**SOLE SOURCE / SINGLE SOURCE / NO SUBSTITUTE JUSTIFICATION**

**Complete this form and submit to Procurement Services when Purchase Request dollar amount exceeds standard purchase amounts\* and competitive bidding is unavailable or deemed unacceptable.**

REQUISITION #   
ITEM(S): Galvo mirror system & Bislide platform COST: $4981.50

**I. Check the category most applicable to your requirement:**

◼**Sole Source.** No other known source or the only source meeting specification requirements.

**Single Source.** Only the designated Supplier is acceptable, others may exist.

**No Substitute.** Specified item is required due to uniqueness, research continuity, etc.

**II. Check the description(s) most applicable to your requirement:**

◼Item has characteristics unique to a single manufacturer essential to proposed use.

Proprietary repair or replacement item.

◼Supplementary or accessory item required from same manufacturer.

Designed into fabricated equipment.

Required for test and evaluation.

Emergency acquisition as defined in BUS 43

Other:

**III. Defining Item / Supplier uniqueness:**

A. What are the minimum use requirements (e.g., operating specifications; dimensions; tolerances; accuracy; purity; reliability; useful life, etc.)?

The Galvo mirror system should have enough precision and scanning speed while being compatible with the scanning lens we are planning to use in combination. The two-axis sliding platform is needed for our far-field imaging setup for integrated phased-array systems, and it should provide wide moving range with precision while providing reliable support for heavy components (e.g. infrared camera).

B. How are these requirements critical to your needs?

As we are trying to demonstrate beam-steering system uses laser scanning lens with wide field of view and aberration performance, compatibility of the system with the lens of interest is of greatest importance. For two-axis linear stage should have with travel range and high flexibility to accommodate different imaging angles of microscopy tube for far-field imaging experiment.

C. What other suppliers were considered and why were they rejected? (Brand names and suppliers should be specified.)

Edmund optics also offers Galvo mirror system, but the price was more than $1000 higher and it lacks compatibility with the laser scanning lens of interest from Thorlabs. As for the two-axis linear stage, similar product from Newport corporation was not considered mainly because of prohibitively higher price.

D. Why is this make, model, service, or supplier the only one acceptable?

Thorlabs Galvo mirror scanning system provides sufficient functionality we need and the only product that is compatible with the laser scanning lens from Thorlabs which is planned to be used in combination. Velmex Bislide platform is the only two-axis wide-range linear stage in the market with acceptable price, and we already have list of customizations picked by our collaborators that builds optimized setup for our far-field imaging experiment.

Prepared By: Fred Burghardt Date: Email: flb@berkeley.edu

(if different than the Approver)

Approved By: Date: Email:

(Principal Investigator/Administrative Officer)

Concurrence: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:

Buyer

\* $5,000 for Federal and $10,000 for Non-Federal