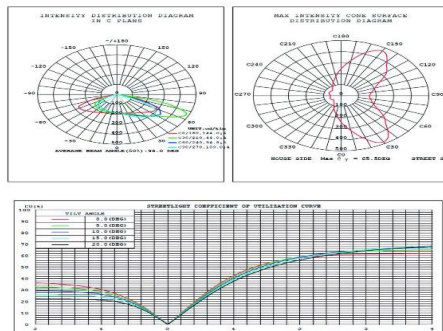


FIȘĂ TEHNICĂ a corpului de iluminat

9 septembrie 2020

MODEL: Street Spectra 30W-50W, 4500K, PJ1502,L330*W150*H65mm

Imagini, date tehnice:



Domeniul de utilizare: este destinat iluminatului stradal si a altor spații deschise: alei, trotuare, parcuri, zone pietonale, drumuri rurale, principale și secundare, gări, parcuri și alte suprafețe asemănătoare.

Sursă de lumină: LED 3030 CREE, Ra=92, durata de viață -1000000 ore.

Flux : 2700 - 6000K , 30W , 125lum/W

Descrierea produsului:

Carcasa totodată radiator pasiv din aluminiu

Sistem de montare pe stilp in consola, pe teava orizontală (Ø 40-60mm)

Dispensur : Lentila din policarbonat cu asimetrie și unghi de propagare la 150°.

Driver pentru alimentarea sursei TRIDONIC, cu PF>0,9.

Marimi : :330*150*65mm

Masa : 1,8 kg

Culoare : GRI

Caracteristici tehnice:

Frecventa-50Hz

Tensiunea de alimentare 160-260 V.

Temperatura ambientală: -30 - + 40 °C

Grad de protecție : IP-65

Rezistența de izolație și rigiditate electrică : clasa I

Corespunde standardelor pentru iluminat și sînt conforme cu cerințele obligatorii stabilite în:

HG Nr. 255 din 05.03.2008 pentru aprobarea Reglementării tehnice

“Securitatea echipamentelor electrice de joasă tensiune”

SM SR EN 60598-2-3:2010 (cap.3.4-3.11, 3.14)

Verificat si aprobat

director, Danu Vadim



Pentru orice informație contactați-ne la : office@ledmarket.md sau magazin@ledmarket.md
Adresa: 1004600060124, mun. Chișinău, bd. Moscovei 21, LED MARKET SRL, tel. +373 60886600

Digitally signed by Miha Nicolae
Date: 2021.03.31 14:00:38 EEST
Reason: MoldSign Signature
Location: Moldova



Declarație de conformitate

"LED MARKET" SRL, .cod fiscal 1004600060124

șos. Muncești 801, mun.Chișinău, RM, info@ledmarket.md , tel. (022)496584

(denumirea reprezentantului autorizat al producătorului, date privind înregistrarea întreprinderii, adresa, telefonul, fax)

în persoana

Danu Vadim

(prenumele, numele conducătorului)

Declară pe propria răspundere că produsul

Corpurile iluminate public-felinare stradale, model SMD 20-300 W, 2700-6000K, Ip-65; COB 20-300 W, 2700-6000K, IP-65; model FUSION și FUSION 2, dimensiunea carcasei, SS, S, M, L, putere SMD 20-300w, 2700-6000K., IP-66. Fabricare în serie conform SF 37525051-05001.0000 1:2019. Codul NCM – 9405

(denumirea, tipul, modelul, codul produsului, informația privind fabricarea în serie sau la un lot de produse (numărul și mărimea lotului, numărul de fabricație, denumirea și numărul documentului care însoțește produsele, facturii, contractului, certificatului de calitate, denumirea producătorului, țării etc.)

Producător: "LED MARKET" SRL, șos. Muncești 801, mun.Chișinău, RM

la care se referă această declarație nu pune în pericol viața, sănătatea consumatorilor, nu produce impact asupra mediului înconjurător și este în conformitate cu următoarele standarde și/sau reglementări tehnice:

SM SR EN 60598-2-3:2010 (cap.3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.13, 3.14)

(indicativul standardelor și/sau reglementărilor tehnice cu indicarea punctelor acestor documente normative, care stabilesc cerințe pentru produsele respective)

Declarația este emisă în baza:

Certificatului de conformitate Nr.OC ICC 11 A 0006639-20 din 24.05.2022, valabil până la 24.08.2022, eliberat de Organismul de certificare a produselor S.R.L. "ICC", str. Sarmizegetusa 92, mun. Chișinău, certificat de acreditare nr. OCpr. - 003 valabil până la 28.11.2022; Rapoartelor de încercări nr.8138/02/19 din 17.05.2019, nr.890702/20 din 25.05.2020, eliberate de LÎ SRL "Certificare", bd. Gagarin 2, mun. Chigindu, certificatul de acreditare Nr. LÎ-076 valabil până la 18.06.2020; Raportului de evaluare a procesului de producție M-8234-19 din 16.05.2019, Raportului de evaluare periodică a procesului de producție M-8234-19 din 27.02.2020; Rapoartelor de identificare și control tehnic al produselor electrotehnice supuse certificării nr.M-8234-19 din 14.05.2019, nr.M-8234-19M din 21.05.2020 și Raportului sumar nr.M-8234-19M din 26.05.2020, eliberate de OC „ICC”.

(informația despre documentele în baza cărora a fost emisă declarația de conformitate)

Informație suplimentară: Fiecare unitate de produs este asigurată cu informația în limba de stat

Declarația dată este înregistrată sub nr. DCLM - 01 din 18.01.2021

Declarația de conformitate este valabilă până la:

24.05.2022



Semnătura

Danu Vadim

prenumele, numele

Digitally signed by Mihai Nicolae
Date: 2021.03.31 14:01:00 EEST
Reason: MoldSign Signature
Location: Moldova



DECLARAȚIE DE CONFORMITATE LEDMARKET S.R.L.



Cu sediul în r.Moldova,mun.Chisinau,sos.Muncesti,801
înregistrată la Registrul Comerțului cu nr1004600060124, în
calitate de producator si furnizori de aparate de iluminat marca
Spectra, declarăm pe propria răspundere că aparatul de
iluminat: **Spectra** Versiune: 30W-50W Clasă electrică: I sau II
Balast: electronic Tensiune nominală: 230V / 50Hz Etanșeitate
compartiment optic: IP 65 Etanșeitate compartiment aparataj:
IP 65

Cu condiția ca acesta să fie instalat, întreținut și utilizat în
conformitate cu standardele de instalare și instrucțiunile
producătorului.



A handwritten signature in blue ink, appearing to be 'Mihai'.

Digitally signed by Miha Nicolae
Date: 2021.03.31 14:01:31 EEST
Reason: MoldSign Signature
Location: Moldova





S.R.L. „TENSGRUP”

MD 2071 mun. Chișinău, str. L. Deleanu, 4 ap 63

mob: 068502016

FAX/TEL: 022470575

IBAN: MD83AG000000022512141559

BC "Moldova Agroindbank" SA fil. Chișinău Centru

IDNO 1013600026414/ cod TVA 0507007

tensgrup@mail.ru

DECLARAȚIE

privind Perioada de garanție a corpurilor de iluminat

Prin prezentă declarație S.R.L. "TENSGRUP" asigură garanția corpurilor de iluminat folosite la procedura "Licitație deschisă privind achiziționarea lucrărilor de iluminat stradal din s.Isacova, rl.Orhei" înregistrată sub nr. ocds-b3wdp1-MD-1616154159302 din 01/04/2021, pentru o perioadă de: **36 luni pentru lucrări de construcție și montaj.**

La semnarea procesului verbal S.R.L."TENSGRUP" va elibera certificatul de garanție.

Data completării: **01.04.2021**

Semnat: _____

Digitally signed by Miha Nicolae
Date: 2021.03.31 14:02:01 EEST
Reason: MoldSign Signature
Location: Moldova



Nume: **Miha Nicolae**

Funcția în cadrul firmei: **Director**

Denumirea firmei **S.R.L. "TENSGRUP"**

TEST REPORT

Reference No. : WTZ82Y24175428R
Applicant..... : ZHONGSHAN WOSEN LIGHTING TECHNOLOGY CO., LTD.
Address..... : Address: No.526, Dong'an North Road,Haizhou, Guzhen Town,
Zhongshan City, Guangdong,China
Manufacturer..... : LED market SRL
Address..... : sos. Muncesti 801, mun. Chisinau, R. Moldova
Product Name..... : Lighting
Model No...... : Spectra
Ratings..... : --
Standards..... : IEC 60529:1989+A1:1999+A2:2013
IEC 62262:2002
Customer commission
Date of Receipt sample : 2020-07-03
Date of Test..... : 2020-07-08 to 2020-07-09
Date of Issue..... : 2020-07-17
Test Report Form No. : WST-60529-50B
Test Result..... : Pass

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:

Waltek Services (Foshan) Co., Ltd.

Address: No.13-19, 2/F., 2nd Building, Sunlink International Machinery City,
Chencun, Shunde District, Foshan, Guangdong, China
Tel:+86-757-23811398 Fax:+86-757-23811381 E-mail:info@waltek.com.cn

Compiled by:

Approved by:

Can Guo/Project Engineer

Jerry Mu/Manager

Digitally signed by Miha Nicolae
Date: 2021.03.31 14:02:40 EEST
Reason: MoldSign Signature
Location: Moldova



WTZ82Y24175428R List of test

No. items:	Test Items	Requirement + Test	Result
1	IP65 Test	IEC 60529:1989+A1:1999+A2:2013	Pass
2	IK09	IEC 62262:2002	Pass
3	High temperature test	Customer commission	Pass
Subcontract Whether parts of tests for the product have been subcontracted to other labs: ☐ Yes ☒ No If Yes, list the related test items and lab information: Test items: --- Lab information: --			
Remarks: Full tests were carried out on the two models			

Test Item :

Tests for protection against dust-proof: IP6X

Test Method: The test should be carried out under the standard atmospheric condition.

The atmospheric conditions during tests are as follows:

Temperature range: 15 °C to 35 °C. Relative humidity: 25% to 75%.

The test is made using a dust chamber incorporating the basic principles shown in figure 2 where by the powder circulation pump may be replaced by other means suitable to maintain the talcum powder in suspension in a closed test chamber. The talcum powder used shall be able to pass through a square-meshed sieve the nominal wire diameter of which is 50µm and the nominal width of gap between wires 75 µm. The amount of talcum powder to be used is 2 kg per cubic meter of the test chamber volume. It shall not have been used for more than 20 tests.

Enclosures are of necessity in one of two categories:

Category 1: Enclosures where the normal working cycle of the equipment causes reductions in air pressure within the enclosure below that of the surrounding air, for example, due to thermal cycling effects.

The enclosure under test is supported inside the test chamber and the pressure inside the enclosure is maintained below the surrounding atmospheric pressure by a vacuum pump. In no event shall the depression exceed 2 KPa(20mbar) on the manometer shown in figure 2. If an extraction rate of 40 to 60 volumes per hour is obtained the duration of the test is 2h. The extraction rate is less than 40 volumes per hour, the test is continued until 80 volumes have been drawn through, or a period of 8h has elapsed.

Category 2: Enclosures where no pressure difference relative to the surrounding air is present.

The enclosure under test is supported in its normal operating position inside the test chamber, but is not connected to a vacuum pump. Any drain-hole normally open shall be left open for the duration of the test. The test shall be continued for a period of 8h.

The enclosure shall be deemed category 1, whether reductions in pressure below the atmospheric pressure are present or not.

The test wire of 1.0 mmφ insert into any openings of the enclosure with a force of $1N \pm 10\%$.

Acceptance Conditions:

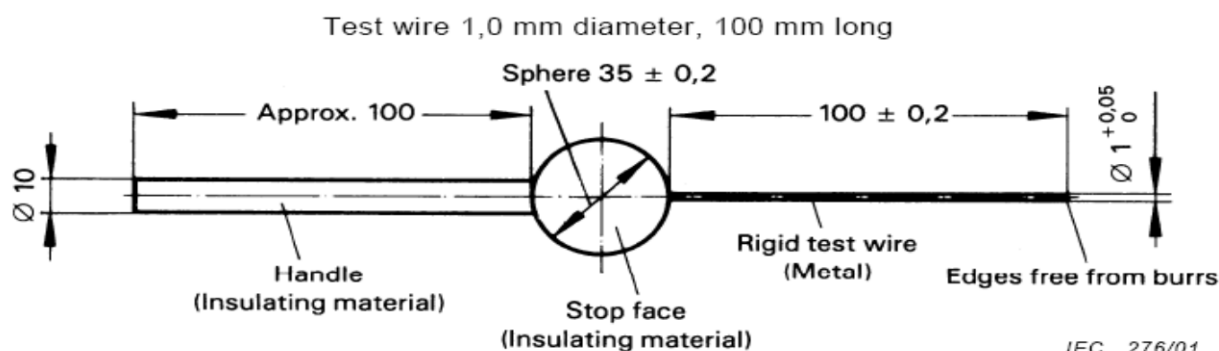
The protection is satisfactory if no deposit of dust is observable inside the enclosure at the end of the test.

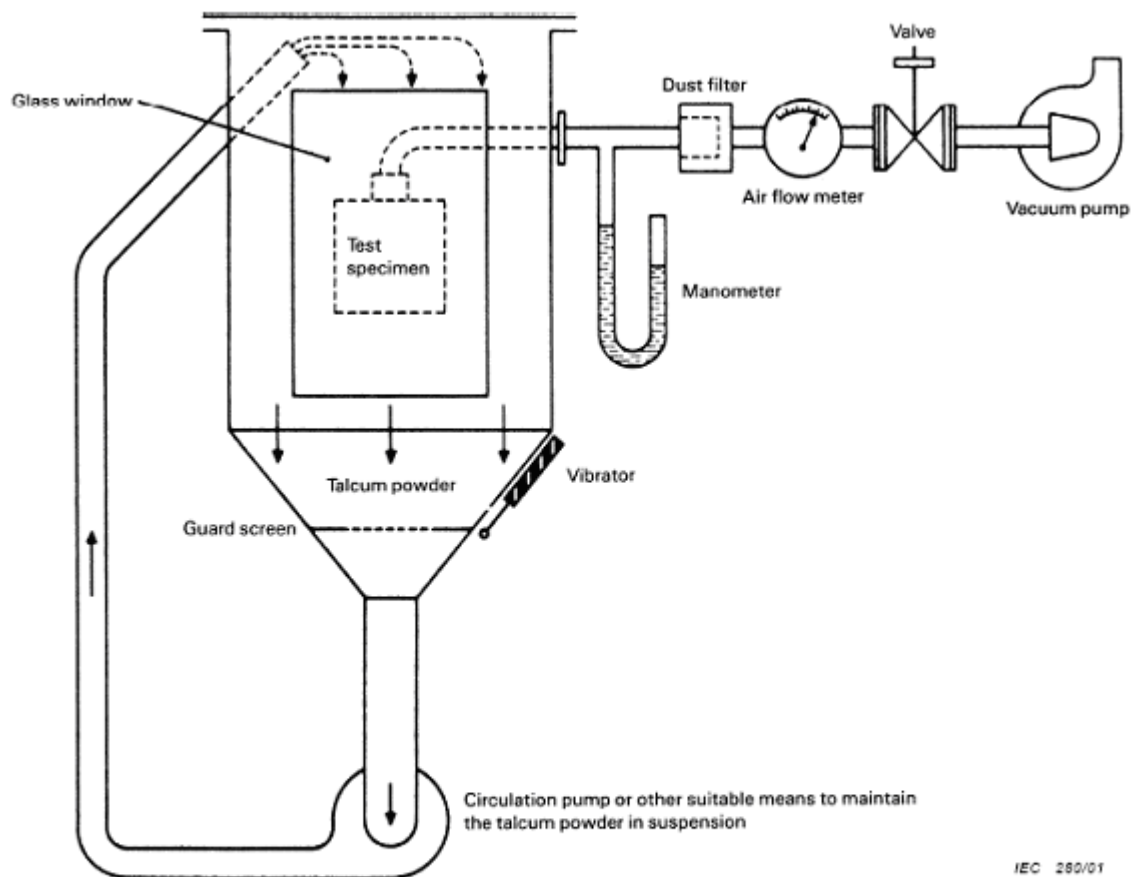
The protection is satisfactory if adequate clearance is kept between the access probe and hazardous parts.

The protection is satisfactory if the access probe 1.0 mm diameter shall not pass through the any opening.

Test Result:

☒ Pass ☐ Fail





IEC 280/01

NOTE See IEC 60068-2-68, figure 2 valid for La2 only.

Figure 2 – Test device to verify protection against dust (dust chamber)

WTZ82Y24175428R Test Item :

Tests for protection against ingress moisture: IPX5

Test Method:

The tests should be carried out under the standard atmospheric condition. The atmospheric conditions during tests are as follows:

Temperature range: 15 °C to 35 °C; Relative humidity: 25% to 75%.

The tests are conducted with fresh water. The water temperature should not differ by more than 5 K from the temperature of the specimen under test. If the water temperature is more than 5 K below the temperature of the specimen a pressure balance shall be provided for the enclosure.

The test is made by spraying the enclosure from all practicable directions with a stream of water from a standard test nozzle as shown in figure 6.

The conditions to be observed are as follows:

- internal diameter of the nozzle: 6,3mm;
- delivery rate: 12,5 l/min $\pm$ 5 %;
- water pressure: to be adjusted to achieve the specified delivery rate;
- core of the substantial stream: circle of approximately 40 mm diameter at 2,5 m distance from nozzle;
- test duration per square meter of enclosure surface area likely to be sprayed: 1 min;
- minimum test duration: 3 min;
- distance from nozzle to enclosure surface: between 2,5 m and 3m.

Acceptance Conditions:

After testing in accordance with the appropriate requirements, the enclosure shall be inspected for ingress of water.

It is the responsibility of the relevant Technical Committee to specify the amount of water which may be allowed to enter the enclosure and the details of a dielectric strength test, if any.

In general, if any water has entered, it shall not:

- be sufficient to interfere with the correct operation of the equipment or impair safety;
- deposit on insulation parts where it could lead to tracking along the creepage distances;
- reach live parts or windings not designed to operate when wet;
- accumulate near the cable end or enter the cable if any.

If the enclosure is provided with drain-holes, it should be proved by inspection that any water which enters does not accumulate and that it drains away without doing any harm to the equipment.

For enclosures without drain-holes, the relevant product standard shall specify the acceptance conditions if water can accumulate to reach live parts.

Test Result:

☒ Pass ☐ Fail

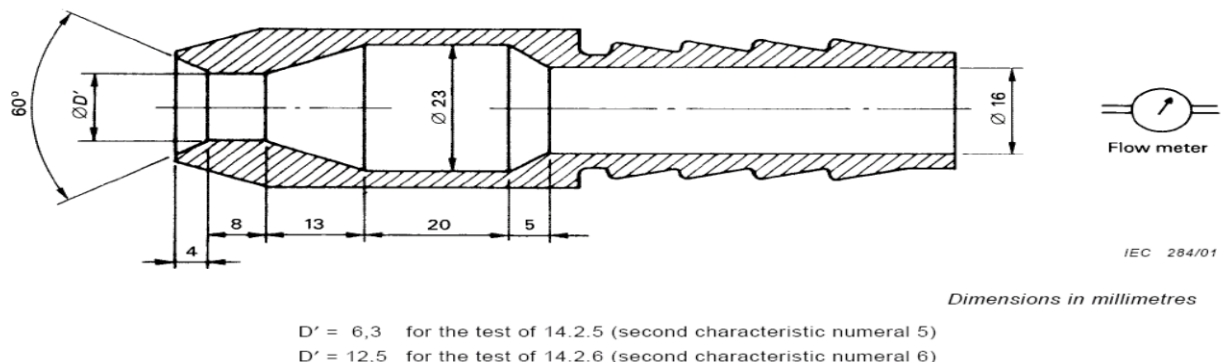


Figure 6 – Test device to verify protection against water jets (hose nozzle)

Test Item :
IK09 test

Test Method:

1. Unless otherwise specified in the relevant product standard, the test shall be carried out under the standard atmospheric conditions for tests described in IEC 60068-1:
 - temperature range: 15°C to 35 °C.
 - air pressure: 86 Kpa to 106 Kpa (860 mbar to 1060 mbar)
2. Each enclosure under test shall be in a clean and new condition, complete with all its parts in place unless otherwise specified in the relevant product standard.
3. In order to verify the protection against mechanical impacts, blows shall be applied to the enclosure to be tested. The test shall be done by using one of the test apparatus described in IEC 60068-2-75. The device to be used for this test is pendulum hammer.
4. During the test the enclosure shall be mounted on a rigid support, according to the manufacturer's instructions for use.
5. The number of impacts shall be five on each exposed face unless otherwise specified in the relevant product standard. The impacts shall be evenly distributed on the faces of the enclosure(s) under test. In no case shall more than three impacts be applied in the surroundings of the same point of the enclosure. The relevant product standard shall specify the points of application of impacts.
6. The impact energy is 5 J.

Verification procedure

1. Visually check the product and notice any "outside visible modifications". (examples: plastic broken, plastic deformation, rubber shifting, display broken, display shifting, key touch shifting...)
2. Functionally check the product and notice any "malfunctions". (Malfunctions can be functions don't working anymore or product security activation or also difficulty to swipe or insert the smart card)
 - Powered the product
 - Check security activation
 - Check each functions with final control application
3. Disassemble the product and check "inside visible modifications". (examples: plastic broken, PCB components unsoldered, FPC deformation...)

Acceptance Conditions:

1. After completion of the tests, there was no broken for the sample.
2. The mechanical structure, function, performance of the sample complied with the requirements.
3. IK09 test is passed if no "outside visible modifications" or "malfunctions" occurred at the end of test on the two samples. If no "outside visible modifications" and no "malfunction" are noticed, "inside visible modifications" are admissible damages.

Test Result:

☒ Pass ☐ Fail

Test Item :
High temperature test

Test Method:

Operating at 25 ° C for 24 hours, Samples should not be damaged after the test.

Test Result:

☒ Pass ☐ Fail



Photo 4 -- During the test of IPX5



Photo 5 -- After the test of IP65

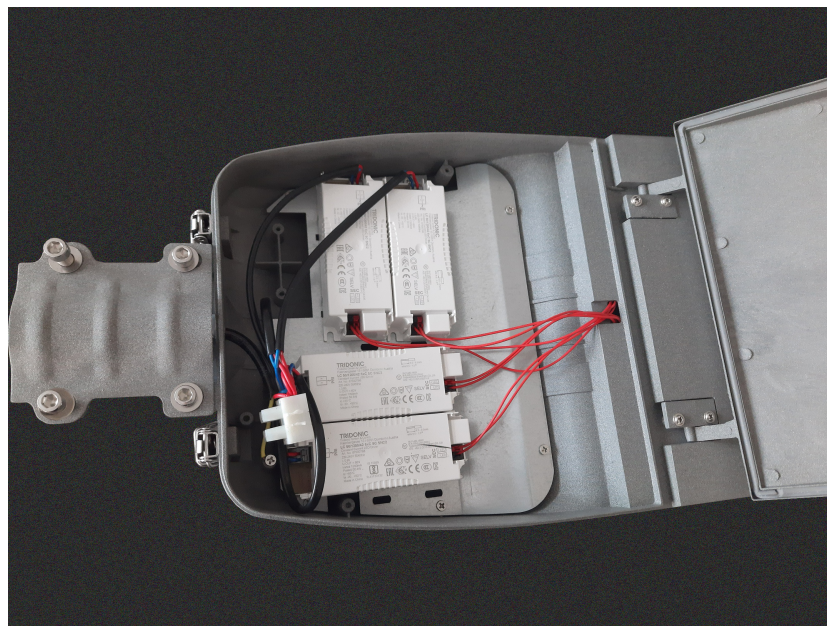


Photo 6 -- After the test of IP65

WTZ82Y24175428R Equipment

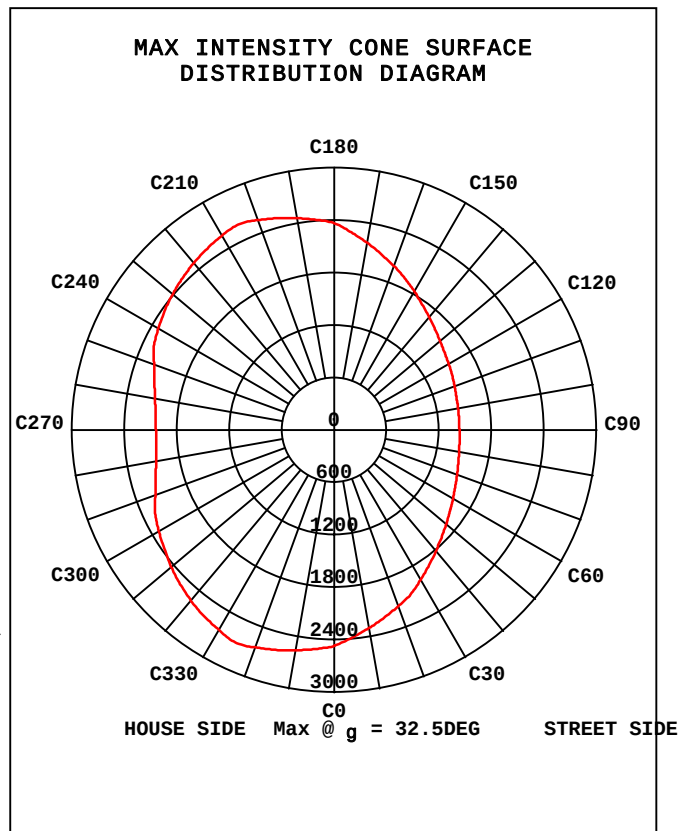
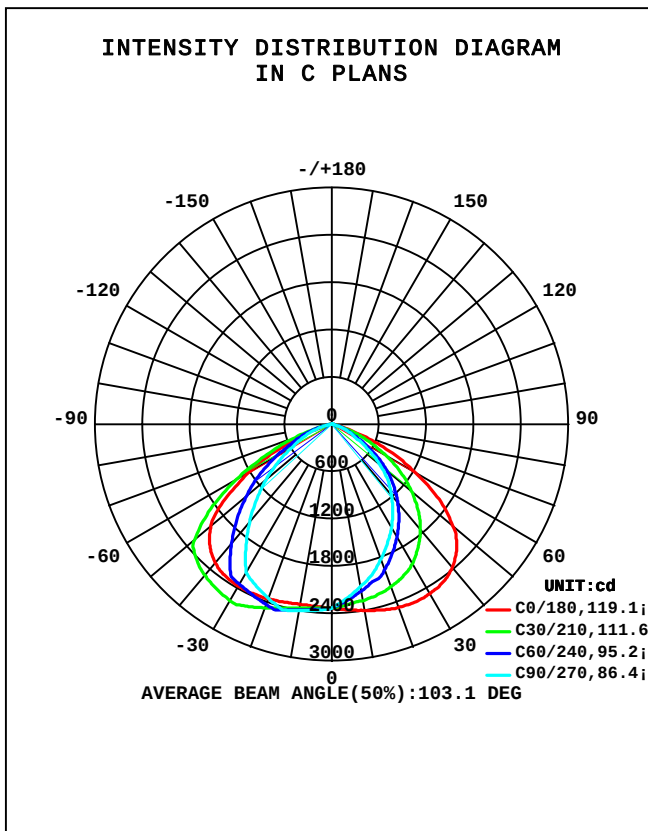
Test:	Model/Type
Temperature & Humidity Datalogger	THG312
Dustproof chamber	HY-FCX
Power Meter	QINZHI 8775A
Dielectric & Insulation Resistance Tester	CHROMA 9012
Probe	HANYANG FZ-1107-A
Force Gauge	ALGOL NK-300
Protection against water test device	HAIYU HY-IPX1-6
The temperature and humidity of atmospheric pressure gauge	Testo 622
Swing Hammer Impact-Test Apparatus	HANYANG FZ-7812
Tape Measure	Assist 3m
Environmental Chamber	KSON THS-D4C-100

===== End of Report =====

STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:221.9V I:0.2270A P:49.20W PF:0.9770 Lamp Flux:6088.95x1 lm		
NAME: Street Light Spectra	TYPE:50W	WEIGHT:1.5
DIM.:	SPEC.:6000K	SERIAL No.:
MFR.: LED MARKET SRL	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 125.64 lm/W			
MODEL	Street Light Spectra	Imax(cd)	2684	h street_up(%)	0.0
NOMINAL POWER(W)	50	LOR(%)	101.5	h street_down(%)	42.8
RATED VOLTAGE(V)	222	TOTAL FLUX(lm)	6182	h house_up(%)	0.0
NOMINAL FLUX(lm)	6088.95	MAXIMUM @(C,g)	335,32.5	h house_down(%)	58.7
LAMPS INSIDE	1	h up(%)	0.0	76 FLASHAREA(m2)	
TEST VOLTAGE(V)	221.9	h down(%)	101.5	SLI	



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:29DEG
Operators:DANU VADIM
Test Date:2020-12-14

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:8.400m [K=1.0000]
Remarks:

Note: SLI:Specific Luminaire Index

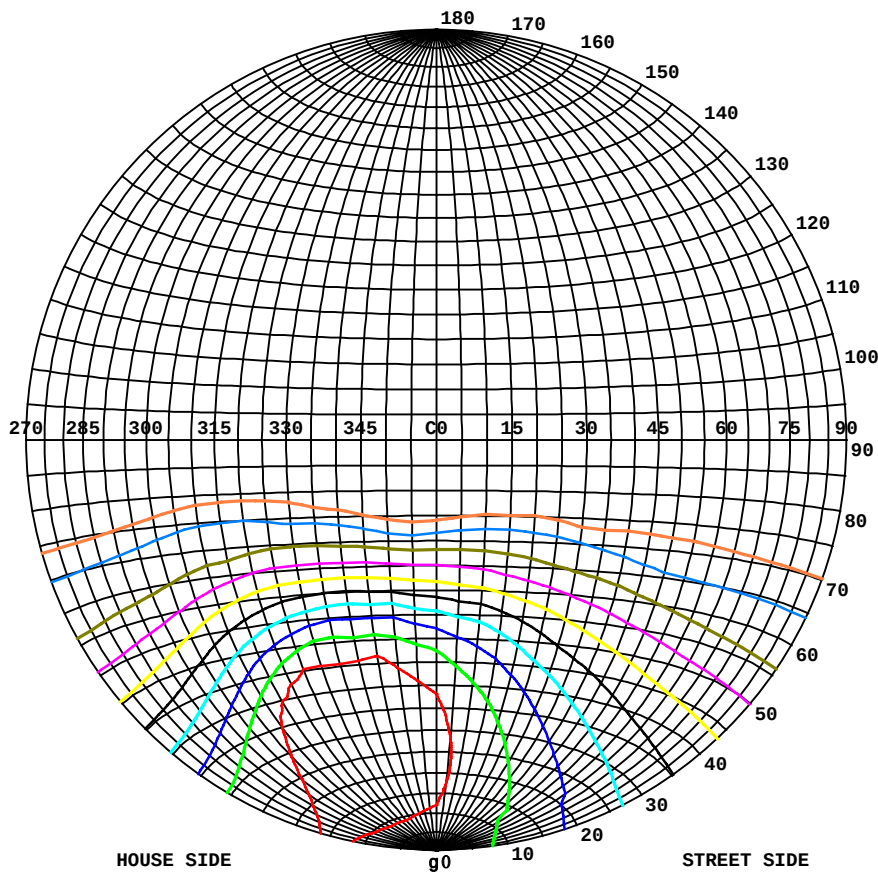
C:\Users\LAB\Desktop\LED\STREET\Spectra\STREET Spectra 50W 6000K ver 2.005

Digitally signed by Miha Nicolae
Date: 2021.03.31 14:03:13 EEST
Reason: MoldSign Signature
Location: Moldova



STREETLIGHT ISOCANDELA DIAGRAM

Test:U:221.9V I:0.2270A P:49.20W PF:0.9770 Lamp Flux:6088.95x1 lm		
NAME: Street Light Spectra	TYPE:50W	WEIGHT:1.5
DIM.:	SPEC.:6000K	SERIAL No.:
MFR.: LED MARKET SRL	SUR.:	PROTECTION ANGLE:



Classification:

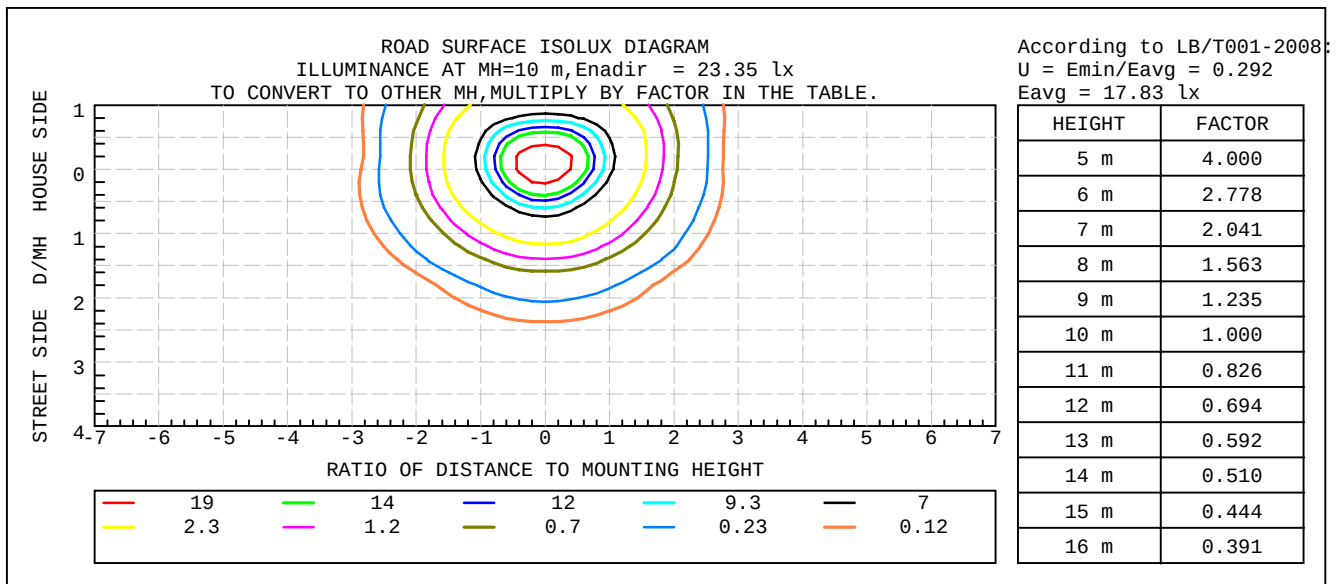
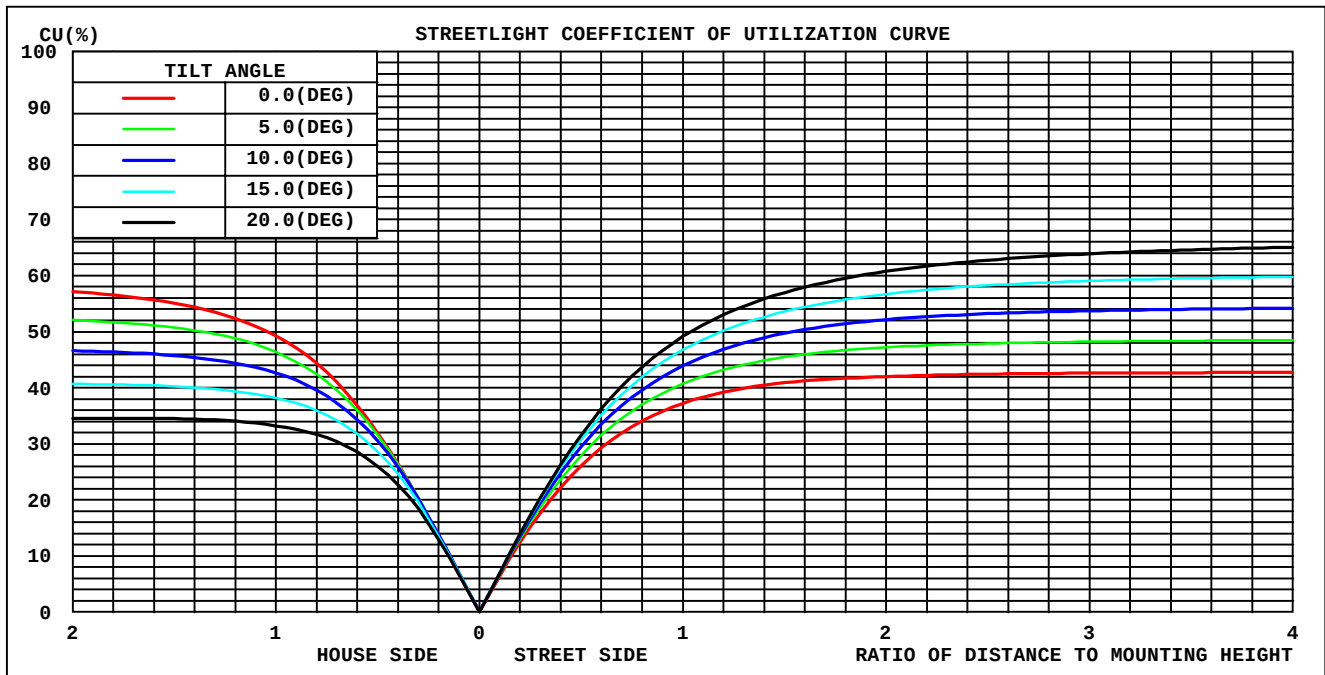
IES:Type V - Very Short
 CIE:Narrow - Short
 IES:Cut-off
 CIE:Full cut-off
 Max.At80:13.98cd/klm
 Max.At90:0.2541cd/klm
 Max.80-90:13.98cd/klm
 NRB 5101:Limited[2.7%]

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	2684
90%	2415
80%	2147
70%	1878
60%	1610
50%	1342
40%	1073
30%	805
20%	537
10%	268
5%	134

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:29DEG
 Operators:DANU VADIM
 Test Date:2020-12-14

g Range: 0 - 90DEG
 g Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
 Humidity:65.0%
 Test Distance:8.400m [K=1.0000]
 Remarks:

COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 29DEG
Operators: DANU VADIM
Test Date: 2020-12-14

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity: 65.0%
Test Distance: 8.400m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

Test:U:221.9V I:0.2270A P:49.20W PF:0.9770 Lamp Flux:6088.95x1 lm		
NAME: Street Light Spectra	TYPE:50W	WEIGHT:1.5
DIM.:	SPEC.:6000K	SERIAL No.:
MFR.: LED MARKET SRL	SUR.:	PROTECTION ANGLE:

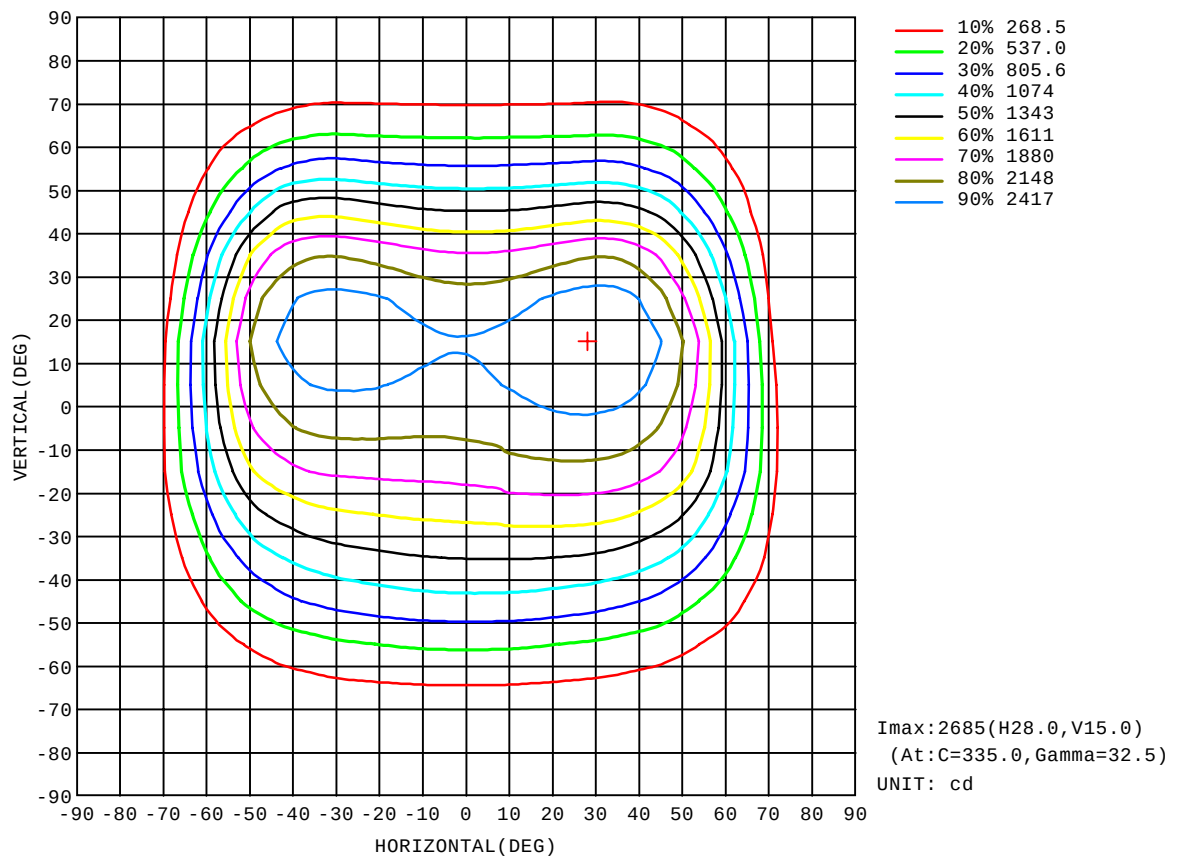
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum, lamp
5	2363	2268	2216	2238	2319	2350	2369	2378	0- 5	55.43	55.43	0.90,0.91
10	2396	2200	2097	2147	2322	2381	2403	2427	5- 10	164.6	220.1	3.56,3.61
15	2442	2154	1978	2056	2337	2435	2438	2490	10- 15	271.7	491.7	7.95,8.08
20	2473	2083	1825	1963	2356	2504	2352	2566	15- 20	374.5	866.2	14.14,14.2
25	2488	1959	1672	1841	2369	2496	2266	2552	20- 25	467.3	1334	21.6,21.9
30	2484	1817	1519	1706	2373	2473	2180	2516	25- 30	548.4	1882	30.4,30.9
35	2452	1659	1351	1559	2352	2445	1903	2474	30- 35	612.6	2495	40.4,41
40	2377	1486	1182	1401	2299	2375	1627	2397	35- 40	650.8	3145	50.9,51.7
45	2239	1291	1014	1227	2187	2117	1350	2111	40- 45	660.0	3805	61.6,62.5
50	2007	1074	797.3	1035	2003	1835	1090	1789	45- 50	635.6	4441	71.8,72.9
55	1665	842.7	580.5	828.7	1649	1523	829.6	1431	50- 55	572.5	5014	81.1,82.3
60	1208	603.2	363.8	596.3	1199	1153	569.2	1088	55- 60	467.2	5481	88.7,90
65	810.8	360.3	251.3	357.5	731.2	759.6	413.2	728.3	60- 65	338.2	5819	94.1,95.6
70	384.5	183.6	138.8	181.5	300.9	435.4	257.2	440.2	65- 70	214.8	6034	97.6,99.1
75	103.8	93.13	26.37	88.66	62.23	238.1	101.2	258.5	70- 75	107.5	6141	99.3,101
80	22.39	14.89	0	11.52	9.237	57.65	0	84.38	75- 80	35.73	6177	99.9,101
85	3.496	0	0	0	1.269	0	0	0	80- 85	4.540	6181	100,102
90	1.373	0	0	0	1.547	0	0	0	85- 90	0.2778	6182	100,102
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:29DEG
Operators:DANU VADIM
Test Date:2020-12-14

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:8.400m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

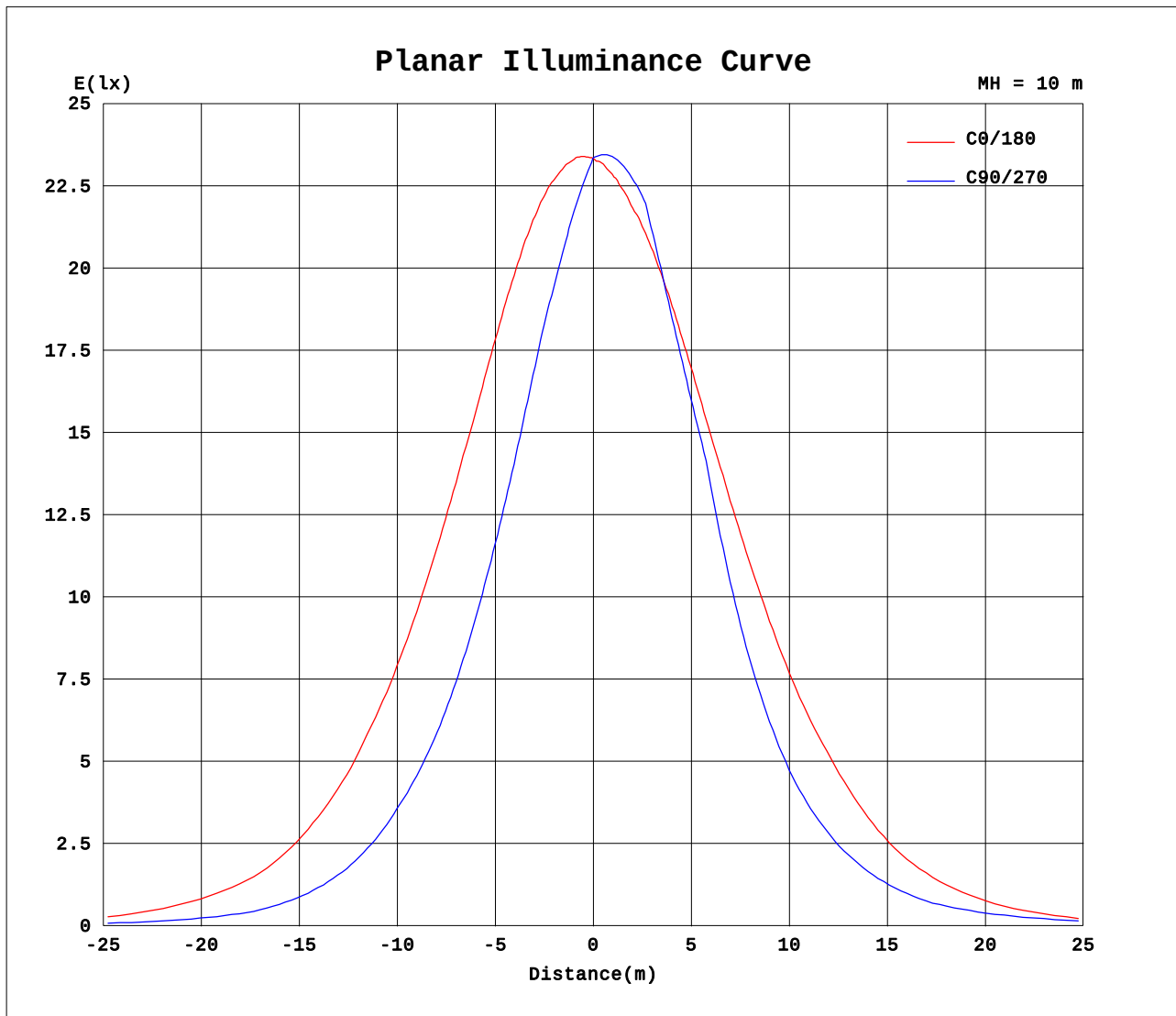
Test:U:221.9V I:0.2270A P:49.20W PF:0.9770 Lamp Flux:6088.95x1 lm		
NAME: Street Light Spectra	TYPE:50W	WEIGHT:1.5
DIM.:	SPEC.:6000K	SERIAL No.:
MFR.: LED MARKET SRL	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:29DEG
Operators:DANU VADIM
Test Date:2020-12-14

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:8.400m [K=1.0000]
Remarks:

Planar Illuminance Curve



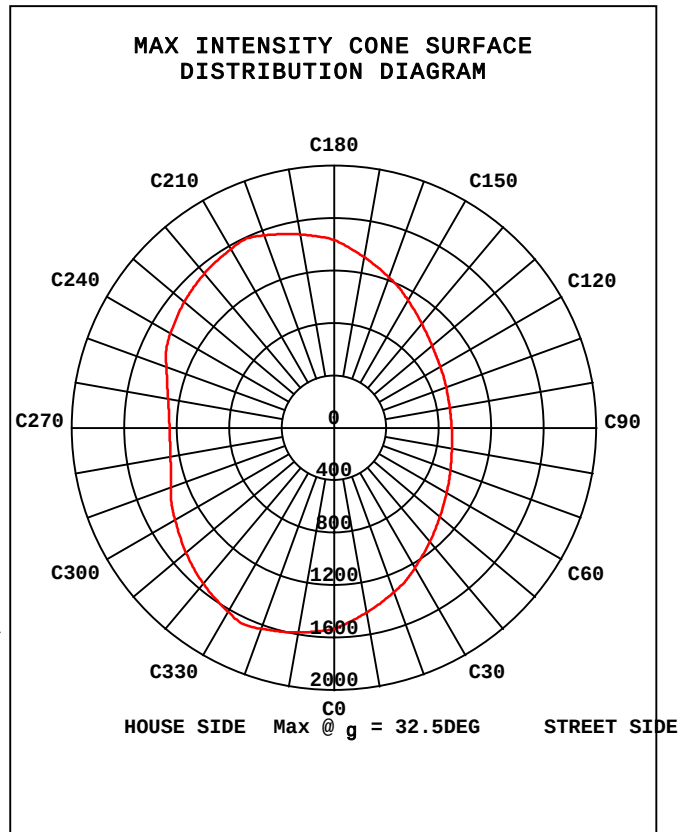
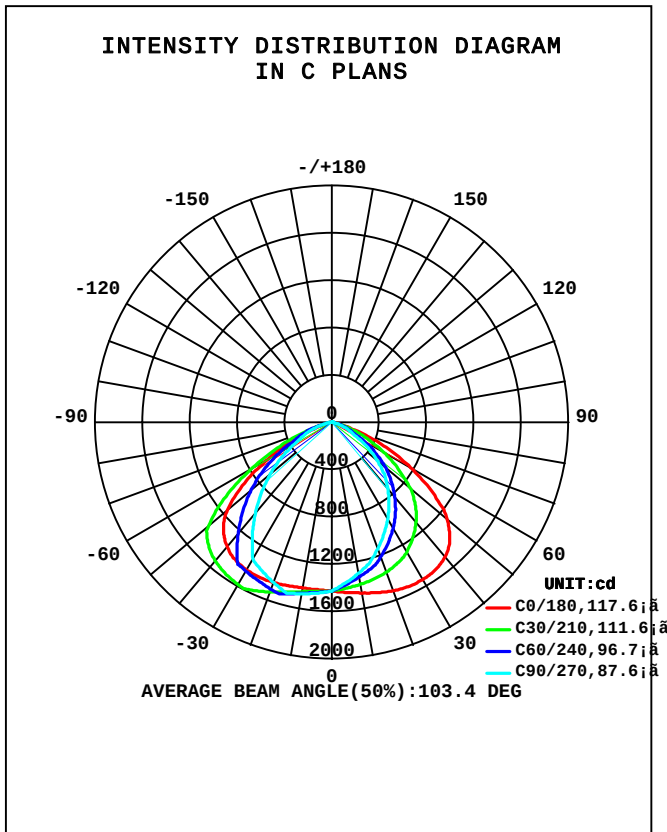
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 29DEG
 Operators: DANU VADIM
 Test Date: 2020-12-14

g Range: 0 - 90DEG
 g Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.269
 Humidity: 65.0%
 Test Distance: 8.400m [K=1.0000]
 Remarks:

STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:221.8V I:0.1270A P:27.50W PF:0.9720 Lamp Flux:3992.12x1 lm		
NAME: Street Light Spectra	TYPE:30W	WEIGHT:1.2
DIM.:	SPEC.:6000K	SERIAL No.:
MFR.: LED MARKET SRL	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 137.75 lm/W			
MODEL	Street Light Spectra	Imax(cd)	1650	h street_up(%)	0.0
NOMINAL POWER(W)	30	LOR(%)	94.9	h street_down(%)	40.2
RATED VOLTAGE(V)	222	TOTAL FLUX(lm)	3788	h house_up(%)	0.0
NOMINAL FLUX(lm)	3992.12	MAXIMUM @(C,g)	335,32.5	h house_down(%)	54.6
LAMPS INSIDE	1	h up(%)	0.0	76 FLASHAREA(m2)	
TEST VOLTAGE(V)	221.8	h down(%)	94.9	SLI	



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:29DEG
Operators:DANU VADIM
Test Date:2020-12-15

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

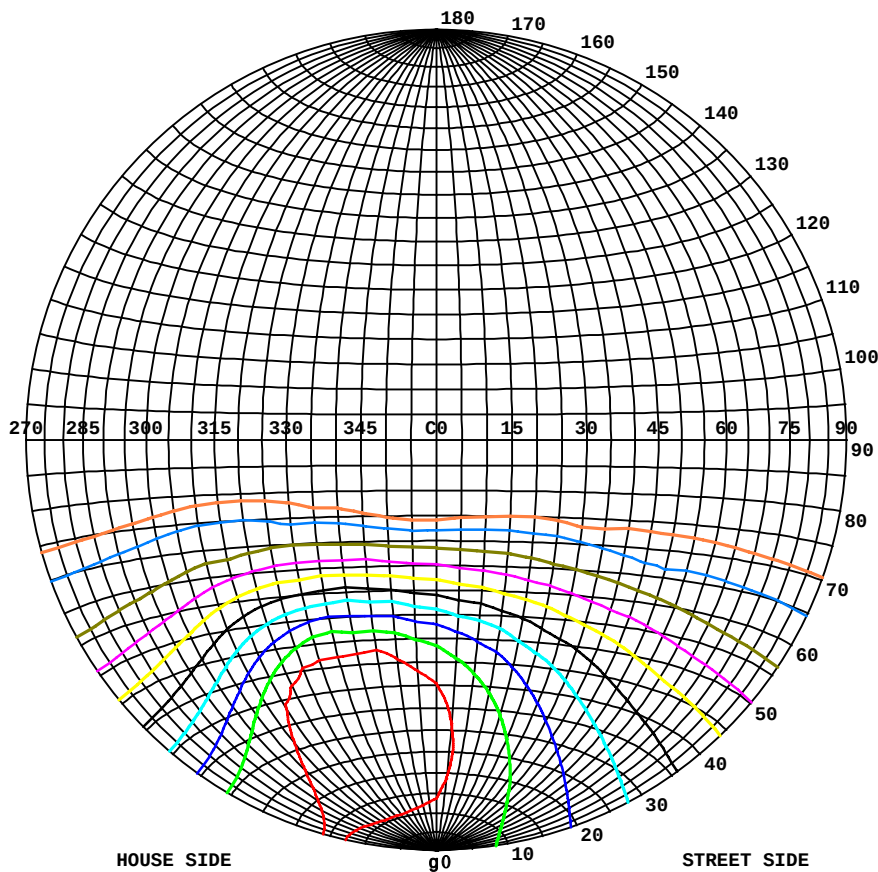
Note: SLI:Specific Luminaire Index
C:\Users\LAB\Desktop\LED\STREET\Spectra 30W 6000K.G0S

Digitally signed by Miha Nicolae
Date: 2021.03.31 14:04:04 EEST
Reason: MoldSign Signature
Location: Moldova



STREETLIGHT ISOCANDELA DIAGRAM

Test:U:221.8V I:0.1270A P:27.50W PF:0.9720 Lamp Flux:3992.12x1 lm		
NAME: Street Light Spectra	TYPE:30W	WEIGHT:1.2
DIM.:	SPEC.:6000K	SERIAL No.:
MFR.: LED MARKET SRL	SUR.:	PROTECTION ANGLE:



Classification:

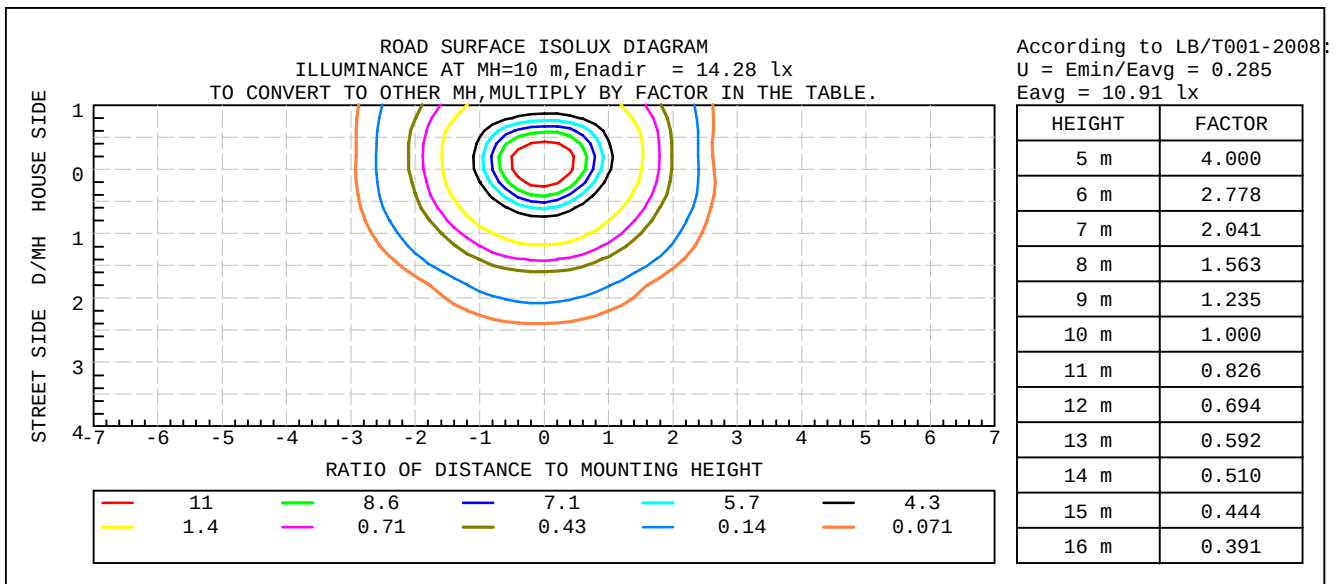
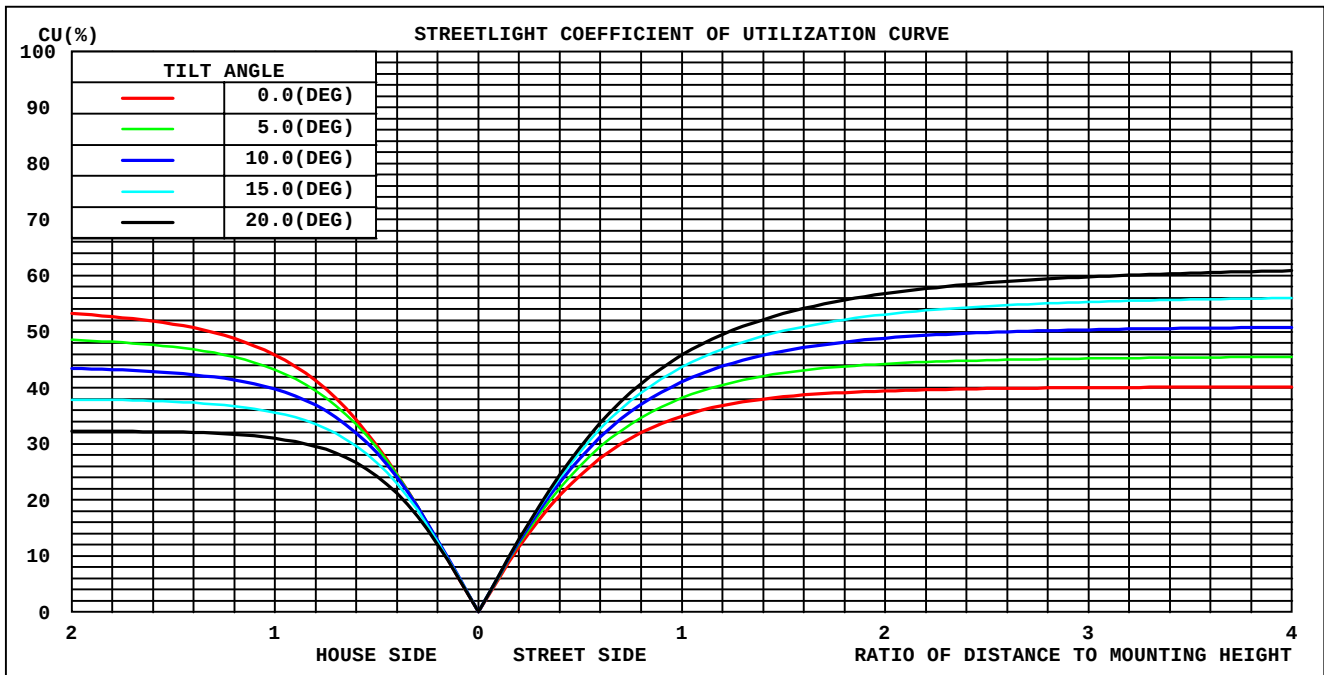
IES:Type V - Very Short
 CIE:Narrow - Short
 IES:Cut-off
 CIE:Full cut-off
 Max.At80:13.40cd/klm
 Max.At90:0.2451cd/klm
 Max.80-90:13.40cd/klm
 NRB 5101:Limited[2.5%]

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	1650
90%	1485
80%	1320
70%	1155
60%	990
50%	825
40%	660
30%	495
20%	330
10%	165
5%	82

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:29DEG
 Operators:DANU VADIM
 Test Date:2020-12-15

g Range: 0 - 90DEG
 g Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
 Humidity:65.0%
 Test Distance:8.300m [K=1.0000]
 Remarks:

COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 29DEG
Operators: DANU VADIM
Test Date: 2020-12-15

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity: 65.0%
Test Distance: 8.300m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

Test:U:221.8V I:0.1270A P:27.50W PF:0.9720 Lamp Flux:3992.12x1 lm		
NAME: Street Light Spectra	TYPE:30W	WEIGHT:1.2
DIM.:	SPEC.:6000K	SERIAL No.:
MFR.: LED MARKET SRL	SUR.:	PROTECTION ANGLE:

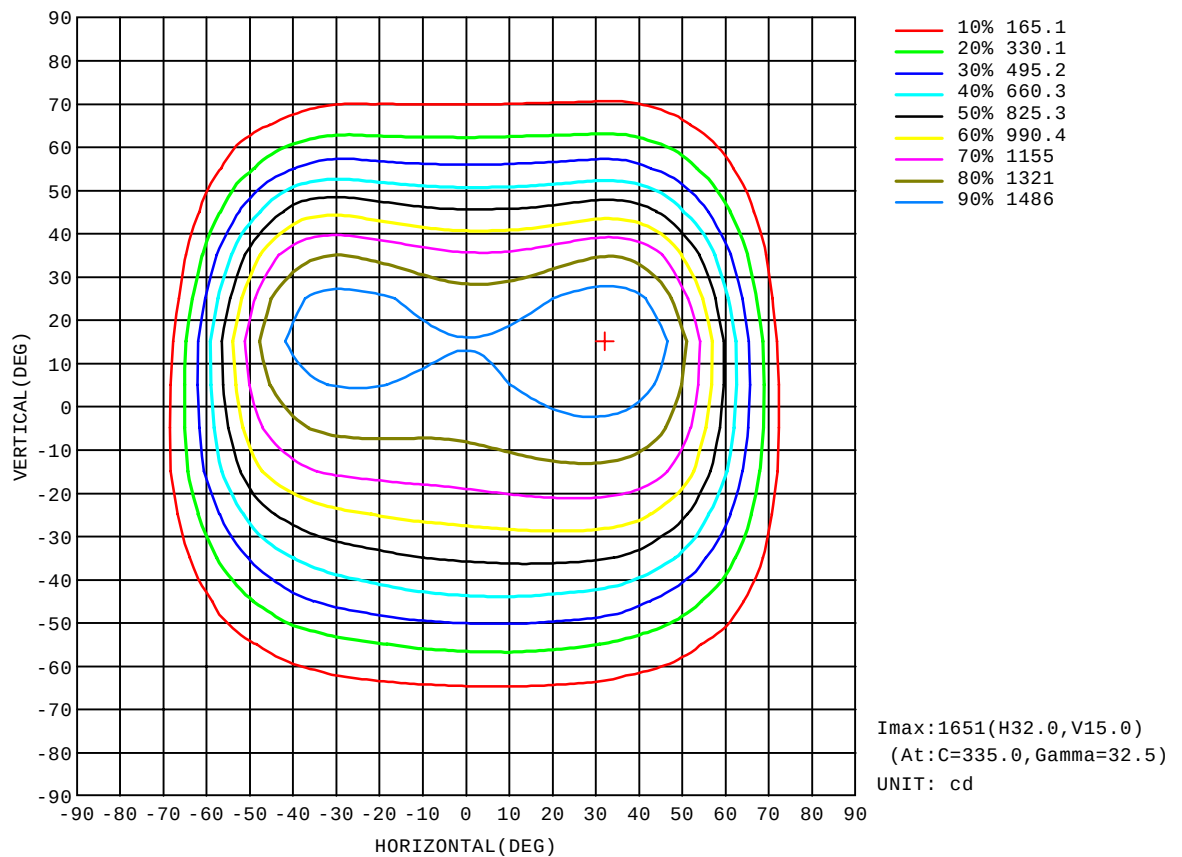
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum, lamp
5	1445	1393	1363	1376	1421	1440	1450	1453	0- 5	33.96	33.96	0.90,0.85
10	1466	1359	1299	1325	1423	1465	1473	1482	5- 10	101.1	135.0	3.56,3.38
15	1492	1323	1235	1274	1431	1500	1495	1517	10- 15	167.0	302.1	7.97,7.57
20	1517	1282	1140	1219	1442	1546	1443	1561	15- 20	230.4	532.4	14.1,13.3
25	1534	1214	1045	1141	1448	1542	1392	1552	20- 25	287.7	820.1	21.6,20.5
30	1536	1134	949.7	1053	1442	1528	1340	1529	25- 30	337.8	1158	30.6,29
35	1526	1048	844.9	957.9	1423	1509	1174	1503	30- 35	377.7	1536	40.5,38.5
40	1489	949.8	740.2	854.5	1378	1469	1009	1457	35- 40	401.8	1937	51.1,48.5
45	1414	831.9	635.4	742.0	1295	1311	842.9	1298	40- 45	408.2	2346	61.9,58.8
50	1277	702.2	500.2	620.6	1154	1133	679.5	1115	45- 50	393.3	2739	72.3,68.6
55	1043	558.7	365.1	491.5	902.8	937.4	516.2	910.7	50- 55	351.8	3091	81.6,77.4
60	771.4	396.5	229.9	347.3	629.7	694.7	352.8	694.7	55- 60	283.8	3374	89.1,84.5
65	507.0	236.9	159.0	200.9	372.9	433.1	256.5	462.9	60- 65	202.8	3577	94.4,89.6
70	260.4	122.1	88.19	95.56	122.7	235.6	160.1	275.6	65- 70	126.4	3704	97.8,92.8
75	61.29	60.53	17.33	46.95	22.76	120.9	63.80	161.7	70- 75	62.05	3766	99.4,94.3
80	9.814	8.632	0	6.715	4.334	22.30	0	52.24	75- 80	19.84	3786	99.9,94.8
85	2.233	0	0	0	2.140	0	0	0	80- 85	2.413	3788	100,94.9
90	0.6735	0	0	0	0.9786	0	0	0	85- 90	0.1864	3788	100,94.9
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:29DEG
Operators:DANU VADIM
Test Date:2020-12-15

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

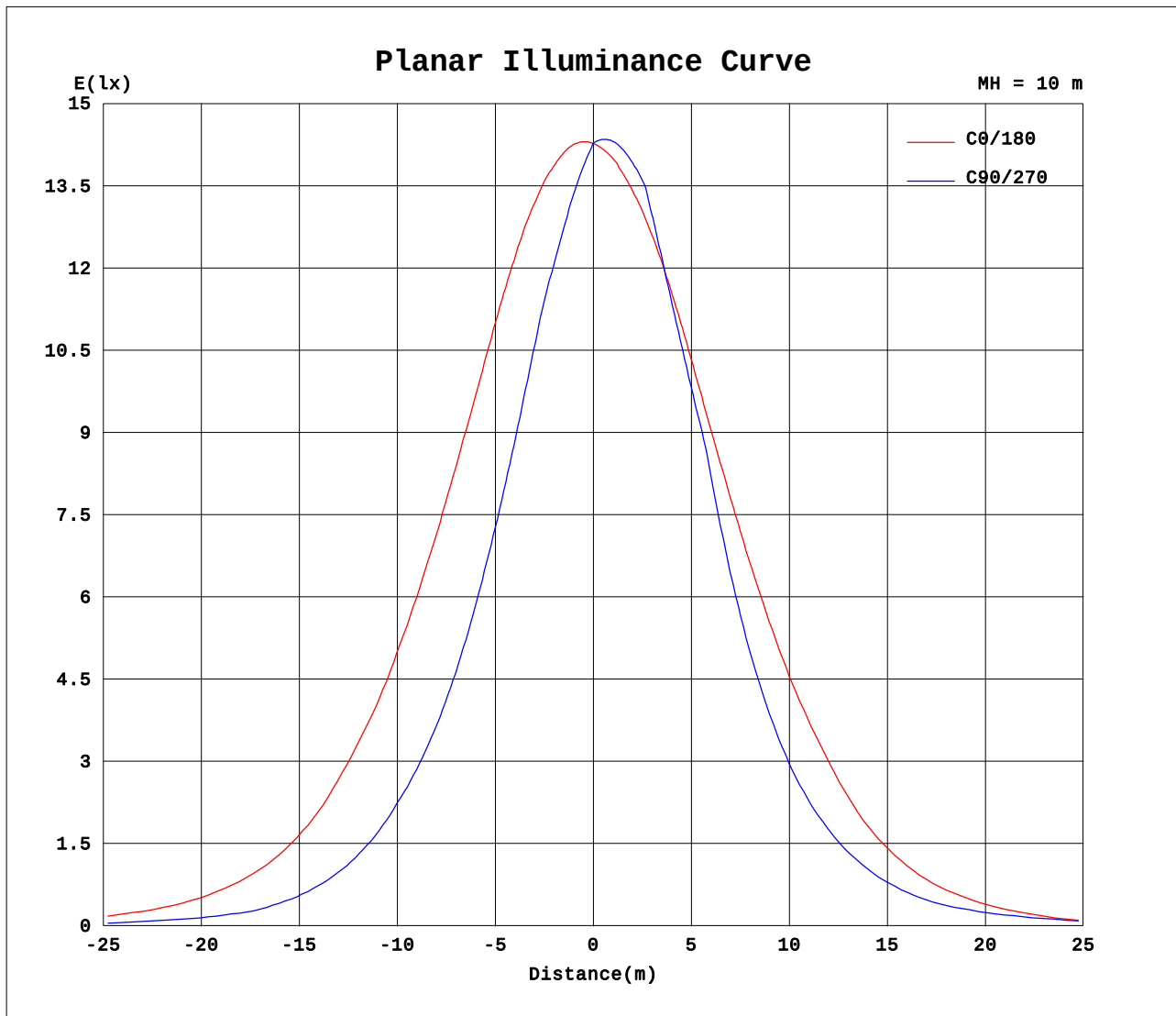
Test:U:221.8V I:0.1270A P:27.50W PF:0.9720 Lamp Flux:3992.12x1 lm		
NAME: Street Light Spectra	TYPE:30W	WEIGHT:1.2
DIM.:	SPEC.:6000K	SERIAL No.:
MFR.: LED MARKET SRL	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:29DEG
Operators:DANU VADIM
Test Date:2020-12-15

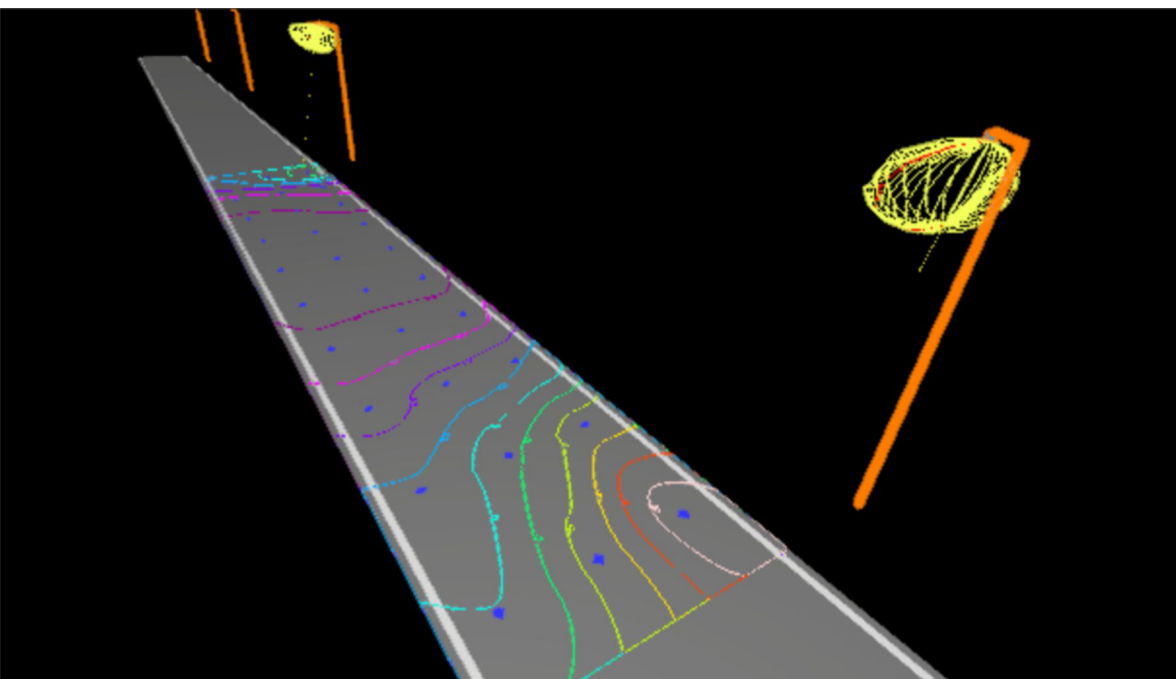
g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:8.300m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 29DEG
 Operators: DANU VADIM
 Test Date: 2020-12-15

g Range: 0 - 90DEG
 g Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.269
 Humidity: 65.0%
 Test Distance: 8.300m [K=1.0000]
 Remarks:



Drum principal · Альтернатива 2

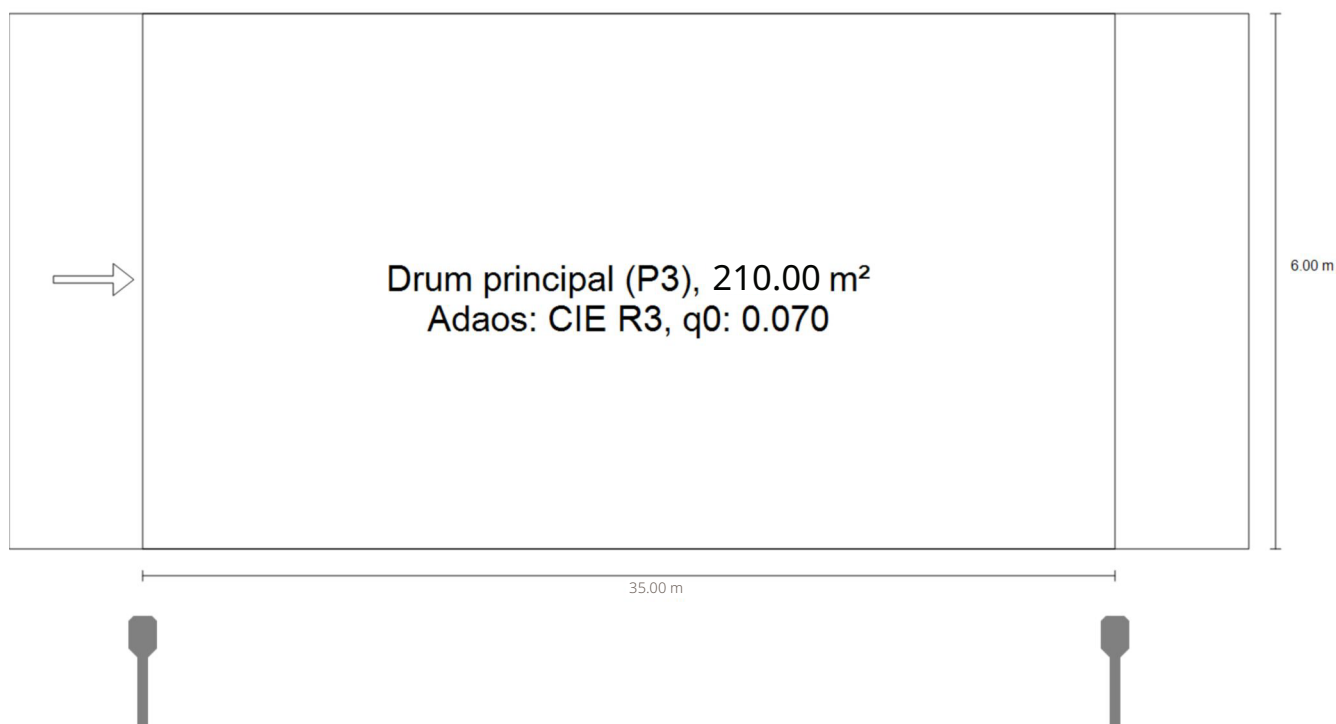
Descriere

Digitally signed by Mihi Nicolae
Date: 2021.03.31 14:04:59 EEST
Reason: MoldSign Signature
Location: Moldova

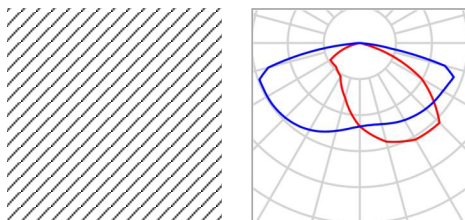


Drum principal · Альтернатива 2

Rezumat (până la EN 13201:2015)



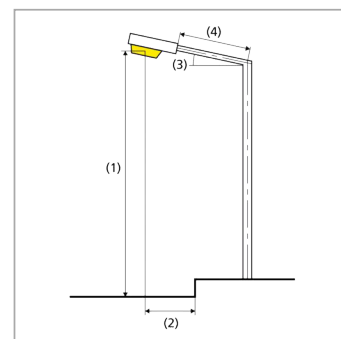
Drum principal · Альтернатива 2

Rezumat (până la EN 13201:2015)

Producător	LED MARKET SRL	P	50.0 W
Nr.articol		$\Phi_{\text{Lampă}}$	6543 lm
Nume articol	50W 6000K	$\Phi_{\text{Corp de iluminat}}$	6521 lm
Dotare	1x Street Light SPECTRA TYPE 3M	η	99.66 %

50W 6000K (Pe o parte Jos)

Distanță stâlp	35.000 m
(1) Înălțimea punctului de lumină	6.800 m
(2) Ieșirea în consolă a punctului de lumină	-1.008 m
(3) Înclinare consolă	15.0°
(4) Lungime consolă	1.000 m
Număr anual de ore de funcționare	4000 h: 100.0 %, 50.0 W
Consum	1650.0 W/km
ULR / ULOR	0.02 / 0.00
Intensități luminoase max.	≥ 70°: 314 cd/klm
Orice direcție ce formează unghiul dat cu verticala în jos a corpurilor de iluminat instalate pentru utilizare.	≥ 80°: 324 cd/klm ≥ 90°: 295 cd/klm
Clasă intensitate luminoasă	-
Valorile intensității luminoase în [cd/klm] pentru calculul clasei intensității luminoase se referă la fluxul luminos al corpului de iluminat, conform EN 13201:2015.	



Drum principal · Альтернатива 2

Rezumat (până la EN 13201:2015)

Clasă index ornamente

D.0

Rezultate pentru câmpurile de evaluare

	Mărime	Calculat	Nominal	Conform
Drum principal	$E_m^{(2)}$	6.01 lx	[6.00 - 9.00] lx	✓
	$E_{min}^{(2)}$	1.29 lx	≥ 1.00 lx	✓

(2) Valoare nominală modificată de proiectant, abatere de la standard

Pentru instalare s-a luat în calcul un factor de întreținere de 0.85.

Rezultate pentru indicatorii de eficiență energetică

	Mărime	Calculat	Consum
Drum principal	D_p	0.046 W/lx*m ²	-
50W 6000K (Pe o parte Jos)	D_e	1.1 kWh/m ² an	200.0 kWh/an

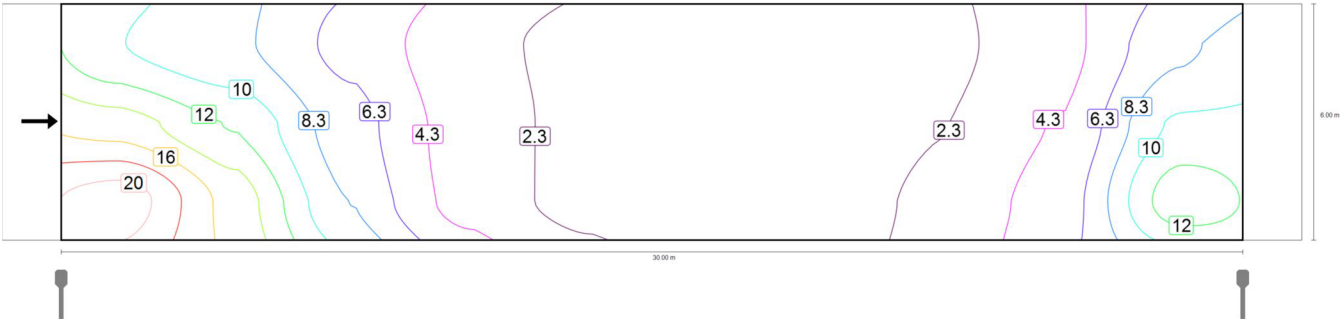
Drum principal · Альтернатива 2

Drum principal

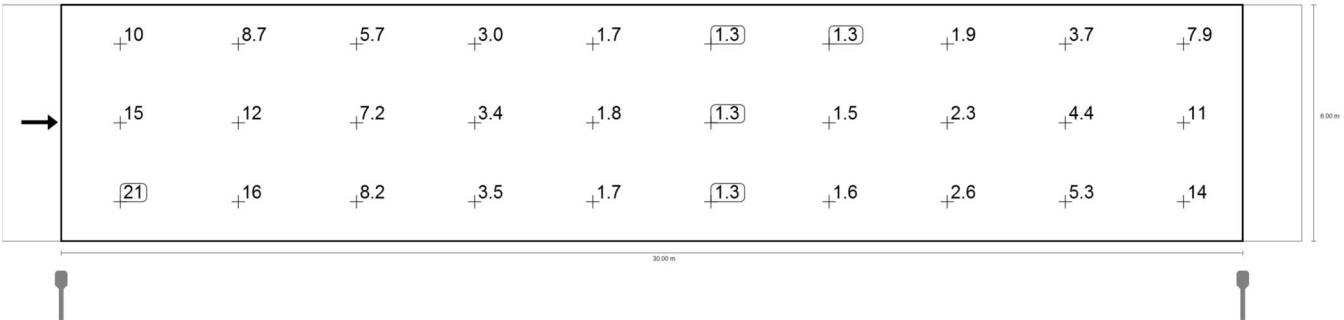
Rezultate pentru câmpul de evaluare

	Mărire	Calculat	Nominal	Conform
Drum principal	$E_m^{(2)}$	6.01 lx	[6.00 - 9.00] lx	✓
	$E_{min}^{(2)}$	1.29 lx	≥ 1.00 lx	✓

(2) Valoare nominală modificată de proiectant, abatere de la standard



Valoarea de întreținere, intensitatea de iluminare orizontală [lx] (Linii Isolux)

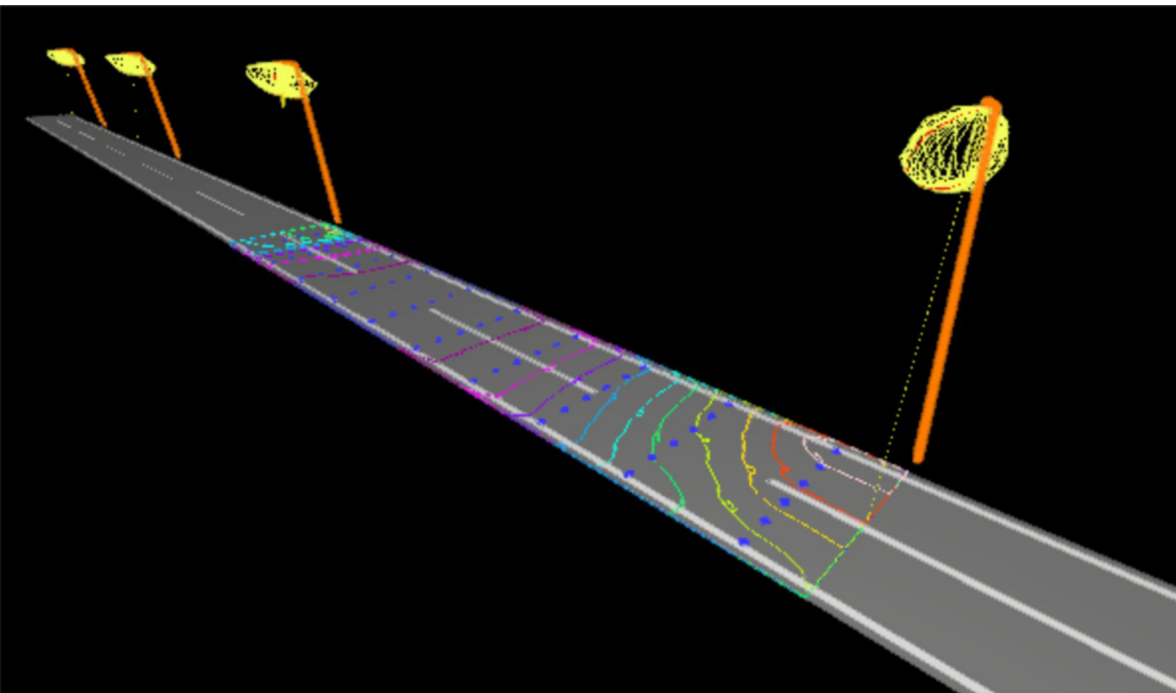


Valoarea de întreținere, intensitatea de iluminare orizontală [lx] (Raster valoric)

m	1.500	4.500	7.500	10.500	13.500	16.500	19.500	22.500	25.500	28.500
5.000	10.40	8.70	5.67	3.01	1.73	1.30	1.32	1.85	3.65	7.87
3.000	15.39	12.13	7.16	3.35	1.81	1.35	1.51	2.26	4.42	10.67
1.000	21.29	15.60	8.22	3.50	1.74	1.29	1.62	2.63	5.30	13.52

Valoarea de întreținere, intensitatea de iluminare orizontală [lx] (Tabel de valori)

	E_m	E_{min}	E_{max}	g_1	g_2
Valoarea de întreținere, intensitatea de iluminare orizontală	6.01 lx	1.29 lx	21.3 lx	0.214	0.061



Drum secundar · Альтернатива 3

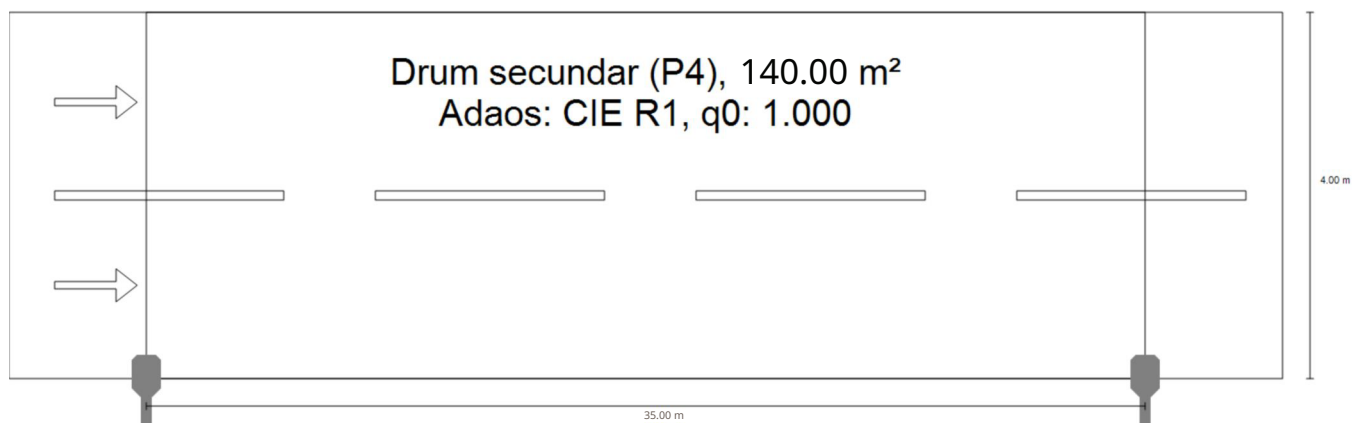
Descriere

Digitally signed by Mihu Nicolae
Date: 2021.03.31 14:05:48 EEST
Reason: MoldSign Signature
Location: Moldova

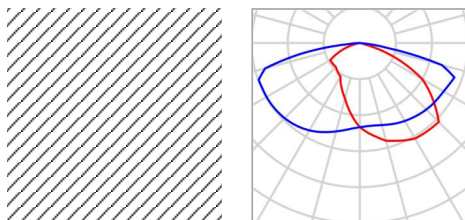


Drum secundar · Альтернатива 3

Rezumat (până la EN 13201:2015)



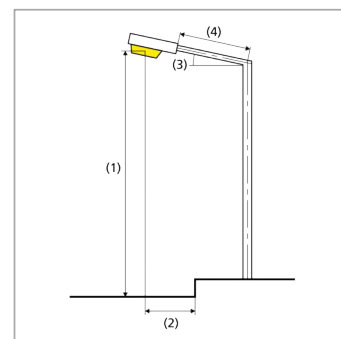
Drum secundar · Альтернатива 3

Rezumat (până la EN 13201:2015)

Producător	LED MARKET SRL	P	30.0 W
Nr.articol		$\Phi_{\text{Lampă}}$	4600 lm
Nume articol	30W 6000K	$\Phi_{\text{Corp de iluminat}}$	4587 lm
Dotare	1x Street Light SPECTRA TYPE 3M	η	99.71 %

30W 6000K (Pe o parte Jos)

Distanță stâlp	35.000 m
(1) Înălțimea punctului de lumină	6.800 m
(2) Ieșirea în consolă a punctului de lumină	0.000 m
(3) Înclinare consolă	15.0°
(4) Lungime consolă	0.500 m
Număr anual de ore de funcționare	4000 h: 100.0 %, 30.0 W
Consum	1080.0 W/km
ULR / ULOR	0.02 / 0.00
Intensități luminoase max.	≥ 70°: 310 cd/klm
Orice direcție ce formează unghiul dat cu verticala în jos a corpurilor de iluminat instalate pentru utilizare.	≥ 80°: 319 cd/klm ≥ 90°: 295 cd/klm
Clasă intensitate luminoasă	-
Valorile intensității luminoase în [cd/klm] pentru calculul clasei intensității luminoase se referă la fluxul luminos al corpului de iluminat, conform EN 13201:2015.	



Drum secundar · Альтернатива 3

Rezumat (până la EN 13201:2015)

Clasă index ornamente

D.0

Rezultate pentru câmpurile de evaluare

	Mărime	Calculat	Nominal	Conform
Drum secundar	$E_m^{(2)}$	2.98 lx	[2.00 - 3.00] lx	✓
	$E_{min}^{(2)}$	0.60 lx	≥ 0.60 lx	✓

(2) Valoare nominală modificată de proiectant, abatere de la standard

Pentru instalare s-a luat în calcul un factor de întreținere de 0.85.

Rezultate pentru indicatorii de eficiență energetică

	Mărime	Calculat	Consum
Drum secundar	D_p	0.090 W/lx*m ²	-
30W 6000K (Pe o parte Jos)	D_e	1.1 kWh/m ² an	120.0 kWh/an

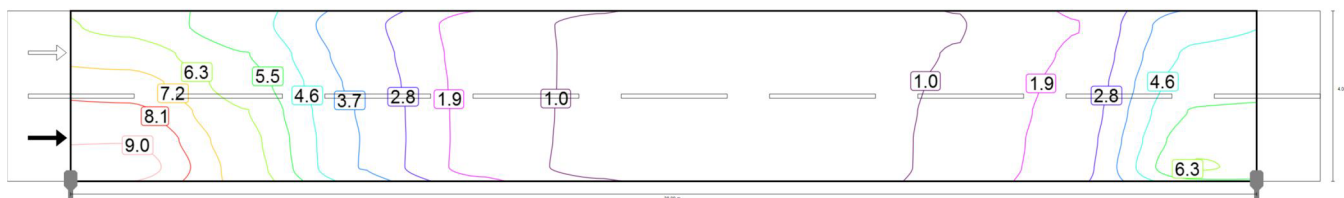
Drum secundar · Альтернатива 3

Drum secundar

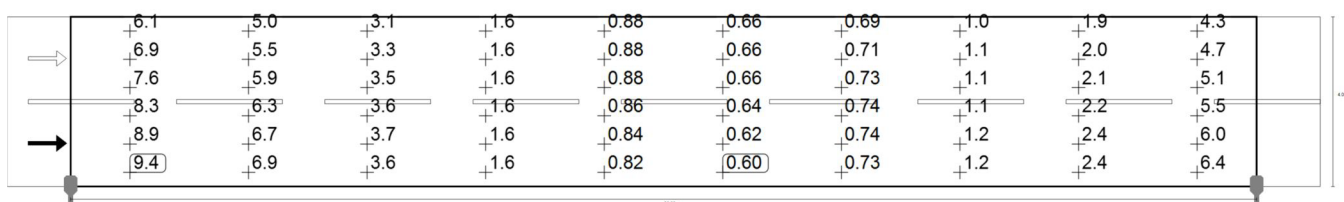
Rezultate pentru câmpul de evaluare

	Mărire	Calculat	Nominal	Conform
Drum secundar	$E_m^{(2)}$	2.98 lx	[2.00 - 3.00] lx	✓
	$E_{min}^{(2)}$	0.60 lx	≥ 0.60 lx	✓

(2) Valoare nominală modificată de proiectant, abatere de la standard



Valoarea de întreținere, intensitatea de iluminare orizontală [lx] (Linii Isolux)



Valoarea de întreținere, intensitatea de iluminare orizontală [lx] (Raster valoric)

m	1.400	4.200	7.000	9.800	12.600	15.400	18.200	21.000	23.800	26.600
3.667	6.12	4.97	3.09	1.55	0.88	0.66	0.69	1.01	1.91	4.35
3.000	6.85	5.47	3.29	1.59	0.88	0.66	0.71	1.06	2.00	4.72
2.333	7.60	5.93	3.47	1.61	0.88	0.66	0.73	1.11	2.13	5.09
1.667	8.31	6.34	3.62	1.62	0.86	0.64	0.74	1.14	2.24	5.51
1.000	8.94	6.66	3.66	1.63	0.84	0.62	0.74	1.17	2.35	5.96
0.333	9.42	6.86	3.64	1.61	0.82	0.60	0.73	1.18	2.44	6.43

Valoarea de întreținere, intensitatea de iluminare orizontală [lx] (Tabel de valori)

	E_m	E_{min}	E_{max}	g_1	g_2
Valoarea de întreținere, intensitatea de iluminare orizontală	2.98 lx	0.60 lx	9.42 lx	0.200	0.063

CERTIFICAT DE CONFORMITATE

Nr. de înregistrare

OCP_{GSP} MD 015 13C 47954-21

Data emiterii 03 februarie 2021

Valabil pînă la 03 februarie 2022

ORGANISMUL DE CERTIFICARE A PRODUSELOR CU GRAD SPORIT DE PERICOL
din cadrul SRL "Centrul Tehnic pentru Securitate Industrială și Certificare",
MD-2004, mun. Chișinău, str. S.Lazo, 48; sediul central: mun. Chișinău, str. Melestiu 22/A,
tel.: 022208186, 022208156

PRIN PREZENTUL DOCUMENT SE CONFIRMĂ FAPTUL, CĂ PRODUSELE IDENTIFICATE ASTFEL:

DENUMIREA / DESCRIEREA

Cabluri și conductoare electrice în sortiment,
marca comercială "ЮЖКАБЕЛЬ";
tipul produselor, articolele, conform anexei - (3 poziții);
livrarea conform contractului nr.12/247 din 01.07.2013;
păstrarea: depozitul firmei (RM, mun. Chișinău, str. Petricani, 21)

Codul NC MD
8544**SUNT CONFORME CU CERINȚELE OBLIGATORII STABILITE ÎN**

SM IEC 60227-4+A1:2016 (cap. 2.1, 2.2, 2.3, pct.2.3.1, 2.3.2, 2.3.5, cap.2.4),
GOST 839-80 (cap.1, pct.1.1, 1.2, cap.2, pct.2.2, 2.8, cap.5, pct.5.2, 5.3)

PRODUCĂTOR

ПАО "ЗАВОД ЮЖКАБЕЛЬ", or. Harikov, Ucraina

Codul țării
UA**CLIENT**

CEGOLTAR SRL,
RM, mun. Chișinău, str. Nuferilor, 25, tel. (022) 273-582

Codul IDNO
1003600017268**CERTIFICATUL ESTE ELIBERAT ÎN BAZA**

Raportului de identificare a produselor nr.10/0029 din 26.01.2021.
Rapoartelor de încercări nr.524/02/21, 525/02/21 din 28.01.2021,
eliberate de LÎ "INSPECT TEST", certificat de acreditare nr.LÎ-129.
Raportului de evaluare nr.10b/026-ev din 02.02.2021.

INFORMAȚIE SUPLIMENTARĂ

Schema de tip 2.

Este stabilită 1 supraveghere cu identificarea de către OC PGSP a fiecărui lot de produse importate.
Produsele date se comercializează numai în prezența informației în limba de stat.
Certificatul este valabil numai în prezența anexei la certificatul dat.

Seria C nr. 005039



Conducătorul

organismului de certificare

Nicolai Manolov

În atenția antreprenorilor și organelor de control!**Copiile certificatului de conformitate se legalizează în modul stabilit de
Organismul de Certificare a Produselor cu Grad Sporit de Pericol**

Anexă

la certificatul de conformitate

din

03.02.2021

Lista produselor concrete

asupra cărora se extinde acțiunea certificatului de conformitate

Nr.	Tipul produselor	Articole
1	Cabluri electrice	АВВГ
		АПвБбШв
		АПвБбШп
		АПвПг
		ВВГнг
		ВВГ-п
		ВВГнг -LS
		ВВГнг FR-LS
		N2XH-J
		NYM-J
		NA2XS(F)2Y
		NA2XS(FL)2Y
		АПвЭгаПы
		АПвЭгП
		ААБл
		ААШв
		КВВГ
		КВВГнг
2	Conductoare electrice	АС
		СИП-2
		СИП-5
		СИП-3
		АПВ
		АППВ
		ПВС
		ШВВП
		ВПП
		ПВ 1
		ПВ 3
3	Conductoare electrice cu fibre optice	ПСДКТ-Л
		ПЭИДХ2
		ОАрП
		ОЦПс
		ОПТ
		ОЦБгП
		ОБгПо

Seria C nr. 002457



**Conducătorul
Organismului de certificare**

W. Wacziarg

Nicolai Manolov

Anexa nu este valabilă în lipsa certificatului de conformitate

Digitally signed by Miha Nicolae
Date: 2021.03.31 14:08:02 EEST
Reason: MoldSign Signature
Location: Moldova





СЕРТИФИКАТ СООТВЕТСТВИЯ НАУЧНО – ТЕХНИЧЕСКОЙ ЭКСПЕРТИЗЫ И ИСПЫТАНИЙ

Научный Экспертно-Технический Центр "MOLDTESTENERGO"
МД 2071, г. Кишинев, ул. Деляну 7/6, оф.10, т. 022-74-92-29

Регистрационный номер CSET MTE 26 11A 713-19

Дата выдачи: 28 октября 2019

Действителен по: 27 октября 2022

НАСТОЯЩИМ ДОКУМЕНТОМ УДОСТОВЕРЯЕТСЯ, ЧТО ПРОДУКЦИЯ, ИДЕНТИФИЦИРОВАННАЯ КАК:
НАИМЕНОВАНИЕ / ОПИСАНИЕ

Код NM MD
8536 20 100

Выключатели автоматические ВА47-29, ВА47-29М, ВА47-29N на токи до 63А, время-токовые характеристики В, С, D, число полюсов от одного до четырех и аксессуары к ним товарного знака "IEK":
- расцепители минимального/максимального напряжения RM47 и RMM47
- расцепители независимые RN47
- звонок ЗД47.

Серийный выпуск

СООТВЕТСТВУЕТ ОБЯЗАТЕЛЬНЫМ ТРЕБОВАНИЯМ, УСТАНОВЛЕННЫМ В:
Безопасности SM EN 60898-1:2003/AC:2016

ИЗГОТОВИТЕЛЬ:
ZHEJIANG CHUANGQI ELECTRIC CO., LTD. NO.18 SHAHONG ROAD,
BEIBAIXIANG, YUEQING, 325603, CHINA

Код страны
CN

ЗАЯВИТЕЛЬ:
SRL "IEK TRADE", mun. Chişinău, str. Maria Dragan 21
tel. 47-90-65, fax 47-90-66

Код СИПО
40201104

СЕРТИФИКАТ ВЫДАН НА ОСНОВАНИИ:

Сертификата соответствия ЕАЭС RU C-CN.СП28.И.00293/19 сроком действия с 19.07.2019 по 18.07.2020, выданного ОС ООО «Тест-С-Петербург», 190103, Россия, г. Санкт-Петербург, ул. 10-я Красноармейская дом 22, Литер А. Аттестат аккредитации № РОСС RU.0001.10СП28 от 29.10.2014. тел. +78123275559

Протоколов испытаний № S2019/01/057-06-07-08 от 17.07.2019 г., № S2019/01/129 от 29.07.2019 г., выданных ИЛ «Тест-С-Петербург» 190103, Россия, г. Санкт-Петербург, ул. Курляндская д.1.

Акта обследования № 356/019 от 25.10.2019 г.

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ:

Периодическая экспертная оценка продукции будет осуществляться НЭТЦ „Moldtestenergo” один раз в год.

Директор НЭТЦ "MOLDTESTENERGO"

Д.Т.Н.

М.П.



М. Гураевский

Digitally signed by Mihai Nicolae
Date: 2021.03.31 14:09:00 EEST
Reason: MoldSign Signature
Location: Moldova



Настоящий сертификат MTE легализован в соответствии с правилами
Научного Экспертно-технического центра "MOLDTESTENERGO"