporate UL rated low voltage LED light sources at no more than 12V, and will include wall plug
4. Power supplies used to power light sources for the Small Area LED Kit will be UL low voltage rated at no more than 12V, and will include wall plug.
5. Component materials shall be alterable in the field to accommodate for changes to detail.

C. Definitions:

1. System will be a series of 3 items, light source, harness, and star bundles that will account for dimensions of the Small Area to be covered in the detail (24, 48, 72 or 96 square feet). Detail may incorporate add-on effects (shooting star or twinkle), that will each incorporate a dedicated light source and dedicated fiber strands per the effect.

**1.2 QUALITY ASSURANCE**

A. Installer Qualifications: A qualified General Contractor or Electrician whose work has

resulted in a record of successful in-service performance.

B. Manufacturer Qualifications: A manufacturer with primary experience in custom fiber optic systems manufacturing and ISO certified for an effective Quality Management System.

C. Source Limitations: Obtain quantity, Small Area dimensional design (24, 48, 72 or 96 square feet), star density, desired add-on effects (if necessary, shooting star and/or twinkle) and any other specified requests from manufacturer.

D. Product Options: Drawings indicate dimensional requirement (24, 48, 72 or 96 square feet), star density, light source choice, any add-on effects (if necessary, shooting star and/or twinkle), and are based on the system indicated in the detail.

### 1.3 REFERENCES

A. Star Bundles and Custom Harness

1. UL Fire Rating on PMMA plastic fiber
2. Medical Grade silicone sheathing
3. Aluminum or brass end tips

B. Light Sources (Small Area LED Kit, Twinkle and Shooting Star):

1. UL Low Voltage Rating not to exceed 12V for Shooting Star and Twinkle Light Sources, and will include wall plug
2. Enclosures will be hard plastic or aluminum shell

### 1.4 SUBMITTALS

A. Product Data: Include physical characteristics such as dimensions (24, 48, 72 or 96 square feet), star density requested, and any add-on effects requested.

B. Shop Drawings: Show installation details, and any cut sheets available.

C. Maintenance Data: Include standard maintenance manual, or installation and handling manual for this product.

### 1.5 DELIVERY, STORAGE, AND HANDLING

A. Inspect Small Area LED Kit System and any other components on delivery for carrier damage. Store system in original undamaged packaging in an area sheltered from weather until ready for installation. Inspect system and other components prior to installation.

## 1.6 WARRANTY

A. Small Area LED Kit, and all other related components are to carry a one year manufacturer's limited warranty against defects in materials and workmanship. The one year warranty period begins the date the product is shipped from the manufacturer.

## PART 2 - PRODUCTS

### 2.1 ACCEPTABLE MANUFACTURERS

A. Fiberoptics Technology Inc. 1 Quassett Rd. Pomfret, CT, USA 06258. Ph: 860-928-0443, Fax: 860-928-7664. Contact: Zach Morin Email: [zmorin@fiberoptix.com](mailto:zmorin@fiberoptix.com)

### 2.2 MATERIALS

- A. Harness
  - 1. Harness will be constructed of PMMA fiber optic, medical grade silicone sheathing, and aluminum or brass end tips, and will be constructed to the given dimensions and desired star density.
  
- B. Small Area LED Kit Light Source
  - 1. Light source enclosure will be hard plastic or aluminum shell
  - 2. Light source will be UL Low Voltage rated at no more than 12V, and will include wall plug
  - 3. Light source will be equipped with desired control if necessary (i.e. DMX, IR, RF etc.).
  
- C. Twinkle and Shooting Star Light Source
  - 1. Light sources will be UL Low Voltage Rating, not to exceed 12V, and will come with wall plug
  - 2. Light source enclosure will be hard plastic or aluminum shell
  
- D. Fiber Optic Bundles
  - 1. Fiber optic bundle will consist of PMMA plastic end emitting fiber optic strands.
  - 2. The number of strands designated will be determined by the specified star density outlined by the architect or client
  - 3. The fiber optic strands will be bonded together in a small brass eyelet and ground and polished for maximum light output and performance.

#### E. Options

1. Small Area LED Kit size (24, 48, 72 or 96 square feet) per detailed dimensions
2. Star Density: number of star points per square foot as specified in the detail
3. Shooting Star Effect Add On: 40 additional fibers, and similar LED light source (UL rated low voltage 9V) for shooting star effect.
4. Twinkle Effect Add On: 80 additional fibers, and similar LED light source (UL rated low voltage no more than 12V) for twinkle effect.

#### 2.3 Custom Harness Star Ceiling System:

A. The Small Area LED Kit System shall be a part of the Starscape model line, Square footage of Small Area LED Kit will be \_\_\_\_\_ (24, 48, 72 or 96 square feet). Quantity will be \_\_\_\_\_. Desired star density will be \_\_\_\_\_/sq ft. Desired add-on effects necessary are \_\_\_\_\_ (if necessary, shooting star and/or twinkle).

1. Manufacturer part numbers will vary, and be created anew due to the custom nature of each project and build.

### PART 3 B EXECUTION

#### 3.1 INSTALLATION

##### A. Site requirements.

1. Installation of Small Area LED Kit System shall be in existing drywall, drop ceiling or other medium, or new construction medium in detail to local building code requirements.
2. Add-on effects will be installed similar to Small Area LED Kit System
3. Heed all other installation instructions and tips in installation manual required by submittals.

B. Handle and install Small Area LED Kit System and any add-ons in accordance with manufacturer's recommendations and installation instructions.

C. Ensure that all material, when mounted, is secure in position and securely fixed.