



**LABORATORY FOR TESTING OF MACHINERY,
EQUIPMENT AND DEVICES
CENTER FOR TESTING AND EUROPEAN CERTIFICATION LTD**

ИА "БСА"
Per.№ 101 ЛИ
ЛАБОРАТОРИЯ ЗА
ИЗПИТВАНЕ

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Accredited certificate
№ 101 ЛИ / 24.11.2014
Valid until: 24.11.2018
of EA BAS, according
EN ISO/IEC 17025

TEST REPORT

№ 2e-14-1087 / 18.12.2014

OBJECT TO BE TESTED: Compact fluorescent lamp - CFL Model: Half Spiral/T2 -15W, cat. No: 99210149
Model representative of: 2U/T3 -5W cat.№ 99200028; 2U/T3 -9W cat.№ 99200030;
2U/T3 -11W cat.№ 99200032; 2U/T3 -11W cat.№ 99200033; 3U/T2 -7W cat.№ 99216166; 3U/T2 -11W cat.№ 99216168;
4U/T2 -15W cat.№ 99216170; Full Spiral D2 -5W cat.№ 99210046; Full Spiral D2 -9W cat.№ 99210048;
Full Spiral D2 -11W cat.№ 99210050; Full Spiral D2 -11W cat.№ 99210051; Half Spiral/T2 -9W cat.№ 992100145;
Half Spiral/T2 -11W cat.№ 992100147

*(name of object 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 № 1087 / 10.11.2014

(name of the firm – applicant, address, telephone, number and date of the test application)

METHOD OF TEST : BDS EN EN 60968:2013+A1:2014 Self-ballasted lamps for general lighting services;
Safety requirements
(number and name of the standards)

DATE OF ACCEPTANCE IN THE TEST LABORATORY: 17.11.2014

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

MANUFACTURER: "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 V
Rated frequency – 50 Hz
Rated power – 15 W
Cab – E14

DATE OF TEST PERFORMANCE : 17.11.2014 – 18.12.2014

LABORATORY CHIFF :
/ T. Hristov /



**The results showed in present certificate concern tested sample only
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Copy of identification table and/or photo of tested object



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RESULTS OF TESTING:

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BDS EN 60968:2013

Test report : N° 2e-14-1087 / 18.12.2014

N°	Factor name	Units	Standard method	N° of sample	Test results	Factor volume and tolerance	Test conditions
1.	Interchangeability	-	cl. 6	1087	-	cl. 6	-
1.1	Check lamp cap dimensions	mm mm mm mm mm mm	cl. 6.1	1087 1087 1087 1087 1087 1087	H = 5,2 C = 4,1 S ₁ = 4,1 T ₁ = 19,1 d = 13,7 d ₁ = 12,1	cl. 6.1 Table 1 BDS EN 60061-1 H = 4,8 ÷ 6,2 C > 3,0 S ₁ = 3,5 ÷ 4,5 T ₁ > 16,0 d = 13,60 ÷ 13,89 d ₁ < 12,29	-
2.	Protection against electric shock	-	cl. 7	1087	-	cl. 7	-
2.1	Check with test finger	N	cl. 7	1087	withstand 10	cl. 7 10	-
3.	Insulation resistance and electric strength after humidity treatment	-	cl. 8	1087	-	cl. 8	48 h t=25°C HR = 93%
3.1	Insulation resistance	MΩ	cl. 8.2	1087	R > 999,9	cl. 8.2 R > 4	1 min , 500 V
3.2	Electric strength	V	cl. 8.3	1087	withstand U = 4000	cl. 8.3 U(test) = 4000	1 min , 50 Hz
4.	Mechanical strength	-	cl. 9	1087	-	cl. 9	-
4.1	Torsion resistance of lamps	N.m	cl. 9	1087	withstand M = 1,15	cl. 9 M = 1,15	-
4.2	Protection against electric shock after mechanical strength test	-	cl. 7	1087	-	cl. 7	-
4.2.1	Check with test finger	N	cl. 7	1087	withstand 10	cl. 7 10	-
5.	Cap temperature rise (above ambient)	K	cl. 10	1087	32	cl. 10 < 120	U _{sup} = 230 V t _{amb} = 23°C
6.	Resistance to heat	mm	cl. 11	1087	0,8	cl. 11 ≤ 2	t=125°C 60 min
7.	Resistance to flame and ignition	°C	cl. 12	1087	no ignition at 650°C	cl. 12 650	-

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Used technical equipments:

N°	Designation	Type	Manufacturer	Identification N°	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	18.12.2014
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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