PETRI PLATES READING & VIEWING :

➔ A NEED FOR STANDARDISATION

PIONEERING DIAGNOSTICS

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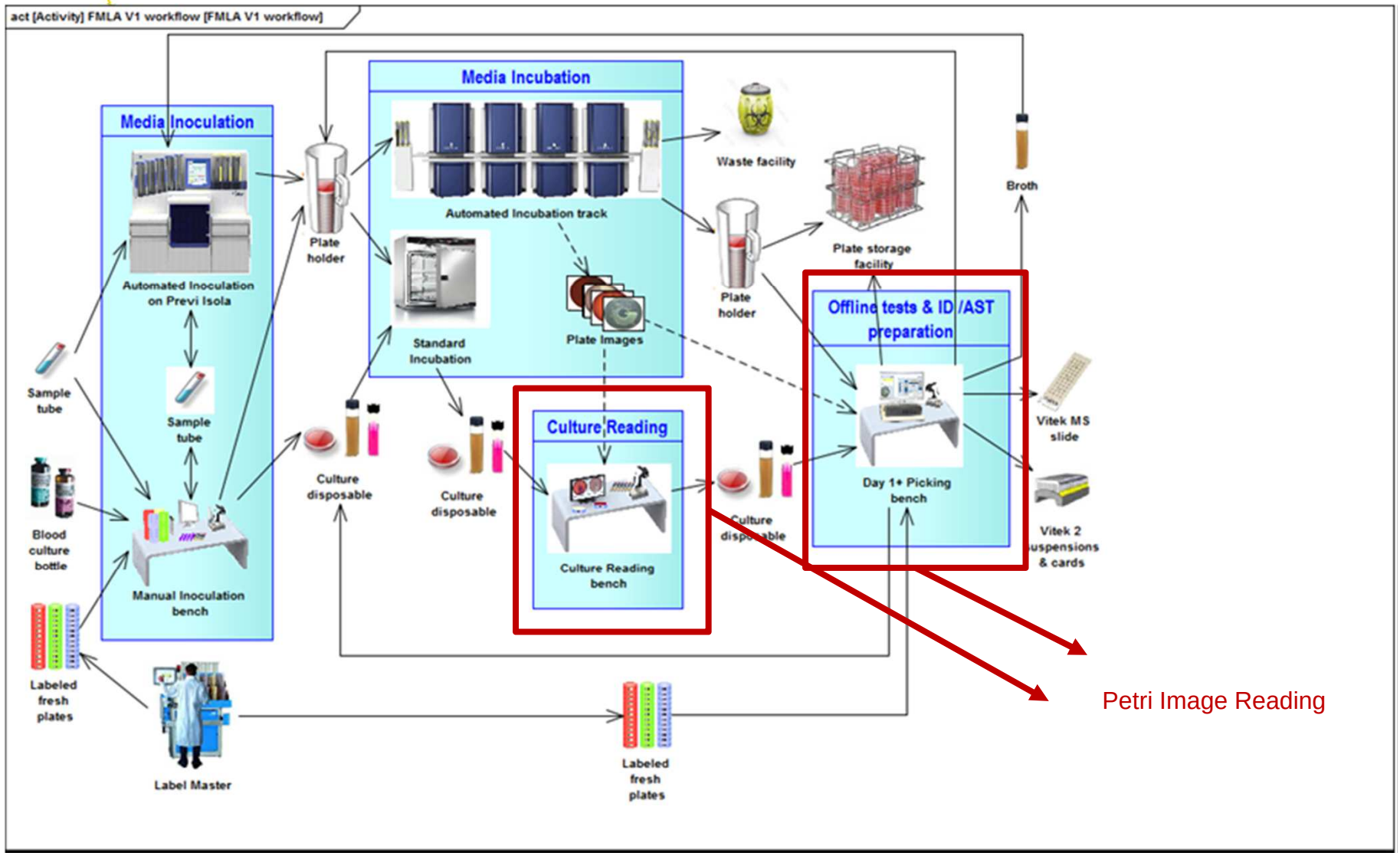
BIOMÉRIEUX

Revision 1

Clinical Imaging & Aided Diagnosis (CIAD)



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PPM Plates : Reading Environements

Culture Reading = Reading of petri plates to define « isolates »

Clean Environement where **clinical diagnostic** is performed.

➔ ambient room conditions may (to some extent) be controlled

ID / AST Reading = Reading of petri plates to pick « isolates »

Dirty Environement : where **clinical diagnostic** is not necesseraly performed

➔ ambient room conditions is difficult to control

Mobile Culture Reading = Reading of petri plates out of the Laboratory

Environement : where **clinical diagnostic may be** performed

➔ ambient room conditions is difficult to control

Can be build standardized common viewing conditions = Display ICC Output profile ?

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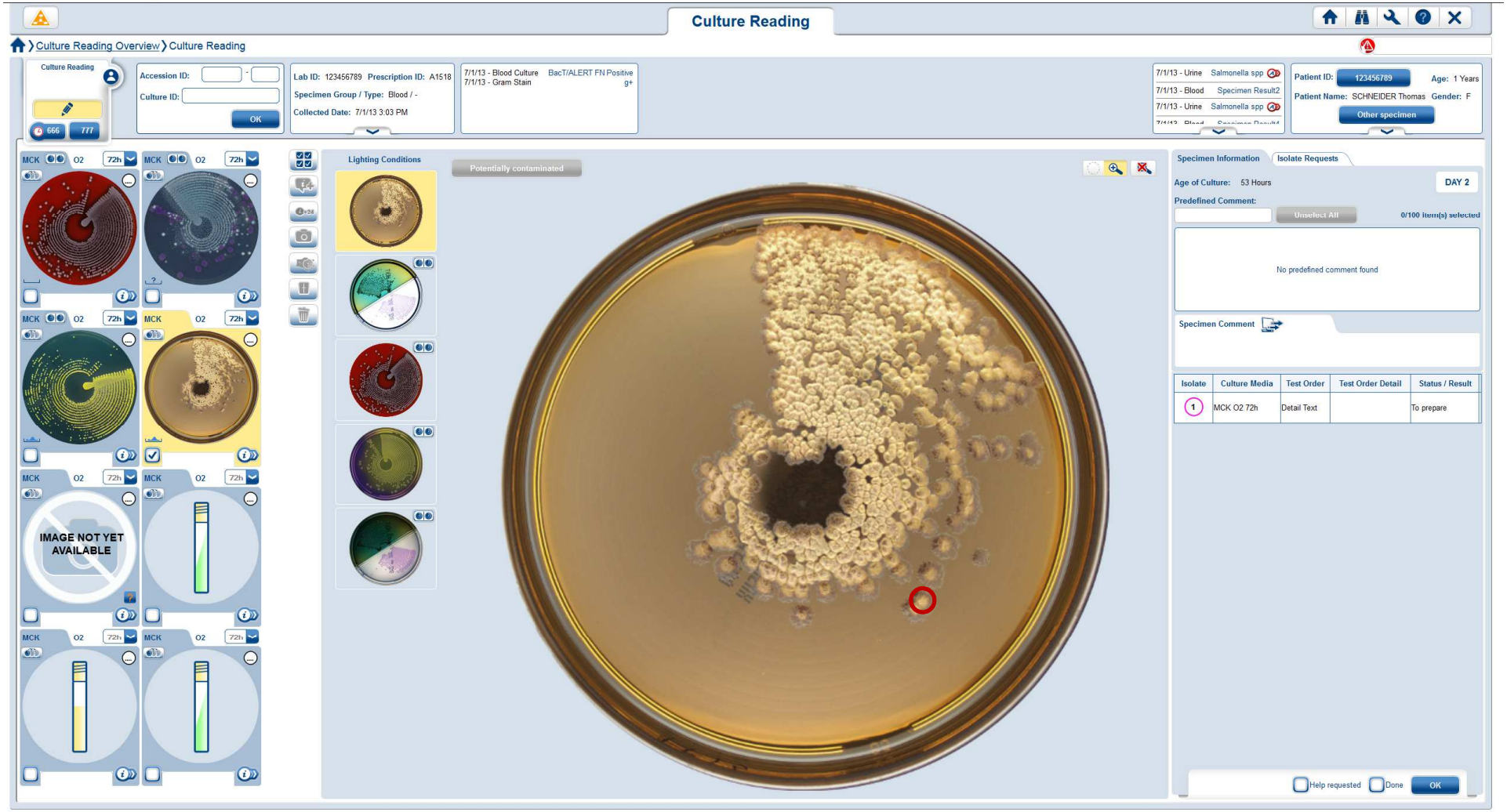
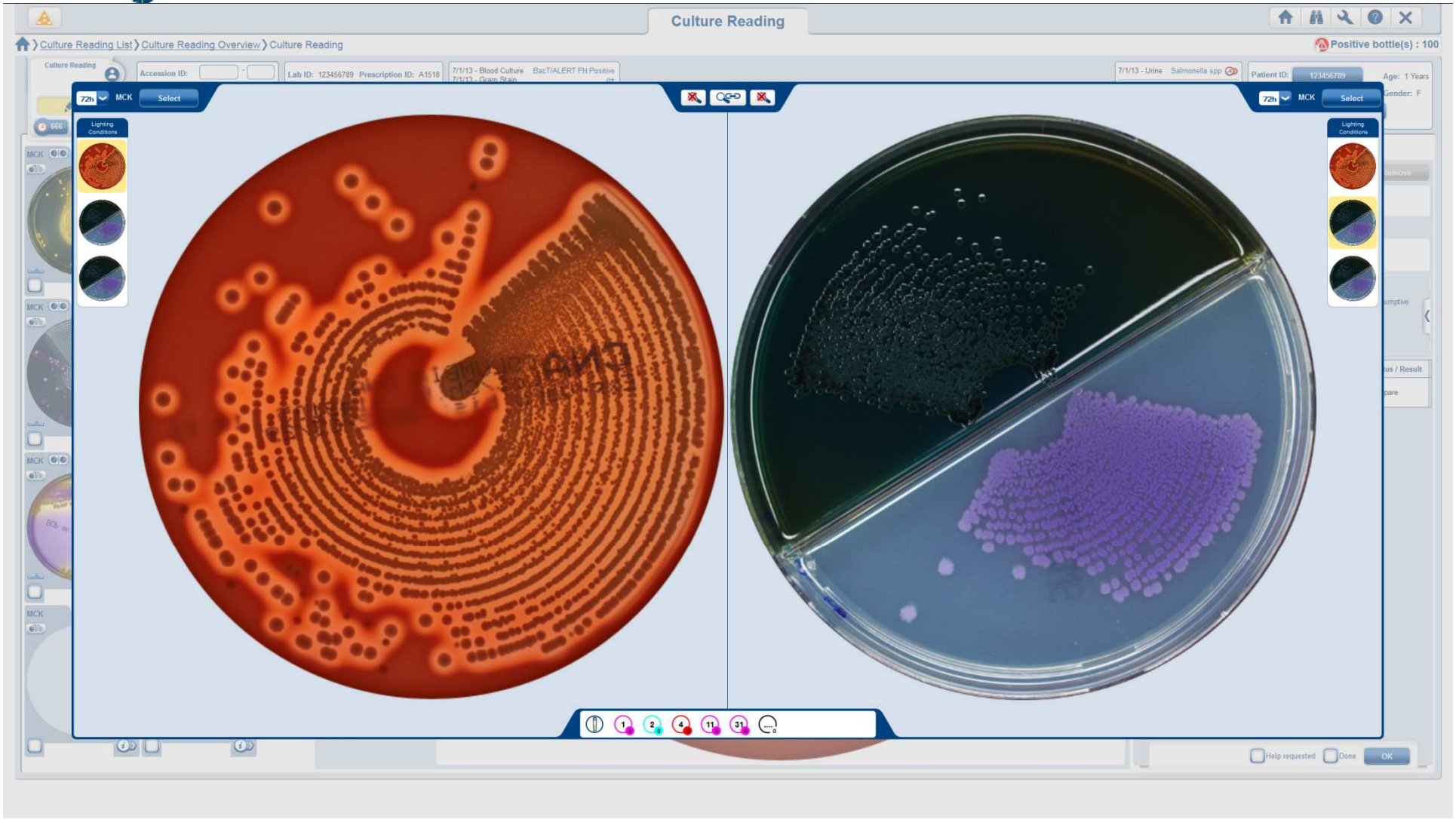
Culture Reading : Clinical Diagnostics Screen (I)



- **EIZO CG 276** : **16/9 , 27”** (2540 x 1440) **w. sRGB gamut**
- Default display 1000 x 1000 up to full resolution (in zoom mode) **with a « bluyish background »**

Culture Reading : Clinical Diagnostics Screen (II)

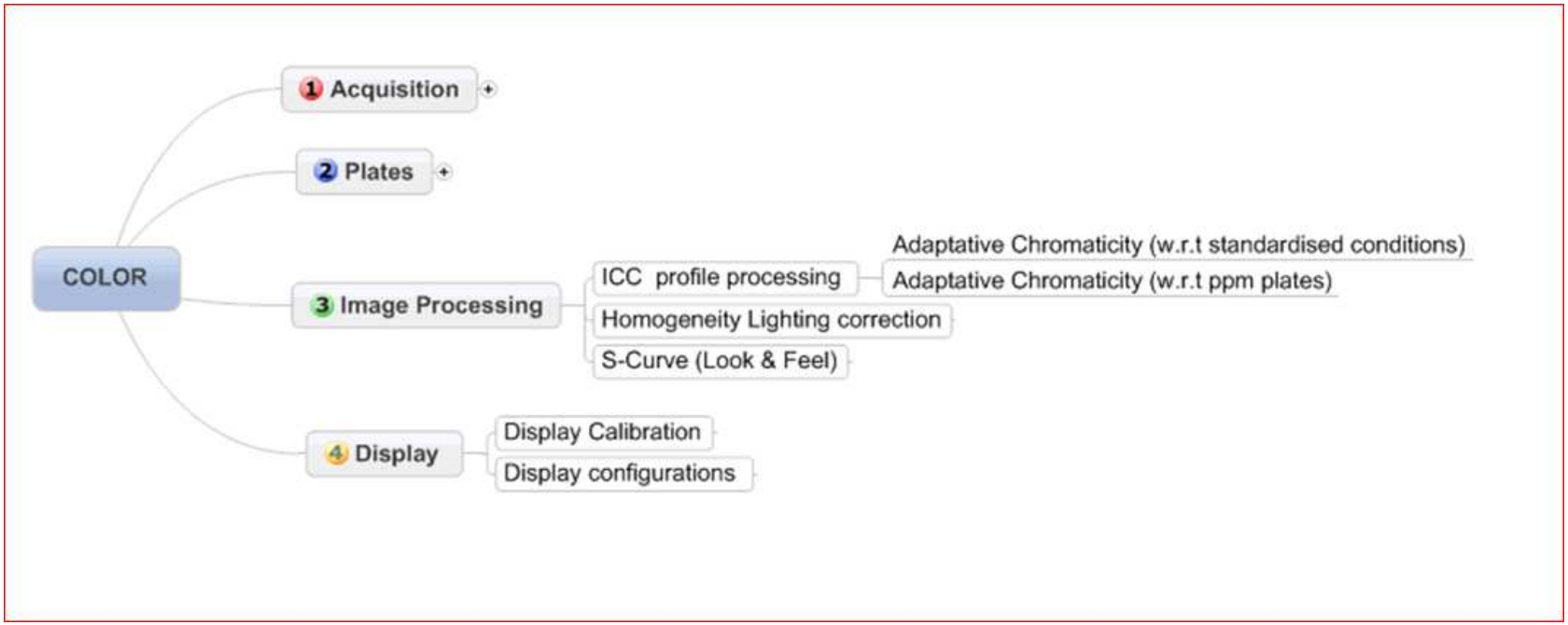


- EIZO CG 276 : **16/9 , 27”** (2540 x 1440**)** **w. sRGB gamut**
- Default display **1000 x 1000** up to full resolution (in zoom mode) with a **« bluyish background »**

ID / AST : Clinical Diagnostics Screen (II)

- ELO Medical 1519 Resolution : **16/9** ➔ 1366 x 768
- Default display **350 x 350** (no zoom mode) with a **« bluyish background »**

Petri Plates Reading & Viewing



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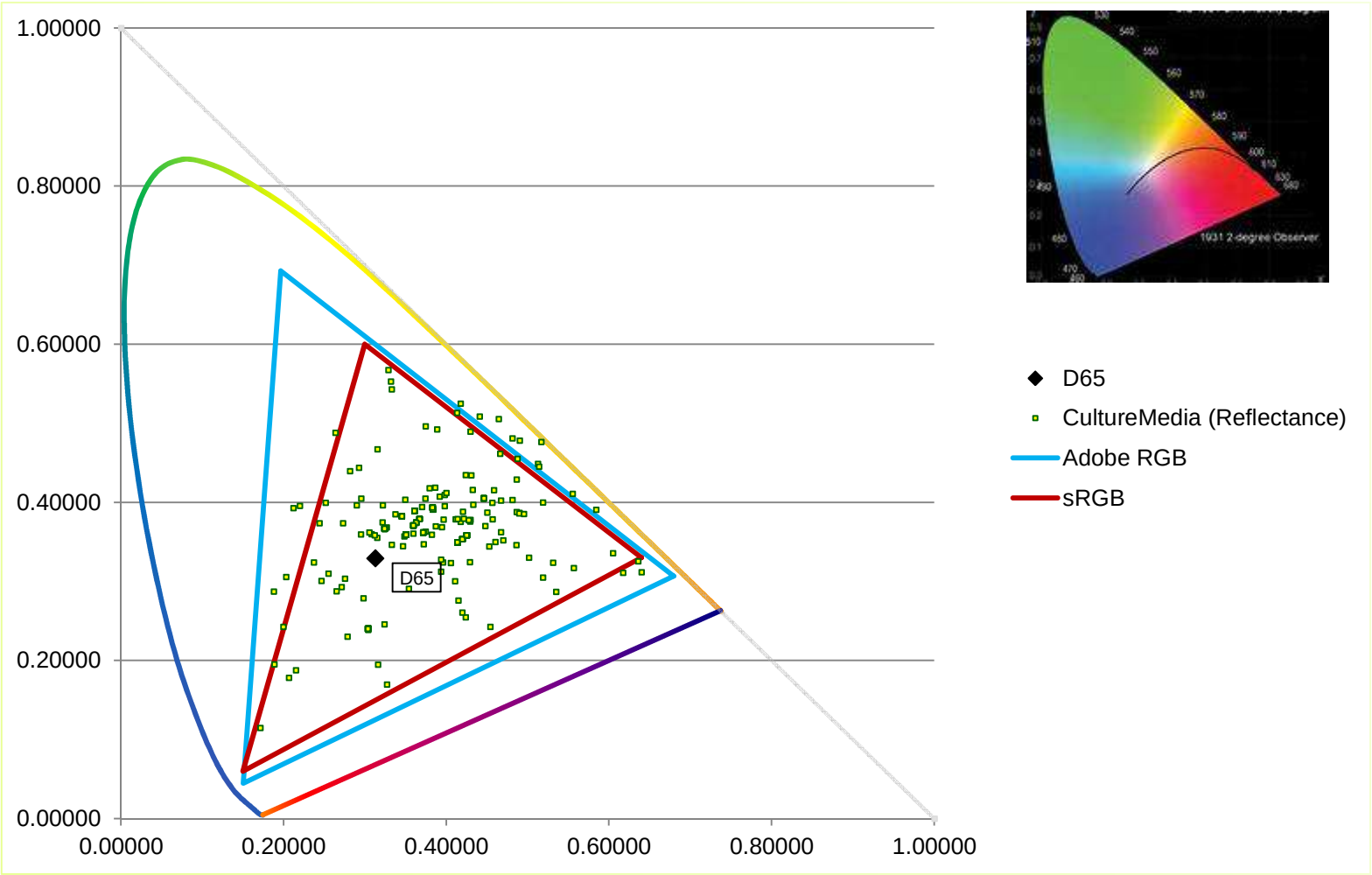
Media Plates Reflectance & Existing Gamut



Can we define a **standardized** gamut w.r.t. to monitor characteristics ?

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A need for standardisation

Open Points :

1. How should the effect ambiant light incorporated and standardized ?
2. How should the effect of the displayed background (chromatic adaptation) standardized with respect to viewing conditions
3. How should the **in/out gamut** of the display w.r.t. to petri optical properties (transmittance & reflectance) shall be standardized ?
4. How should (ie : image format, DICOM ?) output display profile shall be attached to the petri image data in order to display with the same manner on different displays ?

➔ **Could mRGB or dRGB color spaces could include these considerations for petri images ?**

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THANK YOU FOR YOUR ATTENTION

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