As filed with the Securities and Exchange Commission on March 29, 2016

Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM F-3 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

RADCOM LTD. (Exact name of registrant as specified in its charter)

Israel (State or other jurisdiction of incorporation or organization) Not Applicable (I.R.S. Employer Identification No.)

24 Raoul Wallenberg Street Tel-Aviv 69719, Israel +972-3-645-5055 (Address and Telephone Number of Registrant's Principal Executive Offices)

RADCOM Equipment Inc. 6 Forest Avenue, Paramus, NJ 07652 (201) 518-0033 (Name, Address, and Telephone Number of Agent for Service)

Copies to:

Oded Har-Even, Esq.	Eran Ben-Dor, Adv.
Shy S. Baranov, Esq.	Zysman, Aharoni, Gayer & Co.
Howard E. Berkenblit, Esq.	41-45 Rothschild Blvd.
Zysman, Aharoni, Gayer and Sullivan & Worcester LLP	Beit Zion
1633 Broadway	Tel Aviv 65784, Israel
New York, NY 10019	Tel: +972-3-7955555
(212)-660-3000	

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box."

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering."

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this Form is a registration statement pursuant to General Instruction I.C. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.C. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box."

CALCULATION OF REGISTRATION FEE

			Proposed	
	Amount To		Maximum	
	Be	Proposed	Aggregate	Amount of
Title of each class of	Registered	Maximum Offering	Offering	Registration
securities to be registered	(1)	Price Per Unit (1)	Price (2)	Fee
Ordinary Shares, NIS 0.20 par value	(3)		(3) \$50,000,000	\$ 5,035

(1) There are being registered under this registration statement such indeterminate number of ordinary shares, as may be sold by the registrant from time to time, which collectively shall have an aggregate initial offering price not to exceed \$50,000,000. In addition, pursuant to Rule 416 under the Securities Act of 1933, as amended, or the Securities Act, the ordinary shares being registered hereunder include such indeterminate number of ordinary shares as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.

- (2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(o) under the Securities Act.
- (3) Omitted pursuant to Rule 457(o) under the Securities Act.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until this Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell securities and it is not soliciting an offer to buy securities in any state where the offer or sale is not permitted.

Subject to Completion, Dated March 29, 2016

Prospectus

\$50,000,000

Ordinary Shares

We may offer and sell from time to time in one or more offerings up to a total amount of \$50,000,000 of our ordinary shares. Each time we sell ordinary shares pursuant to this prospectus, we will provide in a supplement to this prospectus the price and any other material terms of any such offering. We may also authorize one or more free writing prospectuses to be provided to you in connection with each offering. Any prospectus supplement and related free writing prospectuses may also add, update or change information contained in the prospectus. You should read this prospectus, any applicable prospectus supplement and related free writing prospectuses, as well as the documents incorporated by reference or deemed incorporated by reference into this prospectus, carefully before you invest in our ordinary shares.

Our ordinary shares are traded on the NASDAQ Capital Market under the symbol "RDCM."

Investing in our ordinary shares involves a high degree of risk. Risks associated with an investment in our ordinary shares will be described in any applicable prospectus supplement and are and will be described in certain of our filings with the Securities and Exchange Commission, as described in "Risk Factors" on page 3.

The ordinary shares may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers, or through a combination of such methods, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus. If any agents or underwriters are involved in the sale of our ordinary shares with respect to which this prospectus is being delivered, the names of such agents or underwriters and any applicable fees, commissions, discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of our ordinary shares and the net proceeds that we expect to receive from such sale will also be set forth in a prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed on completeness or the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2016.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form F-3 that we filed with the Securities and Exchange Commission, or the SEC, utilizing a "shelf" registration process. Under this shelf registration process, we may offer from time to time up to an aggregate of \$50,000,000 of our ordinary shares in one or more offerings. We sometimes refer to our ordinary shares as the "securities" throughout this prospectus.

Each time we sell ordinary shares, we will provide you with a prospectus supplement that will describe the specific amounts, prices and terms of such offering. We may also authorize one or more free writing prospectuses to be provided to you in connection with such offering. The prospectus supplement and any related free writing prospectuses may also add, update or change information contained in this prospectus. You should read carefully both this prospectus, the applicable prospectus supplement and any related free writing prospectus together with additional information described below under "Where You Can Find More Information and Incorporation by Reference" before buying the ordinary shares being offered.

This prospectus does not contain all of the information provided in the registration statement that we filed with the SEC. For further information about us or our ordinary shares, you should refer to that registration statement, which you can obtain from the SEC as described below under "Where You Can Find More Information and Incorporation by

Reference."

You should rely only on the information contained or incorporated by reference in this prospectus, a prospectus supplement and related free writing prospectuses. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained in this prospectus and the accompanying prospectus supplement or related free writing prospectuses is accurate on any date subsequent to the date set forth on the front of the document or that any information that we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference. Our business, financial condition, results of operations and prospects may have changed since those dates.

In this prospectus, references to the terms "RADCOM," "the Company," "we," "us," "our" and similar terms, refer to RADCO Ltd., unless we state or the context implies otherwise. References to our "ordinary shares" mean our ordinary shares, par value New Israeli Shekels, or NIS, 0.20 per share.

PROSPECTUS SUMMARY

This summary highlights information contained in the documents incorporated herein by reference. Before making an investment decision, you should read the entire prospectus, and our other filings with the SEC, including those filings incorporated herein by reference, carefully, including the sections entitled "Risk Factors" and "Warning Regarding Forward-Looking Statements."

Overview

We provide service assurance and customer experience management solutions to communication service providers, or CSPs. Over 50 CSPs in 25 countries use our solutions to deliver high quality services, reduce churn, manage network performance, analyze traffic and enhance customer care. Our solutions incorporate cutting-edge technologies and a wealth of knowledge acquired by partnering with many of the industry's leading CSPs for over two decades. Our carrier-grade solutions support both mobile and fixed networks and scale to terabit data bandwidths to enable big data analytics. We have a strong track record of innovation, and we were the first-to-market with a software-based probe solution that supports Network Function Virtualization, or NFV, for next-generation networks. As new and existing customers seek to manage their existing networks while evaluating and deploying NFV-based architectures, we believe we are well positioned with our advanced software-based solutions and industry track record.

Our solutions deliver specialized capabilities for virtualized infrastructure and next-generation networks, such as Long Term Evolution (LTE), LTE-A, Voice over Long Term Evolution (VoLTE), IP Multimedia Subsystem (IMS), Voice Over IP (VoIP), Universal Mobile Telecommunications Service/Global System for Mobile Communications (UMTS/GSM) and mobile broadband. The key benefits of our solutions are:

- advanced software-based architecture for rapid deployment and ease of management;
 - improved customer retention; reduced subscriber churn rates; improved service availability;
- ability to install the solution as a virtual network function for seamless integration into all NFV infrastructures;
 collection of all network packets for a complete and comprehensive view of the network and the customer experience;

•

support for multiple protocols for end-to-end network coverage; both network-wide views and drilldown to an individual subscriber level; and • support for terabyte networks.

Our software-based solutions enable CSPs to manage both existing networks and next-generation, NFV-based architectures. In 2013, we recognized that CSPs would require a new approach for service assurance and customer experience management solutions in order to monitor huge volumes of data and support NFV-based network deployments. In February 2014, we launched our MaveriQ solution which incorporates software-based probes and replaced our OmniQ hardware-based solution. During 2015, we saw increased interest from CSPs in NFV-capable solutions for service assurance and customer experience management, and we enhanced our solutions to support NFV and remove dependencies from proprietary hardware-based devices.

In December 2015, our MaveriQ solution was selected by a top-tier North American mobile operator for its next-generation virtualized network environment. This deployment represents one of the first Network Function

Virtualization networks of scale in the industry, and we were selected after a vigorous and lengthy validation process against several competing products. We are now in the process of deploying our software-based NFV solution with this leading CSP, and we are leveraging this success in discussions with other CSPs looking to manage existing networks while accelerating their roadmaps towards next-generation NFV architectures.

Our principal executive offices are located at 24 Raoul Wallenberg Street, Tel-Aviv 69719, Israel, and our telephone number is +972-77-7745-060.

RISK FACTORS

Investing in our securities involves significant risks. Before making an investment decision, you should carefully consider the risks described under "Risk Factors" in the applicable prospectus supplement and under Item 3.D. – "Risk Factors" in our most recent Annual Report on Form 20-F, or any updates in our Reports on Form 6-K, together with all of the other information appearing in this prospectus or incorporated by reference into this prospectus and any applicable prospectus supplement, in light of your particular investment objectives and financial circumstances. The risks so described are not the only risks facing us. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations. Our business, financial condition and results of operations could be materially adversely affected by any of these risks. The trading price of our securities could decline due to any of these risks, and you may lose all or part of your investment. The discussion of risks includes or refers to forward-looking statements; you should read the explanation of the qualifications and limitations on such forward-looking statements discussed elsewhere in this prospectus.

WARNING REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains and any prospectus supplement may contain, "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 and other U.S. Federal securities laws. Also, documents that we incorporate by reference into this prospectus, including documents that we subsequently file with the SEC, will contain forward-looking statements. These forward-looking statements include, but are not limited to, those statements regarding our process of deploying our software-based NFV solution, our expectations regarding the increasing use of NFV solutions, leveraging our success in discussions with other CSPs, anticipated expenses, capital requirements and our needs for additional financing. In some cases, forward-looking statements are identified by terminology such as "may," "will," "could," "should," "expects," "plans," "anticipates," "believes," "intends," "estimates," "plans," anticipates," "believes," "intends," "estimates," "plans," anticipates," "believes," "intends," "estimates," "plans," anticipates," "believes," "intends," "estimates," "plans," "anticipates," "believes," "intends," "estimates," "plans," "anticipates," "believes," "believes," "intends," "estimates," "plans," "anticipates," "believes," "believes," "intends," "estimates," "plans," "believes," believes," "believes," believes," belie "potential," or "continue" or the negative of these terms or other comparable terminology. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results or performance to differ materially from those projected. These statements are only current predictions and are subject to known and unknown risks, uncertainties, and other factors that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from those anticipated by the forward-looking statements. The forward-looking statements contained in this prospectus are subject to risks and uncertainties, including in our most recent Annual Report on Form 20-F, under Item 3.D. - "Risk Factors" and in our other filings with the SEC. You are cautioned not to place undue reliance on these forward looking statements, which speak only as of the date hereof. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Except as otherwise required by law, we are under no obligation to (and expressly disclaim any such obligation to) update or revise any of the forward-looking statements, whether as a result of new information, future events or otherwise, after the date of this prospectus.

CAPITALIZATION

The following table sets forth cash, cash equivalents and short-term investments and total capitalization as of December 31, 2015. The financial data in the following table should be read in conjunction with our consolidated financial statements included in our Annual Report on Form 20-F for the year ended December 31, 2015 filed with the SEC on March 29, 2016, which have been incorporated by reference in this prospectus.

	As of
	December
	31, 2015
	(U.S.
	Dollars, in
	thousands)
Cash, cash equivalents and short-term bank deposits	\$8,759
Shareholders' equity:	
Ordinary Shares of NIS 0.20 par value: 20,000,000 shares authorized 8,674,717 shares issued and	
8,638,685 shares outstanding.	372
Additional paid-in capital	70,270
Accumulated other comprehensive loss	(2,760)
Accumulated deficit	(58,019)
Total shareholders' equity	9,863
Total capitalization	\$18,622

REASONS FOR THE OFFER AND USE OF PROCEEDS

Unless otherwise set forth in the related prospectus supplement or, if applicable, the pricing supplement, we intend to use the net proceeds from the sale of securities offered through this prospectus for general corporate purposes, which include financing our operations, capital expenditures and business development. The specific purpose of any individual issuance of securities will be described in the related prospectus supplement.

PRICE RANGE OF OUR ORDINARY SHARES

The following table sets forth for the periods indicated the high and low sales prices per ordinary share as reported on the NASDAQ Capital Market:

Annual Information:	Low	High
2013	\$ 2.21	\$ 7.35
2014	4.65	13.23
2015	9.59	14.93
Quarterly Information		
First Quarter 2014	\$ 5.05	\$ 6.69
Second Quarter 2014	4.65	7.05
Third Quarter 2014	5.09	6.14
Fourth Quarter 2014	5.60	13.23
First Quarter 2015	9.62	11.97
Second Quarter 2015	9.59	10.93
Third Quarter 2015	9.67	11.65

Fourth Quarter 2015	9.60	14.93
Monthly Information:		
September 2015	\$ 10.53	\$ 11.5
October 2015	9.6	11.2
November 2015	11.07	11.57
December 2015	12.26	14.93
January 2016	11.72	16.63
February 2016	12.89	15.84
March 2016 (through March 24)	13.05	14.69

DESCRIPTION OF OUR ORDINARY SHARES

The following is a summary description of our ordinary shares under our amended and restated memorandum of association and articles of association, or Articles of Association. Our share capital is NIS 4,000,466, consisting of 20,000,000 ordinary shares NIS 0.20 par value per share, of which 8,638,685 were outstanding as of December 31, 2015, and 2,330 deferred shares NIS 0.20 par value per share, of which 0 were outstanding as of December 31, 2015. The ordinary shares do not have cumulative voting rights in the election of directors. As a result, the holders of ordinary shares that represent more than 50% of the voting power have the power to elect all the directors. The deferred shares confer upon their holders no rights other than the right to their par value upon liquidation of the Company.

Dividends. Our board of directors may declare dividends as it deems justified. Dividends may be paid in assets or shares of capital stock, debentures or debenture stock of us or of other companies. Our board of directors may decide to distribute our profits among the shareholders. Dividends that remain unclaimed after seven years will be forfeited and returned to us. Unless there are shareholders with special dividend rights, any dividend declared will be distributed among the shareholders in proportion to their respective holdings of our shares for which the dividend is being declared. Neither our memorandum of association or our Articles of Association nor the laws of the State of Israel restrict in any way, the ownership or voting of ordinary shares by non-residents of Israel, except with regard to subjects of countries which are in a state of war with Israel who may not be recognized as owners of ordinary shares. If we are wound up, then aside from any special rights of shareholders our remaining assets will be distributed among the shareholders in proportion to their respective holdings. Our Articles of Association allow us to create redeemable shares, although at the present time we do not have any such redeemable shares.

Shareholder Meetings. The Company has two types of general shareholder meetings: the annual general meeting and the extraordinary general meeting. An annual general meeting must be held once in every calendar year, but not more than 15 months after the last annual general meeting. We are required to give notice of general meetings (annual or extraordinary) no less than seven days before the general meetings. We may provide notice of our general meetings by publishing such notice, either (1) on our website and/or (2) in one international wire service and/or (3) in any other common form of electronic dissemination. A quorum in a general meeting consists of two or more holders of ordinary shares (present in person or by proxy), who together hold at least one-third (1/3) of the voting power of the company. If there is no quorum within an hour of the time set, the meeting , if convened upon requisition under Sections 63(b)(1) or (2), 64 or 65 of the Israeli Companies Law, or the Companies Law, shall be dissolved, but in any other case it shall be postponed until the same day in the next week, at the same time and place, or to any other time and place upon which the Chairman of our board of directors and the majority of the voting power represented at the meeting agree. Every ordinary share has one vote. A shareholder may only vote the shares for which all calls have been paid, except in separate general meetings of a particular class. A shareholder may vote in person or by proxy, or, if the shareholder is a corporate body, by its representative.

Amending the Rights of Shareholders. Pursuant to the Israeli Companies Law and the Company's Articles of Association, the Company may change the rights of owners of shares of capital stock only with the approval of a majority of the holders of such class of stock present and voting at a separate general meeting called for such class of stock. An enlargement of a class of stock is not considered changing the rights of such class of stock or any other class.

Election of Directors. Directors, other than external directors, are elected by the shareholders at the annual general meeting by the vote of the holders of a majority of the voting power represented at such meeting, or appointed by the board of directors. In the event that any directors are appointed by the board of directors, their appointment is required to be ratified by the shareholders at the next shareholders' meeting following such appointment. Our shareholders may remove a director from office subject to applicable law. There is no requirement that a director own

any of our capital shares. Directors may appoint alternative directors in their place, with the exception of external directors, who may appoint an alternate director subject to limited circumstances in the applicable law.

External directors are elected for an initial term of three years and may be elected for up to two additional three-year terms (or more) subject to applicable law. External directors may be removed from office only under the limited circumstances set forth in the Israeli Companies Law.

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PLAN OF DISTRIBUTION

We may sell the securities being offered hereby in one or more of the following methods from time to time:

- a block trade (which may involve crosses) in which the broker or dealer so engaged will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker or dealer as principal and resale by such broker or dealer for its own account pursuant to this prospectus;
- exchange distributions and/or secondary distributions;
- ordinary brokerage transactions and transactions in which the broker solicits purchasers;
- to one or more underwriters for resale to the public or to investors;
- through agents;
- in "at the market offerings," within the meaning of Rule 415(a)(4) of the Securities Act of 1933, as amended, or the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise;
- transactions not involving market makers or established trading markets, including direct sales or privately negotiated transactions;
- through a combination of these methods of sale.

The securities that we distribute by any of these methods may be sold, in one or more transactions, at:

- a fixed price or prices, which may be changed;
- market prices prevailing at the time of sale;
- · prices related to prevailing market prices; or
- · negotiated prices.

We will set forth in a prospectus supplement the terms of the offering of securities, including:

- the name or names of any agents, dealers or underwriters;
- the purchase price of the securities being offered and the proceeds we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;

- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- the public offering price;
- · any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchanges or markets on which such securities may be listed.



If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any over-allotment option. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may also sell securities directly to one or more purchasers without using underwriters or agents.

Underwriters, dealers and agents that participate in the distribution of the securities may be underwriters as defined in the Securities Act and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the Securities Act. We will identify in the applicable prospectus supplement any underwriters, dealers or agents and will describe their compensation. We may have agreements with the underwriters, dealers and agents to indemnify them against specified civil liabilities, including liabilities under the Securities Act. Underwriters, dealers and agents may engage in transactions with or perform services for us in the ordinary course of their businesses.

In connection with an offering, an underwriter may purchase and sell securities in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of securities than they are required to purchase in the offering.

Accordingly, to cover these short sales positions or to otherwise stabilize or maintain the price of the securities, the underwriters may bid for or purchase securities in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to syndicate members or other broker-dealers participating in the offering are reclaimed if securities previously distributed in the offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. The impositions of a penalty bid may also affect the price of the securities to the extent that it discourages resale of the securities. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on The Nasdaq Capital Market or otherwise and, if commenced, may be discontinued at any time.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum commission or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

EXPENSES

We are paying all of the expenses of the registration of our securities under the Securities Act, including, to the extent applicable, registration and filing fees, printing and duplication expenses, administrative expenses, accounting fees and the legal fees of our counsel. We estimate these expenses to be approximately \$30,000 which at the present time

include the following categories of expenses:

SEC registration fee	\$ 5,035
Legal fees and expenses	\$ 15,000
Accounting fees and expenses	\$ 8,000
Miscellaneous expenses	\$ 1,965
Total	\$ 30,000

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In addition, we anticipate incurring additional expenses in the future in connection with the offering of our securities pursuant to this prospectus. Any such additional expenses will be disclosed in a prospectus supplement.

LEGAL MATTERS

The validity of the ordinary shares offered in this prospectus will be passed upon for us by Zysman, Aharoni, Gayer & Co., Tel Aviv, Israel. Zysman, Aharoni, Gayer and Sullivan & Worcester LLP, New York, New York, is acting as our counsel in connection with United States securities laws.

EXPERTS

The consolidated financial statements of Radcom Ltd. appearing in Radcom Ltd's Annual Report (Form 20-F) for the year ended December 31, 2015, have been audited by Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION AND INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

We are an Israeli company and are a "foreign private issuer" as defined in Rule 3b-4 under the Securities Exchange Act of 1934, as amended, or the Exchange Act. As a result, (1) our proxy solicitations are not subject to the disclosure and procedural requirements of Regulation 14A under the Exchange Act, and (2) transactions in our equity securities by our officers and directors are exempt from Section 16 of the Exchange Act.

In addition, we are not required to file reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act. However, we file with the SEC an Annual Report on Form 20-F containing financial statements audited by an independent registered public accounting firm. We also furnish reports on Form 6-K containing unaudited financial information for each calendar quarter and other material information that we are required to make public, that we file with, and that is made public by, any stock exchange on which our shares are traded, or that we distribute, or that is required to be distributed by us, to our shareholders.

You can read and copy any materials we file with the SEC at its Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You can obtain information about the operation of the SEC Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site that contains information we file electronically with the SEC, which you can access over the Internet at http://www.sec.gov. You may also access the information we file electronically with the SEC through our website at http://www.radcom.com. The information contained on, or linked from our website or the SEC's website does not form part of this prospectus.

This prospectus is part of a registration statement on Form F-3 filed by us with the SEC under the Securities Act. As permitted by the rules and regulations of the SEC, this prospectus does not contain all the information set forth in the registration statement and the exhibits thereto filed with the SEC. For further information with respect to us and the ordinary shares offered hereby, you should refer to the complete registration statement on Form F-3, which may be obtained from the locations described above. Statements contained in this prospectus or in any prospectus supplement about the contents of any contract or other document are not necessarily complete. If we have filed any contract or other document as an exhibit to the registration statement or any other document incorporated by reference in the registration statement, you should read the exhibit for a more complete understanding of the document or matter involved. Each statement regarding a contract or other document is qualified in its entirety by reference to the actual document.

The following documents filed with or furnished to the SEC by our Company are incorporated by reference in this registration statement:

- The Company's Annual Report on Form 20-F for the fiscal year ended December 31, 2015;
- The description of the Company's ordinary shares, par value NIS 0.20 per share contained in the Company's registration statement on Form 8-A filed pursuant to the Exchange Act on September 19, 1997, including any amendment or report filed which updates such description.

All subsequent Annual Reports filed by us pursuant to the Exchange Act on Form 20-F prior to the termination of the offering shall be deemed to be incorporated by reference to this prospectus and to be a part hereof from the date of filing of such documents. We may also incorporate any Form 6-K subsequently submitted by us to the SEC prior to the termination of the offering by identifying in such Forms 6-K that they are being incorporated by reference herein, and any Forms 6-K so identified shall be deemed to be incorporated by reference in this prospectus and to be a part hereof from the date of submission of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein or in any other subsequently filed document which also is incorporated or deemed to be incorporated by reference herein. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

The information we incorporate by reference is an important part of this prospectus, and later information that we file with the SEC will automatically update and supersede the information contained in this prospectus.

We will provide you without charge, upon your written or oral request, a copy of any of the documents incorporated by reference in this prospectus, other than exhibits to such documents which are not specifically incorporated by reference into such documents. Please direct your written or telephone requests to us at RADCOM Ltd., 24 Raoul Wallenberg Street, Tel-Aviv 69719, Israel, attention: Mr. Uri Birenberg, Chief Financial Officer, telephone number: +972-77-7745-060.

ENFORCEABILITY OF CIVIL LIABILITIES

We are incorporated in Israel, almost all of our executive officers and directors and the Israeli experts named herein are nonresidents of the United States, and a substantial portion of our assets and of such persons' assets are located outside the United States. Service of process upon us and upon our directors and officers and the experts named in his prospectus, may be difficult to obtain within the United States. Furthermore, because substantially all of our assets and substantially all of our directors and officers are located outside the United States against us or any of our directors and officers may not be collectible within the United States.

We have been informed by our legal counsel in Israel that it may be difficult to assert United States securities law claims in original actions instituted in Israel. Israeli courts may refuse to hear a claim based on a violation of United States securities laws because Israel is not the most appropriate forum to bring such a claim. In addition, even if an Israeli court agrees to hear a claim, it may determine that Israeli law and not U.S. law is applicable to the claim. If United States law is found to be applicable, the content of applicable U.S. law must be proved as a fact, which can be a time-consuming and costly process. Certain matters of procedure will also be governed by Israeli law. There is little binding case law in Israel addressing these matters.

Subject to specified time limitations and legal procedures, under the rules of private international law currently prevailing in Israel, Israeli courts may enforce a final U.S. judgment in a civil matter, including judgments based upon the civil liability provisions of the U.S. securities laws and including a monetary or compensatory judgment in a non-civil matter, provided that:

- the judgment is enforceable in the state in which it was given;
- adequate service of process has been effected and the defendant has had a reasonable opportunity to present his arguments and evidence;
- the judgment and the enforcement of the judgment are not contrary to the law, public policy, security or sovereignty of the state of Israel;
- the judgment was not obtained by fraud and does not conflict with any other valid judgment in the same matter between the same parties; and
- an action between the same parties in the same matter is not pending in any Israeli court at the time the lawsuit is instituted in the foreign court.

We have irrevocably appointed our subsidiary, RADCOM Equipment, Inc., as our agent to receive service of process in any action against us in the state and federal courts sitting in the City of New York, Borough of Manhattan arising out of any offering under this registration statement of which this prospectus forms a part, or any purchase or sale of securities in connection therewith. We have not given consent for this agent to accept service of process in connection with any other claim.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 8. Indemnification of Directors and Officers

Under the Israeli Companies Law, a company may indemnify, or undertake in advance to indemnify, an office holder (defined as a director, chief executive officer, deputy chief executive officer or other officer reporting to the chief executive officer of the company) for the following liabilities and expenses, imposed on an office holder or incurred by an office holder due to acts performed by him or her as an office holder, provided its articles of association include a provision authorizing such indemnification:

- financial liability incurred by or imposed on him or her in favor of another person pursuant to a judgment, including a settlement or arbitrator's award approved by a court. However, if an undertaking to indemnify an office holder with respect to such liability is provided in advance, then such an undertaking must be limited to events which, in the opinion of the board of directors, can be foreseen based on the company's activities when the undertaking to indemnify is given, and to an amount or according to criteria determined by the board of directors as reasonable under the circumstances, and such undertaking shall detail the abovementioned foreseen events and amount or criteria;
- reasonable litigation expenses, including attorneys' fees, incurred by the office holder as a result of an investigation or proceeding instituted against him or her by an authority authorized to conduct such investigation or proceeding, provided that (i) no indictment was filed against such office holder as a result of such investigation or proceeding; and (ii) no financial liability was imposed upon him or her as a substitute for the criminal proceeding as a result of such investigation or proceeding or, if such financial liability was imposed, it was imposed with respect to an offense that does not require proof of criminal intent or as a monetary sanction; and
- reasonable litigation expenses, including attorneys' fees, incurred by the office holder or imposed by a court in proceedings instituted against him or her by the company, on its behalf, or by a third party, or in connection with criminal proceedings in which the office holder was acquitted, or as a result of a conviction for an offense that does not require proof of criminal intent.

Under the Israeli Companies Law, a company may insure an office holder against the following liabilities incurred for acts performed by him or her as an office holder if and to the extent provided in the company's articles of association:

- a breach of the duty of loyalty to the company, provided that the office holder acted in good faith and had a reasonable basis to believe that the act would not harm the company;
- a breach of duty of care to the company or to a third party; and
- a financial liability imposed on the office holder in favor of a third party.

Nevertheless, under the Israeli Companies Law, a company may not indemnify, exculpate or insure an office holder against any of the following:

- a breach of fiduciary duty, except for indemnification and insurance for a breach of the duty of loyalty to the company in the event office holder acted in good faith and had a reasonable basis to believe that the act would not prejudice the company;
- a breach of duty of care committed intentionally or recklessly, excluding a breach arising out of the negligent conduct of the office holder;
- \cdot an act or omission committed with intent to derive unlawful personal benefit; or
- a fine, monetary sanction, penalty or forfeit levied against the office holder.

Under the Companies Law, exculpation, indemnification and insurance of office holders require the approval of the compensation committee, board of directors and, in certain circumstances, the shareholders.

Our Articles of Association permit us to exculpate, indemnify and insure our office holders to the fullest extent permitted by the Israeli Companies Law.

We have obtained directors' and officers' liability insurance for the benefit of our office holders and intend to continue to maintain such coverage and pay all premiums thereunder to the fullest extent permitted by the Israeli Companies Law.

Item 9. Exhibits

Exhibit Number Description

- 1.1* Form of underwriting agreement.
- 4.1 Memorandum of Association of the Company, as amended, incorporated herein by reference to the (i) Registration Statement on Form F-1 of RADCOM Ltd. (File No. 333-05022), filed with the SEC on June 12, 1996, (ii) Form 6-K of RADCOM Ltd., filed with the SEC on April 1, 2008 and (iii) Exhibit 99.2 to Form 6-K of RADCOM Ltd., filed with the SEC on November 23, 2015
- 4.2 Amended and Restated Articles of Association of the Company, as amended, filed as Exhibit 1.2 to Form 20-F filed on March 29, 2016 (File No. 000-29452) and incorporated herein by reference.
- 5.1** Opinion of Zysman, Aharoni, Gayer & Co.
- 23.1** Consent of Kost Forer Gabbay & Kasierer, a member of EY Global, independent registered public accounting firm.
- 23.2 ** Consent of Zysman, Aharoni, Gayer & Co. (included in Exhibit 5.1).
- 24 Power of Attorney (included in the signature page of this registration statement).

* To be filed, if applicable, by post-effective amendment or incorporated by reference in connection with the offering of any ordinary shares, as appropriate.

** Filed herewith.

Item 10. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) to file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

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(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) To file a post-effective amendment to the registration statement to include any financial statements required by Item 8.A. of Form 20-F at the start of any delayed offering or throughout a continuous offering; provided, however, that a post-effective amendment need not be filed to include financial statements and information required by Section 10(a)(3) of the Act or Rule 3-19 if such financial statements and information are contained in periodic reports filed with or furnished to the SEC by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act that are incorporated by reference in this registration statement.

(5) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) If the registrant is relying on Rule 430B:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement or prospectus that is part of the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of

contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

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(6) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

(d) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4), or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunder duly authorized, in the city of Tel Aviv, Israel, on March 29, 2016.

RADCOM LTD.

By:

/s/ Uri Birenberg Uri Birenberg, Chief Financial Officer

We, the undersigned directors and/or officers of RADCOM Ltd., hereby severally constitute and appoint Racheli (Heli) Bennun, Yaron Ravkaei and Uri Birenberg, and each of them singly, our true and lawful attorneys, with full power to any of them, and to each of them singly, to sign for us and in our names in the capacities indicated below the registration statement on Form F-3 filed herewith, and any and all pre-effective and post-effective amendments to said registration statement, and any registration statement filed pursuant to Rule 462(b) under the Securities Act, as amended, in connection with the said registration under the Securities Act, as amended, and to file or cause to be filed the same, with all exhibits thereto and other documents in connection therewith, with the SEC, granting unto said attorneys, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as each of them might or could do in person, and hereby ratifying and confirming all that said attorneys, and each of them, shall do or cause to be done by virtue of this Power of Attorney.

Pursuant to the requirements of the Securities Act, as amended, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated:

Name	Title	Date
/s/ Yaron Ravkaie Yaron Ravkaie	Chief Executive Officer (Principal Executive Officer)	March 29, 2016
/s/ Uri Birenberg Uri Birenberg	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 29, 2016
/s/ Racheli (Heli) Bennun Heli Bennun	Chairwoman, Director	March 29, 2016
/s/ Uri Har Uri Har	Director	March 29, 2016
/s/ Irit Hillel Irit Hillel	Director	March 29, 2016
/s/ Matty Karp Matty Karp	Director	March 29, 2016

/s/ Zohar Zisapel Zohar Zisapel Director

March 29, 2016

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Pursuant to the requirements of the Securities Act, as amended, the undersigned, the duly authorized representative in the United States of RADCOM Ltd. has signed this registration statement on March, 29, 2016.

RADCOM Equipment, Inc.

By:	/s/ Uri Birenberg
Name:	Uri Birenberg
Title:	Chief Financial Officer

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