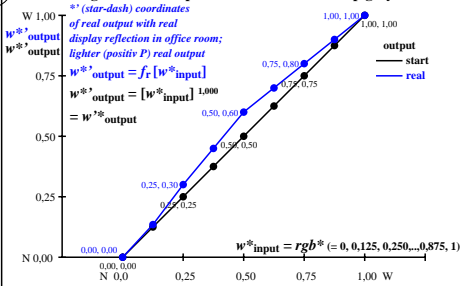
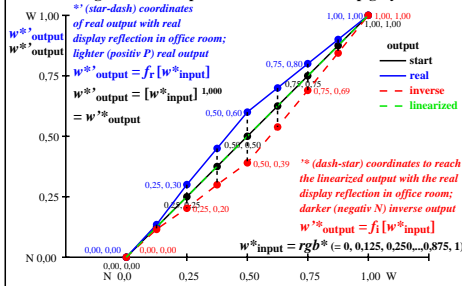


Colour management for output linearization of a 9 step grey scale



Colour management for output linearization of a 9 step grey scale



Three, 5 and 9 colour steps for visual evaluation

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

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
C00w	C08w	c16w	C00w	C04w	C08w	c12w	c16w	C00w	C02w	C04w	C06w	C08w	c10w	c12w	c14w	c16w
0	12	25	0	25	50	75	100	0	12	25	37	50	62	75	87	100

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,...	0,00	e46=0,...	1,00	e68=0,...	1,00
0,00	a1=e08	1,00	0,00	b1=e04*a1	b2=a1	b3=e48*	b2-a1	0,00	c1=e02*b1	c2=b1	c3=e24*	c4=b2	c5=e46*	c6=b3	c7=e68*	c8=b3
						(1-b2)+b2					(b2-b1)+b1		(b3-b2)+b2		(1-b3)+b3	

Three, 5 and 9 colour steps, numeric calculation example

0,00	0,60	1,00	0,00	0,50	1,00	0,50	1,00	0,00	0,45	1,00	0,50	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
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

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
C00w	C08w	c16w	C00w	C04w	C08w	c12w	c16w	C00w	C02w	C04w	C06w	C08w	c10w	c12w	c14w	c16w

Test samples: 3, 5 and 9 colour steps, $g_{iso}=0,50, \text{exp}=1,000, \text{exp}=1,000, \text{exp}=1,000$

see similar files of the whole serie: <http://farbe.li.tu-berlin.de/hel7/hel7.htm>
 technical information: <http://farbe.li.tu-berlin.de> or <http://color.li.tu-berlin.de>

TUB registration: 20241001-hel7/hel710n1.txt / .ps
 application for evaluation and measurement of display or print output

TUB material: code=thadta