



STAIR NOSING AUSTRALIA

Glow in the dark, photoluminescent stair nosing

Key Features

- **No Power Required:** This product uses natural light to glow in the dark. You don't need batteries or wires, and you always see it even if the power goes out.
- **Slip Resistance:** The anti-skid surface or textured strips keep your footing steady and help you avoid slipping, even in low light.
- **Long Lifespan:** The glow-in-the-dark material stores light and shines for a long time.
- One standard candle gives off about 1 candela (Latin for candle), which equals 1 lux when measuring total light in all directions (lumens).

Understanding the Units

- **Candela (cd):** You use this unit to show how bright light is in one direction. One candle gives off about one candela.
- **Lumen (lm):** You use this unit to show the total amount of light you see in all directions.

Installation Options

- **Glue/Adhesive:** Stick the product to flat steps or ramps with strong glue. You install it quickly and easily.
- **Screw-Fix:** For the strongest hold, drill and screw the product into concrete or wooden stairs. You can use this method in high-traffic areas.

Standard and definitions

What does DIN stand for?

DIN stands for **Deutsches Institut für Normung** (German Institute for Standardisation). It's like Australian Standards.

What is 67510?

67510 is the technical standard for glow-in-the-dark products and safety systems in Germany.

What is D65

D65 is the average midday daylight standard. It is widely used in industries **that need to copy** natural daylight. Testing labs use D65 light to "charge" or test glow materials in a consistent way. The letter D means daylight.

What is Illuminance:

1 lux is the same as the light from **1 candle at 1 meter away**.

Excitation Duration:

5 minutes of continuous exposure with effectively stimulated by an energy source such as sunlight.

Preconditioning:

Sample kept in total darkness for at least 48 hours prior to testing

Lux

Measures light intensity on a surface, calculated as lumens per square meter.

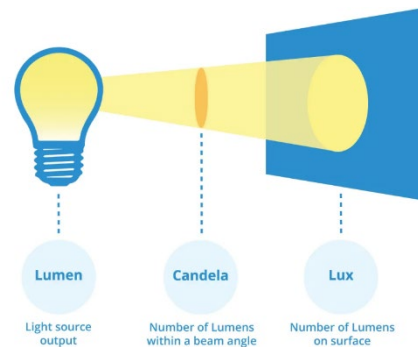
Lumen

Measures the total light **output** emitted in all directions from a source

Notes

DIN is Germany's main group that sets official standards for products and safety. It started in 1917 and is based in Berlin.

- **History and Role**
- *The group started as NADI in 1917. It changed its name to DIN in 1975.*
- *DIN operates as a non-profit group.*
- *DIN represents Germany worldwide in groups such as ISO and CEN.*



Examples

Old vs New Bulb Power

- **450 lumens:** Replaces an old 40W bulb
- **800 lumens:** Replaces an old 60W bulb
- **1100 lumens:** Replaces an old 75W bulb
- **1500 to 1600 lumens:** Replaces an old 100W bulb

Examples

Indoor and Artificial Light Levels on Surfaces

- Retail display areas / Grocery aisles: 500 to 1,000 lux
- Office workstations / Kitchen countertops: 300 to 500 lux (ideal for detailed tasks)
- Office hallways / Hotel corridors: 80 to 100 lux
- Living room ambient light: 50 to 150 lux
- Outdoor street or security path lighting: 10 to 15 lux

Stairwell Lighting Guide

- **Safety Standard:** Aim for 10 to 20 foot-candles of light on the stairs.
- **Low Ceiling / Small Area:** Use **800 lumens** (60W equivalent)
- **High Ceiling / Open Stairs:** Use **1,100 to 1,600 lumens** (75W–100W equivalent).
- **Color Temperature:** Use **3,000K to 4,000K** (bright white) for clear visibility



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The phrase "10min >1000mcd/sqm" specifies a photoluminescent performance requirement. It means that after 10 minutes of being charged by a light source, the glowing material must emit a luminance greater than 1000 millicandelas per square meter (mcd/m²), which is a unit of luminous intensity equal to one-thousandth (1/1,000) of a candela.

A rating of >1000 mcd/m² at 10 minutes significantly exceeds standard safety requirements (such as DIN 67510, which requires just 15 mcd/m² at 10 minutes).