**48-stufiger Bunttonkreis mit Interpretation *rgb* −> *rgb**$_d$-Geräte-Bunttonstufen von 1080 Normfarben**

| *rgb* −> *rgb**$_d$ | $h_{ab,a}$ | *L** | $a^*_a$ | $b^*_a$ | *rgb* −> *rgb**$_d$ | $h_{ab,a}$ | *L** | $a^*_a$ | $b^*_a$ | *rgb* −> *rgb**$_d$ | $h_{ab,a}$ | *L** | $a^*_a$ | $b^*_a$ | *rgb* −> *rgb**$_d$ | $h_{ab,a}$ | *L** | $a^*_a$ | $b^*_a$ | *rgb* −> *rgb**$_d$ | $h_{ab,a}$ | *L** | $a^*_a$ | $b^*_a$ | *rgb* −> *rgb**$_d$ | $h_{ab,a}$ | *L** | $a^*_a$ | $b^*_a$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.0 0.0 0.0 | 31.3 | 48.4 | 66.2 | 40.3 | 1.0 1.0 0.0 | 96.2 | 90.2 | −9.6 | 88.3 | 0.0 1.0 0.0 | 152.5 | 55.8 | −65.2 | 33.9 | 0.0 1.0 1.0 | 233.9 | 63.0 | −30.5 | −41.9 | 0.0 0.0 1.0 | 298.7 | 27.5 | 26.0 | −47.3 | 1.0 0.0 1.0 | 353.0 | 49.5 | 73.5 | −8.9 |
| 1.0 0.12 0.0 | 38.9 | 52.8 | 56.7 | 45.9 | 0.87 1.0 0.0 | 99.9 | 86.4 | −14.5 | 83.3 | 0.0 1.0 0.12 | 159.4 | 56.7 | −62.6 | 23.5 | 0.0 0.87 1.0 | 239.6 | 59.1 | −24.9 | −42.6 | 0.12 0.0 1.0 | 308.4 | 29.6 | 34.0 | −42.7 | 1.0 0.0 0.87 | 357.1 | 49.4 | 72.3 | −3.6 |
| 1.0 0.25 0.0 | 47.6 | 57.4 | 46.7 | 51.2 | 0.75 1.0 0.0 | 103.4 | 82.7 | −18.9 | 79.6 | 0.0 1.0 0.25 | 167.8 | 57.5 | −59.1 | 12.7 | 0.0 0.75 1.0 | 245.5 | 55.3 | −19.6 | −43.1 | 0.25 0.0 1.0 | 317.1 | 31.3 | 40.8 | −37.8 | 1.0 0.0 0.75 | 0.8 | 49.2 | 71.2 | 1.1 |
| 1.0 0.37 0.0 | 58.1 | 62.8 | 35.8 | 57.6 | 0.62 1.0 0.0 | 110.2 | 77.5 | −25.5 | 69.0 | 0.0 1.0 0.37 | 179.0 | 58.5 | −54.5 | 0.8 | 0.0 0.62 1.0 | 253.6 | 50.4 | −12.9 | −43.9 | 0.37 0.0 1.0 | 322.4 | 35.4 | 44.8 | −34.5 | 1.0 0.0 0.62 | 5.8 | 49.3 | 69.7 | 7.0 |
| 1.0 0.5 0.0 | 68.6 | 68.6 | 25.0 | 64.1 | 0.5 1.0 0.0 | 116.8 | 73.3 | −31.7 | 62.8 | 0.0 1.0 0.5 | 190.1 | 59.3 | −50.3 | −8.9 | 0.0 0.5 1.0 | 262.6 | 45.7 | −5.7 | −44.6 | 0.5 0.0 1.0 | 331.5 | 38.3 | 52.7 | −28.5 | 1.0 0.0 0.5 | 10.6 | 48.9 | 69.3 | 13.0 |
| 1.0 0.62 0.0 | 78.2 | 74.5 | 14.6 | 70.8 | 0.37 1.0 0.0 | 124.3 | 68.7 | −38.7 | 56.8 | 0.0 1.0 0.62 | 201.4 | 60.1 | −45.8 | −18.0 | 0.0 0.37 1.0 | 272.8 | 40.7 | 2.2 | −45.0 | 0.62 0.0 1.0 | 339.4 | 40.9 | 59.1 | −22.2 | 1.0 0.0 0.37 | 15.7 | 48.9 | 68.2 | 19.2 |
| 1.0 0.75 0.0 | 85.6 | 80.0 | 5.8 | 76.6 | 0.25 1.0 0.0 | 137.9 | 62.4 | −48.6 | 43.9 | 0.0 1.0 0.75 | 213.2 | 61.0 | −40.8 | −26.7 | 0.0 0.25 1.0 | 281.3 | 36.6 | 9.2 | −45.9 | 0.75 0.0 1.0 | 343.4 | 44.9 | 63.2 | −18.7 | 1.0 0.0 0.25 | 22.0 | 48.8 | 67.1 | 27.1 |
| 1.0 0.87 0.0 | 91.4 | 85.1 | −2.0 | 82.0 | 0.12 1.0 0.0 | 145.4 | 59.3 | −56.5 | 38.9 | 0.0 1.0 0.87 | 223.3 | 61.9 | −36.1 | −34.0 | 0.0 0.12 1.0 | 289.8 | 32.4 | 16.8 | −46.6 | 0.87 0.0 1.0 | 348.3 | 47.4 | 68.2 | −14.0 | 1.0 0.0 0.12 | 26.9 | 48.6 | 66.5 | 33.8 |

***RYGB*$_{ton}$**, 25.4, 92.3, 162.2, 271.7 ***RYGB*$_{all}$:** 25.4 42.1 58.8 75.6 92.3 109.7 127.2 144.7 162.2 189.6 216.9 244.3 271.7 300.1 328.6 357.0 ***LAB*Nio:*** 22.2, 0.2, 0.6 ***LAB*Wio:*** 96.3, −0.8, 2.0

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.4 | 42.1 | 58.8 | 75.6 | 92.3 | 109.7 | 127.2 | 144.7 | 162.2 | 189.6 | 216.9 | 244.3 | 271.7 | 300.1 | 328.6 | 357.0 |
| 46 | 1 | 3 | 4 | 7 | 10 | 13 | 14 | 17 | 19 | 22 | 25 | 28 | 32 | 35 | 40 |
| 15.7 22.0 | 31.3 38.9 | 47.6 58.1 | 58.1 68.6 | 85.6 91.4 | 99.9 103.4 | 116.8 124.3 | 124.3 137.9 | 152.5 159.4 | 167.8 179.0 | 201.4 213.2 | 233.9 239.6 | 253.6 262.6 | 289.8 298.7 | 317.1 322.4 | 348.3 353.0 |
| 26.9 31.3 | 47.6 58.1 | 68.6 78.2 | 78.2 85.6 | 96.2 99.9 | 110.2 116.8 | 137.9 145.4 | 145.4 152.5 | 167.8 179.0 | 190.1 201.4 | 223.3 233.9 | 245.5 253.6 | 272.8 281.3 | 308.4 317.1 | 331.5 339.4 | 357.1 0.8 |
| 0.703 | 0.369 | 0.074 | 0.722 | 0.183 | 0.928 | 0.217 | 0.908 | 0.33 | 0.952 | 0.369 | 0.798 | 0.888 | 0.144 | 0.673 | 0.984 |
| 651 650 | 648 657 | 666 675 | 675 684 | 702 711 | 639 558 | 396 315 | 315 234 | 72 73 | 74 75 | 77 78 | 80 71 | 53 44 | 17 8 | 170 251 | 575 656 |
| 649 648 | 666 675 | 684 693 | 693 702 | 720 639 | 477 396 | 234 153 | 153 72 | 74 75 | 76 77 | 79 80 | 62 53 | 35 26 | 89 170 | 332 413 | 655 654 |
| 507 506 | 504 531 | 558 585 | 585 612 | 666 693 | 477 234 | 468 225 | 225 702 | 216 217 | 218 219 | 221 222 | 224 197 | 143 116 | 35 8 | 494 17 | 269 512 |
| 505 504 | 558 585 | 612 639 | 639 666 | 720 477 | 711 468 | 702 459 | 459 216 | 218 219 | 220 221 | 223 224 | 170 143 | 89 62 | 251 494 | 260 503 | 511 510 |

**16-stufiger Elementar-Bunttonkreis mit Ziel-Elementar-Buntton: $h_{ab,a}$ = 25.4, 92.3, 162.2, 271.7**

| | | | | | | | | | | | | | | | | | | | | *X* | *Y* | *Z* | *x* | *y* | $h_{AB}$ | *L** | *a** | *b** | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h_{ab,a}$ | *rgb* −> *rgb**$_e$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***r00j=R*** | 1335 | 1118 | 883 | 730 | 636 | 605 | 600 | 609 | 630 | 591 | 531 | 566 | 678 | 701 | 590 | 497 | 468 | 417 | | | | | | | | | | | | | | | | |
| | 328 | 285 | 489 | 1960 | 4762 | 6931 | 8011 | 8461 | 8649 | 8744 | 8799 | 8809 | 8819 | 8821 | 8839 | 8859 | 8855 | 8871 | 31.4 | 17.3 | 6.6 | 0.566 | 0.313 | 17.3 | 48.7 | 66.5 | 32.9 | 48.7 | 66.7 | 31.8 | 73.9 | **25.4** | **1.00 0.00 0.00** |
| ***r25j*** | 1241 | 997 | 748 | 565 | 451 | 404 | 389 | 405 | 459 | 467 | 455 | 581 | 898 | 1184 | 1219 | 1160 | 1140 | 1076 | | | | | | | | | | | | | | | | |
| | 946 | 860 | 1123 | 2711 | 5340 | 7236 | 8147 | 8519 | 8679 | 8762 | 8807 | 8815 | 8823 | 8823 | 8839 | 8857 | 8854 | 8873 | 34.5 | 22.5 | 5.1 | 0.555 | 0.361 | 29.2 | 54.5 | 52.6 | 49.2 | 54.5 | 52.9 | 47.9 | 71.4 | **42.2** | **1.00 0.25 0.00** |
| ***r50j*** | 1399 | 1144 | 864 | 646 | 503 | 438 | 417 | 439 | 520 | 555 | 570 | 786 | 1354 | 2017 | 2325 | 2364 | 2373 | 2316 | | | | | | | | | | | | | | | | |
| | 2167 | 2056 | 2349 | 3874 | 6109 | 7614 | 8315 | 8598 | 8725 | 8791 | 8832 | 8836 | 8841 | 8838 | 8852 | 8870 | 8866 | 8879 | 40.5 | 31.9 | 6.2 | 0.514 | 0.405 | 46.6 | 63.2 | 34.6 | 59.5 | 63.2 | 35.0 | 58.0 | 67.8 | **58.9** | **1.00 0.50 0.00** |
| ***r75j*** | 1583 | 1325 | 1010 | 743 | 568 | 490 | 459 | 488 | 596 | 663 | 706 | 1033 | 1913 | 3079 | 3802 | 4013 | 4086 | 4061 | | | | | | | | | | | | | | | | |
| | 3925 | 3820 | 4095 | 5365 | 7005 | 8027 | 8486 | 8673 | 8762 | 8815 | 8848 | 8844 | 8845 | 8845 | 8857 | 8875 | 8867 | 8884 | 48.6 | 44.8 | 7.6 | 0.48 | 0.443 | 68.5 | 72.7 | 17.1 | 70.4 | 72.7 | 17.6 | 68.8 | 71.1 | **75.5** | **1.00 0.75 0.00** |
| ***j00g=J*** | 1933 | 1642 | 1262 | 928 | 702 | 598 | 550 | 589 | 746 | 862 | 953 | 1460 | 2847 | 4868 | 6383 | 6984 | 7209 | 7298 | | | | | | | | | | | | | | | | |
| | 7283 | 7277 | 7410 | 7891 | 8370 | 8632 | 8759 | 8819 | 8863 | 8897 | 8920 | 8914 | 8913 | 8910 | 8921 | 8937 | 8928 | 8943 | 63.1 | 68.2 | 10.2 | 0.445 | 0.481 | 93.3 | 86.1 | −4.0 | 85.1 | 86.1 | −3.3 | 83.2 | 83.3 | **92.3** | **1.00 1.00 0.00** |
| ***j25g*** | 1430 | 1343 | 1125 | 864 | 658 | 562 | 527 | 571 | 735 | 859 | 962 | 1498 | 2960 | 5049 | 6458 | 6750 | 6560 | 6189 | | | | | | | | | | | | | | | | |
| | 5730 | 5364 | 5122 | 5003 | 4898 | 4827 | 4825 | 4843 | 4880 | 4975 | 5103 | 5166 | 5138 | 5064 | 4951 | 4859 | 4902 | 5126 | 41.3 | 53.0 | 10.1 | 0.396 | 0.507 | 115.4 | 77.8 | −25.6 | 71.3 | 77.8 | −25.0 | 69.6 | 74.0 | **109.8** | **0.75 1.00 0.00** |
| ***j50g*** | 979 | 1028 | 952 | 764 | 590 | 512 | 487 | 535 | 689 | 809 | 904 | 1409 | 2792 | 4683 | 5749 | 5683 | 5161 | 4471 | | | | | | | | | | | | | | | | |
| | 3730 | 3164 | 2823 | 2650 | 2517 | 2427 | 2413 | 2430 | 2470 | 2581 | 2741 | 2832 | 2801 | 2711 | 2564 | 2449 | 2512 | 2793 | 24.2 | 36.8 | 9.3 | 0.344 | 0.523 | 131.8 | 67.1 | −41.3 | 55.2 | 67.1 | −40.9 | 53.7 | 67.6 | **127.3** | **0.50 1.00 0.00** |
| ***j75g*** | 740 | 919 | 927 | 788 | 629 | 556 | 540 | 594 | 759 | 882 | 978 | 1488 | 2831 | 4539 | 5310 | 4989 | 4269 | 3411 | | | | | | | | | | | | | | | | |
| | 2543 | 1907 | 1548 | 1372 | 1243 | 1158 | 1147 | 1164 | 1200 | 1307 | 1466 | 1561 | 1531 | 1447 | 1307 | 1201 | 1267 | 1547 | 14.9 | 27.7 | 9.8 | 0.285 | 0.527 | 145.3 | 59.6 | −56.0 | 40.7 | 59.6 | −55.6 | 39.3 | 68.2 | **144.7** | **0.25 1.00 0.00** |
| ***g00b=G*** | 760 | 1072 | 1250 | 1214 | 1089 | 1049 | 1070 | 1161 | 1353 | 1487 | 1582 | 2076 | 3314 | 4758 | 5248 | 4762 | 3938 | 3000 | | | | | | | | | | | | | | | | |
| | 2073 | 1406 | 1038 | 862 | 738 | 657 | 648 | 667 | 703 | 808 | 967 | 1065 | 1038 | 956 | 820 | 719 | 785 | 1066 | 12.2 | 24.9 | 15.6 | 0.232 | 0.471 | 159.4 | 56.9 | −61.7 | 20.9 | 56.9 | −61.5 | 19.6 | 64.5 | **162.2** | **0.00 1.00 0.00** |
| ***g25b*** | 1061 | 1702 | 2237 | 2523 | 2535 | 2646 | 2848 | 3069 | 3313 | 3457 | 3526 | 3905 | 4752 | 5541 | 5551 | 4890 | 4008 | 3037 | | | | | | | | | | | | | | | | |
| | 2088 | 1407 | 1033 | 854 | 729 | 649 | 642 | 664 | 701 | 807 | 966 | 1064 | 1036 | 953 | 817 | 719 | 790 | 1072 | 15.6 | 27.3 | 35.0 | 0.2 | 0.35 | 193.4 | 59.3 | −50.8 | −7.1 | 59.3 | −50.5 | −8.5 | 51.2 | **189.5** | **0.00 1.00 0.50** |
| ***g50b*** | 1374 | 2257 | 3200 | 3874 | 4120 | 4462 | 4950 | 5363 | 5612 | 5726 | 5740 | 5865 | 6129 | 6198 | 5780 | 4976 | 4044 | 3049 | | | | | | | | | | | | | | | | |
| | 2082 | 1389 | 1011 | 833 | 709 | 632 | 627 | 648 | 688 | 795 | 951 | 1048 | 1020 | 939 | 803 | 707 | 780 | 1061 | 19.3 | 29.6 | 57.3 | 0.181 | 0.279 | 229.9 | 61.3 | −39.4 | −28.0 | 61.3 | −39.1 | −29.4 | 49.0 | **216.9** | **0.00 1.00 1.00** |
| ***g75b*** | 1370 | 2308 | 3342 | 4166 | 4552 | 5041 | 5674 | 6129 | 6216 | 6146 | 5981 | 5745 | 5428 | 4984 | 4395 | 3711 | 3016 | 2263 | | | | | | | | | | | | | | | | |
| | 1520 | 1004 | 771 | 722 | 678 | 624 | 624 | 645 | 683 | 787 | 940 | 1034 | 1007 | 928 | 795 | 700 | 774 | 1049 | 18.4 | 23.9 | 62.3 | 0.176 | 0.228 | 254.1 | 56.0 | −20.9 | −41.7 | 56.0 | −20.6 | −43.0 | 47.7 | **244.3** | **0.00 0.50 1.00** |
| ***b00r=B*** | 998 | 1643 | 2320 | 2834 | 3087 | 3423 | 3843 | 4071 | 3978 | 3736 | 3438 | 3132 | 2808 | 2431 | 2013 | 1643 | 1327 | 975 | | | | | | | | | | | | | | | | |
| | 626 | 417 | 383 | 493 | 575 | 567 | 572 | 592 | 624 | 717 | 858 | 945 | 920 | 847 | 724 | 634 | 701 | 951 | 11.6 | 12.0 | 39.6 | 0.183 | 0.19 | 271.2 | 41.2 | 1.3 | −44.0 | 41.2 | 1.3 | −45.0 | 45.0 | **271.7** | **0.00 0.00 1.00** |
| ***b25r*** | 757 | 1189 | 1584 | 1888 | 2053 | 2283 | 2557 | 2650 | 2462 | 2141 | 1800 | 1489 | 1200 | 909 | 642 | 475 | 381 | 272 | | | | | | | | | | | | | | | | |
| | 173 | 151 | 200 | 370 | 540 | 573 | 586 | 604 | 634 | 720 | 855 | 939 | 916 | 846 | 728 | 643 | 700 | 941 | 7.5 | 5.3 | 24.3 | 0.203 | 0.142 | 288.9 | 27.5 | 27.4 | −46.1 | 27.5 | 27.2 | −46.9 | 54.2 | **300.1** | **0.50 0.00 1.00** |
| ***b50r*** | 1651 | 1834 | 1994 | 2146 | 2261 | 2436 | 2638 | 2661 | 2445 | 2101 | 1748 | 1435 | 1151 | 870 | 621 | 478 | 417 | 333 | | | | | | | | | | | | | | | | |
| | 236 | 207 | 329 | 1018 | 2095 | 2728 | 3002 | 3121 | 3201 | 3325 | 3486 | 3575 | 3551 | 3471 | 3336 | 3227 | 3285 | 3555 | 16.8 | 9.8 | 24.6 | 0.327 | 0.191 | 322.8 | 37.4 | 50.1 | −29.6 | 37.4 | 50.1 | −30.6 | 58.7 | **328.5** | **1.00 0.00 1.00** |
| ***b75r*** | 2481 | 2281 | 2106 | 2058 | 2071 | 2152 | 2246 | 2216 | 2027 | 1731 | 1430 | 1192 | 990 | 774 | 571 | 466 | 440 | 389 | | | | | | | | | | | | | | | | |
| | 307 | 281 | 497 | 1945 | 4721 | 6890 | 7983 | 8444 | 8642 | 8741 | 8797 | 8809 | 8821 | 8825 | 8843 | 8865 | 8865 | 8883 | 33.8 | 17.9 | 20.9 | 0.465 | 0.247 | 357.3 | 49.4 | 72.2 | −2.5 | 49.4 | 72.4 | −3.7 | 72.5 | **357.0** | **1.00 0.00 0.50** |

**5-stufige gleichabständige Graureihe mit Ziel-Helligkeit: *L** = 22.2, 40.7, 59.3, 77.8, 96.3**

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***n000w=N*** | 277 | 301 | 310 | 313 | 325 | 333 | 345 | 350 | 361 | 372 | 377 | 385 | 386 | 385 | 380 | 372 | 361 | 354 | | | | | | | | | | | | | | | | |
| | 348 | 348 | 350 | 356 | 362 | 373 | 388 | 402 | 421 | 441 | 461 | 484 | 510 | 539 | 570 | 605 | 634 | 666 | 3.5 | 3.6 | 3.8 | 0.317 | 0.332 | 0.5 | 22.5 | 0.2 | 0.7 | **22.5** | 0.0 | 0.0 | 0.0 | 37.9 | **0.00 0.00 0.00** |
| ***n025w*** | 1036 | 1084 | 1107 | 1126 | 1144 | 1161 | 1174 | 1189 | 1204 | 1209 | 1218 | 1223 | 1224 | 1220 | 1212 | 1194 | 1178 | 1161 | | | | | | | | | | | | | | | | |
| | 1148 | 1144 | 1139 | 1143 | 1148 | 1158 | 1173 | 1191 | 1211 | 1234 | 1257 | 1283 | 1309 | 1339 | 1373 | 1411 | 1444 | 1476 | 11.1 | 11.7 | 12.9 | 0.31 | 0.327 | 271.5 | 40.8 | −0.3 | −0.4 | **40.8** | −0.3 | −1.4 | 1.4 | 256.8 | **0.25 0.25 0.25** |
| ***n050w*** | 2421 | 2537 | 2593 | 2640 | 2678 | 2710 | 2735 | 2760 | 2784 | 2792 | 2800 | 2807 | 2809 | 2802 | 2792 | 2765 | 2742 | 2719 | | | | | | | | | | | | | | | | |
| | 2695 | 2687 | 2675 | 2674 | 2675 | 2685 | 2702 | 2718 | 2741 | 2768 | 2795 | 2816 | 2842 | 2870 | 2903 | 2941 | 2973 | 3003 | 25.7 | 27.2 | 30.0 | 0.31 | 0.328 | 266.5 | 59.2 | −0.6 | −0.4 | **59.2** | −0.3 | −1.8 | 1.8 | 258.1 | **0.50 0.50 0.50** |
| ***n075w*** | 4546 | 4783 | 4913 | 5022 | 5097 | 5163 | 5223 | 5269 | 5314 | 5331 | 5347 | 5361 | 5367 | 5368 | 5365 | 5337 | 5315 | 5288 | | | | | | | | | | | | | | | | |
| | 5257 | 5254 | 5237 | 5232 | 5230 | 5237 | 5257 | 5275 | 5301 | 5331 | 5357 | 5370 | 5387 | 5409 | 5435 | 5473 | 5489 | 5520 | 49.9 | 52.9 | 57.3 | 0.311 | 0.33 | 264.9 | 77.8 | −0.8 | 0.2 | **77.8** | −0.2 | −1.4 | 1.4 | 259.2 | **0.75 0.75 0.75** |
| ***n100w=W*** | 7373 | 7810 | 8068 | 8301 | 8459 | 8596 | 8717 | 8817 | 8904 | 8946 | 8987 | 9026 | 9060 | 9088 | 9119 | 9111 | 9120 | 9115 | | | | | | | | | | | | | | | | |
| | 9099 | 9125 | 9110 | 9110 | 9103 | 9113 | 9140 | 9155 | 9182 | 9209 | 9226 | 9215 | 9208 | 9204 | 9208 | 9226 | 9210 | 9229 | 86.0 | 91.0 | 95.9 | 0.315 | 0.333 | 99.2 | 96.4 | −0.8 | 2.1 | **96.4** | 0.0 | 0.0 | 0.0 | 100.0 | **1.00 1.00 1.00** |

SG880−7N Messung: %BEG 'KK0X'REM_OFFS04_080929_3.TXTOffsetdruck, Modell-Separation cmyn6*, Seite 1/2

**48-stufiger Bunttonkreis mit Interpretation *rgb* −> *rgb**$_d$-Geräte-Bunttonstufen von 1080 Normfarben**

| *rgb* −> *rgb**$_d$ | $h_{ab,a}$ | *L** | $a^*_a$ | $b^*_a$ | *rgb* −> *rgb**$_d$ | $h_{ab,a}$ | *L** | $a^*_a$ | $b^*_a$ | *rgb* −> *rgb**$_d$ | $h_{ab,a}$ | *L** | $a^*_a$ | $b^*_a$ | *rgb* −> *rgb**$_d$ | $h_{ab,a}$ | *L** | $a^*_a$ | $b^*_a$ | *rgb* −> *rgb**$_d$ | $h_{ab,a}$ | *L** | $a^*_a$ | $b^*_a$ | *rgb* −> *rgb**$_d$ | $h_{ab,a}$ | *L** | $a^*_a$ | $b^*_a$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.0 0.0 0.0 | 31.3 | 48.4 | 66.2 | 40.3 | 1.0 1.0 0.0 | 96.2 | 90.2 | −9.6 | 88.3 | 0.0 1.0 0.0 | 152.5 | 55.8 | −65.2 | 33.9 | 0.0 1.0 1.0 | 233.9 | 63.0 | −30.5 | −41.9 | 0.0 0.0 1.0 | 298.7 | 27.5 | 26.0 | −47.3 | 1.0 0.0 1.0 | 353.0 | 49.5 | 73.5 | −8.9 |
| 1.0 0.12 0.0 | 38.9 | 52.8 | 56.7 | 45.9 | 0.87 1.0 0.0 | 99.9 | 86.4 | −14.5 | 83.3 | 0.0 1.0 0.12 | 159.4 | 56.7 | −62.6 | 23.5 | 0.0 0.87 1.0 | 239.6 | 59.1 | −24.9 | −42.6 | 0.12 0.0 1.0 | 308.4 | 29.6 | 34.0 | −42.7 | 1.0 0.0 0.87 | 357.1 | 49.4 | 72.3 | −3.6 |
| 1.0 0.25 0.0 | 47.6 | 57.4 | 46.7 | 51.2 | 0.75 1.0 0.0 | 103.4 | 82.7 | −18.9 | 79.6 | 0.0 1.0 0.25 | 167.8 | 57.5 | −59.1 | 12.7 | 0.0 0.75 1.0 | 245.5 | 55.3 | −19.6 | −43.1 | 0.25 0.0 1.0 | 317.1 | 31.3 | 40.8 | −37.8 | 1.0 0.0 0.75 | 0.8 | 49.2 | 71.2 | 1.1 |
| 1.0 0.37 0.0 | 58.1 | 62.8 | 35.8 | 57.6 | 0.62 1.0 0.0 | 110.2 | 77.5 | −25.5 | 69.0 | 0.0 1.0 0.37 | 179.0 | 58.5 | −54.5 | 0.8 | 0.0 0.62 1.0 | 253.6 | 50.4 | −12.9 | −43.9 | 0.37 0.0 1.0 | 322.4 | 35.4 | 44.8 | −34.5 | 1.0 0.0 0.62 | 5.8 | 49.3 | 69.7 | 7.0 |
| 1.0 0.5 0.0 | 68.6 | 68.6 | 25.0 | 64.1 | 0.5 1.0 0.0 | 116.8 | 73.3 | −31.7 | 62.8 | 0.0 1.0 0.5 | 190.1 | 59.3 | −50.3 | −8.9 | 0.0 0.5 1.0 | 262.6 | 45.7 | −5.7 | −44.6 | 0.5 0.0 1.0 | 331.5 | 38.3 | 52.7 | −28.5 | 1.0 0.0 0.5 | 10.6 | 48.9 | 69.3 | 13.0 |
| 1.0 0.62 0.0 | 78.2 | 74.5 | 14.6 | 70.8 | 0.37 1.0 0.0 | 124.3 | 68.7 | −38.7 | 56.8 | 0.0 1.0 0.62 | 201.4 | 60.1 | −45.8 | −18.0 | 0.0 0.37 1.0 | 272.8 | 40.7 | 2.2 | −45.0 | 0.62 0.0 1.0 | 339.4 | 40.9 | 59.1 | −22.2 | 1.0 0.0 0.37 | 15.7 | 48.9 | 68.2 | 19.2 |
| 1.0 0.75 0.0 | 85.6 | 80.0 | 5.8 | 76.6 | 0.25 1.0 0.0 | 137.9 | 62.4 | −48.6 | 43.9 | 0.0 1.0 0.75 | 213.2 | 61.0 | −40.8 | −26.7 | 0.0 0.25 1.0 | 281.3 | 36.6 | 9.2 | −45.9 | 0.75 0.0 1.0 | 343.4 | 44.9 | 63.2 | −18.7 | 1.0 0.0 0.25 | 22.0 | 48.8 | 67.1 | 27.1 |
| 1.0 0.87 0.0 | 91.4 | 85.1 | −2.0 | 82.0 | 0.12 1.0 0.0 | 145.4 | 59.3 | −56.5 | 38.9 | 0.0 1.0 0.87 | 223.3 | 61.9 | −36.1 | −34.0 | 0.0 0.12 1.0 | 289.8 | 32.4 | 16.8 | −46.6 | 0.87 0.0 1.0 | 348.3 | 47.4 | 68.2 | −14.0 | 1.0 0.0 0.12 | 26.9 | 48.6 | 66.5 | 33.8 |

***RYGB*$_{ton}$**, 25.4, 92.3, 162.2, 271.7 ***RYGB*$_{all}$:** 25.4 42.1 58.8 75.6 92.3 109.7 127.2 144.7 162.2 189.6 216.9 244.3 271.7 300.1 328.6 357.0 ***LAB*Nio:*** 22.2, 0.2, 0.6 ***LAB*Wio:*** 96.3, −0.8, 2.0

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.4 | 42.1 | 58.8 | 75.6 | 92.3 | 109.7 | 127.2 | 144.7 | 162.2 | 189.6 | 216.9 | 244.3 | 271.7 | 300.1 | 328.6 | 357.0 |
| 46 | 1 | 3 | 4 | 7 | 10 | 13 | 14 | 17 | 19 | 22 | 25 | 28 | 32 | 35 | 40 |
| 15.7 22.0 | 31.3 38.9 | 47.6 58.1 | 58.1 68.6 | 85.6 91.4 | 99.9 103.4 | 116.8 124.3 | 124.3 137.9 | 152.5 159.4 | 167.8 179.0 | 201.4 213.2 | 233.9 239.6 | 253.6 262.6 | 289.8 298.7 | 317.1 322.4 | 348.3 353.0 |
| 26.9 31.3 | 47.6 58.1 | 68.6 78.2 | 78.2 85.6 | 96.2 99.9 | 110.2 116.8 | 137.9 145.4 | 145.4 152.5 | 167.8 179.0 | 190.1 201.4 | 223.3 233.9 | 245.5 253.6 | 272.8 281.3 | 308.4 317.1 | 331.5 339.4 | 357.1 0.8 |
| 0.703 | 0.369 | 0.074 | 0.722 | 0.183 | 0.928 | 0.217 | 0.908 | 0.33 | 0.952 | 0.369 | 0.798 | 0.888 | 0.144 | 0.673 | 0.984 |
| 651 650 | 648 657 | 666 675 | 675 684 | 702 711 | 639 558 | 396 315 | 315 234 | 72 73 | 74 75 | 77 78 | 80 71 | 53 44 | 17 8 | 170 251 | 575 656 |
| 649 648 | 666 675 | 684 693 | 693 702 | 720 639 | 477 396 | 234 153 | 153 72 | 74 75 | 76 77 | 79 80 | 62 53 | 35 26 | 89 170 | 332 413 | 655 654 |
| 507 506 | 504 531 | 558 585 | 585 612 | 666 693 | 477 234 | 468 225 | 225 702 | 216 217 | 218 219 | 221 222 | 224 197 | 143 116 | 35 8 | 494 17 | 269 512 |
| 505 504 | 558 585 | 612 639 | 639 666 | 720 477 | 711 468 | 702 459 | 459 216 | 218 219 | 220 221 | 223 224 | 170 143 | 89 62 | 251 494 | 260 503 | 511 510 |

**16-stufiger Elementar-Bunttonkreis mit Ziel-Elementar-Buntton: $h_{ab,a}$ = 25.4, 92.3, 162.2, 271.7**

| | | | | | | | | | | | | | | | | | | | | *X* | *Y* | *Z* | *a* | *b* | *A* | *B* | $C_{AB}$ | $h_{AB}$ | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h_{ab,a}$ | *rgb* −> *rgb**$_e$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***r00j=R*** | 1335 | 1118 | 883 | 730 | 636 | 605 | 600 | 609 | 630 | 591 | 531 | 566 | 678 | 701 | 590 | 497 | 468 | 417 | | | | | | | | | | | | | | | | |
| | 328 | 285 | 489 | 1960 | 4762 | 6931 | 8011 | 8461 | 8649 | 8744 | 8799 | 8809 | 8819 | 8821 | 8839 | 8859 | 8855 | 8871 | 31.4 | 17.3 | 6.6 | 1.806 | −0.152 | 14.9 | 4.6 | 15.6 | 17.3 | 48.7 | 66.7 | 31.8 | 73.9 | **25.4** | **1.00** | **0.00** | **0.00** |
| ***r25j*** | 1241 | 997 | 748 | 565 | 451 | 404 | 389 | 405 | 459 | 467 | 455 | 581 | 898 | 1184 | 1219 | 1160 | 1140 | 1076 | | | | | | | | | | | | | | | | |
| | 946 | 860 | 1123 | 2711 | 5340 | 7236 | 8147 | 8519 | 8679 | 8762 | 8807 | 8815 | 8823 | 8823 | 8839 | 8857 | 8854 | 8873 | 34.5 | 22.5 | 5.1 | 1.534 | −0.091 | 13.2 | 7.4 | 15.2 | 29.2 | 54.5 | 52.9 | 47.9 | 71.4 | **42.2** | **1.00** | **0.25** | **0.00** |
| ***r50j*** | 1399 | 1144 | 864 | 646 | 503 | 438 | 417 | 439 | 520 | 555 | 570 | 786 | 1354 | 2017 | 2325 | 2364 | 2373 | 2316 | | | | | | | | | | | | | | | | |
| | 2167 | 2056 | 2349 | 3874 | 6109 | 7614 | 8315 | 8598 | 8725 | 8791 | 8832 | 8836 | 8841 | 8838 | 8852 | 8870 | 8866 | 8879 | 40.5 | 31.9 | 6.2 | 1.27 | −0.078 | 10.3 | 10.9 | 15.0 | 46.6 | 63.2 | 35.0 | 58.0 | 67.8 | **58.9** | **1.00** | **0.50** | **0.00** |
| ***r75j*** | 1583 | 1325 | 1010 | 743 | 568 | 490 | 459 | 488 | 596 | 663 | 706 | 1033 | 1913 | 3079 | 3802 | 4013 | 4086 | 4061 | | | | | | | | | | | | | | | | |
| | 3925 | 3820 | 4095 | 5365 | 7005 | 8027 | 8486 | 8673 | 8762 | 8815 | 8848 | 8844 | 8845 | 8845 | 8857 | 8875 | 8867 | 8884 | 48.6 | 44.8 | 7.6 | 1.084 | −0.068 | 6.2 | 15.8 | 17.0 | 68.5 | 72.7 | 17.6 | 68.8 | 71.1 | **75.5** | **1.00** | **0.75** | **0.00** |
| ***j00g=J*** | 1933 | 1642 | 1262 | 928 | 702 | 598 | 550 | 589 | 746 | 862 | 953 | 1460 | 2847 | 4868 | 6383 | 6984 | 7209 | 7298 | | | | | | | | | | | | | | | | |
| | 7283 | 7277 | 7410 | 7891 | 8370 | 8632 | 8759 | 8819 | 8863 | 8897 | 8920 | 8914 | 8913 | 8910 | 8921 | 8937 | 8928 | 8943 | 63.1 | 68.2 | 10.2 | 0.924 | −0.06 | −1.4 | 24.7 | 24.7 | 93.3 | 86.1 | −3.3 | 83.2 | 83.3 | **92.3** | **1.00** | **1.00** | **0.00** |
| ***j25g*** | 1430 | 1343 | 1125 | 864 | 658 | 562 | 527 | 571 | 735 | 859 | 962 | 1498 | 2960 | 5049 | 6458 | 6750 | 6560 | 6189 | | | | | | | | | | | | | | | | |
| | 5730 | 5364 | 5122 | 5003 | 4898 | 4827 | 4825 | 4843 | 4880 | 4975 | 5103 | 5166 | 5138 | 5064 | 4951 | 4859 | 4902 | 5126 | 41.3 | 53.0 | 10.1 | 0.78 | −0.076 | −8.7 | 18.3 | 20.2 | 115.4 | 77.8 | −25.0 | 69.6 | 74.0 | **109.8** | **0.75** | **1.00** | **0.00** |
| ***j50g*** | 979 | 1028 | 952 | 764 | 590 | 512 | 487 | 535 | 689 | 809 | 904 | 1409 | 2792 | 4683 | 5749 | 5683 | 5161 | 4471 | | | | | | | | | | | | | | | | |
| | 3730 | 3164 | 2823 | 2650 | 2517 | 2427 | 2413 | 2430 | 2470 | 2581 | 2741 | 2832 | 2801 | 2711 | 2564 | 2449 | 2512 | 2793 | 24.2 | 36.8 | 9.3 | 0.657 | −0.101 | −10.6 | 11.8 | 15.8 | 131.8 | 67.1 | −40.9 | 53.7 | 67.6 | **127.3** | **0.50** | **1.00** | **0.00** |
| ***j75g*** | 740 | 919 | 927 | 788 | 629 | 556 | 540 | 594 | 759 | 882 | 978 | 1488 | 2831 | 4539 | 5310 | 4989 | 4269 | 3411 | | | | | | | | | | | | | | | | |
| | 2543 | 1907 | 1548 | 1372 | 1243 | 1158 | 1147 | 1164 | 1200 | 1307 | 1466 | 1561 | 1531 | 1447 | 1307 | 1201 | 1267 | 1547 | 14.9 | 27.7 | 9.8 | 0.54 | −0.141 | −11.2 | 7.7 | 13.6 | 145.3 | 59.6 | −55.6 | 39.3 | 68.2 | **144.7** | **0.25** | **1.00** | **0.00** |
| ***g00b=G*** | 760 | 1072 | 1250 | 1214 | 1089 | 1049 | 1070 | 1161 | 1353 | 1487 | 1582 | 2076 | 3314 | 4758 | 5248 | 4762 | 3938 | 3000 | | | | | | | | | | | | | | | | |
| | 2073 | 1406 | 1038 | 862 | 738 | 657 | 648 | 667 | 703 | 808 | 967 | 1065 | 1038 | 956 | 820 | 719 | 785 | 1066 | 12.2 | 24.9 | 15.6 | 0.493 | −0.251 | −11.2 | 4.2 | 12.0 | 159.4 | 56.9 | −61.5 | 19.6 | 64.5 | **162.2** | **0.00** | **1.00** | **0.00** |
| ***g25b*** | 1061 | 1702 | 2237 | 2523 | 2535 | 2646 | 2848 | 3069 | 3313 | 3457 | 3526 | 3905 | 4752 | 5541 | 5551 | 4890 | 4008 | 3037 | | | | | | | | | | | | | | | | |
| | 2088 | 1407 | 1033 | 854 | 729 | 649 | 642 | 664 | 701 | 807 | 966 | 1064 | 1036 | 953 | 817 | 719 | 790 | 1072 | 15.6 | 27.3 | 35.0 | 0.569 | −0.511 | −10.2 | −2.4 | 10.5 | 193.4 | 59.3 | −50.5 | −8.5 | 51.2 | **189.5** | **0.00** | **1.00** | **0.50** |
| ***g50b*** | 1374 | 2257 | 3200 | 3874 | 4120 | 4462 | 4950 | 5363 | 5612 | 5726 | 5740 | 5865 | 6129 | 6198 | 5780 | 4976 | 4044 | 3049 | | | | | | | | | | | | | | | | |
| | 2082 | 1389 | 1011 | 833 | 709 | 632 | 627 | 648 | 688 | 795 | 951 | 1048 | 1020 | 939 | 803 | 707 | 780 | 1061 | 19.3 | 29.6 | 57.3 | 0.651 | −0.772 | −8.7 | −10.4 | 13.5 | 229.9 | 61.3 | −39.1 | −29.4 | 49.0 | **216.9** | **0.00** | **1.00** | **1.00** |
| ***g75b*** | 1370 | 2308 | 3342 | 4166 | 4552 | 5041 | 5674 | 6129 | 6216 | 6146 | 5981 | 5745 | 5428 | 4984 | 4395 | 3711 | 3016 | 2263 | | | | | | | | | | | | | | | | |
| | 1520 | 1004 | 771 | 722 | 678 | 624 | 624 | 645 | 683 | 787 | 940 | 1034 | 1007 | 928 | 795 | 700 | 774 | 1049 | 18.4 | 23.9 | 62.3 | 0.77 | −1.039 | −4.1 | −14.8 | 15.3 | 254.1 | 56.0 | −20.6 | −43.0 | 47.7 | **244.3** | **0.00** | **0.50** | **1.00** |
| ***b00r=B*** | 998 | 1643 | 2320 | 2834 | 3087 | 3423 | 3843 | 4071 | 3978 | 3736 | 3438 | 3132 | 2808 | 2431 | 2013 | 1643 | 1327 | 975 | | | | | | | | | | | | | | | | |
| | 626 | 417 | 383 | 493 | 575 | 567 | 572 | 592 | 624 | 717 | 858 | 945 | 920 | 847 | 724 | 634 | 701 | 951 | 11.6 | 12.0 | 39.6 | 0.965 | −1.315 | 0.2 | −10.7 | 10.7 | 271.2 | 41.2 | 1.3 | −45.0 | 45.0 | **271.7** | **0.00** | **0.00** | **1.00** |
| ***b25r*** | 757 | 1189 | 1584 | 1888 | 2053 | 2283 | 2557 | 2650 | 2462 | 2141 | 1800 | 1489 | 1200 | 909 | 642 | 475 | 381 | 272 | | | | | | | | | | | | | | | | |
| | 173 | 151 | 200 | 370 | 540 | 573 | 586 | 604 | 634 | 720 | 855 | 939 | 916 | 846 | 728 | 643 | 700 | 941 | 7.5 | 5.3 | 24.3 | 1.43 | −1.834 | 2.5 | −7.4 | 7.9 | 288.9 | 27.5 | 27.2 | −46.9 | 54.2 | **300.1** | **0.50** | **0.00** | **1.00** |
| ***b50r*** | 1651 | 1834 | 1994 | 2146 | 2261 | 2436 | 2638 | 2661 | 2445 | 2101 | 1748 | 1435 | 1151 | 870 | 621 | 478 | 417 | 333 | | | | | | | | | | | | | | | | |
| | 236 | 207 | 329 | 1018 | 2095 | 2728 | 3002 | 3121 | 3201 | 3325 | 3486 | 3575 | 3551 | 3471 | 3336 | 3227 | 3285 | 3555 | 16.8 | 9.8 | 24.6 | 1.715 | −1.005 | 7.5 | −5.7 | 9.4 | 322.8 | 37.4 | 50.1 | −30.6 | 58.7 | **328.5** | **1.00** | **0.00** | **1.00** |
| ***b75r*** | 2481 | 2281 | 2106 | 2058 | 2071 | 2152 | 2246 | 2216 | 2027 | 1731 | 1430 | 1192 | 990 | 774 | 571 | 466 | 440 | 389 | | | | | | | | | | | | | | | | |
| | 307 | 281 | 497 | 1945 | 4721 | 6890 | 7983 | 8444 | 8642 | 8741 | 8797 | 8809 | 8821 | 8825 | 8843 | 8865 | 8865 | 8883 | 33.8 | 17.9 | 20.9 | 1.883 | −0.465 | 16.8 | −0.7 | 16.8 | 357.3 | 49.4 | 72.4 | −3.7 | 72.5 | **357.0** | **1.00** | **0.00** | **0.50** |

**5-stufige gleichabständige Graureihe mit Ziel-Helligkeit: *L** = 22.2, 40.7, 59.3, 77.8, 96.3**

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***n000w=N*** | 277 | 301 | 310 | 313 | 325 | 333 | 345 | 350 | 361 | 372 | 377 | 385 | 386 | 385 | 380 | 372 | 361 | 354 | | | | | | | | | | | | | | | | |
| | 348 | 348 | 350 | 356 | 362 | 373 | 388 | 402 | 421 | 441 | 461 | 484 | 510 | 539 | 570 | 605 | 634 | 666 | 3.5 | 3.6 | 3.8 | 0.955 | −0.421 | 0.0 | 0.0 | 0.0 | 0.5 | **22.5** | 0.0 | 0.0 | 0.0 | 37.9 | **0.00** | **0.00** | **0.00** |
| ***n025w*** | 1036 | 1084 | 1107 | 1126 | 1144 | 1161 | 1174 | 1189 | 1204 | 1209 | 1218 | 1223 | 1224 | 1220 | 1212 | 1194 | 1178 | 1161 | | | | | | | | | | | | | | | | |
| | 1148 | 1144 | 1139 | 1143 | 1148 | 1158 | 1173 | 1191 | 1211 | 1234 | 1257 | 1283 | 1309 | 1339 | 1373 | 1411 | 1444 | 1476 | 11.1 | 11.7 | 12.9 | 0.946 | −0.441 | 0.0 | −0.2 | 0.2 | 271.5 | **40.8** | −0.3 | −1.4 | 1.4 | 256.8 | **0.25** | **0.25** | **0.25** |
| ***n050w*** | 2421 | 2537 | 2593 | 2640 | 2678 | 2710 | 2735 | 2760 | 2784 | 2792 | 2800 | 2807 | 2809 | 2802 | 2792 | 2765 | 2742 | 2719 | | | | | | | | | | | | | | | | |
| | 2695 | 2687 | 2675 | 2674 | 2675 | 2685 | 2702 | 2718 | 2741 | 2768 | 2795 | 2816 | 2842 | 2870 | 2903 | 2941 | 2973 | 3003 | 25.7 | 27.2 | 30.0 | 0.944 | −0.44 | 0.0 | −0.4 | 0.5 | 266.5 | **59.2** | −0.3 | −1.8 | 1.8 | 258.1 | **0.50** | **0.50** | **0.50** |
| ***n075w*** | 4546 | 4783 | 4913 | 5022 | 5097 | 5163 | 5223 | 5269 | 5314 | 5331 | 5347 | 5361 | 5367 | 5368 | 5365 | 5337 | 5315 | 5288 | | | | | | | | | | | | | | | | |
| | 5257 | 5254 | 5237 | 5232 | 5230 | 5237 | 5257 | 5275 | 5301 | 5331 | 5357 | 5370 | 5387 | 5409 | 5435 | 5473 | 5489 | 5520 | 49.9 | 52.9 | 57.3 | 0.944 | −0.433 | 0.0 | −0.6 | 0.6 | 264.9 | **77.8** | −0.2 | −1.4 | 1.4 | 259.2 | **0.75** | **0.75** | **0.75** |
| ***n100w=W*** | 7373 | 7810 | 8068 | 8301 | 8459 | 8596 | 8717 | 8817 | 8904 | 8946 | 8987 | 9026 | 9060 | 9088 | 9119 | 9111 | 9120 | 9115 | | | | | | | | | | | | | | | | |
| | 9099 | 9125 | 9110 | 9110 | 9103 | 9113 | 9140 | 9155 | 9182 | 9209 | 9226 | 9215 | 9208 | 9204 | 9208 | 9226 | 9210 | 9229 | 86.0 | 91.0 | 95.9 | 0.945 | −0.421 | 0.0 | 0.0 | 0.0 | 99.2 | **96.4** | 0.0 | 0.0 | 0.0 | 100.0 | **1.00** | **1.00** | **1.00** |