

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No. __)*

Applied Optoelectronics, Inc.
(Name of Issuer)

Common stock, \$0.001 par value
(Title of Class of Securities)

868459108
(CUSIP Number)

February 10, 2015
(Date of Event Which Requires Filing of This Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
 Rule 13d-1(c)
 Rule 13d-1(d)

(Page 1 of 16 Pages)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAME OF REPORTING PERSON Ardsley Partners Fund II, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 307,400
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 307,400
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 307,400	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 2.1%	
12	TYPE OF REPORTING PERSON PN	

1	NAME OF REPORTING PERSON Ardsley Partners Institutional Fund, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 277,500
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 277,500
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 277,500	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 1.9%	
12	TYPE OF REPORTING PERSON PN	

1	NAME OF REPORTING PERSON Ardsley Partners US Equity UCITS Fund plc	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION New York	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 30,000
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 30,000
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 30,000	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0.2%	
12	TYPE OF REPORTING PERSON PN	

1	NAME OF REPORTING PERSON Ardsley Ridgecrest Partners Fund, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION New York	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 30,000
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 30,000
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 30,000	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0.2%	
12	TYPE OF REPORTING PERSON PN	

1	NAME OF REPORTING PERSON Ardsley Advisory Partners	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION New York	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 644,900
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 644,900
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 644,900	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 4.4%	
12	TYPE OF REPORTING PERSON PN; IA	

1	NAME OF REPORTING PERSON Ardsey Partners I	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION New York	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 614,900
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 614,900
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 614,900	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 4.2%	
12	TYPE OF REPORTING PERSON PN	

1	NAME OF REPORTING PERSON Philip J. Hempleman	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 939,424
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 939,424
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 939,424	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 6.3%	
12	TYPE OF REPORTING PERSON IN	

Item 1(a). NAME OF ISSUER

The name of the issuer is Applied Optoelectronics, Inc. (the "Company").

Item 1(b). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES

The Company's principal executive offices are located at 13115 Jess Pirtle Blvd., Sugar Land, TX 77478.

Item 2(a). NAME OF PERSON FILING

This statement is filed by:

- (i) Ardsley Partners Fund II, L.P., a Delaware limited partnership ("AP II"), with respect to the Shares (as defined in Item 2(d) below) directly owned by it;
- (ii) Ardsley Partners Institutional Fund, L.P., a Delaware limited partnership ("Ardsley Institutional"), with respect to the Shares directly owned by it;
- (iii) Ardsley Partners US Equity UCITS Fund plc, an Irish UCITS plc ("Ardsley US Equity"), with respect to the Shares directly owned by it;
- (iv) Ardsley Ridgecrest Partners Fund, L.P., a Delaware limited partnership ("Ardsley Ridgecrest"), with respect to the Shares directly owned by it;
- (v) Ardsley Advisory Partners, a New York general partnership ("Ardsley") which serves as Investment Adviser of AP II, Ardsley Institutional and Ardsley Ridgecrest and as Sub-Advisor of Ardsley US Equity, with respect to the Shares directly owned by AP II, Ardsley Institutional, Ardsley US Equity and Ardsley Ridgecrest;
- (vi) Ardsley Partners I, a New York general partnership ("Ardsley Partners") which serves as General Partner of AP II, Ardsley Institutional and Ardsley Ridgecrest, with respect to the Shares owned by AP II, Ardsley Institutional and Ardsley Ridgecrest; and
- (vii) Philip J. Hempleman ("Mr. Hempleman"), the Managing Partner of Ardsley and Ardsley Partners, with respect to the Shares owned by AP II, Ardsley Institutional, Ardsley US Equity, Ardsley Ridgecrest and with respect to the Shares owned by certain accounts managed by him directly.

The foregoing persons are hereinafter sometimes collectively referred to as the "Reporting Persons." Any disclosures herein with respect to persons other than the Reporting Persons are made on information and belief after making inquiry to the appropriate party. The filing of this statement should not be construed as an admission that any of the Reporting Persons is, for the purposes of Section 13(d) of the Act, the beneficial owner of the Shares reported herein.

Item 2(b). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE

The address of the business office of each of the Reporting Persons is 262 Harbor Drive, Stamford, Connecticut 06902.

Item 2(c). CITIZENSHIP

AP II, Ardsley Institutional and Ardsley Ridgecrest are Delaware limited partnerships. Ardsley US Equity is an Irish UCITS plc. Ardsley and Ardsley Partners are New York general partnerships. Mr. Hempleman is a United States citizen.

Item 2(d). TITLE OF CLASS OF SECURITIES

Common stock, par value \$0.001 (the "Shares")

Item 2(e). CUSIP NUMBER

03823U102

Item 3. IF THIS STATEMENT IS FILED PURSUANT TO Rules 13d-1(b), OR 13d-2(b) OR (c), CHECK WHETHER THE PERSON FILING IS A:

- (a) Broker or dealer registered under Section 15 of the Act;
- (b) Bank as defined in Section 3(a)(6) of the Act;
- (c) Insurance company as defined in Section 3(a)(19) of the Act;
- (d) Investment company registered under Section 8 of the Investment Company Act of 1940;
- (e) An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
- (h) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act;
- (i) A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act;
- (j) A non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J);
- (k) Group, in accordance with Rule 13d-1(b)(1)(ii)(K).

If filing as a non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J), please specify the type of institution: _____

Item 4. OWNERSHIP

The information required by Items 4(a) – (c) is set forth in Rows 5-11 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each Reporting Person.

The percentages used in this Schedule 13G are calculated based upon 14,816,055 Shares reported to be outstanding as of November 3, 2014 in the Company's Form 10-Q filed on November 12, 2014. The percentages used herein and in the rest of the Schedule 13G are based upon such number of Shares outstanding.

Item 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS

Not applicable.

Item 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON

Ardsley, the Investment Adviser of AP II, Ardsley Institutional and Ardsley Ridgecrest and the Sub-Advisor of Ardsley US Equity, has the power to vote and direct the disposition of the proceeds from the sale of the Shares owned by AP II, Ardsley Institutional, Ardsley US Equity and Ardsley Ridgecrest, and accordingly may be considered to be the direct "beneficial owner" of such Shares.

Ardsley Partners, the General Partner of AP II, Ardsley Institutional and Ardsley Ridgecrest, shares the power to vote and direct the disposition of the Shares owned by AP II, Ardsley Institutional and Ardsley Ridgecrest, and accordingly, may be considered to be the direct "beneficial owner" of such Shares.

Mr. Hempleman is the Managing Partner of Ardsley and Ardsley Partners and in that capacity directs their operations and therefore may be considered to be the indirect "beneficial owner" of the Shares owned by AP II, Ardsley Institutional, Ardsley US Equity, Ardsley Ridgecrest and certain accounts managed by him directly. Mr. Hempleman disclaims beneficial ownership of all of the Shares reported in this 13G.

Item 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY OR CONTROL PERSON

Not applicable.

Item 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP

See Item 2.

Item 9. NOTICE OF DISSOLUTION OF GROUP

Not applicable.

Item 10. CERTIFICATION

Each of the Reporting Persons hereby makes the following certification:

By signing below each Reporting Person certifies that, to the best of his or its knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURES

After reasonable inquiry and to the best of his or its knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

DATE: February 20, 2015

ARDSLEY PARTNERS FUND II, L.P.

BY: ARDSLEY PARTNERS I,
GENERAL PARTNER

BY: /s/ Steve Napoli

Steve Napoli
General Partner

ARDSLEY PARTNERS INSTITUTIONAL FUND, L.P.

BY: ARDSLEY PARTNERS I,
GENERAL PARTNER

BY: /s/ Steve Napoli

Steve Napoli
General Partner

ARDSLEY PARTNERS US EQUITY UCITS FUND PLC

BY: ARDSLEY ADVISORY PARTNERS
SUB-ADVISOR

BY: /s/ Steve Napoli

Steve Napoli
Partner

ARDSLEY RIDGECREST PARTNERS FUND, L.P.

BY: ARDSLEY PARTNERS I,
GENERAL PARTNER

BY: /s/ Steve Napoli

Steve Napoli
General Partner

ARDSLEY ADVISORY PARTNERS

BY: /s/ Steve Napoli
Steve Napoli
Partner

ARDSLEY PARTNERS I

BY: /s/ Steve Napoli
Steve Napoli
General Partner

PHILIP J. HEMPLEMAN, INDIVIDUALLY

BY: /s/ Steve Napoli
Steve Napoli
As attorney in fact for
Philip J. Hempleman

* Evidence of Power of Attorney was filed with the Schedule 13G/A filed on February 15, 2006 (Acc-no: 0000902664-06-000895) and is incorporated by reference into this filing.

EXHIBIT 1

**JOINT FILING AGREEMENT
PURSUANT TO RULE 13d-1(k)**

The undersigned acknowledge and agree that the foregoing statement on Schedule 13G is filed on behalf of each of the undersigned and that all subsequent amendments to this statement on Schedule 13G shall be filed on behalf of each of the undersigned without the necessity of filing additional joint filing agreements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning him or it contained herein and therein, but shall not be responsible for the completeness and accuracy of the information concerning the others, except to the extent that he or it knows or has reason to believe that such information is inaccurate.

DATE: February 20, 2015

ARDSLEY PARTNERS FUND II, L.P.

BY: ARDSLEY PARTNERS I,
GENERAL PARTNER

BY: /s/ Steve Napoli
Steve Napoli
General Partner

ARDSLEY PARTNERS INSTITUTIONAL FUND, L.P.

BY: ARDSLEY PARTNERS I,
GENERAL PARTNER

BY: /s/ Steve Napoli
Steve Napoli
General Partner

ARDSLEY PARTNERS US EQUITY UCITS FUND PLC

BY: ARDSLEY ADVISORY PARTNERS
SUB-ADVISOR

BY: /s/ Steve Napoli
Steve Napoli
Partner

ARDSLEY RIDGECREST PARTNERS FUND, L.P.

BY: ARDSLEY PARTNERS I,
GENERAL PARTNER

BY: /s/ Steve Napoli
Steve Napoli
General Partner

ARDSLEY ADVISORY PARTNERS

BY: /s/ Steve Napoli
Steve Napoli
Partner

ARDSLEY PARTNERS I

BY: /s/ Steve Napoli
Steve Napoli
General Partner

PHILIP J. HEMPLEMAN, INDIVIDUALLY

BY: /s/ Steve Napoli
Steve Napoli
As attorney in fact for
Philip J. Hempleman

* Evidence of Power of Attorney was filed with the Schedule 13G/A filed on February 15, 2006 (Acc-no: 0000902664-06-000895) and is incorporated by reference into this filing.