



CE LVD TEST REPORT

For

LED SPOTLIGHT

Model No.: VT-1805, VT-1817, VT-1824, VT-1825, VT-1834, VT-1835, VT-1836, VT-1837, VT-1839, VT-1840, VT-1892, VT-1967, VT-1977, VT-257, VT-267

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

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Report Number : J00.06.0004S-R1

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Date of Report : May 07, 2018

Note:

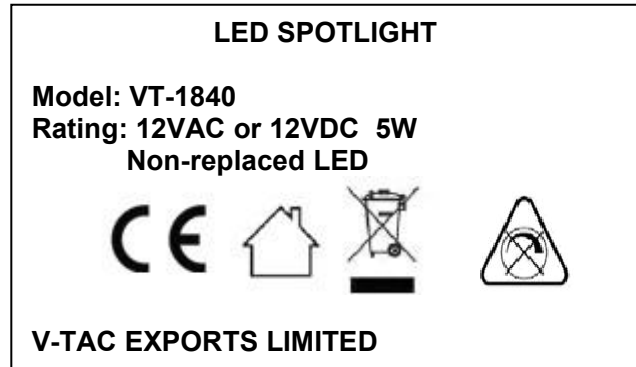
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4. This report is based on report J00.06.0004S dated January 12, 2016

TEST REPORT	
EN 62560:2012	
Self-ballasted lamps for general lighting services Safety requirements	
Report reference No.:	J00.06.0004S-R1
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 62560:2012 EN 60061-1:1993 EN 62031:2008+A1:2013+A2:2015 EN 61347-1:2008 + A1:2011+A2:2013 EN 61347-2-13:2014 EN 62471:2008 EN 62493:2010
Procedure deviation.....:	N/A
Non-standard test method.....:	N/A
Type of test equipment	LED SPOTLIGHT
Trade mark.....:	
Model/Type designation.....:	VT-1805, VT-1817, VT-1824, VT-1825, VT-1834, VT-1835, VT-1836, VT-1837, VT-1839, VT-1840, VT-1892, VT-1967, VT-1977, VT-257, VT-267
Rating.....:	Input: 12VAC or 12VDC 5W
Test item particulars:	--
Operating Condition	Continuous
Class of equipment	N/A
Protection against ingress of water	IP20

<p>General remarks:</p>	
<p>“(see remark #)” refers to a remark appended to the report.</p> <p>“(see appended table)” refers to a table appended to the report.</p> <p>Throughout this report a comma is used as the decimal separator.</p> <p>The test results presented in this report relate only to the object tested.</p> <p>This report shall not be reproduced except in full without the written approval of the testing laboratory.</p> <p>Until otherwise specified, all tests are done under normal ambient condition $25^{\circ}\text{C}\pm 10^{\circ}\text{C}$, Max RH: 75% and air pressure of 860 mbar to 1060 mbar.</p>	<p>Attached with:</p> <p>Attachment - A. Photo Documentation</p>
<p>Brief description of the test sample:</p> <ol style="list-style-type: none"> 1.This report covers models VT-1805, VT-1817, VT-1824, VT-1825, VT-1834, VT-1835, VT-1836, VT-1837, VT-1839, VT-1840, VT-1892, VT-1967, VT-1977, VT-257, VT-267; 2.Test data for VT-1840. represent all models in this test report, which is conditioned with Max. current, power consumption and the test result was pass; 3.Lamp base was evaluated with reference to EN 60061-1; 4.The European standard EN 62471 for LED laser product requirement has not considered; 5.The Safety specifications of LED modules for general lighting was evaluated with reference to EN 62031; 6.The European standard test EN61347-2-13 used in conjunction with EN 61347-1 for lamp control gear; 7.The test result presented in this report relate only to the object tested. The samples tested comply with the requirements of this standard; 8.The maximum ambient was 40°C; 9.This report is based on report GST130307109S dated march 13, 2013. 	

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 :	
<p style="text-align: center;">Global-Standard Testing Service Co., Ltd. Room 1911-1914, Noble Plaza, Qian Jin 1st Road, Bao An District, Shenzhen, Guangdong, China.</p>	
Tested by :	<p style="text-align: center;"><u>Justin Li</u> Signature</p> <p style="text-align: center;">Justin Li/ Engineer Name/title</p>
	<p style="text-align: center;"><u>May 03, 2018</u> Date</p>
Witnessed by :	<p style="text-align: center;"><u>Jerry Hu</u> Signature</p> <p style="text-align: center;">Jerry Hu/ Supervisor Name/title</p>
	<p style="text-align: center;"><u>May 07, 2018</u> Date</p>
Approved by :	<p style="text-align: center;"> Signature</p> <p style="text-align: center;">Tim Sun / Manager Name/title</p>
	<p style="text-align: center;"><u>May 07, 2018</u> Date</p>

Copy of marking plate



Note: Due to similarity of the labels, only above label was listed;

- The above copy of marking plate as an example, All the other models will have the same marking plate except the model name and input rating only and other parameter;

-The above markings are the minimum requirements required by the safety standard. For the final productions samples, the additional markings which do not give rise to misunderstanding may be added;

- the height of WEEE directive mark is at least 7mm height.

EN 60968			
Clause	Requirement + Test	Result - Remark	Verdict
4.	MARKING		P
4.1	1) Mark of origin	See label	P
	2) Rated voltage/voltage range (V)	12VAC or 12VDC	P
	3) Rated input (W)	See label	P
	4) Rated frequency (Hz)		N
4.2	1) Lamp current (A)		--
	2) Burning position if restricted		N
	3) The mechanical stress caused by the weight of the lamp in the luminaire		N
	4) Other things which have effect on the operation		N
4.3	1) Presence and legibility of the marking by visual inspection		P
	2) The durability of the marking is checked by rubbing lightly with water and hexane for 15s		P
	3) Availability of information by visual inspection		P
Addition:	Position of the marking	On the body	P
	Language of instructions	English	P
	Suitability for use indoors		P
	Wireways smooth and free from sharp edges		P

5.	INTERCHANGEABILITY		P
5.1	Interchangeability shall be ensured by the use of caps in accordance with IEC Publication 61-1		P
5.2	Compliance of the combination of cap and bulb is checked by the use of gauges		P
	B 22d:		N
	A max. and A min. gauge 7006-10/11		N
	D1 max. gauge 7006-10/11		N
	N min. gauge 7006-10/11		N
	Diametrical position of the pins:		N
	Insertion in lampholder gauge 7006-4A		N
	Retention in lampholder gauge 7006-4B		N
	B22		N

EN 60968			
Clause	Requirement + Test	Result - Remark	Verdict
	G9:		N
	MR16		P
	E 27:		N
	Max. dimension of the screw thread gauge		N
	Min. major diameter of the screw thread gauge 7006-28A		N
	Contact making gauge 7006-50	reference to EN 60061-1	N
	E14:		N
	G13		N
	GU10		N
5.3	Mass not exceeding 1Kg		P
	Bending moment not exceeding 2Nm		P

6.	PROTECTION AGAINST ELECTRIC SHOCK		P
	Lamps shall be so constructed that no internal metal parts or live parts are accessible, when the lamp is installed in a prescribed lampholder. Compliance is checked by means of the standard test finger with force of 10N.		P
	Edison screw caps (E27) compliance with gauge 7006-51A		N
	B22d caps compliances with normal incandescent lamps		N
	B22 caps compliances with normal incandescent lamps		N
	External metal parts shall be so designed that live parts are not accessible (test of Cl. 7)		P
Addition:	Live parts not accessible		P
	Protection in any position		P
	Insulation lacquer not reliable		P
	Class II luminaire:		N
	- insulation-encased, reinforced insulation		N
	- glass protective shields not used as supplementary insulation		N
	Covers have adequate strength		P

EN 60968			
Clause	Requirement + Test	Result - Remark	Verdict
	Covers reliably secured		P
	Discharging of capacitors $\geq 0,5 \mu\text{F}$		N
	Portable plug connected luminaire with capacitor		N

7.	INSULATION RESISTANCE AND ELECTRIC STRENGTH AFTER HUMIDITY TREATMENT		P
7.1	After storage 48 h at a 91-95 % relative humidity and at 20-30 °C.		P
	Insulation resistance with 500 V d.c., required $\geq 4 \text{ M}\Omega$.		P
7.2	Immediately after the insulation resistance test, electric strength test for 1 min.		P
	Type HV (220 ... 250 V): 4000 V rms		P
	Type BV (100 ... 120 V): $2xU + 1000 \text{ V}$		N
	No flashover or breakdown		P

8.	MECHANICAL STRENGTH		P
	Torsion resistance		P
	The mechanical strength of connection between the cap and the bulb/part of the lamp is checked by the torque		P
	- B22d 3 Nm:		N
	- B22 3 Nm:		N
	- E27 3 Nm:		N
	-G9 1.2Nm:		N
	-G13 1.2Nm:		N
	-GU10 1.2Nm:		N
	-MR16 1.2Nm		P
Addition:	Lampholders		N
	Mounting brackets for Edison screw or bayonet-capped lampholders are subjected to testing for 1min, to the following bending moments:		N
	For E14 and B15 lampholders 1.0Nm;		N

EN 60968			
Clause	Requirement + Test	Result - Remark	Verdict
	For E26, E27 and B22 lampholders 2.0Nm;		N
	For E39 and E40 lampholders		N
	Locked connections:		P
	- fixed arms; torque (Nm).....:	5.0Nm	P
	- lampholder; torque (Nm).....:		N
	- push-button switches; torque (Nm).....:		N
	No sharp point or edges (BS EN60598-1:2008)		P
	Impact tests:		P
	- fragile parts; energy (Nm).....:	0.20Nm	P
	- other parts; energy (Nm).....:	0.35Nm	P
	1) live parts		P
	2) linings		P
	3) protection		P
	4) covers		P
	Straight test finger		P

9.	CAP TEMPERATURE RISE		P
	Cap temperature rise ΔT_s not exceeding the condition specified in IEC Publication 360		P
	- B22d..... 125K :		N
	- B22..... 125K :		N
	- B15d..... 125K :		N
	- E27..... 120K :		N
	- E14..... 120 K :		N
	-G13..... 55 K		N
	-G9..... 55 K		N
	-GU10..... 55 K		N
	-MR16..... 55 K		P
Addition:	The thermal requires of other parts (EN60598-1:2008)	See appended table	P
	- no part unserviceable		P

EN 60968			
Clause	Requirement + Test	Result - Remark	Verdict
	- luminaire not unsafe		P
	- no damage to track system		N
	- marking legible		P
	- no cracks, deformation etc.		P
	Thermal test (normal operation)		P
	Thermal test (abnormal operation)		P

10.	RESISTANCE TO HEAT		P
	External parts of insulating material providing protection against electric shock, and parts of insulating material retaining live parts in position, ball pressure test:		P
	Part tested; temperature (°C); diameter of impression (≤ 2 mm):	Lamp plastical base, PCB, Temperature: 125°C/1h See table 10	P
	Part tested; temperature (°C); diameter of impression (≤ 2 mm):		N
	Part tested; temperature (°C); diameter of impression (≤ 2 mm):		N

11.	RESISTANCE TO FLAME AND IGNITION		P
	Parts of insulating material retaining live parts in position and external parts of insulating material providing protection against electric shock, glow-wire test 650 °C	Lamp plastical base, PCB	P
	Part tested; temperature (°C).....:	See table 11	P
	Part tested; temperature (°C).....:		N
	Part tested; temperature (°C).....:		N
	No visible flame and no sustained glowing		P
	Flames and glowing, extinguish within 30 s.....:		P
	No ignition of the tissue paper		P

12.	FAULT CONDITIONS		P
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EN 60968			
Clause	Requirement + Test	Result - Remark	Verdict
	a) In a switch-start circuit, the starter is short-circuited		N
	b) Short-circuit across capacitors		P
	c) The lamp does not start, because one of the cathodes is broken		N
	d) The lamp does not start, although the cathode circuits are intact (de-activated lamp)		N
	e) The lamp operates, but one of the cathodes is de-activated or broken (rectifying effect)		N
	f) Opening or bridging other points in the circuit where the diagram indicates that such a fault condition may impair safety		N

Addition:	CREEPAGE DISTANCES AND CLEARANCES (EN 60598-1, EN 61347-2-13)		N
	Class of protection..... :	Class III	N
	Working voltage (V)..... :		N
	Voltage form		N
	PTI		N
	Rated pulse voltage (kV)		N
	(1) Live parts of different polarity: cr (mm); cl (mm)		N
	(2) Live parts and accessible parts: cr (mm); cl (mm)..... :		N
	(3) Parts becoming live: cr (mm); cl (mm)... :		N
	(4) Outer surface of cable: cr (mm); cl (mm):		N
	(5) Live parts of switches: cr (mm); cl (mm):		N
	(6) Live parts and supporting surface: cr (mm); cl (mm)..... :		N

EN 60968			
Clause	Requirement + Test	Result - Remark	Verdict

TABLE	List of critical components and materials			
Component	manufacturers / trademark	Type / model	Value / rating	Approval/ Reference
Lmap base plastical material	Chang Chun Plastics Co Ltd	FBT-756	V-0, 90°C	UL E59481
Plastic enclosur	Chang Chun Plastics Co Ltd	FBT-756	V-0, 90°C	UL E59481
lamp base MR16	DongGuan XiangJiang Electronic Lamps Factory	--	24V, 1A	Test according to EN60061
Input wire	--	3239	300V, 150°C, 24AWG	UL
Fuse resistance	Shenzhen G-Uni Optoelectronics Co.,Ltd.	--	10 Ω 1W	Tested with appliance
PCB	Shikibo Electronics Co Ltd	E4	V-0, 130°C	UL E84369

EN 60968			
Clause	Requirement + Test	Result - Remark	Verdict

Test Data table

Table 9		Heating under normal operating conditions		P
No.	Test points	Rated supply voltage 12VDC measured Δt (°C)	Limit (°C)	
1	Input wire	57.3	75	
2	PCB under capacitor	63.1	130	
3	PCB under LED	65.6	130	
4	Plastic enclosure inside	54.3	90	
5	Lamp base	41.4	55	
6	Plastic enclosure outside	43.7	90	
7	Ambient	25.2	--	

Table 10		TABLE: ball pressure test of thermoplastics		P
Part	Test temperature (°C)	Impression diameter (mm)	Required impression diameter (mm)	
Lamp plastical base	125	1.42	≤2.0	
PCB	125	1.28	≤2.0	

Table 11		TABLE: glow wire test		P
Part at:/	Test temperature (°C)	Result		
Lamp plastical base	650	No any flame or glowing		
PCB	650	No any flame or glowing		

Attachment –A
Photo Documentation

<p>Photo 1</p> <p>View:</p> <p><input checked="" type="checkbox"/> Front</p> <p><input type="checkbox"/> Rear</p> <p><input type="checkbox"/> Right side</p> <p><input type="checkbox"/> Left side</p> <p><input type="checkbox"/> Top</p> <p><input type="checkbox"/> Bottom</p> <p><input type="checkbox"/> Internal</p>	
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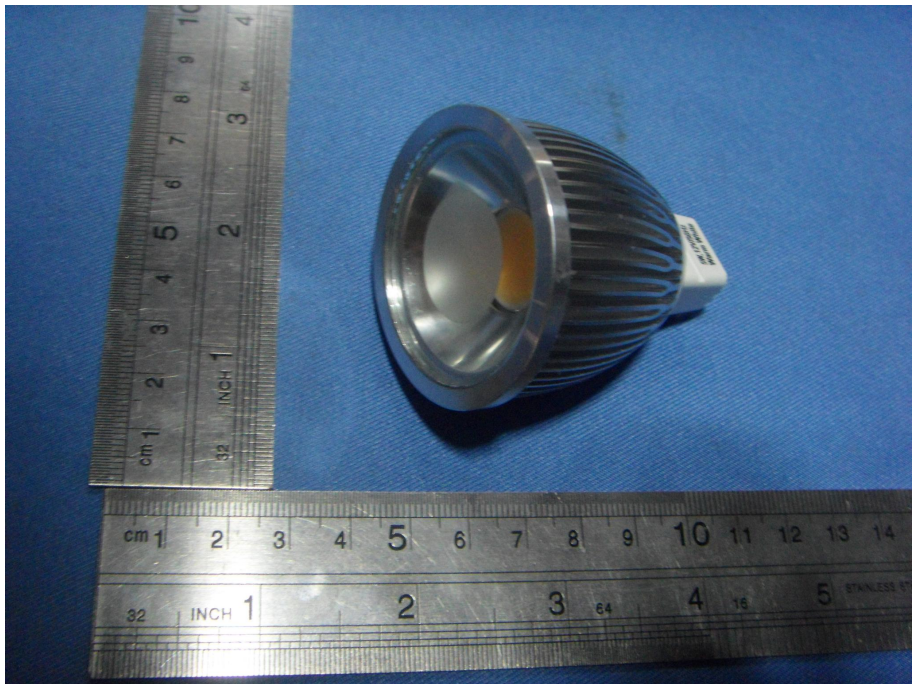
<p>Photo 2</p> <p>View:</p> <p><input checked="" type="checkbox"/> Front</p> <p><input type="checkbox"/> Rear</p> <p><input type="checkbox"/> Right side</p> <p><input type="checkbox"/> Left side</p> <p><input type="checkbox"/> Top</p> <p><input type="checkbox"/> Bottom</p> <p><input type="checkbox"/> Internal</p>	
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Photo 3

View:

- Front
- Rear
- Right side
- Left side
- Top
- Bottom
- Internal



--END--.