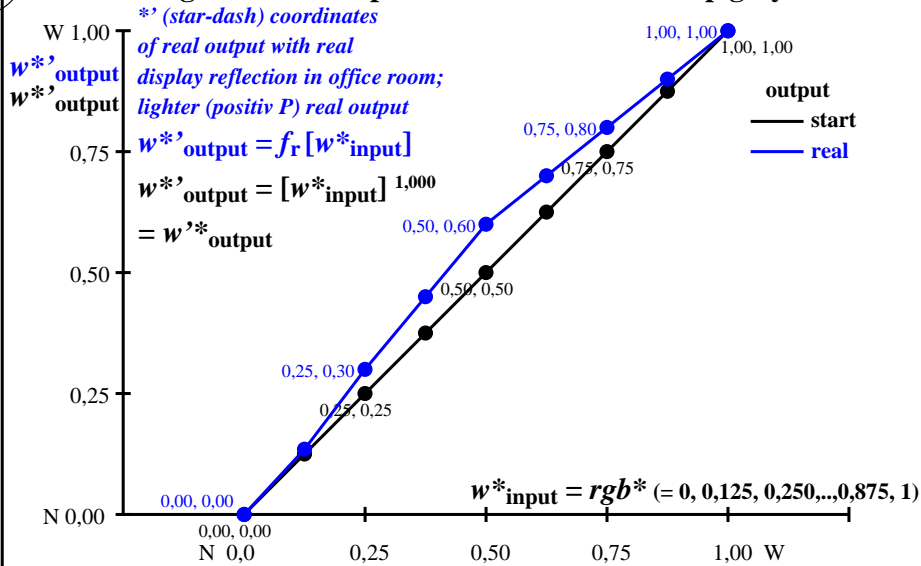
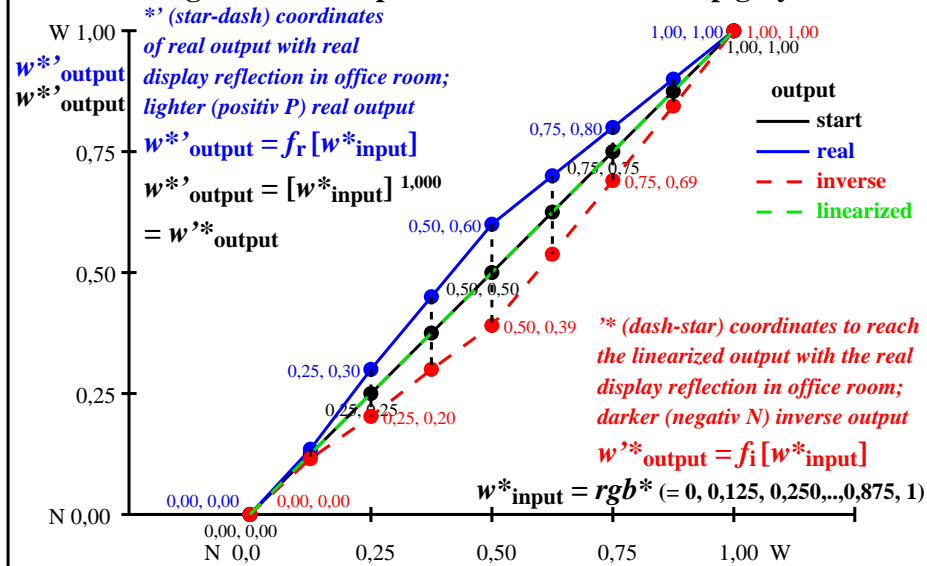


Colour management for output linearization of a 9 step grey scale



Colour management for output linearization of a 9 step grey scale



hek80-3n

hek81-3n

Three, 5 and 9 colour steps for visual evaluation $s: 0, 125, 250, 375, 500, 625, 750, 875, 1000$ $L^*_{TUBLOG,U} = [50/\log(5)] \log(Y/Y_U) + 50, Y_N=4, Y_U=20, Y_W=100$
 Green G00w – Green G16w = White W



Three, 5 and 9 colour steps, numeric specification

| | | | | | | | | | | | | | | | | |
|--------------|----------------------------|--------------|--------------|-------------------------------|-------------------------|--------------------------------------|--------------|--------------|-------------------------------|-------------------------|---------------------------------------|-------------------------|---------------------------------------|-------------------------|--------------------------------------|--------------|
| 0,00 0,00 | $e08=0, \dots$ $a1=e08$ | 1,00 1,00 | 0,00 0,00 | $e04=0, \dots$ $b1=e04*a1$ | 1,00 0,00 $b2=a1$ | $e48=0, \dots$ $b3=e48*(1-b2)+b2$ | 1,00 1,00 | 0,00 0,00 | $e02=0, \dots$ $c1=e02*b1$ | 1,00 0,00 $c2=b1$ | $c24=0, \dots$ $c3=e24*(b2-b1)+b1$ | 0,00 1,00 $c4=b2$ | $e46=0, \dots$ $c5=e46*(b3-b2)+b2$ | 1,00 0,00 $c6=b3$ | $e68=0, \dots$ $c7=e68*(1-b3)+b3$ | 1,00 1,00 |
|--------------|----------------------------|--------------|--------------|-------------------------------|-------------------------|--------------------------------------|--------------|--------------|-------------------------------|-------------------------|---------------------------------------|-------------------------|---------------------------------------|-------------------------|--------------------------------------|--------------|

Three, 5 and 9 colour steps, numeric calculation example

| | | | | | | | | | | | | | | | | |
|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 0,00 0,000 0,000 | 0,60 0,600 0,390 | 1,00 1,000 1,000 | 0,00 0,000 0,000 | 0,50 0,300 0,202 | 1,00 0,600 0,390 | 0,50 0,800 0,690 | 1,00 1,000 1,000 | 0,00 0,000 0,000 | 0,45 0,135 0,115 | 1,00 0,300 0,202 | 0,50 0,450 0,299 | 0,00 1,000 0,390 | 0,50 0,700 0,538 | 1,00 0,800 0,690 | 0,49 0,900 0,844 | 1,00 1,000 1,000 |
|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|

Three, 5 and 9 colour steps, produced visual linearization $r: 0, 135, 300, 450, 600, 700, 800, 900, 1000$ $i: 0, 115, 202, 299, 390, 538, 690, 844, 1000$ $L^*_{TUBLOG,U} = [50/\log(5)] \log(Y/Y_U) + 50, Y_N=4, Y_U=20, Y_W=100$
 Green G00w – Green G16w = White W



hek80-7n, Test samples: 3, 5 and 9 colour steps, greu=0.500, expu=1.000, expa=1.000, expi=1.000

TUB-test chart hek8; adjacent grey samples for visual intervall scaling, evaluation of the series G_W with 3, 5 and 9 steps, output $(rgb^*)^{1,0}$ & experimental; surround mean Grey U=N08w

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

TUB registration: 20241001-hek8/hek810np.pdf / .ps
 application for evaluation and measurement of display or print output
 TUB material: code=rh4ta