



**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-14-906 / 20.06.2014

**OBJECT TO BE TESTED:** Luminaire „VIKIOM“ 4x14W/T5 with cat. № 9VOM414  
Representative sample from fixtures group „VIKI“ with cat. №: 9VOM214; 9VOM414  
*(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](mailto:denkov@elmark.bg)  
Application № 906 / 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](mailto:denkov@elmark.bg)  
*(firm, trade mark, address)*

**DECLARED TECHNICAL DATA:** Rated voltage – 230 V AC  
Rated frequency – 50 Hz  
Rated power – 4x14 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

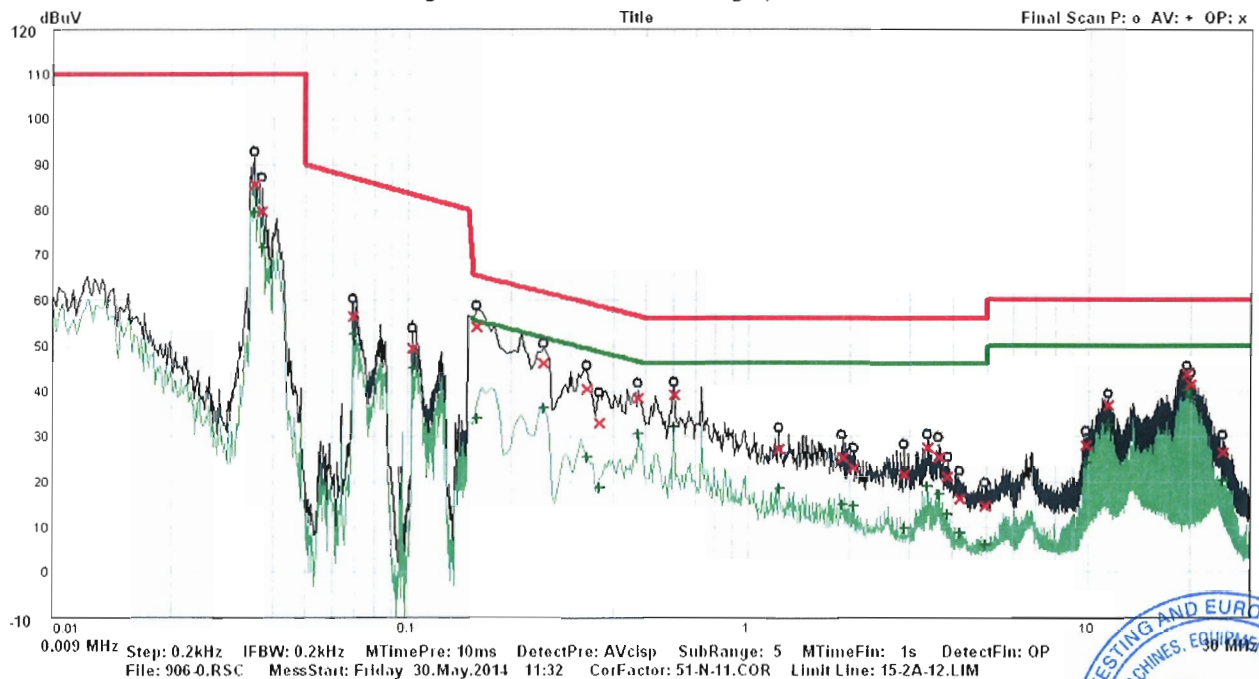
BDS EN 55015, cl.8.2 – Measurement of disturbance voltages, at the mains terminals of indoor and outdoor luminaires – Figure 6a.

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)
0,035	85,68	24,32	110,00	79,40	-	-
0,037	79,56	30,44	110,00	71,75	-	-
0,160	54,05	11,41	65,46	33,83	21,63	55,46
0,250	46,12	15,64	61,76	36,26	15,50	51,76
0,335	40,32	19,00	59,32	25,44	23,88	49,32
0,365	33,01	25,60	58,61	18,78	29,83	48,61
0,475	38,30	18,12	56,42	30,48	15,94	46,42
0,605	39,22	16,78	56,00	32,21	13,79	46,00
1,235	27,20	28,80	56,00	18,47	27,53	46,00
1,900	25,31	30,69	56,00	14,93	31,07	46,00
3,390	27,40	28,60	56,00	18,97	27,03	46,00
3,635	25,46	30,54	56,00	17,24	28,76	46,00
9,825	27,88	32,12	60,00	24,15	25,85	50,00
11,470	36,72	23,28	60,00	32,43	17,57	50,00
19,455	43,69	16,31	60,00	40,08	9,92	50,00
20,035	41,54	18,46	60,00	38,46	11,54	50,00

Drawing of terminal disturbance voltages, mains line – N

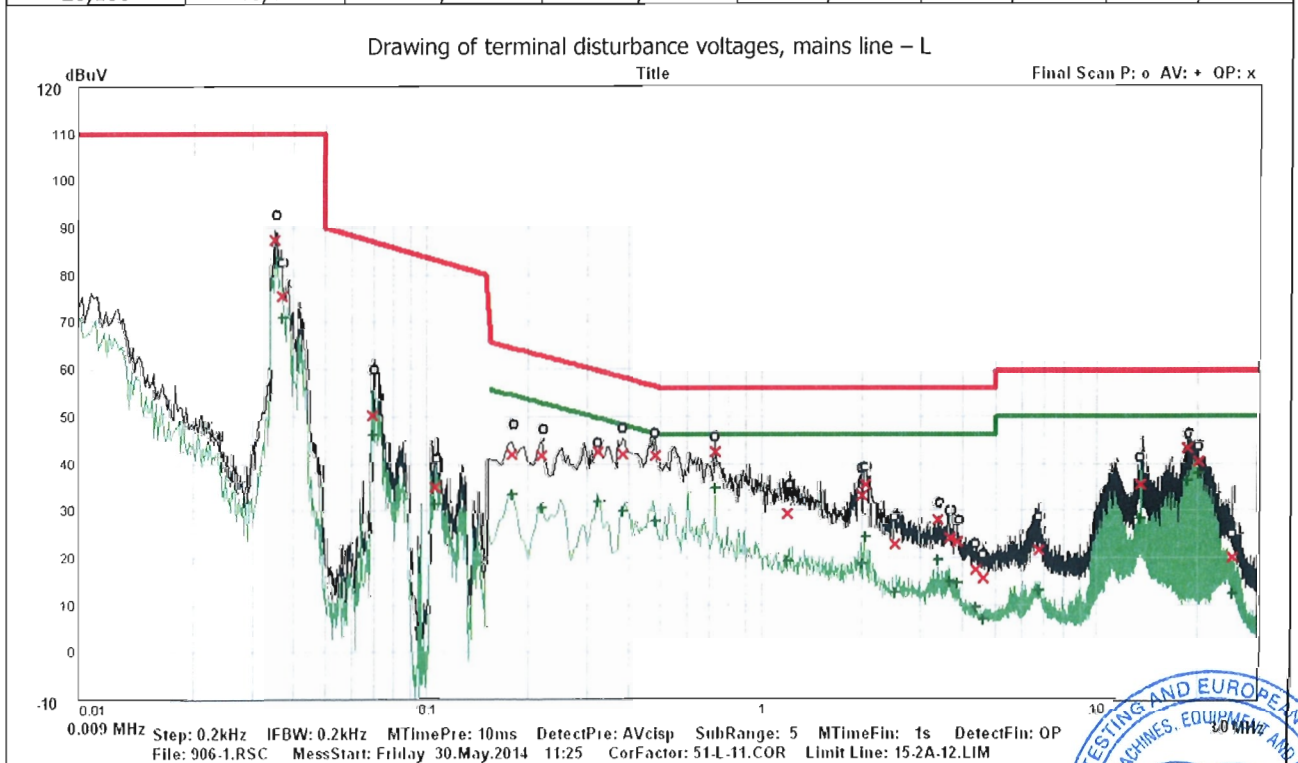


*The results showed in present test report concern tested sample only  
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Frequency	Terminal disturbance voltages, mains line - L					
	Quasi peak - QP			Average - AV		
	Measuring	Margin	Limit	Measuring	Margin	Limit
MHz	dB(μV)	dB(μV)	dB(μV)	dB(μV)	dB(μV)	dB(μV)
0,035	87,54	22,46	110,00	83,47	-	-
0,037	75,55	34,45	110,00	71,02	-	-
0,180	42,06	22,43	64,49	33,51	20,98	54,49
0,220	41,77	21,05	62,82	30,56	22,26	52,82
0,325	42,42	17,15	59,57	31,89	17,68	49,57
0,385	41,84	16,33	58,17	29,69	18,48	48,17
0,480	41,60	14,73	56,33	27,85	18,48	46,33
0,730	42,42	13,58	56,00	34,63	11,37	46,00
1,200	29,23	26,77	56,00	19,12	26,88	46,00
1,995	33,11	22,89	56,00	18,61	27,39	46,00
2,050	35,48	20,52	56,00	24,35	21,65	46,00
2,525	22,84	33,16	56,00	12,47	33,53	46,00
3,390	28,03	27,97	56,00	19,40	26,60	46,00
3,680	24,08	31,92	56,00	14,89	31,11	46,00
3,865	23,24	32,76	56,00	14,62	31,38	46,00
6,730	21,60	38,40	60,00	12,90	37,10	50,00
13,635	35,46	24,54	60,00	28,33	21,67	50,00
18,680	43,20	16,80	60,00	36,25	13,75	50,00
20,180	40,47	19,53	60,00	37,74	12,26	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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