

Algorhythmic Solution of Luminaires Placement - Reflections and Symetry Issues

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Abstract—The paper deals with lighting road design. The demands on illuminance are defined in standard ČSN EN 13201 in case of Czech Republic. There are several parameters that a designer can change to get the optimal solution to fulfill the standard. The distance between pillars, their heights, the lamp overlap and tilt have to be defined. Such number of parameters make the optimization difficult. This paper solves the optimization via genetic algorithm. The fitness function that is convergent to good solutions is a vital point for this type of algorithms. The paper shows that solutions found by the genetic algorithm fulfill the demands and it also shows the way, how the fitness function can be created.

Keywords - *genetic algorithm, lighting, design, illuminance*

I. INTERIOR LIGHTENING DESIGN ISSUES

II. CONCLUSION

Here comes conclusion.

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