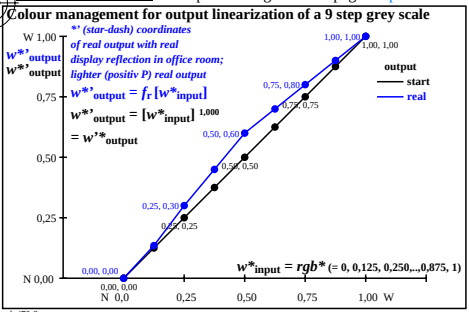
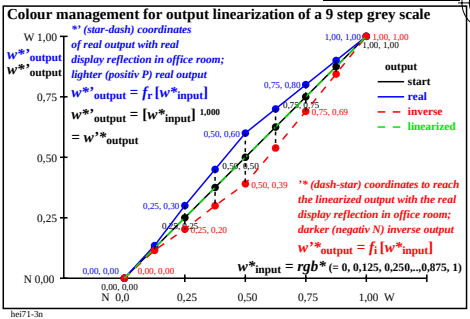
Colour management for output linearization of a 9 step grey scale



Colour management for output linearization of a 9 step grey scale



Three, 5 and 9 colour steps for visual evaluation — s: 0, 125, 250, 375, 500, 625, 750, 875, 1000 — Black N00c ~ Black N16c = Cyan C — $L^*_{TUBLOG,U}=[50/\log(5)]\,\log(Y/Y_U)+50$, $Y_N=4$, $Y_U=20$, $Y_W=100$

N00c	N08c	N16c
0,000	0,500	1,000

N00c	N04c	N08c	N12c	N16c
0,000	0,250	0,500	0,750	1,000

N00c	N02c	N04c	N06c	N08c	N10c	N12c	N14c	N16c
0	12?	25?	37?	50?	62?	75?	87?	100
0,000	0,125	0,250	0,375	0,500	0,625	0,750	0,875	1,000

Three, 5 and 9 colour steps, numeric specification

0,00	e08=0, . .	1,00
0,00	a1=e08	1,00

0,00	e04=0, . .	1,00	e48=0, . .	1,00
0,00	b1=e04*a1	b2=a1	b3=e48* (1−b2)+b2	1,00

0,00	e02=0, . .	1,00	c24=0, . .	0,00	e46=0, . .	1,00
0,00	c1=e02*b1	c2=b1	c3=e24* (b2−b1)+b1	1,00	c5=e46* (b3−b2)+b2	0,00
				c4=b2		c6=b3

0,00	e68=0, . .	1,00
0,00	c7=e68* (1−b3)+b3	1,00

Three, 5 and 9 colour steps, numeric calculation example

0,00	0,60	1,00
0,000	0,600	1,000
0,000	0,390	1,000

0,00	0,50	1,00		
0,00	0,300	0,600	0,800	1,000
0,000	0,202	0,390	0,690	1,000

0,00	0,50	1,00			
0,00	0,300	0,600	0,800	1,000	
0,000	0,202	0,390	0,690	1,000	
0,000	0,250	0,500	0,750	1,000	

0,00	0,45	1,00						
0,00	0,135	0,300	0,450	0,600	0,700	0,800	0,900	1,000
0,000	0,115	0,202	0,299	0,390	0,538	0,690	0,844	1,000
0,000	0,125	0,250	0,375	0,500	0,625	0,750	0,875	1,000

0,00	0,50	1,00						
0,00	0,300	0,600	0,800	1,000				
0,000	0,202	0,390	0,690	1,000				
0,000	0,250	0,500	0,750	1,000				

0,00	0,50	1,00						
0,00	0,300	0,600	0,800	1,000				
0,000	0,202	0,390	0,690	1,000				
0,000	0,250	0,500	0,750	1,000				

0,00	0,45	1,00						
0,00	0,135	0,300	0,450	0,600	0,700	0,800	0,900	1,000
0,000	0,115	0,202	0,299	0,390	0,538	0,690	0,844	1,000
0,000	0,125	0,250	0,375	0,500	0,625	0,750	0,875	1,000

r: 0, 135, 300, 450, 600, 700, 800, 900, 1000 — i: 0, 115, 202, 299, 390, 538, 690, 844, 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 — Black N00c ~ Black N16c = Cyan C

	N00c	N08c	N16c
s	0,000	0,500	1,000
r	0,000	0,600	1,000
i	0,000	0,390	1,000
f	0,000	0,500	1,000

	N00c	N04c	N08c	N12c	N16c
s	0,000	0,250	0,500	0,750	1,000
r	0,000	0,300	0,600	0,800	1,000
i	0,000	0,202	0,390	0,690	1,000
f	0,000	0,250	0,500	0,750	1,000

	N00c	N02c	N04c	N06c	N08c	N10c	N12c	N14c	N16c
s	0,000	0,125	0,250	0,375	0,500	0,625	0,750	0,875	1,000
r	0,000	0,135	0,300	0,450	0,600	0,700	0,800	0,900	1,000
i	0,000	0,115	0,202	0,299	0,390	0,538	0,690	0,844	1,000
f	0,000	0,125	0,250	0,375	0,500	0,625	0,750	0,875	1,000

TUB-test chart hei7; separate grey samples for visual intervall scaling, evaluation of the series N_C with 3, 5 and 9 steps, output (rgb^*)^{1,0} & experimental; surround mean Grey U=N08w