

CASE STUDY

# Creating Cleaner Air and Safer Spaces with Visium at LECOM

Implementing Lit Thinking's Visium Far-UVC light fixtures reduces germicidal load in two testing areas on campus.

**OVERVIEW** 

The Lake Erie College of Osteopathic Medicine is a leading institution dedicated to training healthcare professionals while prioritizing safety and innovation for its students and staff.



LECOM needed a solution to maintain better sanitization in occupied and high-traffic areas to reduce risk of pathogen exposure to students and faculty.

LECOM is an active teaching facility, with large lecture halls, handson practicum room, and cafeteria alongside smaller study and learning spaces. These education spaces are open to the students and faculty for 18 hours a day with minimal down time.





#### THE CHALLENGE

Traditional terminal cleaning methods leave gaps in sanitation between cleaning sessions, allowing germs to accumulate on high-touch surfaces like desks and sinks. With class attendance paramount, the addition of air treatment to classrooms will maintain a cleaner and lower-risk learning environment when some occupants are sick.

### **OUR SOLUTION**

### **Visium Far-UVC Fixtures**

Forty-four of Lit Thinking's Visium devices were installed in key areas, including a lecture hall, the main bathrooms, conference rooms, and boardrooms, covering 6,160 sqft.





Both Visium Diffused and Clear models were deployed, tailored to each space's needs. Despite high traffic and varying ceiling heights, the installation was seamless.



### **KEY FEATURES**



Continuous air and surface sanitization all day and night while activated



Far-UVC is proven to reduce pathogens safely in occupied spaces



Visium app bridges IoT connectivity for real-time monitoring via mobile devices



## **Third-Party Test Results**

Sampling was done of high-touch surfaces before and after Visium installation to demonstrate the effect on bacterial bioburden in the presence of students and faculty.

Five locations in two rooms had their surfaces swabbed with and without Visium on in the room.

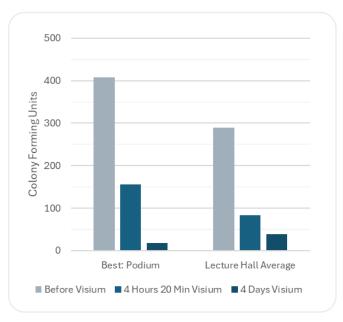
Once Visium was turned on, samples were taken again, same day, with people actively in the spaces. Samples were then independently quantified.

Results showed that Visium reduces bacteria abundance on high-touch surfaces and kept them up to 96% lower than pre-Visium levels, even as the rooms remained in use.

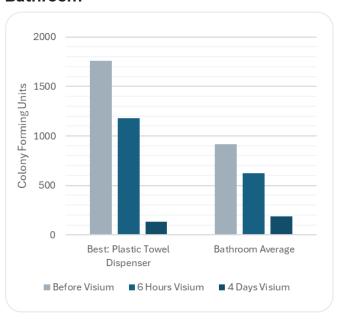


# **Change in Surface Bacteria Counts With Visium**

### **Lecture Hall**



### **Bathroom**







### **Outcome**

Visium seamlessly integrated with LECOM's facilities, providing continuous sanitization that was verified by biological sampling.

- ✓ Up to 96% reduction in colony-forming units (CFUs) even with active room usage
- Samples collected from lecture halls and bathrooms, independently analyzed, revealed consistent bacterial reduction with Visium use
- Visium maintained superior cleanliness compared to pre-Visium conditions

ENERGY SAVINGS	SQ FT	VISIUM QTY	TOTAL eACH	COST (24/7)	ANNUAL SAVINGS
Conference Room	888	6	17.3	\$114.73	\$5,946.29
Lecture Hall	4,140	24	22.5	\$492.78	\$21,878.22
Bathroom	266	4	23.8	\$58.87	\$2,370.37

### Conclusion

LECOM sets a high bar for themselves in regard to cleanliness of their spaces and their dedication to seek greener, eco-friendly solutions to room hygiene. Visium installations allowed them to achieve their goals of improved air quality and surface sanitation without undue disruption to the students and faculty.

Even with students and faculty moving through the tested rooms, Visium was able to reduce the amount of colony forming units on high-touch surfaces and keep levels low with continued Visium use. LECOM representatives see Visium installations as an additional safeguard for students against seasonal flu risks and as a new layer of protection provided by their cleaning regimen.

"As someone dedicated to providing a safe and healthy learning environment, I've seen firsthand the need for continuous sanitization. Visium is a game-changer for protecting our community in real-time."

Dr. Silvia M. Ferretti, D.O.

Provost, Vice President, and Dean of Academic Affairs

