UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): November 3, 2011

KLA-TENCOR CORPORATION

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 000-09992 (Commission File Number) 04-2564110 (I.R.S. Employer Identification No.)

One Technology Drive, Milpitas, California (Address of principal executive offices)

95035 (Zip Code)

Registrant's telephone number, including area code: (408) 875-3000 (Former name and former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 5.07 Submission of Matters to a Vote of Security Holders.

KLA-Tencor Corporation (the "Company") held its fiscal year 2011 Annual Meeting of Stockholders on November 3, 2011. Of the 166,543,044 shares of the Company's common stock outstanding as of September 13, 2011 (the record date), 152,900,986 shares, or 91.81%, were present or represented by proxy at the meeting. Four proposals were considered at the meeting.

Proposal One. The stockholders elected the Company's three Class I nominees to the Company's Board of Directors to each serve for a three-year term, each until his successor is duly elected. The table below presents the results of the election:

Name	For	Withheld	Broker Non-Votes
Robert M. Calderoni	131,741,940	6,121,515	15,037,531
John T. Dickson	135,003,075	2,860,380	15,037,531
Kevin J. Kennedy	135,087,891	2,775,564	15,037,531

The Company's Class II directors (Robert P. Akins, Robert T. Bond, Kiran M. Patel and David C. Wang) and Class III Directors (Edward W. Barnholt, Emiko Higashi, Stephen P. Kaufinan and Richard P. Wallace) were not subject to reelection at the annual meeting, and their respective terms of office as members of the Board of Directors continued after the meeting.

<u>Proposal Two</u>. The stockholders ratified the appointment of PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm for the fiscal year ending June 30, 2012. The table below presents the voting results on this proposal:

For	Against	Abstentions	Broker Non-Votes
150,639,870	1,932,219	328,897	0

<u>Proposal Three</u>. The stockholders approved, on a non-binding advisory basis, the compensation of the Company's named executive officers, as disclosed in the Company's Proxy Statement. The table below presents the voting results on this proposal:

For	Against	Abstentions	Broker Non-Votes
96,033,408	41,266,207	563,840	15,037,531

<u>Proposal Four</u>. The stockholders voted, on a non-binding advisory basis, on the preferred frequency (among the options of every one year, every two years or every three years) of future advisory votes on the compensation of the Company's named executive officers. The table below presents the voting results on this proposal:

One Year	Two Years	Three Years	Abstentions	Broker Non-Votes
127,554,874	112,688	9,419,501	776,392	15,037,531

With regard to Proposal Four, a majority of the shares were voted, consistent with the recommendation of the Company's Board of Directors (the "Board") set forth in the Proxy Statement, for holding future advisory votes on executive compensation on an annual basis. The Board has considered the outcome of this advisory vote and has determined that the Company will hold an annual advisory vote on the compensation of the Company's named executive officers until the Board decides to hold the next advisory vote regarding the frequency of advisory votes (which advisory vote regarding frequency is required to be held at least every six years).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: November 4, 2011

KLA-TENCOR CORPORATION

By: /s/ BRIAN M. MARTIN

Name: Brian M. Martin

Title: Executive Vice President and General Counsel