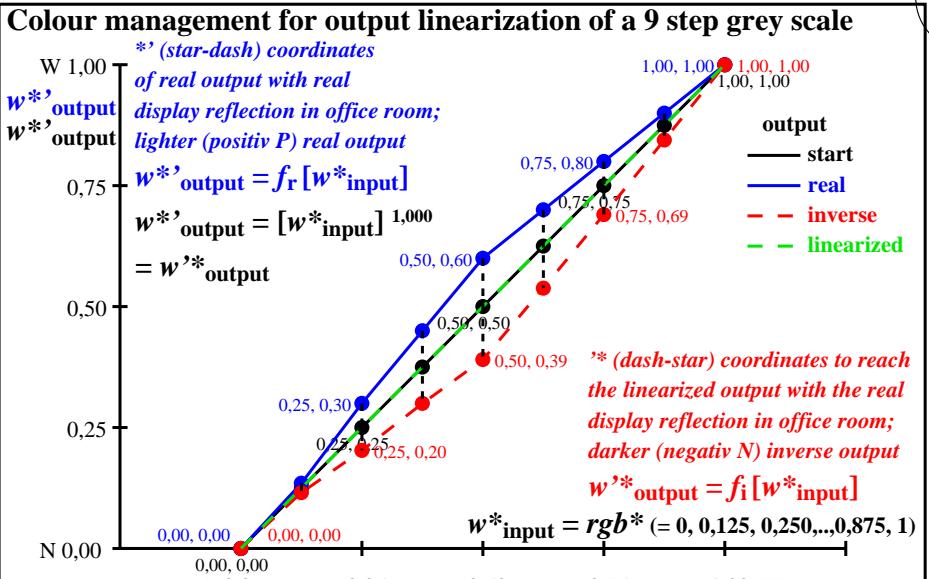
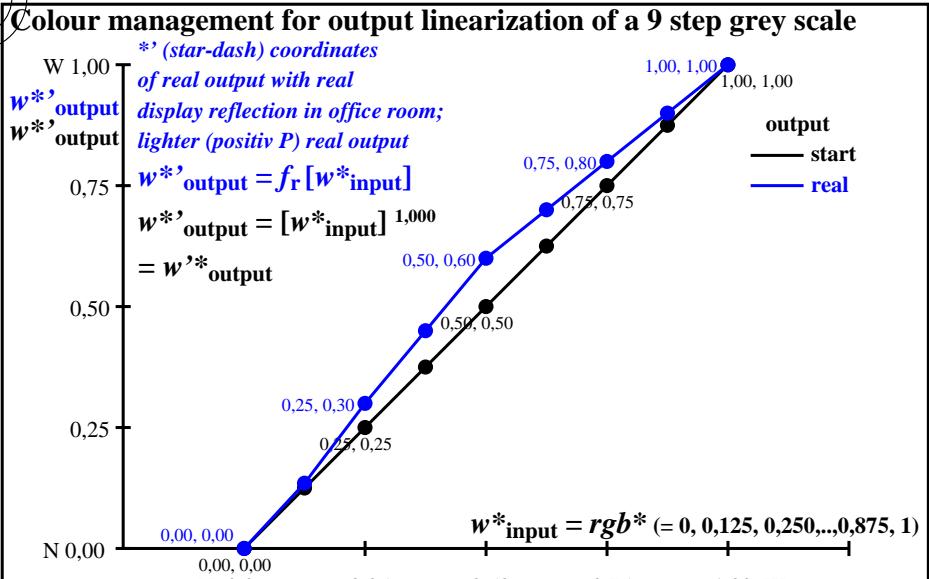




see similar files of the whole serie: <http://farbe.li.tu-berlin.de/hels.htm>  
technical information: <http://farbe.li.tu-berlin.de> or <http://color.li.tu-berlin.de>



TUB registration: 20241001-hel3/hel3l0na.txt.pss - application for evaluation and measurement of dis-

TUB material: code=rha4ta  
output

## **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  
 Blue B00w – Blue B16w = White W

B00w	B08w	B16w	B00w	B04w	B08w	B12w	B16w
Three, 5 and 9 colour steps, numeric specification							
0,00	e08=0,.. a1=e08	1,00 1,00	0,00	e04=0,.. b1=e04*a1	1,00 0,00 b2=a1	e48=0,.. b3=e48* (1-b2)+b2	1,00 1,00

B00w 0	B02w 12?	B04w 25?	B06w 37?	B08w 50?	B10w 62?	B12w 75?	B14w 87?	B16w 100
0,00	e02=0,...	1,00	c24=0,...	0,00	e46=0,...	1,00	e68=0,...	1,00
0,00	c1=e02*b1	0,00	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

<b>0,00</b>	<b>0,60</b>	<b>1,00</b>	<b>0,00</b>	<b>0,50</b>	<b>1,00</b>	<b>0,00</b>	<b>0,50</b>	<b>1,00</b>
<b>0,000</b>	<b>0,600</b>	<b>1,000</b>	<b>0,000</b>	<b>0,300</b>	<b>0,600</b>	<b>0,800</b>	<b>0,690</b>	<b>1,000</b>
<b>0,000</b>	<b>0,390</b>	<b>1,000</b>	<b>0,000</b>	<b>0,202</b>	<b>0,390</b>	<b>0,690</b>	<b>1,000</b>	

<b>0,00</b>	<b>0,45</b>	<b>1,00</b>	<b>0,00</b>	<b>0,50</b>	<b>0,00</b>	<b>0,50</b>	<b>1,00</b>	<b>0,00</b>	<b>0,49</b>	<b>1,00</b>
<b>0,000</b>	<b>0,135</b>	<b>0,300</b>	<b>0,450</b>	<b>0,600</b>	<b>0,700</b>	<b>0,800</b>	<b>0,900</b>	<b>0,900</b>	<b>0,844</b>	<b>1,000</b>
<b>0,000</b>	<b>0,115</b>	<b>0,202</b>	<b>0,299</b>	<b>0,390</b>	<b>0,538</b>	<b>0,690</b>	<b>0,844</b>	<b>0,844</b>	<b>0,844</b>	<b>1,000</b>

**r: 0, 135, 300, 450, 600, 700, 800, 900, 1000**      **i: 0, 115, 202, 299, 386, 473, 560, 647, 734, 821, 908, 995**  
**Three, 5 and 9 colour steps, produced visual linearization**      **Blue B00w – Blue B99w**

$L^*_{\text{TUBLOG,U}} = [50/\log(5)] \log(Y/Y_U) + 50$ ,  $Y_N=4$ ,  $Y_U=20$ ,  $Y_W=100$

A horizontal color bar composed of four distinct segments. From left to right, the colors are dark blue, medium blue, light blue, and white. The segments are separated by thin vertical lines.

A horizontal color bar consisting of several colored squares. From left to right, the colors are: dark blue, medium blue, light blue, very light blue, and white. A single vertical white line is positioned in the center of the bar.

[30-7p] Test samples: 3, 5 and 9 colour steps, grey=0.500, expu=1,000, expa=1,000, expi=1,000

TUB-test chart hel3; adjacent grey samples for visual intervall scaling, evaluation of the series B\_W with 3, 5 and 9 steps, output ( $r_{gb}^*$ )<sup>1,0</sup> & experimental; surround mean Grey U=N08w