

MEASUREMENT REPORT NUMBER 2014-157/16.05.2014

testing samples of products

**Model number or type, referring to the manufacturer: LED luminarie VT-1415 SQ / RD
SKU 4809 15W**

Company identification: V-TAC Europe Ltd., Sofia 1220, 1, Iliansko Shaussee Blvd.

Applicant testing: V-TAC Europe Ltd., Sofia 1220, 1, Iliansko Shaussee Blvd.

Type of test: control measurements

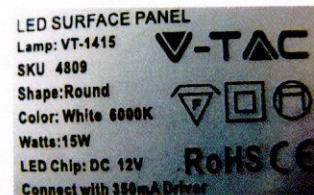
Measurements have been performed:

- luxmeter PU 550, ID 263621/2586, calibration certificate of the METRA BLANSKO a.s. №2887/2012, 19.12.2012;
- luxmeter KYORITSU 5202, ID K0017929, calibration certificate of the National Centre of Metrology 181-OИ/15.12.2012;
- luminance-meter L 1003 of angular field 1°, producer "LMT" Germany, ID 0686191, calibration certificate of the National Centre of Metrology 130-OИ/20.12.2010;
- Ulbricht photometer with diameter 2m;
- Automated goniophotometer.
- Power Meter HM8115-2 ID 015447345, calibration certificate of the National Centre of Metrology 148-ЕЕИ/14.12.2012;
- Digital thermometer with temperature sensor DS18B20 ID 0000011697CDH, calibration certificate of the National Centre of Metrology 268-ТИ/14.11.2012;
- Ampermeter Д5101 ID 737/1990, calibration certificate of 'ЛК УНИСИСТ' Ltd №733/21.11.2012;
- MEGER UT512 ID 1111074682, calibration certificate of 'ЛК УНИСИСТ' Ltd №732/21.11.2012;
- Laser rangefinder DLE-40
- spectroradiometer MK350 ID HS0313220158, test source MK002, calibration certificate of UPRtek lab № A012001 / 2013/7/5

Technical specifications of documentation:

LED luminarie VT-1415 SQ / RD SKU 4809 15W

Optics - opal diffuser



tabele



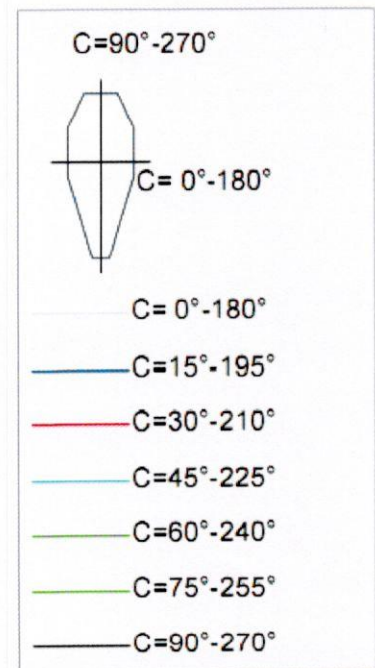
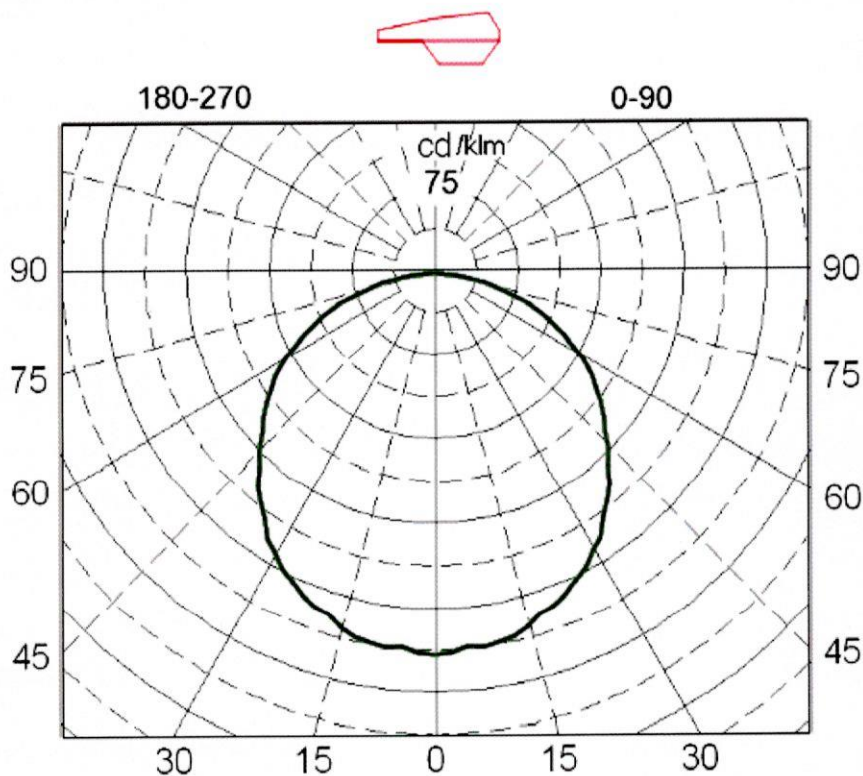
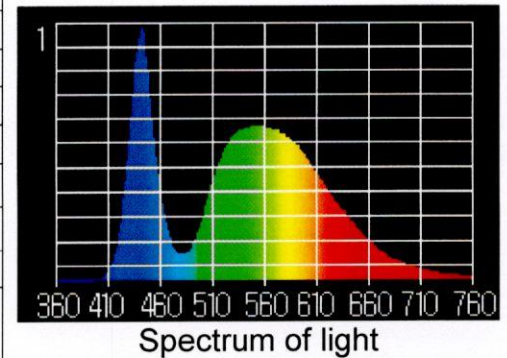
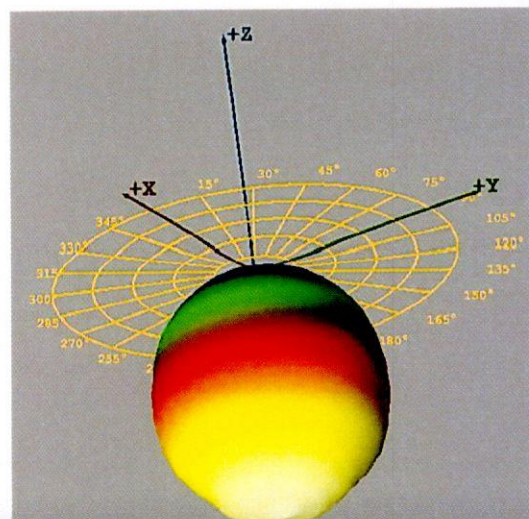
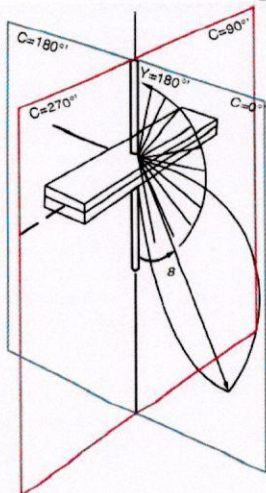
Luminaire SQ



Luminaire RD

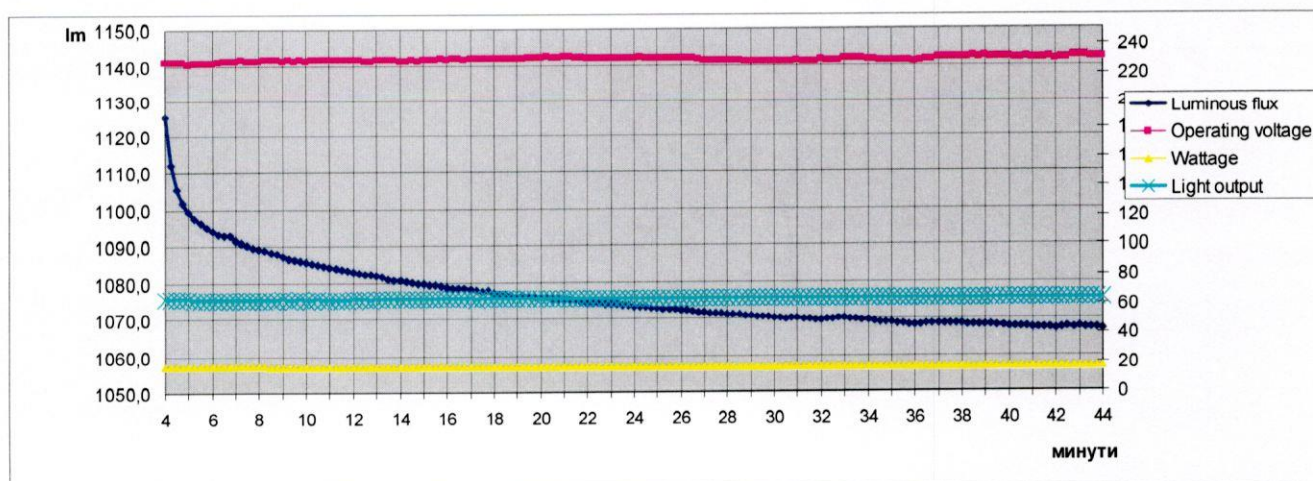
Results of test for VT-1415 SQ / RD

Operating voltage	AC 230V
Operating Current	AC 0.129A / 0.129A
Wattage including ballast (watts)	16.6W / 17.2W
Power factor	0.57 / 0.58
color temperature	5908K
Color rendering index CRI	86
color coordinates CIE 1931	$x=0.3233, y=0.3423$
color coordinates CIE 1976	$u'=0.2002, v'=0.4768$
Luminous flux emitted by a luminaire	1065 lm / 1150 lm
Light output of the luminaire	64.2 lm/W / 66.8 lm/W

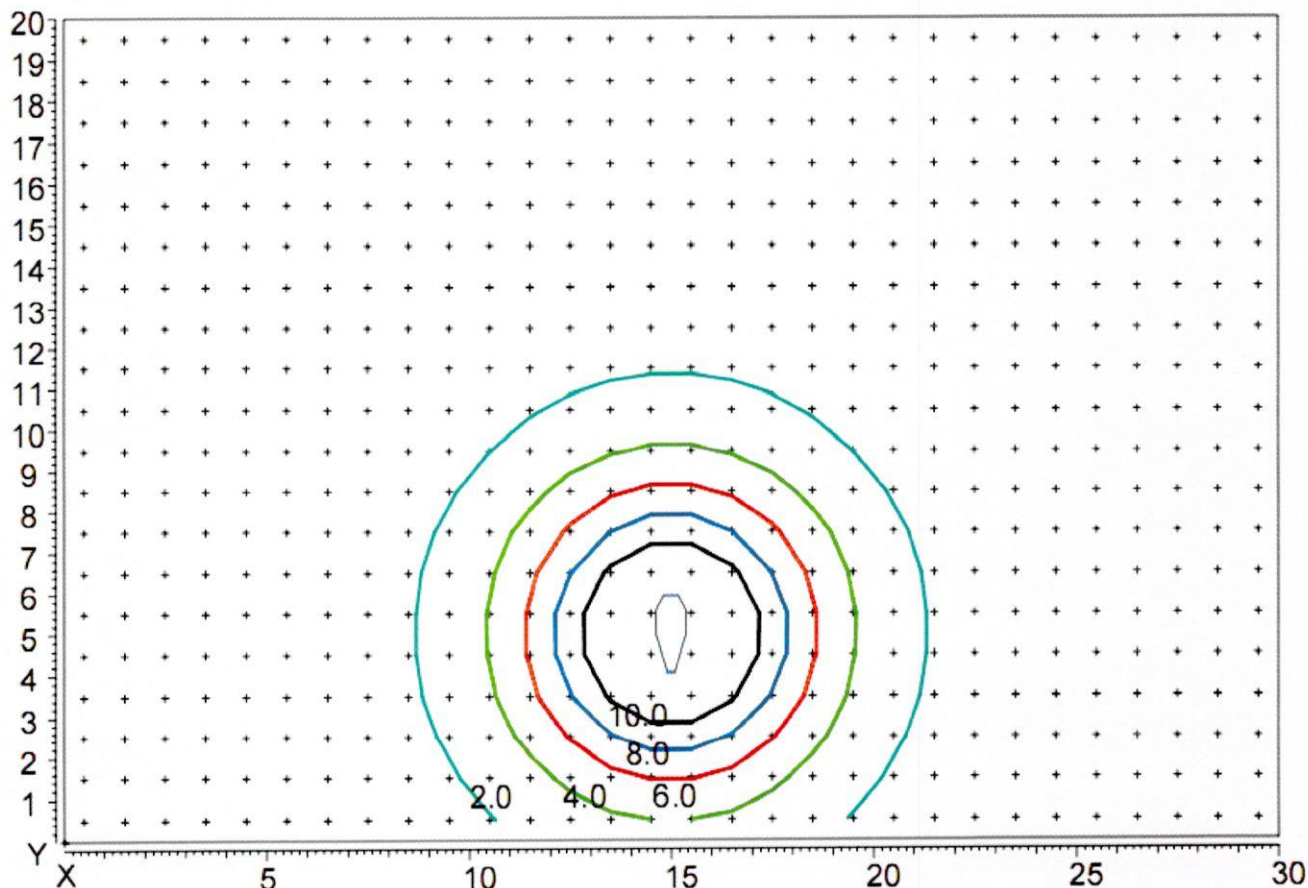
**Luminaire light distribution of polar coordinates in the conditional flux 1000lm****Luminaire light distribution of the 3D**

**Light distribution of luminaries are in tabular form
for conditional luminous flux 1000lm:**

gm/C	I _{gm}
0.0	343
2.5	342
5.0	337
7.5	339
10.0	337
12.5	335
15.0	329
17.5	321
20.0	318
22.5	312
25.0	305
27.5	299
30.0	289
32.5	282
35.0	268
37.5	259
40.0	249
42.5	235
45.0	225
47.5	212
50.0	203
52.5	192
55.0	181
57.5	171
60.0	157
62.5	143
65.0	130
67.5	115
70.0	102
72.5	90
75.0	73
77.5	58
80.0	47
82.5	33
85.0	21
87.5	8
90.0	2
92.5	1
95.0	1



Changing the light flux



Distribution of illumination in height hanging lamp 5 m
Coordinates of the luminaire X=15m, Y=5m.

Applications:

Files with the EULUMDAT format. Light distribution is captured in γ -C planes with step 2.5° in plane γ (от 0° - 95°) и 5° in plane C (от 0° - 360°) accordance with EN 13032-1 p 4.2.3.

Files with the measured values

- 2014-157a-S.ltd – **VT-1415 SQ**

- 2014-157b-S.ltd – **VT-1415 RD**

(photometric data in a standard format for axel of symmetry) ,

Test results relate only to test samples.

Sofia 16.05.2014

The measurements made:

/assoc. prof. d-r. Krasimir Velinov/

Manager:

