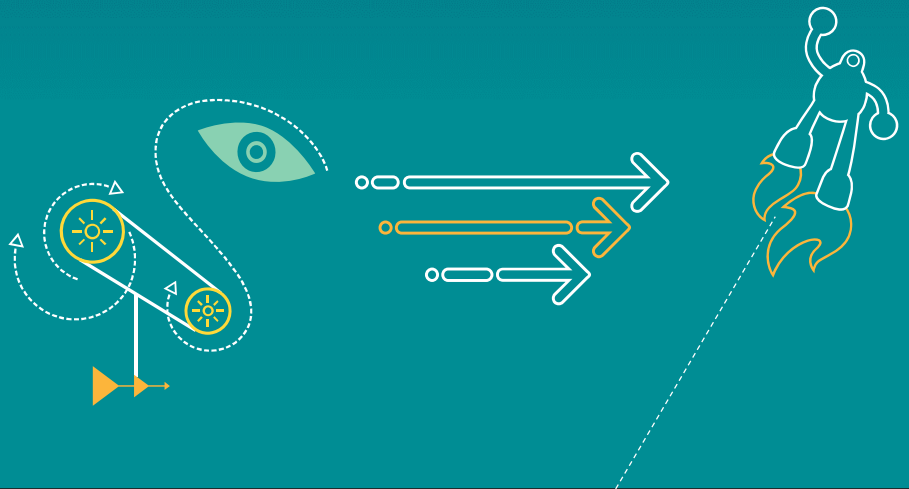
高通多媒体技术期刊　20160224

Qualcomm Technologies, Inc.



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Revision History

Revision	Date	Description
A	Feb. 2016	Initial release

Note: There is no Rev. I, O, Q, S, X, or Z per Mil. standards.

内容

- Display
  - QDCM Tuning Documents
  - 使用QDCM做OLED屏的白点校准
-

Display

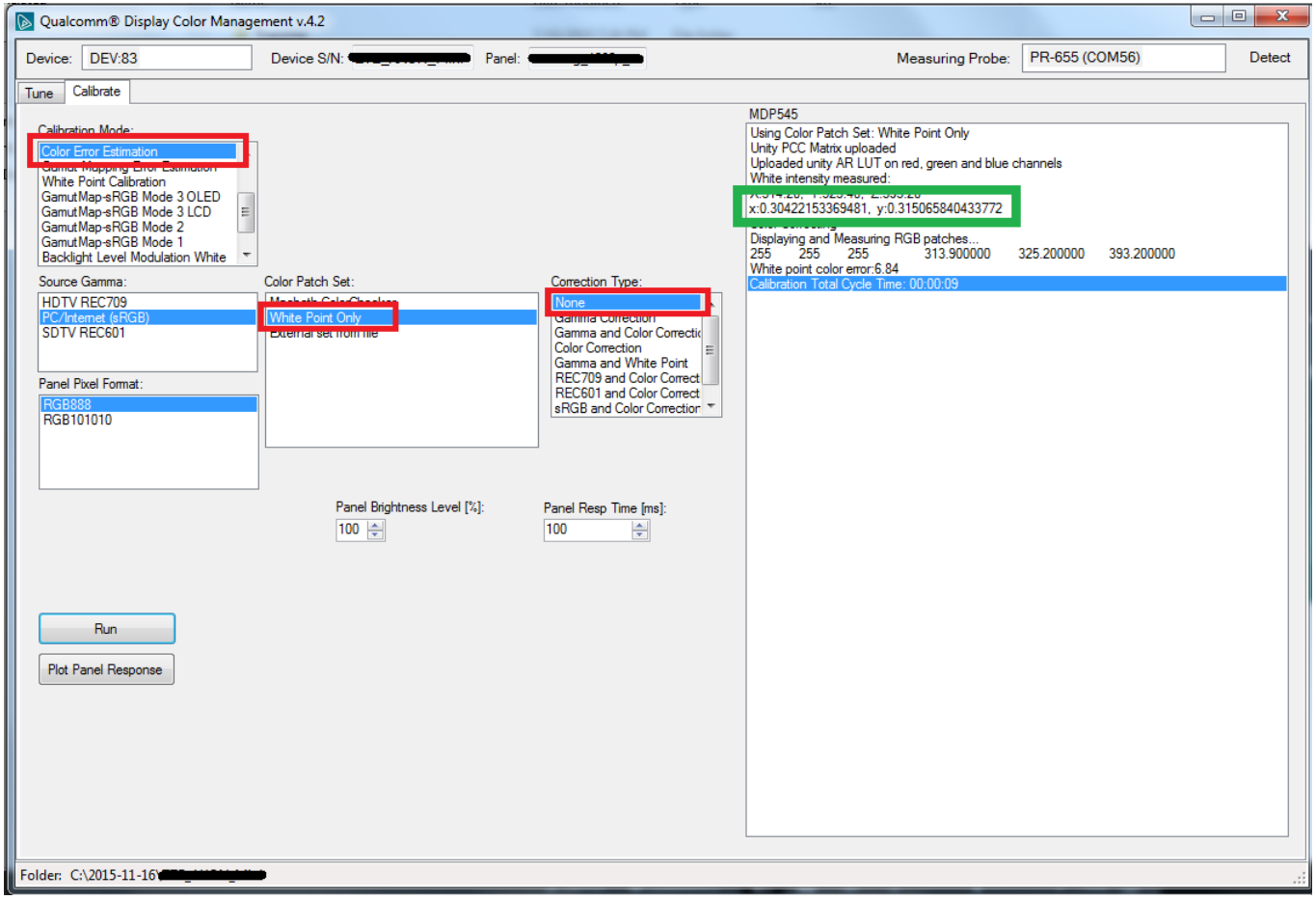
Display Tuning Document

- 80-P4181-1_QDCM Tools Training and Demo

越来越多的客户应用高通发布的QDCM工具进行屏幕校准和调试，上篇文章详细介绍了屏幕校准和调试的一般流程和调试原则

首先测量原生白点

- 打开最新版本的QDCM，切到Calibrate
- Calibration mode 选color error estimation
- 按照截图所示来设置Source gamma/ Color patch set/ Correction type/ Panel Pixel format（如红色），而绿色部分为打印出来的实测结果。



读取原生白点的测量报告

- 可以在当前的工程目录中找到Color_Error_Estimation.html报告

QDCM CALIBRATION REPORT

Mode: Color Error Estimation
Created on: 2016-02-23@18:10:21
Device S/N: Test_gamma
Colour Gamut: Custom
Panel Pixel Format: RGB888
Backlight Level: 100
LUT size: 4096
Source Gamma: PC/Internet (sRGB)
Colour Measuring Probe: Probe Fake 0
Target System Gamma: N/A
Using Color Patch Set: White Point Only
‚See Measurement Data
‚See Colour Error Data
Unity PCC Matrix uploaded
Unity (gamma 1.0) IGC LUT uploaded
Unity GC LUTs uploaded
Measured White intensity: 255
Uploaded IGC LUT for gamma 1.0
Gamma Correction for 1/ (PC/Internet (sRGB)) applied in S/W
HW Gamut mapping disabled
Target WP x: 0.3127, Target WP y: 0.329

Measurement Data (R,G,B,X,Y,Z):

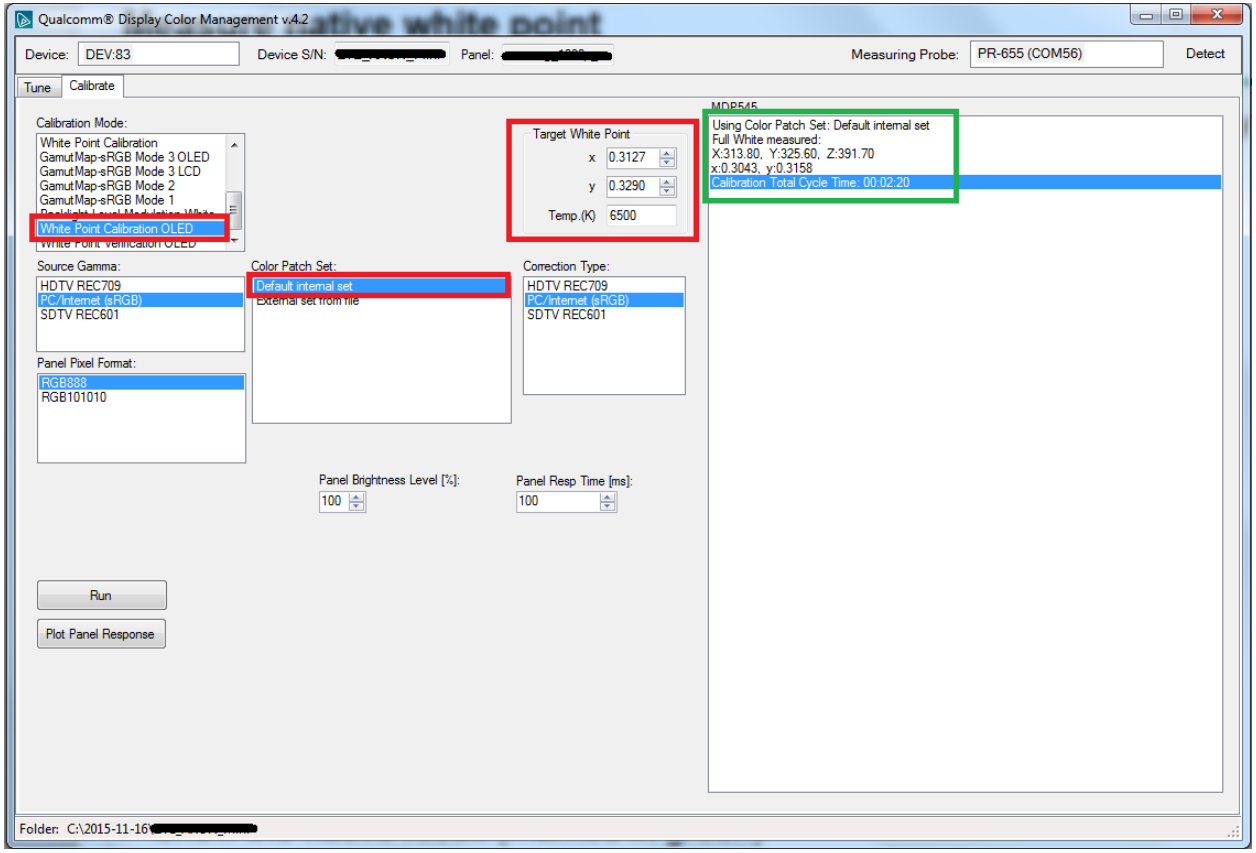
255,255,255,242.37,255,277.652

Colour Errors:

0: 0.0144267
White point color error:0.0144267
‚Go to the Top

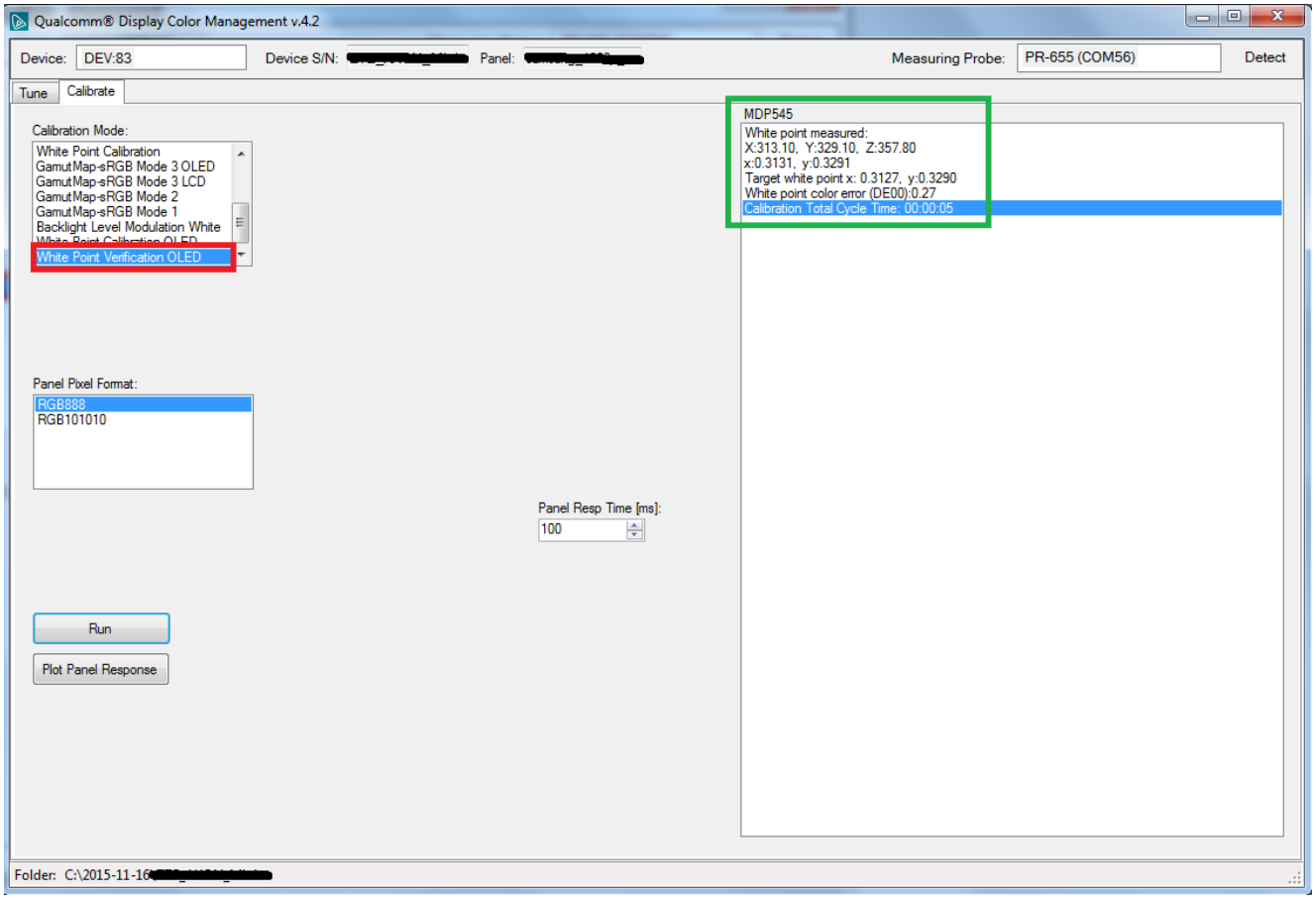
OLED屏白点校准

- Calibration mode 选White point calibration OLED
- 按照截图所示来设置Source gamma/ Color patch set/ Correction type/ Panel Pixel format， 并输入目标白点 target white point x,y （Temp会自动计算）
- 点击Run，绿色部分为打印出来的原生白点实测结果。



OLED屏白点校准的验证

- Calibration mode 选White point verification OLED
- 按照截图所示来设置Panel Pixel format
- 点击Run，绿色部分为打印出来的验证结果。



OLED屏白点校准的验证报告

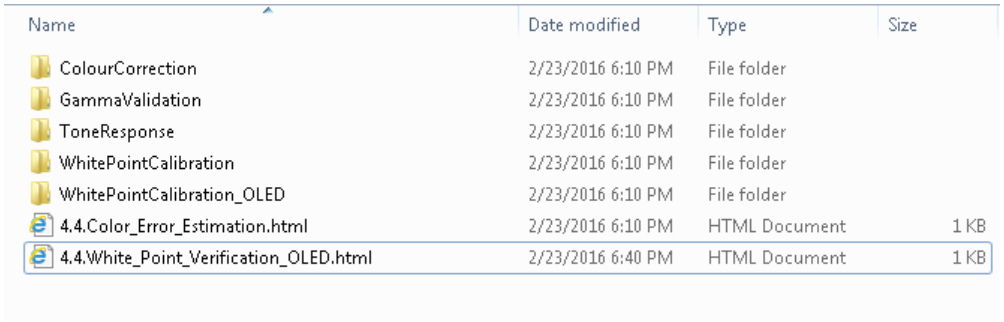
- 可以在当前的工程目录中找到White_Point_Verification_OLED.html报告

QDCM CALIBRATION REPORT

Mode: White Point Verification OLED
Created on: 2016-02-23@18:40:05
Device S/N: Test_gamma
Colour Gamut: Custom
Panel Pixel Format: RGB888
Backlight Level: 100
Source Gamma: PC/Internet (sRGB)
Colour Measuring Probe: Probe Fake 0
Measured White: 242.37, 255, 277.652

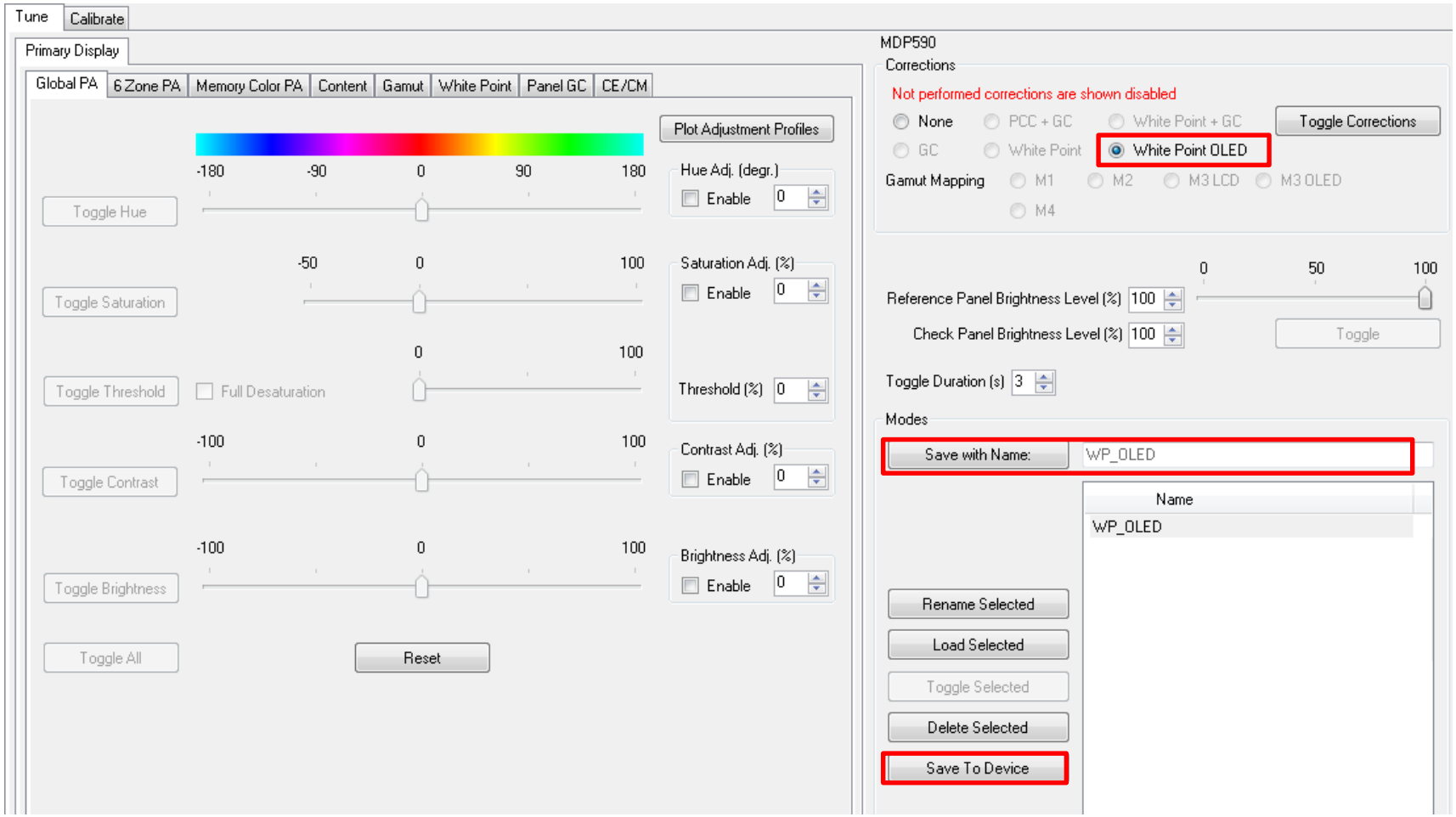
Colour Errors:

WP color error: 0.0144267
,Go to the Top



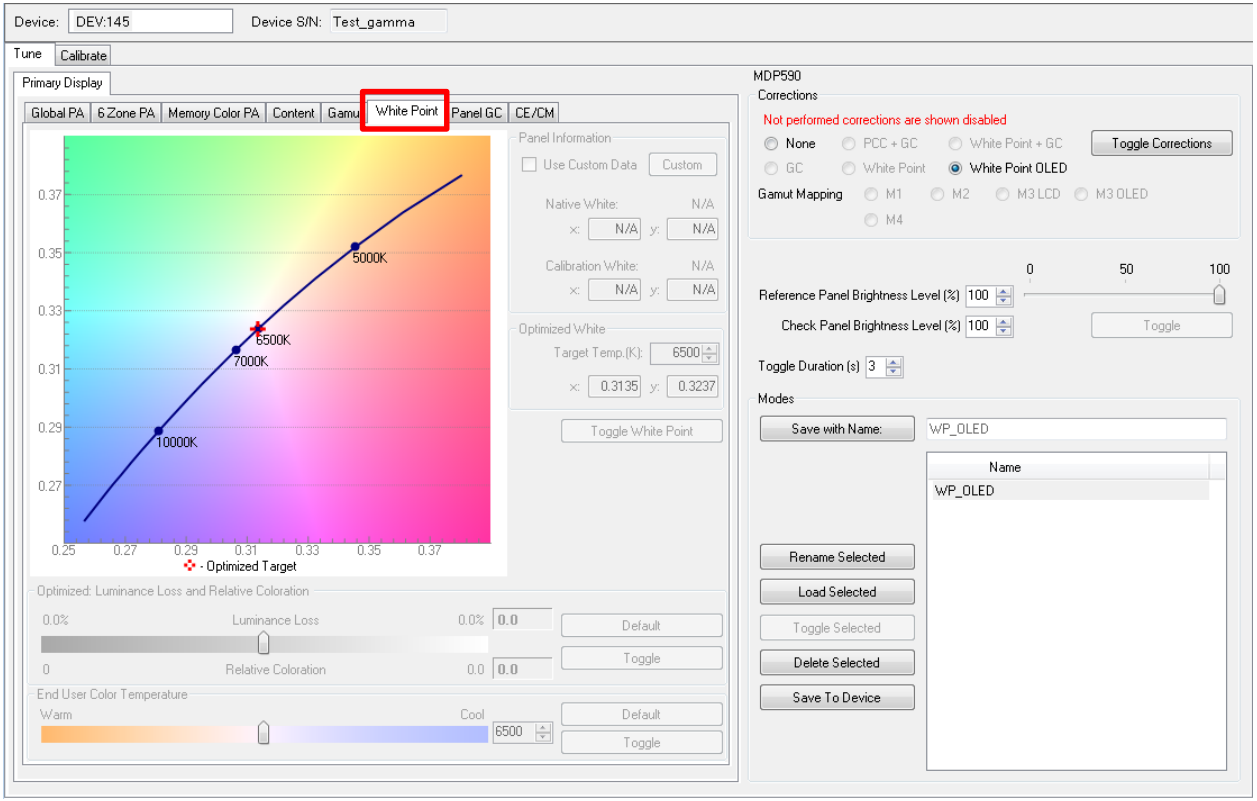
保存OLED屏的校准结果

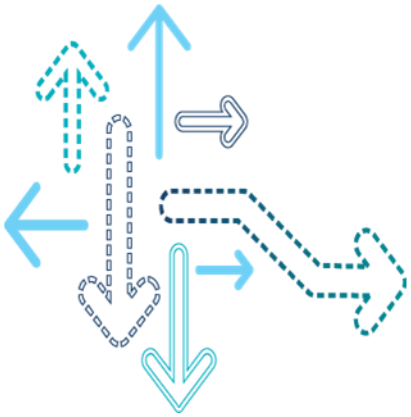
- 切回到Tune
- 在Corrections中选中White Point OLED
- 输入模式名称，点击Save with name保存至电脑，点击Save to device保存至手机



补充说明

- 注意事项1：在QDCM中原生白点的测量，LCD和OLED屏都适用。
- 注意事项2：在QDCM中 White Point Calibration和 White Point OLED Calibration是不同的。White Point Calibration的校准是只针对LCD屏的，而White Point OLED Calibration 的校准是只针对OLED屏的。
- 注意事项3：Tune界面下的White Point的优化调试，是在White Point Calibration基础上的微调，所以也只针对LCD屏。





Questions?

https://support.cdmatech.com