LABORATORY FOR TESTING OF MACHINERY, EQUIPMENT AND DEVICES

CENTER FOR TESTING AND EUROPEAN CERTIFICATION LTD

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TEST REPORT

№ 2e-14-1064 / 31.10.2014

OBJECT TO BE TESTED: LED lamp Model: LED50SMD3014 - 5,5 W cat. No: 99LED419
Model representative of: LED60SMD3528 - 3W cat. № 99LED411 и 99LED412;
LED50SMD3014 - 5,5W cat. № 99LED420;
LEDSMDPAR16 cat. № 99LED605 и 99LED606
(name of obejct to be tested , type, model, quantity, type – portable, fixed, for walling in and other)

APPLICANT FOR TEST: "ELMARK INDUSTRIES" SC. 2 Dobrudja Blvd. Dobrich, Bulgaria ,
Tel.: 058 500 055, e-mail: denkov@elmark.bg
Application № 1064 / 16.10.2014
(name of the firm – applicant, address, telephone, number and date of the test application)

METHOD OF TEST : BDS EN 62560:2012 Self-ballasted LED-lamps for general lighting services by voltage > 50 V – Safety specifications
(number and name of the standards)

DATE OF ACCEPTANCE IN THE TEST LABORATORY: 16.10.2014

CODE OF THE OBJECT: 1 piece
(identification number , year of production)

MANIFACTURER: "ELMARK INDUSTRIES" SC. 2 Dobrudja Blvd. Dobrich, Bulgaria ,
Tel.: 058 500 055, e-mail: denkov@elmark.bg
(firm, trade mark, address)

DECLARED TECHNICAL DATA:
Rated voltage – 230 - 240 V
Rated frequency – 50 - 60 Hz
Rated power – 5,5 W
Cab – E14

DATE OF TEST PERFORMANCE : 16.10.2014 – 31.10.2014

LABORATORY CHIFF :.....
/ T. Hristov /

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Copy of identification table and/or photo of tested object

RESULTS OF TESTING:

№	Factor name	Units	Standard method	№ of sample	Test results	Factor volume and tolerance	Test conditions
1.	**Interchangeability**	-	cl. 6	1064	-	cl. 6	-
1.1	Check lamp cap dimensions	mm mm mm	cl. 6.1	1064 1064 1064	S_1=4,42 d=13,64 d_1=12,21	cl. 6.1 Table 1 BDS EN 60061-1 S= 3,2 ÷ 4,5 d=13,6÷13,84 d_1< 12,24	-
2.	**Protection against accidental contact with live parts**	-	cl. 7	1064	-	cl. 7	-
2..1	Check with test finger	N	BDS EN 61347-1 cl. 10	1064	withstand 10	cl. 7 10	-
3.	**Insulation resistance and electric strength after humidity treatment**	-	cl. 8	1064	-	cl. 8	48 h t=25°C HR = 93%
3.1	Insulation resistance	MΩ	cl. 8.2	1064	R > 999,9	cl. 8.2 R > 4	1 min , 500 V
3.2	Electric strength	V	BDS EN 60598-1 +A11 cl.10.2.2	1064	withstand U = 2960	cl. 8.3 U(test) = 2960	1 min , 50 Hz
4.	**Mechanical strength**		cl. 9	1064	-	cl. 9	-
4.1	Torsion resistance of unused lamps	N.m	cl. 9.1	1064	withstand M = 1,15	cl. 9.1 M = 1,15	
4.2	Insulation resistance and electric strength after mechanical strength test	-	cl. 9.3	1064	-	cl. 9.3	
4.1.1	Insulation resistance	MΩ	cl. 8.2	1064	R > 999,9	cl. 8.2 R > 4	1 min , 500 V
4.2.1	Electric strength	V	BDS EN 60598-1 +A11 cl.10.2.2	1064	withstand U = 2960	cl. 8.3 U(test) = 2960	1 min , 50 Hz
5.	**Cap temperature rise (above ambient)**	K	cl. 10	1064	14	cl. 10 < 120	U_{sup} =240 V t_{amb} =23°C
6.	**Resistance to heat**	mm	cl. 11	1064	0,8	cl. 11 ≤ 2	t=125°C 60 min
7.	**Resistance to flame and ignition**	°C	cl. 12	1064	no ignition at 650°C	cl. 12 650	-
8.	**CREEPAGE DISTANCES AND CLEARANCES:**	-	cl. 14	1064	-	cl. 14	-
8.1	Creepage distances for a.c. (50 Hz) sinusoidal voltages ≤ 250 V	mm	BDS EN 61347-1 cl. 16	1064	3,8	BDS EN 61347-1 , cl. 16 Table 3 ≥ 2,5	-
8.2	Clearances for a.c. (50 Hz) sinusoidal voltages ≤ 250 V	mm	BDS EN 61347-1 cl. 16	1064	3,8	BDS EN 61347-1 , cl. 16 Table 3 ≥ 1,5	-

Used technical equipments:

№	Designation	Type	Manufacturer	Identification №	Date of last calibration
1.	Appliance multitester	CA6160	CHAUVIN ARNOUX France	16010173	21.03.2014
2.	Digital multimeter	UNIGOR 390	LEM- Austria	PI 3288	19.03.2014
3.	Climatic chamber	Alpha 990H	Design Environmental England	A3793	-
4.	Multi channel termoneter	MT100TD-16	Bulgaria	0418/2009	09.06.2014
5.	Digital gauge	-	China	090	31.10.2014
6.	Termometer-higrometer	177-H1	TESTO Germany	01320300/902	19.04.2012
7.	Appliances, devices and gauges	-	Bulgaria	-	21.07.2014

TEST PERFORMER: 1.....
/ T. Hristov /

2.....
/ D. Chavalinov /

HEAD OF LABORATORY:.....
/ T. Hristov /

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