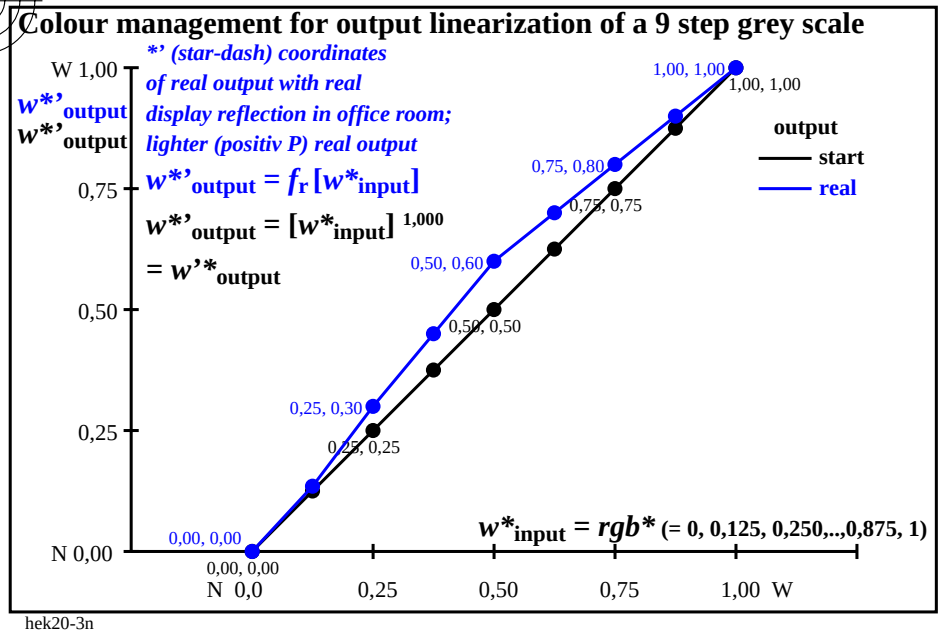
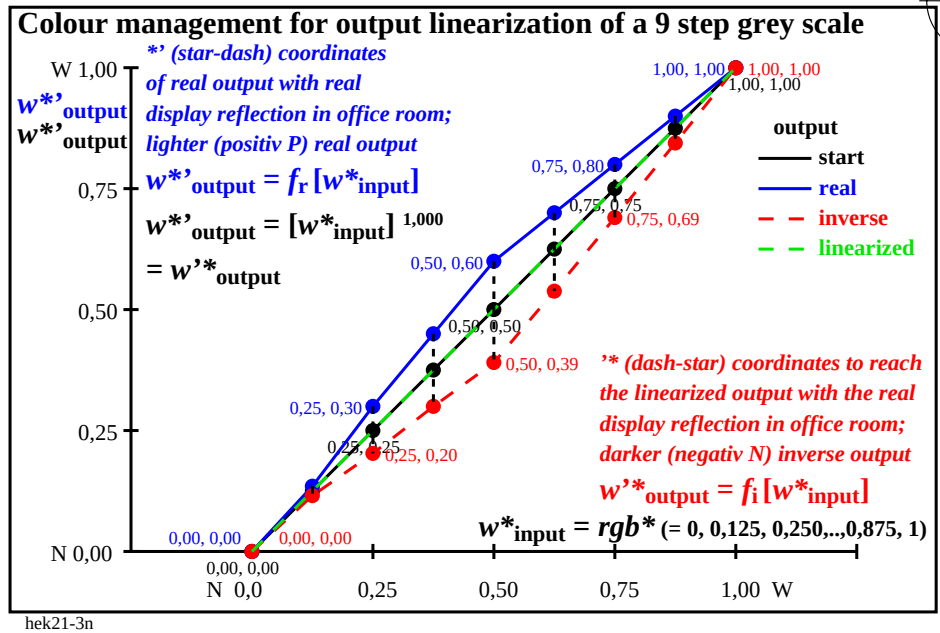
Colour management for output linearization of a 9 step grey scale



hek20-3n

Colour management for output linearization of a 9 step grey scale



hek21-3n

Three, 5 and 9 colour steps for visual evaluation

s: 0, 125, 250, 375, 500, 625, 750, 875, 1000
Red R00w − Red R16w = White W
$L^*_{TUBLOG,U}=[50/\log(5)]\ \log(Y/Y_U)+50$, $Y_N=4$, $Y_U=20$, $Y_W=100$

R00w	R08w	R16w	R00w	R04w	R08w	R12w	R16w	R00w	R02w	R04w	R06w	R08w	R10w	R12w	R14w	R16w
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									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	e46=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	c24=0, . . c3=e24* (b2−b1)+b1	1,00 c4=b2	c5=e46* (b3−b2)+b2	0,00 c6=b3	e68=0, . . 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			0,00	0,45	1,00		0,00	0,50	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
Red R00w − Red R16w = 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

	R00w	R08w	R16w	R00w	R04w	R08w	R12w	R16w	R00w	R02w	R04w	R06w	R08w	R10w	R12w	R14w	R16w
s	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
r	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
i	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
f	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

hek20-7n, Test samples: 3, 5 and 9 colour steps, greu=0,500, expu=1,000, expa=1,000, expi=1,000