

Executive Summary

The purpose of technical report one is to look at and analyze existing lighting conditions in the Newseum and Freedom Forum Headquarters building. Four spaces to be looked at are a special purpose space, a large work space, a circulation space, and an outdoor space. They are the News History Gallery, Freedom Forum offices, the welcoming area/foyer, and the Newseum entry porch area respectively.

First information regarding the lighting system was gathered. This includes luminaires, lamps, ballasts, and control devices. Information regarding the spaces was also gathered. This includes materials and reflectances, dimensions, furnishings, and any details such as artwork or other areas of interest. Plans, sections, and lighting plans are also included in the report.

After documenting the system information, a list of design criteria was produced. These include psychological aspects, aesthetics, power allowances, and lighting levels. While producing this list, the IESNA Lighting Handbook and ASHRAE 90.1 standards were used.

The final step was to analyze the existing lighting conditions. This was done with the help of AGI. Light levels were calculated and the overall look and performance was compared to the list of design criteria.