

PRACTICAL LIGHTING KNOWLEDGE

BUG Ratings

IES TM-15 — Backlight, Uplight, Glare, and how three letters control light pollution.

Where does the wasted light go?

Behind the pole, up into the sky, and into your eyes. The BUG rating scores all three so you can pick a luminaire that keeps light on target.

DEFINITION · 1 OF 2

BUG

Backlight · **U**plight · **G**lare.



Three zones of stray light. **Lower numbers are better** — each scored 0 to 5.

DEFINITION · 2 OF 2

Uo

Zero light **above horizontal.**



No uplight at all. **The dark-sky target** — kills skyglow at the source.

THE IDEA

Light on target = good

B + U + G → low

Backlight is trespass behind the fixture, Uplight is skyglow, Glare is discomfort. TM-15 scores each by lumens in defined solid angles.

Three letters. One luminaire.

Each component scored 0 (best) to 5 (worst).

B

Backlight

trespass

U

Uplight

skyglow

G

Glare

disco

BUG components **to know.**

What each letter measures, per IES TM-15 (illustrative).

Backlight (B)

behind pole

Uplight (U)

sky glow

Glare (G)

high angle

Best rating

0

Worst rating

5



A bright flood that lights the sky.

High lumens with a high BUG rating means **light trespass, skyglow and glare** — wasted energy and an unhappy neighbour. Aim the light down and the numbers fall.

NEXT TIME YOU SPEC AN OUTDOOR FIXTURE

Ask for the **BUG** rating.

For dark-sky areas, target UO and a low overall BUG. The photometric report carries the values.

- ✓ B, U, G values (lower = better)
- ✓ UO for dark-sky zones
- ✓ Backlight control near boundaries

PRACTICAL LIGHTING KNOWLEDGE

Save this. Send it to a colleague.



NEXT EPISODE

Light Pollution, Deep Dive

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