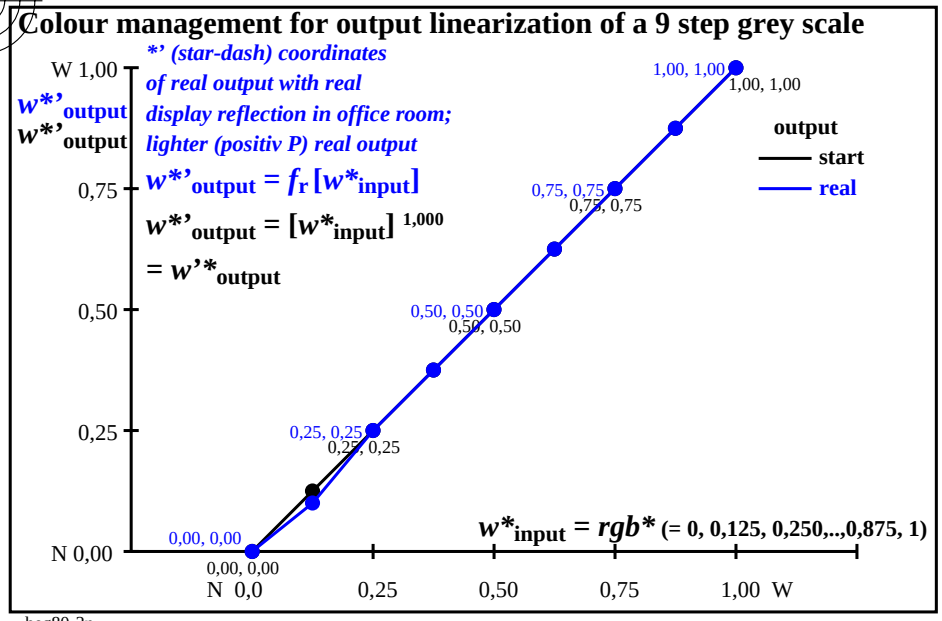
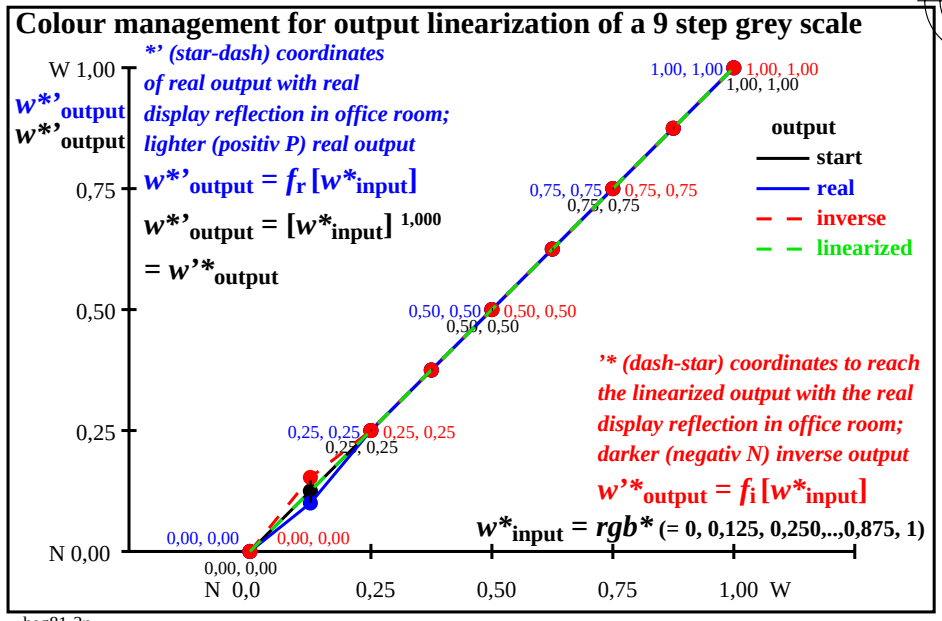
Colour management for output linearization of a 9 step grey scale



heg80-3n

Colour management for output linearization of a 9 step grey scale



heg81-3n

s: 0, 125, 250, 375, 500, 625, 750, 875, 1000
Black N00w − Black N16w = White W

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

Three, 5 and 9 colour steps for visual evaluation

N00w	N08w	N16w	N00w	N04w	N00w	N12w	N16w	N00w	N02w	N04w	N06w	N08w	N10w	N12w	N14w	N16w
0								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			0,00	e02=0, . .	1,00		0,00		1,00		
0,00	a1=e08	1,00	0,00	b1=e04*a1	0,00	b2=a1	b3=e48* (1−b2)+b2	1,00	0,00	c1=e02*b1	c2=b1	1,00	c24=0, . .	0,00	e46=0, . .	0,00	c6=b3	e68=0, . .	1,00
			1,00								c3=e24* (b2−b1)+b1	c4=b2	c5=e46* (b3−b2)+b2		c7=e68* (1−b3)+b3	

Three, 5 and 9 colour steps, numeric calculation example

0,00	0,50	1,00	0,00	0,50	1,00			0,00	0,40	1,00		0,00	0,50	1,00		
0,000	0,500	1,000	0,000	0,250	0,500	0,50	1,00	0,000	0,100	0,250	0,50	0,500	0,625	0,750	0,50	1,00
0,000	0,500	1,000	0,000	0,250	0,500	0,750	1,000	0,000	0,152	0,250	0,375	0,500	0,625	0,750	0,875	1,000

r: 0, 100, 250, 375, 500, 625, 750, 875, 1000
i: 0, 152, 250, 375, 500, 625, 750, 875, 1000
Black N00w − Black N16w = White W

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

Three, 5 and 9 colour steps, produced visual linearization

N00w	N08w	N16w	N00w	N04w	N08w	N12w	N16w	N00w	N02w	N04w	N06w	N08w	N10w	N12w	N14w	N16w

heg80-7n, Test samples: 3, 5 and 9 colour steps, greu=0,500, expu=1,000, expa=1,000, expi=1,000

TUB-test chart heg8; adjacent grey samples for visual intervall scaling, evaluation of the series N_W with 3, 5 and 9 steps, output $(rgb^*)^{1,0}$ & experimental_2; surround mean Grey U=N08w