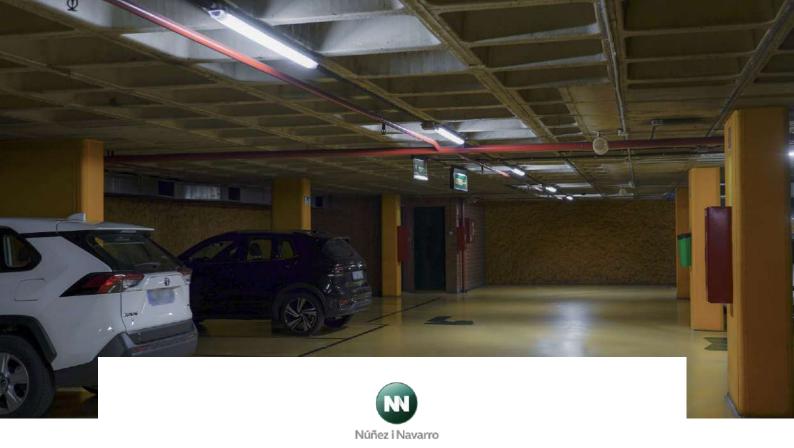


Parking NN Concept PROJECT REPORT.

NÚÑEZ i NAVARRO

C/ de València, 307, Eixample, 08009 Barcelona, España

MAY 2024



Industry.

Application.

The client operates in the Real Estate Management industry.

The solution was applied in all the access stairs and full parking lot.

Luminaires.

A total of 141 semi-autonomous (SA) tubes and 53 wall fixtures (SA) were installed.

Savings.

Thanks to LEDCity, 86% of energy consumption can be saved compared to the previous installation.

Introduction.

In the heart of Barcelona, located in the privileged and central street Valencia 307, the NN Concept parking lot serves neighborhood residents, surrounding offices and leisure visitors. Núñez i Navarro, in its mission to decarbonize its extensive portfolio, selected LEDCity's technology to help reduce its energy consumption and environmental impact. Thanks to its integrated intelligence, our system's lights are exceptionally efficient from both an energy and economic standpoint. As a result, our client enjoys energy savings of 86%, which translates into significant cost savings: approximately 38,000 euros in total, discounting the investment.





Overview

86% less energy consumption.

incurring into unnecessary spending.

24 hs.

hs.

VS.

2,1

Before: 100% intensity during **24 hours** per day.



After: 100% intensity only **2,1 hours** per day.

on average with LEDCity:

lights reach:

100% intensity during **2,2 hours**

on week days. 100% intensity during **1,7 hours**

on weekends.

This parking is located in a central area of the city of Barcelona and in consequence the traffic flow is really high. In stand-by mode, the LEDCity system remains at **10% base**

intensity, always providing the necessary light to feel safe inside the parking, but never

from 46'667 to 9'612



* Calculation based on an energy price of 0.15 EUR/kWh and an operating time of 24 hours per day and 7 operating days per week. Calculations are based on 8 years of operation (70'000 hours).



Innovation and sustainability in NN Concept Parking.

Unnecessary light, unnecessary expenses.

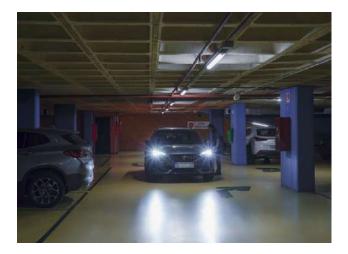
As Núñez i Navarro set out to modernize their lighting setup at NN Concept Parking, and sought to embrace more sustainable alternatives, the challenge was clear: trim energy usage without compromising user comfort. But how to balance these aspects, without actually turning off the lights? Fortunately for the client, LEDCity has the solution.

A simple yet effective solution.

To face this dilemma, Núñez i Navarro opted for a sustainable, future-oriented and of course, cost-effective solution, choosing LEDCity and its innovative solution. The client made the decision to replace a total of 194 luminaires. The installation of the new lighting system was very easy, as all the necessary sensors and control components are integrated into each light source. Also, in contrast to the prevailing trends in the industry, LEDCity presents a modular approach based on a standard norm to all manufacturers. This offers the customer a clear advantage: they can use their existing rail system allowing effortless integration of their new intelligent LEDCity light sources. Additionally, if a light source were to fail in the future, there is no need to replace the entire luminaire. This is not only more economical, but also again, more sustainable.

In this particular case, the luminaires were considerably outdated, so the entire luminaire was replaced at the customer's request, improving the overall appearance and aesthetics of the entire installation.

The "Plug-and-Play" system characterizes the solution: just plug in the light sources and energy savings start right from the very first second. Nothing else is needed.



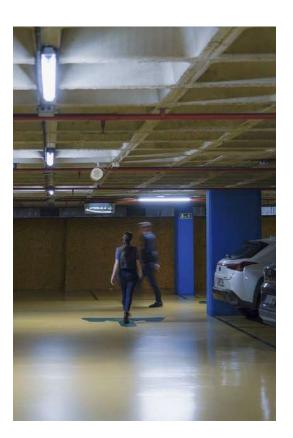


LEDCity Werdstrasse 21 CH-8004 Zurich info@ledcity.ch





Decentralization and automation: the keys to unlock true efficency.



So how can LEDCity's smart luminaires save so much energy?

While the previously installed system kept the entire facility on, at 100% intensity, 24 hours a day, the solution provided by LEDCity is decentralized and uses light exactly where and how it is needed. Thanks to integrated sensors, the light sources are only switched on to 100 % intensity when a visitor is nearby. Thus, unlike before, only the sector of the parking or staircase where someone is passing by, is switched on at 100 %, and not the entire area, which is dimmed. Another factor contributing to minimizing the operating time is the short follow-up times. With most motion detectors, luminaires remain alight for 10 to 15 minutes after the last detection of movement. With LEDCity, this tracking time can be reduced to 15 seconds, depending on individual customer and user requirements. Specifically in this case, 100% intensity switch-on times were reduced from 24 hours per day to an average of 2.1 hours per day. This drastic reduction in operating times not only generates large savings in electricity consumption, but at the same time increases the service life of the light sources.





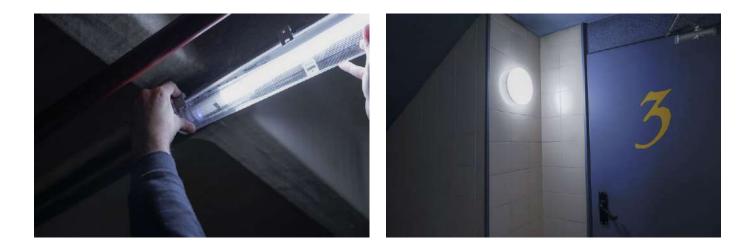


Total cost savings of 38,166 euros.

Reducing the operating hours of the lights led to a notable drop in energy use, going from 46,667 kWh to 9,612 kWh per year. This reduction brings substantial environmental and financial benefits, protecting the customer from possible future increases in energy prices.

Additionally, LEDCity light sources have a lifespan over twice as long as the previously installed FL tubes. This means less frequent replacements, cutting down on the maintenance team's workload and material expenses.

Due to the enormous reduction in energy consumption, the new lighting solution of the NN Concept Parking fits the customer's vision of a future-oriented real estate asset, contributing greatly to fostering a more sustainable future.



Project Report 08009 Barcelona May 2024

