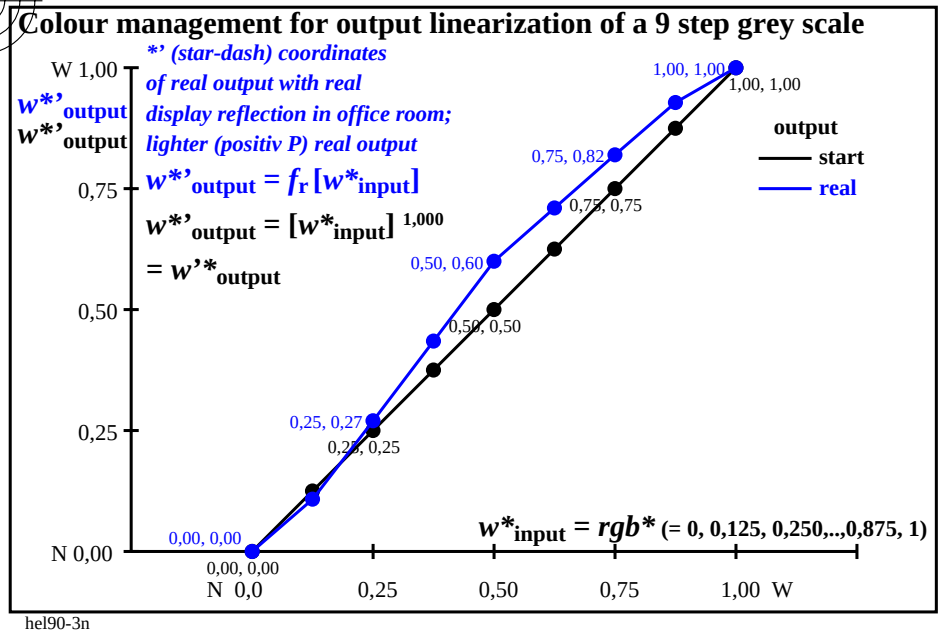
Colour management for output linearization of a 9 step grey scale



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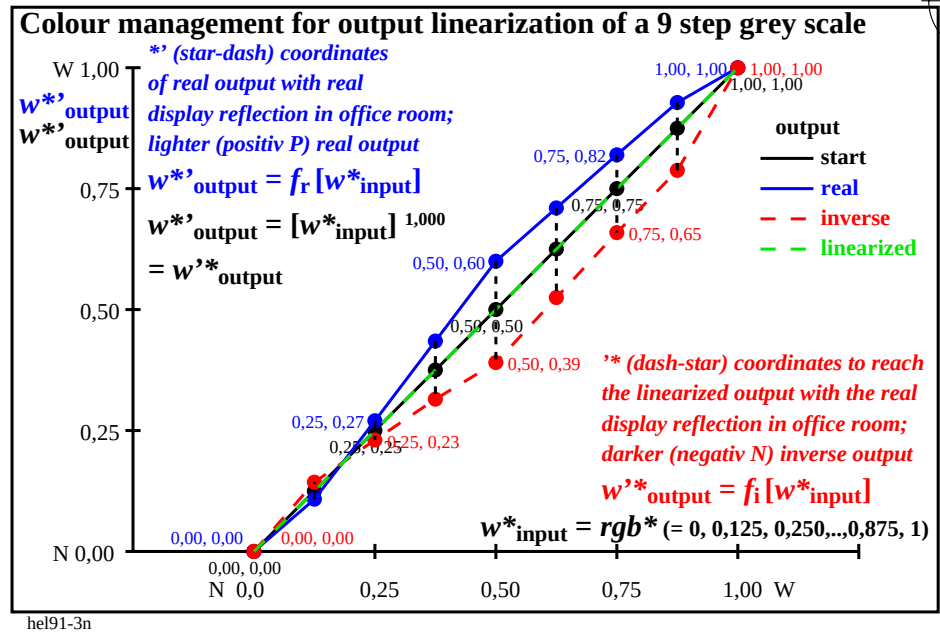
Colour management for output linearization of a 9 step grey scale



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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

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

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

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	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	0,00 0,600	0,820	1,000	0,000	0,108	0,270	0,435	1,00 0,600	0,710	0,00 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

Cyan C00w − Cyan C16w = White W

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

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

hel90-7n, Test samples: 3, 5 and 9 colour steps, greu=0,500, expu=1,000, expa=1,000, expi=1,000