

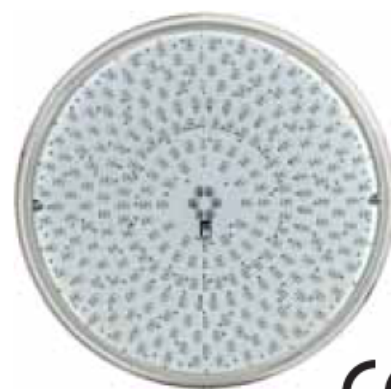
SlimLED Bulbs for PAR56 Replacement - RGB

"SlimLED" Underwater Light Bulb - Replacement Kit - RGB changing Color.

Polycarbonate light body with a choice of LED quantities and powers embedded into a special transparent silicone. Complete with 2 x 1,5 mm cable of 2,5 m length and adapter set. 120° - IP68. For built in PCB models there are 13 different lighting patterns. For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional). **2 years leakage warranty.** The light can be used as a replacement bulb for LED conversion of all PAR56 products available on the market. 50,000 hours life.

Max. operating temperature 30°.

120° Light Spectrum



Description	Code	Pieces/ box	Weight Kg	Volume m ³
• 252 Built-in Control replacement kit	05115301	1		
• 252 Central Control replacement kit	05115501	1		
• 90 Built-in Control replacement kit	0541201	1		
• 90 Central Control replacement kit	0541202	1		
• 81 Built-in Control replacement kit	05115601	1		
• 81 Central Control replacement kit	05115701	1		

"SLIMLED" BULBS				
Color	# of LED	AC Power (W)	Light Intensity (lux=lm/m ²)	Light Angle
RGB B.I.	252	36	1011	120°
RGB C.I.	252	36	1011	120°
RGB B.I.	90	36	1081	120°
RGB C.I.	90	36	1081	120°
RGB B.I.	81	30	1241	120°
RGB C.I.	81	30	1241	120°

"New Generation"

"ECOSlimLED" Bulbs for PAR56 Replacement Kit - RGB

"ECOSlimLED" Underwater Light Bulb - Replacement Kit - RGB changing Color.

Complete with 72 SMD LEDs: Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of 1,5 m length and adapter kit. 120° - IP68. For built in PCB models there are 13 different lighting patterns. For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional).

The light can be used as a replacement bulb for LED conversion of all PAR56 products available on the market.

Max. operating temperature 30°.

120° Light Spectrum



Description	Code	Pieces/ box	Weight Kg	Volume m ³
• 72 Built-in Control replacement kit	051150ER	1		
• 72 Central Control replacement kit	051151ER	1		
• 72 Self Control replacement kit	051150ERSC	1		

"ECOSLIMLED" BULBS				
Color	# of LED	AC Power (W)	Light Intensity (lux=lm/m ²)	Light Angle
RGB B.I.	72	20	671	120°
RGB C.I.	72	20	671	120°
RGB S.C.	72	20	671	120°



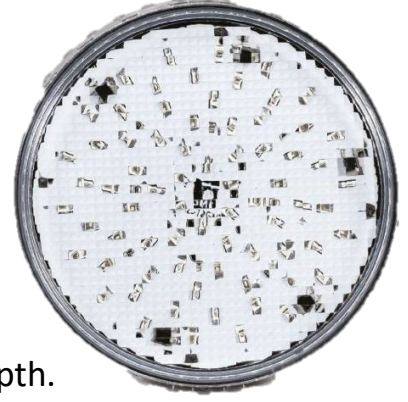
051150ER

“ECOSlim Underwater Lights

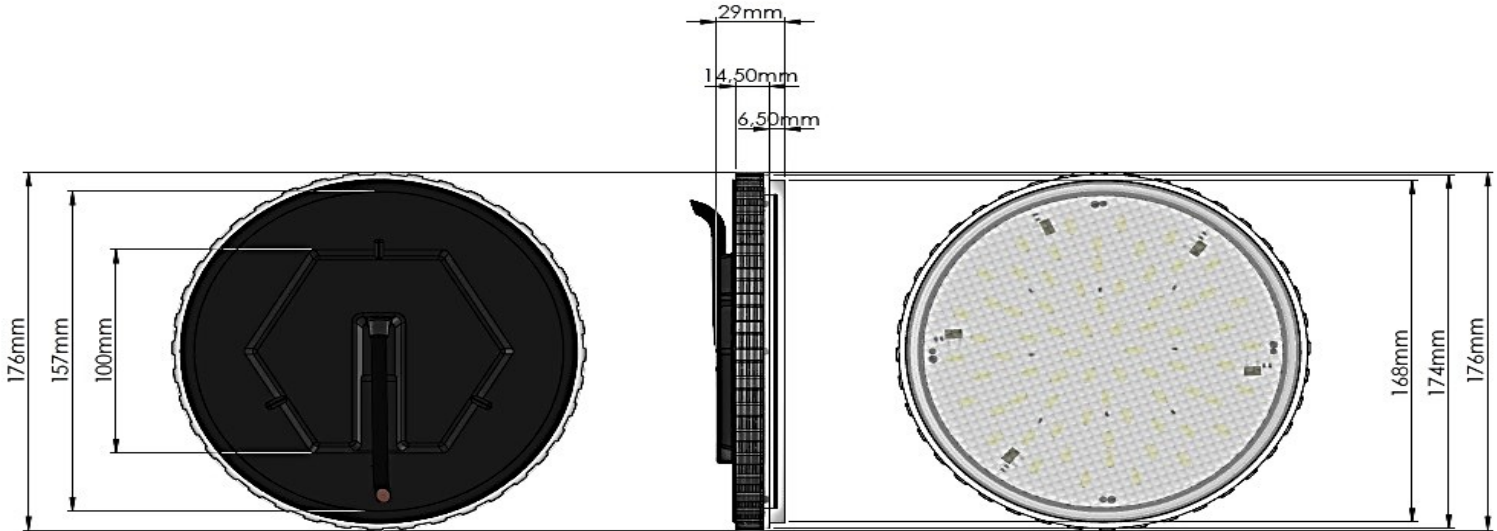


PRODUCT FEATURES

- It has a special, elegant, stylish and patented design.
- It can be easily installed in all swimming pools.
- Compatible with all PAR56 lamp niche on the market.
- It gives instant beam thanks to the LEDs used in the light.
- Light scattering angle is 120 °.
- The light complies with IP68 protection degree at 2 m nominal depth.
- Diffuser glass is made of polycarbonate.
- Body part consists of gray PA6.
- The light operating voltage is very low (12V AC / DC), making it a Class III electrical device.
- Energy input cable length is 1 meter.



VOLTAGE (V)	POWER (W)	CCT (K)	Φ (lm) Min	Useful (lm flux)	CRI (Ra)	Light Intensity (cd)
12V AC/DC	20.15	61516	641.4	671	81,4	269.21 cd



Note:

1. 2θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. The above luminous flux measurement allowance tolerance is ±5%.
3. The above Color Rendering Index measurement allowance tolerance is -2
4. The above color coordinates measurement allowance tolerance is ±0.003.



International Inspection & Certification Body

UYGUNLUK ONAYI ATTESTATION OF COMPLIANCE

2014/35/AB Belirli Gerilim Sınırları Dahilinde Kullanılmak Üzere Tasarlanmış Elektrikli Teçhizat İle İlgili Yönetmeliği'ne Göre 2014/35/EU Electrical Equipment Designed For Use Within Certain Voltage Limits Directive

Sertifika Numarası Certificate Number	: FMK.20/AC.C0022.01.01
Belgelendirme Kuruluşu Certification Body	: Femko Uluslararası Teknik Kontrol Eğitim Belgelendirme Ltd. Şti. Kazımdirik Mah. 372/7 Sok. No:8 Bornova - İzmir / Türkiye
Sertifika Sahibi ve Adresi Certificate Holder and Address	: Gemaş Genel Mühendislik Mekanik Sanayi Ve Ticaret A.Ş. İTOB Organize Sanayi Bölgesi 10001 Sok. No:28 Menderes - İzmir / Türkiye
Test Numunesinin Üreticisi Manufacturer of The Test Sample	: Gemaş Genel Mühendislik Mekanik Sanayi Ve Ticaret A.Ş. İTOB Organize Sanayi Bölgesi 10001 Sok. No:28 Menderes - İzmir / Türkiye
Ürün Ticari Markası Product Commercial Brand	: -
Ürün Product	: Havuz Armatürü
Tip ve Model Type and Model	: 051130SS, 051130SS01, 051131, 051131SS, 051131SS01, 051132, 051133 051133SS, 051133SS01, 051134, 051135, 051141SS01, 051142, 051143, 051144 051145, 051152, 051153, 05115301, 05115301SC, 051153SC, 051153SS, 051153SS01, 051154, 05115401, 05115401SC, 051154SC, 051155, 05115501, 052150, 052151SC, 052152, 052153, 052155, 0541113, 0541114, 0541115, 0541116 0541201SC
Test Rapor Numarası ve Tarihi Date and Number of The Test Report	: LVD-467-02 : 22.01.2020
Direktif / Yönetmelik Directive / Regulations	: 2014/35/AB 2014/35/EU Electrical Equipment Designed For Use Within Certain Voltage Limits Directive
Harmonize Standartlar Harmonised Standards	: TS 8707 EN 60598-2-18 : 2001

Sonuç: Uygunluk Beyanına istinaden; Teknik dosya, test raporları ve montajı yapılan örnek ürün incelenerek, belirtilen ürünün Avrupa Birliği Teknik Komisyonu tarafından 26 Şubat 2014 tarihinde yayınlanan 2014/35/AB Belirli Gerilim Sınırları Dahilinde Kullanılmak Üzere Tasarlanmış Elektrikli Teçhizat İle İlgili Yönetmeliği'ne uygunluğu saptanmıştır. Güvenlik bileşenleri, temel parçalar, çizimler, montaj ve kurulum prosedürleri üzerinde herhangi bir değişiklik yapılması halinde Femko Ltd. Şti. durumdan haberdar edilmektedir.

Result : Based on the Declaration of Conformity; The technical file, test reports and examples of assembled product have been checked and found in compliance with the Parliament and Council Directive 2014/35/EU of February 26, 2014 on the harmonization of the laws of Electrical Equipment Designed For Use Within Certain Voltage Limits Directive. Femko Ltd. Şti. must be informed for any changes on the safety components, basic part, drawings, montage and assembly procedures.

Düzenleme Tarihi (Date of issue) : 30.04.2020
Geçerlilik Tarihi (Date of Validity) : 30.04.2021
Revizyon Tarihi/No (Date of Revision/No) : -

Koray GÜNDOĞDU
Şirket Müdürü
Company Manager

 Femko Inspection & Certification
Femko Ulus. Tek. Kont. Eğt. Belg. Ltd. Şti.
www.femko.com.tr
MF04.00



DENEY RAPORU
TEST REPORT

AB-1374-T

2022-PTC-1395-5

03-22

Müşteri Adı / Adresi:
Customer name / address

GEMAŞ GENEL MÜHENDİSLİK MEKANİK SAN. TİC. A.Ş.
İTOB Organize Sanayi Bölgesi 10001 Sokak No:28 Menderes / İZMİR

İstek Numarası
Order No.

2022-PTC-1395

Numunenin adı ve tarifi
Name and identity of test item

AYDINLATMA ARMATÜRÜ

Numunenin kabul tarihi
The date of receipt of test item

03.02.2022

Açıklamalar
Remarks

DGC'ye ANSI IES LM 79-19 standard uyarınca fotometrik ölçümler yapılmıştır.
Photometric measurements were made to the DGC in accordance with the ANSI IES LM 79-19 standard.

Deneyin yapıldığı tarih
Date of Test

07.02.2022

Raporun Sayfa Sayısı
Number of pages of the Report

7

Deney laboratuvarı olarak faaliyet gösteren **PTC Ürün Test ve Belgelendirme San. Tic. Ltd. Şti.**, TÜRKAK'tan AB-1374-T akreditasyon dosya numarası ile **TS EN ISO IEC 17025:2017** standardına göre akredite edilmiştir.
PTC Ürün Test ve Belgelendirme San. Tic Ltd. Şti. accredited by TÜRKAK under registration number AB-1374-T accreditation file no for **TS EN ISO IEC 17025:2017** as test laboratory.
Türk Akreditasyon Kurumu(TÜRKAK) deney raporlarının tanınırılığı 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, laboratuvarın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. İmzasız ve mühürlü raporlar geçersizdir.

This report shall not be reproduced other than in full except with the permission of the laboratory. Testing reports without signature and seal are not valid.

Mühür
Seal

Tarih
Date

Deneyi Yapan Personel
Person in Performing the Test

Laboratuvar Teknik Yöneticisi
Laboratory Technical Manager



14.03.2022

TEST REPORT

İÇİNDEKİLER(CONTENTS)

1. **DGC, Çevre Şartları ve Sembollerin Tanımları** (*Description of the EUT, Environmental Conditions and Symbol Definitions*)
2. **Deney Standartları** (*Test Standards*)
3. **Deney Ekipmanları** (*Test Equipments*)
4. **Deney Sonuçları ve Koşulları** (*Test Results and Conditions*)
5. **Fotoğraflar** (*Photo Documentation*)

TEST REPORT

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

Markası / Brand	: GEMAŞ
Modeli / Model	: ECO SLIM 72 RGB
Seri Numarası / Serial Number	: 051150E
Beyan Giriş Gücü / Rated Power	: 20 W
Beyan Gerilimi / Rated Voltage	: 12 V AC/DC
Sembollerin Tanımı / Definitions of Symbols	DGC= Deneyden Geçen Cihaz EUT=Equipment Under Test
Led Markası / Led Brand	: -
Led Modeli / Led Model	: -
Led Seri Numarası / Serial Number	: -

Deney Standartları (Test Standards)

Deneyler aşağıdaki standartlara göre yapılmıştır. (The tests were performed according to following standard).

Standart / Standard

ANSI IES LM-79-19 Electrical and Photometric Measurements of Solid-State Lighting Products.

Ölçüm Cihazları / Measuring Equipments

Cihaz Adı <i>Device name</i>	Model Tipi <i>Model Type</i>	Üretici <i>Manufacturer</i>	Kalibrasyon Tarihi <i>Cal Date</i>	Son Kalb. Tarihi <i>Last Cal. Date</i>
Goniophotometer	LSG-1700B	LISUN GROUP	19.01.2022	13.01.2023
AC Power Supply	9388	LISUN GROUP	13.01.2022	13.01.2023
Powermeter	WXYZQ50025	LISUN GROUP	13.01.2022	13.01.2023
Standart Lamp	CAL001A01135	LISUN GROUP	24.01.2022	28.01.2023
Integrating sphere	IS1.5MA	LISUN GROUP	-	-

TEST REPORT

PTC Ürün Test ve Belgelendirme San. Tic. Ltd. Şti.

Aydınlı Mah. Patlayıcı Maddeler Yolu Cad. Beyoğlu Sanayi Sitesi. D1 Blok No:26 Tuzla/İstanbul-Turkey

Tel: +90 216 393 3232 e-mail: info@ptctestng.com web: www.ptctestng.com

Dok.No: PR.20-RP.37 / Rev.Tarihi: 30.03.2021 / Rev. No: 01

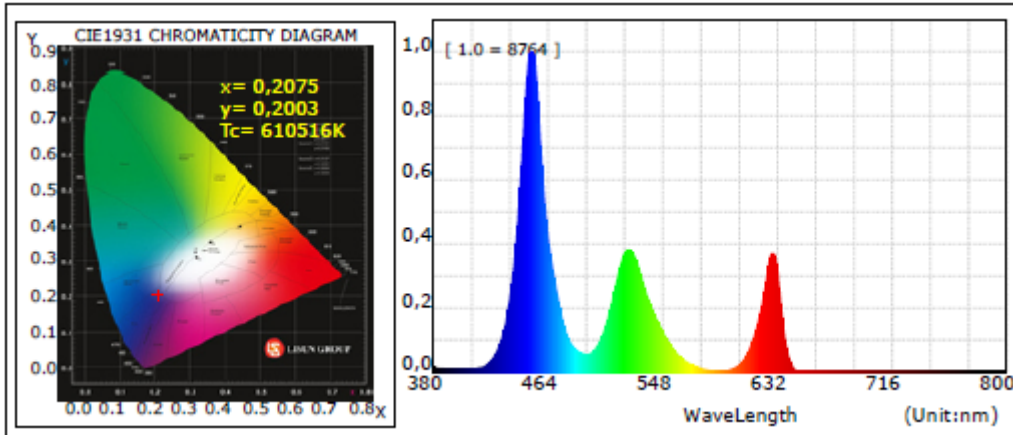
Deney Sonuçları (Test Results)

Elektriksel Ölçümler (Electrical Measurements)

Ölçülen Güç (W) (Input Power)	20.15 W
Ölçülen Gerilim (V) (Input Voltage)	12 V AC
Ölçülen Akım (A) (Input Current)	2.055 A
Güç Faktörü (PF) (Power Factor)	0.817
Ölçülen Frekans (Hz) (Input Frequency)	50 Hz
Ortam Sıcaklığı / Bağıl Nem (Ambient Temperature / Relative Humidity)	25,1 °C 48% Rh
Stabilizasyon Süresi (Stabilization Time)	60 dk ±5dk

Fotometrik Ölçüm Sonuçları (Photometric Measurement Results)

Toplam Işık Akısı (Total Luminous Flux) (lm)	641.4 lm
Maksimum Işık Şiddeti (Max. Light Intensity) (cd)	269.21 cd
Armatür Etkinliği (Luminaire Efficacy) (lm/W)	24.17 lm/W

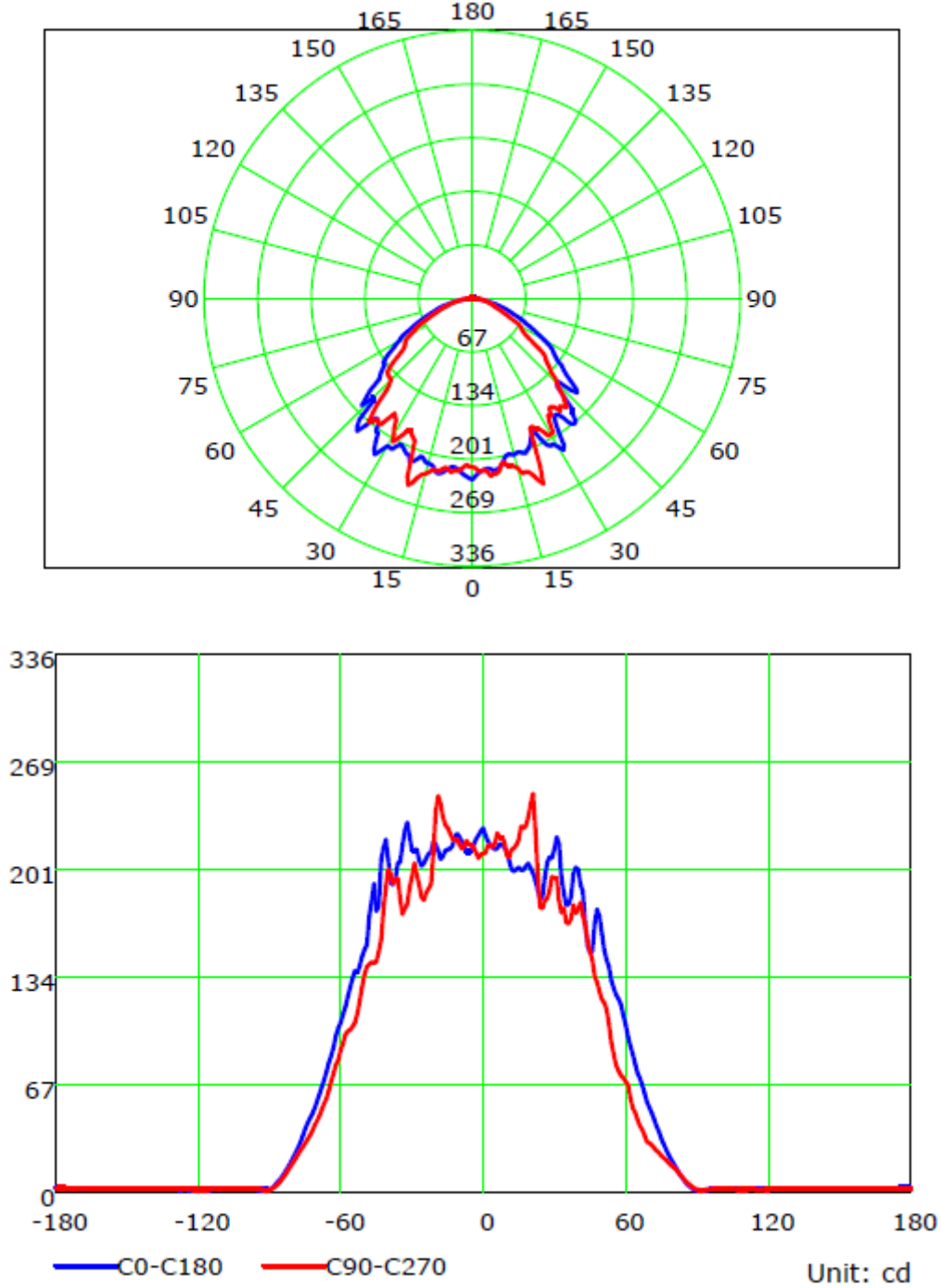


TEST REPORT

Date/Time	07.02.2022 12:00
Chromaticity x coord	0,2075
Chromaticity y coord	0,2003
Chromaticity u coord	0,1664
Chromaticity v coord	0,2409
Chromaticity u' coord	0,1664
Chromaticity v' coord	0,3613
Peak Wavelength (nm)	451,9
Half Wavelength (nm)	20,0
Dominant Wavelength (nm)	475,9
Color Purity (%)	55,456
Correlated Color Temperature (deg. K)	61516
SDCM	63,41
Color Rendering Index Average (RA)	81,4
Color Fidelity Index (RF)	100,0
Color Gamut Index (RG)	100,0
Color Rendering Index (R1)	77
Color Rendering Index (R2)	86
Color Rendering Index (R3)	96
Color Rendering Index (R4)	73
Color Rendering Index (R5)	82
Color Rendering Index (R6)	80
Color Rendering Index (R7)	89
Color Rendering Index (R8)	67
Color Rendering Index (R9)	-39
Color Rendering Index (R10)	77
Color Rendering Index (R11)	44
Color Rendering Index (R12)	66
Color Rendering Index (R13)	69
Color Rendering Index (R14)	97
Color Rendering Index (R15)	66

TEST REPORT

Luminous Intensity Distribution Curve



TEST REPORT

ATTACHMENT

Photo Documentation



TEST REPORT