



All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters. Unless otherwise specified, dimensions have a tolerance of  $\pm 0.13$  and angles have a tolerance of  $\pm 2^\circ$ . Figures are for identification only and are not drawn to scale.

## 1. INTRODUCTION

This specification covers the requirements for application of the Z50 (type 1) optic clip for Z50 Zhaga-compliant form-factor profile LED holder. The optic clip is used as an interface to attach a reflector to the LED holder in order to create a directional beam of light.

The optic clip is a frame that features 3 attachment clips used to hold the reflector in place and 2 screw holes that each accept a customer-supplied mounting screw. The mounting screws must be compatible with the screw holes of the LED holder. The mounting screws are used to secure the optic clip to the LED holder and the LED holder to the cooling device.

When corresponding with personnel, use the terminology provided in this specification to facilitate your inquiries for information. Basic terms and features of this product are provided in Figure 1.

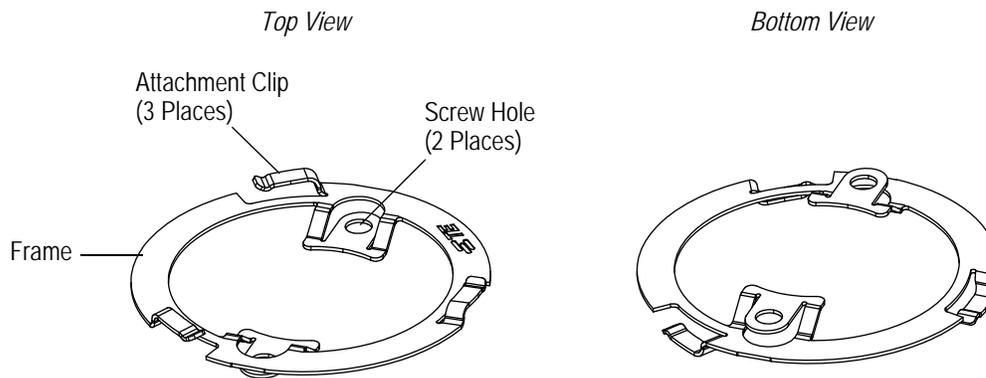


Figure 1

## 2. REFERENCE MATERIAL

### 2.1. Revision Summary

Initial release of application specification

### 2.2. Customer Assistance

Reference Product Base Part Number 2213194 and Product Code L836 are representative of Z50 (Type 1) optic clip for Z50 Zhaga-compliant form-factor profile LED holder. Use of these numbers will identify the product line and help you to obtain product and tooling information. Such information can be obtained through a local Representative, by visiting our website at [www.te.com](http://www.te.com), or by calling PRODUCT INFORMATION or the TOOLING ASSISTANCE CENTER at the numbers at the bottom of this page.

### 2.3. Drawings

Customer Drawings for product part numbers are available from the service network. If there is a conflict between the information contained in the Customer Drawings and this specification or with any other technical documentation supplied, call PRODUCT INFORMATION at the number at the bottom of this page.

Zhaga is a trademark.

## 2.4. Specifications

Design Objective 108-133012 provides product performance and test information.

## 2.5. Instructional Material

Instruction Sheets (408-series) provide product assembly instructions. There are no instruction sheets available that pertain to this product.

## 3. REQUIREMENTS

### 3.1. Safety

Do not stack product shipping containers so high that the containers buckle or deform.

### 3.2. Storage

The optic clip should remain in the shipping container until ready for use to prevent deformation to the frame or attachment clips. The optic clips should be used on a first in, first out basis to avoid storage contamination that could adversely affect performance.

### 3.3. Reflector

It is recommended that the interface of the reflector have the dimensions given on the customer drawing for the Z50 optic clip. A reference sample design is shown in Figure 2.

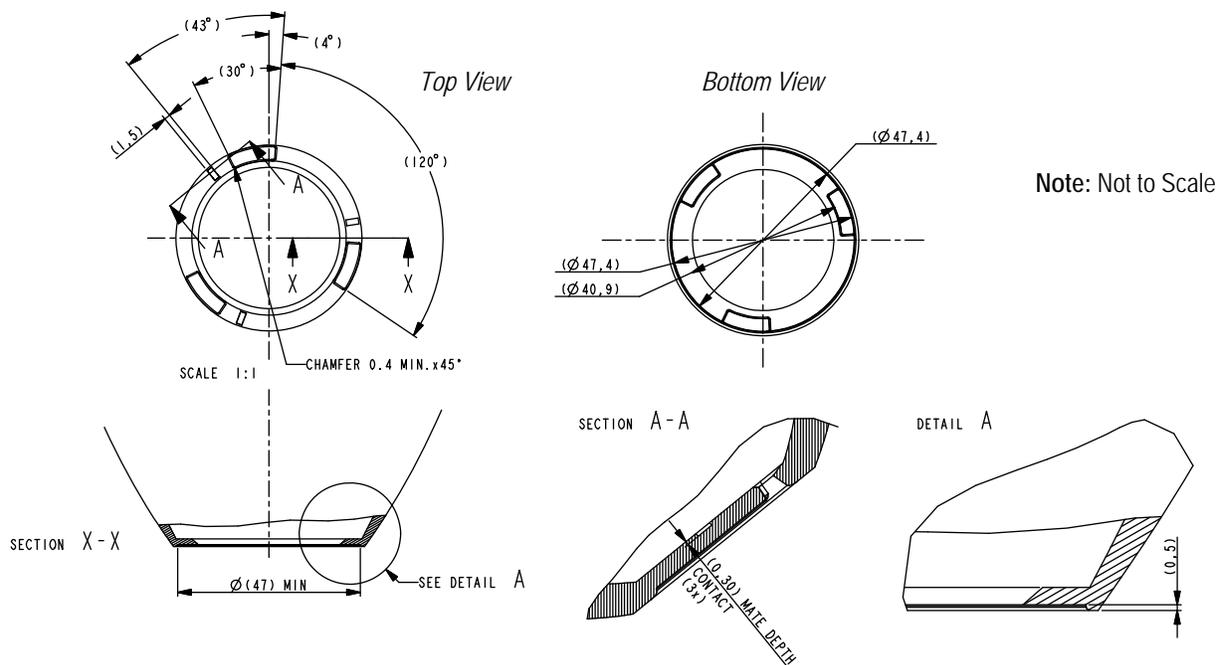


Figure 2

### 3.4. Assembly

#### NOTE



The LED holder, LED, and cooling device must be properly prepared before attaching the optic clip. If the LED holder is mounted onto the cooling device, the mounting screws must be removed from the LED holder. The optic clip is designed to be attached to the LED holder using the same mounting screws that mount the LED holder to the cooling device. The optic clip can be installed before or after the wires are attached to the LED holder.

1. The optic clip must be placed over the LED holder with the attachment clips facing away from the LED holder and the screw holes aligned with the screw holes of the LED holder. See Figure 3, Detail A.
2. The optic clip and LED holder must be secured to the cooling device using the mounting screws. Each mounting screw should be tightened to a torque between 0.3 and 0.5 Nm [2.5 and 4 in.-lb]. See Figure 3, Detail B.

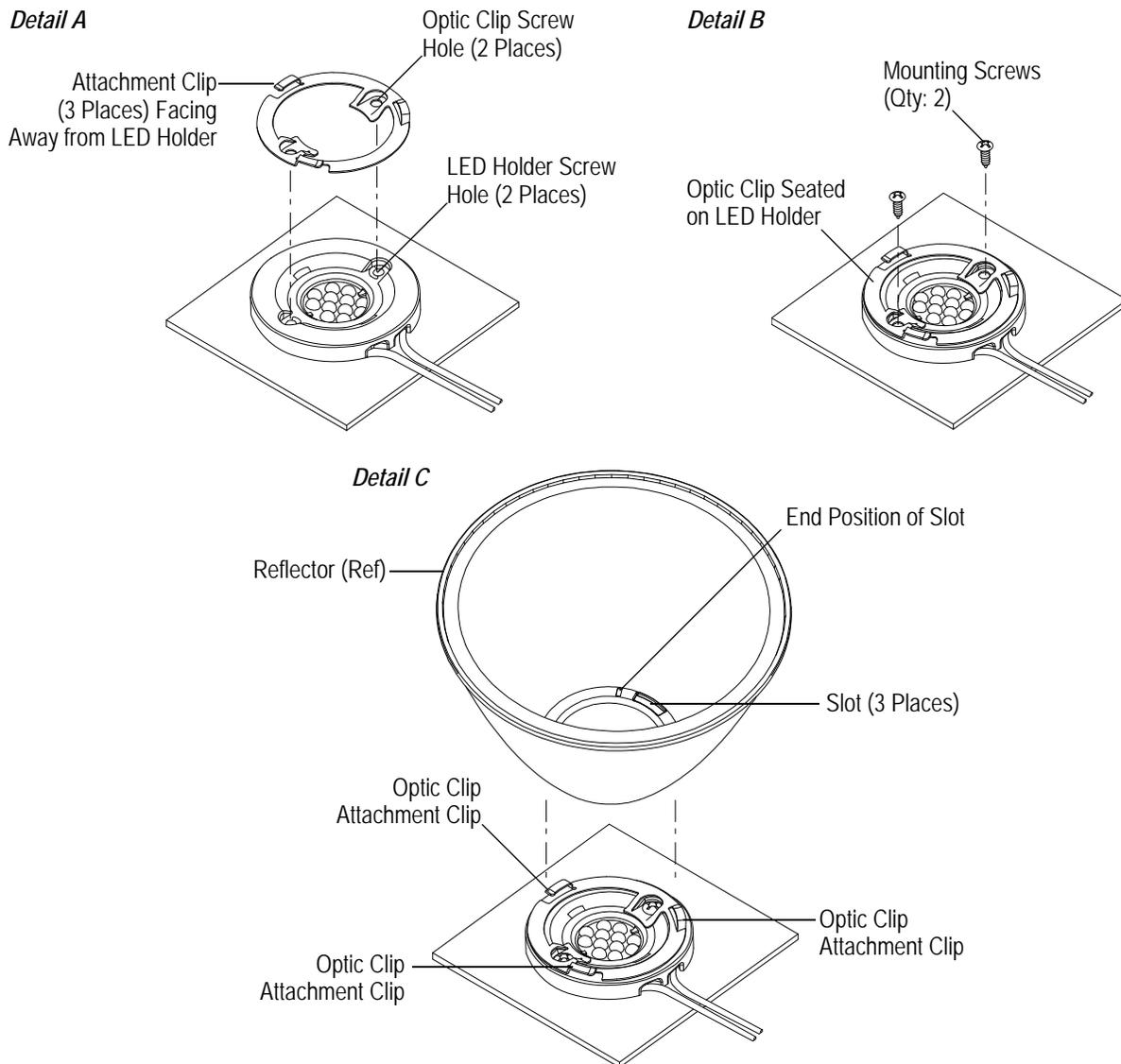


Figure 3

3. The slots of the reflector must be placed over the attachment clips of the optic clip, then the reflector must be secured to the optic clip by rotating the reflector clockwise until it stops (approximately 33 degrees). There will be an audible and/or tactile “click” when the attachment clips are in the end position of the slots. See Figure 3, Detail C.

### 3.5. Removal

The optic clip can be removed from the LED holder by rotating the reflector counter-clockwise until the optic clip attachment clips are out of the reflector slots (approximately 33 degrees), lifting the reflector off of the optic clip, and removing the mounting screws from the optic clip.

### 3.6. Replacement and Repair

Defective or damaged optic clips must not be used.

## 4. QUALIFICATION

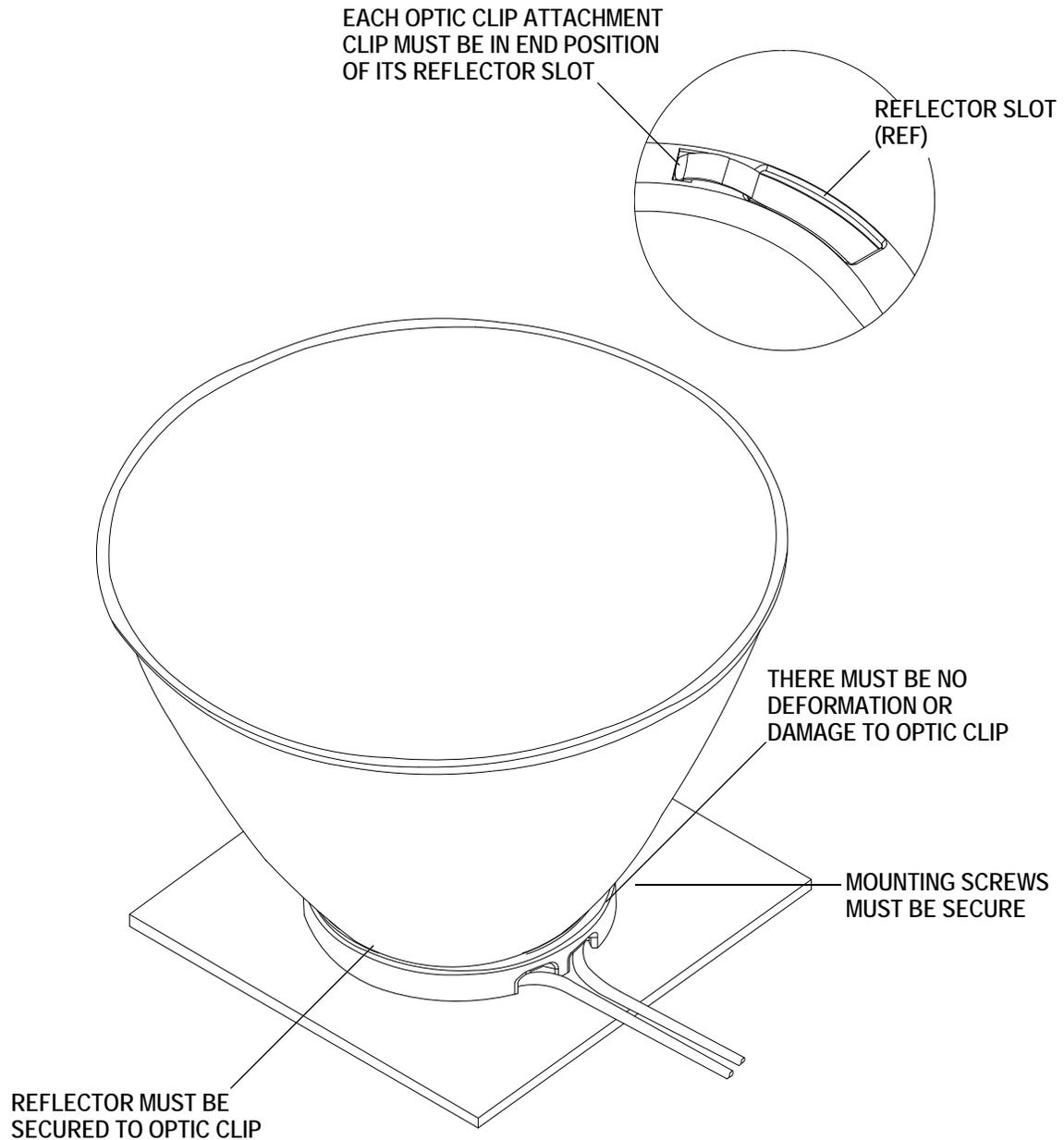
No outside agency approvals for the optic clip was defined at the time of publication of this document.

## 5. TOOLING

A standard screwdriver is required to tighten the mounting screws for attaching the optic clip to the LED holder.

## 6. VISUAL AID

The illustration below shows a typical application of Z50 (Type 1) optic clip for Z50 Zhaga-compliant form-factor profile LED holder. This illustration should be used by production personnel to ensure a correctly applied product. Applications which DO NOT appear correct should be inspected using the information in the preceding pages of this specification and in the instructional material shipped with the product or tooling.



**FIGURE 4. VISUAL AID**