



Test Laboratuvarları

LVT Test Laboratuvarları Ltd. Şti.

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AB-0341-T

22-1157-
R0-N1-1

05-22

DENEY RAPORU

Test Report

1/57

Müşteri Client	: BSI AYDINLATMA SAN. VE TIC. A.Ş.
Adres Address	: BAŞKENT OSB, 20.CAD. B/3 BLOK NO:4 MALIKÖY, SİNCAN, ANKARA / TURKEY
İmalatçı Manufacturer	: BSI AYDINLATMA SAN. VE TIC. A.Ş.
Teklif Numarası Order No	: 22-1157-R0
Deney Numunesi Test Sample	: DECORATIVE LED LIGHTING FIXTURE
Marka Trade Mark	: BSI
Deney Metodu Test Method	: IEC 60598-2-3:2002+AMD1:2011 CSV
Deney Tarihi Date of Test	: 15.04.2022 – 16.05.2022
Toplam Sayfa Sayısı Total Number of Pages	: 57
Basım Tarihi Date of Issue	: 18.05.2022

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

Mühür
Seal

Deney Sorumlusu
Person in Charge of Test

Bölüm Müdürü
Department Manager



Mustafa YETİŞEN

Ata Gürül ARSLANLI

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FRT.76/Rev08/0422

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1. **Numunelerin Tanımı**
Definition of the Samples

Dekoratif LED Aydınlatma Armatürü
Decorative LED Lighting Fixture

1.1 Dekoratif LED Aydınlatma Armatürü

(22-1157-R0-N1)

Numune Kabul Tarihi Date of Receive	:	14.04.2022
Numune Seri No Serial No	:	LB30221
Tip Type	:	iLenti Bollard
Kutup Sayısı Number of Poles	:	LN + PE
Beyan Gerilimi Rated Voltage	U_n	: 220 – 240V
Beyan Akımı Rated Current	I_n	: 700 mA
Beyan Güç Rated Power	P_n	: 12W
Beyan Frekans Rated Frequency	f_n	: 50 – 60Hz
Beyan Koruma Derecesi Rated Degree of Protection	IP	: 66
Numune Boyutları Dimensions of the Sample	mm	: 60x140x190x100
Numune Ağırlığı Weight of the Sample	kg	: 1.2 kg
Sınıf Class	:	Class I
Cihaz – Malzeme Listesi Device – Component List	:	Bakınız Firma Dokümanlarına See Client Documentation

2. **Deney Sonuçları**
Test Results

: Deney sonuçları, müşteri tarafından laboratuvara teslim edilen ve sadece deneyi yapılan numuneye aittir.
The test results only belong to the tested sample(s) delivered to the laboratory by client.

Numune Sample	Uygulanan Deney Applied Test	Sonuç Result
Dekoratif LED Aydınlatma Armatürü Decorative LED Lighting Fixture	IEC 60598-2-3:2002+AMD1:2011 CSV	Olumlu (Passed)

3. **Çevre Şartları**
Environmental Conditions

3.1 Ortam Sıcaklığı Ambient Temperature	:	(20-30) °C
3.2 Ortam Nemi Ambient Moisture	:	(30-60) %Rh

4. **Deney Metodundan Sapma, Ekleme ve Çıkarmalar**

: Deneyler; standart deney metoduna göre uygulanmıştır.
Tests were made according to the clauses of the relevant standards.

5. **Şartnamelere Uygunluk (Gerekli Hallerde)**
Conformity to Specifications
(If Necessary)

: -

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6. **Dağıtım Bilgileri**
Distribution Information : BSI AYDINLATMA SAN. VE TIC. A.Ş.

7. **Açıklama**
Explanation : -

8. **Ölçüm Belirsizliği**
Uncertainty of Measurement : -



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Luminaires Safety Tests
Luminaires for Road and Street Lighting
Luminaires for flood lighting

9. Deney Uygulamaları:

Test Applications

TEST REPORT IEC 60598-2-3 Luminaires Part 2: Particular requirements Section 3: Luminaires for road and street lighting	
Test specification:	
Standard	IEC 60598-2-3:2002, IEC 60598-2-3:2002/AMD1:2011 used in conjunction with IEC 60598-1:2020
Test procedure	Type Test
Non-standard test method	N/A
TRF template used	IECEE OD-2020-F1:2021, Ed.1.4
Test Report Form No.	IEC60598_2_3M
Test Report Form(s) Originator	Intertek Semko AB
Master TRF	2021-11-11
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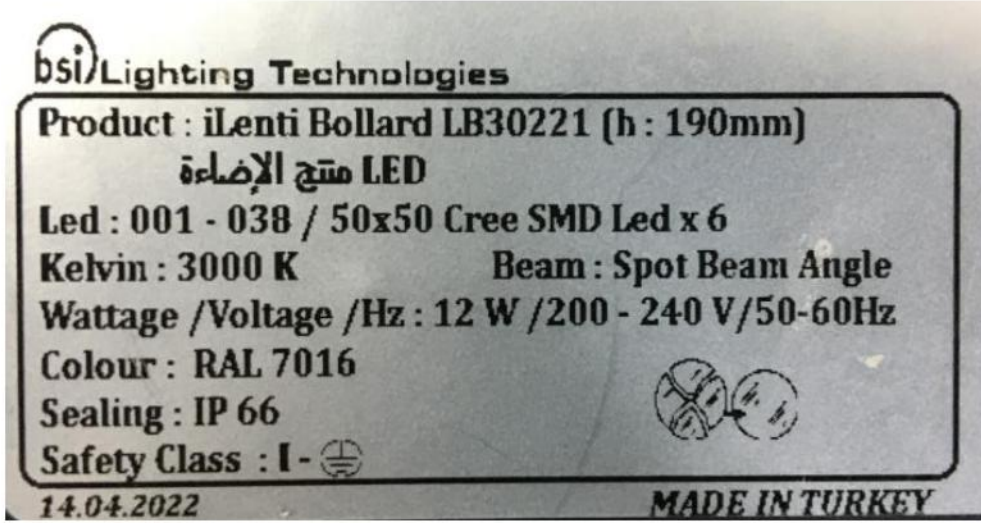
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Copy of marking plate:

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Test item particulars	Decorative LED Lighting Fixture
Classification of installation and use	Class I
Supply Connection.....	Permanently supply connection.
.....	
Possible test case verdicts:	
- 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)	
Testing	
Date of receipt of test item	14.04.2022
Date (s) of performance of tests.....	15.04.2022 – 16.05.2022
.....	
General remarks:	
"(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	
General product information:	
Decorative LED Lighting Fixture	





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P:Passed, F:Fail, N/A:Not Applicable

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict

3.2 (0)	GENERAL TEST REQUIREMENTS		P
3.2 (0.3)	More sections applicable..... :	Yes ☐ No ☒ Section/s:	—
3.2 (0.5)	Components	(see Annex 1)	—
3.2 (0.7)	Information for luminaire design in light sources standards		—
3.2 (0.7.2)	Light source safety standard		—
	Luminaire design in the light source safety standard		P

3.4 (2)	CLASSIFICATION OF LUMINAIRES		P
3.4 (2.2)	Type of protection	Class I	P
3.4 (2.3)	Degree of protection..... :	IP 66	P
3.4 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces..... :	Yes ☒ No ☐	—
3.4 (2.5)	Luminaire for normal use	Yes ☒ No ☐	—
	Luminaire for rough service	Yes ☐ No ☒	—
3.4 (-)	Modes of installation of road or street lighting		—
	a) on a pipe	Yes ☐ No ☒	—
	b) on a mast arm	Yes ☐ No ☒	—
	c) on a post top	Yes ☐ No ☒	—
	d) on span or suspension wires	Yes ☐ No ☒	—
	e) on a wall	Yes ☒ No ☐	—

3.5 (3)	MARKING		P
3.5 (3.2)	Mandatory markings		P
	Position of the marking		P
	Format of symbols/text		P
3.5 (3.3)	Additional information		P
	Language of instructions	Turkish.	P
3.5 (3.3.1)	Combination luminaires	The luminaire is not combination luminaire.	N/A
3.5 (3.3.2)	Nominal frequency in Hz	50-60 Hz	P
3.5 (3.3.3)	Operating temperature	The manufacturer did not declare any operating temperature.	N/A





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3.5 (3.3.5)	Wiring diagram	The luminaire can be connected directly to the mains.	N/A
3.5 (3.3.6)	Special conditions		P
3.5 (3.3.7)	Metal halide lamp luminaire – warning	The luminaire does not have metal halide lamp.	N/A
3.5 (3.3.8)	Limitation for semi-luminaires	The luminaire is not semi-luminaire.	N/A
3.5 (3.3.9)	Power factor and supply current		P
3.5 (3.3.10)	Suitability for use indoors	The luminaire is not use indoor.	N/A
3.5 (3.3.11)	Luminaires with remote control	The luminaire does not have remote control.	N/A
3.5 (3.3.12)	Clip-mounted luminaire – warning	Not a clip-mounted luminaire.	N/A
3.5 (3.3.13)	Specifications of protective shields		P
3.5 (3.3.14)	Symbol for nature of supply	For alternating current, the rated frequency in hertz is sufficient to identify the type of current.	P
3.5 (3.3.15)	Rated current of socket outlet	The luminaire does not have socket outlet.	N/A
3.5 (3.3.16)	Rough service luminaire	Not rough service luminaire.	N/A
3.5 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments	Type Y.	P
3.5 (3.3.18)	Non-ordinary luminaires with PVC cable		N/A
3.5 (3.3.19)	Protective conductor current in instruction if applicable	Supply current is not greater than 20 A.	N/A
3.5 (3.3.20)	Provided with information if not intended to be mounted within arm's reach		N/A
3.5 (3.3.21)	Non replaceable and non-user replaceable light sources information provided		P
3.5 (3.3.22)	Controllable luminaires, classification of insulation provided	Not controllable luminaire.	N/A
3.5 (3.3.23)	Luminaires without control gear provided with necessary information for selection of appropriate component		N/A
3.5 (3.3.24)	If not supplied with terminal block, information on the packaging		P
3.5 (3.3.25)	Luminaires employing light sources emitting UV on mains wiring, information provided	No light source emitting UV.	N/A
3.5 (3.3.26)	Wall mounted luminaire using external flexible cable or cord longer than 0.3 m, information provided		P
3.5 (3.4)	Test with water	Tried to remove it by rubbing lightly for 15 s with a piece of cloth soaked with water.	P





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	Test with hexane	It was rubbed with petroleum ether for another 15 seconds using a cloth.	P
	Legible after test		P
	Label attached		P
3.5 (-)	Additional information in instruction leaflet		P
	a) Design attitude	Normal use.	P
	b) Weight	1.2 kg.	P
	c) Overall dimensions	60x140x190x100	P
	d) Maximum projected area if applicable		N/A
	e) Cross-sectional area of wires if applicable		N/A
	f) Suitability for indoors use		N/A
	g) Dimensions of the compartment		N/A
	h) Torque setting to be applied to bolts or screws		P
	i) Maximum mounting height	The luminaire will be used by being mounted on the floor.	P

3.6 (4)	CONSTRUCTION		P
3.6 (4.2)	Components replaceable without difficulty	The luminaire is designed with sufficient space to allow replacement of replaceable components or parts without difficulty and without compromising safety.	P
3.6 (4.3)	Wireways smooth and free from sharp edges	Wireways are smooth and free from sharp edges, burrs, flashes and the like, which might cause abrasion of the insulation of the wiring.	P
3.6 (4.4)	Lampholders		N/A
3.6 (4.4.1)	Integral lampholder	The luminaire does not have lampholder.	N/A
3.6 (4.4.2)	Wiring connection		N/A
3.6 (4.4.3)	Lampholder for end-to-end mounting		N/A
3.6 (4.4.4)	Positioning		N/A
	- pressure test (N)		—
	After test the lampholder comply with relevant standard sheets and show no damage		N/A
	After test on single-capped lampholder the lampholder have not moved from its position and show no permanent deformation		N/A
	- bending test (N)		—





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	After test the lampholder have not moved from its position and show no permanent deformation		N/A
3.6 (4.4.5)	Peak pulse voltage		N/A
3.6 (4.4.6)	Centre contact		N/A
3.6 (4.4.7)	Parts in rough service luminaires resistant to tracking		N/A
3.6 (4.4.8)	Lamp connectors		N/A
3.6 (4.4.9)	Caps and bases correctly used		N/A
3.6 (4.4.10)	Light source for lampholder or connection according IEC 60061 not connected another way		N/A
3.6 (4.5)	Starter holders		N/A
	Starter holder in luminaires other than class II		N/A
	Starter holder class II construction		N/A
3.6 (4.6)	Terminal blocks		N/A
	Tails		N/A
	Unsecured blocks		N/A
3.6 (4.7)	Terminals and supply connections		P
3.6 (4.7.1)	Contact to metal parts	The luminaire is not portable luminaire of class I and II and fixed luminaire of class I and II that are frequently adjusted.	N/A
3.6 (4.7.2)	Test 8 mm live conductor		P
	Test 8 mm earth conductor		P
3.6 (4.7.3)	Terminals for supply conductors		
3.6 (4.7.3.1)	Welded method and material		N/A
	- stranded or solid conductor	The welding was used only in the enclosure. No welding is used in electrical connections.	N/A
	- spot welding		N/A
	- welding between wires		N/A
	- Type Z attachment		N/A
	- mechanical test according to 15.6.2		N/A
	- electrical test according to 15.6.3		N/A
	- heat test according to 15.6.3.2.3 and 15.6.3.2.4		N/A
3.6 (4.7.4)	Terminals other than supply connection		N/A
3.6 (4.7.5)	Heat-resistant wiring/sleeves		N/A
3.6 (4.7.6)	Multi-pole plug	No multi-pole plug.	N/A
	- test at 30 N		N/A
3.6 (4.8)	Switches		N/A





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	- adequate rating	The luminaire does not have switch.	N/A
	- adequate fixing		N/A
	- polarized supply		N/A
	- compliance with IEC 61058-1 for electronic switches		N/A
3.6 (4.9)	Insulating lining and sleeves		P
3.6 (4.9.1)	Retainment		P
	Method of fixing	Insulating linings are fixed by compression.	P
3.6 (4.9.2)	Insulated linings and sleeves:		N/A
	Resistant to a temperature > 20 °C to the wire temperature or	There are no cables reaching extreme temperatures.	N/A
	a) & c) Insulation resistance and electric strength		N/A
	b) Ageing test. Temperature (°C)		N/A
3.6 (4.10)	Double or reinforced insulation		N/A
3.6 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation	The luminaire is Class I.	N/A
	Safe installation fixed luminaires		N/A
	Capacitors and switches		N/A
3.6 (4.10.2)	Assembly gaps:		N/A
	- not coincidental		N/A
	- no straight access with test probe		N/A
3.6 (4.10.3)	Retainment of insulation:		N/A
	- fixed		N/A
	- unable to be replaced; luminaire inoperative		N/A
	- sleeves retained in position		N/A
	- lining in lampholder		N/A
3.6 (4.10.4)	Protective impedance device		N/A
	Basic and supplementary insulation bridged by resistor(s) or appropriate capacitor		N/A
	Double or reinforced insulation bridged by appropriate and at least two resistors or two Y2 capacitors or one Y1 capacitor		N/A
	Capacitors comply with IEC 60384-14		N/A
	Resistors comply with test (a) in 14.1 of IEC 60065		N/A
3.6 (4.11)	Electrical connections and current-carrying parts		P
3.6 (4.11.1)	Contact pressure	There is enough flexibility.	P
3.6 (4.11.2)	Screws:		P





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	- self-tapping screws		P
	- thread-cutting screws		P
3.6 (4.11.3)	Screw locking:		P
	- spring washer		P
	- rivets	No such rivet.	N/A
3.6 (4.11.4)	Material of current-carrying parts		P
3.6 (4.11.5)	No contact to wood or mounting surface	Current-carrying parts are not in direct contact with the mounting surface or wood.	P
3.6 (4.11.6)	Electro-mechanical contact systems		N/A
3.6 (4.12)	Screws and connections (mechanical) and glands		P
3.6 (4.12.1)	Screws not made of soft metal		P
	Screws of insulating material		N/A
	Torque test: torque (Nm); part	Enclosure Screw 3.9mm: 1.20Nm	P
	Torque test: torque (Nm); part	Mounting Screw 3.9mm: 0.7Nm	P
	Torque test: torque (Nm); part	Driver Mounting Screw 2.9mm: 0.5Nm	P
3.6 (4.12.2)	Screws with diameter < 3 mm screwed into metal		P
3.6 (4.12.4)	Locked connections:		P
	- fixed arms; torque (Nm)	2.5Nm	P
	- lampholder; torque (Nm)	The luminaire does not have lampholder.	N/A
	- push-button switches; torque 0,8 Nm	The luminaire does not have push-button switch.	N/A
3.6 (4.12.5)	Screwed glands; force (Nm)	11mm: 6.25Nm	P
3.6 (4.13)	Mechanical strength		P
3.6 (4.13.1)	Impact tests:		P
	- fragile parts; energy (Nm)	0.5	P
	- other parts; energy (Nm)	0.7	P
	1) live parts		P
	2) linings	No such part.	N/A
	3) protection	No damage to break IP66 protection.	P
	4) covers	No such part.	N/A
3.6 (4.13.2)	Metal parts have adequate mechanical strength		P
3.6 (4.13.3)	Straight test finger	The finger was pressed against the surface with a force of 30 N. During the test, metal parts are not touch live parts.	P



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3.6 (4.13.4)	Rough service luminaires		N/A
	- IP54 or higher	The luminaire is not rough service luminaire.	N/A
	a) fixed		N/A
	b) hand-held		N/A
	c) delivered with a stand		N/A
	d) for temporary installations and suitable for mounting on a stand		N/A
3.6 (4.13.6)	Tumbling barrel		N/A
3.6 (4.14)	Suspensions, fixings and means of adjusting		P
3.6 (4.14.1)	Mechanical load:		P
	A) four times the weight	4.8 kg	P
	B) torque 2,5 Nm	The luminaire is not rigid suspension luminaire.	N/A
	C) bracket arm; bending moment (Nm)	The luminaire does not have rigid suspension bracket.	N/A
	D) load track-mounted luminaires	The luminaire is not track-mounted luminaire.	N/A
	E) clip-mounted luminaires, glass-shelve. Thickness (mm)	The luminaire is clip-mounted luminaire.	N/A
	Metal rod. diameter (mm)		N/A
	Fixed luminaire or independent control gear without fixing devices	No such part.	N/A
3.6 (4.14.2)	Load to flexible cables		N/A
	Mass (kg)		—
	Stress in conductors (N/mm ²)		N/A
	Mass (kg) of semi-luminaire		N/A
	Bending moment (Nm) of semi-luminaire		N/A
3.6 (4.14.3)	Adjusting devices:		N/A
	- flexing test; number of cycles	No such part.	N/A
	- strands broken		N/A
	- electric strength test afterwards		N/A
3.6 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors	The luminaire does not have telescopic tube.	N/A
3.6 (4.14.5)	Guide pulleys	No such part.	N/A
3.6 (4.14.6)	Strain on socket-outlets	No such part.	N/A
3.6 (4.15)	Flammable materials		N/A
	- glow-wire test 650°C.....	See Test Table 3.15 (13.3.2) No such material.	N/A



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	- spacing ≥ 30 mm		N/A
	- screen withstanding test of 13.3.1		N/A
	- screen dimensions		N/A
	- no fiercely burning material		N/A
	- thermal protection		N/A
	- electronic circuits exempted		N/A
3.6 (4.15.2)	Luminaires made of thermoplastic material with lamp control gear		N/A
	a) construction		N/A
	b) temperature sensing control		N/A
	c) surface temperature		N/A
3.6 (4.16)	Luminaires for mounting on normally flammable surfaces		P
	No lamp control gear	(compliance with Section 12)	P
	Provided with adaptor for a track meet the requirements for direct mounting on normally flammable surfaces		N/A
3.6 (4.16.1)	Lamp control gear spacing:		P
	- spacing 35 mm		N/A
	- spacing 10 mm		P
3.6 (4.16.2)	Thermal protection:		N/A
	- in lamp control gear		N/A
	- external		N/A
	- fixed position		N/A
	- temperature marked lamp control gear		N/A
3.6 (4.16.3)	Design to satisfy the test of 12.6	(see clause 12.6)	N/A
3.6 (4.17)	Drain holes		N/A
	Clearance at least 5 mm	The luminaire does not have drain hole.	N/A
3.6 (4.18)	Resistance to corrosion		P
3.6 (4.18.1)	- rust-resistance		P
3.6 (4.18.2)	- season cracking in copper		N/A
3.6 (4.18.3)	- corrosion of aluminium		N/A
3.6 (4.19)	Ignitors compatible with ballast	No ignitor.	N/A
3.6 (4.20)	Rough service vibration	The luminaire is not rough service luminaire.	N/A
3.6 (4.21)	Protective shield		N/A
3.6 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N/A
	Shield of glass if tungsten halogen lamps		N/A





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3.6 (4.21.2)	Particles from a shattering lamp not impair safety		N/A
3.6 (4.21.3)	No direct path		N/A
3.6 (4.21.4)	Impact test on shield		N/A
	Glow-wire test on lamp compartment	See Test Table 3.15 (13.3.2)	N/A
3.6 (4.22)	Attachments to lamps not cause overheating or damage		N/A
3.6 (4.23)	Semi-luminaires comply Class II		N/A
*3.6 (4.24)	Photobiological hazards		N/A
3.6 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)		N/A
3.6 (4.24.2)	Retinal blue light hazard		N/A
	Class of risk group assessed according to IEC/TR 62778		—
	Luminaires with E_{thr} :		N/A
	a) Fixed luminaires		N/A
	- distance x m, borderline between RG1 and RG2....:		N/A
	- marking and instruction according 3.2.23		N/A
	b) Portable and handheld luminaires		N/A
	- marking according 3.2.23 if RG1 exceeded at 200 mm according to IEC/TR 62778		N/A
	Portable luminaires for children IEC 60598-2-10 and Mains socket outlet nightlights IEC 60598-2-12 not exceed RG1 at 200 mm according to IEC/62778		N/A
3.6 (4.25)	Mechanical hazard		P
	No sharp point or edges	Luminaire does have no sharp points or edges that could, during installation, normal use, or maintenance, create a hazard for the user.	P
3.6 (4.26)	Short-circuit protection		N/A
3.6 (4.26.1)	Adequate means of uninsulated accessible SELV parts	No such part.	N/A
3.6 (4.26.2)	Short-circuit test with test chain according 4.26.3		N/A
	Supply source ES1 PSE		N/A
	Test chain not melt through		N/A
	Test sample not exceed values of Table 12.1 and 12.2		N/A
3.6 (4.27)	Terminal blocks with integrated screwless earthing contacts		N/A
	Test according Annex V	No such part.	N/A
	Pull test of terminal fixing (20 N)		N/A
	After test, resistance < 0,05 Ω		N/A





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	Pull test of mechanical connection (50 N)		N/A
	After test, resistance < 0,05 Ω		N/A
	Voltage drop test, resistance < 0,05 Ω		N/A
3.6 (4.28)	Fixing of thermal sensing control		N/A
	Not plug-in or easily replaceable type	No such part.	N/A
	Reliably kept in position		N/A
	No adhesive fixing if UV radiations from a lamp can degrade the fixing		N/A
	Not outside the luminaire enclosure		N/A
	Test of adhesive fixing:		N/A
	Max. temperature on adhesive material (°C)		—
	100 cycles between t min and t max		N/A
	Temperature sensing control still in position		N/A
3.6 (4.29)	Luminaires with non-replaceable light source		P
	Not possible to replace light source		P
	Live part not accessible after parts have been opened by hand or tools		P
3.6 (4.30)	Luminaires with non-user replaceable light source		N/A
	If protective cover provide protection against electric shock and marked with “caution, electric shock risk” symbol:		N/A
	At least one fixing means requiring use of tool		N/A
3.6 (4.31)	Insulation between circuits		P
	Circuits insulated from LV supply fulfil requirements according 4.31.1 – 4.31.3		P
	Controllable luminaires requiring same level of insulation for all components, the insulation between control terminals and LV supply fulfil requirements according 4.31.1 – 4.31.3		N/A
3.6 (4.31.1)	SELV or PELV circuits		N/A
	Used SELV/PELV source	No such part.	N/A
	Voltage $\leq$ ELV		N/A
	Insulating of SELV/PELV circuits from LV supply		N/A
	Insulating of SELV/PELV circuits from other non SELV/PELV circuits		N/A
	Insulating of SELV/PELV circuits from FELV		N/A
	Insulating of SELV/PELV circuits from other SELV/PELV circuits		N/A
	SELV/PELV circuits insulated from accessible parts according Table X.1		N/A





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	Plugs not able to make any electrical contact with socket-outlets of other voltage systems		N/A
	Socket outlets does not admit plugs of other voltage systems		N/A
	Plugs and socket-outlets does not have protective conductor contact		N/A
3.6 (4.31.2)	FELV circuits		N/A
	Used FELV source	The luminaire does not have FELV circuit.	N/A
	Voltage $\leq$ ELV		N/A
	Insulating of FELV circuits from LV supply		N/A
	FELV circuits insulated from accessible parts according Table X.1		N/A
	Plugs not able to make any electrical contact with socket-outlets of other voltage systems		N/A
	Socket outlets does not admit plugs of other voltage systems		N/A
	Socket-outlets does not have protective conductor contact		N/A
3.6 (4.31.3)	Other circuits		P
	Other circuits insulated from accessible parts according Table X.1		P
	Class II construction with equipotential bonding for protection against indirect contacts with live parts:		N/A
	- conductive parts are connected together	Class I.	N/A
	- test according 7.2.3		N/A
	- conductive part not cause an electric shock in case of an insulation fault		N/A
	- equipotential bonding in master/slave applications		N/A
	- master luminaire provided with terminal for accessible conductive parts of slave luminaires		N/A
	- slave luminaire constructed as class I		N/A
3.6 (4.32)	Overvoltage protective devices		N/A
	Comply with IEC 61643-11	No such part.	N/A
	External to controlgear and connected to earth:		N/A
	- only in fixed luminaires		N/A
	- only connected to protective earth		N/A
3.6 (4.33)	Luminaire powered via information technology communication cabling		N/A
	Requirements for Class III luminaire	No such part.	N/A
	Rated voltage within the range of ES1 and does not exceed maximum voltage of used connector		N/A





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	Luminaire does not create any hazard from overvoltage	(see Annex 2)	N/A
3.6 (4.34)	Electromagnetic fields (EMF)		N/A
	No harmful electromagnetic fields		N/A
3.6 (4.35)	Protection against moving fan blades		N/A
	Test with a standard test finger	The luminaire does not have fan blade.	N/A
	Test with test probe acc. to Figure 13 (IEC 61032) for portable luminaire		N/A
	Blades rounded with radius ≥ 0.5 mm and:		N/A
	-hardness less than D60 Shore		N/A
	-peripheral speed less than 15 m/s		N/A
	-input power of fan ≤ 2 W at rated voltage		N/A
3.6 (4.36)	Track-mounted luminaires		N/A
	Test in accordance with Annex A of IEC60570:2003/AMD2:2019	The luminaire is not track-mounted luminaire.	N/A
3.6.1 (-)	At least IP X3 or X5 respectively. IP		N/A
	Column-integrated luminaires:		N/A
	- parts below 2,5 m. IP	The luminaire is not column-integrated luminaire.	N/A
	- parts above 2,5 m. IP		N/A
3.6.2 (-)	Suspension on span wires	No such part.	N/A
3.6.3 (-)	Means for attaching the luminaire or external parts to its support appropriate to the weight		P
3.6.3.1 (-)	Static load test		N/A
	- drag coefficient		N/A
	- loaded area (m ²)		N/A
	- used load (N)		N/A
	- measured deformation (cm/m)		N/A
	- no rotation		N/A
3.6.4 (-)	Adjustable lampholders		N/A
3.6.5 (-)	Luminaires installed above 5 m, glass covers shall be:		N/A
	a) glass that fractures into small pieces (test according to 3.6.5.1), or	The luminaire is not mounted above 5 m.	N/A
	b) glass having a high impact shock resistance (test according to 3.6.5.2), or		N/A
	c) protected by any means to retain glass fragments		N/A
	For tunnel luminaires 3.6.5.1 apply		N/A
	Method of protection declared by the manufacturer		N/A





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3.6.5.1 (-)	Protection by the use of glass that fractures into small pieces	N/A
	- number of particles is more than 40 : No such part.	N/A
3.6.5.2 (-)	Protection by the use of high impact resistant glass	N/A
3.6.5.2.1 (-)	Glass covers have high mechanical strength	The luminaire does not have high impact resistant glass.
	Test according IEC 62262 with test apparatus according IEC 60068-2-75 with impact energy of 5J on preconditioned sample	N/A
3.6.5.2.2 (-)	Glass covers not break into large pieces	N/A
	- test according 3.6.5.1, number of particles is more than 20 :	N/A
3.6.6 (-)	Connection compartment of column-integrated luminaire	N/A
	- provides adequate space	The luminaire is not column-integrated luminaire.
	- means for attachment	N/A
	- means for attachment of metal corrosion-resistant	N/A
3.6.7 (-)	Compliance with ISO standard or other :	N/A
3.6.8 (-)	Doors of column-integrated luminaires:	N/A
	- corrosion-resistant	The luminaire is not column-integrated luminaire.
	- opening only possible for an authorized person	N/A
	- impact test 5 Nm	N/A
	- sample show no damage	N/A
3.6.9 (-)	Column-integrated luminaire:	N/A
	- dimension of the cable entry slot (mm) :	The luminaire is not column-integrated luminaire.
	- cable path from the slot to the connection compartment (mm) :	N/A
	- cable path free from obstruction that might cause abrasion of the cable	N/A

3.7 (11)	CREEPAGE DISTANCES AND CLEARANCES		P
3.7 (11.2)	Creepage distances and clearances :	See Table 3.7 (11.2)	P
	Impulse withstand category (Normal category II) (Category III Annex U, Table U.1)	Category II ☒ Category III ☐	—
	Protected against pollution, reduced creepage and clearance according Annex P of IEC 61347-1		P
3.7 (11.2.2)	Creepage distances for frequency up to 30 kHz	See Test Table 3.7 (11.2) I	P
	Creepage distances for frequency over 30 kHz:		N/A

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	- Controlgear marked with $\dot{U}_{OUT}$ and f_{OUT} according IEC 61347-1, clause 7.1, item w	See Test Table 3.7 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 3.7 (11.2) II	N/A
3.7 (11.2.3)	Clearances for frequency up to 30 kHz	See Test Table 3.7 (11.2) I	P
	Clearances distances for frequency over 30 kHz:		N/A
	- Controlgear marked with U_P	See Test Table 3.7 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 3.7 (11.2) II	N/A

3.8 (7)	PROVISION FOR EARTHING		P
3.8 (7.2.1 + 7.2.3)	Accessible metal parts		P
	Metal parts in contact with supporting surface		P
	Resistance $< 0,5 \Omega$	Max: 0.05 Ω	P
	Self-tapping screws used		P
	Thread-forming screws		N/A
	Thread-forming screw used in a groove		N/A
	Protective earth makes contact first		P
	Terminal blocks with integrated screwless protective earthing contacts tested according Annex V	No such part.	N/A
	Protective earthing of the luminaire not via built-in control gear		N/A
3.8 (7.2.2 + 7.2.3)	Protective earth continuity in joints, etc.		P
3.8 (7.2.4)	Locking of clamping means		P
	Compliance with 4.7.3		P
3.8 (7.2.5)	Protective earth terminal integral part of connector socket	The luminaire does not have connector socket.	N/A
3.8 (7.2.6)	Protective earth terminal adjacent to mains terminals		P
3.8 (7.2.7)	Electrolytic corrosion of the protective earth terminal		N/A
3.8 (7.2.8)	Material of protective earth terminal		P
	Contact surface bare metal		P
3.8 (7.2.10)	Class II luminaire for looping-in	The luminaire is Class I.	N/A
	Double or reinforced insulation to functional earth		N/A
3.8 (7.2.11)	Protective earthing core coloured green-yellow		P
	Length of earth conductor		P



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3.8 (7.2.12)	PELV circuit connected to protective earth for functional purpose	The luminaire does not have PELV circuit.	N/A
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3.9 (14)	SCREW TERMINALS		N/A
	Separately approved; component list	(see Annex 1)	N/A
	Part of the luminaire	(see Annex 3)	N/A

3.9 (15)	SCREWLESS TERMINALS AND ELECTRICAL CONNECTIONS		N/A
	Separately approved; component list	(see Annex 1)	N/A
	Part of the luminaire.....	(see Annex 4)	N/A

3.10 (5)	EXTERNAL AND INTERNAL WIRING		P
3.10 (5.2)	Supply connection and external wiring		P
3.10 (5.2.1)	Means of connection.....		P
	Outdoor luminaire has not PVC insulated external wiring if not Class III or SELV/PELV circuits ≤ 25 V AC/60 V DC/25 V peak interrupted DC voltage with frequency 10Hz -200 Hz or protected from outdoor environment		P
3.10 (5.2.2)	Type of cable	H05VV-F	P
	Nominal cross-sectional area (mm ²).....	3 x 0.75 mm ²	P
	Cables equal to IEC 60227 or IEC 60245		P
3.10 (5.2.3)	Type of attachment, X, Y or Z	Type Y.	P
3.10 (5.2.5)	Type Z not connected to screws		N/A
3.10 (5.2.6)	Cable entries:		P
	- suitable for introduction		P
	- adequate degree of protection	IP 66.	P
3.10 (5.2.7)	Cable entries through rigid material have rounded edges	The luminaire does not have rigid material.	P
3.10 (5.2.8)	Insulating bushings:		N/A
	- suitably fixed	The luminaire does not have rigid material.	N/A
	- material in bushings		N/A
	- material not likely to deteriorate		N/A
	- tubes or guards made of insulating material		N/A
3.10 (5.2.9)	Locking of screwed bushings	No such part.	N/A
3.10 (5.2.10)	Cord anchorage:		N/A





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	- covering protected from abrasion	The luminaire does not have cord anchorage.	N/A
	- clear how to be effective		N/A
	- no mechanical or thermal stress		N/A
	- no tying of cables into knots etc.		N/A
	- insulating material or lining		N/A
3.10 (5.2.10.1)	Cord anchorage for type X attachment:		N/A
	a) at least one part fixed	The luminaire does not have cord anchorage.	N/A
	b) types of cable		N/A
	c) no damaging of the cable		N/A
	d) whole cable can be mounted		N/A
	e) no touching of clamping screws		N/A
	f) metal screw not directly on cable		N/A
	g) replacement without special tool		N/A
	Glands not used as anchorage		N/A
	Labyrinth type anchorages		N/A
3.10 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment	The luminaire does not have cord anchorage.	N/A
3.10 (5.2.10.3)	Tests:		N/A
	- impossible to push cable; unsafe		N/A
	- pull test: 25 times; pull (N)		N/A
	- torque test: torque (Nm)		N/A
	- displacement ≤ 2 mm		N/A
	- no movement of conductors		N/A
	- no damage of cable or cord		N/A
	- function independent of electrical connection		N/A
3.10 (5.2.10.4)	Luminaire with/designed for use with supply cord with maximum current of 2A:		N/A
	- Ordinary Class III luminaire supplied with SELV $\leq 25V$ RMS/60V DC	Class I.	N/A
	- Ordinary Class III luminaire supplied with PELV $\leq 12V$ RMS/30V DC		N/A
	- Other than ordinary Class III luminaire supplied with voltage $\leq 12V$ RMS/30V DC		N/A
	Pull test of 30N		N/A





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3.10 (5.2.11)	External wiring passing into luminaire		P
3.10 (5.2.12)	Looping-in terminals	No such part.	N/A
3.10 (5.2.13)	Wire ends not tinned		P
	Wire ends tinned: no cold flow		P
3.10 (5.2.14)	Mains plug same protection	No such part.	N/A
	Class III luminaire plug		N/A
	No unsafe compatibility		N/A
3.10 (5.2.15)	Connectors for Class III luminaires (IEC 60603 or IEC 62680)	The luminaire is Class I luminaire.	N/A
3.10 (5.2.16)	Appliance inlets (IEC 60320)	No such part.	N/A
	Installation couplers (IEC 61535)		N/A
	Appliance inlet or connector systems (IEC 61984)		N/A
3.10 (5.2.17)	No standardized interconnecting cables properly assembled		N/A
3.10 (5.2.18)	Used plug in accordance with		N/A
	- IEC 60083	The luminaire does not have plug.	N/A
	- other standard		N/A
3.10 (5.3)	Internal wiring		P
3.10 (5.3.1)	Internal wiring of suitable size and type	HO5VV-F and 3 x 0.75 mm ² .	P
	Through wiring		P
	- not delivered/ mounting instruction		N/A
	- factory assembled		P
	- socket outlet loaded (A).....:		N/A
	- temperatures:	(see Annex 2)	P
	Green-yellow for protective earth only		P
3.10 (5.3.1.1)	Internal wiring connected directly to fixed wiring		P
	Cross-sectional area (mm ²):	3 X 0.75 mm ² .	P
	Insulation thickness		P
	Extra insulation added where necessary		P
3.10 (5.3.1.2)	Internal wiring connected to fixed wiring via internal current-limiting device		N/A
	Cross-sectional area (mm ²):		N/A





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3.10 (5.3.1.3)	Double or reinforced insulation for class II	The luminaire is Class I luminaire.	N/A
3.10 (5.3.1.4)	Conductors without insulation	No such part.	N/A
3.10 (5.3.1.5)	SELV/PELV current-carrying parts	The luminaire does not have SELV/PELV current-carrying part.	N/A
3.10 (5.3.1.6)	Insulation thickness other than PVC or rubber		N/A
3.10 (5.3.2)	Sharp edges etc.		P
	No moving parts of switches etc.	The luminaire does not have switch.	N/A
	Joints, raising/lowering devices	No such part.	N/A
	Telescopic tubes etc.	No such part.	N/A
	No twisting over 360°		P
3.10 (5.3.3)	Insulating bushings:		N/A
	- suitable fixed	The luminaire does not have insulating bushing.	N/A
	- material in bushings		N/A
	- material not likely to deteriorate		N/A
	- cables with protective sheath		N/A
3.10 (5.3.4)	Joints and junctions effectively insulated		N/A
3.10 (5.3.5)	Strain on internal wiring	Internal wiring does not protrude outside the enclosure.	N/A
3.10 (5.3.6)	Wire carriers	No such part.	N/A
3.10 (5.3.7)	Wire ends not tinned		P
	Wire ends tinned: no cold flow		P
3.10 (5.4)	Test to determine suitability of conductors having a reduced cross-sectional area		N/A
	Under test the temperature of the luminaire wiring insulation not exceed the limits stated in Table 12.2	(see Annex 2)	N/A
	No damage to luminaire wiring after test	No such part.	N/A
3.10.1 (-)	Cord anchorage if applicable	No such part.	N/A
	- pull test: 25 times; pull (N)		N/A
	- torque test: torque (Nm)		N/A

3.11 (8)	PROTECTION AGAINST ELECTRIC SHOCK		P
3.11 (8.2.1)	Live parts not accessible		P
	Basic insulated parts not used on the outer surface without appropriate protection		N/A



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	Basic insulated parts not accessible with standard test finger on portable, settable and adjustable luminaires		N/A
	Basic insulated parts not accessible with Ø 50 mm probe from outside, other types of luminaires		P
	Lamp and starterholders in portable and adjustable luminaires comply with double or reinforced insulation requirements	The luminaire does not have starterholder.	N/A
	Basic insulation only accessible under lamp or starter replacement		P
	Protection in any position		P
	Double-ended tungsten filament lamp	The luminaire does not have tungsten filament lamp.	N/A
	Insulation lacquer not reliable	No such part.	N/A
	Double-ended high pressure discharge lamp	No such part.	N/A
	Relevant warning according to 3.2.18 fitted to the luminaire	No such part.	N/A
3.11 (8.2.2)	Portable luminaire adjusted in most unfavourable position	The luminaire is not portable luminaire.	N/A
3.11 (8.2.3.a)	Class II luminaire:		N/A
	- basic insulated metal parts not accessible during starter or lamp replacement	Class I.	N/A
	- basic insulation not accessible other than during starter or lamp replacement		N/A
	- glass protective shields not used as supplementary insulation		N/A
3.11 (8.2.3.b)	BC lamp holder of metal in class I luminaires shall be connected to protective earth		N/A
3.11 (8.2.3.c)	SELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V)		N/A
	- voltage under load/ no-load DC (V).....		N/A
	- interrupted DC voltage (V)		N/A
	- touch current if applicable (mA)		N/A
	One conductive part insulated if required		N/A
	Other than ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V)		N/A
	- voltage under load/ no-load DC (V).....		N/A
	- interrupted DC voltage (V)		N/A
	Class III luminaire only for connection to SELV		N/A





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	Class III luminaire not provided with means for protective earthing		N/A
3.11 (8.2.3.d)	PELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V)	The luminaire does not have PELV circuit.	N/A
	- voltage under load/ no-load DC (V).....		N/A
	Other than ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V)		N/A
	- voltage under load/ no-load DC (V).....		N/A
	One pole insulated if required		N/A
3.11 (8.2.4)	Portable luminaire have protection independent of supporting surface	The luminaire is not portable luminaire.	N/A
3.11 (8.2.5)	Compliance with the standard test finger or relevant probe	10 N.	P
3.11 (8.2.6)	Covers reliably secured		P
3.11 (8.2.7)	Luminaire other than below with capacitor > 0,5 μ F not exceed 50 V 1 min after disconnection	No such part.	N/A
	Portable luminaire with capacitor > 0,1 μ F (0.25) not exceed 34 V 1 s after disconnection	No such part.	N/A
	Other luminaires with capacitor > 0,1 μ F (0.25) with plug and track adaptors not exceed 60 V 5 s after disconnection	No such part.	N/A

3.12 (12)	ENDURANCE TEST AND THERMAL TEST		P
3.12 (-)	If IP > IP 20 relevant test of (12.4), (12.5), (12.6) and (12.7) after (9.2) before (9.3) as specified in 3.13		—
3.12 (12.2)	Selection of lamps and ballasts		—
	Lamp used according Annex B	(Lamp used see Annex 2)	—
	Control gear if separate and not supplied	(Control gear used see Annex 2)	—
3.12 (12.3)	Endurance test:		P
	a) mounting-position	Normal use.	—
	b) test temperature (°C).....	35°C	—
	c) total duration (h)	240 hours.	—
	d) supply voltage (V).....	264 V.	—
	d) if not equipped with control gear, constant voltage/current (V) or (A)		—



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3.12 (12.3.1d)	d) Class III luminaires powered via information technology communication cable:		N/A
	- voltage under normal operation (V).....:	The luminaire is Class I.	—
	- voltage under abnormal operation (V).....:		—
	e) luminaire ceases to operate		—
	f) luminaire with constant light output function		N/A
3.12 (12.3.2)	After endurance test:		P
	- no part unserviceable		P
	- luminaire not unsafe		P
	- no damage to track system	No such part.	N/A
	- marking legible		P
	- no cracks, deformation etc.		P
3.12 (12.4)	Thermal test (normal operation)	(see Annex 2)	P
3.12 (12.5)	Thermal test (abnormal operation)	(see Annex 2)	N/A
3.12 (12.6)	Thermal test (failed lamp control gear condition):		N/A
3.12 (12.6.1)	Through wiring or looping-in wiring loaded by a current of (A)		—
	- case of abnormal conditions.....:		—
	- electronic lamp control gear		N/A
	- measured winding temperature (°C): at 1,1 Un		—
	- measured mounting surface temperature (°C) at 1,1 Un		N/A
	- calculated mounting surface temperature (°C)		N/A
	- track-mounted luminaires		N/A
3.12 (12.6.2)	Temperature sensing control		N/A
	- case of abnormal conditions.....:	No such part.	—
	- thermal link		N/A
	- manual reset cut-out		N/A
	- auto reset cut-out		N/A
	- measured mounting surface temperature (°C).....:		N/A
	- track-mounted luminaires		N/A
3.12 (12.7)	Thermal test (failed lamp control gear in plastic luminaires):		N/A
3.12 (12.7.1)	Luminaire without temperature sensing control		N/A
3.12 (12.7.1.1)	Luminaire with fluorescent lamp ≤ 70W		N/A





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	Test method 12.7.1.1 or Annex W		—
	Test according to 12.7.1.1:		N/A
	- case of abnormal conditions.....		—
	- Ballast failure at supply voltage (V)		—
	- Components retained in place after the test		N/A
	- Test with standard test finger after the test		N/A
	Test according to Annex W:		N/A
	- case of abnormal conditions.....		—
	- measured winding temperature (°C): at 1,1 Un.....		—
	- measured temperature of fixing point/exposed part (°C): at 1,1 Un.....		—
	- calculated temperature of fixing point/exposed part (°C).....		—
	Ball-pressure test.....	See Table 3.15 (13.2.1)	N/A
3.12 (12.7.1.2)	Luminaire with discharge lamp, fluorescent lamp > 70W, transformer > 10 VA		N/A
	- case of abnormal conditions.....	No such part.	—
	- measured winding temperature (°C): at 1,1 Un.....		—
	- measured temperature of fixing point/exposed part (°C): at 1,1 Un.....		—
	- calculated temperature of fixing point/exposed part (°C).....		—
	Ball-pressure test.....	See Table 3.15 (13.2.1)	N/A
3.12 (12.7.1.3)	Luminaire with short circuit proof transformers ≤ 10 VA		N/A
	- case of abnormal conditions.....		—
	- Components retained in place after the test		N/A
	- Test with standard test finger after the test		N/A
3.12 (12.7.2)	Luminaire with temperature sensing control		N/A
	- thermal link	Yes ☐ No ☒	—
	- manual reset cut-out.....	Yes ☐ No ☒	—
	- auto reset cut-out.....	Yes ☐ No ☒	—
	- case of abnormal conditions.....		—
	- highest measured temperature of fixing point/exposed part (°C):.....		—
	Ball-pressure test:	See Table 3.15 (13.2.1)	N/A
3.12.1 (-)	Temperature reduction if for outdoor use only		N/A



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3.12.2 (-)	(See above)		—
3.12.3 (-)	Glass covers used within the thermal limits declared by the glass manufacturer		N/A

3.13 (9)	RESISTANCE TO DUST AND MOISTURE		P
3.13.1 (-)	If IP > IP 20 the order of tests as specified in clause 3.12		P
3.13 (9.2)	Tests for ingress of dust, solid objects and moisture:		P
	- classification according to IP	IP 66.	—
	- mounting position during test.....	Declared mounting position.	—
	- fixing screws tightened; torque (Nm)		—
	- tests according to clauses		—
	- electric strength test afterwards		P
	a) no deposit in dust-proof luminaire		P
	b) no talcum in dust-tight luminaire		P
	c) no trace of water on current-carrying parts or on insulation where it could become a hazard		P
	c.1) For luminaires without drain holes – no water entry		P
	c.2) For luminaires with drain holes – no hazardous water entry	The luminaire does not have drain hole.	N/A
	d) no water in watertight, pressure watertight, high pressure and temperature water jet-proof or high pressure and cold water jet-proof luminaire		P
	e) no contact with live parts (IP 2X)	IP 6X.	P
	e) no entry into enclosure (IP 3X and IP 4X)	IP 6X.	P
	e) no contact with live parts through drain holes and ventilation slots (IP3X and IP4X)	No such part.	N/A
	f) no trace of water on part of lamp requiring protection from splashing water		P
	g) no damage of protective shield or glass envelope		P
3.13 (9.3)	Humidity test 48 h	%93 Rh, 25°C.	P

3.14 (10)	INSULATION RESISTANCE AND ELECTRIC STRENGTH		P
3.14 (10.2.1)	Insulation resistance test		P
	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø		—
	Insulation resistance (MΩ).....		—
	SELV/PELV:		N/A
	- between current-carrying parts of different polarity :		N/A

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	- between current-carrying parts and mounting surface		N/A
	- between current-carrying parts and metal parts of the luminaire		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts		N/A
	- Insulation bushings as described in Section 5		N/A
	Other than SELV/PELV:		P
	- between live parts of different polarity	> 20 GΩ	P
	- between live parts and mounting surface		N/A
	- between live parts and metal parts	> 20 GΩ	P
	- between live parts of different polarity through action of a switch		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts		N/A
	- Insulation bushings as described in Section 5	No such part.	N/A
3.14 (10.2.2)	Electric strength test		P
	Dummy lamp	The luminaire does not have dummy lamp.	N/A
	Luminaires with ignitors after 24 h test	The luminaire does not have ignitor.	N/A
	Luminaires with manual ignitors		N/A
	Test voltage (V)		N/A
	SELV/PELV:		N/A
	- between current-carrying parts of different polarity :		N/A
	- between current-carrying parts and mounting surface		N/A
	- between current-carrying parts and metal parts of the luminaire		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts		N/A
	- Insulation bushings as described in Section 5		N/A
	Other than SELV/PELV:		P
	- between live parts of different polarity	1480 V.	P
	- between live parts and mounting surface		
	- between live parts and metal parts	1480 V.	P



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	- between live parts of different polarity through action of a switch		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts		N/A
	- Insulation bushings as described in Section 5		N/A
3.14 (10.3)	Touch current (mA).....	Max: 0.036 mA	P
	Protective conductor current (mA).....	0.11 mA	P

3.15 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING		N/A
3.15 (13.2.1)	Ball-pressure test.....	See Test Table 3.15 (13.2.1)	N/A
3.15 (13.3.1)	Needle-flame test (10 s)	See Test Table 3.15 (13.3.1)	N/A
3.15 (13.3.2)	Glow-wire test (650°C).....	See Test Table 3.15 (13.3.2)	N/A
3.15 (13.4)	Proof tracking test (IEC 60112)	See Test Table 3.15 (13.4)	N/A

3.7 (11.2)	TABLE I: Creepage distances and clearances						P
	Minimum distances (mm) for a.c. up to 30 kHz sinusoidal voltages						P
	Applicable part of IEC 60598-1 Table 11.1.A*, 11.1.B* and 11.2*						P
	Insulation type **	Measured clearance	Required		Measured creepage	Required	
			clearance	*Table		creepage	*Table
Distance 1:	S	1.85	1.5	11.1.B	10.85	2.5	11.1.A
Working voltage (V)					220 – 240 V		—
PTI					< 600 ☒ ≥ 600 ☐		—
Pulse voltage or U_P if applicable (kV)							—
Supplementary information: L – N Driver Input							
Distance 2:	S	1.70	1.5	11.1.B	14.04	2.5	11.1.A
Working voltage (V)					60-80 V		—
PTI					< 600 ☒ ≥ 600 ☐		—
Pulse voltage or U_P if applicable (kV)							—
Supplementary information: (+) – (-) Driver Output							

** Insulation type: B – Basic; S – Supplementary; R – Reinforced. See also IEC 60598-1 Annex M.





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3.7 (11.2)	TABLE II: Creepage distances and clearances							N/A
Minimum distances (mm) for a.c. higher than 30 kHz sinusoidal voltages								
Applicable part of IEC 61347-1 Table 7 and 8* or IEC 60664-4 Table 1 and 2								
Distances	Insulation type **	Measured clearance	Required		Measured creepage	Required		
			clearance	*Table		creepage	*Table	
Distance 1:								
Working voltage (V)							—	
Frequency if applicable (kHz)							—	
PTI					< 600 ☐ ≥ 600 ☐		—	
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV)							—	
Supplementary information:								
Distance 2:								
Working voltage (V)							—	
Frequency if applicable (kHz)							—	
PTI					< 600 ☐ ≥ 600 ☐		—	
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV)							—	
Supplementary information:								
Distance 3:								
Working voltage (V)							—	
Frequency if applicable (kHz)							—	
PTI					< 600 ☐ ≥ 600 ☐		—	
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV)							—	
Supplementary information:								

** Insulation type: B – Basic; S – Supplementary; R – Reinforced.

3.15 (13.2.1)	TABLE: Ball Pressure Test of Thermoplastics			N/A
Allowed impression diameter (mm) :		2		—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)	
—	—	—	—	
Supplementary information:				





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3.15 (13.3.1)	TABLE: Needle-flame test (IEC 60695-11-5)					N/A
Object/ Part No./ Material	Manufacturer/ trademark	Duration of application of test flame (ta); (s)	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict	
—	—	—	—	—	N/A	
Supplementary information:						

3.15 (13.3.2)	TABLE: Resistance to heat and fire - Glow wire tests						N/A
Object/ Part No./ Material	Manufacturer/ trademark	Glow wire test (°C)					Verdict
		650		750		850	
		te	ti	te	ti		
—	—	—	—	—	—	—	N/A
Ignition of the specified layer placed underneath the test specimen (Yes/No)							—
Supplementary information:							

3.15 (13.4)	TABLE: Proof tracking test					N/A
Test voltage PTI		175 V				—
Object/ Part No./ Material	Manufacturer/ trademark	Withstand 50 drops without failure on three places or on three specimens				Verdict
—	—	—	—	—	—	N/A
Supplementary information:						

ANNEX 1	TABLE: Critical components information						P
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾	
Description:	See client documentation.						
Description:							
Supplementary information:							
1) Provided evidence ensures the agreed level of compliance. See OD-CB2039.							
The codes above have the following meaning:							
A	- The component is replaceable with another one, also certified, with equivalent characteristics						
B	- The component is replaceable if authorised by the test house						
C	- Integrated component tested together with the appliance						
D	- Alternative component						



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ANNEX 2	TABLE: Thermal tests of Section 12					P	
	Type reference.....:					—	
	Lamp used	LED.				—	
	Lamp control gear used					—	
	Mounting position of luminaire	Normal use.				—	
	Supply wattage (W)	12 W				—	
	Supply current (A)	0.3 A				—	
	Temperatures in test 1 - 4 below are corrected for ta (°C)					—	
	- abnormal operating mode					—	
3.12 (12.4)	- test 1: rated voltage	Test 1(a): 220V Test 1(b): 240V				—	
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current	255 V				—	
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage.....					—	
	Through wiring or looping-in wiring loaded by a current of A during the test					—	
3.12 (12.5)	- test 4: 1,1 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current or 130/150% of rated input voltage.....					—	
Temperature measurements (°C)							
Part	Ambient	Cl. 12.4 – normal				Cl. 12.5 – abnormal	
		test 1(a)	test 1(b)	test 2	limit	test 4	limit
1) Driver	20 - 22	28.6	33.9	29.0	t _c = 80	-	-
2) LED Cooler	20 - 22	28.0	32.5	28.6	Information	-	-
3) Supply Cable	20 - 22	22.7	26.0	24.0	90	-	-
4) Enclosure(Internal)	20 - 22	23.8	24.9	26.1	90	-	-
5) Enclosure(External)	20 - 22	22.9	26.8	25.3	90	-	-
6) Lighting Enclosure	20 - 22	22.9	26.7	25.1	90	-	-
7) Illuminated Area	20 - 22	22.8	24.8	24.3	90	-	-
Supplementary information:							



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ANNEX 3	Screw terminals (part of the luminaire)		N/A
(14)	SCREW TERMINALS		N/A
(14.2)	Type of terminal		—
	Rated current (A)		—
(14.3.2.1)	One or more conductors		N/A
(14.3.2.2)	Special preparation		N/A
(14.3.2.3)	Terminal size		N/A
	Cross-sectional area (mm ²)		—
(14.3.3)	Conductor space (mm)		N/A
(14.4)	Mechanical tests		N/A
(14.4.1)	Minimum distance		N/A
(14.4.2)	Cannot slip out		N/A
(14.4.3)	Special preparation		N/A
(14.4.4)	Nominal diameter of thread (metric ISO thread).....	M	N/A
	External wiring		N/A
	No soft metal		N/A
(14.4.5)	Corrosion		N/A
(14.4.6)	Nominal diameter of thread (mm)		N/A
	Torque (Nm).....		N/A
(14.4.7)	Between metal surfaces		N/A
	Lug terminal		N/A
	Mantle terminal		N/A
	Pull test; pull (N)		N/A
(14.4.8)	Without undue damage		N/A

ANNEX 4	Screwless terminals (part of the luminaire)		N/A
(15)	SCREWLESS TERMINALS		N/A
(15.2)	Type of terminal		—
	Rated current (A)		—
(15.3.1)	Material		N/A
(15.3.2)	Clamping		N/A
(15.3.3)	Stop		N/A
(15.3.4)	Unprepared conductors		N/A
(15.3.5)	Pressure on insulating material		N/A
(15.3.6)	Clear connection method		N/A





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(15.3.7)	Clamping independently		N/A
(15.3.8)	Fixed in position		N/A
(15.3.10)	Conductor size		N/A
	Type of conductor		N/A
(15.5)	Terminals and connections for internal wiring		N/A
(15.5.1)	Mechanical tests		N/A
(15.5.1.1.1)	Pull test spring-type terminals (4 N, 4 samples)..... :		N/A
(15.5.1.1.2)	Pull test pin or tab terminals (4 N, 4 samples)..... :		N/A
	Insertion force not exceeding 50 N		N/A
(15.5.1.2)	Permanent connections: pull-off test (20 N)		N/A
(15.5.2)	Electrical tests		N/A
	Voltage drop (mV) after 1 h (4 samples) :		N/A
	Voltage drop of two inseparable joints		N/A
	Number of cycles:		—
	Voltage drop (mV) after 10th alt. 25th cycle (4 samples) :		N/A
	Voltage drop (mV) after 50th alt. 100th cycle (4 samples) :		N/A
	After ageing, voltage drop (mV) after 10th alt. 25th cycle (4 samples)..... :		N/A
	After ageing, voltage drop (mV) after 50th alt. 100th cycle (4 samples)..... :		N/A
(15.6)	Terminals and connections for external wiring		N/A
(15.6.1)	Conductors		N/A
	Terminal size and rating		N/A
15.6.2	Mechanical tests		N/A
(15.6.2.1)	Pull test spring-type terminals or welded connections (4 samples); pull (N) :		N/A
(15.6.2.2)	Pull test pin or tab terminals (4 samples); pull (N) :		N/A
(15.6.3)	Electrical tests		N/A
	Tests according 15.6.3.1 + 15.6.3.2 in IEC 60598-1		N/A



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(15.6.3.1) (15.6.3.2)	TABLE: Contact resistance test / Heating tests										N/A
	Voltage drop (mV) after 1 h										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Voltage drop of two inseparable joints										
	Voltage drop after 10th alt. 25th cycle										
	Max. allowed voltage drop (mV) :										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Voltage drop after 50th alt. 100th cycle										
	Max. allowed voltage drop (mV) :										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Continued ageing: voltage drop after 10th alt. 25th cycle										
	Max. allowed voltage drop (mV) :										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Continued ageing: voltage drop after 50th alt. 100th cycle										
	Max. allowed voltage drop (mV) :										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
Supplementary information:											





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10. Deney ve Ölçüm Bilgileri:

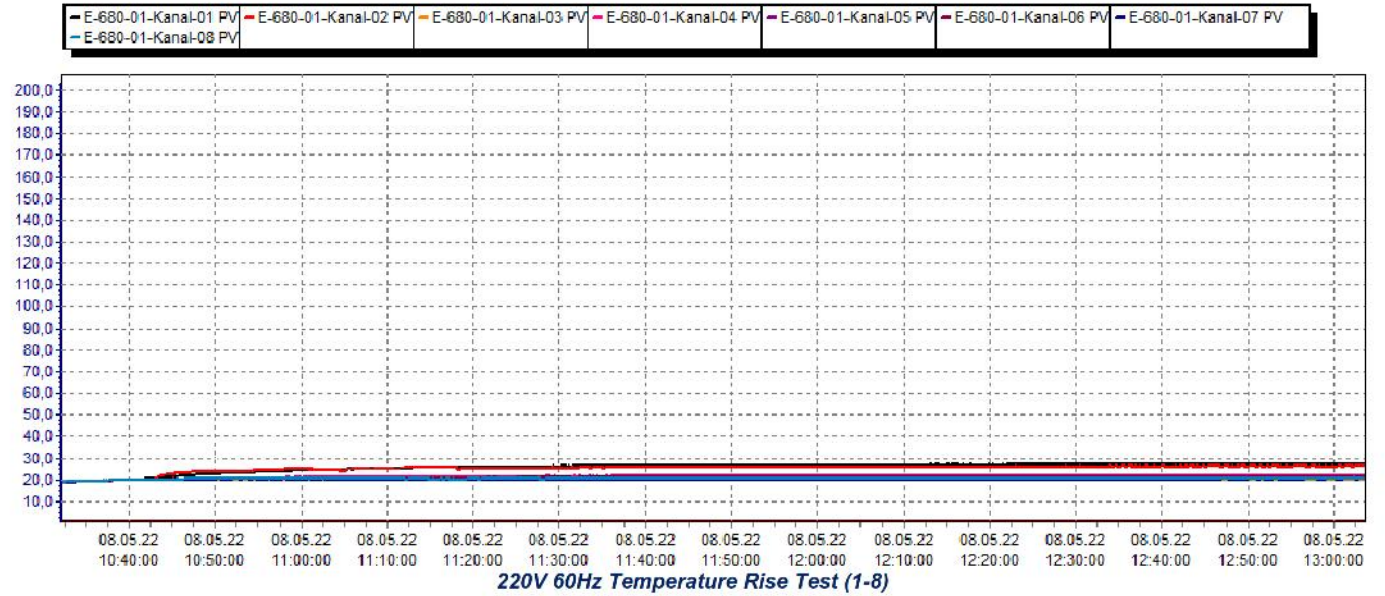
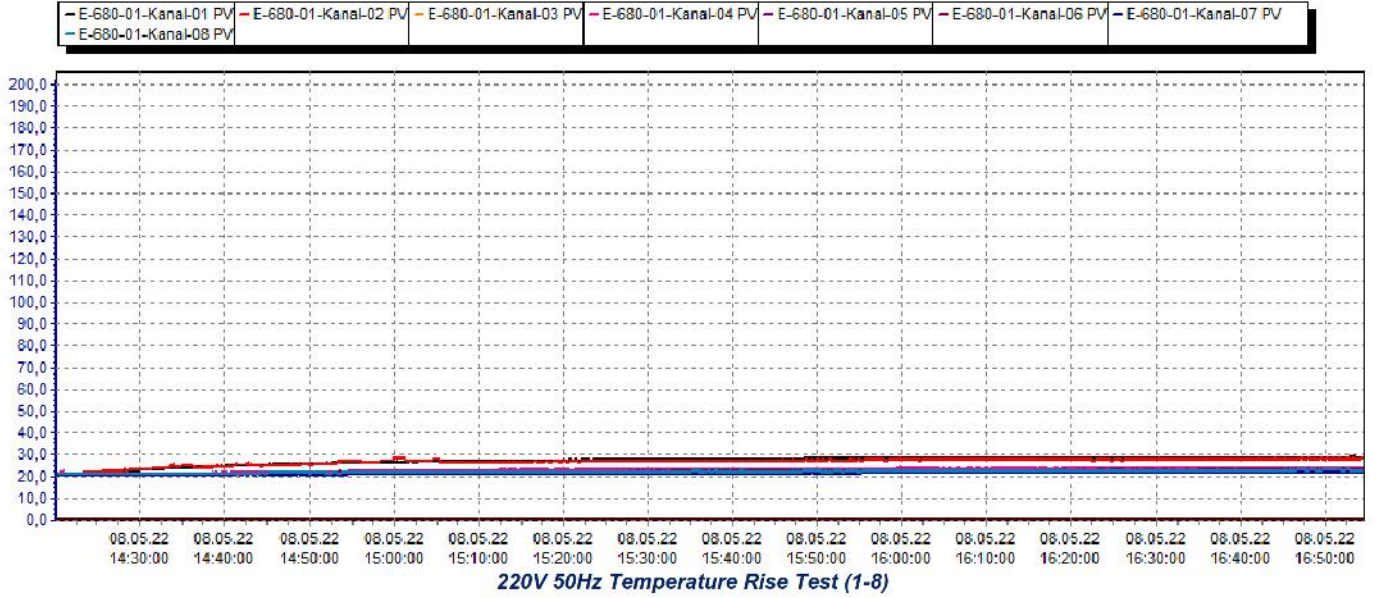
Test And Measuring Arrangement

Cihaz Device	İmalatçı Manufacturer	Seri No. / Kod Serial No / Code	Sertifika No Certificate No	Kalibrasyon Tarihi Calibration Date
Humidity Temperature Meter	CEM	LC329	6214	January/2023
Temperature Rise Data Logger	ELİMKO	LC336	194009	September/2022
Portable Variac	VARSAN	LC380	63411	April/2023
Digital Caliper	ACCUD	LC365	6212	January/2023
Torque Meter	AUTE	LC177	2120858	June/2024
Humidity Cabinet	LVT	LC324	-	No need to calibrate
Dielectric Test Equipment	REK	LC477	2200996	February/2023
Picoscope	PICO	LC520	194007	September/2022
Touch Current Simulator	CSK	LC88	146402	October/2023
Newtonmeter	NK-500	LC204	2138245	September/2022
Multimeter	FLUKE	LC361	6205	January/2023
Spring Hammer (0,5J)	-	LC220	63403	April/2023
Spring Hammer (0,7J)	-	LC221	63404	April/2023
Digital Scales	DIKOMSAN	LC69	3820	January/2023
Earthing Continuity	REK	LC476	2200997	February/2023
Insulation resistance tests	WUHAN	LC475	2201008	February/2023
IP Dusting Container	-	LC148	-	No need to calibrate
IPX6 Nozzle	-	LC156	20KD4034	December/2023



11. Deney Osilogramları:

Test Oscillograms



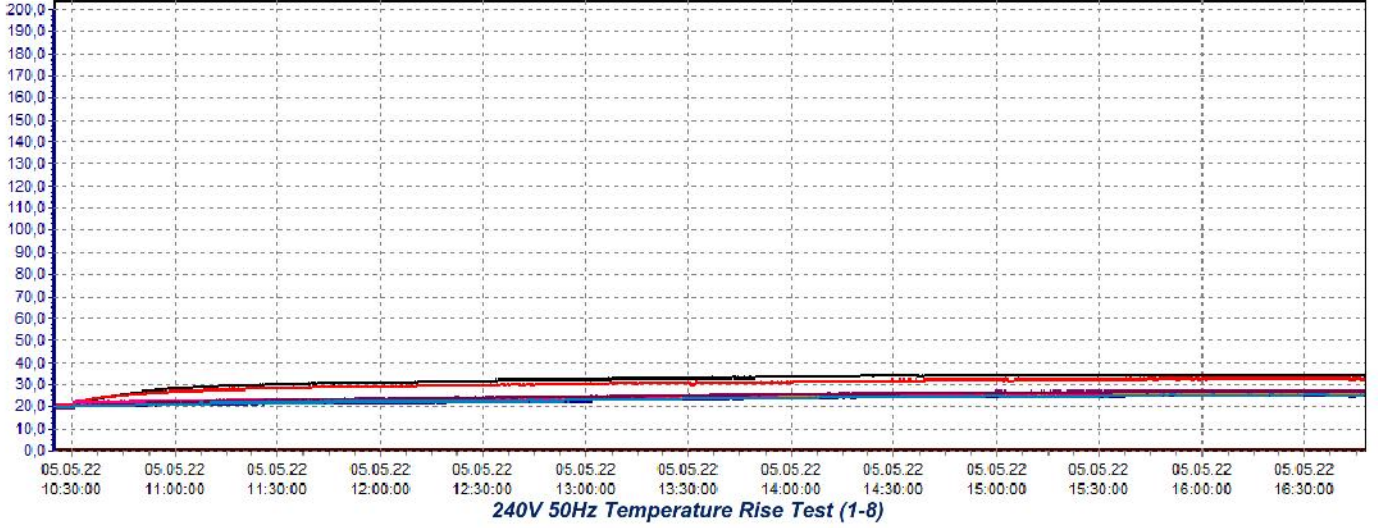


Test Laboratuvarları

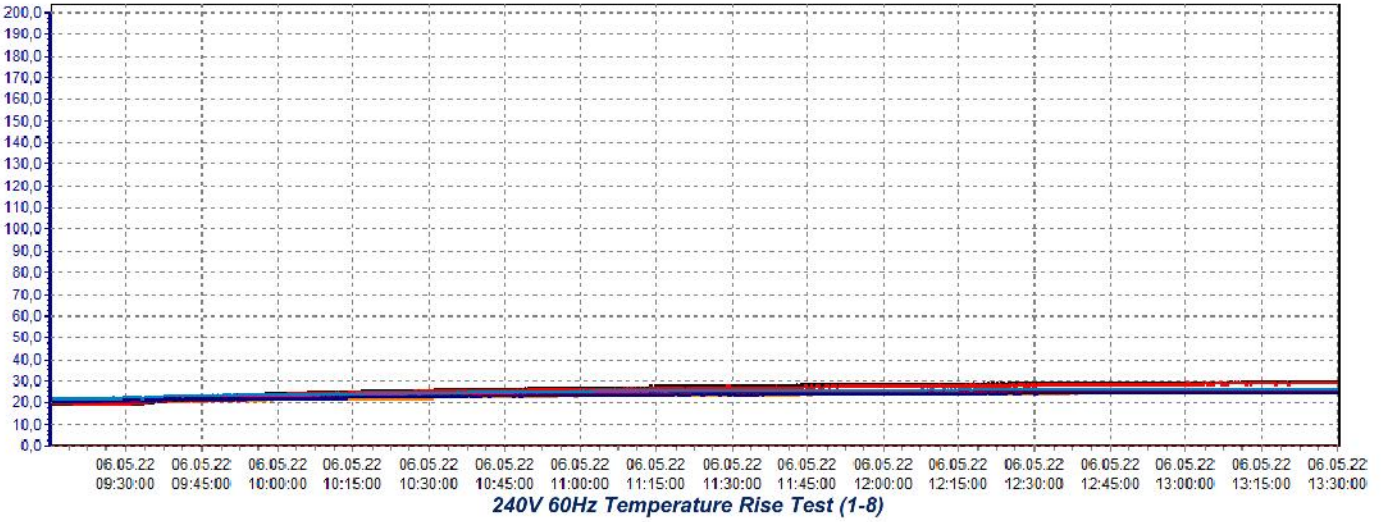
Aydınlatma Armatürleri Güvenlik Deneyleri Yol ve Cadde Aydınlatma Armatürleri

Luminaires Safety Tests
Luminaires for Road and Street Lighting
Luminaires for flood lighting

E-680-07-Kanal-01 PV E-680-07-Kanal-02 PV E-680-07-Kanal-03 PV E-680-07-Kanal-04 PV E-680-07-Kanal-05 PV E-680-07-Kanal-06 PV E-680-07-Kanal-07 PV
E-680-07-Kanal-08 PV



E-680-01-Kanal-01 PV E-680-01-Kanal-02 PV E-680-01-Kanal-03 PV E-680-01-Kanal-04 PV E-680-01-Kanal-05 PV E-680-01-Kanal-06 PV E-680-01-Kanal-07 PV
E-680-01-Kanal-08 PV



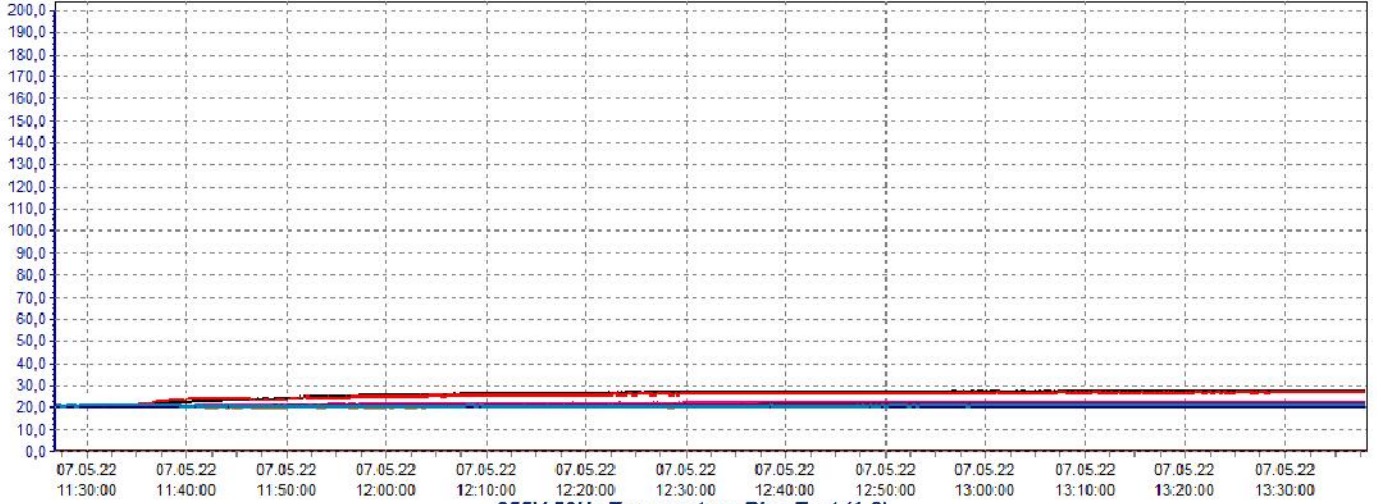


Test Laboratuvarları

Aydınlatma Armatürleri Güvenlik Deneyleri Yol ve Cadde Aydınlatma Armatürleri

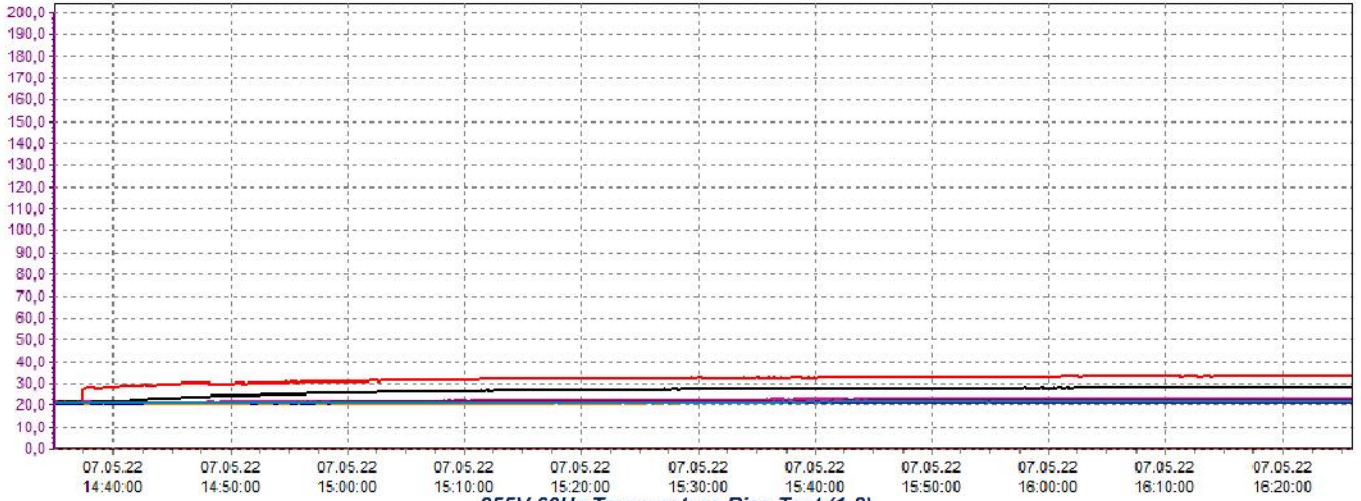
Luminaires Safety Tests
Luminaires for Road and Street Lighting
Luminaires for flood lighting

E-680-01-Kanal-01 PV E-680-01-Kanal-02 PV E-680-01-Kanal-03 PV E-680-01-Kanal-04 PV E-680-01-Kanal-05 PV E-680-01-Kanal-06 PV E-680-01-Kanal-07 PV
E-680-01-Kanal-08 PV



255V 50Hz Temperature Rise Test (1-8)

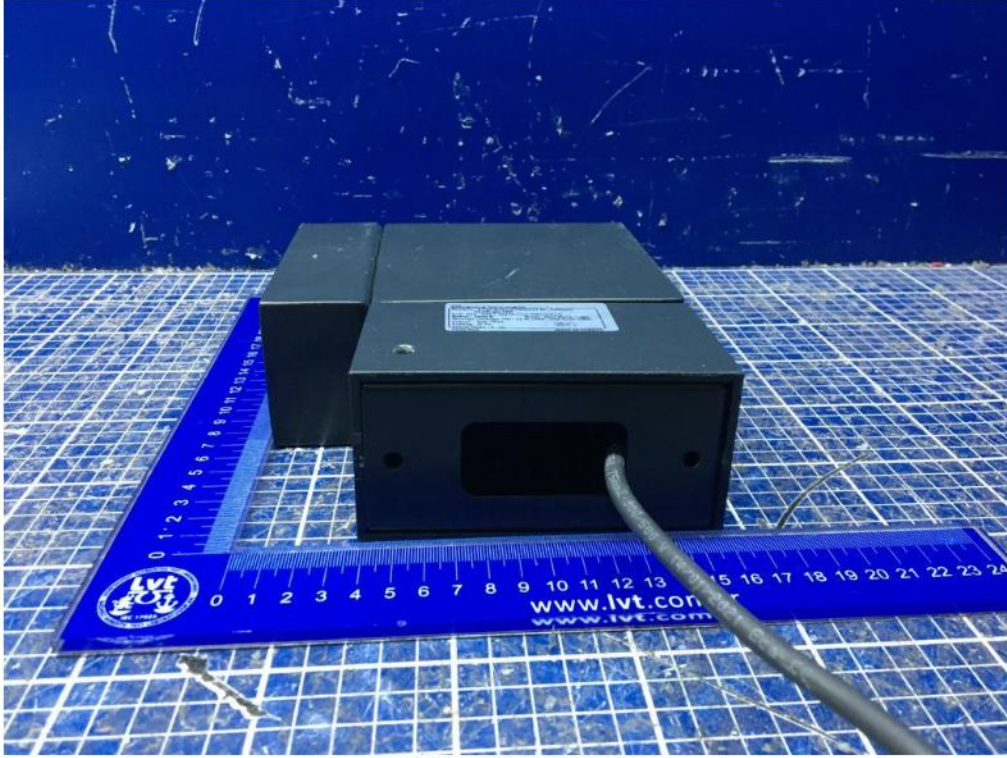
E-680-01-Kanal-01 PV E-680-01-Kanal-02 PV E-680-01-Kanal-03 PV E-680-01-Kanal-04 PV E-680-01-Kanal-05 PV E-680-01-Kanal-06 PV E-680-01-Kanal-07 PV
E-680-01-Kanal-08 PV



255V 60Hz Temperature Rise Test (1-8)



12. Deney Fotoğrafları:
Test Photographs



Photograph 1: Bottom View



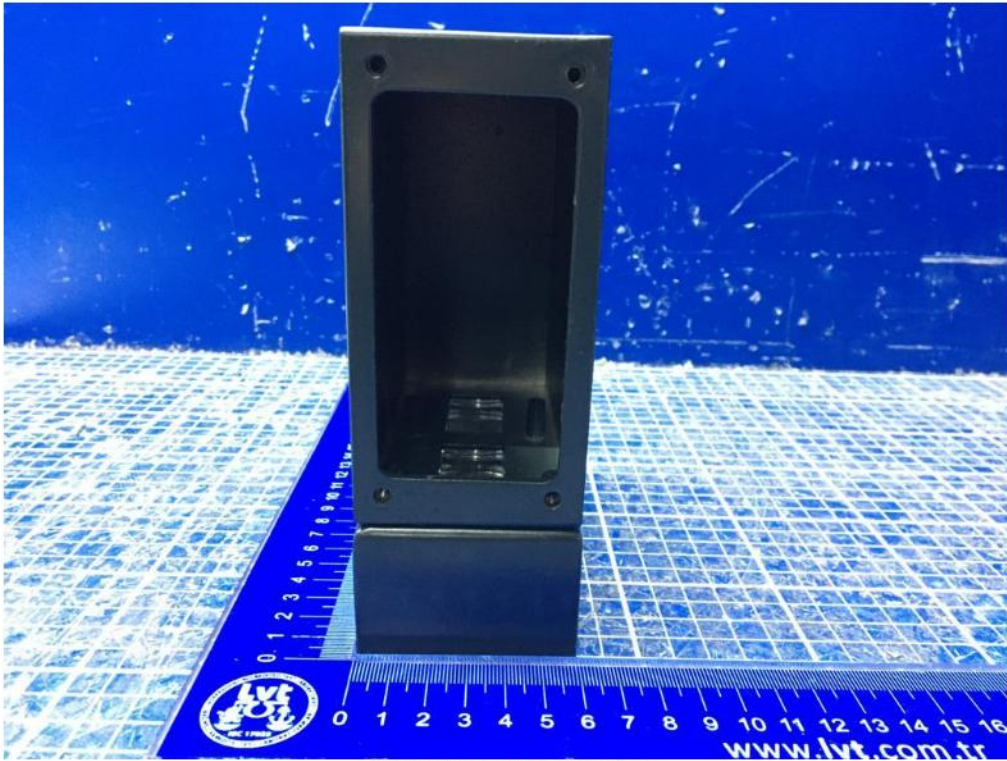
Photograph 2: Front View

Aydınlatma Armatürleri Güvenlik Deneyleri Yol ve Cadde Aydınlatma Armatürleri

Luminaries Safety Tests
Luminaires for Road and Street Lighting
Luminaires for flood lighting



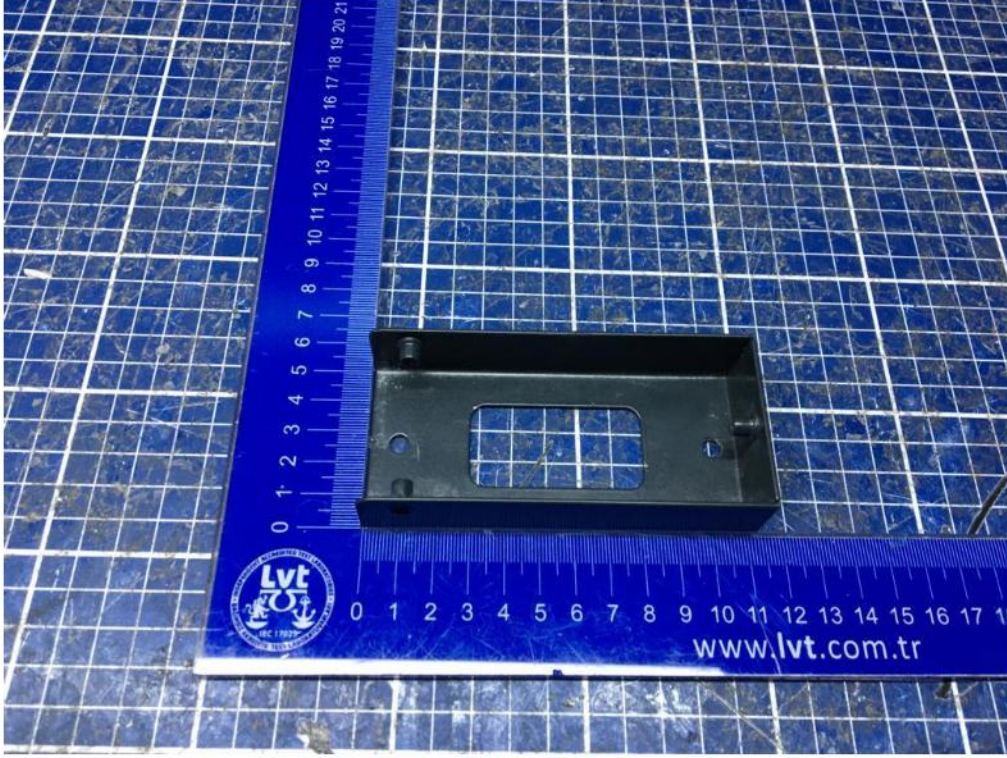
Photograph 3: Side View



Photograph 4: Internal View

Aydınlatma Armatürleri Güvenlik Deneyleri Yol ve Cadde Aydınlatma Armatürleri

Luminaries Safety Tests
Luminaires for Road and Street Lighting
Luminaires for flood lighting



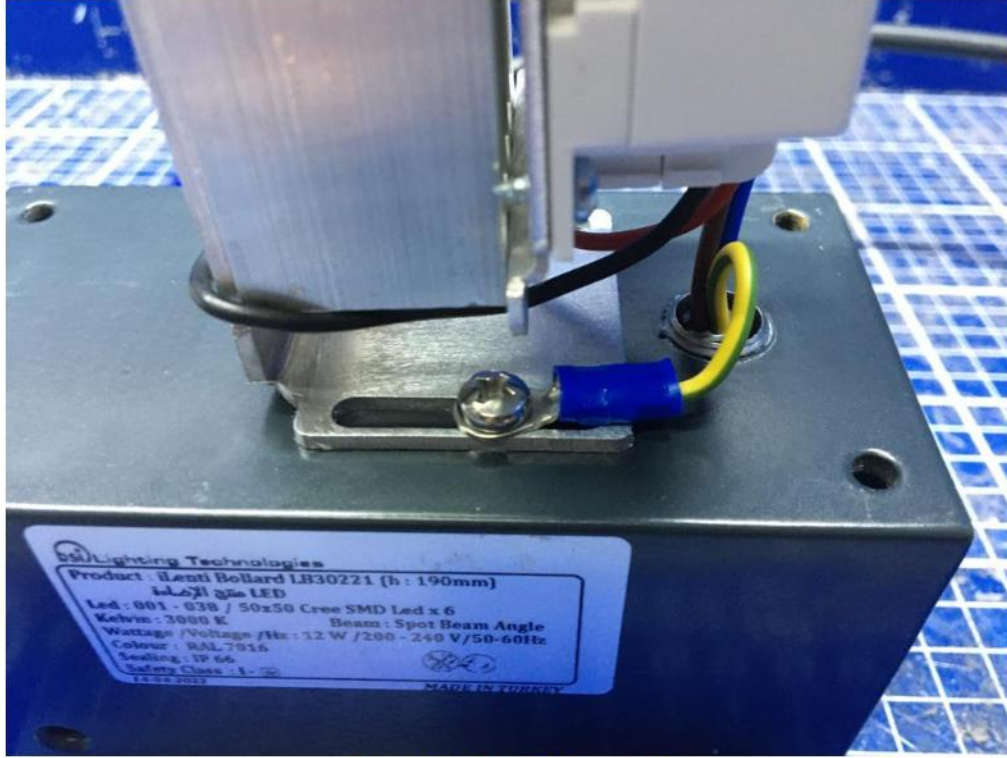
Photograph 5: Mounting Enclosure



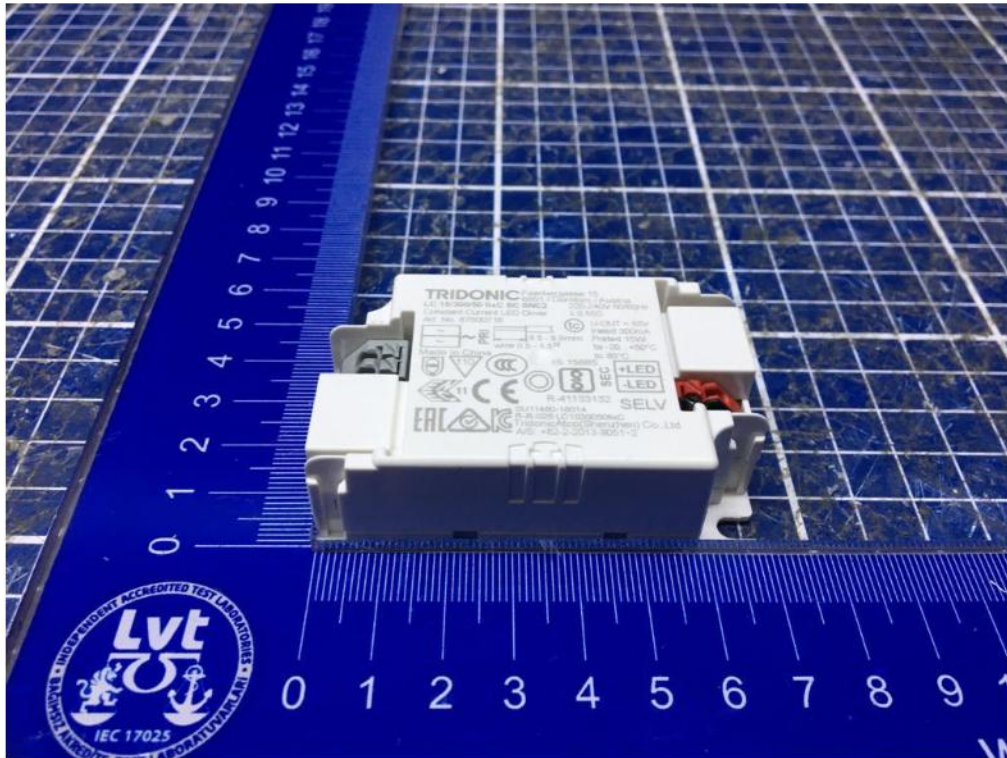
Photograph 6: Internal View

Aydınlatma Armatürleri Güvenlik Deneyleri Yol ve Cadde Aydınlatma Armatürleri

Luminaires Safety Tests
Luminaires for Road and Street Lighting
Luminaires for flood lighting



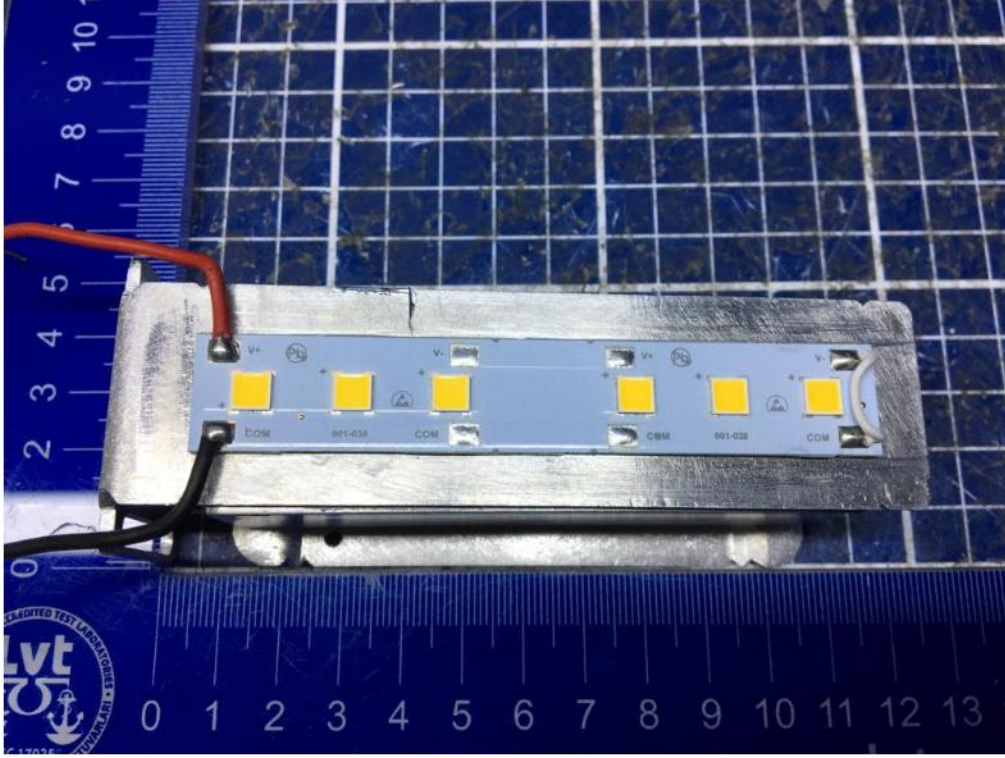
Photograph 7: Earth Connection



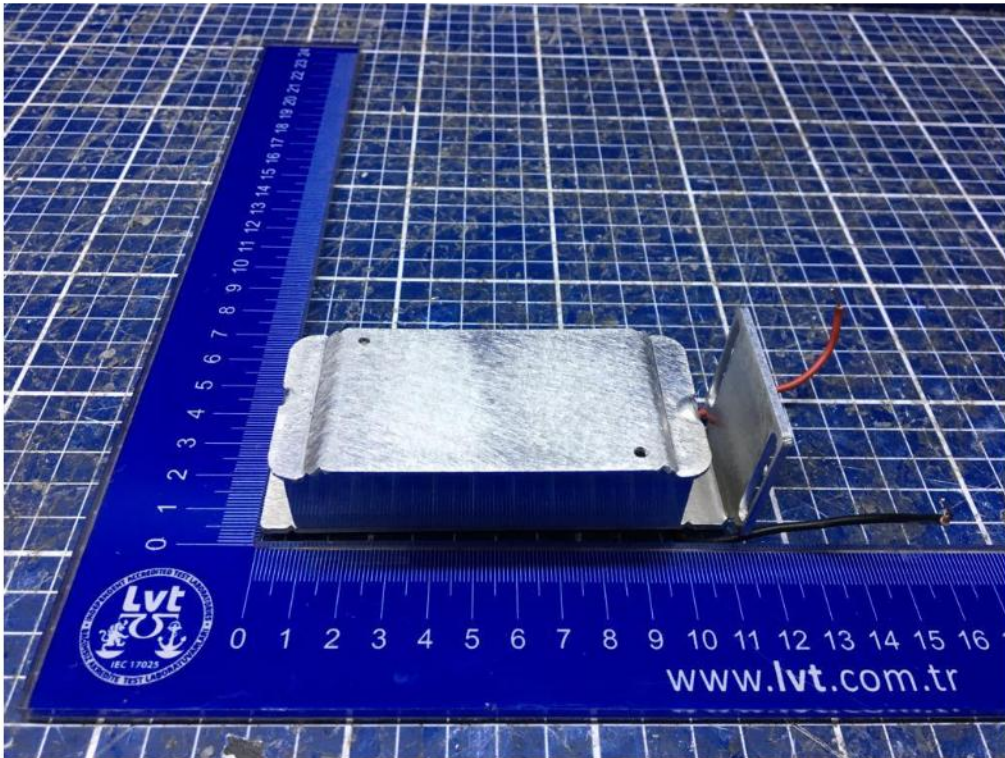
Photograph 8: Driver

Aydınlatma Armatürleri Güvenlik Deneyleri Yol ve Cadde Aydınlatma Armatürleri

Luminaires Safety Tests
Luminaires for Road and Street Lighting
Luminaires for flood lighting



Photograph 9: LED



Photograph 10: LED Cooler



Luminaires Safety Tests
Luminaires for Road and Street Lighting
Luminaires for flood lighting

Documentary of Client



Critical Component List

bsi **BSİ AYDINLATMA**
ELEK. ELEKT. SAN. VE TİC. A.Ş.
Konutlar Mah. 322. Sk. No:391 06810
Çankaya, Ankara / TÜRKİYE Dışarıya V.A. 131 065 2062
Tic. Sic. No:33371 Mersis No: 065 371784900139
Web: bsighting.com Email: info@bsighting.com

MERSIS NO: 7651371784968136 REGISTRY NO: 359371

300/500 V

PVC İZOLELİ ÇOK DAMARLI FLEKSİBEL TESİSAT KABLoları



H05VV-F(HAR)

Tip	H05W-F (TSE)
Standartlar	TS EN 50525-2-11, VDE 0281, BS 6500, IEC 60227
Yapısı	Fleksibel bakır iletken, PVC izole, PVC dış kılıf
Kullanıldığı Yerler	Az mekanik zorlamalı ve rutubetli yerlerde kullanılan ev gereçlerinde.
Teknik Veriler	Maks. çalışma sıcaklığı 70 °C Maks. kısa devre sıcaklığı 160 °C Minimum bükülme yarı çapı 6"D D: Kablo dış çapı (mm)

Boyut ve Ağırlıklar			Elektriksel Bilgiler		
Nominal Kesit	Dış Çap Yaklaşık	Net Ağırlık Yaklaşık	Standart Sevk	20°C'de İletken DC Direnci (Maks.)	Havada [A]
mm²	mm	kg/km	uzunluk/m	ohm/km	
2x0.75	6,5	58	100	26,0	6
2x1	7,0	65	100	19,5	10
2x1.5	7,7	82	100	13,3	16
2x2.5	9,6	130	100	7,98	25
2x4	11,5	182	100	4,95	32
3x0.75	6,4	63	100	26,0	6
3x1	7,1	74	100	19,5	10
3x1.5	7,9	103	100	13,3	16
3x2.5	9,8	159	100	7,98	25
3x4	11,6	230	100	4,95	32
4x0.75	7,0	76	100	26,0	6
4x1	7,8	93	100	19,5	10
4x1.5	8,8	129	100	13,3	16
4x2.5	10,8	193	100	7,98	25
4x4	12,7	285	100	4,95	32
5x0.75	7,9	100	100	26,0	6
5x1	8,5	120	100	19,5	10
5x1.5	10,1	170	100	13,3	16
5x2.5	12,2	260	100	7,98	25
5x4	14,5	380	100	4,95	32



Test Laboratuvarları

Aydınlatma Armatürleri Güvenlik Deneyleri Yol ve Cadde Aydınlatma Armatürleri

Luminaries Safety Tests
Luminaires for Road and Street Lighting
Luminaires for flood lighting



Markanın Tanımı Description of the Mark
TSE veya/ve TSE veya/ve TSE

BELGE NUMARASI
REFERENCE NUMBER OF LICENCE

001015-TSE-09/01

BELGENİN İLK VERİLİŞ TARİHİ
DATE OF FIRST ISSUE OF LICENCE

15.09.1998

BELGENİN SON GEÇERLİLİK TARİHİ
LICENCE VALID UNTIL

11.11.2022

BELGE SAHİBİ KURULUŞUN ADI
NAME OF THE LICENCE HOLDER

ÖZNUR KABLO SAN. VE TİC.A.Ş.

BELGE SAHİBİ KURULUŞUN ADRESİ
ADDRESS OF THE LICENCE HOLDER

ŞAİR ZİYA PAŞA CD. NO:41 KARAKÖY İSTANBUL İSTANBUL/TÜRKİYE

ÜRETİM YERİ ADI
NAME OF THE MANUFACTURING PLACE

ÖZNUR KABLO SAN.VE TİC.A.Ş.

ÜRETİM YERİ ADRESİ
ADDRESS OF THE MANUFACTURING PLACE

2.ORGANİZE SAN. BÖLGESİ KAVAKLIDERE MEVKİİ NO:14
ÇERKEZKÖY TEKİRDAĞ / TÜRKİYE

İPTAL EDİLEN BELGE NUMARASI (Varsa)
INDICATION OF SUPERSEDED LICENCE (if any)

14.0.10.0.01.00/TSE-65303

TESCİLLİ TİCARİ MARKASI
REGISTERED TRADE MARK

ÖZNUR

İLGİLİ TÜRK STANDARDI
RELATED TURKISH STANDARD

TS EN 50525-2-11:2011 / 22.11.2011

BELGE KAPSAMI
SCOPE OF LICENCE

OLAĞAN PVC KILIFLI KABLOLAR (KORDONLAR).

H05VV-F



e-imza/e-signed

08.11.2021

Belgelendirme Merkezi Başkanı Adına
SOYDAN CERAN

ELEKTROTEKNİK SEKTÖRÜ MÜDÜRÜ

*Bu belge, belgelendirilen ürünün, üretim yerinin Enstitümüzün bellediği şartları karşıladığını da gösterir.

*Bu belge, hiçbir suretle tahrif edilemez, kurtarılmaz veya okunmasını zorlaştırmak, çabuklaştırmak, kurtarılmaz ve silinir yapılmaz.

*TSE ELEKTROTEKNİK SEKTÖRÜ MÜDÜRLÜĞÜ * Adres: Necatibey Cad.No:112 06100 Bakanlıklar/ANKARA * Telefon: 0312 416 63 96 * Faks: 0312 416 66 17

*TSE BELGELENDİRME MERKEZİ BAŞKANLIĞI Adres: Necatibey Cad. No:112 06100 Bakanlıklar/ANKARA - Telefon: 0 312 416 64 81 / 416 64 23, Faks: 0 312 416 66 17 E-posta: tseb@tse.org.tr, web : www.tse.org.tr

<https://evrakkontrol.tse.org.tr/BelgeDogrulama.aspx?pg=56&id=56> adresinden belgenin doğruluğuna ve geçerliliğine sorgulayınız.



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Test Laboratuvarları

Aydınlatma Armatürleri Güvenlik Deneyleri Yol ve Cadde Aydınlatma Armatürleri

Luminaries Safety Tests
Luminaires for Road and Street Lighting
Luminaires for flood lighting

SERTİFİKA NO: RKSNI01
Certificate Nr:

UYGUNLUK BEYANI DECLARATION OF CONFORMITY

Üretici Adı ve adresi / Manufacturer



Elektrik Malzemeleri Sanayi ve Ticaret Ltd. Şti.
Fabrika(Factory): Kumpas Cad. No:20 Ö 1-3 Parsel
Tuzla/İSTANBUL/TURKEY

Ürün Grubu / Product Classification

Nikel Kaplı Pirinç Kablo Rakorları
Nickel Plated Brass Cable Glands

Ürün Tipi / Type Designation

REM, REK (Ürün kapsamı için Sayfa 2'ye bakınız)
REM, REK (Refer to addendum page 2 for product covered)

İlgili AT Direktifi /

The designated product meets the essential safety requirements of the EC-Directive

(2006/95/AT)

**Belirli Gerilim Sınırları Dahilinde Kullanılmak Üzere Tasarlanmış
Elektrikli Teçhizat İle İlgili Yönetmelik (Ürün kapsamı için Sayfa 2'ye bakınız)**

Adı geçen ürün serilerimizde bu hükümlerin yerine getirilmesinde aşağıda belirtilen standartlar kullanılmıştır; / The conformity with the provisions of this directive is proved by the compliance with the following standards;

EN 60079-0, EN 60079-1, EN 60079-7

CE işaretinin ilâstinildiği yıl: 13
fixing date of CE label



Bu beyanat REKSAN Ltd. Şti'nin yetkilisi Genel Müdür Müjgan ŞAHİN tarafından düzenlenmiştir.
This declaration is signed and issued by Müjgan ŞAHİN / Chairwoman

Teknik Dosya No:RKDT.01.01
Technical File Nr:

Genel Müdür / Chairwoman
Müjgan ŞAHİN
İstanbul - 20.09.2015

Rev. Nr: 01

Rev. Date: 20.09.2015

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Test Laboratuvarları

Aydınlatma Armatürleri Güvenlik Deneyleri Yol ve Cadde Aydınlatma Armatürleri

Luminaires Safety Tests
Luminaires for Road and Street Lighting
Luminaires for flood lighting

SERTİFİKA NO: RKSAN101
Certificate Nr:

UYGUNLUK BEYANI DECLARATION OF CONFORMITY

Üretici Adı ve adresi / Manufacturer



Elektrik Malzemeleri Sanayi ve Ticaret Ltd. Şti.
Fabrika(Factory): Kumpas Cad. No:20 Ö 1-3 Parsel
Tuzla/İSTANBUL/TURKEY

Ürün Grubu / Product Classification

Nikel Kaplı Pirinç Kablo Rakorları
Nickel Plated Brass Cable Glands

Ürün Tipi / Type Designation

REM, REK (Ürün kapsamı için Sayfa 2'ye bakınız)
REM, REK (Refer to addendum page 2 for product covered)

İlgili AT Direktifi /

The designated product meets the essential safety requirements of the EC-Directive

(2006/95/AT)

**Belirli Gerilim Sınırları Dahilinde Kullanılmak Üzere Tasarlanmış
Elektrikli Teçhizat İle İlgili Yönetmelik (Ürün kapsamı için Sayfa 2'ye bakınız)**

Adı geçen ürün serilerimizde bu hükümlerin yerine getirilmesinde aşağıda belirtilen standartlar kullanılmıştır; / The conformity with the provisions of this directive is proved by the compliance with the following standards;

EN 60079-0, EN 60079-1, EN 60079-7

CE işaretinin ilâştirildiği yıl: 13
fixing date of CE label



Bu beyanat REKSAN Ltd. Şti'nin yetkilisi Genel Müdür Müjgan ŞAHİN tarafından düzenlenmiştir.
This declaration is signed and issued by Müjgan ŞAHİN / Chairwoman

Teknik Dosya No:RKDT.01.01
Technical File Nr:

Genel Müdür / Chairwoman
Müjgan ŞAHİN
İstanbul - 20.09.2015

Rev. Nr: 01

Rev. Date: 20.09.2015

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Test Laboratuvarları

Aydınlatma Armatürleri Güvenlik Deneyleri Yol ve Cadde Aydınlatma Armatürleri

Luminaries Safety Tests
Luminaires for Road and Street Lighting
Luminaires for flood lighting

J SERIES® 5050 LED

CREE LED

FLUX CHARACTERISTICS, ORDER CODES AND BINS - JR5050B 6-V K CLASS FOR HORTICULTURE ($I_F = 400 \text{ mA}$, $T_J = 25^\circ \text{C}$)

The following table provides order codes for J Series 5050B 6-V K Class LEDs. For a complete description of the order code nomenclature, please see the Order Code and Bin Code Formats section (page 3). For definitions of the chromaticity kits, please see the Performance Groups - Chromaticity section (page 49).

Nominal CCT	Minimum CRI	Minimum Luminous Flux (lm) @ 25 °C	Typical Luminous Flux (lm) @ 25 °C	Typical Luminous Efficacy (lm/W)	PPF* (μmol/s)	PPF/W* (μmol/J)	Kitted 3-Step Order Code**
6500 K	70	400	455	201	6.33	2.79	JR5050BWT-K-B65EB0000-N0000001
	80	350	425	187	6.18	2.72	JR5050BWT-K-H65EB0000-N0000001
	90	300	357	157	5.72	2.52	JR5050BWT-K-U65EB0000-N0000001
5700 K	70	400	455	201	6.13	2.70	JR5050BWT-K-B57EB0000-N0000001
	80	350	425	187	6.04	2.66	JR5050BWT-K-H57EB0000-N0000001
	90	300	357	157	5.56	2.45	JR5050BWT-K-U57EB0000-N0000001
5000 K	70	400	455	201	6.04	2.66	JR5050BWT-K-B50EB0000-N0000001
	80	350	425	187	5.95	2.62	JR5050BWT-K-H50EB0000-N0000001
	90	300	357	157	5.48	2.42	JR5050BWT-K-U50EB0000-N0000001
4000 K	70	400	455	201	6.06	2.67	JR5050BWT-K-B40EB0000-N0000001
	80	350	425	187	5.96	2.63	JR5050BWT-K-H40EB0000-N0000001
	90	300	357	157	5.50	2.42	JR5050BWT-K-U40EB0000-N0000001
3500 K	70	400	440	194	5.95	2.62	JR5050BWT-K-B35EB0000-N0000001
	80	350	415	183	5.91	2.61	JR5050BWT-K-H35EB0000-N0000001
	90	300	347	153	5.42	2.39	JR5050BWT-K-U35EB0000-N0000001
3000 K	70	350	433	191	5.94	2.62	JR5050BWT-K-B30EB0000-N0000001
	80	350	404	178	5.84	2.57	JR5050BWT-K-H30EB0000-N0000001
	90	300	337	149	5.33	2.35	JR5050BWT-K-U30EB0000-N0000001
2700 K	70	350	412	182	5.73	2.53	JR5050BWT-K-B27EB0000-N0000001
	80	350	389	172	5.70	2.51	JR5050BWT-K-H27EB0000-N0000001
	90	250	327	144	5.23	2.31	JR5050BWT-K-U27EB0000-N0000001

Notes:

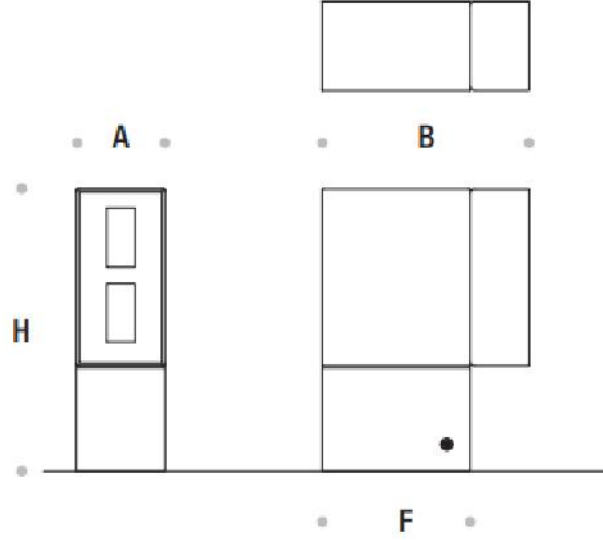
- Cree Venture maintains a tolerance of $\pm 7\%$ on flux and power measurements, ± 0.005 on chromaticity (CCx, CCy) measurements and ± 2 on CRI measurements. See the Measurements section (page 58).
- Cree Venture J Series 5050 LED order codes specify only a minimum flux bin and not a maximum. Cree Venture may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity restrictions specified by the order code.

* PPF values are calculated from luminous flux values and are for reference only.

** Contact your Cree LED sales representative for kitted 3-step order code details.



iLenti



CODE	A (mm)	B (mm)	H (mm)	F (mm)
LB30221	60	140	190	100

bsilighting.com

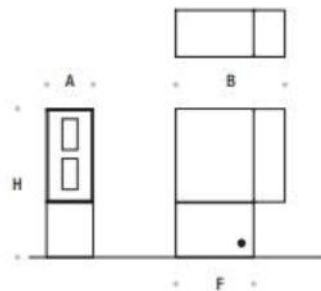
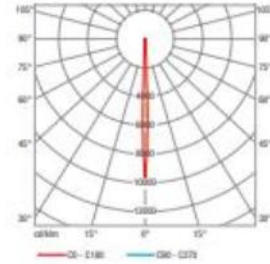
Aydınlatma Armatürleri Güvenlik Deneyleri Yol ve Cadde Aydınlatma Armatürleri

Luminaries Safety Tests
Luminares for Road and Street Lighting
Luminares for flood lighting



CODE	POWER CONSUMPTION	LUMEN OUTPUT (lm) 3000K / 4000K	COLOUR TEMPERATURE	A (mm)	B (mm)	H (mm)	F (mm)
LB30221	12W	900/960	3000K/4000K	60	140	190	100

LED Type	High efficiency LEDs, available in 2700K, 3000K, 4000K, 5000K, 6500K CCT tolerance within a 3-step MacAdams ellipse and LM80 compliant.
Nominal Voltage	220V-240V AC, 50/60Hz
Color Rendering Index	CRI> 80 standard and CRI>90 on request.
Optics	Narrow beam focused illumination.
Materials	Corrosion resistant double layer polyester powder coated paint finish die cast aluminium housing, aluminium extruded column (EN AW-6060) with stainless steel screws (A4 grade) and silicone gaskets. Power unit is built in. Available in anthracite gray as a standard finish or any desired RAL colour.
Optional Coating	Marine grade.
Accessories	Terminal block.
Diffuser	Shockproof PMMA UV Stabilised Diffuser.
LED Specification	L90B50 > 100000 hours life time.
Energy Efficiency Class (EEC)	A++
Operating Temperature	-40°C / +55°C
Control Systems	DALI Interface.
Protection Class	IP66
Impact Resistance	IK 08
Insulation Class	Class I
Conformity	Complies with European Standards EN 60598 and CE certified.



İLENTİ INSTALLATION GUIDE



PRODUCT FEATURES:

The aluminium low-bollard type luminaire is particularly appropriate for the illumination of extensive gardens, parks and commercial areas.
The product provides optimum visual comfort with a very focused and certain orientation of light.

Designed to last in extremely harsh environments.

RECOMMENDATIONS FOR THE USER:

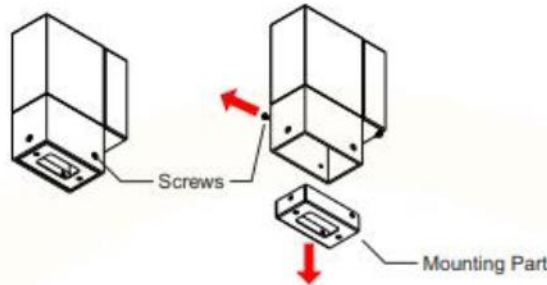
- 1) Before the installation, make sure that there is no voltage.
- 2) Do not touch the fitting when it is working on / switched on
- 3) Do not look at the fitting directly or from a short distance.
- 4) Disconnect / switch off the fitting before changing the lamps

NOTES:

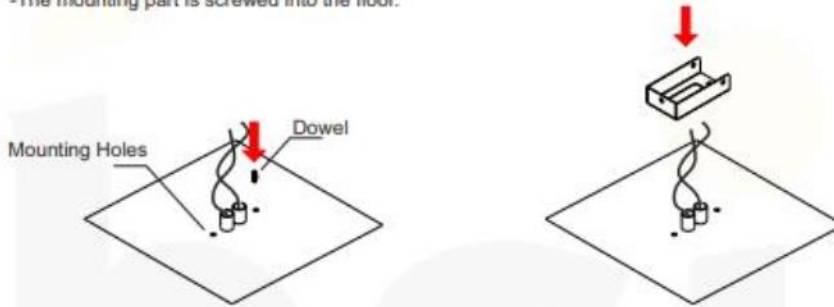
- Technical amendments are reserved.
- CE – Conformity mark
- The manufacturer is then discharged from liability when damage is caused by improper use or installation.
- Clean luminaire regularly with solvent-free cleansers from dirt and deposits. Do not use high pressure cleaners.

iLENTI INSTALLATION GUIDE

- 1) The mounting part is removed from the luminaire by unscrewing the screws under the luminaire.



- 2) -Mounting holes in the floor are drilled and the dowel are driven into the holes.
-The mounting part is screwed into the floor.



- 3) -Electrical connection is made.
-The luminaire is screwed into the mounting part.

