

Thin LED-illuminated panels using an ultra-thin light guide plate to allow double-sided, waterproof, and dust-proof installations

TELUMINA

Features

- The product provides energy savings by using approximately half the power of fluorescent lighting (when used at the same level of illuminance as a poster using fluorescent backlighting).
- It does not contain harmful substances such as mercury or lead.
- It uses a high-brightness, uniform ultra-thin light guide plate to allow double-sided, waterproof, and dust-proof installations.



Example B1-size panel



Wide type consisting of two B0-size panels in a landscape orientation

Overview

(Technical principles, actions, etc.)

TELUMINA LED panels can be manufactured in a series of standard sizes ranging from A4 to B0. They offer high-brightness, uniform lighting; a long, maintenance-free service life; and the ability to save on expenses thanks to an energy-saving design that consumes little power. They also feature a waterproof design that can be used outdoors. Brightness can be adjusted in response to people's movements by means of external control.

TELUMINA LED panel features

- ① B0 size (max.): 3,000 lux (power supply/patent pending)
- ② Light emission structure: Light guide plate + Reflecting plate (similar to backlights for LCDs)
- ③ An FPC-type LED can be encased in molded plastic to create a waterproof design that can be used outdoors, on curved surfaces, and in double-sided installations.
- ④ Thin (22.5 mm), light weight structure (with a 9-mm-thick light emitting panel)

Example special applications

- ① Shopping arcades: TELUMINA can be made of non-combustible polycarbonates to comply with the Fire Services Act.
- ② Ceiling, wall, and floor illumination in train stations and hotels: Thin lighting panel (22.5 mm)
- ③ Lighting for retail shelving: Small lighting panels can be placed on the bottom of shelving to illuminate the products underneath.

Introductory Track Record

- Product sales to date have been limited to Japan.

Effects

- ◎ Compared to posters with fluorescent backlighting, TELUMINA uses approximately half the power to generate the same illuminance.
- ◎ TELUMINA does not discolor posters since it generates no ultraviolet light, allowing long-term use.
- ◎ Thin design is easily installed.
- ◎ LEDs have a long service life of about 50,000 hours (at 70% illuminance) (approximately 6 times fluorescent lighting), freeing you from the need change bulbs.
- ◎ TELUMINA dramatically reduces the disposal costs associated with fluorescent bulb replacement.

Applicable field
Billboard advertisements, road signage, public transport facilities,
convenience stores, banks, airports, and department stores

Water

Energy saving/Energy/recovery

Energy storage/Energy creation

New energy

Waste disposal/
Recycling/
Resource saving

Air

Soil

Other

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