A DATA-DRIVEN COMPARISON · DECEMBER 2025

ARRI M40 *vs* Aputure XT26

Lux ratings sell brochures. Lumens shoot commercials.

HMI · ARRI M40 (4000W/SE)

LED · APUTURE ELECTROSTORM XT26

ZOLTÁN HALMÁGYI · DP / CINEMATOGRAPHER

ZOLTANHALMAGYI.COM →

Photometric *performance*

Total Luminous Flux from a single source — factory specifications.

+55%

More raw light from the HMI as a single source — a critical exposure reserve under heavy diffusion.

Power and *efficacy*

How much light per Watt of generator load — the metric that matters on location.

ARRI M40 · HMI

4,650W in 380,000 lm out

GENERATOR LOAD	~4,650 W
LUMINOUS FLUX	380,000 lm
BALLAST EFF.	> 90%

82

LUMENS PER WATT

APUTURE XT26 · LED

3,500W in 245,000 lm out

GENERATOR LOAD	3,500 W
LIGHT OUTPUT POWER	2,604 W
COOLING & LOSS	~900 W

70

LUMENS PER WATT

Measured *at 5 meters*

Three beam settings · peak intensity reading · per manufacturer reflector spec.

BEAM SETTING	ARRI M40 (HMI)	APUTURE XT26 (LED)	WINNER
SPOT 18°–20° reflector	43,000 LUX	64,700 LUX	LED · PEAK ONLY
MEDIUM 30°–35° reflector	26,000 LUX	22,700 LUX	HMI TAKES OVER
FLOOD 45°–52° reflector	13,500 LUX	12,540 LUX	HMI · STRONGER AND WIDER

The LED only "wins" inside a narrow Ø 1.76m hotspot. As the beam widens, the M40's MAX Reflector overtakes — stronger and more evenly distributed across the projected circle.

Budapest *rental, daily*

Verified market check · package rentals · December 2025.

ARRI M40 · HMI

48,000

HUF / DAY

APUTURE XT26 · LED

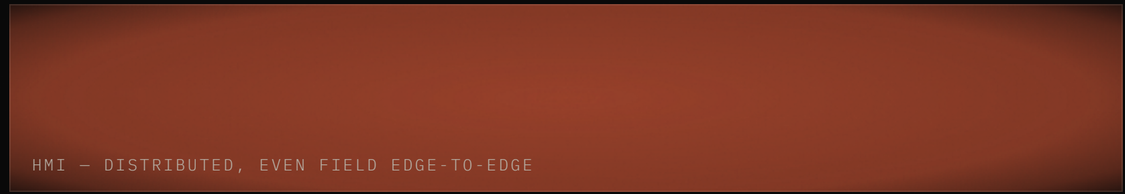
84,000

HUF / DAY

−36,000 HUF *per lamp/day with the HMI — and +55% more light. Nearly half the cost for physically superior output.*

Two design *philosophies*

LED — CONCENTRATED PEAK, STEEP FALLOFF



HMI — DISTRIBUTED, EVEN FIELD EDGE-TO-EDGE

LED · APUTURE XT26

"Peak *Intensity*"

Concentrate as many photons as possible on the center axis.

- **Goal:** High Lux numbers for marketing
- **Curve:** Steep Gaussian, hotspot center
- **Effect:** Bright core, edge vignetting

HMI · ARRI M40 · MAX REFLECTOR

"Flat *Field*"

Spread light energy so edges match the center.

- **Goal:** Uniform illumination, no hotspot
- **Curve:** Truncated peak, redistributed sides
- **Effect:** Usable across the full projected circle

Lux measures *peak intensity* through narrow optics. Lumens measure *total light energy*. For set work — the second number is the one that matters.

FULL ANALYSIS · MEASUREMENTS · REFERENCES

Sources, photometry tables, and the full optical breakdown — including manufacturer PDFs.

zoltanhalmagyi.com/articles/lux-ratings-can-be-a-trap