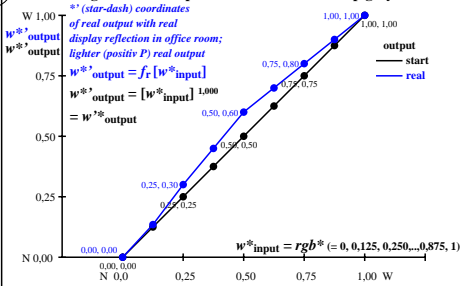
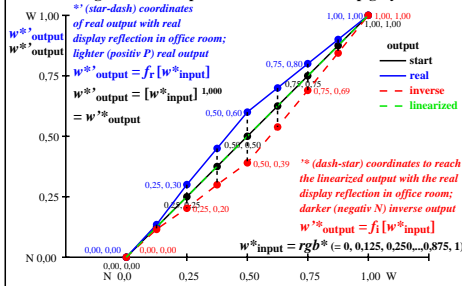


### Colour management for output linearization of a 9 step grey scale



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



hek30-3n

hek31-3n

Three, 5 and 9 colour steps for visual evaluation s: 0, 125, 250, 375, 500, 625, 750, 875, 1000  $L^*_{TUBLOG,U}=[50/\log(5)] \log(Y/Y_U)+50, Y_N=4, Y_U=20, Y_W=100$   
 Red R00w – Red R16w = White W



Three, 5 and 9 colour steps, numeric specification

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

Three, 5 and 9 colour steps, numeric calculation example

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

Three, 5 and 9 colour steps, produced visual linearization  $L^*_{TUBLOG,U}=[50/\log(5)] \log(Y/Y_U)+50, Y_N=4, Y_U=20, Y_W=100$   
 Red R00w – Red R16w = White W



30-7n: Test samples: 1,5 and 9 colour steps, green=0,500, exp=1,000, exp=1,000, exp=1,000

see similar files of the whole serie: <http://farbe.li.tu-berlin.de/hek3.htm>  
 technical information: <http://farbe.li.tu-berlin.de> or <http://color.li.tu-berlin.de>

TUB registration: 20241001-hek3/hek3f0n1.txt / .ps  
 application for evaluation and measurement of display or print output  
 TUB material: code=thadta