FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

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* FRODSHAM JAMES (Last) (First) (Middle) C/O CIENA CORPORATION 1201 WINTERSON ROAD (Street) LINTHICUM, MD 21090					3. D 12/2	2. Issuer Name and Ticker or Trading Symbol CIENA CORP [CIEN] 3. Date of Earliest Transaction (Month/Day/Year) 12/21/2012 4. If Amendment, Date of Original Filed (Month/Day/Year)								S. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director				
(City) (State) (Zip) Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																		
1. Title of Security (Instr. 3) 2. Transacti Date (Month/Day)					tion	on 2A. Deemed Execution Date,			3. Transaction Code (Instr. 8)		4. Securities Acquired (A) o Disposed Of (D) (Instr. 3, 4 a			5. Amount of		ount of ities icially d Following	6. Ownership Form: Direct (D) or Indirec (I) (Instr. 4)	of Indirect
						Code	v	Amount	(A) or (D)	Price	•	Transa	action(s) 3 and 4)		(11301.4)			
Common Stock 12/21					2012	2012					1,458(1)	D	\$15	.2323	19	90,901	D	
Common Stock 12/21/					2012				S		1,543(2)	D	\$15	\$15.2349		89,358	D	
Common Stock 12/21/2					2012	.012			S		1,015(3)	D \$15.2358		.2358	3 188,343		D	
Common Stock 12/21/2					2012				A		4,445(4)	A	\$	\$0.0		92,788	D	
Common Stock 12/21/20					2012	012			S	5,244 ⁽⁵⁾		D	\$15	\$15.2319		9 187,544 ⁽⁶⁾		
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) (Month/Day/Year) 3. Transaction Date Execution if any (Month/E				Instr.	5. Nu of Deriv Secu Acqu (A) of Dispo of (D) (Instr and 5	rities ired r osed) : 3, 4	6. Date Exerc Expiration Da (Month/Day/Y		ate	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) Amount or Number of Shares		Deri Sec (Ins	rice of ivative urity tr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)	Ownershi Form: Direct (D) or Indirec (I) (Instr. 4	Beneficial Ownership t (Instr. 4)	

Explanation of Responses:

- 1. Shares reported represent an amount sold to cover the tax liabilities of the reporting person pursuant to a 10b5-1 sales instruction related to a restricted stock unit (RSU) award agreement dated 12/16/2009. $Acquisition \ of the \ RSU \ was \ previously \ reported \ in \ Table \ I \ of \ reporting \ person's \ Form \ 4 \ on \ 12/18/2009.$
- 2. Shares reported represent an amount sold to cover the tax liabilities of the reporting person pursuant to a 10b5-1 sales instruction related to a restricted stock unit (RSU) award agreement dated 12/14/2010. Acquisition of the RSU was previously reported in Table I of reporting person's Form 4 on 12/16/2010.
- 3. Shares reported represent an amount sold to cover the tax liabilities of the reporting person pursuant to a 10b5-1 sales instruction related to a restricted stock unit (RSU) award agreement dated 12/15/2011. Acquisition of the RSU was previously reported in Table I of reporting person's Form 4 on 12/19/2011.
- 4. Reflects additional shares earned, as determined by the Compensation Committee, pursuant to Performance Stock Units (PSUs) granted December 14, 2010.
- 5. Shares reported represent an amount sold to cover the tax liabilities of the reporting person pursuant to a 10b5-1 sales instruction related to a performance stock unit (PSU) award agreement dated
- 12/14/2010. Acquisition of the PSU was previously reported in Table 1 of reporting person's Form 4 in December 2010.

6. Shares reported include unvested Restricted Stock Units (RSUs).

By: Erik Lichter For: James A **Frodsham**

12/26/2012

** 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.