

**Farbreize für gerade unterscheidbare Farb-Schwellen (p=50%) in 3 Richtungen**

| Nummer<br>Farb-<br>Serie | Farbreize<br>Normfarbwerte |        |        | Farbreiz-Differenzen an der Schwelle |           |        |           |         | Bemerkungen<br>Experiment-<br>Serie                                 |
|--------------------------|----------------------------|--------|--------|--------------------------------------|-----------|--------|-----------|---------|---|
|                          | Y                          | x      | y      | -WN<br>ΔY                            | -GR<br>Δx | Δy     | -BY<br>Δx | Δy      |   |
| 0 WPN                    | 196.9                      | 0.3986 | 0.4175 | 1.19                                 | -0.0011   | 0.0009 | -0.0016   | -0.0014 | _WN, GR, BY<br>graues Umfeld<br>Daten Nr. 03<br>mit weissem<br>Rand |
| 1 WPN                    | 74.13                      | 0.3919 | 0.4139 | 0.41                                 | -0.0012   | 0.0011 | -0.0016   | -0.0013 |   |
| 2 WPN                    | 34.31                      | 0.3926 | 0.414  | 0.18                                 | -0.0013   | 0.0011 | -0.0017   | -0.0015 |   |
| 3 WPN                    | 17.69                      | 0.3973 | 0.4153 | 0.09                                 | -0.0016   | 0.0013 | -0.002    | -0.0017 |   |
| 4 WPN                    | 9.15                       | 0.4052 | 0.4185 | 0.07                                 | -0.0017   | 0.0015 | -0.0029   | -0.0024 |   |
| 5 WPN                    | 4.65                       | 0.4159 | 0.4226 | 0.05                                 | -0.0023   | 0.002  | -0.0042   | -0.0036 |   |
| 6 WPN                    | 3.14                       | 0.386  | 0.4113 | 0.04                                 | -0.0027   | 0.0022 | -0.0039   | -0.0034 |   |
| 7 GDR                    | 14.96                      | 0.1198 | 0.3961 | 0.06                                 | -0.0061   | 0.003  | -0.0012   | -0.0022 | _WN, GR, BY<br>graues Umfeld<br>Daten Nr. 09<br>mit weissem<br>Rand |
| 8 GDR                    | 15.71                      | 0.2422 | 0.3728 | 0.06                                 | -0.0037   | 0.0021 | -0.0013   | -0.0016 |   |
| 9 GDR                    | 16.52                      | 0.321  | 0.3578 | 0.06                                 | -0.0017   | 0.001  | -0.0016   | -0.0013 |   |
| 10 GDR                   | 16.96                      | 0.4598 | 0.2388 | 0.07                                 | -0.0022   | 0.0011 | -0.0022   | -0.001  |   |
| 11 GDR                   | 17.17                      | 0.485  | 0.2119 | 0.09                                 | -0.002    | 0.0009 | -0.0026   | -0.001  |   |
| 12 BDY                   | 17.29                      | 0.2497 | 0.2914 | 0.07                                 | -0.0018   | 0.0008 | -0.0011   | -0.0009 | _WN, GR, BY<br>graues Umfeld<br>Daten Nr. 14<br>mit weissem<br>Rand |
| 13 BDY                   | 17.26                      | 0.2877 | 0.3257 | 0.06                                 | -0.0017   | 0.0009 | -0.0013   | -0.0011 |   |
| 14 BDY                   | 16.44                      | 0.3232 | 0.3593 | 0.06                                 | -0.0016   | 0.001  | -0.0014   | -0.0013 |   |
| 15 BDY                   | 17.72                      | 0.4338 | 0.4529 | 0.05                                 | -0.002    | 0.0019 | -0.0026   | -0.0024 |   |
| 16 BDY                   | 18.46                      | 0.4841 | 0.4968 | 0.05                                 | -0.002    | 0.0025 | -0.0037   | -0.0032 |   |

Muster: helles Weiss (W, Nr. 0), dunkles Schwarz (Nr. 10), Weiss (W, Nr. 11), Schwarz (Nr. 21)  
 Grün (G=T (Türkis), Nr. 22), Rot (R=M (Magenta), Nr. 32), Blau (B, Nr. 33), Gelb (Y, Nr. 43)  
 Quelle: BAM-Forschungsbericht Nr. 115 (1985), Tabellen 5.40;1 bis 11

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WG800-3N

**Farbreize für gerade unterscheidbare Farb-Schwellen (p=50%) in WN-Richtung**

| Nummer<br>Farb-<br>Serie | CIELAB-Differenzen |                 |                 |      | LABJND-Differenzen |       |       |      | Farb-Differenzen |      |      | Bemerkungen<br>Experiment-<br>Serie                                 |
|--------------------------|--------------------|-----------------|-----------------|------|--------------------|-------|-------|------|------------------|------|------|---|
|                          | Helligkeit<br>ΔL*  | Buntheit<br>Δa* | Buntheit<br>Δb* | ΔE*  | Helligkeit<br>ΔL*  | Δa*   | Δb*   | ΔE*  | CMC              | C94  | C00  |   |
| 0 WPN                    | 0.29               | 0.0             | 0.0             | 0.29 | 1.13               | 0.0   | 0.0   | 1.13 | 0.14             | 0.29 | 0.13 | _WN, GR, BY<br>graues Umfeld<br>Daten Nr. 03<br>mit weissem<br>Rand |
| 1 WPN                    | 0.19               | 0.0             | 0.0             | 0.19 | 1.0                | 0.0   | 0.0   | 1.0  | 0.1              | 0.19 | 0.12 |   |
| 2 WPN                    | 0.14               | 0.0             | 0.0             | 0.14 | 0.91               | 0.0   | 0.0   | 0.91 | 0.09             | 0.14 | 0.11 |   |
| 3 WPN                    | 0.12               | 0.0             | 0.0             | 0.12 | 0.9                | 0.0   | 0.0   | 0.9  | 0.09             | 0.12 | 0.12 |   |
| 4 WPN                    | 0.15               | -0.01           | -0.01           | 0.15 | 1.25               | -0.03 | -0.02 | 1.25 | 0.14             | 0.15 | 0.12 |   |
| 5 WPN                    | 0.15               | -0.02           | -0.03           | 0.15 | 1.27               | -0.04 | -0.04 | 1.27 | 0.19             | 0.15 | 0.11 |   |
| 6 WPN                    | 0.19               | 0.0             | 0.02            | 0.19 | 1.55               | 0.0   | 0.04  | 1.55 | 0.28             | 0.19 | 0.13 |   |
| 7 GDR                    | 0.09               | 0.46            | 0.03            | 0.47 | 0.74               | 0.21  | 0.12  | 0.78 | 0.16             | 0.13 | 0.13 | _WN, GR, BY<br>graues Umfeld<br>Daten Nr. 09<br>mit weissem<br>Rand |
| 8 GDR                    | 0.09               | 0.11            | 0.01            | 0.14 | 0.71               | 0.12  | 0.04  | 0.72 | 0.09             | 0.1  | 0.1  |   |
| 9 GDR                    | 0.08               | 0.0             | 0.0             | 0.08 | 0.68               | 0.0   | 0.0   | 0.68 | 0.07             | 0.08 | 0.08 |   |
| 10 GDR                   | 0.1                | -0.17           | 0.04            | 0.2  | 0.76               | -0.27 | 0.16  | 0.82 | 0.09             | 0.1  | 0.1  |   |
| 11 GDR                   | 0.11               | -0.25           | 0.06            | 0.28 | 0.84               | -0.35 | 0.25  | 0.95 | 0.11             | 0.12 | 0.12 |   |
| 12 BDY                   | 0.08               | 0.0             | 0.03            | 0.09 | 0.65               | 0.0   | 0.17  | 0.67 | 0.07             | 0.08 | 0.08 | _WN, GR, BY<br>graues Umfeld<br>Daten Nr. 14<br>mit weissem<br>Rand |
| 13 BDY                   | 0.07               | 0.0             | 0.01            | 0.07 | 0.56               | 0.0   | 0.07  | 0.56 | 0.06             | 0.07 | 0.07 |   |
| 14 BDY                   | 0.07               | 0.0             | 0.0             | 0.07 | 0.59               | 0.0   | 0.0   | 0.59 | 0.06             | 0.07 | 0.07 |   |
| 15 BDY                   | 0.07               | -0.01           | -0.17           | 0.19 | 0.55               | -0.03 | -0.16 | 0.57 | 0.09             | 0.09 | 0.09 |   |
| 16 BDY                   | 0.07               | -0.01           | -0.8            | 0.8  | 0.53               | -0.02 | -0.18 | 0.56 | 0.27             | 0.2  | 0.2  |   |

Mittel Standardabweichung **0.21** **0.17**

Quelle: BAM-Forschungsbericht Nr. 115 (1985), Tabellen 5.40;1 bis 11; LABJND0,8; 1,4; 1,1

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**Farbreize für gerade unterscheidbare Farb-Schwellen (p=50%) in GR-Richtung**

| Nummer<br>Farb-<br>Serie | CIELAB-Differenzen |       |      |      | LABJND-Differenzen |       |      |      | Farb-Differenzen |      |      | Bemerkungen<br>Experiment-<br>Serie                                 |
|--------------------------|--------------------|-------|------|------|--------------------|-------|------|------|------------------|------|------|---|
|                          | Helligkeit<br>ΔL*  | Δa*   | Δb*  | ΔE*  | Helligkeit<br>ΔL*  | Δa*   | Δb*  | ΔE*  | CMC              | C94  | C00  |   |
| 0 WPN                    | 0.01               | -1.13 | 0.1  | 1.13 | 0.04               | -0.76 | 0.06 | 0.77 | 1.59             | 1.08 | 1.62 | _WN, GR, BY<br>graues Umfeld<br>Daten Nr. 03<br>mit weissem<br>Rand |
| 1 WPN                    | 0.0                | -0.9  | 0.1  | 0.9  | 0.05               | -0.82 | 0.07 | 0.82 | 1.18             | 0.85 | 1.25 |   |
| 2 WPN                    | 0.0                | -0.75 | 0.08 | 0.75 | 0.05               | -0.85 | 0.08 | 0.85 | 1.0              | 0.72 | 1.07 |   |
| 3 WPN                    | 0.01               | -0.71 | 0.06 | 0.71 | 0.08               | -0.93 | 0.06 | 0.94 | 1.01             | 0.69 | 1.03 |   |
| 4 WPN                    | 0.0                | -0.62 | 0.07 | 0.62 | 0.0                | -0.89 | 0.08 | 0.9  | 0.84             | 0.59 | 0.87 |   |
| 5 WPN                    | 0.0                | -0.64 | 0.07 | 0.64 | 0.0                | -0.94 | 0.08 | 0.94 | 0.89             | 0.6  | 0.88 |   |
| 6 WPN                    | 0.0                | -0.66 | 0.06 | 0.67 | 0.0                | -0.93 | 0.08 | 0.93 | 0.89             | 0.64 | 0.94 |   |
| 7 GDR                    | 0.01               | -3.6  | 0.04 | 3.6  | 0.1                | -1.33 | 0.1  | 1.34 | 1.16             | 0.81 | 0.8  | _WN, GR, BY<br>graues Umfeld<br>Daten Nr. 09<br>mit weissem<br>Rand |
| 8 GDR                    | 0.01               | -1.69 | 0.05 | 1.69 | 0.1                | -1.37 | 0.13 | 1.38 | 0.89             | 0.78 | 0.79 |   |
| 9 GDR                    | 0.01               | -0.78 | 0.02 | 0.78 | 0.08               | -0.99 | 0.06 | 0.99 | 1.13             | 0.77 | 1.12 |   |
| 10 GDR                   | 0.01               | -1.1  | 0.03 | 1.1  | 0.09               | -1.02 | 0.09 | 1.03 | 0.37             | 0.24 | 0.24 |   |
| 11 GDR                   | 0.02               | -1.1  | 0.03 | 1.1  | 0.18               | -0.93 | 0.11 | 0.96 | 0.34             | 0.2  | 0.2  |   |
| 12 BDY                   | 0.01               | -0.94 | 0.01 | 0.94 | 0.09               | -1.09 | 0.03 | 1.1  | 0.8              | 0.68 | 0.75 | _WN, GR, BY<br>graues Umfeld<br>Daten Nr. 14<br>mit weissem<br>Rand |
| 13 BDY                   | 0.01               | -0.8  | 0.02 | 0.8  | 0.09               | -0.97 | 0.06 | 0.98 | 0.95             | 0.67 | 0.94 |   |
| 14 BDY                   | 0.0                | -0.7  | 0.03 | 0.7  | 0.0                | -0.89 | 0.07 | 0.89 | 1.07             | 0.7  | 1.02 |   |
| 15 BDY                   | 0.01               | -0.86 | 0.11 | 0.86 | 0.09               | -1.06 | 0.07 | 1.07 | 0.78             | 0.55 | 0.65 |   |
| 16 BDY                   | 0.01               | -0.92 | 0.4  | 1.01 | 0.07               | -1.13 | 0.08 | 1.14 | 0.64             | 0.46 | 0.58 |   |

Mittel Standardabweichung **1.06** **0.68**

Quelle: BAM-Forschungsbericht Nr. 115 (1985), Tabellen 5.40;1 bis 11; LABJND0,8; 1,4; 1,1

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WG801-3N

**Farbreize für gerade unterscheidbare Farb-Schwellen (p=50%) in -Richtung**

| Nummer<br>Farb-<br>Serie | CIELAB-Differenzen |       |       |      | LABJND-Differenzen |       |       |      | Farb-Differenzen |      |      | Bemerkungen<br>Experiment-<br>Serie                                 |
|--------------------------|--------------------|-------|-------|------|--------------------|-------|-------|------|------------------|------|------|---|
|                          | Helligkeit<br>ΔL*  | Δa*   | Δb*   | ΔE*  | Helligkeit<br>ΔL*  | Δa*   | Δb*   | ΔE*  | CMC              | C94  | C00  |   |
| 0 WPN                    | 0.0                | -0.14 | -1.75 | 1.75 | 0.03               | -0.09 | -0.96 | 0.97 | 2.49             | 1.71 | 1.71 | _WN, GR, BY<br>graues Umfeld<br>Daten Nr. 03<br>mit weissem<br>Rand |
| 1 WPN                    | 0.0                | -0.1  | -1.16 | 1.16 | 0.05               | -0.09 | -0.89 | 0.89 | 1.4              | 1.02 | 1.0  |   |
| 2 WPN                    | 0.0                | -0.08 | -1.01 | 1.02 | 0.05               | -0.09 | -0.96 | 0.97 | 1.32             | 0.93 | 0.91 |   |
| 3 WPN                    | 0.0                | -0.08 | -0.94 | 0.95 | 0.0                | -0.11 | -1.02 | 1.03 | 1.4              | 0.93 | 0.92 |   |
| 4 WPN                    | 0.0                | -0.09 | -1.08 | 1.08 | 0.0                | -0.13 | -1.23 | 1.24 | 1.43             | 1.01 | 1.02 |   |
| 5 WPN                    | 0.0                | -0.1  | -1.31 | 1.32 | 0.0                | -0.15 | -1.4  | 1.41 | 1.55             | 1.12 | 1.15 |   |
| 6 WPN                    | 0.0                | -0.08 | -0.97 | 0.98 | 0.0                | -0.12 | -1.19 | 1.2  | 1.29             | 0.9  | 0.89 |   |
| 7 GDR                    | 0.0                | -0.25 | -0.51 | 0.57 | 0.0                | -0.09 | -1.23 | 1.24 | 0.22             | 0.22 | 0.22 | _WN, GR, BY<br>graues Umfeld<br>Daten Nr. 09<br>mit weissem<br>Rand |
| 8 GDR                    | 0.0                | -0.11 | -0.46 | 0.47 | 0.0                | -0.09 | -1.05 | 1.05 | 0.3              | 0.31 | 0.31 |   |
| 9 GDR                    | 0.0                | -0.09 | -0.48 | 0.49 | 0.0                | -0.12 | -1.06 | 1.07 | 0.71             | 0.48 | 0.48 |   |
| 10 GDR                   | 0.01               | -0.07 | -0.63 | 0.63 | 0.09               | -0.08 | -1.48 | 1.49 | 0.54             | 0.28 | 0.23 |   |
| 11 GDR                   | 0.01               | -0.08 | -0.74 | 0.75 | 0.08               | -0.08 | -1.78 | 1.79 | 0.58             | 0.29 | 0.23 |   |
| 12 BDY                   | 0.0                | -0.09 | -0.36 | 0.37 | 0.0                | -0.1  | -0.87 | 0.88 | 0.2              | 0.17 | 0.17 | _WN, GR, BY<br>graues Umfeld<br>Daten Nr. 14<br>mit weissem<br>Rand |
| 13 BDY                   | 0.0                | -0.1  | -0.42 | 0.44 | 0.0                | -0.13 | -0.99 | 1.0  | 0.34             | 0.28 | 0.29 |   |
| 14 BDY                   | 0.0                | -0.09 | -0.45 | 0.46 | 0.0                | -0.11 | -0.98 | 0.99 | 0.69             | 0.45 | 0.46 |   |
| 15 BDY                   | 0.0                | -0.08 | -1.24 | 1.24 | 0.0                | -0.1  | -0.9  | 0.91 | 0.54             | 0.45 | 0.45 |   |
| 16 BDY                   | 0.01               | -0.11 | -4.84 | 4.85 | 0.07               | -0.14 | -0.97 | 0.99 | 1.59             | 1.1  | 1.14 |   |

Mittel Standardabweichung **1.09** **1.01**

Quelle: BAM-Forschungsbericht Nr. 115 (1985), Tabellen 5.40;1 bis 11; LABJND0,8; 1,4; 1,1

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Technische Information: http://www.ps.bam.de oder http://130.149.60.45/~farbmetrik  
 Siehe ähnliche Dateien: http://130.149.60.45/~farbmetrik/WG80/WG80LONA.TXT /PS  
 TUB-Registrierung: 20130201-WG80/WG80LONA.TXT /PS  
 Anwendung für Messung von Druck- oder Display-Ausgabe  
 TUB-Material: Code=rh4ta