

Photometric Laboratory

Measurement report 202468G001

Name and address of customer

Kacem Electronic Industry
Kerkennah 3070
Sfax, Tunisia

Description of device under test („DUT“)

Kacem Electronic Industry
Play III

Type of luminaire/lamp

1 x Osram Vialox NAV-T 4Y Super (SON-T Plus)
250W E40

Electronic gear

Kacem Electronic Industry Na-Na Oghl.250
250W Ref: 825003

Date of receipt of DUT

05.10.2015

Date of measurement

19.10.2015

Details of order

Measurement of light distribution and luminous flux according to EN 13032-1:2012-06

Measurement procedure

Measurement in an eccentric goniometer with rotating mirror according to EN 13032-1:2012-06

Instructions for measurement

QMMA01 Test instruction for the measurement of light distribution and colorimetric values in the goniometer with rotating mirror

Comments

Certification

The results apply solely to the above-mentioned measuring configuration. The implementation of other luminaires, operation equipment and lamps will lead to different results. If these measurements are to be repeated, then the devices under test are marked with the label "DUT" and the report number which should be retained by the customer.

Measurement uncertainty

This report refers to the expanded measurement uncertainty arising from the multiplication of the standard uncertainty in measurement by the extended tolerance factor $k = 2$. The measurement uncertainty arises from a combination of the uncertainty in measurement within the procedure itself and in the object being tested.

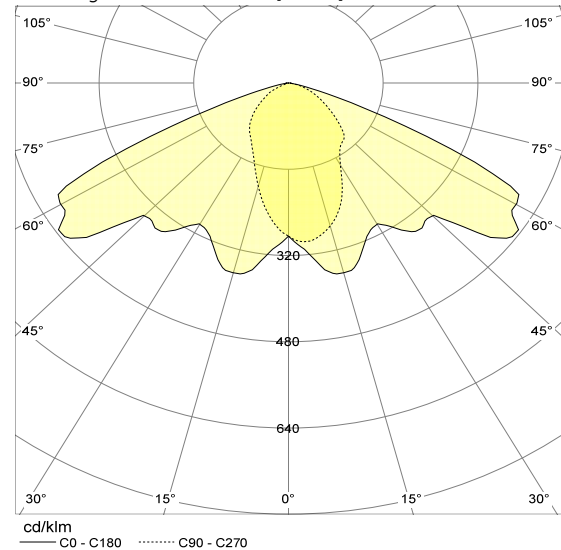
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Bahnhofsallee 18
D · 58507 Lüdenscheid
Phone +49 (0) 2351-5674-400
Fax +49 (0) 2351-5674-410
internet: www.dial.de
e-mail: dialog@dial.de

Result: Light distribution curve [cd/klm]



Result: Light output ratio (LOR)*

LOR = 76.7 %

Result: Measured values

Lamp luminous flux	36,541.0 lm
Luminaire luminous flux	28,022.2 lm
Upper hemisphere	Lower hemisphere
0.0 lm	28,022.2 lm
0.0 %	100.0 %
Efficacy of luminaire	86.7 lm/W

Nominal values

Lamp luminous flux	33,200.0 lm
Luminaire luminous flux	25,460.1 lm
Upper hemisphere	Lower hemisphere
0.0 lm	25,460.1 lm
0.0 %	100.0 %

*Measuring uncertainty at $k=2$ 5.0 %

Lüdenscheid, 18.12.2015

Thomas Pittner M.Sc., Lighting team

Felix Schirmer, Lighting team

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Customer
Kacem Electronic Industry

Date of measurement
19.10.2015

Device
Kacem Electronic Industry
Play III

Total nominal luminous flux
 $\Phi = 33,200 \text{ lm}$

Result: Maximum light intensity at $C = 0.0^\circ$ and $\gamma = 55.0^\circ$
474.8 cd /klm

Result: Symmetrical properties
symmetrical to C90/C270

Position of device
according to customer
horizontal

during measurement
horizontal

Light centre
Light output

Coordinates		
Starting angle C	Final angle C	Measured in C steps
0.0°	357.5°	2.5°
Starting angle γ	Final angle γ	Measured in γ steps
0.0°	90.0°	2.5°

Luminaire dimensions [mm]		
Length	Width	Height
730	300	220

Dimensions of illuminated/luminous area [mm]		
Length	Width	Height
360	250	0

Stability of luminous flux of lamp and/or luminaire
< 0.3 %

Classification	
DIN 5040 Teil 2	A40
BZ (CIBSE TM 5)	BZ 5/1.50/BZ 4
UTE C71-121	0.76D
CIE FLUX CODE	49 83 99 100 76

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DUT

- (1) 1 x Vialox NAV-T 4Y Super (SON-T Plus)
250W E40
(1 x HST 250W)

Nominal luminous flux / Measured luminous flux
(1) $\Phi = 33,200.0 \text{ lm} / 36,541.0 \text{ lm}$

Control gear / Ballast
(1) Na-Na Oghl.250 250W Ref: 825003

Ambient temperature during measurement [°C]

Measuring point	T _{MIN}	T _{MAX}	T _{AVG}
Environment	24.9	25.1	25.0

Electrical operating parameters

Measuring point	U [VAC]	I [A]	P [W]
Primary circuit	230.0	1.519	323.3

Test Equipment

- (1) Device: AC Power Source
Brand: Hewlett Packard
Type: 6813A
- (2) Device: Digital Power Meter
Brand: Yokogawa
Type: WT-210
- (3) Device: Eccentric goniophotometer with
rotating mirror
Brand: Czibula&Grundmann GmbH
Type: Unique
- (4) Device: Standard Light Source
Brand: Czibula&Grundmann GmbH
Type: WI-41

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light. building. software.

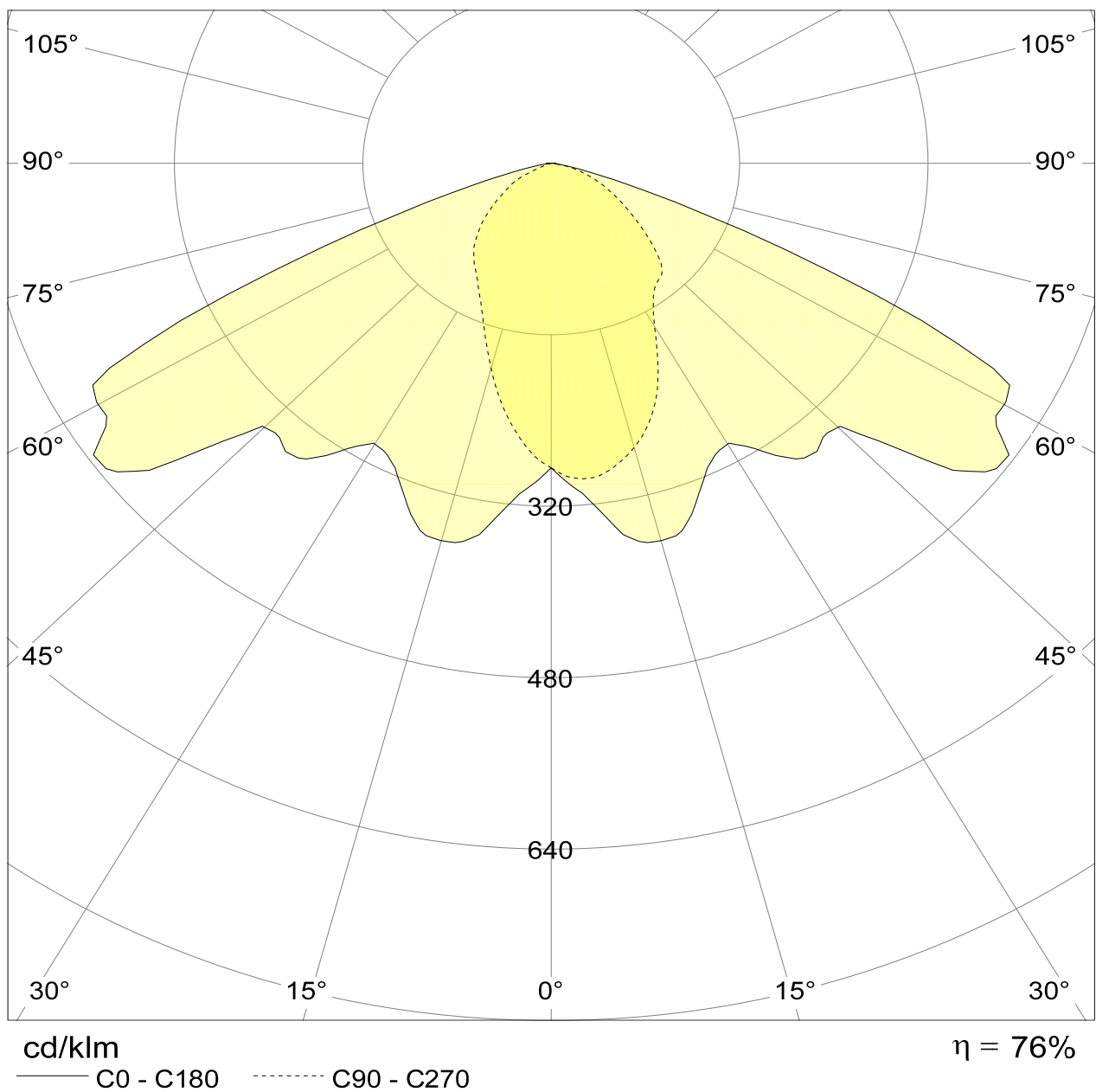
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Total nominal luminous flux
 $\Phi = 33,200 \text{ lm}$

Result: polar light distribution diagram



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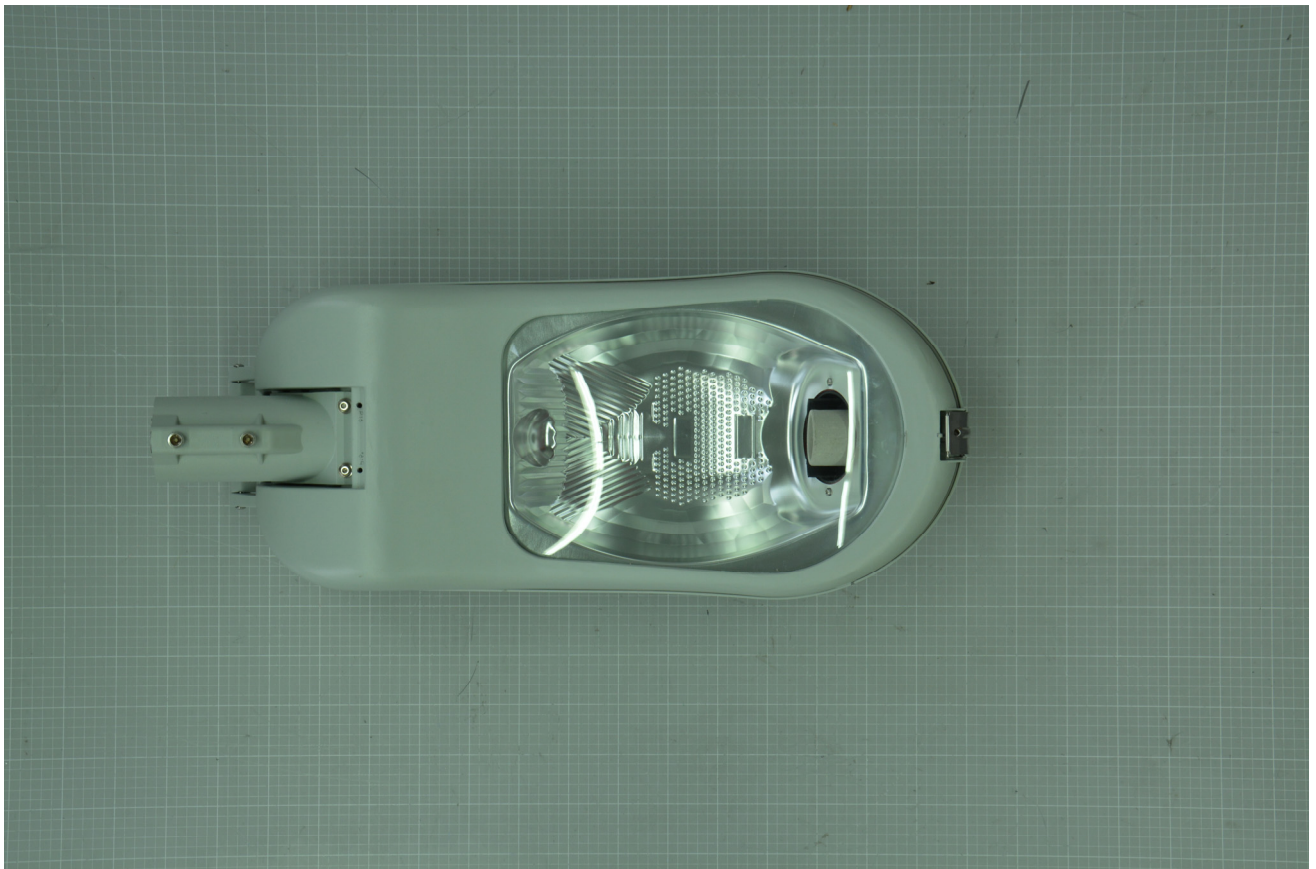
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Picture of DUT:



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