

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

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

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

1. Name and Address of Reporting Person* <u>SMITH ARTHUR D</u> (Last) (First) (Middle) <u>C/O CIENA CORPORATION</u> <u>1201 WINTERSON ROAD</u> (Street) <u>LINTHICUM, MD 21090</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>CIENA CORP [CIEN]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>CHIEF OPERATING OFFICER</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>05/07/2007</u>	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	05/07/2007		M		1,785	A	\$19.95	56,587	D	
Common Stock	05/07/2007		M		2,514	A	\$16.52	59,101	D	
Common Stock	05/07/2007		s ⁽¹⁾		4,299	D	\$29.9442 ⁽²⁾	54,802	D	

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Non-Qualified Stock Option (right to buy)	\$16.52	05/07/2007		M			2,514	(3)	11/02/2015	Common Stock	2,514	\$0	42,129	D	
Non-Qualified Stock Option (right to buy)	\$19.95	05/07/2007		M			1,785	(4)	12/10/2014	Common Stock	1,785	\$0	13,558	D	

Explanation of Responses:

- Sales were effected pursuant to Rule 10b5-1 trading plan dated 3/19/07.
- Reflects the average sale price of the total shares sold. Actual sales prices are as follows: 98 shares at \$29.84; 2 shares at \$29.85; 200 shares at \$29.86; 300 shares at \$29.87; 200 shares at \$29.89; 766 shares at \$29.94; 534 shares at \$29.95; 700 shares at \$29.96; 599 shares at \$29.97; 736 shares at \$29.98; and 164 shares at \$29.99.
- Option vests at a rate of 25% on the last day of the month of the one year anniversary of the grant date and 2.084% for each of the 36 months thereafter.
- Option is fully vested. On October 26, 2005, the Board of Directors accelerated the vesting of Ciena's then unvested, "out-of-the-money" stock options.

By: Erik Lichter For: Arthur D. Smith 05/08/2007

** 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.