

MEASUREMENT REPORT NUMBER 2014-250/11.07.2014

testing samples of products

Model number or type, referring to the manufacturer: LED luminarie VT-8001C with microwave sensor, SCU Code 4965

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-ON/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-ON/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-EEW/14.12.2012;
- Digital thermometer with temperature sensor DS18B20 ID 0000011697CDH, calibration certificate of the National Centre of Metrology 268-TM/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-8001C with microwave sensor, SCU Code 4965

tabelle

Optics - opal diffuser

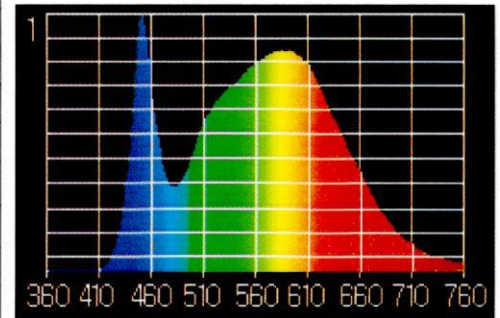


SEPS	YMS	ELIX
20	2.0	100
21	1.8	100
22	1.6	100
23	1.4	100
24	1.2	100
25	1.0	100
26	0.8	100
27	0.6	100
28	0.4	100
29	0.2	100
30	0.1	100

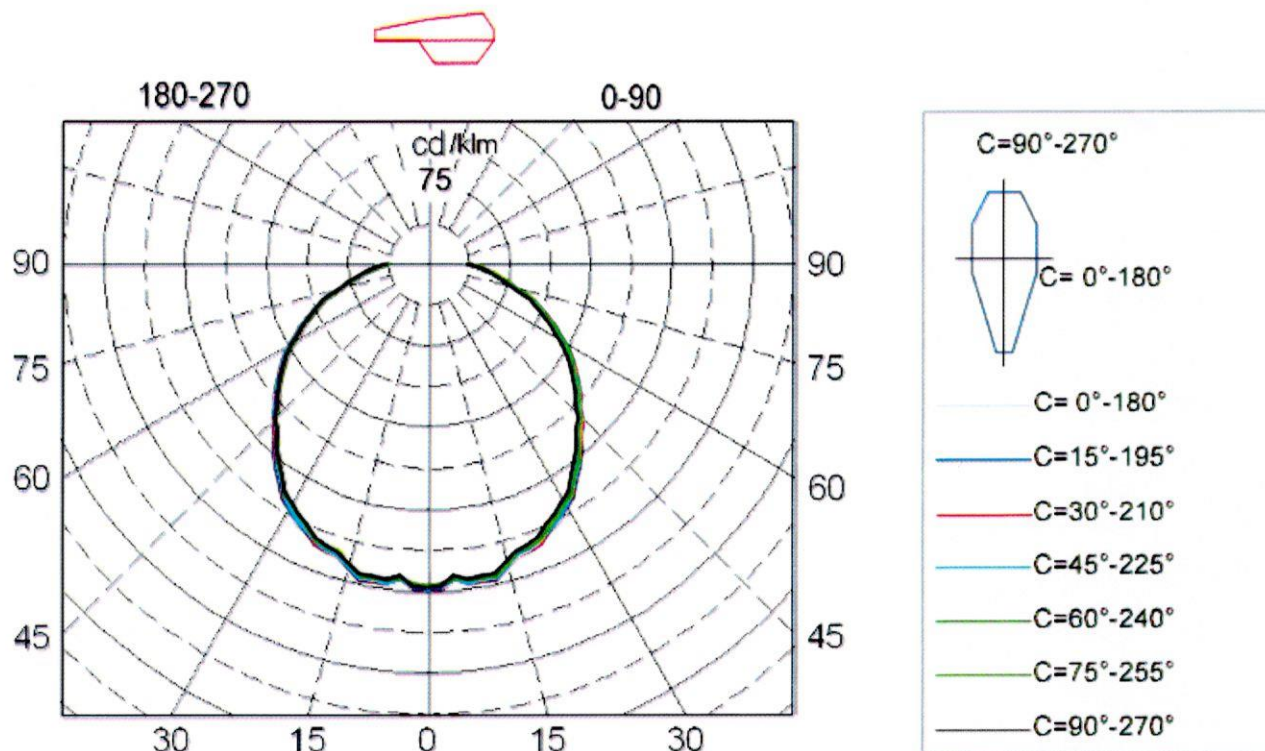
Luminaire

Results of test for LED luminaire VT-8001C

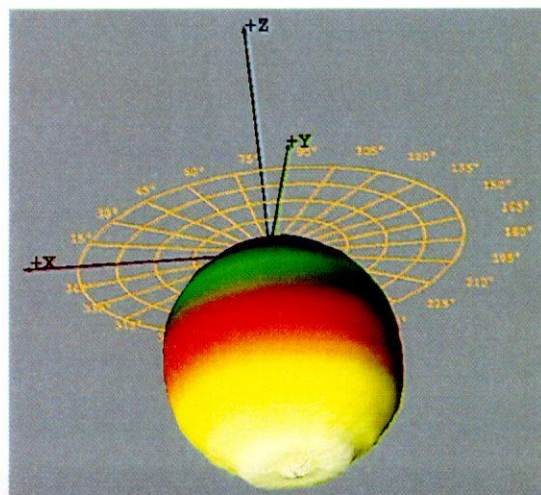
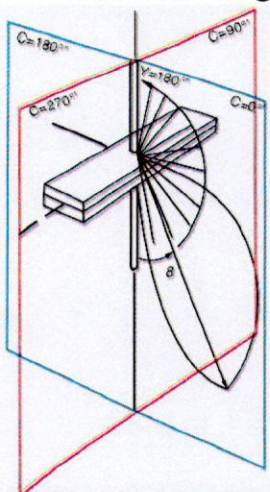
Operating voltage	AC 230V
Operating Current	AC 0.086A
Wattage including ballast (watts)	17.19W
Power factor	0.86
color temperature	4463K
Color rendering index CRI	82
color coordinates CIE 1931	$x=0.3631$, $y=0.3699$
color coordinates CIE 1976	$u'=0.2163$, $v'=0.4960$
Luminous flux emitted by a luminaire	1286 lm
Light output of the luminaire	74.8 lm/W



Spectrum of light



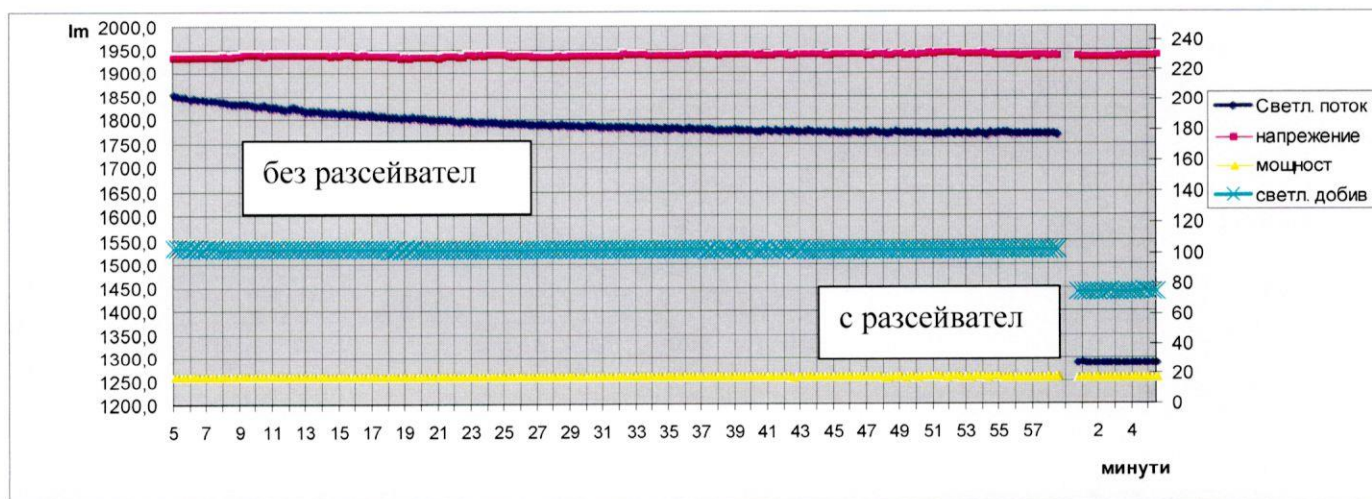
Luminaire light distribution of polar coordinates in the conditional flux 1000lm



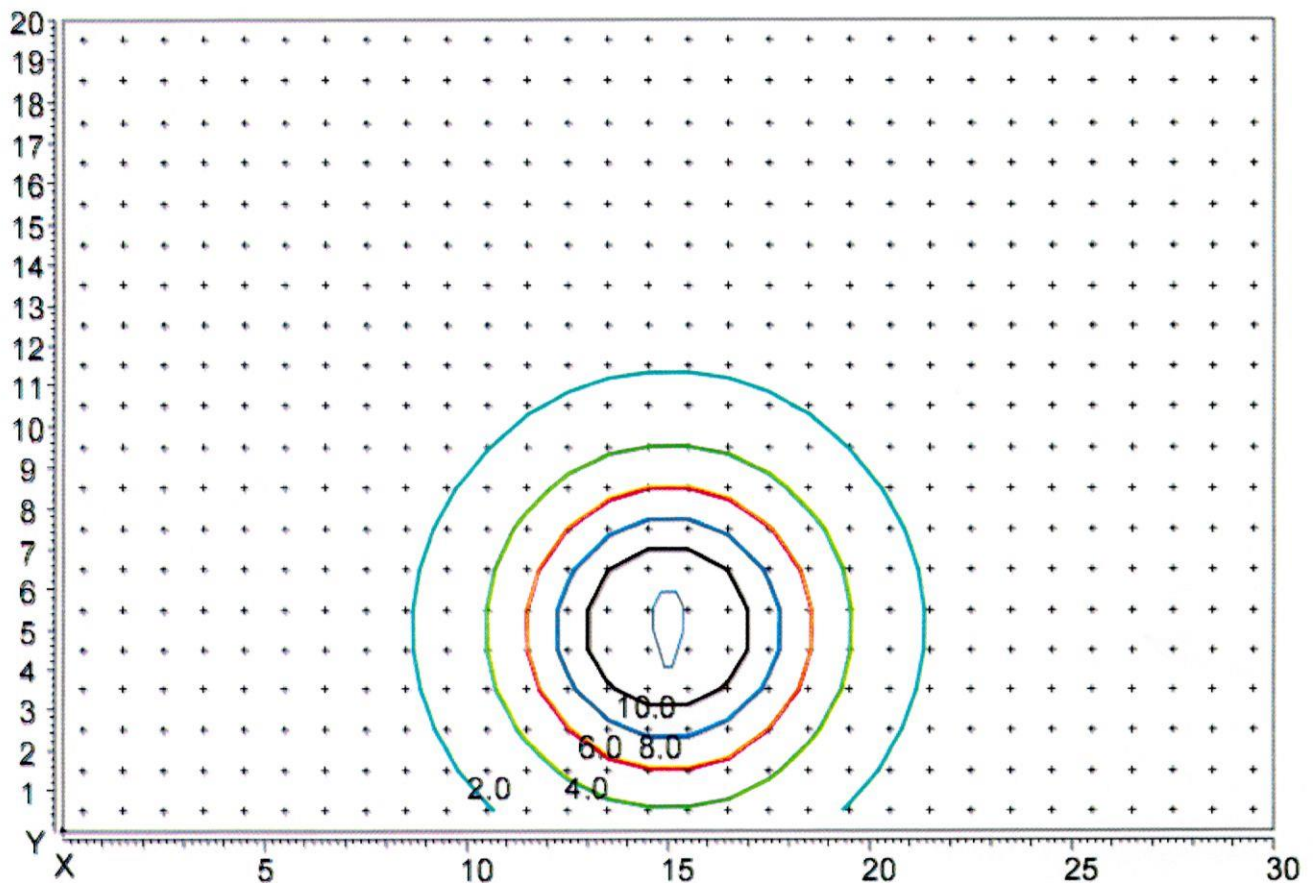
Luminaire light distribution of the 3D

**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	298	298	297	297	296	296	297	296	296	297	297	298	298
2.5	297	297	296	295	295	294	296	294	295	295	296	297	297
5.0	291	289	289	290	289	289	287	289	289	290	289	289	291
7.5	296	295	294	294	293	292	292	292	293	294	294	295	296
10.0	294	294	294	292	292	292	290	292	292	292	294	294	294
12.5	296	295	294	294	292	291	291	291	292	294	294	295	296
15.0	287	288	286	286	286	285	284	285	286	286	286	288	287
17.5	281	279	280	279	276	276	277	276	276	279	280	279	281
20.0	280	278	278	277	275	275	274	275	275	277	278	278	280
22.5	277	276	275	273	272	273	271	273	272	273	275	276	277
25.0	269	268	267	266	265	266	263	266	265	266	267	268	269
27.5	266	263	262	263	260	258	258	258	260	263	262	263	266
30.0	257	258	255	255	252	252	251	252	252	255	255	258	257
32.5	252	251	250	248	248	246	246	246	248	248	250	251	252
35.0	242	240	239	238	236	236	235	236	236	238	239	240	242
37.5	234	232	231	230	229	228	226	228	229	230	231	232	234
40.0	224	223	221	220	219	217	217	217	219	220	221	223	224
42.5	212	211	211	208	207	207	206	207	207	208	211	211	212
45.0	205	203	203	201	200	199	199	199	200	201	203	203	205
47.5	194	193	191	190	189	189	188	189	189	190	191	193	194
50.0	187	185	185	183	182	182	181	182	182	183	185	185	187
52.5	178	177	176	176	173	173	172	173	173	176	176	177	178
55.0	169	168	167	166	165	164	163	164	165	166	167	168	169
57.5	162	160	159	158	157	156	155	156	157	158	159	160	162
60.0	152	151	150	149	148	147	145	147	148	149	150	151	152
62.5	141	140	138	138	137	136	135	136	137	138	138	140	141
65.0	132	131	130	129	128	128	127	128	128	129	130	131	132
67.5	122	121	120	119	118	117	116	117	118	119	120	121	122
70.0	113	112	110	110	109	108	107	108	109	110	110	112	113
72.5	106	105	104	103	102	102	101	102	102	103	104	105	106
75.0	92	92	91	90	89	89	88	89	89	90	91	92	92
77.5	83	83	81	81	81	80	79	80	81	81	81	83	83
80.0	78	77	76	76	75	74	74	74	75	76	76	77	78
82.5	68	68	67	67	66	66	65	66	66	67	67	68	68
85.0	64	63	62	62	62	61	60	61	62	62	62	63	64
87.5	56	56	55	54	54	54	54	54	54	54	55	56	56
90.0	50	50	50	49	49	48	48	48	49	49	50	50	50
92.5	44	43	43	42	42	42	42	42	42	42	43	43	44
95.0	38	38	38	37	37	37	37	37	37	37	38	38	38



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

- 2014-250-P2.ltd

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

Test results relate only to test samples.

Sofia 11.07.2014

The measurements made:

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

Manager

/ prof. d-r. L. Totev/