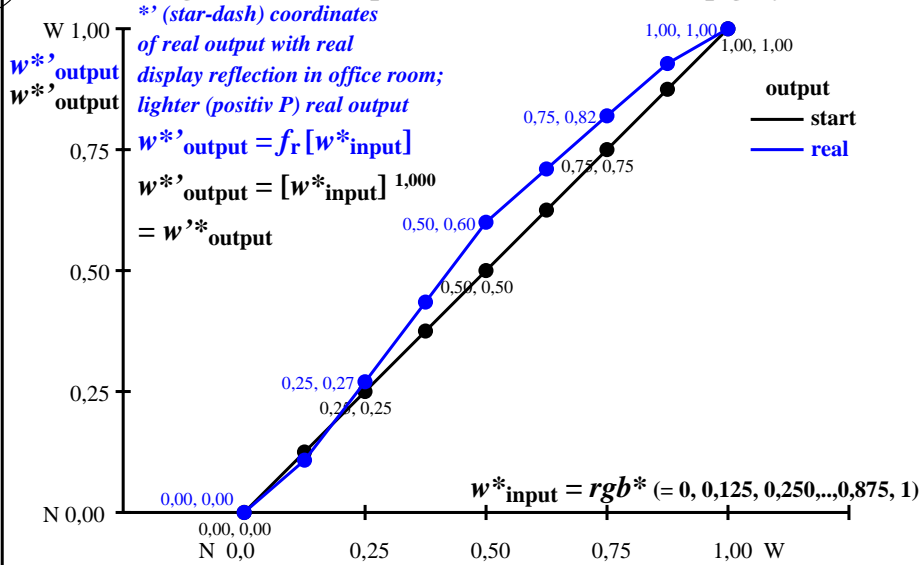
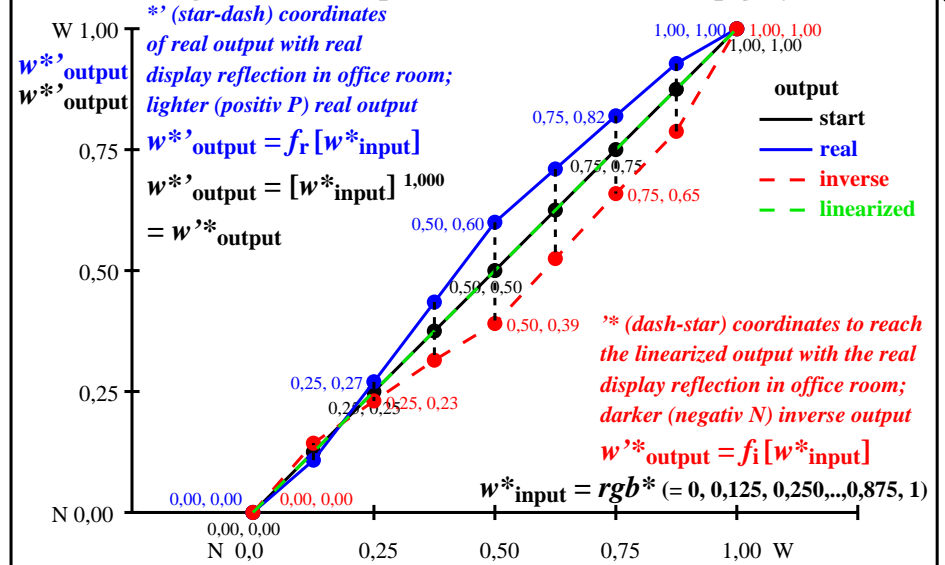


### Colour management for output linearization of a 9 step grey scale



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



hel90-3n

hel91-3n

### Three, 5 and 9 colour steps for visual evaluation

s: 0, 125, 250, 375, 500, 625, 750, 875, 1000  $L^*_{TUBLOG,U} = [50/\log(5)] \log(Y/Y_U) + 50, Y_N=4, Y_U=20, Y_W=100$   
 Cyan C00w – Cyan C16w = White W



### Three, 5 and 9 colour steps, numeric specification

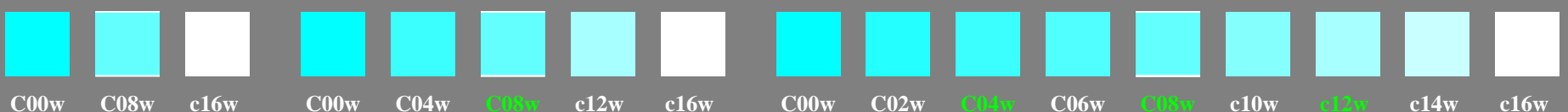
C00w 0,00 0,00	C08w e08=0, .. a1=e08	c16w 1,00 1,00	C00w 0,00 0,00	C04w e04=0, .. b1=e04*a1	C08w 1,00 0,00 e48=0, .. b2=a1 b3=e48* (1-b2)+b2	c12w	c16w 1,00 1,00	C00w 0,00 0,00	C02w e02=0, .. c1=e02*b1	C04w 1,00 0,00 c24=0, .. c2=b1 c3=e24* (b2-b1)+b1	C06w 0,00 1,00 c4=b2	C08w 1,00 0,00 c5=e46* (b3-b2)+b2	c10w e46=0, .. c6=b3	c12w 1,00 0,00 c7=e68* (1-b3)+b3	c14w e68=0, .. 1,00	c16w 1,00 1,00
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### 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	0,45 0,270 0,230	1,00 0,00 0,600 0,390	0,55 0,820 0,658	1,00 1,000 1,000	0,00 0,000 0,000	0,40 0,108 0,143	1,00 0,00 0,270 0,230	0,49 0,435 0,314	0,00 1,00 0,600 0,390	0,50 0,710 0,524	1,00 0,00 0,820 0,658	0,60 0,928 0,787	1,00 1,000 1,000
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### Three, 5 and 9 colour steps, produced visual linearization

r: 0, 108, 270, 435, 600, 710, 820, 928, 1000 i: 0, 143, 230, 314, 390, 524, 658, 787, 1000  $L^*_{TUBLOG,U} = [50/\log(5)] \log(Y/Y_U) + 50, Y_N=4, Y_U=20, Y_W=100$   
 Cyan C00w – Cyan C16w = White W



hel90-7n, Test samples: 3, 5 and 9 colour steps, greu=0.500, expu=1.000, expa=1.000, expi=1.000

TUB-test chart hel9; separate grey samples for visual intervall scaling, evaluation of the series C\_W with 3, 5 and 9 steps, output (rgb\*)<sup>1,0</sup> & experimental; surround mean Grey U=N08w

see similar files of the whole serie: <http://farbe.li.tu-berlin.de/hel9/hel910np.pdf> / .ps  
 technical information: <http://farbe.li.tu-berlin.de> or <http://color.li.tu-berlin.de>

TUB registration: 20241001-hel9/hel910np.pdf / .ps  
 application for evaluation and measurement of display or print output

TUB material: code=rh4ta