

see similar files of the whole serie: <http://farbe.li.tu-berlin.de/heq2.htm>
 technical information: <http://farbe.li.tu-berlin.de> OR <http://color.li.tu-berlin.de>

TUB registration: 20241201-heq2/heq210np.pdf / .ps
 application for evaluation and measurement of display or print output
 TUB material: code=rhata

A choose of a value different "0.50" changes the grey sample and surround. Beginners often have difficulties to choose on an appropriate value. Therefore it is recommended for beginners to proceed with image 2. After a restart of the experiment, a value different "0.50" may be used.

adjust visual equal difference for one of 3 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 2

one experimental value: e_{58}

equally spaced $0 < r_{gb}^n \leq 1$ Input (9 steps)

heq20-1a, image 1, produce equal visual difference between Black N – Magenta Mn – Magenta M

9 step series based only on the visual adjustment of image 1 with value "0.50" or different

adjust visual equal difference for two of 5 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 3

two experimental values: e_{64}, e_{48}

equally spaced $0 < r_{gb}^n \leq 1$ Input (9 steps)

heq20-2a, image 2, produce equal visual difference between two of five steps

A choose of a value different "0.50" changes the grey sample and surround. Beginners often have difficulties to choose on an appropriate value. Therefore it is recommended for beginners to proceed with image 2. After a restart of the experiment, a value different "0.50" may be used.

adjust visual equal difference for one of 3 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 2

one experimental value: e_{58}

equally spaced $0 < r_{gb}^n \leq 1$ Input (9 steps)

heq21-1a, image 1, produce equal visual difference between Black N – Magenta Mn – Magenta M

9 step series based only on the visual adjustment of image 1 with value "0.50" or different

adjust visual equal difference for two of 5 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 3

two experimental values: e_{64}, e_{48}

equally spaced $0 < r_{gb}^n \leq 1$ Input (9 steps)

heq21-2a, image 2, produce equal visual difference between two of five steps

9 step series based only on the visual adjustment of image 1 with value "0.50" or different

adjust visual equal difference for four of 9 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 4

four experimental values: $e_{62}, e_{24}, e_{46}, e_{68}$

equally spaced $0 < r_{gb}^n \leq 1$ Input (9 steps)

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

heq20-3a, image 3, produce equal visual difference between four of nine steps

9 step series based only on the visual adjustment of image 1 with value "0.50" or different

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

adjust visual equal difference for four of 9 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 4

four experimental values: $e_{62}, e_{24}, e_{46}, e_{68}$

equally spaced $0 < r_{gb}^n \leq 1$ Input (9 steps)

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

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

heq20-4a, image 4, adjust visual threshold (+0.047) of 9 steps; all equal?

9 step series based only on the visual adjustment of image 1 with value "0.50" or different

adjust visual equal difference for four of 9 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 4

four experimental values: $e_{62}, e_{24}, e_{46}, e_{68}$

equally spaced $0 < r_{gb}^n \leq 1$ Input (9 steps)

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heq21-3a, image 3, produce equal visual difference between four of nine steps

9 step series based only on the visual adjustment of image 1 with value "0.50" or different

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

adjust visual equal difference for four of 9 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 4

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adjust visual equal difference for one of 3 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 2

one experimental value: e_{58}

equally spaced $0 < r_{gb}^n \leq 1$ Input (9 steps)

heq20-5a, image 1, produce equal visual difference between Black N – Magenta Mn – Magenta M

9 step series based only on the visual adjustment of image 1 with value "0.50" or different

adjust visual equal difference for two of 5 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 3

two experimental values: e_{64}, e_{48}

equally spaced $0 < r_{gb}^n \leq 1$ Input (9 steps)

heq20-6a, image 2, produce equal visual difference between two of five steps

A choose of a value different "0.50" changes the grey sample and surround. Beginners often have difficulties to choose on an appropriate value. Therefore it is recommended for beginners to proceed with image 2. After a restart of the experiment, a value different "0.50" may be used.

adjust visual equal difference for one of 3 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 2

one experimental value: e_{58}

equally spaced $0 < r_{gb}^n \leq 1$ Input (9 steps)

heq21-5a, image 1, produce equal visual difference between Black N – Magenta Mn – Magenta M

9 step series based only on the visual adjustment of image 1 with value "0.50" or different

adjust visual equal difference for two of 5 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 3

two experimental values: e_{64}, e_{48}

equally spaced $0 < r_{gb}^n \leq 1$ Input (9 steps)

heq21-6a, image 2, produce equal visual difference between two of five steps

9 step series based only on the visual adjustment of image 1 with value "0.50" or different

adjust visual equal difference for four of 9 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 4

four experimental values: $e_{62}, e_{24}, e_{46}, e_{68}$

equally spaced $0 < r_{gb}^n \leq 1$ Input (9 steps)

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save 9 data below as text

heq20-7a, image 3, produce equal visual difference between four of nine steps

9 step series based only on the visual adjustment of image 1 with value "0.50" or different

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

adjust visual equal difference for four of 9 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 4

four experimental values: $e_{62}, e_{24}, e_{46}, e_{68}$

equally spaced $0 < r_{gb}^n \leq 1$ Input (9 steps)

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

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

heq20-8a, image 4, adjust visual threshold (+0.047) of 9 steps; all equal?

9 step series based only on the visual adjustment of image 1 with value "0.50" or different

adjust visual equal difference for four of 9 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 4

four experimental values: $e_{62}, e_{24}, e_{46}, e_{68}$

equally spaced $0 < r_{gb}^n \leq 1$ Input (9 steps)

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heq21-7a, image 3, produce equal visual difference between four of nine steps

9 step series based only on the visual adjustment of image 1 with value "0.50" or different

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

adjust visual equal difference for four of 9 steps

Output (9 steps) adjusted spacing $0 < r_{gb}^n \leq 1$

go to next image 4

four experimental values: $e_{62}, e_{24}, e_{46}, e_{68}$

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adjust and proof threshold of the linearized output
restart with image 1

heq21-8a, image 4, adjust visual threshold (+0.047) of 9 steps; all equal?

TUB-test chart heq2; Adjacent and separated colours with increasing luminance
 Output linearization and thresholds for the 9 step equally spaced colour series Black N – Magenta M