FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

OMB APPROVAL
OMB Number: 3235-0287
Estimated average burden
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. *See* Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| (Print or Ty | pe Response | s) | | | | | | | | | | | | | | |
|---|--|--|---|--|------------------------------------|-----|-----------------------------|--|-------------------------|---|--|---|--------------------------------------|---|--|---------------------------------------|
| 1. Name and Address of Reporting Person* Hanley Jeneanne Michelle | | | | 2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC] | | | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner | | | | |
| (Last) (First) (Middle) ONE TECHNOLOGY DRIVE | | | | 3. Date of Earliest Transaction (Month/Day/Year) 06/10/2019 | | | | | | | | Office | r (give title belo | ow) | Other (specify b | elow) |
| (Street) | | | | 4. If Amendment, Date Original Filed(Month/Day/Year) | | | | | | 6. Individual or Joint/Group Filing(Check Applicable Line) Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | | |
| MILPITAS, CA 95035 (City) (State) (Zip) | | | | Table I - Non-Derivative Securities Acqu | | | | | | ired, Disposed of, or Beneficially Owned | | | | | | |
| (Instr. 3) Date | | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | | (Instr. 8) | | (A) | | | of (D) | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) | | Ownership Form: | Beneficial | | |
| | | | | | | ode | V Am | ount | (A) or (D) | Price | (Instr. 3 and 4) | | | . , | Ownership Instr. 4) | |
| Common Stock Un | Stock - R | estricted | 06/10/2019 | | | 1 | A | 724 | (2) | A | \$ 0 | 724 | | | D | |
| | | | | Derivative Se | | | quire | contained the form d, Dispose | d in the displ d of, | his for lays a o | m are curre eficial | not requesting ntly valid | OMB conf | ormation spond unle trol numbe | ss | 1474 (9-02) |
| Security | 2. Conversion or Exercise Price of Derivative Security | ***** | 3A. Deemed Execution Date | te, if Transac | 4., if Transaction Code (Instr. 8) | | er ative ities red | and Expiration Date (Month/Day/Year) L S | | | 7. Ti Amo Und Secu | itle and ount of lerlying urities tr. 3 and | Derivative Security (Instr. 5) | 9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s (Instr. 4) | Ownersl Form of Derivati Security Direct (I or Indire | Beneficial Ownership (Instr. 4) |
| | | | | Code | V | (A) | | Date Exercisab | | epiration ate | Title | Amount or Number of Shares | | | | |

Reporting Owners

| | Relationships | | | | | |
|--|---------------|--------------|---------|-------|--|--|
| Reporting Owner Name / Address | Director | 10% Owner | Officer | Other | | |
| Hanley Jeneanne Michelle ONE TECHNOLOGY DRIVE MILPITAS, CA 95035 | X | | | | | |

Signatures

| /s/ Jeffrey Cannon, attorney-in-fact | 06/11/2019 | | |
|--------------------------------------|------------|--|--|
| **Signature of Reporting Person | Date | | |

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) Each restricted stock unit ("RSU") represents a contingent right to receive one share of KLA-Tencor common stock.
- (2) Represents a pro-rated annual outside director grant, which will vest in full immediately prior to the next annual meeting of stockholders.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.