



Dr. Mike Patella is co-inventor of the Humphrey Field Analyzer (HFA) and the Lightcare Eclipse™. He holds bachelor's degrees from Pomona College and Texas A&M University, as well as a doctorate in optometry from UC Berkeley. Dr. Patella worked for more than four decades at Humphrey and Zeiss on the invention and development of automated ophthalmic diagnostic instruments, including the HFA.

UVC Disinfection For HFA

Rapidly disinfect the Humphrey perimeter and enhance patient care.

ADAM DOHERTY
PRESIDENT, MI HEALTH, INC.

The Humphrey Field Analyzer (HFA) is the world's most widely used visual field testing device. If you have glaucoma, you will very likely be regularly tested using the HFA, co-invented by Dr. Mike Patella.

Living through the COVID-19 pandemic has not only reinforced the need for proper disinfection solutions, but has shown the gaps where disinfection may be needed most. Currently, over 2,000 Americans are dying from COVID-19 every week.* At this rate, over 100,000 people will be killed by the disease in the next year. Most are elderly and in the age range that also includes glaucoma patients and typical users of the HFA. Healthcare workers continue to wear masks and healthcare offices continue to apply infection control procedures that are over and above what was commonly seen prior to the pandemic. This has become the new normal.

We talked to Dr. Mike Patella about the Lightcare Eclipse™, the first and only HFA disinfection device utilizing Philips UVC lighting technology that has shown greater than a 4-log reduction (99.99%) when used for 3 minutes on the human coronavirus.

MI HEALTH: Dr. Patella, can you tell us what is MI Health's Lightcare Eclipse™ and how was it designed for the HFA?

DR. PATELLA: Heretofore, the standard method for disinfecting ophthalmic diagnostic instruments has been alcohol wipes and alcohol sprays. Alcohol wipes work well on most surfaces but can damage the optics of the HFA and its projection surface—its bowl. Alcohol sprays can be used for the HFA's bowl, but it is time-consuming and

holds the potential for causing significant problems if used too copiously.

Ultraviolet C (UVC) light has been used for many years to disinfect rooms, instruments and even municipal water supplies.



However, UVC can also damage the skin and especially the eyes, and thus can only be used in areas that have no people in them. The Lightcare Eclipse™ was designed to form a light-tight seal against the front of the HFA, with two Philips UVC light bulbs protruding into the HFA's bowl. Eclipse has been shown to kill 99.99% of coronavirus inside the bowl, including the optical projection system, and on the chinrest in just 3 minutes.

Eclipse's light-tight seal and its computerized safety circuitry allow use of Eclipse while staff and patients are in the room. After each patient finishes visual field testing, Eclipse can be locked onto the HFA and the disinfection can be done while the next patient is being called and moved into the room. Three minutes later, a patient entering the perimeter testing room will see a clear message displayed on Eclipse's computer screen saying that the disinfection is now complete. We know of no other infection control system that communicates directly to patients that an instrument is clean and ready for their use.

MI HEALTH: What are the benefits of the new Lightcare Eclipse™?

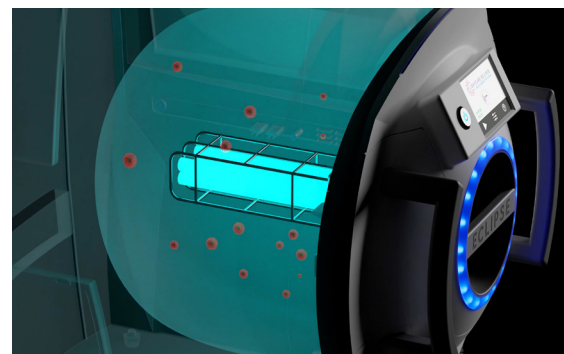
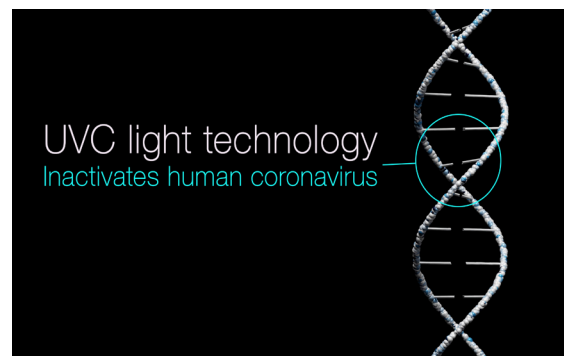
DR. PATELLA: Eclipse is computerized and always disinfects using the same routine. Thus, it minimizes human variability commonly seen in manual infection control procedures. Eclipse is quick and only takes 3 minutes. It's designed to reduce patient concern regarding infection control by visibly communicating that disinfection has been done, and the HFA is now ready for patient use.

MI HEALTH: What do you think the new normal is when it relates to healthcare clinics?

DR. PATELLA: The new normal is that infection control must be visibly thorough and minimally variable in all places where healthcare is delivered.

Clinic flow is key, and infection control procedures must be simple to teach and minimally time consuming. Eclipse automates and de-skills infection control of one of ophthalmology's most widely used diagnostic instruments, and it kills 99.99% of the coronavirus in just 3 minutes.

Lightcare Eclipse™ is a must-have in all clinical settings using the HFA!



*https://covid.cdc.gov/covid-data-tracker/#trends_weeklydeaths_select_00
Accessed March 24, 2023.