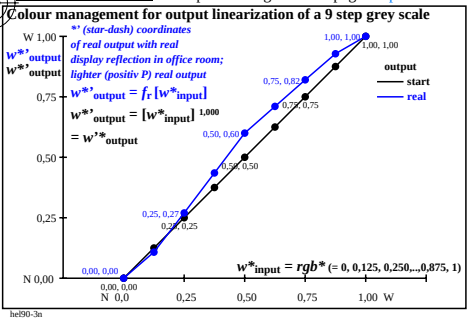
Colour management for output linearization of a 9 step grey scale



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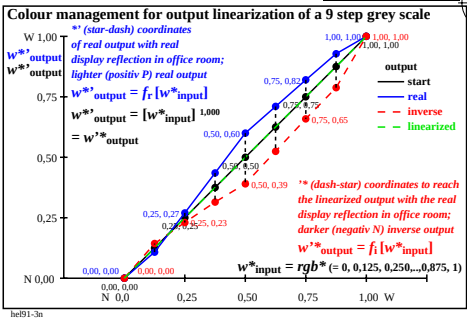

Three, 5 and 9 colour steps for visual evaluation

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

Cyan C00w − Cyan C16w = White W

C00w	C08w	c16w	C00w	C04w	C08w	c12w	c16w	C00w	C02w	C04w	C06w	C08w	c10w	c12w	c14w	c16w
0		1	0		1		1	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	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	0,00	0,55	1,00	0,00	0,40	1,00	0,00	0,49	1,00	0,00	0,60	1,00
0,000	0,600	1,000	0,000	0,270	0,600	0,000	0,820	1,000	0,000	0,108	0,270	0,000	0,435	0,600	0,000	0,928	1,000
0,000	0,390	1,000	0,000	0,230	0,390	0,000	0,658	1,000	0,000	0,143	0,230	0,000	0,314	0,390	0,000	0,787	1,000

r: 0, 108, 270, 435, 600, 710, 820, 928, 1000 i: 0, 143, 230, 314, 390, 524, 658, 787, 1000 $L^*_{TUBLOG,U}$=[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

Cyan C00w − Cyan C16w = White W

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

TUB-test chart hel9; separate grey samples for visual intervall scaling, evaluation of the series C_W with 3, 5 and 9 steps, output *(rgb*)*^{1,0} & experimental; surround mean Grey U=N08w