



Feeling Better With HealthE®

PROJECT

Convent of the Sisters,
Servants of the Immaculate
Heart of Mary

VERTICAL/INDUSTRY
Residential



LOCATION
Arlington, VA

INSTALLATION PARTNER
Anthrospheres



THE CHALLENGE

The Arlington Convent is part of the Congregation of the Sisters, Servants of the Immaculate Heart of Mary (IHM), a Pontifical religious institute, whose members are committed to God and to the Church. In Arlington, the Sisters serve as school teachers in the convent adjacent Bishop O'Connell High School. Inspired by a change in lighting at the school, the Sisters became interested in implementing lighting to enhance mental focus in the daytime during daily service, to enhance sleep at night, and to create a healthier, more serene and productive space in their home. They also agreed to be part of a pilot study to evaluate and prove the impact of the lighting on sleep quality.

THE INSTALLATION

During the winter of 2015 Lighting Science and installation partner, Anthrospheres, retrofitted the lighting in selected areas of the convent with HealthE™ lighting. GoodDay® lighting was installed in the morning chapel and the common areas: GoodDay BR lamps were installed in the bathrooms for morning use, GoodDay linear lighting was installed in the chapel, and GoodDay troffers in common areas. For evening illumination, GoodNight® lamps were installed in the bedrooms in bedside table lamps, and in common evening reading areas. In addition, Anthrospheres and Lighting Science's team provided product training to the resident Sisters on how to use the lighting to help improve sleep quality at night and achieve serenity and alertness during the day.

The Sisters were given Basis peak watches to wear with sensors for heart rate,

perspiration, skin temperature, and activity enabling advanced biometric sleep tracking (REM, Deep, and Light Sleep). The data was tracked for two weeks before (early December) and two weeks after the lighting upgrade and during the winter holiday (early January). In addition, sleep and anxiety surveys were administered at end of the baseline and test periods.

THE FINDINGS

The Sisters are very happy with the results, and have used the Lighting Science HealthE® lighting ever since. Comparing the sleep data during two weeks before and two weeks after the lighting upgrade, the Sisters' sleep duration increased significantly, on average by 27 min/ per night (up to 1hr 14 min), their deep sleep duration increased on average by 14 min/ night (up to 38 min), and their sleep quality score increased on average by 7% (up to 22%). The survey data did corroborate the findings, the Sisters reported less drowsiness and higher alertness upon waking up, as well as decreased overall anxiety after installing the GoodDay and GoodNight lighting.

“THE SISTERS REPORTED LESS DROWSINESS AND HIGHER ALERTNESS UPON WAKING UP, AS WELL AS DECREASED OVERALL ANXIETY AFTER INSTALLING THE GOODDAY® AND GOODNIGHT® LIGHTING.”

– Sisters, Servants of the IHM

Products Installed



GoodNight® A19 Lamps: LED light bulb with engineered spectrum to enhance sleep quality and duration. Used in the evening it supports the natural wake-sleep cycle and general wellbeing.



GoodDay® BR30/BR40 Lamps: LED light bulb with engineered spectrum to enhance mood, mental focus, and to boost energy and performance. High quality white light that supports the natural wake-sleep cycle and general wellbeing, similar to morning sunlight.



GoodDay® Troffers: Recessed troffer luminaire with engineered spectrum to enhance mood, mental focus, and to boost energy and performance. High quality white light that supports the natural wake-sleep cycle and general wellbeing, similar to morning sunlight.



GoodDay® Lbars: Linear LED luminaire with engineered spectrum to enhance mood, mental focus, and to boost energy and performance. High quality white light that supports the natural wake-sleep cycle and general wellbeing, similar to morning sunlight.