



DENEY RAPORU TEST REPORT

AB-1333-T

170321UT03

17032021

www.labbee.com.tr

Susuz Mah. İstanbul Yolu 26. Km Rampa Gıda Blokları C Blok No:1 Kat:2 Yenimahalle /

ANKARA

Tel. 0312 351 76 86

Müşterinin Adı / Adresi:

(Customer Name / Address)

BSİ Aydınlatma Elek. Elekt. San. Tic. A.Ş.

Konutkent Mahallesi 3029 Cadde No:3/91 Çankaya / ANKARA

Talep Numarası:

(Order No)

210310-02

Ürünün Adı ve tanımı:

(Name and Identity of Test Item)

Dekoratif Led Armatür Bollard (iMistral Bollard 7W 6 Led)

Decorative Led Luminaire Bollard (iMistral Bollard 7W 6 Led)

Ürünün Kabul Tarihi:

(The Date of Receipt of Test Item)

10.03.2021

Deney Tarihi:

(Date of Test)

17.03.2021

Açıklamalar:

(Comments)

Numuneye IESNA LM 79-19 standardı uyarınca testler uygulanmıştır.

Test were applied to sample according to IESNA LM 79-19 standards.

Türk Akreditasyon Kurumu (TÜRKAK) deney raporlarının tanınırlığı konusunda Avrupa Akreditasyon Birliği (EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği (ILAC) ile karşılıklı tanıma anlaşması imzalamıştır.

Turkish Accreditation Agency (TURKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for the recognition of test reports.

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; firmamıza ulaşan numunelere deney ve/veya deneyler uygulanarak elde edilmiştir.

This report was prepared after applying test/tests to the samples that are sent to our company.

Müşteriye ait diğer numuneleri kapsamaz.

Note that this report does not involve other samples of the customer.

* İşaretli deneyler veya akreditasyon numarasının yer almadığı sayfalar, akreditasyon kapsamı dahilinde değildir.

*signed tests or the papers which have not the accreditation number are not in the scope of accreditation.

Onay Tarihi

Date of Approval

30.03.2021



Deney Sorumlusu

Person in Charge of Test

Uğur TEMİZYÜREK

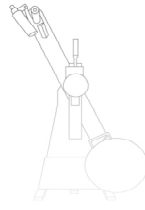
Laboratuvar Müdürü

Head of Testing Laboratory

Ayhan İNALTUN

Bu rapor laboratuvarın yazılı izni olmadan kısmen veya tamamen kopyalanıp çoğaltılamaz. İmzasız ve mühürlü raporlar geçersizdir.

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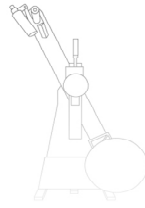
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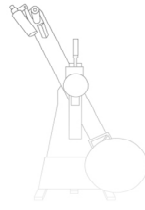
1.3 Ürün Bilgileri (Information of Test Item)

Ürünün Adı: (Name of Test Item)	Dekoratif Led Armatür Bollard Decorative Led Luminaire Bollard
Marka / Model: (Mark / Model)	BSI /iMistral Bollard
Ürünün Tanımı / Tipi: (Product description / Type)	Bollard
Sürücü Tipi / Modeli: (Model of Driver)	Mean Well / APC-12-350
Seri No: (Serial Number)	-
Ürünün Boyutları / cm: (Product dimensions / cm)	Uzunluk / Çap: 26 (length / diameter) Genişlik: 12 (Width) Yükseklik: 100 (height)
Ürünün Ağırlığı / kg: (Product weight / kg)	3.2
IP Sınıfı: (IP Class)	-

1.4 Çevre Şartları (Environmental Conditions)

Sıcaklık - °C: (Temperature - °C)	25.3
Nem: (Humidity)	%30
Hava Akımı - m/s: (Air flow - m/s)	0





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1.5 Deney Standartları (Test Standard)

Deneyler aşağıdaki standartlara göre yapılmıştır.

(The tests were performed according to following standards)

IESNA LM 79-19	Katı Hal Aydınlatma Ürünlerinin Elektriksel ve Fotometrik Ölçümleri. Electrical and Photometric Measurements of Solid-State Lighting Products.
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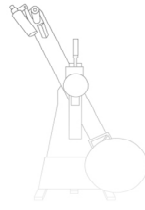
1.6 Belirsizlik Açıklamaları (Uncertainty Explanations)

Ölçüm belirsizliği genişletilmiş belirsizlik olup bileşik belirsizlik kapsam faktörü $k = 2.0$ çarpılarak elde edildi. Güvenirlilik düzeyi %95'tir.

The measurement is sum uncertainty and extended uncertainty, and the composite uncertainty coverage factor $k = 2.0$ is derived. Reliability level is 95%.)



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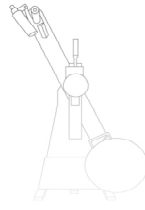
1.7 Elektriksel Ölçüm Sonuçları (Electrical Measurement Results)

Gerilim -Volt (Voltage - Volt)	Akım - Amper (Current - Amper)	Güç - Watt (Power - Watt)	Güç Faktör (Power Factor)
230.1	0.0874	7.291	0.3624

1.8 Ölçüm Sonuçları Özeti (Measurement Results Summary)

Işık Akısı - Lümen: (Luminous Flux - Lumen)	717.232
Işık Şiddeti - Kandela: (Luminous Intensity - Candela)	285.6
Ortalama Işıma Açısı: (Average Beam Angle)	107.7
Verimlilik - lm/w: (Efficiency - lm/w)	98.37
Renksel Geri Verim / CRI: (CRI: Color Render Index)	85.9
Renk Sıcaklığı / Kelvin: (CCT: Colarated Color temprature / Kelvin)	3073
Test sırasında SSL ürünün yanma pozisyonu: (Burn position of SSL during testing)	Görsellere Bakınız.
Stabilizasyon süresi /dakika: (Stabilization time / Minute)	30
Stabilizasyon dahil olmak üzere ürünün toplam çalışma süresi / dakika (Total operating time of the product including stabilization / Minute)	45
Uygulanan düzeltme faktörleri: (Applied correction factors)	-



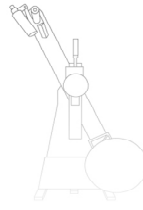


2. Deney Sonuçları (Test Results)

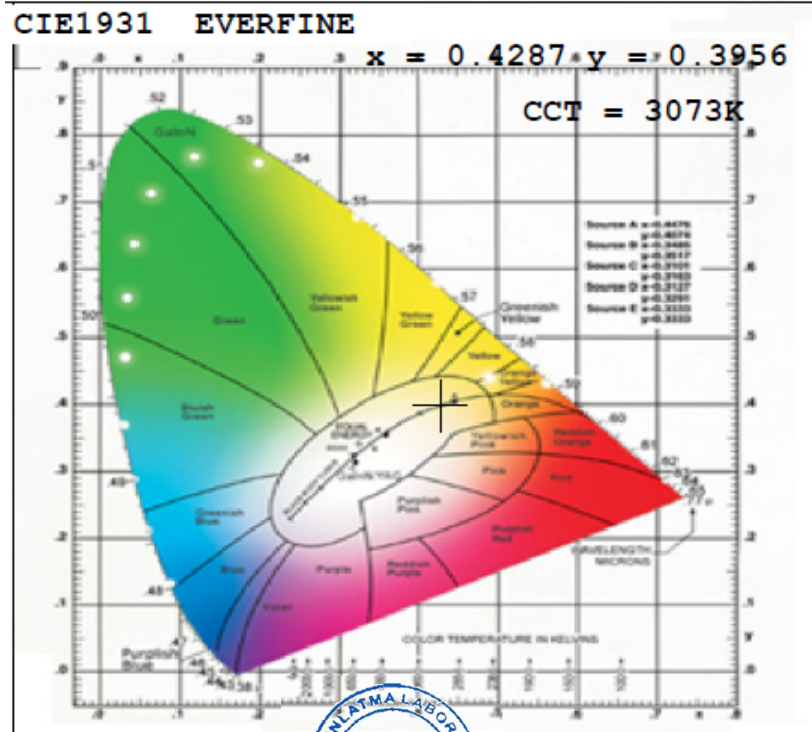
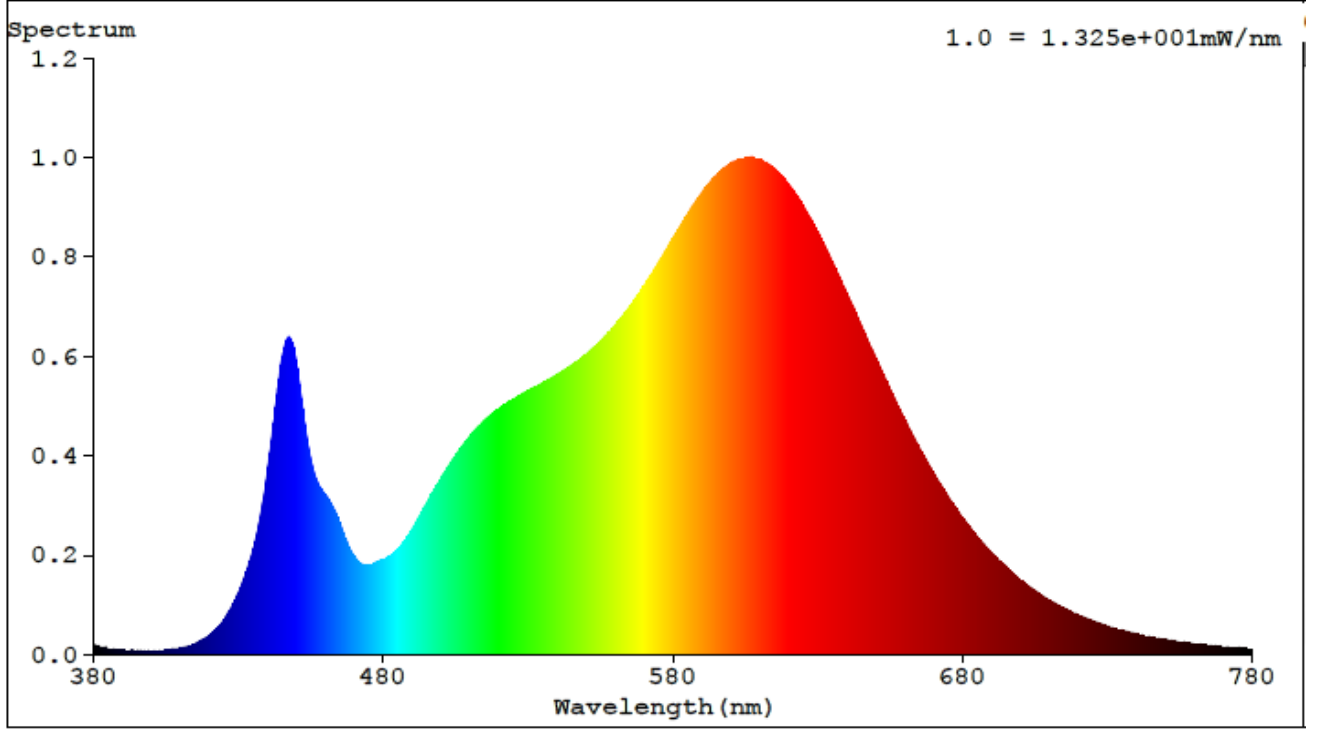
2.1 Entegre Küre Sonuçları (Integrating Sphere Measurement Results)

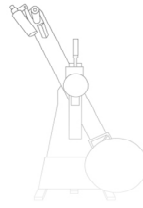
Renklilik Koordinatı: (Chromaticity Coordinate)		x: 0.4287		y: 0.3956	
		u': 0.2489		v': 0.5168	
		duv: -0.00225			
Renk Sıcaklığı - Kelvin: (CCT: Colarated Color temprature - Kelvin)		Renksel Geri Verim: (CRI: Color Render Index)			
3073		85.9			
Ld:Baskın Dalga boyu -nm: (Ld:dominant wavelength - nm)	583.4	R1	R2	R3	R4
		85	93	97	86
Spektral Bant Genişliği -nm: (Spectral Bandwidth -nm)	136.5	R5	R6	R7	R8
		86	92	84	64
Lp:Tepe Dalga boyu -nm: (Lp:Peak wavelength - nm)	607	R9	R10	R11	R12
		19	83	87	79
Saflik - % (Purity -%)	47.4	R13	R14	R15	
		87	99	78	
% RGB oranları (% RGB Ratio)		%R: 23.1		%G: 74.2	%B: 2.7





2.1.1 Entegre Küre Renkserlik Grafiği ve Spektrum (Integrating Sphere Chromaticity Diagram and Spectrum)

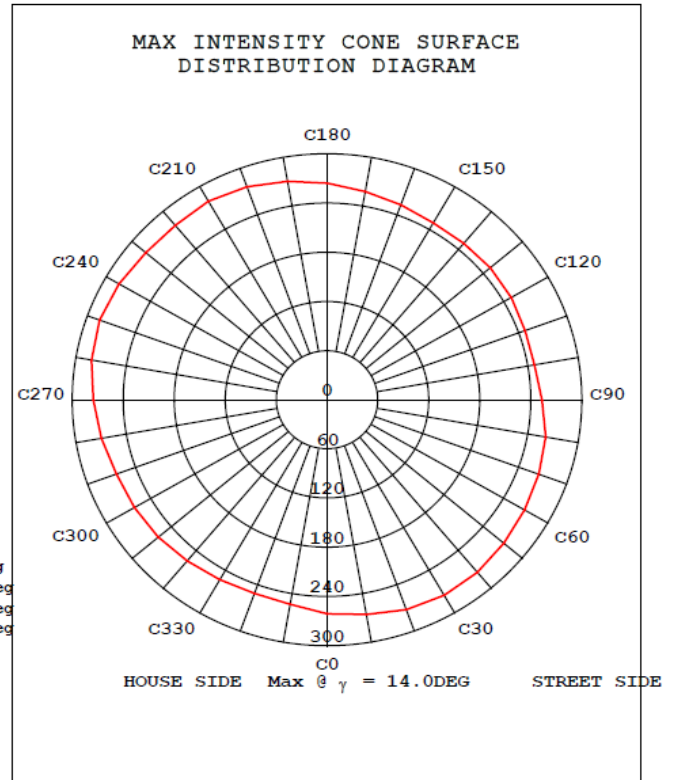
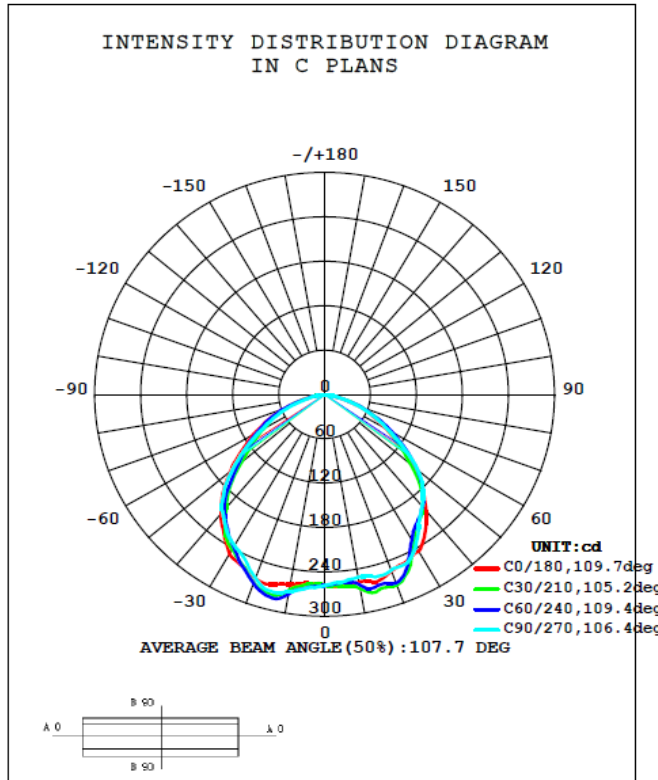


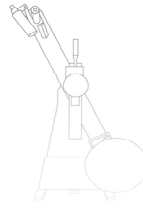


2.2 Gonyofotometre Sonuçları (Goniophotometer Measurement Results)

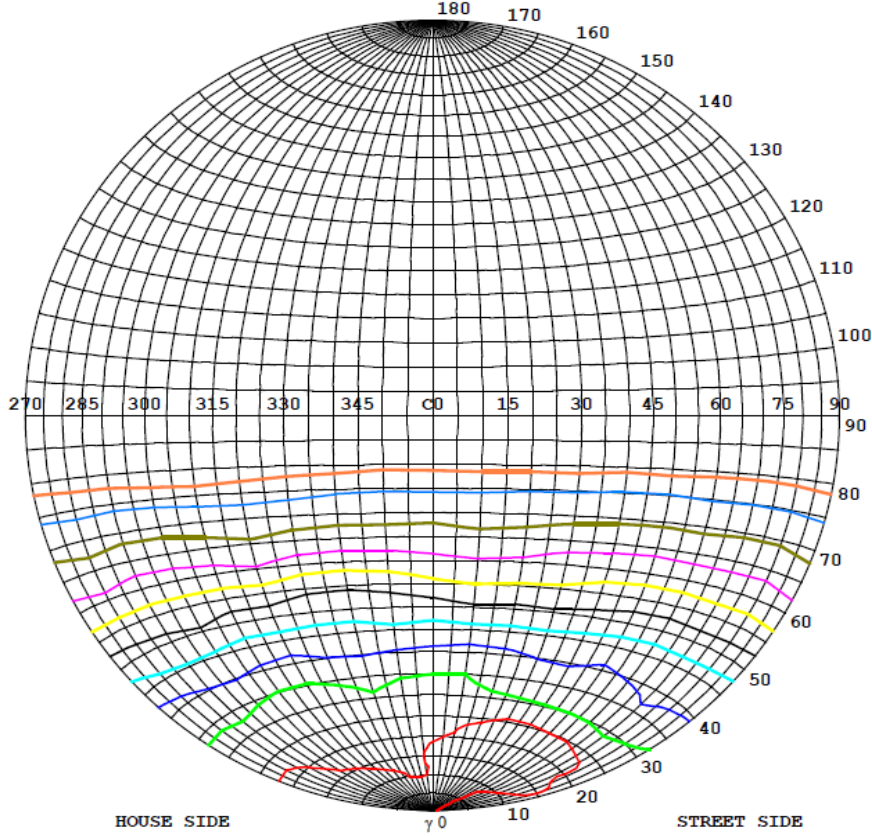
DATA OF LAMP		PHOTOMETRIC DATA				Eff: 98.37 lm/W
MODEL		Imax (cd)	285.6	η street_up (%)	0.0	
NOMINAL POWER (W)	7	LOR (%)	100.0	η street_down (%)	50.2	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	717.2	η house_up (%)	0.0	
NOMINAL FLUX (lm)	717.232	MAXIMUM @ (C, γ)	250, 14.0	η house_down (%)	49.7	
LAMPS INSIDE	1	η up (%)	0.0	76 FLASHAREA (m2)	0.00100	
TEST VOLTAGE (V)	230	η down (%)	100.0	SLI	15.085	

2.2.1 Işık Yeğirliği Polar Eğrisi (Luminous Intensity Distribution Diagram)





2.2.2 Isocandela Diagramı (Street Light Isocandela Diagram)



Classification:

IES:Type VS - Very Short
CIE:Narrow - Short
IES:Cut-off
CIE:Full cut-off
Max.At80:21.69cd/klm
Max.At90:0.0725cd/klm
Max.80-90:21.69cd/klm
NRB 5101:Limited[4.1%]

ISOCANDELA DIAGRAM	
UNIT	cd
I _{max} =100%	286
90%	257
80%	229
70%	200
60%	171
50%	143
40%	114
30%	86
20%	57
10%	29
5%	14

Açıklamalar (Descriptions)

Luminous Intensity: Işık Şiddeti.

Unit: Birim.

γ: Gama.

Zone: Bölge.

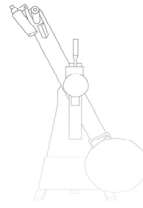
Total: Toplam.

Lamp: Lamba.

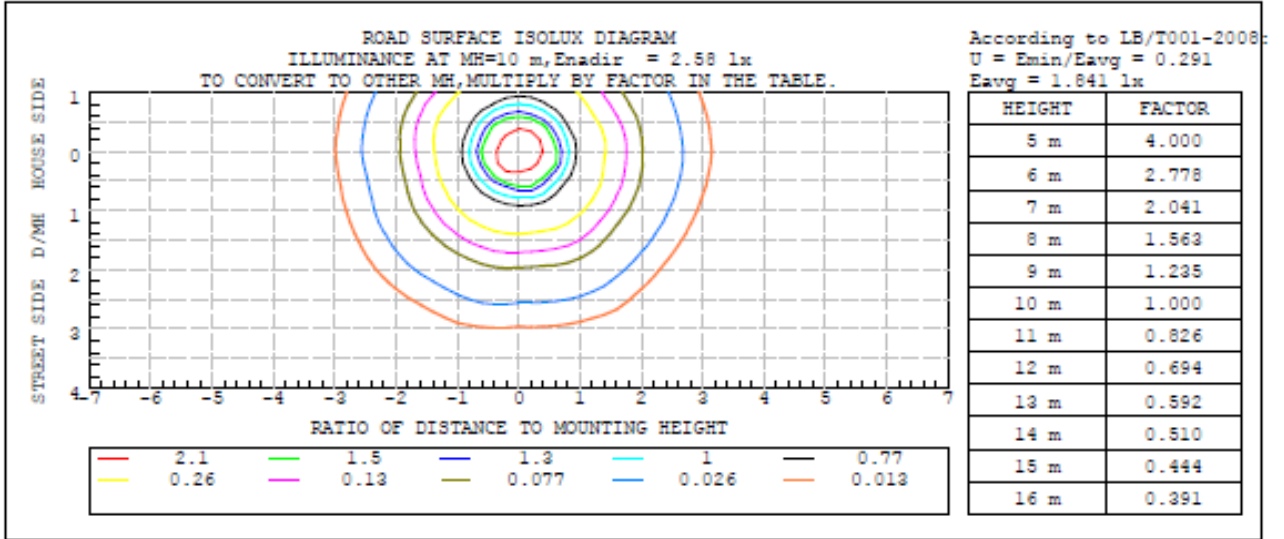
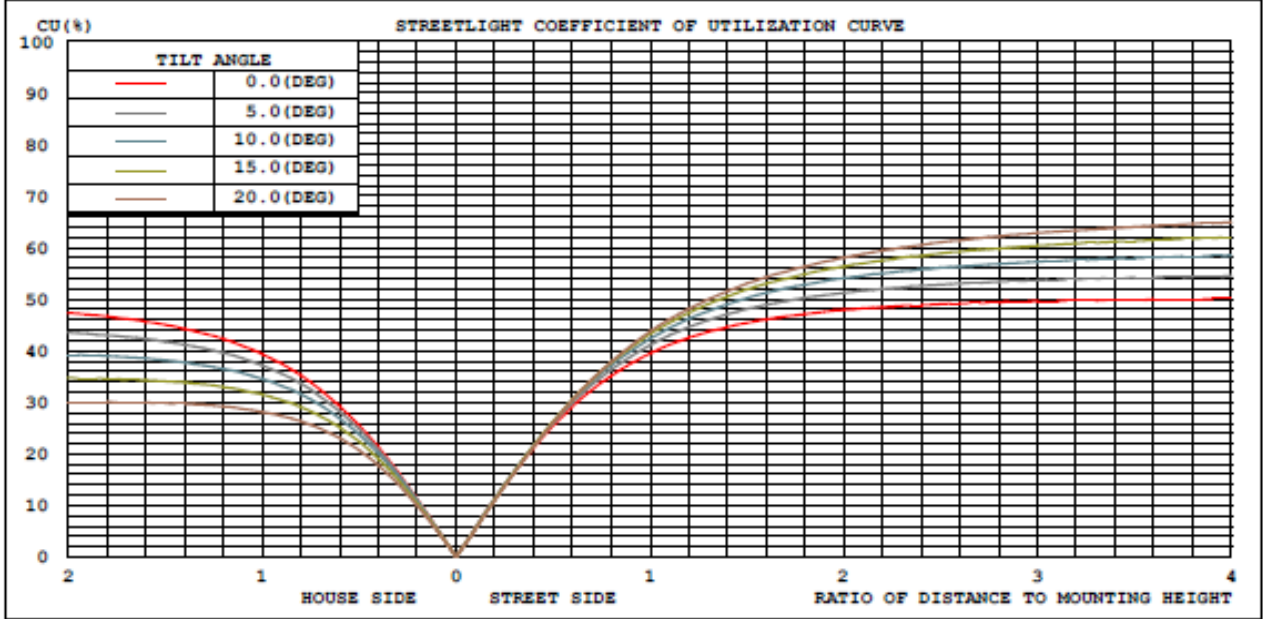
Degree: Derece.



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2.2.3 Kullanım katsayı eğrisi ve isolux diagramı (Coefficient of utilization curve and isolux diagram)



Açıklamalar (Descriptions)

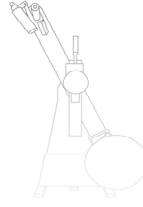
Conical surface Flux: **Konik yüzey Akısı.**

Vertical: **Dikey.**

Horizontal: **Yatay.**



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2.2.4 Alan Akı Diagramı (Area Flux Diagram)

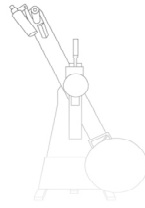
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φlum, lamp
10	257.5	266.1	250.9	252.1	260.6	270.7	270.1	262.7	0- 10	24.75	24.75	2.45, 2.45
20	254.4	274.3	253.2	253.4	264.5	269.7	264.5	242.7	10- 20	74.46	99.21	13.8, 13.8
30	244.9	229.9	237.0	238.4	249.1	241.6	235.8	241.1	20- 30	115.7	214.9	30, 30
40	205.7	200.5	197.9	200.9	211.2	208.2	208.0	205.3	30- 40	139.2	354.1	49.4, 49.4
50	154.8	153.8	158.2	170.1	160.7	150.7	156.9	155.1	40- 50	140.1	494.2	68.9, 68.9
60	91.95	101.6	95.17	114.1	107.7	97.32	95.93	91.75	50- 60	114.9	609.1	84.9, 84.9
70	47.36	52.17	46.87	52.90	57.54	55.43	46.85	40.76	60- 70	74.39	683.5	95.3, 95.3
80	10.64	10.59	9.777	11.52	15.55	11.53	9.409	7.373	70- 80	30.06	713.6	99.5, 99.5
90	0.0282	0.0285	0.0363	0.0436	0.0274	0.0273	0.0264	0.0265	80- 90	3.467	717.1	100, 100
100	0.0274	0.0273	0.0261	0.0265	0.0274	0.0272	0.0269	0.0270	90-100	0.0296	717.1	100, 100
110	0.0282	0.0274	0.0274	0.0283	0.0274	0.0278	0.0272	0.0277	100-110	0.0288	717.1	100, 100
120	0.0282	0.0289	0.0274	0.0278	0.0285	0.0289	0.0277	0.0285	110-120	0.0278	717.1	100, 100
130	0.0293	0.0288	0.0277	0.0286	0.0293	0.0296	0.0280	0.0285	120-130	0.0253	717.2	100, 100
140	0.0298	0.0294	0.0277	0.0286	0.0295	0.0296	0.0285	0.0285	130-140	0.0221	717.2	100, 100
150	0.0306	0.0300	0.0298	0.0289	0.0295	0.0294	0.0285	0.0286	140-150	0.0182	717.2	100, 100
160	0.0298	0.0298	0.0293	0.0289	0.0282	0.0290	0.0285	0.0285	150-160	0.0135	717.2	100, 100
170	0.0295	0.0292	0.0296	0.0278	0.0282	0.0288	0.0277	0.0284	160-170	0.0081	717.2	100, 100
180	0.0274	0.0268	0.0277	0.0274	0.0266	0.0276	0.0275	0.0270	170-180	0.0027	717.2	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Açıklamalar (Descriptions)

Mounting Height: Montaj Yüksekliği.



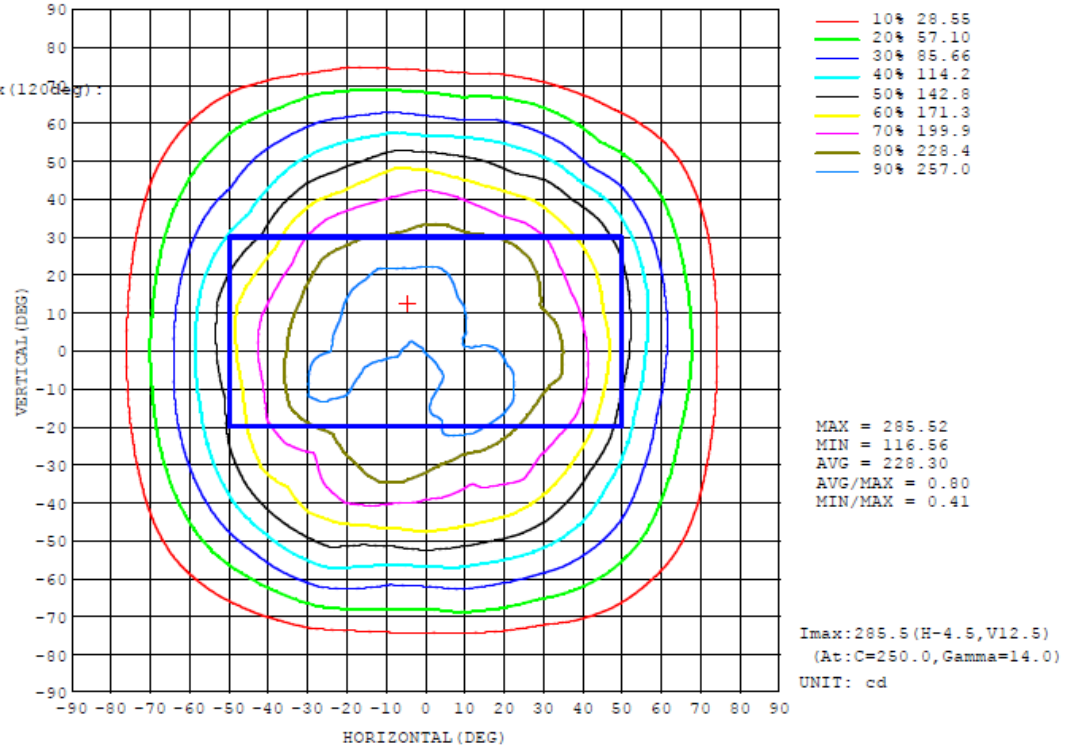
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2.2.5 Isocandela Diagramı (Isocandela Diagram)

Conical surface Flux(90deg):
428.78 lm
%lum = 59.4%
%lamp = 59.4%

Conical surface Flux(120deg):
609.14 lm
%lum = 84.9%
%lamp = 84.9%

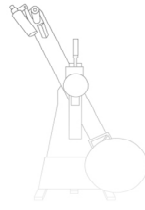


Açıklamalar (Descriptions)

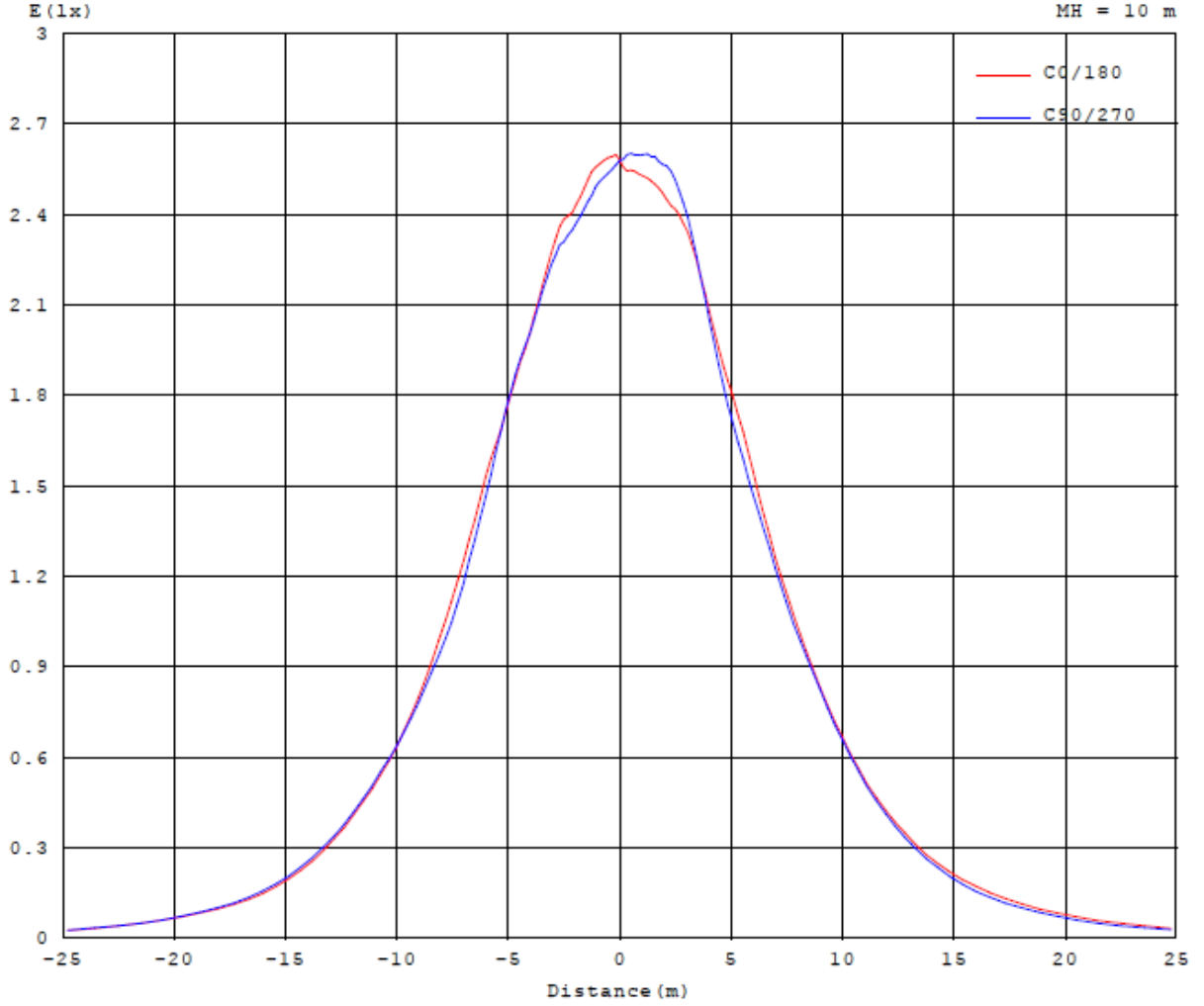
MH: Mounting Height: Montaj Yüksekliği.

Distance: Mesafe.





2.2.6 Düzlemsel Aydınlık Eğrisi (Planar Illuminance Curve)



Açıklamalar (Descriptions)

Flux Out: Akı (Lümen) Çıkışı.

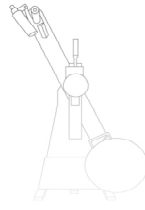
Height: Yükseklik.

Angle: Açı.

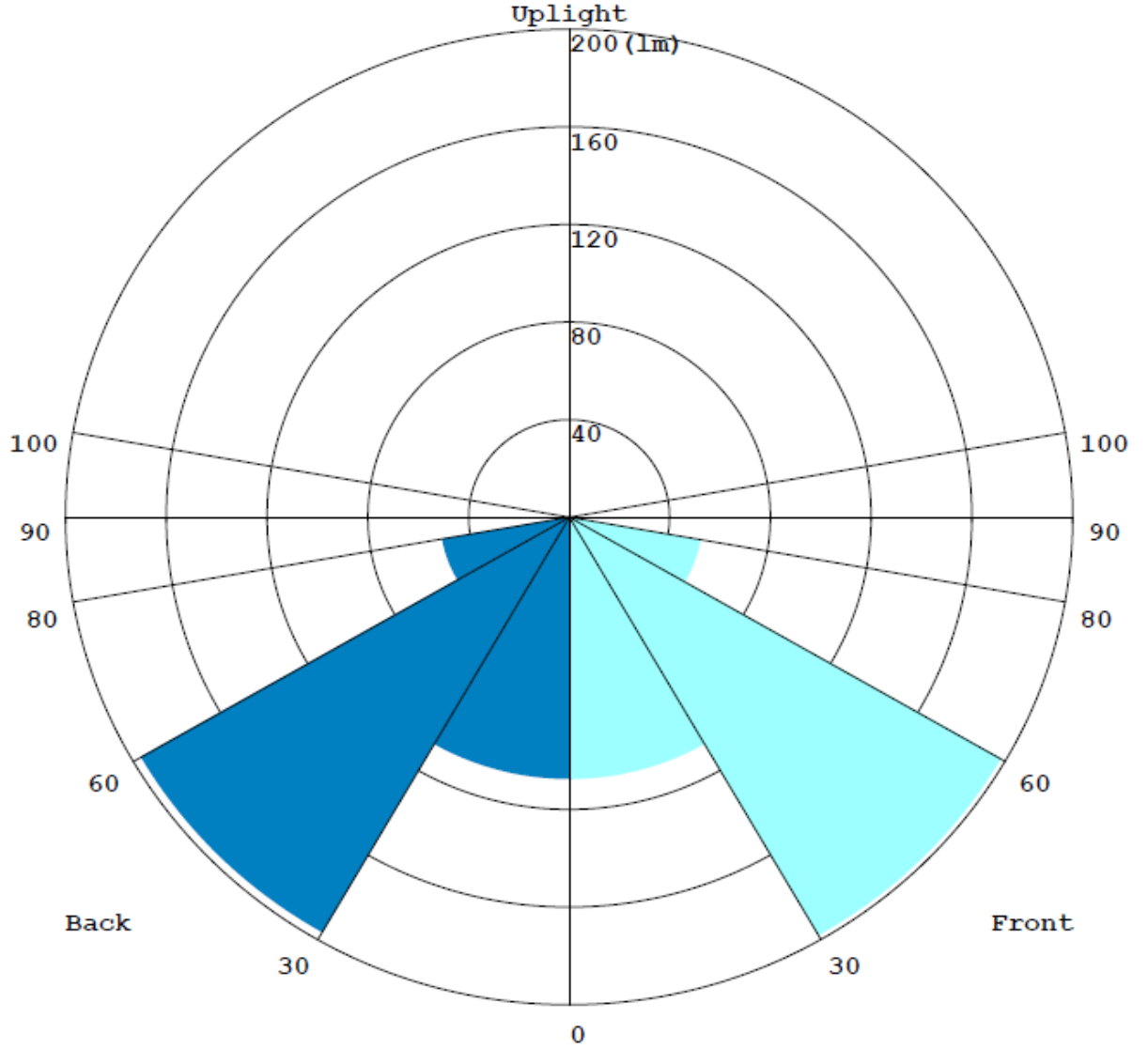
Diameter: Çap.



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2.2.7 Armatür sınıflandırma sistemi grafiği
(Luminaire classification system (LCS) graph)



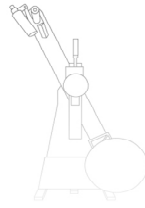
Açıklamalar (Descriptions)

Horizontal: Yatay

Vertical: Dikey



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2.2.7 Armatür Akı Dağılım Tablosu (Back, Up, Glare Report)

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low (0-30)	107.46	15.0
FM - Front-Medium (30-60)	197.88	27.6
FH - Front-High (60-80)	53.167	7.4
FVH - Front-Very High (80-90)	1.7855	0.2
Total Forward Light	360.38	50.2

BL - Back-Low (0-30)	107.45	15.0
BM - Back-Medium (30-60)	196.36	27.4
BH - Back-High (60-80)	51.279	7.1
BVH - Back-Very High (80-90)	1.6819	0.2
Total Back Light	356.85	49.8

UL - Uplight-Low (90-100)	0.02962	0.0
UH - Uplight-High (100-180)	0.14657	0.0
Total Up Light	0.17619	0.0

BUG (Back, Up, Glare) Rating	B0-U1-G0
------------------------------	----------

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	360.29	0.088257	360.38
Street Side	356.76	0.08793	356.85

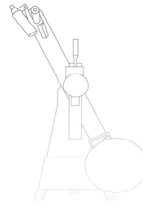
Açıklamalar (Descriptions)

Horizontal: Yatay

Vertical: Dikey



Bu rapor laboratuvarın yazılı izni olmadan kısmen veya tamamen kopyalanıp çoğaltılamaz. İmzasız ve mühürsüz raporlar geçersizdir.
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2.2.7 Işık Şiddeti yoğunluğu dağılımına ait veriler (Luminous Distribution Intensity Data)

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	258	258	258	258	258	258	258	258	258	258	258	258	258	258	258	258	258	258	258
5	260	260	260	260	259	258	255	255	254	254	255	255	254	254	254	254	256	256	256
10	257	261	264	266	268	264	260	257	253	251	251	252	252	253	251	252	255	257	261
15	262	265	271	273	273	270	268	265	260	255	248	248	251	251	250	249	254	259	266
20	254	259	266	274	276	273	271	265	255	253	255	249	252	255	252	253	260	266	264
25	250	251	253	261	260	257	256	250	251	252	251	252	251	253	249	254	269	268	255
30	245	243	234	233	231	229	227	222	228	237	246	249	245	241	235	246	264	257	249
35	228	228	215	213	211	215	211	203	206	215	228	235	228	220	213	228	242	236	230
40	206	208	205	199	198	203	198	195	198	198	203	210	217	206	195	207	214	210	211
45	181	180	180	177	178	183	181	179	180	182	181	188	195	191	180	190	194	184	188
50	155	147	149	147	151	156	158	155	155	158	156	158	169	172	168	172	166	155	161
55	121	114	117	118	125	130	129	126	127	126	124	132	146	146	145	144	139	130	132
60	92.0	87.2	90.2	96.0	101	102	102	101	101	95.2	95.8	106	118	116	112	112	110	108	108
65	69.6	63.8	66.8	73.8	76.2	77.3	75.3	76.3	78.1	71.0	71.5	81.0	88.8	85.8	81.6	82.3	82.7	84.1	81.6
70	47.4	43.6	46.0	49.3	51.9	52.5	51.1	53.2	52.6	46.9	48.7	53.9	57.0	54.0	51.8	53.3	53.9	56.1	57.5
75	25.7	25.1	26.3	26.7	29.2	29.8	26.4	28.0	27.1	24.9	25.7	27.2	29.9	28.7	27.8	28.1	29.6	30.9	33.5
80	10.6	10.9	11.2	10.7	10.2	11.0	11.6	11.2	10.4	9.78	9.50	9.91	11.0	11.0	12.0	12.6	13.9	14.4	15.6
85	2.20	2.09	2.08	2.14	1.93	1.72	0.84	0.49	0.45	0.47	0.56	0.67	1.21	2.14	2.38	2.76	3.93	4.11	4.16
90	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.05	0.05	0.04	0.03	0.03	0.03	0.03
95	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
100	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
105	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
110	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
115	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
120	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
125	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
130	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
135	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
140	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
145	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
150	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
155	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
160	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
165	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
170	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
175	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
180	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03

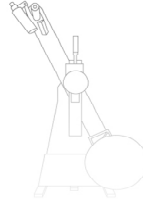
Açıklamalar (Descriptions)

Horizontal: Yatay

Vertical: Dikey



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2.2.7 Işık Şiddeti yoğunluğu dağılımına ait veriler (Luminous Distribution Intensity Data)

Table--2

UNIT: cd

C (DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	258	258	258	258	258	258	258	258	258	258	258	258	258	258	258	258	258		
5	257	257	257	258	260	262	262	263	263	263	264	263	262	261	261	260	259		
10	263	265	268	270	271	274	275	273	270	267	266	266	264	262	258	257	256		
15	271	275	279	278	278	283	284	281	275	271	264	261	258	253	251	250	252		
20	264	265	271	270	269	272	267	264	265	264	257	249	245	240	240	244	249		
25	254	250	254	256	255	256	248	247	247	246	244	243	240	240	239	241	245		
30	238	239	242	243	240	238	233	234	236	234	235	240	242	240	236	231	237		
35	228	226	226	229	225	222	219	220	224	225	220	224	229	230	224	220	225		
40	210	204	201	208	208	205	203	205	208	207	201	198	204	207	200	198	203		
45	190	180	174	182	183	178	182	189	186	178	174	175	182	182	181	178	175		
50	166	155	143	149	152	149	153	162	157	153	150	147	155	155	161	162	157		
55	136	126	115	119	126	126	127	131	125	125	125	124	127	126	135	137	132		
60	106	100	92.5	95.4	99.3	101	102	102	95.9	92.5	98.6	97.6	95.1	88.4	99.2	101	98.8		
65	80.1	76.8	74.3	76.4	77.8	80.8	78.2	76.1	70.6	66.7	72.2	72.2	67.8	60.7	67.6	70.6	69.8		
70	55.8	54.6	54.5	55.6	55.2	58.0	56.1	51.7	46.8	44.2	47.7	46.9	42.3	39.2	42.7	46.5	46.0		
75	32.7	31.4	31.2	33.5	32.8	30.1	30.8	26.8	24.3	22.2	22.9	22.1	20.5	19.9	21.9	24.7	26.5		
80	15.0	13.5	13.1	11.2	11.9	13.2	12.8	10.1	9.41	8.23	7.96	7.22	7.05	7.69	9.58	9.56	10.5		
85	3.93	3.75	3.53	2.82	2.51	1.08	0.35	0.32	0.32	0.34	0.37	0.37	0.51	1.04	1.71	1.77	2.47		
90	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
95	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
100	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
105	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
110	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
115	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
120	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
125	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
130	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
135	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
140	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
145	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
150	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
155	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
160	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
165	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
170	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
175	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
180	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		

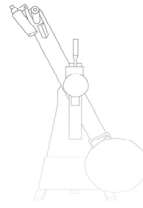
Açıklamalar (Descriptions)

Horizontal: Yatay

Vertical: Dikey



Bu rapor laboratuvarın yazılı izni olmadan kısmen veya tamamen kopyalanıp çoğaltılamaz. İmzasız ve mühürsüz raporlar geçersizdir.
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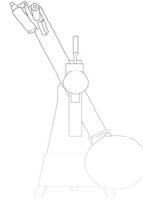
3. EKLER (Attachments)

3.1 Deney Bileşenleri (Test Components)

Envanter No (Inventory Number)	Cihaz Adı (Device Name)	Seri No (Serial Number)	Kal./Doğ. Tarihi (Cal./Ver. Date)
LAB-004	Power Meter	G103508CD1331128	18.06.2020
LAB-006	AC Power Supply	G119885CF1341123	17.06.2020
LAB-022	Standard light source (sphere)	M133806CJ1401124	30.03.2020
LAB-025	Auxiliary lamp (sphere)	M133803CD1391147	31.03.2020
LAB-059	Sphere termokupl	13200840	15.10.2020
LAB-021	Standard light source(gonio)	M147803CN1391114	31.03.2020
LAB-030	AC Power Supply	G120984CF1341115	17.06.2020
LAB-031	Power Meter	G103508TO1331122	18.06.2020



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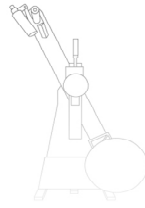
3.2 Kritik Komponent Listesi (Critical Components List)

(Mistral Bollard) Komponent Listesi / list of Component				
Sıra No	Komponent Adı	Marka / Model	Serî No:	Teknik Özellikleri
1	DRIVER	MEANWELL / APC 12-350	APC 12-350	EMC sertifikası / CE deklarasyonu
2	LED	NICHIA HIGH POWER / 219 FIT	219 FIT	LM80
3	GLASS	TÜL CAM	4 mm	
4	BODY	ALÜMİNYUM PROFİL KASA	60X120X100mm	ANTRASİT GRİ ELEKTROTATSIK POLYESTER TOZ BOYALI
5	CABLE	PANUKKALE	H05VVH-F_280820	TSE
6				
7				
8				
9				
10				

Firma Yetkilisi Adı Soyad / Kaye / İmza / Tarih

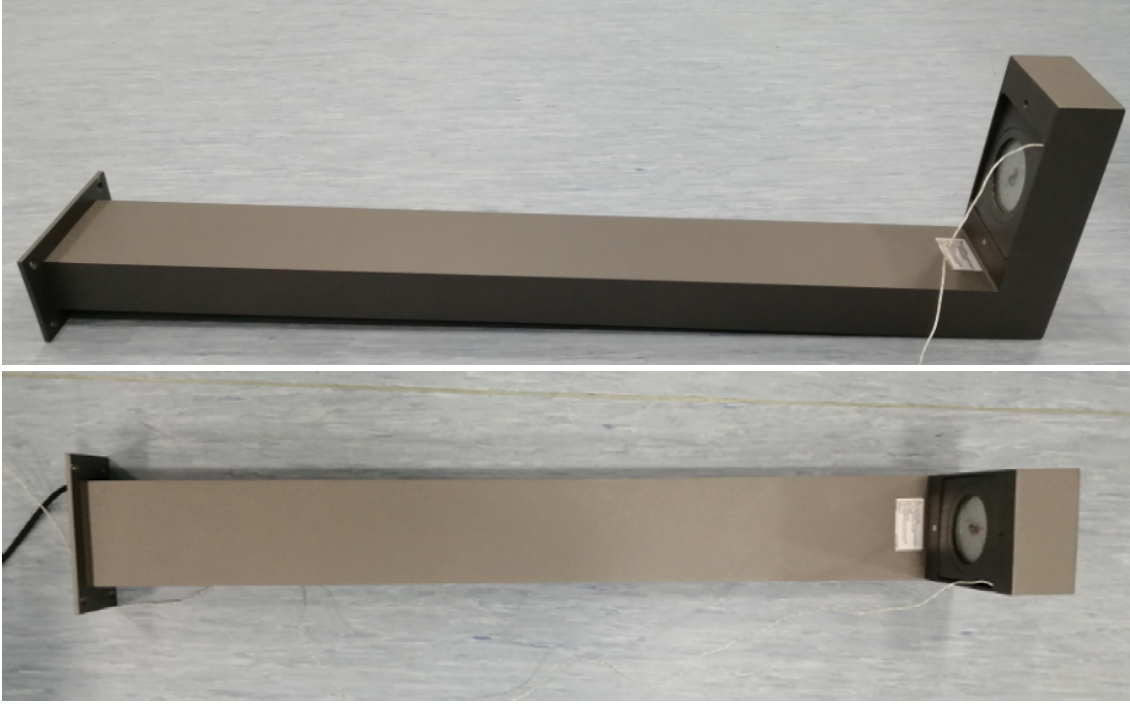


Serdar Erçiyer
23.03.2021

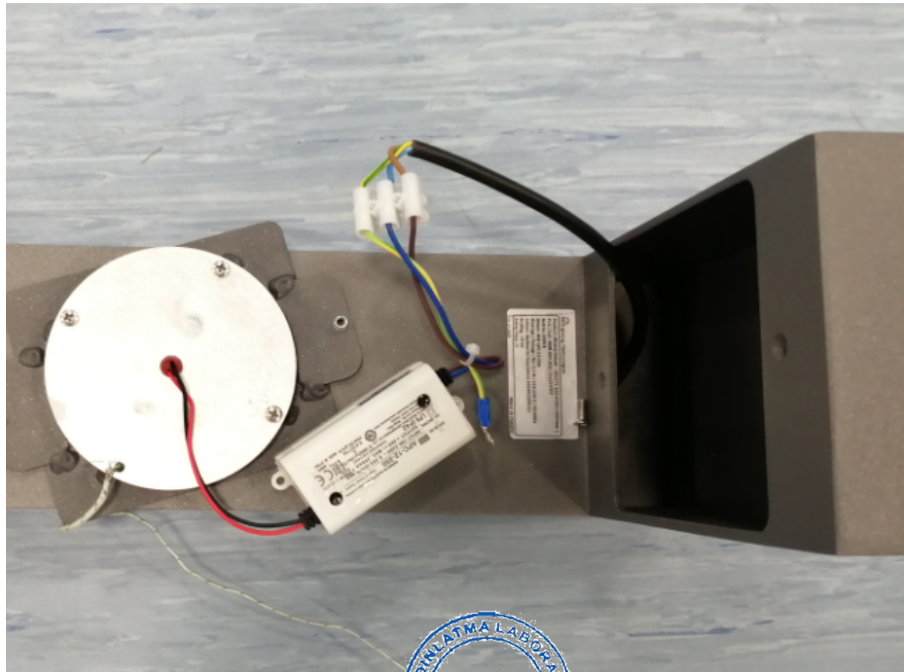


3.3 Ürün Fotoğrafları (Photos of Test Items)

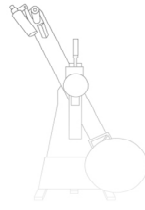
3.3.1 Ön Görünüm (Front view)



3.3.2 Görünüm (view)



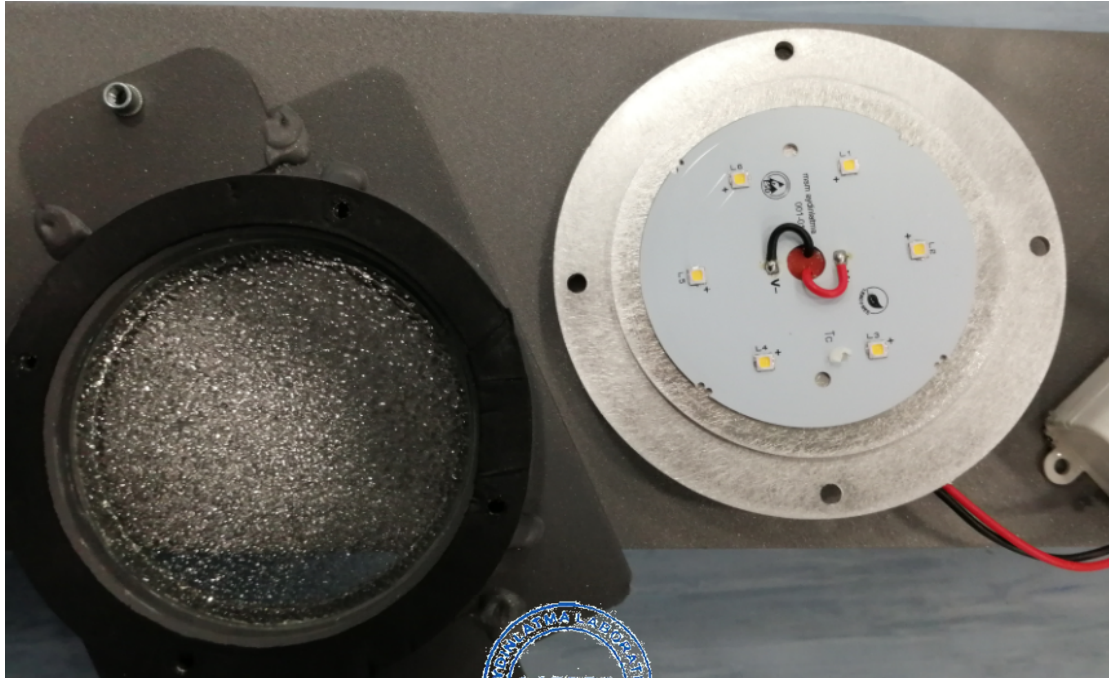
Bu rapor laboratuvarın yazılı izni olmadan kısmen veya tamamen kopyalanı, çoğaltılamaz. İmzasız ve mühürsüz raporlar geçersizdir.
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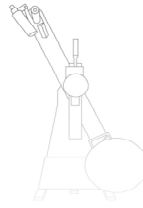
3.3.3 Görünüm (view)



3.3.4 Görünüm (view)



Bu rapor laboratuvarın yazılı izni olmadan kısmen veya tamamen kopyalanıp çoğaltılamaz. İmzasız ve mühürlü raporlar geçersizdir.
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AB-1333-T

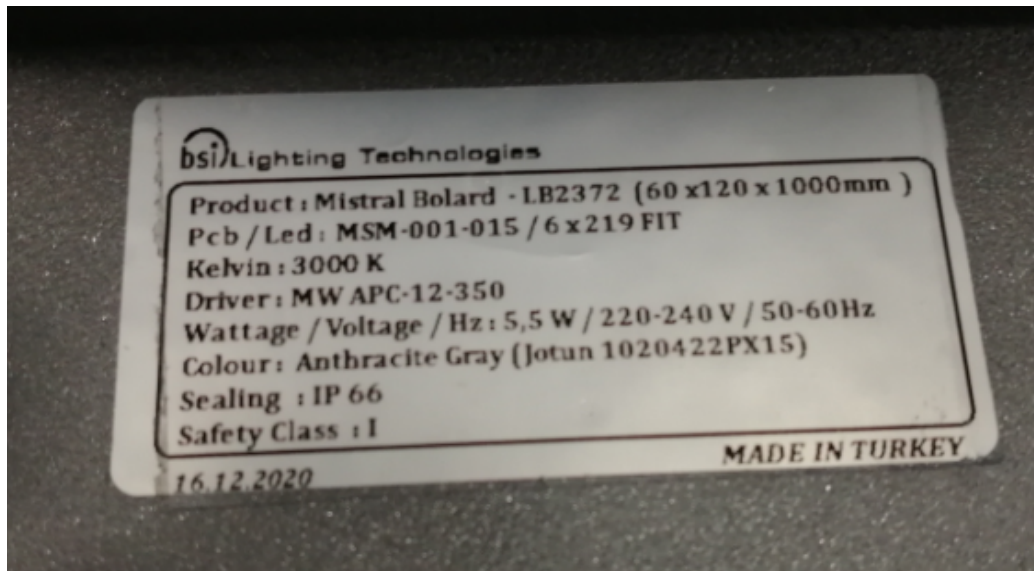
170321UT03

17032021

3.3.5 Görünüm (view)



3.3.6 Görünüm (view)



Bu rapor laboratuvarın yazılı izni olmadan kısmen veya tamamen kopyalanamaz, çoğaltılamaz. İmzasız ve mühürlü raporlar geçersizdir.
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