

SAMSUNG DISPLAY



Investor Presentation

2023

Contents

BUSINESS UPDATE

BUSINESS OPPORTUNITIES

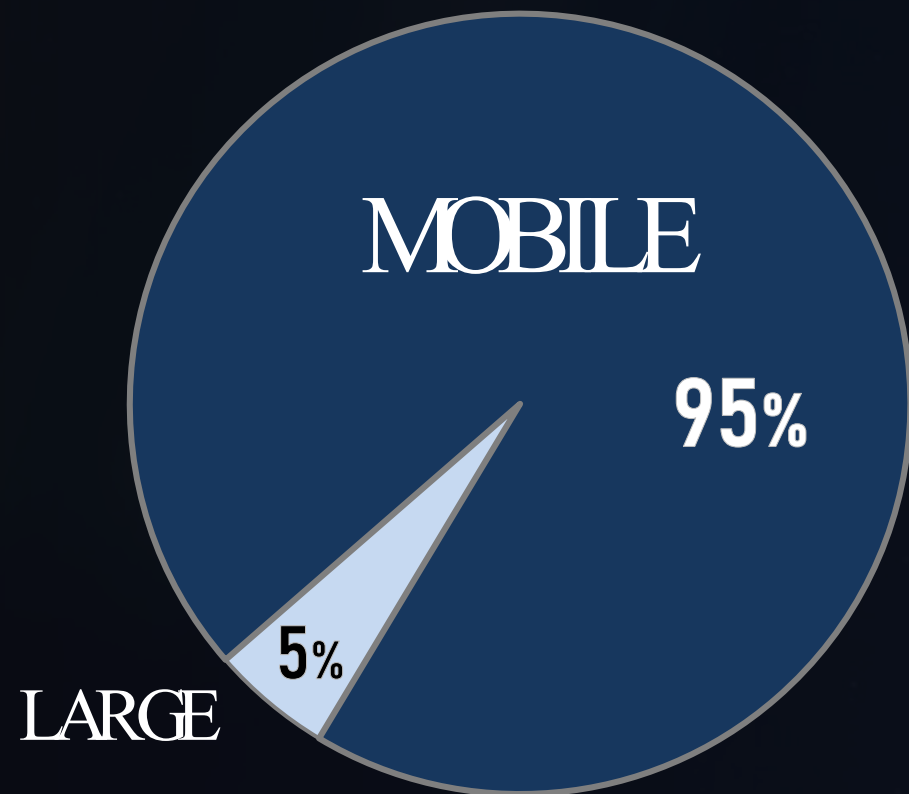
SAMSUNG STRATEGY

SAMSUNG DISPLAY ESG

DISPLAY OVERVIEW

FY2022 Net Revenue

\$27B



Business Accomplishment

[Market Share]

1

Smartphone Display 58%

Smartphone AMOLED Display 74%

(Revenue base, OMDIA)

LEADERSHIP : OLED DISPLAY

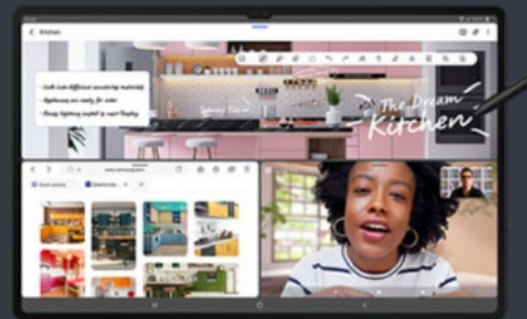
Mainstream in the Small-Medium Display Market



SmartPhone



Foldable Phone



Tablet



Note PC



Automotive



Smart Watch

LEADERSHIP : QD-OLED

New standard for next-generation Large Display

TV



Monitor



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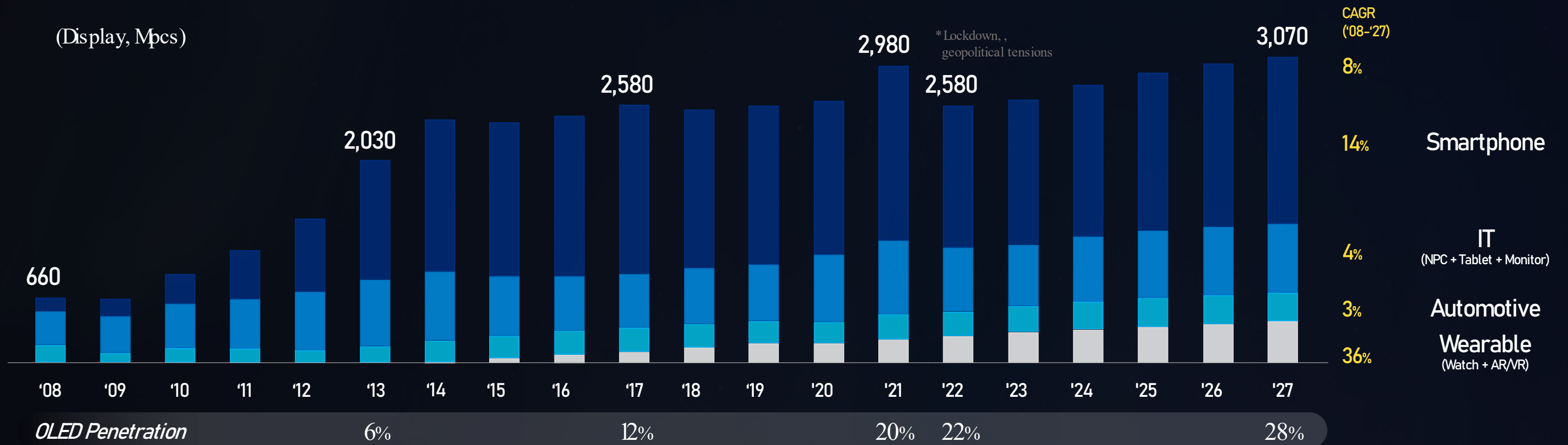
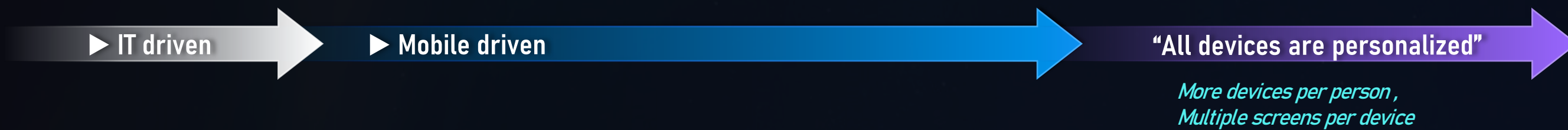
BUSINESS OPPORTUNITIES

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DISPLAY MARKET

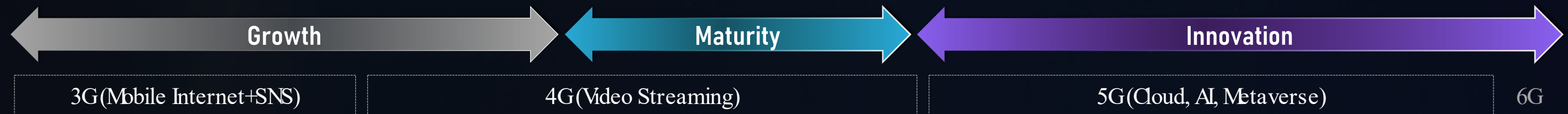
Pandemic accelerates device personalization



*Source: Omdia

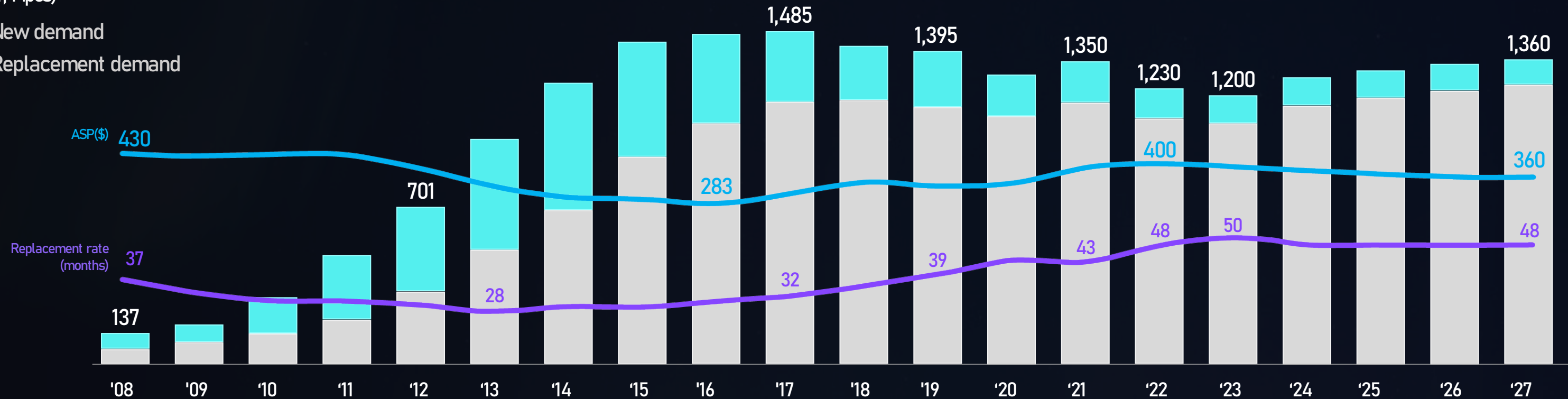
SMARTPHONE MARKET

Continue to advance the performance and form-factor



(SET, Mpcs)

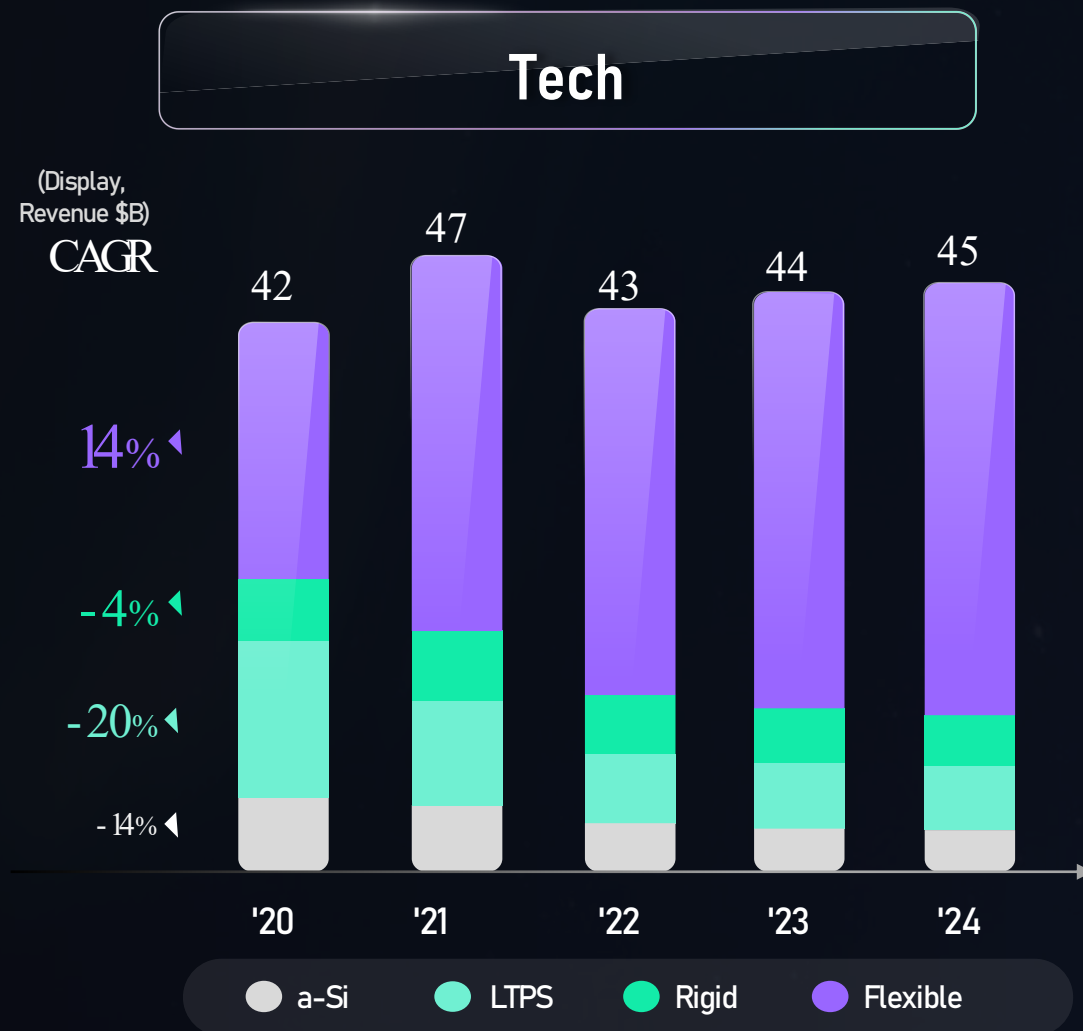
- New demand
- Replacement demand



(Source : IDC, SA)

FOLDABLE BECOMES MAINSTREAM

More OLED, Various Form-Factor



(Source : Omdia ETC)

NEW APPLICATIONS

Wearable

Healthcare drives wearable



- Blood Sugar
- Blood Pressure
- SpO2 * SPO2 : Pulse Oximeter Saturation
- Stress Monitor
- ECG
- Heart Rate

AR/VR/MR

key devices in Metaverse era



Standalone

Slim/Wireless
"Kinetic/Ergonomics"

Tethering

LTE (1Gb)

5G (20Gb)

• Metaverse

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SUPERIOR TECHNOLOGY LEADERSHIP

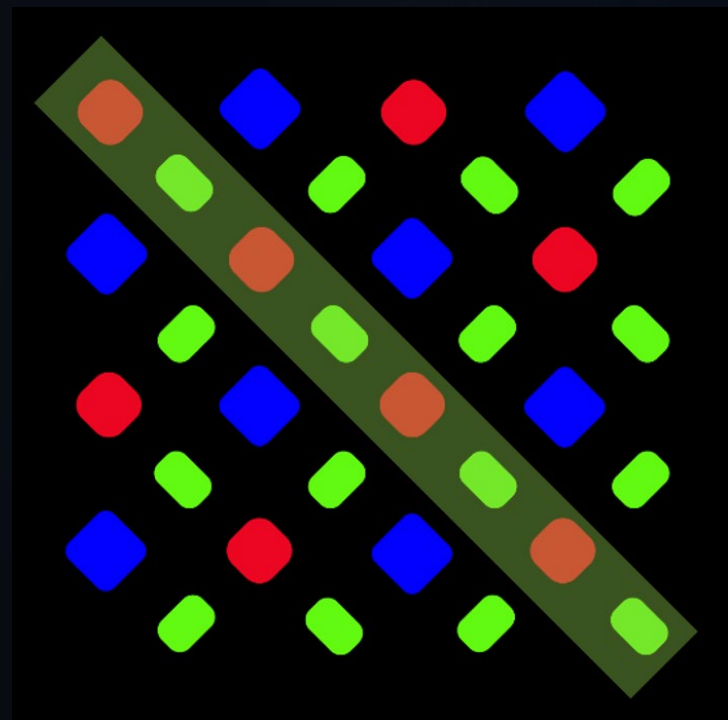
Diamond Pixel

Eco² OLED

QD-OLED

 Samsung Diamond Pixel™

 Eco² OLED™



Efficient power

Consumption

+

Eco friendly

Component

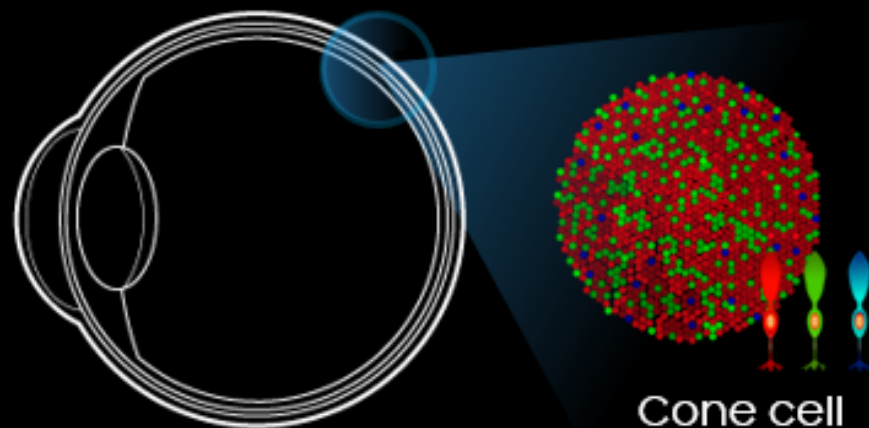


DIAMOND PIXEL

A structure like human eyes, optimized for straight and diagonal shape expression

Human eye structure

"Human eyes are more sensitive to **Green**"

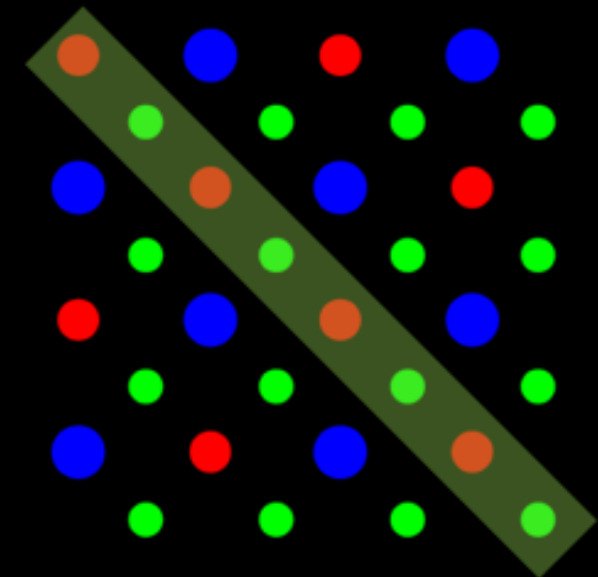


Pixel Structure

 Samsung Diamond Pixel™

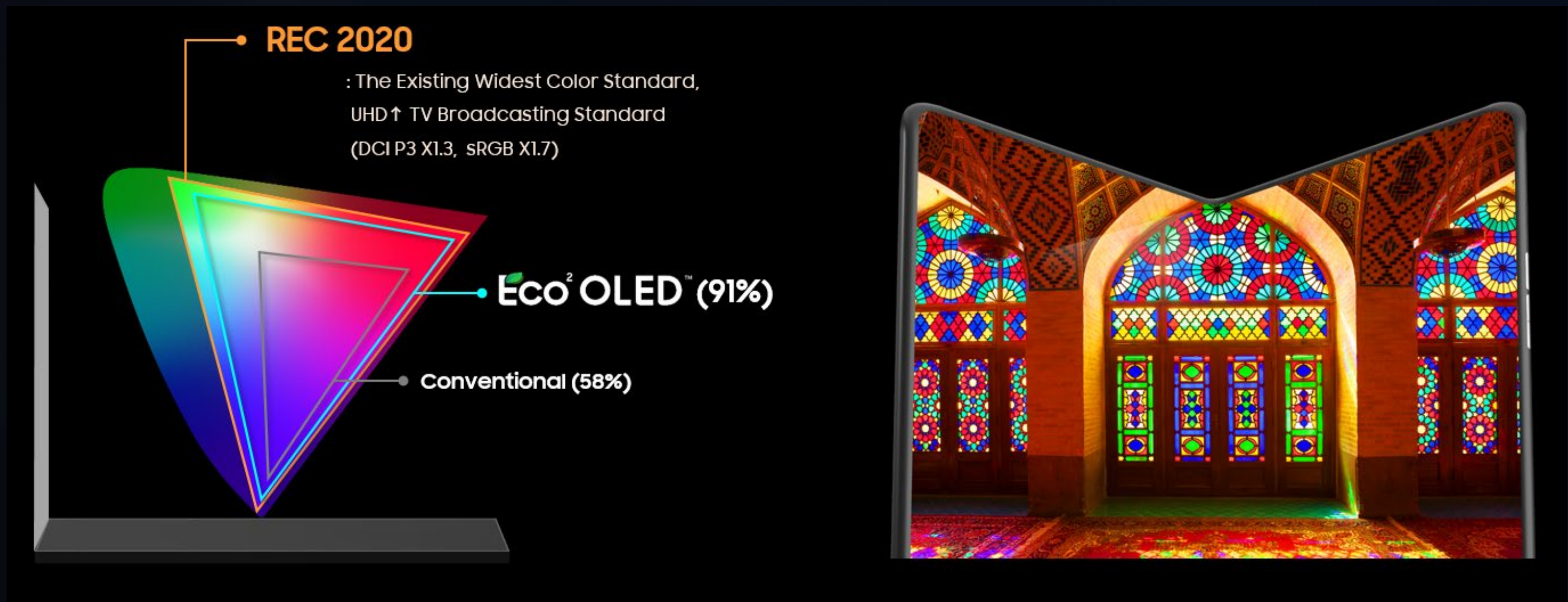


 Round Diamond Pixel™



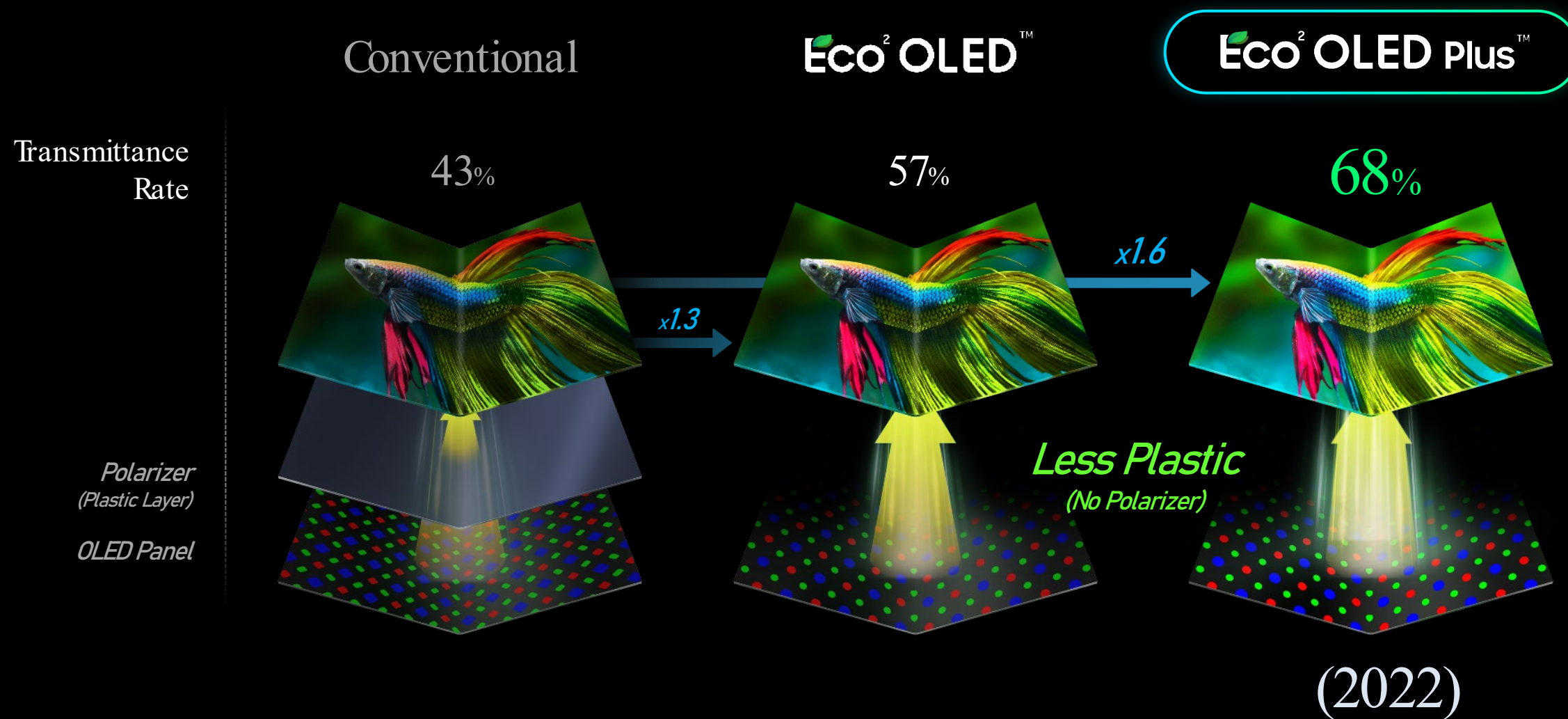
ECO² OLED : COLOR

Eco² OLED delivers the best color performance of any smartphone display
(REC 2020, 91%)



ECO² OLED : ENERGY

Eco² OLED promises high transmittance and energy efficiency with round diamond pixel



LEADERSHIP : ALL NEW QD-OLED 2023

The Innovations re-define ‘Premium Experience’

Leap in Technology



HyperEfficient EL



IntelliSense AI 2.0

The Performance

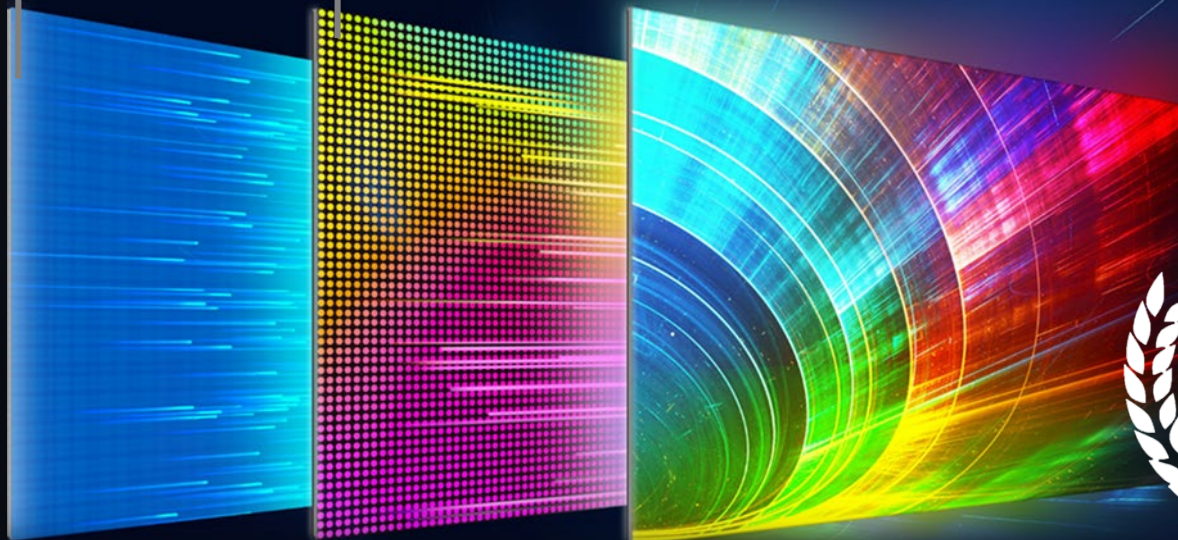
Luminance **+130%**

2X Reliability

Power consumption **Down**

Blue OLED

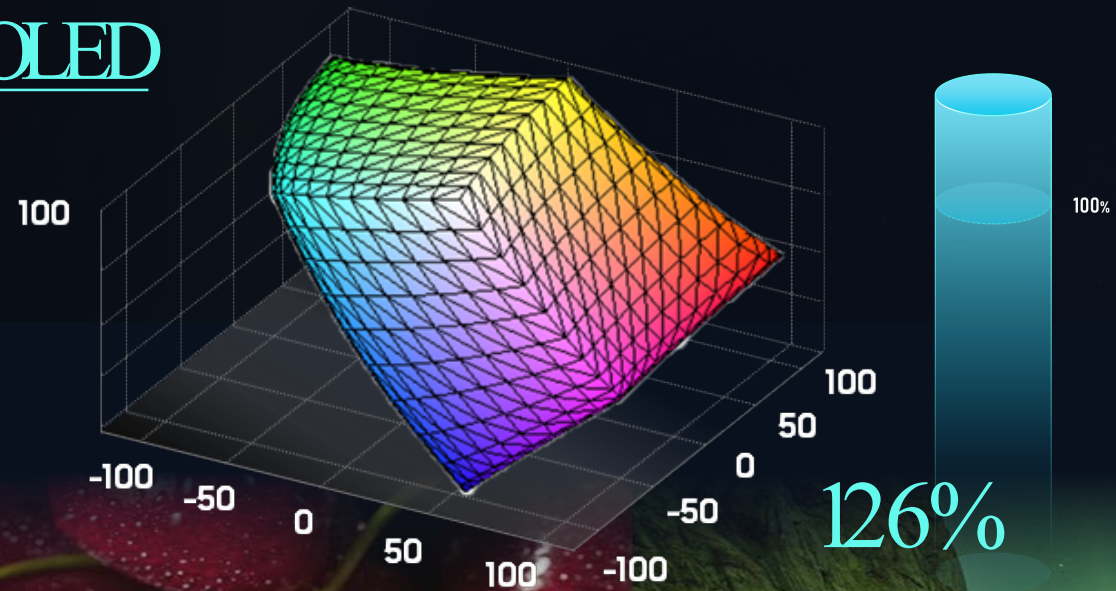
Printed Quantum Dots



QD-OLED : COLOR VOLUME

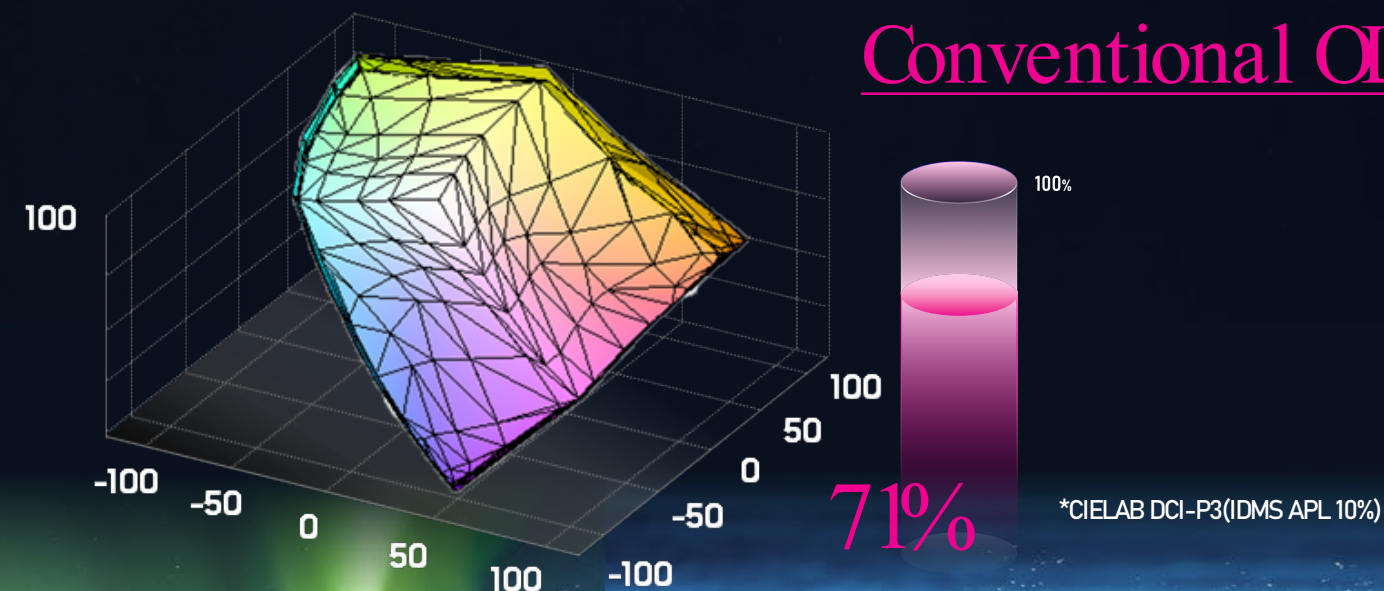
REAL HDR Color Performance
QD-OLED delivers more shades of colors

QD-OLED



126%

Conventional OLED



71%

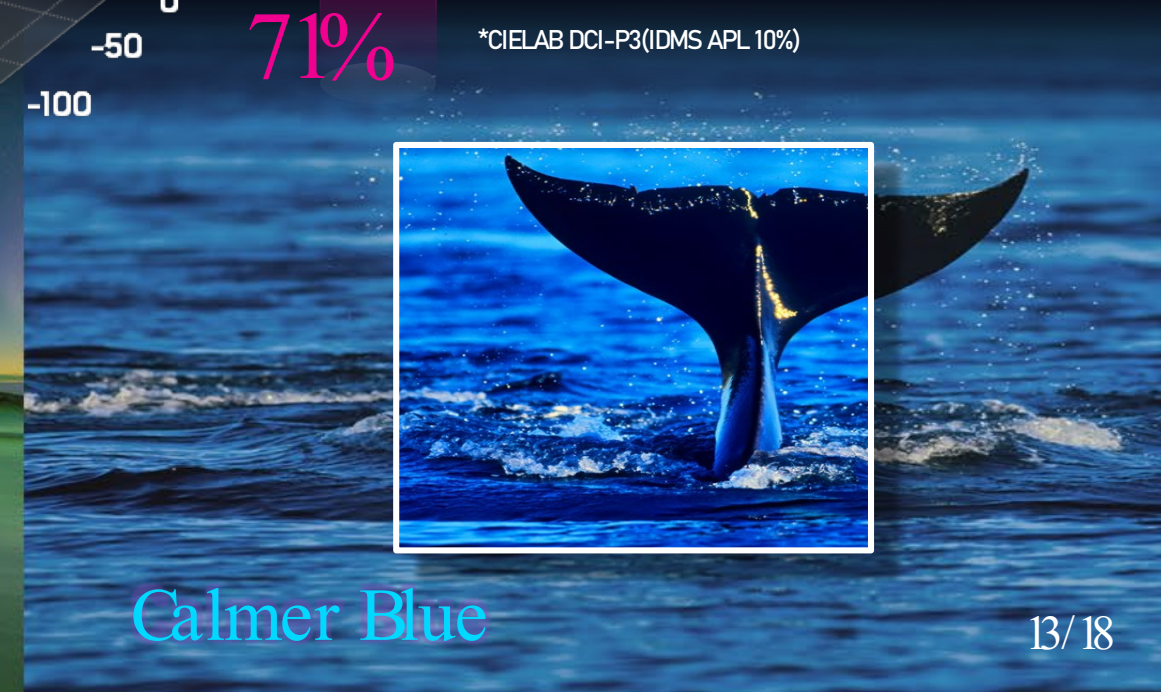
*CIELAB DCI-P3 (IDMS APL 10%)



Rosier Reds



Envious Greens



Calmer Blue

QD-OLED : REAL BRIGHTNESS

'23 QD-OLED

'23 Conventional OLED



453nit



2.4x

188nit



1442nit



2.8x

514nit



165nit



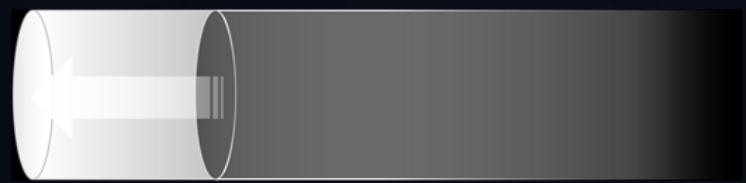
1.9x

85nit



Color Light Output = Peak Light Output

Color Light Output = 40% of Peak Light Output



2060nit



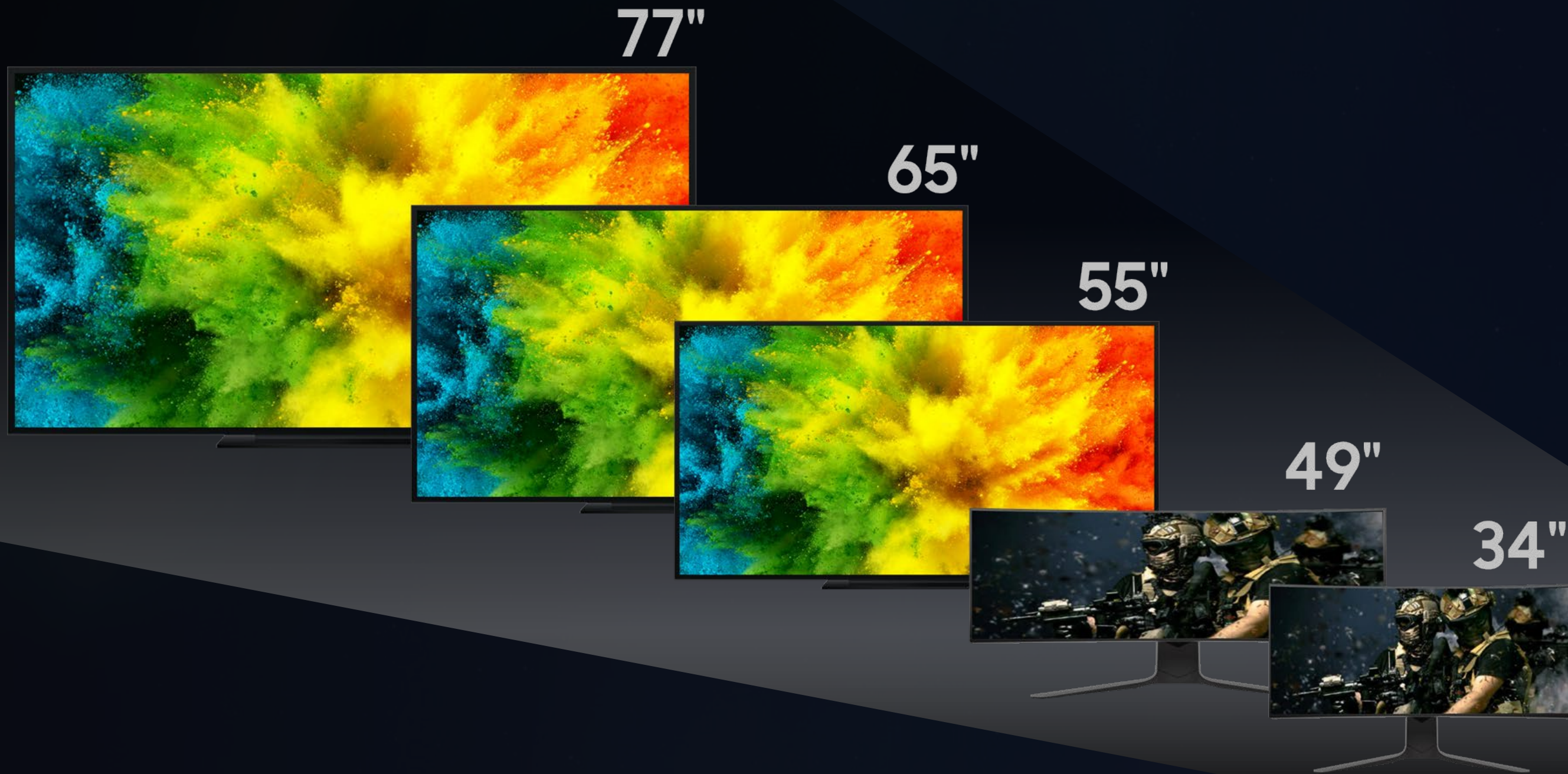
1.1x

1936nit



@ Peak luminance

QD-OLED : NEW SIZES, ONE FOR EVERYONE



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SAMSUNG DISPLAY ESG

PLANET FIRST : GLASS TO SAND

Samsung Display protects sand by recycling glass



PLANET FIRST : LESS PLASTIC

Self lighting Samsung Displays are rarely using Plastics



LCD

Plastic 8 Layer / 11



OLED

Plastic 1 Layer / 4

*Polarizer

* Eco² OLED Tech even removes Polarizer



LCD

Plastic 8 Layer / 11



QD-Display

Plastic 1 Layer / 4

Decomposition Time for Plastic **600** years

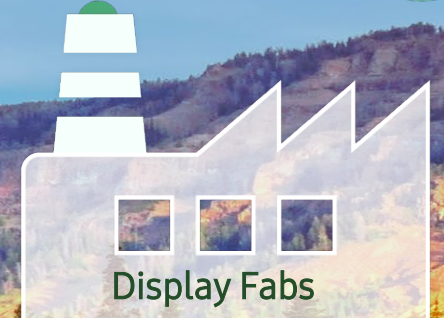
PLANET FIRST : REDUCING GHG

* GHG : Greenhouse Gas

Samsung Display has been striving to reduce GHGs since 2016



Reducing **12M tons**
of Greenhouse gasses since 2016



It reduces the amount of greenhouse gases that are purified by 8 times the size of Yellowstone.