



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

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## TEST REPORT

№ 2emc-e-17-615 / 21.12.2017

**OBJECT TO BE TESTED:** Electric and electronic equipment, appliances, devices. Luminaries.  
LED street lamp, cat. No:99STREET150SMD  
Model representative of LED Street luminaire with cat.№ :98STREET50SMD;  
98STREET100SMD;98AVENUE30SMD; 98AVENUE50SMD; 98AVENUE100SMD  
(name of object to be tested , type, model, quantity, type and other)

**APPLICANT FOR TEST:** "ELMARK INDUSTRIES" SC. 2 Dobrudja Blvd. Dobrich, Bulgaria ,  
Tel.: 0899812240, e-mail: [m.vasilev@elmark.bg](mailto:m.vasilev@elmark.bg)  
Application № 615/ 02.06.2017  
(name of the firm – applicant, address, telephone, number and date of the test application)

**METHOD OF TEST :** BDS EN 55015:2013+A1:2015 Limits and methods of measurement of radio  
disturbance characteristics of electrical lighting and similar equipment. cl. 4.4.1, cl. 9.2  
(number and name of the standards)

**DATE OF ACCEPTANCE IN THE TEST LABORATORY:** 12.06.2017

**MANUFACTURER:** "ELMARK INDUSTRIES" SC. 2 Dobrudja Blvd. Dobrich, Bulgaria ,  
[elmarkfactory@elmarkholding.eu](mailto:elmarkfactory@elmarkholding.eu)  
(firm, trade mark, address )

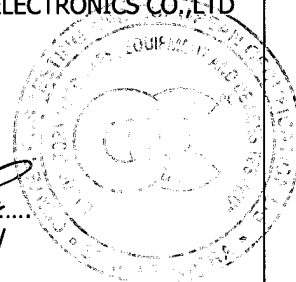
**DECLARED TECHNICAL DATA:** Rated voltage – 220 - 240 V  
Rated frequency – 50 Hz  
Rated power – 150 W

**ELECTRONIC CONTROLGEAR:** SS-200H-36 201,6W 5,6A 24-36V DC tc=90°C SOSEN ELECTRONICS CO.,LTD

**DATE OF TEST PERFORMANCE:** 16.06.2017

**LABORATORY CHIEF:** .....

  
/ T. Hristov /





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

**1. Radiated electromagnetic disturbances – 9kHz ÷ 30MHz**

BDS EN 55015, cl. 4.4.1 – Radiated electromagnetic disturbances, limits – Table 3a

BDS EN 55015, cl. 5.2.4 – Other luminaires

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

BDS EN 55015, cl. 6.4 – Ambient temperature: 25 °C ; Relative Humidity: 44 %.

BDS EN 55015, cl.9.1 – Measuring arrangement and procedure

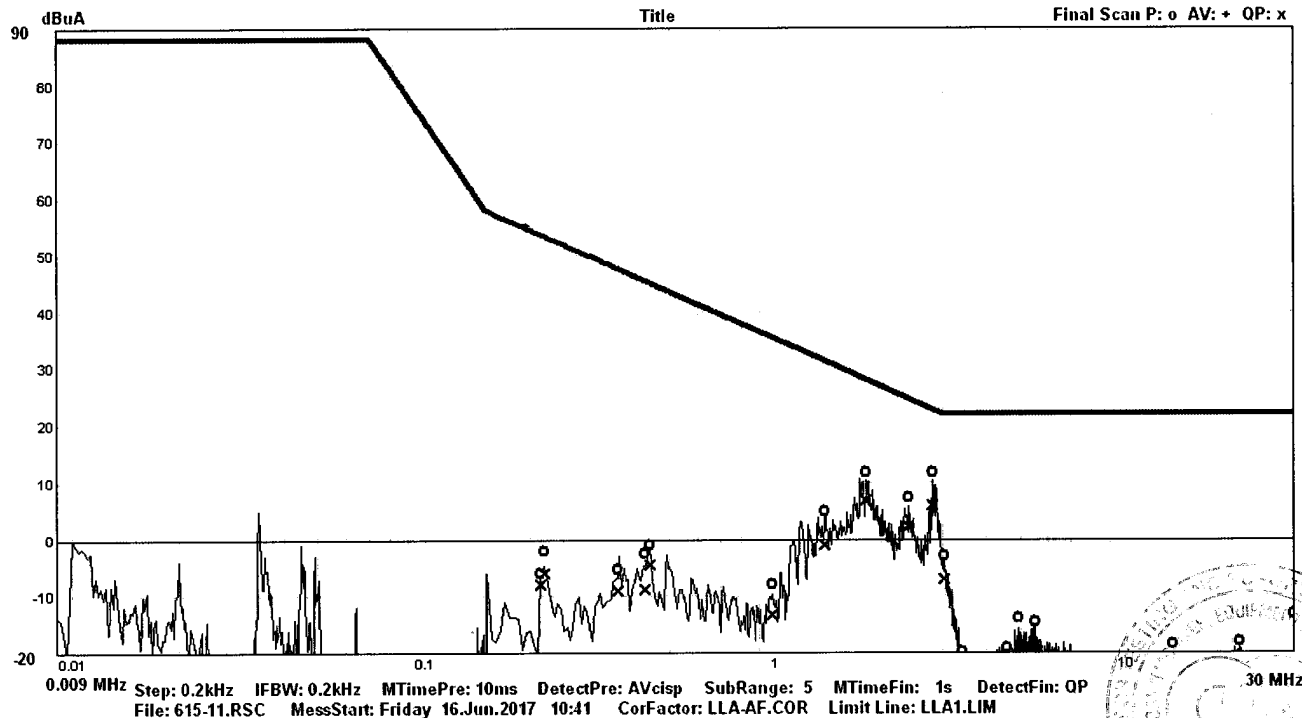
BDS EN 55015, cl.9.2 – Indoor and outdoor luminaires

The test is performed at supply voltage: 230 V

**RESULTS OF MEASUREMENT :**

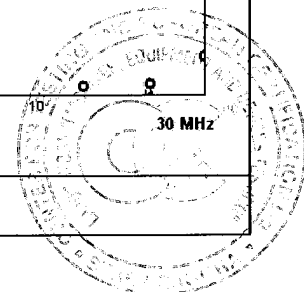
Frequency	Radiated electromagnetic disturbances - measured along the axis - X		
	Quasi peak - QP		
	Measuring	Margin	Limit
MHz	dB(µA)	dB(µA)	dB(µA)
0,215	-8,03	61,70	53,67
0,220	-6,08	59,47	53,39
0,355	-9,02	56,66	47,64
0,425	-8,76	54,24	45,48
0,440	-4,37	49,43	45,06
0,975	-13,18	48,68	35,50
1,385	-1,00	32,28	31,28
1,815	6,89	21,14	28,03
2,395	2,36	22,34	24,70
2,800	6,07	16,75	22,82
3,025	-7,13	29,13	22,00
4,565	-23,71	45,71	22,00
4,920	-20,95	42,95	22,00
5,490	-18,59	40,59	22,00
13,635	-22,57	44,57	22,00
30,000	-24,69	46,69	22,00

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



The results showed in present test report concern tested sample only

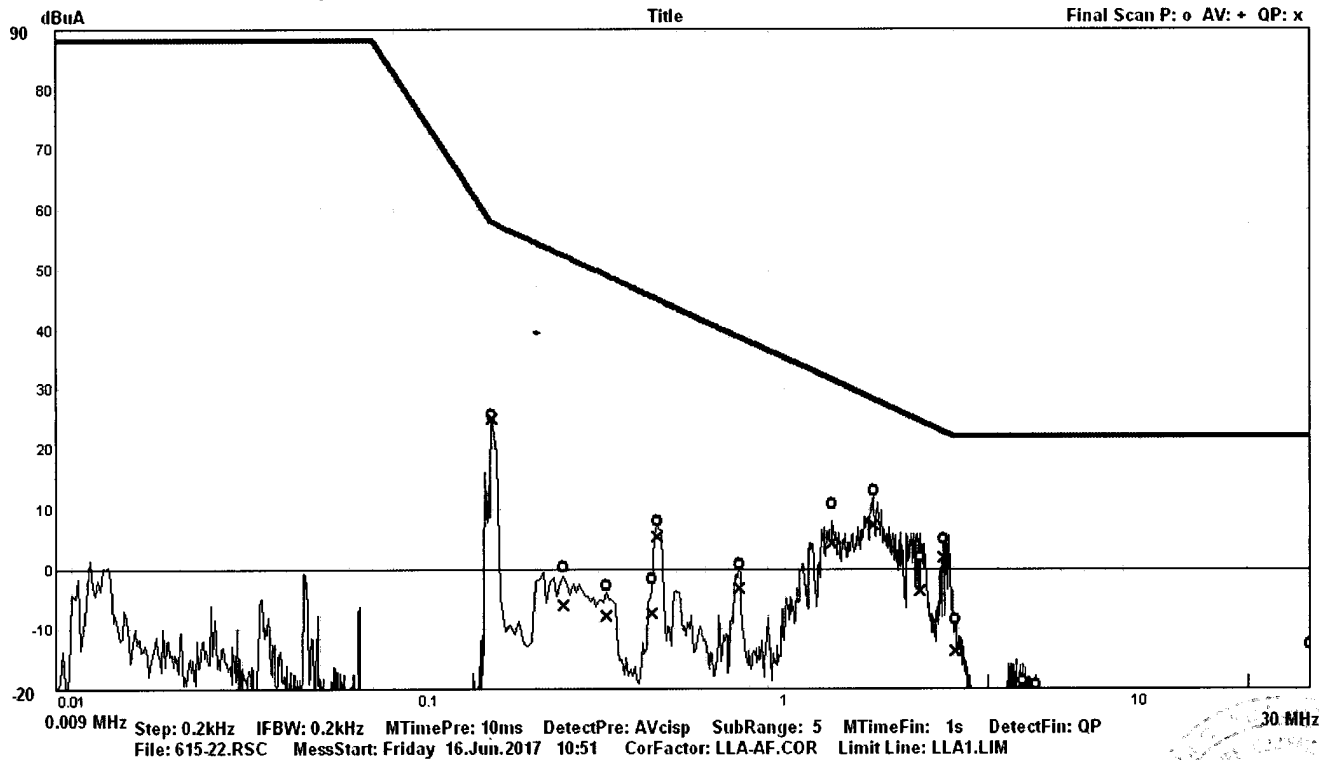
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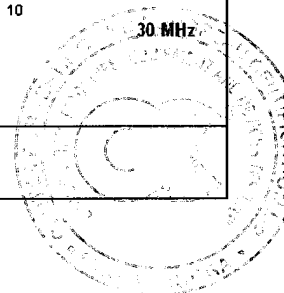


Frequency	Radiated electromagnetic disturbances - measured along the axis - Y		
	Quasi peak - QP		
	Measuring	Margin	Measuring
MHz	dB(μA)	dB(μA)	dB(μA)
0,150	24,95	33,05	58,00
0,240	-5,97	58,32	52,35
0,315	-7,83	56,91	49,08
0,425	-7,31	52,79	45,48
0,440	5,39	39,67	45,06
0,745	-3,23	41,96	38,73
1,360	4,20	27,30	31,50
1,780	7,43	20,84	28,27
2,415	-3,53	28,13	24,60
2,810	1,89	20,89	22,78
3,025	-13,64	35,64	22,00
4,160	-30,95	52,95	22,00
4,495	-26,02	48,02	22,00
4,695	-25,45	47,45	22,00
5,105	-26,64	48,64	22,00
30,000	-24,31	46,31	22,00

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



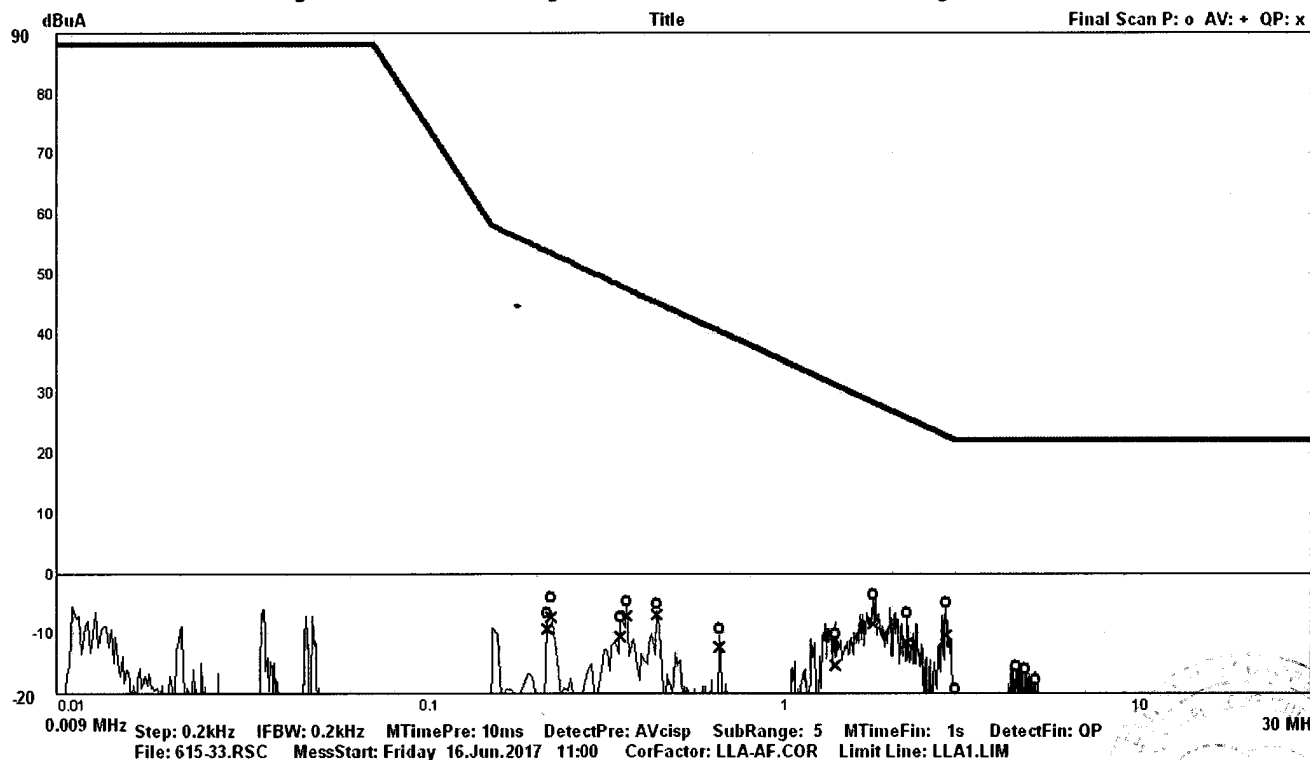
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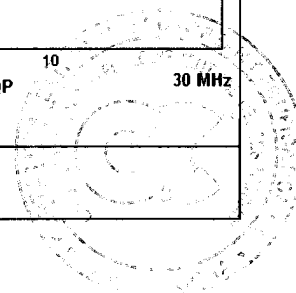


Frequency	Radiated electromagnetic disturbances - measured along the axis - Z		
	Quasi peak - QP		
	Measuring	Margin	Measuring
MHz	dB(μA)	dB(μA)	dB(μA)
0,215	-9,38	63,05	53,67
0,220	-7,42	60,81	53,39
0,345	-10,68	58,67	47,99
0,360	-7,08	54,55	47,47
0,435	-6,97	52,17	45,20
0,655	-12,31	52,59	40,28
1,385	-15,46	46,74	31,28
1,770	-8,51	36,85	28,34
2,205	-11,72	37,41	25,69
2,820	-10,39	33,13	22,74
3,010	-25,72	47,72	22,00
3,465	-34,41	56,41	22,00
4,180	-27,43	49,43	22,00
4,450	-21,10	43,10	22,00
4,725	-22,48	44,48	22,00
5,065	-24,04	46,04	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.	Termometer-higrometer	177-H1	TESTO Germany	01320300/902	17.04.2015

TEST PERFORMER:

1. ....

  
/ D. Chavalinov /

2. ....

  
/ T. Hristov /

CHIEF LABORATORY :.....

  
/ T. Hristov /