

Comparative analysis of the application of light fields in the illumination of selected architectural objects of Prague and Poznan city

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Abstract The aim of this study is to analyse the comparative distribution of light fields and the techniques of illumination on the examples of architectural of Prague and Poznan at the same function in the city. Particular attention is paid to the influence of illumination techniques, colour of light and luminance levels on the perception of the surrounding of the architectural object in a complex urban environment. The work summarizes the observations on the effects of different approaches to night exposure of architecture of Prague and Poznan.

Keywords illumination, light fields, techniques of illumination, colour of light, luminance level, urban enviroment.

I. INTRODUCTION

Illumination of architectural object is not only the technical and lighting project. Is no longer a single architectural objects but entire groups of objects. At the moment, illumination is a tool of marketing activities to attract tourists and give positive image of public spaces at night. The overall objective of the research is to determine the best method for a given object illumination and optimal average luminance of the object in illuminated public space [1], [2].

II. ILLUMINATION IN POZNAN AND PRAGUE

The paper presents the results of a comparison of architectural objects illumination of identical function in being compared cities and urban-like situation. The first compared place is Poznan Freedom Square and Prague's Wenceslas Square.



Fig. 1. Day view of Poznan Freedom Square [2]



Fig. 2. Day view of Prague's Wenceslas Square [2]

Both urban planning schemes in Prague and Poznan, differing in history and location, have the same functions in the city.



Fig. 3. Night view of Poznan Freedom Square [2]



Fig. 4. Night view of Prague's Wenceslas Square [2]

III. CONCLUSION

Strategic approach to illumination from the standpoint of the public space perception of architecture and urban planning in the united Europe is different.

While the square of Poznan has one light dominant [1] - a fountain, Wenceslas Square has them at least two [1] - the National Opera and Wenceslas statue. Average square luminance levels are similar and are about 1 cd/m^2 . The better way to light the area is in Poznan in this case.

Summing better effects of illumination for the same object can point method of illumination, and the even distribution of the light field better effect on the space around the object.

IV. REFERENCES

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