THE NEXT GAME CHANGER IN TV's

QD-OLED



Contents

INTRODUCTION

Redefine your HDR experience!

MILLIONS OF QD PIXELS, ONE OF A KIND DISPLAY

SEE IT. FEEL IT. BELIEVE IT.
VISUALS LIKE YOU'VE NEVER SEEN BEFORE
RICH WITH DETAIL
ALWAYS THE BEST SEAT IN THE HOUSE
GLARE, GONE
THE X FACTOR OF VIVID COLOR
BYE BYE, BLUR

TAKE THE QUANTUM LEAP
QD-OLED: YOUR NEXT TV

CONTACT US



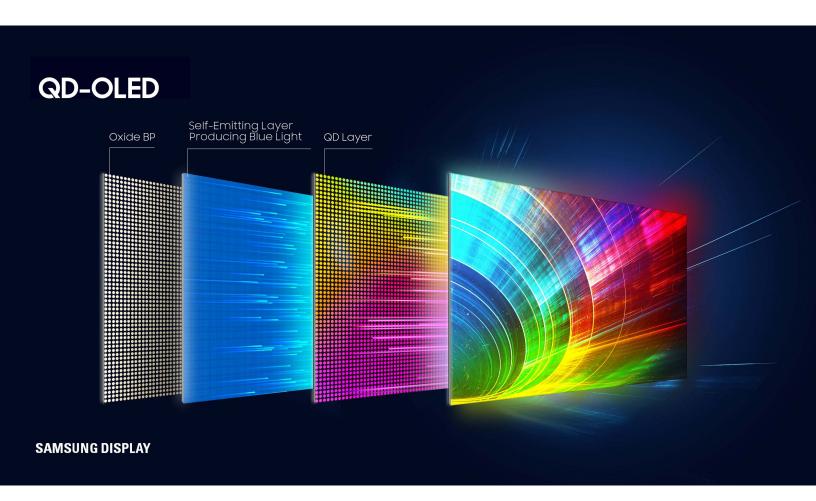
Redefine your HDR experience!



Home entertainment has seen a massive shift - OTT/Streaming was once seen as a fringe as quickly become a dominant segment and expected to further grow. Consumers have voted with their wallets - more and more users are adopting the streaming services like Netflix or Disney Plus. Streaming services are not only investing billions of dollars in high quality content but also providing an elevated experience with their premium 4K HDR membership tiers. Since 2021, we are seeing the TV shrug their tag as "poor cousin" of Cinema to becoming "first amongst equals". QD-OLED provides the most advanced entertainment platform - so consumers can enjoy the thrills of cinema from their living room!

Millions of QD pixels, ONE of a kind display

QD-OLED combines the best in material engineering, quantum physics and vision science to create an advanced display platform. This is the world's first display to integrate the power of printed Quantum Dots with the self-emitting layers producing blue light. The result is a viewing experience like no other!





SEE IT. FEEL IT. BELIEVE IT.

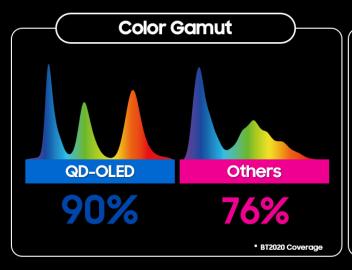


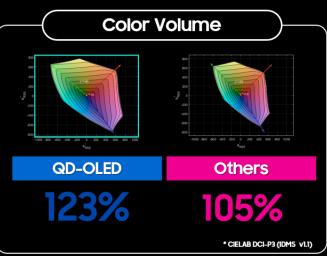
You've Never Seen Visuals Like This

Immerse yourself in the widest possible spectrum of vibrant color, and feel the full range of emotions, exactly as the director intended, so you can experience "real" cinema on a whole new level.

Unlike Other TV technologies that rely on color filters, QD-OLED introduces color conversion by quantum dots. This industry-first innovation allows QD-OLED to produce narrow band red, green and blue spectrum of light.

This narrow color spectrum means that each color in the RGB trifecta is created accurately at a finely tuned wavelength. These slim R,G and B slim cones translate into more possible color combinations ensuring the widest color range. All of this while also ensuring color accuracy and uniformity – ensuring you get the most vivid and expansive color performance.





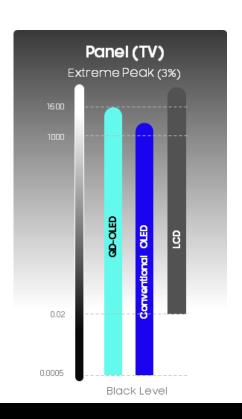
SAMSUNG DISPLAY 03 / See It. Feel it. Believe It.

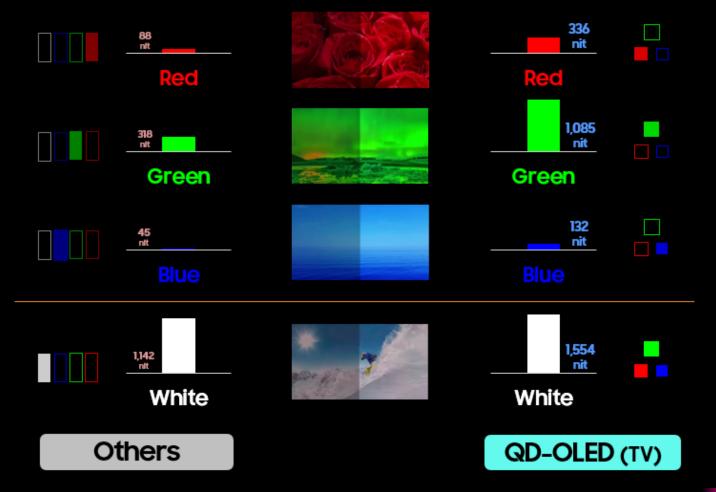


% Rich with Detail

When it comes to illumination, it's not about peak or typical brightness, but about highlights and contrast. The level of detail increases dramatically when only specific areas are highlighted, and QD-OLED provides the lowest measurable black level of 0.0005 nits, achieving a true black unlike any other. QD-OLED also uses true RGB additive light to create perfect whites and high color luminance, providing the perfect complement to your HDR contents library with an infinite contrast ratio.

Compare that to transmissive screens, like LCDs, which are equipped with a separate backlight. To create blacks, these "always-on" backlights are blocked by the liquid crystals. Even with advanced designs like dimming zones some light escapes resulting in LCD blacks that often look gray! With QD-OLED you can see 'shadow details' rendered with exceptional clarity and integrity; in fact, you may uncover previously unseen details in your favorite films, unlocking a totally new experience.



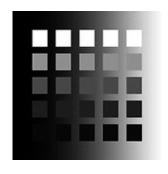


SAMSUNG DISPLAY 03 / See It. Feel it. Believe It.



The X Factor of Vivid Color

The users perception of brightness is a function of not only the actual luminosity of the display, but also affected by the black levels and the color saturation. QD-OLED leads the pack with lowest black levels and ability to create vivid colors ensuring that you experience life-like colors as good as you were there!



SIMULTANEOUS CONTRAST

What surrounds an image influences how it is seen. QD-OLED provides industry leading 0.0005nit blacks. (Other LCD 0.05nit)



HK-Effect

More color saturation, at a constant relative luminance, makes a view appear brighter. QD-OLED 90% BT2020 can create max colors - more saturated colors.

Others



QD-OLED





Always the Best Seat in the House

Perspective matters. Viewing angles have a significant impact on the way we experience a display. QD-Display with its exceptionally wide viewing angle, delivers uniform luminance and color regardless of where you're seated.

QD-OLED has a distinctive, dome shaped flux structure (also called Lambertian Flux). This uniformly dispersed light structure ensures that images look the same - no matter which angle you're watching it from. No more washed-out colors and no more dull images ...and no more guesswork about where to sit for the best view.







Side viewing Angle

Others		QD-OLED
0.012	Color Shift @60° (WAD)(∆u'v')	<0.006
53%	Luminance Shift @60° (Ratio against @0°)(%)	80%



Glare, Gone.

Specifically designed to minimize reflections on screen, QD-OLED provides an industry-leading total reflection (SCI) of only 1.1% - meaning reflections you'd usually see are a thing of the past, allowing you to see a clearer and sharp images everytime!

Others



QD-OLED





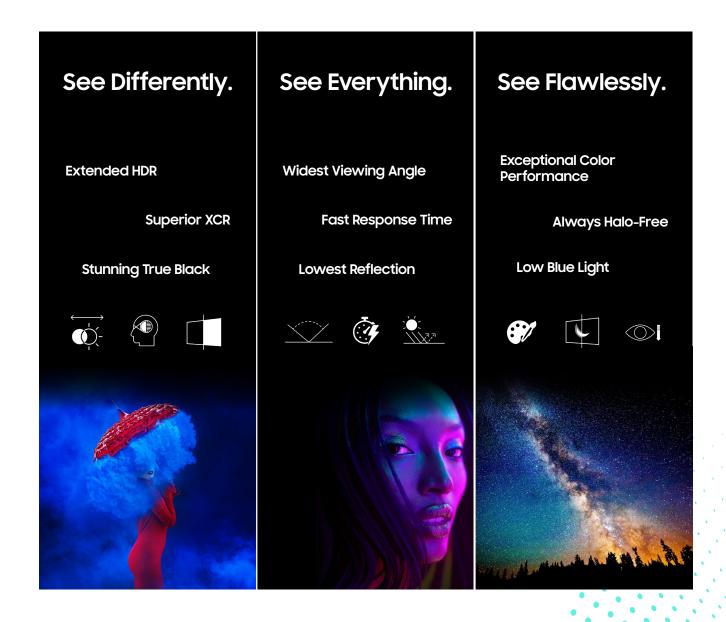
Response time on QD-OLED panels is near-instantaneous, delivering clear motion in even the fastest moving scenes at a mind-blowing 0.1ms response time.

QD-OLED also boasts motion clarity (reduced motion blur) like nothing else on the market, with a high frame refresh rate capability (TV - 144Hz, Monitor - 175Hz). These features ensure significantly minimized ghosting (a faint double image), or tearing (when the processor is out of sync with display), so you can stay focused on the action, instead of distractions.



Others QD-OLED

SAMSUNG DISPLAY



Want more?

Get yours @ innovate.samsungdisplay.com