

<http://farbe.li.tu-berlin.de/hec4/hec410n1.txt> /ps; only vector graphic VG; start output
see separate images of this page: <http://farbe.li.tu-berlin.de/hec4/hec4.htm>

see similar files of the whole series: <http://farbe.li.tu-berlin.de/hecs.htm>
technical information: <http://farbe.li.tu-berlin.de> or <http://color.li.tu-berlin.de>

TUB registration: 20241001-hec4-hec410n1.txt /ps
application for evaluation and measurement of display or print output

TUB material: code=rhadata

```
!proc05_gammal_yxreh %BEG proc05_gammal_yxreh
$BEG Local file (name and calculation of xyreh)1024
/gammal1 21 array def
/gammal1 tral: gamma according to ISO 9241-3:06/2018
40 1 0.475 0.550 0.625 0.700 0.775 0.849 0.924 1.000
18 9 10 11 12 13 14 15 16 17
1.000 1.081 1.176 1.290 1.428 1.600 1.818 2.105
116 19 18 19 20
2.000 0.500 1.500 0.666 1.000] def

/gamma gammal indexFl def
/xrehj 1024 array def /yrehj 1024 array def
/xinhj 1024 array def /yinhj 1024 array def

calculation of the table xyreh1024 (h-bxax) of real values (reh) with gamma
0 1 1023 /j each def
  xrehj j 1023 put
  yrehj j 1023 div gamma exp 1023 mul cvi def
  /for j=0,1023
/proc06_FF_LM_FLVLF %BEG proc06_FF_LM_FLVLF
  /yeh yed 1023 mul cvi def
  /xinh yrehj yeh get def
  /inh 1023 div
  ] def %END proc06_FF_LM_FLVLF

] def %END proc05_gammal_yxreh
*****
/proc00_LMR_FLVLF %BEG proc00_LMR_FLVLF
%Main procedure Fast Linear Visual Local File (FLVLF)
/FF_LM_setgrayFLVLF0 [setgray] bind def
/FF_LM_setrgbcolorFLVLF0 [setrgbcolor] bind def
/FF_LM_setcmykcolorFLVLF0 [setcmykcolor] bind def
/FF_LM_transferFLVLF0 [settransfer] bind def
/FF_LM_colortransferFLVLF0 [setcolortransfer] bind def

/setgray %BEG procedure setgrayFLVLF
  dup dup FF_LM_setrgbcolorFLVLF
  ] def %END procedure setgrayFLVLF

/setcmykcolor %BEG procedure setcmykcolorFLVLF
/FF_LM_kPLVLF exch def /FF_LM_yPLVLF exch def
/FF_LM_mPLVLF exch def /FF_LM_cPLVLF exch def
/FF_LM_LPLVLF 0 eq { 1 FF_LM_cPLVLF sub 1 FF_LM_mPLVLF sub
  1 FF_LM_yPLVLF sub 1 FF_LM_kPLVLF sub dup dup
  1 FF_LM_kPLVLF sub dup dup
  FF_LM_setrgbcolorFLVLF } ifelse
] def %END procedure setcmykcolorFLVLF

/setrgbcolor %BEG procedure setrgbcolorFLVLF
/FF_LM_RPLVLF exch def /FF_LM_GPLVLF exch def
/FF_LM_BPLVLF exch def
/FF_LM_YPLVLF FF_LM_GPLVLF FF_LM_BPLVLF
/FF_LM_CPLVLF FF_LM_RPLVLF
] def %BEG procedure setrgbcolorFLVLF

/FF_LM_setrgbcolorFLVLF %BEG FF_LM_setrgbcolorFLVLF
/FF_LM_RPLVLF exch def /FF_LM_GPLVLF exch def
/FF_LM_BPLVLF 0 le { /FF_LM_YPLVLF 0.0001 def } if
/FF_LM_GPLVLF 0 le { /FF_LM_CPLVLF 0.0001 def } if
/FF_LM_RPLVLF 0 le { /FF_LM_DPLVLF 0.0001 def } if
/FF_LM_CPLVLF FF_LM_GPLVLF FF_LM_BPLVLF def
/FF_LM_GPLVLF FF_LM_RPLVLF FF_LM_CPLVLF def
/FF_LM_BPLVLF FF_LM_DPLVLF FF_LM_GPLVLF def
/FF_LM_DPLVLF FF_LM_CPLVLF FF_LM_BPLVLF
/FF_LM_setrgbcolorFLVLF] def %END FF_LM_setrgbcolorFLVLF

/FF_LM_transferFLVLF %BEG FF_LM_transferFLVLF
[proc06_FF_LM_FLVLF]
/FF_LM_transferFLVLF] def %END FF_LM_transferFLVLF
/settransfer [FF_LM_transferFLVLF] def

/setcolortransferFLVLF %BEG FF_LM_colortransferFLVLF
[proc06_FF_LM_FLVLF] [proc06_FF_LM_FLVLF]
[proc06_FF_LM_FLVLF]
/FF_LM_colortransferFLVLF] def
/setcolortransfer [FF_LM_colortransferFLVLF] def

] def %END proc00_LMR_FLVLF
*****
/proc00_FF_LM_FLVLF %END proc00_FF_LM_FLVLF
*****
! 20 { /index each def %for 20 Local gamma values
/procIMR 1 def /optional application example
/procIMR 1 eq { /Linearization_Method [FF_LM] %Example: combined procedure
proc00_LMR_FLVLF proc05_gammal_yxreh } if
*****
```

```
!proc04_7data_FLVLF %BEG proc04_7data_FLVLF
%The procedure proc04_7data_FLVLF is used only once in Local File
/Visewl1 07 array def %for real data [i=0,6] of visual evaluation
%e08 1.e02 2.e08 3.e08 4.e24 5.e46 6.e68 %indexd
[0.500 0.500 0.500 0.500 0.500 0.500 0.500] 7data, for manual change
/ai Visewkx 0 get def %BEG calculation Visewl1 [i=0,8] from 7data
/b2 ai Visewkx 1 get mul def %b2
/b2 ai def
/b2 ai sub Visewkx 2 get mul b2 add def %b2
/Visewl1 09 array def %for real data [i=0,8] of visual evaluation
Visewl1 0 0 put
Visewl1 1 b1 0 sub Visewl1 3 get mul put %b1
Visewl1 2 b1 0 sub Visewl1 3 get mul put %b2
Visewl1 3 b2 b1 sub Visewl1 4 get mul b1 add put %b3
Visewl1 4 b2 put %b4
Visewl1 5 b3 b2 sub Visewl1 5 get mul b2 add put %b5
Visewl1 6 b3 put %b6
Visewl1 7 b3 sub Visewl1 6 get mul b3 add put %b7
Visewl1 8 1 put %b8
] def %END proc04_7data_FLVLF
*****
/proc02_Visew_FLVLF %BEG proc02_Visew_FLVLF
%for visual data with Fast Linear Visual Local File (FLVLF)
%The procedure proc01_7data_FLVLF is used only once in Local File
/xrehd 10 array def /yrehd 10 array def %real. j=0,8
/xinh8 10 array def /yinh8 10 array def %lin-invers. j=0,8
/xrehj 1025 array def /yrehj 1025 array def
/xinhj 1025 array def /yinhj 1025 array def
/xrehd 10 array def /yrehd 10 array def %real. j=0,8
/xinh8 10 array def /yinh8 10 array def %lin-invers. j=0,8
/xrehj 1025 array def /yrehj 1025 array def
/xinhj 1025 array def /yinhj 1025 array def
0 1 8 /j each def
  xj=0,1023
  0 1 7 /k each def %k=0,8
  0 1 127 /n each def %n=0,127
  /j 128 mul n add def
  xredj ] 1023 div put
  yredj yrehd k 1 add get yredh k get sub
  xinhj xrehd k 1 add get yredh k get add put
  yinhj yrehd j get put
  yindj yredj xredj get put
  for %n=0,127
  for %k=1,127
  0 1 1023 /j each def %j=0,1023
  xrehj xredj j get 1023 mul put
  yrehj yredj j get 1023 mul put
  xinhj xredj j get put
  yinhj yredj j get put
  ] def
  for %j=0,1023
  xredj 1024 1 put yredj 1024 1 put
  xinhj 1024 1023 put yrehj 1024 1023 put
  xinhj 1024 1023 put yinhj 1024 1023 put
  ] def %END proc01_Visew_FLVLF
*****
/proc00_FF_LM_FLVLF %BEG proc00_FF_LM_FLVLF
%this procedure is used for any sub data in proc00_LMR_FLVLF
/yeh exch def
/yeh yed 1023 mul cvi def
/xinh yrehj yeh get def
xinh 1023 div
] def

%END proc00_FF_LM_FLVLF
*****
%default experimental, no gamma value
/procIMR 1 def /optional application example
/procIMR 1 eq { /Linearization_Method [FF_LM] %Example: combined procedure
proc00_LMR_FLVLF proc02_Visew_FLVLF proc02_Visew_FLVLF] if
*****
```

hec40-7n

hec41-7n

TUB-test chart hec4; EPS-example code of eps images, see EPS code FLVLF within
<http://color.li.tu-berlin.de/hec0/hec010np.txt> and in images <http://color.li.tu-berlin.de/hecs.htm>