CE LVD

TEST REPORT

For

FLOOR LAMP

Model No.: **VT-7500, VT-7600**

Applicant : **V-TAC EXPORTS LIMITED**
ROOM NO.301, KAM ON BUILDING 176A QUEENS ROAD CENTRAL, CENTRAL, HONGKONG

Manufacturer : **V-TAC EXPORTS LIMITED**
ROOM NO.301, KAM ON BUILDING 176A QUEENS ROAD CENTRAL, CENTRAL, HONGKONG

Issued By : **Global-Standard Testing Service Co., Ltd.**
Room 1911-1914, Noble Plaza, Qian Jin 1st Road, Bao An district,Shenzhen, Guangdong, China.

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Report Number : **J02.06.0265S**

Issued Date : **July 26, 2016**

Date of Report : **July 26, 2016**

Note:

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LVD Report

EN60598-1
Luminaires—Part 1 :General requirements and tests

EN60598-2-4
Part 2-4:Particular requirments
Section 4 – portable general purpose luminaires

Report reference No. ……..…:	J02.06.0265S
Testing laboratory ……:	Global-Standard Testing Service Co., Ltd.
Location……..:	Room 1911-1914, Noble Plaza, Qian Jin 1st Road, Bao An district, Shenzhen, Guangdong, China.
Applicant……:	V-TAC EXPORTS LIMITED
Address:……....:	ROOM NO.301, KAM ON BUILDING 176A QUEENS ROAD CENTRAL, CENTRAL, HONGKONG
Manufacturer……....:	V-TAC EXPORTS LIMITED
Address:……....	ROOM NO.301, KAM ON BUILDING 176A QUEENS ROAD CENTRAL, CENTRAL, HONGKONG
Standards……..:	EN 60598-2-4: 1997 EN 60598-1: 2015
Procedure deviation……:	N/A
Non-standard test method……..:	N/A
Type of test equipment ……...:	FLOOR LAMP
Trade mark……:	V-TAC
Model/Type designation……..:	VT-7500, VT-7600
Rating……:	AC220-240V, 50/60Hz, E27, Max.27W Self-ballast lamp
TRF originator……:	Global-Standard Testing Service Co., Ltd.
Test item particulars:	--
Operating Condition	Continuous
Tested for IT power systems	N/A
IT testing, phase-phase voltage (V)	N/A.
Class of equipment	Class II equipment
Protection against ingress of water	IP20

Possible test case verdicts :	
test case does not apply to the test object	N(/A.)
test object does meet the requirement	P(ass)
test object does not meet the requirement	F(ail)

Name and address of the testing laboratory :

Global-Standard Testing Service Co., Ltd.
Room 1911-1914, Noble Plaza, Qian Jin 1st Road, Bao An District, Shenzhen, Guangdong, China.

Tested by : Sean Xiao — July 21, 2016
Signature — Date

Sean Xiao / Engineer
Name/title

Reviewed by : Peter Chen — July 26, 2016
Signature — Date

Peter Chen / Project Engineer
Name/title

Approved by : Tim Sun — July 26, 2016
Signature — Date

Tim Sun / Manager
Name/title

General remarks:	
Clause number between brackets refer to clauses in IEC 60598-1 "(see remark #)" refers to a remark appended to the report. "(see appended table)" refers to a table appended to the report. Throughout this report a comma is used as the decimal separator. 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 testing laboratory. Unless otherwise specified, test are made under normal conditions at an ambient temperature within the range of 15℃ to 35℃, RH45% to 75% and an air pressure of 860mbar of 1060mbar	Attachment with: 1) Photo documentation

The test samples were pre-production samples without serial numbers. This report shall not be reproduced except in full without the written approval of the testing laboratory.

This report covers model VT-7500, VT-7600.

FLOOR LAMP with different power depended on dimension of shade.

All tests were performed by model VT-7600 to represent the other identical models.

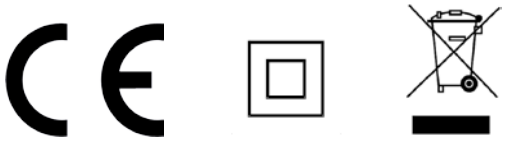
The European standard IEC 62493 for requirement has considered.

Label

Representative

FLOOR LAMP

Model No. : VT-7600
Rating: AC220-240V, 50/60Hz, E27, Max.27W Self-ballast lamp



V-TAC EXPORTS LIMITED

Note:

1.Due to similarity of the labels, only above label was listed.

2,All models have the same marking plate except the model name and input rating with wattage.

3.The height of WEEE directive mark is at least 7mm,and others directive mark are at least 5mm.height.

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EN 60598-2-4			
Clause	Requirement – Test	Result – Remark	Verdict
4.1 (0)	SCOPE		P
4.1 (0.1)	More sections applicable ..... :		N/A
	Rated voltage not exceeding 250 V		P
4.4 (2)	CLASSIFICATION		P
4.4 (2.2)	Type of protection ..... :	Class II	P
4.4 (2.3)	Degree of protection ..... :	IP20	N/A
4.4 (2.4)	Portable or handheld luminaire ..... :	Portable luminaire	P
	Fixed luminaire suitable for normally flammable surfaces..... :		N/A
	Fixed luminaire suitable for non-combustible materials only ..... :		N/A
4.4 (2.5)	Luminaire for normal use ..... :		P
	Luminaire for rough service ..... :		N/A
4.5 (3)	MARKING		P
4.5 (3.2)	Mandatory markings	See marking	P
	Position of the marking	Sticking on the enclosure of product	P
	Format of symbols/text		P
4.5 (3.2.1)	Mark of origin	Made in China	P
4.5 (3.2.2)	Rated voltage(s) in volts	AC 220-240V	P
4.5 (3.2.3)	Rated max. ta, if other than 25 °C		N/A
4.5 (3.2.4)	Symbol for class II luminaires		P
4.5 (3.2.5)	Symbol for class III luminaires		N/A
4.5 (3.2.6)	Marking (if applicable) with IP number	IP20	N/A
4.5 (3.2.7)	Maker's model number or type reference	VT-7500, VT-7600	P
4.5 (3.2.8)	Rated wattage	60W	P
4.5 (3.2.9)	suitability or non-suitability for mounting on normally flammable surface	Suitability for mounting on normally flammable surface	P
4.5 (3.2.10)	Information concerning special lamp		N/A
4.5 (3.2.11)	Symbol for 'cool beam'		N/A
4.5 (3.2.12)	Except for type Z attachments, terminations shall be clearly marked		N/A

EN 60598-2-4			
Clause	Requirement – Test	Result – Remark	Verdict
	Information for luminaires with non-detachable flexible cable not fitted with a plug		N/A
	ELV d.c. supplied fluorescent luminaires		N/A
4.5 (3.2.13)	Symbol for minimum distance		N/A
	Explanation for its meaning in instructions		N/A
4.5 (3.2.14)	Symbol for rough service luminaires		N/A
4.5 (3.2.15)	Symbol for luminaires with bowl mirror lamp		N/A
4.5 (3.2.16)	Luminaires with glass protective shield		N/A
4.5 (3.2.17)	Interconnected luminaires		N/A
4.5 (3.2.18)	Warning for lumiaires with ignitors		N/A
4.5 (3.2.19)	Symbol for luminaires designed for use with self-shielded tungsten halogen lamps only		N/A
4.5 (3.3)	Additional information		P
	Language of instructions	English	P
4.5 (3.3.1)	Combination luminaires		N/A
4.5 (3.3.2)	Nominal frequency in Hz	50Hz	P
4.5 (3.3.3)	Operating temperature		N/A
4.5 (3.3.4)	Symbol or warning notice		N/A
4.5 (3.3.5)	Wiring diagram		N/A
4.5 (3.3.6)	Special conditions		N/A
4.5 (3.3.7)	Metal halid lamp luminaire – warning		N/A
4.5 (3.3.8)	Limitation for semi-luminaires		N/A
4.5 (3.3.9)	Power factor and supply current		P
4.5(3.3.10)	Suitability for use indoors		P
4.5 (3.3.11)	Luminaires with remote control		N/A
4.5 (3.3.12)	Clip-mounted luminaire - warning		P
4.5 (3.3.13)	Specifications of protective shields		N/A
4.5 (3.3.14)	Symbol for nature of supply		P
4.5 (3.3.15)	Rated current of socket outlet		N/A
4.5 (3.3.16)	Rough service luminaire		N/A
4.5 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments	type Y	P
4.5 (3.3.18)	Non-ordinary luminaires with PVC cable		N/A

EN 60598-2-4			
Clause	Requirement – Test	Result – Remark	Verdict
3.3.101	If no terminal block is provided with the luminaire, the packaging needs to contain the warning: "Terminal block not included. Installation may require advice from a qualified person"		N/A
4.5 (3.4)	Test with water		P
	Test with hexane		P
	Legible after test		P
	Label attached		P
4.6 (4)	CONSTRUCTION		P
4.6.1 (-)	Insulation not damaged when placing on support		P
4.6.2 (-)	Wiring fixed, to avoid rubbing		P
4.6.3 (-)	Stability 6°		P
4.6.4 (-)	Candlestick luminaires with switch		N/A
4.6.5 (-)	E5 lampholders		N/A
4.6 (4.2)	Components replaceable without difficulty		N/A
4.6 (4.3)	Wireways smooth and free from sharp edges		P
4.6 (4.4)	Lampholders		P
4.6 (4.4.1)	Integral lampholder		P
4.6 (4.4.2)	Wiring connection		P
4.6 (4.4.3)	Lampholder for end-to-end mounting		P
4.6 (4.4.4)	Positioning		N/A
4.6 (4.4.5)	Peak pulse voltage		N/A
4.6 (4.4.6)	Centre contact		N/A
4.6 (4.4.7)	Rough service luminaires		N/A
4.6 (4.4.8)	Lamp connectors		N/A
4.6 (4.5)	Starter holders		N/A
	Starter holder in luminaires other than class II		N/A
	Starter holder class II construction		N/A
4.6 (4.6)	Terminal blocks		N/A
	Tails		N/A
	Unsecured blocks		N/A
4.6 (4.7)	Terminals and supply connections		N/A
4.6 (4.7.1)	Contact to metal parts		N/A
4.6 (4.7.2)	Test 8 mm live conductor		N/A

EN 60598-2-4			
Clause	Requirement – Test	Result – Remark	Verdict
	Test 8 mm earth conductor		N/A
4.6 (4.7.3)	Terminals for supply conductors		N/A
4.6 (4.7.4)	Terminals other than supply connection		N/A
4.6 (4.7.5)	Heat-resistant wiring/sleeves		N/A
4.6 (4.7.6)	Multi-pole plug		N/A
4.6 (4.8)	Switches:		P
	- adequate rating		N/A
	- adequate fixing		N/A
	- polarized supply		P
4.6 (4.9)	Insulating lining and sleeves		P
4.6 (4.9.1)	Retainment		P
	Method of fixing..... :		P
4.6 (4.9.2)	Insulated linings and sleeves		P
	a) & c) Insulation resistance and electric strength		P
	b) Ageing test. Temperature (°C)..... :		N/A
4.6 (4.10)	Insulation of Class II luminaires		P
4.6 (4.10.1)	No contact, mounting surface - accessible metal parts - wiring of basic insulation		P
	Safe installation fixed luminaires		N/A
	Capacitors		N/A
	Interference suppression capacitors according to IEC 60384-14		N/A
4.6 (4.10.2)	Assembly gaps:		N/A
	- not coincidental		N/A
	- no straight access with test probe		N/A
4.6 (4.10.3)	Retainment of insulation:		P
	- fixed		P
	- unable to be replaced; luminaire inoperative		P
	- sleeves retained in position		N/A
	- lining in lampholder		N/A
4.6 (4.11)	Electrical connections		N/A
4.6 (4.11.1)	Contact pressure		N/A

EN 60598-2-4			
Clause	Requirement – Test	Result – Remark	Verdict
4.6 (4.11.2)	Screws:		N/A
	- self-tapping screws		N/A
	- thread-cutting screws		N/A
	- at least two self-tapping screws		N/A
4.6 (4.11.3)	Screw locking:		N/A
	- spring washer		N/A
	- rivets		N/A
4.6 (4.11.4)	Material of current-carrying parts		N/A
4.6 (4.11.5)	No contact to wood		N/A
4.6 (4.11.6)	Electro-mechanical contact systems		N/A
4.6 (4.12)	Mechanical connections and glands		P
4.6 (4.12.1)	Screws not made of soft metal		P
	Screws of insulating material		N/A
	Torque test: torque (Nm); part ..... :	0.5Nm	P
4.6 (4.12.2)	Screws with diameter < 3 mm screwed into metal		N/A
4.6 (4.12.4)	Locked connections:		N/A
	- fixed arms; torque (Nm) ..... :		N/A
	- lampholder; torque (Nm)..... :		N/A
	- push-button switches; torque 0,8 Nm ..... :		N/A
4.6 (4.12.5)	Screwed glands; force (N) ..... :		N/A
4.6 (4.13)	Mechanical strength		P
4.6 (4.13.1)	Impact tests:		P
	- fragile parts; energy (Nm)..... :		N/A
	- other parts; energy (Nm)..... :	0.5Nm	P
	1) live parts		P
	2) linings		P
	3) protection		P
	4) covers		P

EN 60598-2-4			
Clause	Requirement – Test	Result – Remark	Verdict
4.6 (4.13.3)	Straight test finger		P
4.6 (4.13.4)	Rough service luminaires		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
4.6 (4.13.6)	Tumbling barrel		N/A
4.6 (4.14)	Suspensions and adjusting devices		P
4.6 (4.14.1)	Mechanical load:		N/A
	A) four times the weight		N/A
	B) torque 2,5 Nm		N/A
	C) bracket arm; bending moment (Nm) ..... :		N/A
	D) load track-mounted luminaires		N/A
	E) clip-mounted luminaires, glass-shelve. Thickness (mm) ..... :		N/A
	metal rod. diameter (mm)..... :		N/A
4.6 (4.14.2)	Load to flexible cables		N/A
	Mass (kg) ..... :		N/A
	Stress in conductors (N/mm²) ..... :		N/A
	Mass (kg) of semi-luminaire..... :		N/A
	Bending moment (Nm) of semi-luminaire ..... :		N/A
4.6 (4.14.3)	Adjusting devices:		P
	- flexing test; number of cycles ..... :		P
	- strands broken		N/A
	- electric strength test afterwards		P
4.6 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N/A
4.6 (4.14.5)	Guide pulleys		N/A
4.6 (4.14.6)	Strain on socket-outlets		N/A

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Clause	Requirement – Test	Result – Remark	Verdict
4.6 (4.15)	Flammable materials:		N/A
	- glow-wire test 650 °C		N/A
	- 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
4.6 (4.15.2)	Luminaires made of thermoplastic material with lamp control gear		P
	a) construction		P
	b) temperature sensing control		N/A
	c) surface temperature		N/A
4.6 (4.16)	Luminaires suitable for normally flammable surfaces		P
	No lamp control gear		N/A
4.6 (4.16.1)	Lamp control gear spacing:		N/A
	- spacing 35 mm		N/A
	- spacing 10 mm		N/A
4.6 (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
4.6 (4.16.3)	Luminaires suitable for normally flammable surfaces measured		P
4.6 (4.17)	Drain holes		N/A
	Clearance at least 5 mm		N/A
4.6 (4.18)	Resistance to corrosion: .		P
4.6 (4.18.1)	- rust-resistance		P
4.6 (4.18.2)	- season cracking in copper		N/A
4.6 (4.18.3)	- corrosion of aluminium		N/A
4.6 (4.19)	Ignitors compatible with ballast		N/A

EN 60598-2-4			
Clause	Requirement – Test	Result – Remark	Verdict
4.6 (4.20)	Rough service vibration		N/A
4.6 (4.21)	Protective shield:		N/A
4.6 (4.21.1)	Shield fitted		N/A
4.6 (4.21.2)	Particles from a shattering lamp not impair safety		N/A
4.6 (4.21.3)	No direct path		N/A
4.6 (4.21.4)	Impact test on shield		N/A
	Glow-wire test on lamp compartment		N/A
4.6 (4.22)	Attachments to lamps		N/A
4.6 (4.23)	Semi-luminaires comply Class II		N/A
4.6 (4.24)	UV radiation, metal halide lamps		N/A
4.6 (4.25)	No sharp point or edges		P
4.6 (4.26)	Short-circuit protection:		N/A
4.6 (4.26.1)	Uninsulated accessible SELV parts		N/A
4.6 (4.26.2)	Short-circuit test		N/A
4.6 (4.26.3)	Test chain according to IEC 61032		N/A
4.7 (11)	CREEPAGE DISTANCES AND CLEARANCES		P
	Working voltage (V) ..... :	AC 220-240V	-
	Voltage form	~	-
	PTI	< 600 [✓] ≥ 600 [ ]	-
	Rated pulse voltage (kV)..... :		-
	(1) Current-carrying parts of different polarity: cr (mm); cl (mm) 2,5/1,7..... :		P
	(2) Current-carrying parts and accessible parts: cr (mm); cl (mm) ..... :	>5.0/30	P
	(3) Parts becoming live due to breakdown of basic insulation and metal parts: cr (mm); cl (mm)..... :		N/A
	(4) Outer surface of cable where it is clamped and metal parts: cr (mm); cl (mm)3.6/3.6..... :		N/A

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Clause	Requirement – Test	Result – Remark	Verdict
	(5) Current-carrying parts of switches and metal parts, after removal of insulation: cr (mm); cl (mm)..... :		N/A
	(6) Current-carrying parts and supporting surface: cr (mm); cl (mm) 5.0/3.0..... :		P
4.8 (7)	PROVISION FOR EARTHING		N/A
4.8 (7.2.1 + 7.2.3)	Accessible metal parts		N/A
	Metal parts in contact with supporting surface		N/A
	Resistance < 0,5 Ω		N/A
	Two self-tapping screws used		N/A
	Thread-forming screws		N/A
	Connector earthing first		N/A
4.8 (7.2.2 + 7.2.3)	Earth continuity in joints etc.		N/A
4.8 (7.2.4)	Locking of clamping means		N/A
	Compliance with 4.7.3		N/A
4.8 (7.2.5)	Earth terminal integral part of connector socket		N/A
4.8 (7.2.6)	Earth terminal adjacent to mains terminals		N/A
4.8 (7.2.7)	Electrolytic corrosion of the earth terminal		N/A
4.8 (7.2.8)	Material of earth terminal		N/A
	Contact surface bare metal		N/A
4.8 (7.2.10)	Class II luminaire for looping-in		N/A
4.8 (7.2.11)	Earthing core coloured green-yellow		N/A
	Length of earth conductor		N/A
4.9 (14)	SCREW TERMINALS		N/A
	Separately approved; component list		N/A
	Part of the luminaire		N/A
4.9 (15)	SCREWLESS TERMINALS		N/A
	Separately approved; component list		N/A
	Part of the luminaire		N/A

EN 60598-2-4			
Clause	Requirement – Test	Result – Remark	Verdict
4.10 (5)	EXTERNAL AND INTERNAL WIRING		P
4.10 (5.2)	Supply connection and external wiring		P
4.10 (5.2.1)	Means of connection..... :		P
4.10 (5.2.2)	Type of cable..... :	VT-7500, VT-7600	P
	Nominal cross-sectional area (mm²)..... :	2X0.75 mm²	P
4.10 (5.2.3)	Type of attachment, X, Y or Z	Type Y	P
4.10 (5.2.5)	Type Z not connected to screws		N/A
4.10 (5.2.6)	Cable entries		P
	- suitable for introduction		P
	- adequate degree of protection		P
4.10 (5.2.7)	Cable entries through rigid material have rounded edges		P
4.10 (5.2.8)	Insulating bushings:		P
	- suitably fixed		P
	- material in bushings		P
	- tubes or guards made of insulating material		P
4.10 (5.2.9)	Locking of screwed bushings		N/A
4.10 (5.2.10)	Cord anchorage:		P
	- covering protected from abrasion		P
	- clear how to be effective		P
	- no mechanical or thermal stress		P
	- no tying of cables into knots etc.		P
	- insulating material or lining		P
4.10 (5.2.10.1)	Cord anchorage for type X attachment:		N/A
	a) at least one part fixed		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

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Clause	Requirement – Test	Result – Remark	Verdict
	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
4.10 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment	type Y	P
4.10 (5.2.10.3)	Tests:		P
	- impossible to push cable; unsafe		P
	- pull test: 25 times; pull (N) ..... :		P
	- torque test: torque (Nm)..... :		P
	- displacement ≤ 2 mm		P
	- no movement of conductors		P
	- no damage of cable or cord		P
4.10 (5.2.11)	External wiring passing into luminaire		P
4.10 (5.2.12)	Looping-in terminals		N/A
4.10 (5.2.13)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		N/A
4.10 (5.2.14)	Mains plug same protection		N/A
	Class III luminaire plug		N/A
4.10 (5.2.15)	Colour code low voltage		P
4.10 (5.2.16)	Appliance inlets (IEC 60320)		N/A
	Appliance couplers of class II type		N/A
4.10 (5.3)	Internal wiring		P
4.10 (5.3.1)	Cross-sectional area (mm^2) ..... :		P
	Insulation thickness		P
	Temperature resistant		P
	Sleeves suitable for hot spots		P
	Green-yellow for earth only		N/A
	Through wiring		N/A
	- cross-sectional area (mm^2)..... :		N/A

EN 60598-2-4			
Clause	Requirement – Test	Result – Remark	Verdict
	- not delivered/ mounting instruction		N/A
	- factory assembled		N/A
	- socket outlet loaded (A) ..... :		N/A
	- temperatures..... :		N/A
4.10 (5.3.2)	Sharp edges etc.		P
	No moving parts of switches etc.		N/A
	Joints, raising/lowering devices		N/A
	Telescopic tubes etc.		N/A
	No twisting over 360°		P
4.10 (5.3.3)	Openings		P
	Bushings not removable		P
	Bushings in sharp openings		P
	Cables with protective sheath		P
4.10 (5.3.4)	Joints and junctions effectively insulated		P
4.10 (5.3.5)	Strain on internal wiring		N/A
4.10 (5.3.6)	Wire carriers		N/A
4.10 (5.3.7)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		N/A
4.11 (8)	PROTECTION AGAINST ELECTRIC SHOCK		P
4.11.1 (-)	Luminaires with BC cap		N/A
4.11 (8.2.1)	Live parts not accessible		P
	Protection in any position		P
	Double-ended tungsten filament lamp		N/A
	Insulation lacquer not reliable		P
	Double-ended high pressure discharge lamp		N/A
4.11 (8.2.2)	Portable luminaire adjusted in most unfavourable position		P
4.11 (8.2.3)	Class II luminaire:		P

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Clause	Requirement – Test	Result – Remark	Verdict
	- basic insulated metal parts not accessible during starter or lamp replacement		P
	- basic insulation not accessible other than during starter or lamp replacement		N/A
	- glass protective shields not used as supplementary insulation		N/A
	Class I luminaire with BC lampholder		N/A
4.11 (8.2.4)	Portable luminaire:		P
	- protection independent of supporting surface		P
	- terminal block completely covered		N/A
4.11 (8.2.6)	Covers reliably secured		P
4.11 (8.2.7)	Discharging of capacitors ≥ 0,5 μF		N/A
	Portable plug connected luminaire with capacitor		N/A
	Other plug connected luminaire with capacitor		N/A
	Discharge device on or within capacitor		N/A
	Discharge device mounted separately		N/A

4.12 (12)	ENDURANCE TEST AND THERMAL TEST		P
4.12 (12.3)	Endurance test:		P
	- mounting-position ..... :	Normal position	P
	- test temperature (°C) ..... :	35°C	P
	- total duration (h)..... :	240h	P
	- supply voltage: Un factor; calculated voltage (V) ..... :	254.4VAC	P
	- lamp used ..... :	Self-ballast lamp	P
4.12 (12.3.2)	After endurance test:		P
	- no part unserviceable		P
	- luminaire not unsafe		P
	- no damage to track system		N/A
	- marking legible		P
	- no cracks, deformation etc.		P
4.12 (12.4)	Thermal test (normal operation)		P
4.12 (12.5)	Thermal test (abnormal operation)		N/A

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Clause	Requirement – Test	Result – Remark	Verdict
4.12 (-)	Test overturned position (overturns < 15°)		N/A
4.12 (12.6)	Thermal test (failed lamp control gear condition):		N/A
4.12 (12.6.1)	- case of abnormal conditions..... :		N/A
	- electronic lamp control gear		N/A
	- measured winding temperature (°C): at 1,1 Un :		N/A
	- measured mounting surface temperature (°C): at 1,1 Un..... :		N/A
	- calculated mounting surface temperature (°C). :		N/A
	- track-mounted luminaires		N/A
4.12 (12.6.2)	Temperature sensing control		N/A
	- case of abnormal conditions..... :		N/A
	- 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
4.12 (12.7)	Thermal test:		P
	- case of abnormal conditions		P
4.12 (12.7.1)	- measured winding temperature (°C): at 1,1 Un :		P
	- measured temperature of fixing point/ exposed part (°C): at 1,1 Un..... :		P
	- calculated temperature of fixing point/ exposed part (°C)..... :		N/A
4.12 (12.7.2)	Temperature sensing control		N/A
	- thermal link		N/A
	- manual reset cut-out		N/A
	- auto reset cut-out		N/A
	- measured temperature of fixing point/ exposed part (°C): ..... :		N/A

4.13 (9)	RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE		P
4.13 (9.2)	Tests for ingress of dust, solid objects and moisture:		P
	- classification according to IP ..... :	IP20	P

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Clause	Requirement – Test	Result – Remark	Verdict
	- mounting position during test..... :		N/A
	- fixing screws tightened; torque (Nm)..... :		N/A
	- tests according to clauses ..... :		N/A
	- electric strength test afterwards		N/A
	a) no deposit in dust-proof luminaire		N/A
	b) no talcum in dust-tight luminaire		N/A
	c) no trace of water on current-carrying parts or where it could become a hazard		N/A
	d) i) For luminaires without drain holes – no water entry		N/A
	d) ii) For luminaires with drain holes – no hazardous water entry		N/A
	e) no water in watertight luminaire		N/A
	f) no contact with live parts (IP 2X)		P
	f) no entry into enclosure (IP 3X and IP 4X)		N/A
4.13 (9.3)	Humidity test 48 h		P
4.14 (10)	INSULATION RESISTANCE AND ELECTRIC STRENGTH		P
4.14 (10.2.1)	Insulation resistance test		P
	Insulation resistance (MΩ):		P
	SELV:		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
	Other than SELV:		P
	- between live parts of different polarity..... :	>3MΩ	P
	- between live parts and mounting surface..... :	100 MΩ	P
	- between live parts and metal parts..... :	100 MΩ	P
	- between live parts of different polarity through action of a switch ..... :		N/A
4.14 (10.2.2)	Electric strength test		P
	Dummy lamp		N/A
	Luminaires with ignitors after 24 h test		N/A

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Clause	Requirement – Test	Result – Remark	Verdict
	Luminaires with manual ignitors		N/A
	Test voltage (V):		P
	SELV:		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
	Other than SELV:		P
	- between live parts of different polarity ..... :	3000V	P
	- between live parts and mounting surface ..... :	3000V	P
	- between live parts and metal parts ..... :	3000V	P
	- between live parts of different polarity through action of a switch ..... :		N/A
4.14 (10.3.1)	Leakage current (mA) ..... :	0.01mA	P
4.15 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING		N/A
4.15 (13.2.1)	Ball-pressure test:		N/A
	- part tested; temperature (°C)..... :		N/A
	- part tested; temperature (°C)..... :		N/A
4.15 (13.3.1)	Needle flame test (10 s):		N/A
	- part tested ..... :		N/A
	- part tested ..... :		N/A
4.15 (13.3.2)	Glow-wire test (650°C):		N/A
	- part tested ..... :		N/A
	- part tested ..... :		N/A
	- part tested ..... :		N/A
4.15 (13.4.1)	Tracking test: part tested ..... :		N/A
	COMMON MODIFICATIONS (including A11 and A12 to EN 60598-1:2000)		N/A

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Clause	Requirement – Test	Result – Remark	Verdict
(3.3.101 + 5.2.1)	For luminaires connected by tails, information about terminal block		N/A
4.10 (5.2.1) (EN 60598 -1:2000/ A12: 2002)	Connecting leads (tail): account shall be taken of national installation rules/practice when deciding whether to supply a connection device or not.		N/A
(5.2.2)	Cables equal to HD 21 S2 or HD 22 S2		N/A
(5.2.15)	Colour code low voltage		N/A
C (EN 60598: 2000/A11)	ANNEX C, ABNORMAL CIRCUIT CONDITIONS (For metal halide lamps and high-pressure sodium vapour lamps.)		N/A
	Item b) and Figure C.3 replaced		N/A
ZB	ANNEX ZB, SPECIAL NATIONAL CONDITIONS		N/A
(2.2)	Class 0 not accepted		N/A
4.4 (2.2)	PL: class 0 and class I not permitted on portable luminaires		N/A
(3.3)	DK: power supply cord with label		N/A
	IT: warning label on Class 0 luminaire		N/A
(4.5.1)	DK: socket-outlets		N/A
(4.5.1)	FR: socket-outlets		N/A
(5.2.1)	DK, FI, SE, GB: type of plug		N/A
ZC	ANNEX ZC, NATIONAL DEVIATIONS		N/A
(13.3)	DK: Needle flame test or glow-wire test 750 °C for luminaires in access routes		N/A
(13.3)	GB: Requirements according to United Kingdom Building Regulation		N/A
(13.3.2)	FR: Glow-wire test 850 °C alt. 750 °C for luminaires in premises open to public and workers		N/A

TABLE	**List of critical components and materials**			
Component	manufacturers / trademark	Type / model	Value / rating	Approval/ Reference
Lampholder	ZhongShan Xiaolan Town Jia Zhang Electric Appliance Factory	E27	250 V; 4 A; T210 □ C	VDE
Plug	Kenic Electric Mfg. Co., Ltd.	KE-21	AC 250 V; 2,5 A	VDE
Supply cord	New Square Company Ltd.	H03VVH2-F	300/300V, 2*0.75mm2	Tested with Appliance and UL
Switch	Openwise Industrial Limited	303	250 VAC; 2 A; 1E4; for Class II appliances; T55	VDE

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Clause	Requirement – Test	Result – Remark	Verdict

	ANNEX 2: TEMPERATURE MEASUREMENTS, THERMAL TESTS OF SECTION 12		P
	Type reference ..... :	VT-7600	--
	Lamp used ..... :	60W	--
	Mounting position of luminaire ..... :	No	--
	Supply wattage (W) ..... :	As in normal use	--
	Supply current (A) ..... :	63.7W	--
	Calculated power factor ..... :	--	--
	Table: measured temperatures corrected for ta = 25 °C:		--
	- abnormal operating mode ..... :	--	--
	- test 1: 1,06 times rated voltage or 1,05 times rated wattage ..... :	Supplied from adapter 1.06x240V=254.4V	--
	- test 2: 1,1 times rated voltage or 1,05 times rated wattage ..... :	--	--
	- test 3: 1,1 times rated voltage or 1,05 times rated wattage ..... :	--	--
	- test 4: 1,1 times rated voltage or 1,05 times rated wattage ..... :	--	--
	- test 5: 1,1 times rated voltage or 1,05 times rated wattage ..... :	--	--

temperature (°C) of part	clause 12.4 – normal		clause 12.5 – abnormal				
	test 1	Limits	test 2	test 3	test 4	test 5	Limits
Shade,outside	-	-	32.3	-	-	-	90
Internal wire	-	-	34.1	-	-	-	105
Lampholder contact	-	-	84.1	-	-	-	200
Lampholder screw	-	-	80.1	-	-	-	200
Lampholder rim	-	-	81.0	-	-	-	110
Supply cord	-	-	66.3	-	-	-	105
Plug, near pin	-	-	62.4	-	-	-	105
Ambient	-	-	25.6	-	-	-	-

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Clause	Requirement – Test	Result – Remark	Verdict
	ANNEX 3: SCREW TERMINALS (PART OF THE LUMINAIRE)		N/A
(14)	SCREW TERMINALS		N/A
(14.2)	Type of terminal ..... :		N/A
	Rated current (A)..... :		N/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 (mm²) ..... :		N/A
(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). :		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

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Clause	Requirement – Test	Result – Remark	Verdict
	ANNEX 4: SCREWLESS TERMINALS (PART OF THE LUMINAIRE)		N/A
(15)	SCREWLESS TERMINALS		N/A
(15.2)	Type of terminal ..... :		N/A
	Rated current (A)..... :		N/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
(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
(15.5.1)	Terminals internal wiring		N/A
(15.5.1.1)	Pull test spring-type terminals (4 N, 4 samples)		N/A
(15.5.1.2)	Pull test pin or tab terminals (4 N, 4 samples)		N/A
	Insertion force not exceeding 50 N		N/A
(15.5.2)	Permanent connections: pull-off test (20 N)		N/A
(15.6)			N/A
	Voltage drop (mV) after 1 h (4 samples)..... :		N/A
	Voltage drop of two inseparable joints		N/A
	Number of cycles ..... :		N/A
	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
(15.7)	Terminals external wiring		N/A
	Terminal size and rating		N/A
(15.8.1)	Pull test spring-type terminals (4 samples); pull (N)		N/A
	Pull test pin or tab terminals (4 samples); pull (N)		N/A

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Clause	Requirement – Test	Result – Remark	Verdict

(15.9)	Contact resistance test									N/A
	Voltage drop (mV) after 1 h									N/A
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)										
	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)										

Appendix 1
Photo Documentation

Photo 1 View: [√] Front [ ] Rear [ ] Right side [ ] Left side [ ] Top [ ] Bottom [ ] Internal	

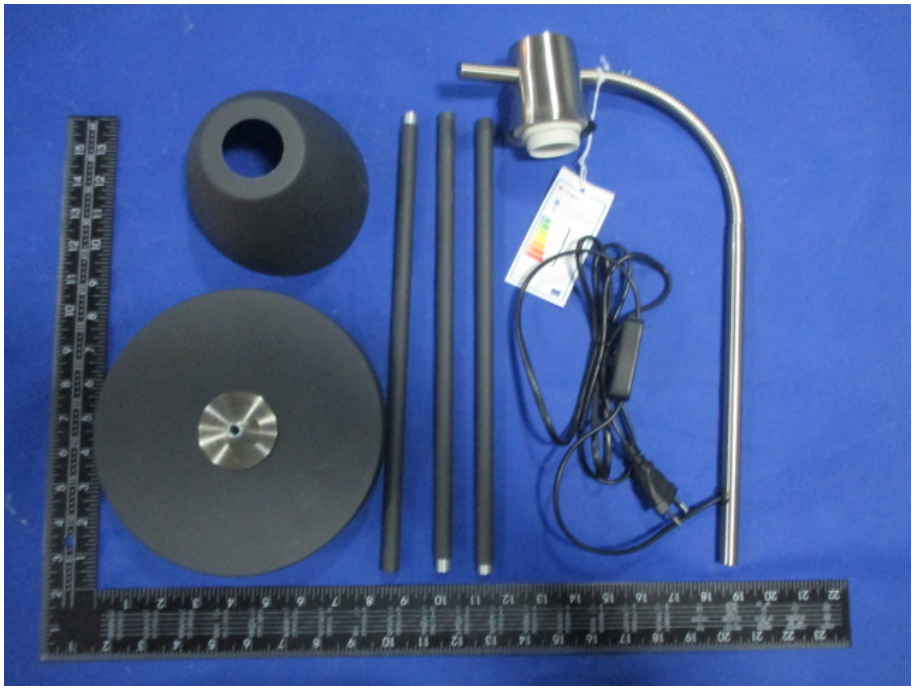
Photo 2 View: [ ] Front [ ] Rear [ ] Right side [ ] Left side [ ] Top [ ] Bottom [√] Internal	

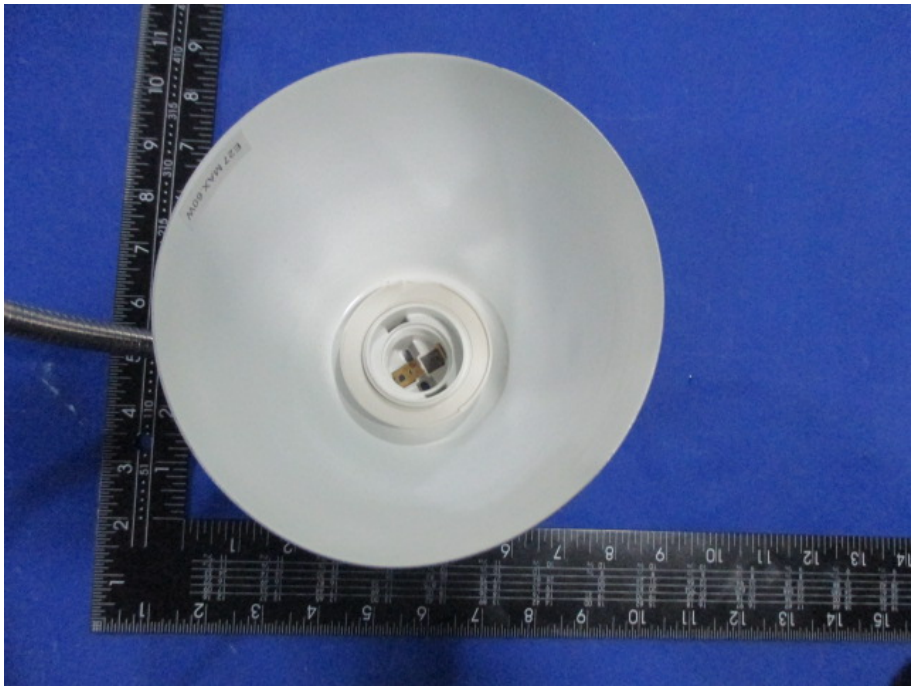
Photo 3 View: [ ] Front [ ] Rear [ ] Right side [ ] Left side [ ] Top [ ] Bottom [√] Internal	

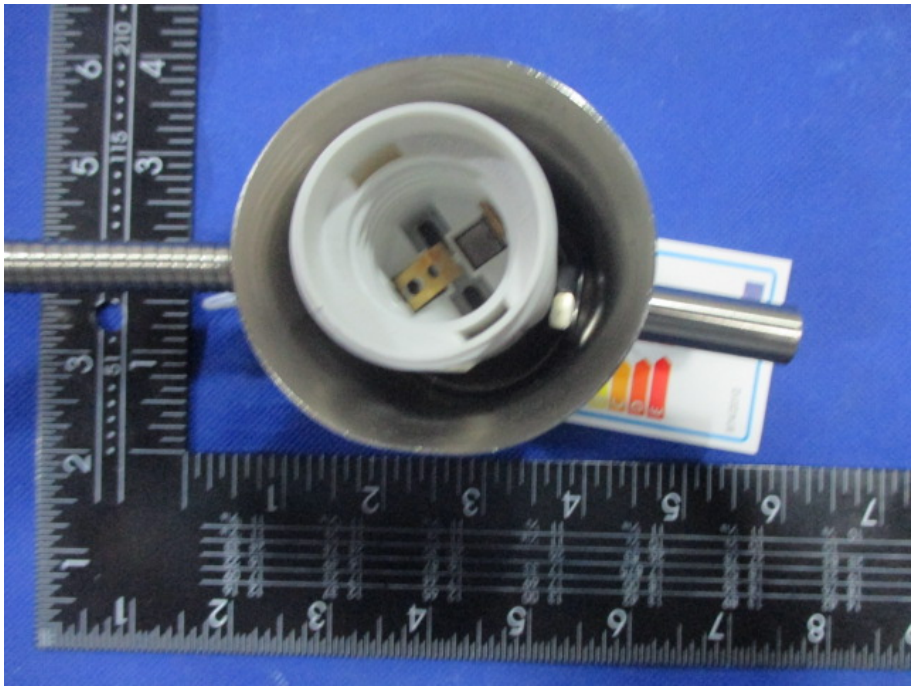
Photo 4 View: [ ] Front [ ] Rear [ ] Right side [ ] Left side [ ] Top [ ] Bottom [√] Internal	

Photo 5 View: [ ] Front [ ] Rear [ ] Right side [ ] Left side [ ] Top [ ] Bottom [√] Internal	

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