

LED Phosphors: Materials, Technologies, and Global Markets

<https://marketpublishers.com/r/LC8BEE86EABEN.html>

Date: November 2018

Pages: 186

Price: US\$ 1,250.00 (Single User License)

ID: LC8BEE86EABEN

Abstracts

Report Scope:

A phosphor is defined as a substance that emits light, or luminesces, when exposed to radiation such as ultraviolet light, or an electron beam. Different phosphors have different characteristic colors of emission and period of time during which light is emitted after excitation ceases. Phosphors are a key material in the manufacture of white LEDs, and white LEDs are usually a combination of a blue light-emitting indium gallium nitride (InGaN) die and a phosphor that takes some of the blue light and converts it into a broad-spectrum peaking at yellow or amber. The combination of blue light and yellow light looks white to humans. Phosphors are important in LED technology as phosphor chemistry and composition largely determine an LED's efficiency, light quality and stability.

The scope of this report covers various types (technologies) of LED phosphors present in the market. The market is broken down by major types, technologies, region and applications. Revenue forecasts from 2017 to 2022 are given for each LED phosphor segment and regional market with estimated values derived from manufacturers' total revenues.

Detailed inclusions and exclusions -

For the purpose of this report, phosphor is defined as a substance that emits light, or luminesces, when exposed to radiation such as ultraviolet light or an electron beam.

The report covers the following stakeholders in the global market for LED

phosphors -

R&D centers and universities.

LED phosphor and general phosphor manufacturers.

LED lighting manufacturers.

Suppliers of materials and components.

Revenue from LED modules, LEDs and other components, products, solutions and services, are excluded where the revenue is not derived from phosphor sales or phosphor post-sales services if any.

Revenue forecasts from 2017 to 2022 are given for the overall market and regional markets, with estimated values derived from manufacturers' total revenues.

The report excludes independent service providers, if any, and unorganized phosphor manufacturers that may have a presence in underdeveloped and emerging regions.

The report also excludes any post-sales service providers that provide consulting, education or support.

In the company profiles chapter, the report has considered companies based on the above four categories, depending on their importance in the global market. Also, companies that are innovative, albeit maybe a new entrant, are considered—provided they are not too small.

Companies considered for the profiles are based on a number of criteria such as geographic presence, customer base, innovation capability and phosphor portfolio strength.

The report begins by introducing the reader to how the global market for LED phosphors has evolved over time and how various factors impact the market. The report then proceeds to identify the following -

Primary forces with a direct impact on the market.

Secondary forces that have an indirect impact.

Key funding and financing in this space.

Some key challenges that may hinder the growth of this market.

Key trends in the market.

Leading end-use industries in the global market for LED phosphors.

Demand in Asia-Pacific, North America, Europe, the Middle East and Africa, and South America.

The report also includes a discussion of the major companies across each regional market for LED phosphors. Further, it explains the major drivers and regional dynamics of the global market for LED phosphors and current trends within the industry.

The report concludes with a special focus on the vendor landscape and includes detailed profiles of the major vendors in the global market for LED phosphors.

Report Includes:

107 data tables

An overview of the global markets for LED phosphors, materials and technologies

Analyses of global market trends, with data from 2016 and 2017, and projections of compound annual growth rates (CAGRs) through 2022

Coverage of history and evolution of LED phosphors, current scenario and development in the industry

Discussion of key strategies used by various stakeholders

Analysis of what trends are influencing the market now, and what to expect in

the near future

Detailed profiles of the major companies in the market, including Avago Technologies, Everlight Electronics, Philips Lumileds Lighting Company, Stanley Electric, and Yantai Tomley Hi-tech Advanced Materials

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