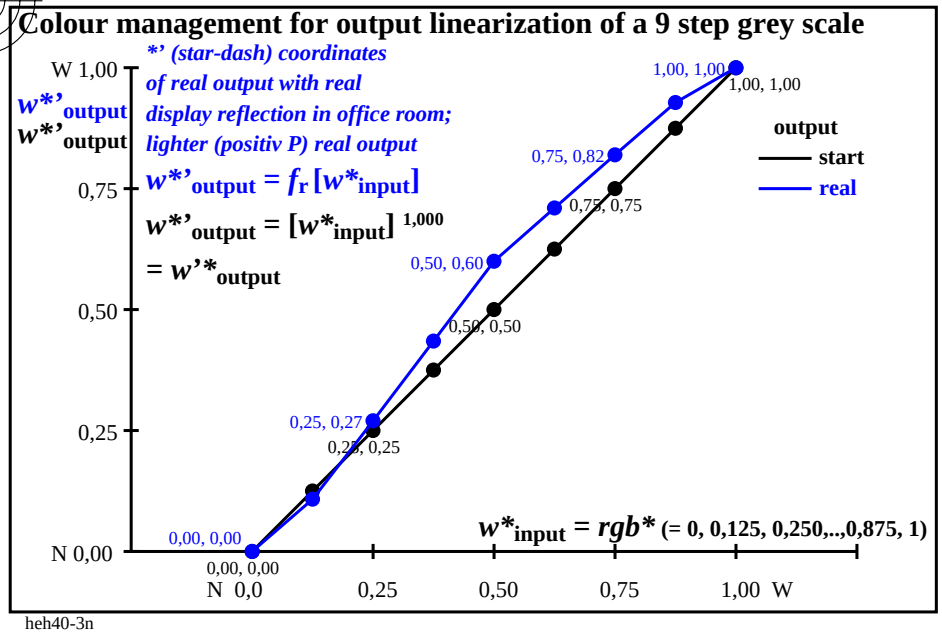
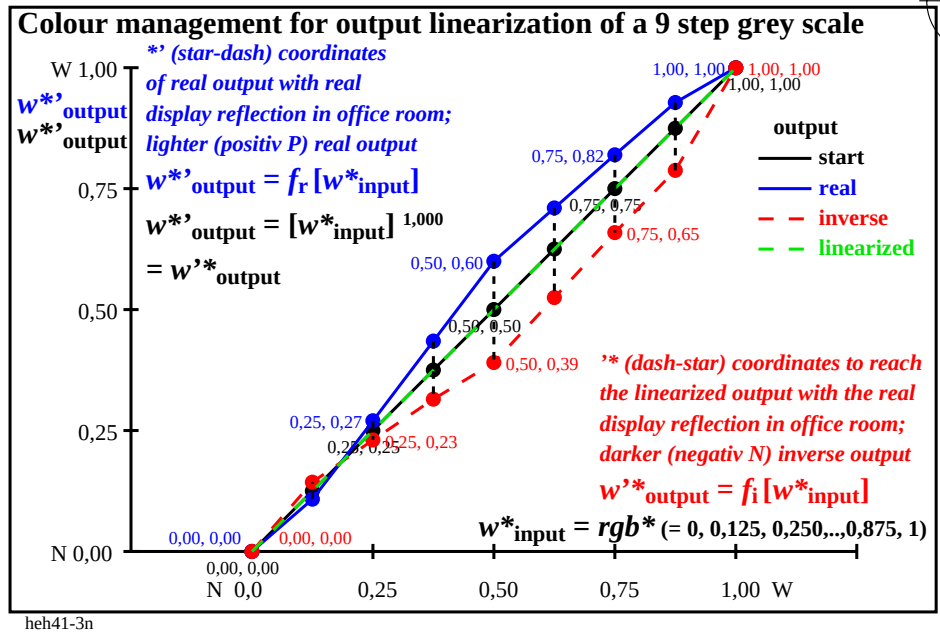
Colour management for output linearization of a 9 step grey scale



heh40-3n

Colour management for output linearization of a 9 step grey scale



heh41-3n

Three, 5 and 9 colour steps for visual evaluation

s: 0, 125, 250, 375, 500, 625, 750, 875, 1000
Black N00r − Black N16r = Red R

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

N00r	N08r	N16r	N00r	N04r	N08r	N12r	N16r	N00r	N02r	N04r	N06r	N08r	N10r	N12r	N14r	N16r
								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	0,00 b2=a1	b3=e48* (1−b2)+b2	1,00	0,00	c1=e02*b1	0,00 c2=b1	c3=e24* (b2−b1)+b1	1,00 c4=b2	c5=e46* (b3−b2)+b2	0,00 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	0,00	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

Black N00r − Black N16r = Red R

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

N00r	N08r	N16r	N00r	N04r	N08r	N12r	N16r	N00r	N02r	N04r	N06r	N08r	N10r	N12r	N14r	N16r

heh40-7n, Test samples: 3, 5 and 9 colour steps, greu=0,500, expu=1,000, expa=1,000, expi=1,000