

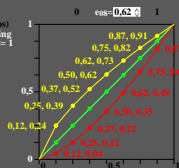
9 step series with grey sample and surround too dark, adjust both with a value larger "0.50"



adjust visual equal difference for Grey U between White W and Black N



Output (9 steps)
adjusted spacing
 $0 < r_{gb}^{b^*}_{out} < 1$



so to next image 2

one experimental value:
 e_{08}

equally spaced
 $0 < r_{gb}^{b^*}_{in} < 1$

Input (9 steps)

heq91-1a, image 1, produce equal visual difference between Black N – White W

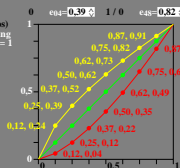
9 step series with grey sample and surround appears too dark, all will be lighter below



adjust visual equal difference for two of 5 steps



Output (9 steps)
adjusted spacing
 $0 < r_{gb}^{b^*}_{out} < 1$



so to next image 3

two experimental values:
 e_{04} e_{48}

equally spaced
 $0 < r_{gb}^{b^*}_{in} < 1$

Input (9 steps)

heq91-2a, image 2, produce equal visual difference between two of five steps

9 step series with grey sample and surround appears too dark, all will be lighter below



adjust visual equal difference for four of 9 steps



0 e_{02} =0.24

1/0

e_{24} =0.52

1/0

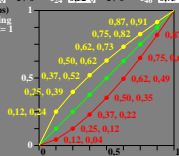
e_{46} =0.73

1/0

e_{68} =0.91

1

Output (9 steps)
adjusted spacing
 $0 < r_{gb}^{b^*}_{out} < 1$



so to next image 4

four experimental values:
 e_{02} e_{24} e_{46} e_{68}

save 7 data above as text

equally spaced
 $0 < r_{gb}^{b^*}_{in} < 1$

Input (9 steps)

heq91-3a, image 3, produce equal visual difference between four of nine steps

heq91-3n

9 step series with grey sample and surround appears too dark, all will be lighter below



9 step series based on all visual adjustments used for output linearization



0,00

$c_1=0,12$

$c_2=0,25$

$c_3=0,37$

$c_4=0,50$

$c_5=0,62$

$c_6=0,75$

$c_7=0,87$

1,00

calculation with visual experimental (e) data adjusted above

$a_1=e_{08}$, $b_1=e_{04}^*a_1$, $b_2=e_{48}(1-b_2)+b_2$, $c_2=b_1$, $c_4=b_2$, $c_6=b_3$

$c_1=e_{02}^*b_1$, $c_3=e_{24}(b_2-b_2)+b_1$, $c_5=e_{46}(b_1-b_2)+b_2$, $c_7=e_{68}(1-b_3)+b_3$

+0,04

+0,04

+0,04

+0,04

+0,04

+0,04

+0,04

+0,04

+0,04



0,00

$c_1=0,12$

$c_2=0,25$

$c_3=0,37$

$c_4=0,50$

$c_5=0,62$

$c_6=0,75$

$c_7=0,87$

1,00

grey example

difference visible?

0,25

+0,06

adjust threshold

0,25

+0,00

no change

adjust and proof threshold of the linearized output

restart with image 1

heq91-4a, image 4, adjust visual threshold (+0,04?) of 9 steps; all equal?