



EFFECTIVE USE OF DECORATIVE LIGHTING IN A MODERN URBAN ENVIRONMENT

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ABSTRACT: The article analyzes the features, scope and application of compositional laws for the effective use of decorative lighting in the organization of a modern urban environment.

Key words: design, composition, decorative lighting, halogen, decorative lighting of city buildings, streets, parks and squares, festive decorative lighting of the city.

At night, many cities change beyond recognition. At night, city lights perform important functions: they help residents feel safe and secure on the streets, emphasize the uniqueness of the urban environment, and decorate public spaces. During the day, some architectural structures may not be visible, their borders in the late afternoon, but with the onset of darkness, the decorative lighting of buildings separates them well from the wax background, making the space bright and colorful. (Figure 1)

Urban lighting design is an important element of outdoor decoration for small and large cities. The decorative lighting of buildings at night emphasizes their architectural features and reflects the functional purpose of the buildings [1]. Classic night lighting in neutral white tones is suitable for office buildings, can be illuminated in shopping malls, cinemas and restaurants with lamps that provide bright colors and attract the attention of guests. Proper placement of light accents is important to highlight the most important components. In addition, its "compatibility" with neighboring buildings should be taken into account when designing a lighting design project; the decorative lighting of the city should correspond to the general concept of the city. (Fig. 2)

Currently, metal halide, sodium and LED lamps are mainly used to create night lighting. When designing a lighting project, not only the utilitarian functions of light sources, but also the aesthetic component are taken into account. Metal halide lamps are used everywhere and provide good color rendering, but they are very large and can fail when



suddenly powered up. Sodium lamps provide a warm yellow light, so they are often used to illuminate gardens, parks and sidewalks. LED lamps are the most popular today because they are durable, compact, respond well to temperature changes, and consume very little electricity. LED lighting is versatile and suitable for any object in an urban environment.

Lighting of building facades: one of the main tasks of decorative lighting of buildings in our city is to highlight the beauty and historical significance of museums, mosques, madrassas and architectural monuments. It is advisable to illuminate the facades of such structures in a classical style: the use of neutral white colors of light, the use of soft floodlight, similar to daylight, so that even in the dark of day the purpose of the building becomes clear. Local lighting, in turn, is used to highlight only certain parts of the structure, such as columns, cornices, and pylons [2]. Concealed lighting is often used to illuminate the facades of shopping malls or shops, cafes and restaurants, residential complexes. It is designed to create light patterns on the plane, allowing the use of different methods of light graphics. The lighting of the entertainment complexes should be bright, colorful and memorable. Neon and LED lamps are best suited for lighting facades, without the help of which you can create unique designs in light colors. (Figure 3)

The lighting of streets and squares, in turn, should be bright enough to make a person feel comfortable at night. Such lighting should be safe and aesthetic, which emphasizes the overall composition of the space [3]. As a rule, external light sources are installed at a high altitude, so that the light flux is diffused. Particular attention is paid to the lighting of intersections and roads: a neutral white light has the best effect on the concentration of drivers and pedestrians. One of the main functions of street lighting is to provide good visibility and constant, direct light output (Figure 4).

The decorative lighting of parks, squares and alleys can be very diverse. In such public places, the light is focused on trees and shrubs, recreation areas and corridors [4]. Designers and lighting technicians should take into account the specific features of the landscape when creating park lighting, which can be highlighted using a combination of general and local lighting. Wreaths and lights hanging on the trees, as well as decorative lighting of statues, art objects and fountains created a unique style. (Figure 5-6)

The solemn lighting of the city constantly raises the general mood of the population and creates an atmosphere of unique pleasure and well-being. LED technology is often used

to create festive city lighting. With their help, you can decorate both common space and separate structures, create different visual and lighting effects, give the light rays any color and shade. On the eve of the New Year holidays, LED volumetric decorations are especially popular: balls, butterflies, animals and fairy-tale characters. The city holiday arch is decorated with LED wreaths, the squares and paths are decorated with thematic patterns created from LED lights and lamps. Such lighting is ergonomic and guarantees tens of thousands of jobs, which means it can be used for several years.

Undoubtedly, decorative lighting of cities is a promising direction of modern architectural design. But every year the lighting in the megacities is growing, lighted advertising banners are placed everywhere, bright windows dazzle the population. Recently, the concepts of "light noise" and "light pollution" have become relevant - a large number of brightly lit buildings are appearing in large cities. Overcrowding of residential buildings should be avoided to ensure that the illumination of the urban space is not negative. Light rays should not be directed directly at the windows, the brightness of lighting fixtures should be strictly regulated. Modern LED lights avoid the problem of "light noise" - the light rays are concentrated in a certain plane, and the brightness of the lamps can be easily adjusted.

The well-developed concept of decorative lighting of the city provides comfort and safety on the streets, gives the population a pleasant impression and a good mood. Any building that makes a strong impression during the day and stands out from the crowd loses its splendor with a late entry [5]. An architectural lighting system can help to illuminate it at night in an urban environment. It draws the attention of residents and visitors to the city, with a special emphasis on every aspect of the architectural style and appearance of the building. An attraction or building with a strong architectural lighting system can become a street beauty and a symbol of the city. Properly lit building will increase the aesthetic value of the building, it will be more sealed in the photos of tourists, "walk around" on social networks, and thus help to shape the image of the country.



Figure 1.



Figure 4.

Figure 2.

3.

Figure



Figure 5.



Figure 1.

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