



BRNO UNIVERSITY OF TECHNOLOGY

VYSOKÉ UČENÍ TECHNICKÉ V BRNĚ

FACULTY OF CIVIL ENGINEERING
FAKULTA STAVEBNÍ

INSTITUTE OF BUILDING STRUCTURES
ÚSTAV POZEMNÍHO STAVITELSTVÍ

HOTEL

D.1.3.1 – DAYLIGHTING OF ACCOMMODATION ROOM

DIPLOMA THESIS
DIPLOMOVÁ PRÁCE

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BRNO 2019

CONTENT

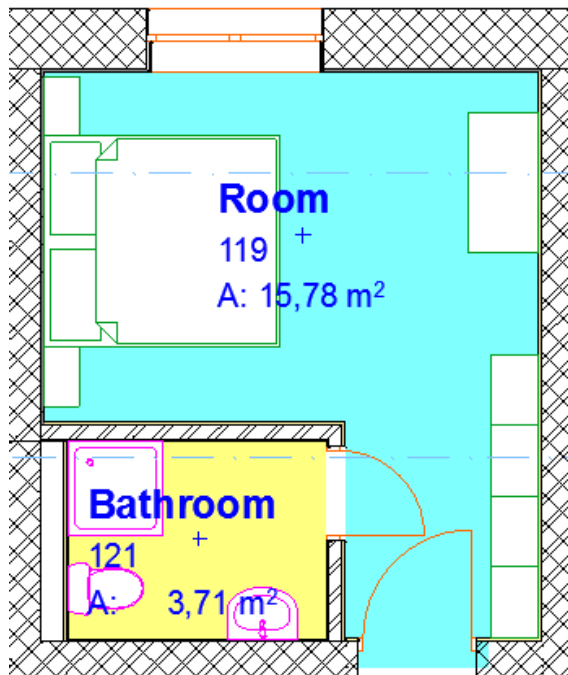
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1. Identification

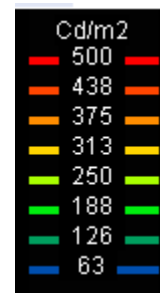
Construction: Hotel
Location: Suvorovova 2888/9, 902 01 Pezinok [846163], Slovakia
Designer: Richard Sasko

2. Calculation

Used methods: ČSN 73 0580
Name: Accommodation Room
Conditions: Day time
Area: 15.78 m²
Height: 3000 mm
Surface size: 300 mm
Reflectance:
Floor 0.3
Ceiling 0.7
Walls 0.5 / 0.5 / 0.5 / 0.5



Pic.01 Floorplan of evaluated room



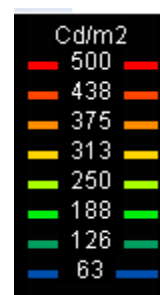
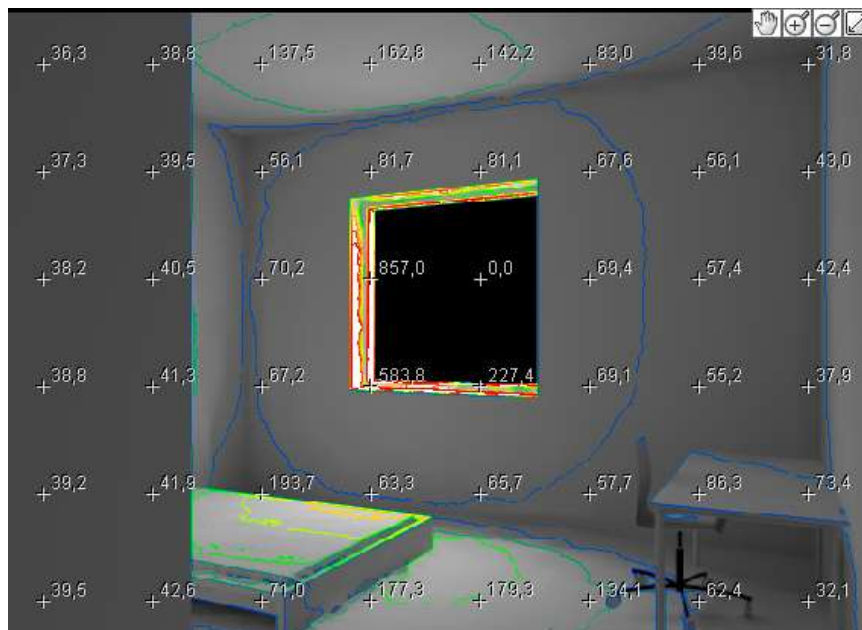
Location Bratislava, latitude 48,9 N, longitude 17,7 E

Time March at 12:00

Orientation 147,0 CW

Sky condition Overcast (1)

Pic.02 Result of Luminance rendering



Location Bratislava, latitude 48,9 N, longitude 17,7 E

Time March at 12:00

Orientation 147,0 CW

Sky condition Overcast (1)

Pic.03 Result of Illuminance rendering

3. Conclusion

Calculation of lighting of the considered room satisfies the requirements.