LABORATORY FOR TESTING OF MACHINERY, EQUIPMENT AND DEVICES

CENTER FOR TESTING AND EUROPEAN CERTIFICATION LTD

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Tel.: +359 42 620 368 Fax: +359 42 602 377 ctec@ctec-sz.com

TEST REPORT

№ 2emc-e-15-036 / 06.04.2015

OBJECT TO BE TESTED: Electric and electronic equipment. Luminaire
Luminaire-LED lighting fixtures„LED DOWNLIGHTS" Model RDL-COB, cat.№ 92DLC3027/WH
Representative sample from fixtures group **RDL-COB** with cat. №: 92DLC1040/WH; 92DLC1027/WH; 92DLC1040/SN; 92DLC1027/SN; 92DLC1540/WH; 92DLC1527/WH; 92DLC1540/SN; 92DLC1527/SN; 92DLC2540/WH; 92DLC2527/WH; 92DLC2540/SN; 92DLC2527/SN; 92DLC3040/WH; 92DLC3040/SN; 92DLC3027/SN;
and group **RDL60-COB** with cat. № 92DL62040; 92DL62027; 92DL63040; 92DL63027; 92DL64040; 92DL64027;
(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 № 036 / 11.02.2015
(name of the firm – applicant, address, telephone, number and date of the test application)

METHOD OF TEST: 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: 11.03.2015

YEAR OF PRODUCTION : 2015
(identification number)

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

DECLARED DATA: Declared voltage 230 V
Declared frequency 50-60 Hz
Declared power 30 W
Class II

ELECTRONIC CONTROLGEAR: LCM- 25 ELMARK

DATE OF TEST PERFORMANCE: 19.03.2015

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LABORATORY CHIEF: .....
/ T. Hristov /

I. Emission of Radio disturbance characteristics of electrical lighting and similar equipment

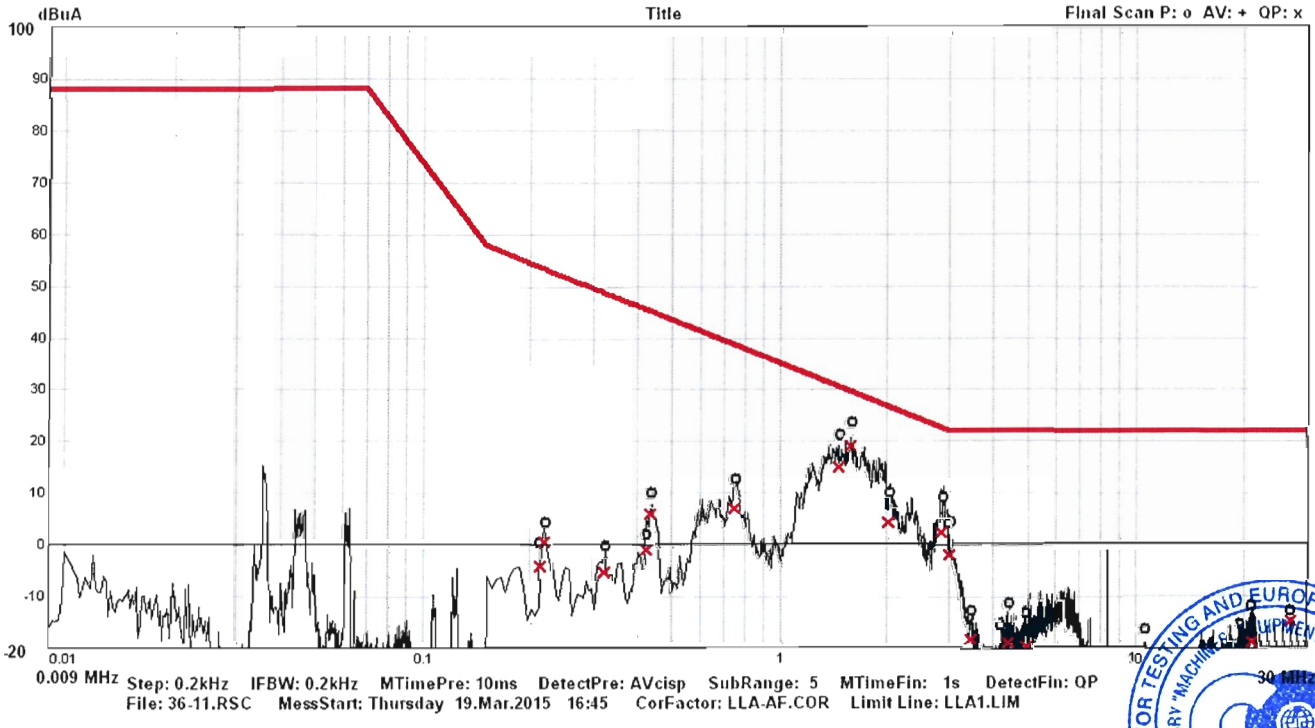
1. Radiated electromagnetic disturbances – 9kHz ÷ 30MHz

EN 55015, cl. 4.4 – Radiated electromagnetic disturbances, limits – Table 3
EN 55015, cl. 5.2.4 – Other luminaires
EN 55015, cl. 6 – Operating conditions for lighting equipment
EN 55015, cl. 6.4 – Ambient temperature: 24 °C ; Relative Humidity: 48 %.
EN 55015, cl.9.1 – Measuring arrangement and procedure
EN 55015, cl.9.2 – Indoor and outdoor luminaires
The test is performed at supply voltage: 230 V

RESULTS OF MEASUREMENT :

Frequency	Radiated electromagnetic disturbances - measured along the axis - X		
	Quasi peak - QP		
	Measuring	Margin	Limit
MHz	dB(μA)	dB(μA)	dB(μA)
0,215	-3,98	57,65	53,67
0,220	0,57	52,82	53,39
0,325	-5,28	53,98	48,70
0,425	-0,93	46,41	45,48
0,435	6,09	39,11	45,20
0,745	6,90	31,83	38,73
1,460	15,03	15,62	30,65
1,585	19,19	10,47	29,66
2,020	4,39	22,36	26,75
2,850	2,46	20,15	22,61
3,000	-1,95	23,95	22,00
3,430	-18,09	40,09	22,00
4,370	-18,92	40,92	22,00
4,945	-19,44	41,44	22,00
21,050	-18,84	40,84	22,00
27,020	-14,70	36,70	22,00

Drawing of Radiated electromagnetic disturbances - measured along the axis - X



The results showed in present test report concern tested sample only
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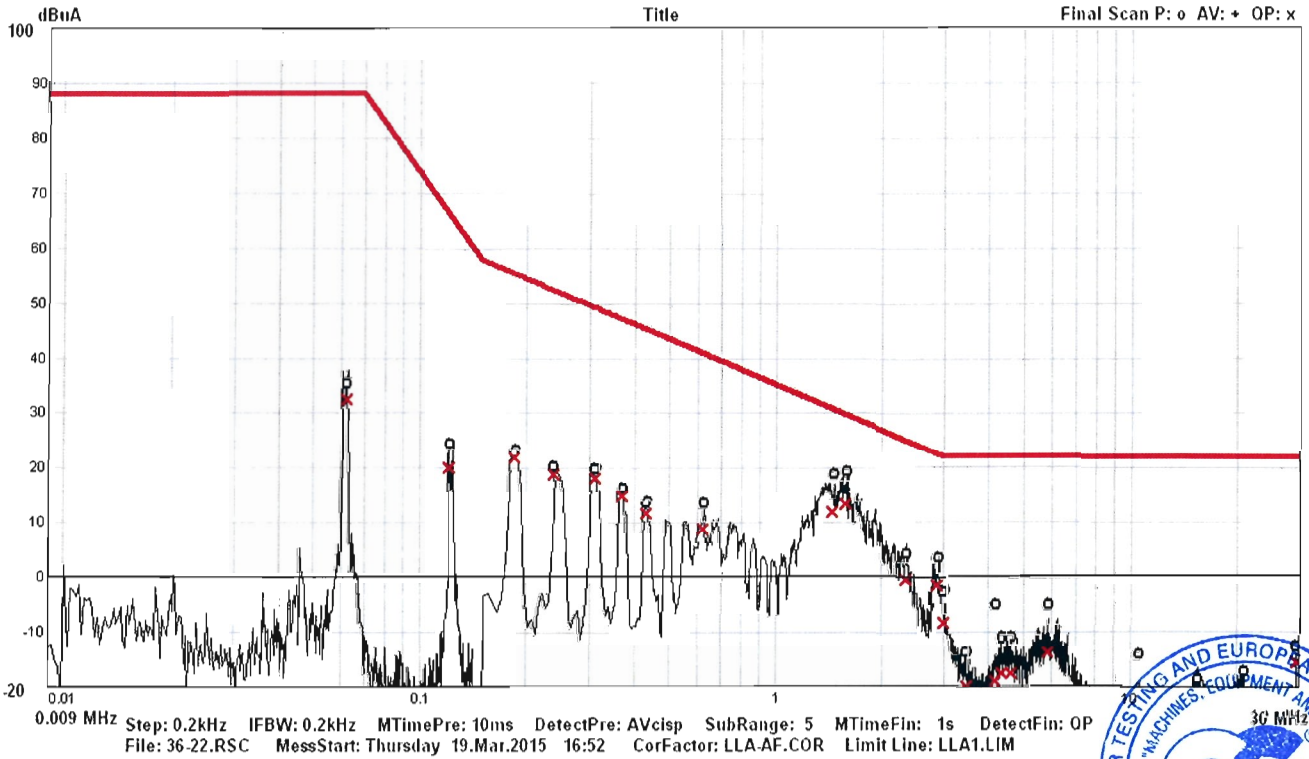
Frequency	Radiated electromagnetic disturbances - measured along the axis - Y		
	Quasi peak - QP		
	Measuring	Margin	Measuring
MHz	dB(μA)	dB(μA)	dB(μA)
0,062	32,39	55,61	88,00
0,120	20,03	46,62	66,65
0,185	22,02	33,45	55,47
0,240	18,99	33,36	52,35
0,310	18,10	31,17	49,27
0,370	14,72	32,43	47,15
0,430	11,63	33,71	45,34
0,620	8,84	32,10	40,94
1,455	11,90	18,79	30,69
1,585	13,37	16,29	29,66
2,335	-0,44	25,45	25,01
2,875	-1,51	24,02	22,51
3,000	-8,34	30,34	22,00
4,355	-17,57	39,57	22,00
5,845	-13,79	35,79	22,00
29,475	-15,54	37,54	22,00

Drawing of Radiated electromagnetic disturbances - measured along the axis - Y



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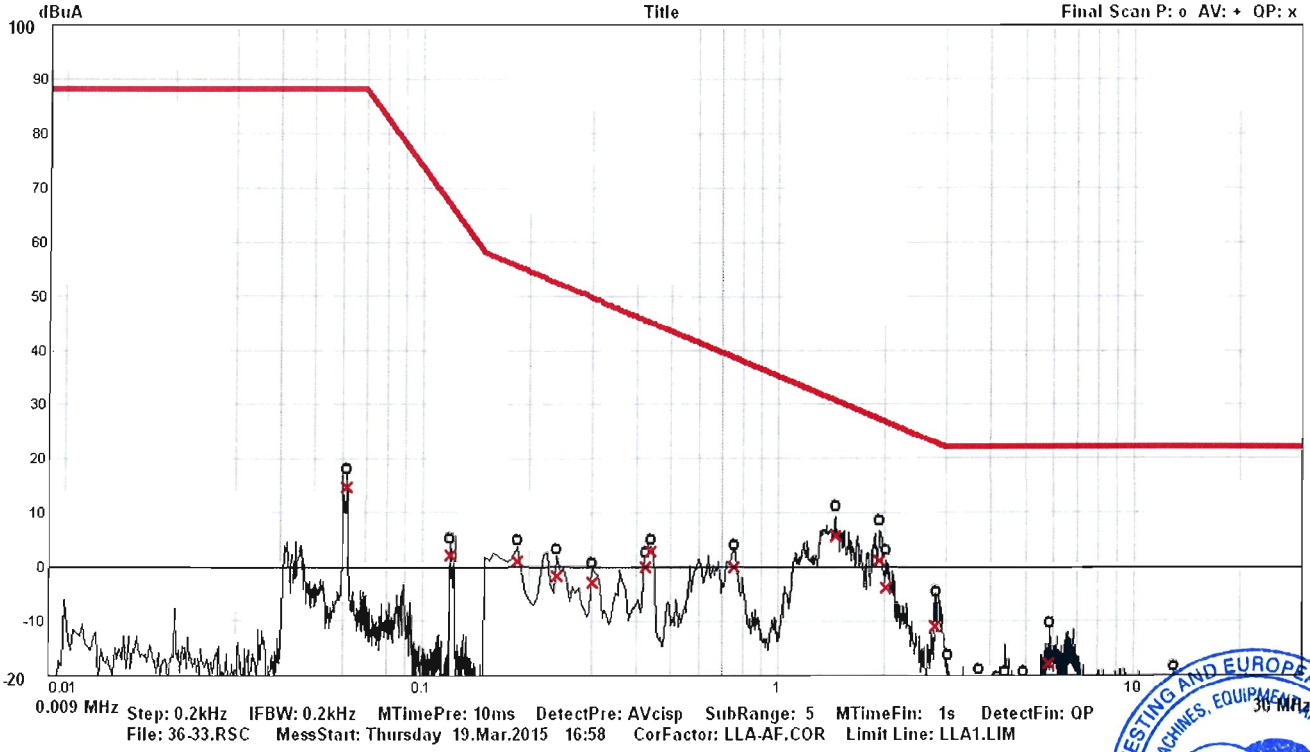
Frequency	Radiated electromagnetic disturbances - measured along the axis - Z		
	Quasi peak - QP		
	Measuring	Margin	Measuring
MHz	dB(μA)	dB(μA)	dB(μA)
0,062	14,76	73,24	88,00
0,120	2,12	64,59	66,71
0,185	0,92	54,55	55,47
0,240	-1,70	54,05	52,35
0,300	-2,79	52,46	49,67
0,425	-0,05	45,53	45,48
0,440	2,81	42,25	45,06
0,755	-0,04	38,61	38,57
1,450	5,77	24,96	30,73
1,940	1,32	25,91	27,23
2,020	-3,80	30,55	26,75
2,805	-10,89	33,69	22,80
3,025	-22,53	44,53	22,00
4,940	-24,63	46,63	22,00
5,860	-17,79	39,79	22,00
13,015	-25,11	47,11	22,00

Drawing of Radiated electromagnetic disturbances - measured along the axis - Z



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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	26.06.2014
2.	Large loop antenna 2m	RF300	Laplace Instruments LTD U.K.	9123	12.03.2013
3.	Digital multimeter	UNIGOR 390	LEM Austria	PI 3288	19.03.2014
4.	Thermometer-higrometer	177-H1	TESTO Germany	01320300/902	19.04.2012

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

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2. .....
/ D. Chavalinov /

CHIEF LABORATORY :.....,
/ T. Hristov /

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