

LED Lighting: Market Research Report

https://marketpublishers.com/r/LD00990B11EEN.html

Date: August 2018

Pages: 539

Price: US\$ 5,600.00 (Single User License)

ID: LD00990B11EEN

Abstracts

This report analyzes the worldwide markets for LED Lighting in US\$ by the following Applications: Residential, Architectural, Commercial, Outdoor, and Others. The report provides separate comprehensive analytics for the US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America.

Annual estimates and forecasts are provided for the period 2016 through 2024. Also, a five-year historic analysis is provided for these markets. Market data and analytics are derived from primary and secondary research. Company profiles are primarily based on public domain information including company URLs.

The report profiles 168 companies including many key and niche players such as -

American Electric Lighting
Holophane, Inc.
Juno Lighting Group
Lithonia Lighting Company
Bajaj Electricals Ltd.
Cree, Inc.



Contents

1. INTRODUCTION, METHODOLOGY & PRODUCT DEFINITIONS

Study Reliability and Reporting Limitations

Data Interpretation & Reporting Level

Quantitative Techniques & Analytics

Product Definitions and Scope of Study

Residential

Architectural

Commercial

Outdoor

Others (Includes Hospitality, and Industrial)

2. INDUSTRY OVERVIEW

LED Lighting: Transformative Lighting Technology Goes Mainstream, Fast Replaces

Legacy Incumbent Lighting Technologies

Major Trends & Drivers in the Global LED Lighting Market Summarized

The Rise of LED-based Smart Lighting

Rapid Adoption of LED-based Lighting in Emerging Countries

Niche Applications of LED Lighting

Status and Potential: Global LED Lighting Market

LED Lighting: Market Facts

Superior Attributes of LED Lighting over Traditional Lighting Technologies Drive

Widespread Adoption

Table 1. Typical LED Downlight Luminaire Cost by Component: Percentage Breakdown of Cost for Assembly, Drivers, Optics, Packaged LED Chips, and Thermal/Mechanical Components (includes corresponding Graph/Chart)

Table 2. Global Lamp Market by Technology (2014, 2016, 2018, 2020 & 2022): Percentage Share Breakdown of Unit Installed Base for CFL, Fluorescent, Halogen, Incandescent, and LED Replacement (includes corresponding Graph/Chart)

Table 3. Global Luminaire Market by Technology (2014, 2016, 2018, 2020 & 2022): Percentage Share Breakdown of Unit Shipments for CFL, Fluorescent, Halogen, HID, Incandescent, LED Integrated and LED Replacement (includes corresponding



Graph/Chart)

Table 4. Global General Lighting Market by Type (2016, 2018 & 2020): Percentage Breakdown of Value Sales for Control Systems, LED Lamps, Conventional Lamps, LED Luminaires, and Conventional Luminaires (includes corresponding Graph/Chart)

LED and Other Lighting Technologies: A Comparison

Comparison of a 12.5 W LED with 15 W CFL and 60 W Incandescent Bulb

LED Bulbs vs. Fluorescent Bulbs

LED Bulbs vs. Halogen Bulbs

LED Bulbs vs. HID Bulbs

The Urgent Need to Achieve Energy and Cost Savings amidst Spiraling Electricity

Consumption: The Fundamental Growth Driver

Table 5. Global Electricity Demand by Region/Country (2016-2040): Breakdown of Demand (Thousand TWh) for Australia, Brazil, Canada, China, Europe, India, Japan, Middle East & North Africa, South East Asia, USA, and Rest of World (includes corresponding Graph/Chart)

Energy Savings Feature Augments Popularity of LEDs

LED Lighting to Make Strong Contribution towards a Green Future

LED's Longevity and Digital Connectivity to Help Lighting Industry Achieve

Sustainability

Key Drivers Propelling Demand for LED Lighting

Adoption of Energy-Efficient Lighting Options

Supportive Policies and Regulations

Growing Significance of Energy-Efficient Certifications

Major Infrastructure Projects and International Events

Global Market Outlook

Developing Countries to Turbo Charge Current and Future Market Growth

Table 6. Global LED General Lighting Market - Geographic Regions Ranked by Value CAGR for 2016-2024: Latin America, Asia-Pacific, Middle East, Japan, Europe, USA, and Canada (includes corresponding Graph/Chart)

Asia Strong in Upstream LED Segments
Upward Movement in Construction Activity to Drive Strong Market Gains



Leading LED Producing Countries Worldwide China: Largest LED Producer Worldwide

3. MARKET TRENDS, ISSUES AND DRIVERS

Surging Demand for Smart Intelligent LED Lighting Drives Strong Market Growth Innovations in Smart Home Technologies Benefit Adoption of Smart LED Lighting Smart Thermostats Enhance Energy Efficiency

The Moon

Smart LED Lighting Systems Controllable by Google Assistant and Amazon Alexa LB100

DW1KD-1BZ Decora

FluxSmart LED Light Bulb

Wemo Light Switch

LED Colored Light Strips from LIFX

Growing Number of Smart Homes and Smart Cities Create Enormous Demand

Table 7. Smart Home Penetration (%) in Select Region/Country for 2017 (includes corresponding Graph/Chart)

Table 8. Global Smart Home Market: Percentage Breakdown of Revenues by Application for 2017 (includes corresponding Graph/Chart)

Table 9. Global Smart Homes Market (In US\$ Billion) for the Years 2018, 2020 & 2022 (includes corresponding Graph/Chart)

Smart & Connected Lighting Systems Make Cities Smarter and Safer Integration of Security, Smart LED Lighting, and Climate Control in Home Automation Offers Growth Opportunities

Table 10. Global Home Automation Market by Application (2017): Percentage Breakdown of Revenues for Energy Management, Entertainment, HVAC, Lighting, Safety & Security and Others (includes corresponding Graph/Chart)

Healthy Growth Projected for LED Luminaires Over the Next Few Years



Table 11. Global Market for LED Luminaires by Type (2016 & 2022): Percentage Breakdown of Revenues for Downlights, High Bay, Suspended Pendants, Track Lights, Troffers, Street Lights, and Others (includes corresponding Graph/Chart)

LED Outdoor Luminaire are Poised for Rapid Penetration

Key Trends in LED Lighting and Luminaires Market

LEDs Fast Penetrate the Street Lighting Application Hitherto Dominated by HID Lights

Cities Switch towards LEDs to Modernize and Make Street Lighting Smart

Newer LED Chips Offering Higher Lumens per Watt and More Savings Drive Demand in Industrial Applications

Myriad Benefits Drive Integration of LED Lighting in Industrial Automation

More Efficient and Productive Maintenance of Facilities

Adjustments at Individual Fixture Level for Greater Efficiencies

LED Environment Sensors Offer Intelligence in Fine-tuning Operations

LED Lighting Networks for Transmitting Data

Exponential Increase in Urbanization Drive Development of Higher Quality, More

Efficient, and Longer Lasting LED Solutions

City Lights as Part of Modern Conveniences

Exponential Increase in Urban Population

Table 12. World Urban Population in Thousands: 1950-2050P (includes corresponding Graph/Chart)

Table 13. Degree of Urbanization Worldwide: Urban Population as a % of Total Population by Geographic Region for the Years 1990, 2018 & 2050 (includes corresponding Graph/Chart)

Need to Support Plant Protection and Health in Controlled Environment Spurs LEDs Demand in Horticulture Applications

Advancement in LED Technology to Boost Horticulture Crop Production

Urban, Indoor, and Vertical Farming Applications in Horticultural Lighting

Evolution of Embedded Lighting and Focus on Developing Tourism Infrastructure Spur

Demand for Architectural and Landscape Lighting

Demand for Stylish and Decorative Architectural and Landscape Lighting Gain Momentum

Organic LEDs (OLEDs): The Future Growth Area

OLED Lighting Market Ready to Take Off as Price-Performance Improves

More Companies to Venture into the OLED Market



LED Applications in Backlighting Shrinks, While General Lighting Takes Off

Table 14. Global Packaged LED Market by Application (2012, 2014, 2016, 2018 & 2020): Breakdown of Revenues (US\$ Billion) for Auto Exterior, Display & Mobile, Lighting, IR, UV, and Others (includes corresponding Graph/Chart)

Change in Focus of LED Applications

Silicon-based LEDs to Drive Cost Reductions

Perovskites: A Potential Replacement to Gallium Nitride?

Excellent Color Rendering of LEDs Spurs Penetration in the Retail Display Segment

Control Solutions and LED Lighting Address Complex and Precise Lighting

Requirements of Retail Stores

LEDs Support IoT integration for Retailers

Increasing Adoption of LEDs in Innovative Niche Lighting Markets Favor Market

Expansion

Livestock Lighting

Human-Centric Lighting

Fishing Lighting

Stage Lighting

Rising Environmental Concerns Drive Demand for Recyclable Options

Human-Centric Lighting: A Forward Leap over Traditional Lighting Systems

Major Benefits of Human-Centric Solutions

Europe: A Major Market for Human-Centric Lighting Solutions

LEDs to Enter Human Centric Lighting Market in a Big Way

Focus of SSL Technology Research on Improving Lighting Performance and Lighting

System's Value Augurs Well for the Market

Light Utilization

Enhanced Lighting Design and Performance

Increased Environmental Sustainability

Health and Productivity

Favorable Demographic Trends Strengthens Market Prospects

Table 15. World Population by Geographic Region (2000-2050) (in Millions) (includes corresponding Graph/Chart)

Burgeoning Middle Class Population



Table 16. Global Middle Class Population (in Millions) and as a Percentage of Total Population: 2005, 2015, 2025 & 2035 (includes corresponding Graph/Chart)

Table 17. Global Middle Class Spending (in US\$ Trillion) by Geographic Region (2017E, 2025P & 2030P) (includes corresponding Graph/Chart)

4. CHALLENGES & CONCERNS

LiFi and Laser Lighting: More Powerful and Profitable than LEDs?

Psychiatric Studies Highlight Negative Impact of LED on Health

LED Light Bulbs Add to Light Pollution

AMA Warning Necessitates a Relook at LED Lighting in Cities

The First Generation LEDs

Eco-friendly LEDs: A Potential Health Hazard?

High Toxic Content

Other Hurdles in LED Lighting Adoption

Cost Factor

Reliability

Color Stability

Compatibility Challenges

Longer Lifespan Reduce Replacement Demand

Efficiency Improvement Requirements

Lack of Consumer Awareness

5. INNOVATIONS AND ADVANCEMENTS

Smart Lighting Technology Innovations

Maximus Smart Security Light

Lutron Caseta Wireless Smart Bridge

Lutron Caseta Wireless In-Wall Dimmer

NEBO Tools LED Rechargeable Flashlight

SengLED Pulse Light Bulb with Wireless Bluetooth Speakers

LED Lighting Products Innovations

Homogeneous Illumination

Leveraging the Spectrum

Illumination Akin to Sunlight Ideal for Several Applications

Configuring Illumination

Other LED Lighting Innovations: Model Name and Key Features Summarized



Ultra-thin Lumination

AIR LED Luminaire

Vector Linear Architectural Luminaire

Lumentalk Technology

Wide Spectrum LED for Optimum Plant Growth

Indigo-Clean to Kill Bacteria Continuously and Safely

Helvar's ActiveAhead

Hybrid Luminaire

Innovative LED Street Lights

World's First Eye-Pleasing (EP) LED

Innovation in Solid-State Lighting

LED Indoor Detection System Based on VLC Technology

Innovative Metal Organic Frameworks (MOFs) Enables Development of Warm White

Light LEDs

Nanotechnology to Deliver Efficient LEDs

Small, High-Powered LED Device

New GaN Technology Based RGB LED

New UV LED Curved Lens Technology

Solution to Create Large-Size Sapphire Substrates

White LED Product with Alrali Earth Metal

Other Noteworthy LED Research Initiatives

6. PRODUCT OVERVIEW

Light Emitting Diode (LED) Lighting: A Prelude

Development Timeline of LEDs

Technology behind LED

LED Light Tube

LED Bulbs Categorization

Colors of LED and Materials Employed

Available Colors with Wavelength Range and Semiconductor Material Used

White LEDs

RGB LEDs

Phosphor-based LEDs

Other White LEDs

Key Components in an LED Lighting System

Advantages and Disadvantages of LED Lighting

Advantages

Disadvantages



Types of LED Lights

Miniature LEDs

Mid-range LEDs

High-power LEDs

Organic light-emitting diodes (OLEDs)

Quantum dot LEDs

Ultraviolet and Blue LEDs

LED Strips

Applications of LED Light Bulbs

Illumination

Street Lighting

Automotive Lighting

Aviation and Heliport Lighting

Stage Lighting

Backlighting

Aquarium Lighting

Medical Lighting

Industrial Lighting

Other Applications of LED Lighting

Indicators and Signs

Smart Lighting

7. COMPETITIVE LANDSCAPE

LED Lighting Marketplace: Highly Competitive and Fragmented Competitive Landscape in the Global Market for LED Lighting: Leading Companies by Geographic Region

Table 18. Leading LED Luminaire Companies Worldwide (2018E): Percentage Market Share for Acuity Brands, Osram, Philips, Cree, and Others (includes corresponding Graph/Chart)

Table 19. Leading Packaged LED Companies Worldwide (2018E): Percentage Market Share Breakdown for Cree, LG Innotek, Lumileds, Nichia, Osram, Samsung, Seoul, and Others (includes corresponding Graph/Chart)

Leading LED Chip Manufacturers Worldwide: Brief Details

Leading LED Light Bulbs: Brief Details



Regional Players Dominate the Current Low-cost LED Era

Table 20. Increasing Share of LED in Total Lighting Revenue for Regional Market Players (includes corresponding Graph/Chart)

Three Companies Continue to Rule the Global Lighting Market

GE Lighting Co., Ltd. (GE Lighting)

OSRAM Lighting

Philips Lighting

Key Strategies for Leading Players

Longer Lifespan of LED Lamps Motivate Manufacturers to Diversify into Fittings and

Fixtures

Large Manufacturers Focus on Luminaires to Sustain Growth

Rapid Decline in Infrared LED Lighting Products Due to Cheap Chinese Manufacturing

Aggressive Pricing Strategy by Leading UV-C LED Manufacturers

LED Chip Market to Witness Highest Capacity Expansion in Recent Years

Non-Residential Buildings: Key Growth Areas for LED Lighting Manufacturers

Ambient Lighting

Accent Lighting

Task Lighting

Non-Building Construction: Key Growth Areas for LED Lighting Manufacturers

Roadway Lighting

Area Lighting

Floodlighting

Specialty Lighting

7.1 Focus on Select Global Players

Acuity Brands Lighting, Inc. (USA)

American Electric Lighting (USA)

Holophane, Inc. (USA)

Juno Lighting Group (USA)

Lithonia Lighting Company (USA)

Bajaj Electricals Ltd. (India)

Cree, Inc. (USA)

Crompton Greaves Ltd. (India)

Current, Powered by GE (USA)

Dialight plc (UK)

Eaton Corporation plc (Ireland)

Cooper Industries Plc. (Ireland)



Fagerhult Group (Sweden)

Feilo Sylvania (UK)

Feit Electric Company (USA)

FW Thorpe Plc (UK)

Havells India Limited (India)

Hubbell Lighting, Inc. (USA)

LEDvance LLC, Inc. (USA)

LG Corporation (South Korea)

LG Electronics (South Korea)

LG Innotek (South Korea)

Lighting Science Group Corporation (USA)

MEGAMAN (Hong Kong)

NVC Lighting Technology Corporation (China)

OMS, a.s. (Slovakia)

Opple Lighting Co., Ltd. (China)

Osram GmbH (Germany)

Panasonic Corporation (Japan)

Douglas Lighting Controls (Canada)

Universal Lighting Technologies, Inc. (USA)

Philips Lighting Holding B. V. (The Netherlands)

Philips Color Kinetics (USA)

Strand Lighting (USA)

PhotonStar LED Group plc (UK)

Revolution Lighting Technologies, Inc. (USA)

Schréder Group GIE (Belgium)

Samsung Electronics Co., Ltd. (Korea)

Sharp Corporation (Japan)

Standard Products, Inc. (Canada)

Targetti Sankey S. p. A. (Italy)

TCP International Holdings Ltd. (Switzerland)

Toshiba Lighting & Technology Corporation (Japan)

TRILUX GmbH & Co. KG (Germany)

Ultra LEDs Limited (UK)

Venture Lighting International, Inc. (USA)

Zumtobel Group AG (Austria)

Thorn Licht GmbH (Germany)

Tridonic GmbH & Co KG (Austria)

7.2 Product Introductions/Innovations

Cree Launches XLamp XP-G3 S Line LED



TCP Announces the Availability of LED PL Quad Replacement Lamps

KYOCERA Develops World's First Full-Spectrum LED Lighting for Aquariums

Cree Launches New High Efficacy Version of XLamp XP-G2 LED

LEDvance Rolls Out Voice-Dimmable Filament LED Lamps in Europe

Signify Launches Philips MyCare LED Bulb with Interlaced Optics

Bulbrite Launches Over 30 New LED Products and Merchandising Programs

LG Innotek to Launch InnoUV LED Brand

Matrix Announces Advanced Mine Lighting Product – UVision

GREEN CREATIVE Launches CLICK 277V Line

GE Expands Vintage LED Offering

Philips Introduces New and Tiered Portfolio of LED Lamps

LG Unveils LG Simple Choice LED High Bay Lights and LG Sensor Connect

Samsung Announces New Horticulture LED – The LH351B Red

Cree Expands XLamp High Current LED Array Line with CMT LEDs

Acuity Brands Unveils Lighting, Controls and Connected Building Solutions

Revolution Lighting Launches SIX New LED Lighting Solutions

Larson Electronics Releases EPL-48-2L-LED-G3 Explosion Proof LED Fixture

Larson Electronics Releases SMLP-16X500LTL-LED-1227 Cube Mount LED Light Plant

Maxxima Introduces M20388 Ultra-Thin LED Emergency/Warning Lights

Larson Electronics Releases 150 Watt High Bay LED Light Fixture

Larson Electronics Releases Portable Magnetic Explosion Proof LED Light

Philips Unveils New Philips GreenPower LED Toplighting

Larson Electronics Releases Waterproof LED Signal Light

Cree Announces New XLamp XD16 Extreme Density LED

Philips Launches Philips T-shaped LED Bulb

Larson Electronics Releases Vapor Proof Dimmable LED Fixture

Larson Electronics Releases 100W Portable LED Lamp

Larson Electronics Launches 50W Explosion Proof High Bay LED Fixture

MEGAMAN Launches LED Luminaires and Redefines Commercial Lighting

Philips Launches LiFi IoT Platform

Lumileds Launches Luxeon MX packaged LEDs

Osram Opto Launches DURIS S 5 LEDs

Microtek Enters into LED Lighting Segment in India

Cree Expands XQ LED Line with XLamp XQ-A LED

Larson Electronics Releases 8W Rechargeable Explosion Proof LED

Philips Launches TrueForce LED Road and CorePro LEDtube Universal T8

Samsung Enhances Chip-Scale Package (CSP) LEDs

Samsung Launches H influx LED for Industrial Lighting Applications

MEGAMAN Extends Range of TECOH Components and New Smart Modules



MEGAMAN Unveils Advanced Features in Smart Lighting Solutions TCP Announces the Availability of LED PL Replacement Lamps Rittal Launches LED Lights for Network and Server Enclosures Litetronics Launches Architectural LED Volumetric Retrofit Lightings LG Unveils Flip Chip LED

Valoya Unveils Lightweight LED Bars – BL-Series and BX-Series

Feit Electric Expands LED Lighting Product Line

LEDVANCE Develops Bluetooth Mesh Qualified LED Lighting Products

TCP Launches DirecT5 Lamps

7.3 Recent Industry Activity

Once Acquires iLOX

Osram Supports an LED Horticultural Lighting Project at NASA

Surya Roshni to Separate its Two Business Verticals

T-H Marine Acquires Blue Water LED Enterprises

Osram to Acquire Fluence Bioengineering

General LED Acquires Acolyte

Acuity Brands Acquires IOTA

LG to Acquire ZKW Group

Lutron Acquires Ketra

GB Energie Partners with RC Energy Group for LED Lighting Solutions

GB Energie Partners with SunLand for LED Lighting Solutions

Light Efficient Design to Merge with RemPhos Technologies

GB Energie Partners with IMPACT Construction for LED Lighting Solutions

Ring Acquires Mr. Beams

Masco to Acquire Kichler Lighting

8. GLOBAL MARKET PERSPECTIVE

Table 21. World Recent Past, Current & Future Analysis for LED Lighting in General Lighting Applications by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 22. World Historic Review for LED Lighting in General Lighting Applications by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding



Graph/Chart)

Table 23. World 14-Year Perspective for LED Lighting in General Lighting Applications by Geographic Region - Percentage Breakdown of Dollar Revenues for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)

Table 24. World Recent Past, Current & Future Analysis for Residential LED Lighting by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 25. World Historic Review for Residential LED Lighting by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 26. World 14-Year Perspective for Residential LED Lighting by Geographic Region - Percentage Breakdown of Dollar Revenues for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)

Table 27. World Recent Past, Current & Future Analysis for Architectural LED Lighting by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 28. World Historic Review for Architectural LED Lighting by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 29. World 14-Year Perspective for Architectural LED Lighting by Geographic Region - Percentage Breakdown of Dollar Revenues for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)



Table 30. World Recent Past, Current & Future Analysis for Commercial LED Lighting by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 31. World Historic Review for Commercial LED Lighting by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 32. World 14-Year Perspective for Commercial LED Lighting by Geographic Region - Percentage Breakdown of Dollar Revenues for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)

Table 33. World Recent Past, Current & Future Analysis for Outdoor LED Lighting by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 34. World Historic Review for Outdoor LED Lighting by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 35. World 14-Year Perspective for Outdoor LED Lighting by Geographic Region - Percentage Breakdown of Dollar Revenues for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)

Table 36. World Recent Past, Current & Future Analysis for Other LED Lighting by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 37. World Historic Review for Other LED Lighting by Geographic Region - US,



Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 38. World 14-Year Perspective for Other LED Lighting by Geographic Region - Percentage Breakdown of Dollar Revenues for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East & Africa and Latin America Markets for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)

9. REGIONAL MARKET PERSPECTIVE

9.1 THE UNITED STATES

A. Market Analysis

Growing Demand for Connected LED Lighting Drive Strong Market Growth

Table 39. Lighting Technologies Penetration in the US by Type (2015 & 2030): Percentage Breakdown of Installed Base for Conventional Lighting with Controls, Conventional Lighting with No Controls, LED with Controls, LED with No Controls, and LED-Connected Lighting (includes corresponding Graph/Chart)

Growing Adoption of Smart LED Lighting
Open Wireless Standards to Support Smart Lighting Demand
Potential of LED Lighting to Manage Enterprise IoT
Researchers Explore Connected Lighting Systems for Additional Energy Benefits
Technological, Consumer, and Regulatory Driven Changes Transform the Country's
Lighting Landscape

LEDs Find Increasing Adoption in General Lighting Applications

Table 40. LED Lighting Installations and Energy Savings in the US by General Lighting Application (2016)

LED Bulbs Witness Increasing Penetration in Residential Market Steady Recovery in Residential and Non-Residential Construction Bodes Well for LED Lighting

Table 41. Residential Construction in the US (2008-2019F): Number of Housing Starts



by Type - Single-Family Units and Multi-Family Units (in '000) (includes corresponding Graph/Chart)

Table 42. Projected Growth (%) of the US Construction Market over the Period 2016-2024 by Sector (includes corresponding Graph/Chart)

Table 43. US Non-Residential Construction Market by Segment (2017): Percentage Share Breakdown of Investments for Commercial & Office, Industrial & Others, and Institutional (includes corresponding Graph/Chart)

Table 44. US Private Non-Residential Construction Market by Sector (2017): Percentage Share Breakdown of Construction Spend for Commercial, Communication, Education, Healthcare, Lodging, Manufacturing, Office, Power, and Others (includes corresponding Graph/Chart)

Increasing Use of LEDs in Retrofit Applications Benefit Market Expansion Key Factors Driving Demand for LED Lighting

LED Lighting along with Software, Connectivity and Sensing to Make Cities Smart

LED Lamps, Luminaires and Control: Major Trends Summarized

LED Lamps Continue to Gain Over Other Lighting Technologies

Luminaires: Majorly Impacted by Decorating Trends in Residential Sector

Controls: Facilitating Lighting Management Anywhere Anytime

Emerging Trends in LED Luminaire Designs Drive Adoption in Indoor Applications

Emerging Optics and Form Factors

Controllability

LED Industrial Luminaires Grow in Prominence over Conventional Industrial Luminaires Regulatory Initiatives Boost LED Lighting Demand

New Standard Interface for Advanced Lighting Systems

Steady Rise in Green Building Programs

List of Green Building Codes/Projects in the US in Select States

US DOE Spearhead the Drive for Solid-State Lighting Adoption

DOE LED Lighting Facts Program

Competitive Landscape

Table 45. Leading LED Luminaire Companies in the US (2018E): Percentage Market Share for Acuity Brands, Eaton/Cooper, Hubbell Lighting, Philips and Others (includes corresponding Graph/Chart)



Table 46. Leading LED Light Bulb Brands in the US (2018E): Percentage Market Share for General Electric, LG, Philips, Samsung, Sylvania, and Others (includes corresponding Graph/Chart)

B. Market Analytics

Table 47. The US Recent Past, Current & Future Analysis for LED General Lighting by Application - Residential, Architectural, Commercial, Outdoor, and Others Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 48. The US Historic Review for LED General Lighting by Application - Residential, Architectural, Commercial, Outdoor, and Others Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 49. The US 14-Year Perspective for LED General Lighting by Application - Percentage Breakdown of Dollar Revenues for Residential, Architectural, Commercial, Outdoor, and Others for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)

9.2 Canada

A. Market Analysis

Recovery in Residential and Non-Residential Construction Propel Market Demand

Table 50. Housing Market in Canada (2008-2017): Breakdown of Number of Housing Starts in Thousands (includes corresponding Graph/Chart)

Table 51. Canadian Non-Residential Construction Sector's Capital Expenditure in US\$ Billion: 2010-2017 (includes corresponding Graph/Chart)

B. Market Analytics

Table 52. Canadian Recent Past, Current & Future Analysis for LED General Lighting by Application - Residential, Architectural, Commercial, Outdoor, and Others Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016



through 2024 (includes corresponding Graph/Chart)

Table 53. Canadian Historic Review for LED General Lighting by Application - Residential, Architectural, Commercial, Outdoor, and Others Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 54. Canadian 14-Year Perspective for LED General Lighting by Application - Percentage Breakdown of Dollar Revenues for Residential, Architectural, Commercial, Outdoor, and Others for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)

9.3 Japan

A. Market Analysis

Energy Starved Japan Shift to LED Lighting, Drive Strong Adoption Steady Growth in New Construction Augurs Well for the Market

Table 55. Housing Starts (in Thousand Units) in Japan for the Years 2005 through 2016 (includes corresponding Graph/Chart)

Companies Strategize to Differentiate With Penetration Reaching 100% B. Market Analytics

Table 56. Japanese Recent Past, Current & Future Analysis for LED General Lighting by Application - Residential, Architectural, Commercial, Outdoor, and Others Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 57. Japanese Historic Review for LED General Lighting by Application - Residential, Architectural, Commercial, Outdoor, and Others Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 58. Japanese 14-Year Perspective for LED General Lighting by Application - Percentage Breakdown of Dollar Revenues for Residential, Architectural, Commercial, Outdoor, and Others for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)



9.4 Europe

A. Market Analysis

Increasing Penetration of Transformative and Disruptive LED Lighting Solutions Drive Market Growth

Energy Efficiency Factor Spur Market Demand amidst Economic Hardships Recovery in Construction Activity to Drive Steady Growth in Demand

Table 59. Construction Industry in Europe (2014-2018): Percentage Change in Construction Output for Major Countries (includes corresponding Graph/Chart)

Bright Future for LED Street Lightings in Europe Regulations Governing LED Lighting Products in Europe The CE Marking

The EU EcoDesign Regulation

The ErP Instruction

WEEE (Waste of Electrical and Electronic Equipment)

Labeling of Energy Related Products

REACH Regulation

RoHS (Restriction on the Use of Hazardous Substances in Electrical and Electronic Equipment)

Competitive Landscape

Table 60. Leading LED Luminaire Companies in Europe (2018E): Percentage Market Share for Fagerhult, Osram, Philips, Trilux, Zumtobel, and Others (includes corresponding Graph/Chart)

Table 61. Leading Professional Luminaires, Systems and Services Companies in Europe (2018E): Percentage Market Share for Fagerhult, Iguzzini, Osram, Philips, Trilux, Zumtobel, and Others (includes corresponding Graph/Chart)

B. Market Analytics

Table 62. European Recent Past, Current & Future Analysis for LED General Lighting by Geographic Region - France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)



Table 63. European Historic Review for LED General Lighting by Geographic Region - France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 64. European 14-Year Perspective for LED General Lighting by Geographic Region - Percentage Breakdown of Dollar Revenues for France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)

Table 65. European Recent Past, Current & Future Analysis for LED General Lighting by Application - Residential, Architectural, Commercial, Outdoor, and Others Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 66. European Historic Review for LED General Lighting by Application - Residential, Architectural, Commercial, Outdoor, and Others Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 67. European 14-Year Perspective for LED General Lighting by Application - Percentage Breakdown of Dollar Revenues for Residential, Architectural, Commercial, Outdoor, and Others for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)

9.4.1 France Market Analysis

Table 68. French Recent Past, Current & Future Analysis for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 69. French Historic Review for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

9.4.2 Germany Market Analysis



Table 70. German Recent Past, Current & Future Analysis for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 71. German Historic Review for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

9.4.3 Italy Market Analysis

Table 72. Italian Recent Past, Current & Future Analysis for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 73. Italian Historic Review for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

9.4.4 The United Kingdom

A. Market Analysis

Retrofitting of Existing Lighting with Efficient LED Lamps Drive Market Growth LED Lighting Fixtures on the Growth Path

B. Market Analytics

Table 74. The UK Recent Past, Current & Future Analysis for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 75. The UK Historic Review for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

9.4.5 Spain Market Analysis



Table 76. Spanish Recent Past, Current & Future Analysis for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 77. Spanish Historic Review for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

9.4.6 Russia

A. Market Analysis

Despite the Current Economic Slowdown, Bright Outlook for Russia in the Long Term Major Characteristics of the Russian Lighting Market

Cheap Chinese Imports Poses a Major Concern

B. Market Analytics

Table 78. Russian Recent Past, Current & Future Analysis for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 79. Russian Historic Review for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

9.4.7 Rest of Europe Market Analysis

Table 80. Rest of Europe Recent Past, Current & Future Analysis for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 81. Rest of Europe Historic Review for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

9.5 Asia-Pacific



A. Market Analysis

LEDs Fast Penetrate Asia-Pacific Lighting Market, Offers Lucrative Market Growth Opportunities

Unpenetrated and Underpenetrated Asian Countries Offer Huge Untapped Market Potential

Asia-Pacific: The Power House of LED Materials and Manufacture Asian Companies Set to Disrupt the Global Lighting Industry Supply Chain B. Market Analytics

Table 82. Asia-Pacific Recent Past, Current & Future Analysis for LED General Lighting by Geographic Region - China, India and Rest of Asia-Pacific Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 83. Asia-Pacific Historic Review for LED General Lighting by Geographic Region - China, India and Rest of Asia-Pacific Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 84. Asia-Pacific 14-Year Perspective for LED General Lighting by Geographic Region - Percentage Breakdown of Dollar Revenues for China, India and Rest of Asia-Pacific Markets for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)

Table 85. Asia-Pacific Recent Past, Current & Future Analysis for LED General Lighting by Application - Residential, Architectural, Commercial, Outdoor, and Others Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 86. Asia-Pacific Historic Review for LED General Lighting by Application - Residential, Architectural, Commercial, Outdoor, and Others Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 87. Asia-Pacific 14-Year Perspective for LED General Lighting by Application - Percentage Breakdown of Dollar Revenues for Residential, Architectural, Commercial, Outdoor, and Others for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)



9.5.1 China

A. Market Analysis

China: Leading Exporter of LED Lighting Solutions to Witness Strong Market Gains

Export of Chinese LED Lighting Products Register Robust Growth

Growing Significance of Energy Conservation and Eco-friendliness: A Major Growth

Driver

Rapid LED Penetration to Benefit Market Prospects

Innovative and Advanced Product Offerings by Local Players Drive Market Growth

China: Massive Level of Urbanization Spurs Market Demand

Table 88. Urbanization in China (2007-2017): Percentage Share of Total Population Living in Cities (includes corresponding Graph/Chart)

Chinese Regulatory Standards for Lighting Products

Government Initiatives Support LED Lighting Adoption in the Country

China: The Largest LED Producer Worldwide

Domestic Players to Improve their Share within LED Packaging Market

Increase in Availability of Domestic MOCVD to Lower Total Cost of Ownership

Multinational Lighting LED OEM to Shift Manufacturing to China

Scientists in China Develop Internet Connections using LED Light Bulbs – The LiFi

Method

Competitive Landscape

Distribution Channels

B. Market Analytics

Table 89. Chinese Recent Past, Current & Future Analysis for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 90. Chinese Historic Review for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

9.5.2 India

A. Market Analysis

Energy Conservation Initiatives amidst Rising Energy Costs Fuel Strong Market Growth LED Lighting Pushes Eco-efficiency in Urban India



Availability and Energy Efficiency: Two Major Factors Driving Consumer Interest Growing Popularity of Recessed LED Luminaires Augurs Well for Market Growth Rapid Urbanization and Rising Affluence Drive Demand for Higher Priced and Designer Luminaires

Table 91. Urbanization in India (2007-2017): Urban Population as a Percentage of Total Population (includes corresponding Graph/Chart)

Table 92. Percentage Share Breakdown of Indian Households by Income Group (2015 & 2025) (includes corresponding Graph/Chart)

Increasing Residential Construction Drive Market Demand
Spurt in Residential and Commercial Construction in Tier-2 and Tier-3 Cities
Indian Market for Street Lights: LEDs taking over from HIDs
Key advantages of LED Lighting in Street Lights
B. Market Analytics

Table 93. Indian Recent Past, Current & Future Analysis for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 94. Indian Historic Review for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

9.5.3 Rest of Asia-Pacific

A. Market Analysis

Vietnam: LED Lighting Experience Rapid Growth Supported by Strong Penetration Rate

South Korea: A Major LED Lighting Market in the Region

Taiwan: LED Makers Enhance Production Capabilities

LED Lighting Manufacturers Focus More on Feature Enhancements

B. Market Analytics

Table 95. Rest of Asia-Pacific Recent Past, Current & Future Analysis for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)



Table 96. Rest of Asia-Pacific Historic Review for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

9.6 Middle East & Africa

A. Market Analysis

Booming Construction Activity in the Middle Eastern Countries Drive Market Demand LED Lighting Witness Soaring Popularity in the Middle East

Dubai Partners with Signify, Makes to Efforts to Augment LED Usage in Residential Sector

B. Market Analytics

Table 97. Middle East & Africa Recent Past, Current & Future Analysis for LED General Lighting by Application - Residential, Architectural, Commercial, Outdoor, and Others Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 98. Middle East & Africa Historic Review for LED General Lighting by Application - Residential, Architectural, Commercial, Outdoor, and Others Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 99. Middle East & Africa 14-Year Perspective for LED General Lighting by Application - Percentage Breakdown of Dollar Revenues for Residential, Architectural, Commercial, Outdoor, and Others for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)

9.7 Latin AmericaMarket Analysis

Table 100. Latin American Recent Past, Current & Future Analysis for LED General Lighting by Geographic Region - Brazil and Rest of Latin America Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 101. Latin American Historic Review for LED General Lighting by Geographic Region - Brazil and Rest of Latin America Markets Independently Analyzed with Annual



Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 102. Latin American 14-Year Perspective for LED General Lighting by Geographic Region - Percentage Breakdown of Dollar Revenues for Brazil and Rest of Latin America Markets for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)

Table 103. Latin American Recent Past, Current & Future Analysis for LED General Lighting by Application - Residential, Architectural, Commercial, Outdoor, and Others Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 104. Latin American Historic Review for LED General Lighting by Application - Residential, Architectural, Commercial, Outdoor, and Others Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 105. Latin American 14-Year Perspective for LED General Lighting by Application - Percentage Breakdown of Dollar Revenues for Residential, Architectural, Commercial, Outdoor, and Others for Years 2011, 2018 and 2024 (includes corresponding Graph/Chart)

9.7.1 Brazil Market Analysis

Table 106. Brazilian Recent Past, Current & Future Analysis for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 107. Brazilian Historic Review for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

9.7.2 Rest of Latin America Market Analysis



Table 108. Rest of Latin America Recent Past, Current & Future Analysis for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 109. Rest of Latin America Historic Review for LED General Lighting Market Analyzed with Annual Revenue Figures in US\$ Million for Years 2011 through 2015 (includes corresponding Graph/Chart)

10. COMPANY PROFILES

Asia-Pacific (Excluding Japan) (53)

Total Companies Profiled: 168 (including Divisions/Subsidiaries - 191)
The United States (86)
Canada (5)
Japan (8)
Europe (39)
Germany (7)
The United Kingdom (15)
Italy (2)
Rest of Europe (15)



I would like to order

Product name: LED Lighting: Market Research Report

Product link: https://marketpublishers.com/r/LD00990B11EEN.html

Price: US\$ 5,600.00 (Single User License / Electronic Delivery)

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

Service:

info@marketpublishers.com

Payment

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/LD00990B11EEN.html

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

Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer 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