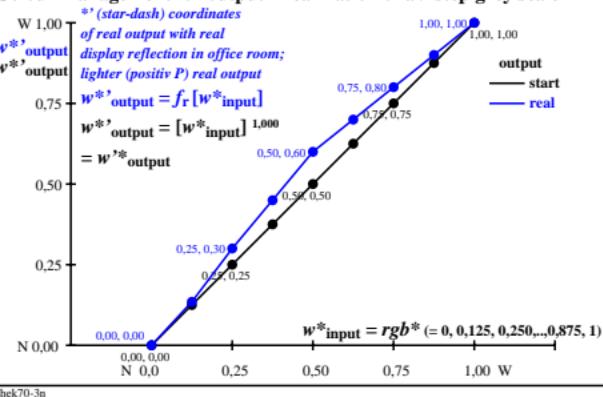
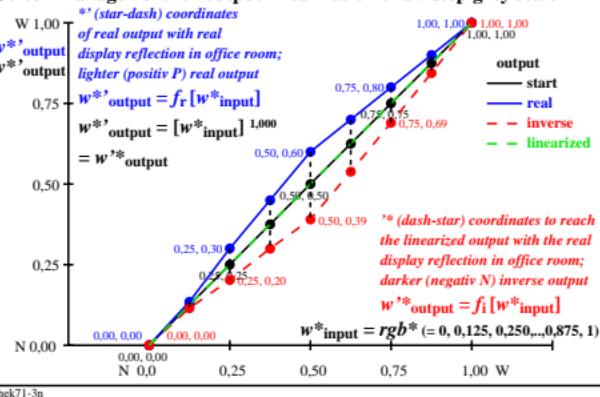


## Colour management for output linearization of a 9 step grey scale



hek7-3n

## Colour management for output linearization of a 9 step grey scale



hek71-3n

### Three, 5 and 9 colour steps for visual evaluation

s: 0, 125, 250, 375, 500, 625, 750, 875, 1000  
Green G00w – Green G16w = White W  
 $L^* \text{TUBLOG,U} = [50/\log(5)] \log(Y/Y_U) + 50, Y_N=4, Y_U=20, Y_W=100$

|       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 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 |
| G00w  | G08w  | G16w  | G00w  | G04w  | G08w  | G12w  | G16w  | G00w  | G02w  | G04w  | G06w  | G08w  | G10w  | G12w  | G14w  | G16w  |

### Three, 5 and 9 colour steps, numeric specification

|      |           |      |      |           |      |       |                  |      |      |           |       |                   |       |                   |       |                  |      |
|------|-----------|------|------|-----------|------|-------|------------------|------|------|-----------|-------|-------------------|-------|-------------------|-------|------------------|------|
| 0,00 | e08=0,... | 1,00 | 0,00 | e04=0,... | 1,00 | 0,00  | e48=0,...        | 1,00 | 0,00 | e02=0,... | 1,00  | c24=0,...         | 1,00  | e46=0,...         | 1,00  | e68=0,...        | 1,00 |
| 0,00 | a1=e08    | 1,00 | 0,00 | b1=e04*a1 | 1,00 | b2=a1 | b3=e48*(1-b2)+b2 | 1,00 | 0,00 | c1=e02*b1 | c2=b1 | c3=e24*(b2-b1)+b1 | c4=b2 | c5=e46*(b3-b2)+b2 | 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  | 0,50  | 1,00  | 0,00  | 0,50  | 1,00  | 0,00  | 0,45  | 1,00  | 0,00  | 0,50  | 1,00  | 0,00  | 0,49  | 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 |
| 0,000 | 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 | 0,000 |

r: 0, 135, 300, 450, 600, 700, 800, 900, 1000 i: 0, 115, 202, 299, 390, 538, 690, 844, 1000  
Green G00w – Green G16w = White W  
 $L^* \text{TUBLOG,U} = [50/\log(5)] \log(Y/Y_U) + 50, Y_N=4, Y_U=20, Y_W=100$

### Three, 5 and 9 colour steps, produced visual linearization

|         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 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 |

|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| G00w | G08w | G16w | G00w | G04w | G08w | G12w | G16w | G00w | G02w | G04w | G06w | G08w | G10w | G12w | G14w | G16w |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|

rek7-7b. Test samples: 3, 5 and 9 colour steps, grev=0,500, expu=1,000, expi=1,000, expf=1,000

TUB-test chart hek7; separate grey samples for visual intervall scaling, evaluation of the series G\_W with 3, 5 and 9 steps, output (rgb\*)1.0 & experimental; surround mean Grey U=N08w