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): December 19, 2014

KLA-TENCOR CORPORATION

(Exact name of registrant as specified in its charter)				
	Delaware	000-09992	04-2564110	
	(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)	
	One Technology Drive, Milpitas, California		95035	
	(Address of principal executive offices)		(Zip Code)	
	Registrant's telephone number, including area code: (408) 875-3000			
(Former name or 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 1.02 Termination of a Material Definitive Agreement.

On November 19, 2014, KLA-Tencor Corporation (the "Company") announced that the Company will redeem \$750.0 million outstanding principal amount of the Company's 6.900% Senior Notes due 2018 (the "2018 Notes") on December 19, 2014 (the "Redemption Date"). The Company has completed such redemption on the Redemption Date. In connection with such redemption, the Company has discharged its obligations under the 2018 Notes and the Indenture, dated as of May 2, 2008 (the "Indenture"), by and among the Company and Wells Fargo Bank, National Association, as trustee. The redemption price is the sum of the present values of the remaining scheduled payments of principal and interest on the 2018 Notes redeemed (exclusive of interest accrued to the Redemption Date), discounted to the Redemption Date on a semi-annual basis, at a rate equal to the sum of the treasury rate plus 50 basis points, plus the accrued and unpaid interest to, but not including, the Redemption Date. The Company did not incur any additional early termination penalties in connection with such redemption.

To the extent required by Item 1.02 of Form 8-K, the Indenture, which was filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on May 6, 2008, is incorporated by reference in this Item 1.02.

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.

KLA-TENCOR CORPORATION

Date: December 22, 2014 By: /s/ BRIAN M. MARTIN

Name: Brian M. Martin

Title: Executive Vice President and General Counsel