



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

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

TEST REPORT

№ 2emc-e-14-905 / 20.06.2014

OBJECT TO BE TESTED: Luminaire "GALA" 4x18W/T8 with cat. № 9GOME418
Representative sample from fixtures group "GALA" with cat. №: 9GOME218; 9GOME418
*(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 № 905 / 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 – 4x18 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

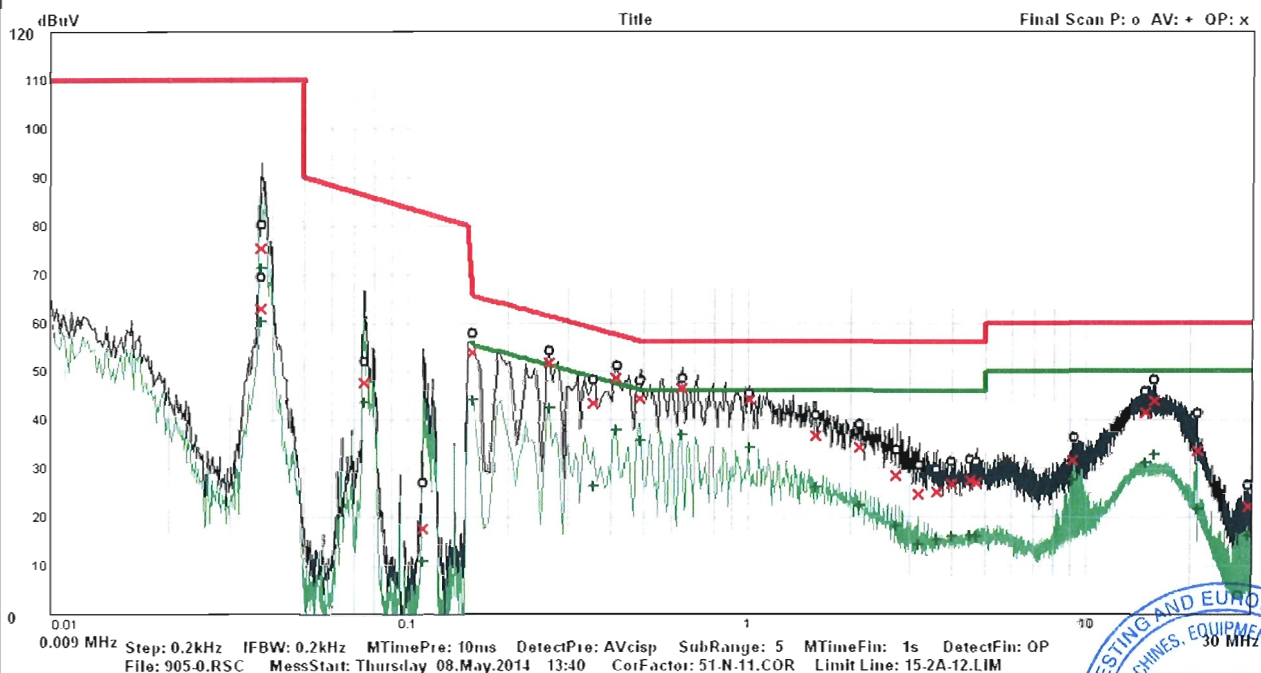
BDS EN 55015, cl.8.2 – Measurement of disturbance voltages, at the mains terminals of indoor and outdoor luminaires – Figure 6a.

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)
0,037	75,30	34,70	110,00	71,41	-	-
0,155	53,95	11,78	65,73	44,08	11,65	55,73
0,265	51,66	9,61	61,27	42,42	8,85	51,27
0,355	43,36	15,48	58,84	26,46	22,38	48,84
0,415	48,67	8,87	57,54	37,99	9,55	47,54
0,485	44,33	11,92	56,25	35,87	10,38	46,25
0,640	46,51	9,49	56,00	36,96	9,04	46,00
1,015	44,22	11,78	56,00	34,32	11,68	46,00
1,580	36,67	19,33	56,00	26,24	19,76	46,00
2,130	34,35	21,65	56,00	22,50	23,50	46,00
2,740	28,29	27,71	56,00	18,07	27,93	46,00
4,555	27,39	28,61	56,00	16,29	29,71	46,00
9,140	31,79	28,21	60,00	27,78	22,22	50,00
14,845	41,46	18,54	60,00	31,29	18,71	50,00
15,770	43,93	16,07	60,00	32,83	17,17	50,00
20,965	33,65	26,35	60,00	21,67	28,33	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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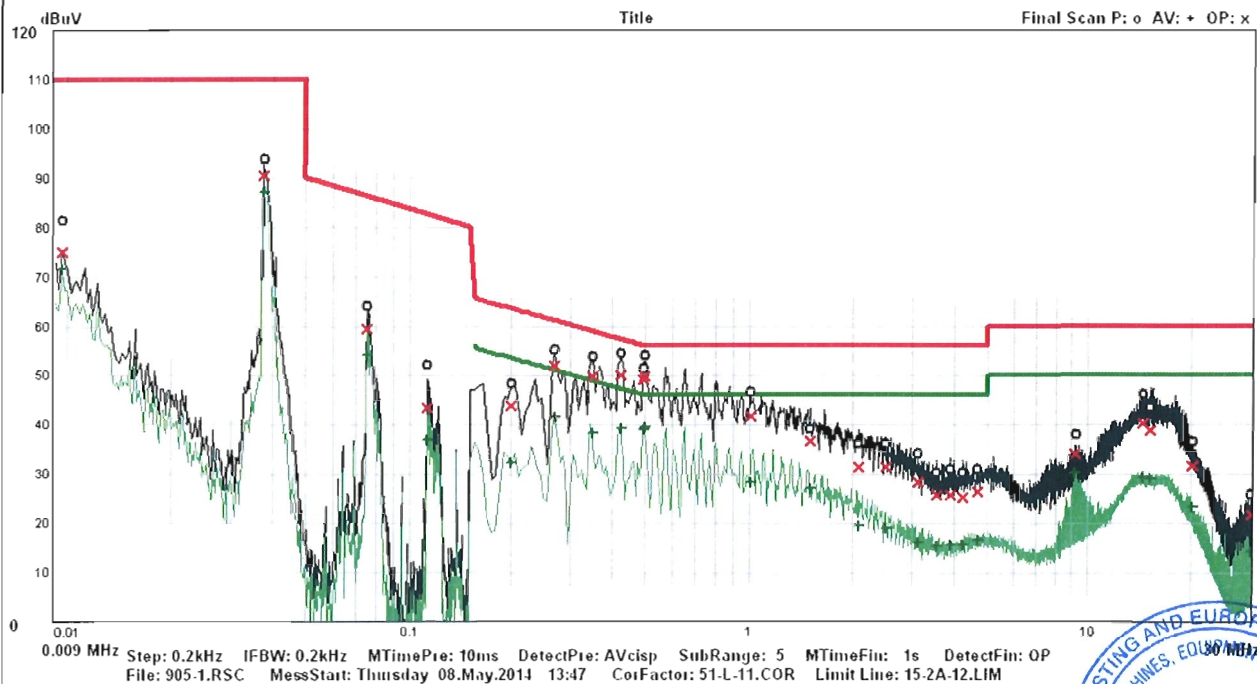
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BDS EN 55015:2006+A1:2007+A2:2009

Test report : № 2 emc-e-14-905/20.06.2014

Frequency	Terminal disturbance voltages, mains line - L					
	Quasi peak - QP			Average - AV		
	Measuring	Margin	Limit	Measuring	Margin	Limit
MHz	dB(μV)	dB(μV)	dB(μV)	dB(μV)	dB(μV)	dB(μV)
0,038	90,34	19,66	110,00	87,15	-	-
0,075	59,36	26,90	86,26	54,22	-	-
0,200	44,01	19,60	63,61	32,45	21,16	53,61
0,270	52,11	9,01	61,12	41,49	9,63	51,12
0,350	49,76	9,20	58,96	38,30	10,66	48,96
0,425	50,04	7,31	57,35	39,31	8,04	47,35
0,495	49,12	6,96	56,08	39,03	7,05	46,08
0,500	49,84	6,16	56,00	39,72	6,28	46,00
1,010	41,80	14,20	56,00	28,39	17,61	46,00
1,500	36,64	19,36	56,00	27,22	18,78	46,00
2,090	31,48	24,52	56,00	19,62	26,38	46,00
2,520	31,46	24,54	56,00	19,17	26,83	46,00
3,130	28,48	27,52	56,00	16,27	29,73	46,00
3,545	25,77	30,23	56,00	15,41	30,59	46,00
3,890	25,85	30,15	56,00	15,84	30,16	46,00
4,705	26,55	29,45	56,00	16,76	29,24	46,00
9,205	34,10	25,90	60,00	30,33	19,67	50,00
14,495	40,34	19,66	60,00	29,43	20,57	50,00
15,290	38,88	21,12	60,00	29,02	20,98	50,00

Drawing of terminal disturbance voltages, mains line – L



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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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