

# Table of Contents

- Color Calibration** ..... 1
- Saturation** ..... 1
- Color Checker in browser** ..... 1
- ColorChecker Display vs Pro** ..... 1
- DELL U2415** ..... 1
- LG OLED 65B9S** ..... 2
  - LG-WOLED SDR rec.709-D65 ..... 3
  - LG-WOLED HDR10 bt.2020 / P3-D65 ..... 3
  - TV can play ..... 4
- Lenovo VIBE Z2 Pro** ..... 4
- Lenovo YOGA Tab 3 Plus** ..... 5

# Color Calibration

<https://www.panelook.com>

CIE Color Calculator

<https://www.avsforum.com/threads/avs-hd-709-blu-ray-mp4-calibration.948496/>

<https://github.com/arthur-liberman/hcfr-code/releases>

## Saturation

- Point the color analyzer or light meter towards the screen and display a 100% white test pattern.
- Measure the Y value (luminance) of white.
- Display a 100% Red test pattern, and measure the Y value here as well.
- You will notice that as you move the Color control up and down, the Y value of Red increases and decreases, but white stays the same.
- Set the color control at the point where Red measures closest to 21% of the white reading.

## Color Checker in browser

<https://janforman.org/colorchecker/>

## ColorChecker Display vs Pro

Approx deviation  $\Delta E$  between units mean: 0.4 max: 1.6

Device precision  $\Delta E$  mean (wide gamut): 1.7 max: 2.8

ColorChecker Display (formerly ColorMunki) 400-700nm

ColorChecker Display Pro 380-730nm

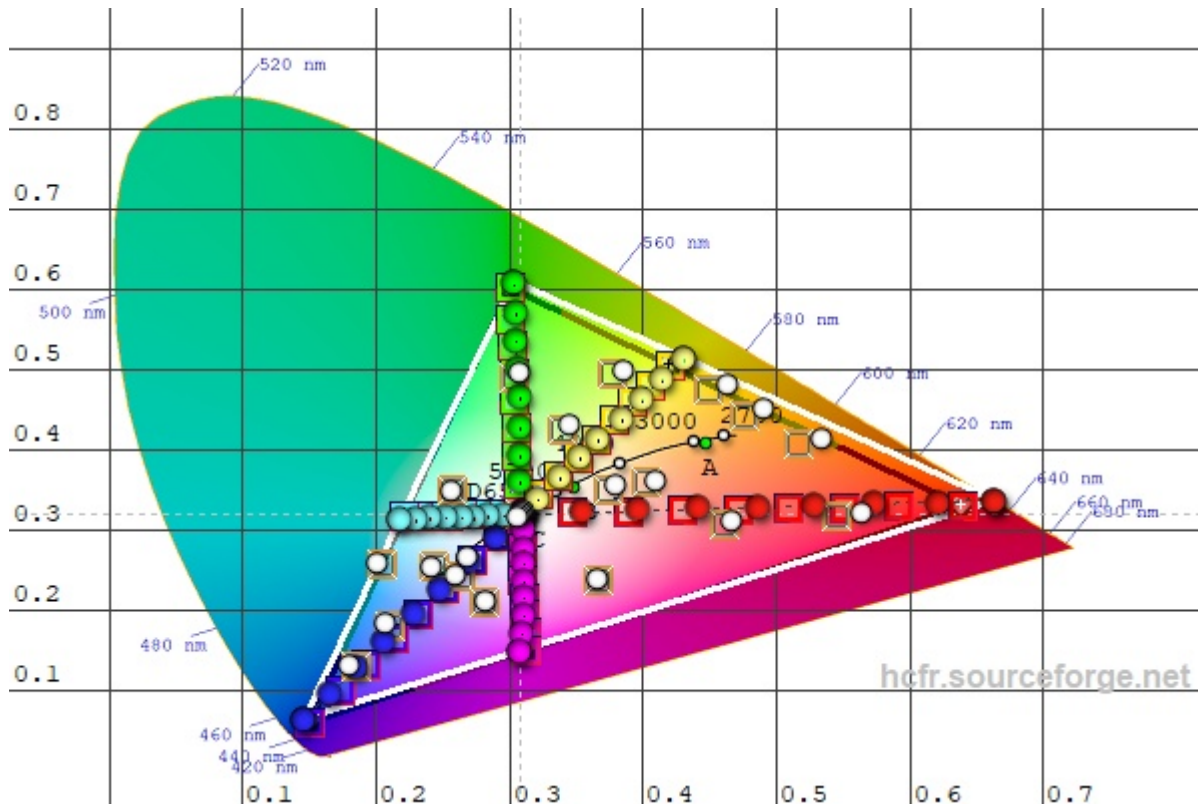
## DELL U2415

**Contrast 73** for correct white point

WhiteLED alternative white point

**x:0.308 y:0.319** RAW(uncorrected)

Gamut 98% sRGB, 73% AdobeRGB, 77% DCI-P3



[https://www.panelook.com/LM240WUA-SSA1\\_LG%20Display\\_24.0\\_LCM\\_parameter\\_23652.html](https://www.panelook.com/LM240WUA-SSA1_LG%20Display_24.0_LCM_parameter_23652.html)

## LG OLED 65B9S

OLED 2019 Alternative White Point **x: 0.308 y: 0.313** RAW(uncorrected)

LG Electronics with Dolby Laboratories (visual color matching method trying to match a Reference Grade-1 CRT)

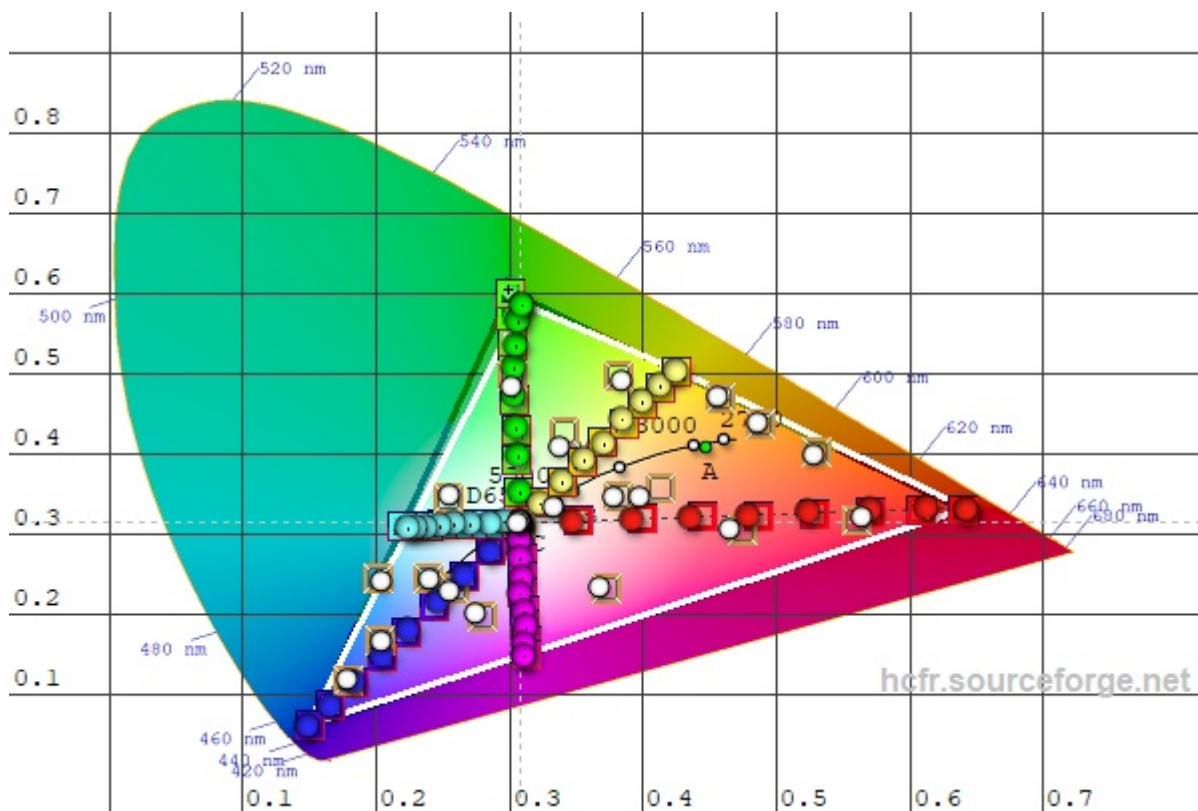
[https://pro.sony/s3/2021/01/22153606/ColourMatching\\_Between\\_OLED\\_and\\_CRT\\_E.pdf](https://pro.sony/s3/2021/01/22153606/ColourMatching_Between_OLED_and_CRT_E.pdf)

Service Menu: 192 / 172 / 140

<b>Sharpness</b>	<b>10 or more because conture smoothing (15)</b>
<b>Mode</b>	<b>SDR</b>
<b>Mode</b>	<b>ISF Dark (Warm2)</b>
<b>Contrast</b>	<b>68</b>
<b>Brightness</b>	<b>53</b>
<b>Saturation</b>	<b>60</b>
<b>Color</b>	<b>LOW</b>
L-RED	2
L-GREEN	0
L-BLUE	-1
<b>Color</b>	<b>HIGH</b>
H-RED	0
H-GREEN	0
H-BLUE	0
<b>Mode</b>	<b>HDR10 / Dolby Vision</b>
<b>Mode</b>	<b>Technicolor (Warm2) / Cinema (Warm2)</b>
<b>Dynamic contrast</b>	<b>Low (any high and blacks are crushed) / Standard</b>
<b>Contrast</b>	<b>77 (keep proper white point D65)</b>
<b>Brightness</b>	<b>50</b>
<b>Saturation</b>	<b>61</b>
<b>Color</b>	<b>LOW</b>
L-RED	1

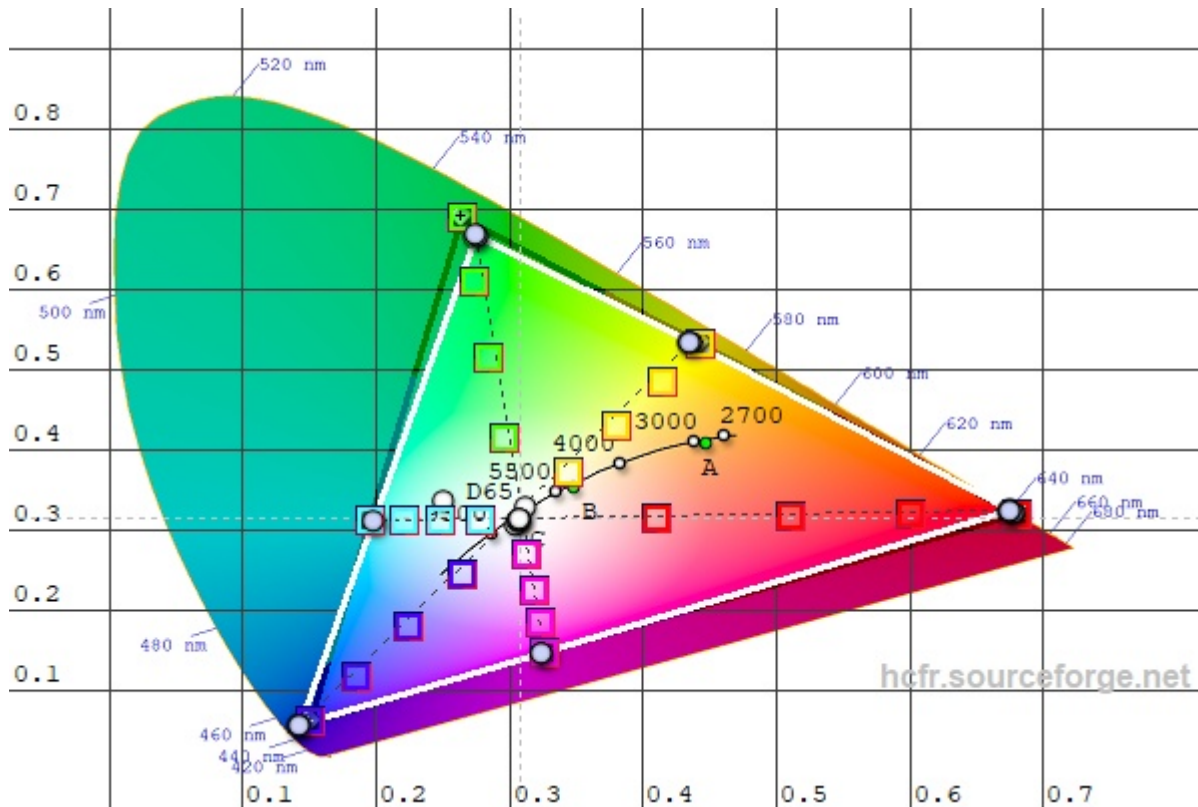
<b>Sharpness</b>	<b>10 or more because conture smoothing (15)</b>
<b>Mode</b>	<b>SDR</b>
<b>Mode</b>	<b>ISF Dark (Warm2)</b>
<b>Contrast</b>	<b>68</b>
<b>Brightness</b>	<b>53</b>
<b>Saturation</b>	<b>60</b>
<b>Color</b>	<b>LOW</b>
L-GREEN	0
L-BLUE	-4
<b>Color</b>	<b>HIGH</b>
H-RED	19
H-GREEN	0
H-BLUE	24

**LG-WOLED SDR rec.709-D65**



Color	Saturation	Tint	Light
RED	-5	2	0
GREEN	6	15	0
BLUE	-6	3	-1
AZURE	4	1	0
MAGENTA	0	6	1
YELLOW	3	0	0

**LG-WOLED HDR10 bt.2020 / P3-D65**



Color	Saturation	Tint	Light
RED	2	13	-13
GREEN	7	-30	0
BLUE	-7	-11	0
AZURE	-1	-8	1
MAGENTA	-5	-8	-2
YELLOW	2	9	2

**Force HDMI input on LG OLED**

highlight the picture mode in the main menu, and press 1113111 from the TV remote.

**TV can play**

Dolby Vision (DVHE) Profile 5 and 8 in HEVC (only in MP4/TS mux)  
HDR10 VP9 (MKV), HEVC (MP4 and MKV)

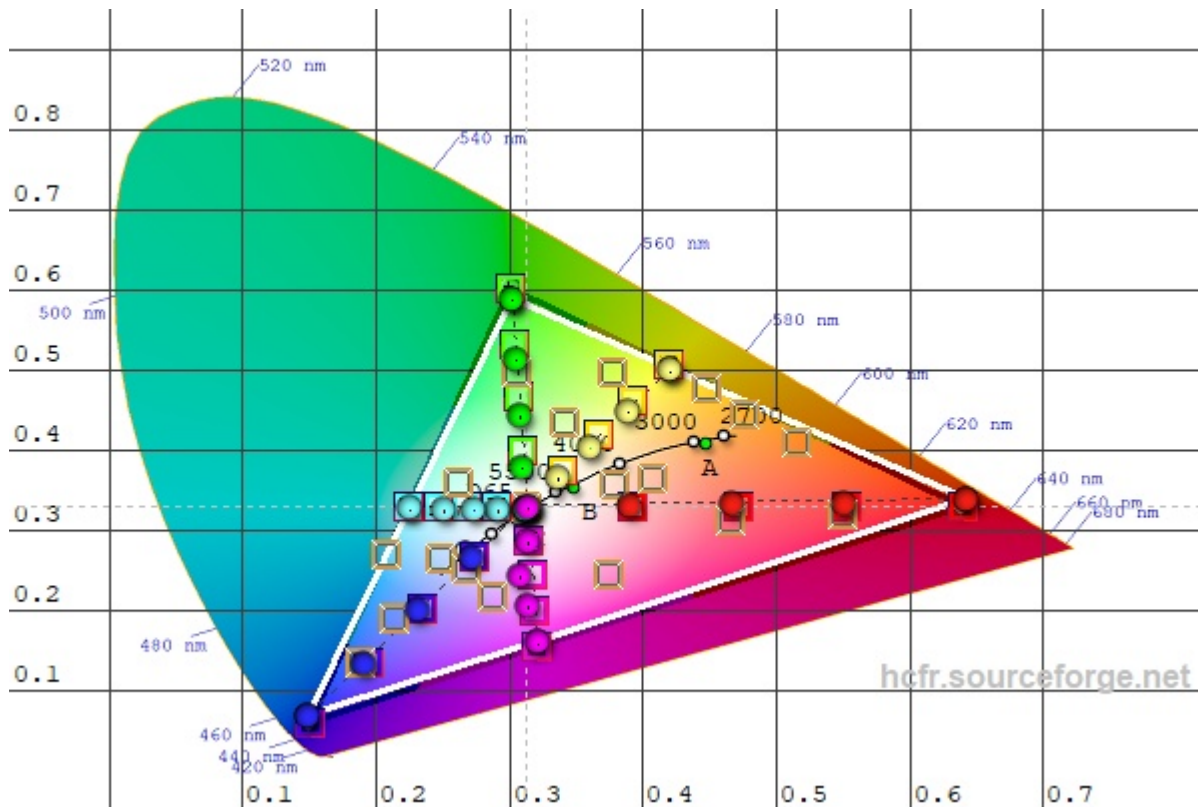
**Lenovo VIBE Z2 Pro**

~6500K	Value
RED	100
GREEN	91
BLUE	95

- Phone can accelerate H264 4K and HEVC 1080p in 8bit
- Phone can record H264 3840x2160x30fps 100mbit/s in 8bit

# Lenovo YOGA Tab 3 Plus

~6500K	Value
RED	100
GREEN	91
BLUE	85



- Tablet can accelerate H264, HEVC, VP9 up to 4K in 8bit (only)

From: <https://wiki.janforman.com/> - [wiki.janforman.com](https://wiki.janforman.com/)

Permanent link: <https://wiki.janforman.com/colorcalibration?rev=1682203806>

Last update: 2023/04/23 00:50

