

**MEASUREMENT REPORT NUMBER 2015-004/06.01.2015**

testing samples of products

Model number or type, referring to the manufacturer: TRACKLIGHT 40W VT-4540T  
 SKU 1191

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-ОИ/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-ОИ/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:**  
 TRACKLIGHT 40W VT-4540T SKU 1191

tabele

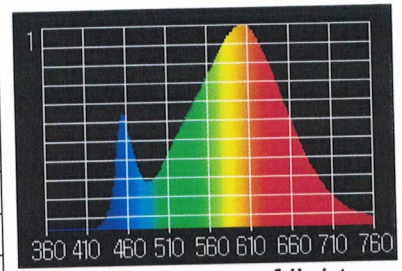


Luminaire

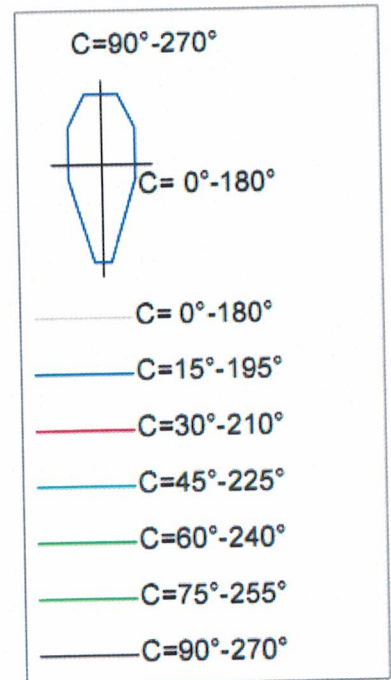
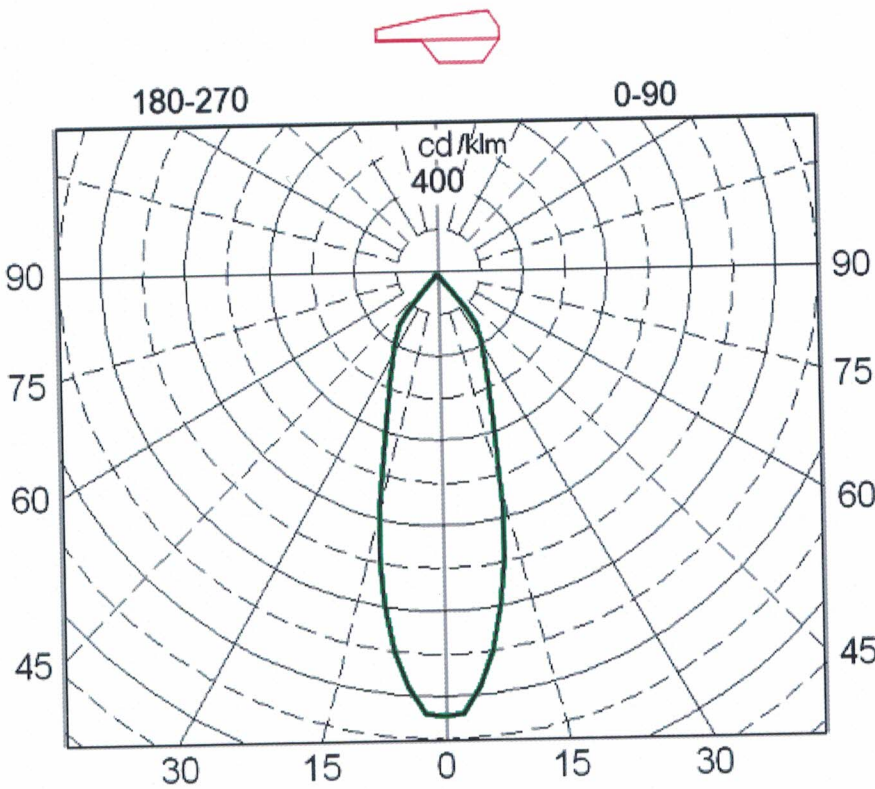


**Results of test**

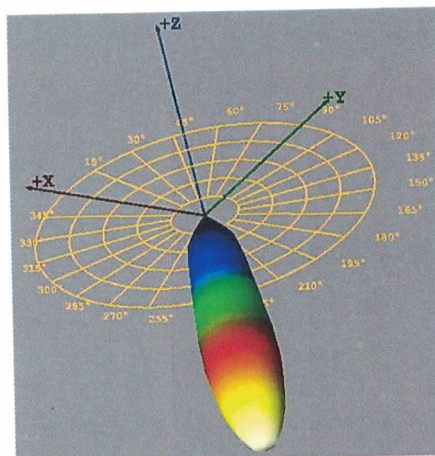
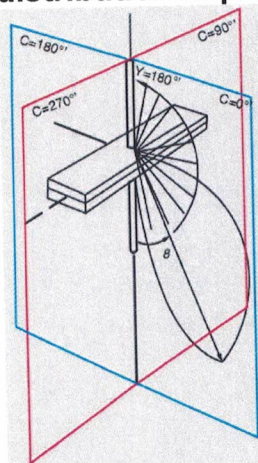
Operating voltage	AC 230V
Operating Current	AC 0.199 A
Wattage including ballast (watts)	42.9W
Power factor	0.95
color temperature	3081 K
Color rendering index CRI	82
color coordinates CIE 1931	x=0.4316, y=0.4029
color coordinates CIE 1976	u'=0.2477, v'=0.5201
Luminous flux emitted by a luminaire	3252 lm
Light output of the luminaire	75.8 lm /W



Spectrum of light



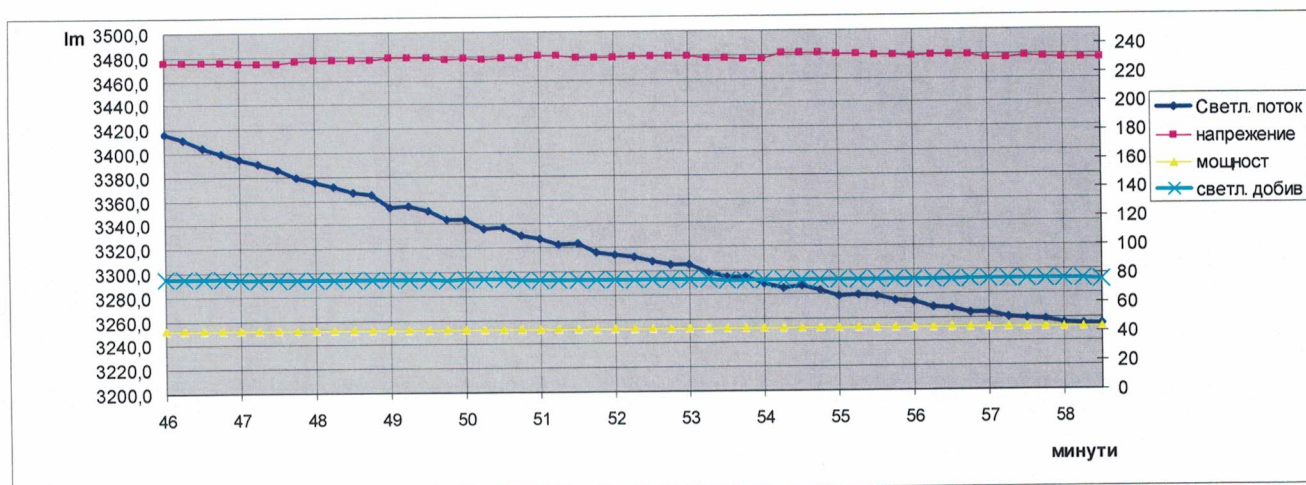
**Luminaire light distribution of polar coordinates in the conditional flux 1000lm**



**Luminaire light distribution of the 3D**

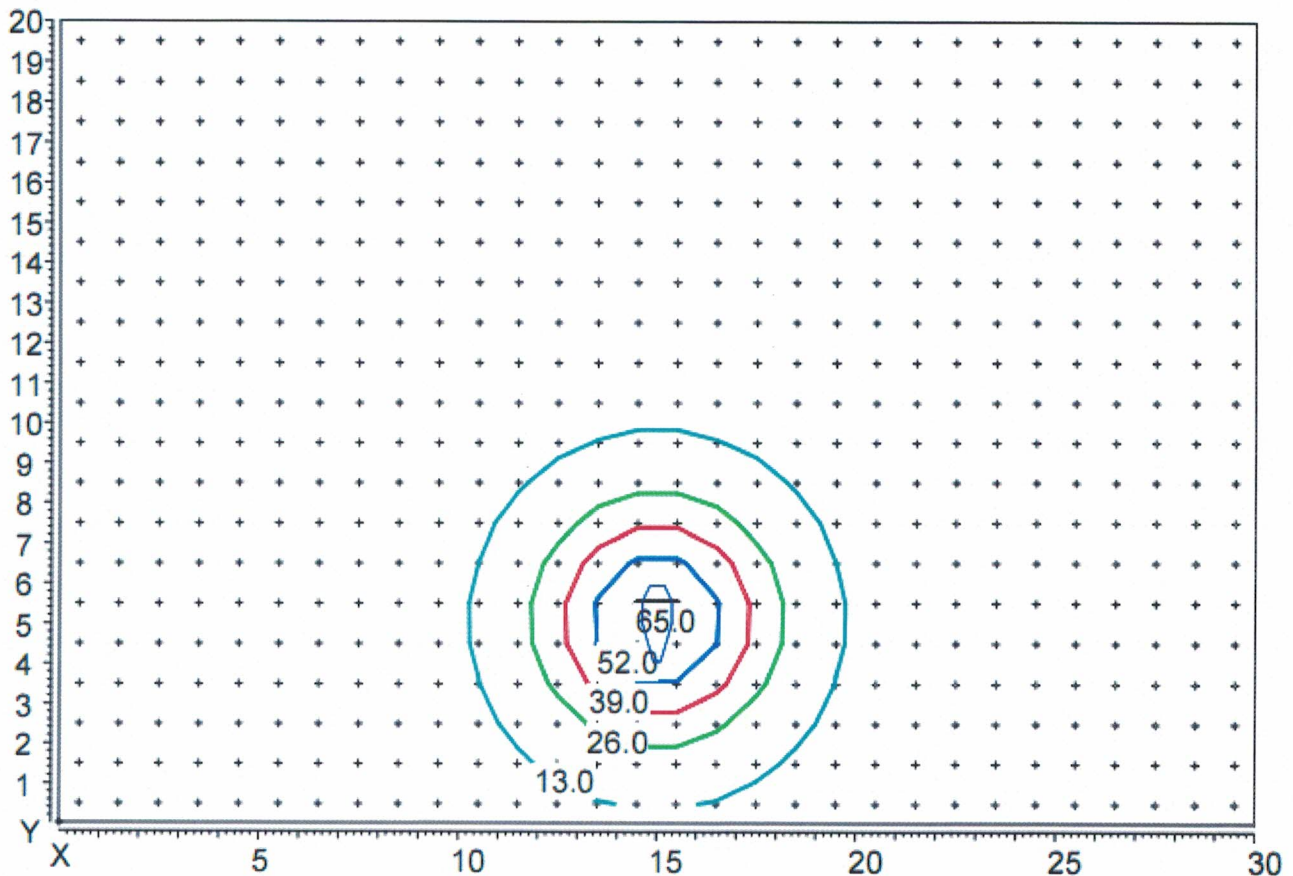
**Light distribution of luminaries are in tabular form for conditional luminous flux 1000lm:**

gm/C	0	15	30	45	60	75	90	105	120	135	150	165	180
0.0	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
2.5	2092	2092	2092	2092	2092	2092	2092	2092	2092	2092	2092	2092	2092
5.0	1970	1970	1970	1970	1970	1970	1970	1970	1970	1970	1970	1970	1970
7.5	1807	1807	1807	1807	1807	1807	1807	1807	1807	1807	1807	1807	1807
10.0	1595	1595	1595	1595	1595	1595	1595	1595	1595	1595	1595	1595	1595
12.5	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
15.0	1136	1136	1136	1136	1136	1136	1136	1136	1136	1136	1136	1136	1136
17.5	893	893	893	893	893	893	893	893	893	893	893	893	893
20.0	740	740	740	740	740	740	740	740	740	740	740	740	740
22.5	627	627	627	627	627	627	627	627	627	627	627	627	627
25.0	548	548	548	548	548	548	548	548	548	548	548	548	548
27.5	481	481	481	481	481	481	481	481	481	481	481	481	481
30.0	424	424	424	424	424	424	424	424	424	424	424	424	424
32.5	380	380	380	380	380	380	380	380	380	380	380	380	380
35.0	335	335	335	335	335	335	335	335	335	335	335	335	335
37.5	302	302	302	302	302	302	302	302	302	302	302	302	302
40.0	210	210	210	210	210	210	210	210	210	210	210	210	210
42.5	75	75	75	75	75	75	75	75	75	75	75	75	75
45.0	19	19	19	19	19	19	19	19	19	19	19	19	19
47.5	14	14	14	14	14	14	14	14	14	14	14	14	14
50.0	12	12	12	12	12	12	12	12	12	12	12	12	12
52.5	10	10	10	10	10	10	10	10	10	10	10	10	10
55.0	8	8	8	8	8	8	8	8	8	8	8	8	8
57.5	7	7	7	7	7	7	7	7	7	7	7	7	7
60.0	6	6	6	6	6	6	6	6	6	6	6	6	6
62.5	4	4	4	4	4	4	4	4	4	4	4	4	4
65.0	3	3	3	3	3	3	3	3	3	3	3	3	3
67.5	3	3	3	3	3	3	3	3	3	3	3	3	3
70.0	2	2	2	2	2	2	2	2	2	2	2	2	2
72.5	2	2	2	2	2	2	2	2	2	2	2	2	2
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1
77.5	1	1	1	1	1	1	1	1	1	1	1	1	1
80.0	0	0	0	0	0	0	0	0	0	0	0	0	0
82.5	0	0	0	0	0	0	0	0	0	0	0	0	0
85.0	0	0	0	0	0	0	0	0	0	0	0	0	0
87.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95.0	0	0	0	0	0	0	0	0	0	0	0	0	0



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  $\gamma$ -C planes with step  $2.5^\circ$  in plane  $\gamma$  (от  $0^\circ$  -  $95^\circ$ ) и  $5^\circ$  in plane C (от  $0^\circ$  -  $360^\circ$ ) accordance with EN 13032-1 p 4.2.3.

Files with the measured values

- 2015-004.ltd

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

Test results relate only to test samples.

Sofia 06.01.2015

The measurements made:

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



Manager:

/ prof. d-r. L. Totev/