

Annex III

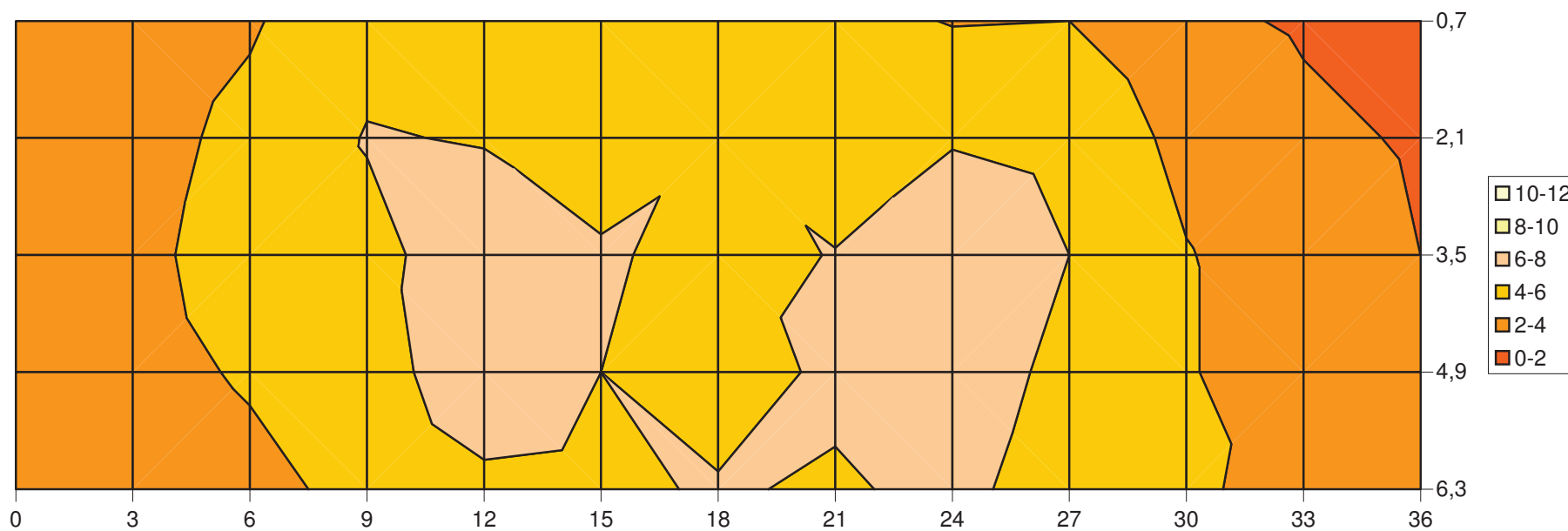
Isolux diagrams

Annex III

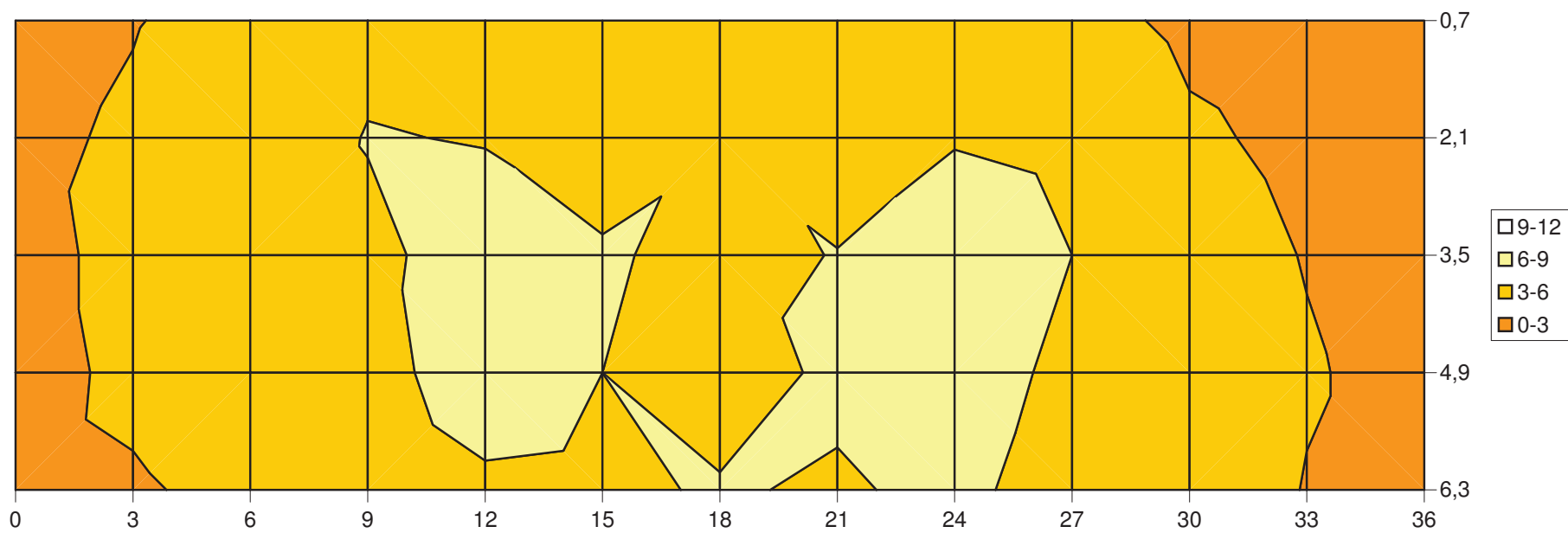
Isolux diagrams

LED Roadway Lighting

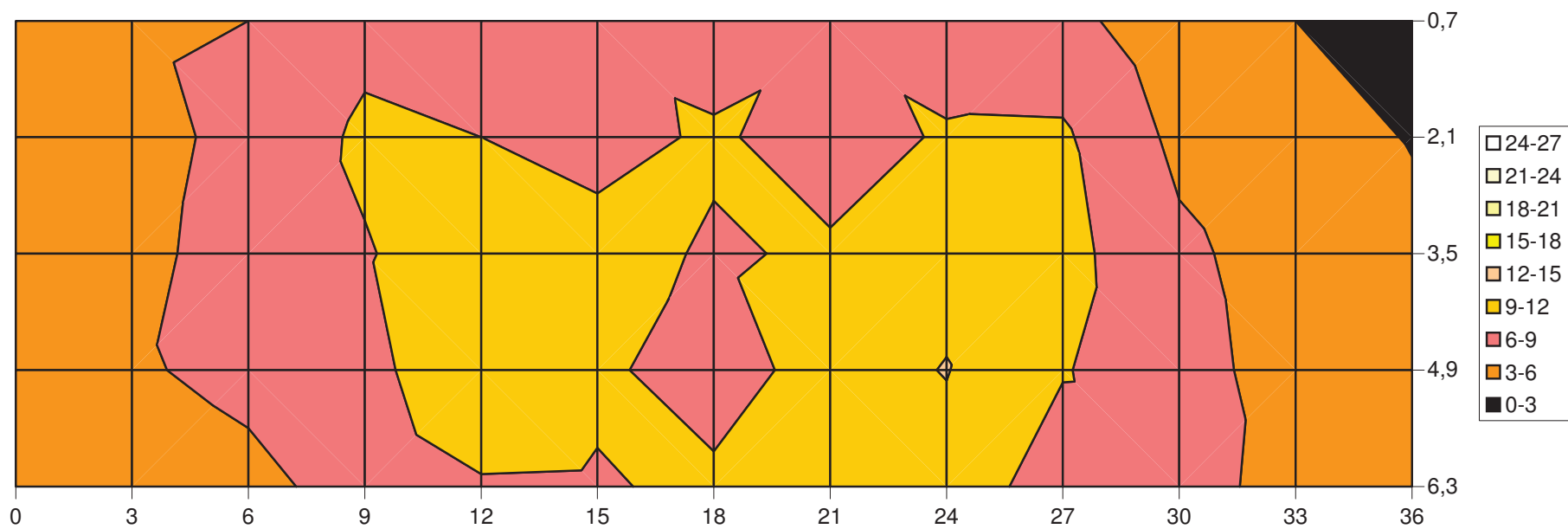
Isolux diagram LED Roadway Lighting



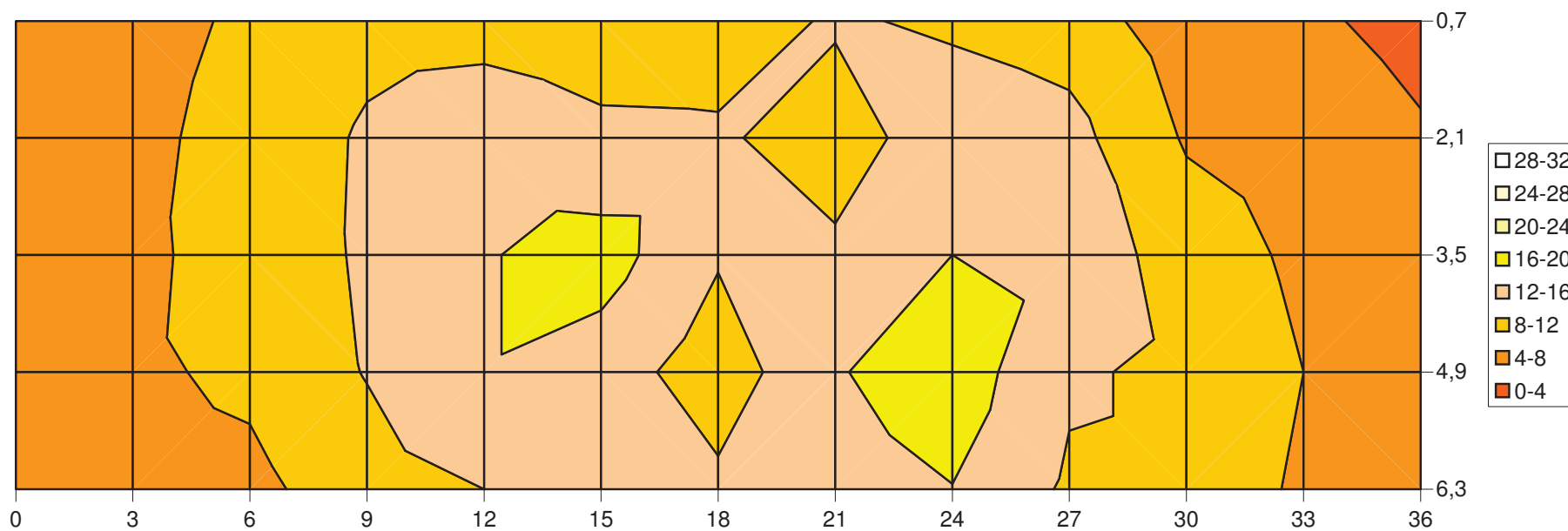
Isolux diagram LED Roadway Lighting



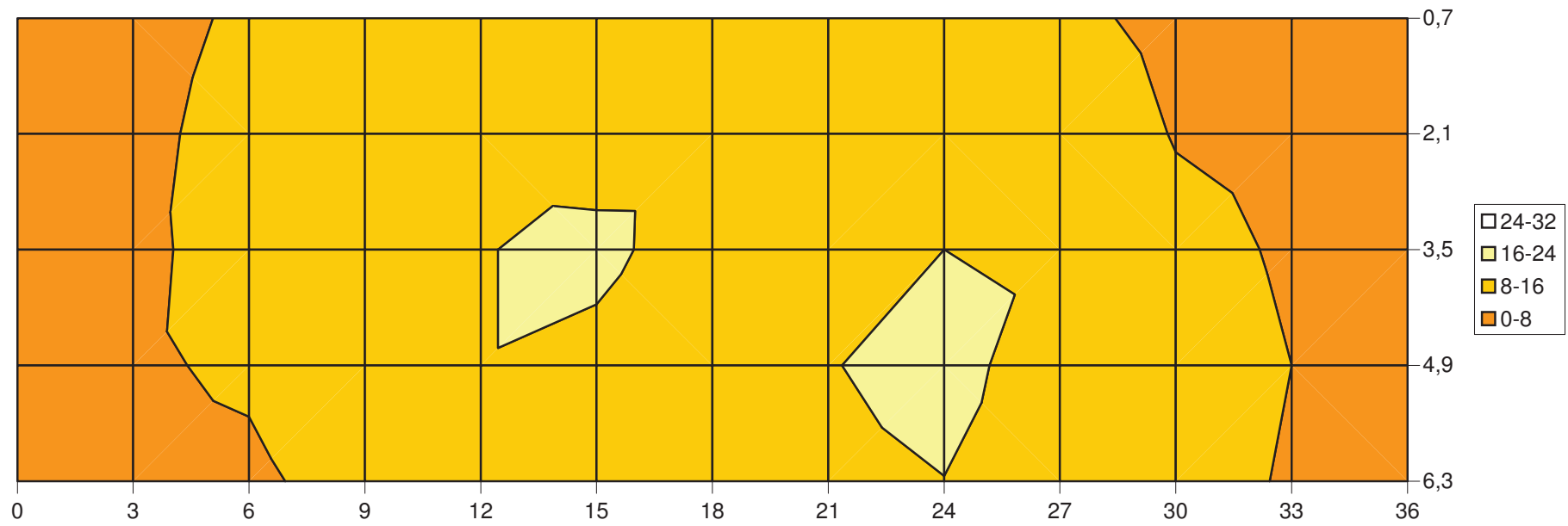
Isolux diagram LED Roadway Lighting



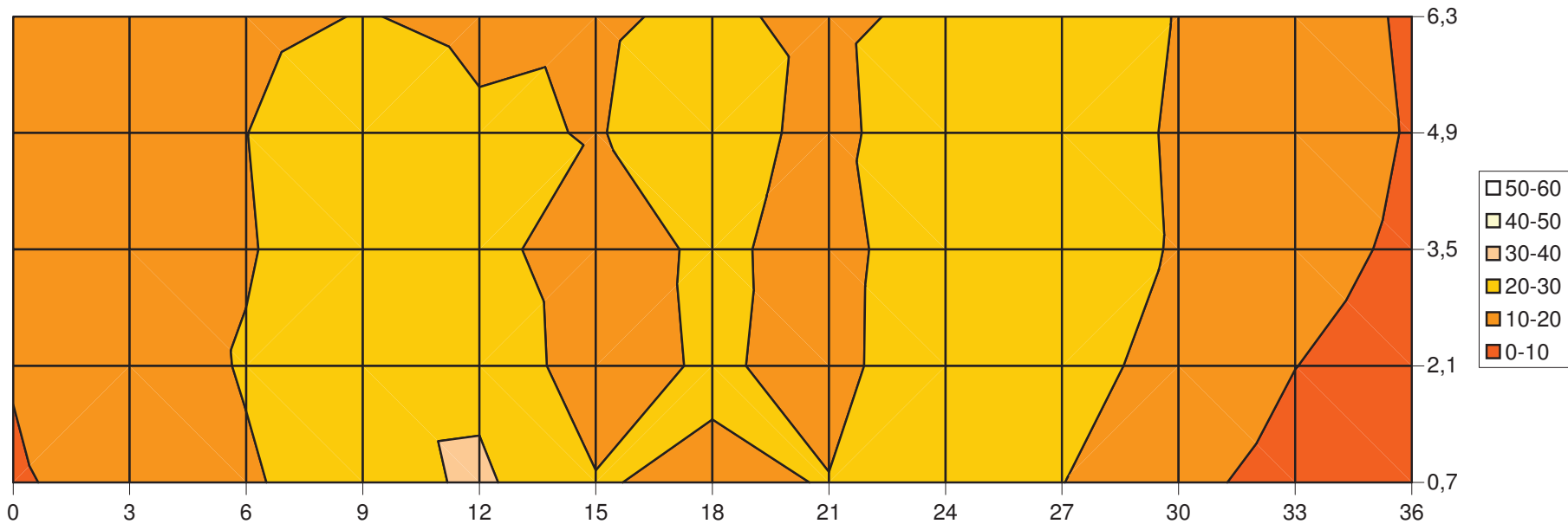
Isolux diagram LED Roadway Lighting



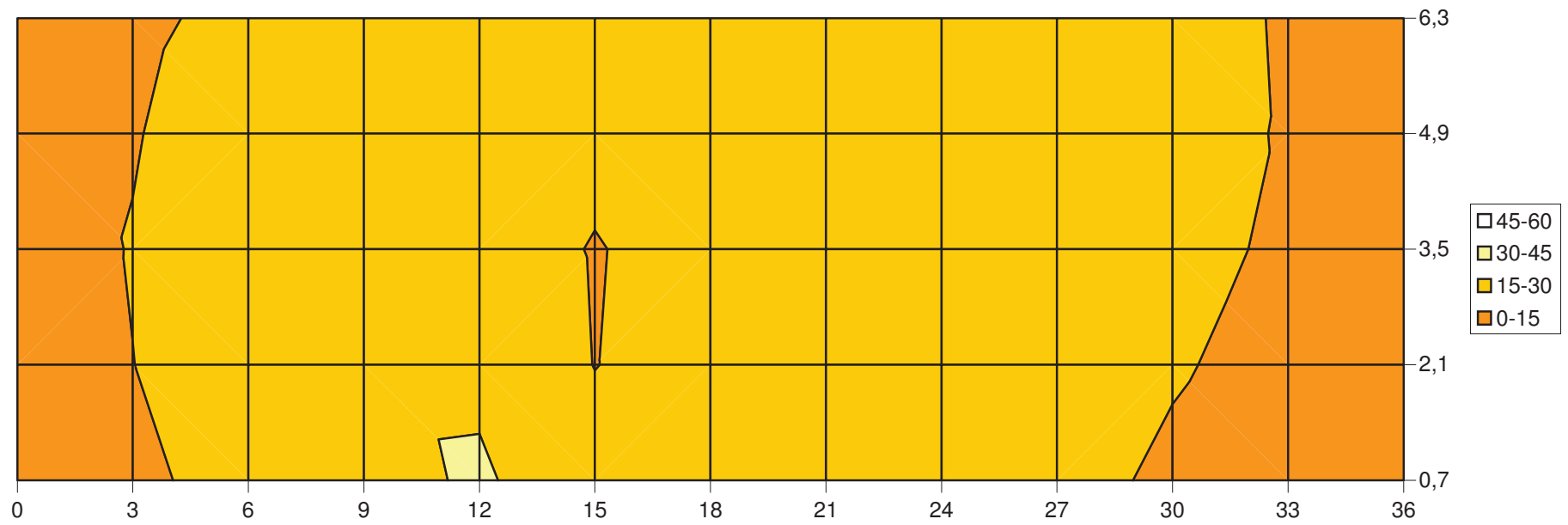
Isolux diagram LED Roadway Lighting



Isolux diagram LED Roadway Lighting



Isolux diagramm LED Roadway Lighting

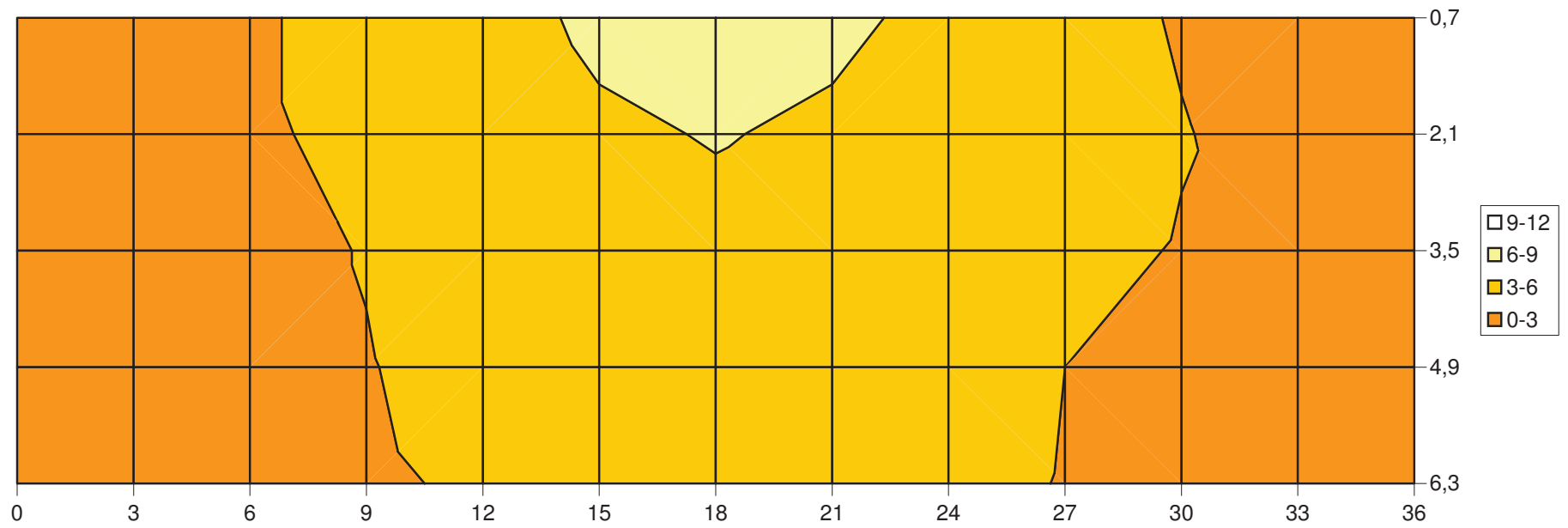


Annex III

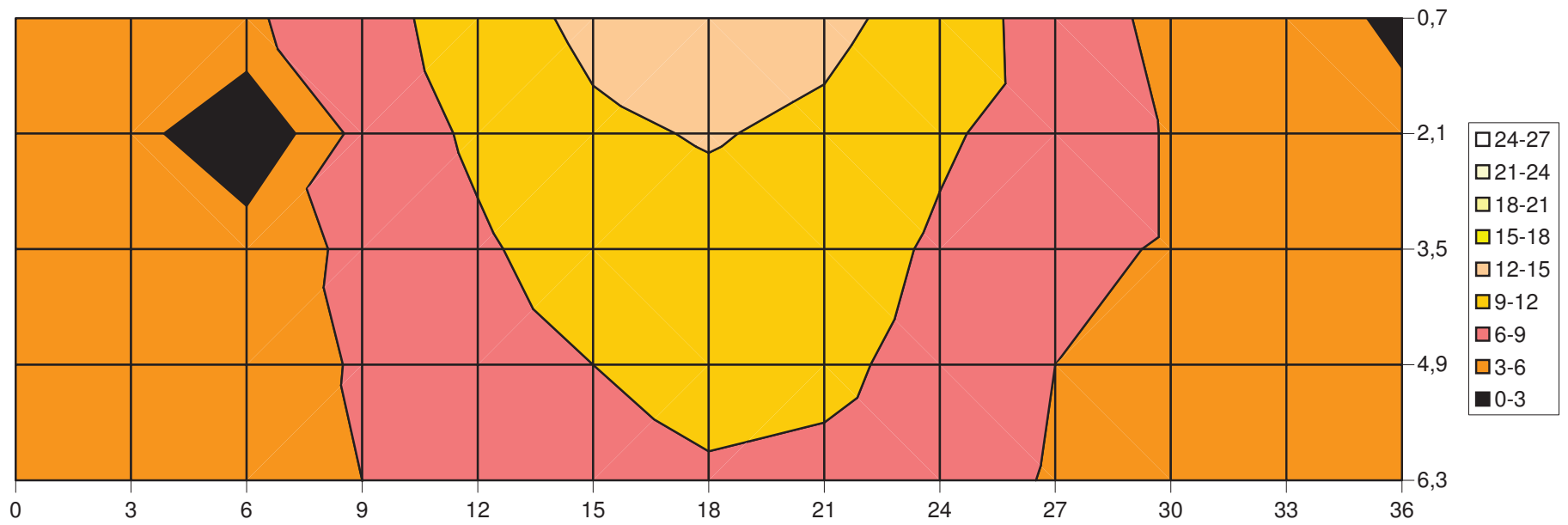
Isolux diagrams

Maxlite Inc

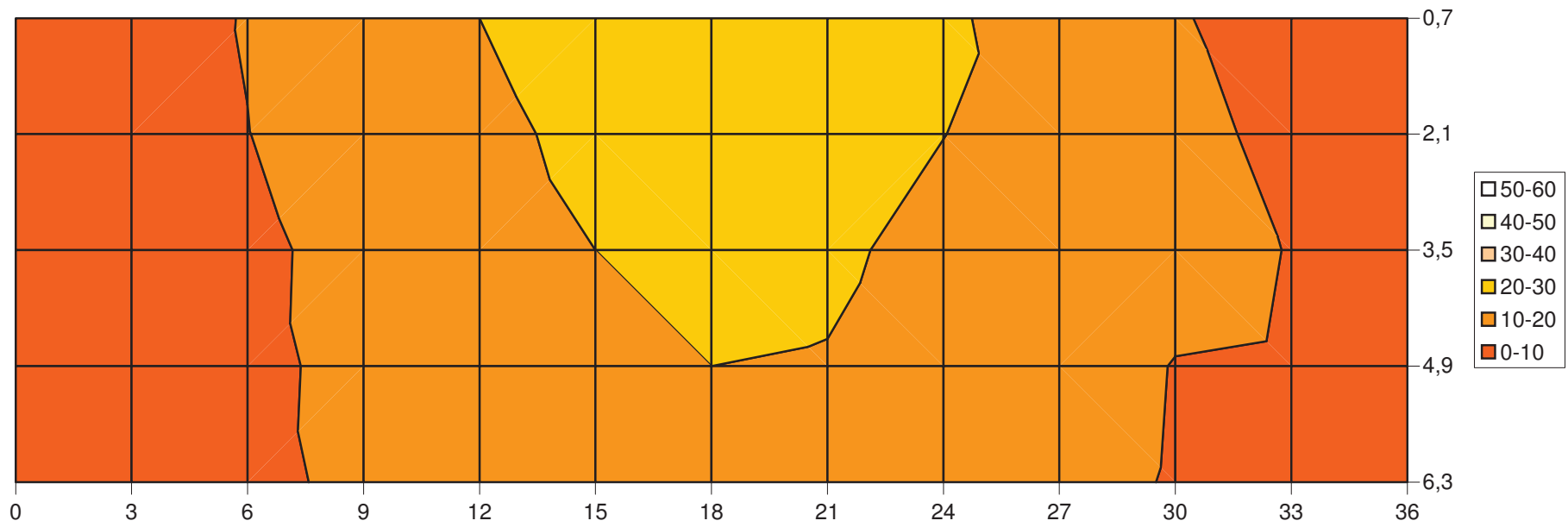
Isolux diagram Maxlite Inc



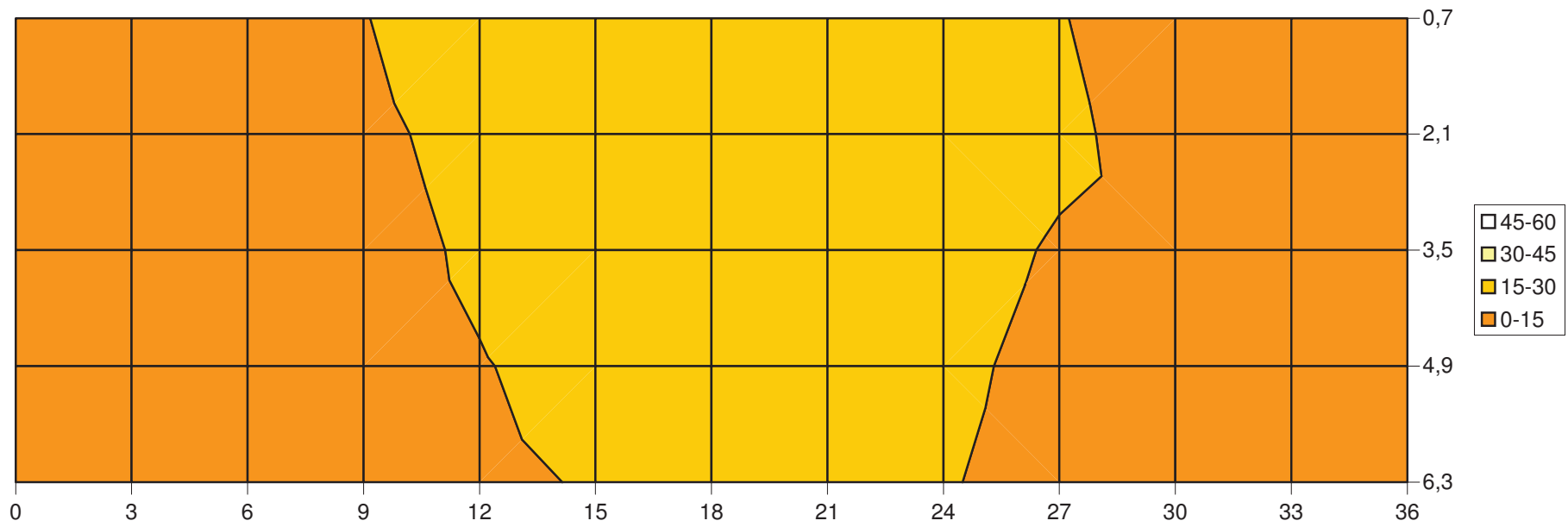
Isolux diagram Maxlite Inc



Isolux diagram Maxlite Inc



Isolux diagram Maxlite Inc

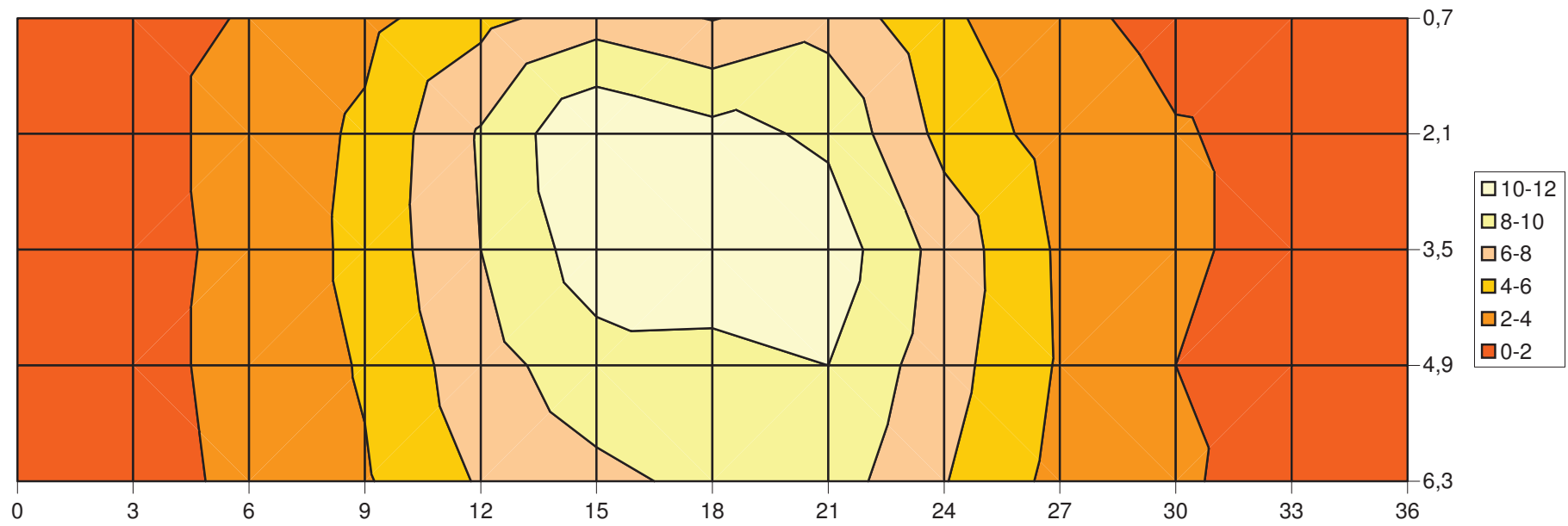


Annex III

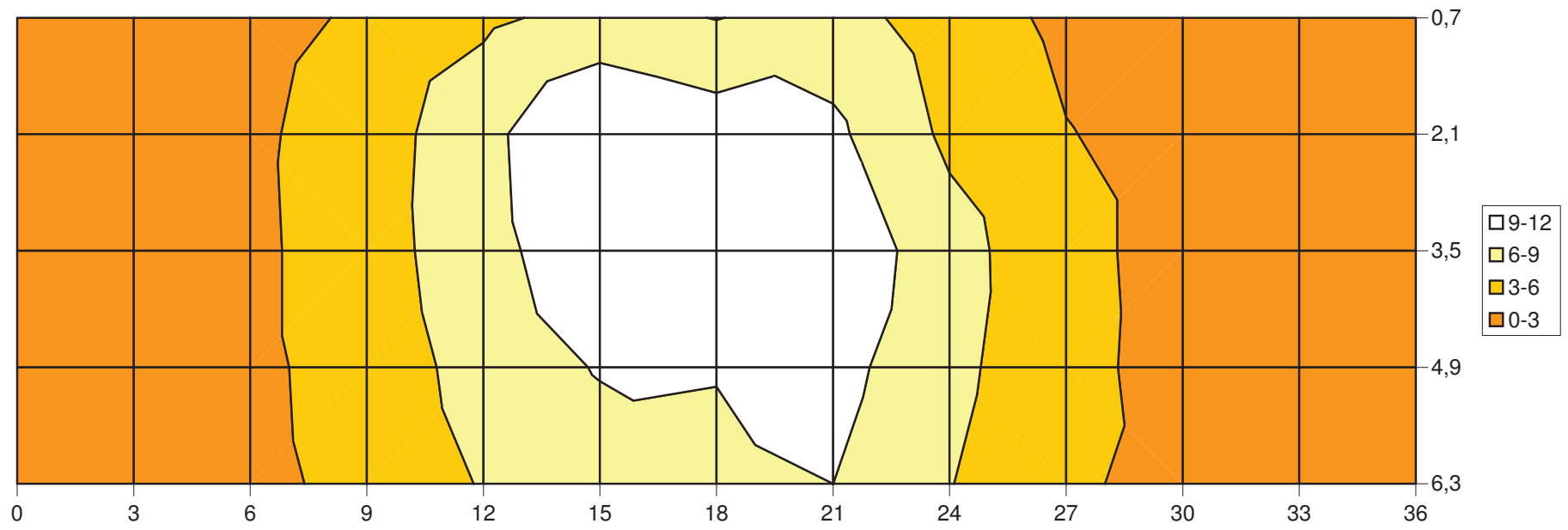
Isolux diagrams

Peco International Electric In

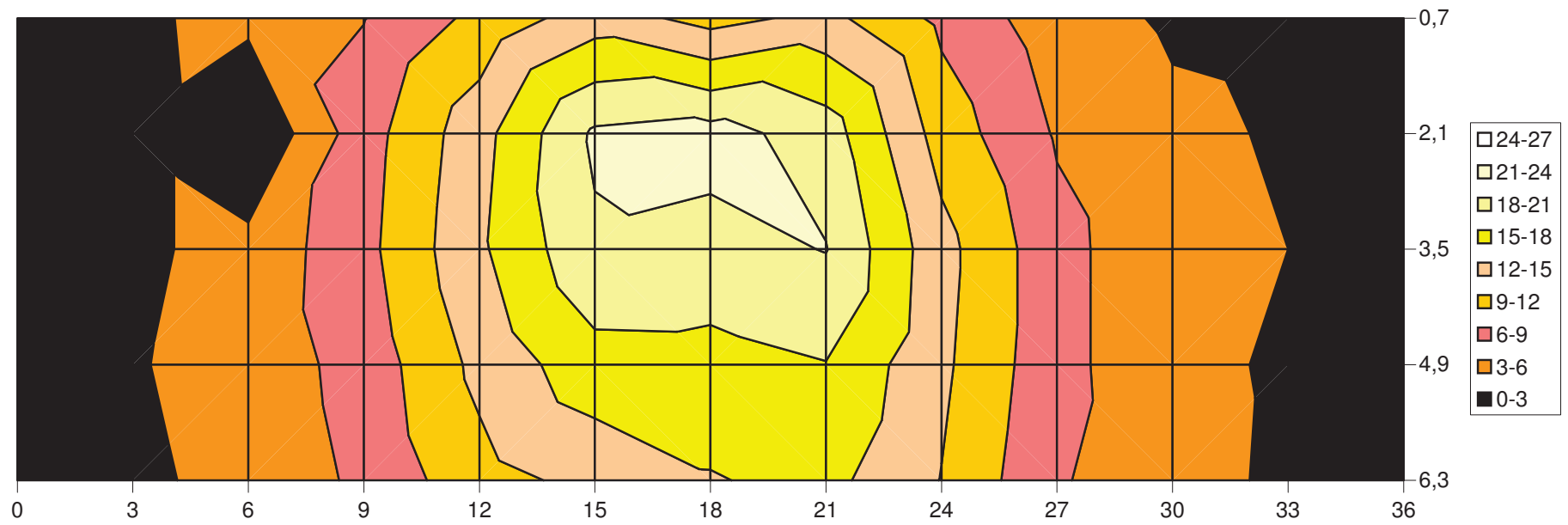
Isolux diagram Peco



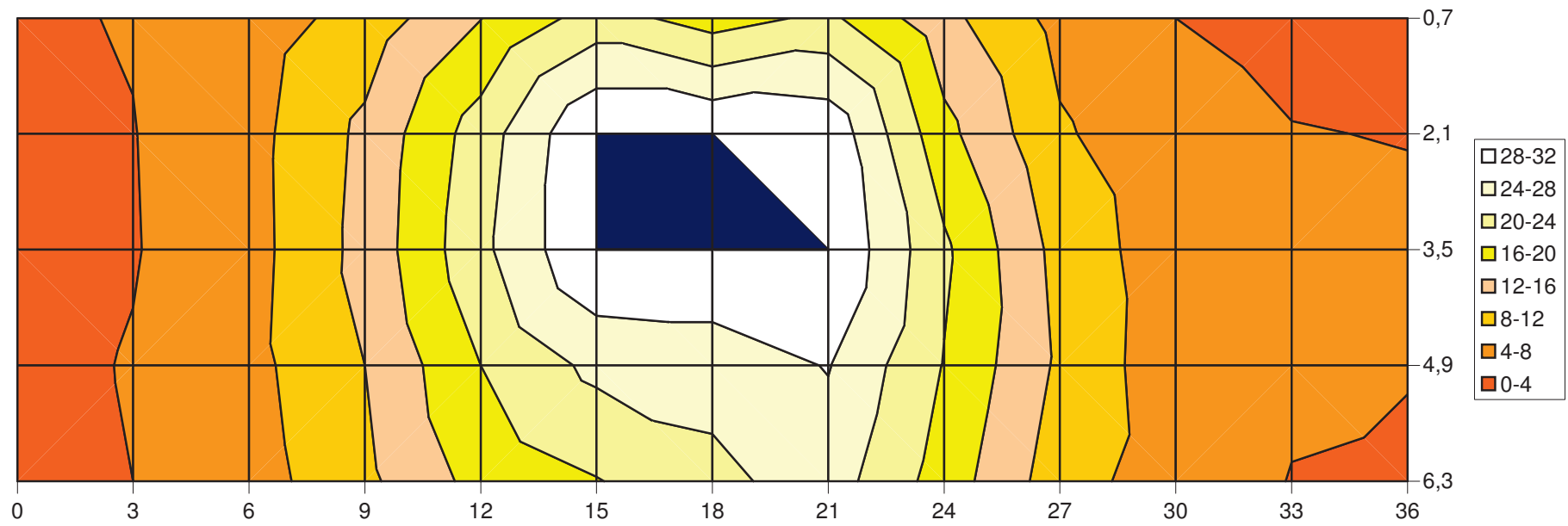
Isolux diagram Peco



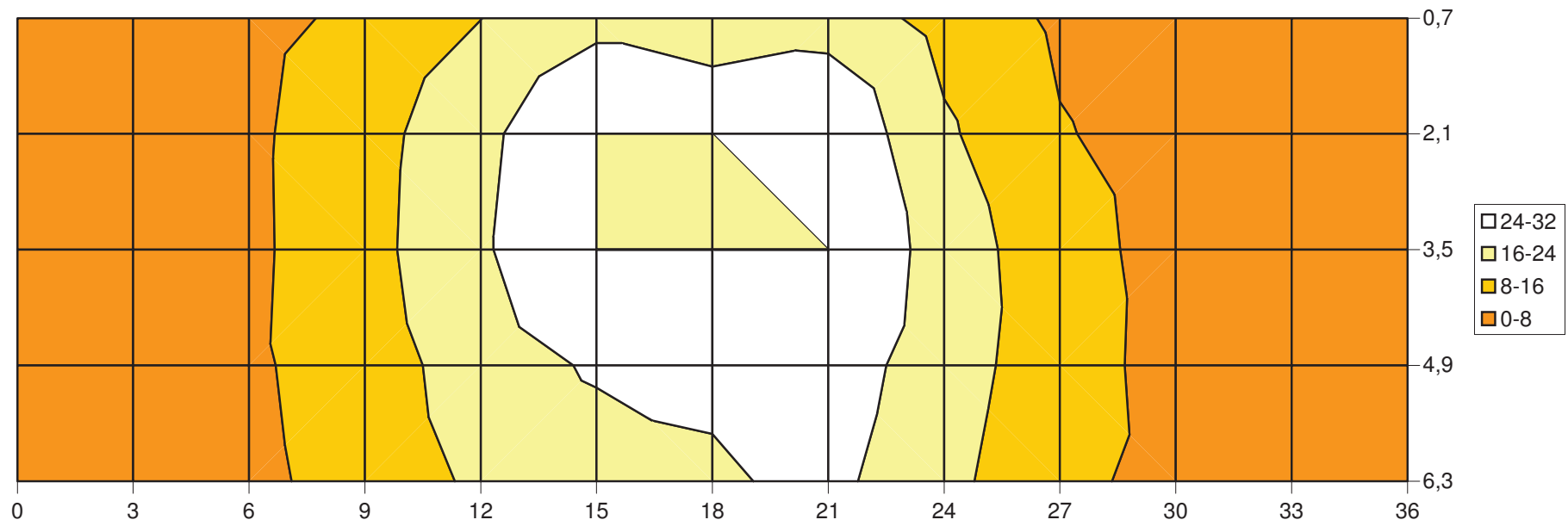
Isolux diagram Peco



Isolux diagram Peco



Isolux diagram Peco

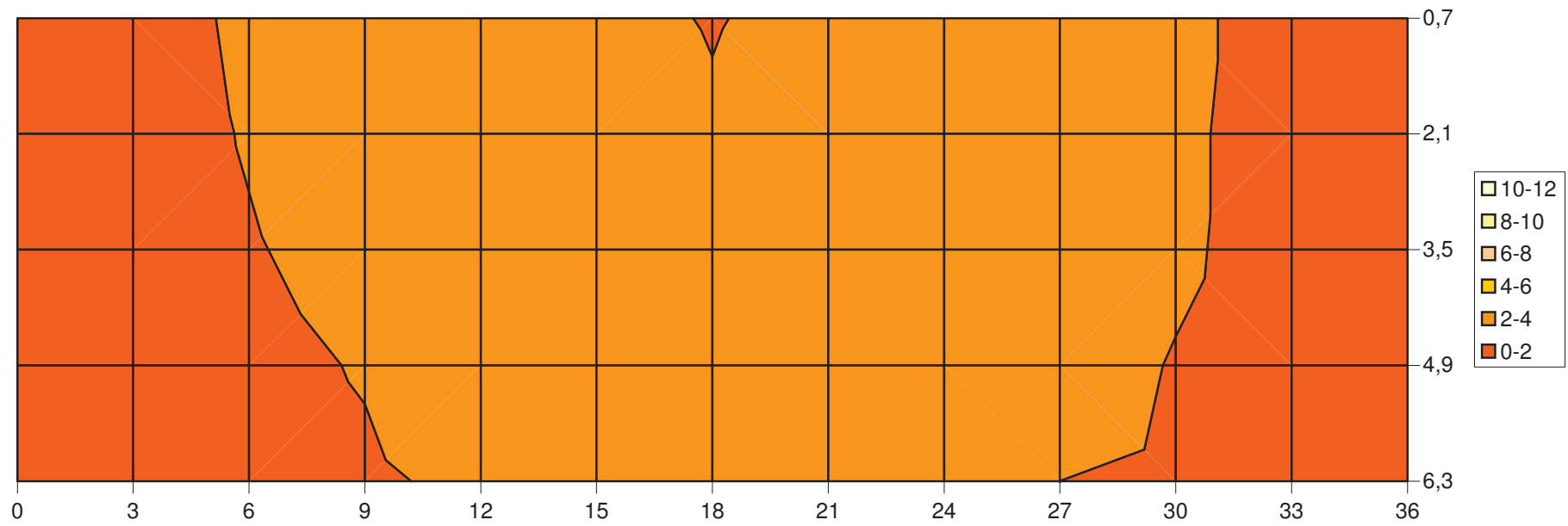


Annex III

Isolux diagrams

Lemnis Lighting

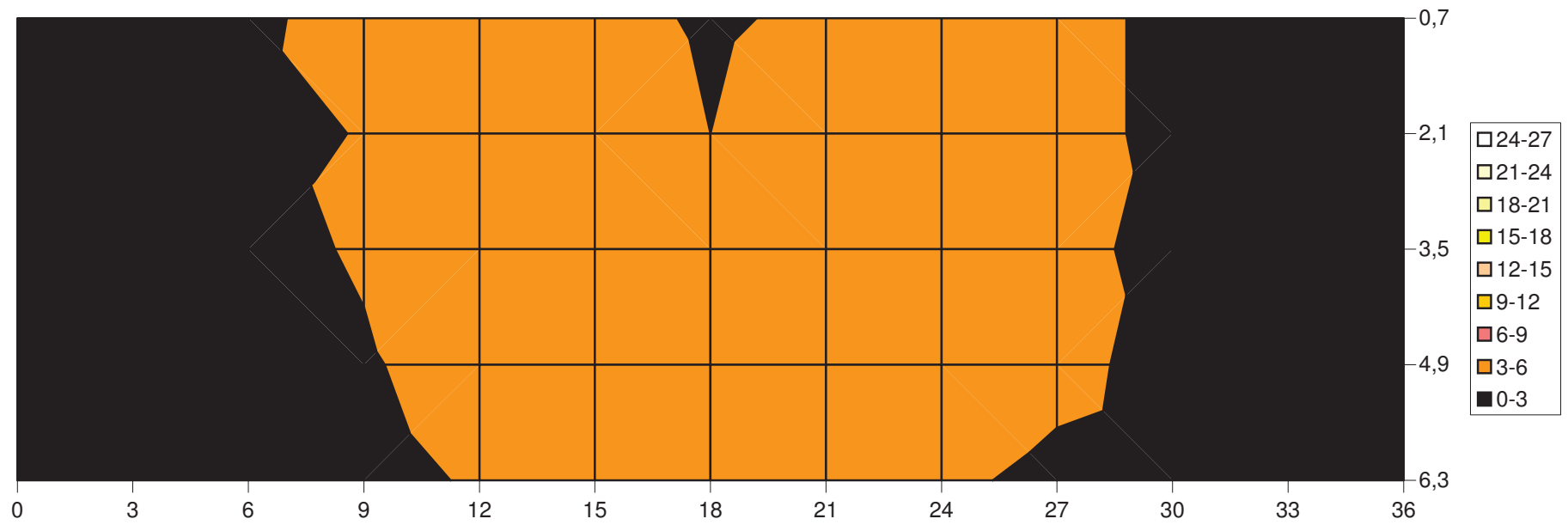
Isolux diagram Lemnis



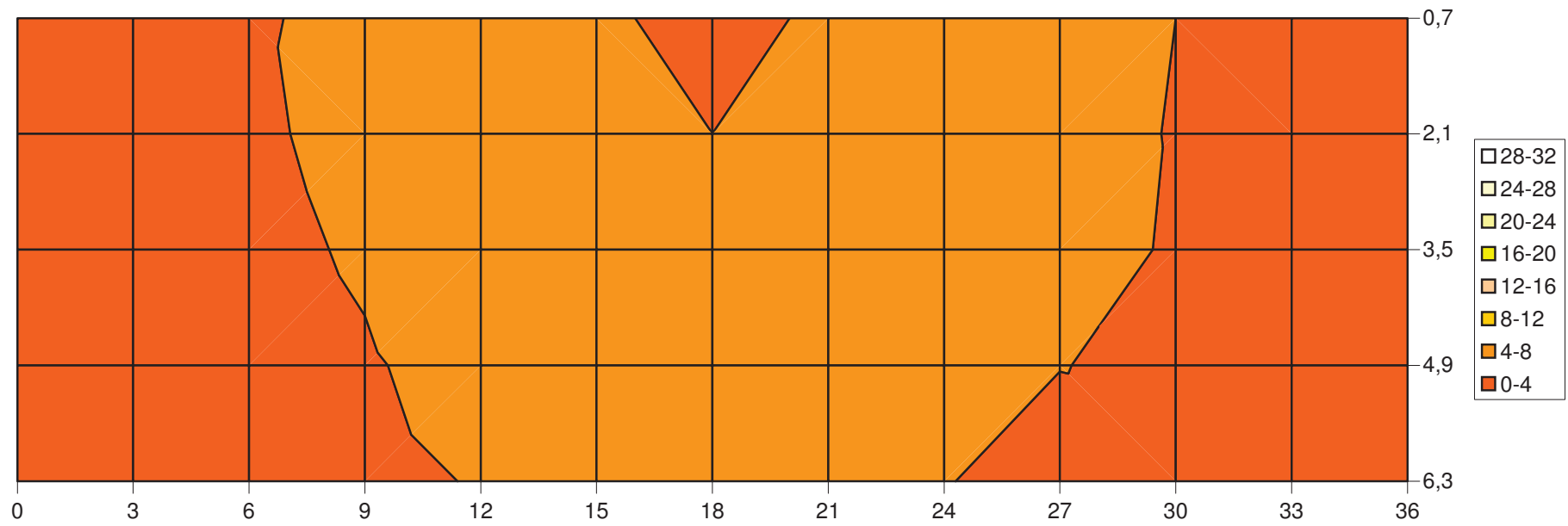
Isolux diagram Lemnis



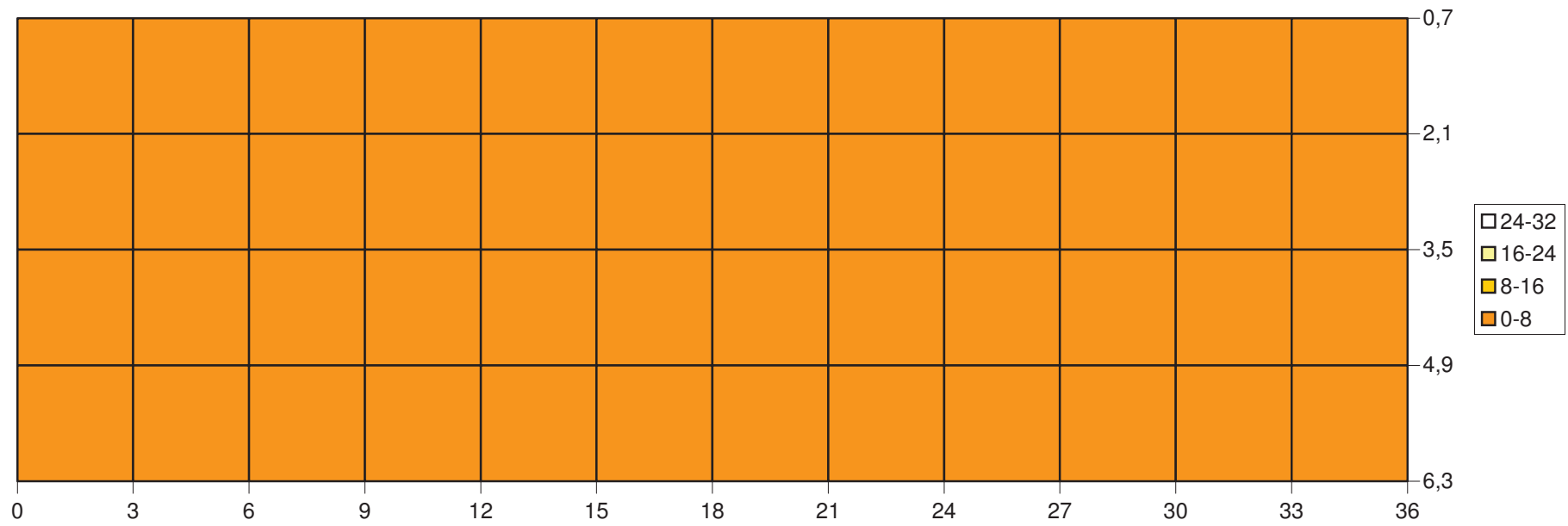
Isolux diagram Lemnis



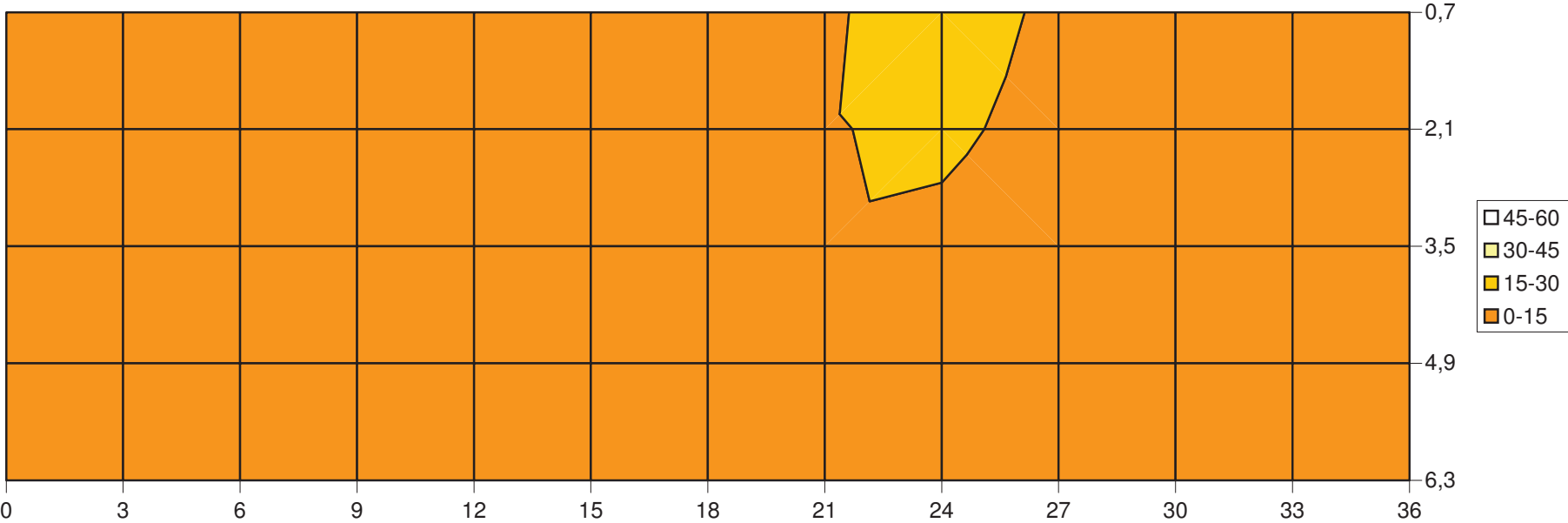
Isolux diagram Lemnis



Isolux diagram Lemnis



Isolux diagram Lemnis

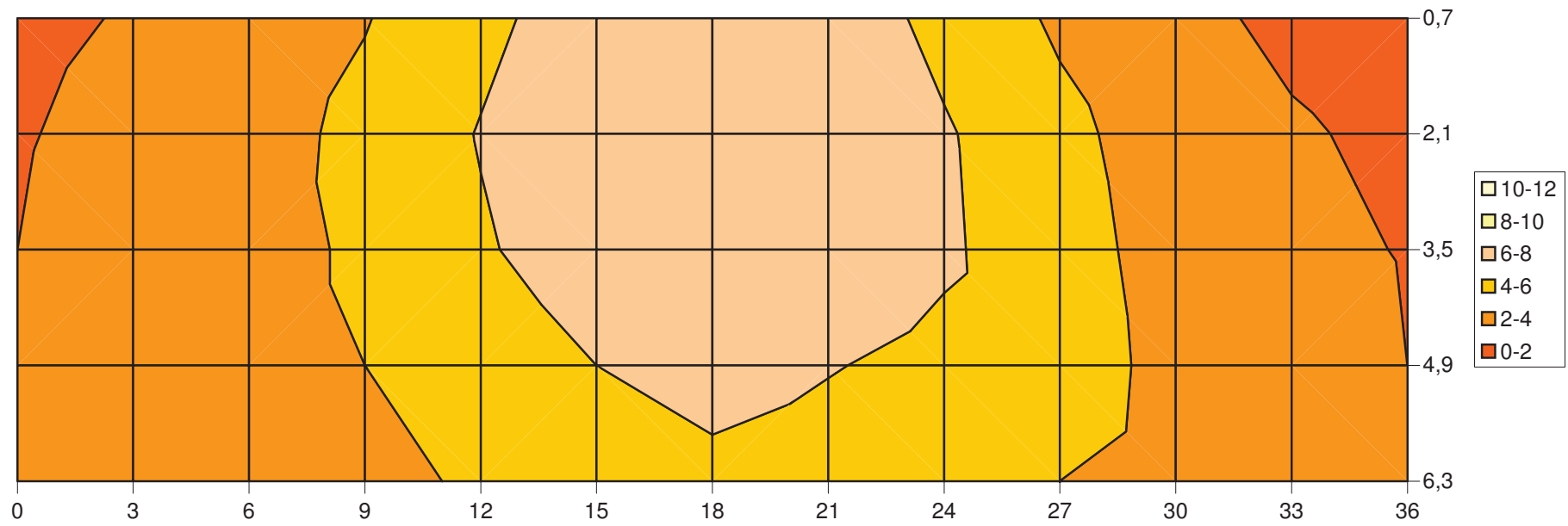


Annex III

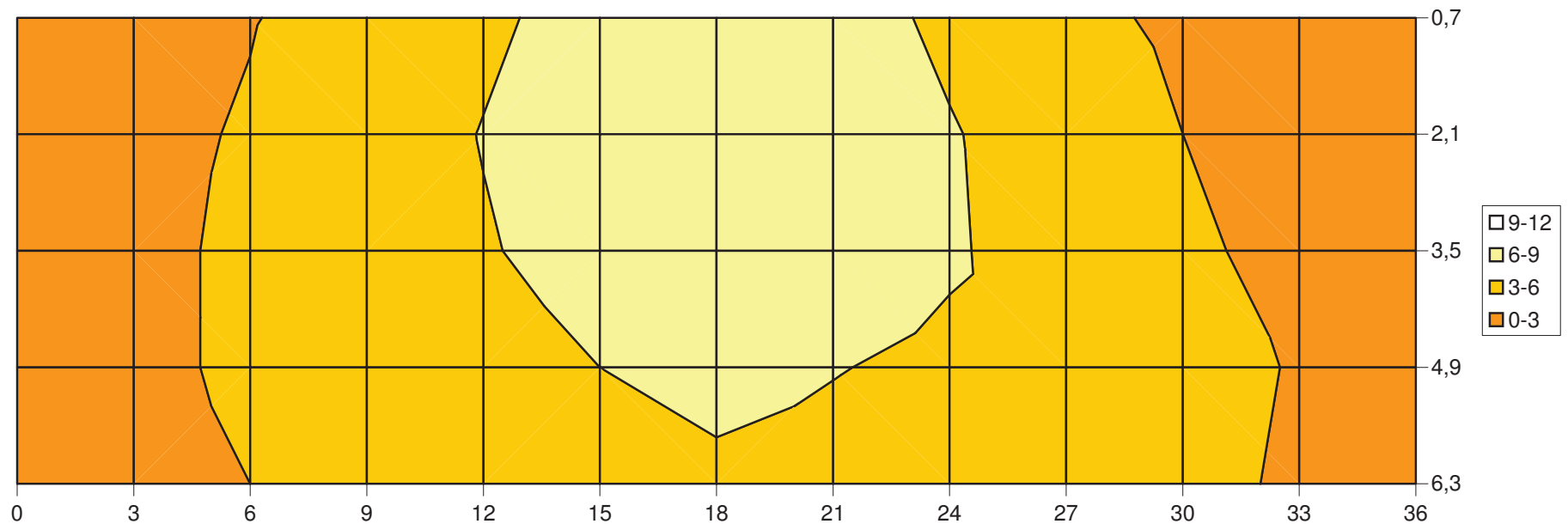
Isolux diagrams

Contemporary Lighting Sales

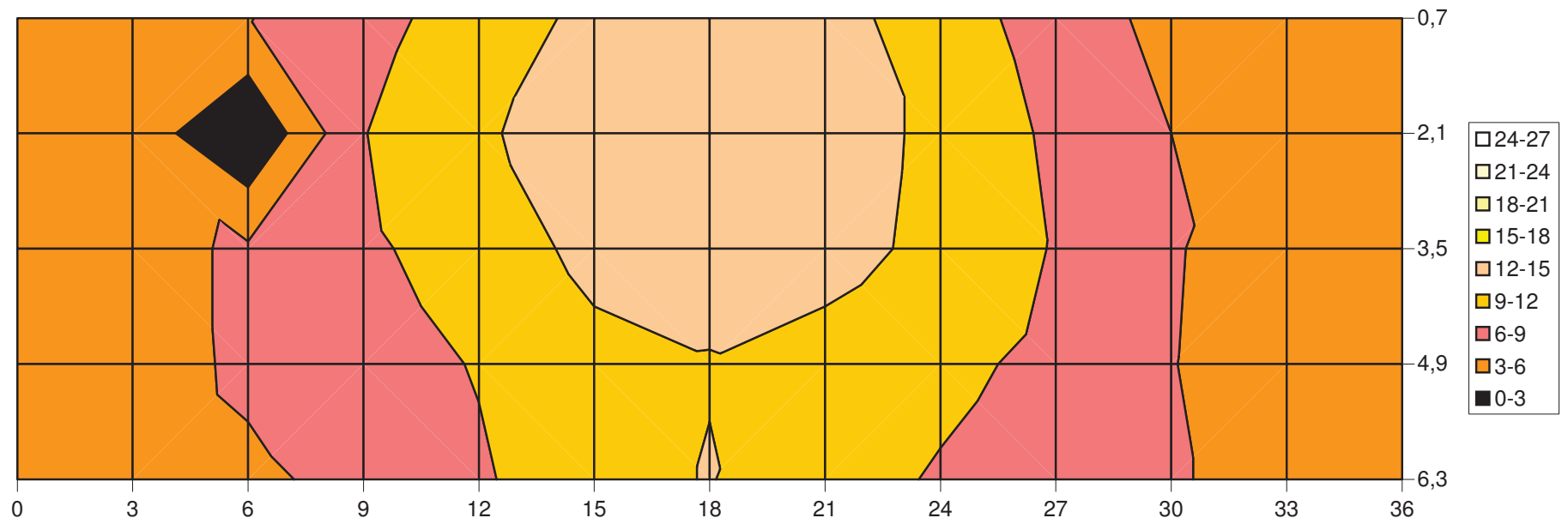
Isolux diagram Contemporary Lighting Sales



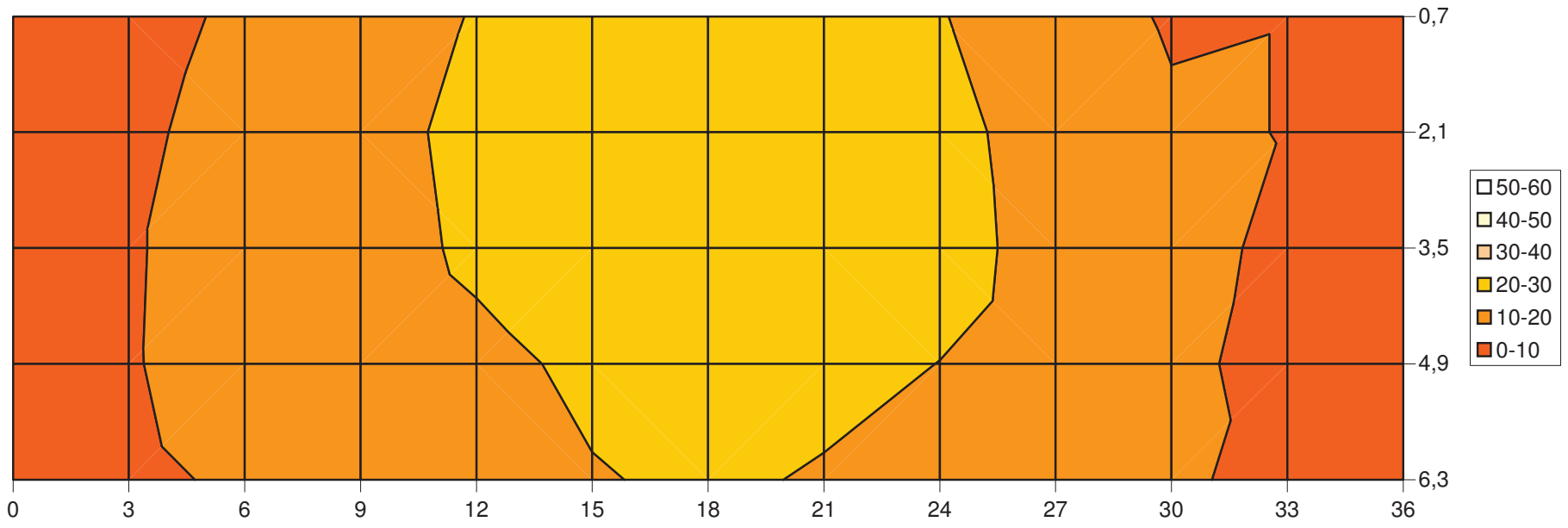
Isolux diagram Contemporary Lighting Sales



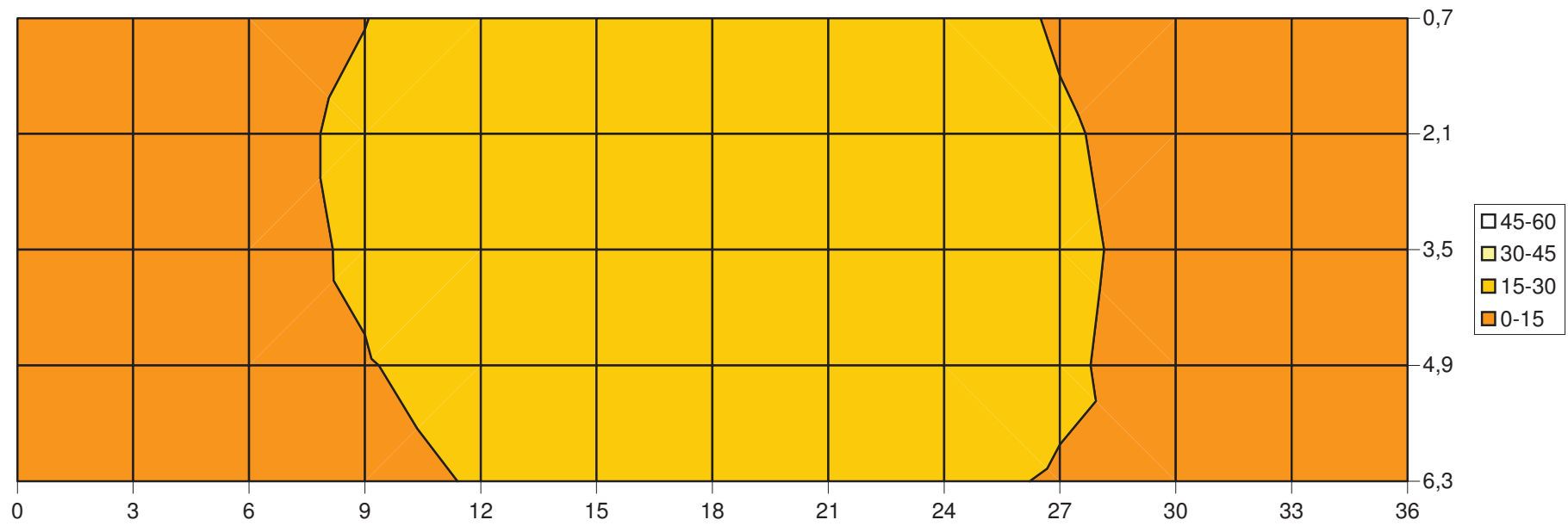
Isolux diagram Contemporary Lighting Sales



Isolux diagram Contemporary Lighting Sales



Isolux diagram Contemporary Lighting Sales

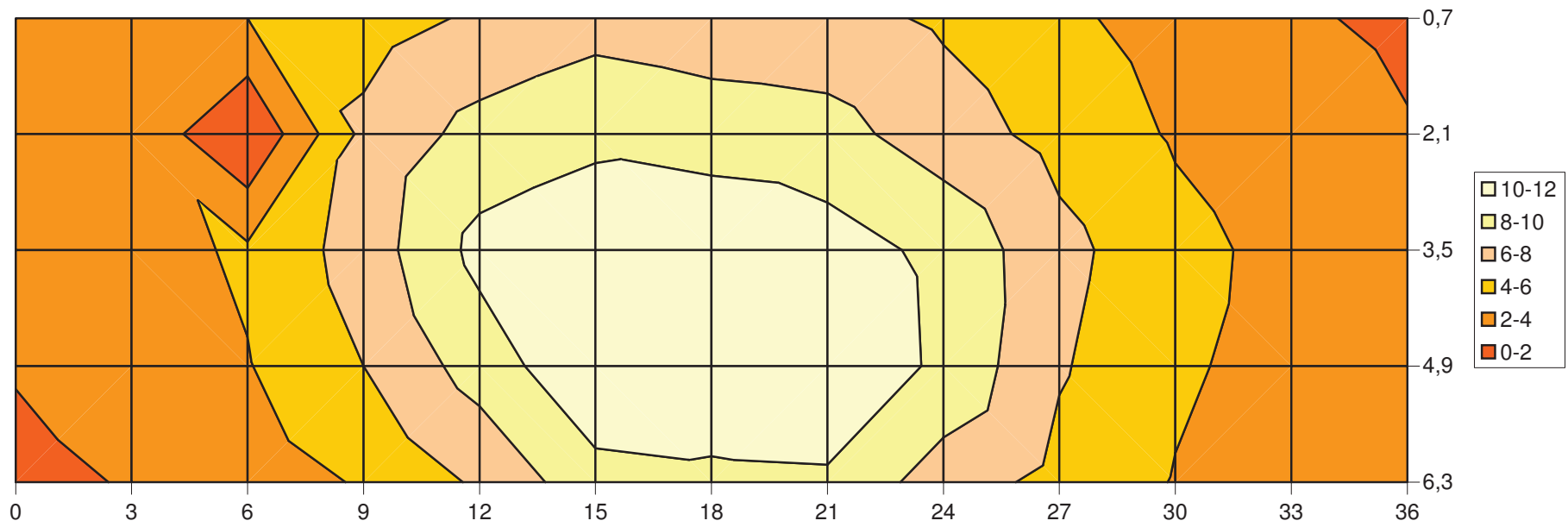


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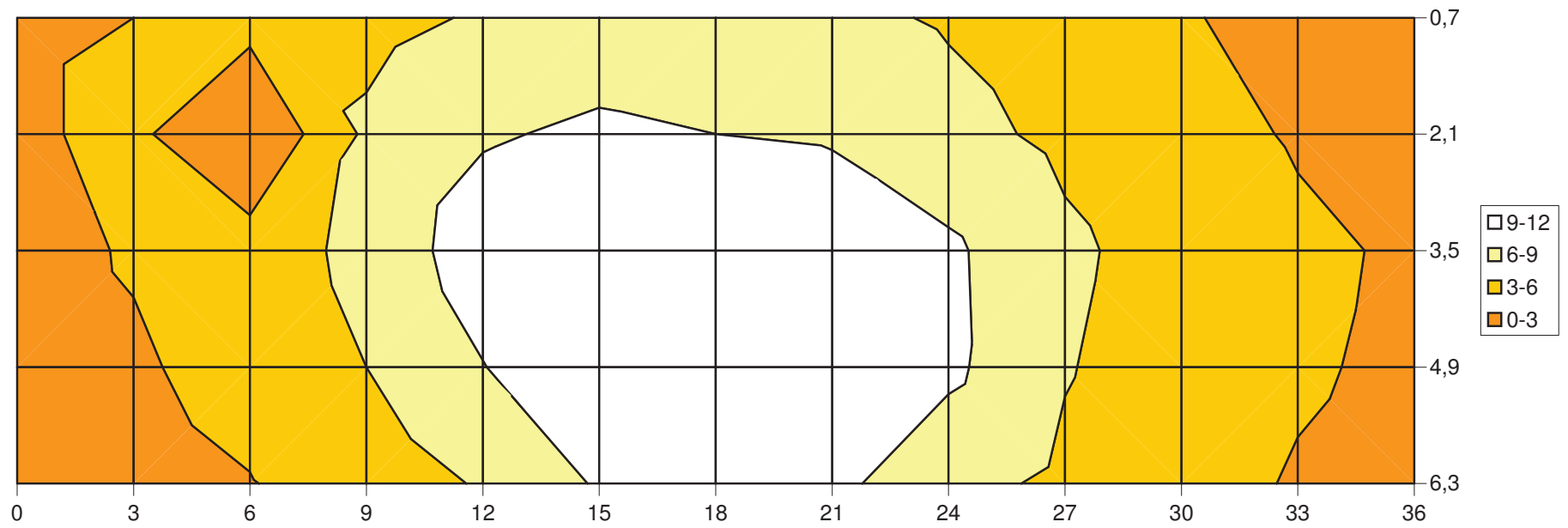
Isolux diagrams

Urbis lighting ltd

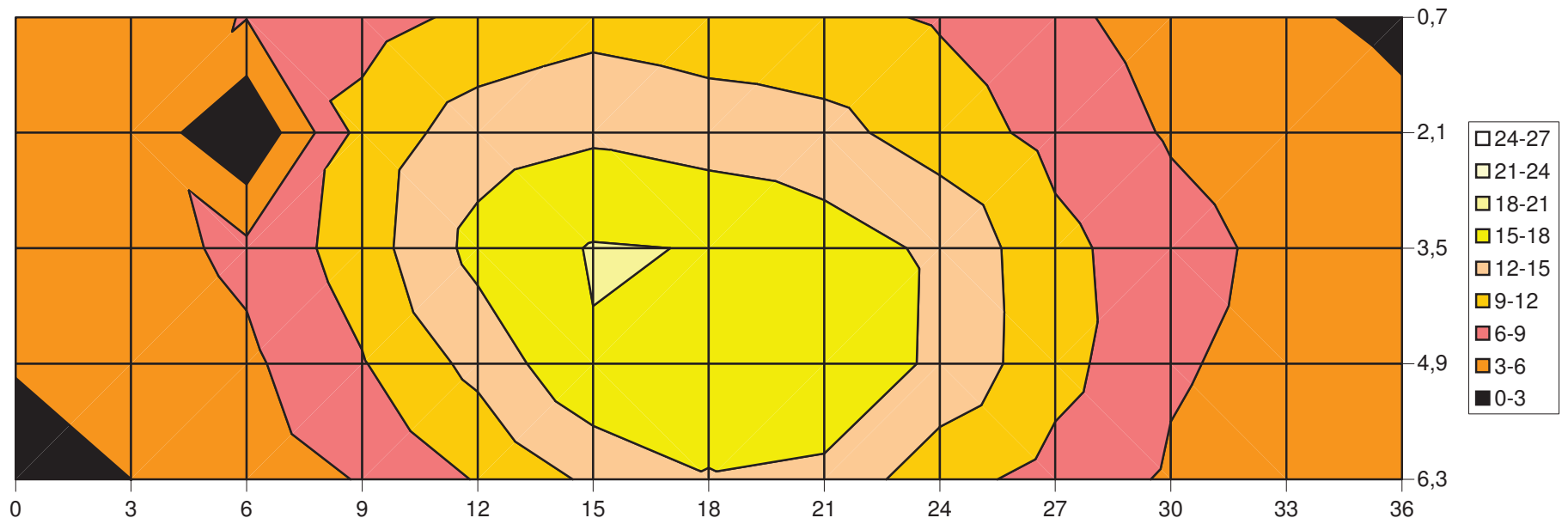
Isolux diagram Urbis LED



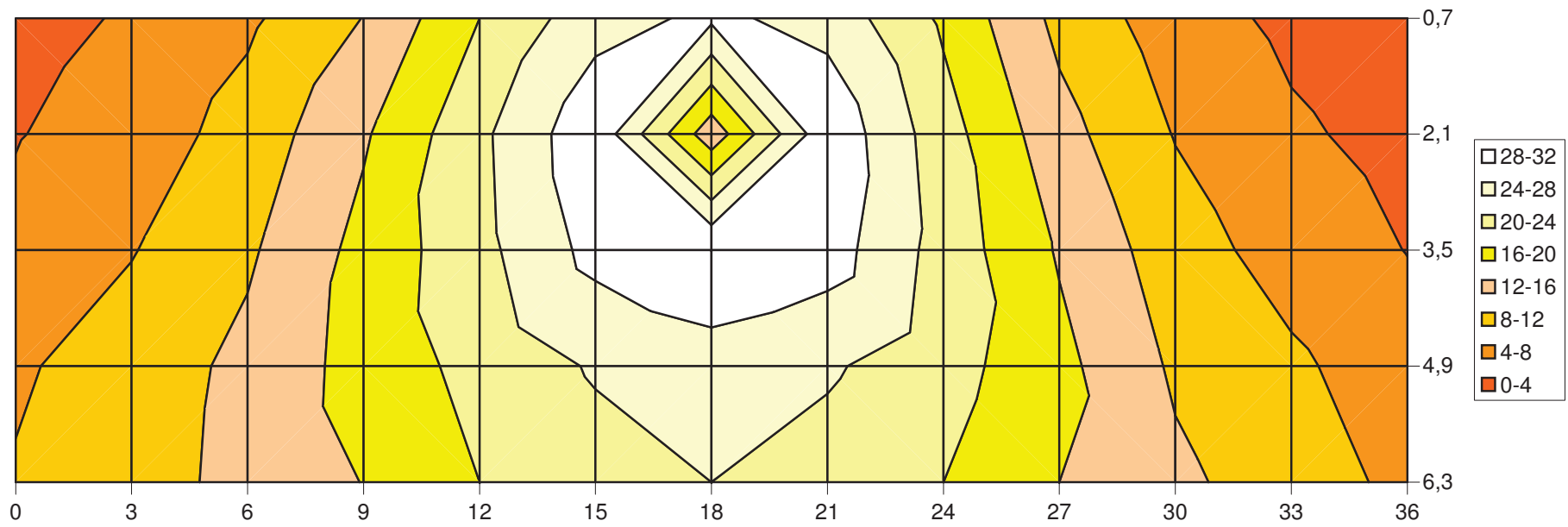
Isolux diagram Urbis LED



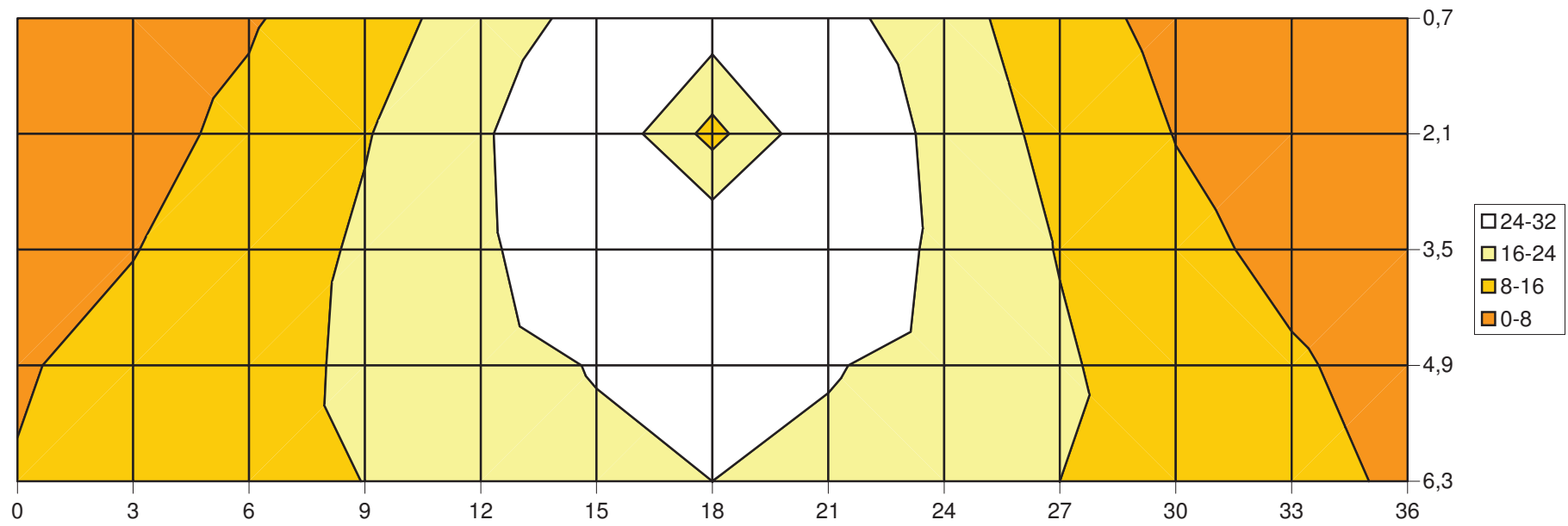
Isolux diagram Urbis LED



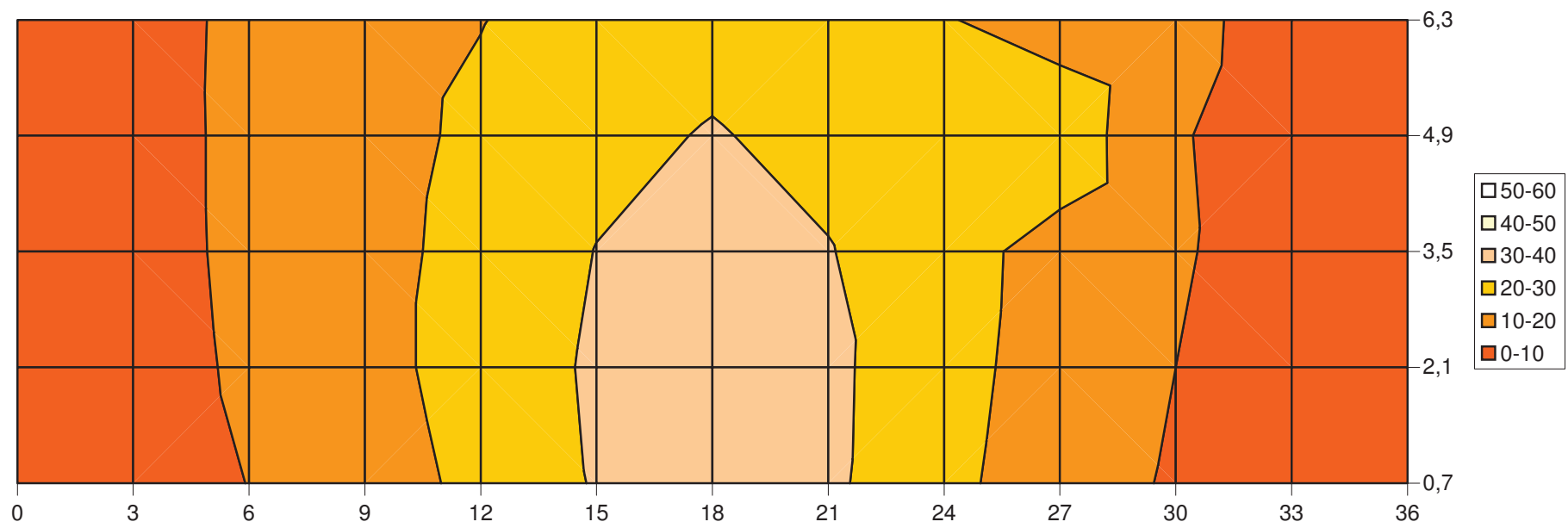
Isolux diagram Urbis LED



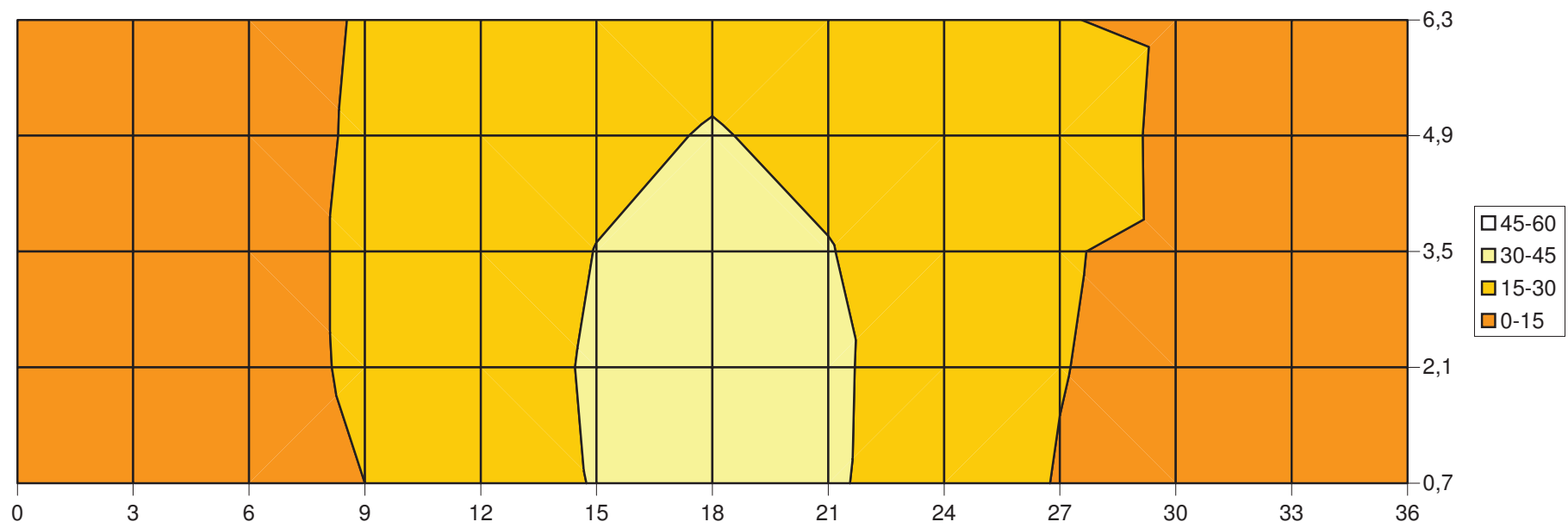
Isolux diagram Urbis LED



Isolux diagram Urbis LED



Isolux diagram Urbis LED

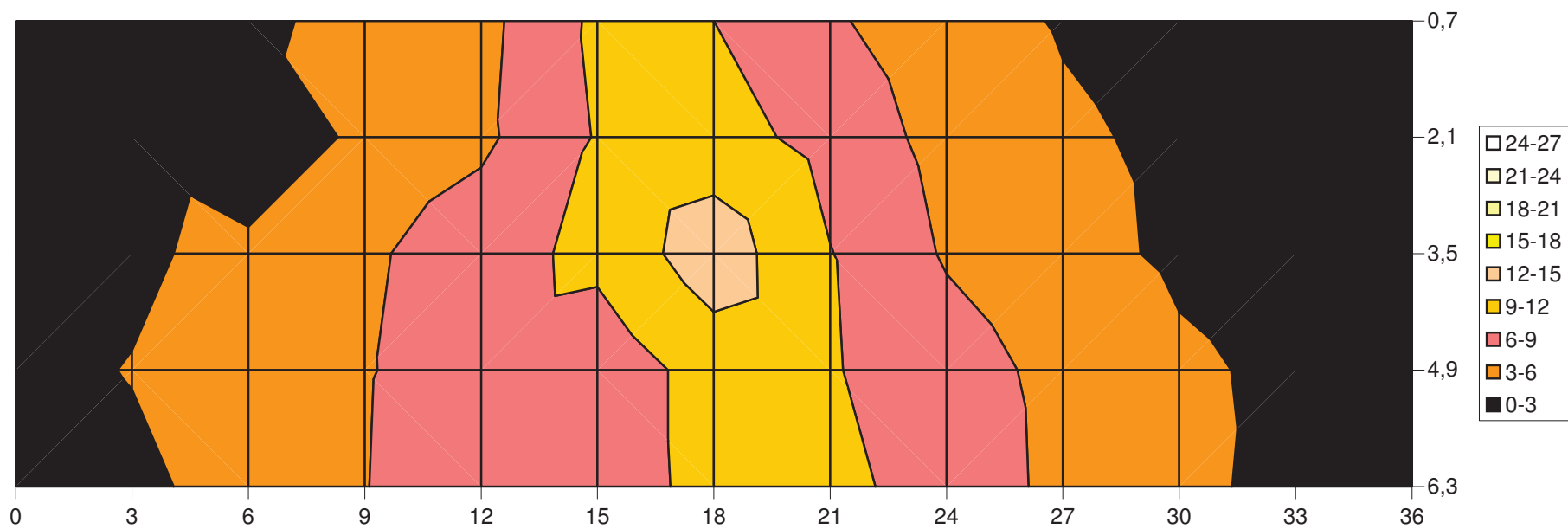


Annex III

Isolux diagrams

Swarco

Isolux diagram Swarco LED

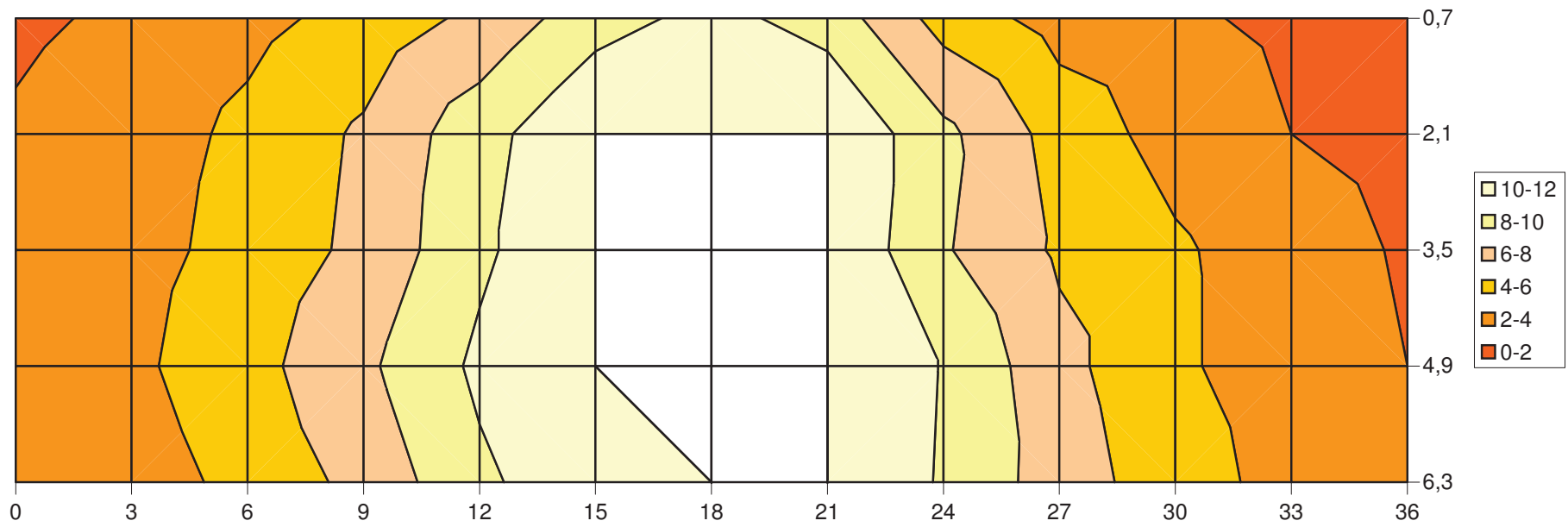


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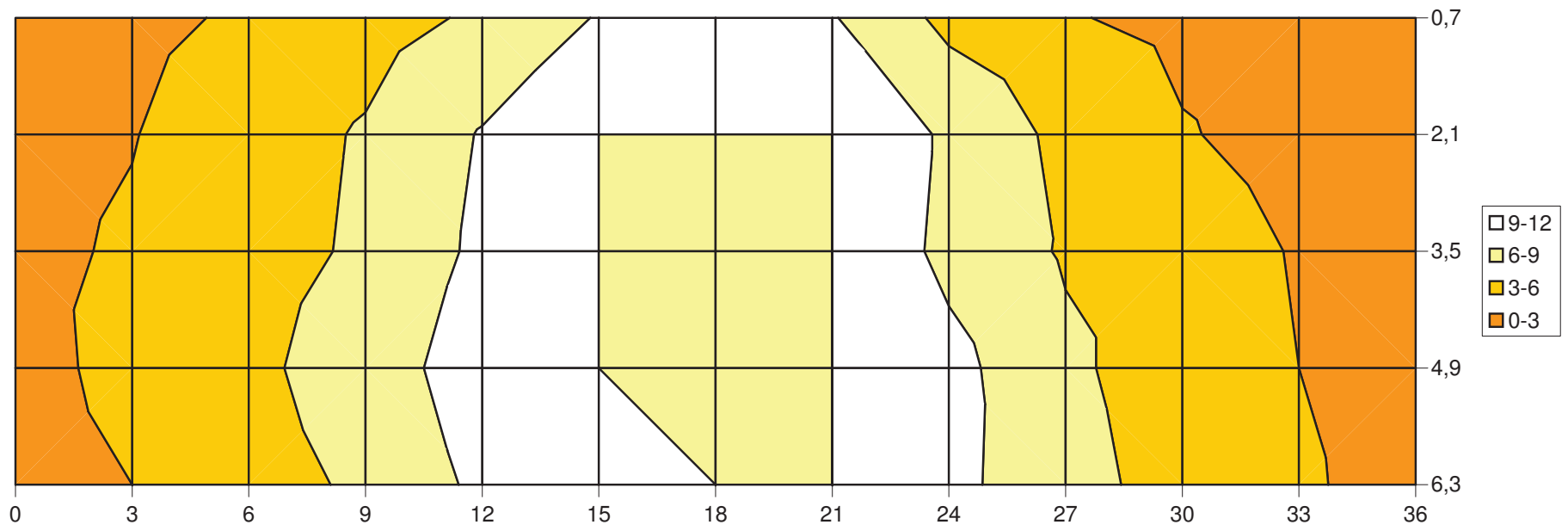
Isolux diagrams

LEDenergy

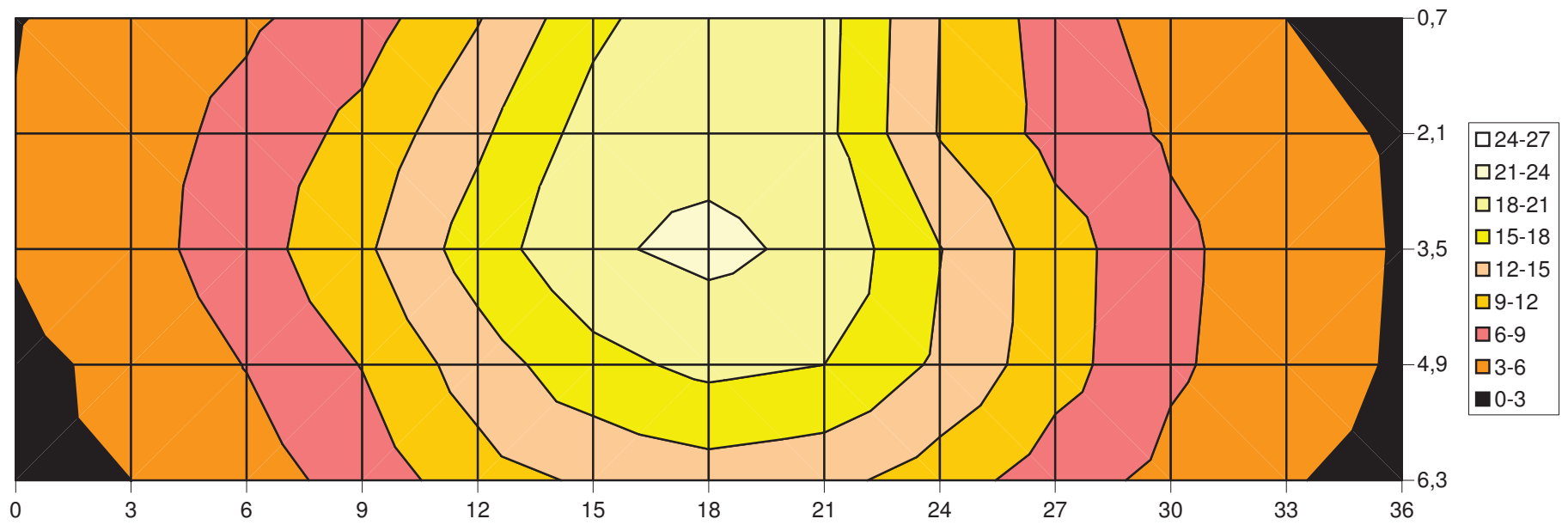
Isolux diagram LEDenergy



Isolux diagram LEDenergy



Isolux diagram LEDenergy

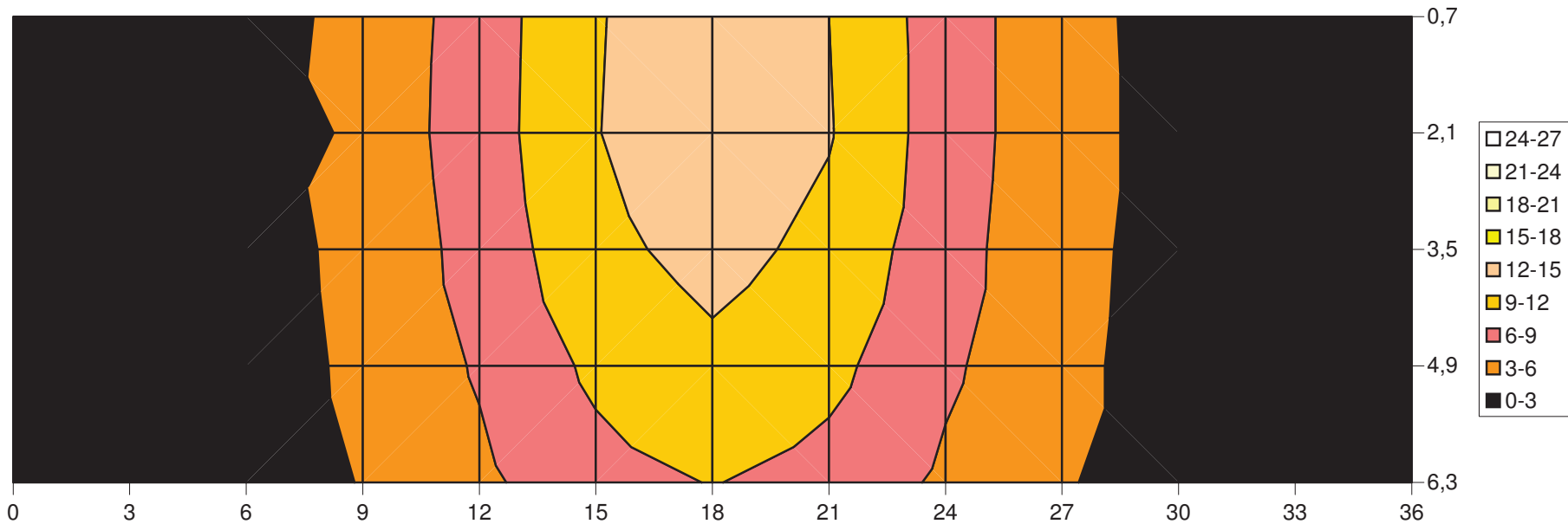


Annex III

Isolux diagrams

Caribbean LED Lighting Ltd.

Isolux diagram CLLL

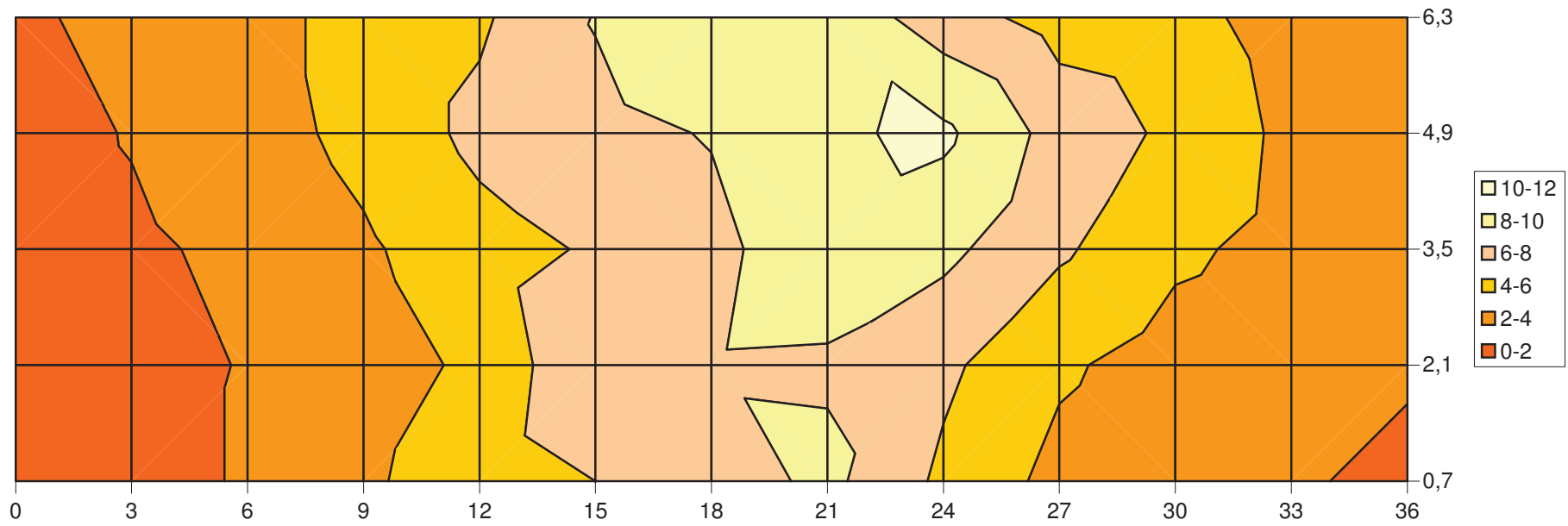


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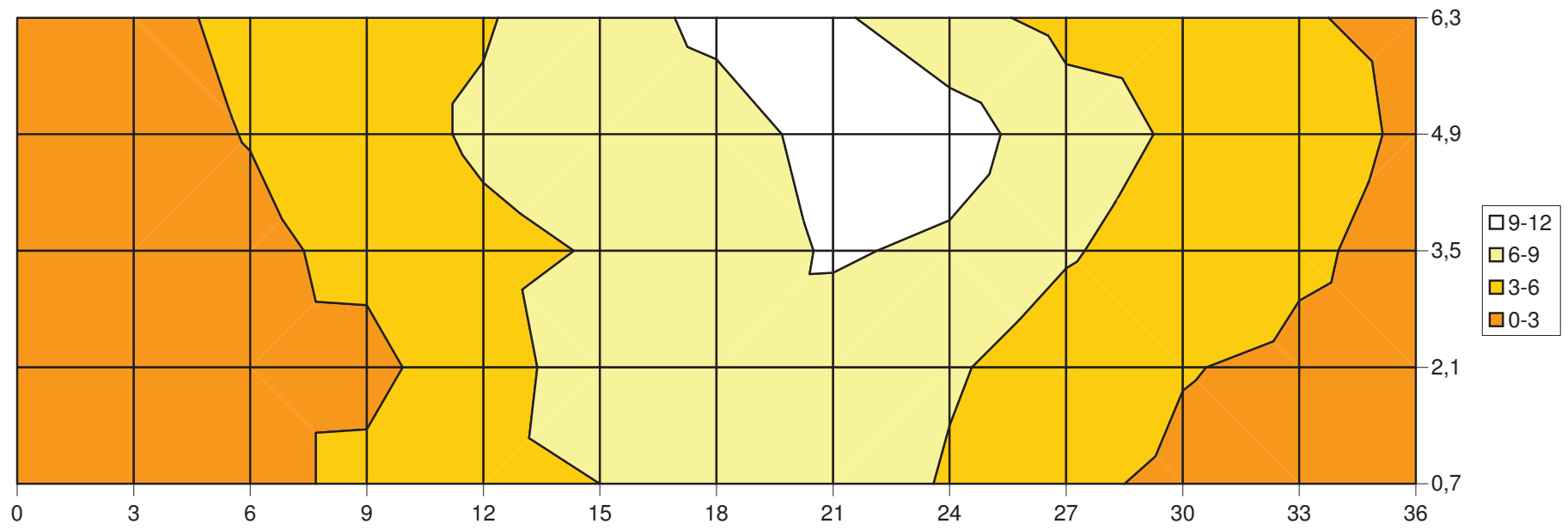
Isolux diagrams

Urbis lighting ltd - HPS luminaire

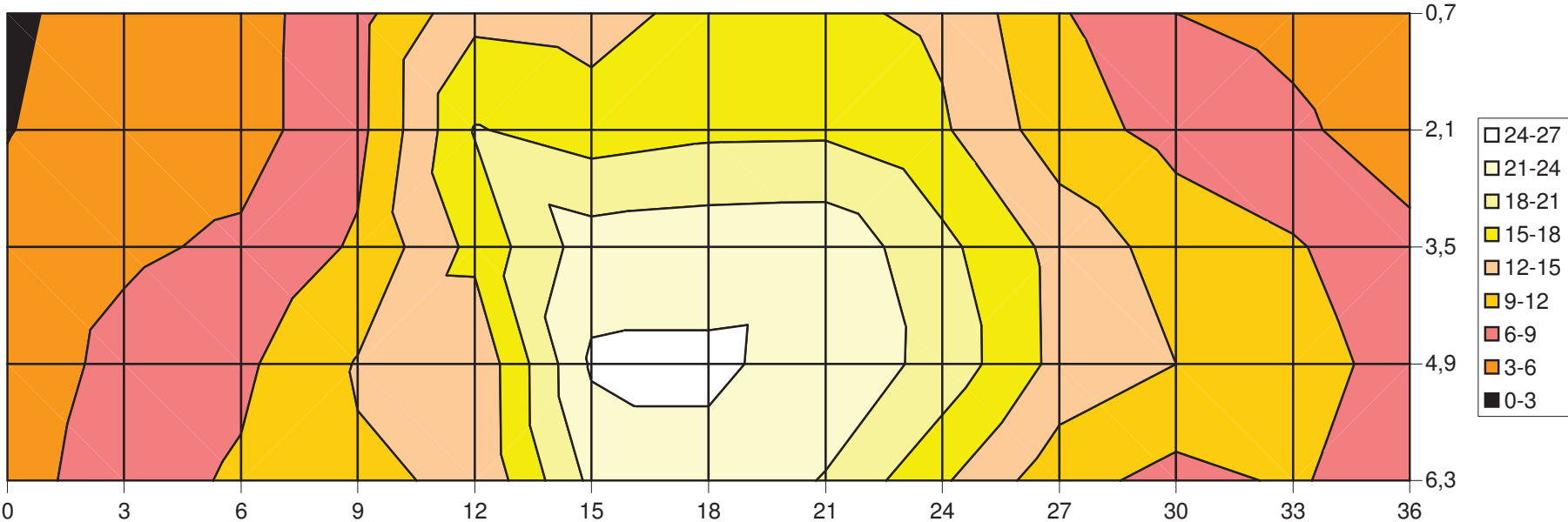
Isolux diagram 50W HPS



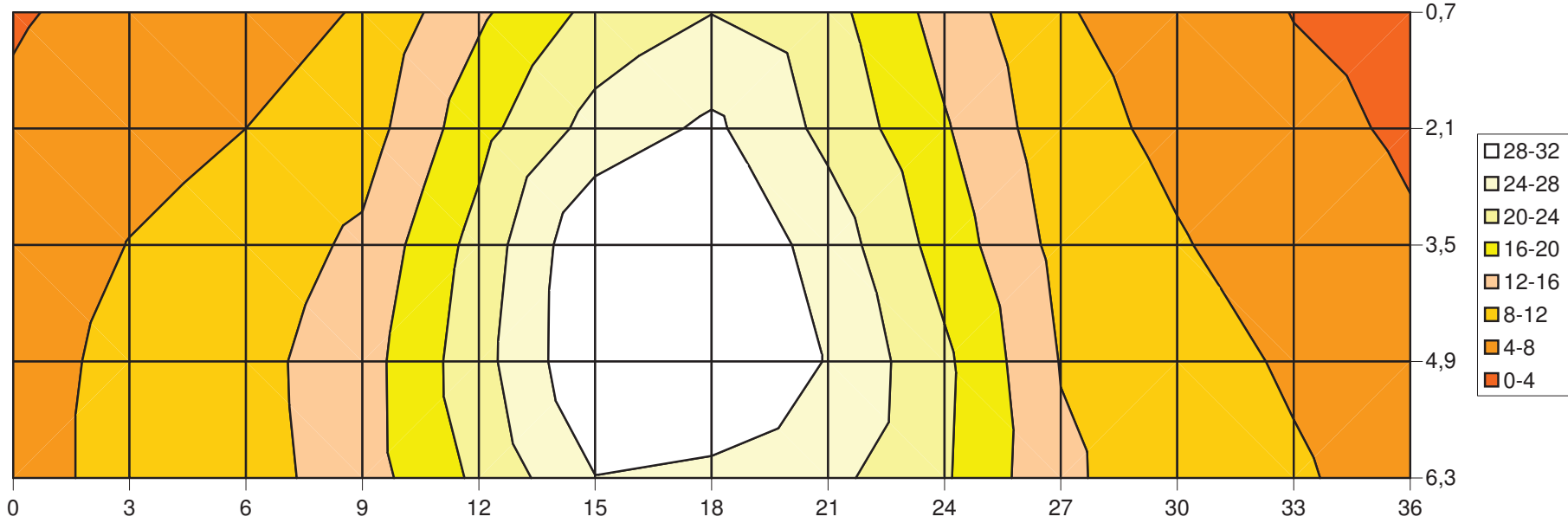
Isolux diagram 50W HPS



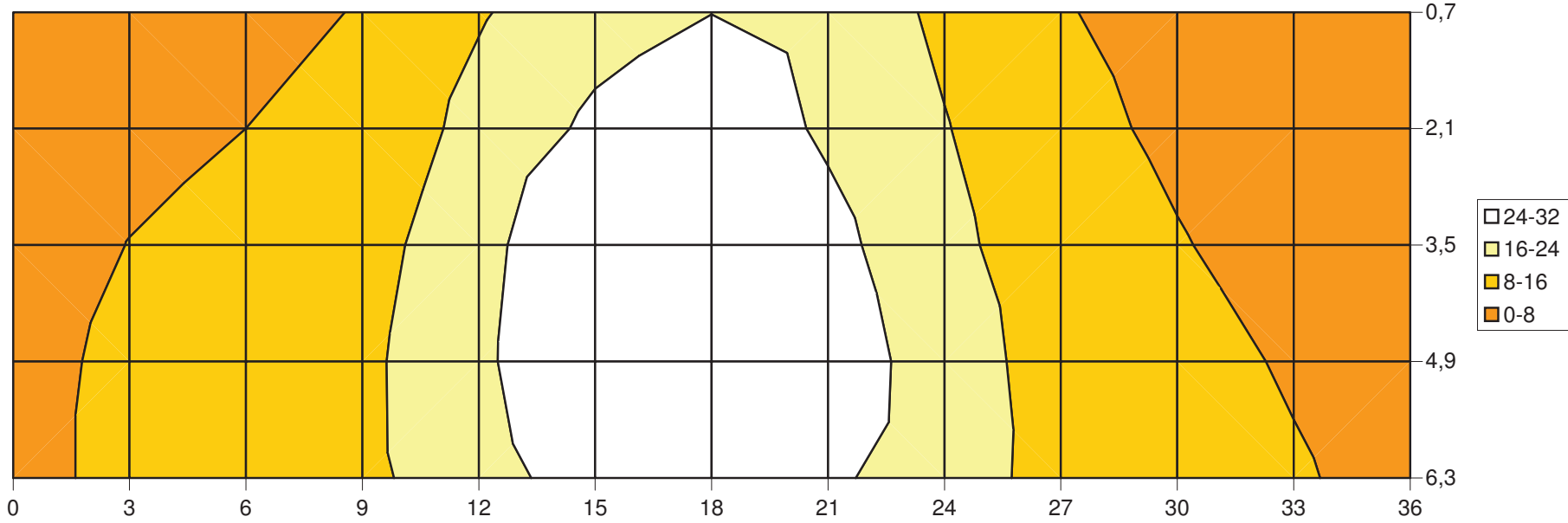
Isolux diagram 100W HPS



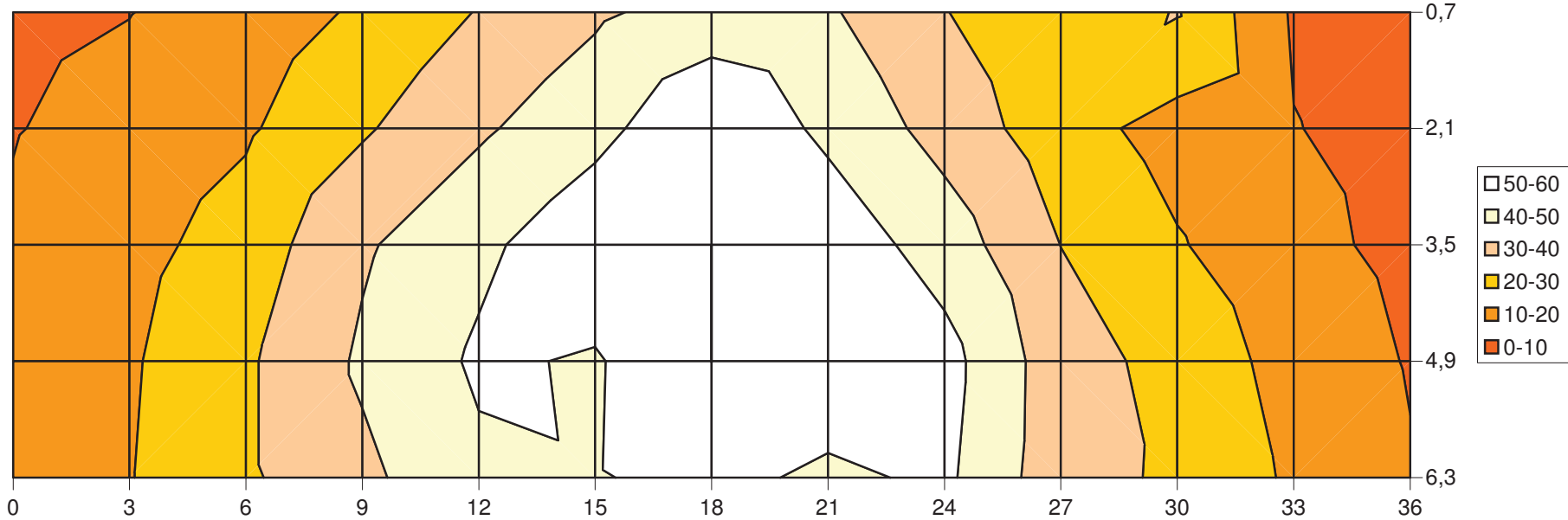
Isolux diagram 150W HPS



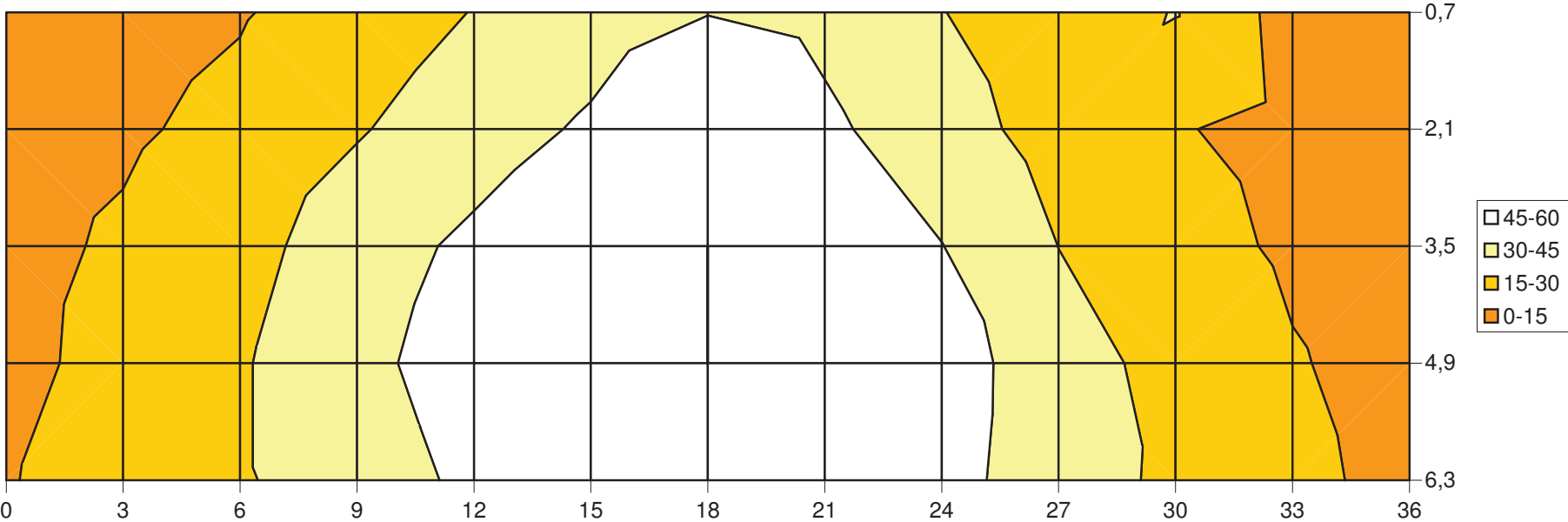
Isolux diagram 150W HPS



Isolux diagram 250W HPS



Isolux diagram 250W HPS



Annex IV

Picture documentation - components of the luminaire

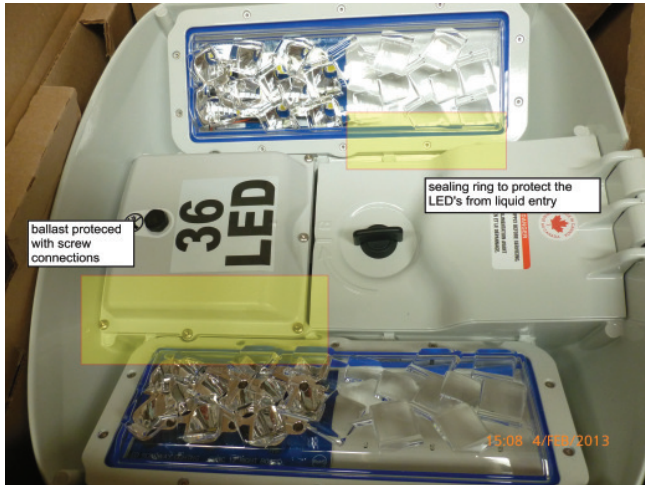
Annex IV

Picture documentation - components of the
luminaire

LED Roadway Lighting

LED Roadway Lighting

STEPConsult GmbH
On behalf of
VINLEC, GIZ



open casing, robustly constructed



cooling fin, where rain can drain off

Annex IV

Picture documentation - components of the
luminaire

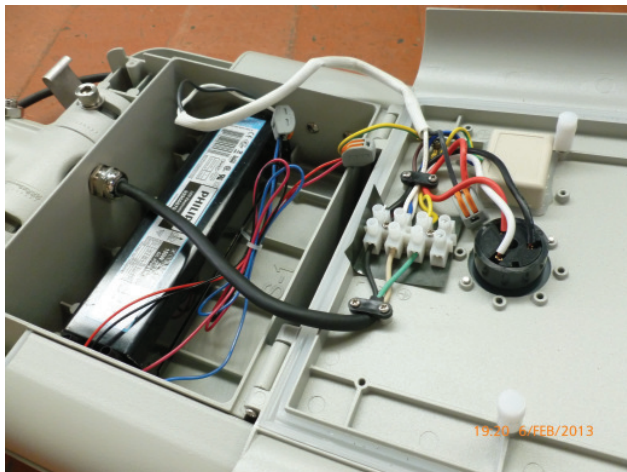
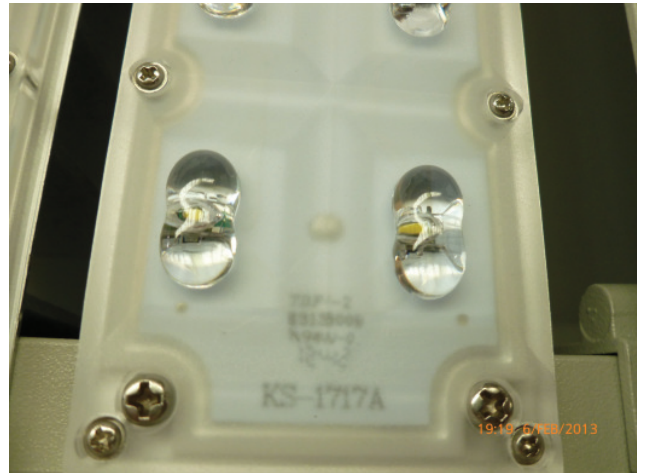
Maxlite Inc

Maxlite Inc

STEPConsult GmbH
On behalf of
VINLEC, GIZ



LED'S on different numbers of platines



electrical components clearly arranged



sealing ring



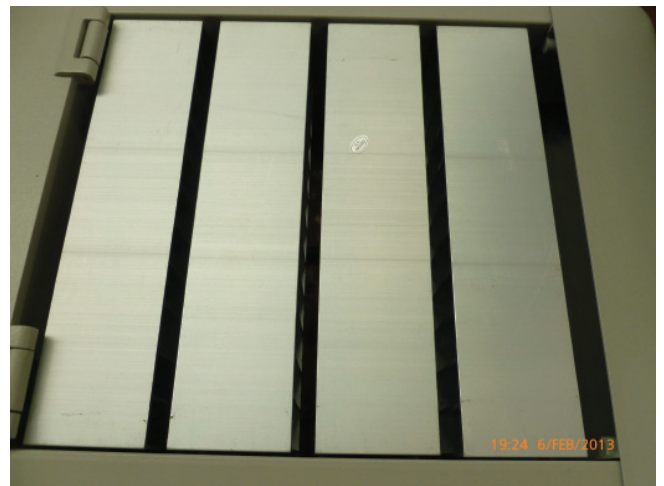
sealing ring



angle can be adjusted



replacement for 50W



cooling device like a framwork

Annex IV

Picture documentation - components of the
luminaire

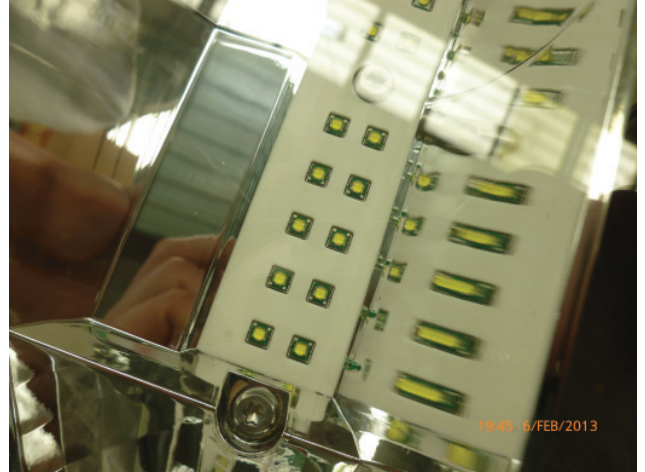
Peco International Electric In

Peco International Electric In

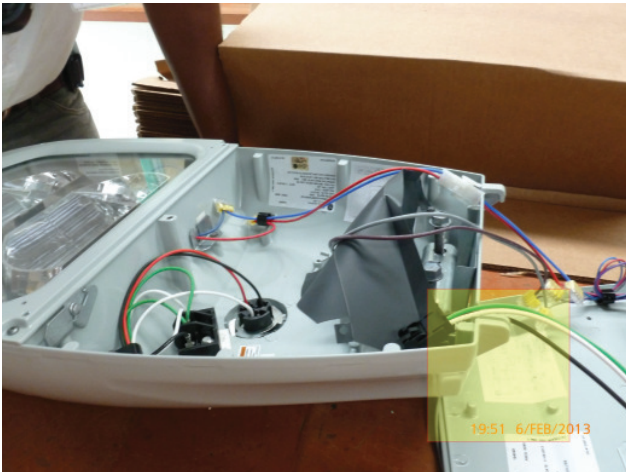
STEPConsult GmbH
On behalf of
VINLEC, GIZ



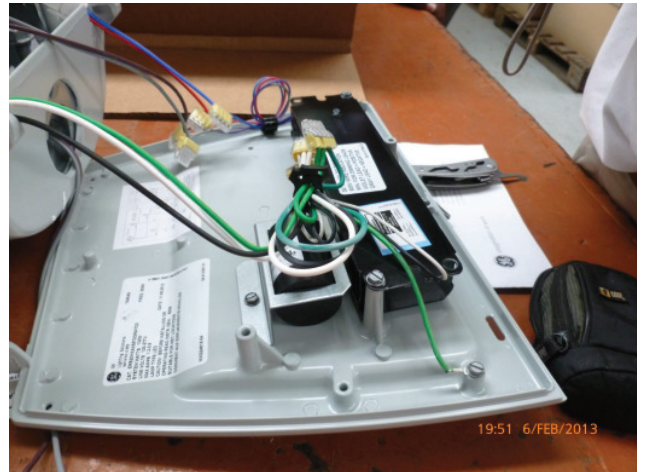
closed with a screw connection



Optic: Reflector



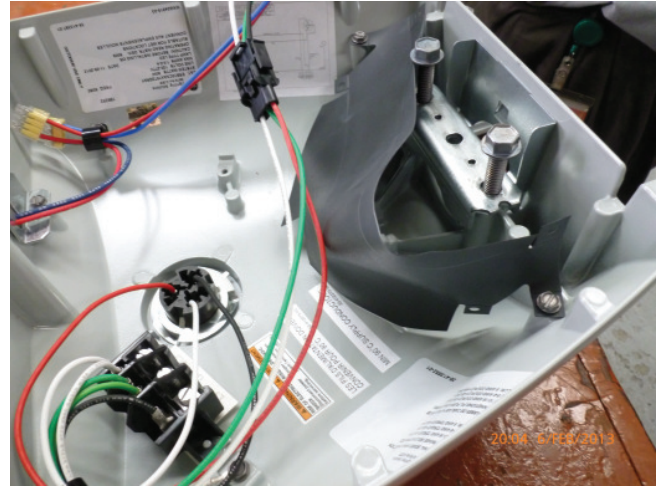
no well-constructed mounting point



cooling device is flat, water collects in it



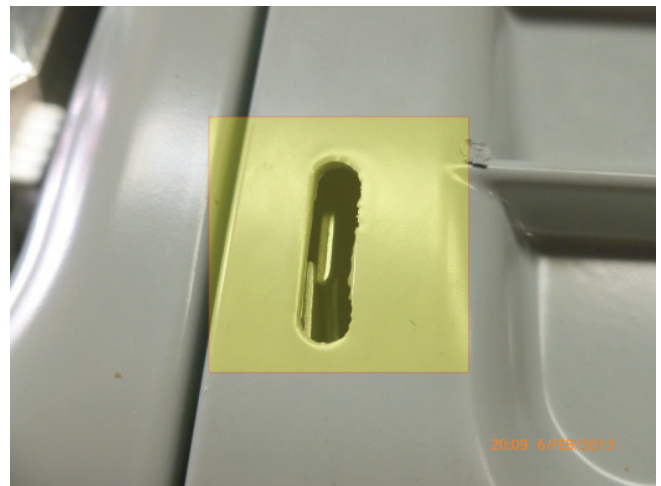
second cooling device at the bottom



cardboard inside



hole at the flap --> water can get into the luminaire



hole at the flap --> water can get into the luminaire

Annex IV

Picture documentation - components of the
luminaire

Lemnis Lighting

Lemnis Lighting

STEPConsult GmbH
On behalf of
VINLEC, GIZ



LED platines at the sides



no cooling fin, heat conduction maybe over the whole body



well-structured electrical components



sealing ring

Lemnis Lighting

STEPConsult GmbH
On behalf of
VINLEC, GIZ



luminaire supplied with a broken photocell



luminaire opened from the top, open top cover just fixed with a cable



LED platines at the sides, Optic: reflector



top cover fixed with a screw



Annex IV

Picture documentation - components of the
luminaire

Contemporary Lighting Sales

Contemporary Lighting Sales

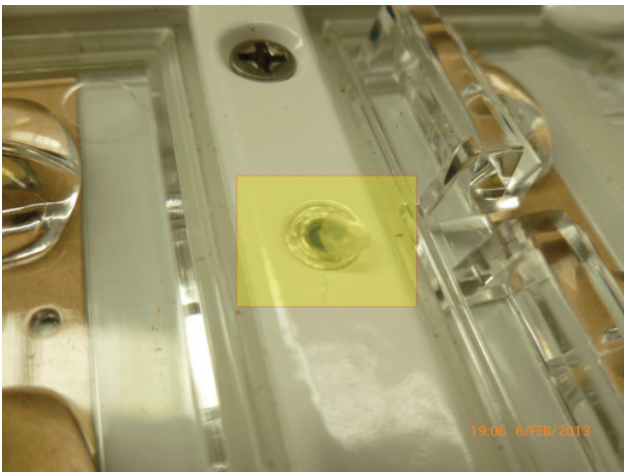
STEPConsult GmbH
On behalf of
VINLEC, GIZ



luminaire closed with a bracket



holes in the cooling device



screws filled with selicon

Contemporary Lighting Sales

STEPConsult GmbH
On behalf of
VINLEC, GIZ



flat cooling device --> water cannot drain off



slot --> water can get easily into the luminaire



hole (maybe for water to drain off?)

Annex IV

Picture documentation - components of the
luminaire

Urbis lighting ltd

Urbis lighting

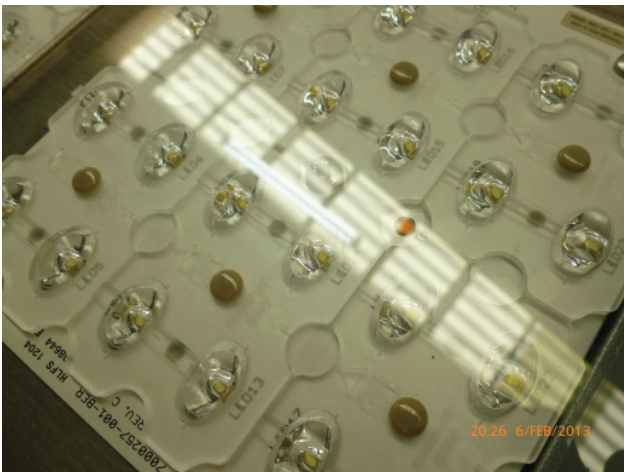
STEPConsult GmbH
On behalf of
VINLEC, GIZ



luminaire from the top, no visible cooling device



luminaire from the bottom, closed with screws



sealing ring



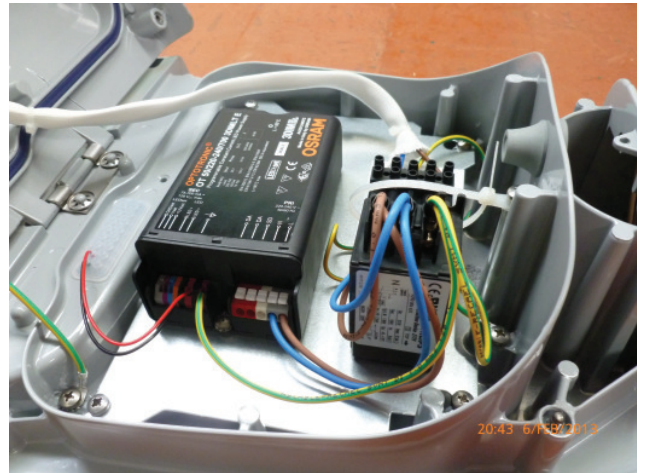
electrical components

Urbis lighting ltd

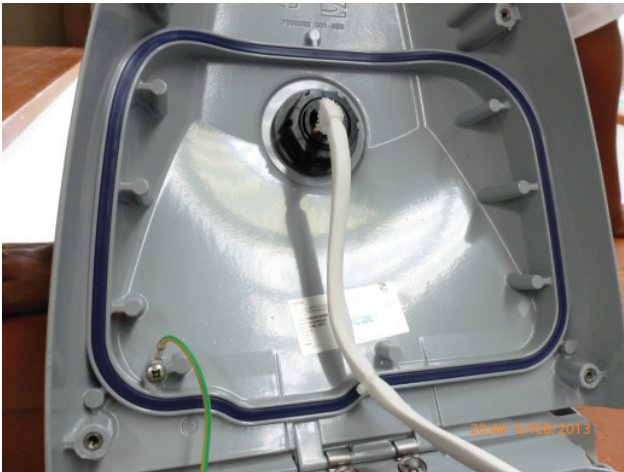
STEPConsult GmbH
On behalf of
VINLEC, GIZ



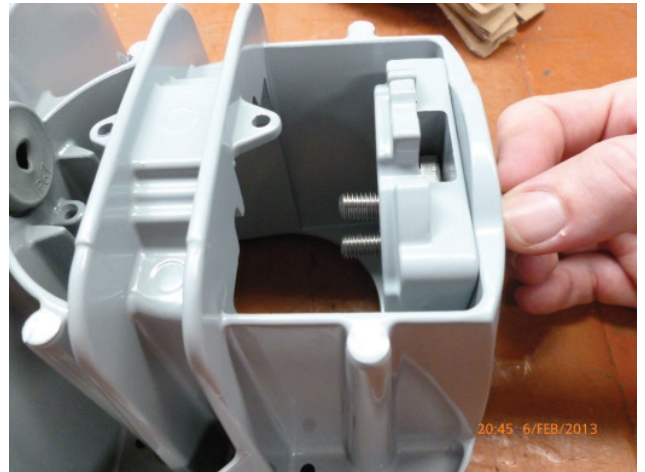
second type of Urbis, closed with screws



electrical components



sealing ring



adjustable as lateral or pole-top luminaire



Annex IV

Picture documentation - components of the
luminaire

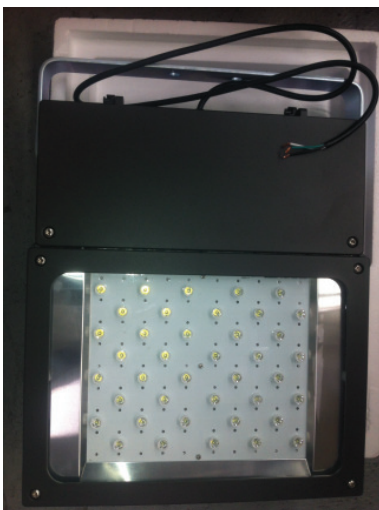
Swarco



heat conduction around the whole body



sealing ring inside the luminaire to protect the electrical components from humidity



optical element: reflector to direct the light

Annex V

Picture documentation - light distribution at the
test stand

Urbis lighting ltd - HPS luminaire

Urbis HPS - light distribution at Lowman's Bay

STEPConsult GmbH
on behalf of

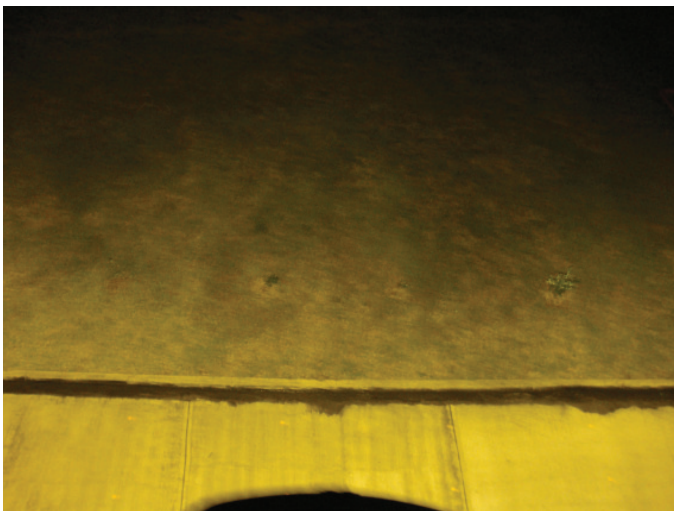
VINLEC, GIZ



light distribution of the 250W HPS
luminaire

out of the bucket truck down the street

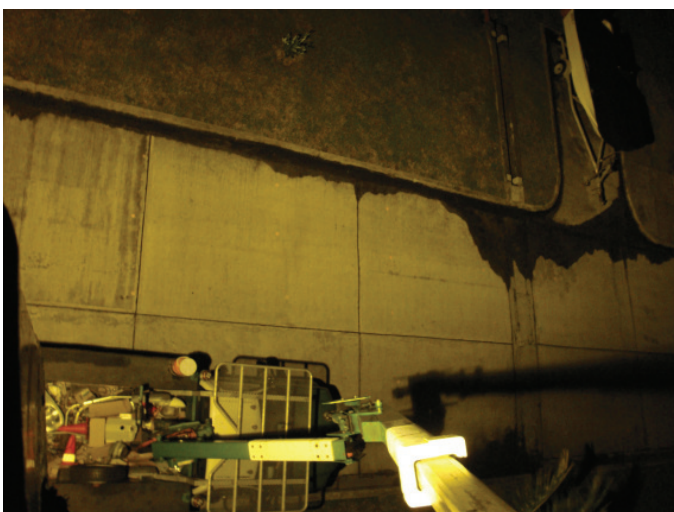
left side



light distribution of the 250W HPS
luminaire

out of the bucket truck down the street

to the front



light distribution of the 250W HPS
luminaire

out of the bucket truck down the street

right side

Annex VI

Picture documentation - light distribution at the
test road

Annex VI

Picture documentation - light distribution at the
test road

LED Roadway Lighting

LED Roadway Lighting - test road

STEPConsult GmbH
on behalf of

VINLEC, GIZ



light distribution of the _____ LED fixture

at the test road



light distribution of the _____ LED fixture

at the test road



light distribution of the _____ LED fixture

at the test road

Annex VI

Picture documentation - light distribution at the
test road

Maxlite Inc

MAXLITE - test road

STEPConsult GmbH
on behalf of

VINLEC, GIZ



light distribution of the _____ LED luminaire
test road

02-19-2013



light distribution of the _____ LED luminaire
test road

02-19-2013



light distribution of the _____ LED luminaire
test road

02-19-2013

Annex VI

Picture documentation - light distribution at the
test road

Peco International Electric In

Peco - test road

STEPConsult GmbH
on behalf of

VINLEC, GIZ



light distribution of the _____ LED luminaire
test road

03-05-2013



light distribution of the _____ LED luminaire
test road

03-05-2013



light distribution of the _____ LED luminaire
test road

03-05-2013

Annex VI

Picture documentation - light distribution at the
test road

Contemporary Lighting Sales

Contemporary Lighting Sales - test road

STEPConsult GmbH
on behalf of

VINLEC, GIZ



Installation of the _____ LED luminaire

test road

03-12-13



Light distribution of the _____ LED luminaire

test road

03-12-13



Light distribution of the _____ LED luminaire

test road

03-12-13

Annex VI

Picture documentation - light distribution at the
test road

Urbis lighting ltd



light distribution of the _____ LED luminaire

test road

03-20-2013



light distribution of the _____ LED luminaire

test road

03-20-2013



light distribution of the _____ LED luminaire

test road

03-20-2013

Annex VI

Picture documentation - light distribution at the
test road

Swarco

Swarco - light distribution at Questelles

STEPConsult GmbH
on behalf of

VINLEC, GIZ



light distribution of the _____ LED luminaire
test road

06-03-2013



light distribution of the _____ LED luminaire
test road

06-03-2013



light distribution of the _____ LED luminaire
test road

06-03-2013

Annex VI

Picture documentation - light distribution at the
test road

LEDenergy

LEDenergy - light distribution at Questelles

STEPConsult GmbH
on behalf of

VINLEC, GIZ



light distribution of the _____ LED luminaire

03-26-2013

test road



light distribution of the _____ LED luminaire

03-26-2013

test road



light distribution of the _____ LED luminaire

03-26-2013

test road

Annex VI

Picture documentation - light distribution at the
test road

Caribbean LED Lighting Ltd

CLLL - light distribution at Questelles

STEPConsult GmbH
on behalf of

VINLEC, GIZ



light distribution of the _____ LED luminaire

05-08-2013

test road



light distribution of the _____ LED luminaire

05-08-2013

test road



light distribution of the _____ LED luminaire

05-08-2013

test road