see similar files of the whole serie: http://farbe.li.tu-berlin.de/gess.htm
technical information: http://farbe.li.tu-berlin.de or http://color.li.tu-berlin.de

```
%***********************************
%BEG Frame File Linearization Method (FF_LM)
%Combined transfers: setgray, setrgbcolor, setcmykcolor
%          and settransfer, setcolortransfer

/FF_LM_setgrayF0 {setgray} bind def
/FF_LM_setrgbcolorF0 {setrgbcolor} bind def
/FF_LM_setcmykcolorF0 {setcmykcolor} bind def
/FF_LM_transferF0 {settransfer} bind def
/FF_LM_colortransferF0 {setcolortransfer} bind def
/FF_LM_xchart_gammaF {/xchart where {pop /xchartN xchart 8 idiv def
                                     /xchartP xchart
                                     xchart 8 idiv 8 mul sub def}
                      {/xchartN 2.0 def %default
                       /xchartP 0.5 def} ifelse
          /gammaF 2.4 xchartP 0.18 mul sub 2.4 div
                  1 2.4 xchartN 0.18 mul sub 2.4 div div mul def
          gammaF exp gammaR mul
          } def

/FF_LM_setrgbcolorF {%FF_LM_setrgbcolorF
          /FF_LM_b0L exch def /FF_LM_g0L exch def
          /FF_LM_r0L exch def
          FF_LM_r0L 0 le {/FF_LM_r0L 0.0001 def} if
          FF_LM_g0L 0 le {/FF_LM_g0L 0.0001 def} if
          FF_LM_b0L 0 le {/FF_LM_b0L 0.0001 def} if
          /FF_LM_r1F FF_LM_r0L FF_LM_xchart_gammaF def
          /FF_LM_g1F FF_LM_g0L FF_LM_xchart_gammaF def
          /FF_LM_b1F FF_LM_b0L FF_LM_xchart_gammaF def
          FF_LM_r1F FF_LM_g1F FF_LM_b1F
          FF_LM_setrgbcolorF0
          } def %FF_LM_setrgbcolorF

/FF_LM_transferF {{FF_LM_xchart_gammaF} FF_LM_transferF0} def

/FF_LM_colortransferF {{FF_LM_xchart_gammaF} {FF_LM_xchart_gammaF}
                       {FF_LM_xchart_gammaF} FF_LM_colortransferF0} def

%END Frame File Linearization Method (FF_LM)
%***********************************
```
ges00-3n

This is an example EPS code, see use in
http://color.li.tu-berlin.de/fek9/fek9f1p0.txt
http://color.li.tu-berlin.de/fek9/fek9f1p0.pdf

External values of the Frame File (FF):
xchart=0, 1, ..., 8 for P und N series
for the range 0,5 <= gammaF <=2

Example gammaR values for HDR-head room:
gammaR=0,64 (2 stop);
gammaR=0,8 (1 stop); 1,0 (SDR)

For use of this EPS code with gammaR see
http://color.li.tu-berlin.de/few1/few1l0np.pdf
http://color.li.tu-berlin.de/few2/few2l0np.pdf

### Colour management for output linearization of a 9 step grey scale



ges01-3n

```
%***********************************
%BEG Frame File Linearization Method FF_LM, calculates inverse data

%main file data:
/xvredj 9 array def /yvredj 9 array def %vred=visual real decimal, j=0,8
/xvindj 9 array def /yvindj 9 array def %vind=visual invers decimal, j=0,8

/indexGi 07 def %default linear
indexGi 07 eq {/gamma 1.0 def %indexGi=07
%       0   1   2   3   4   5   6   7   8
/yvredj [0.000 0.125 0.250 0.375 0.500 0.625 0.750 0.875 1.000] def} if
index 16 eq {/gamma 2.0 def %indexGi=16
/yvredj [0.000 0.015 0.062 0.140 0.250 0.390 0.562 0.765 1.000] def} if

%procedure to calculate the inverse data
/FF_LM_xchart_gammaF {%BEG /FF_LM_xchart_gammaF for invers function 240715
          /yvred exch def
          yvred 0 eq {/yvred 0.0001 def} if
          yvred 1 eq {/yvred 0.9999 def} if
          0 1 7 {/j exch def %j=0,7
                 yvred yvredj j get ge {/jm j def} if
                } for %j=0,7
          /yvredt yvred            yvredj jm get sub
                  yvredj jm 1 add get yvredj jm get sub div def
          /xvindt jm yvredt add 0.125 mul put
          xvindj j yvredt j 7 le {yvred add} if put
          yvindj j xvindt put
          yvindj j get
          } def %END %BEG /FF_LM_xchart_gammaF for invers function 240715

%Calculation example of xvindj, yvindj by the procedure /FF_LM_xchart_gammaF
0 1 8 {/j exch def %j
       /xvredj j 8 div def
       /yvredj j xvredj j get gamma exp def
       yvredj j get FF_LM_xchart_gammaF %output: xvindj & yvindj j=0,8
       } for stroke %j

%then available: xvredj, yvredj, xvindj, yvindj, j=0,8
%END Frame File Linearization Method FF_LM, inverse function
%***********************************
```
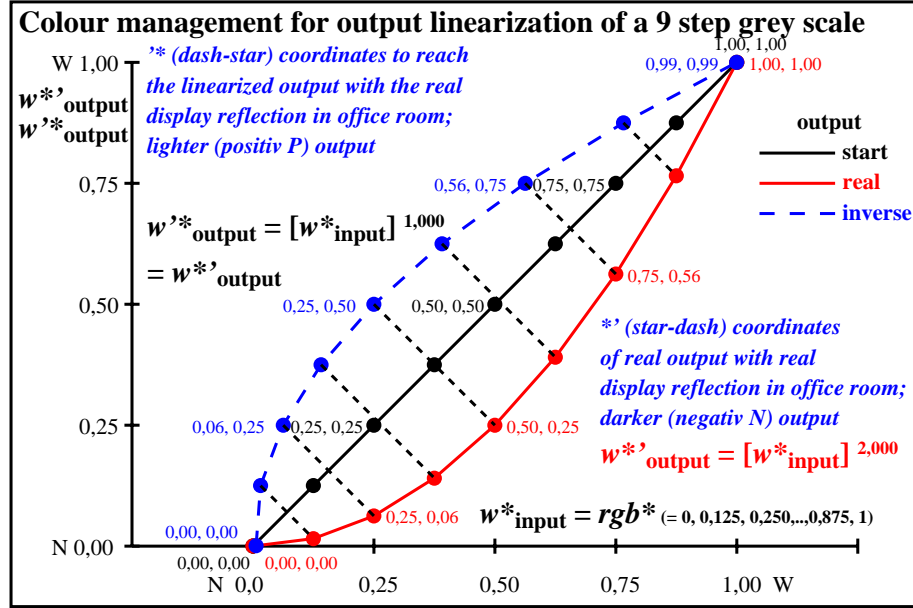ges00-7n

This is an example EPS code, see use in
http://color.li.tu-berlin.de/ges3/ges30-1n.txt
http://color.li.tu-berlin.de/ges3/ges30-1n.pdf

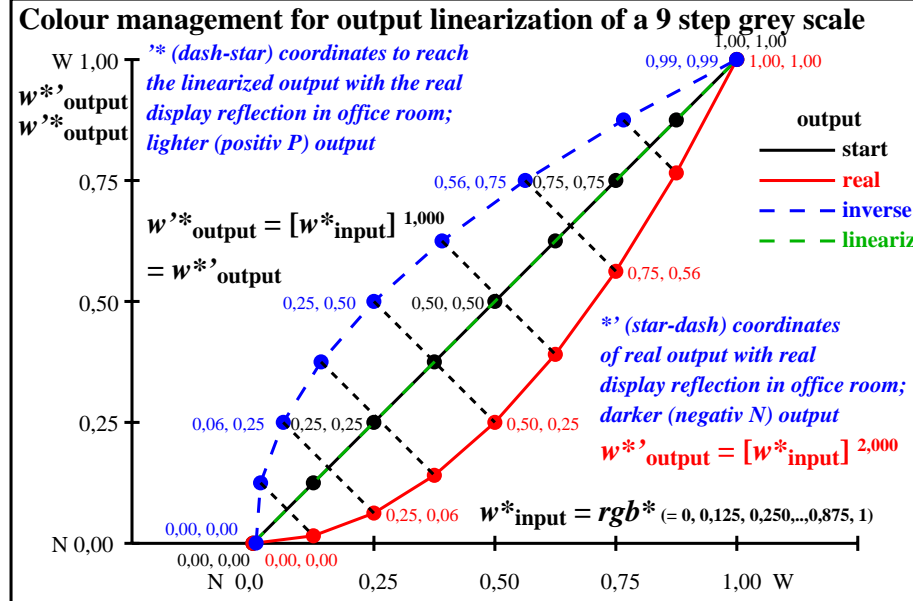Example visual scaling data:
gamma = 1,0 and 2,0

invers transfer of x to y,
and output y

### Colour management for output linearization of a 9 step grey scale



ges01-7n

TUB-test chart ges0; *PostScript eps Code* for output linearization and output, EPS code and images,
Basic EPS code for output of invers images, gamma=2, and 0,5