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## DENEY RAPORU TEST REPORT

AB-1333-T
040320AI03
04032020

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Susuz Mah. İstanbul Yolu 26 Km Rampa Gıda Blokları C Blok No1 Kat:2 Yenimahalle / ANKARA

Tel. 0312 351 76 86

Müşterinin Adı / Adresi: Baytaş Aydınlatma İmalat Proje Taah.San.Ltd.Şti.  
(Customer Name / Address) Sincan Sanayi Sitesi Ahi Evran Mahallesi 225 Cadde No:84 Sincan / ANKARA

Talep Numarası: 200302-01  
(Order No)

Ürünün Adı ve tanımı: Led projektör (Tetra PRL-1)  
(Name and Identity of Test Item) Led projector (Tetra PRL-1)

Ürünün Kabul Tarihi: 02.03.2020  
(The Date of Receipt of Test Item)

Deneysel Tarihi: 04.03.2020  
(Date of Test)

Açıklamalar: Numuneye TS EN 13032-1 ve TS EN 13032-2 standardı uyarınca testler uygulanmıştır.  
(Comments) Test were applied to sample according to TS EN 13032-1 and TS EN 13032-2 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.

Deneysel ve/veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deneysel 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 deneysel ve/veya deneysel 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 deneysel 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

09.03.2020

09.03.2020

09.03.2020

09.03.2020

09.03.2020

09.03.2020

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09.03.2020

09.03.2020

Deneysel Sorumlusu

Person in Charge of Test

A. İNALTUN

Ayhan İNALTUN

Laboratuvar Müdürü

Head of Testing Laboratory

A. İNALTUN

Ayhan İNALTUN

Bu rapor laboratuvarın yazılı izni olmadan kısmen veya tamamen kopyalanıp çoğaltılamaz. İmzasız ve mühürsüz raporlar geçersizdir.  
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## İÇİNDEKİLER (CONTEST)

### 1. DÖKÜMANTASYON (DOCUMENTATION)

1.1 Rapor Kapağı (Report Cover)	1
1.2 İçindekiler (Contents)	2
1.3 Ürün Bilgileri (Information of Test Item)	3
1.4 Çevre Şartları (Environmental Conditions)	3
1.5 Deney Standartları (Test Standard)	4
1.6 Belirsizlik Açıklamaları (Uncertainty Explanations)	4
1.7 Elektriksel Ölçüm Sonuçları (Electrical Measurement Results)	5
1.8 Ölçüm Sonuçları Özeti (Measurement Results Summary)	5

### 2. DENEY SONUÇLARI (TEST RESULTS)

2.2 Gonyofotometre Sonuçları (Goniophotometer Measurement Results)	6-13
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### 3. EKLER (ATTACHMENTS)

3.1 Deney Bileşenleri (Test Components)	14
3.2 Kritik Komponent Listesi (Critical Components List)	15
3.3 Ürün Fotoğrafları (Photos of Test Items)	16-20

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**1.3 Ürün Bilgileri (Information of Test Item)**

Ürünün Adı: (Name of Test Item)	Led projektör (Tetra PRL-1) Led projector (Tetra PRL-1)
Marka / Model: (Mark / Model)	Bayled / Tetra
Ürünün Tanımı / Tipi: (Product description / Type)	Led projektör Led projector
Sürücü Tipi / Modeli: (Model of Driver)	Philips / Xİ LP 150W 0.3-1.05A S1 230V I175
Seri No: (Serial Number)	-
Ürünün Boyutları / cm: (Product dimensions / cm)	Uzunluk / Çap: 43 (length / diameter) Genişlik: 18 (Width) Yükseklik: 12 (height)
Ürünün Ağırlığı / kg: (Product weight / kg)	5.15
IP Sınıfı: (IP Class)	IP66 (Müşteri Beyanı)

**1.4 Çevre Şartları (Environmental Conditions)**

Sıcaklık - °C: (Temperature - °C)	25.2
Nem: (Humidity)	%29
Hava Akımı - m/s: (Air flow - m/s)	0.1

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**1.5 Deney Standartları (Test Standard)**

Deneyler aşağıdaki standartlara göre yapılmıştır.

(The tests were performed according to following standards)

<b>TS EN 13032-1</b>	<b>Işık ve aydınlatma - Lambaların ve armatürlerin fotometrik verilerinin ölçülmesi ve sunulması - Bölüm 1: Ölçme ve dosya biçimi</b> Light and lighting - Measurement and presentation of photometric data of lamps and luminaires - Part 1: Measurement and file format
<b>TS EN 13032-2</b>	<b>Işık ve aydınlatma - Lambaların ve armatürlerin fotometrik verilerinin ölçülmesi ve sunulması - Bölüm 2: İç ve dış mekan iş yerleri için verilerin sunulması</b> Light and lighting - Measurement and presentation of photometric data of lamps and luminaires - Part 2: Presentation of data for indoor and outdoor work places

**1.6 Belirsizlik Açıklamaları (Uncertainty Explanations)**

Ölçüm belirsizliği, genişletilmiş belirsizlik olup belirsizlik kapsam faktörü  $k = 2.0$  çarpılarak elde edildi. Güvenirlik 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%.)

**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	0,5456	124	0.9876

**1.8 Ölçüm Sonuçları Özeti (Measurement Results Summary)**

Işık Akısı - Lümen: (Luminous Flux - Lumen)	20319
Işık Şiddeti - Kandela: (Luminous Intensity - Candela)	61134
Ortalama Işıma Açısı: (Average Beam Angle)	22.7
Verimlilik - lm/w: (Efficiency - lm/w)	163.9
Renk Geri Verim / CRI: (CRI: Color Render Index)	73.2
Renk Sıcaklığı / Kelvin: (CCT: Colorated Color temprature / Kelvin)	5223
Test sırasında SSL ürünün yanma pozisyonu: (Burn position of SSL during testing)	Görsellere Bakınız.
Stabilizasyon süresi /dakika: (Stabilization time / Minute)	50
Stabilizasyon dahil olmak üzere ürünün toplam çalışma süresi (Total operating time of the product including stabilization)	80
Uygulanan düzeltme faktörleri: (Applied correction factors)	-

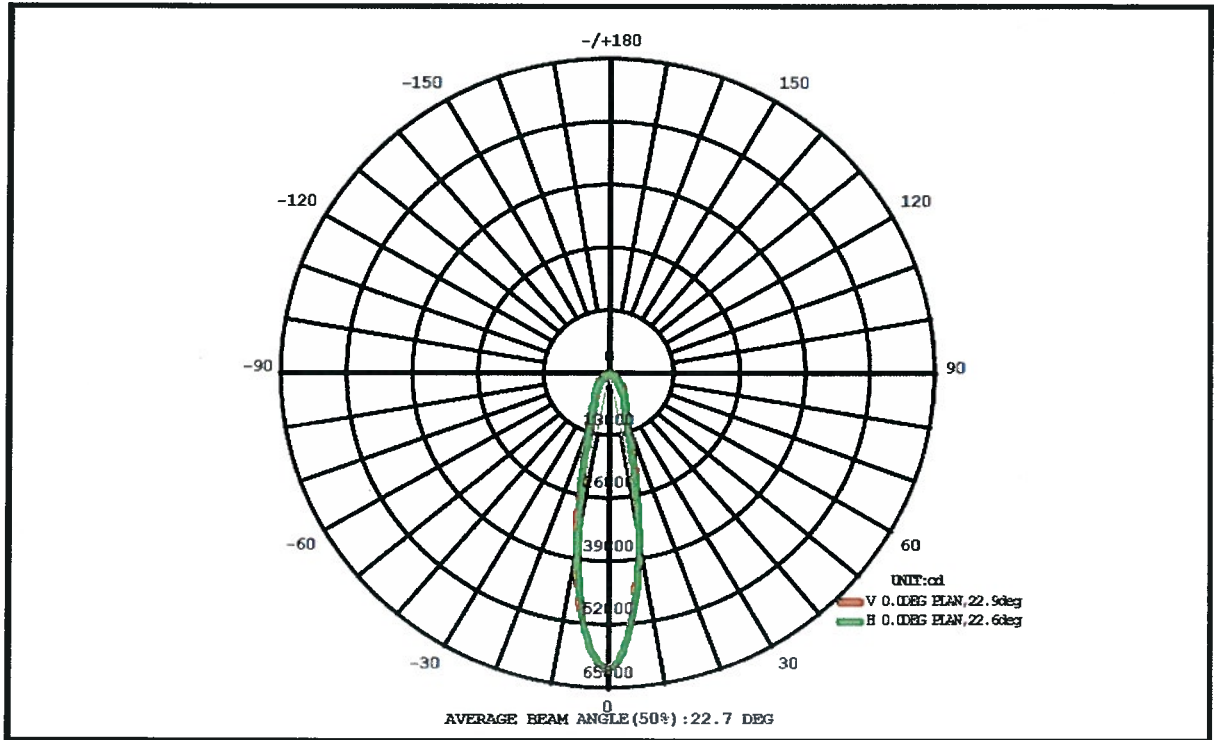
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**2.2 Gonyofotometre Sonuçları (Goniophotometer Measurement Results)**

Işık Şiddeti (I max): Luminous intensity(Cd)	61134	C: (C Range)	0-360 derece
Aydınlatma Çıkış Oranı: (LOR:Lighting Output Ratio)	100	Düzlemler arası açı adımı C: (C Interval)	10 derece
Ort. Işıma Açısı: (Average Beam Angle)	22.7	Gama: (Gamma range)	0-180 derece
Ölçme uzaklığı: (Test Distance)	26	Düzlem içi açı adımı X: (X Interval)	1 derece
Availability(%)	65.9	Toplam Akı: (Total flux)	20319
Avai. Flux	13387	e @50%(H,V)	23,23Deg

**2.2.1 Işık Yeğirliği Polar Eğrisi**

(Luminous Intensity Distribution Diagram)



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## 2.2.2 Alan Akı Diagramı (Area Flux Diagram)

		AREA FLUX DIAGRAM																UNIT: lm		$\phi$ t	$\phi$ a
VERTICAL (DEG)	90	0.00	0.01	0.03	0.07	0.11	0.14	0.18	0.19	0.20	0.20	0.18	0.16	0.12	0.08	0.05	0.02	0.00	0.00	1.74	0.00
	80	0.00	0.08	0.32	0.78	1.47	2.22	2.90	3.35	3.57	3.53	3.21	2.70	2.01	1.29	0.67	0.25	0.06	0.00	28.4	0.00
	70	0.01	0.24	1.06	2.73	5.12	7.82	10.2	11.7	12.5	12.4	11.4	9.78	7.42	4.80	2.52	0.93	0.20	0.01	101	0.00
	60	0.03	0.51	2.21	5.59	10.4	16.2	22.3	27.6	30.8	30.6	27.0	21.5	15.6	10.0	5.32	2.04	0.43	0.02	228	0.00
	50	0.05	0.84	3.56	8.82	17.4	31.4	48.9	65.2	75.1	74.7	64.1	47.4	30.3	17.0	8.56	3.36	0.74	0.04	498	0.00
	40	0.07	1.17	4.83	12.1	27.9	55.8	89.7	121	141	141	122	89.1	54.8	27.5	11.9	4.61	1.05	0.05	905	0.00
	30	0.09	1.45	5.87	15.7	40.7	82.1	133	186	229	228	187	134	82.3	40.4	15.5	5.66	1.33	0.07	1387	650
	20	0.10	1.66	6.63	19.2	52.1	104	175	311	552	539	303	175	105	52.3	19.1	6.45	1.54	0.09	2423	1917
	10	0.11	1.77	7.04	21.4	58.7	117	210	553	1336	1294	526	208	118	59.9	21.5	6.88	1.66	0.10	4542	4087
	0	0.11	1.76	7.03	21.4	58.5	117	211	557	1340	1314	539	209	118	60.4	21.6	6.89	1.67	0.10	4585	4129
	-10	0.10	1.64	6.60	19.0	51.4	104	176	314	560	557	310	175	106	53.5	19.3	6.47	1.56	0.09	2461	1953
	-20	0.09	1.43	5.83	15.5	39.7	80.7	132	187	231	230	186	134	83.8	41.5	15.6	5.70	1.35	0.07	1392	651
	-30	0.07	1.14	4.79	11.9	27.2	53.5	87.1	120	139	140	121	90.5	56.6	28.1	11.9	4.64	1.08	0.06	899	0.00
	-40	0.05	0.81	3.51	8.66	16.9	29.7	46.1	62.2	72.7	73.6	64.4	48.5	31.2	17.1	8.55	3.37	0.76	0.04	488	0.00
	-50	0.03	0.49	2.16	5.45	10.0	15.4	21.2	26.6	30.2	30.5	27.3	21.9	15.8	10.0	5.33	2.03	0.45	0.02	225	0.00
	-60	0.01	0.23	1.03	2.65	4.93	7.44	9.65	11.2	12.2	12.3	11.4	9.79	7.46	4.84	2.53	0.94	0.20	0.01	98.8	0.00
	-70	0.00	0.07	0.30	0.75	1.39	2.09	2.73	3.23	3.52	3.49	3.20	2.71	2.03	1.32	0.68	0.26	0.06	0.00	27.8	0.00
	-80	0.00	0.01	0.03	0.07	0.11	0.15	0.18	0.20	0.21	0.21	0.19	0.17	0.13	0.09	0.05	0.02	0.00	0.00	1.83	0.00
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)	20	30	40	50	60	70	80	90			
$\phi$ t	0.92	15.3	62.8	172	424	826	1378	2561	4768	4685	2507	1380	837	430	171	60.5	14.1	0.76	20292	---	---
$\phi$ a	0.00	0.00	0.00	0.00	0.00	0.00	603	1960	4200	4118	1907	598	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	13387

one-half-peak spread: U:11.4,D:11.3 , L:11.7,R:11.4

NEMA Beam Type: Type 4

## Açıklamalar (Descriptions)

Luminous Intensity: Işık Şiddeti.

Unit: Birim.

Y: Gama.

Zone: Bölge.

Total: Toplam.

Lamp: Lamba.

Degree: Derece.

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## 2.2.3 Isocandela Diyagramı (Isocandela Diagram)

Conical surface Flux(90deg):

17720 lm

$\phi_{lum} = 87.2\%$

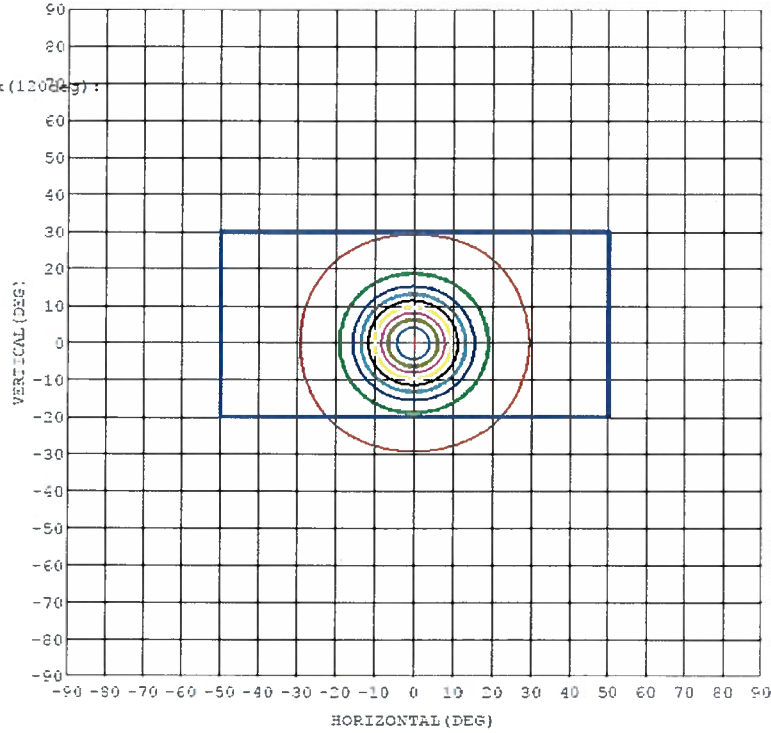
$\phi_{lamp} = 87.2\%$

Conical surface Flux(120deg):

19635 lm

$\phi_{lum} = 96.6\%$

$\phi_{lamp} = 96.6\%$



## Açıklamalar (Descriptions)

Conical surface Flux: Konik yüzey Akısı.

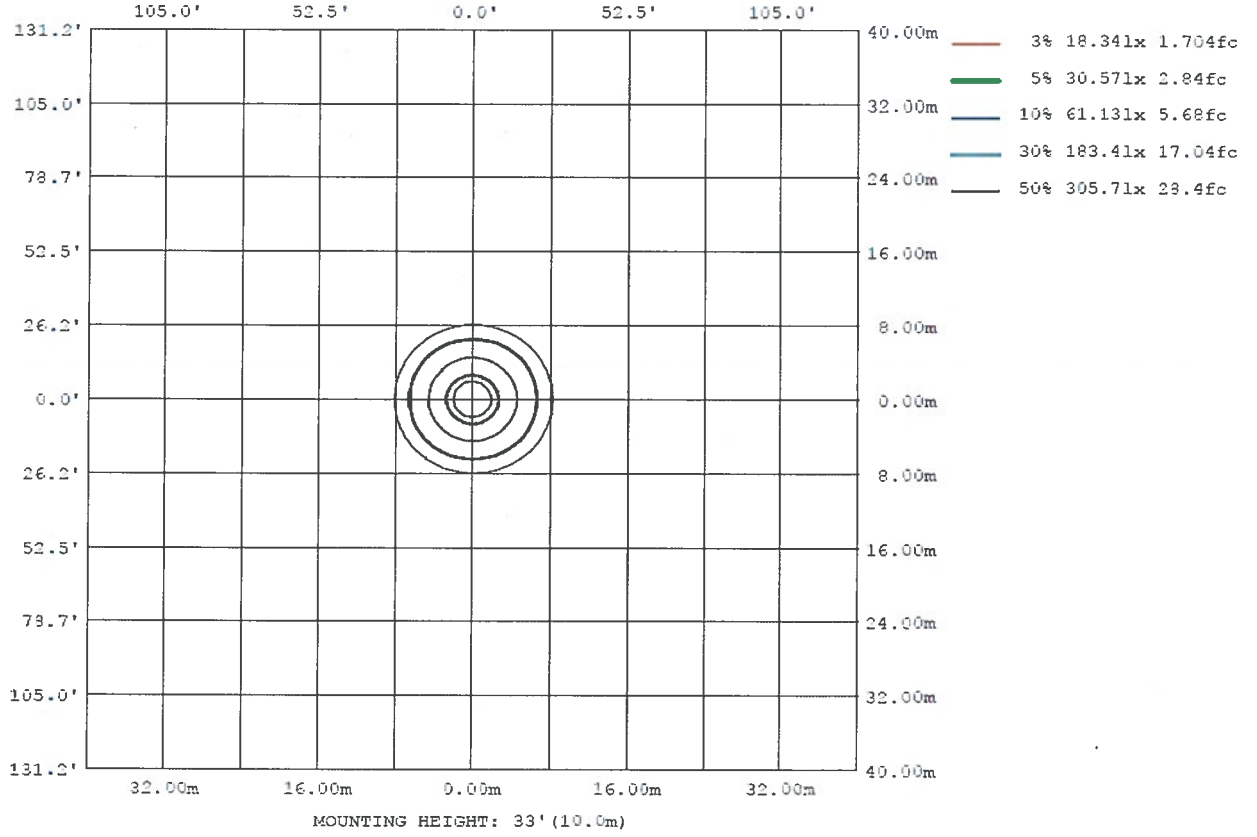
Vertical: Dikey.

Horizontal: Yatay.

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## 2.2.4 Isolux Diyagramı (Isolux Diagram)

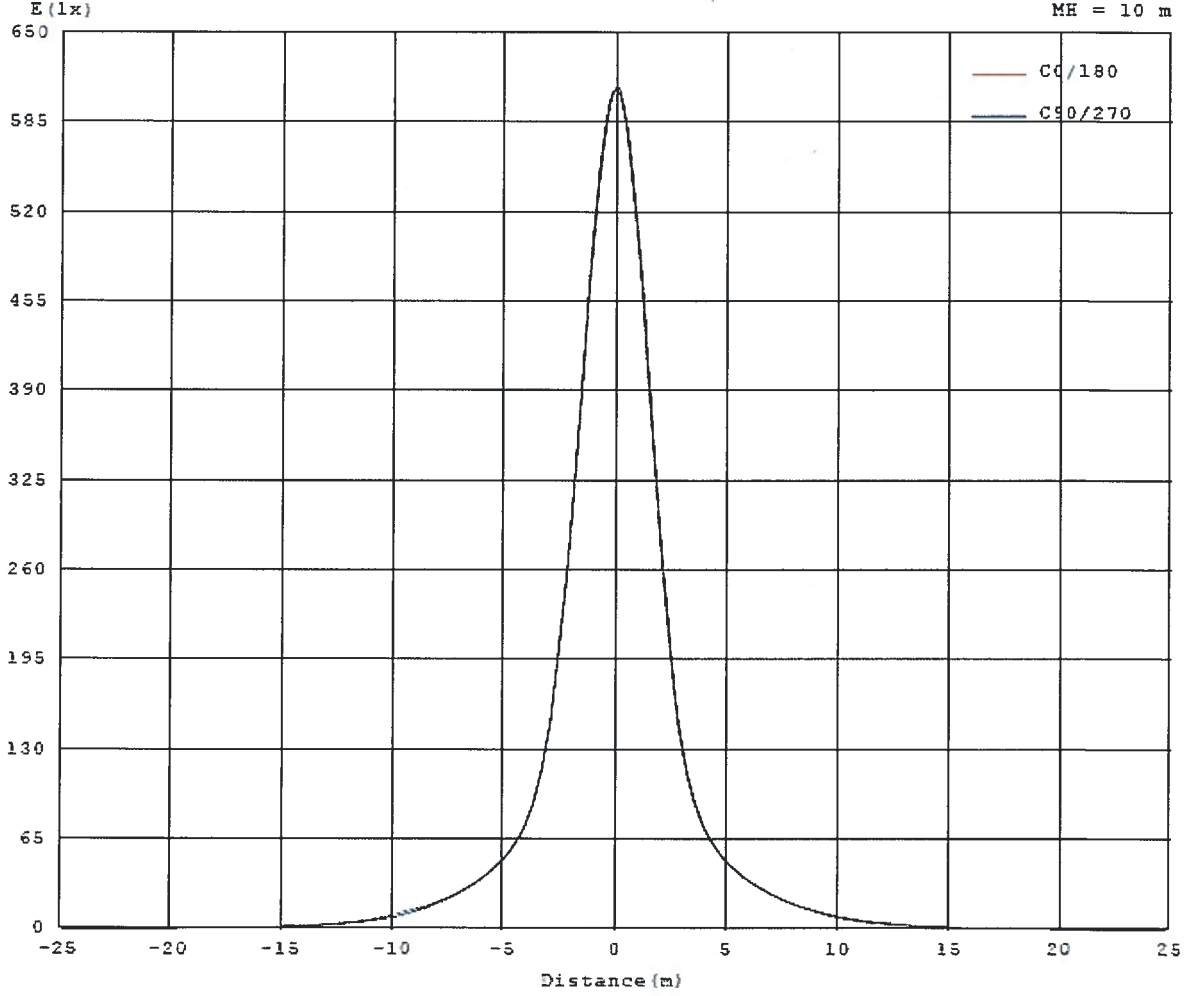


## Açıklamalar (Descriptions)

Mounting Height: Montaj Yüksekliği.

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## 2.2.5 Işık Yeğİnliđi Kartezyan Eđrisi (Planar illuminance Curve)

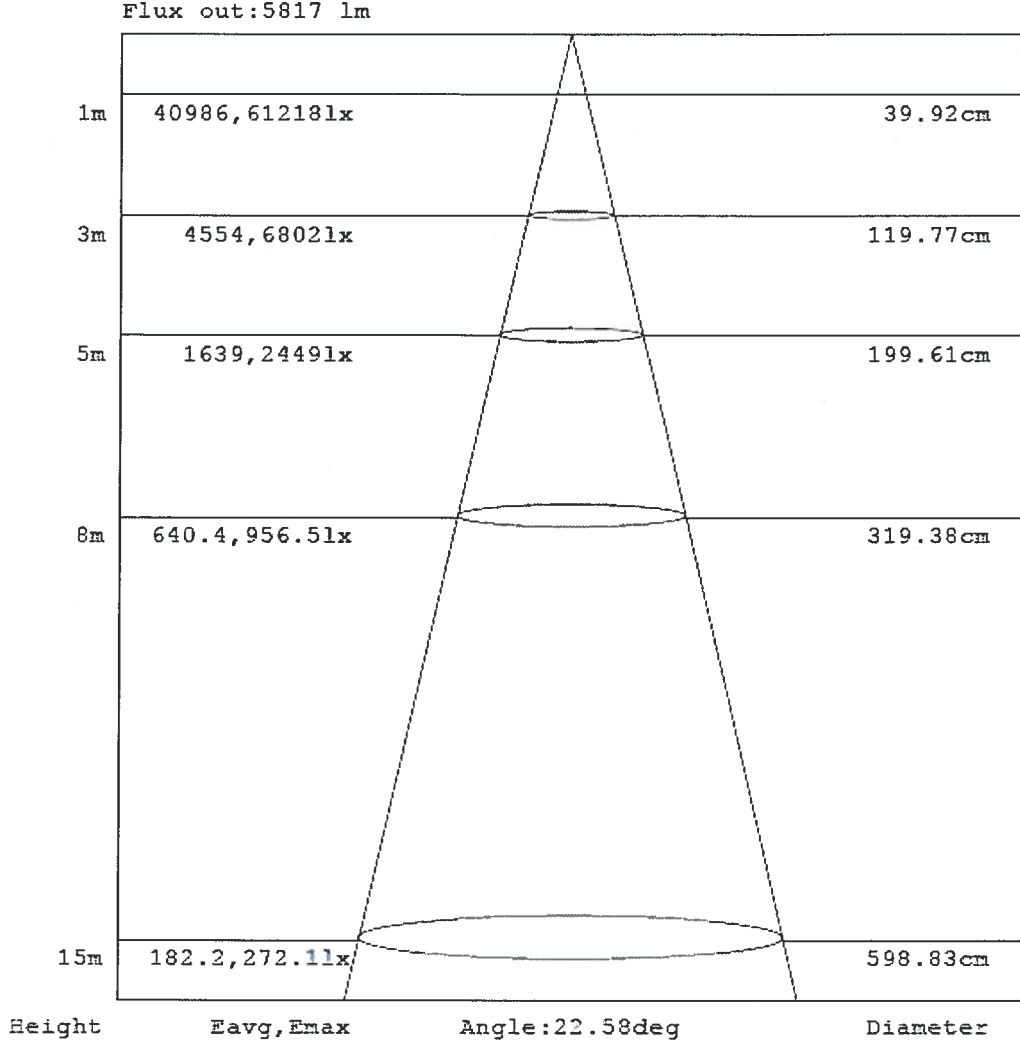


## Açıklamalar (Descriptions)

MH: Mounting Height: Montaj Yüksekliđi.

Distance: Mesafe.

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**2.2.6 Aydınlık Şeması (Illuminance Diagram)**

Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

**Açıklamalar (Descriptions)**

Flux Out: Akı (Lümen) Çıkışı.

Height: Yükseklik.

Angle: Açı.

Diameter: Çap.

Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

Not: Eğriler, aydınlatılmış alanı ve armatür farklı mesafede olduğunda ortalama aydınlatmayı gösterir.

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

Table--1

UNIT: ×10cd

H (DEG) \ V (DEG)	-90	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
-180	0.00	0.02	0.03	0.06	0.11	0.19	0.30	0.41	0.58	0.72	0.90	1.16	1.73	2.71	3.75	4.73	4.93	4.66	4.25
-170	0.00	0.01	0.03	0.04	0.07	0.10	0.12	0.12	0.09	0.06	0.08	0.16	0.26	0.36	0.56	0.98	1.58	2.11	2.25
-160	0.00	0.01	0.02	0.02	0.03	0.02	0.00	0.00	0.00	0.00	0.05	0.10	0.17	0.23	0.33	0.43	0.52	0.62	0.72
-150	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.08	0.13	0.17	0.19	0.24	0.25
-140	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.06	0.05	0.06
-130	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-80	0.00	0.00	0.11	0.30	0.55	0.79	1.01	1.28	1.51	1.74	1.94	2.15	2.30	2.44	2.54	2.62	2.63	2.69	2.69
-70	0.00	0.10	0.66	1.53	2.76	4.35	6.31	8.52	10.8	13.1	15.1	17.1	19.0	20.4	21.4	22.4	23.1	23.6	23.8
-60	0.00	0.32	1.61	3.92	7.26	11.5	16.7	22.4	28.0	33.9	38.9	44.1	48.0	51.4	54.0	56.7	58.7	60.2	60.5
-50	0.00	0.61	2.97	7.36	13.3	21.3	30.2	40.1	49.7	60.5	71.6	84.0	98.0	112	126	140	150	158	160
-40	0.00	0.96	4.62	11.2	20.2	31.5	44.4	57.5	75.1	97.9	127	161	197	235	270	303	328	344	351
-30	0.00	1.30	6.27	14.8	26.4	40.3	56.1	75.1	107	152	207	268	332	398	460	513	556	581	595
-20	0.00	1.57	7.70	17.8	31.3	47.2	65.7	94.6	144	210	288	373	463	557	661	783	923	1047	1095
-10	0.00	1.75	8.73	19.9	34.4	51.9	72.9	111	175	256	348	446	556	694	930	1383	2251	3152	3540
0	0.00	1.82	9.20	20.8	35.5	53.5	75.6	118	187	274	369	473	591	760	1110	1985	3653	5338	6113
10	0.00	1.76	8.82	20.1	34.5	52.0	73.1	112	177	259	348	446	556	691	922	1370	2221	3164	3520
20	0.00	1.59	7.86	18.1	31.5	47.3	66.2	95.1	146	215	293	376	462	555	655	776	911	1031	1074
30	0.00	1.33	6.47	15.3	26.8	40.6	56.8	75.8	108	156	214	276	340	403	463	515	557	583	591
40	0.00	0.99	4.83	11.6	20.5	31.9	44.7	58.7	76.0	100	133	170	210	248	284	316	340	356	360
50	0.00	0.63	3.10	7.78	13.8	21.5	30.9	40.5	51.2	62.3	74.1	88.2	102	118	132	144	154	160	161
60	0.00	0.32	1.71	4.17	7.51	11.9	17.2	22.9	29.0	34.9	40.6	46.2	50.7	54.2	56.6	58.9	60.5	61.7	61.8
70	0.00	0.10	0.71	1.64	2.89	4.52	6.50	8.78	11.3	13.6	15.8	18.1	19.9	21.6	22.6	23.4	23.5	23.8	23.8
80	0.00	0.00	0.10	0.30	0.58	0.84	1.09	1.37	1.63	1.87	2.06	2.27	2.42	2.55	2.66	2.73	2.70	2.73	2.69
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.00
110	0.00	0.00	0.00	0.02	0.01	0.02	0.03	0.03	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03
120	0.00	0.00	0.02	0.02	0.03	0.04	0.05	0.06	0.08	0.09	0.10	0.10	0.11	0.10	0.08	0.07	0.07	0.08	0.09
130	0.00	0.01	0.02	0.03	0.04	0.06	0.08	0.12	0.15	0.19	0.22	0.23	0.22	0.21	0.27	0.30	0.29	0.30	0.33
140	0.00	0.01	0.02	0.03	0.06	0.09	0.14	0.20	0.26	0.32	0.38	0.39	0.34	0.39	0.55	0.56	0.56	0.55	0.59
150	0.00	0.01	0.02	0.05	0.07	0.12	0.20	0.28	0.37	0.48	0.56	0.61	0.61	0.71	0.91	1.01	0.99	0.95	0.96
160	0.00	0.01	0.03	0.05	0.09	0.16	0.24	0.35	0.48	0.61	0.75	0.86	1.03	1.08	1.56	2.52	2.77	2.68	2.71
170	0.00	0.02	0.03	0.05	0.11	0.18	0.28	0.40	0.54	0.70	0.90	1.16	1.65	2.59	3.19	3.78	5.41	5.41	3.89
180	0.00	0.02	0.03	0.06	0.11	0.19	0.30	0.41	0.58	0.72	0.90	1.16	1.73	2.71	3.75	4.73	4.93	4.66	4.39

**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--2

UNIT: ×10cd

H (DEG) \ V (DEG)	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
-180	3.03	2.37	1.57	0.65	0.38	0.28	0.17	0.09	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-170	2.14	1.63	0.98	0.56	0.35	0.21	0.14	0.09	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-160	0.64	0.52	0.42	0.31	0.20	0.14	0.09	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-150	0.24	0.21	0.18	0.13	0.08	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-140	0.05	0.06	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-80	2.69	2.62	2.57	2.46	2.32	2.15	1.98	1.75	1.53	1.32	1.08	0.84	0.63	0.39	0.18	0.05	0.00	0.00
-70	23.5	22.8	22.5	21.7	20.5	18.8	17.0	14.8	12.7	10.3	7.91	5.70	3.84	2.41	1.28	0.47	0.05	0.00
-60	60.7	59.6	57.6	55.1	52.6	49.0	44.7	39.0	33.5	27.4	21.6	15.8	10.6	6.65	3.49	1.32	0.17	0.00
-50	159	153	144	131	117	102	86.9	72.7	60.8	49.3	39.2	29.3	19.9	12.5	6.85	2.56	0.38	0.00
-40	348	335	312	282	248	209	171	133	99.4	75.0	57.3	43.3	30.3	19.2	10.5	4.07	0.69	0.00
-30	583	557	516	466	407	345	282	217	158	108	74.9	55.6	39.3	25.3	14.0	5.66	0.98	0.00
-20	1044	916	778	657	559	469	384	300	220	148	94.7	65.4	45.8	30.1	16.8	6.99	1.22	0.00
-10	3109	2210	1350	913	691	559	454	358	266	181	112	72.5	50.5	33.1	18.8	7.89	1.37	0.00
0	5212	3511	1948	1084	757	596	479	379	284	192	119	74.7	52.0	34.1	19.5	8.25	1.43	0.00
10	3050	2094	1317	903	688	558	451	353	261	177	112	72.2	50.4	32.9	18.6	7.81	1.37	0.00
20	1020	900	770	657	560	468	379	294	214	145	94.1	65.0	45.8	29.7	16.6	6.86	1.22	0.00
30	583	560	519	466	405	339	274	212	154	107	74.5	55.4	39.0	24.8	13.7	5.50	0.98	0.00
40	354	340	314	281	243	204	165	130	98.0	75.0	57.2	43.2	30.2	18.9	10.2	3.93	0.69	0.00
50	159	152	141	128	114	99.0	85.0	72.1	60.9	49.4	39.2	29.2	20.2	12.4	6.50	2.46	0.38	0.00
60	61.4	60.0	57.9	55.2	52.4	48.7	44.4	38.9	33.5	27.3	21.5	15.9	10.7	6.44	3.31	1.31	0.16	0.00
70	23.5	22.9	22.4	21.4	20.3	18.8	16.8	14.6	12.4	10.1	7.83	5.63	3.75	2.32	1.27	0.47	0.03	0.00
80	2.68	2.60	2.56	2.43	2.24	2.07	1.92	1.70	1.48	1.26	1.04	0.80	0.60	0.36	0.15	0.01	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
110	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00
120	0.08	0.07	0.06	0.07	0.09	0.10	0.10	0.09	0.10	0.09	0.07	0.06	0.04	0.03	0.01	0.01	0.00	0.00
130	0.31	0.29	0.27	0.26	0.23	0.20	0.21	0.20	0.17	0.15	0.12	0.10	0.07	0.05	0.03	0.00	0.00	0.00
140	0.55	0.54	0.53	0.55	0.43	0.38	0.38	0.35	0.29	0.23	0.20	0.14	0.10	0.06	0.04	0.01	0.00	0.00
150	0.98	0.97	0.99	0.95	0.77	0.66	0.58	0.53	0.45	0.33	0.27	0.20	0.14	0.08	0.04	0.01	0.00	0.00
160	2.51	2.49	2.55	1.72	1.18	0.96	0.86	0.74	0.62	0.47	0.35	0.26	0.16	0.07	0.03	0.01	0.00	0.00
170	3.78	4.97	4.51	3.65	2.57	1.79	1.27	0.97	0.75	0.47	0.28	0.17	0.09	0.04	0.02	0.01	0.00	0.00
180	3.03	2.37	1.57	0.65	0.38	0.28	0.17	0.09	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**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-002	Integrating Sphere 2 m.	G121960CF1341163D	12.04.2019
LAB-004	Power Meter	G103508CD1331128	26.06.2019
LAB-006	AC Power Supply	G119885CF1341123	26.06.2019
LAB-022	Standard light source (sphere)	G100283CA1341240	17.04.2019
LAB-025	Auxiliary lamp (sphere)	001	17.04.2019
LAB-059	Sphere termokupl	13200840	25.10.2019
LAB-021	Standard light source(gonio)	M119805CN1331115	17.04.2019
LAB-027	Full field speed goniophotometer	0110133CA1341113	12.04.2019
LAB-030	AC Power Supply	G120984CF1341115	26.06.2019
LAB-031	Power Meter	G103508TO1331122	26.06.2019

Bu rapor laboratuvarın yazılı izni olmadan kısmen veya tamamen kopyalanıp çoğaltılamaz. İmzasız ve mühürsüz raporlar geçersizdir.  
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### 3.2 Kritik Komponent Listesi (Critical Components List)

TETRA PRL-1

Komponent Listesi / list of Component				
Sıra No	Komponent Adı	Marka / Model	Seri No:	Teknik Özellikleri
1	DRIVER	PHILIPS / XLIP 150W 0.3-1.05A 5L 230V 1175		150W 72-214VDC 0.3-1.05A I-10V IP67
2	LED	NICHIA NF2W757HT-F1		MID POWER 3V LED CHIP TRUE WHITE 5000K
3	LENS	EMGE		50*50MM 24'LÜ 20 DERECE LENS
4				
5				
6				
7				
8				
9				
10				

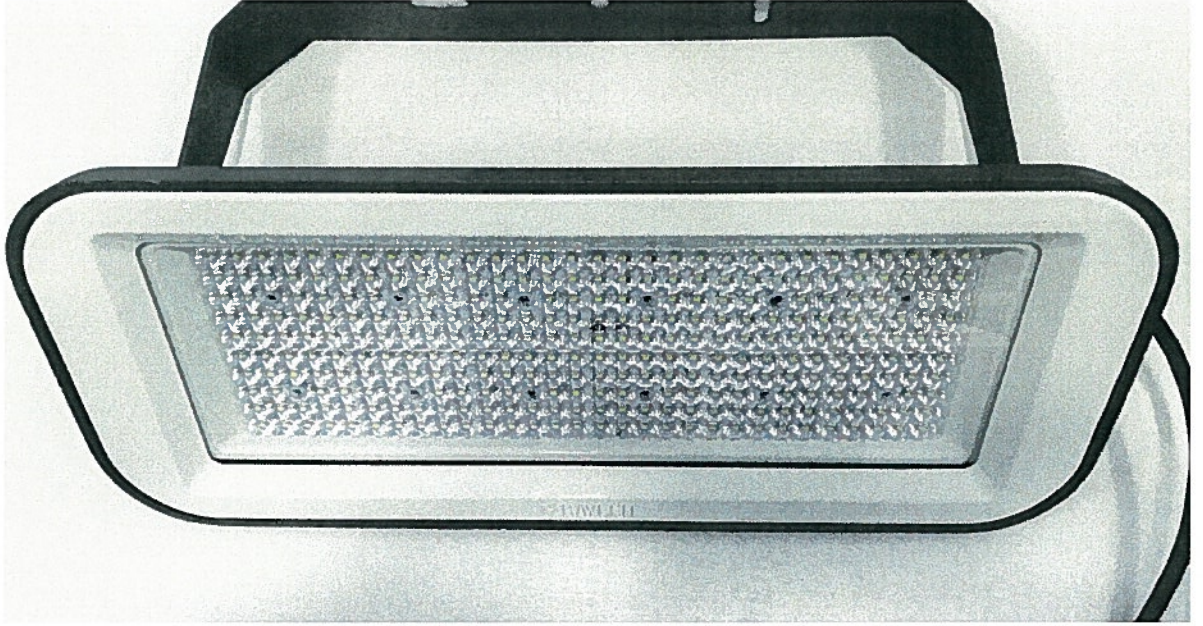
Firma Yetkili Ad Soyad / Kaşe / İmza / Tarih

ŞEHAN TURKAL ÖZGÜR  
Firma Yetkili Ad Soyad / Kaşe / İmza / Tarih

Bu rapor laboratuvarın yazılı izni olmadan kısmen veya tamamen kopya edilip çoğaltılamaz. İmzasız ve mühürsüz raporlar geçersizdir.  
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### 3.3 Ürün Fotoğrafları (Photos of Test Items)

#### 3.3.1 Ön Görünüm (Front view)



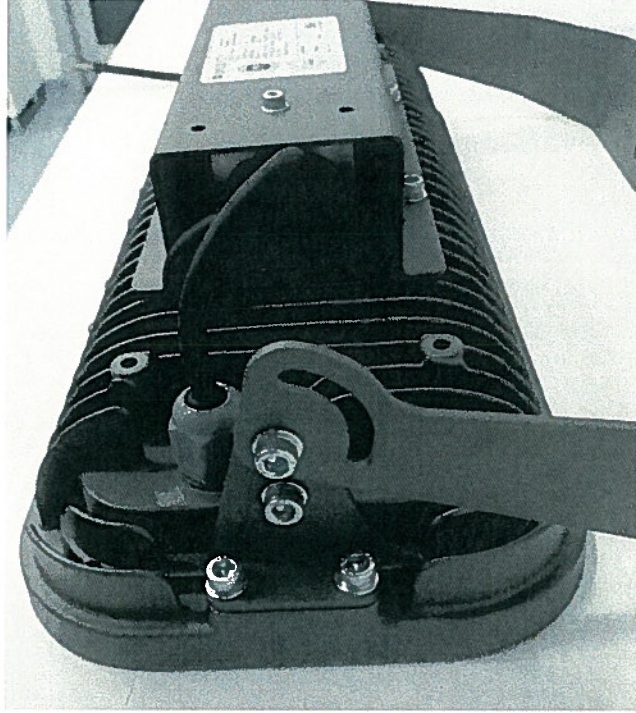
#### 3.3.2 Yan Görünüm (Side view)



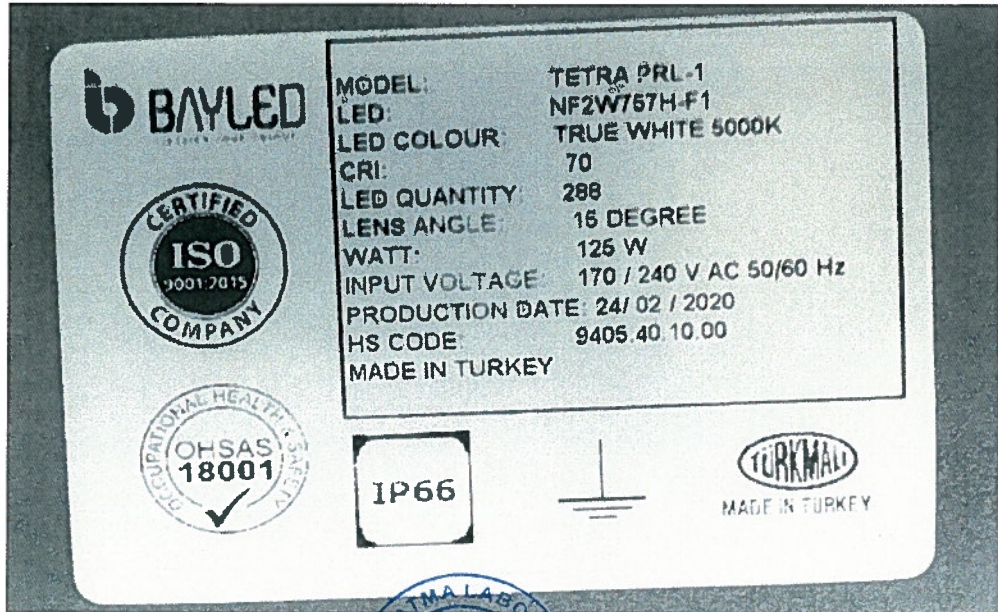
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### 3.3.3 Üst Görünüm (top view)



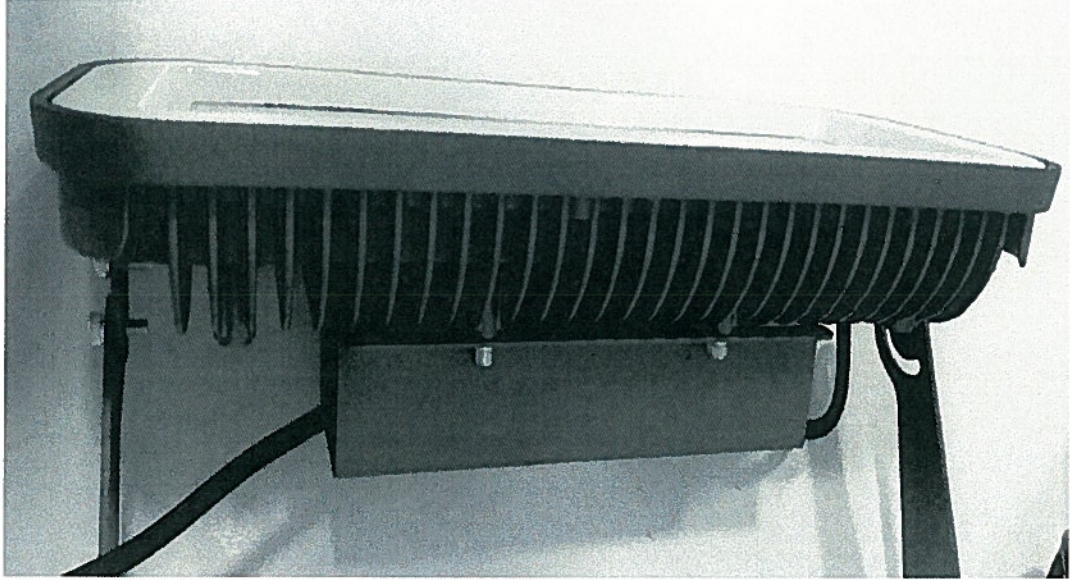
### 3.3.4 Arka Görünüm (back view)



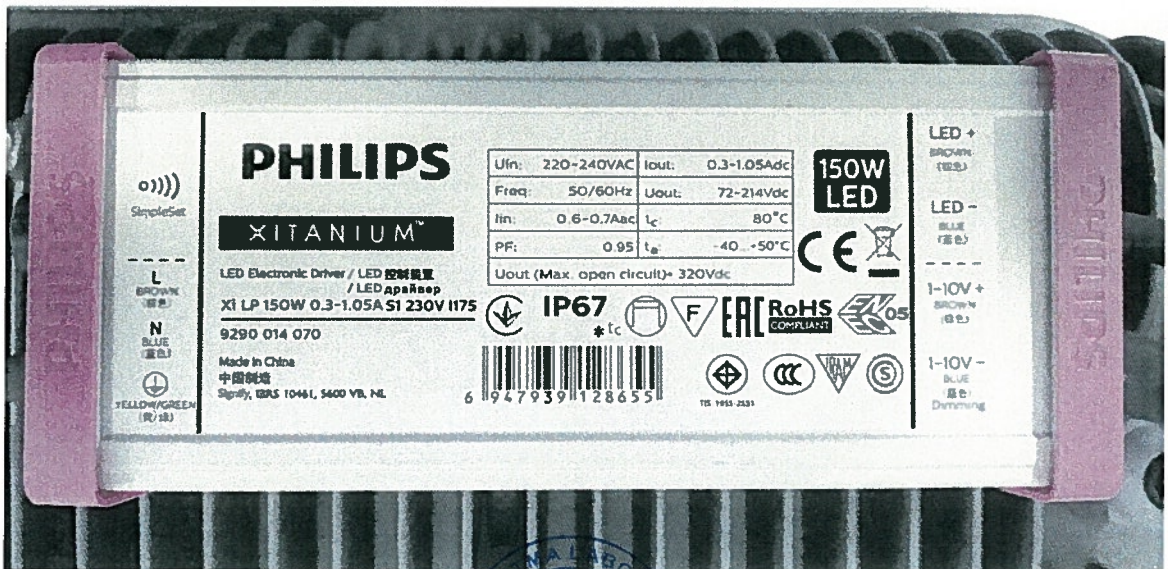
Bu rapor laboratuvarın yazılı izni olmadan kısmen veya tamamen kopyalanıp çoğaltılamaz. İmzasız ve mühürsüz raporlar geçersizdir.

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### 3.3.5 Komponentler (Components)

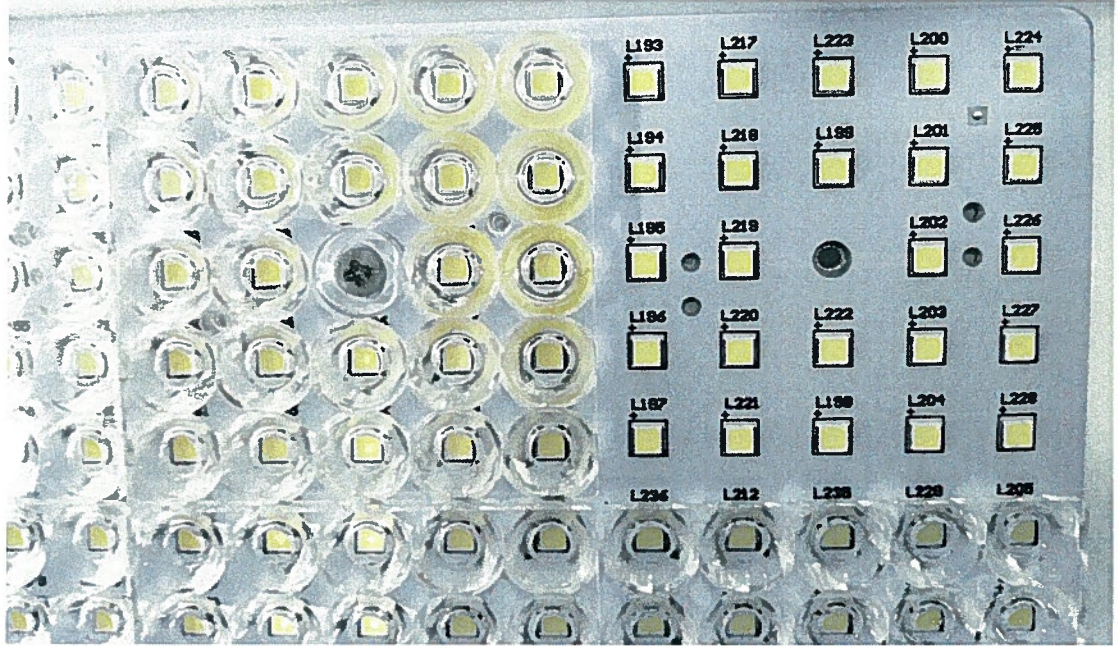


### 3.3.6 Görünüm (view)

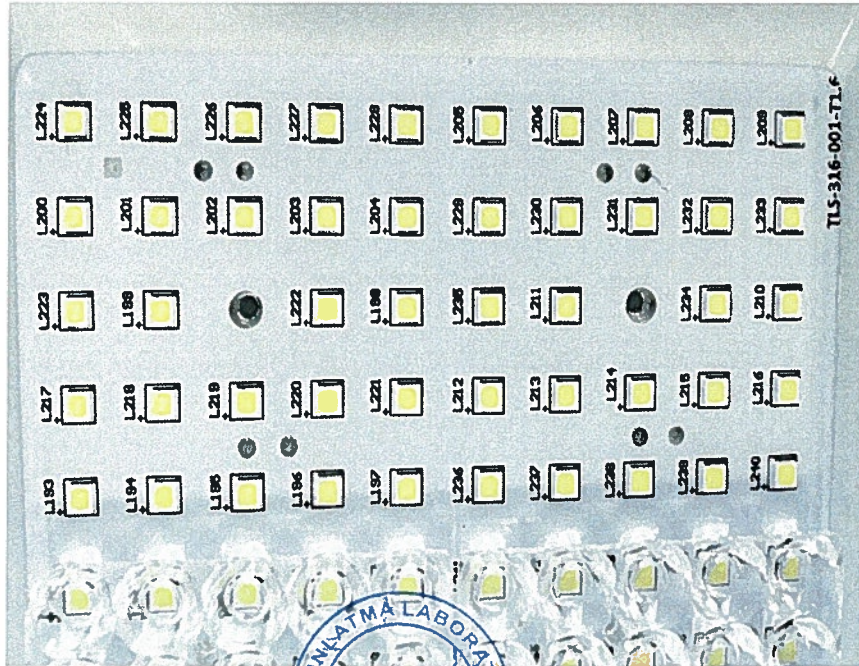


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### 3.3.7 Görünüm (view)



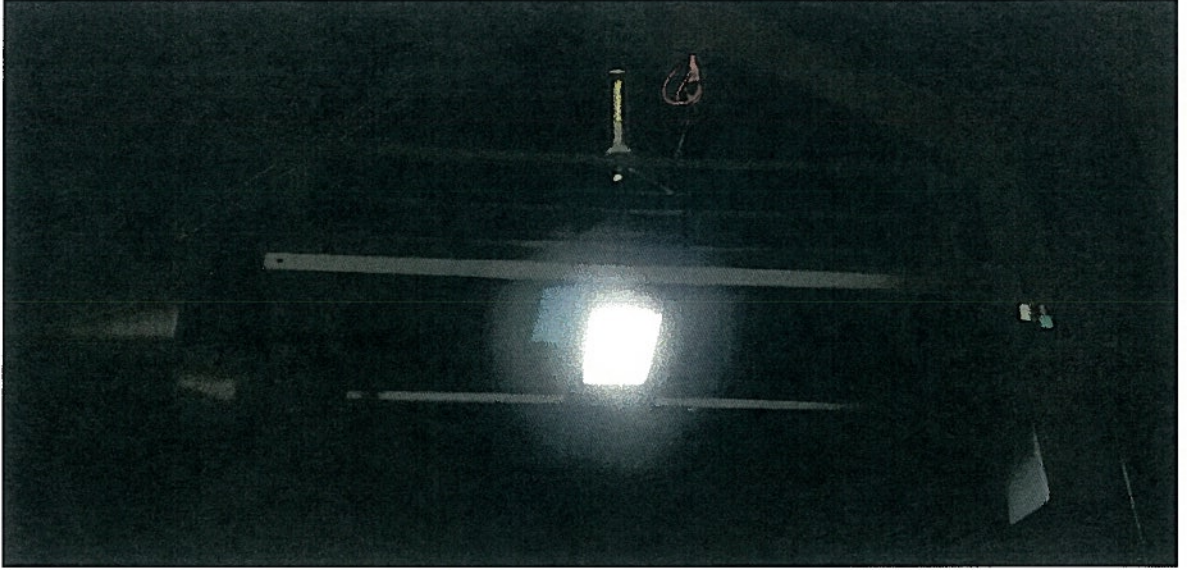
### 3.3.8 Görünüm (view)



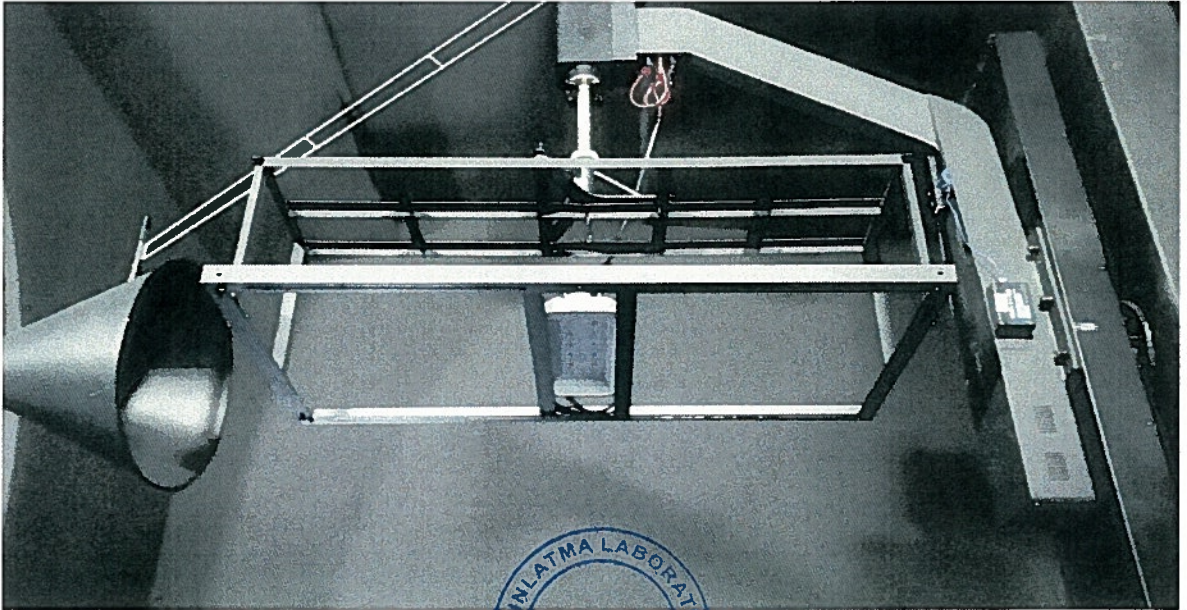
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### 3.3.7 Görünüm (view)



### 3.3.8 Görünüm (view)



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