



Master thesis opponent's review

Master thesis: The application of bio-dynamic luminaries for road lighting
Author: Bc. Chandran Bharath
Thesis supervisor: Ing. Marek Bálský, Ph.D.
Thesis opponent: Ing. Jan Zálešák, Ph.D.

Rating (1 – 5)
(1 = best; 5 = worst):

1. Fulfillment of assignment requirements:	<input type="text" value="1"/>
2. Systematic solutions of individual tasks:	<input type="text" value="2"/>
3. Ability to apply knowledge and to use literature:	<input type="text" value="1"/>
4. Thesis formal and language level:	<input type="text" value="1"/>
5. Thesis readability and structuring:	<input type="text" value="2"/>
6. Thesis professional level:	<input type="text" value="3"/>
7. Conclusions and their formulation:	<input type="text" value="3"/>
8. Final mark evaluation (A, B, C, D, E, F):	<input type="text" value="C"/>
verbal:	GOOD

Brief summary evaluation of the thesis (compulsory):

Thesis is construct as very deep scope to problematic of bio-dynamic lighting, which can be considered as excellent. Author clearly put a lot of work to finding all information's regarding describe state of art of chosen topic.

However, thesis lacks direct scientific data on the effect of bio dynamic lighting on human vision and vary between indoor and outdoor research and conclusions.

Final section of thesis "Propose the guidelines of bio dynamic lightning..." lacks an explanation or reasons for using proposed values. Due to this handicap work may seem to be not finished, but it gives very good overview and put basis of needed guidelines.

Questions:

1. In chapter 18.4 and 18.5 are Color Rendering Index and Luminous Uniformity defined by given values – what is the basis of this choice? Please state a reason for given values.
2. Thesis in many places refers to the positive effects of not-blue part of the spectrum. Specifically, in Chapter 10.8 in fig.25 and yet, you propose lower CCT to 2700 K due to luminous efficiency. It is means, that money is more than health?

Date: 10.06.2020

Signature: