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ÖLÇÜM RAPORU
MEASUREMENT REPORT

TL-806
19-TST-0045- 127
05-19

Müşterinin Adı Adresi
Customer name/address

: Baytaş Aydınlatma İmalat Proje Taah.San. ve Tic.Ltd.Şti.
Sincan Sanayi Sitesi Ahi Evran Mah. 225.Cad. No:84 Sincan -ANKARA

İstek Numarası
Order No

: 19-TST-0045

Numunenin Adı ve Tarifi
Name and identity of test item

: B-LIGHT SOKAK ARMATÜRÜ
B-LIGHT STREET LUMINIARE

Numunenin kabul tarihi
The date of receipt of test item

: 07.03.2019

Açıklamalar
Remarks

: DGC'ye , IES LM-82-12 standardı uyarınca fotometrik ölçümler yapılmıştır.
Photometric measurement has been applied to EUT according to IESNA LM-82-12.

Deneyin Yapıldığı Tarih
Date of Test

: 27.05.2019

Raporun Sayfa Sayısı
Number of Pages of the Report

:17

Deney laboratuvarı olarak faaliyet gösteren TÜV AUSTRIA TURK, International Accreditation Service, Inc. (IAS) TL-806 ile TS EN ISO/IEC 17025 Nisan 2012 standardına göre akredite edilmiştir.
TÜV AUSTRIA TURK is accredited by International Accreditation Service, Inc. (IAS) under registration number TL-806 for TS EN ISO/IEC 17025 April 2012 as a test laboratory.

International Accreditation Service, Inc. (IAS) deney raporlarının tanınırlığı konusunda Avrupa Akreditasyon Birliği(EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği(ILAC) ile karşılıklı tanıma anlaşması imzalamıştır.
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Deney ve /veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metotları bu sertifikanın tamamlayıcı kısmı olan takip eden sayfalarda verilmiştir.
The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.

Bu rapor, laboratuvara gönderilen numunelere uygulanan deney/deneyler sonucu hazırlanmıştır. Müşteriye ait diğer numuneleri kapsamaz.
This report was prepared according to test results of specimens sent to laboratory. It doesn't contain other specimens belonging to customer.



Deney Sorumlusu
Person in charge of test


Gürhan CANSIZ

Onaylayan
Approval


Gürhan CANSIZ

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1.1

DGC, Çevre Şartları ve Sembollerin Tanımları (Description of the EUT, Environmental Conditions and Symbol Definitions)

Markası / Brand	: BAYLED
Modeli / Model	: B-LIGHT 200W
Seri Numarası / Serial Number	: Test Numunesi Test sample
Beyan Gücü / Rated Power	: 200 W
Beyan Gerilimi / Rated Voltage	: 100-240 VAC
Sembollerin Tanımı / Definitions of Symbols	DGC= Deneden Geçen Cihaz EUT=Equipment Under Test

Çevre Şartları / Environmental Conditions	
Sıcaklık (°C) (Temperature)	25 °C ±1
Nem (Rh) (Humidity)	%45 ±10
Stabilizasyon (Stabilization)	1 hour ±5min



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1.2 Deney Standartları (Test Standards)

Deneyler aşağıdaki standartlara göre yapılmıştır (The tests were performed according to following standards):

Standart / Standard

- IES LM-82-12
- IES LM-79-08

1.3 Deney Ekipmanları (Test Equipments)

Kayıt No. (ID – No.)	Tip (Type)	Kontrol (Check Point)
LAB-011	Goniophotometer	<input checked="" type="checkbox"/>
LAB-015	AC Power Supply	<input checked="" type="checkbox"/>
LAB-027	Powermeter	<input checked="" type="checkbox"/>
LAB-012	Integrating Sphere	<input checked="" type="checkbox"/>
LAB-007	Accelerated Aging Lifetime Test System	<input checked="" type="checkbox"/>
LAB-023	Standart Lamp	<input checked="" type="checkbox"/>

1.3 Komponent listesi (Component list)

Komponent (Component)	Üretici (Manufacturer)	Model (Model)	Standart no. (Standart No.)	Sertifika no. (Certificate No.)
LED	NICHIA	NVSL219C	-	-
DRİVER	MEANWELL	ELG-240-C1050A	-	-
LENS	LEDİL	C12362_STRADA-2X2-DWC	-	-



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1.4 25°C Oda Sıcaklığında ilk ölçüm (Room Temperature Initial Measurement Test at 25°C)

Unit	Room Temperature Initial Measurement Test at 25°C
Aktif Güç <i>Electric Power P_o (W)</i>	220,9
Gerilim <i>Voltage (V)</i>	240,1
Akım <i>Current (A)</i>	0,9368
Işık Akısı <i>Luminous Flux Φ_o (lm)</i>	20745
Verimlilik <i>Luminous efficacy (lm/w)</i>	93,92
CIE Koordinatları <i>CIE Coordinate x_o</i>	0,3657
CIE Koordinatları <i>CIE Coordinate y_o</i>	0,3703
CCTi (K)	4329
Tb	47,1
Tsp	96,1
Tc LED Driver	71,2



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1.4 **T_{b,0}+25°C Oda Sıcaklığında ilk ölçüm (Room Temperature Initial Measurement Test at T_{b,0}+25°C)**

Unit	Room Temperature Initial Measurement Test at T _{b,0} +25°C
Aktif Güç <i>Electric Power P_o (W)</i>	213,6
Gerilim <i>Voltage (V)</i>	240
Akım <i>Current (A)</i>	0,91
Işık Akısı <i>Luminous Flux Φ_o (lm)</i>	19305,95
Verimlilik <i>Luminous efficacy (lm/w)</i>	90,4
CIE Koordinatları <i>CIE Coordinate x₀</i>	0,3403
CIE Koordinatları <i>CIE Coordinate y₀</i>	0,3446
CCTi (K)	4321
T _b	72,1
T _{sp}	132
T _c LED Driver	94,8



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2 Deney Sonuçları (Test Results)

Electrical Measurements

Aktif güç (W)(active power)	220,9
Ortalama Gerilim (V)(Average Voltage)	240,1
Ortalama AC Akım (mA)(Average AC Current)	0,9368
Güç Faktörü (PF)(Power Factor)	0,9819
Frekans (Hz)(Frequency)	50
Ortam Sıcaklığı (°C)(Ambient Temperature)	25,1 °C 49% Rh

Photometric Results

Işık Akısı (Luminous Flux)	20745 lm
Maksimum Işık Şiddeti (Peak Intensity)	10572 cd
Verimlilik (Luminous efficacy)	93,92 lm/W



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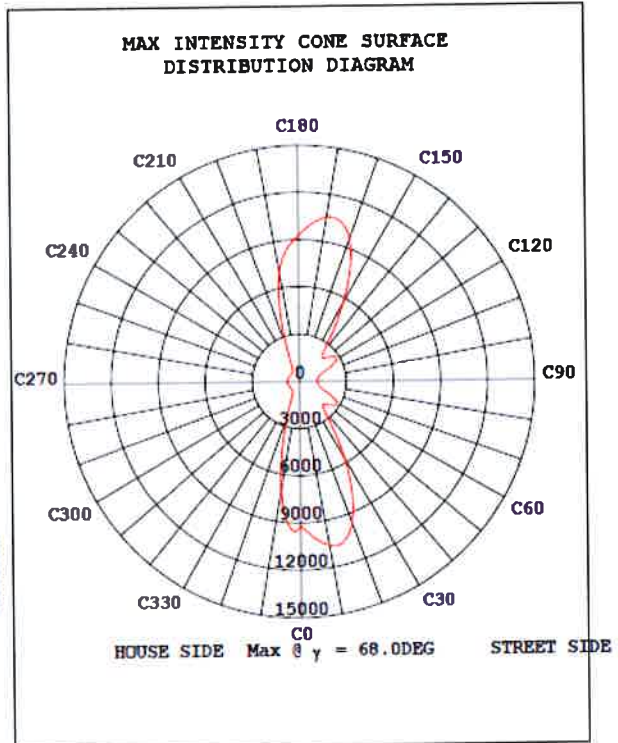
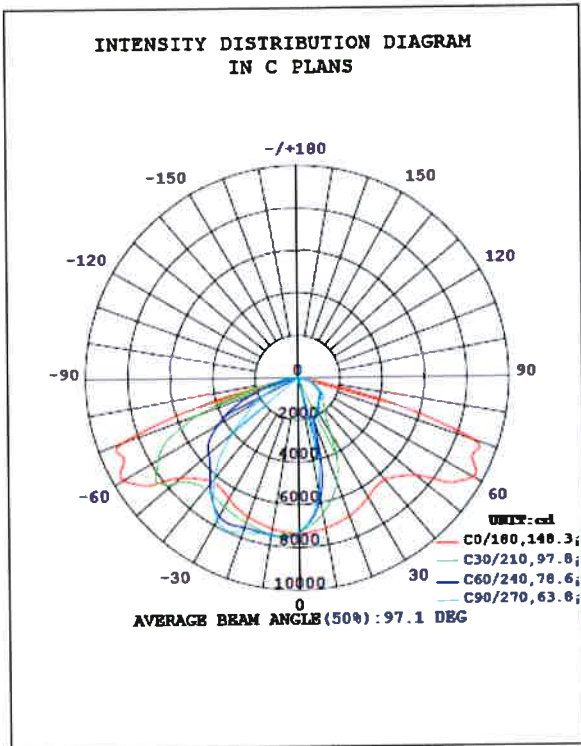
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2 Deney Sonuçları (Test Results)



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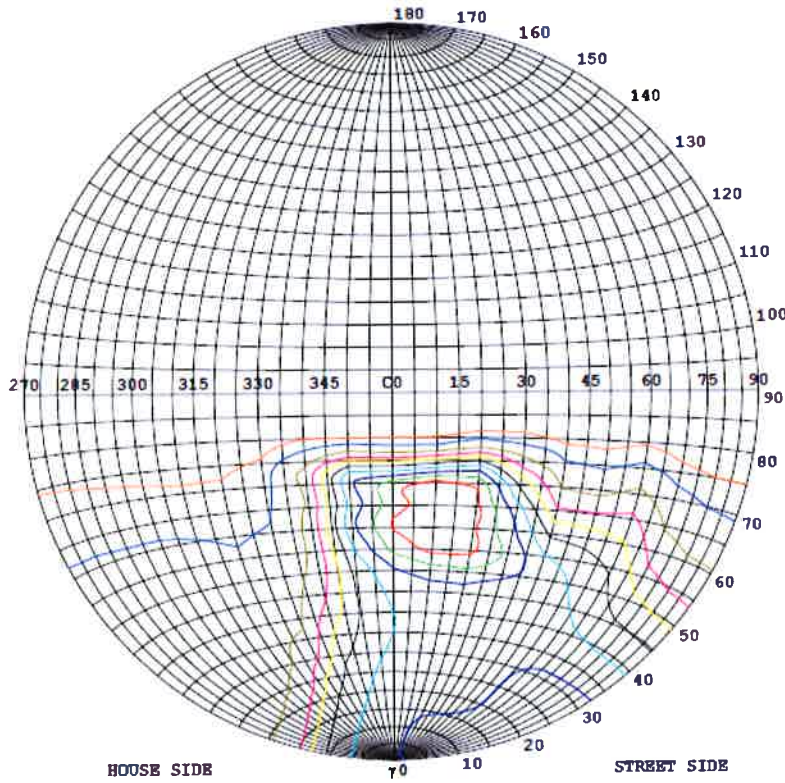
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Deney Sonuçları (Test Results)

STREETLIGHT ISOCANDELA DIAGRAM



Classification:

IES:Type II - Medium
CIE:Narrow - Intermediate
IES:Cut-off
CIE:Semi-cut-off
Max.At80:44.96cd/klm
Max.At90:0.4580cd/klm
Max.80-90:44.96cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
I_{max}=100%	10572
90%	9515
80%	8459
70%	7401
60%	6343
50%	5286
40%	4229
30%	3172
20%	2114
10%	1057
5%	529



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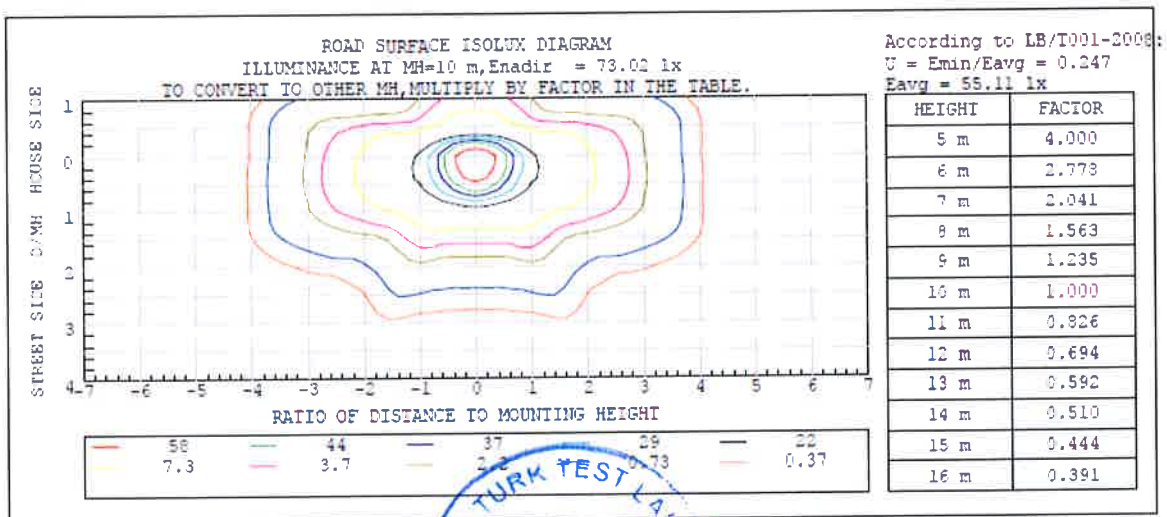
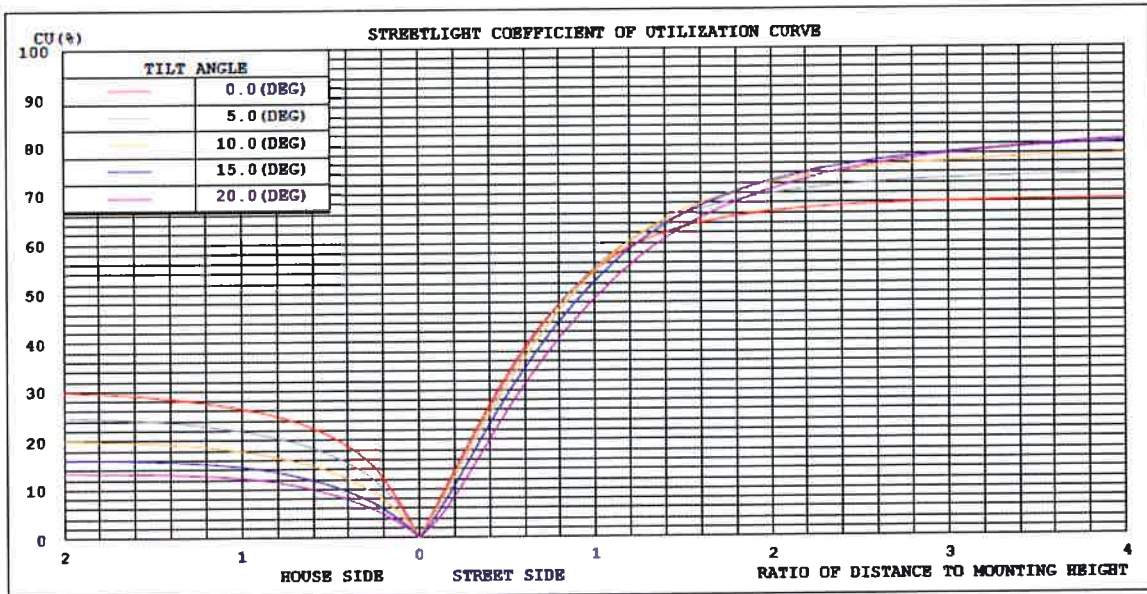
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2 Deney Sonuçları (Test Results)

**COEFFICIENT OF UTILIZATION CURVE
AND ISOLUX DIAGRAM**



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Deney Sonuçları (Test Results)

ZONAL FLUX DIAGRAM

T	C0	C45	C90	C135	C180	C225	C270	C315	y	zone	total	lum.lamp
5	721.2	752.9	755.8	752.9	721.2	684.2	669.9	684.2	0- 5	172.1	172.1	0.83,0.82
10	723.2	752.0	756.1	752.0	723.2	616.2	552.2	616.2	5- 10	502.2	675.2	2.26,2.26
15	711.0	744.4	759.4	744.4	711.0	515.8	309.0	515.8	10- 15	777.2	1452	7.7
20	697.8	735.8	776.6	735.8	697.8	349.8	209.1	349.8	15- 20	974.5	2427	11.7,11.7
25	679.8	722.4	792.6	722.4	679.8	234.8	204.0	234.8	20- 25	1162	3589	17.2,17.2
30	656.5	726.6	769.5	726.6	656.5	203.7	192.4	203.7	25- 30	1242	4992	23.8,23.8
35	626.6	714.5	704.6	714.5	626.6	191.8	164.6	191.8	30- 35	1477	6410	30.9,20.9
40	625.6	696.2	617.1	696.2	625.6	166.6	147.9	166.6	35- 40	1569	7979	28.5,28.5
45	669.2	677.0	520.7	677.0	669.2	142.9	142.9	142.9	40- 45	1648	9626	16.4,46.4
50	720.4	659.0	404.7	659.0	720.4	127.8	154.0	127.8	45- 50	1742	11270	14.8,54.8
55	880.2	606.8	294.8	606.8	880.2	116.2	152.4	116.2	50- 55	1907	13277	64.64
60	954.4	490.2	219.8	490.2	954.4	102.2	117.0	102.2	55- 60	1980	15256	22.5,72.5
65	905.6	221.4	149.9	221.4	905.6	84.14	89.22	84.14	60- 65	1895	17151	22.7,82.7
70	879.9	192.6	94.54	192.6	879.9	61.24	69.59	61.24	65- 70	1712	18864	20.9,90.9
75	281.1	102.5	52.22	102.5	281.1	29.60	48.49	29.60	70- 75	1280	20145	27.1,97.1
80	82.21	27.62	14.24	27.62	82.21	19.62	20.71	19.62	75- 80	485.2	20620	29.4,99.4
85	7.677	7.216	2.587	7.216	7.677	4.281	2.754	4.281	80- 85	101.2	20721	29.9,99.9
90	0.8225	0.2150	0.0150	0.2150	0.8225	0.1048	0	0.1048	85- 90	12.58	20744	100,100
95	0.0097	0	0	0	0.0097	0.0029	0	0.0029	90- 95	0.2048	20744	100,100
100	0.0222	0.0005	0.0008	0.0008	0.0222	0.0079	0.0006	0.0079	95-100	0.0242	20744	100,100
105	0.0486	0.0017	0.0020	0.0017	0.0486	0.0124	0.0026	0.0124	100-105	0.0661	20744	100,100
110	0.0468	0.0024	0.0027	0.0024	0.0468	0.0192	0.0057	0.0192	105-110	0.0844	20744	100,100
115	0.0422	0.0025	0.0022	0.0025	0.0422	0.0248	0.0089	0.0248	110-115	0.0929	20744	100,100
120	0.0410	0.0028	0.0040	0.0028	0.0410	0.0279	0.0118	0.0279	115-120	0.0969	20744	100,100
125	0.0267	0.0022	0.0028	0.0022	0.0267	0.0289	0.0144	0.0289	120-125	0.0902	20744	100,100
130	0.0229	0.0041	0.0042	0.0041	0.0229	0.0291	0.0161	0.0291	125-130	0.0924	20744	100,100
135	0.0207	0.0057	0.0055	0.0057	0.0207	0.0271	0.0186	0.0271	130-135	0.0780	20745	100,100
140	0.0299	0.0077	0.0069	0.0077	0.0299	0.0259	0.0211	0.0259	135-140	0.0712	20745	100,100
145	0.0214	0.0112	0.0082	0.0112	0.0214	0.0255	0.0222	0.0255	140-145	0.0670	20745	100,100
150	0.0222	0.0174	0.0100	0.0174	0.0222	0.0267	0.0250	0.0267	145-150	0.0645	20745	100,100
155	0.0269	0.0246	0.0146	0.0246	0.0269	0.0282	0.0268	0.0282	150-155	0.0621	20745	100,100
160	0.0450	0.0226	0.0271	0.0226	0.0450	0.0209	0.0200	0.0209	155-160	0.0622	20745	100,100
165	0.0461	0.0269	0.0265	0.0269	0.0461	0.0249	0.0230	0.0249	160-165	0.0580	20745	100,100
170	0.0425	0.0405	0.0425	0.0405	0.0425	0.0227	0.0289	0.0227	165-170	0.0442	20745	100,100
175	0.0289	0.0422	0.0448	0.0422	0.0289	0.0288	0.0247	0.0288	170-175	0.0264	20745	100,100
180	0.0474	0.0422	0.0445	0.0422	0.0474	0.0498	0.0442	0.0498	175-180	0.0089	20745	100,100
DEG	LUMINOUS INTENSITY: µA/m²										UNIT:lm	



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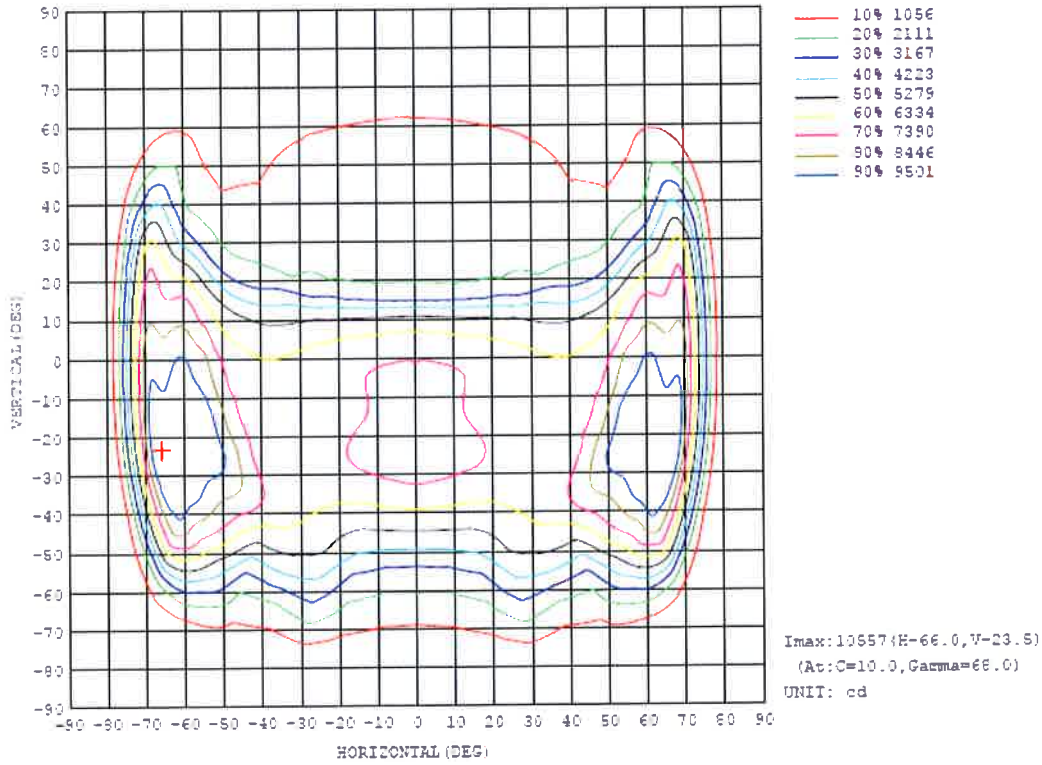
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Deney Sonuçları (Test Results)

ISOCANDELA DIAGRAM



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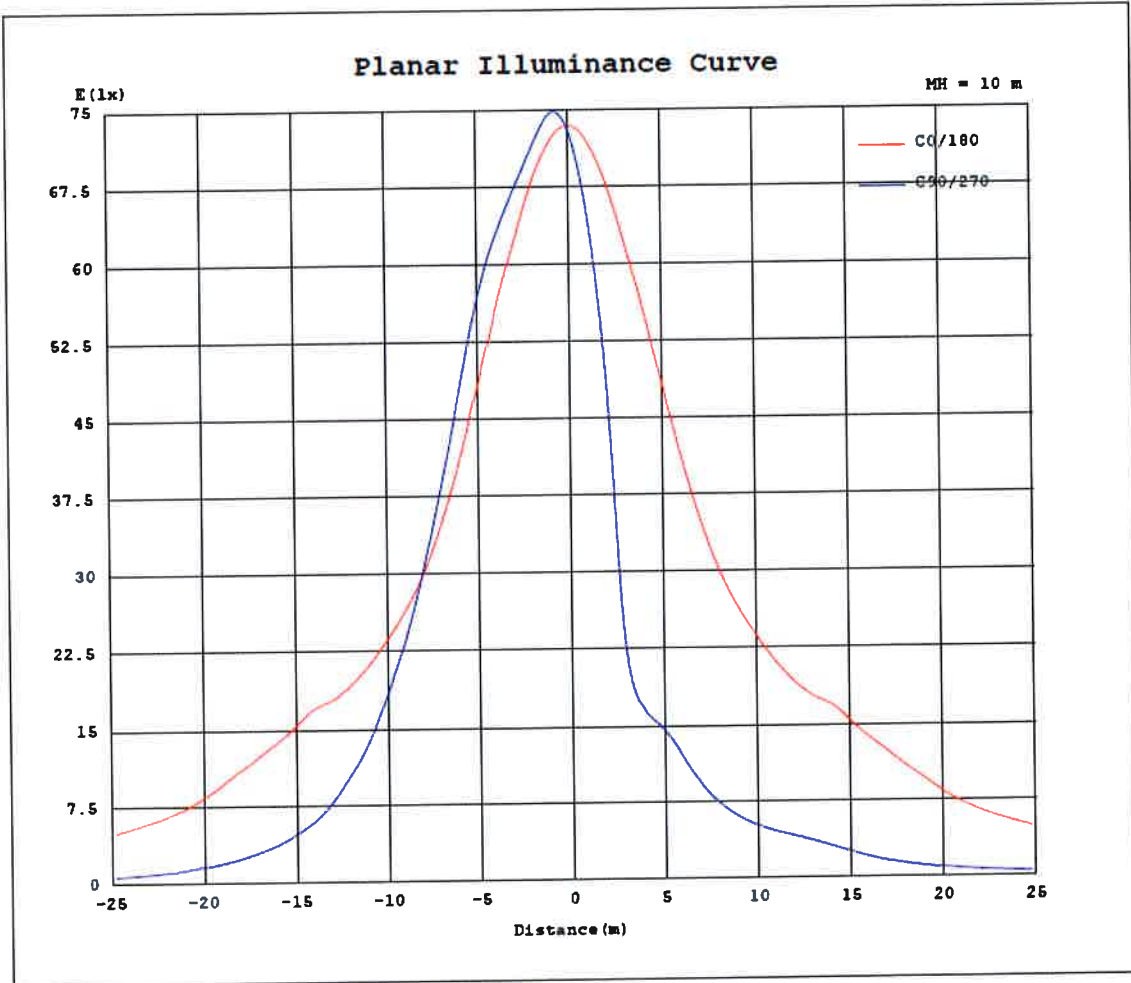
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Deney Sonuçları (Test Results)

Planar Illuminance Curve



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Aktif güç (W)(active power)	220,9
Ortalama Gerilim (V)(Average Voltage)	240,1
Ortalama AC Akım (mA)(Average AC Current)	0,9368
Güç Faktörü (PF)(Power Factor)	0,9819
Frekans (Hz)(Frequency)	50
Ortam Sıcaklığı (°C)(Ambient Temperature)	25.1 °C 49% Rh

Spectrocolorimetric Results

Chrom x	0,3657
Chrom y	0,3703
Duv	0,0010
Chrom u'	0,2191
Chrom v'	0,4968
Peak	444 nm
Dominant	577 nm
CCT	4329 K
Nominal CCT	4000 K
Ra(CRI)	74
R9	-18
S/P Ratio	1,6
Preburning time	1 hr
Test Configuration	4π



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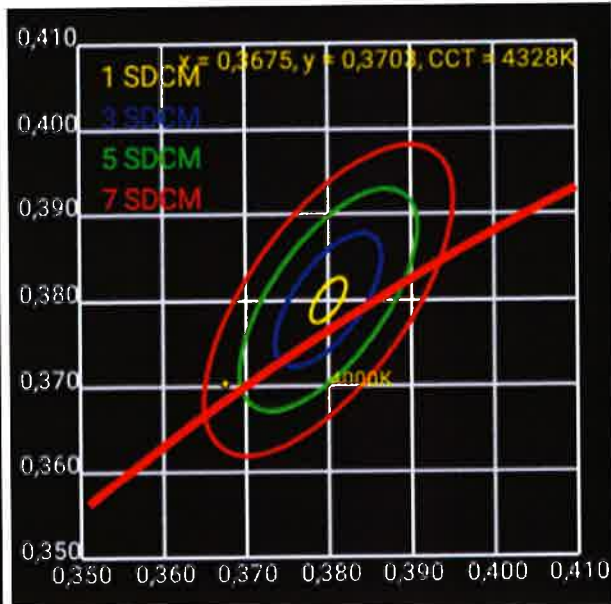
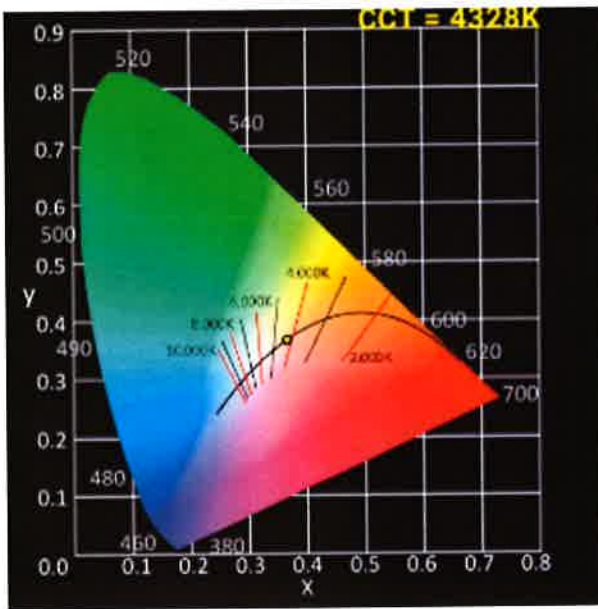
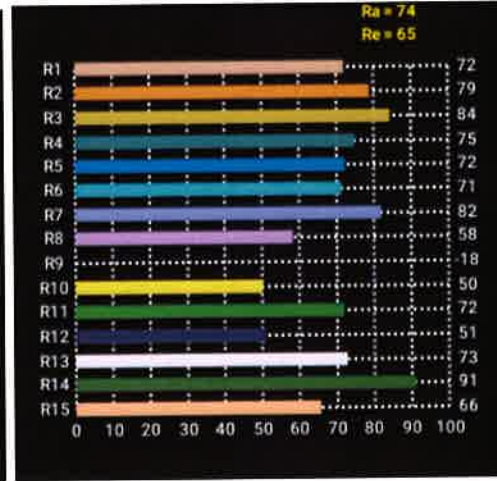
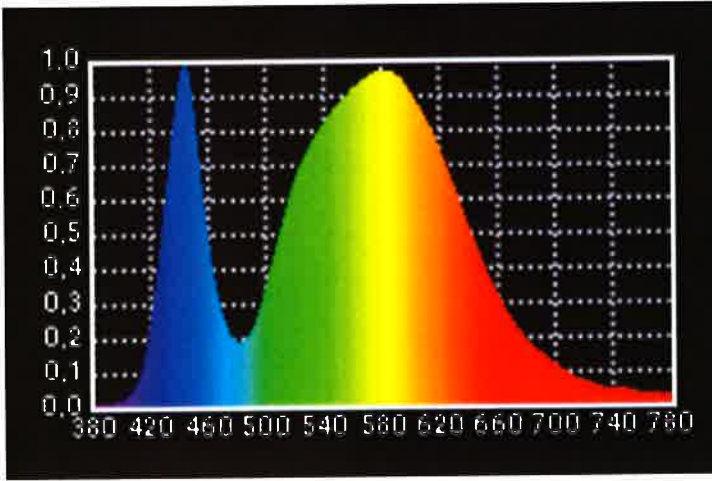
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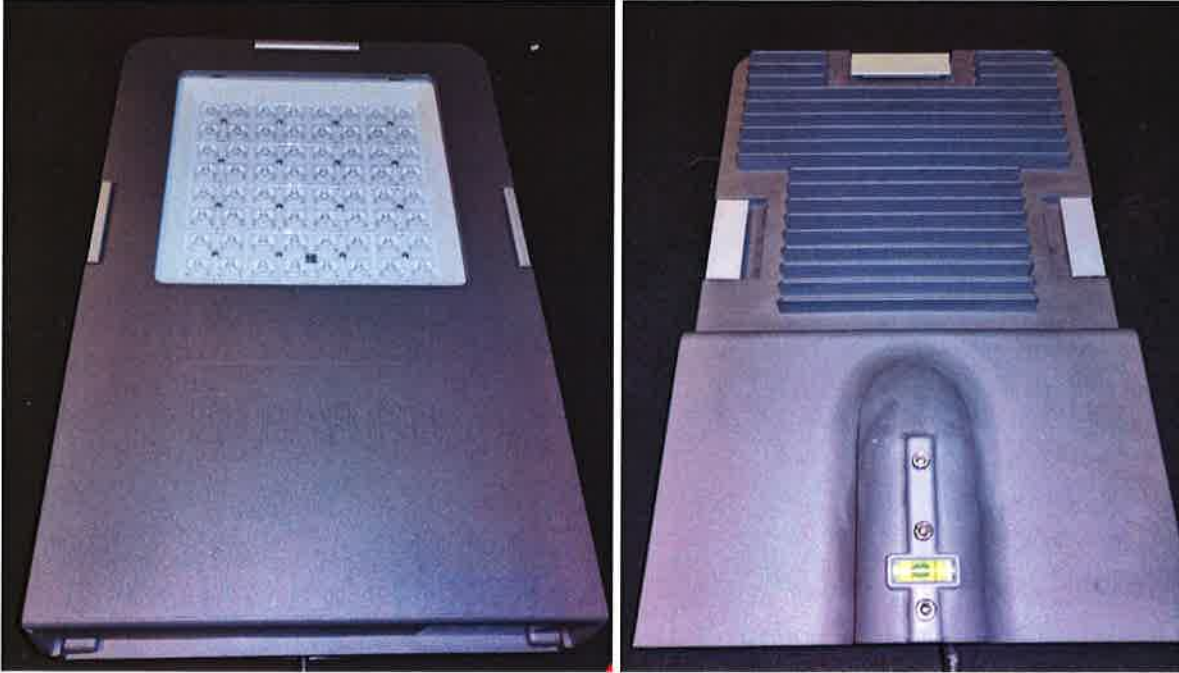
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3.1 DGC'nin Fotoğrafları (Photos of EUT)



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3.1 DGC'nin Fotoğrafları (Photos of EUT)

