

ElectroniCast Consultants



LED Linear Tube Lamp Global Market Forecast and Analysis (2011-2021)

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ElectroniCast Consultants 10-year market forecast of the worldwide consumption of light emitting diode (LED) linear tube lamps, which are used in new construction, retrofitting of existing (installed-based) and as a replacement for fluorescent linear lamps (tubes).

The ElectroniCast report provides an independent examination and analysis of the changing market dynamics for two major types of LED-based linear tube lamps, segmented by length (less than 4 feet and 4 feet or longer), each of diameter classification ("T" standard) and by technology:

- DIP LED-based linear tube lamps
 - T5, T8, T12 and T10/Other
- SMD LED-based linear tube lamps
 - T5, T8, T12 and T10/Other

The market forecast data are presented for LED linear lamps, segmented by the following functions:

- Consumption Value (US\$, million)
- Quantity (number/units)
- Average Selling Prices (ASP \$, each)

The market data are segmented into the following geographic regions, plus a Global summary:

- America (North America, Central and South America)
- EMEA (Europe, Middle Eastern countries, plus Africa)
- APAC (Asia Pacific)

The global market is segmented into the following major application categories:

- Government
 - Interior and Exterior General Lighting
 - Display and Signage
- Commercial/Industrial
 - Interior and Exterior General Lighting
 - Display and Signage
- Vehicles: Mass-Transit and Other Vehicle
- Residential and Non-Specific (Other) Consumer

10-Year Global Market Forecast General Lighting provides the main illumination of an area. In this study, ElectroniCast provides the market forecast (2011-2021) and analysis of the LED component used for general lighting applications, including interior and exterior decorative and functional lighting for residential, commercial/industrial and government areas. For the purposes of this study, ElectroniCast includes Directional Lighting, Supplementary Lighting and Architectural Lighting in the General Lighting category.

Compared to incandescent lighting, LED-based solid-state lighting (SSL) delivers visible light with reduced heat. In addition, its solid-state nature provides for greater resistance to shock, vibration, and wear, thereby significantly increasing its lifespan, which also translates to lower maintenance/labor expenses.

The worldwide use of LED linear tube lamps is forecast increase at a dramatic average annual growth rate of 75 percent (2011-2016), before speeding-up the pace from 2016-2021. The use of SSL (solid-state lighting) LED linear tube lamps in the Government controlled general lighting (interior and exterior) lighting applications is currently the market leader; however, the commercial/ industrial lighting category is forecast for even faster growth and will eventually take the leadership role. All of the selected end-user groups (applications) are forecast for very strong growth rates (2011-2021).

Another major consumer category for the use of LED linear tube lamps is the vehicle category, which includes both commercial (private) and government controlled bus, trains, subways airplanes, shipping and other vehicles.

The use of LED linear tube lamps is being marketed for use inside taxi light box (taxi roof light box, taxi top light box, taxi roof signs). Note: we count the taxi lighting in the display/signage category (we count displays and signage in vehicles in the display/signage category and not the vehicle category).

The residential category includes MDUs (multiple dwelling units) as well as single family units; therefore lighting in large apartment complexes in parking areas, stairways and elevators are counted along with the under-the-cabinet lighting found in a growing number of residences. This category is forecast for the fastest annual growth during the

2016 to 2021 time span, as linear lamps finally begin to show-up in the consumer (retail) market channel.

According to ElectroniCast Consultants, the automatic assembly and test manufacturing process for the surface mounted device (SMD) light emitting diode linear tube lamps allows for mass-production capability. In addition, over the next few years, the average selling prices of the LED linear tube lamps will be driven lower, as a result of production efficiencies, yield-number improvements (aided by quality controls), competition (both market competition and technological competition), marketing/sales distribution improvements, and other factors.

LED linear tube lamps provide a good example of using component-level LEDs bulbs with a higher lumen/Watt (lm/W) in a set-sized package. Over the next 10-years, it will become apparent that it will take less LEDs per lamp to provide more brightness, at a lower average selling price per lamp.

During the forecast period (2011-2021), as the volume of use of the component-level bulbs increase, as the competition intensifies, as the consumer awareness increases, as the automatic test and assembly (the manufacturing processes) of the piece-parts and higher-level components improves, the road will be paved for lower price LEDs with a higher lumen/W rating to be use in the LED linear tube lamp. Therefore, by the year 2021, less packaged LEDs will be required (at a lower average selling price per LED) to produce a LED linear tube lamp.

LED Linear Tube Lamp Global Market Forecast and Analysis (2011-2021) Table of Contents

1.	LED Linear Tube Lamps Global Market Forecast and Analysis	1-1
1.1	Executive Summary	1-1
1.2	LED Chips Used in General Solid-State Lighting (SSL)	1-148
1.3	LED Lamps & Light Fixtures Used in General Lighting	1-153
2.	LED Linear Tube Lamp Market Forecast & Analysis, By Lamp Technology Type and Length	2-1
2.1	Global Overview	2-1
2.2	Regional Market Forecast, By Type, Diameter and Length	2-22
3.	LED Linear Tube Lamp Market Forecast & Analysis, By End-User Application	3-1
3.1	Overview	3-1
3.2	Regional Market Forecast by End-User Group Application	3-34
4.	LEDs – Technology Overview	4-1
5.	Profile Briefs of LED and Related Companies -- Selected Competitors (290 companies)	5-1
6.	Market Research Methodology	6-1
7.	Definitions - Acronyms, Abbreviations, and General Terms	7-1
8.	Market Forecast Data Base	8-1
8.1	Overview	8-1
8.2	Tutorial	8-3

Addendum

- Excel Data Base Spreadsheets (Global Market Forecast)
Detailed Data: ASP (\$, each); Quantity (Million); Value (\$, Million) for all Regions
- Power Point Market Data Figures (Global Market Forecast – Data Figures)

– List of Tables –

1.1.1	LED Linear Tube Lamp Global Consumption Forecast, By Region (\$Million)	1-2
1.1.2	LED Linear Tube Lamp Global Consumption Forecast, By End-Use Application (\$Million)	1-5
1.1.3	LED Linear Tube Lamp Global Consumption Forecast, By LED Type & Tube Length (\$Million)	1-11
1.1.4	LED Linear Tube Lamp Global Forecast, By Technology Type, Diameter and Length (\$Million)	1-12
1.1.5	LED Linear Tube Lamp Global Forecast, By Technology Type, Diameter and Length (Quantity)	1-13
1.1.6	Typical Luminous Efficacies for Traditional and LED Sources	1-16
1.1.7	Current Members of NGLIA (as of January 2012)	1-26
1.1.8	Latin American Demographic Trends	1-51
1.1.9	List of ELCOMA Members	1-126
2.1.1	Calculation of the Cost of Manufacturing Facility Downtime	2-4
2.1.2	Comparison of Lighting Technologies	2-5
2.1.3	LED Linear Tube Lamp Global Forecast, By LED Type & Tube Length (\$Million)	2-12
2.1.4	LED Linear Tube Lamp Global Forecast, By LED Type & Tube Length (Quantity/Units)	2-14
2.1.5	LED Linear Tube Lamps Global Forecast, By Technology Type and Length (Price, \$ Each Unit)	2-16
2.1.6	LED Linear Tube Lamp Global Forecast, By Technology Type, Diameter and Length (\$Million)	2-17
2.1.7	LED Linear Tube Lamp Global Forecast, By Technology Type, Diameter and Length (Quantity)	2-18
2.1.8	LED Linear Tube Lamp Global Forecast, By Technology Type, Diameter and Length (ASP, \$/ea)	2-19
2.2.1	LED Linear Tube Lamp America Forecast, By Technology Type, Diameter and Length (\$Million)	2-23
2.2.2	LED Linear Tube Lamp America Forecast, By Technology Type, Diameter and Length (Quantity)	2-24
2.2.3	LED Linear Tube Lamp America Forecast, By Technology Type, Diameter and Length (ASP, \$)	2-25
2.2.4	LED Linear Tube Lamp EMEA Forecast, By Technology Type, Diameter and Length (\$Million)	2-26
2.2.5	LED Linear Tube Lamp EMEA Forecast, By Technology Type, Diameter and Length (Quantity)	2-27

– List of Tables – Continued

2.2.6	LED Linear Tube Lamp EMEA Forecast, By Technology Type, Diameter and Length (ASP, \$/ea)	2-28
2.2.7	LED Linear Tube Lamp APAC Forecast, By Technology Type, Diameter and Length (\$Million)	2-29
2.2.8	LED Linear Tube Lamp APAC Forecast, By Technology Type, Diameter and Length (Quantity)	2-20
2.2.9	LED Linear Tube Lamp APAC Forecast, By Technology Type, Diameter and Length (ASP, \$/ea)	2-31
2.2.10	DIP-Type LED Tube Lamps, <1200mm in Length Global Forecast, By Region (\$Million)	2-32
2.2.11	DIP-Type LED Tube Lamps, <1200mm in Length Global Forecast, By Region Quantity/Units	2-33
2.2.12	DIP-Type LED Tube Lamps, <1200mm in Length Global Forecast, By Region (Price, \$ Each Unit)	2-33
2.2.13	DIP-Type LED Tube Lamps, > = 1200mm in Length Global Forecast, By Region (\$Million)	2-35
2.2.14	DIP-Type LED Tube Lamps, > = 1200mm in Length Global Forecast, By Region Quantity/Units	2-36
2.2.15	DIP-Type LED Tube Lamps, > = 1200mm in Length Global Forecast, By Region (Price, \$ Each)	2-36
2.2.16	SMD-Type LED Tube Lamps, <1200mm in Length Global Forecast, By Region (\$Million)	2-38
2.2.17	SMD-Type LED Tube Lamps, <1200mm in Length Global Forecast, By Region Quantity/Units	2-39
2.2.18	SMD-Type LED Tube Lamps, <1200mm in Length Global Forecast, By Region (Price, \$ Each)	2-39
2.2.19	SMD-Type LED Tube Lamps, > = 1200mm in Length Global Forecast, By Region (\$Million)	2-41
2.2.20	SMD-Type LED Tube Lamps, > = 1200mm in Length Global Forecast, By Region Quantity/Units	2-42
2.2.21	SMD-Type LED Tube Lamps, > = 1200mm in Length Global Forecast, By Region (Price, \$ Each)	2-42
3.1.1	LED Linear Tube Lamp Global Forecast, By End-Use Application (\$Million)	3-9
3.1.2	LED Linear Tube Lamp Global Forecast, By End-Use Application Quantity/Units	3-10
3.2.1	LED Linear Tube Lamp America Forecast, By End-Use Application (\$Million)	3-34
3.2.2	LED Linear Tube Lamp America Forecast, By End-Use Application Quantity/Units	3-35
3.2.3	LED Linear Tube Lamp EMEA Consumption Forecast, By End-Use Application (\$Million)	3-36
3.3.2	LED Linear Tube Lamp EMEA Consumption Forecast, By End-Use Application Quantity/Units	3-37
3.4.1	LED Linear Tube Lamp APAC Consumption Forecast, By End-Use Application (\$Million)	3-38
3.4.2	LED Linear Tube Lamp APAC Consumption Forecast, By End-Use Application Quantity/Units	3-39
4.1	LED Color Variety – Selected Examples	4-9
4.2	LED Color Chart	4-11
8.1.1	ElectroniCast Market Forecast Data Base: Category Hierarchy List	8-3
8.2.1	ElectroniCast Market Forecast Database Application Category Hierarchy List	8-4

– List of Figures –

1.1.1	LED Linear Tube Lamp Global Consumption Forecast, By Region (\$Million)	1-3
1.1.2	LED Linear Tube Lamp Global Consumption Forecast, By End-Use Application (\$Million)	1-5
1.1.3	LED-Based Linear Tube Lamp DIP Technology with Metal End-Caps (T8 Tube)	1-8
1.1.4	LED-Based Linear Tube Lamp SMD Technology with Metal End-Caps (T8 Tube)	1-9
1.1.5	LED Linear Tube Lamp Global Consumption Forecast, By LED Type & Tube Length (\$Million)	1-12
1.1.6	Single-die LED: 1000 lm at 100 lm/W at 3A	1-18
1.1.7	Example of LED Packaged Chip (Component-Level) Bulb	1-19
1.1.8	Example of LED Packaged Chip (Component-Level) Bulb	1-19
1.1.9	Example of LED Packaged Chip (Component-Level Bulb) Surface Mount Variations	1-20
1.1.10	Example of LED Packaged Chip: Flux (Component-Level Bulb)	1-21
1.1.11	Example of High Brightness LED Packaged Chip (Component-Bulb)	1-22
1.2.1	Diagram of a typical LED chip	1-137
1.2.2	Diagram of a typical LED chip	1-138
1.2.3	LED Chip Cross-Sectional Structure	1-139
1.2.4	ESD Protection Diodes	1-140
1.2.5	Electrostatic Discharge Example	1-141
1.3.1	A19 Bulbs (Consumer-Level Bulb/LED Lamp)	1-143
1.3.2	Obstruction Bulbs (Lamps) - Flashing - 138 red or amber LEDs	1-144
1.3.3	LED Lamp – Down-light Retrofit Module	1-145
1.3.4	Miscellaneous LED Lamps	1-146
1.3.5	LED Light Bulb (Cool White)	1-147
1.3.6	Complete Fixture and Replacement Bulb - Streetlight (Lamp)	1-148
1.3.7	Samples of Lighting Fixture Types	1-150 to 1-153
2.1.1	48-inch Fluorescent Replacement Style LED Light Fixture	2-6
2.1.2	DIP T8 – Linear Tube Lamps With Plastic End-Caps	2-9
2.1.3	SMD T8 and T5 – LED Linear Tube Lamps With Plastic End-Caps	2-10
2.1.4	LED Linear Tube Lamps Global Forecast, By Technology Type and Length (\$Million)	2-13
2.1.5	LED Linear Tube Lamps Global Forecast, By Technology Type and Length (Quantity, Thousand)	2-15
2.2.1	DIP-Type LED Linear Tube Lamps with Plastic End-Caps 600mm (60cm) in Length	2-34
2.2.2	DIP-Type LED Linear Tube Lamps with Metal End-Caps 1200mm (120cm) in Length	2-37
2.2.3	SMD-Type LED Linear Tube Lamps with Metal End-Caps 600mm (60cm) in Length	2-40
2.2.4	SMD-Type High-Output LED Linear Tube Lamps with Plastic End-Caps 1200mm in Length	2-43
3.1.1	LED Linear Tube Lamps Global Market Forecast, (Value Basis, \$Million)	3-5
3.1.2	LED Linear Tube Lamps Global Market Forecast, (Quantity/Number of Units in Thousands)	3-6
3.1.3	LED Linear Tube Lamps Global Market Forecast, (Average Selling Price, \$ Each)	3-7
3.1.4	World Map – Cooperation on Reducing GHG Emissions	3-13
4.1	LED Chromatic Chart	4-10
4.2	ElectroniCast - Evolution of Research Emphasis During Technology Life Cycle	4-12
4.3	LED Chip: Metal Layer (Thin Film Technology)	4-18
4.4	Vertical LED Chip	4-19
4.5	AC LED Technology on a Wafer	4-20
4.6	Ultra High Bright LED Chip	4-21
4.7	Ultra-Thin LED	4-24
4.8	Solid-State Lighting LED	4-25
4.9	LED Module with High Light Quality	4-26
4.10	Transparent and flexible inorganic, organic hybrid n-type: Thin Film Transistors (TFTs)	4-30
4.11	Lumiramic Phosphor Technology: Thin Film Flip Chip (TFFC) technology	4-31
4.12	Wire-to-Board LED Connector	4-34
4.13	Next-Generation Light Emitting Diode Module	4-38
4.14	4-Leaded RGB LED	4-40
4.15	Vertically Conducting Advanced LED Structure	4-44
4.16	AlGaInP LED Efficacy	4-46
5.1	PCB Assembly	5-23
5.2	LED Backlit Display	5-26
5.3	Rugged Touch Screen with NVIS Capability	5-42
5.4	LED Down light with 102 Lumens per Watt Fixture	5-56
5.5	LED Lighting Military Solutions	5-59
5.6	LED Lighting in Railway Station	5-61
5.7	LED Technology Safelight Design	5-73
5.8	LED Lighting (water flow stream)	5-77

– List of Figures – Continued

5.9	NVIS/LED Control Panel	5-81
5.10	Integrated Weapons Delivery System	5-82
5.11	Cockpit Modular Display/Panel	5-91
5.12	Cockpit Large Area Display	5-92
5.13	Traffic Lamp LED	5-99
5.14	High Power LED Lamp	5-99
5.15	Surface Mount Type LED	5-100
5.16	Surface Mount Type LED	5-104
5.17	Exterior Aircraft LED Lighting	5-108
5.18	LED/CCD Barcode Readers	5-121
5.19	Surface-Mount Multi-layer Ceramic Packages	5-126
5.20	LED Linear Optical Array	5-132
5.21	Solid-State NVIS Lamps	5-144
5.22	LED Escalator Light	5-148
5.23	Nanostructures Designed for Different Color Emission	5-152
5.24	LED Array Lighting – Lamp	5-158
5.25	Light-Measurement Device	5-167
5.26	SSL LED: Replacement for Halogen Lamp in Spotlights	5-174
5.27	LED-Based Digital Billboard (Signage/Display)	5-189
5.28	Diagram of Backlight LED Drivers	5-192
5.29	Diagram of Multifunction Backlight LED Drivers	5-193
5.30	Diagram of White Backlight LED Drivers	5-194
5.31	Diagram White Backlight LED Drivers	5-195
5.32	Rotary Wing Aircraft Cockpit Display	5-197
5.33	Ultra-Thin LED	5-209
5.34	Quality Management System in LED Manufacturing	5-212
5.35	Military and Harsh-Environment LEDs	5-232
5.36	LED-Based Marine Biology Lighting Device	5-237
6.1	ElectroniCast Market Research & Forecasting Methodology	6-3