



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



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Accredited certificate
№ 101 ЛИ / 21.06.2013
Valid until: 30.11.2014
of EA BAS, according
EN ISO/IEC 17025

TEST REPORT

№ 2emc-e-14-904 / 20.06.2014

OBJECT TO BE TESTED: Luminaire " BELLA T8 " 2x36W with cat. № 9BE236
*(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 № 904 / 14.03.2014
(name of the firm – applicant, address, telephone, number and date of the test application)

STANDARD: BDS EN 55015:2006+A1:2007+A2:2009 Limits and methods of measurement of radio disturbance
characteristics of electrical lighting and similar equipment.
(number and name of the standards)

DATE OF ACCEPTANCE IN THE TEST LABORATORY: 21.03.2014

YEAR OF PRODUCTION : 2014
(identification number)

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 AC
Rated frequency – 50 Hz
Rated power – 2x36 W
Class I

DATE OF TEST PERFORMANCE: 08.05.2014

LABORATORY CHIEF:
/ T. Hristov /





Emission of Radio disturbance characteristics of electrical lighting and similar equipment

Mains terminal disturbance voltage – 9kHz + 30MHz

BDS EN 55015, cl. 4.3 – Disturbance voltage limits at mains terminals – Table 2a

BDS EN 55015, cl. 5.2.4 – Application of the limits for other luminaires

BDS EN 55015, cl. 6 – Operating conditions for lighting equipment

BDS EN 55015, cl. 6.4 – Ambient temperature: 25 °C; Relative Humidity: 48 %.

BDS EN 55015, cl.8.1 – Measuring arrangement and procedure

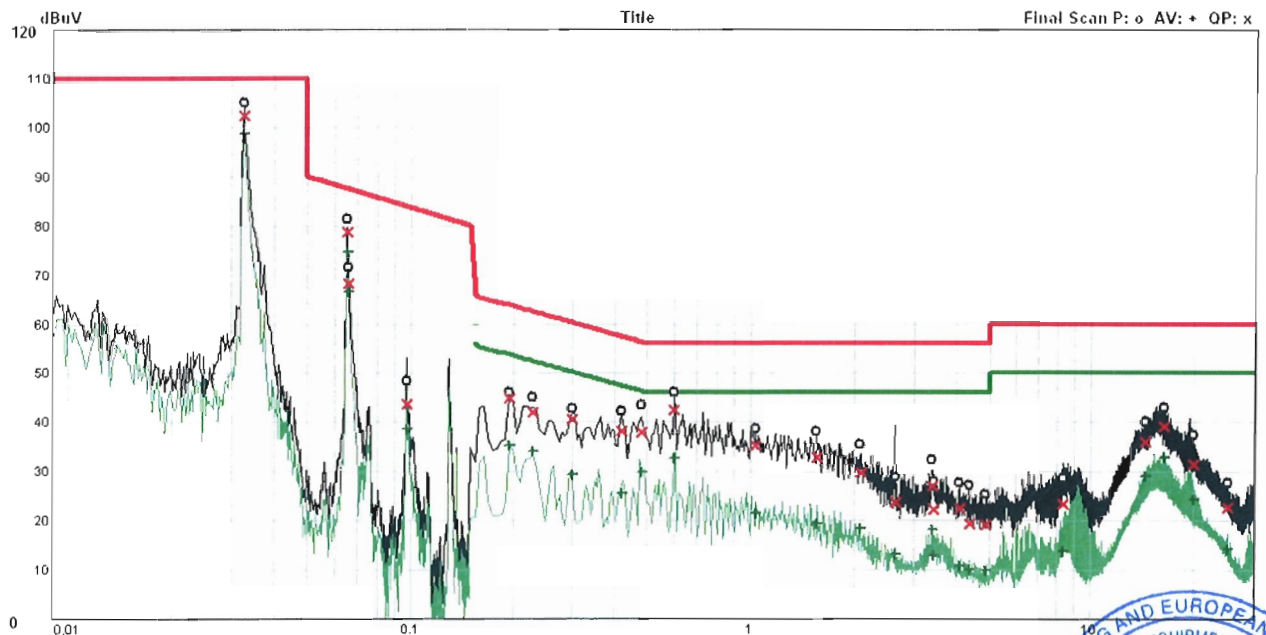
BDS EN 55015, cl.8.2 – Measurement of disturbance voltages, at the mains terminals of indoor and outdoor luminaires – Figure 6a.

The test is performed at supply voltage: 230 V

RESULTS OF MEASUREMENT :

Frequency MHz	Terminal disturbance voltages, mains line – N					
	Quasi peak - QP			Average - AV		
	Measuring dB(μV)	Margin dB(μV)	Limit dB(μV)	Measuring dB(μV)	Margin dB(μV)	Limit dB(μV)
0,033	102,31	7,69	110,00	98,73	-	-
0,065	78,72	8,86	87,58	74,74	-	-
0,066	68,14	19,38	87,52	66,58	-	-
0,195	44,79	19,03	63,82	35,31	18,51	53,82
0,230	41,87	20,58	62,45	34,12	18,33	52,45
0,300	40,56	19,68	60,24	29,39	20,85	50,24
0,420	38,07	19,37	57,44	25,61	21,83	47,44
0,480	38,04	18,29	56,33	29,91	16,42	46,33
0,600	42,49	13,51	56,00	32,68	13,32	46,00
1,040	35,19	20,81	56,00	21,45	24,55	46,00
1,555	32,87	23,13	56,00	19,25	26,75	46,00
2,085	29,81	26,19	56,00	18,36	27,64	46,00
3,395	26,90	29,10	56,00	18,24	27,76	46,00
14,565	35,97	24,03	60,00	29,15	20,85	50,00
16,420	39,18	20,82	60,00	32,91	17,09	50,00
20,055	31,59	28,41	60,00	24,35	25,65	50,00

Drawing of terminal disturbance voltages, mains line – N

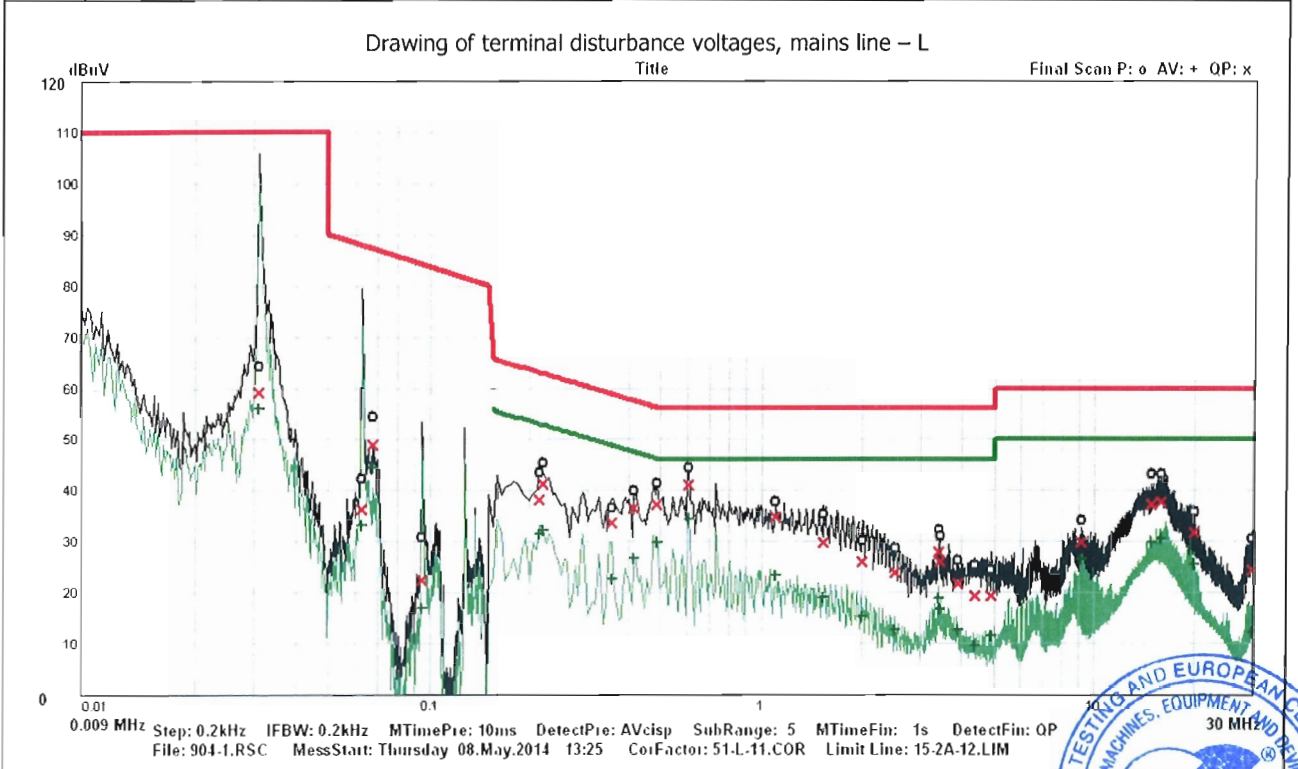


*The results showed in present test report concern tested sample only
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Frequency MHz	Terminal disturbance voltages, mains line - L					
	Quasi peak - QP			Average - AV		
	Measuring dB(μV)	Margin dB(μV)	Limit dB(μV)	Measuring dB(μV)	Margin dB(μV)	Limit dB(μV)
0,068	48,79	38,46	87,25	44,29	-	-
0,215	38,22	24,79	63,01	31,57	21,44	53,01
0,220	41,17	21,65	62,82	32,31	20,51	52,82
0,355	33,56	25,28	58,84	22,68	26,16	48,84
0,415	36,59	20,95	57,54	26,75	20,79	47,54
0,485	37,10	19,15	56,25	29,91	16,34	46,25
0,605	40,96	15,04	56,00	34,31	11,69	46,00
1,105	34,92	21,08	56,00	23,41	22,59	46,00
1,530	29,87	26,13	56,00	19,16	26,84	46,00
2,010	25,94	30,06	56,00	15,20	30,80	46,00
2,520	23,75	32,25	56,00	12,58	33,42	46,00
3,395	28,02	27,98	56,00	18,96	27,04	46,00
3,425	26,11	29,89	56,00	16,62	29,38	46,00
3,905	21,71	34,29	56,00	12,68	33,32	46,00
9,135	29,85	30,15	60,00	26,49	23,51	50,00
14,840	37,30	22,70	60,00	29,75	20,25	50,00
15,940	37,78	22,22	60,00	30,61	19,39	50,00
20,060	31,68	28,32	60,00	25,53	24,47	50,00
29,630	24,30	35,70	60,00	12,22	37,78	50,00



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Used technical equipments:

	Appliance	Type	Manufacturer	Identity №	Last calibration date
1.	EMI – receiver 9 kHz ÷ 1000 MHz	SCR 3501	Schaffner Electrotest GmbH, Germany	522	07.07.2011
2.	Line impedance stabilisation networks	NNB 51	TESEQ Switzerland	26458	15.11.2011
3.	Digital multimeter	UNIGOR 390	LEM-Austria	PI 3288	08.07.2011
4.	Termometer-higrometer	177-H1	TESTO Germany	01320300/902	19.04.2012

TEST PERFORMER:



1.

/ T. Hristov /

2.

/ D. Chavalinov /

CHIEF LABORATORY :

/ T. Hristov /

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