Panel 1 (top-left):
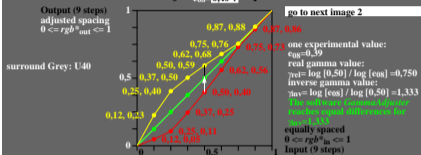
9 step series, sample and surround mean grey U40 is too dark, evaluate scaling of U40 e08<0.50.

evaluate the scaling for the presented Grey U40 between White W and Black N

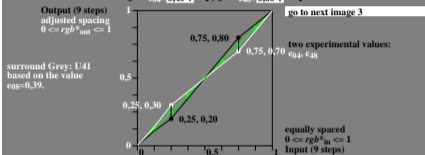The gamma value $g_{av}=1.333$ of the software GammaAdjuster reaches equal differences and corresponds to $e_{08}=0.39$.

0    $e_{08}=0.40$?   1

Output (9 steps) adjusted spacing $0 <= rgb*_{out} <= 1$

surround Grey: U40

0,87, 0,88
0,75, 0,76
0,62, 0,68   0,75, 0,73
0,50, 0,59
0,37, 0,50   0,62, 0,56
0,25, 0,40
0,12, 0,23   0,50, 0,40
0,37, 0,25
0,25, 0,11
0,12, 0,03

go to next image 2

one experimental value: $e_{08}=0.39$

real gamma value: $\gamma_{rel}=\log[0.50]/\log[e_{08}]=0.750$

inverse gamma value: $g_{av}=\log[e_{08}]/\log[0.50]=1.333$

The software GammaAdjuster reaches equal differences for $g_{av}=1.333$

equally spaced $0 <= rgb*_{in} <= 1$
Input (9 steps)

ieb40−1a, image 1, evaluate (e) visual scaling between Black N – White W, $\gamma_{rel}=0.75$

Panel 2 (top-right):

9 step series, sample and surround mean Grey is U41, all samples are lighter based on $e_{08}=0.39$.

evaluate the scaling for two of 5 steps

0    $e_{04}=0.40$?   1 / 0 $e_{48}=0.60$?   1

Output (9 steps) adjusted spacing $0 <= rgb*_{out} <= 1$

surround Grey: U41 based on the value $e_{08}=0.39$.

0,75, 0,80
0,75, 0,70
0,25, 0,30
0,25, 0,20

go to next image 3

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

equally spaced $0 <= rgb*_{in} <= 1$
Input (9 steps)

ieb40−2a, image 2, evaluate (e) visual scaling between two of five steps, $\gamma_{rel}=0.75$

Panel 3 (bottom-left):

9 step series, sample and surround mean Grey is U41, all samples are lighter based on $e_{08}=0.39$.
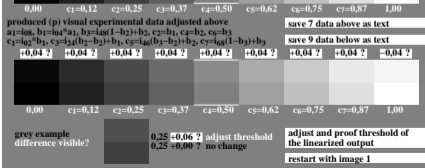
evaluate the scaling for four of 9 steps

0    $e_{02}=0.25$?   1 / 0 $e_{24}=0.50$?   1 / 0 $e_{46}=0.50$?   1 / 0 $e_{68}=0.50$?   1

Output (9 steps) adjusted spacing $0 <= rgb*_{out} <= 1$

surround Grey: U41 based on the value $e_{08}=0.39$.

0,87, 0,90
0,75, 0,80   0,87, 0,85
0,62, 0,65
0,37, 0,40   0,75, 0,70
0,25, 0,30   0,62, 0,60
0,12, 0,34   0,37, 0,35
0,25, 0,20
0,12, 0,11

go to next image 4

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

save 7 data above as text

equally spaced $0 <= rgb*_{in} <= 1$
Input (9 steps)
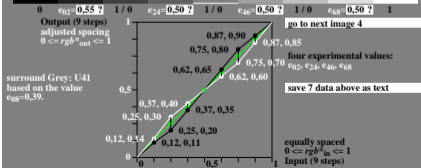
ieb40−3a, image 3, evaluate (e) visual scaling between four of nine steps, $\gamma_{rel}=0.75$

Panel 4 (bottom-right):

9 step series, sample and surround mean Grey is U41, all samples are lighter based on $e_{08}=0.39$.

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

produced (p) visual experimental data adjusted above
$a_1=e_{08}, b_1=a_0*a_1, b_1=i_{40}(1-b_2)=b_2, c_2=b_1, c_8=2b_2, c_6=b_3$
$c_1=a_0*b_1, c_3=i_{24}(b_2-b_3)+b_3, c_5=i_{46}(b_3-b_2)+b_3, c_7=i_{68}(1-b_3)+b_3$

$a_2=e_{08}$	$c_1=0,12$	$c_2=0,25$	$c_3=0,37$	$c_4=0,50$	$c_5=0,62$	$c_6=0,75$	$c_7=0,87$	1,00
+0,04 ?	+0,04 ?	+0,04 ?	+0,04 ?	+0,04 ?	+0,04 ?	+0,04 ?	+0,04 ?	−0,04 ?

save 7 data above as text
save 9 data below as text

| 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

ieb40−4a, image 4, evaluate (e) visual threshold (+0,04?) of 9 steps; all equal?, $\gamma_{rel}=0.75$

ieb40−3n