

| Colour stimuli of just noticeable colour thresholds (p=50%) in 4 directions                                                                                                                                               |                |                                         |                   |                   |                   |                   |                     |                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------|-------------------|-------------------|-------------------|-------------------|---------------------|----------------------------------------------------------------------|
| number                                                                                                                                                                                                                    | Colour stimuli | Colour stimuli differences at threshold |                   |                   |                   |                   | notes               |                                                                      |
| Colour series                                                                                                                                                                                                             | colour values  |                                         |                   |                   |                   |                   | experimental series |                                                                      |
| Y                                                                                                                                                                                                                         | x              | y                                       | $\Delta x$<br>_TM | $\Delta y$<br>_TM | $\Delta x$<br>_BY | $\Delta y$<br>_BY |                     |                                                                      |
| 0 GDV                                                                                                                                                                                                                     | 17.42          | 0.2192                                  | 0.6811            | -0.0064           | 0.0066            | -0.0054           | 0.014               | _TM, _BY<br>grey surround<br>CIE data no. 05<br>with white<br>border |
| 1 GDV                                                                                                                                                                                                                     | 16.9           | 0.2577                                  | 0.5648            | -0.005            | 0.0044            | -0.0029           | 0.0076              |                                                                      |
| 2 GDV                                                                                                                                                                                                                     | 16.4           | 0.2875                                  | 0.4664            | -0.0025           | 0.0019            | -0.0018           | 0.0046              |                                                                      |
| 3 GDV                                                                                                                                                                                                                     | 16.91          | 0.3051                                  | 0.4122            | -0.0023           | 0.0016            | -0.0015           | 0.0037              |                                                                      |
| 4 GDV                                                                                                                                                                                                                     | 16.7           | 0.3165                                  | 0.3791            | -0.002            | 0.0013            | -0.0013           | 0.0029              |                                                                      |
| 5 GDV                                                                                                                                                                                                                     | 16.51          | 0.3234                                  | 0.3568            | -0.0017           | 0.0011            | -0.0009           | 0.002               |                                                                      |
| 6 GDV                                                                                                                                                                                                                     | 15.06          | 0.3311                                  | 0.3322            | -0.0021           | 0.0011            | -0.001            | 0.0024              |                                                                      |
| 7 GDV                                                                                                                                                                                                                     | 14.17          | 0.3387                                  | 0.301             | -0.002            | 0.001             | -0.001            | 0.0022              |                                                                      |
| 8 GDV                                                                                                                                                                                                                     | 14.06          | 0.344                                   | 0.2792            | -0.002            | 0.0009            | -0.0011           | 0.0024              |                                                                      |
| 9 GDV                                                                                                                                                                                                                     | 13.57          | 0.3482                                  | 0.2641            | -0.002            | 0.0008            | -0.001            | 0.0023              |                                                                      |
| 10 GDV                                                                                                                                                                                                                    | 13.26          | 0.3515                                  | 0.2516            | -0.0019           | 0.0008            | -0.001            | 0.0021              |                                                                      |
| 11 RDC                                                                                                                                                                                                                    | 16.44          | 0.6152                                  | 0.3414            | -0.0013           | 0.0017            | 0.0007            | 0.0031              | _TM, _BY<br>grey surround<br>CIE data no. 16<br>with white<br>border |
| 12 RDC                                                                                                                                                                                                                    | 15.81          | 0.5421                                  | 0.3436            | -0.0018           | 0.0018            | 0.0001            | 0.0026              |                                                                      |
| 13 RDC                                                                                                                                                                                                                    | 16.2           | 0.4549                                  | 0.3285            | -0.0015           | 0.0012            | -0.0003           | 0.0025              |                                                                      |
| 14 RDC                                                                                                                                                                                                                    | 16.72          | 0.4097                                  | 0.3512            | -0.0017           | 0.0012            | -0.0006           | 0.0027              |                                                                      |
| 15 RDC                                                                                                                                                                                                                    | 16.79          | 0.362                                   | 0.3542            | -0.0017           | 0.0011            | -0.0007           | 0.002               |                                                                      |
| 16 RDC                                                                                                                                                                                                                    | 16.64          | 0.3222                                  | 0.3567            | -0.0015           | 0.0009            | -0.0008           | 0.002               |                                                                      |
| 17 RDC                                                                                                                                                                                                                    | 16.05          | 0.2876                                  | 0.3649            | -0.0021           | 0.0012            | -0.0013           | 0.0027              |                                                                      |
| 18 RDC                                                                                                                                                                                                                    | 16.69          | 0.2386                                  | 0.3769            | -0.0025           | 0.0014            | -0.0022           | 0.0036              |                                                                      |
| 19 RDC                                                                                                                                                                                                                    | 17.71          | 0.213                                   | 0.3831            | -0.0027           | 0.0014            | -0.0024           | 0.0036              |                                                                      |
| 20 RDC                                                                                                                                                                                                                    | 18.02          | 0.1875                                  | 0.3897            | -0.0029           | 0.0016            | -0.0025           | 0.0037              |                                                                      |
| 21 RDC                                                                                                                                                                                                                    | 18.33          | 0.1664                                  | 0.3949            | -0.0037           | 0.0019            | -0.003            | 0.0042              |                                                                      |
|                                                                                                                                                                                                                           |                |                                         |                   | _GV               | _GV               | _RC               | _RC                 |                                                                      |
| 22 GDV                                                                                                                                                                                                                    | 17.42          | 0.2174                                  | 0.6877            | -0.0029           | -0.0064           | 0.0084            | 0.0                 | _GV, _RC<br>grey surround<br>CIE data no. 27<br>with white<br>border |
| 23 GDV                                                                                                                                                                                                                    | 16.91          | 0.2564                                  | 0.5691            | -0.0025           | -0.004            | 0.0057            | -0.0001             |                                                                      |
| 24 GDV                                                                                                                                                                                                                    | 16.41          | 0.2874                                  | 0.4688            | -0.0022           | -0.0028           | 0.0049            | -0.0001             |                                                                      |
| 25 GDV                                                                                                                                                                                                                    | 16.92          | 0.305                                   | 0.4141            | -0.002            | -0.0022           | 0.0033            | -0.0001             |                                                                      |
| 26 GDV                                                                                                                                                                                                                    | 16.71          | 0.3164                                  | 0.3807            | -0.0018           | -0.0018           | 0.0028            | -0.0001             |                                                                      |
| 27 GDV                                                                                                                                                                                                                    | 16.52          | 0.3234                                  | 0.3581            | -0.0017           | -0.0015           | 0.0023            | -0.0001             |                                                                      |
| 28 GDV                                                                                                                                                                                                                    | 15.06          | 0.3311                                  | 0.3336            | -0.0021           | -0.0017           | 0.0029            | -0.0001             |                                                                      |
| 29 GDV                                                                                                                                                                                                                    | 14.18          | 0.3388                                  | 0.3023            | -0.002            | -0.0013           | 0.0032            | -0.0001             |                                                                      |
| 30 GDV                                                                                                                                                                                                                    | 14.06          | 0.344                                   | 0.2804            | -0.0021           | -0.0013           | 0.003             | -0.0001             |                                                                      |
| 31 GDV                                                                                                                                                                                                                    | 13.57          | 0.3483                                  | 0.2652            | -0.0021           | -0.0013           | 0.0031            | 0.0                 |                                                                      |
| 32 GDV                                                                                                                                                                                                                    | 13.26          | 0.3515                                  | 0.2527            | -0.002            | -0.0012           | 0.003             | 0.0                 |                                                                      |
| 33 RDC                                                                                                                                                                                                                    | 16.44          | 0.6162                                  | 0.3431            | -0.0035           | -0.0017           | 0.0059            | -0.0001             | _GV, _RC<br>grey surround<br>CIE data no. 38<br>with white<br>border |
| 34 RDC                                                                                                                                                                                                                    | 15.81          | 0.543                                   | 0.3455            | -0.0034           | -0.0018           | 0.0047            | 0.0                 |                                                                      |
| 35 RDC                                                                                                                                                                                                                    | 16.2           | 0.4556                                  | 0.3301            | -0.0029           | -0.0018           | 0.0042            | -0.0001             |                                                                      |
| 36 RDC                                                                                                                                                                                                                    | 16.72          | 0.4102                                  | 0.3528            | -0.0025           | -0.0018           | 0.0033            | -0.0001             |                                                                      |
| 37 RDC                                                                                                                                                                                                                    | 16.8           | 0.3622                                  | 0.3556            | -0.002            | -0.0017           | 0.0027            | -0.0001             |                                                                      |
| 38 RDC                                                                                                                                                                                                                    | 16.65          | 0.3223                                  | 0.3579            | -0.0017           | -0.0013           | 0.002             | -0.0001             |                                                                      |
| 39 RDC                                                                                                                                                                                                                    | 16.05          | 0.2874                                  | 0.3664            | -0.0016           | -0.0016           | 0.0041            | -0.0001             |                                                                      |
| 40 RDC                                                                                                                                                                                                                    | 16.7           | 0.2382                                  | 0.3787            | -0.0017           | -0.0019           | 0.0039            | -0.0001             |                                                                      |
| 41 RDC                                                                                                                                                                                                                    | 17.72          | 0.2123                                  | 0.3848            | -0.0013           | -0.0018           | 0.0045            | -0.0001             |                                                                      |
| 42 RDC                                                                                                                                                                                                                    | 18.03          | 0.1867                                  | 0.3914            | -0.0012           | -0.0019           | 0.005             | 0.0                 |                                                                      |
| 43 RDC                                                                                                                                                                                                                    | 18.33          | 0.1652                                  | 0.3969            | -0.0012           | -0.002            | 0.0057            | -0.0001             |                                                                      |
| Samples: Green (G, no. 00 or 22), Violet V (no. 10 or 32), Red (R, no. 11 or 33)<br>Cyan (C, no. 21 or 43), Grey (no. 05, 16, 27 or 38), White (Y=100)<br>Source: BAM Research Report no. 115 (1985), Tables 5.40;1 to 11 |                |                                         |                   |                   |                   |                   |                     |                                                                      |