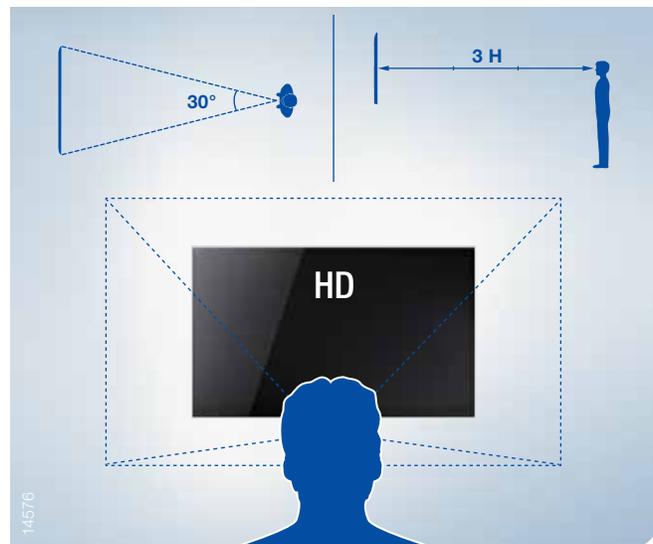
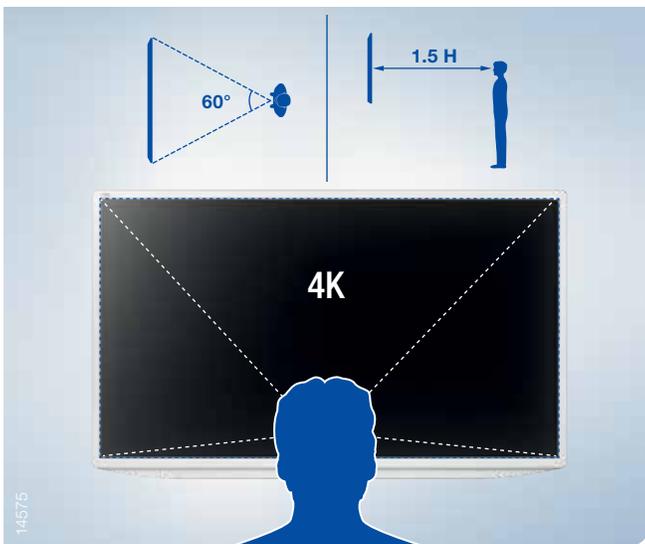


## Three Ways 4K Big-Screen Surgery Will Change the Way You Operate

### Distinction #1 [Resolution]: Four Times the Resolution of Full HD

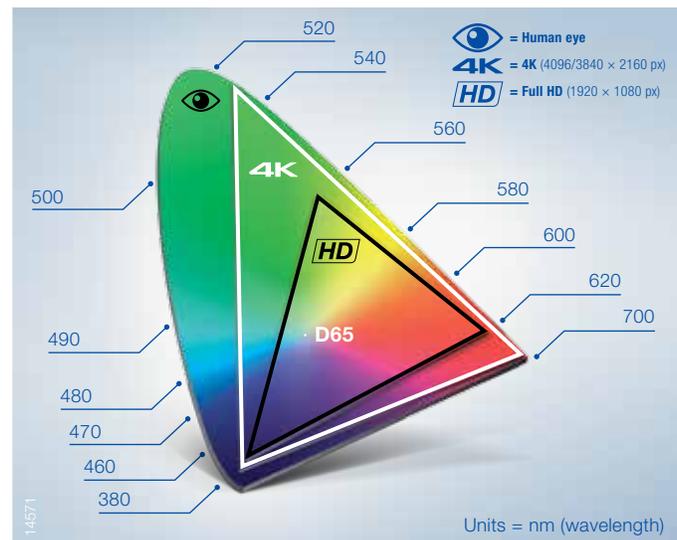
A large, 55-inch UHD operative display provides four times more information than conventional Full HD imaging systems and it gives an operating surgeon such an immersive experience with viewing distances closer than ever before. Initial surgeon observations equated their experience with the 55-inch large monitor “as if you are stepping into the patient’s abdomen.” Others have described it as a “feeling as if you were doing an open surgery.” The large display also provides your surgical staff with the same view eliminating the need for secondary monitors which may help minimize errors as all O.R. personnel view the same screen during the procedure. No matter how you describe it, the large display allows the entire team to focus on the operative area while maintaining peripheral vision to the surrounding tissue.

#### An immersive experience with viewing distances closer than ever before



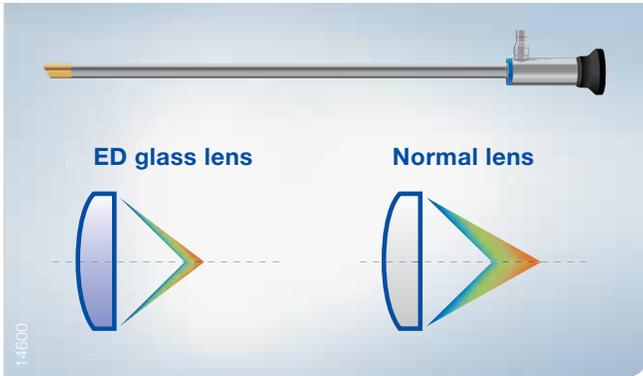
### Distinction #2 [Color]: Color reproduction you have yet to see on another surgical imaging system

The Olympus 4K UHD generates a wider color gamut than the conventional HD system. The expanded 4K color format BT2020 standard allows the system to reproduce twice the color range of HD. The expanded color spectrum reproduces much more subtle differences in red and yellow colors than conventional HDTV images which may help in distinguishing oxygenated and non-oxygenated blood as well as other fine details in the surgical field (i.e., omentum, stomach, nerves, ureter).



## Distinction #3 [Light]: Clearer Images in all light conditions — 5 mm scopes without the light loss of traditional HD

Five mm scopes are the desired size for most general laparoscopic procedures, but due to limitations of light, many surgeons are forced to use 10 mm scopes to obtain right amount of light in the cavity. However, by aligning Olympus imaging technologies with Sony cutting-edge electronics technologies, we are now able to reproduce a 4K 5 mm image that exceeds existing 10 mm HD images on the market as a result of three key technological developments:



1. **Ultra-HD (UHD) Telescopes** with specialized extra-low dispersion (ED) glass. This glass allows more light across a wider spectrum of colors to be passed to the sensor, thereby, allowing it to capture all wavelengths of light in a very bright and high-contrast image.
2. **Sony Exmor R® Sensor** moves the wiring from the front to the back of the sensor thereby increasing the amount of light seen by each pixel.
3. **One-Touch Auto Focus** eliminates the need for optical zoom.

There is enough resolution to zoom in two times the magnification and still maintain an HD or better image quality. By zooming digitally, you avoid the light loss of an optical zoom. This allows you to keep the scope out of the way of instrumentation and far enough back to avoid smoke and mist as well as surgical plume which would require the scope to be cleaned.

For more information, please call 1-800-848-9024 or visit us at [olympusamerica.com/4K](http://olympusamerica.com/4K) or [www.4KLaparoscopy.com](http://www.4KLaparoscopy.com)