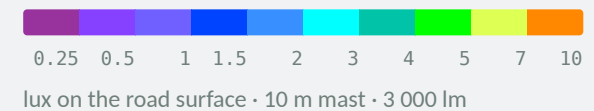


Which optic for which road

Every Lightholm street luminaire carries an optic code. Here is what each code actually puts on the road, sorted by the kind of road it is meant for — so you can start from your road, not from the code.

Both diagrams are calculated from the luminaire's own photometric file. The plot on the right is the illuminance on the road surface seen from above: **the road runs left to right, the luminaire is the cross in the middle at 10 m, no tilt**, and the frame is 80 × 60 m, big enough to hold the whole footprint. Every optic is calculated with the same 3 000 lm output, so the shapes and the lux values can be compared directly with each other — a real luminaire will put out more or less than that.



Footways, cycle paths and narrow roads

Road narrower than the mast is tall, people rather than traffic. EN 13201 P-classes.

F401 • F411

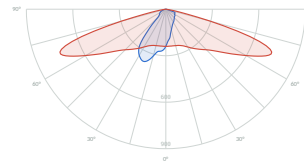
F401

Type I medium beam for footways and cycle paths. Throws far along the path and keeps the light off the surroundings.

EN 13201 P-CLASSES

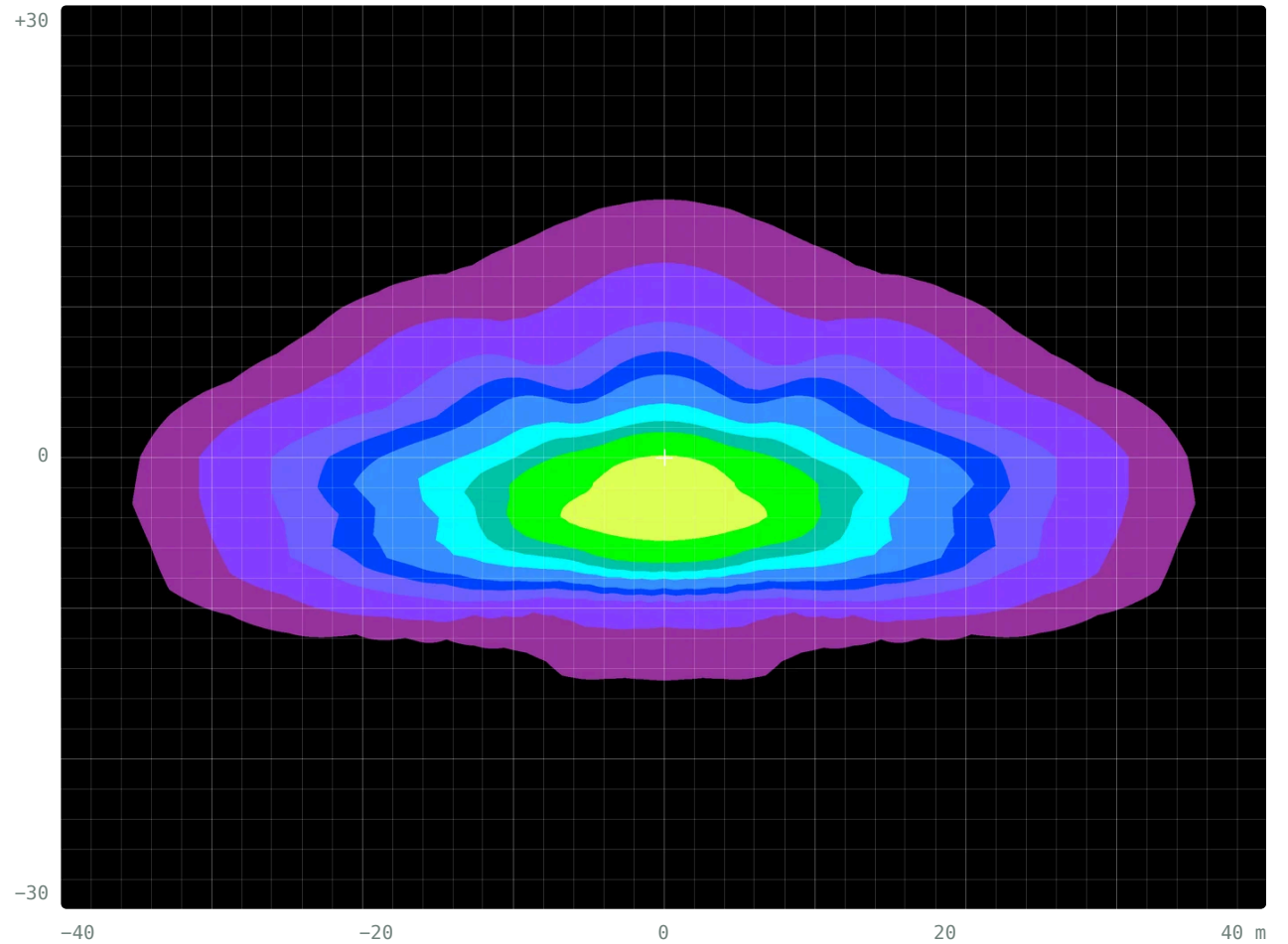
Peak throw 67° from vertical
Peak intensity 810 cd/klm
1 lx covers 52 × 19 m

LIGHT DISTRIBUTION • CD/KLM



— along the road — across

LIGHT ON THE ROAD • LX



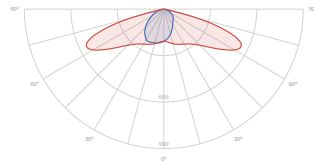
F411

The same Type I beam mixed 50/50 with a soft wide beam, for a path that also needs light on what is beside it.

COMBINATION OPTIC

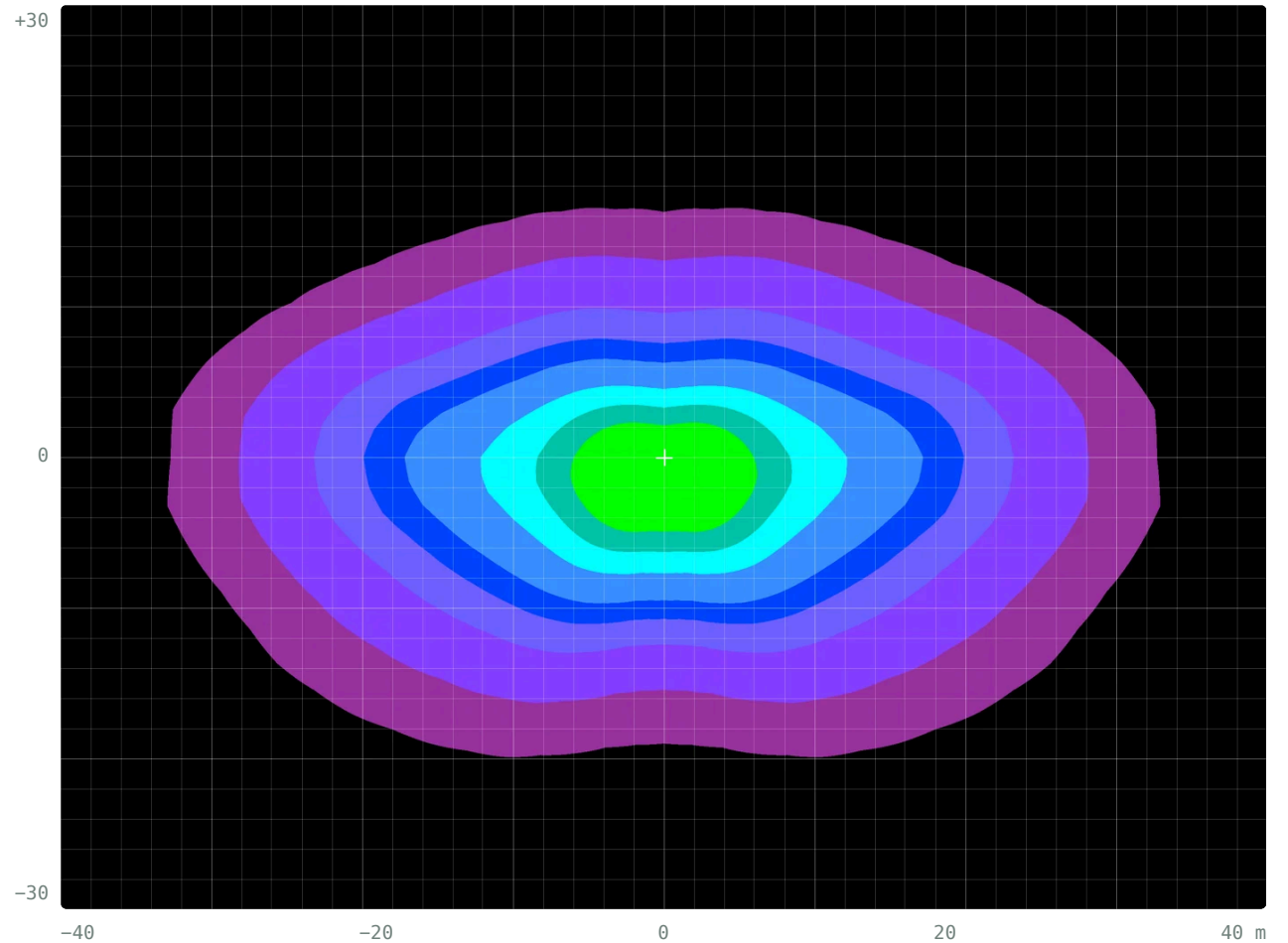
Peak throw 64° from vertical
Peak intensity 555 cd/klm
1 lx covers 46 × 23 m

LIGHT DISTRIBUTION · CD/KLM



— along the road — across

LIGHT ON THE ROAD · LX



Streets

Traffic routes where the road is no wider than the mast is tall. Even luminance along the road is what these three are built for.

E0422 • F402 • F403

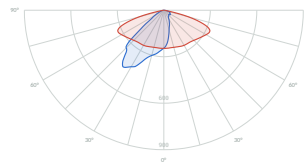
E0422

The plain street optic: high longitudinal uniformity on a straight run of poles, one side of the road.

EN 13201 M-CLASSES

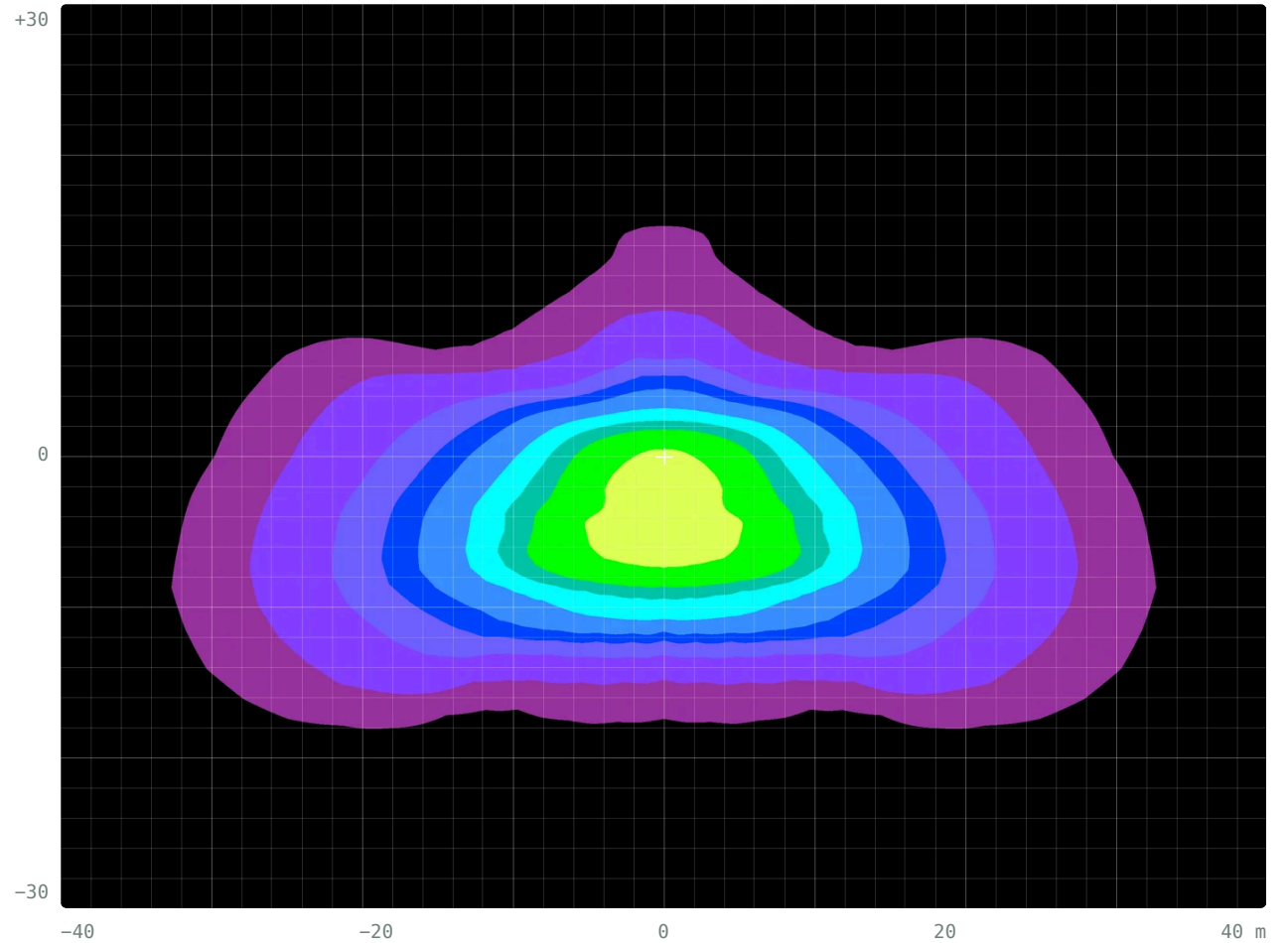
Peak throw 36° from vertical
Peak intensity 574 cd/klm
1 lx covers 44 × 20 m

LIGHT DISTRIBUTION • CD/KLM



— along the road — across

LIGHT ON THE ROAD • LX



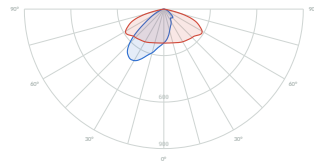
F402

The same job on staggered poles — poles alternating left and right along the street.

EN 13201 M-CLASSES • STAGGERED

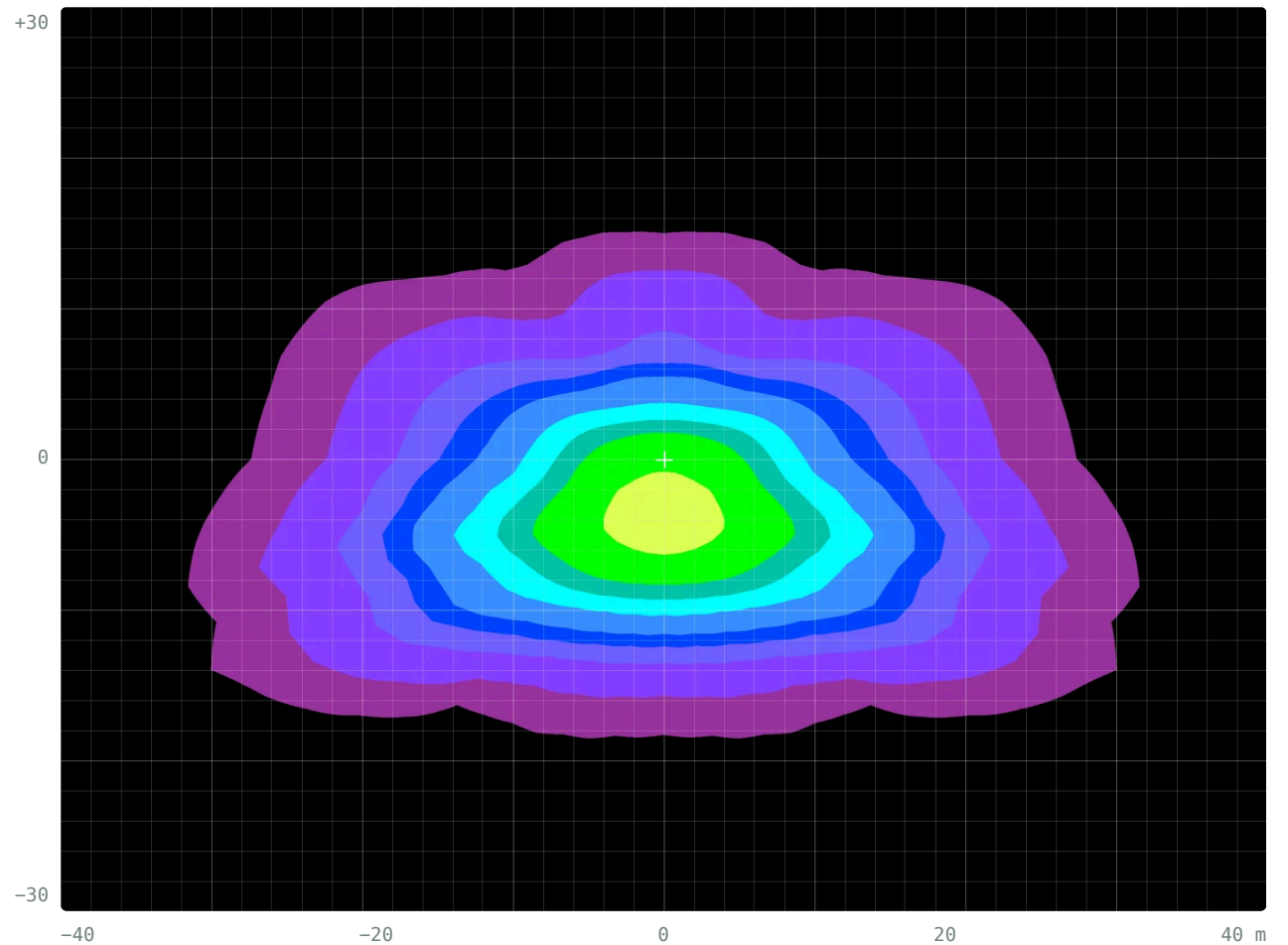
Peak throw 33° from vertical
Peak intensity 578 cd/klm
1 lx covers 43 × 22 m

LIGHT DISTRIBUTION • CD/KLM



— along the road — across

LIGHT ON THE ROAD • LX



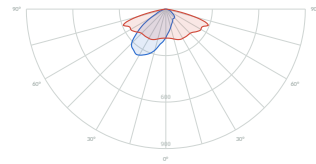
F403

The long Type II/III beam combined with F402. Reaches further along the road than F402 alone.

COMBINATION OPTIC

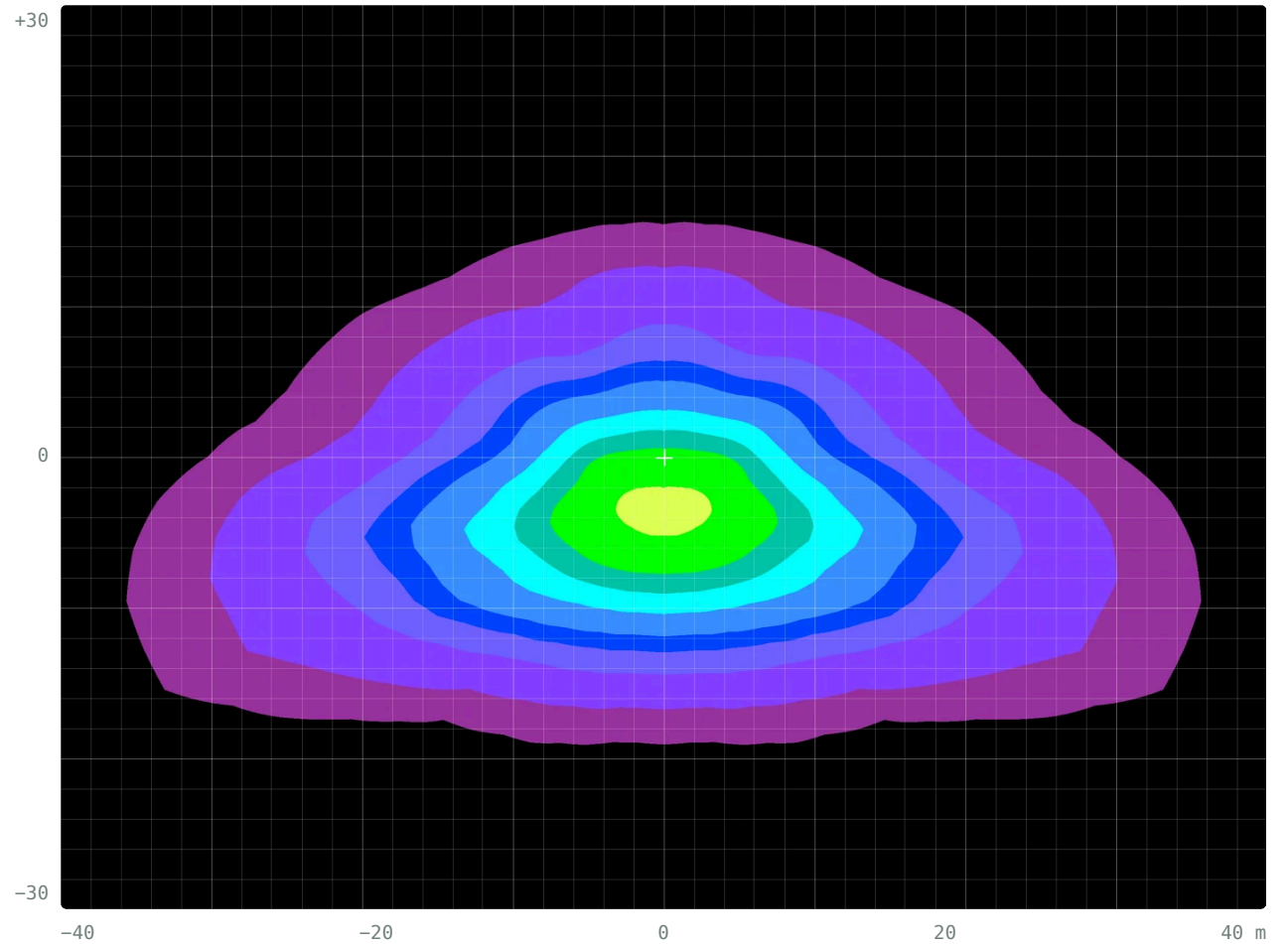
Peak throw 33° from vertical
Peak intensity 632 cd/klm
1 lx covers 48 × 23 m

LIGHT DISTRIBUTION · CD/KLM



— along the road — across

LIGHT ON THE ROAD · LX



Residential roads with long pole spacing

Few poles, long distances between them, pedestrians alongside.

F412

F412

Long Type II/III beam for very wide pole-to-pole distances. Pedestrian paths and residential roads.

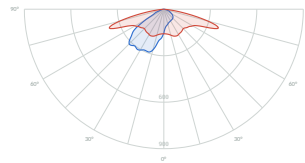
EN 13201 P-CLASSES

Peak throw 71° from vertical

Peak intensity 828 cd/klm

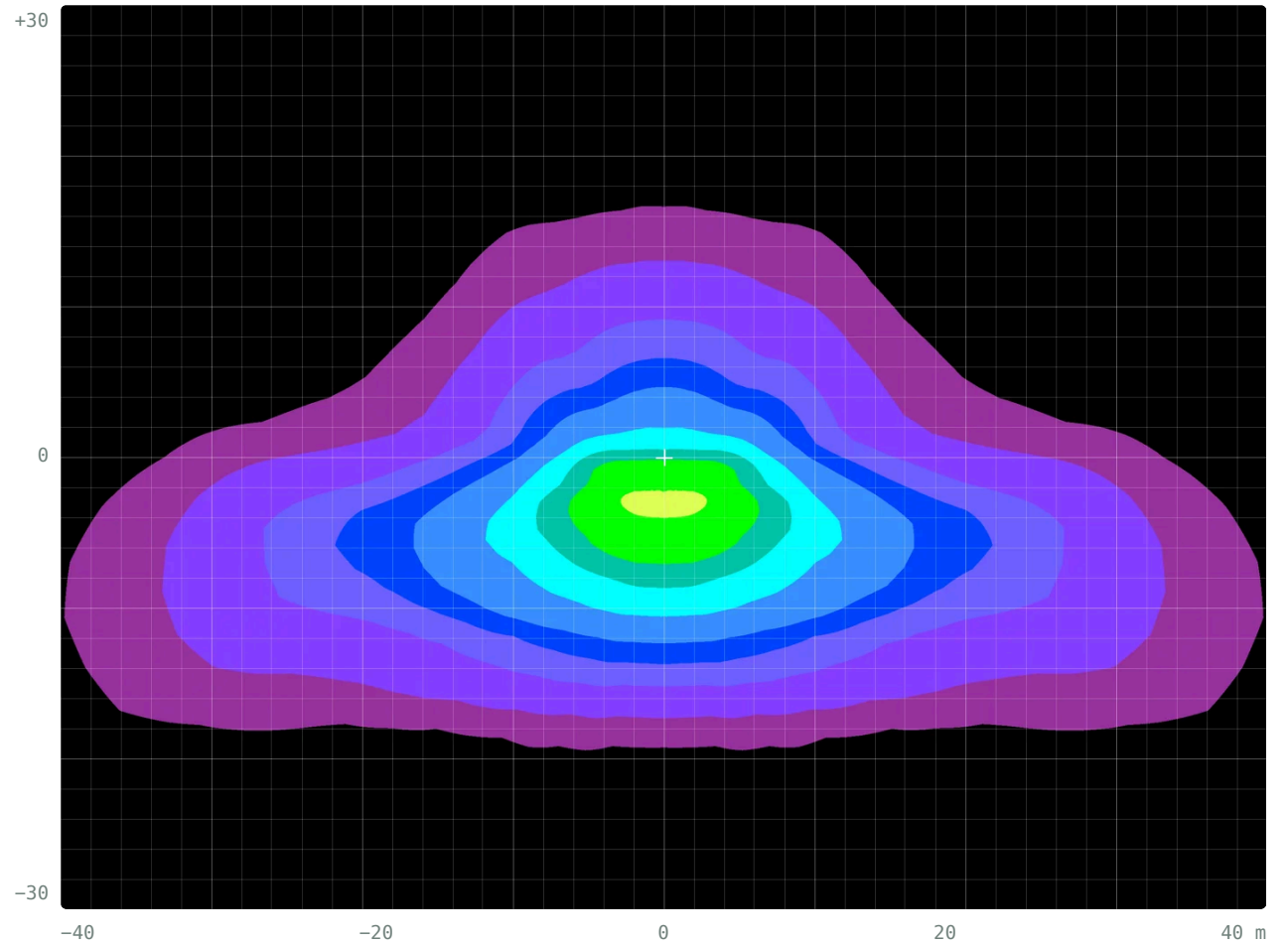
1 lx covers 53 × 24 m

LIGHT DISTRIBUTION · CD/KLM



— along the road — across

LIGHT ON THE ROAD · LX



Wide roads and open areas

Road as wide as the mast is tall or wider, plus car parks, yards and security lighting.

F414 • A140 • E0442 • E0443

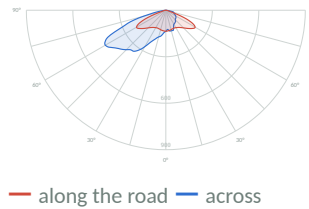
F414

Type IV beam for wider roads and large outdoor areas. Pushes the light away from the pole rather than along the road.

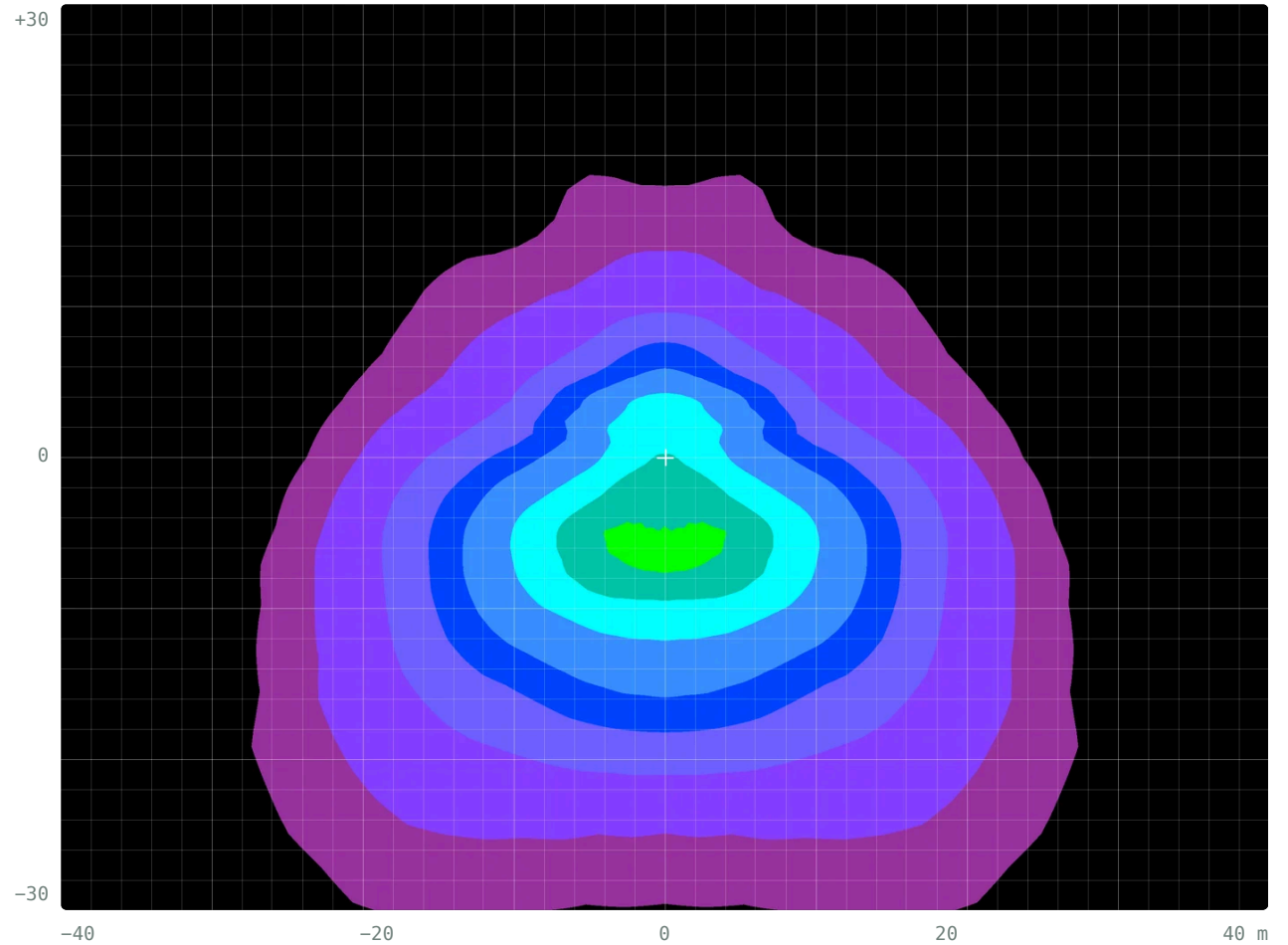
AREA LIGHTING

Peak throw 60° from vertical
Peak intensity 532 cd/klm
1 lx covers 38 × 31 m

LIGHT DISTRIBUTION • CD/KLM



LIGHT ON THE ROAD • LX



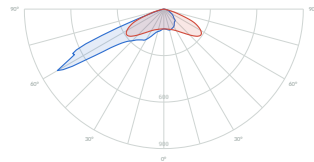
A140

The earlier area optic, kept for replacements on existing installations.
Wide across, short along the road.

AREA LIGHTING · EARLIER VERSION

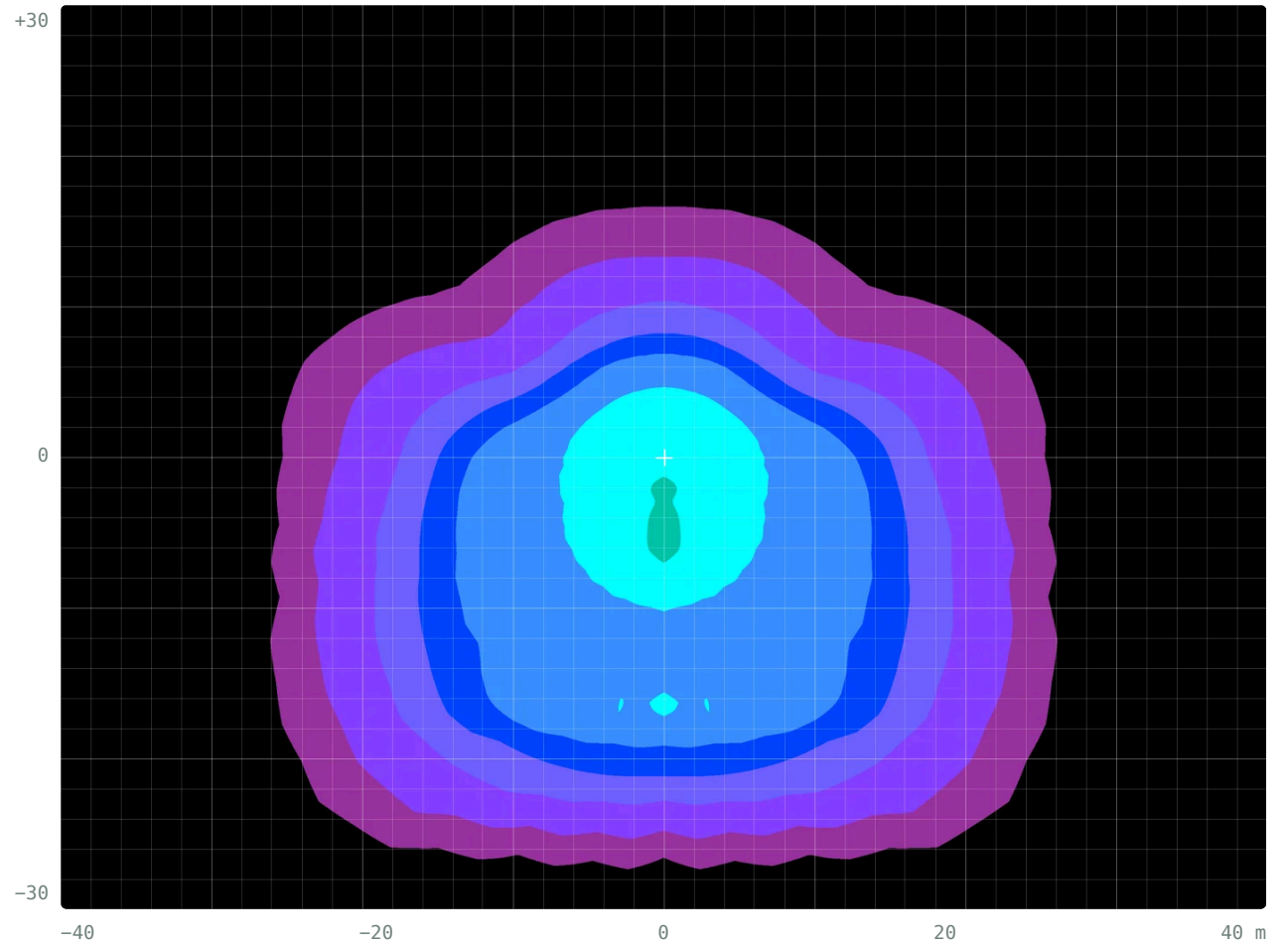
Peak throw 60° from vertical
Peak intensity 802 cd/klm
1 lx covers 38 × 33 m

LIGHT DISTRIBUTION · CD/KLM



— along the road — across

LIGHT ON THE ROAD · LX



E0442

Soft wide beam with good uniformity
— the most even of the three, and the
brightest under the pole.

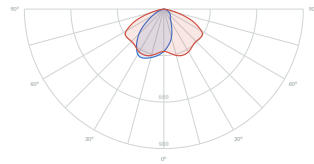
WIDE • UNIFORM

Peak throw 26° from vertical

Peak intensity 417 cd/klm

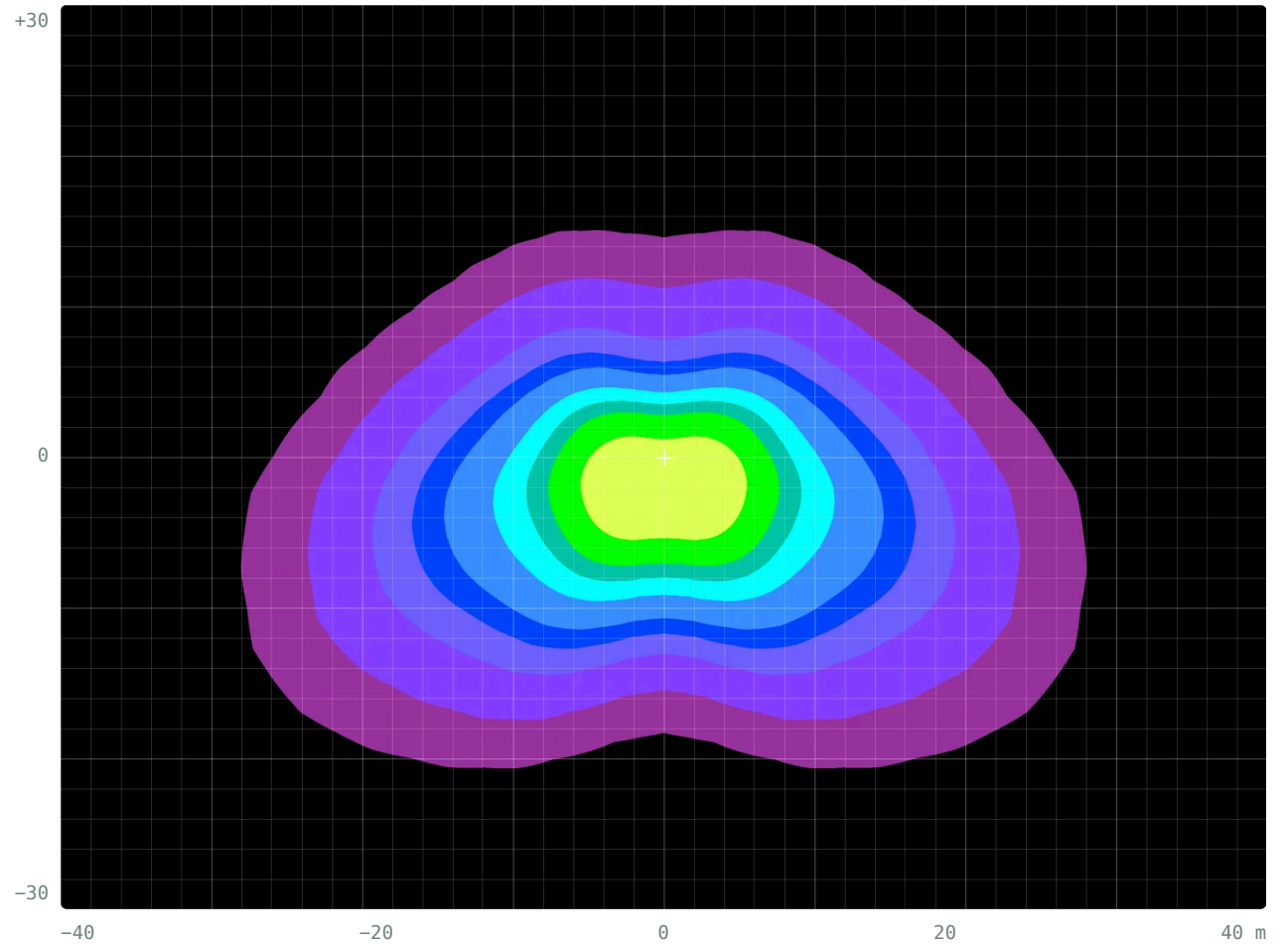
1 lx covers 39 × 23 m

LIGHT DISTRIBUTION • CD/KLM



— along the road — across

LIGHT ON THE ROAD • LX



E0443

Extra wide beam for wide-area and security lighting. The widest across the road of every optic here.

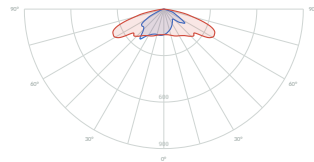
EXTRA WIDE

Peak throw 62° from vertical

Peak intensity 616 cd/klm

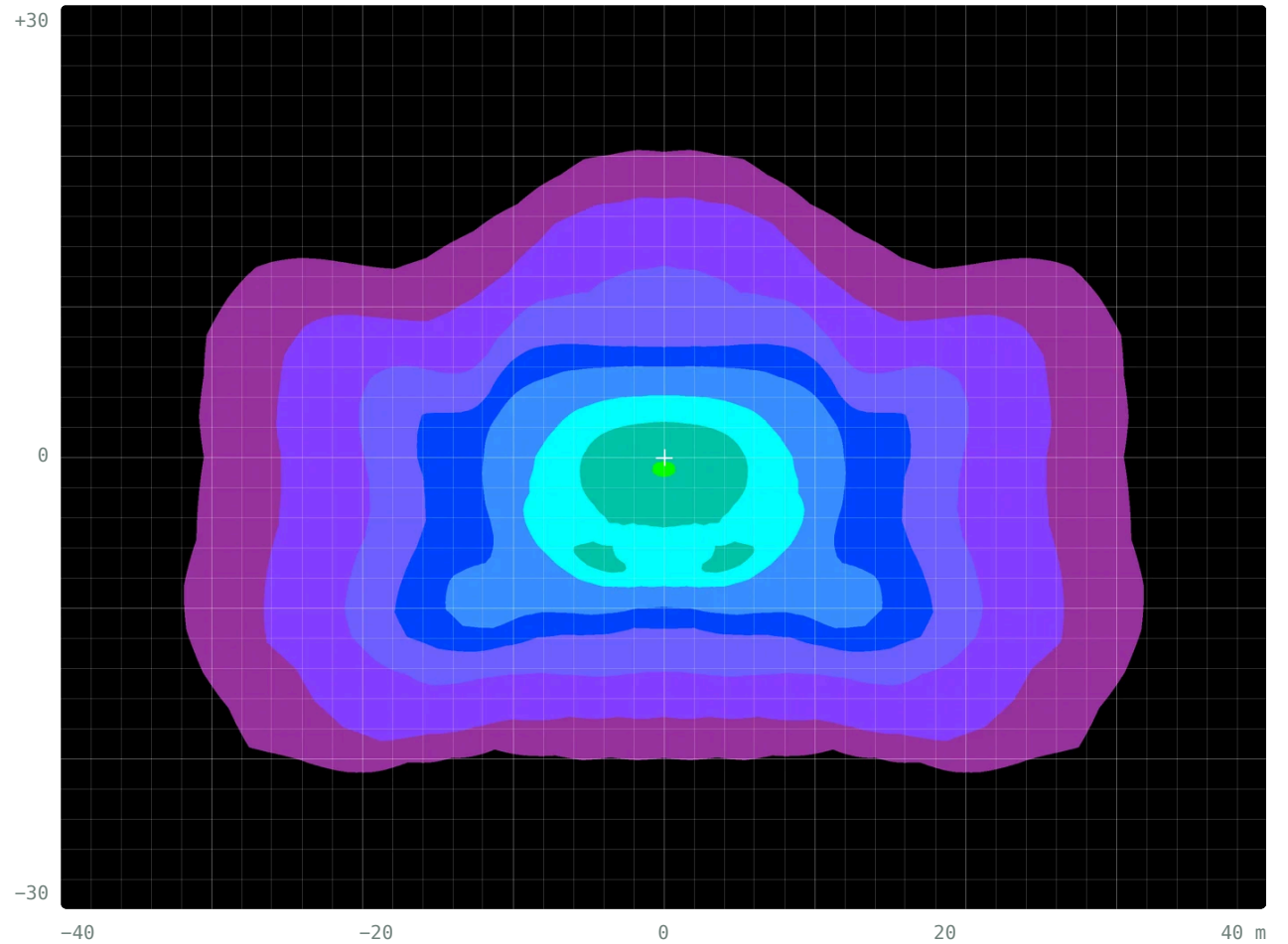
1 lx covers 42 × 28 m

LIGHT DISTRIBUTION · CD/KLM



— along the road — across

LIGHT ON THE ROAD · LX



Pedestrian crossings

Mounted ahead of the crossing so the person is lit from the front, not from above.

The two optics are mirror images of each other — one for each approach direction.

E0445 • E0446

E0445

Double-asymmetric beam that puts its peak about 5 m to one side of the pole.

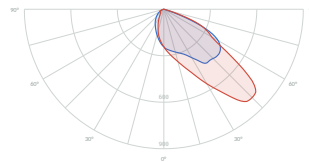
CROSSING • ONE DIRECTION

Peak throw 45° from vertical

Peak intensity 879 cd/klm

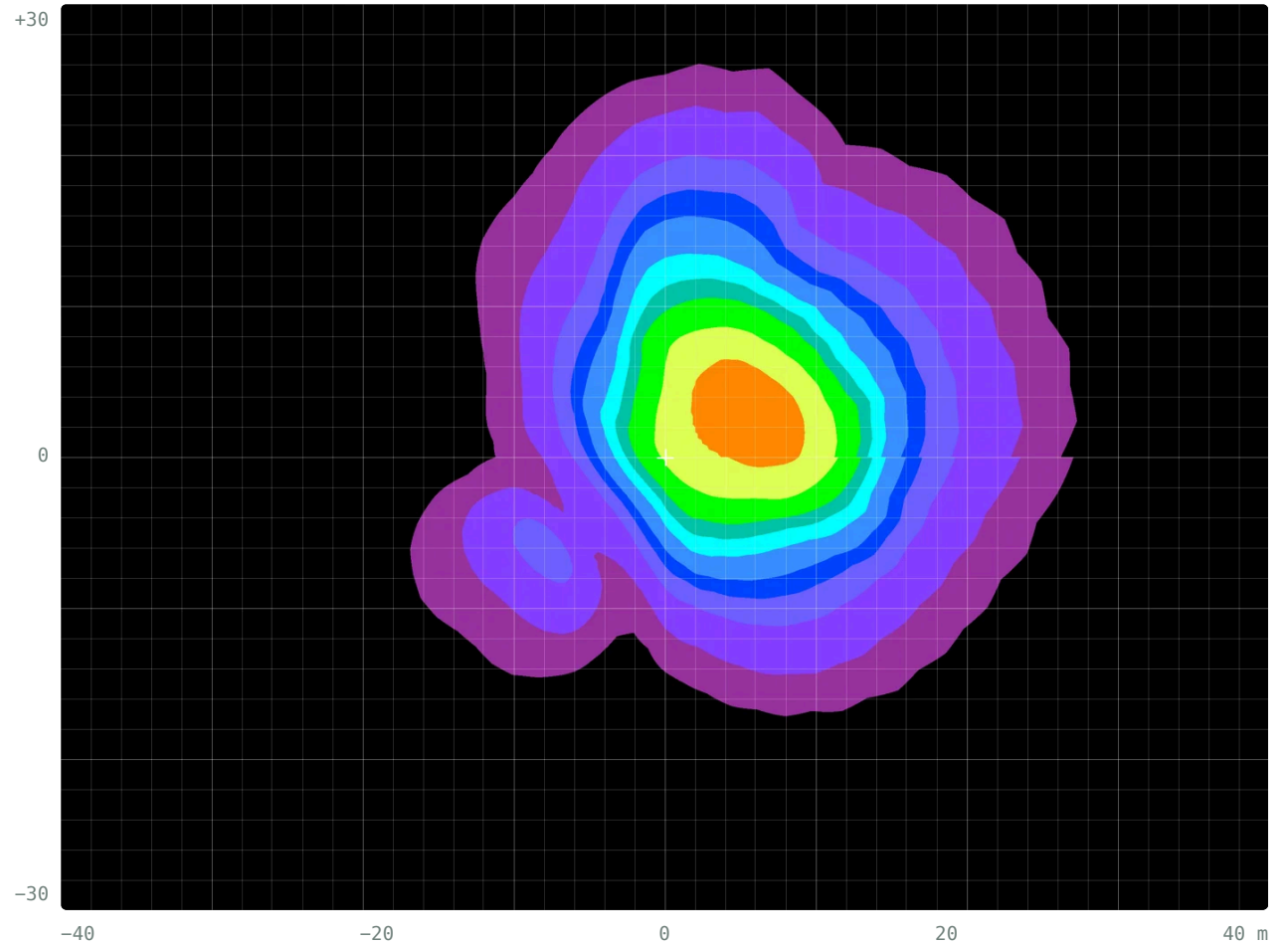
1 lx covers 30 × 31 m

LIGHT DISTRIBUTION • CD/KLM



— along the road — across

LIGHT ON THE ROAD • LX



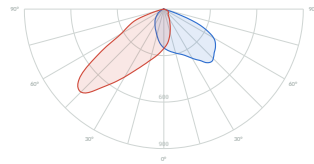
E0446

The same beam mirrored, for a crossing approached from the other side.

CROSSING · OTHER DIRECTION

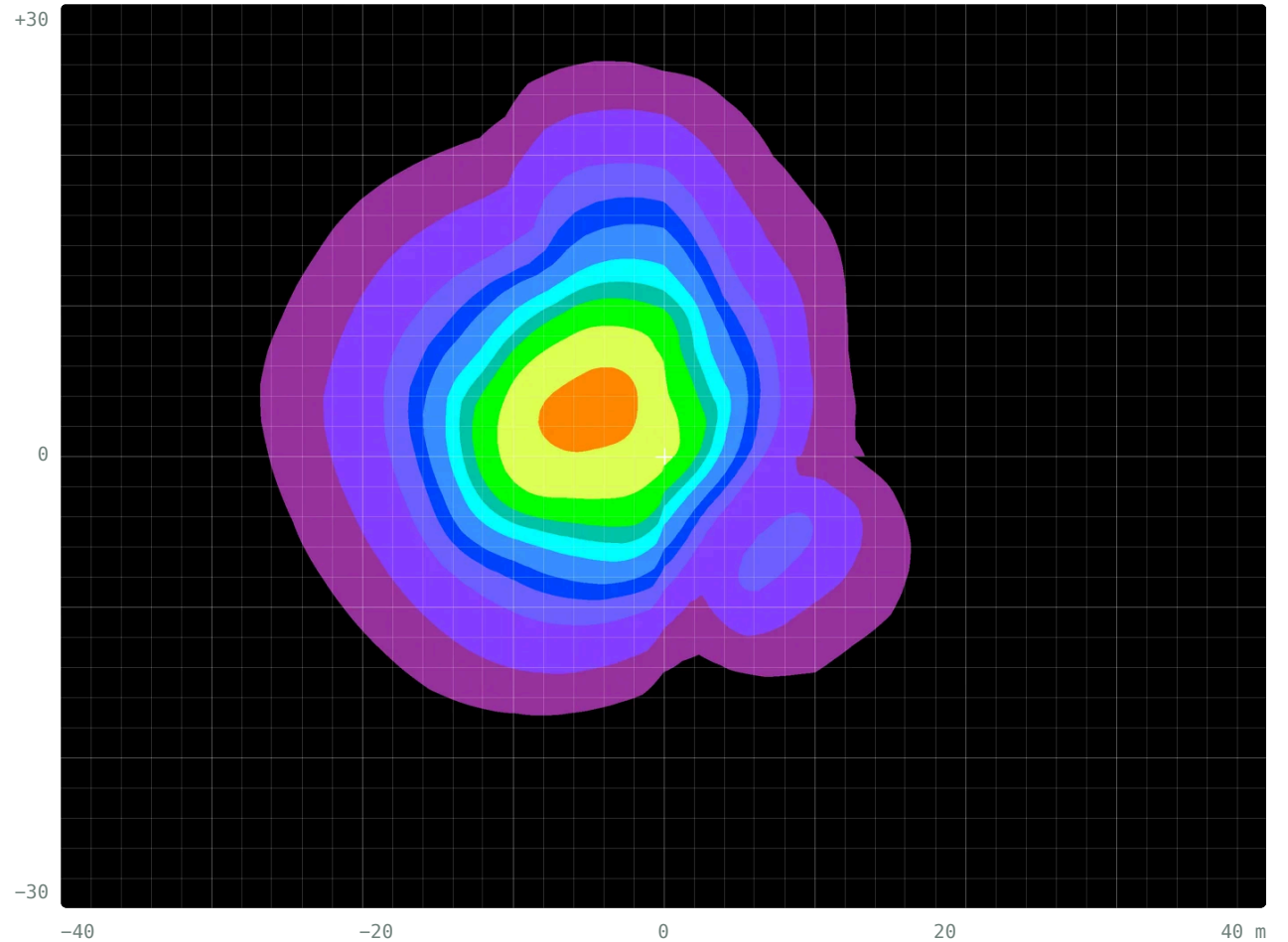
Peak throw 46° from vertical
Peak intensity 820 cd/klm
1 lx covers 28 × 31 m

LIGHT DISTRIBUTION · CD/KLM



— along the road — across

LIGHT ON THE ROAD · LX



Iso-illuminance plots and light distribution curves computed from the EULUMDAT files of the GEO Street M luminaire — 10 m mounting height, 0° tilt, one luminaire, 3 000 lm for every optic.