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Elektro Man. Uym. Ve İç Dış Tic. Ltd. Şti.  
**MTK SİTESİ 5746/13 No:12 Bornova**  
**35090 İZMİR/TÜRKİYE**

*Deney Raporu*  
Test Report



AB-0684-T

S-1070-  
1979-00 TG

07-15

**Müşterinin adı /adres:**  
Customer name/address

ODSEL ELEKTRONİK SANAYİ VE TİCARET A.Ş.  
Orta Ölçekli Sanayi Bölgesi, 14.Sokak No:4 Muradiye 45140 Manisa / TURKEY

**İstek Numarası:**  
Order no.

150520yuk1rev02

**Numunenin Adı ve Tanımı:**  
Name and identity of test item

Mikro Bant ve Mikro Etanj LED Armatür/Micro Batten and Micro Waterproof LED Luminaire

**Numunenin Kabul tarihi:**  
The date of receipt of test item

2015-06-17

**Açıklamalar:**  
Remarks

Ürün ilgili testlerden geçmiştir, lütfen raporu inceleyiniz. /The product passes related tests, see report below.

**Deneyin yapıldığı tarih:**  
Date of Test

2015-06-17 to 2015-07-02

**Raporun Sayfa Sayısı:**  
Number of pages of the Report

38

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The test and / or measurement results, the uncertainties ( if applicable ) with confidence probability and test methods are given on the following pages which are parts of this report.

**Mühür**  
Seal

**Tarih**  
Date

**Deney Sorumlusu**  
Person in charge of test

**Laboratuvar Müdürü**  
Head of Testing Laboratory



2015-07-07

Timur Guser

Canberk Tekir

**Bu rapor laboratuvarın izni olmadan kısmen kopyalanıp çoğaltılamaz.**

**İmzasız ve mühürlü raporlar geçersizdir.**

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*Deney Raporu*  
Test Report



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S-1070-  
1979-00 TG

07-15

**Deney Standardı :**

Test Standard:

IEC 60598-2-1:1979 (First Edition) + A1:1987 used in conjunction with IEC 60598-1:2014 (Eighth Edition)  
EN 60598-2-1:1989/A1 used in conjunction with TS EN 60598-1:2015

**Akreditasyon Kapsamında Uygulanan Deneyler:**

List of Tests applied under Accreditation Scope:

- 1.5 (3.4) *Etiket Dayanıklılığı / Durability*
- 1.6 (4.12.1) *Tork Testi / Torque Test*
- 1.6 (4.13.1) *Darbe Testi / Impact Test/*
- 1.7 (11.2.1) *Yalıtma- Yüzey Aralıkları Ölçümü / Clearance Creepage Test*
- 1.8 (7) *Toprak Devamlılığı Testi / Earthing Continuity Test*
- 1.11 (8.2.5) *Elektrik Şoklarından Korunma / Protection against electric shock*
- 1.12 (12.3.1) *Dayanıklılık Testi / Endurance test*
- 1.12 (12.4.1) *Sıcaklık Testi (Normal Çalışma) / Thermal test (normal operation)*
- 1.13 (9.3) *Neme Dayanıklılık / Humidity test*
- 1.14 (10.2.1) *İzolasyon Direnci Testi / Insulation resistance test*
- 1.14 (10.2.2) *Dielektrik Dayanımı Testi / Electric strength test*
- 1.14 (10.2.3) *Kaçak Akım Testi / Touch current test*

**Akreditasyon Kapsamı Dışında Uygulanan Deneyler:**

List of Tests not applied under Accreditation Scope:

Testreport No.: S-1070-1979-00 TG  
AB-0684-T / 07-15

**emitel TR, MTK Sitesi 5746/13 Sok. No:12 Camdibi Bornova 35090 Izmir / Turkiye**

**Tel.: +90 (232) 433 3190 Fax: +90 (232) 433 3290**

emTR\_F510\_29\_Rev2\_0 Date of release / Yayın tarihi: 24-06-2015 Author / Yazar: Timur Güser

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**TESTREPORT**

**TEST REPORT**  
**IEC 60598-2-1**  
**Luminaires**  
**Part 2: Particular requirements**  
**Section 1: Fixed general purpose luminaires**

**Report Number.....:** S-1070-1979-00 TG

**Date of issue.....:** 07/07/2015

**Total number of pages.....:** 38

**Testing Laboratory.....:** Emitel TR Ltd. Sti.

**Address :** MTK Sitesi 5746/13 Sok. No:12 Camdibi Bornova 35090 Izmir  
TURKEY

**Testing location :** Emitel TR Ltd. Sti.

**Address :** MTK Sitesi 5746/13 Sok. No:12 Camdibi Bornova 35090 Izmir  
TURKEY

**Applicant's name :** ODSEL ELEKTRONİK SANAYİ VE TİCARET A.Ş.

**Address .....** Orta Ölçekli Sanayi Bölgesi, 14.Sokak No:4 Muradiye 45140  
Manisa / TURKEY

**Test specification:**

**Standard .....** IEC 60598-2-1:1979 (First Edition) + A1:1987 used in conjunction  
with IEC 60598-1:2014 (Eighth Edition)  
EN 60598-2-1:1989/A1 used in conjunction with TS EN 60598-  
1:2015

**Test procedure.....:** Compliance Testing

**Non-standard test method.....:** N/A

**Test Report Form No.....:** emTR\_F510\_29\_Rev2\_0

**Test Report Form(s) Originator.....:** Intertek Semko AB

**Master TRF.....:** 2014-08

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**Test item description .....** Micro Batten and Micro Waterproof LED Luminaire

**Trade Mark.....:** LUXAR

**Manufacturer.....:** ODSEL ELEKTRONİK SANAYİ VE TİCARET A.Ş.

**Model/Type reference.....:** HS15-273-XXYZG8ST  
HL15-144-XXYZG8ST  
HL12-144-XXYZG8ST

**Ratings .....** 100-240 VAC / 29 W / Class I / IP65 / 50-60 Hz

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**TESTREPORT**

**List of Attachments (including a total number of pages in each attachment):**

Test Report : 34 pages  
Attachment-1 : (List of equipment : 1 page)  
Attachment-2 : (Photo documentation : 3 pages)

**Summary of testing:**

**Tests performed (name of test and test clause):**

Cl. 1.5 (3.4) Durability  
Cl. 1.6 (4.12.1) Torque Test  
Cl. 1.6 (4.13.1) Impact Test  
Cl. 1.7 (11.2.1) Clearance Creepage Test  
Cl. 1.8 (7) Earth Continuity Test  
Cl. 1.11 (8.2.5) Protection against electric shock  
Cl. 1.12 (12.3.1) Endurance test  
Cl. 1.12 (12.4.1) Thermal test (normal operation)  
Cl. 1.13 (9.3) Humidity test  
Cl. 1.14 (10.2.1) Insulation resistance test  
Cl. 1.14 (10.2.2) Electric strength test  
Cl. 1.14 (10.2.3) Touch current test

**Testing location:**

Emitel TR Ltd. Sti.  
  
MTK Sitesi 5746/13 Sok. No:12 Camdibi Bornova  
35090 Izmir TURKIYE

**Copy of marking plate:**

**The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.**

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**TESTREPORT**

<b>Test item particulars</b> .....	Micro Batten and Micro Waterproof LED Luminaire
Classification of installation and use.....	Class I
Supply Connection.....	Permanent
.....	
<b>Possible test case verdicts:</b>	
- test case does not apply to the test object.....	: N/A
- test object does meet the requirement .....	: P (Pass)
- test object does not meet the requirement.....	: F (Fail)
<b>Testing</b> .....	
Date of receipt of test item .....	: 17-06-2015
Date (s) of performance of tests.....	: 17-06-2015 to 02-07-2015
<b>General remarks:</b>	
<p>The test results presented in this report relate only to the object tested.  This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.  "(See Enclosure #)" refers to additional information appended to the report.  "(See appended table)" refers to a table appended to the report.  Throughout this report a comma (point) is used as the decimal separator.  Clause numbers between brackets refer to clauses in IEC 60598-1</p>	
<b>General product information:</b>	
<p>These products are Micro Etanj LED Armature which include LED modules and AC to DC drivers. HS15-273-60FIG8ST was tested according to the standard above. HL15-144-60FNG8ST ; HL12-144-60FNG8ST; has the same mechanical and electrical design features with the 2501-417-LI60FNN except that 2501-817-LI60FNN consumes more power because of involving more LED modules HL15-144-60FNG8ST ; HL12-144-60FNG8ST. Thus, HL15-144-60FNG8ST ; HL12-144-60FNG8ST was partially tested.</p> <p>The model name can be changed according to the specifications listed below. The explanation of the coding system:  HS15-273-XXYZG8ST  HL15-144-XXYZG8ST  HL12-144-XXYZG8ST  XX: CCT value : 30 for 3000K, 40 for 4000K and 60 for 6000K  Y: Type of Diffuser T transparent, F opaque  Z: Ingress level I for IP65, N for IP4X</p>	