



POLITECNICO
DI TORINO

Honors Thesis

MASTER OF SCIENCE
IN
SUNTAINABLE ARCHITECTURE

Abstract

**Sport facilities of educational buildings in Turin:
analysis of the existing situation an lighting design of a
case-study**

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The idea of developing this thesis was born from a personal experience with a sports club in Turin as coach of a volleyball team ; during the years , thanks to this passion , I went to school buildings with different characteristics that often do not meet current standards for both proper physical education for pupils of the same school, that for all those clubs who play sports at competitive and must abide by the rules and regulations imposed by sports bodies as CONI (Italian Olympic Committee) and the Fipav (Italian Volleyball Federation). Driven by these reasons I have chosen to analyze in terms of lighting design and the Gym of the school Santorre Santarosa located in Via Vigone 70 in Turin , as well as one of the largest gyms in the district 3 from concession on time extra-school

The thesis is in the first part with an analysis of the Turin area looking into the gyms of school in the fabric and judging them suitable or not in a sport - athletic extra -school education through the regulations .

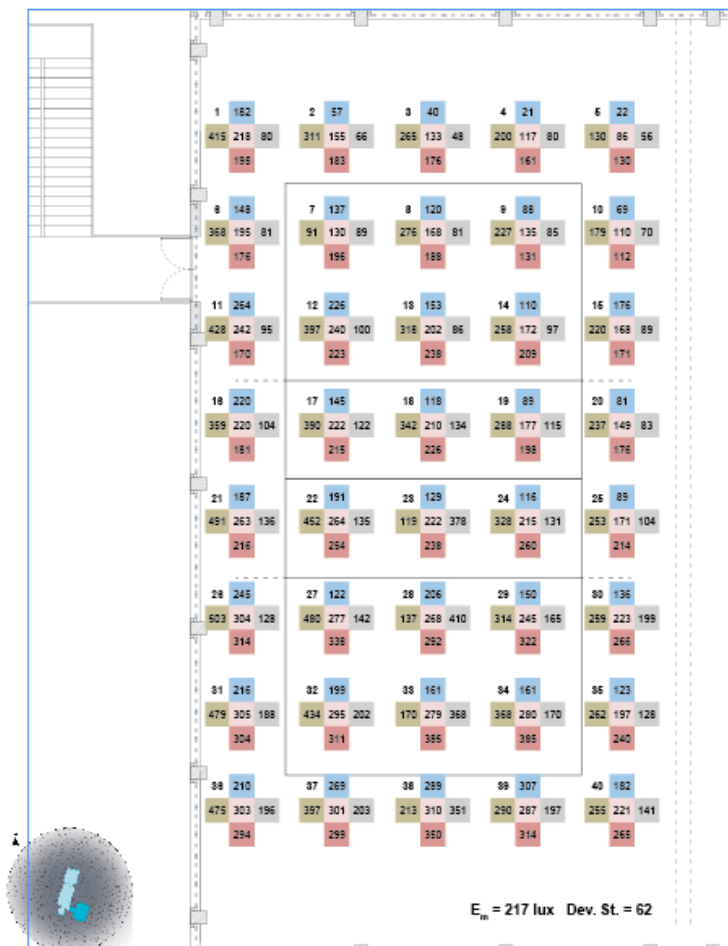
The city of Turin is divided into 10 districts and has plenty of schools with gyms , starting from elementary , small children who saw the use of its users, to finish high school where the gyms usually have larger , is in them that take place , in most cases sports activities available outside of school .

The present school gyms in Turin are owned by the municipalities , every sports club that wanted to use one of these spaces must make a request to the relevant constituency , who will evaluate it and draw up a list of annual grants to various companies than the basic requirements imposed

Taking into account that the school buildings scattered in the Turin area were built at different times, as a result, every gym has different characteristics according to the regulations at the time (height, size, local athletes, the public space, outputs Safety and passages) and not all are suitable for the performance of all sports, but not in them can't perform physical activity. The activities to which reference is most in this thesis are volleyball and basketball, which is the most popular sports for boys in the age group between 6 and 15 years, focusing on the volley for analyzing lighting breakthrough on two case studies.

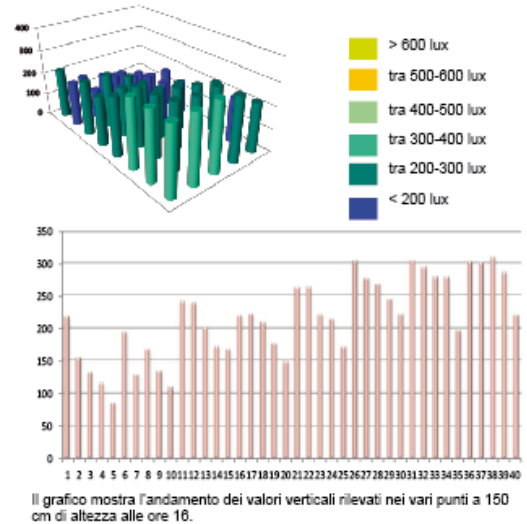
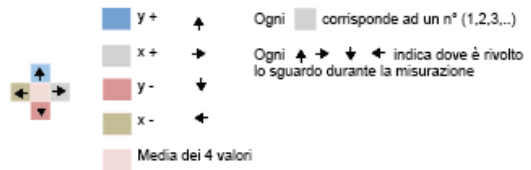
In Part 2 is analyzed and compared all the important lighting played through two case studies: the gym Vigone inside the school complex Santorre Santarosa, located in Via Vigone 70 in Turin and the gym of the school Alessandro Manzoni Corso Svizzera 63, where you live all the regulations required by the cones and with the availability of Fipav Luxmeter that happy detection Lux within the environment.

In Part 3, in front of the considerations we came out of the inspections, surveys, interviews and referring to the rules I thought of a project intervention to improve these spaces, recreating the changing rooms for athletes divided between males and females, suitable changing facilities for the referees, services Toilet accessible to both the public at the gym that disabled people.



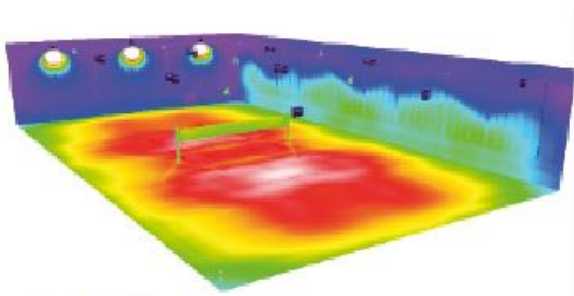
PALESTRA VIGONE 1 ORE 16_Aprile ILLUMINAMENTO VERTICALE

Anche se non prevista da normativa si è ritenuto opportuno rilevare i punti verticali, misurati con il luxmetro ad un'altezza di 1,5 m da terra, elaborando così un grafico che mostra i valori medi (~ 200 lux) considerato importante per la disciplina in considerazione, perché durante un'ora di gioco lo sguardo è rivolto in più direzioni e non solo orizzontalmente come richiede la normativa.



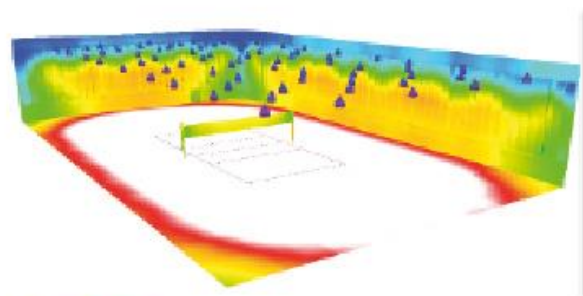
On the first floor, taking advantage of the existing masonry and the consequent division, they are obtained: 4 changing rooms for athletes (2 for the women and 2 for the male), toilets and showers, two changing rooms dedicated to independent arbitrators, and equipped with inside toilet and shower, 1 block of public toilets, broken down by user M / F and disabled, 1 store found in the previous entry / lobby, 1 bar to accommodate all user needing a stop recreation. On the second floor, it is assumed to demolish the internal division and the border wall between the hall and changing rooms to create new spaces accessible to all; from arrival on the landing: 1 office, 1 store, 1 block bathrooms for the public, in the North was willing to made space for a meeting room that can accommodate in its interior up to 45 people, at the ready to South a gym with tools and machines for physical exercise, with attached toilets and showers, along the balcony, taking advantage of the support on the new wall that divides the new space you have created a flight of steps, allowing the public to be able to stop seated and relatively comfortable. In addition , it was considered essential to hypothesize the insertion of a lift for the vertical connection of the two floors , in order to submit the elevator will have to intervene externally with respect the structure

PALESTRA VIGONE UNITA STATO DI FATTO

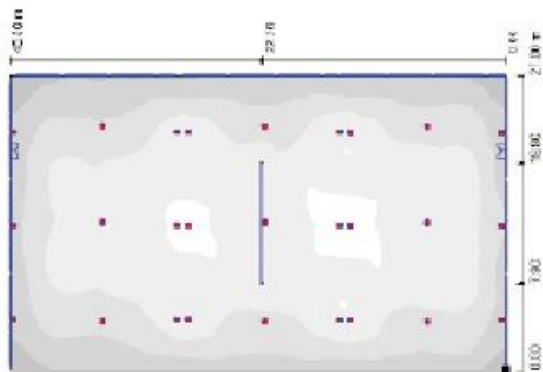


STATO DI FATTO PALESTRA VIGONE UNITA
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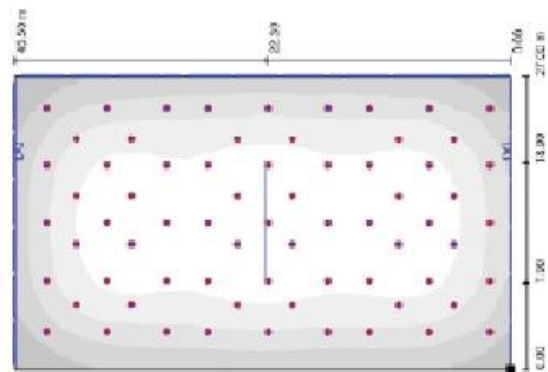
PALESTRA VIGONE UNITA PROGETTO



PROGETTO PALESTRA VIGONE UNITA
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Stato di fatto palestra Vigone unita
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Progetto palestra Vigone unita
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