



[Provisional Translation Only] This English translation of the original Japanese document is provided solely for information purposes. Should there be any discrepancies between this translation and the Japanese original, the latter shall prevail.

October 31, 2022

Japan Display Inc. (Tokyo Stock Exchange Prime Market, 6740) Representative: Scott Callon, Chairman & CEO Inquiries: Akihito Okochi, CFO Telephone: +81-3-6732-8100 www.j-display.com/english

JDI Develops LumiFree, World's First LED Free Lighting Technology

Japan Display Inc. (JDI) has leveraged its deep expertise in advanced frontplane and backplane display technologies to create LumiFree, the world's first LED Free Lighting technology that can freely and flexibly control the light distribution characteristics of LED light sources.

LumiFree is GreenTech that enables the precise, controlled delivery of an exact amount and shape of light at an exact place and time. It was developed by an internal JDI start-up and underscores JDI's commitment to delivering on its METAGROWTH 2026 growth strategy and six proprietary growth drivers. LumiFree is one element of <u>Growth Driver 6: New</u><u>Tech, Products, & Businesses</u>.

Via LumiFree JDI is working to contribute to a sustainable society by improving the way we experience the illumination of people, places, and things and by reducing the energy consumption and light pollution caused by excessive lighting.

JDI began LumiFree sample customer shipments in September 2022, with mass production scheduled for April 2023, and is targeting LumiFree sales of over JPY 10 billion by FY26/3.



LumiFree Schematic



First LumiFree Device (TOKI CORPORATION)

Variable Control of Light Distribution Characteristics Made Possible by LumiFree



Horizontal

Using LumiFree, light can be freely controlled and shaped along both the vertical and horizontal axes. This means that not only does LumiFree allow light distribution characteristics to be freely and flexibly adjusted after production and installation, but that LumiFree can also generate distinctive and diverse elongated and elliptical shapes that are difficult to produce with conventional fixed lighting.

In addition, because LumiFree leverages the technical advantages of liquid crystal displays, including low noise, fast response, compact and lightweight design and manufacturing, and long life, LumiFree can be deployed across a broad range of lighting environments and devices for residential, commercial, and professional use.

Amidst increasingly urgent efforts to reduce energy consumption around the world, lighting technology needs to evolve to meet the growing demand for healthier and more environmental lighting tailored to diverse needs. Reflecting this structural demand growth, the global market for smart lighting is projected to grow from USD 26 billion in 2022 to USD 77 billion in 2026. JDI believes that LumiFree can fulfill important societal needs and become a key technological underpinning for the realization of a more sustainable society.

LumiFree Demonstration Videos

- 1) https://youtu.be/1nq1GF_Bq94
- 2) <u>https://youtu.be/dQFtiShMtQE</u>

<u>Notes</u>

- 1) The LumiFree name is pending trademark registration.
- 2) TOKI CORPORATION is scheduled to ship the first LumiFree device in April 2023. TOKI CORPORATION Web Site URL: <u>https://www.toki.co.jp/en/</u>
- 3) Figures for global smart lighting market size are from Mordor Intelligence.

Contact

JDI Corporate Communication Tel: +81-3-6732-8364 https://www.j-display.com/contact.html