

# **LED Agricultural Grow Lights: Market Shares, Strategies, and Forecasts, Worldwide, 2015 to 2021**

<https://marketpublishers.com/r/LC6764D1A45EN.html>

Date: March 2015

Pages: 596

Price: US\$ 4,000.00 (Single User License)

ID: LC6764D1A45EN

## **Abstracts**

LEXINGTON, Massachusetts (March 10, 2015) – WinterGreen Research announces that it has published a new study LED Agricultural Grow Lights: Market Shares, Strategy, and Forecasts, Worldwide, 2015 to 2021. The 2015 study has 596 pages, 163 tables and figures. Worldwide markets for LED Agricultural Grow Lights are growing as units support more efficient indoor growing. The LEDs are less costly than alternatives and save significantly on electricity costs. Rapid adoption of LED lighting in general is occurring. Rapid adoption of LED grow lights worldwide is occurring as systems provide peak growing efficiently.

LED grow lights are more powerful and efficient than the older generation high-pressure sodium and metal halide bulb grow lights. They lower the electricity bill and produce less heat. Less heat allows putting the light closer to plants, the plants do not get burned.

Next-generation LED grow lights deliver dramatic power savings and unmatched product reliability. LED grow lights are shifting as illustrated by the new Everlight GL-Flora LED lighting fixtures for agriculture. They offer low power, high-efficiency, uniform light pattern, homogenous light distribution at precisely the right wavelengths and color ratios needed for superior photosynthetic response.

LED grow lights are different. Grow lights provide artificial light used for plant growth. The spectrum of growth lights is tuned to the plant growing task. Plant light has photons from the blue to red (400–700 nm) part of the spectrum. This is called growth light. Horticulture lamps address the role of light in the growth and development of plants. Plant growth is a function of photosynthesis.

The plant growth lights work in three different ways:

To provide all the light a plant needs to grow

To supplement sunlight, especially in winter months when daylight hours are short

To increase the length of the 'day' in order to trigger specific growth and flowering

LED grow lights use growth light to automate and control growing. The ability to grow food consistently, locally represents a major breakthrough for humanity. Growth lights permit people to grow food in warehouses and in the home, dedicating unused space in a manner that is efficient for producing food.

Taking cost of transportation out of the food chain is a breakthrough of major proportions. The ability to make fresh, sanitary food available consistently presents a major shift in how people live and achieve quality of life. Growth lights increase the density of food production by a factor of ten. This is significant.

In some places, like Japan, where there is a deficiency in the environment, plant factories will continue to proliferate and to use LED grow lights as large warehouse type entities that provide food for the general public and for people who need specialized nutrition.

According to Susan Eustis, the lead author of the team that created the study, "Solid state electronics brings the same advantages to agriculture as it has brought to all other industry segments it touches. Growers are finding that they can achieve a rapid return on investment from substantially decreasing the energy costs associated with using grow lights, lengthening the growing season, eliminating chemical contaminants in the food supply, and significantly decreasing transportation costs for food production."

As more people become more health conscious and try to avoid the deleterious effects of pesticides in their food grow lights are anticipated to find more and larger markets among greenhouse operators. The large warehouse size plant factories are expected to concentrate on raising seedlings.

LED grow light module markets at \$395 million in 2014 are forecast to reach \$1.8 billion

by 2021. Rapid growth is anticipated as green house and plant factory growers find the LED grow lights improve agriculture.

WinterGreen Research is positioned to help customers face challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust WinterGreen Research to work alongside them to ensure the success of the participation in a particular market segment.

WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

WinterGreen Research is an independent research organization funded by the sale of market research studies all over the world and by the implementation of ROI models that are used to calculate the total cost of ownership of equipment, services, and software. The company has 35 distributors worldwide, including Global Information Info Shop, Market Research.com, Research and Markets, Bloomberg, electronics.ca, and Thompson Financial.

## Contents

### LED GROW LIGHTS MARKET EXECUTIVE SUMMARY

LED Grow Lights Market Driving Forces

Grow Light LEDs Mitigate Impact of Global Warming

Spectrum Of Growth Lights Is Tuned To The Plant Growing Task

LED Advantages over Halide Lamps

Growth Light Spectrum Positioning

LED Grow Lights Market Shares

LED Grow Light Market Forecasts

### 1. LED GROW LIGHT MARKET DESCRIPTION AND MARKET DYNAMICS

#### 1.1 LED Grow Lights

1.1.1 LED Light Plant Factory In Japan

1.1.2 LED Lighting For Horticulture Sees Growth In Japan With Newly Equipped Factory

1.1.3 Philips 13,000 LED Pieces for Fifth-Largest Plant Factory in Japan

1.1.4 Philips Partners with LED Green Sense Farms

1.1.5 Philips 13,000 LED Pieces for Plant Factory in Osaka

1.1.6 Where LED Grow Lighting Is Applied

1.1.7 Illumination Induced Plant Light Cycle, Speeds Morphogenesis

1.1.8 Induced Illumination For The Cycle And Morphogenesis Of Plants

#### 1.2 LED Grow Lights

1.2.1 LED Brightness: Grow Lights

1.2.2 LED Grow Lights Included in Systems Three Light Bands:

1.2.3 LED Light Systems Balanced Lighting

1.2.4 Grow LED Lights Peak Targeting

1.2.5 LED Light Systems LEDs Increase Indoor Plant Growth

1.2.6 LED Improves Indoor Garden Performance

1.2.7 LED Indoor Garden

1.2.8 LED Optimal for Plants

1.2.9 LED Colors And Light Spectrums

1.2.10 LED Light Spectrum For Plant Growth

1.2.11 LED Red Light

1.2.12 LED Blue Light

1.2.13 LED Size Fan Needed for LED Lighting Systems

1.2.14 LED Size Carbon Filter

- 1.2.15 LED Temperature For Plants
- 1.2.16 LED Grow Lights for Indoor Gardens
- 1.2.17 LED Plant Grow Lighting
- 1.3 Light For The Human Eye Is The Visible Part Of Electromagnetic Radiation
- 1.4 Photosynthesis
- 1.5 High-Power LED Illumination System For Photosynthetic Plants
  - 1.5.1 LED Grow Light Technology Benefits
  - 1.5.2 LED Wavelength of Light Impact On Plants
- 1.6 Light Reactions Increase Plant Yield
  - 1.6.1 LED Lighting System

## **2. LED GROW LIGHTS MARKET SHARES AND FORECASTS**

- 2.1 LED Grow Lights Market Driving Forces
  - 2.1.1 Grow Light LEDs Mitigate Impact of Global Warming
  - 2.1.2 Spectrum Of Growth Lights Is Tuned To The Plant Growing Task
  - 2.1.3 LED Advantages over Halide Lamps
  - 2.1.4 Growth Light Spectrum Positioning
- 2.2 LED Grow Lights Market Shares
  - 2.2.1 Illumitex Chosen by the Dutch Company PlantLab as the Exclusive Supplier of Advanced LED Grow Light Technology
  - 2.2.2 Everlight Electronics
  - 2.2.3 Syhdee
  - 2.2.4 Valoya Target Markets
  - 2.2.5 Valoya a Leading Provider Of Wide Spectrum LED Lights
  - 2.2.6 Valoya Composition Of Light Spectrum
  - 2.2.7 Shenzhen Sanxinbao Semiconductor Lighting Co., Ltd.
  - 2.2.8 Philips Embraces Light In The Growth And Development Of Plants
  - 2.2.9 GE Grow Lights
- 2.3 LED Grow Light Market Forecasts
  - 2.3.1 LED Grow Light to Achieve \$1.8 Billion in 2021
  - 2.3.2 Everlight Electronics Invests NT\$30 billion (US\$943 Million) To Expand LED Production
  - 2.3.3 LED Grow Lights in Greenhouses
  - 2.3.4 LED Grow Lights for Large Plant Factories
  - 2.3.5 Growing More Plants
  - 2.3.6 LED Grow Light Module Segment Market Forecasts
  - 2.3.7 LED Grow Light Market Segments
- 2.4 LED Grow Light ROI

- 2.4.1 LED Grow Light Prices
- 2.4.2 Phillips LED Grow Light
- 2.4.3 Operating Cost Per Hour For A Light
- 2.4.4 LED Grow Lights Control Systems Solutions
- 2.5 LED Grow Lights Regional Analysis
  - 2.5.1 LED Grow Light Operations in Japan
  - 2.5.2 LED Grow Light Operations in Taiwan
  - 2.5.3 Everlight Electronics Regional Segments
  - 2.5.4 Everlight Shares Business Experience in China

### **3. LED GROW LIGHT PRODUCT DESCRIPTION**

- 3.1 Everlight Electronics
  - 3.1.1 Everlight Electronics LED Grow Lights Control Over Crops
  - 3.1.2 Everlight GL Flora
- 3.2 Philips LED Grow Lights
  - 3.2.1 Philips GreenPower LED Toplighting Solution
  - 3.2.2 Philips GreenPower LED Interlighting
- 3.3 Syhdee
  - 3.3.1 Japan: World Largest LED Plant Grow Factory with LED Lighting
- 3.4 Epistar
- 3.5 Opto-LED Technology
  - 3.5.1 LED GROW PANEL LIGHT
- 3.6 Shenzhen Sanxinbao Semiconductor Lighting Co., Ltd.
  - 3.6.1 Evergrow IT2060 51x3w Programme Auto Dimmable Marine Aquarium LED Lighting
  - 3.6.2 IT2060 with CE&ROHS 55\*3w,Dimmble,LCD Player,Remote Controller,Shenzhen Sanxinbao Semiconductor Lighting Co. Ltd
  - 3.6.3 2013 NOVA Integrated Led Grow Light Shenzhen Sanxinbao Semiconductor Lighting With CE&ROHS
- 3.7 Shenzhen Baisheng Semiconductor Lighting Co., Ltd.
  - 3.7.1 Shenzhen Baisheng Semiconductor Lighting Tri-Band LED Grow Light
  - 3.7.2 Shenzhen Baisheng Semiconductor Lighting LED Spectrum
- 3.8 Grow Northern / Philips LED Array for Grow Light Modules
- 3.9 LumiGrow
  - 3.9.1 LumiGrow Grow Series Greenhouse Lights
  - 3.9.2 LumiGrow Pro Series Cost-Effective LEDs Boost Crop Yield
  - 3.9.3 LumiGrow Products
- 3.10 GrowBlu

### 3.11 TruLite

### 3.12 Shenzhen StarVanq Technology Co.

### 3.13 Nanning Lijie Energy Saving Electric Co., Ltd.

### 3.14 Shenzhen Baisheng Semiconductor Lighting Co., Ltd.

### 3.15 Shenzhen Baisheng Semiconductor Lighting Co., Ltd.

### 3.16 Shenzhen Baisheng Semiconductor Lighting Co., Ltd.

#### 3.16.1 Super Power 255W ChloroBA2 LED Grow Light With Full Spectrum

#### 3.16.2 Ebay Best Sellers 280 Watt SP114D Equal to Hot Sale 600W Led Grow Light 2013

#### 3.16.3 Plant Dimmable 300W LED Grow Light

### 3.17 Shenzhen LG-LED Solutions Technology Limited

#### 3.17.1 2015 ETL Listed Mars Hydro Led Grow Light 400w~1600w Mars 2,5watt Chips Led Grow Lights Full Spectrum Hydroponics Grow Equipment

#### 3.17.2 2015 ETL Listed Mars II 1600W Led Grow Light,5W Chips Led Grow Lights Full Spectrum,Switchable Grow Light For Hydroponic Systems

#### 3.17.3 Led Grow Light 2014 Hottest 600W(192pcs\*3w), Reflector Switchable Led Grow Lights For Indoor Grow/Flowering Stock in US/UK/AU/CA

### 3.18 Twilight Group Co., Limited

#### 3.18.1 Factory Wholesale 1200w 300w LED Grow Light Best For Flowering And Fruiting With Full Spectrum

#### 3.18.2 Factory Full Spectrum 15W COB LED Grow Light

#### 3.18.3 Full Spectrum 1000W LED Grow Light

### 3.19 Shenzhen Heng Yi Technology Co., Ltd. (LED Star Lighting)

#### 3.19.1 China Cree LED Grow Light

#### 3.19.2 Cree 200x3w LED Grow Light For Greenhouse Lettuce

#### 3.19.3 Iris Rainbow High Power 5W LED Grow Light For Hydroponics System,Tomato, Medical Plants

### 3.20 Shenzhen Jiangjing Lighting Co., Ltd.

### 3.21 Shenzhen Sanxinbao Semiconductor Lighting Co., Ltd.

### 3.22 E. Shine Systems Limited

### 3.23 Dongguan A-One LED Lighting Co., Ltd.

### 3.24 Shenzhen Aladdin Precision Lighting Co., Ltd.

#### 3.24.1 Forest Grower Innovative 9w 12w 15w ,45w ,54w PAR 38 LED grow light for aeroponics hydroponic aquaponic grow tent bloom veg

#### 3.24.2 2015 5w Chips Switch Control 6 Color Modes 100% Modular High Power 4x100w LED Grow Light

#### 3.24.3 Plant Growth High Quality Modular 6x75w LED Grow Light Factory

### 3.25 Shenzhen Dayton Electronic Co., Ltd.

#### 3.25.1 Apollo4-Apollo20 140W 200W 280W 360W 430W 580W 640W 720W LED



## Grow Light

- 3.25.2 IP65 LED Grow Light For Plant for 120-600w
- 3.26 Shenzhen SOSCI Technology Co., Ltd.
- 3.27 Wenzhou Zhente Trade Co., Ltd.
- 3.28 Shenzhen Sanxinbao Semiconductor Lighting Co., Ltd.
- 3.29 GE Grow Lights
- 3.30 Black Dog LED Grow Lights
  - 3.30.1 Black Dog LED Grow Light
- 3.31 Venture Lighting International SunMaster K3 Series L300
- 3.32 SuperNova LED Grow Lights
- 3.33 Ultrasun
- 3.34 Leiderkerk International Co.,Ltd High Power LED Grow Light
- 3.35 LED USA Systems UFO Grow Light
  - 3.35.1 USA LED Light Systems Comet Magenta 150 LED Grow Light \$149.99
- 3.36 Sunshine Systems SSLGP198567 45wt LED Grow Light
- 3.37 LEDHydroponics.co.uk
  - 3.37.1 LEDHydroponics Red Light
  - 3.37.2 LEDHydroponics Blue Light
  - 3.37.3 LEDHydroponics Quantum LED lights 7 & 9 Band Spectrum Technology
  - 3.37.4 LEDHydroponics Sister Company Quantum LED
  - 3.37.5 Efficient and Energy-Saving HEFL Lighting System Delivering Light Vertically Downward
  - 3.37.6 Cultivation Without Using Agrichemicals
  - 3.37.7 LEDHydroponics Quantum LED Grow Lights Scheduled Production For Stable Supply
  - 3.37.8 LEDHydroponics Quantum Cultivation of Strawberries And Seedlings
  - 3.37.9 LED Hydroponics Products
  - 3.37.10 LEDHydroponics Super Helios 6 Lights
  - 3.37.11 LEDHydroponics LEDbud
  - 3.37.12 LEDHydroponics
  - 3.37.13 Quantum 7 & 9 Band Spectrum Technology
  - 3.37.14 Quantum LED Light Absorption
  - 3.37.15 LEDHydroponics LED Grow Lights
  - 3.37.16 Quantum LED Grow Lights
- 3.38 Hydrogrow
- 3.39 T6 HO Grow Lights
- 3.40 Valoya
  - 3.40.1 Valoya L-series for Growth Chambers and Multilayers
  - 3.40.2 Valoya Spectra



3.40.3 Valova C-series for High Intensity Chambers and Shelves

3.40.4 Valoya B-Series LED Grow Lighting for Interlighting and Multilayer

3.40.5 Valoya R-Series LED Grow Lighting for Greenhouse

3.41 Illumitex

3.41.1 Illumitex LED Grow Lights for Controlled Environment Agriculture (CEA)

3.41.2 Illumitex LED Grow Lights Eclipse Series (ESI & ESII)

3.41.3 Illumitex LED Grow Lights Safari

3.41.4 Illumitex LED Grow Lights Quantum

3.41.5 Illumitex NeoSol DS Grow Light

3.41.6 Illumitex Greenhouse LED Light

3.41.7 Illumitex Quantum Premium Product

3.41.8 Illumitex Quantum Research LED Grow Light

3.42 Solid Apollo LED Grow Lights Tuned to Optimize Plant Growth with Red and Blue Light

3.42.1 Titan LED Grow Lights from Solid Apollo LED

3.42.2 Midas LED Grow Lights from Solid Apollo LED

3.43 Hubbell Industrial Lighting Addresses Indoor Horticulture with NutriLED Featuring 60-Degree Beam Spread

3.44 Novagant

3.44.1 Novagant AlKanna

## **4. LED GROW LIGHT TECHNOLOGY**

4.1 Plant Grow Lights for Indoor Gardening / Supplemental Greenhouse Lighting

4.2 Solar Powered LED Lamps

4.2.1 Solar Lighting Eliminates the Need for Electricity in Rural Areas.

4.3 AC LEDs

4.4 Blue Wavelength Helps Leaves And Stalks Red Wavelength Promotes Photosynthesis

4.4.1 Light Absorption for Photosynthesis

4.4.2 Valoya Composition Of Light Spectrum

4.4.3 Grow Light Spectrum Wavelength Experiment

4.4.4 LumiGrow Pro Series Cost-Effective LEDs Boost Crop Yield

## **5. GROW LIGHT COMPANY PROFILES**

5.1 Advanced Lighting Technologies

5.1.1 APL Engineered Materials

5.1.2 Advanced Lighting Technologies / Venture Lighting International / Sunmaster

- 5.1.3 Venture Advanced Lighting Technologies Company
- 5.1.4 Venture Lighting / Sunmaster Light & Plants
- 5.1.5 Venture Lighting / Sunmaster Hydroponic Product Support
- 5.1.6 Venture Lighting / Sunmaster PAR and Plant Response Curve
- 5.1.7 Sunmaster Comprehensive Supply of HID Lamps
- 5.1.8 Venture Lighting PAR Watts for Plants
- 5.1.9 Venture Lighting Photons
- 5.1.10 Venture Lighting
- 5.1.11 Venture Lighting Global Perspective
- 5.1.12 Venture Lighting Metal Halide Innovator
- 5.1.13 Venture Lighting International / Sunmaster
- 5.2 Black Dog LED
  - 5.2.1 Black Dog LED Prices
- 5.3 Conviron
- 5.4 Dalsem Group
- 5.5 Daystar
- 5.6 Delta Group
  - 5.6.1 Delta Group Data Center Power
  - 5.6.2 Delta Group Data Center Power
  - 5.6.3 Delta Group Renewable Energy Solutions
  - 5.6.4 Delta Group Revenue
- 5.7 Epistar
  - 5.7.1 Epistar
  - 5.7.2 Epistar Revenue
  - 5.7.3 Epistar Leads the LED Era
- 5.8 Everlight Electronics Co. Ltd.
  - 5.8.1 Everlight Business
  - 5.8.2 Everlight Revenue
  - 5.8.3 5.20.3 Everlight LED Grow Lights GI Flora
  - 5.20.4 Everlight LED Lifestyle Lights
  - 5.20.5 Everlight Electronics LED Innovation
  - 5.8.4 Everlight Electronics Regional Segments
  - 5.8.5 Everlight Electronics Products
  - 5.8.6 Everlight LED Grow Lights GI Flora
  - 5.8.7 Everlight LED Lifestyle Lights
- 5.9 Fujitsu
  - 5.9.1 Fujitsu Implements the Internet of Things
  - 5.9.2 Fujitsu Ecosystem of Smartphone
- 5.10 GE Lighting Solutions

- 5.10.1 General Electric Lighting
- 5.10.2 GE Tetra EdgeStrip and Tetra miniStrip
- 5.10.3 GE Evolve LED Fixtures Reduce Auto Dealership's Energy Costs by \$49,000 Annually
- 5.10.4 GE Scorecard
- 5.10.5 GE Manufactures Electrical Distribution And Control Products, Lighting And Power Panels, Switchgear And Circuit Breakers
- 5.10.6 GE Home & Business Solutions
- 5.10.7 GE Offers Major Home Appliances
- 5.10.8 GE Lamps
- 5.10.9 GE Lighting Solutions
- 5.10.10 GE Healthcare
- 5.10.11 GE Healthcare Regional P&Ls
- 5.10.12 GE Key Medical Care Areas: Cardiology
- 5.10.13 GE Neurology
- 5.10.14 GE Emergency Medicine
- 5.10.15 GE Oncology
- 5.10.16 GE Women's Health
- 5.10.17 GE Healthcare Oxygen Humidifier
- 5.10.18 GE Healthcare Air/O2 Blender
- 5.10.19 GE M2100 Air/O2 Blender
- 5.10.20 GE Invests \$100 Million to Grow its LED Lighting Business; Forms New Strategic Alliance
- 5.10.21 GE Supports Innovation
- 5.10.22 General Electric Offers Wind Turbine Customers Clean Energy From Solar Panels
- 5.11 General Hydroponics
- 5.12 Genesis Photonics (GPI)
  - 5.12.1 Genesis Photonics Year 2014 Revenue
  - 5.12.2 Genesis Photonics 3D COB
- 5.13 Grow Northern
- 5.14 GrowBlu
- 5.15 GYLED
  - 5.15.1 GYLED LED Lights
  - 5.15.2 GYLED Grille LED Lights
- 5.16 Shanxi Guangyu LED Lighting Co. Ltd
  - 5.16.1 Shanxi Guangyu LED Lighting Co. Ltd. Certifications
- 5.17 Hon Hai
  - 5.17.1 Hon Hai Precision Ind. Co. Ltd.

- 5.17.2 Hon Hai Precision Industry Ltd / Foxconn
- 5.17.3 Hon Hai Group Plant Factories
- 5.17.4 Hon Hai Partners
- 5.17.5 Hon Hai Establishes First LED Street Light Production Line in Guizhou
- 5.18 Hydrofarm
  - 5.18.1 Hydrofarm Manufacturer Of Hydroponics Equipment And High-Intensity Grow Lights
  - 5.18.2 Hydrofarm AgroSun Gold Halide
- 5.19 Illumitex
  - 5.19.1 Illumitex LED Grow Lights ROI
  - 5.19.2 Illumitex Chosen by the Dutch Company PlantLab as the Exclusive Supplier of Advanced LED Grow Light Technology
- 5.20 Iwasaki Electric
  - 5.20.1 Iwasaki's Quality Oriented Culture
  - 5.20.2 Iwasaki EYE Hortilux
  - 5.20.3 EYE Lighting International of North America
- 5.21 LEDengine
- 5.22 LEDsense Technologies / Solid Apollo LED Lighting
- 5.23 LumiGrow
  - 5.23.1 LumiGrow LED Supplier: Shenzhen Panda Grow Technology Co., Ltd.
  - 5.23.2 LumiGrow: Shenzhen Sanxinbao Semiconductor Lighting Co., Ltd.
- 5.24 Nihon Advanced Agri Corporation
  - 5.24.1 Nihon Advanced Agri Evolves Agriculture Into Cosmetics And Wellness
  - 5.24.2 Nihon Advanced Agri
  - 5.24.3 Nihon Advanced Agri Business Description
  - 5.24.4 Nihon Advanced Agri Features
  - 5.24.5 Nihon Advanced Agri Plant Factory Business
  - 5.24.6 Nihon Advanced Agri Ceramics
- 5.25 Novagant
- 5.26 Opto-LED Technology
- 5.27 Ozu Corporation
- 5.28 Philips Horticulture Lamps
  - 5.28.1 Philips Lighting Positioning
  - 5.28.2 Royal Philips Electronics of the Netherlands
  - 5.28.3 Philips Enables Consumer Lifestyle
  - 5.28.4 Philips Lighting
  - 5.28.5 Philips Market Opportunity
  - 5.28.6 Philips Visicu
  - 5.28.7 Philips Addresses Healthcare Landscape

- 5.28.8 Philips/Respironics Monitoring Solution Powered By Cinterion TC65i:
- 5.28.9 Philips Healthcare Revenue
- 5.28.10 Philips Accelerate! Positioning
- 5.29 Rockwool Group
  - 5.29.1 Grodan Rockwool Grow Blocks
- 5.30 Rambridge
- 5.31 Ringdale ActiveLED
- 5.32 SolarMax
- 5.33 Sunleaves Garden Products
- 5.34 Sunlight Supply
  - 5.34.1 Sun System The #1 Leading Brand Of Grow Lights For Indoor And Greenhouse Gardening
- 5.35 Syhdee
  - 5.35.1 Syhdee Factory Direct Price
- 5.36 Taiwan Floriculture Exports Association
- 5.37 USALight
- 5.38 Valoya
  - 5.38.1 Valoya Composition Of Light Spectrum
  - 5.38.2 Valoya Target Markets
- 5.39 Selected Grow Light Companies
  - 5.39.1 Selected Grow Light Companies
- 5.40 Selected Chinese Grow Light Companies / Shenzhen Wayet Lighting Co., Ltd.
  - 5.40.1 full spectrum led grow lights (600w LED for medical plant growing)
  - 5.40.2 cheap 600w led grow lights for sale (600w LED for medical plant growing)
  - 5.40.3 3w led chip 660nm 300W LED grow light for medical plants growing543
- 5.41 Shenzhen Herifi Technology Co., Ltd.
  - 5.41.1 hot sale 100w 200w 400w 600w 900w 1600w full spectrum COB led grow light
  - 5.41.2 Full spectrum apollo 6 198W led grow light hydroponic supplies Leds For Indoor Plants LED Plant Lamp lighting
  - 5.41.3 led-grow-lights canada full spectrum grow light full spectrum 100W 200W 400W 600W 900W 1600W COB LED grow light
- 5.42 Shenzhen Lumini Technology Co., Ltd.
  - 5.42.1 Lumini Grow System 600 watt led grow light
  - 5.42.2 Lumini Grow System led grow light medical plant
  - 5.42.3 China supplier high power LuminiGrow 450R1 full spectrum best led grow lights
- 5.43 Shenzhen Qkwin Technology Co., Ltd.
  - 5.43.1 Wholesale Led Grow light Cheap Led Grow Light 180W UFO Led Grow Lights,Grow Led Light ,Netherlands Led Grow Lights Medical Plant
  - 5.43.2 100\*3W Led Grow Light 300W Full Spectrum 9Bands Hydroponic acuario

## Growing Lamp For Medical Plant/Vegetables Dropship

5.43.3 New Arrival 2015 Top Sale 300W Hydroponics Led Grow Light 9Band 410nm UV Full Spectrum Lights For Medical Plant

### 5.44 Wuxi Rave Optoelectronics Technology Co., Ltd.

5.44.1 High power programmable and dimmable 900w led grow light for plants growing

5.44.2 LED Grow Lights 900w 300\*3w Full Spectrum 8 Bands for Hydroponics Medical Plant

5.44.3 Modularized design super power 1200w full spectrum LED Grow Lights for indoor plants

### 5.45 Shenzhen Panda Grow Technology Co., Ltd.

5.45.1 agricultural led grow lights,full spectrum 5w chip led grow lights

5.45.2 Cheapest 360w LED Grow Light Hydroponics Systems Agricultural Hydroponics Full Spectrum LED Grow Lights

5.45.3 2014 advanced flexible 45w,180w,270w,360w Osram led grow light sunlight spectrum best for MJ, medical plants ,veg growing

### 5.46 Shenzhen Gehl Lamps Co., Ltd.

5.46.1 2015 best selling products Noah series cob led grow light full spectrum led grow lights 1000w led grow lights

5.46.2 2015 best selling led grow lights 900w led grow light full spectrum commercial greenhouse grow led light

5.46.3 2015 hot selling diy led grow light kits led horticulture lighting cheap 600w led grow lights for sale

### 5.47 Shenzhen SOSCI Technology Co., Ltd.

5.47.1 wholesales cree high lumen 1000w led grow light

5.47.2 Best Cheap 600w Full Spectrum LED Grow Lights

5.47.3 hot sale low price high power apollo led grow light

### 5.48 Shenzhen Sanxinbao Semiconductor Lighting Co., Ltd.

5.48.1 Revolutionary Modular High Power 1000W LED Grow Light

5.48.2 Nova S8 270W hydroponic led grow light panels with CE RoHS led grow light

5.48.3 2014 NOVA Integrated Led Grow Light Led 6500k With Full Spectrum

### 5.49 Shenzhen Cidly Group Co., Ltd.

5.49.1 2015 new hydroponics CIDLY LED GROW LIGHT 60\*3w led grow light indoor plants grow lights

5.49.2 Made in China Module Design 180W CIDLY LED series 60x3w led grow light Full Spectrum for medical plants

5.49.3 Cidly A8 LED grow light 280W

### 5.50 Shenzhen CT Lighting Technology Co., Ltd.

5.50.1 810w dimmable full spectrum led grow light with three independent channels

5.50.2 Best quality full spectrum led grow lights



- 5.50.3 Intelligent smart g3 led grow light,floating mini solar lights
- 5.51 Shenzhen Gerylove Technology Co., Ltd.
  - 5.51.1 Hot Promotion!!! 300w led grow light full spectrum led plant grow light 300w led hydroponic grow light for greenhouse
  - 5.51.2 Hot Sale !! 300W LED Grow Light Full Spectrum Led Grow Lights , Grow Light LED , 300W Grow Light for Greenhouse
  - 5.51.3 UFO Led Grow Light 135W Grow Led Light 3W Led UFO Grow Light Led
- 5.52 Shenzhen Baisheng Semiconductor Lighting Co., Ltd.
  - 5.52.1 Bysen cultivators used cob led grow light of cfl grow light
  - 5.52.2 Innovative Design 255W ChloroBA LED Grow Light Full Spectrum Perfectly Replace HPS
  - 5.52.3 Best Design 560W Top Rated LED Grow Lights Top Quality LED Grow Lighting
- 5.53 Shenzhen Ecosun Aquarium Lighting Co., Ltd.
  - 5.53.1 2015 New Brand GrowSmart Plus Cree led grow light 1200w
  - 5.53.2 Best selling GrowSmart 4 WiFi control rgb led grow light panel for greenhouse
  - 5.53.3 Patent design module COB led grow light
- 5.54 Shenzhen Gehl Lamps Co., Ltd.
  - 5.54.1 1000w led grow lights for medical plants 2014
  - 5.54.2 New power integrated led grow lighting 5w leds & COB combination
  - 5.54.3 Noah 600w led grow light with 90w integrated cob grow light led for plants
- 5.55 Shenzhen Casa Electronic Co., Ltd.
  - 5.55.1 Grow System 500W led grow light
  - 5.55.2 TOP Sale 300W full spectrum led grow light
  - 5.55.3 Professional Manufacture 300W diy cob led grow light
- 5.56 Nanning Lijie Energy Saving Electric Co., Ltd.
  - 5.56.1 2015 NEW DESIGN Apollo 6 90\*3W Full Spectrum LED Grow Light Best for Indoor Plants,Green House with CE,FCC,RoHS Approved
  - 5.56.2 500w grow light 168x3w chip high quality low power consumption factory price high quality professional led grow light
  - 5.56.3 400w grow light 133 leds x 3 watt full spectrum customized color ratio for indoor/ hydroponic / greenhouse plants led grow light
- 5.57 Hopthink (Shenzhen) Industry Co., Ltd.
  - 5.57.1 5w chip led grow lights with CE RoHS approval
  - 5.57.2 Full spectrum led grow lights Apollo HTGL-G-Apollo 6
  - 5.57.3 New Arrial Apollo LED Grow light HTGL-G-Apollo 6
- 5.58 Shenzhen Highway Technology Co., Ltd.
  - 5.58.1 2014 New Arrival Growmax series full spectrum led grow light(360/300/240/180\*5w)
  - 5.58.2 Hydroponics growmax full spectrum LED Grow Light for medical



plants(1800w/,1500w/300\*5w,1200w/240\*5w,600w/120\*5w,300w/60\*5w)

5.58.3 2014 UWAY series wholesale led grow lights with adjustable spot lights

5.59 Shenzhen SOSCI Technology Co., Ltd.

5.59.1 high power high par value full spectrum 1200 watt led grow lights

5.59.2 best 600w 400w 300w 120w full spectrum led grow light

5.59.3 2014 Best Hans Panel High Power 1000w LED Grow Light

5.60 Shenzhen Topline Optoelectronic Co., Ltd.

5.60.1 Full spectrum programmable 2014 900W Matrix new design S900 led grow light

5.60.2 Newest Matrix S600 Smart dimmable led grow lighting

5.60.3 Latest design Matrix S900 90 watt ufo shape 600W 3W LED grow lights

5.61 Shenzhen Rosun Lighting Technology Co., Ltd.

5.61.1 Apollo\_18\_LED\_Grow\_Light red blue uv ir led grow light 600 watt

5.61.2 full spectrum high power 120 watt led grow light,led growth taller and stronger

5.61.3 diy led grow light 3w high power red blue spectrum ratio option

5.62 Shenzhen JYO Technology Co., Ltd.

5.62.1 HOTSALE 90 watt ufo led grow lights for plant growing in grow tent or grow box

5.62.2 New design 100W ufo led grow light with full spectrum best for grow tent grow box greenhouse

5.62.3 JYO led grow lamp 725w Apollo 20 Full Spectrum led grow lights for indoor plants

5.63 Shenzhen Houyi Lighting Co., Ltd.

5.63.1 Best Seller 90 watt ufo led grow light,led grow lighting for best flowering and fruiting with full spectrum

5.63.2 shenzhen led grow light COB+Lens houyi led chip Modular high power grow light 60degree full spectrum 100w/200w/300w/400w/450w

5.63.3 Professional Manufacture full spectrum 300w high power led grow lights for medical plant,hydroponic system

5.64 Zhongshan Guzhen Lohas Led Lighting Factory

5.64.1 2015 ebay worldwide shipping 132w/136w 630NM:460NM AC85-264V apollo led grow light garden used greenhouses for sale

5.64.2 wholesale led grow lights 144x3W 630nm/460nm AC 100~240V led aquarium light looking for products to represent

5.64.3 helios led grow lights 150W 630nm/460nm AC 100~240V led aquarium light looking for products to represent

5.65 Shenzhen Jiangjing Lighting Co., Ltd.

5.65.1 led grow light bar,aluminum housing led grow lights 27w with passive cooling

5.65.2 24pcs\*3W 60 watt led grow lights europe Red(630nm)/Blue(460nm) customized product

5.65.3 2014 Best choice innovative 660nm 460nm DC12V IP68 waterproof full

spectrum led grow lights

5.66 Twilight Group Co., Ltd.

5.66.1 Spider Led Grow Lights / Apollo LED Grow Light / Classical LED Grow Light

5.66.2 Hydroponic systems good well 432w COB led grow light

5.66.3 NEW design spider 2 series 2X COB best smoll tant led grow light

5.67 Shenzhen Starvanq Technology Co., Ltd.

5.67.1 newest technology integrated vanq led grow lights with bestreflector,  
7band 120-300w led grow light best for growing flower

5.67.2 led grow light bar, aluminum housing led grow lights 36w with passive cooling

5.67.3 led grow light t8 tube, indoor led plant growing light

## List Of Tables

### LIST OF TABLES AND FIGURES

Table ES-1 Aspects of LED Grow Light
Table ES-2 Grow Light Garden Modules
Table ES-3 LED Grow Light Market Driving Forces
Table ES-4 Grow Light Benefits Of Lower Heat Levels:
Table ES-5 LED Grow Lights Market Positioning
Table ES-6 LED Grow Light Environmental Controls
Figure ES-7 LED Grow Lights Market Shares, Dollars, Worldwide, 2014
Figure ES-8 LED Grow Light Modules for Greenhouses and Plant Factories, Market Forecasts Dollars, Worldwide, 2015-2021
Figure 1-1 Growing Lettuce Using LED Grow Lights
Figure 1-2 Japanese Miriai Co. Ltd. Largest Plant Factory Uses LEDs from Syhdee
Figure 1-3 Philips 13,000 LED Pieces for Plant Factory in Osaka
Figure 1-4 LED Lighting Tests In Display Cases
Table 1-5 LED Quick Reference Growing Guide
Table 1-6 LED Vegetative Guide for Hydroponics
Table 1-7 LED Flowering for Hydroponics
Table 1-8 LED Phases Of Plant Growth
Figure 1-9 LED Plant Grow Lighting
Table 1-10 LED Grow Light Technology Benefits
Table 1-11 LED Plant Growth Lighting System Target Markets
Table 1-12 LED Diode-Based Lighting Advantages:
Table 2-1 Aspects of LED Grow Light
Table 2-2 Grow Light Garden Modules
Table 2-3 LED Agricultural Grow Lights, LED Grow Light Market Driving Forces
Table 2-4 Grow Light Benefits Of Lower Heat Levels:
Table 2-5 LED Grow Lights Market Positioning
Table 2-6 LED Grow Light Environmental Controls
Figure 2-7 LED Grow Lights Market Shares, Dollars, Worldwide, 2014
Table 2-8 LED Grow Light Market Shares, Dollars, Worldwide, 2014
Figure 2-9 Everlight's GL-Flora Provides Accelerated Photosynthesis Lights
Figure 2-10 Shenzhen Sanxinbao Semiconductor Lighting Co., Ltd.
Figure 2-11 GE Grow Light Facility Located in Japan, Tagajo, Miyagi Prefecture
Figure 2-12 LED Grow Light Modules for Greenhouses and Plant Factories, Market Forecasts Dollars, Worldwide, 2015-2021
Table 2-13 LED Grow Light Modules, Dollars, Shipments, Worldwide, 2015-2021

Table 2-14 Hectares of Green Houses By Region and Country Green Houses, Worldwide, 2014

Table 2-15 LED Agricultural Grow Lights, Installed Base of Grow Light Systems By Region and Country Green Houses, Worldwide, 2014

Table 2-16 Penetration Analysis: LED Grow Lights vs Installed Base of Grow Lights By Region Green Houses and Plant Factories, Worldwide, 2015-2021

Figure 2-17 Grow Light Environments

Figure 2-43 LED USA Systems 90W Tri-Band UFO

Table 2-44 LEDHydroponics Helios Lights

Table 2-45 LEDHydroponics Super Helios and UpLight Grow Lights

Table 2-46 LEDHydroponics Photon Pro Lights

Table 2-47 LEDHydroponics BudBooster

Figure 2-18 LED Grow Lights And Greenhouse Cultivation Control Systems

Figure 2-19 LED Grow Lights Regional Market Segments, Dollars, 2014

Table 2-20 LED Grow Lights Regional Market Segments, 2014

Figure 2-21 Everlight Electronics LED Grow Lights

Table 2-22 Plant Factory LED Grow Light Strategies in Taiwan

Figure 2-23 LED Agricultural Grow Lights, Everlight Electronics Regional Segments

Figure 3-1 Everlight's GL-Flora Provides Accelerated Photosynthesis Lights

Table 3-2 Everlight Electronics LED Grow Lights Benefits

Figure 3-3 Everlight Electronics Sun vs. LED for Growing

Table 3-4 Everlight Electronics LED Light Plant Growing Advantages

Table 3-5 Everlight Electronics Key Features

Table 3-6 Everlight Electronics LED Grow Light Applications

Figure 3-7 Everlight Grow Light GL Flora Plant Container Module

Figure 3-8 Everlight Grow Light GL Flora

Table 3-9 Everlight GL Flora Features

Figure 3-10 Everlight GL Flora Product Specifications

Figure 3-11 Everlight GL Flora Electro-Optical-Thermal Characteristics Curves

Figure 3-12 Everlight Grow Light GL Flora Characteristics Intensity Distribution Curve

Figure 3-13 Everlight Relative Spectral Distribution

Figure 3-14 Everlight GL Flora Module Product Dimensions

Table 3-15 Everlight LED Growlight Tube Products

Table 3-16 Everlight Electronics Co., Ltd. GL-Flora Product Series Features

Figure 3-17 Philips Horticulture Lamps

Table 3-18 Philip Light Recipes For Different Horticultural Segments

Figure 3-19 Philips LED Grow Lighting GreenPower LED Toplighting

Figure 3-20 Philips GreenPower LED Toplighting Solution

Figure 3-21 Philips GreenPower LED Interlighting

Figure 3-22 Japan: World Largest LED Plant Grow Factory with LED Lighting

Table 3-23 Syhdee Best Selling Products

Figure 3-24 Syhdee Best Selling LED Grow Lights

Figure 3-25 Syhdee Plant LEDs

Figure 3-26 Shenzhen Sanxinbao Semiconductor Lighting Products

Figure 3-27 Shenzhen Sanxinbao Semiconductor Lighting Co., Ltd.

Figure 3-28 Shenzhen Baisheng Semiconductor Lighting Tri-Band LED GROW LIGHT

Table 3-29 Shenzhen Baisheng Semiconductor Lighting 120-watt TRI-Band LED Grow Light Features:

Figure 3-30 LumiGrow Grow Series LED Greenhouse Lights.

Figure 3-31 LumiGrow Targeted Spectral Output

Table 3-32 LumiGrow LED Grow Light Applications

Table 3-33 LumiGrow LED Grow Light Key Features

Table 3-34 LumiGrow PRO 325 Grow Light Specifications

Table 3-35 LumiGrow PRO 650 Grow Light Specifications

Table 3-36 TruLite LED grow Light Suppliers

Figure 3-37 Shenzhen StarVanq Technology Tri-Band LED Grow Lights

Figure 3-38 Nanning Lijie Energy Saving Electric Tri-Band LED Grow Light

Figure 3-39 Shenzhen Baisheng Semiconductor Lighting Tri-Band LED Grow Light

Figure 3-40 Shenzhen Baisheng Semiconductor Lighting Tri-Band LED Grow Light

Figure 3-41 Shenzhen SOSCI Technology Italian 600w 300w tri band LED Grow Light

Figure 3-42 Wenzhou Zhente Trade 300w Tri Band Led Grow Light

Figure 3-43 Shenzhen Sanxinbao Semiconductor Lighting Co., Ltd. LED Grow Lights

Figure 3-44 GE Grow Light Facility Located in Japan, Tagajo, Miyagi Prefecture

Figure 3-45 GE LEDs Used to Grow Lettuce

Figure 3-46 GE Grow Light Facility Aisles

Figure 3-47 LED Lights Leverage Plant Physiology

Table 3-48 GE Grow Lighting Locations

Figure 3-49 Black Dog LED light

Figure 3-50 Black Dog LED light Platinum XL-U

Figure 3-51 Black Dog LED Light Module Product Line

Table 3-52 Black Dog LED Light Platinum XL-U Specifications

Figure 3-53 Black Dog LED Light Platinum XL-U

Table 3-54 Black Dog LED Light Description

Figure 3-55 Black Dog LED Light Platinum XL

Figure 3-56 SuperNova LED Grow Light

Table 3-57 Leiderkerk International High Power LED Functions

Table 3-58 Leiderkerk International High Power LED Application

Table 3-59 Leiderkerk International High Power LED Features:

Figure 3-60 USA LED Systems 90W Tri-Band UFO \$185

Figure 3-61 USA LED Systems 90W Tri-Band UFO

Figure 3-62 LED USA Systems UFO Grow Light Specifications

Source: LED USA Systems

Figure 3-63 LED USA Systems

Figure 3-64 LED USA 600 W Tri-Band Grow Light Systems

Figure 3-65 USA LED Light Systems Comet Magenta 150 LED Grow Light

Figure 3-66 USA LED Grow Lights

Figure 3-67 USA LED Efficiency

Figure 3-68 LED Hydroponics Quantum LED Grow lights

Figure 3-69 Compare LED Grow Lights

Figure 3-70 LEDHydroponics Quantum LED Grow Lights

Figure 3-71 LEDHydroponics Quantum LED Grow Lights

Figure 3-72 LEDHydroponics Quantum LED Grow Lights

Figure 3-73 LEDHydroponics Quantum LED Grow Lights

Figure 3-74 LEDHydroponics Quantum LED Grow Lights Height Adjustable Lighting

Figure 3-75 LEDHydroponics Quantum HEFL Light Is Delivered Vertically Downward With Specially Designed Reflectors (Cultivation Of Frill Lettuce)

Figure 3-76 LEDHydroponics Quantum LED Grow Lights Even Illumination

Figure 3-77 LEDHydroponics Quantum Cultivation of Strawberries

Table 3-78 LED Hydroponics Products

Table 3-79 LEDHydroponics Helios Lights

Table 3-80 LED Hydroponics Super Helios and Up Light Grow Lights

Table 3-81 LED Hydroponics Photon Pro Lights

Table 3-82 LED Hydroponics BudBooster

Table 3-83 LEDHydroponics Grow Light Comparison Chart

Figure 3-84 LEDHydroponics Super Helios 6 Professional Grow Lights

Figure 3-85 LEDHydroponics Super Helios 6 Grow Lights

Figure 3-86 LEDHydroponics.co.uk LEDbud Used for Automazar Plants Grow Lights

Figure 3-87 LEDHydroponics.co.uk Quantum Grow Lights for Vegetation

Figure 3-88 Quantum Grow Lights for Vegetation

Figure 3-89 Quantum LED Light Absorption

Figure 3-90 LEDHydroponics LED Grow Lights

Table 3-91 Quantum LED Grow Light Models

Figure 3-92 ValoyaTube Grow Lights

Figure 3-93 Valoya LED Gtrow Light Spectra

Figure 3-94 Illumitex NeoSol DS Grow Light

Table 3-95 NeoSol DS grow light Details

Figure 3-96 Solid Apollo LED Grow Lights Tuned to Optimize Plant Growth with Red



and Blue Light

Figure 3-97 Solid Apollo LED Grow Lights

Figure 3-98 Novagant LEDs Allow 1000 Combinations of Different Color and Intensity Settings

Table 4-1 Plant Grow Lights for Greenhouses Benefits

Figure 4-2 Solar Powered LED Grow Lamp Architecture

Figure 4-3 HEFL Offers Range Of Wavelengths Necessary For Cultivation Of Plants

Figure 4-4 LumiGrow Targeted Spectral Output

Figure 5-1 Venture Lighting International Human Eye Response Curve

Figure 5-2 Venture Lighting / Sunmaster Plant Response Curve

Figure 5-3 Venture Lighting Efficiencies of Light Sources Used in Plant Growth

Figure 5-4 Delta Group Data Center Power

Figure 5-5 Delta Group Data Center Power Infrasuite Components

Table 5-6 Delta Group InfraSuite Advantages

Figure 5-7 Delta Group Renewable Energy Solutions

Figure 5-8 Epistar Management's Beliefs

Figure 5-9 Epistar Headquarters

Figure 5-10 Everlight Electronics Regional Segments

Figure 5-11 Everlight Electronics Global Locations

Figure 5-12 Everlight Electronics Products

Figure 5-13 Fujitsu.Agricultural EcoSystem

Figure 5-14 Fujitsu Cultivating Low-Potassium Vegetables At Its Own Plant-Factory

Figure 5-15 Fujitsu Human Centric Innovation

Figure 5-16 Fujitsu Ecosystem of Smartphone

Table 5-17 Applications for Fujitsu Smart Phone EcoSystems

Figure 5-18 GE Scorecard 2014, 2013, 2012 GE 2014

LED Agricultural Grow Lights, Table of Contents and List of Tables and Figures  
Source: Milken Institute.

Figure 5-19 GE Healthcare Oxygen Humidifier

Table 5-20 GE Healthcare Oxygen Humidifier

Figure 5-21 GE Healthcare Air/O2 Blender

Table 5-22 Hydrofarm One-Stop Solutions

Table 523 Hydrofarm Locations

Table 5-24 Hydrofarm Profile

Figure 5-25 Illumitex Greenhouse and Quantum LED Grow Light

Figure 5-26 Iwasaki Electric, Ltd New Generation Dimmable High-Bay Fixture

Figure 5-27 Iwasaki Electric, Ltd Commercial Lighting Examples

Figure 5-28 Iwasaki Electric, Ltd High Speed Capture Lighting

Figure 5-29 Iwasaki Electric, Ltd Light Source for Image Operation



Figure 5-30 Iwasaki Electric, Ltd Halogen Heater  
Figure 5-31 Iwasaki Electric, Ltd Halogen Lamp  
Figure 5-32 Iwasaki Electric, Ltd Insect Repelling Lamp  
Figure 5-33 Iwasaki Electric, Ltd Plant Factory Light For Cultivation  
Figure 5-34 Iwasaki Electric, Ltd Light Source for Image Processing  
Figure 5-35 Iwasaki Electric, Ltd Infrared LED Board  
Figure 5-36 Iwasaki Electric, Ltd EYE Black Lamp  
Table 5-37 Nihon Advanced Agri Business Activities  
Figure 5-38 Study of Nano Materials: Hiromi Nakano in Toyohashi Tech's Cooperative Research Facility Center  
Figure 5-39 Opto-LED Technology Company Product Ranking  
Figure 5-40 Opto-LED Technology Sales by Region  
Figure 5-41 Opto-LED Technology System Products Sales by Region  
Figure 5-42 Opto-LED Technology Grow Light Crops, Peanut, Herb, Pumpkin, and Tomato  
Figure 5-43 Opto-LED Technology Company Profile  
Figure 5-44 Opto-LED Technology Main Products  
Figure 5-45 Opto-LED Technology Main Suppliers of LED Epi Wafers  
Figure 5-46 Philips Global Presence  
Figure 5-47 Philips Global Trends And Challenges  
Table 5-48 Philips Positions To Simplify Global Healthcare Delivery For The Long Term  
Table 5-49 Philips Healthcare Delivery Product Positioning  
Figure 5-50 Philips Delivering Margin Improvement and Decreasing Manufacturing Overhead  
Figure 5-51 Philips Healthcare Information Systems Market Shares  
Figure 5-52 Rambridge Brands  
Figure 5-53 Solarmax HPS Lamps  
Figure 5-54 SolarMax HPS Lamps Radiation From The "Red" Portion Of The Spectrum  
Figure 5-55 Sunleaves Product Stacks  
Figure 5-56 Syhdee Employee Team  
Figure 5-57 Syhdee Production Capability  
Figure 5-58 Syhdee Manufactory Industrial Park  
Figure 5-59 Syhdee Manufacturing  
Table 5-60 Syhdee Profile

## I would like to order

Product name: LED Agricultural Grow Lights: Market Shares, Strategies, and Forecasts, Worldwide, 2015 to 2021

Product link: <https://marketpublishers.com/r/LC6764D1A45EN.html>

Price: US\$ 4,000.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/LC6764D1A45EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:  
Last name:  
Email:  
Company:  
Address:  
City:  
Zip code:  
Country:  
Tel:  
Fax:  
Your message:

**\*\*All fields are required**

Customer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970

