

<http://farbe.li.tu-berlin.de/hell/hell10n1.txt> /ps; only vector graphic VG; start output  
 see separate images of this page: <http://farbe.li.tu-berlin.de/hell/hell1m>

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

Three, 5 and 9 colour steps for visual evaluation

0,000	0,500	1,000	0,000	0,250	0,500	0,750	1,000	0,000	0,125	0,250	0,375	0,500	0,625	0,750	0,875	1,000
B00w	B08w	B16w	B00w	B04w	B08w	B12w	B16w	B00w	B02w	B04w	B06w	B08w	B10w	B12w	B14w	B16w

Three, 5 and 9 colour steps, numeric specification

0,00	e08=0,...	1,00	0,00	e04=0,...	1,00	e48=0,...	1,00	0,00	e02=0,...	1,00	c24=0,...	1,00	e46=0,...	1,00	e68=0,...	1,00
0,00	a1=e08	1,00	0,00	b1=e04*a1	b2=a1	b3=e48* (1-b2)+b2	1,00	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	1,00

Three, 5 and 9 colour steps, numeric calculation example

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

r: 0, 135, 300, 450, 600, 700, 800, 900, 1000 i: 0, 115, 202, 299, 390, 538, 690, 844, 1000

Three, 5 and 9 colour steps, produced visual linearization

0,000	0,500	1,000	0,000	0,250	0,500	0,750	1,000	0,000	0,125	0,250	0,375	0,500	0,625	0,750	0,875	1,000
0,000	0,600	1,000	0,000	0,300	0,600	0,800	1,000	0,000	0,135	0,300	0,450	0,600	0,700	0,800	0,900	1,000
0,000	0,390	1,000	0,000	0,202	0,390	0,690	1,000	0,000	0,115	0,202	0,299	0,390	0,538	0,690	0,844	1,000
0,000	0,500	1,000	0,000	0,250	0,500	0,750	1,000	0,000	0,125	0,250	0,375	0,500	0,625	0,750	0,875	1,000
B00w	B08w	B16w	B00w	B04w	B08w	B12w	B16w	B00w	B02w	B04w	B06w	B08w	B10w	B12w	B14w	B16w

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

Three, 5 and 9 colour steps for visual evaluation

0,000	0,500	1,000	0,000	0,250	0,500	0,750	1,000	0,000	0,125	0,250	0,375	0,500	0,625	0,750	0,875	1,000
B00w	B08w	B16w	B00w	B04w	B08w	B12w	B16w	B00w	B02w	B04w	B06w	B08w	B10w	B12w	B14w	B16w

Three, 5 and 9 colour steps, numeric specification

0,00	e08=0,...	1,00	0,00	e04=0,...	1,00	e48=0,...	1,00	0,00	e02=0,...	1,00	c24=0,...	1,00	e46=0,...	1,00	e68=0,...	1,00
0,00	a1=e08	1,00	0,00	b1=e04*a1	b2=a1	b3=e48* (1-b2)+b2	1,00	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	1,00

Three, 5 and 9 colour steps, numeric calculation example

0,00	0,60	1,00	0,00	0,45	1,00	0,55	1,00	0,00	0,40	1,00	0,49	1,00	0,50	1,00	0,60	1,00
0,000	0,600	1,000	0,000	0,270	0,600	0,820	1,000	0,000	0,108	0,270	0,435	0,600	0,710	0,820	0,928	1,000
0,000	0,390	1,000	0,000	0,230	0,390	0,658	1,000	0,000	0,143	0,230	0,314	0,390	0,524	0,658	0,787	1,000

r: 0, 108, 270, 435, 600, 710, 820, 928, 1000 i: 0, 143, 230, 314, 390, 524, 658, 787, 1000

Three, 5 and 9 colour steps, produced visual linearization

0,000	0,600	1,000	0,000	0,270	0,600	0,820	1,000	0,000	0,108	0,270	0,435	0,600	0,710	0,820	0,928	1,000
0,000	0,390	1,000	0,000	0,230	0,390	0,658	1,000	0,000	0,143	0,230	0,314	0,390	0,524	0,658	0,787	1,000
B00w	B08w	B16w	B00w	B04w	B08w	B12w	B16w	B00w	B02w	B04w	B06w	B08w	B10w	B12w	B14w	B16w

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

TUB-test chart hell1; adj & sep grey samples for visual interval scaling, evaluation of the series  
 B\_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/hells.htm>  
 technical information: <http://farbe.li.tu-berlin.de> or <http://color.li.tu-berlin.de>

TUB registration: 20241001-hell1/hell10n1.txt /ps  
 application for evaluation and measurement of display or print output  
 TUB material: code=thadta

10/26: Test samples: 3, 5 and 9 colour steps, (grey=0.500, cyan=1.000, mag=1.000, cyan=1.000)