FORM 4

obligations may continue. See Instruction 1(b).

Check this box if no longer subject to Section 16. Form 4 or Form 5

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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| STATEMENT OF CHANGES IN BENEFICIA | L OWNERSHIP |
|-----------------------------------|-------------|
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OMB APPROVAL

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

| 1. Name and Address of Reporting Person* SMITH ARTHUR D | | | | | | 2. Issuer Name and Ticker or Trading Symbol CIENA CORP [CIEN] | | | | | | | | | Check | tionship of Reportir all applicable) Director Officer (give title | | 10% (| ssuer Owner (specify |
|--|--|--|--------------------------------|--|------------|---|--|--|------------------|---|---|--|---------------|-------|--|---|---|--|---|
| (Last) (First) (Middle) C/O CIENA CORPORATION 1201 WINTERSON ROAD | | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 07/01/2010 | | | | | | | | | X | belov | N) . | below ef Integration | |
| (Street) LINTHICUM, MD 21090 (City) (State) (Zip) | | | | | 4. If | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | 6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transac Date (Month/Date) | | | | | | ır) E | A. Deemed Execution Date, f any Month/Day/Year) | | Transaction D | | Disposed | 1. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4 5) | | | 4 and So | | ount of ities icially d Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | | | | | | | v | Amount | | (A) or (D) | Price | | Reported Transaction(s) (Instr. 3 and 4) | | | (1130.4) |
| Common Stock | | | | | 07/01/2010 | | | | S ⁽¹⁾ | | 4,000 | | D | \$12 | .67 | 220,460(2) | | D | |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | | | | |
| Derivative Conversion Date Security Or Exercise (Month/Day/Year) Exercise | | 3A. Deem Execution if any (Month/Da | n Date, Transaction Code (Inst | | Instr. | | | 6. Date Exercisable and Expiration Date (Month/Day/Year) Date Expiration Exercisable Date | | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) Amour or Numbe of | | ount nber | | | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |

Explanation of Responses:

- 1. Sales were effected pursuant to Rule 10b5-1 trading plan dated December 22, 2009.
- 2. Shares reported include unvested Restricted Stock Units (RSUs).

By: Erik Lichter For: Arthur D Smith

07/02/2010

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * 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).

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

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