

Colour data in file, user choice and output needs:

Test: Equally spaced device or elementary hue output?

User choice no. 1 of colour data for output:  
Output interpretation as device data and output transformation  $rgb \rightarrow rgb^*_1$  for device 1

Device 1 uses the data  $rgb^*_1$  for output.  
Is the device output equally spaced for any of the six device hues OYLCVM?

Colour data file with input data  $rgb$  as undefined colour data  $rgb \rightarrow rgb$   
no special device colours

User choice no. 2 of colour data for output:  
Output interpretation as device data and output transformation  $rgb \rightarrow rgb^*_2$  for device 2

Device 2 uses the data  $rgb^*_2$  for output.  
Is the device output equally spaced for any of the six device hues OYLCVM?

User choice no. 3 of colour data for output:  
Output interpretation as elementary data and output transformation  $rgb \rightarrow rgb^*_1$  for device 1

Device 1 uses the data  $rgb^*_1$  for output.  
Is the device output equally spaced for any of the four elementary hues RJGB?

Remark:  
For output linearisation see ISO/IEC TR 19797

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Colour data in file, user chroma change user interpretation and output needs:

Test: More or less chromatic device and elementary hue output?

User: Change of chroma and interpretation

1. More chromatic by  $c^* = c^{*1/2}$  (new  $rgb$ ), output interpretation as device data  
3. Less chromatic by  $c^* = c^{*2}$  (new  $rgb$ ), output interpretation as device data

2. More chromatic by  $c^* = c^{*1/2}$  (new  $rgb$ ), output interpretation as elementary data

Device uses lookup table  $olv^* - rgb^*$  for output.  
Is the device output more chromatic for any of the six device hues OYLCVM?

Device uses lookup table  $olv^* - rgb^*$  for output.  
Is the device output less chromatic for any of the six device hues OYLCVM?

Device uses lookup table  $rgb^* - rgb^*$  for output.  
Is the device output more chromatic for any of the four elementary hues RJGB?

Remark:  
For output linearisation see ISO/IEC TR 19797

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BAM-test chart ZE39; Office colour workflow  
User input, output choice and output needs

User specification of the output with  $rgb$  data interpretation as  $olv^*$   
Equally spaced output, equal output, chroma change, smoothing

Is the output visually equally spaced for equally spaced colour data as input?

device hue colour output  $olv^*$  for six device hue planes OYLCVM  
Colour Code:  $rgb$   $cmy0$   $000k$   $w$   $LAB^*$   $LCH^*$   $nch^*$   $nce^*$   
5 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐  
16 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Is the output visually equal for equivalent colour data as input?

device hue colour output  $olv^*$  for six device hue planes OYLCVM  
Colour Code:  $rgb$   $cmy0$   $rgb...w$   $rgb...LCH^*$   $rgb...nce^*$   
5 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐  
16 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Exists an option for a change of chroma for equally spaced input data?

device hue colour output  $olv^*$  for six device hue planes OYLCVM  
Change option: no option less chromatic more chromatic achromatic  
5 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐  
16 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Exists an option for colour smoothing for equally spaced input data?

device hue colour output  $olv^*$  for six device hue planes OYLCVM  
Smoothing option: no option No smoothing smoothing visual evaluation  
5 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐  
16 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

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User specification of the output with  $rgb$  data interpretation as  $rgb^*$   
Equally spaced output, equal output, chroma change, smoothing

Is the output visually equally spaced for equally spaced colour data as input?

elementary hue colour output  $rgb^*$  for four elementary hue planes RJGB  
Colour Code:  $rgb$   $cmy0$   $000k$   $w$   $LAB^*$   $LCH^*$   $nch^*$   $nce^*$   
5 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐  
16 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Is the output visually equal for equivalent colour data as input?

elementary hue colour output  $rgb^*$  for four elementary hue planes RJGB  
Colour Code:  $rgb$   $cmy0$   $rgb...w$   $rgb...LCH^*$   $rgb...nce^*$   
5 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐  
16 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Exists an option for a change of chroma for equally spaced input data?

elementary hue colour output  $rgb^*$  for four elementary hue planes RJGB  
Change option: no option less chromatic more chromatic achromatic  
5 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐  
16 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Exists an option for colour smoothing for equally spaced input data?

elementary hue colour output  $rgb^*$  for four elementary hue planes RJGB  
Smoothing option: no option No smoothing smoothing visual evaluation  
5 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐  
16 steps: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

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input:  $rgb \rightarrow olv^*/rgb^*$  setrgbcolor  
output: no change compared to input