AZUMO

Backlight vs Frontlight Competitive Analysis

3.4" Transflective MIP Color Display

LCD 2.0

Native Display Specs

Display Type	3.4" Transflective
LCD Structure	LTPS - Memory in Pixel (MIP)
Color	64 Color
Resolution	272 x 451 pixels
Contrast Ratio	20
Color Gamut (NTSC)	19%
Reflectance	10%
Transmittance	1%

Competitor Lighting:
Back Light Unit (BLU) Bike Computer
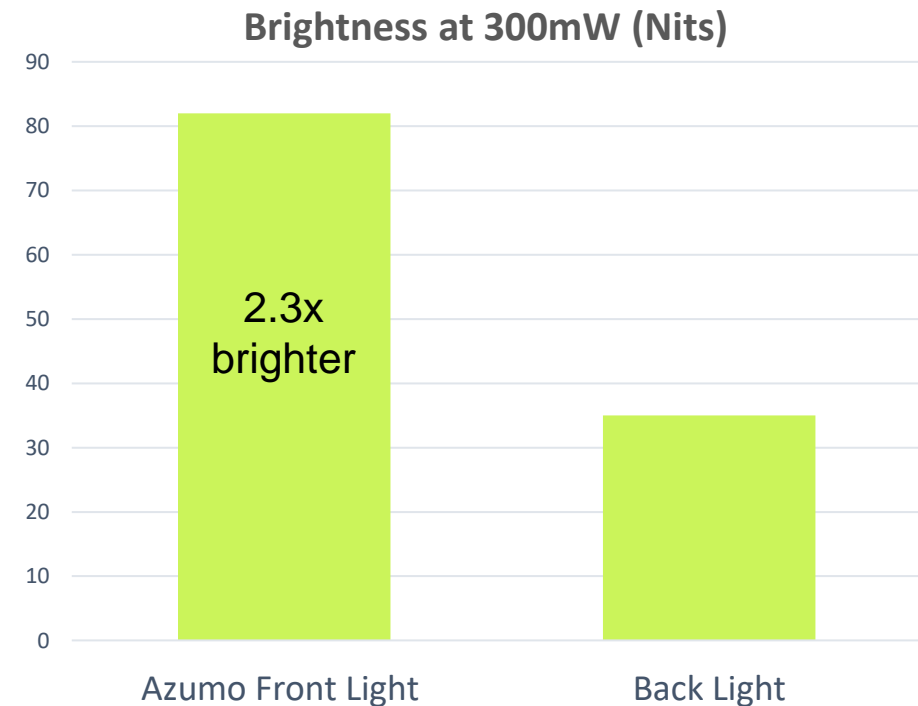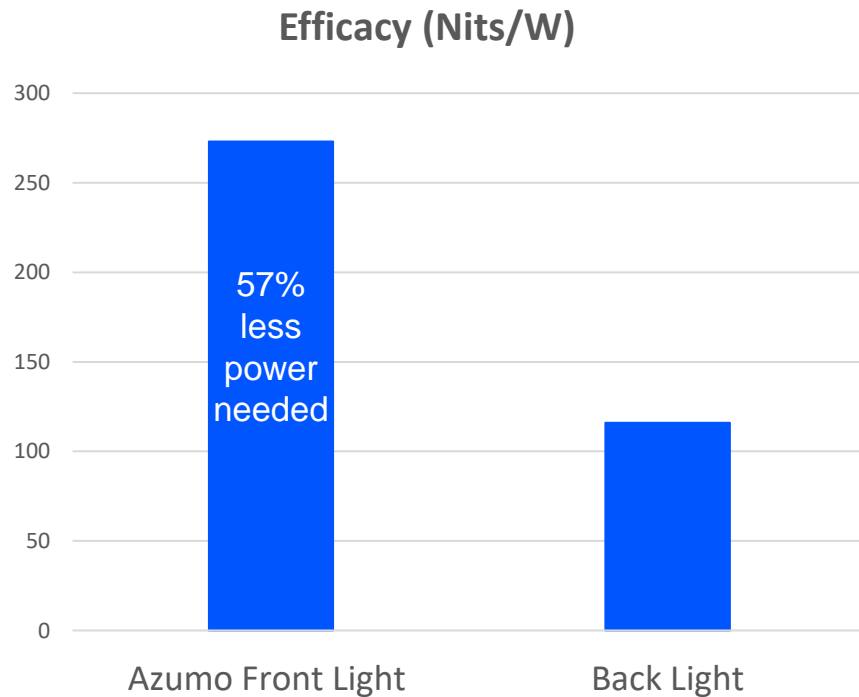
Azumo Lighting:
LCD 2.0 Front Light Panel (FLP)
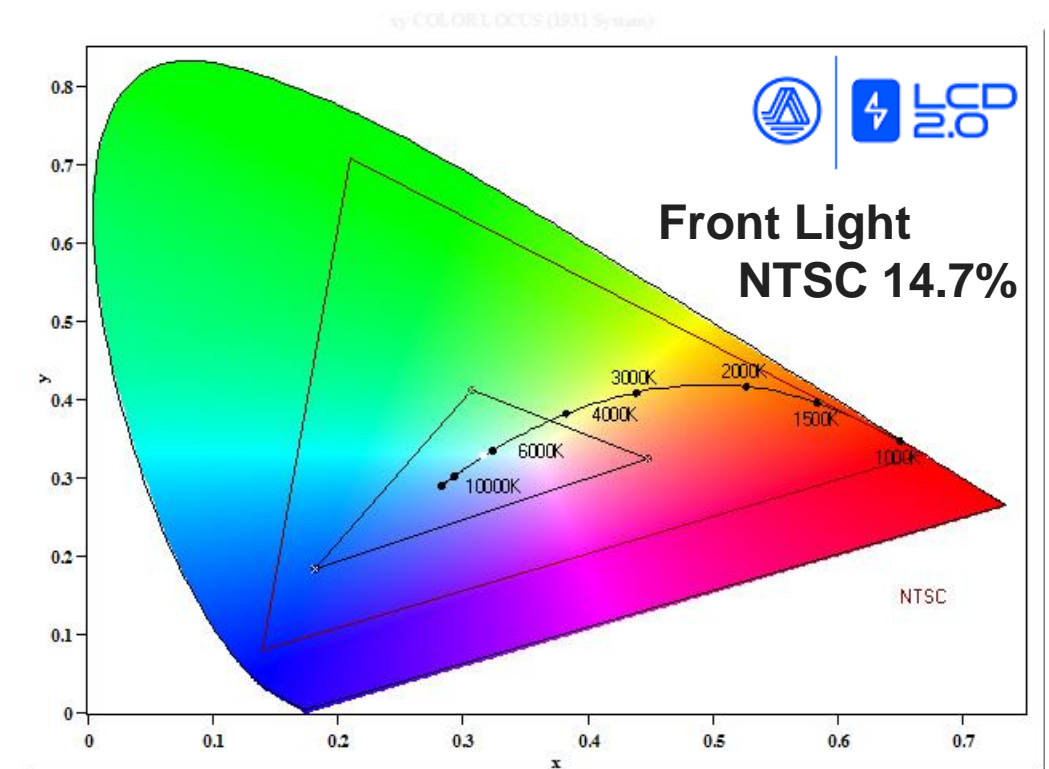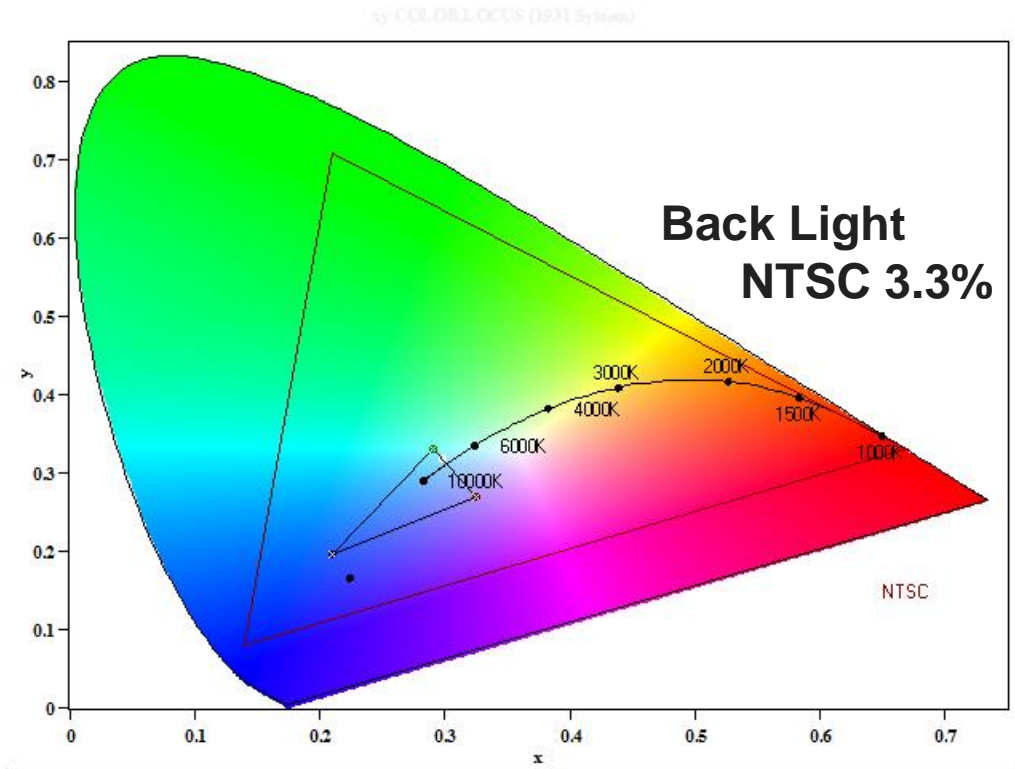
Test Equipment:
Eldim EZ Contrast (Model # XL88)

Brightness and Power

	Azumo Front Light (FLP)	Back Light
Brightness at 300mW	82 Nits	35 Nits
Brightness Efficacy	273 [Nits/Watt]	116 [Nits/Watt]

Efficacy (Nits/W)

57% less power needed

Azumo Front Light — Back Light

Brightness at 300mW (Nits)

2.3x brighter

Azumo Front Light — Back Light

Color Gamut

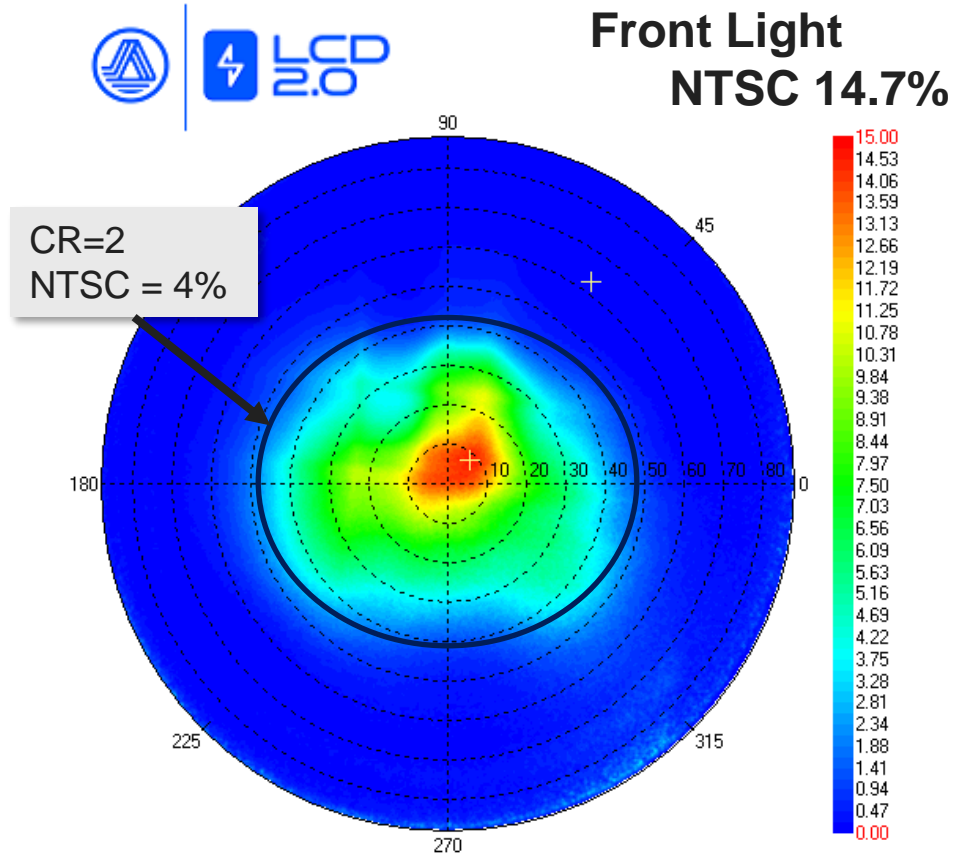**Back Light
NTSC 3.3%**
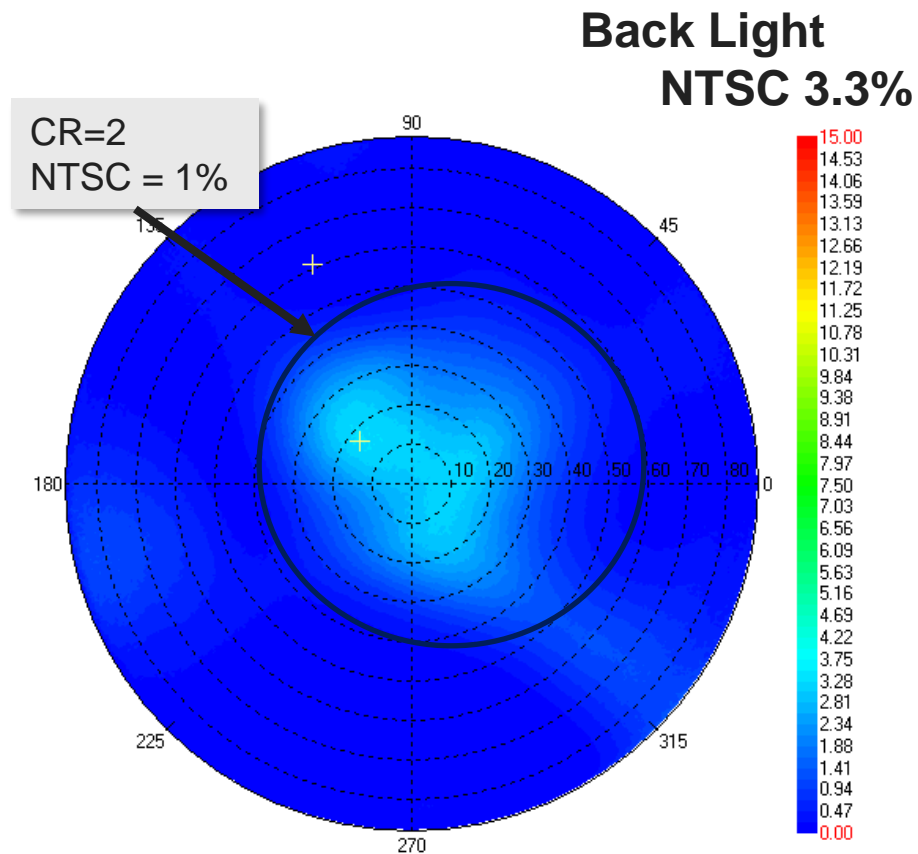
**Front Light
NTSC 14.7%**

LCD 2.0 = 4.5x Greater Color Gamut

Color Gamut vs Angle

LCD 2.0 has better color at the edges of viewability (CR=2) than BLU's viewed straight on

Back Light
NTSC 3.3%

Front Light
NTSC 14.7%

CR=2
NTSC = 1%

CR=2
NTSC = 4%

LCD 2.0 has more consistent viewing angles and superior color throughout

The LCD 2.0 Difference

Azumo FLP has significant advantages over BLU in Color, Brightness, and Power consumption

~4.5x Greater NTSC%
14.7% vs 3.3%

Color Gamut (NTSC)

Better NTSC% at the edge of viewability than BLU at normal

Color over Angle

2.3x Brighter at 300 mW
82 Nits vs 35 Nits

Brightness

57% less power consumption at equivalent brightness

Efficacy

3.4" Transflective LCD – Backlight vs Frontlight

Contact Azumo
to learn more about LCD 2.0

Request a Demo