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1x1

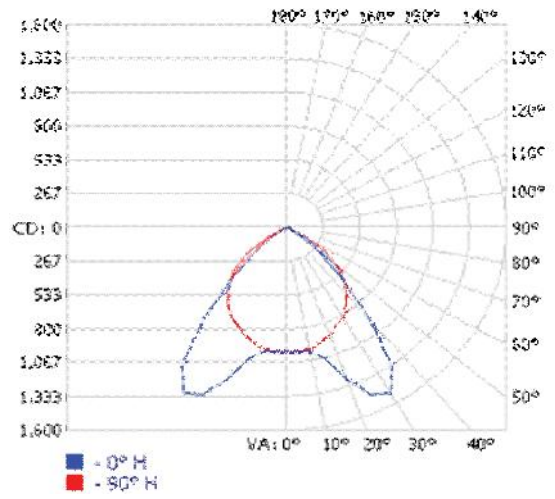
600 x 600

(.1).



.1.

[11].



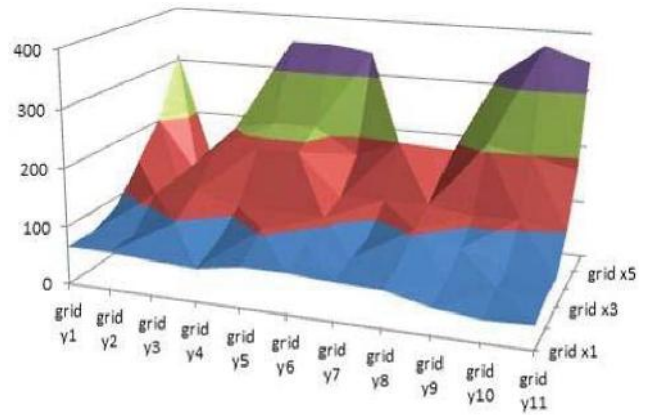
.3.



.2.

	68.5%
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1x1 ,
grid x1....grid x5, grid y1 ...grid y11

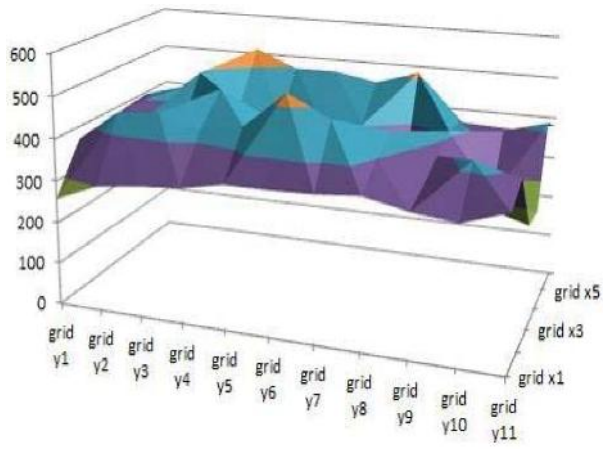


.4.

[9, 12].

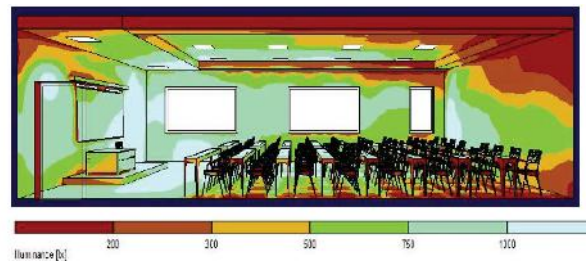
10.00

[13, 14].



. 5. () .

20.00 (.8) 800 .



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E-mail – vasilyevauo@gmail.com

E-mail –happy.light9574@ gmail.com

E-mail – vasilyev.ant@gmail.com

LIGHT-AUDIT: OPTIMIZATION OF ELECTRIC ENERGY CONSUMPTION IN LIGHTING FOR CLASSROOMS

U. . Vasilyeva, . . Lyashenko, A.L. Vasilyev

Actual ways optimizing the energy consumption of lighting systems for education facilities with high levels of ambient normalized horizontal illuminance on the audit results have been highlighted. Efficient using electricity and decreasing the cost of the lighting needs can be achieved by such arrangements: improving the lighting systems; applying efficient light sources, correct selection and placement of fixtures and rational application of new lighting fixtures and devices, optimizing lighting networks and control systems, the rational organization of lighting operation. Optimization of the lighting of the lighting systems is justifying the choice of means and methods of lighting. One of the important issues determining the efficiency of indoor lighting is the choice of lighting systems. The simulation results have been shown that using daylight and artificial lighting can realized high energy efficiency of the lighting system with the corrective approach. Implementation of energy-efficient lighting arrangements can significantly reduced energy consumption, thereby decreasing greenhouse gas emissions.

Keywords: light audit, lighting systems, modeling lighting, natural lighting, artificial lighting, combined lighting