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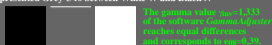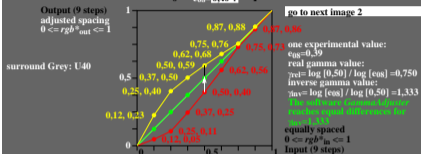
9 step series, sample and surround mean grey U40 is too dark, evaluate scaling of U40 e08<0.50.

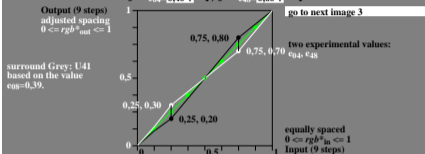evaluate the scaling for the presented Grey U40 between White W and Black N

The gamma value g_{ov}=1.333 of the software GammaAdjuster reaches equal differences and corresponds to e08=0.39.

$e08=0.40$?

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

surround Grey: U40

0.87, 0.88
0.75, 0.76
0.62, 0.68
0.50, 0.59
0.37, 0.50
0.25, 0.40
0.12, 0.23

one experimental value: e08=0.39

real gamma value: g_{rel}= log [0.50] / log [e08] =0.750
inverse gamma value: g_{inv}= log [e08] / log [0.50] =1.333
The software GammaAdjuster reaches equal differences for g_{inv}=1.333

go to next image 2

0.87, 0.86
0.75, 0.73
0.62, 0.66
0.50, 0.40
0.37, 0.25
0.25, 0.11
0.12, 0.05

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

ieb40−5a, image 1, evaluate (e) visual scaling between Black N – White W, γ_{rel}=0,75

Image 2 (top-right):

9 step series, sample and surround mean Grey is U41, all samples are lighter based on e08=0.39.

evaluate the scaling for two of 5 steps

$e04=0.40$? 1 / 0 $e48=0.60$?

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

surround Grey: U41 based on the value e08=0.39.

0.75, 0.80
0.75, 0.70
0.25, 0.30
0.25, 0.20

two experimental values: e04, e48

go to next image 3

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

ieb40−6a, image 2, evaluate (e) visual scaling between two of five steps, γ_{rel}=0,75

Image 3 (bottom-left):

9 step series, sample and surround mean Grey is U41, all samples are lighter based on e08=0.39.
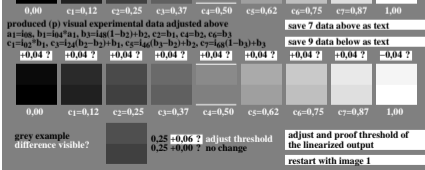
evaluate the scaling for four of 9 steps

$e02=0.55$? 1 / 0 $e24=0.50$? 1 / 0 $e46=0.50$? 1 / 0 $e68=0.50$?

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

surround Grey: U41 based on the value e08=0.39.

0.87, 0.90
0.75, 0.85
0.75, 0.80
0.75, 0.70
0.62, 0.65
0.62, 0.60
0.37, 0.40
0.37, 0.35
0.25, 0.30
0.25, 0.20
0.12, 0.34
0.12, 0.11

four experimental values: e02, e24, e46, e68

go to next image 4

save 7 data above as text

equally spaced $0 <= rgb*_{in} <= 1$
Input (9 steps)
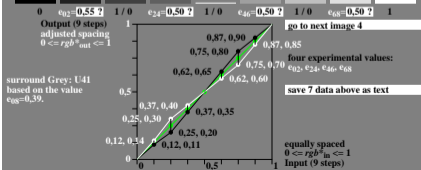
ieb40−7a, image 3, evaluate (e) visual scaling between four of nine steps, γ_{rel}=0,75

Image 4 (bottom-right):

9 step series, sample and surround mean Grey is U41, all samples are lighter based on e08=0.39.

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

0,00 c1=0,12 c2=0,25 c3=0,37 c4=0,50 c5=0,62 c6=0,75 c7=0,87 1,00

produced (p) visual experimental data adjusted above
a1=e08, b1=a0*a1, b1=i48(1−b2)=b2, c2=b1, c2=b2, c4=b3
c1=i05*b1, c3=i24(b2−b1)+b1, c5=i46(b3−b2)+b2, c7=i08(1−b3)+b3

| +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 c1=0,12 c2=0,25 c3=0,37 c4=0,50 c5=0,62 c6=0,75 c7=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

ieb40−8a, image 4, evaluate (e) visual threshold (+0,04?) of 9 steps; all equal?, γ_{rel}=0,75

ieb40−7n