

<http://farbe.li.tu-berlin.de/hec4/hec4l0na.txt> /.ps; only vector graphic VG; start output
see separate images of this page: <http://farbe.li.tu-berlin.de/hec4/hec4.htm>

```
%*****
/proc05_gammaL_xyreh %BEG proc05_gammaL_xyreh %BEG proc05_gammaL_xyreh
%BEG Local (L) gamma and calculation of xyreh.1024
/gammaLi 21 array def
/gammaLi 1 2 3 4 5 6 7
[0.475 0.550 0.625 0.700 0.775 0.849 0.924 1.000
%8 9 10 11 12 13 14 15
1.000 1.081 1.176 1.290 1.428 1.600 1.818 2.105
%16 17 18 19 20
2.000 0.500 1.500 0.666 1.000] def

/gamma gammaLi indexFi get def
/xrehj 1024 array def /yrehj 1024 array def
/xinhj 1024 array def /yinhj 1024 array def

%calculation of the table xyreh.1024 (h=hex) of real values (reh) with gamma
0 1 1023 {/j exch def %j=0,1023
xrehj j j put
yrehj j j 1023 div gamma exp 1023 mul cvi put
} for %j=0,1023

/proc06_FF_LM_FLVLF %BEG proc06_FF_LM_FLVLF %BEG proc06_FF_LM_FLVLF
/yed exch def
/yeh yed 1023 mul cvi def
/xinh yrehj yeh get def
xinh 1023 div
} def %END proc06_FF_LM_FLVLF %END proc06_FF_LM_FLVLF

} def %END proc05_gammaL_xyreh %END proc05_gammaL_xyreh
%*****
/proc00_1MR_FLVLF %BEG proc00_1MR_FLVLF %BEG proc00_FF_LM_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 setgray -> FF_LM_setrgbcOLORG
dup dup FF_LM_setrgbcOLORFLVLF
} def %END procedure setgrayFLVLF

/setcmYKcolor %BEG procedure setcmYKcolorFLVLF setcmYKcolor -> FF_LM_setrgbcOLORG
/FF_LM_kFLVLF exch def /FF_LM_yFLVLF exch def
/FF_LM_mFLVLF exch def /FF_LM_cFLVLF exch def
FF_LM_kFLVLF 0 eq {1 FF_LM_cFLVLF sub 1 FF_LM_mFLVLF sub
1 FF_LM_yFLVLF sub FF_LM_setrgbcOLORFLVLF}
{1 FF_LM_kFLVLF sub dup dup
FF_LM_setrgbcOLORFLVLF} ifelse
} def %END procedure setcmYKcolorFLVLF

/setrgbcOLOR %BEG procedure setrgbcOLORFLVLF setrgbcOLOR -> FF_LM_setrgbcOLORG
/FF_LM_bFLVLF exch def /FF_LM_gFLVLF exch def
/FF_LM_rFLVLF exch def
FF_LM_rFLVLF FF_LM_gFLVLF FF_LM_bFLVLF
FF_LM_setrgbcOLORFLVLF
} def %BEG procedure setrgbcOLORFLVLF

/FF_LM_setrgbcOLORFLVLF %BEG FF_LM_setrgbcOLORFLVLF FF_LM_setrgbcOLORG -> FF_LM_setrgbcOLORG0
/FF_LM_b0FLVLF exch def /FF_LM_g0FLVLF exch def
/FF_LM_r0FLVLF exch def
FF_LM_r0FLVLF 0 le {/FF_LM_r0FLVLF 0.0001 def} if
FF_LM_g0FLVLF 0 le {/FF_LM_g0FLVLF 0.0001 def} if
FF_LM_b0FLVLF 0 le {/FF_LM_b0FLVLF 0.0001 def} if
/FF_LM_r1FLVLF FF_LM_r0FLVLF proc06_FF_LM_FLVLF def
/FF_LM_g1FLVLF FF_LM_g0FLVLF proc06_FF_LM_FLVLF def
/FF_LM_b1FLVLF FF_LM_b0FLVLF proc06_FF_LM_FLVLF def
FF_LM_r1FLVLF FF_LM_g1FLVLF FF_LM_b1FLVLF
FF_LM_setrgbcOLORFLVLF0} def %END FF_LM_setrgbcOLORFLVLF

/FF_LM_transferFLVLF %BEG FF_LM_transferFLVLF settransferG -> FF_LM_settransferG0
{proc06_FF_LM_FLVLF} {proc06_FF_LM_FLVLF}
{proc06_FF_LM_FLVLF}
FF_LM_colortransferFLVLF0} def
/settransfer {FF_LM_transferFLVLF} def

/FF_LM_colortransferFLVLF %BEG FF_LM_colortransferFLVLF setcolortransferG->FF_LM_setcolortransferG0
{proc06_FF_LM_FLVLF} {proc06_FF_LM_FLVLF}
{proc06_FF_LM_FLVLF}
FF_LM_colortransferFLVLF0} def
/setcolortransfer {FF_LM_colortransferFLVLF} def
} def %END proc00_1MR_FLVLF %END proc00_FF_LM_FLVLF
%*****
0 1 20 {/indexLi exch def %loop for 21 Local gamma values
/iproclMR 1 def %optional application example
iproclMR 1 eq {%main program Frame_File_Linearisation_Method (FF_LM)%Example: combined procedure
proc00_1MR_FLVLF proc05_gammaL_xyreh} if
%*****
```

hec40-7n

TUB-test chart hec4; EPS-example code of eps images, see EPS code FLVLF within
<http://color.li.tu-berlin.de/hec0/hec0l0np.txt> and in images <http://color.li.tu-berlin.de/hecs.htm>

```
%*****
/proc04_7data_FLVLF %BEG proc04_7data_FLVLF %BEG proc04_7data_FLVLF
%The procedure proc04_7data_FLVLF is used only once in local File
/VisevLi 07 array def %for real data (i=0,6) of visual evaluation
%0.008 1.024 2.048 3.072 4.096 5.120 6.144 7.168 %indexL
[0.500 0.500 0.500 0.500 0.500 0.500 0.500] %7data, for manuel change
/a1 VisevEx 0 get def %BEG calculation VisevLi (i=0,8) from 7data
/b1 a1 VisevEx 1 get mul def %b1
/b2 a1 def %b2
/b3 1 b2 sub VisevEx 2 get mul b2 add def %b3
/VisevLi 09 array def %for real data (i=0,8) of visual evaluation
VisevLi 0 0 put
VisevLi 1 b1 0 sub VisevEx 3 get mul put %c1
VisevLi 2 b1 put %c2
VisevLi 3 b2 b1 sub VisevEx 4 get mul b1 add put %c3
VisevLi 4 b2 put %c4
VisevLi 5 b3 b2 sub VisevEx 5 get mul b2 add put %c5
VisevLi 6 b3 put %c6
VisevLi 7 1 b3 sub VisevEx 6 get mul b3 add put %c7
VisevLi 8 1 put
} def %END proc04_7data_FLVLF %END proc04_7data_FLVLF
%*****
/proc02_Visev_FLVLF %BEG proc02_Visev_FLVLF %BEG proc02_Visev_FLVLF
%For visual data with Fast Linear Visual Local File (FLVLF)
%The procedure proc01_7data_FLVLF is used only once in Local File
/xreh8 10 array def /yreh8 10 array def %re=real, j=0,8
/xinh8 10 array def /yinh8 10 array def %in=invers, j=0,8
/xrehj 1025 array def /yrehj 1025 array def
/xinhj 1025 array def /yinhj 1025 array def
/xred8 10 array def /yred8 10 array def %re=real, j=0,8
/xind8 10 array def /yind8 10 array def %in=invers, j=0,8
/xredj 1025 array def /yredj 1025 array def
/xindj 1025 array def /yindj 1025 array def
0 1 8 {/j exch def %j=0,8
xred8 j j 0.125 mul put
yred8 j VisevFi j get put
xind8 j yred8 j get put
yind8 j xred8 j get put
} for %j=0,8

xreh8 j xred8 j get 255 mul put
yreh8 j yred8 j get 255 mul put
xinh8 j yreh8 j get put
yinh8 j xreh8 j get put
} for %j=0,8

xred8 9 1 put yred8 9 1 put
xind8 9 1 put yind8 9 1 put
xreh8 9 255 put yreh8 9 255 put
xind8 9 255 put yind8 9 255 put

%j=0,1023
0 1 7 {/k exch def %k=0,8
0 1 127 {/n exch def %n=0,127
/j k 128 mul n add def
xredj j j 1023 div put
yredj j yred8 k 1 add get yred8 k get add put
n 128 div mul yred8 k get add put
xindj j yredj j get put
yindj j xredj j get put
} for %n=0,127
} for %k=1,8

0 1 1023 {/j exch def %j=0,1023
xrehj j xredj j get 1023 mul put
yrehj j yredj j get 1023 mul put
xinhj j yredj j get put
yinhj j xredj j get put
} for %j=0,1023
xredj 1024 1 put yredj 1024 1 put
xindj 1024 1 put yindj 1024 1 put
xrehj 1024 1023 put yrehj 1024 1023 put
xinhj 1024 1023 put yinhj 1024 1023 put
} def %END proc01_Visev_FLVLF %END proc02_Visev_FLVLF
%*****
/proc00_FF_LM_FLVLF %BEG proc00_FF_LM_FLVLF %BEG proc00_FF_LM_FLVLF
%This procedure is used for any rgb data in proc00_1MR_FLVLF
/yed exch def
/yeh yed 1023 mul cvi def
/xinh yrehj yeh get def
xinh 1023 div
} def
%END proc00_FF_LM_FLVLF %END proc00_FF_LM_FLVLF
%*****
%default experimental, no gamma value
/iproclMR 1 def %optional application example
iproclMR 1 eq {%main program Frame_File_Linearisation_Method (FF_LM) %Example: combined procedure
proc00_1MR_FLVLF proc04_7data_FLVLF proc02_Visev_FLVLF} if
%*****
```

hec41-7n

see similar files of the whole serie: <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/hec4l0na.txt /.ps
application for evaluation and measurement of display or print output
TUB material: code=rha4ta