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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/

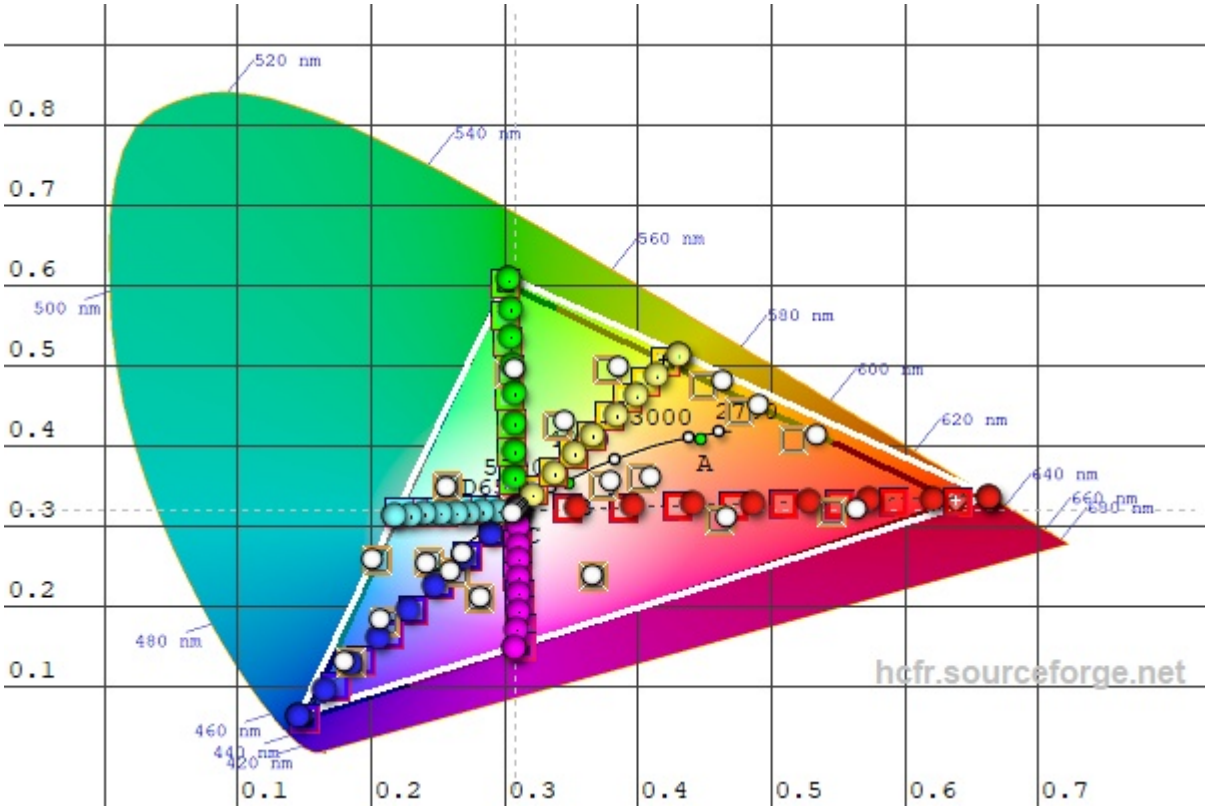
ColorChecker Display vs Pro

Approx deviation ΔE between units mean: 0.4 max: 1.6
Device precision ΔE 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

LG OLED 65B9S

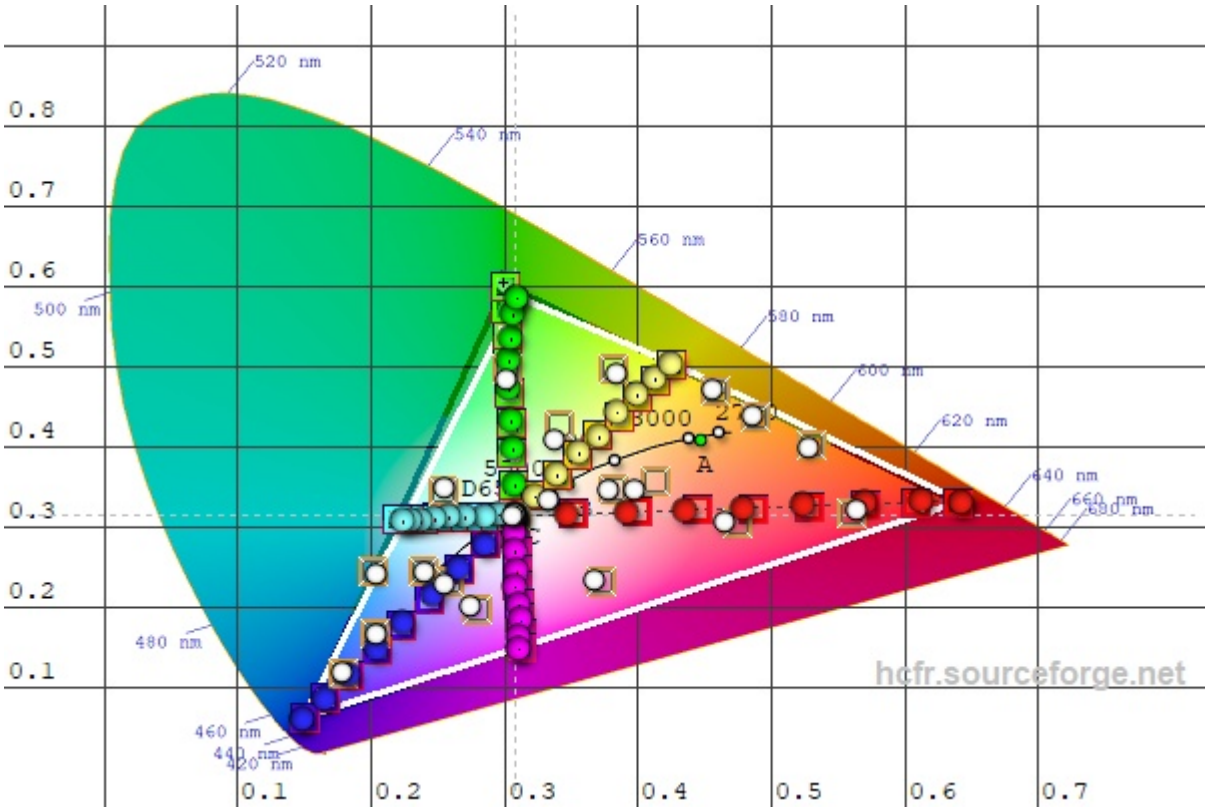
OLED 2019 Alternative White Point **x: 0.308 y: 0.313** RAW(uncorrected)
LG Electronics with Dolby Laboratories (visual color matching method trying to match a Reference Grade-1 CRT)
https://pro.sony/s3/2021/01/22153606/ColourMatching_Between_OLED_and_CRT_E.pdf

Service Menu: 192 / 172 / 140

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

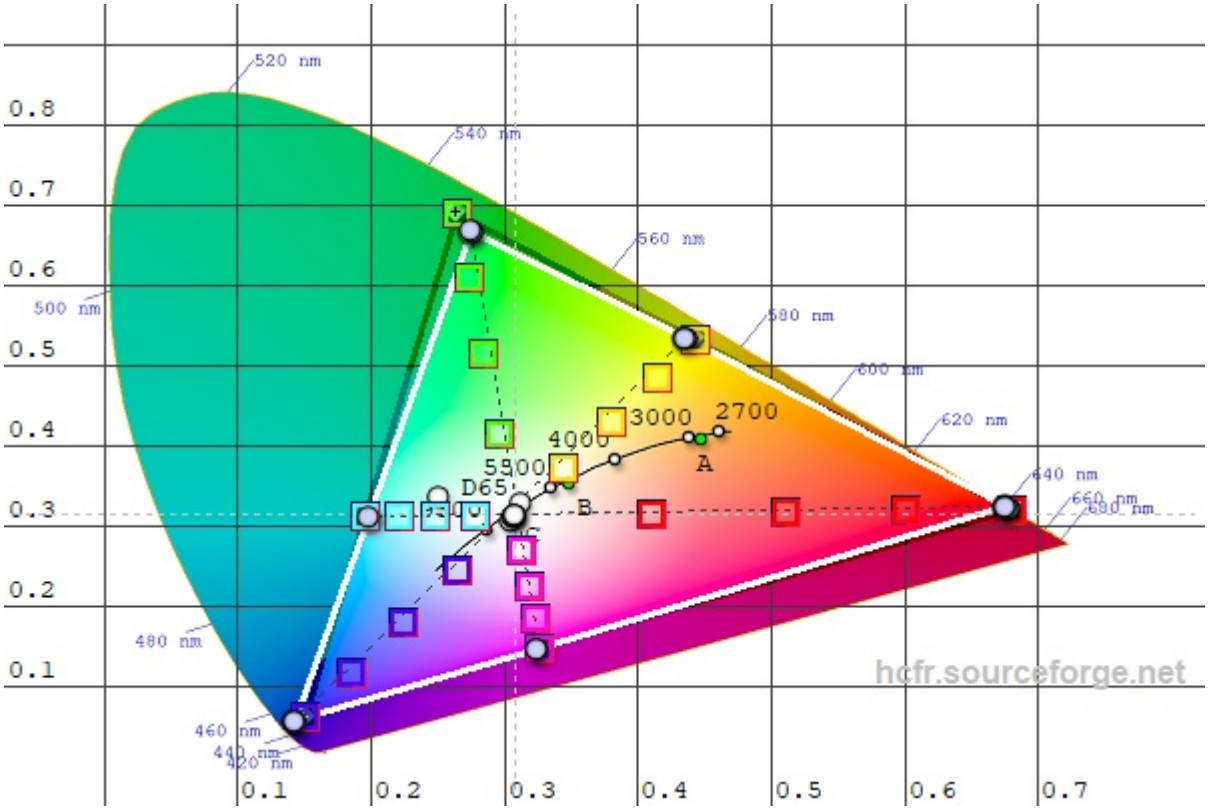
Sharpness	**10 or more because conture smoothing (15)**
Mode	**SDR**
Mode	**ISF Dark (Warm2)**
Contrast	**68**
Brightness	**53**
Saturation	**60**
Color	**LOW**
L-GREEN	0
L-BLUE	-4
Color	**HIGH**
H-RED	19
H-GREEN	0
H-BLUE	24

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	-2	-9	1
MAGENTA	-5	-7	-2
YELLOW	3	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)

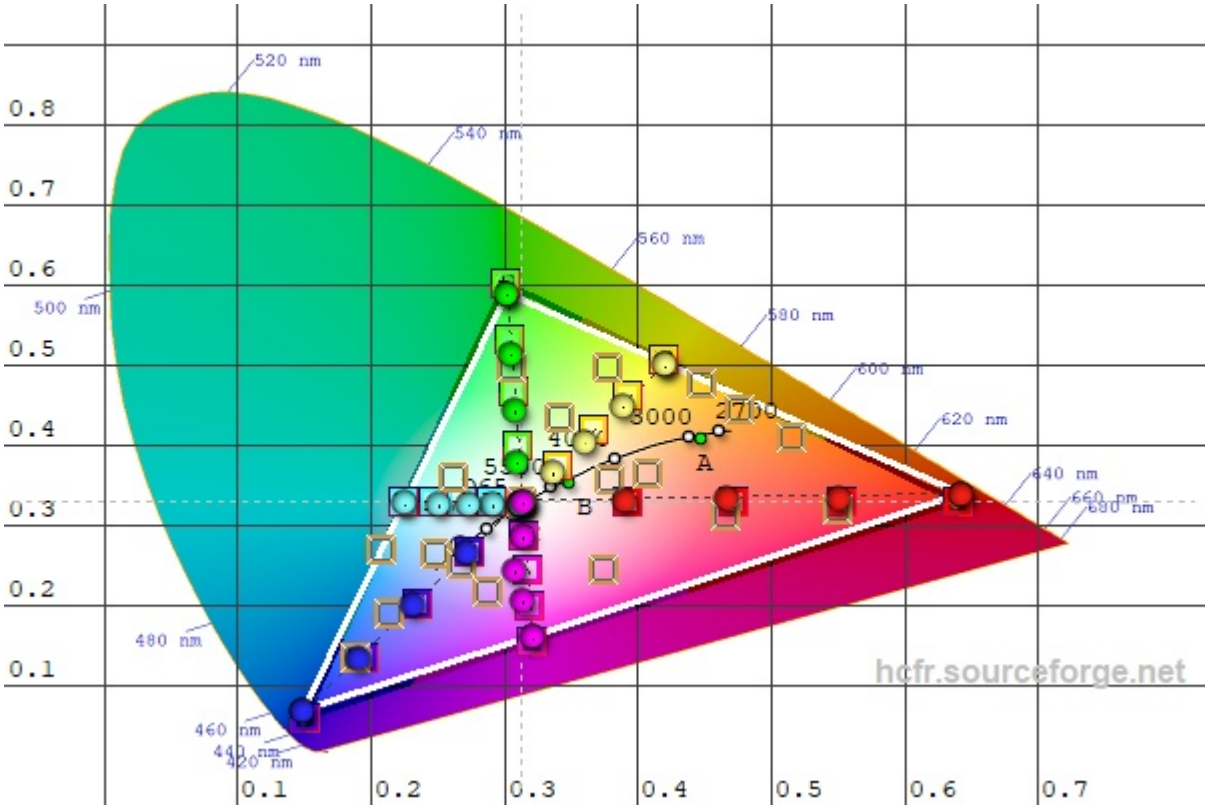
Lenovo VIBE Z2 Pro

~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)