

Immettere y uscita: Offset Reflective System ORS18a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 31/360 = 0.08$

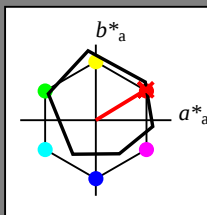
Dati del dispositivo (d) o colori elementari (e):

$HIC^*_-$

codice di tonalità per i colori questa pagina:

$H^*_- = R00Y_-$

triangolo chiarezza  $T^*$



ORS18a; dati atti CIELAB (a)

| name   | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------|-------------|---------|---------|--------------|--------------|
| R-,Ma  | 47.9        | 65.3    | 50.5    | 82.6         | 37           |
| Y-,Ma  | 90.3        | -10.2   | 91.7    | 92.3         | 96           |
| G-,Ma  | 50.9        | -62.8   | 34.9    | 71.9         | 150          |
| C-,Ma  | 58.6        | -30.3   | -45.0   | 54.2         | 236          |
| B-,Ma  | 25.7        | 31.0    | -44.4   | 54.2         | 305          |
| M-,Ma  | 48.1        | 75.2    | -8.3    | 75.7         | 353          |
| N-,Ma  | 18.0        | 0.0     | 0.0     | 0.0          | 0            |
| W-,Ma  | 95.4        | 0.0     | 0.0     | 0.0          | 0            |
| R-,CIE | 39.9        | 58.7    | 27.9    | 65.0         | 25           |
| Y-,CIE | 81.2        | -2.8    | 71.5    | 71.6         | 92           |
| G-,CIE | 52.2        | -42.4   | 13.6    | 44.5         | 162          |
| B-,CIE | 30.5        | 1.4     | -46.4   | 46.4         | 271          |

Il dati per il massimo colore (Ma):

$LabCh^*_{-,Ma}$ : 48 66 40 77 31

$HIC^*_{-,Ma}$ : R00Y\_100\_100\_

$rgbic^*_{-,Ma}$ :

1.0 0.0 0.0 1.0 1.0

triangolo chiarezza  $T^*$

%Gamma

$u^*_{rel} = 92$

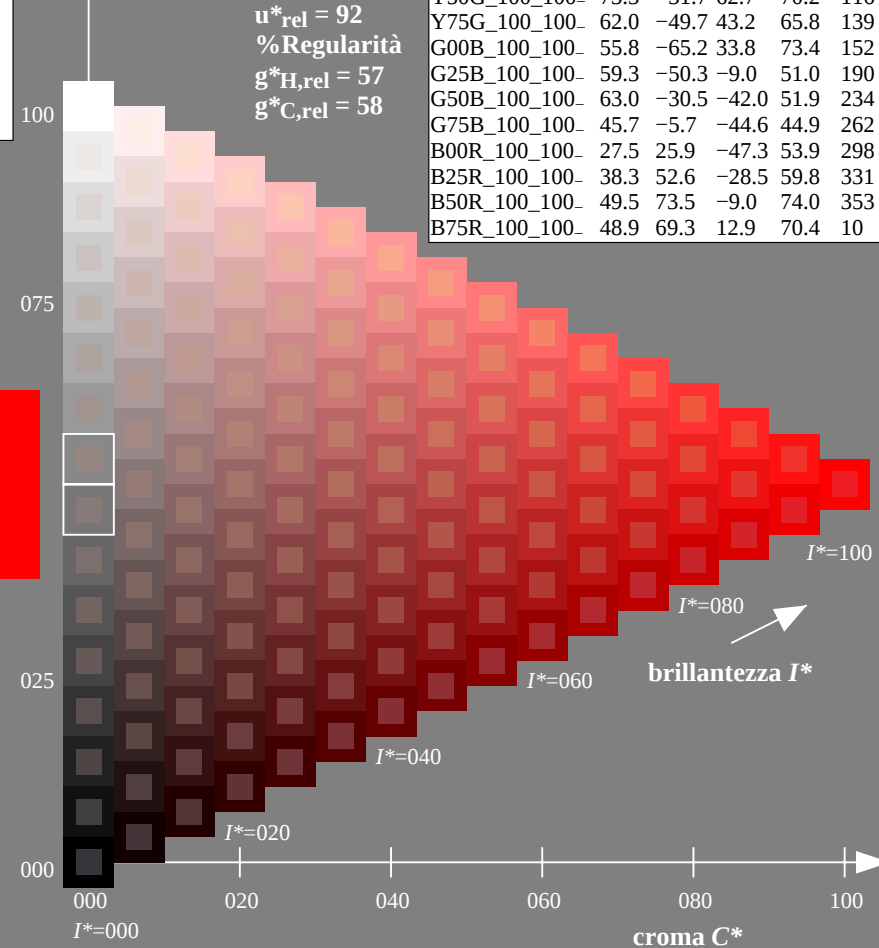
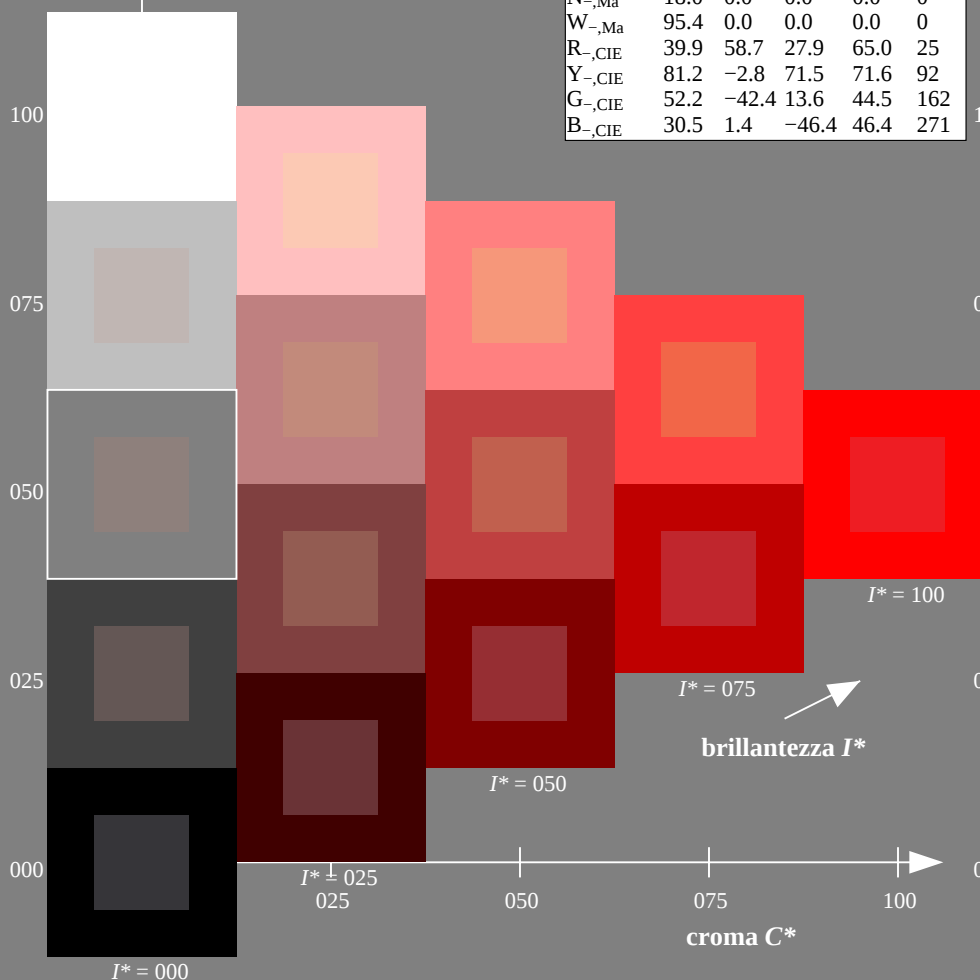
%Regularità

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 58$

ORS20a; dati atti CIELAB (a)

| $H^*_-$       | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---------------|-------------|---------|---------|--------------|--------------|
| R00Y_100_100_ | 48.4        | 66.1    | 40.2    | 77.3         | 31           |
| R25Y_100_100_ | 56.8        | 48.0    | 50.5    | 69.6         | 46           |
| R50Y_100_100_ | 68.6        | 25.0    | 63.9    | 68.6         | 68           |
| R75Y_100_100_ | 80.6        | 4.8     | 77.2    | 77.3         | 86           |
| Y00G_100_100_ | 90.2        | -9.6    | 88.2    | 88.7         | 96           |
| Y25G_100_100_ | 83.2        | -18.4   | 79.9    | 81.9         | 102          |
| Y50G_100_100_ | 73.3        | -31.7   | 62.7    | 70.2         | 116          |
| Y75G_100_100_ | 62.0        | -49.7   | 43.2    | 65.8         | 139          |
| G00B_100_100_ | 55.8        | -65.2   | 33.8    | 73.4         | 152          |
| G25B_100_100_ | 59.3        | -50.3   | -9.0    | 51.0         | 190          |
| G50B_100_100_ | 63.0        | -30.5   | -42.0   | 51.9         | 234          |
| G75B_100_100_ | 45.7        | -5.7    | -44.6   | 44.9         | 262          |
| B00R_100_100_ | 27.5        | 25.9    | -47.3   | 53.9         | 298          |
| B25R_100_100_ | 38.3        | 52.6    | -28.5   | 59.8         | 331          |
| B50R_100_100_ | 49.5        | 73.5    | -9.0    | 74.0         | 353          |
| B75R_100_100_ | 48.9        | 69.3    | 12.9    | 70.4         | 10           |



Immettere y uscita: Offset Reflective System ORS18a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 32/360 = 0.08$

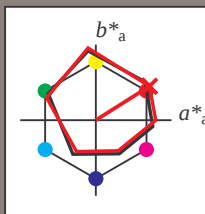
Dati del dispositivo (d) o  
colori elementari (e):

$HIC^*_d$

codice di tonalità per i colori  
questa pagina:

$H^*_d = R00Y_d$

triangolo chiarezza  $T^*$



ORS20a; dati atti CIELAB (a)

| name                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---------------------|-------------|---------|---------|--------------|--------------|
| R <sub>d</sub> ,Ma  | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| Y <sub>d</sub> ,Ma  | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| G <sub>d</sub> ,Ma  | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| C <sub>d</sub> ,Ma  | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| B <sub>d</sub> ,Ma  | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| M <sub>d</sub> ,Ma  | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| N <sub>d</sub> ,Ma  | 24.3        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>d</sub> ,Ma  | 95.6        | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>d</sub> ,CIE | 39.9        | 58.7    | 27.9    | 65.0         | 25           |
| Y <sub>d</sub> ,CIE | 81.2        | -2.8    | 71.5    | 71.6         | 92           |
| G <sub>d</sub> ,CIE | 52.2        | -42.4   | 13.6    | 44.5         | 162          |
| B <sub>d</sub> ,CIE | 30.5        | 1.4     | -46.4   | 46.4         | 271          |

Il dati per il massimo colore (Ma):

$LabCh^*_d, Ma$ : 45 70 44 83 32

$HIC^*_d, Ma$ : R00Y\_100\_100<sub>d</sub>

$rgbic^*_d, Ma$ :

1.0 0.0 0.0 1.0 1.0

triangolo chiarezza  $T^*$

%Gamma

$u^*_{rel} = 92$

%Regularità

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 58$

ORS20a; dati atti CIELAB (a)

| $H^*_d$                   | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---------------------------|-------------|---------|---------|--------------|--------------|
| R00Y_100_100 <sub>d</sub> | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| R25Y_100_100 <sub>d</sub> | 53.0        | 53.4    | 54.8    | 76.5         | 45           |
| R50Y_100_100 <sub>d</sub> | 64.9        | 28.9    | 68.6    | 74.5         | 67           |
| R75Y_100_100 <sub>d</sub> | 78.6        | 4.3     | 84.7    | 84.8         | 87           |
| Y00G_100_100 <sub>d</sub> | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| Y25G_100_100 <sub>d</sub> | 81.2        | -17.0   | 84.3    | 86.0         | 101          |
| Y50G_100_100 <sub>d</sub> | 70.6        | -29.7   | 66.5    | 72.8         | 114          |
| Y75G_100_100 <sub>d</sub> | 57.9        | -48.3   | 45.8    | 66.5         | 136          |
| G00B_100_100 <sub>d</sub> | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| G25B_100_100 <sub>d</sub> | 52.9        | -48.6   | -8.0    | 49.3         | 189          |
| G50B_100_100 <sub>d</sub> | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| G75B_100_100 <sub>d</sub> | 41.7        | -1.2    | -40.6   | 40.6         | 268          |
| B00R_100_100 <sub>d</sub> | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| B25R_100_100 <sub>d</sub> | 35.6        | 58.6    | -20.7   | 62.1         | 340          |
| B50R_100_100 <sub>d</sub> | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| B75R_100_100 <sub>d</sub> | 45.9        | 74.2    | 21.1    | 77.1         | 15           |

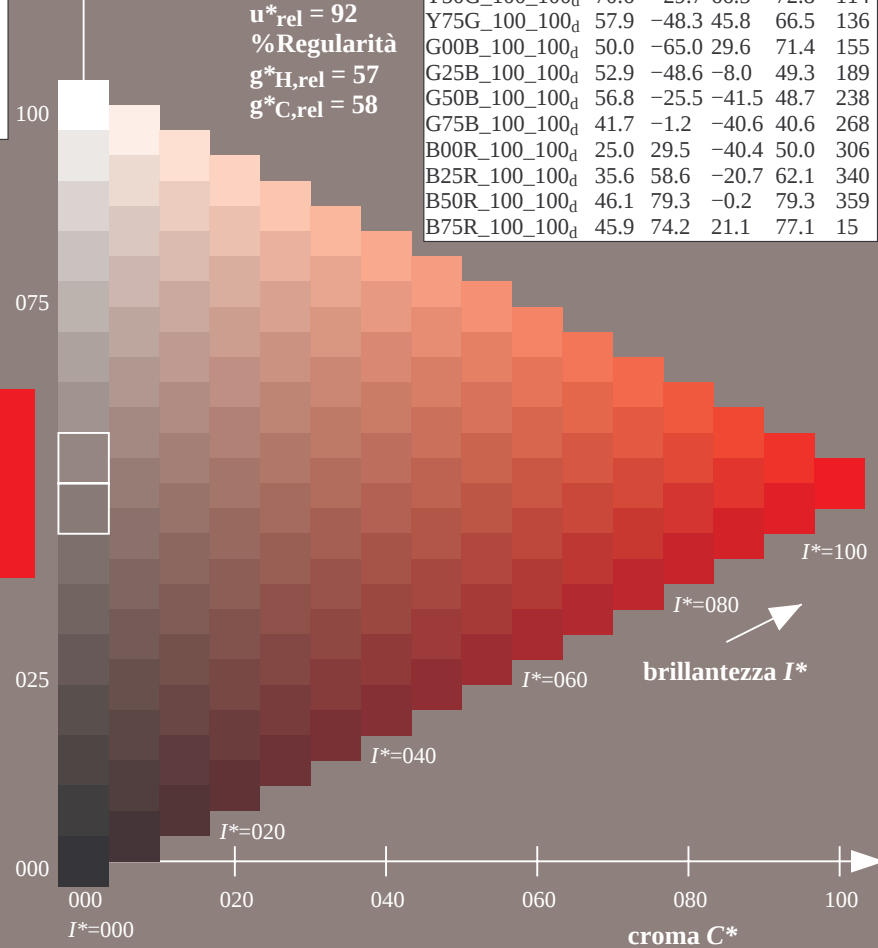
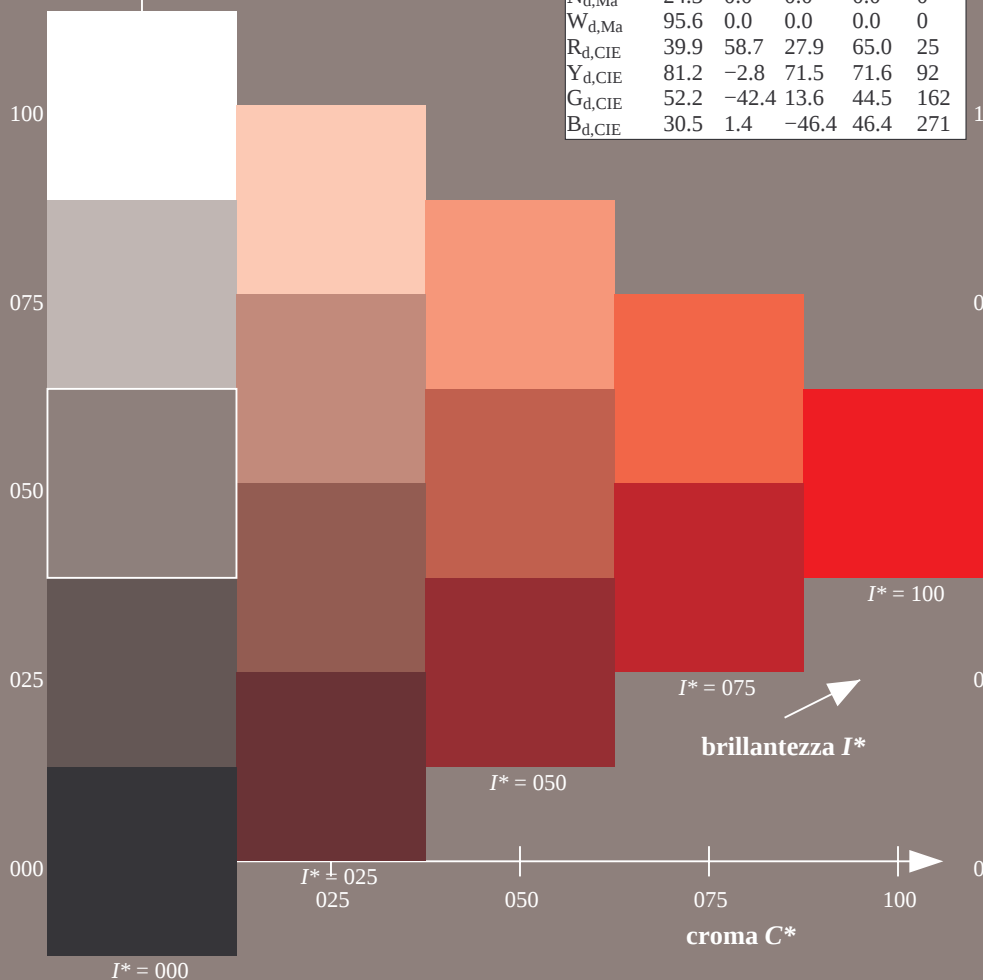


grafico TUB-PI97; codice di tinte:  $H^*_d=R00Y_d$   
grafico conformemente a DIN 33872, 3D=0, de=0,  $cmY0$

Input:  $rgb/cmyk \rightarrow rgb_d$   
Output: trasferire a  $cmY0_d$

Immettere y uscita: Offset Reflective System ORS18a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 32/360 = 0.08$

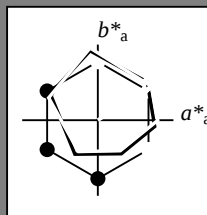
Dati del dispositivo (d) o  
colori elementari (e):

$HIC^*_d$

codice di tonalità per i colori  
questa pagina:

$H^*_d = R00Y_d$

triangolo chiarezza  $T^*$



ORS20a; dati atti CIELAB (a)

| name        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|-------------|-------------|---------|---------|--------------|--------------|
| $R_{d,Ma}$  | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| $Y_{d,Ma}$  | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| $G_{d,Ma}$  | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| $C_{d,Ma}$  | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| $B_{d,Ma}$  | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| $M_{d,Ma}$  | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| $N_{d,Ma}$  | 24.3        | 0.0     | 0.0     | 0.0          | 0            |
| $W_{d,Ma}$  | 95.6        | 0.0     | 0.0     | 0.0          | 0            |
| $R_{d,CIE}$ | 39.9        | 58.7    | 27.9    | 65.0         | 25           |
| $Y_{d,CIE}$ | 81.2        | -2.8    | 71.5    | 71.6         | 92           |
| $G_{d,CIE}$ | 52.2        | -42.4   | 13.6    | 44.5         | 162          |
| $B_{d,CIE}$ | 30.5        | 1.4     | -46.4   | 46.4         | 271          |

Il dati per il massimo colore (Ma):

$LabCh^*_{d,Ma}$ : 45 70 44 83 32

$HIC^*_{d,Ma}$ : R00Y\_100\_100d

$rgbic^*_{d,Ma}$ :

1.0 0.0 0.0 1.0 1.0

triangolo chiarezza  $T^*$

%Gamma

$u^*_{rel} = 92$

%Regularità

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 58$

ORS20a; dati atti CIELAB (a)

| $H^*_d$       | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---------------|-------------|---------|---------|--------------|--------------|
| R00Y_100_100d | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| R25Y_100_100d | 53.0        | 53.4    | 54.8    | 76.5         | 45           |
| R50Y_100_100d | 64.9        | 28.9    | 68.6    | 74.5         | 67           |
| R75Y_100_100d | 78.6        | 4.3     | 84.7    | 84.8         | 87           |
| Y00G_100_100d | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| Y25G_100_100d | 81.2        | -17.0   | 84.3    | 86.0         | 101          |
| Y50G_100_100d | 70.6        | -29.7   | 66.5    | 72.8         | 114          |
| Y75G_100_100d | 57.9        | -48.3   | 45.8    | 66.5         | 136          |
| G00B_100_100d | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| G25B_100_100d | 52.9        | -48.6   | -8.0    | 49.3         | 189          |
| G50B_100_100d | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| G75B_100_100d | 41.7        | -1.2    | -40.6   | 40.6         | 268          |
| B00R_100_100d | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| B25R_100_100d | 35.6        | 58.6    | -20.7   | 62.1         | 340          |
| B50R_100_100d | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| B75R_100_100d | 45.9        | 74.2    | 21.1    | 77.1         | 15           |

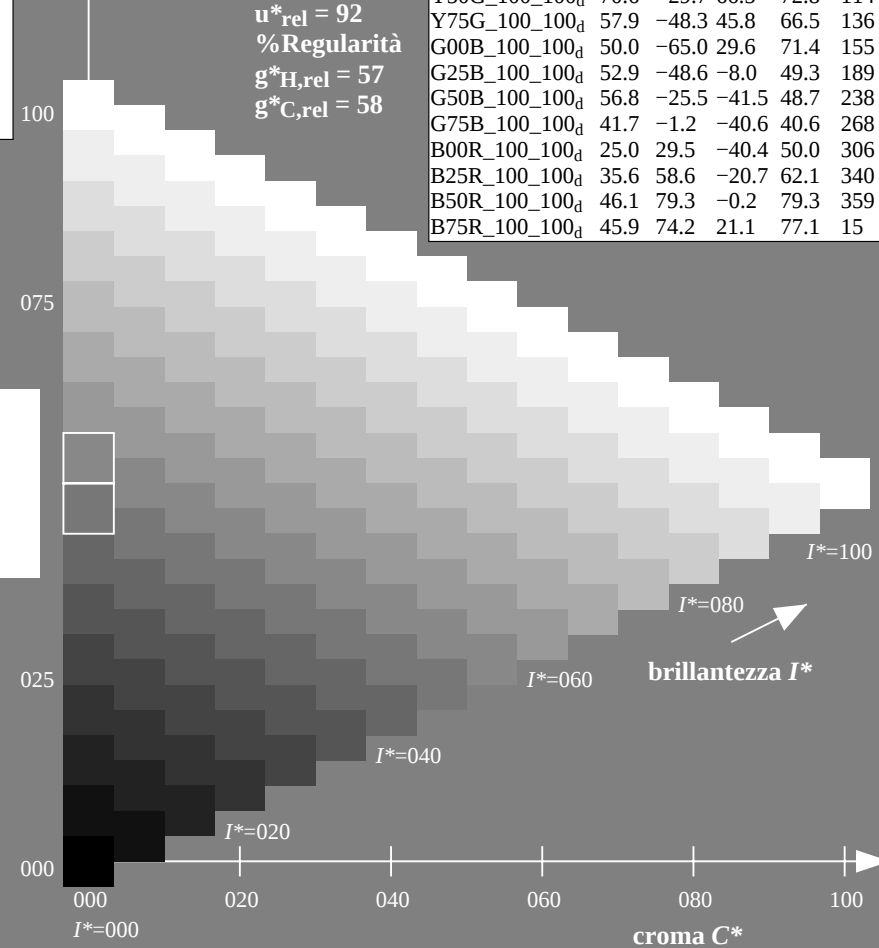
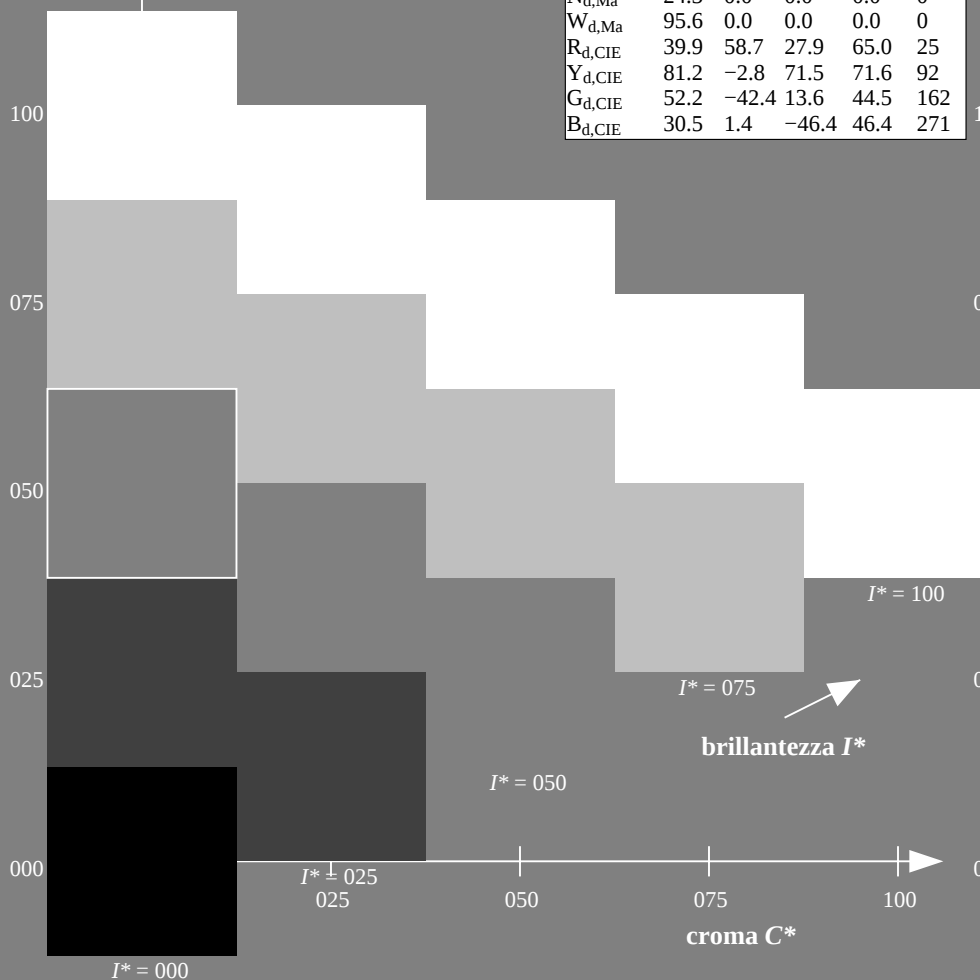


grafico TUB-PI97; codice di tinte:  $H^*_d=R00Y_d$   
grafico conformemente a DIN 33872, 3D=0, de=0,  $cmY0$

Input:  $rgb/cmyk \rightarrow rgb_d$   
Output: trasferire a  $cmY0_d$

Immettere y uscita: Offset Reflective System ORS18a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 32/360 = 0.08$

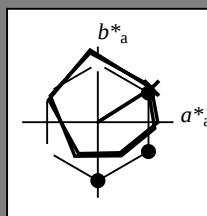
Dati del dispositivo (d) o  
colori elementari (e):

$HIC^*_d$

codice di tonalità per i colori  
questa pagina:

$H^*_d = R00Y_d$

triangolo chiarezza  $T^*$



ORS20a; dati atti CIELAB (a)

| name                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---------------------|-------------|---------|---------|--------------|--------------|
| R <sub>d</sub> ,Ma  | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| Y <sub>d</sub> ,Ma  | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| G <sub>d</sub> ,Ma  | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| C <sub>d</sub> ,Ma  | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| B <sub>d</sub> ,Ma  | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| M <sub>d</sub> ,Ma  | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| N <sub>d</sub> ,Ma  | 24.3        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>d</sub> ,Ma  | 95.6        | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>d</sub> ,CIE | 39.9        | 58.7    | 27.9    | 65.0         | 25           |
| Y <sub>d</sub> ,CIE | 81.2        | -2.8    | 71.5    | 71.6         | 92           |
| G <sub>d</sub> ,CIE | 52.2        | -42.4   | 13.6    | 44.5         | 162          |
| B <sub>d</sub> ,CIE | 30.5        | 1.4     | -46.4   | 46.4         | 271          |

Il dati per il massimo colore (Ma):

$LabCh^*_{d,Ma}$ : 45 70 44 83 32

$HIC^*_{d,Ma}$ : R00Y\_100\_100<sub>d</sub>

$rgbic^*_{d,Ma}$ :

1.0 0.0 0.0 1.0 1.0

triangolo chiarezza  $T^*$

%Gamma

$u^*_{rel} = 92$

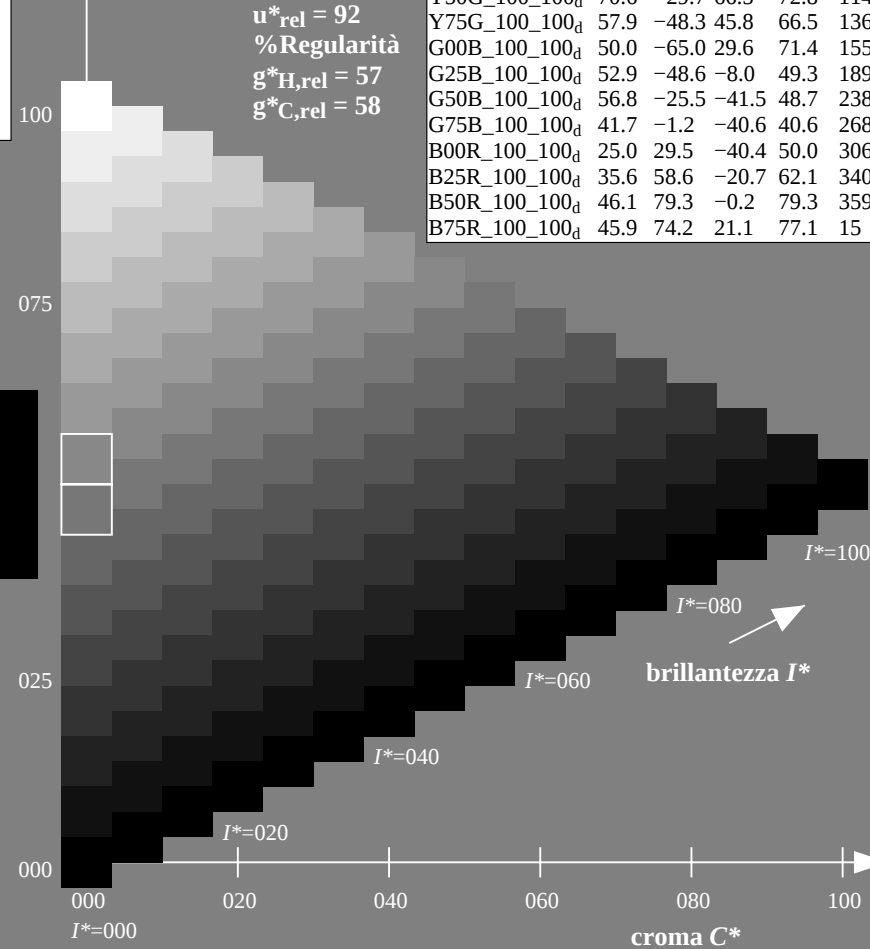
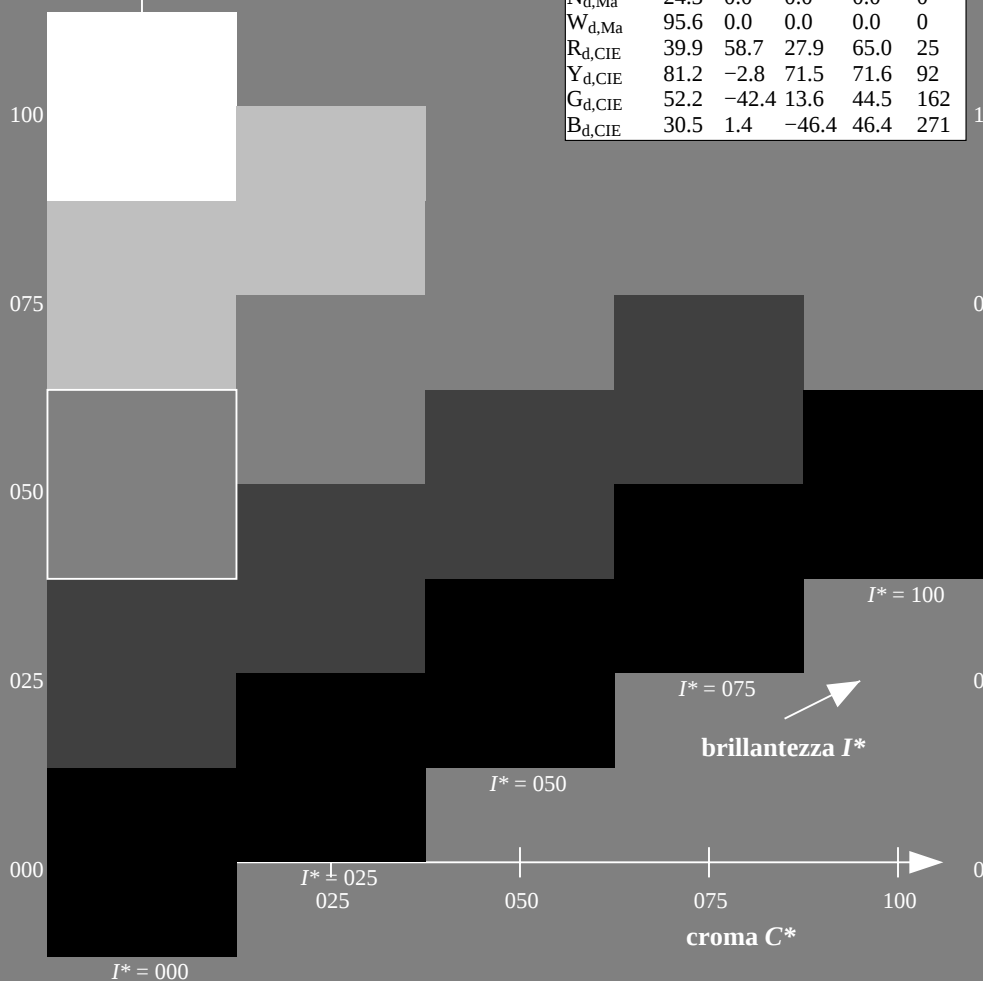
%Regolarità

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 58$

ORS20a; dati atti CIELAB (a)

| $H^*_d$                   | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---------------------------|-------------|---------|---------|--------------|--------------|
| R00Y_100_100 <sub>d</sub> | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| R25Y_100_100 <sub>d</sub> | 53.0        | 53.4    | 54.8    | 76.5         | 45           |
| R50Y_100_100 <sub>d</sub> | 64.9        | 28.9    | 68.6    | 74.5         | 67           |
| R75Y_100_100 <sub>d</sub> | 78.6        | 4.3     | 84.7    | 84.8         | 87           |
| Y00G_100_100 <sub>d</sub> | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| Y25G_100_100 <sub>d</sub> | 81.2        | -17.0   | 84.3    | 86.0         | 101          |
| Y50G_100_100 <sub>d</sub> | 70.6        | -29.7   | 66.5    | 72.8         | 114          |
| Y75G_100_100 <sub>d</sub> | 57.9        | -48.3   | 45.8    | 66.5         | 136          |
| G00B_100_100 <sub>d</sub> | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| G25B_100_100 <sub>d</sub> | 52.9        | -48.6   | -8.0    | 49.3         | 189          |
| G50B_100_100 <sub>d</sub> | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| G75B_100_100 <sub>d</sub> | 41.7        | -1.2    | -40.6   | 40.6         | 268          |
| B00R_100_100 <sub>d</sub> | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| B25R_100_100 <sub>d</sub> | 35.6        | 58.6    | -20.7   | 62.1         | 340          |
| B50R_100_100 <sub>d</sub> | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| B75R_100_100 <sub>d</sub> | 45.9        | 74.2    | 21.1    | 77.1         | 15           |



4-003331-L0 PI970-70

grafico TUB-PI97; codice di tinte:  $H^*_d=R00Y_d$   
grafico conformemente a DIN 33872, 3D=0, de=0,  $cmY_0$

Input:  $rgb/cmyk \rightarrow rgb_d$   
Output: trasferire a  $cmY_0_d$

4-003331-F0

Immettere y uscita: Offset Reflective System ORS18a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 32/360 = 0.08$

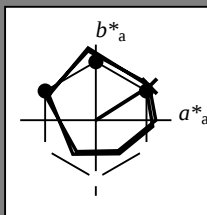
Dati del dispositivo (d) o colori elementari (e):

$HIC^*_d$

codice di tonalità per i colori questa pagina:

$H^*_d = R00Y_d$

triangolo chiarezza  $T^*$



ORS20a; dati atti CIELAB (a)

| name               | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| R <sub>d,Ma</sub>  | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| Y <sub>d,Ma</sub>  | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| G <sub>d,Ma</sub>  | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| C <sub>d,Ma</sub>  | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| B <sub>d,Ma</sub>  | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| M <sub>d,Ma</sub>  | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| N <sub>d,Ma</sub>  | 24.3        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>d,Ma</sub>  | 95.6        | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>d,CIE</sub> | 39.9        | 58.7    | 27.9    | 65.0         | 25           |
| Y <sub>d,CIE</sub> | 81.2        | -2.8    | 71.5    | 71.6         | 92           |
| G <sub>d,CIE</sub> | 52.2        | -42.4   | 13.6    | 44.5         | 162          |
| B <sub>d,CIE</sub> | 30.5        | 1.4     | -46.4   | 46.4         | 271          |

Il dati per il massimo colore (Ma):

$LabCh^*_{d,Ma}$ : 45 70 44 83 32

$HIC^*_{d,Ma}$ : R00Y\_100\_100<sub>d</sub>

$rgbic^*_{d,Ma}$ :

1.0 0.0 0.0 1.0 1.0

triangolo chiarezza  $T^*$

%Gamma

$u^*_{rel} = 92$

%Regolarità

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 58$

ORS20a; dati atti CIELAB (a)

| $H^*_d$                   | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|---------------------------|-------------|---------|---------|--------------|--------------|
| R00Y_100_100 <sub>d</sub> | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| R25Y_100_100 <sub>d</sub> | 53.0        | 53.4    | 54.8    | 76.5         | 45           |
| R50Y_100_100 <sub>d</sub> | 64.9        | 28.9    | 68.6    | 74.5         | 67           |
| R75Y_100_100 <sub>d</sub> | 78.6        | 4.3     | 84.7    | 84.8         | 87           |
| Y00G_100_100 <sub>d</sub> | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| Y25G_100_100 <sub>d</sub> | 81.2        | -17.0   | 84.3    | 86.0         | 101          |
| Y50G_100_100 <sub>d</sub> | 70.6        | -29.7   | 66.5    | 72.8         | 114          |
| Y75G_100_100 <sub>d</sub> | 57.9        | -48.3   | 45.8    | 66.5         | 136          |
| G00B_100_100 <sub>d</sub> | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| G25B_100_100 <sub>d</sub> | 52.9        | -48.6   | -8.0    | 49.3         | 189          |
| G50B_100_100 <sub>d</sub> | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| G75B_100_100 <sub>d</sub> | 41.7        | -1.2    | -40.6   | 40.6         | 268          |
| B00R_100_100 <sub>d</sub> | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| B25R_100_100 <sub>d</sub> | 35.6        | 58.6    | -20.7   | 62.1         | 340          |
| B50R_100_100 <sub>d</sub> | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| B75R_100_100 <sub>d</sub> | 45.9        | 74.2    | 21.1    | 77.1         | 15           |

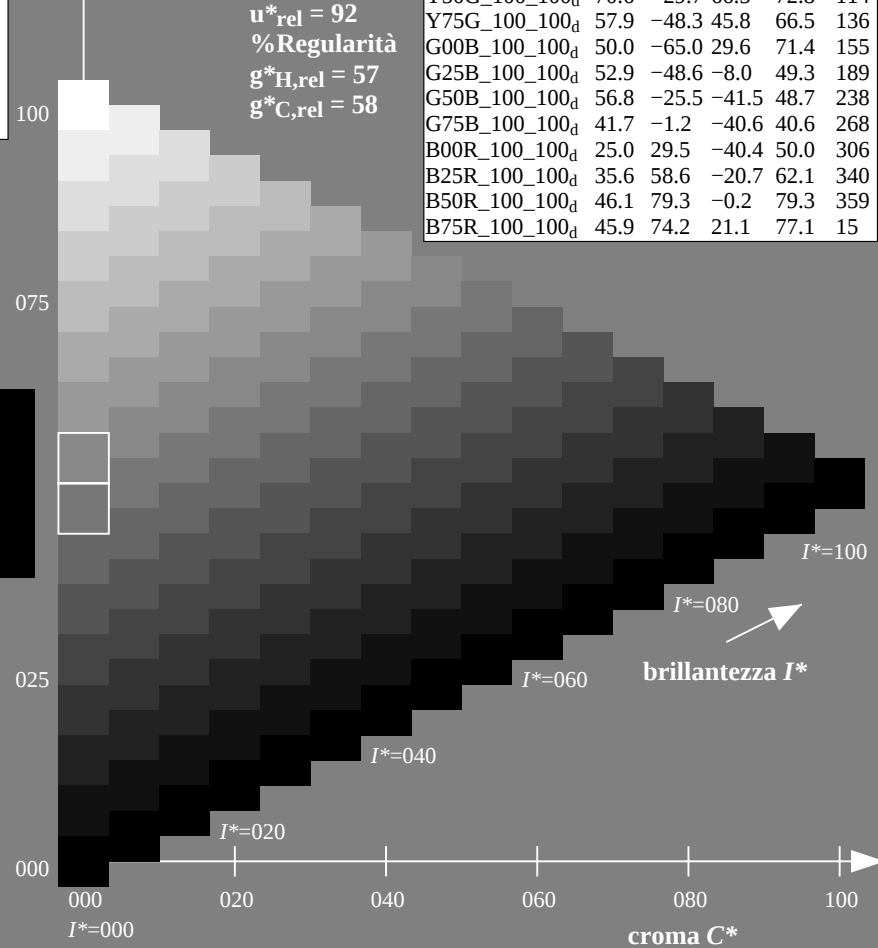
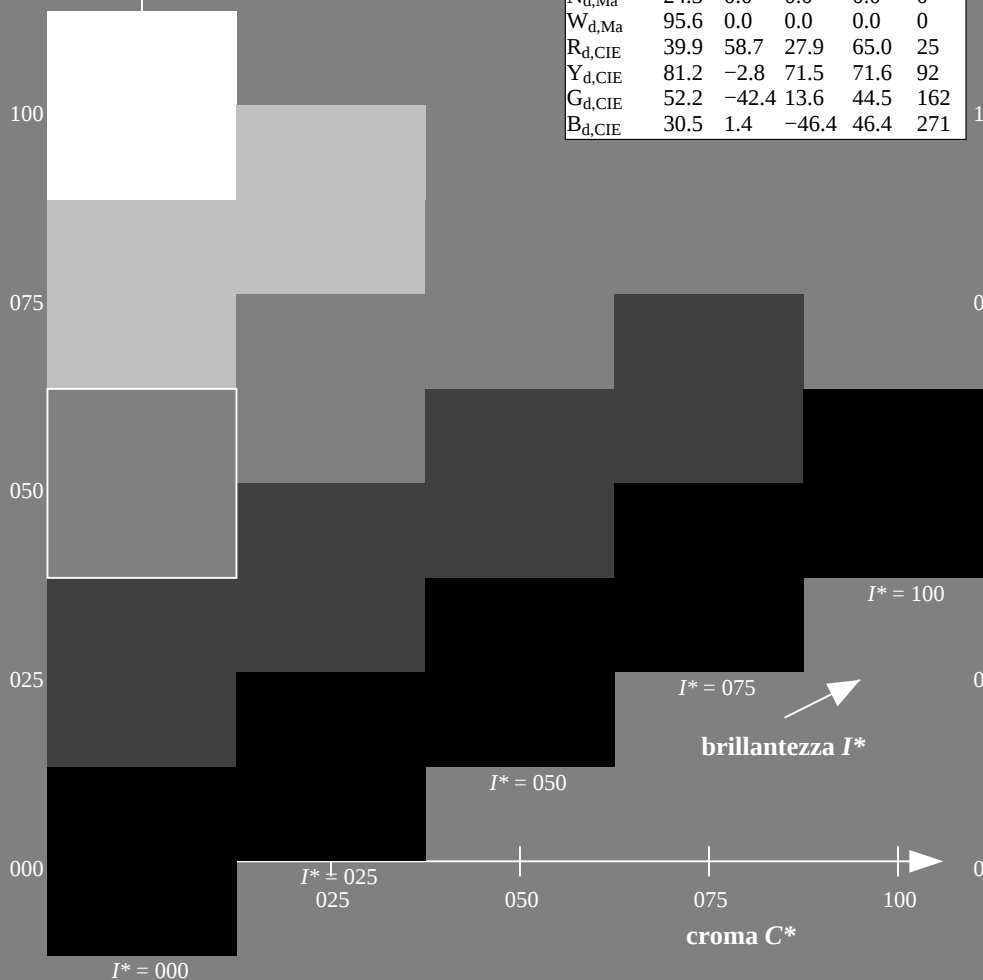


grafico TUB-PI97; codice di tinte:  $H^*_d=R00Y_d$   
grafico conformemente a DIN 33872, 3D=0, de=0,  $cmY_0$

Input:  $rgb/cmyk \rightarrow rgb_d$   
Output: trasferire a  $cmY_0_d$

iscrizione TUB: 20150701-PI97/PI97L0NP.PDF /.PS  
TUB materiale: code=rh4ta  
Applicazione per la misura dell'output output nella stampa di offset, separazione cmy0 (CMY0)



http://farbe.li.tu-berlin.de/PI97/PI97L0NP.PDF /.PS; Output di trasferimento  
N: nessuna linearizzazione 3D (OL) nel file (F) o PS-startup (S), pagine 6/33

vedi file simili: <http://farbe.li.tu-berlin.de/PI97/PI97.HTM>  
informazioni tecniche: <http://www.ps.bam.de> o <http://130.149.60.45/~farbmetrik>

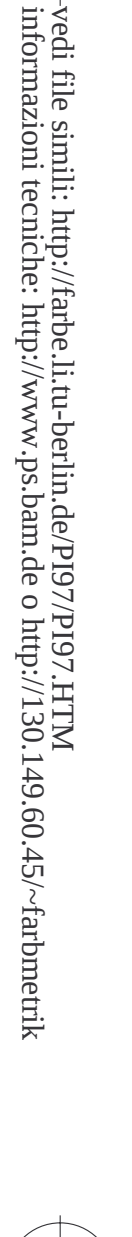
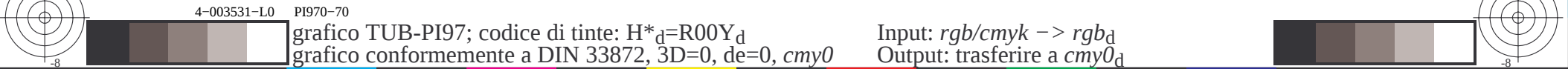


grafico TUB-PI97; codice di tinte:  $H^*_d=R00Y_d$   
grafico conformemente a DIN 33872, 3D=0,  $de=0$ ,  $cmy0$

Input:  $rgb/cmyk \rightarrow rgb_d$   
Output: trasferire a  $cmy0_d$



Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours  $RYGCBM_s$ :  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ; Six hue angles of the device colours  $RYGCBM_d$ :  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours  $RYGCBM_e$ :  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

$J=Y_d$

$LCH^*_d = 87.8 \ 96.0 \ 96.1$   
 $LAB^*_d = 87.8 \ -10.2 \ 95.4$   
 $rgb^*_d = 1.0 \ 1.0 \ 0.0$

$L=G_d$

$LCH^*_d = 50.0 \ 71.4 \ 155.5$   
 $LAB^*_d = 50.0 \ -65.0 \ 29.6$   
 $rgb^*_d = 0.0 \ 1.0 \ 0.0$

$C=C_d$

$LCH^*_d = 56.8 \ 48.7 \ 238.4$   
 $LAB^*_d = 56.8 \ -25.5 \ -41.5$   
 $rgb^*_d = 0.0 \ 1.0 \ 1.0$

$O=R_d$

$LCH^*_d = 45.4 \ 83.9 \ 32.3$   
 $LAB^*_d = 45.4 \ 70.9 \ 44.8$   
 $rgb^*_d = 1.0 \ 0.0 \ 0.0$

$M=M_d$

$LCH^*_d = 46.1 \ 79.3 \ 359.8$   
 $LAB^*_d = 46.1 \ 79.3 \ -0.2$   
 $rgb^*_d = 1.0 \ 0.0 \ 1.0$

$V=B_d$

$LCH^*_d = 25.0 \ 50.0 \ 306.2$   
 $LAB^*_d = 25.0 \ 29.5 \ -40.4$   
 $rgb^*_d = 0.0 \ 0.0 \ 1.0$

$Y_e$

$LCH^*_e = 83.6 \ 90.4 \ 92.3$   
 $LAB^*_e = 83.6 \ -3.6 \ 90.4$   
 $rgb^*_{de} = 1.0 \ 0.878 \ 0.0$

$G_e$

$LCH^*_e = 50.6 \ 65.2 \ 162.2$   
 $LAB^*_e = 50.6 \ -62.1 \ 19.9$   
 $rgb^*_{de} = 0.0 \ 1.0 \ 0.151$

$C_e$

$LCH^*_e = 55.0 \ 45.3 \ 216.9$   
 $LAB^*_e = 55.0 \ -36.2 \ -27.2$   
 $rgb^*_{de} = 0.0 \ 1.0 \ 0.747$

$B_e$

$LCH^*_e = 40.2 \ 40.6 \ 271.7$   
 $LAB^*_e = 40.2 \ 1.2 \ -40.6$   
 $rgb^*_{de} = 0.0 \ 0.458 \ 1.0$

$R_e$

$LCH^*_e = 45.6 \ 80.0 \ 25.4$   
 $LAB^*_e = 45.6 \ 72.2 \ 34.4$   
 $rgb^*_{de} = 1.0 \ 0.0 \ 0.254$

$M_e$

$LCH^*_e = 31.1 \ 55.9 \ 328.6$   
 $LAB^*_e = 31.1 \ 47.7 \ -29.1$   
 $rgb^*_{de} = 0.321 \ 0.0 \ 1.0$

$Y_s$

$LCH^*_s = 81.4 \ 87.9 \ 90.0$   
 $LAB^*_s = 81.4 \ 0.0 \ 87.9$   
 $rgb^*_{ds} = 1.0 \ 0.828 \ 0.0$

$G_s$

$LCH^*_s = 52.3 \ 68.9 \ 150.0$   
 $LAB^*_s = 52.3 \ -59.6 \ 34.4$   
 $rgb^*_{ds} = 0.062 \ 1.0 \ 0.0$

$R_s$

$LCH^*_s = 45.5 \ 82.4 \ 30.0$   
 $LAB^*_s = 45.5 \ 71.3 \ 41.2$   
 $rgb^*_{ds} = 1.0 \ 0.0 \ 0.096$

$M_s$

$LCH^*_s = 31.6 \ 56.5 \ 330.0$   
 $LAB^*_s = 31.6 \ 49.0 \ -28.2$   
 $rgb^*_{ds} = 0.337 \ 0.0 \ 1.0$

$B_s$

$LCH^*_s = 40.9 \ 40.6 \ 270.0$   
 $LAB^*_s = 40.9 \ 0.0 \ -40.6$   
 $rgb^*_{ds} = 0.0 \ 0.479 \ 1.0$

$(a^*_d, b^*_d), (a^*_s, b^*_s), (a^*_e, b^*_e)$

$rgb^*_d, LCH^*_d, LAB^*_d$

$h_{ab,s}, rgb^*_d$

$$h_{ab,s} = \text{atan} [ r^*_d \cos(30) + g^*_d \cos(150) ] / [ r^*_d \sin(30) + g^*_d \sin(150) + b^*_d \sin(270) ] \quad (1)$$

$h_{ab,s}$

$s: h_{ab,i} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0, 390.0 (i=0,6)$

$$h_{48ab,sij} = h_{ab,si} + j [h_{ab,si+1} - h_{ab,si}] / 8 (i = 0, 1, \dots, 5; j = 0, 1, \dots, 7) \quad (2)$$

$$h_{360ab,sij} = h_{ab,si} + j [h_{ab,si+1} - h_{ab,si}] / 60 (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59) \quad (3)$$

$h_{ab,e}$

$e: h_{ab,i} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6, 385.5 (i=0,6)$

$$h_{48ab,eij} = h_{ab,ei} + j [h_{ab,ei+1} - h_{ab,ei}] / 8 (i = 0, 1, \dots, 5; j = 0, 1, \dots, 7) \quad (4)$$

$$h_{360ab,eij} = h_{ab,ei} + j [h_{ab,ei+1} - h_{ab,ei}] / 60 (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59) \quad (5)$$

$h_{ab,d}$

$rgb^*_{de}$

4-003631-L0

PI970-70

$LAB^*Ia0, YN=0\%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB^*nw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0$

grafico TUB-PI97; codice di tinte:  $H^*_d=R00Y_d$   
cerchio delle tinte a 48 passi;  $rgb-LabCh^*$ tavole

Input:  $rgb/cmyk \rightarrow rgb_d$   
Output: trasferire a  $cmy0_d$

uscita: Offset standard print; separation cmy0\*, D65, pagina 7/33

4-003631-F0

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours  $RYGCBM_s$ :  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;  
Six hue angles of the device colours  $RYGCBM_d$ :  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours  $RYGCBM_e$ :  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| The lengths of the three colour channels (x=LabCh) for the 1000 test images |                   |                   |                       |                                  | The lengths of the three colour channels (x=LabCh) for the 1000 test images |                                   |                         |                                   |                         | The lengths of the three colour channels (x=LabCh) for the 1000 test images |                   |                   |                   |                       | The lengths of the three colour channels (x=LabCh) for the 1000 test images |                         |                                   |                         |                                   | The lengths of the three colour channels (x=LabCh) for the 1000 test images |                         |                   |                   |                   | The lengths of the three colour channels (x=LabCh) for the 1000 test images |                                  |                         |                                   |                         |                                   |                         |                         |      |    |
|-----------------------------------------------------------------------------|-------------------|-------------------|-----------------------|----------------------------------|-----------------------------------------------------------------------------|-----------------------------------|-------------------------|-----------------------------------|-------------------------|-----------------------------------------------------------------------------|-------------------|-------------------|-------------------|-----------------------|-----------------------------------------------------------------------------|-------------------------|-----------------------------------|-------------------------|-----------------------------------|-----------------------------------------------------------------------------|-------------------------|-------------------|-------------------|-------------------|-----------------------------------------------------------------------------|----------------------------------|-------------------------|-----------------------------------|-------------------------|-----------------------------------|-------------------------|-------------------------|------|----|
| h <sub>ab,d</sub>                                                           | h <sub>ab,s</sub> | h <sub>ab,e</sub> | rgb* <sub>dd64M</sub> | LAB* <sub>ddx64M</sub> (x=LabCh) | rgb* <sub>ddx361M</sub>                                                     | LAB* <sub>ddx361M</sub> (x=LabCh) | rgb* <sub>dsx361M</sub> | LAB* <sub>dsx361M</sub> (x=LabCh) | rgb* <sub>dex361M</sub> | LAB* <sub>dex361M</sub>                                                     | h <sub>ab,d</sub> | h <sub>ab,s</sub> | h <sub>ab,e</sub> | rgb* <sub>dd64M</sub> | LAB* <sub>ddx64M</sub> (x=LabCh)                                            | rgb* <sub>ddx361M</sub> | LAB* <sub>ddx361M</sub> (x=LabCh) | rgb* <sub>dsx361M</sub> | LAB* <sub>dsx361M</sub> (x=LabCh) | rgb* <sub>dex361M</sub>                                                     | LAB* <sub>dex361M</sub> | h <sub>ab,d</sub> | h <sub>ab,s</sub> | h <sub>ab,e</sub> | rgb* <sub>dd64M</sub>                                                       | LAB* <sub>ddx64M</sub> (x=LabCh) | rgb* <sub>ddx361M</sub> | LAB* <sub>ddx361M</sub> (x=LabCh) | rgb* <sub>dsx361M</sub> | LAB* <sub>dsx361M</sub> (x=LabCh) | rgb* <sub>dex361M</sub> | LAB* <sub>dex361M</sub> |      |    |
| 32.3                                                                        | 30.0              | 25.4              | 1.0                   | 0.0                              | 0.0                                                                         | 45.4                              | 70.9                    | 44.8                              | 83.9                    | 32.3                                                                        | 1.0               | 0.0               | 0.0               | 45.5                  | 70.9                                                                        | 44.9                    | 83.9                              | 32                      | 1.0                               | 0.0                                                                         | 0.096                   | 45.5              | 71.4              | 41.2              | 82.4                                                                        | 30                               | 1.0                     | 0.0                               | 0.255                   | 45.7                              | 72.2                    | 34.4                    | 80.0 | 25 |
| 38.1                                                                        | 37.5              | 33.8              | 1.0                   | 0.125                            | 0.0                                                                         | 48.9                              | 62.8                    | 49.4                              | 79.9                    | 38.1                                                                        | 1.0               | 0.117             | 0.0               | 48.7                  | 63.4                                                                        | 49.1                    | 80.2                              | 37                      | 1.0                               | 0.1                                                                         | 0.0                     | 48.2              | 64.5              | 48.6              | 80.7                                                                        | 37                               | 1.0                     | 0.021                             | 0.0                     | 46.0                              | 69.6                    | 45.7                    | 83.3 | 33 |
| 46.8                                                                        | 45.0              | 42.1              | 1.0                   | 0.25                             | 0.0                                                                         | 53.6                              | 51.9                    | 55.5                              | 76.0                    | 46.8                                                                        | 1.0               | 0.25              | 0.0               | 53.7                  | 52.0                                                                        | 55.5                    | 76.0                              | 46                      | 1.0                               | 0.223                                                                       | 0.0                     | 52.7              | 54.4              | 54.4              | 76.9                                                                        | 45                               | 1.0                     | 0.183                             | 0.0                     | 51.1                              | 57.9                    | 52.5                    | 78.1 | 42 |
| 56.9                                                                        | 52.5              | 50.5              | 1.0                   | 0.375                            | 0.0                                                                         | 59.1                              | 40.3                    | 62.0                              | 74.0                    | 56.9                                                                        | 1.0               | 0.367             | 0.0               | 58.8                  | 41.1                                                                        | 61.7                    | 74.2                              | 56                      | 1.0                               | 0.313                                                                       | 0.0                     | 56.5              | 46.2              | 59.1              | 75.0                                                                        | 52                               | 1.0                     | 0.288                             | 0.0                     | 55.4                              | 48.5                    | 57.8                    | 75.4 | 49 |
| 67.1                                                                        | 60.0              | 58.8              | 1.0                   | 0.5                              | 0.0                                                                         | 64.9                              | 28.9                    | 68.6                              | 74.5                    | 67.1                                                                        | 1.0               | 0.5               | 0.0               | 64.9                  | 28.9                                                                        | 68.7                    | 74.5                              | 67                      | 1.0                               | 0.412                                                                       | 0.0                     | 60.9              | 37.1              | 64.2              | 74.2                                                                        | 60                               | 1.0                     | 0.398                             | 0.0                     | 60.3                              | 38.3                    | 63.5                    | 74.1 | 58 |
| 78.6                                                                        | 67.5              | 67.2              | 1.0                   | 0.625                            | 0.0                                                                         | 72.1                              | 15.4                    | 77.1                              | 78.6                    | 78.6                                                                        | 1.0               | 0.617             | 0.0               | 71.6                  | 16.5                                                                        | 76.7                    | 78.4                              | 77                      | 1.0                               | 0.498                                                                       | 0.0                     | 64.8              | 29.1              | 68.6              | 74.5                                                                        | 67                               | 1.0                     | 0.494                             | 0.0                     | 64.6                              | 29.5                    | 68.4                    | 74.5 | 66 |
| 86.2                                                                        | 75.0              | 75.6              | 1.0                   | 0.75                             | 0.0                                                                         | 77.9                              | 5.4                     | 83.8                              | 84.0                    | 86.2                                                                        | 1.0               | 0.75              | 0.0               | 77.9                  | 5.5                                                                         | 83.9                    | 84.1                              | 86                      | 1.0                               | 0.585                                                                       | 0.0                     | 69.8              | 20.0              | 74.7              | 77.4                                                                        | 75                               | 1.0                     | 0.592                             | 0.0                     | 70.2                              | 19.3                    | 75.2                    | 77.6 | 75 |
| 92.1                                                                        | 82.5              | 83.9              | 1.0                   | 0.875                            | 0.0                                                                         | 83.4                              | -3.4                    | 90.2                              | 90.2                    | 92.1                                                                        | 1.0               | 0.867             | 0.0               | 83.1                  | -2.7                                                                        | 89.8                    | 89.9                              | 91                      | 1.0                               | 0.68                                                                        | 0.0                     | 74.7              | 11.3              | 80.3              | 81.1                                                                        | 82                               | 1.0                     | 0.703                             | 0.0                     | 75.8                              | 9.4                     | 81.5                    | 82.0 | 83 |
| 96.1                                                                        | 90.0              | 92.3              | 1.0                   | 1.0                              | 0.0                                                                         | 87.8                              | -10.2                   | 95.4                              | 96.0                    | 96.1                                                                        | 1.0               | 1.0               | 0.0               | 87.8                  | -10.1                                                                       | 95.5                    | 96.0                              | 96                      | 1.0                               | 0.829                                                                       | 0.0                     | 81.4              | 0.0               | 88.0              | 88.0                                                                        | 90                               | 1.0                     | 0.879                             | 0.0                     | 83.6                              | -3.6                    | 90.4                    | 90.5 | 92 |
| 98.8                                                                        | 97.5              | 101.0             | 0.875                 | 1.0                              | 0.0                                                                         | 84.3                              | -13.9                   | 89.2                              | 90.3                    | 98.8                                                                        | 0.883             | 1.0               | 0.0               | 84.6                  | -13.6                                                                       | 89.7                    | 90.7                              | 98                      | 0.959                             | 1.0                                                                         | 0.0                     | 86.7              | -11.4             | 93.5              | 94.2                                                                        | 97                               | 0.807                   | 1.0                               | 0.0                     | 82.4                              | -15.8                   | 86.2                    | 87.7 | 10 |
| 101.8                                                                       | 105.0             | 109.7             | 0.75                  | 1.0                              | 0.0                                                                         | 80.7                              | -17.5                   | 83.5                              | 85.3                    | 101.8                                                                       | 0.75              | 1.0               | 0.0               | 80.8                  | -17.4                                                                       | 83.6                    | 85.4                              | 101                     | 0.682                             | 1.0                                                                         | 0.0                     | 77.8              | -21.2             | 79.4              | 82.2                                                                        | 105                              | 0.583                   | 1.0                               | 0.0                     | 73.7                              | -26.1                   | 72.7                    | 77.3 | 10 |
| 107.6                                                                       | 112.5             | 118.5             | 0.625                 | 1.0                              | 0.0                                                                         | 75.3                              | -24.0                   | 75.7                              | 79.4                    | 107.6                                                                       | 0.633             | 1.0               | 0.0               | 75.7                  | -23.6                                                                       | 76.3                    | 79.9                              | 107                     | 0.54                              | 1.0                                                                         | 0.0                     | 72.1              | -28.0             | 69.5              | 75.0                                                                        | 112                              | 0.434                   | 1.0                               | 0.0                     | 68.0                              | -32.9                   | 62.2                    | 70.5 | 11 |
| 114.0                                                                       | 120.0             | 127.2             | 0.5                   | 1.0                              | 0.0                                                                         | 70.6                              | -29.7                   | 66.5                              | 72.8                    | 114.0                                                                       | 0.5               | 1.0               | 0.0               | 70.6                  | -29.6                                                                       | 66.5                    | 72.8                              | 114                     | 0.399                             | 1.0                                                                         | 0.0                     | 66.7              | -34.5             | 59.9              | 69.2                                                                        | 120                              | 0.322                   | 1.0                               | 0.0                     | 62.6                              | -40.8                   | 53.8                    | 67.6 | 12 |
| 121.4                                                                       | 127.5             | 136.0             | 0.375                 | 1.0                              | 0.0                                                                         | 65.7                              | -35.6                   | 58.3                              | 68.3                    | 121.4                                                                       | 0.383             | 1.0               | 0.0               | 66.1                  | -35.2                                                                       | 58.9                    | 68.6                              | 120                     | 0.325                             | 1.0                                                                         | 0.0                     | 62.8              | -40.6             | 54.0              | 67.6                                                                        | 127                              | 0.249                   | 1.0                               | 0.0                     | 58.4                              | -47.4                   | 46.8                    | 66.6 | 13 |
| 135.3                                                                       | 135.0             | 144.7             | 0.25                  | 1.0                              | 0.0                                                                         | 58.4                              | -47.3                   | 46.8                              | 66.6                    | 135.3                                                                       | 0.25              | 1.0               | 0.0               | 58.4                  | -47.3                                                                       | 46.9                    | 66.6                              | 135                     | 0.253                             | 1.0                                                                         | 0.0                     | 58.6              | -47.0             | 47.1              | 66.7                                                                        | 135                              | 0.122                   | 1.0                               | 0.0                     | 54.6                              | -54.2                   | 38.4                    | 66.5 | 14 |
| 144.4                                                                       | 142.5             | 153.4             | 0.125                 | 1.0                              | 0.0                                                                         | 54.7                              | -53.9                   | 38.5                              | 66.3                    | 144.4                                                                       | 0.133             | 1.0               | 0.0               | 55.0                  | -53.5                                                                       | 39.2                    | 66.4                              | 143                     | 0.159                             | 1.0                                                                         | 0.0                     | 55.7              | -52.3             | 40.9              | 66.4                                                                        | 142                              | 0.03                    | 1.0                               | 0.0                     | 51.2                              | -62.4                   | 32.0                    | 70.2 | 15 |
| 155.5                                                                       | 150.0             | 162.2             | 0.0                   | 1.0                              | 0.0                                                                         | 50.0                              | -65.0                   | 29.6                              | 71.4                    | 155.5                                                                       | 0.0               | 1.0               | 0.0               | 50.1                  | -64.9                                                                       | 29.6                    | 71.4                              | 155                     | 0.062                             | 1.0                                                                         | 0.0                     | 52.4              | -59.6             | 34.5              | 68.9                                                                        | 150                              | 0.0                     | 1.0                               | 0.151                   | 50.7                              | -62.0                   | 19.9                    | 65.2 | 16 |
| 160.7                                                                       | 157.5             | 169.0             | 0.0                   | 1.0                              | 0.125                                                                       | 50.5                              | -62.8                   | 21.9                              | 66.5                    | 160.7                                                                       | 0.0               | 1.0               | 0.117             | 50.5                  | -62.9                                                                       | 22.4                    | 66.9                              | 160                     | 0.0                               | 1.0                                                                         | 0.035                   | 50.2              | -64.4             | 27.4              | 70.0                                                                        | 157                              | 0.0                     | 1.0                               | 0.261                   | 51.3                              | -58.5                   | 11.8                    | 59.8 | 16 |
| 167.7                                                                       | 165.0             | 175.9             | 0.0                   | 1.0                              | 0.25                                                                        | 51.2                              | -58.9                   | 12.7                              | 60.3                    | 167.7                                                                       | 0.0               | 1.0               | 0.25              | 51.2                  | -58.8                                                                       | 12.7                    | 60.3                              | 167                     | 0.0                               | 1.0                                                                         | 0.2                     | 51.0              | -60.5             | 16.2              | 62.8                                                                        | 165                              | 0.0                     | 1.0                               | 0.364                   | 52.0                              | -55.0                   | 3.9                     | 55.2 | 17 |
| 176.7                                                                       | 172.5             | 182.7             | 0.0                   | 1.0                              | 0.375                                                                       | 52.0                              | -54.5                   | 3.1                               | 54.6                    | 176.7                                                                       | 0.0               | 1.0               | 0.367             | 52.0                  | -54.8                                                                       | 3.7                     | 55.1                              | 176                     | 0.0                               | 1.0                                                                         | 0.309                   | 51.6              | -57.0             | 8.0               | 57.7                                                                        | 172                              | 0.0                     | 1.0                               | 0.43                    | 52.5                              | -52.2                   | -2.0                    | 52.3 | 18 |
| 189.3                                                                       | 180.0             | 189.6             | 0.0                   | 1.0                              | 0.5                                                                         | 52.9                              | -48.6                   | -8.0                              | 49.3                    | 189.3                                                                       | 0.0               | 1.0               | 0.5               | 53.0                  | -48.6                                                                       | -7.9                    | 49.3                              | 189                     | 0.0                               | 1.0                                                                         | 0.407                   | 52.3              | -53.2             | 0.0               | 53.3                                                                        | 180                              | 0.0                     | 1.0                               | 0.502                   | 53.0                              | -48.5                   | -8.1                    | 49.3 | 18 |
| 203.2                                                                       | 187.5             | 196.4             | 0.0                   | 1.0                              | 0.625                                                                       | 54.0                              | -42.3                   | -18.1                             | 46.1                    | 203.2                                                                       | 0.0               | 1.0               | 0.617             | 54.0                  | -42.8                                                                       | -17.5                   | 46.3                              | 202                     | 0.0                               | 1.0                                                                         | 0.477                   | 52.8              | -49.9             | -6.0              | 50.3                                                                        | 187                              | 0.0                     | 1.0                               | 0.56                    | 53.5                              | -45.9                   | -13.1                   | 47.8 | 19 |
| 217.2                                                                       | 195.0             | 203.2             | 0.0                   | 1.0                              | 0.75                                                                        | 55.0                              | -36.0                   | -27.4                             | 45.3                    | 217.2                                                                       | 0.0               | 1.0               | 0.75              | 55.0                  | -35.9                                                                       | -27.3                   | 45.3                              | 217                     | 0.0                               | 1.0                                                                         | 0.551                   | 53.4              | -46.3             | -12.3             | 48.0                                                                        | 195                              | 0.0                     | 1.0                               | 0.626                   | 54.1                              | -42.3                   | -18.1                   | 46.1 | 20 |
| 228.3                                                                       | 202.5             | 210.1             | 0.0                   | 1.0                              | 0.875                                                                       | 55.8                              | -30.7                   | -34.5                             | 46.2                    | 228.3                                                                       | 0.0               | 1.0               | 0.867             | 55.8                  | -31.0                                                                       | -34.0                   | 46.1                              | 227                     | 0.0                               | 1.0                                                                         | 0.614                   | 54.0              | -42.9             | -17.3             | 46.4                                                                        | 202                              | 0.0                     | 1.0                               | 0.682                   | 54.5                              | -39.6                   | -22.6                   | 45.7 | 20 |
| 238.4                                                                       | 210.0             | 216.9             | 0.0                   | 1.0                              | 1.0                                                                         | 56.8                              | -25.5                   | -41.5                             | 48.7                    | 238.4                                                                       | 0.0               | 1.0               | 1.0               | 56.8                  | -25.4                                                                       | -41.4                   | 48.7                              | 238                     | 0.0                               | 1.0                                                                         | 0.685                   | 54.5              | -39.5             | -22.8             | 45.7                                                                        | 210                              | 0.0                     | 1.0                               | 0.747                   | 55.0                              | -36.1                   | -27.2                   | 45.3 | 21 |
| 242.9                                                                       | 217.5             | 223.8             | 0.0                   | 0.875                            | 1.0                                                                         | 54.1                              | -21.1                   | -41.3                             | 46.4                    | 242.9                                                                       | 0.0               | 0.883             | 1.0               | 54.3                  | -21.4                                                                       | -41.3                   | 46.6                              | 242                     | 0.0                               | 1.0                                                                         | 0.747                   | 55.0              | -36.1             | -27.2             | 45.3                                                                        | 217                              | 0.0                     | 1.0                               | 0.819                   | 55.5                              | -33.2                   | -31.3                   | 45.8 | 22 |
| 249.3                                                                       | 225.0             | 230.6             | 0.0                   | 0.75                             | 1.0                                                                         | 50.4                              | -15.5                   | -41.1                             | 43.9                    | 249.3                                                                       | 0.0               | 0.75              | 1.0               | 50.4                  | -15.4                                                                       | -41.0                   | 44.0                              | 249                     | 0.0                               | 1.0                                                                         | 0.837                   | 55.6              | -32.4             | -32.4             | 45.9                                                                        | 225                              | 0.0                     | 1.0                               | 0.904                   | 56.1                              | -29.6                   | -36.1                   | 46.8 | 23 |
| 256.9                                                                       | 232.5             | 237.5             | 0.0                   | 0.625                            | 1.0                                                                         | 46.5                              | -9.4                    | -40.8                             | 41.9                    | 256.9                                                                       | 0.0               | 0.633             | 1.0               | 46.8                  | -9.8                                                                        | -40.8                   | 42.1                              | 256                     | 0.0                               | 1.0                                                                         | 0.92                    | 56.2              | -28.9             | -37.0             | 47.1                                                                        | 232                              | 0.0                     | 1.0                               | 0.983                   | 56.7                              | -26.2                   | -40.5                   | 48.4 | 23 |
| 268.2                                                                       | 240.0             | 244.3             | 0.0                   | 0.5                              | 1.0                                                                         | 41.7                              | -1.2                    | -40.6                             | 40.6                    | 268.2                                                                       | 0.0               | 0.5               | 1.0               | 41.7                  | -1.1                                                                        | -40.6                   | 40.7                              | 268                     | 0.0                               | 0.956                                                                       | 1.0                     | 55.9              | -23.9             | -41.4             | 48.0                                                                        | 240                              | 0.0                     | 0.847                             | 1.0                     | 53.3                              | -19.8                   | -41.3                   | 45.9 | 24 |
| 278.6                                                                       | 247.5             | 251.2             | 0.0                   | 0.375                            | 1.0                                                                         | 37.3                              | 6.1                     | -40.2                             | 40.7                    | 278.6                                                                       | 0.0               | 0.383             | 1.0               | 37.6                  | 5.6                                                                         | -40.2                   | 40.7                              | 277                     | 0.0                               | 0.795                                                                       | 1.0                     | 51.8              | -17.4             | -41.2             | 44.9                                                                        | 247                              | 0.0                     | 0.726                             | 1.0                     | 49.7                              | -14.3                   | -41.1                   | 43.6 | 25 |
| 289.6                                                                       | 255.0             | 258.0             | 0.0                   | 0.25                             | 1.0                                                                         | 32.8                              | 14.3                    | -40.2                             | 42.7                    | 289.6                                                                       | 0.0               | 0.25              | 1.0               | 32.9                  | 14.4                                                                        | -40.1                   | 42.7                              | 289                     | 0.0                               | 0.657                                                                       | 1.0                     | 47.5              | -10.9             | -40.9             | 42.5                                                                        | 255                              | 0.0                     | 0.613                             | 1.0                     | 46.1                              | -8.6                    | -40.8                   | 41.9 | 25 |
| 299.0                                                                       | 262.5             | 264               |                       |                                  |                                                                             |                                   |                         |                                   |                         |                                                                             |                   |                   |                   |                       |                                                                             |                         |                                   |                         |                                   |                                                                             |                         |                   |                   |                   |                                                                             |                                  |                         |                                   |                         |                                   |                         |                         |      |    |

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours  $RYGCBM_s$ :  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;  
Six hue angles of the device colours  $RYGCBM_d$ :  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours  $RYGCBM_e$ :  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| $h_{ab,d}$ | $h_{ab,s}$ | $h_{ab,e}$ | $rgb^*$<br>dd64M | $LAB^*$<br>dd64M (x=LabCh) |       | $rgb^*$<br>dex361M | $LAB^*$<br>dex361M | $rgb^*$<br>dd | $rgb^*$<br>ds | $rgb^*$<br>de |
|------------|------------|------------|------------------|----------------------------|-------|--------------------|--------------------|---------------|---------------|---------------|
| 32.3       | 30.0       | 25.4       | 1.0              | 0.0                        | 0.0   | 45.4               | 70.9               | 44.8          | 83.9          | 32.3          |
| 38.1       | 37.5       | 33.8       | 1.0              | 0.125                      | 0.0   | 48.9               | 62.8               | 49.4          | 79.9          | 38.1          |
| 46.8       | 45.0       | 42.1       | 1.0              | 0.25                       | 0.0   | 53.6               | 51.9               | 55.5          | 76.0          | 46.8          |
| 56.9       | 52.5       | 50.5       | 1.0              | 0.375                      | 0.0   | 59.1               | 40.3               | 62.0          | 74.0          | 56.9          |
| 67.1       | 60.0       | 58.8       | 1.0              | 0.5                        | 0.0   | 64.9               | 28.9               | 68.6          | 74.5          | 67.1          |
| 78.6       | 67.5       | 67.2       | 1.0              | 0.625                      | 0.0   | 72.1               | 15.4               | 77.1          | 78.6          | 78.6          |
| 86.2       | 75.0       | 75.6       | 1.0              | 0.75                       | 0.0   | 77.9               | 5.4                | 83.8          | 84.0          | 86.2          |
| 92.1       | 82.5       | 83.9       | 1.0              | 0.875                      | 0.0   | 83.4               | -3.4               | 90.2          | 90.2          | 92.1          |
| 96.1       | 90.0       | 92.3       | 1.0              | 1.0                        | 0.0   | 87.8               | -10.2              | 95.4          | 96.0          | 96.1          |
| 98.8       | 97.5       | 101.0      | 0.875            | 1.0                        | 0.0   | 84.3               | -13.9              | 89.2          | 90.3          | 98.8          |
| 101.8      | 105.0      | 109.7      | 0.75             | 1.0                        | 0.0   | 80.7               | -17.5              | 83.5          | 85.3          | 101.8         |
| 107.6      | 112.5      | 118.5      | 0.625            | 1.0                        | 0.0   | 75.3               | -24.0              | 75.7          | 79.4          | 107.6         |
| 114.0      | 120.0      | 127.2      | 0.5              | 1.0                        | 0.0   | 70.6               | -29.7              | 66.5          | 72.8          | 114.0         |
| 121.4      | 127.5      | 136.0      | 0.375            | 1.0                        | 0.0   | 65.7               | -35.6              | 58.3          | 68.3          | 121.4         |
| 135.3      | 135.0      | 144.7      | 0.25             | 1.0                        | 0.0   | 58.4               | -47.3              | 46.8          | 66.6          | 135.3         |
| 144.4      | 142.5      | 153.4      | 0.125            | 1.0                        | 0.0   | 54.7               | -53.9              | 38.5          | 66.3          | 144.4         |
| 155.5      | 150.0      | 162.2      | 0.0              | 1.0                        | 0.0   | 50.0               | -65.0              | 29.6          | 71.4          | 155.5         |
| 160.7      | 157.5      | 169.0      | 0.0              | 1.0                        | 0.125 | 50.5               | -62.8              | 21.9          | 66.5          | 160.7         |
| 167.7      | 165.0      | 175.9      | 0.0              | 1.0                        | 0.25  | 51.2               | -58.9              | 12.7          | 60.3          | 167.7         |
| 176.7      | 172.5      | 182.7      | 0.0              | 1.0                        | 0.375 | 52.0               | -54.5              | 3.1           | 54.6          | 176.7         |
| 189.3      | 180.0      | 189.6      | 0.0              | 1.0                        | 0.5   | 52.9               | -48.6              | -8.0          | 49.3          | 189.3         |
| 203.2      | 187.5      | 196.4      | 0.0              | 1.0                        | 0.625 | 54.0               | -42.3              | -18.1         | 46.1          | 203.2         |
| 217.2      | 195.0      | 203.2      | 0.0              | 1.0                        | 0.75  | 55.0               | -36.0              | -27.4         | 45.3          | 217.2         |
| 228.3      | 202.5      | 210.1      | 0.0              | 1.0                        | 0.875 | 55.8               | -30.7              | -34.5         | 46.2          | 228.3         |
| 238.4      | 210.0      | 216.9      | 0.0              | 1.0                        | 1.0   | 56.8               | -25.5              | -41.5         | 48.7          | 238.4         |
| 242.9      | 217.5      | 223.8      | 0.0              | 0.875                      | 1.0   | 54.1               | -21.1              | -41.3         | 46.4          | 242.9         |
| 249.3      | 225.0      | 230.6      | 0.0              | 0.75                       | 1.0   | 50.4               | -15.5              | -41.1         | 43.9          | 249.3         |
| 256.9      | 232.5      | 237.5      | 0.0              | 0.625                      | 1.0   | 46.5               | -9.4               | -40.8         | 41.9          | 256.9         |
| 268.2      | 240.0      | 244.3      | 0.0              | 0.5                        | 1.0   | 41.7               | -1.2               | -40.6         | 40.6          | 268.2         |
| 278.6      | 247.5      | 251.2      | 0.0              | 0.375                      | 1.0   | 37.3               | 6.1                | -40.2         | 40.7          | 278.6         |
| 289.6      | 255.0      | 258.0      | 0.0              | 0.25                       | 1.0   | 32.8               | 14.3               | -40.2         | 42.7          | 289.6         |
| 299.0      | 262.5      | 264.8      | 0.0              | 0.125                      | 1.0   | 28.6               | 22.4               | -40.2         | 46.1          | 299.0         |
| 306.2      | 270.0      | 271.7      | 0.0              | 0.0                        | 1.0   | 25.0               | 29.5               | -40.4         | 50.0          | 306.2         |
| 314.7      | 277.5      | 278.8      | 0.125            | 0.0                        | 1.0   | 27.9               | 36.0               | -36.4         | 51.2          | 314.7         |
| 322.1      | 285.0      | 285.9      | 0.25             | 0.0                        | 1.0   | 28.8               | 41.9               | -32.5         | 53.1          | 322.1         |
| 333.3      | 292.5      | 293.0      | 0.375            | 0.0                        | 1.0   | 32.7               | 51.8               | -26.0         | 58.0          | 333.3         |
| 340.5      | 300.0      | 300.1      | 0.5              | 0.0                        | 1.0   | 35.6               | 58.6               | -20.7         | 62.1          | 340.5         |
| 347.9      | 307.5      | 307.2      | 0.625            | 0.0                        | 1.0   | 38.1               | 65.4               | -14.0         | 66.9          | 347.9         |
| 352.5      | 315.0      | 314.3      | 0.75             | 0.0                        | 1.0   | 41.8               | 71.0               | -9.2          | 71.6          | 352.5         |
| 356.1      | 322.5      | 321.4      | 0.875            | 0.0                        | 1.0   | 44.2               | 75.2               | -5.0          | 75.3          | 356.1         |
| 359.8      | 330.0      | 328.6      | 1.0              | 0.0                        | 1.0   | 46.1               | 79.3               | -0.2          | 79.3          | 359.8         |
| 363.0      | 337.5      | 335.7      | 1.0              | 0.0                        | 0.875 | 45.9               | 78.2               | 4.1           | 78.3          | 363.0         |
| 366.4      | 345.0      | 342.8      | 1.0              | 0.0                        | 0.75  | 45.9               | 77.1               | 8.6           | 77.6          | 366.4         |
| 371.1      | 352.5      | 349.9      | 1.0              | 0.0                        | 0.625 | 46.0               | 75.6               | 14.8          | 77.0          | 371.1         |
| 375.9      | 360.0      | 357.0      | 1.0              | 0.0                        | 0.5   | 45.9               | 74.2               | 21.1          | 77.1          | 375.9         |
| 381.2      | 367.5      | 364.1      | 1.0              | 0.0                        | 0.375 | 45.8               | 72.9               | 28.3          | 78.3          | 381.2         |
| 385.6      | 375.0      | 371.2      | 1.0              | 0.0                        | 0.25  | 45.6               | 72.1               | 34.6          | 80.0          | 385.6         |
| 389.3      | 382.5      | 378.3      | 1.0              | 0.0                        | 0.125 | 45.5               | 71.4               | 40.1          | 81.9          | 389.3         |
| 392.3      | 390.0      | 385.4      | 1.0              | 0.0                        | 0.0   | 45.4               | 70.9               | 44.8          | 83.9          | 392.3         |

4-003831-L0

PI970-70

LAB\*la0, YN=0%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB\*nw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0

uscita: Offset standard print; separation cmy0\*, D65, pagina 9/33

grafico TUB-PI97; codice di tinte:  $H^*_d=R00Y_d$   
cerchio delle tinte a 48 passi;  $rgb-LabCh^*tavole$

Input:  $rgb/cmyk \rightarrow rgb_d$   
Output: trasferire a  $cmy0_d$

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM<sub>s</sub>:  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;  
Six hue angles of the device colours RYGBM<sub>d</sub>:  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours RYGBM<sub>c</sub>:  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| Six hue angles of the device colours RYGBM: $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours RYGBM: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$ |            |            |                  |                              |       |                                      |                              |               |                                      |                   |                              |       |                   |              |              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|------------------|------------------------------|-------|--------------------------------------|------------------------------|---------------|--------------------------------------|-------------------|------------------------------|-------|-------------------|--------------|--------------|
| $h_{ab,d}$                                                                                                                                                                                            | $h_{ab,s}$ | $h_{ab,e}$ | $rgb^*_{dd361M}$ | $LAB^*_{ddx361Mi}$ (x=LabCh) | $R_d$ | $rgb^*_{ds361Mi}$                    | $LAB^*_{dsx361Mi}$ (x=LabCh) | $R_s$         | $rgb^*_{dd361Mi}$                    | $rgb^*_{de361Mi}$ | $LAB^*_{dex361Mi}$ (x=LabCh) | $R_e$ | $rgb^*_{dd361Mi}$ | $rgb^*_{ds}$ | $rgb^*_{de}$ |
| 32                                                                                                                                                                                                    | 30         | 25         | 1.0 0.0 0.0      | 45.4 70.9 44.8 83.9 32       |       | 1.0 0.0 0.096 45.5 71.4 41.2 82.4 30 |                              | 1.0 0.0 0.0   | 1.0 0.0 0.255 45.7 72.2 34.4 80.0 25 |                   | 1.0 0.0 0.0                  |       |                   |              |              |
| 33                                                                                                                                                                                                    | 31         | 26         | 1.0 0.016 0.0    | 45.9 69.8 45.5 83.4 33       |       | 1.0 0.0 0.055 45.5 71.2 42.8 83.1 31 |                              | 1.0 0.017 0.0 | 1.0 0.0 0.218 45.6 72.0 36.1 80.6 26 |                   | 1.0 0.017 0.0                |       |                   |              |              |
| 33                                                                                                                                                                                                    | 32         | 27         | 1.0 0.033 0.0    | 46.3 68.8 46.1 82.8 33       |       | 1.0 0.0 0.013 45.5 71.0 44.4 83.7 32 |                              | 1.0 0.033 0.0 | 1.0 0.0 0.18 45.6 71.8 37.7 81.1 27  |                   | 1.0 0.033 0.0                |       |                   |              |              |
| 34                                                                                                                                                                                                    | 33         | 28         | 1.0 0.05 0.0     | 46.8 67.7 46.8 82.3 34       |       | 1.0 0.015 0.0 45.9 70.0 45.5 83.5 33 |                              | 1.0 0.05 0.0  | 1.0 0.0 0.142 45.6 71.6 39.4 81.7 28 |                   | 1.0 0.05 0.0                 |       |                   |              |              |
| 35                                                                                                                                                                                                    | 34         | 29         | 1.0 0.066 0.0    | 47.3 66.6 47.4 81.8 35       |       | 1.0 0.036 0.0 46.5 68.6 46.3 82.8 34 |                              | 1.0 0.067 0.0 | 1.0 0.0 0.099 45.5 71.4 41.1 82.4 29 |                   | 1.0 0.067 0.0                |       |                   |              |              |
| 36                                                                                                                                                                                                    | 35         | 31         | 1.0 0.083 0.0    | 47.7 65.5 48.0 81.2 36       |       | 1.0 0.057 0.0 47.1 67.3 47.1 82.1 35 |                              | 1.0 0.083 0.0 | 1.0 0.0 0.053 45.5 71.2 42.9 83.1 31 |                   | 1.0 0.083 0.0                |       |                   |              |              |
| 36                                                                                                                                                                                                    | 36         | 32         | 1.0 0.1 0.0      | 48.2 64.4 48.5 80.7 36       |       | 1.0 0.079 0.0 47.6 65.9 47.9 81.4 36 |                              | 1.0 0.1 0.0   | 1.0 0.0 0.006 45.5 71.0 44.6 83.8 32 |                   | 1.0 0.1 0.0                  |       |                   |              |              |
| 37                                                                                                                                                                                                    | 37         | 33         | 1.0 0.116 0.0    | 48.6 63.3 49.1 80.2 37       |       | 1.0 0.1 0.0 48.2 64.5 48.6 80.7 37   |                              | 1.0 0.117 0.0 | 1.0 0.021 0.0 46.0 69.6 45.7 83.3 33 |                   | 1.0 0.117 0.0                |       |                   |              |              |
| 38                                                                                                                                                                                                    | 38         | 34         | 1.0 0.133 0.0    | 49.2 62.1 49.8 79.6 38       |       | 1.0 0.121 0.0 48.8 63.1 49.3 80.1 38 |                              | 1.0 0.133 0.0 | 1.0 0.044 0.0 46.7 68.1 46.6 82.5 34 |                   | 1.0 0.133 0.0                |       |                   |              |              |
| 39                                                                                                                                                                                                    | 39         | 35         | 1.0 0.15 0.0     | 49.8 60.7 50.7 79.1 39       |       | 1.0 0.137 0.0 49.4 61.8 50.1 79.6 39 |                              | 1.0 0.15 0.0  | 1.0 0.068 0.0 47.4 66.6 47.5 81.8 35 |                   | 1.0 0.15 0.0                 |       |                   |              |              |
| 41                                                                                                                                                                                                    | 40         | 36         | 1.0 0.166 0.0    | 50.5 59.2 51.6 78.6 41       |       | 1.0 0.151 0.0 49.9 60.6 50.9 79.1 40 |                              | 1.0 0.167 0.0 | 1.0 0.092 0.0 48.0 65.0 48.3 81.0 36 |                   | 1.0 0.167 0.0                |       |                   |              |              |
| 42                                                                                                                                                                                                    | 41         | 37         | 1.0 0.183 0.0    | 51.1 57.8 52.5 78.1 42       |       | 1.0 0.166 0.0 50.5 59.4 51.6 78.7 41 |                              | 1.0 0.183 0.0 | 1.0 0.116 0.0 48.7 63.5 49.1 80.2 37 |                   | 1.0 0.183 0.0                |       |                   |              |              |
| 43                                                                                                                                                                                                    | 42         | 38         | 1.0 0.2 0.0      | 51.7 56.3 53.3 77.5 43       |       | 1.0 0.18 0.0 51.0 58.1 52.3 78.2 42  |                              | 1.0 0.2 0.0   | 1.0 0.135 0.0 49.3 62.0 49.9 79.6 38 |                   | 1.0 0.2 0.0                  |       |                   |              |              |
| 44                                                                                                                                                                                                    | 43         | 39         | 1.0 0.216 0.0    | 52.4 54.9 54.0 77.0 44       |       | 1.0 0.194 0.0 51.6 56.9 53.0 77.8 43 |                              | 1.0 0.217 0.0 | 1.0 0.151 0.0 49.9 60.7 50.8 79.1 39 |                   | 1.0 0.217 0.0                |       |                   |              |              |
| 45                                                                                                                                                                                                    | 44         | 41         | 1.0 0.233 0.0    | 53.0 53.4 54.8 76.5 45       |       | 1.0 0.209 0.0 52.1 55.6 53.7 77.3 44 |                              | 1.0 0.233 0.0 | 1.0 0.167 0.0 50.5 59.3 51.7 78.6 41 |                   | 1.0 0.233 0.0                |       |                   |              |              |
| 46                                                                                                                                                                                                    | 45         | 42         | 1.0 0.25 0.0     | 53.6 51.9 55.5 76.0 46       |       | 1.0 0.223 0.0 52.7 54.4 54.4 76.9 45 |                              | 1.0 0.25 0.0  | 1.0 0.183 0.0 51.1 57.9 52.5 78.1 42 |                   | 1.0 0.25 0.0                 |       |                   |              |              |
| 48                                                                                                                                                                                                    | 46         | 43         | 1.0 0.266 0.0    | 54.4 50.4 56.5 75.7 48       |       | 1.0 0.237 0.0 53.2 53.1 55.0 76.4 46 |                              | 1.0 0.267 0.0 | 1.0 0.198 0.0 51.7 56.5 53.2 77.6 43 |                   | 1.0 0.267 0.0                |       |                   |              |              |
| 49                                                                                                                                                                                                    | 47         | 44         | 1.0 0.283 0.0    | 55.1 48.9 57.4 75.4 49       |       | 1.0 0.251 0.0 53.7 51.8 55.6 76.0 47 |                              | 1.0 0.283 0.0 | 1.0 0.214 0.0 52.3 55.1 54.0 77.1 44 |                   | 1.0 0.283 0.0                |       |                   |              |              |
| 50                                                                                                                                                                                                    | 48         | 45         | 1.0 0.3 0.0      | 55.8 47.4 58.4 75.2 50       |       | 1.0 0.264 0.0 54.3 50.7 56.3 75.8 48 |                              | 1.0 0.3 0.0   | 1.0 0.23 0.0 52.9 53.7 54.7 76.6 45  |                   | 1.0 0.3 0.0                  |       |                   |              |              |
| 52                                                                                                                                                                                                    | 49         | 46         | 1.0 0.316 0.0    | 56.6 45.8 59.2 74.9 52       |       | 1.0 0.276 0.0 54.8 49.6 57.1 75.6 49 |                              | 1.0 0.317 0.0 | 1.0 0.246 0.0 53.5 52.3 55.4 76.1 46 |                   | 1.0 0.317 0.0                |       |                   |              |              |
| 53                                                                                                                                                                                                    | 50         | 47         | 1.0 0.333 0.0    | 57.3 44.2 60.1 74.6 53       |       | 1.0 0.288 0.0 55.4 48.5 57.8 75.4 50 |                              | 1.0 0.333 0.0 | 1.0 0.261 0.0 54.2 51.0 56.2 75.9 47 |                   | 1.0 0.333 0.0                |       |                   |              |              |
| 54                                                                                                                                                                                                    | 51         | 48         | 1.0 0.35 0.0     | 58.0 42.7 60.9 74.4 54       |       | 1.0 0.301 0.0 55.9 47.3 58.5 75.2 51 |                              | 1.0 0.35 0.0  | 1.0 0.274 0.0 54.8 49.8 57.0 75.6 48 |                   | 1.0 0.35 0.0                 |       |                   |              |              |
| 56                                                                                                                                                                                                    | 52         | 49         | 1.0 0.366 0.0    | 58.8 41.1 61.7 74.1 56       |       | 1.0 0.313 0.0 56.5 46.2 59.1 75.0 52 |                              | 1.0 0.367 0.0 | 1.0 0.288 0.0 55.4 48.5 57.8 75.4 49 |                   | 1.0 0.367 0.0                |       |                   |              |              |
| 57                                                                                                                                                                                                    | 53         | 51         | 1.0 0.383 0.0    | 59.5 39.5 62.5 74.0 57       |       | 1.0 0.326 0.0 57.0 45.0 59.8 74.8 53 |                              | 1.0 0.383 0.0 | 1.0 0.302 0.0 56.0 47.2 58.5 75.2 51 |                   | 1.0 0.383 0.0                |       |                   |              |              |
| 59                                                                                                                                                                                                    | 54         | 52         | 1.0 0.4 0.0      | 60.3 38.1 63.5 74.1 59       |       | 1.0 0.338 0.0 57.6 43.9 60.4 74.6 54 |                              | 1.0 0.4 0.0   | 1.0 0.316 0.0 56.6 45.9 59.3 75.0 52 |                   | 1.0 0.4 0.0                  |       |                   |              |              |
| 60                                                                                                                                                                                                    | 55         | 53         | 1.0 0.416 0.0    | 61.0 36.6 64.5 74.1 60       |       | 1.0 0.35 0.0 58.1 42.7 61.0 74.4 55  |                              | 1.0 0.417 0.0 | 1.0 0.33 0.0 57.2 44.6 60.0 74.8 53  |                   | 1.0 0.417 0.0                |       |                   |              |              |
| 61                                                                                                                                                                                                    | 56         | 54         | 1.0 0.433 0.0    | 61.8 35.1 65.4 74.2 61       |       | 1.0 0.363 0.0 58.6 41.5 61.5 74.2 56 |                              | 1.0 0.433 0.0 | 1.0 0.343 0.0 57.8 43.3 60.6 74.5 54 |                   | 1.0 0.433 0.0                |       |                   |              |              |
| 63                                                                                                                                                                                                    | 57         | 55         | 1.0 0.45 0.0     | 62.6 33.6 66.2 74.3 63       |       | 1.0 0.375 0.0 59.2 40.3 62.1 74.0 57 |                              | 1.0 0.45 0.0  | 1.0 0.357 0.0 58.4 42.0 61.3 74.3 55 |                   | 1.0 0.45 0.0                 |       |                   |              |              |
| 64                                                                                                                                                                                                    | 58         | 56         | 1.0 0.466 0.0    | 63.3 32.0 67.1 74.4 64       |       | 1.0 0.387 0.0 59.8 39.3 62.8 74.1 58 |                              | 1.0 0.467 0.0 | 1.0 0.371 0.0 59.0 40.7 61.9 74.1 56 |                   | 1.0 0.467 0.0                |       |                   |              |              |
| 65                                                                                                                                                                                                    | 59         | 57         | 1.0 0.483 0.0    | 64.1 30.5 67.9 74.4 65       |       | 1.0 0.4 0.0 60.3 38.2 63.5 74.1 59   |                              | 1.0 0.483 0.0 | 1.0 0.385 0.0 59.6 39.5 62.7 74.1 57 |                   | 1.0 0.483 0.0                |       |                   |              |              |
| 67                                                                                                                                                                                                    | 60         | 58         | 1.0 0.5 0.0      | 64.9 28.9 68.6 74.5 67       |       | 1.0 0.412 0.0 60.9 37.1 64.2 74.2 60 |                              | 1.0 0.5 0.0   | 1.0 0.398 0.0 60.3 38.3 63.5 74.1 58 |                   | 1.0 0.5 0.0                  |       |                   |              |              |
| 68                                                                                                                                                                                                    | 61         | 60         | 1.0 0.516 0.0    | 65.8 27.2 69.9 75.0 68       |       | 1.0 0.424 0.0 61.4 36.0 64.9 74.2 61 |                              | 1.0 0.517 0.0 | 1.0 0.412 0.0 60.9 37.1 64.2 74.2 60 |                   | 1.0 0.517 0.0                |       |                   |              |              |
| 70                                                                                                                                                                                                    | 62         | 61         | 1.0 0.533 0.0    | 66.8 25.5 71.1 75.6 70       |       | 1.0 0.436 0.0 62.0 34.9 65.6 74.3 62 |                              | 1.0 0.533 0.0 | 1.0 0.426 0.0 61.5 35.8 65.0 74.2 61 |                   | 1.0 0.533 0.0                |       |                   |              |              |
| 71                                                                                                                                                                                                    | 63         | 62         | 1.0 0.55 0.0     | 67.7 23.8 72.3 76.1 71       |       | 1.0 0.449 0.0 62.6 33.7 66.2 74.3 63 |                              | 1.0 0.55 0.0  | 1.0 0.439 0.0 62.1 34.6 65.7 74.3 62 |                   | 1.0 0.55 0.0                 |       |                   |              |              |
| 73                                                                                                                                                                                                    | 64         | 63         | 1.0 0.566 0.0    | 68.7 22.0 73.5 76.7 73       |       | 1.0 0.461 0.0 63.1 32.6 66.9 74.4 64 |                              | 1.0 0.567 0.0 | 1.0 0.453 0.0 62.8 33.3 66.4 74.3 63 |                   | 1.0 0.567 0.0                |       |                   |              |              |
| 74                                                                                                                                                                                                    | 65         | 64         | 1.0 0.583 0.0    | 69.7 20.2 74.6 77.3 74       |       | 1.0 0.473 0.0 63.7 31.5 67.5 74.4 65 |                              | 1.0 0.583 0.0 | 1.0 0.467 0.0 63.4 32.1 67.1 74.4 64 |                   | 1.0 0.583 0.0                |       |                   |              |              |
| 76                                                                                                                                                                                                    | 66         | 65         | 1.0 0.6 0.0      | 70.6 18.3 75.6 77.8 76       |       | 1.0 0.486 0.0 64.2 30.3 68.0 74.5 66 |                              | 1.0 0.6 0.0   | 1.0 0.48 0.0 64.0 30.8 67.8 74.5 65  |                   | 1.0 0.6 0.0                  |       |                   |              |              |
| 77                                                                                                                                                                                                    | 67         | 66         | 1.0 0.616 0.0    | 71.6 16.4 76.6 78.4 77       |       | 1.0 0.498 0.0 64.8 29.1 68.6 74.5 67 |                              | 1.0 0.617 0.0 | 1.0 0.494 0.0 64.6 29.5 68.4 74.5 66 |                   | 1.0 0.617 0.0                |       |                   |              |              |
| 79                                                                                                                                                                                                    | 68         | 67         | 1.0 0.633 0.0    | 72.5 14.8 77.6 79.0 79       |       | 1.0 0.509 0.0 65.4 28.0 69.4 74.8 68 |                              | 1.0 0.633 0.0 | 1.0 0.507 0.0 65.3 28.2 69.2 74.8 67 |                   | 1.0 0.633 0.0                |       |                   |              |              |
| 80                                                                                                                                                                                                    | 69         | 68         | 1.0 0.65 0.0     | 73.2 13.6 78.5 79.7 80       |       | 1.0 0.52 0.0 66.1 26.9 70.2 75.2 69  |                              | 1.0 0.65 0.0  | 1.0 0.519 0.0 66.0 27.0 70.1 75.2 68 |                   | 1.0 0.65 0.0                 |       |                   |              |              |
| 81                                                                                                                                                                                                    | 70         | 70         | 1.0 0.666 0.0    | 74.0 12.3 79.5 80.4 81       |       | 1.0 0.531 0.0 66.7 25.8 71.0 75.6 70 |                              | 1.0 0.667 0.0 | 1.0 0.531 0.0 66.7 25.8 71.0 75.6 70 |                   | 1.0 0.667 0.0                |       |                   |              |              |
| 82                                                                                                                                                                                                    | 71         | 71         | 1.0 0.683 0.0    | 74.8 11.0 80.4 81.1 82       |       | 1.0 0.542 0.0 67.3 24.7 71.8 75.9 71 |                              | 1.0 0.683 0.0 | 1.0 0.543 0.0 67.4 24.6 71.9 76.0 71 |                   | 1.0 0.683 0.0                |       |                   |              |              |
| 83                                                                                                                                                                                                    | 72         | 72         | 1.0 0.7 0.0      | 75.6 9.6 81.3 81.9 83        |       | 1.0 0.553 0.0 67.9 23.6 72.6 76.3 72 |                              | 1.0 0.7 0.0   | 1.0 0.555 0.0 68.1 23.3 72.8 76.4 72 |                   | 1.0 0.7 0.0                  |       |                   |              |              |
| 84                                                                                                                                                                                                    | 73         | 73         | 1.0 0.716 0.0    | 76.3 8.3 82.2 82.6 84        |       | 1.0 0.564 0.0 68.6 22.4 73.3 76.6 73 |                              | 1.0 0.717 0.0 | 1.0 0.568 0.0 68.8 22.0 73.6 76.8 73 |                   | 1.0 0.717 0.0                |       |                   |              |              |
| 85                                                                                                                                                                                                    | 74         | 74         | 1.0 0.733 0.0    | 77.1 6.9 83.0 83.3 85        |       | 1.0 0.574 0.0 69.2 21.2 74.0 77.0 74 |                              | 1.0 0.733 0.0 | 1.0 0.58 0.0 69.5 20.6 74.4 77.2 74  |                   | 1.0 0.733 0.0                |       |                   |              |              |
| 86                                                                                                                                                                                                    | 75         | 75         | 1.0 0.75 0.0     | 77.9 5.4 83.8 84.0 86        |       | 1.0 0.585 0.0 69.8 20.0 74.7 77.4 75 |                              | 1.0 0.75 0.0  | 1.0 0.592 0.0 70.2 19.3 75.2 77.6 75 |                   | 1.0 0.75 0.0                 |       |                   |              |              |

4-003931-L0

PI970-70

LAB\*la0, YN=0%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB\*nw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0

uscita: Offset standard print; separation cmy0\*, D65, pagina 10/33

grafico TUB-PI97; codice di tinte:  $H^*_d=R00Y_d$   
cerchio delle tinte a 48 passi;  $rgb-LabCh^*$ tavole

Input:  $rgb/cmyk \rightarrow rgb_d$   
Output: trasferire a  $cmy0_d$

4-003931-F0

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM<sub>s</sub>:  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;  
Six hue angles of the device colours RYGBM<sub>d</sub>:  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours RYGBM<sub>e</sub>:  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| $h_{ab,d}$ | $h_{ab,s}$ | $h_{ab,e}$ | $rgb^*$ dd361M | LAB*<br>dxd361Mi (x=LabCh) | $rgb^*$ ds361Mi | LAB*<br>dsx361Mi (x=LabCh) | $rgb^*$ dd361Mi | $rgb^*$ de361Mi | LAB*<br>dex361Mi (x=LabCh) | $rgb^*$ dd361Mi | $rgb^*$ de361Mi |
|------------|------------|------------|----------------|----------------------------|-----------------|----------------------------|-----------------|-----------------|----------------------------|-----------------|-----------------|
| 86         | 75         | 75         | 1.0 0.75 0.0   | 77.9 5.4 83.8 84.0 86      | 1.0 0.585 0.0   | 69.8 20.0 74.7 77.4 75     | 1.0 0.75 0.0    | 1.0 0.592 0.0   | 70.2 19.3 75.2 77.6 75     | 1.0 0.75 0.0    | 1.0 0.592 0.0   |
| 87         | 76         | 76         | 1.0 0.766 0.0  | 78.6 4.3 84.7 84.8 87      | 1.0 0.596 0.0   | 70.5 18.8 75.4 77.7 76     | 1.0 0.767 0.0   | 1.0 0.604 0.0   | 70.9 17.9 75.9 78.0 76     | 1.0 0.767 0.0   | 1.0 0.767 0.0   |
| 87         | 77         | 77         | 1.0 0.783 0.0  | 79.4 3.2 85.6 85.7 87      | 1.0 0.607 0.0   | 71.1 17.6 76.1 78.1 77     | 1.0 0.783 0.0   | 1.0 0.616 0.0   | 71.6 16.5 76.6 78.4 77     | 1.0 0.783 0.0   | 1.0 0.783 0.0   |
| 88         | 78         | 78         | 1.0 0.8 0.0    | 80.1 2.0 86.5 86.5 88      | 1.0 0.618 0.0   | 71.7 16.3 76.7 78.5 78     | 1.0 0.8 0.0     | 1.0 0.63 0.0    | 72.4 15.1 77.4 78.9 78     | 1.0 0.8 0.0     | 1.0 0.8 0.0     |
| 89         | 79         | 80         | 1.0 0.816 0.0  | 80.8 0.8 87.3 87.3 89      | 1.0 0.631 0.0   | 72.4 15.1 77.5 78.9 79     | 1.0 0.817 0.0   | 1.0 0.648 0.0   | 73.2 13.8 78.5 79.7 80     | 1.0 0.817 0.0   | 1.0 0.817 0.0   |
| 90         | 80         | 81         | 1.0 0.833 0.0  | 81.6 -0.3 88.2 88.2 90     | 1.0 0.647 0.0   | 73.2 13.8 78.4 79.6 80     | 1.0 0.833 0.0   | 1.0 0.667 0.0   | 74.1 12.3 79.5 80.5 81     | 1.0 0.833 0.0   | 1.0 0.833 0.0   |
| 91         | 81         | 82         | 1.0 0.85 0.0   | 82.3 -1.5 89.0 89.0 91     | 1.0 0.664 0.0   | 73.9 12.6 79.4 80.4 81     | 1.0 0.85 0.0    | 1.0 0.685 0.0   | 74.9 10.9 80.5 81.3 82     | 1.0 0.85 0.0    | 1.0 0.85 0.0    |
| 91         | 82         | 83         | 1.0 0.866 0.0  | 83.1 -2.8 89.8 89.8 91     | 1.0 0.68 0.0    | 74.7 11.3 80.3 81.1 82     | 1.0 0.867 0.0   | 1.0 0.703 0.0   | 75.8 9.4 81.5 82.0 83      | 1.0 0.867 0.0   | 1.0 0.867 0.0   |
| 92         | 83         | 84         | 1.0 0.883 0.0  | 83.7 -3.8 90.5 90.6 92     | 1.0 0.697 0.0   | 75.5 10.0 81.2 81.8 83     | 1.0 0.883 0.0   | 1.0 0.721 0.0   | 76.6 7.9 82.4 82.8 84      | 1.0 0.883 0.0   | 1.0 0.883 0.0   |
| 92         | 84         | 85         | 1.0 0.9 0.0    | 84.3 -4.7 91.3 91.4 92     | 1.0 0.713 0.0   | 76.2 8.6 82.0 82.5 84      | 1.0 0.9 0.0     | 1.0 0.74 0.0    | 77.5 6.4 83.4 83.6 85      | 1.0 0.9 0.0     | 1.0 0.9 0.0     |
| 93         | 85         | 86         | 1.0 0.916 0.0  | 84.9 -5.6 92.0 92.2 93     | 1.0 0.729 0.0   | 77.0 7.2 82.9 83.2 85      | 1.0 0.917 0.0   | 1.0 0.76 0.0    | 78.4 4.8 84.4 84.6 86      | 1.0 0.917 0.0   | 1.0 0.917 0.0   |
| 94         | 86         | 87         | 1.0 0.933 0.0  | 85.5 -6.5 92.7 92.9 94     | 1.0 0.746 0.0   | 77.7 5.9 83.7 83.9 86      | 1.0 0.933 0.0   | 1.0 0.784 0.0   | 79.4 3.2 85.7 85.7 87      | 1.0 0.933 0.0   | 1.0 0.933 0.0   |
| 94         | 87         | 88         | 1.0 0.95 0.0   | 86.0 -7.4 93.4 93.7 94     | 1.0 0.766 0.0   | 78.6 4.4 84.7 84.8 87      | 1.0 0.95 0.0    | 1.0 0.807 0.0   | 80.5 1.6 86.9 86.9 88      | 1.0 0.95 0.0    | 1.0 0.95 0.0    |
| 95         | 88         | 90         | 1.0 0.966 0.0  | 86.6 -8.3 94.1 94.5 95     | 1.0 0.787 0.0   | 79.6 3.0 85.8 85.9 88      | 1.0 0.967 0.0   | 1.0 0.831 0.0   | 81.5 0.0 88.1 88.1 90      | 1.0 0.967 0.0   | 1.0 0.967 0.0   |
| 95         | 89         | 91         | 1.0 0.983 0.0  | 87.2 -9.2 94.8 95.2 95     | 1.0 0.808 0.0   | 80.5 1.5 86.9 86.9 89      | 1.0 0.983 0.0   | 1.0 0.854 0.0   | 82.6 -1.8 89.2 89.3 91     | 1.0 0.983 0.0   | 1.0 0.983 0.0   |
| 96         | 90         | 92         | 1.0 1.0 0.0    | 87.8 -10.2 95.4 96.0 96    | 1.0 0.829 0.0   | 81.4 0.0 88.0 88.0 90      | 1.0 1.0 0.0     | 1.0 0.879 0.0   | 83.6 -3.6 90.4 90.5 92     | 1.0 1.0 0.0     | 1.0 1.0 0.0     |
| 96         | 91         | 93         | 0.983 1.0 0.0  | 87.3 -10.7 94.6 95.2 96    | 1.0 0.85 0.0    | 82.4 -1.5 89.0 89.0 91     | 0.983 1.0 0.0   | 1.0 0.916 0.0   | 84.9 -5.5 92.0 92.2 93     | 0.983 1.0 0.0   | 0.983 1.0 0.0   |
| 96         | 92         | 94         | 0.966 1.0 0.0  | 86.8 -11.2 93.8 94.5 96    | 1.0 0.871 0.0   | 83.3 -3.0 90.0 90.1 92     | 0.967 1.0 0.0   | 1.0 0.953 0.0   | 86.2 -7.5 93.6 93.9 94     | 0.967 1.0 0.0   | 0.967 1.0 0.0   |
| 97         | 93         | 95         | 0.95 1.0 0.0   | 86.4 -11.7 93.0 93.7 97    | 1.0 0.901 0.0   | 84.4 -4.7 91.4 91.5 93     | 0.95 1.0 0.0    | 1.0 0.99 0.0    | 87.5 -9.6 95.1 95.6 95     | 0.95 1.0 0.0    | 0.95 1.0 0.0    |
| 97         | 94         | 96         | 0.933 1.0 0.0  | 85.9 -12.2 92.2 93.0 97    | 1.0 0.933 0.0   | 85.5 -6.4 92.7 93.0 94     | 0.933 1.0 0.0   | 0.961 1.0 0.0   | 86.7 -11.3 93.6 94.3 96    | 0.933 1.0 0.0   | 0.933 1.0 0.0   |
| 97         | 95         | 98         | 0.916 1.0 0.0  | 85.5 -12.7 91.3 92.2 97    | 1.0 0.965 0.0   | 86.6 -8.1 94.1 94.4 95     | 0.917 1.0 0.0   | 0.907 1.0 0.0   | 85.3 -12.9 90.9 91.8 98    | 0.917 1.0 0.0   | 0.917 1.0 0.0   |
| 98         | 96         | 99         | 0.9 1.0 0.0    | 85.0 -13.2 90.5 91.5 98    | 1.0 0.997 0.0   | 87.7 -9.9 95.4 95.9 96     | 0.9 1.0 0.0     | 0.856 1.0 0.0   | 83.8 -14.4 88.4 89.6 99    | 0.9 1.0 0.0     | 0.9 1.0 0.0     |
| 98         | 97         | 100        | 0.883 1.0 0.0  | 84.5 -13.6 89.7 90.7 98    | 0.959 1.0 0.0   | 86.7 -11.4 93.5 94.2 97    | 0.883 1.0 0.0   | 0.807 1.0 0.0   | 82.4 -15.8 86.2 87.7 100   | 0.883 1.0 0.0   | 0.883 1.0 0.0   |
| 99         | 98         | 101        | 0.866 1.0 0.0  | 84.1 -14.1 88.9 90.0 99    | 0.914 1.0 0.0   | 85.4 -12.7 91.2 92.1 98    | 0.867 1.0 0.0   | 0.759 1.0 0.0   | 81.0 -17.2 84.0 85.7 101   | 0.867 1.0 0.0   | 0.867 1.0 0.0   |
| 99         | 99         | 102        | 0.85 1.0 0.0   | 83.6 -14.6 88.1 89.3 99    | 0.869 1.0 0.0   | 84.2 -14.0 89.0 90.1 99    | 0.85 1.0 0.0    | 0.729 1.0 0.0   | 79.9 -18.6 82.3 84.4 102   | 0.85 1.0 0.0    | 0.85 1.0 0.0    |
| 99         | 100        | 103        | 0.833 1.0 0.0  | 83.1 -15.1 87.4 88.7 99    | 0.827 1.0 0.0   | 83.0 -15.3 87.1 88.5 100   | 0.833 1.0 0.0   | 0.704 1.0 0.0   | 78.8 -20.0 80.8 83.2 103   | 0.833 1.0 0.0   | 0.833 1.0 0.0   |
| 100        | 101        | 105        | 0.816 1.0 0.0  | 82.6 -15.6 86.6 88.0 100   | 0.785 1.0 0.0   | 81.8 -16.5 85.2 86.8 101   | 0.817 1.0 0.0   | 0.679 1.0 0.0   | 77.7 -21.3 79.2 82.0 105   | 0.817 1.0 0.0   | 0.817 1.0 0.0   |
| 100        | 102        | 106        | 0.8 1.0 0.0    | 82.2 -16.1 85.8 87.3 100   | 0.747 1.0 0.0   | 80.6 -17.6 83.4 85.2 102   | 0.8 1.0 0.0     | 0.654 1.0 0.0   | 76.6 -22.6 77.6 80.8 106   | 0.8 1.0 0.0     | 0.8 1.0 0.0     |
| 101        | 103        | 107        | 0.783 1.0 0.0  | 81.7 -16.6 85.1 86.7 101   | 0.725 1.0 0.0   | 79.7 -18.8 82.0 84.2 103   | 0.783 1.0 0.0   | 0.628 1.0 0.0   | 75.5 -23.8 76.0 79.6 107   | 0.783 1.0 0.0   | 0.783 1.0 0.0   |
| 101        | 104        | 108        | 0.766 1.0 0.0  | 81.2 -17.0 84.3 86.0 101   | 0.703 1.0 0.0   | 78.7 -20.0 80.7 83.2 104   | 0.767 1.0 0.0   | 0.605 1.0 0.0   | 74.6 -25.0 74.3 78.4 108   | 0.767 1.0 0.0   | 0.767 1.0 0.0   |
| 101        | 105        | 109        | 0.75 1.0 0.0   | 80.7 -17.5 83.5 85.3 101   | 0.682 1.0 0.0   | 77.8 -21.2 79.4 82.2 105   | 0.75 1.0 0.0    | 0.583 1.0 0.0   | 73.7 -26.1 72.7 77.3 109   | 0.75 1.0 0.0    | 0.75 1.0 0.0    |
| 102        | 106        | 110        | 0.733 1.0 0.0  | 80.0 -18.4 82.5 84.6 102   | 0.66 1.0 0.0    | 76.8 -22.3 78.0 81.1 106   | 0.733 1.0 0.0   | 0.56 1.0 0.0    | 72.9 -27.1 71.0 76.1 110   | 0.733 1.0 0.0   | 0.733 1.0 0.0   |
| 103        | 107        | 112        | 0.716 1.0 0.0  | 79.3 -19.3 81.5 83.8 103   | 0.638 1.0 0.0   | 75.9 -23.3 76.6 80.1 107   | 0.717 1.0 0.0   | 0.538 1.0 0.0   | 72.0 -28.1 69.3 74.9 112   | 0.717 1.0 0.0   | 0.717 1.0 0.0   |
| 104        | 108        | 113        | 0.7 1.0 0.0    | 78.5 -20.2 80.5 83.0 104   | 0.617 1.0 0.0   | 75.0 -24.3 75.2 79.1 108   | 0.7 1.0 0.0     | 0.515 1.0 0.0   | 71.2 -29.0 67.7 73.7 113   | 0.7 1.0 0.0     | 0.7 1.0 0.0     |
| 104        | 109        | 114        | 0.683 1.0 0.0  | 77.8 -21.1 79.4 82.2 104   | 0.598 1.0 0.0   | 74.3 -25.3 73.8 78.1 109   | 0.683 1.0 0.0   | 0.494 1.0 0.0   | 70.4 -30.0 66.1 72.6 114   | 0.683 1.0 0.0   | 0.683 1.0 0.0   |
| 105        | 110        | 115        | 0.666 1.0 0.0  | 77.1 -22.0 78.4 81.4 105   | 0.579 1.0 0.0   | 73.6 -26.2 72.4 77.0 110   | 0.667 1.0 0.0   | 0.474 1.0 0.0   | 69.6 -31.0 64.8 71.9 115   | 0.667 1.0 0.0   | 0.667 1.0 0.0   |
| 106        | 111        | 116        | 0.65 1.0 0.0   | 76.4 -22.8 77.3 80.6 106   | 0.559 1.0 0.0   | 72.9 -27.1 71.0 76.0 111   | 0.65 1.0 0.0    | 0.454 1.0 0.0   | 68.8 -32.0 63.5 71.2 116   | 0.65 1.0 0.0    | 0.65 1.0 0.0    |
| 107        | 112        | 117        | 0.633 1.0 0.0  | 75.6 -23.6 76.2 79.8 107   | 0.54 1.0 0.0    | 72.1 -28.0 69.5 75.0 112   | 0.633 1.0 0.0   | 0.434 1.0 0.0   | 68.0 -32.9 62.2 70.5 117   | 0.633 1.0 0.0   | 0.633 1.0 0.0   |
| 108        | 113        | 119        | 0.616 1.0 0.0  | 75.0 -24.4 75.1 79.0 108   | 0.521 1.0 0.0   | 71.4 -28.8 68.1 74.0 113   | 0.617 1.0 0.0   | 0.414 1.0 0.0   | 67.3 -33.8 60.9 69.7 119   | 0.617 1.0 0.0   | 0.617 1.0 0.0   |
| 108        | 114        | 120        | 0.6 1.0 0.0    | 74.3 -25.3 73.9 78.1 108   | 0.501 1.0 0.0   | 70.7 -29.6 66.6 72.9 114   | 0.6 1.0 0.0     | 0.394 1.0 0.0   | 66.5 -34.7 59.6 69.0 120   | 0.6 1.0 0.0     | 0.6 1.0 0.0     |
| 109        | 115        | 121        | 0.583 1.0 0.0  | 73.7 -26.1 72.7 77.2 109   | 0.484 1.0 0.0   | 70.0 -30.4 65.5 72.3 115   | 0.583 1.0 0.0   | 0.375 1.0 0.0   | 65.7 -35.5 58.3 68.3 121   | 0.583 1.0 0.0   | 0.583 1.0 0.0   |
| 110        | 116        | 122        | 0.566 1.0 0.0  | 73.1 -26.9 71.4 76.3 110   | 0.467 1.0 0.0   | 69.3 -31.3 64.4 71.7 116   | 0.567 1.0 0.0   | 0.364 1.0 0.0   | 65.1 -36.6 57.4 68.2 122   | 0.567 1.0 0.0   | 0.567 1.0 0.0   |
| 111        | 117        | 123        | 0.55 1.0 0.0   | 72.4 -27.6 70.2 75.5 111   | 0.45 1.0 0.0    | 68.7 -32.2 63.3 71.0 117   | 0.55 1.0 0.0    | 0.354 1.0 0.0   | 64.5 -37.7 56.6 68.0 123   | 0.55 1.0 0.0    | 0.55 1.0 0.0    |
| 112        | 118        | 124        | 0.533 1.0 0.0  | 71.8 -28.3 69.0 74.6 112   | 0.433 1.0 0.0   | 68.0 -33.0 62.2 70.4 118   | 0.533 1.0 0.0   | 0.343 1.0 0.0   | 63.9 -38.8 55.7 67.9 124   | 0.533 1.0 0.0   | 0.533 1.0 0.0   |
| 113        | 119        | 126        | 0.516 1.0 0.0  | 71.2 -29.0 67.7 73.7 113   | 0.416 1.0 0.0   | 67.3 -33.7 61.1 69.8 119   | 0.517 1.0 0.0   | 0.333 1.0 0.0   | 63.3 -39.8 54.7 67.8 126   | 0.517 1.0 0.0   | 0.517 1.0 0.0   |
| 114        | 120        | 127        | 0.5 1.0 0.0    | 70.6 -29.7 66.5 72.8 114   | 0.399 1.0 0.0   | 66.7 -34.5 59.9 69.2 120   | 0.5 1.0 0.0     | 0.322 1.0 0.0   | 62.6 -40.8 53.8 67.6 127   | 0.5 1.0 0.0     | 0.5 1.0 0.0     |

4-0031031-L0 PI970-70

LAB\*la0, YN=0%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB\*nw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0

uscita: Offset standard print; separation cmy0\*, D65, pagina 11/33

grafico TUB-PI97; codice di tinte:  $H^*_d=R00Y_d$   
cerchio delle tinte a 48 passi;  $rgb-LabCh^*$ tavole

Input:  $rgb/cmyk \rightarrow rgb_d$   
Output: trasferire a  $cmy0_d$

4-0031031-F0

| Data of Maximum color M in colorimetric system Offset standard print; separation cmy0*, D65 for input or output; Six hue angles of the 60 degree standard colours $RYGCBM_s$ : $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ; |            |            |                  |                            |                   |                            |                   |                            |                   | Six hue angles of the device colours $RYGCBM_d$ : $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours $RYGCBM_e$ : $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$ |                            |                   |                   |                   |                   |                   |                   |                   |                   |                   |       |       |     |       |      |       |      |      |     |           |     |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|------------------|----------------------------|-------------------|----------------------------|-------------------|----------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------|-------|-----|-------|------|-------|------|------|-----|-----------|-----|-------|
| $h_{ab,d}$                                                                                                                                                                                                                            | $h_{ab,s}$ | $h_{ab,e}$ | $rgb^*_{dd361M}$ | $LAB^*_{dd361Mi}(x=LabCh)$ | $rgb^*_{ds361Mi}$ | $LAB^*_{ds361Mi}(x=LabCh)$ | $rgb^*_{de361Mi}$ | $LAB^*_{de361Mi}(x=LabCh)$ | $rgb^*_{dd361Mi}$ | $rgb^*_{de361Mi}$                                                                                                                                                                                                 | $LAB^*_{de361Mi}(x=LabCh)$ | $rgb^*_{dd361Mi}$ | $rgb^*_{ds361Mi}$ | $rgb^*_{de361Mi}$ | $rgb^*_{dd361Mi}$ | $rgb^*_{ds361Mi}$ | $rgb^*_{de361Mi}$ | $rgb^*_{dd361Mi}$ | $rgb^*_{ds361Mi}$ | $rgb^*_{de361Mi}$ |       |       |     |       |      |       |      |      |     |           |     |       |
| 114                                                                                                                                                                                                                                   | 120        | 127        | 0.5              | 1.0                        | 0.0               | 70.6                       | -29.7             | 66.5                       | 72.8              | 114                                                                                                                                                                                                               | 0.399                      | 1.0               | 0.0               | 66.7              | -34.5             | 59.9              | 69.2              | 120               | 0.5               | 1.0               | 0.0   | 0.322 | 1.0 | 0.0   | 62.6 | -40.8 | 53.8 | 67.6 | 127 | 0.5       | 1.0 | 0.0   |
| 115                                                                                                                                                                                                                                   | 121        | 128        | 0.483            | 1.0                        | 0.0               | 69.9                       | -30.5             | 65.4                       | 72.2              | 115                                                                                                                                                                                                               | 0.382                      | 1.0               | 0.0               | 66.0              | -35.2             | 58.8              | 68.6              | 121               | 0.483             | 1.0               | 0.0   | 0.312 | 1.0 | 0.0   | 62.0 | -41.8 | 52.9 | 67.5 | 128 | 0.483     | 1.0 | 0.0   |
| 116                                                                                                                                                                                                                                   | 122        | 129        | 0.466            | 1.0                        | 0.0               | 69.3                       | -31.4             | 64.3                       | 71.6              | 116                                                                                                                                                                                                               | 0.37                       | 1.0               | 0.0               | 65.4              | -36.1             | 57.9              | 68.3              | 122               | 0.466             | 1.0               | 0.0   | 0.301 | 1.0 | 0.0   | 61.4 | -42.8 | 51.9 | 67.3 | 129 | 0.466     | 1.0 | 0.0   |
| 117                                                                                                                                                                                                                                   | 123        | 130        | 0.45             | 1.0                        | 0.0               | 68.6                       | -32.2             | 63.2                       | 71.0              | 117                                                                                                                                                                                                               | 0.361                      | 1.0               | 0.0               | 64.9              | -37.0             | 57.1              | 68.1              | 123               | 0.45              | 1.0               | 0.0   | 0.291 | 1.0 | 0.0   | 60.8 | -43.8 | 50.9 | 67.2 | 130 | 0.45      | 1.0 | 0.0   |
| 117                                                                                                                                                                                                                                   | 124        | 131        | 0.433            | 1.0                        | 0.0               | 68.0                       | -33.0             | 62.1                       | 70.4              | 117                                                                                                                                                                                                               | 0.352                      | 1.0               | 0.0               | 64.4              | -37.9             | 56.4              | 68.0              | 124               | 0.433             | 1.0               | 0.0   | 0.28  | 1.0 | 0.0   | 60.2 | -44.7 | 49.9 | 67.0 | 131 | 0.433     | 1.0 | 0.0   |
| 118                                                                                                                                                                                                                                   | 125        | 133        | 0.416            | 1.0                        | 0.0               | 67.3                       | -33.8             | 61.0                       | 69.8              | 118                                                                                                                                                                                                               | 0.343                      | 1.0               | 0.0               | 63.8              | -38.8             | 55.6              | 67.9              | 125               | 0.417             | 1.0               | 0.0   | 0.27  | 1.0 | 0.0   | 59.6 | -45.6 | 48.9 | 66.9 | 133 | 0.417     | 1.0 | 0.0   |
| 119                                                                                                                                                                                                                                   | 126        | 134        | 0.4              | 1.0                        | 0.0               | 66.7                       | -34.5             | 59.9                       | 69.2              | 119                                                                                                                                                                                                               | 0.334                      | 1.0               | 0.0               | 63.3              | -39.7             | 54.8              | 67.8              | 126               | 0.4               | 1.0               | 0.0   | 0.259 | 1.0 | 0.0   | 59.0 | -46.5 | 47.8 | 66.8 | 134 | 0.4       | 1.0 | 0.0   |
| 120                                                                                                                                                                                                                                   | 127        | 135        | 0.383            | 1.0                        | 0.0               | 66.0                       | -35.2             | 58.8                       | 68.6              | 120                                                                                                                                                                                                               | 0.325                      | 1.0               | 0.0               | 62.8              | -40.6             | 54.0              | 67.6              | 127               | 0.383             | 1.0               | 0.0   | 0.249 | 1.0 | 0.0   | 58.4 | -47.4 | 46.8 | 66.6 | 135 | 0.383     | 1.0 | 0.0   |
| 122                                                                                                                                                                                                                                   | 128        | 136        | 0.366            | 1.0                        | 0.0               | 65.2                       | -36.4             | 57.6                       | 68.2              | 122                                                                                                                                                                                                               | 0.316                      | 1.0               | 0.0               | 62.3              | -41.5             | 53.2              | 67.5              | 128               | 0.366             | 1.0               | 0.0   | 0.233 | 1.0 | 0.0   | 57.9 | -48.3 | 45.8 | 66.6 | 136 | 0.366     | 1.0 | 0.0   |
| 124                                                                                                                                                                                                                                   | 129        | 137        | 0.35             | 1.0                        | 0.0               | 64.2                       | -38.2             | 56.2                       | 67.9              | 124                                                                                                                                                                                                               | 0.307                      | 1.0               | 0.0               | 61.7              | -42.3             | 52.4              | 67.4              | 129               | 0.35              | 1.0               | 0.0   | 0.217 | 1.0 | 0.0   | 57.4 | -49.2 | 44.7 | 66.6 | 137 | 0.35      | 1.0 | 0.0   |
| 126                                                                                                                                                                                                                                   | 130        | 138        | 0.333            | 1.0                        | 0.0               | 63.2                       | -39.8             | 54.7                       | 67.7              | 126                                                                                                                                                                                                               | 0.298                      | 1.0               | 0.0               | 61.2              | -43.1             | 51.5              | 67.3              | 130               | 0.333             | 1.0               | 0.0   | 0.201 | 1.0 | 0.0   | 57.0 | -50.0 | 43.7 | 66.5 | 138 | 0.333     | 1.0 | 0.0   |
| 127                                                                                                                                                                                                                                   | 131        | 140        | 0.316            | 1.0                        | 0.0               | 62.3                       | -41.4             | 53.2                       | 67.5              | 127                                                                                                                                                                                                               | 0.289                      | 1.0               | 0.0               | 60.7              | -44.0             | 50.7              | 67.2              | 131               | 0.317             | 1.0               | 0.0   | 0.185 | 1.0 | 0.0   | 56.5 | -50.9 | 42.7 | 66.5 | 140 | 0.317     | 1.0 | 0.0   |
| 129                                                                                                                                                                                                                                   | 132        | 141        | 0.3              | 1.0                        | 0.0               | 61.3                       | -43.0             | 51.7                       | 67.3              | 129                                                                                                                                                                                                               | 0.28                       | 1.0               | 0.0               | 60.2              | -44.8             | 49.8              | 67.0              | 132               | 0.3               | 1.0               | 0.0   | 0.169 | 1.0 | 0.0   | 56.0 | -51.7 | 41.6 | 66.5 | 141 | 0.3       | 1.0 | 0.0   |
| 131                                                                                                                                                                                                                                   | 133        | 142        | 0.283            | 1.0                        | 0.0               | 60.3                       | -44.5             | 50.1                       | 67.0              | 131                                                                                                                                                                                                               | 0.271                      | 1.0               | 0.0               | 59.6              | -45.5             | 48.9              | 66.9              | 133               | 0.283             | 1.0               | 0.0   | 0.153 | 1.0 | 0.0   | 55.5 | -52.5 | 40.5 | 66.4 | 142 | 0.283     | 1.0 | 0.0   |
| 133                                                                                                                                                                                                                                   | 134        | 143        | 0.266            | 1.0                        | 0.0               | 59.3                       | -45.9             | 48.5                       | 66.8              | 133                                                                                                                                                                                                               | 0.262                      | 1.0               | 0.0               | 59.1              | -46.3             | 48.0              | 66.8              | 134               | 0.267             | 1.0               | 0.0   | 0.137 | 1.0 | 0.0   | 55.1 | -53.3 | 39.4 | 66.4 | 143 | 0.267     | 1.0 | 0.0   |
| 135                                                                                                                                                                                                                                   | 135        | 144        | 0.25             | 1.0                        | 0.0               | 58.4                       | -47.3             | 46.8                       | 66.6              | 135                                                                                                                                                                                                               | 0.253                      | 1.0               | 0.0               | 58.6              | -47.0             | 47.1              | 66.7              | 135               | 0.25              | 1.0               | 0.0   | 0.122 | 1.0 | 0.0   | 54.6 | -54.2 | 38.4 | 66.5 | 144 | 0.25      | 1.0 | 0.0   |
| 136                                                                                                                                                                                                                                   | 136        | 145        | 0.233            | 1.0                        | 0.0               | 57.9                       | -48.3             | 45.8                       | 66.5              | 136                                                                                                                                                                                                               | 0.241                      | 1.0               | 0.0               | 58.1              | -47.8             | 46.3              | 66.6              | 136               | 0.233             | 1.0               | 0.0   | 0.108 | 1.0 | 0.0   | 54.1 | -55.4 | 37.6 | 67.0 | 145 | 0.233     | 1.0 | 0.0   |
| 137                                                                                                                                                                                                                                   | 137        | 147        | 0.216            | 1.0                        | 0.0               | 57.4                       | -49.2             | 44.7                       | 66.5              | 137                                                                                                                                                                                                               | 0.227                      | 1.0               | 0.0               | 57.7              | -48.6             | 45.4              | 66.6              | 137               | 0.217             | 1.0               | 0.0   | 0.095 | 1.0 | 0.0   | 53.6 | -56.6 | 36.7 | 67.6 | 147 | 0.217     | 1.0 | 0.0   |
| 138                                                                                                                                                                                                                                   | 138        | 148        | 0.2              | 1.0                        | 0.0               | 56.9                       | -50.1             | 43.6                       | 66.5              | 138                                                                                                                                                                                                               | 0.213                      | 1.0               | 0.0               | 57.3              | -49.4             | 44.5              | 66.6              | 138               | 0.2               | 1.0               | 0.0   | 0.082 | 1.0 | 0.0   | 53.1 | -57.8 | 35.8 | 68.1 | 148 | 0.2       | 1.0 | 0.0   |
| 140                                                                                                                                                                                                                                   | 139        | 149        | 0.183            | 1.0                        | 0.0               | 56.4                       | -51.0             | 42.5                       | 66.4              | 140                                                                                                                                                                                                               | 0.2                        | 1.0               | 0.0               | 56.9              | -50.1             | 43.6              | 66.5              | 139               | 0.183             | 1.0               | 0.0   | 0.069 | 1.0 | 0.0   | 52.6 | -59.0 | 34.9 | 68.6 | 149 | 0.183     | 1.0 | 0.0   |
| 141                                                                                                                                                                                                                                   | 140        | 150        | 0.166            | 1.0                        | 0.0               | 55.9                       | -51.9             | 41.4                       | 66.4              | 141                                                                                                                                                                                                               | 0.186                      | 1.0               | 0.0               | 56.5              | -50.8             | 42.7              | 66.5              | 140               | 0.167             | 1.0               | 0.0   | 0.056 | 1.0 | 0.0   | 52.1 | -60.1 | 34.0 | 69.2 | 150 | 0.167     | 1.0 | 0.0   |
| 142                                                                                                                                                                                                                                   | 141        | 151        | 0.15             | 1.0                        | 0.0               | 55.4                       | -52.7             | 40.3                       | 66.4              | 142                                                                                                                                                                                                               | 0.172                      | 1.0               | 0.0               | 56.1              | -51.6             | 41.8              | 66.5              | 141               | 0.15              | 1.0               | 0.0   | 0.043 | 1.0 | 0.0   | 51.7 | -61.3 | 33.0 | 69.7 | 151 | 0.15      | 1.0 | 0.0   |
| 143                                                                                                                                                                                                                                   | 142        | 152        | 0.133            | 1.0                        | 0.0               | 54.9                       | -53.5             | 39.1                       | 66.3              | 143                                                                                                                                                                                                               | 0.159                      | 1.0               | 0.0               | 55.7              | -52.3             | 40.9              | 66.4              | 142               | 0.133             | 1.0               | 0.0   | 0.03  | 1.0 | 0.0   | 51.2 | -62.4 | 32.0 | 70.2 | 152 | 0.133     | 1.0 | 0.0   |
| 145                                                                                                                                                                                                                                   | 143        | 154        | 0.116            | 1.0                        | 0.0               | 54.4                       | -54.7             | 38.0                       | 66.6              | 145                                                                                                                                                                                                               | 0.145                      | 1.0               | 0.0               | 55.3              | -52.9             | 40.0              | 66.4              | 143               | 0.117             | 1.0               | 0.0   | 0.016 | 1.0 | 0.0   | 50.7 | -63.5 | 30.9 | 70.8 | 154 | 0.117     | 1.0 | 0.0   |
| 146                                                                                                                                                                                                                                   | 144        | 155        | 0.1              | 1.0                        | 0.0               | 53.7                       | -56.2             | 37.0                       | 67.3              | 146                                                                                                                                                                                                               | 0.131                      | 1.0               | 0.0               | 54.9              | -53.6             | 39.0              | 66.4              | 144               | 0.1               | 1.0               | 0.0   | 0.003 | 1.0 | 0.0   | 50.2 | -64.6 | 29.9 | 71.3 | 155 | 0.1       | 1.0 | 0.0   |
| 148                                                                                                                                                                                                                                   | 145        | 156        | 0.083            | 1.0                        | 0.0               | 53.1                       | -57.7             | 35.9                       | 68.0              | 148                                                                                                                                                                                                               | 0.119                      | 1.0               | 0.0               | 54.5              | -54.5             | 38.2              | 66.6              | 145               | 0.083             | 1.0               | 0.0   | 0.0   | 1.0 | 0.021 | 50.1 | -64.6 | 28.3 | 70.6 | 156 | 0.083     | 1.0 | 0.0   |
| 149                                                                                                                                                                                                                                   | 146        | 157        | 0.066            | 1.0                        | 0.0               | 52.5                       | -59.2             | 34.7                       | 68.7              | 149                                                                                                                                                                                                               | 0.107                      | 1.0               | 0.0               | 54.1              | -55.5             | 37.5              | 67.1              | 146               | 0.067             | 1.0               | 0.0   | 0.0   | 1.0 | 0.049 | 50.3 | -64.2 | 26.5 | 69.5 | 157 | 0.067     | 1.0 | 0.0   |
| 151                                                                                                                                                                                                                                   | 147        | 158        | 0.049            | 1.0                        | 0.0               | 51.9                       | -60.7             | 33.5                       | 69.4              | 151                                                                                                                                                                                                               | 0.096                      | 1.0               | 0.0               | 53.7              | -56.5             | 36.8              | 67.5              | 147               | 0.05              | 1.0               | 0.0   | 0.0   | 1.0 | 0.077 | 50.4 | -63.7 | 24.8 | 68.4 | 158 | 0.05      | 1.0 | 0.0   |
| 152                                                                                                                                                                                                                                   | 148        | 159        | 0.033            | 1.0                        | 0.0               | 51.3                       | -62.2             | 32.2                       | 70.0              | 152                                                                                                                                                                                                               | 0.085                      | 1.0               | 0.0               | 53.2              | -57.6             | 36.0              | 68.0              | 148               | 0.033             | 1.0               | 0.0   | 0.0   | 1.0 | 0.104 | 50.5 | -63.1 | 23.1 | 67.3 | 159 | 0.033     | 1.0 | 0.0   |
| 154                                                                                                                                                                                                                                   | 149        | 161        | 0.016            | 1.0                        | 0.0               | 50.6                       | -63.6             | 30.9                       | 70.7              | 154                                                                                                                                                                                                               | 0.074                      | 1.0               | 0.0               | 52.8              | -58.6             | 35.3              | 68.4              | 149               | 0.017             | 1.0               | 0.0   | 0.0   | 1.0 | 0.13  | 50.6 | -62.6 | 21.5 | 66.3 | 161 | 0.017     | 1.0 | 0.0   |
| 155                                                                                                                                                                                                                                   | 150        | 162        | 0.0              | 1.0                        | 0.0               | 50.0                       | -65.0             | 29.6                       | 71.4              | 155                                                                                                                                                                                                               | $G_d$ 0.062                | 1.0               | 0.0               | 52.4              | -59.6             | 34.5              | 68.9              | 150               | $G_s$ 0.0         | 1.0               | 0.0   | 0.0   | 1.0 | 0.151 | 50.7 | -62.0 | 19.9 | 65.2 | 162 | $G_e$ 0.0 | 1.0 | 0.0   |
| 156                                                                                                                                                                                                                                   | 151        | 163        | 0.0              | 1.0                        | 0.016             | 50.1                       | -64.7             | 28.5                       | 70.7              | 156                                                                                                                                                                                                               | 0.051                      | 1.0               | 0.0               | 52.0              | -60.6             | 33.6              | 69.4              | 151               | 0.0               | 1.0               | 0.017 | 0.0   | 1.0 | 0.167 | 50.8 | -61.6 | 18.7 | 64.4 | 163 | 0.0       | 1.0 | 0.017 |
| 156                                                                                                                                                                                                                                   | 152        | 164        | 0.0              | 1.0                        | 0.033             | 50.1                       | -64.5             | 27.4                       | 70.1              | 156                                                                                                                                                                                                               | 0.04                       | 1.0               | 0.0               | 51.5              | -61.6             | 32.8              | 69.8              | 152               | 0.0               | 1.0               | 0.033 | 0.0   | 1.0 | 0.183 | 50.9 | -61.1 | 17.5 | 63.6 | 164 | 0.0       | 1.0 | 0.033 |
| 157                                                                                                                                                                                                                                   | 153        | 164        | 0.0              | 1.0                        | 0.05              | 50.2                       | -64.2             | 26.4                       | 69.4              | 157                                                                                                                                                                                                               | 0.028                      | 1.0               | 0.0               | 51.1              | -62.5             | 31.9              | 70.3              | 153               | 0.0               | 1.0               | 0.05  | 0.0   | 1.0 | 0.2   | 51.0 | -60.6 | 16.3 | 62.8 | 164 | 0.0       | 1.0 | 0.05  |
| 158                                                                                                                                                                                                                                   | 154        | 165        | 0.0              | 1.0                        | 0.066             | 50.3                       | -63.9             | 25.4                       | 68.8              | 158                                                                                                                                                                                                               | 0.017                      | 1.0               | 0.0               | 50.7              | -63.5             | 31.0              | 70.7              | 154               | 0.0               | 1.0               | 0.067 | 0.0   | 1.0 | 0.216 | 51.0 | -60.0 | 15.1 | 62.0 | 165 | 0.0       | 1.0 | 0.067 |
| 159                                                                                                                                                                                                                                   | 155        | 166        | 0.0              | 1.0                        | 0.083             | 50.3                       | -63.6             | 24.4                       | 68.1              | 159                                                                                                                                                                                                               | 0.006                      | 1.0               | 0.0               | 50.3              | -64.4             | 30.1              | 71.2              | 155               | 0.0               | 1.0               | 0.083 | 0.0   | 1.0 | 0.232 | 51.1 | -59.5 | 14.0 | 61.2 | 166 | 0.0       | 1.0 | 0.083 |
| 159                                                                                                                                                                                                                                   | 156        | 167        | 0.0              | 1.0                        | 0.1               | 50.4                       | -63.3             | 23.4                       | 67.5              | 159                                                                                                                                                                                                               | 0.0                        | 1.0               | 0.012             | 50.1              | -64.7             | 28.9              | 71.0              | 156               | 0.0               | 1.0               | 0.1   | 0.0   | 1.0 | 0.248 | 51.2 | -58.9 | 12.9 | 60.4 | 167 | 0.0       | 1.0 | 0.1   |
| 160                                                                                                                                                                                                                                   | 157        | 168        | 0.0              | 1.0                        | 0.116             | 50.5                       | -62.9             | 22.4                       | 66.8              | 160                                                                                                                                                                                                               | 0.0                        | 1.0               | 0.035             | 50.2              | -64.4             | 27.4              | 70.0              | 157               | 0.0               | 1.0               | 0.117 | 0.0   | 1.0 | 0.261 | 51.3 | -58.5 | 11.8 | 59.8 | 168 | 0.0       | 1.0 | 0.117 |
| 161                                                                                                                                                                                                                                   | 158        | 169        | 0.0              | 1.0                        | 0.133             | 50.5                       | -62.5             | 21.2                       | 66.1              | 161                                                                                                                                                                                                               | 0.0                        | 1.0               | 0.059             | 50.3              | -64.0             | 25.9              | 69.1              | 158               | 0.0               | 1.0               | 0.133 | 0.0   | 1.0 | 0.274 | 51.4 | -58.1 | 10.8 | 59.2 | 169 | 0.0       | 1.0 | 0.133 |
| 162                                                                                                                                                                                                                                   | 159        | 170        | 0.0              | 1.0                        | 0.15              | 50.6                       | -62.1             | 19.9                       | 65.2              | 162                                                                                                                                                                                                               | 0.0                        | 1.0               | 0.083             | 50.4              | -63.5             | 24.4              | 68.2              | 159               | 0.0               | 1.0               | 0.15  | 0.0   |     |       |      |       |      |      |     |           |     |       |

Data of Maximum color M in colorimetric system Offset standard print; separation cmy\*, D65 for input or output; Six hue angles of the 60 degree standard colours  $RYGCBM_s$ ;  $h_{ab,s} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$

| Six hue angles of the device colours $RYGBM_d$ : $n_{abd} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours $RYGBM_e$ : $n_{abe} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$ |            |            |                  |                           |                   |                            |                   |                   |                             |                   |           |           |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|------------------|---------------------------|-------------------|----------------------------|-------------------|-------------------|-----------------------------|-------------------|-----------|-----------|-----------|
| $h_{ab,d}$                                                                                                                                                                                                    | $h_{ab,s}$ | $h_{ab,e}$ | $rgb^*_{dd361M}$ | $LAB^*_{d361Mi}(x=LabCh)$ | $rgb^*_{ds361Mi}$ | $LAB^*_{ds361Mi}(x=LabCh)$ | $rgb^*_{dd361Mi}$ | $LAB^*_{de361Mi}$ | $LAB^*_{dex361Mi}(x=LabCh)$ | $rgb^*_{dd361Mi}$ | $rgb^*_d$ | $rgb^*_s$ | $rgb^*_e$ |
| 167                                                                                                                                                                                                           | 165        | 175        | 0.0              | 1.0                       | 0.25              | 51.2                       | -58.9             | 12.7              | 60.3                        | 167               | 0.0       | 1.0       | 0.25      |
| 168                                                                                                                                                                                                           | 166        | 176        | 0.0              | 1.0                       | 0.266             | 51.3                       | -58.4             | 11.3              | 59.5                        | 168               | 0.0       | 1.0       | 0.267     |
| 170                                                                                                                                                                                                           | 167        | 177        | 0.0              | 1.0                       | 0.283             | 51.4                       | -57.9             | 10.0              | 58.8                        | 170               | 0.0       | 1.0       | 0.283     |
| 171                                                                                                                                                                                                           | 168        | 178        | 0.0              | 1.0                       | 0.3               | 51.5                       | -57.3             | 8.7               | 58.0                        | 171               | 0.0       | 1.0       | 0.3       |
| 172                                                                                                                                                                                                           | 169        | 179        | 0.0              | 1.0                       | 0.316             | 51.6                       | -56.8             | 7.4               | 57.3                        | 172               | 0.0       | 1.0       | 0.317     |
| 173                                                                                                                                                                                                           | 170        | 180        | 0.0              | 1.0                       | 0.333             | 51.7                       | -56.2             | 6.1               | 56.5                        | 173               | 0.0       | 1.0       | 0.333     |
| 174                                                                                                                                                                                                           | 171        | 181        | 0.0              | 1.0                       | 0.35              | 51.8                       | -55.5             | 4.9               | 55.8                        | 174               | 0.0       | 1.0       | 0.35      |
| 176                                                                                                                                                                                                           | 172        | 182        | 0.0              | 1.0                       | 0.366             | 51.9                       | -54.9             | 3.7               | 55.0                        | 176               | 0.0       | 1.0       | 0.367     |
| 177                                                                                                                                                                                                           | 173        | 183        | 0.0              | 1.0                       | 0.383             | 52.0                       | -54.2             | 2.3               | 54.3                        | 177               | 0.0       | 1.0       | 0.383     |
| 179                                                                                                                                                                                                           | 174        | 184        | 0.0              | 1.0                       | 0.4               | 52.2                       | -53.6             | 0.7               | 53.6                        | 179               | 0.0       | 1.0       | 0.4       |
| 180                                                                                                                                                                                                           | 175        | 185        | 0.0              | 1.0                       | 0.416             | 52.3                       | -52.8             | -0.8              | 52.9                        | 180               | 0.0       | 1.0       | 0.417     |
| 182                                                                                                                                                                                                           | 176        | 185        | 0.0              | 1.0                       | 0.433             | 52.4                       | -52.1             | -2.3              | 52.1                        | 182               | 0.0       | 1.0       | 0.433     |
| 184                                                                                                                                                                                                           | 177        | 186        | 0.0              | 1.0                       | 0.45              | 52.6                       | -51.3             | -3.8              | 51.4                        | 184               | 0.0       | 1.0       | 0.45      |
| 185                                                                                                                                                                                                           | 178        | 187        | 0.0              | 1.0                       | 0.466             | 52.7                       | -50.4             | -5.3              | 50.7                        | 185               | 0.0       | 1.0       | 0.467     |
| 187                                                                                                                                                                                                           | 179        | 188        | 0.0              | 1.0                       | 0.483             | 52.8                       | -49.6             | -6.6              | 50.0                        | 187               | 0.0       | 1.0       | 0.483     |
| 189                                                                                                                                                                                                           | 180        | 189        | 0.0              | 1.0                       | 0.5               | 52.9                       | -48.6             | -8.0              | 49.3                        | 189               | 0.0       | 1.0       | 0.5       |
| 191                                                                                                                                                                                                           | 181        | 190        | 0.0              | 1.0                       | 0.516             | 53.1                       | -47.9             | -9.5              | 48.9                        | 191               | 0.0       | 1.0       | 0.517     |
| 193                                                                                                                                                                                                           | 182        | 191        | 0.0              | 1.0                       | 0.533             | 53.2                       | -47.2             | -10.9             | 48.4                        | 193               | 0.0       | 1.0       | 0.533     |
| 194                                                                                                                                                                                                           | 183        | 192        | 0.0              | 1.0                       | 0.55              | 53.4                       | -46.4             | -12.3             | 48.0                        | 194               | 0.0       | 1.0       | 0.55      |
| 196                                                                                                                                                                                                           | 184        | 193        | 0.0              | 1.0                       | 0.566             | 53.5                       | -45.6             | -13.7             | 47.6                        | 196               | 0.0       | 1.0       | 0.567     |
| 198                                                                                                                                                                                                           | 185        | 194        | 0.0              | 1.0                       | 0.583             | 53.6                       | -44.7             | -15.0             | 47.1                        | 198               | 0.0       | 1.0       | 0.583     |
| 200                                                                                                                                                                                                           | 186        | 195        | 0.0              | 1.0                       | 0.6               | 53.8                       | -43.8             | -16.3             | 46.7                        | 200               | 0.0       | 1.0       | 0.6       |
| 202                                                                                                                                                                                                           | 187        | 195        | 0.0              | 1.0                       | 0.616             | 53.9                       | -42.8             | -17.5             | 46.3                        | 202               | 0.0       | 1.0       | 0.617     |
| 204                                                                                                                                                                                                           | 188        | 196        | 0.0              | 1.0                       | 0.633             | 54.1                       | -42.0             | -18.8             | 46.0                        | 204               | 0.0       | 1.0       | 0.633     |
| 206                                                                                                                                                                                                           | 189        | 197        | 0.0              | 1.0                       | 0.65              | 54.2                       | -41.2             | -20.1             | 45.9                        | 206               | 0.0       | 1.0       | 0.65      |
| 207                                                                                                                                                                                                           | 190        | 198        | 0.0              | 1.0                       | 0.666             | 54.3                       | -40.5             | -21.4             | 45.8                        | 207               | 0.0       | 1.0       | 0.667     |
| 209                                                                                                                                                                                                           | 191        | 199        | 0.0              | 1.0                       | 0.683             | 54.5                       | -39.7             | -22.7             | 45.7                        | 209               | 0.0       | 1.0       | 0.683     |
| 211                                                                                                                                                                                                           | 192        | 200        | 0.0              | 1.0                       | 0.7               | 54.6                       | -38.8             | -23.9             | 45.6                        | 211               | 0.0       | 1.0       | 0.7       |
| 213                                                                                                                                                                                                           | 193        | 201        | 0.0              | 1.0                       | 0.716             | 54.7                       | -37.9             | -25.1             | 45.5                        | 213               | 0.0       | 1.0       | 0.717     |
| 215                                                                                                                                                                                                           | 194        | 202        | 0.0              | 1.0                       | 0.733             | 54.9                       | -37.0             | -26.3             | 45.4                        | 215               | 0.0       | 1.0       | 0.733     |
| 217                                                                                                                                                                                                           | 195        | 203        | 0.0              |                           |                   |                            |                   |                   |                             |                   |           |           |           |

4-0031231-L0 PI970-70

LAB\*la0, YN=0%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB\*nw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0

uscita: Offset standard print; separation cmy0\*, D65, pagina 13/32

[grafico TUB-PI97; codice di tinte:  $H^*_d=R00Y_d$   
cerchio delle tinte a 48 passi;  $rgb-LabCh^*$  tavole

Input:  $rgb/cmyk \rightarrow rgb_d$   
Output: trasferire a  $cmy0_d$

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours  $RYGCBM_s$ :  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;  
Six hue angles of the device colours  $RYGCBM_d$ :  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours  $RYGCBM_e$ :  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| Lengths of the three colours (x=LabCh) |                   |                   |                         |                          |                         |                          |                         |                          |                         | Lengths of the elementary colours (x=LabCh) |                   |                   |                         |                          |                         |                          |                         |                          |                         | Lengths of the elementary colours (x=LabCh) |                   |                   |                         |                          |                         |                          |                         |                          |                         | Lengths of the elementary colours (x=LabCh) |                   |                   |                         |                          |                         |                          |                         |                          |                         |     |       |     |     |       |     |
|----------------------------------------|-------------------|-------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|---------------------------------------------|-------------------|-------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|---------------------------------------------|-------------------|-------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|---------------------------------------------|-------------------|-------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|-----|-------|-----|-----|-------|-----|
| h <sub>ab,d</sub>                      | h <sub>ab,s</sub> | h <sub>ab,e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>dex361Mi</sub> | rgb* <sub>de361Mi</sub> | h <sub>ab,d</sub>                           | h <sub>ab,s</sub> | h <sub>ab,e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>dex361Mi</sub> | rgb* <sub>de361Mi</sub> | h <sub>ab,d</sub>                           | h <sub>ab,s</sub> | h <sub>ab,e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>dex361Mi</sub> | rgb* <sub>de361Mi</sub> | h <sub>ab,d</sub>                           | h <sub>ab,s</sub> | h <sub>ab,e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>dex361Mi</sub> | rgb* <sub>de361Mi</sub> |     |       |     |     |       |     |
| 238                                    | 210               | 216               | 0.0                     | 1.0                      | 1.0                     | 56.8                     | -25.5                   | -41.5                    | 48.7                    | 238                                         | 0.0               | 1.0               | 0.685                   | 54.5                     | -39.5                   | -22.8                    | 45.7                    | 210                      | 0.0                     | 1.0                                         | 1.0               | 0.0               | 1.0                     | 0.747                    | 55.0                    | -36.1                    | -27.2                   | 45.3                     | 216                     | 0.0                                         | 1.0               | 1.0               | 0.0                     | 1.0                      | 1.0                     | 0.0                      | 1.0                     | 1.0                      | 0.0                     | 1.0 | 1.0   | 0.0 | 1.0 | 1.0   |     |
| 239                                    | 211               | 217               | 0.0                     | 0.983                    | 1.0                     | 56.4                     | -24.9                   | -41.5                    | 48.4                    | 239                                         | 0.0               | 1.0               | 0.694                   | 54.6                     | -39.0                   | -23.4                    | 45.7                    | 211                      | 0.0                     | 0.983                                       | 1.0               | 0.0               | 1.0                     | 0.757                    | 55.1                    | -35.7                    | -27.8                   | 45.4                     | 217                     | 0.0                                         | 0.983             | 1.0               | 0.0                     | 1.0                      | 0.983                   | 1.0                      | 0.0                     | 0.983                    | 1.0                     | 0.0 | 0.983 | 1.0 | 0.0 | 0.983 | 1.0 |
| 239                                    | 212               | 218               | 0.0                     | 0.966                    | 1.0                     | 56.1                     | -24.3                   | -41.5                    | 48.1                    | 239                                         | 0.0               | 1.0               | 0.703                   | 54.7                     | -38.6                   | -24.1                    | 45.6                    | 212                      | 0.0                     | 0.967                                       | 1.0               | 0.0               | 1.0                     | 0.767                    | 55.2                    | -35.3                    | -28.4                   | 45.4                     | 218                     | 0.0                                         | 0.967             | 1.0               | 0.0                     | 1.0                      | 0.967                   | 1.0                      | 0.0                     | 0.967                    | 1.0                     | 0.0 | 0.967 | 1.0 | 0.0 | 0.967 | 1.0 |
| 240                                    | 213               | 219               | 0.0                     | 0.95                     | 1.0                     | 55.7                     | -23.7                   | -41.5                    | 47.8                    | 240                                         | 0.0               | 1.0               | 0.712                   | 54.7                     | -38.1                   | -24.7                    | 45.6                    | 213                      | 0.0                     | 0.95                                        | 1.0               | 0.0               | 1.0                     | 0.778                    | 55.2                    | -34.9                    | -29.0                   | 45.5                     | 219                     | 0.0                                         | 0.95              | 1.0               | 0.0                     | 1.0                      | 0.95                    | 1.0                      | 0.0                     | 0.95                     | 1.0                     | 0.0 | 0.95  | 1.0 | 0.0 | 0.95  | 1.0 |
| 240                                    | 214               | 220               | 0.0                     | 0.933                    | 1.0                     | 55.4                     | -23.1                   | -41.5                    | 47.5                    | 240                                         | 0.0               | 1.0               | 0.721                   | 54.8                     | -37.6                   | -25.3                    | 45.5                    | 214                      | 0.0                     | 0.933                                       | 1.0               | 0.0               | 1.0                     | 0.788                    | 55.3                    | -34.5                    | -29.6                   | 45.6                     | 220                     | 0.0                                         | 0.933             | 1.0               | 0.0                     | 1.0                      | 0.933                   | 1.0                      | 0.0                     | 0.933                    | 1.0                     | 0.0 | 0.933 | 1.0 | 0.0 | 0.933 | 1.0 |
| 241                                    | 215               | 221               | 0.0                     | 0.916                    | 1.0                     | 55.0                     | -22.5                   | -41.4                    | 47.2                    | 241                                         | 0.0               | 1.0               | 0.73                    | 54.9                     | -37.1                   | -26.0                    | 45.4                    | 215                      | 0.0                     | 0.917                                       | 1.0               | 0.0               | 1.0                     | 0.798                    | 55.4                    | -34.1                    | -30.2                   | 45.7                     | 221                     | 0.0                                         | 0.917             | 1.0               | 0.0                     | 1.0                      | 0.917                   | 1.0                      | 0.0                     | 0.917                    | 1.0                     | 0.0 | 0.917 | 1.0 | 0.0 | 0.917 | 1.0 |
| 242                                    | 216               | 222               | 0.0                     | 0.9                      | 1.0                     | 54.6                     | -22.0                   | -41.4                    | 46.9                    | 242                                         | 0.0               | 1.0               | 0.739                   | 55.0                     | -36.6                   | -26.6                    | 45.4                    | 216                      | 0.0                     | 0.9                                         | 1.0               | 0.0               | 1.0                     | 0.808                    | 55.4                    | -33.6                    | -30.8                   | 45.7                     | 222                     | 0.0                                         | 0.9               | 1.0               | 0.0                     | 1.0                      | 0.9                     | 1.0                      | 0.0                     | 0.9                      | 1.0                     | 0.0 | 0.9   | 1.0 | 0.0 | 0.9   | 1.0 |
| 242                                    | 217               | 223               | 0.0                     | 0.883                    | 1.0                     | 54.3                     | -21.4                   | -41.4                    | 46.6                    | 242                                         | 0.0               | 1.0               | 0.747                   | 55.0                     | -36.1                   | -27.2                    | 45.3                    | 217                      | 0.0                     | 0.883                                       | 1.0               | 0.0               | 1.0                     | 0.819                    | 55.5                    | -33.2                    | -31.3                   | 45.8                     | 223                     | 0.0                                         | 0.883             | 1.0               | 0.0                     | 1.0                      | 0.883                   | 1.0                      | 0.0                     | 0.883                    | 1.0                     | 0.0 | 0.883 | 1.0 | 0.0 | 0.883 | 1.0 |
| 243                                    | 218               | 224               | 0.0                     | 0.866                    | 1.0                     | 53.9                     | -20.7                   | -41.3                    | 46.3                    | 243                                         | 0.0               | 1.0               | 0.758                   | 55.1                     | -35.6                   | -27.8                    | 45.4                    | 218                      | 0.0                     | 0.867                                       | 1.0               | 0.0               | 1.0                     | 0.829                    | 55.6                    | -32.7                    | -31.9                   | 45.9                     | 224                     | 0.0                                         | 0.867             | 1.0               | 0.0                     | 1.0                      | 0.867                   | 1.0                      | 0.0                     | 0.867                    | 1.0                     | 0.0 | 0.867 | 1.0 | 0.0 | 0.867 | 1.0 |
| 244                                    | 219               | 225               | 0.0                     | 0.85                     | 1.0                     | 53.4                     | -20.0                   | -41.3                    | 45.9                    | 244                                         | 0.0               | 1.0               | 0.769                   | 55.2                     | -35.2                   | -28.5                    | 45.4                    | 219                      | 0.0                     | 0.85                                        | 1.0               | 0.0               | 1.0                     | 0.839                    | 55.6                    | -32.3                    | -32.5                   | 45.9                     | 225                     | 0.0                                         | 0.85              | 1.0               | 0.0                     | 1.0                      | 0.85                    | 1.0                      | 0.0                     | 0.85                     | 1.0                     | 0.0 | 0.85  | 1.0 | 0.0 | 0.85  | 1.0 |
| 245                                    | 220               | 226               | 0.0                     | 0.833                    | 1.0                     | 52.9                     | -19.2                   | -41.3                    | 45.6                    | 245                                         | 0.0               | 1.0               | 0.781                   | 55.3                     | -34.8                   | -29.2                    | 45.5                    | 220                      | 0.0                     | 0.833                                       | 1.0               | 0.0               | 1.0                     | 0.85                     | 55.7                    | -31.8                    | -33.1                   | 46.0                     | 226                     | 0.0                                         | 0.833             | 1.0               | 0.0                     | 1.0                      | 0.833                   | 1.0                      | 0.0                     | 0.833                    | 1.0                     | 0.0 | 0.833 | 1.0 | 0.0 | 0.833 | 1.0 |
| 245                                    | 221               | 227               | 0.0                     | 0.816                    | 1.0                     | 52.4                     | -18.5                   | -41.3                    | 45.3                    | 245                                         | 0.0               | 1.0               | 0.792                   | 55.3                     | -34.3                   | -29.8                    | 45.6                    | 221                      | 0.0                     | 0.817                                       | 1.0               | 0.0               | 1.0                     | 0.86                     | 55.8                    | -31.3                    | -33.6                   | 46.1                     | 227                     | 0.0                                         | 0.817             | 1.0               | 0.0                     | 1.0                      | 0.817                   | 1.0                      | 0.0                     | 0.817                    | 1.0                     | 0.0 | 0.817 | 1.0 | 0.0 | 0.817 | 1.0 |
| 246                                    | 222               | 227               | 0.0                     | 0.8                      | 1.0                     | 51.9                     | -17.7                   | -41.3                    | 44.9                    | 246                                         | 0.0               | 1.0               | 0.803                   | 55.4                     | -33.9                   | -30.5                    | 45.7                    | 222                      | 0.0                     | 0.8                                         | 1.0               | 0.0               | 1.0                     | 0.87                     | 55.8                    | -30.8                    | -34.2                   | 46.2                     | 227                     | 0.0                                         | 0.8               | 1.0               | 0.0                     | 1.0                      | 0.8                     | 1.0                      | 0.0                     | 0.8                      | 1.0                     | 0.0 | 0.8   | 1.0 | 0.0 | 0.8   | 1.0 |
| 247                                    | 223               | 228               | 0.0                     | 0.783                    | 1.0                     | 51.4                     | -17.0                   | -41.2                    | 44.6                    | 247                                         | 0.0               | 1.0               | 0.815                   | 55.5                     | -33.4                   | -31.1                    | 45.8                    | 223                      | 0.0                     | 0.783                                       | 1.0               | 0.0               | 1.0                     | 0.881                    | 55.9                    | -30.4                    | -34.8                   | 46.3                     | 228                     | 0.0                                         | 0.783             | 1.0               | 0.0                     | 1.0                      | 0.783                   | 1.0                      | 0.0                     | 0.783                    | 1.0                     | 0.0 | 0.783 | 1.0 | 0.0 | 0.783 | 1.0 |
| 248                                    | 224               | 229               | 0.0                     | 0.766                    | 1.0                     | 50.9                     | -16.2                   | -41.2                    | 44.2                    | 248                                         | 0.0               | 1.0               | 0.826                   | 55.6                     | -32.9                   | -31.7                    | 45.8                    | 224                      | 0.0                     | 0.767                                       | 1.0               | 0.0               | 1.0                     | 0.893                    | 56.0                    | -30.0                    | -35.4                   | 46.6                     | 229                     | 0.0                                         | 0.767             | 1.0               | 0.0                     | 1.0                      | 0.767                   | 1.0                      | 0.0                     | 0.767                    | 1.0                     | 0.0 | 0.767 | 1.0 | 0.0 | 0.767 | 1.0 |
| 249                                    | 225               | 230               | 0.0                     | 0.75                     | 1.0                     | 50.4                     | -15.5                   | -41.1                    | 43.9                    | 249                                         | 0.0               | 1.0               | 0.837                   | 55.6                     | -32.4                   | -32.4                    | 45.9                    | 225                      | 0.0                     | 0.75                                        | 1.0               | 0.0               | 1.0                     | 0.904                    | 56.1                    | -29.6                    | -36.1                   | 46.8                     | 230                     | 0.0                                         | 0.75              | 1.0               | 0.0                     | 1.0                      | 0.75                    | 1.0                      | 0.0                     | 0.75                     | 1.0                     | 0.0 | 0.75  | 1.0 | 0.0 | 0.75  | 1.0 |
| 250                                    | 226               | 231               | 0.0                     | 0.733                    | 1.0                     | 49.9                     | -14.7                   | -41.1                    | 43.6                    | 250                                         | 0.0               | 1.0               | 0.849                   | 55.7                     | -31.9                   | -33.0                    | 46.0                    | 226                      | 0.0                     | 0.733                                       | 1.0               | 0.0               | 1.0                     | 0.915                    | 56.2                    | -29.1                    | -36.7                   | 47.0                     | 231                     | 0.0                                         | 0.733             | 1.0               | 0.0                     | 1.0                      | 0.733                   | 1.0                      | 0.0                     | 0.733                    | 1.0                     | 0.0 | 0.733 | 1.0 | 0.0 | 0.733 | 1.0 |
| 251                                    | 227               | 232               | 0.0                     | 0.716                    | 1.0                     | 49.4                     | -13.8                   | -41.1                    | 43.4                    | 251                                         | 0.0               | 1.0               | 0.86                    | 55.8                     | -31.3                   | -33.6                    | 46.1                    | 227                      | 0.0                     | 0.717                                       | 1.0               | 0.0               | 1.0                     | 0.926                    | 56.3                    | -28.7                    | -37.4                   | 47.2                     | 232                     | 0.0                                         | 0.717             | 1.0               | 0.0                     | 1.0                      | 0.717                   | 1.0                      | 0.0                     | 0.717                    | 1.0                     | 0.0 | 0.717 | 1.0 | 0.0 | 0.717 | 1.0 |
| 252                                    | 228               | 233               | 0.0                     | 0.7                      | 1.0                     | 48.8                     | -13.0                   | -41.1                    | 43.1                    | 252                                         | 0.0               | 1.0               | 0.871                   | 55.9                     | -30.8                   | -34.2                    | 46.2                    | 228                      | 0.0                     | 0.7                                         | 1.0               | 0.0               | 1.0                     | 0.938                    | 56.3                    | -28.2                    | -38.0                   | 47.5                     | 233                     | 0.0                                         | 0.7               | 1.0               | 0.0                     | 1.0                      | 0.7                     | 1.0                      | 0.0                     | 0.7                      | 1.0                     | 0.0 | 0.7   | 1.0 | 0.0 | 0.7   | 1.0 |
| 253                                    | 229               | 234               | 0.0                     | 0.683                    | 1.0                     | 48.3                     | -12.2                   | -41.1                    | 42.9                    | 253                                         | 0.0               | 1.0               | 0.883                   | 55.9                     | -30.3                   | -34.9                    | 46.4                    | 229                      | 0.0                     | 0.683                                       | 1.0               | 0.0               | 1.0                     | 0.949                    | 56.4                    | -27.7                    | -38.6                   | 47.7                     | 234                     | 0.0                                         | 0.683             | 1.0               | 0.0                     | 1.0                      | 0.683                   | 1.0                      | 0.0                     | 0.683                    | 1.0                     | 0.0 | 0.683 | 1.0 | 0.0 | 0.683 | 1.0 |
| 254                                    | 230               | 235               | 0.0                     | 0.666                    | 1.0                     | 47.8                     | -11.4                   | -41.0                    | 42.6                    | 254                                         | 0.0               | 1.0               | 0.896                   | 56.0                     | -29.9                   | -35.6                    | 46.6                    | 230                      | 0.0                     | 0.667                                       | 1.0               | 0.0               | 1.0                     | 0.96                     | 56.5                    | -27.2                    | -39.3                   | 47.9                     | 235                     | 0.0                                         | 0.667             | 1.0               | 0.0                     | 1.0                      | 0.667                   | 1.0                      | 0.0                     | 0.667                    | 1.0                     | 0.0 | 0.667 | 1.0 | 0.0 | 0.667 | 1.0 |
| 255                                    | 231               | 236               | 0.0                     | 0.65                     | 1.0                     | 47.3                     | -10.6                   | -41.0                    | 42.3                    | 255                                         | 0.0               | 1.0               | 0.908                   | 56.1                     | -29.4                   | -36.3                    | 46.9                    | 231                      | 0.0                     | 0.65                                        | 1.0               | 0.0               | 1.0                     | 0.972                    | 56.6                    | -26.7                    | -39.9                   | 48.2                     | 236                     | 0.0                                         | 0.65              | 1.0               | 0.0                     | 1.0                      | 0.65                    | 1.0                      | 0.0                     | 0.65                     | 1.0                     | 0.0 | 0.65  | 1.0 | 0.0 | 0.65  | 1.0 |
| 256                                    | 232               | 237               | 0.0                     | 0.633                    | 1.0                     | 46.8                     | -9.8                    | -40.9                    | 42.1                    | 256                                         | 0.0               | 1.0               | 0.92                    | 56.2                     | -28.9                   | -37.0                    | 47.1                    | 232                      | 0.0                     | 0.633                                       | 1.0               | 0.0               | 1.0                     | 0.983                    | 56.7                    | -26.2                    | -40.5                   | 48.4                     | 237                     | 0.0                                         | 0.633             | 1.0               | 0.0                     | 1.0                      | 0.633                   | 1.0                      | 0.0                     | 0.633                    | 1.0                     | 0.0 | 0.633 | 1.0 | 0.0 | 0.633 | 1.0 |
| 257                                    | 233               | 237               | 0.0                     | 0.616                    | 1.0                     | 46.2                     | -8.9                    | -40.9                    | 41.8                    | 257                                         | 0.0               | 1.0               | 0.933                   | 56.3                     | -28.4                   | -37.7                    | 47.4                    | 233                      | 0.0                     | 0.617                                       | 1.0               | 0.0               | 1.0                     | 0.994                    | 56.8                    | -25.7                    | -41.1                   | 48.6                     | 237                     | 0.0                                         | 0.617             | 1.0               | 0.0                     | 1.0                      | 0.617                   | 1.0                      | 0.                      |                          |                         |     |       |     |     |       |     |

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours  $RYGCBM_s$ :  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;  
Six hue angles of the device colours  $RYGCBM_d$ :  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours  $RYGCBM_e$ :  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| $h_{ab,d}$ | $h_{ab,s}$ | $h_{ab,e}$ | $rgb^*$ dd361M | $LAB^*$ ddx361Mi (x=LabCh) | $rgb^*$ ds361Mi     | $LAB^*$ dsx361Mi (x=LabCh) | $rgb^*$ dd361Mi       | $rgb^*$ de361Mi | $LAB^*$ dex361Mi (x=LabCh) | $rgb^*$ dd361Mi       | $rgb^*_d$ | $rgb^*_s$ | $rgb^*_e$ |
|------------|------------|------------|----------------|----------------------------|---------------------|----------------------------|-----------------------|-----------------|----------------------------|-----------------------|-----------|-----------|-----------|
| 289        | 255        | 258        | 0.0 0.25 1.0   | 32.8 14.3 -40.2 42.7       | 0.0 0.657 1.0       | 47.5 -10.9 -40.9 42.5      | 255 0.0 0.25 1.0      | 0.0 0.613 1.0   | 46.1 -8.6 -40.8 41.9       | 258 0.0 0.25 1.0      |           |           |           |
| 290        | 256        | 258        | 0.0 0.233 1.0  | 32.2 15.3 -40.3 43.1       | 0.0 0.641 1.0       | 47.0 -10.1 -40.9 42.2      | 256 0.0 0.233 1.0     | 0.0 0.603 1.0   | 45.7 -7.9 -40.9 41.7       | 258 0.0 0.233 1.0     |           |           |           |
| 292        | 257        | 259        | 0.0 0.216 1.0  | 31.7 16.4 -40.3 43.6       | 0.0 0.624 1.0       | 46.5 -9.3 -40.8 42.0       | 257 0.0 0.217 1.0     | 0.0 0.593 1.0   | 45.3 -7.2 -40.9 41.6       | 259 0.0 0.217 1.0     |           |           |           |
| 293        | 258        | 260        | 0.0 0.2 1.0    | 31.1 17.5 -40.4 44.0       | 0.0 0.613 1.0       | 46.1 -8.6 -40.8 41.9       | 258 0.0 0.2 1.0       | 0.0 0.583 1.0   | 44.9 -6.6 -40.9 41.5       | 260 0.0 0.2 1.0       |           |           |           |
| 294        | 259        | 261        | 0.0 0.183 1.0  | 30.6 18.5 -40.4 44.5       | 0.0 0.602 1.0       | 45.7 -7.9 -40.9 41.7       | 259 0.0 0.183 1.0     | 0.0 0.573 1.0   | 44.5 -5.9 -40.9 41.4       | 261 0.0 0.183 1.0     |           |           |           |
| 295        | 260        | 262        | 0.0 0.166 1.0  | 30.0 19.6 -40.4 44.9       | 0.0 0.591 1.0       | 45.3 -7.1 -40.9 41.6       | 260 0.0 0.167 1.0     | 0.0 0.562 1.0   | 44.1 -5.2 -40.9 41.3       | 262 0.0 0.167 1.0     |           |           |           |
| 297        | 261        | 263        | 0.0 0.15 1.0   | 29.5 20.7 -40.4 45.4       | 0.0 0.58 1.0        | 44.8 -6.4 -40.9 41.5       | 261 0.0 0.15 1.0      | 0.0 0.552 1.0   | 43.7 -4.5 -40.9 41.2       | 263 0.0 0.15 1.0      |           |           |           |
| 298        | 262        | 264        | 0.0 0.133 1.0  | 28.9 21.8 -40.3 45.8       | 0.0 0.569 1.0       | 44.4 -5.7 -40.9 41.4       | 262 0.0 0.133 1.0     | 0.0 0.542 1.0   | 43.4 -3.9 -40.8 41.1       | 264 0.0 0.133 1.0     |           |           |           |
| 299        | 263        | 265        | 0.0 0.116 1.0  | 28.4 22.8 -40.3 46.3       | 0.0 0.558 1.0       | 44.0 -4.9 -40.9 41.3       | 263 0.0 0.117 1.0     | 0.0 0.532 1.0   | 43.0 -3.2 -40.8 41.0       | 265 0.0 0.117 1.0     |           |           |           |
| 300        | 264        | 266        | 0.0 0.1 1.0    | 27.9 23.8 -40.4 46.9       | 0.0 0.547 1.0       | 43.5 -4.2 -40.8 41.2       | 264 0.0 0.1 1.0       | 0.0 0.522 1.0   | 42.6 -2.6 -40.7 40.9       | 266 0.0 0.1 1.0       |           |           |           |
| 301        | 265        | 267        | 0.0 0.083 1.0  | 27.4 24.7 -40.4 47.4       | 0.0 0.536 1.0       | 43.1 -3.5 -40.8 41.1       | 265 0.0 0.083 1.0     | 0.0 0.512 1.0   | 42.2 -1.9 -40.7 40.8       | 267 0.0 0.083 1.0     |           |           |           |
| 302        | 266        | 268        | 0.0 0.066 1.0  | 26.9 25.7 -40.4 47.9       | 0.0 0.525 1.0       | 42.7 -2.8 -40.7 40.9       | 266 0.0 0.067 1.0     | 0.0 0.502 1.0   | 41.8 -1.3 -40.6 40.7       | 268 0.0 0.067 1.0     |           |           |           |
| 303        | 267        | 269        | 0.0 0.049 1.0  | 26.5 26.6 -40.5 48.4       | 0.0 0.514 1.0       | 42.3 -2.0 -40.7 40.8       | 267 0.0 0.05 1.0      | 0.0 0.491 1.0   | 41.4 -0.6 -40.6 40.7       | 269 0.0 0.05 1.0      |           |           |           |
| 304        | 268        | 269        | 0.0 0.033 1.0  | 26.0 27.6 -40.4 49.0       | 0.0 0.503 1.0       | 41.8 -1.3 -40.6 40.7       | 268 0.0 0.033 1.0     | 0.0 0.48 1.0    | 41.0 0.0 -40.6 40.7        | 269 0.0 0.033 1.0     |           |           |           |
| 305        | 269        | 270        | 0.0 0.016 1.0  | 25.5 28.6 -40.4 49.5       | 0.0 0.491 1.0       | 41.4 -0.6 -40.6 40.7       | 269 0.0 0.017 1.0     | 0.0 0.469 1.0   | 40.6 0.6 -40.6 40.7        | 270 0.0 0.017 1.0     |           |           |           |
| 306        | 270        | 271        | 0.0 0.0 1.0    | 25.0 29.5 -40.4 50.0       | $B_d$ 0.0 0.479 1.0 | 41.0 0.0 -40.6 40.7        | $270 B_s$ 0.0 0.0 1.0 | 0.0 0.458 1.0   | 40.3 1.2 -40.6 40.7        | $271 B_e$ 0.0 0.0 1.0 |           |           |           |
| 307        | 271        | 272        | 0.016 0.0 1.0  | 25.4 30.4 -39.9 50.2       | 0.0 0.467 1.0       | 40.6 0.7 -40.6 40.7        | 271 0.017 0.0 1.0     | 0.0 0.447 1.0   | 39.9 1.9 -40.5 40.7        | 272 0.017 0.0 1.0     |           |           |           |
| 308        | 272        | 273        | 0.033 0.0 1.0  | 25.8 31.3 -39.4 50.4       | 0.0 0.455 1.0       | 40.2 1.4 -40.6 40.7        | 272 0.033 0.0 1.0     | 0.0 0.435 1.0   | 39.5 2.6 -40.5 40.7        | 273 0.033 0.0 1.0     |           |           |           |
| 309        | 273        | 274        | 0.05 0.0 1.0   | 26.2 32.2 -38.9 50.5       | 0.0 0.443 1.0       | 39.7 2.1 -40.5 40.7        | 273 0.05 0.0 1.0      | 0.0 0.424 1.0   | 39.1 3.3 -40.5 40.7        | 274 0.05 0.0 1.0      |           |           |           |
| 310        | 274        | 275        | 0.066 0.0 1.0  | 26.5 33.1 -38.4 50.7       | 0.0 0.431 1.0       | 39.3 2.8 -40.5 40.7        | 274 0.067 0.0 1.0     | 0.0 0.413 1.0   | 38.7 3.9 -40.4 40.7        | 275 0.067 0.0 1.0     |           |           |           |
| 311        | 275        | 276        | 0.083 0.0 1.0  | 26.9 33.9 -37.8 50.8       | 0.0 0.419 1.0       | 38.9 3.5 -40.4 40.7        | 275 0.083 0.0 1.0     | 0.0 0.401 1.0   | 38.3 4.6 -40.3 40.7        | 276 0.083 0.0 1.0     |           |           |           |
| 313        | 276        | 277        | 0.1 0.0 1.0    | 27.3 34.8 -37.3 51.0       | 0.0 0.407 1.0       | 38.5 4.3 -40.4 40.7        | 276 0.1 0.0 1.0       | 0.0 0.39 1.0    | 37.9 5.3 -40.3 40.7        | 277 0.1 0.0 1.0       |           |           |           |
| 314        | 277        | 278        | 0.116 0.0 1.0  | 27.7 35.6 -36.7 51.1       | 0.0 0.395 1.0       | 38.1 5.0 -40.3 40.7        | 277 0.117 0.0 1.0     | 0.0 0.378 1.0   | 37.5 5.9 -40.2 40.7        | 278 0.117 0.0 1.0     |           |           |           |
| 315        | 278        | 279        | 0.133 0.0 1.0  | 27.9 36.4 -36.2 51.3       | 0.0 0.383 1.0       | 37.6 5.7 -40.2 40.7        | 278 0.133 0.0 1.0     | 0.0 0.367 1.0   | 37.1 6.6 -40.2 40.8        | 279 0.133 0.0 1.0     |           |           |           |
| 316        | 279        | 280        | 0.15 0.0 1.0   | 28.1 37.2 -35.7 51.6       | 0.0 0.371 1.0       | 37.2 6.4 -40.2 40.8        | 279 0.15 0.0 1.0      | 0.0 0.357 1.0   | 36.7 7.3 -40.2 41.0        | 280 0.15 0.0 1.0      |           |           |           |
| 317        | 280        | 281        | 0.166 0.0 1.0  | 28.2 38.0 -35.2 51.9       | 0.0 0.36 1.0        | 36.8 7.1 -40.2 41.0        | 280 0.167 0.0 1.0     | 0.0 0.346 1.0   | 36.3 8.0 -40.3 41.2        | 281 0.167 0.0 1.0     |           |           |           |
| 318        | 281        | 282        | 0.183 0.0 1.0  | 28.3 38.8 -34.7 52.1       | 0.0 0.348 1.0       | 36.4 7.8 -40.3 41.1        | 281 0.183 0.0 1.0     | 0.0 0.335 1.0   | 35.9 8.7 -40.3 41.3        | 282 0.183 0.0 1.0     |           |           |           |
| 319        | 282        | 283        | 0.2 0.0 1.0    | 28.5 39.6 -34.2 52.4       | 0.0 0.337 1.0       | 36.0 8.6 -40.3 41.3        | 282 0.2 0.0 1.0       | 0.0 0.324 1.0   | 35.5 9.4 -40.3 41.5        | 283 0.2 0.0 1.0       |           |           |           |
| 320        | 283        | 284        | 0.216 0.0 1.0  | 28.6 40.4 -33.7 52.6       | 0.0 0.326 1.0       | 35.6 9.3 -40.3 41.5        | 283 0.217 0.0 1.0     | 0.0 0.313 1.0   | 35.1 10.1 -40.3 41.7       | 284 0.217 0.0 1.0     |           |           |           |
| 321        | 284        | 285        | 0.233 0.0 1.0  | 28.7 41.2 -33.1 52.9       | 0.0 0.314 1.0       | 35.2 10.1 -40.3 41.7       | 284 0.233 0.0 1.0     | 0.0 0.303 1.0   | 34.8 10.8 -40.3 41.9       | 285 0.233 0.0 1.0     |           |           |           |
| 322        | 285        | 285        | 0.25 0.0 1.0   | 28.8 41.9 -32.5 53.1       | 0.0 0.303 1.0       | 34.8 10.8 -40.3 41.9       | 285 0.25 0.0 1.0      | 0.0 0.292 1.0   | 34.4 11.6 -40.3 42.0       | 285 0.25 0.0 1.0      |           |           |           |
| 323        | 286        | 286        | 0.266 0.0 1.0  | 29.4 43.3 -31.8 53.8       | 0.0 0.291 1.0       | 34.3 11.6 -40.3 42.0       | 286 0.267 0.0 1.0     | 0.0 0.281 1.0   | 34.0 12.3 -40.3 42.2       | 286 0.267 0.0 1.0     |           |           |           |
| 325        | 287        | 287        | 0.283 0.0 1.0  | 29.9 44.7 -31.1 54.4       | 0.0 0.28 1.0        | 33.9 12.3 -40.3 42.2       | 287 0.283 0.0 1.0     | 0.0 0.27 1.0    | 33.6 13.0 -40.2 42.4       | 287 0.283 0.0 1.0     |           |           |           |
| 326        | 288        | 288        | 0.3 0.0 1.0    | 30.4 46.0 -30.3 55.1       | 0.0 0.269 1.0       | 33.5 13.1 -40.2 42.4       | 288 0.3 0.0 1.0       | 0.0 0.26 1.0    | 33.2 13.7 -40.2 42.5       | 288 0.3 0.0 1.0       |           |           |           |
| 328        | 289        | 289        | 0.316 0.0 1.0  | 30.9 47.3 -29.4 55.7       | 0.0 0.257 1.0       | 33.1 13.9 -40.2 42.6       | 289 0.317 0.0 1.0     | 0.0 0.249 1.0   | 32.8 14.4 -40.1 42.7       | 289 0.317 0.0 1.0     |           |           |           |
| 329        | 290        | 290        | 0.333 0.0 1.0  | 31.4 48.6 -28.5 56.4       | 0.0 0.245 1.0       | 32.7 14.6 -40.1 42.8       | 290 0.333 0.0 1.0     | 0.0 0.236 1.0   | 32.4 15.2 -40.2 43.1       | 290 0.333 0.0 1.0     |           |           |           |
| 331        | 291        | 291        | 0.35 0.0 1.0   | 32.0 49.9 -27.5 57.0       | 0.0 0.232 1.0       | 32.2 15.5 -40.2 43.2       | 291 0.35 0.0 1.0      | 0.0 0.223 1.0   | 32.0 16.0 -40.3 43.4       | 291 0.35 0.0 1.0      |           |           |           |
| 332        | 292        | 292        | 0.366 0.0 1.0  | 32.5 51.2 -26.5 57.7       | 0.0 0.219 1.0       | 31.8 16.3 -40.3 43.6       | 292 0.367 0.0 1.0     | 0.0 0.211 1.0   | 31.5 16.8 -40.3 43.8       | 292 0.367 0.0 1.0     |           |           |           |
| 333        | 293        | 293        | 0.383 0.0 1.0  | 32.9 52.3 -25.7 58.3       | 0.0 0.205 1.0       | 31.4 17.2 -40.3 43.9       | 293 0.383 0.0 1.0     | 0.0 0.198 1.0   | 31.1 17.6 -40.3 44.1       | 293 0.383 0.0 1.0     |           |           |           |
| 334        | 294        | 294        | 0.4 0.0 1.0    | 33.3 53.2 -25.0 58.8       | 0.0 0.192 1.0       | 30.9 18.0 -40.3 44.3       | 294 0.4 0.0 1.0       | 0.0 0.186 1.0   | 30.7 18.4 -40.4 44.5       | 294 0.4 0.0 1.0       |           |           |           |
| 335        | 295        | 295        | 0.416 0.0 1.0  | 33.7 54.1 -24.4 59.4       | 0.0 0.179 1.0       | 30.5 18.9 -40.4 44.6       | 295 0.417 0.0 1.0     | 0.0 0.173 1.0   | 30.3 19.2 -40.4 44.8       | 295 0.417 0.0 1.0     |           |           |           |
| 336        | 296        | 296        | 0.433 0.0 1.0  | 34.0 55.0 -23.7 59.9       | 0.0 0.166 1.0       | 30.0 19.7 -40.3 45.0       | 296 0.433 0.0 1.0     | 0.0 0.161 1.0   | 29.9 20.1 -40.3 45.1       | 296 0.433 0.0 1.0     |           |           |           |
| 337        | 297        | 297        | 0.45 0.0 1.0   | 34.4 55.9 -23.0 60.5       | 0.0 0.152 1.0       | 29.6 20.6 -40.3 45.4       | 297 0.45 0.0 1.0      | 0.0 0.148 1.0   | 29.4 20.9 -40.3 45.5       | 297 0.45 0.0 1.0      |           |           |           |
| 338        | 298        | 298        | 0.466 0.0 1.0  | 34.8 56.8 -22.2 61.0       | 0.0 0.139 1.0       | 29.1 21.5 -40.3 45.7       | 298 0.467 0.0 1.0     | 0.0 0.136 1.0   | 29.0 21.7 -40.3 45.8       | 298 0.467 0.0 1.0     |           |           |           |
| 339        | 299        | 299        | 0.483 0.0 1.0  | 35.2 57.7 -21.5 61.6       | 0.0 0.126 1.0       | 28.7 22.3 -40.2 46.1       | 299 0.483 0.0 1.0     | 0.0 0.122 1.0   | 28.6 22.6 -40.2 46.2       | 299 0.483 0.0 1.0     |           |           |           |
| 340        | 300        | 300        | 0.5 0.0 1.0    | 35.6 58.6 -20.7 62.1       | 0.0 0.109 1.0       | 28.2 23.3 -40.3 46.6       | 300 0.5 0.0 1.0       | 0.0 0.106 1.0   | 28.1 23.5 -40.3 46.7       | 300 0.5 0.0 1.0       |           |           |           |

4-0031431-L0 PI970-70

$LAB^*a_{00}$ ,  $YN=0\%$ ,  $XYZ_{nw}=3.6, 4.2, 6.1, 85.4, 89.1, 104.8$ ,  $LAB^*n_w=24.4, 0.0, 0.0, 95.6, 0.0, 0.0$

uscita: Offset standard print; separation cmy0\*, D65, pagina 15/33

grafico TUB-PI97; codice di tinte:  $H^*_{ab}=R00Y_{ab}$   
cerchio delle tinte a 48 passi;  $rgb-LabCh^*$ tavole

Input:  $rgb/cmyk \rightarrow rgb_{ab}$   
Output: trasferire a  $cmy0_{ab}$

4-0031431-F0

| Data of Maximum color M in colorimetric system Offset standard print; separation cmy0*, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM <sub>s</sub> : h <sub>ab,ds</sub> = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0; Six hue angles of the device colours RYGBM <sub>d</sub> : h <sub>ab,d</sub> = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8; Six hue angles of the elementary colours RYGBM <sub>e</sub> : h <sub>ab,e</sub> = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6 |     |     |                        |     |       |                                    |      |            |                         |                      |       |                                    |      |      |                         |     |                    |                                   |       |       |                         |     |      |                         |            |     |                    |     |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|------------------------|-----|-------|------------------------------------|------|------------|-------------------------|----------------------|-------|------------------------------------|------|------|-------------------------|-----|--------------------|-----------------------------------|-------|-------|-------------------------|-----|------|-------------------------|------------|-----|--------------------|-----|-------|
| h <sub>ab,d</sub> h <sub>ab,s</sub> h <sub>ab,e</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |     | rgb* <sub>dd361M</sub> |     |       | LAB* <sub>dsx361Mi</sub> (x=LabCh) |      |            | rgb* <sub>ds361Mi</sub> |                      |       | LAB* <sub>dsx361Mi</sub> (x=LabCh) |      |      | rgb* <sub>dd361Mi</sub> |     |                    | LAB* <sub>de361Mi</sub> (x=LabCh) |       |       | rgb* <sub>dd361Mi</sub> |     |      | rgb* <sub>dd361Mi</sub> |            |     |                    |     |       |
| 340                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 300 | 300 | 0.5                    | 0.0 | 1.0   | 35.6                               | 58.6 | -20.7 62.1 | 340                     | 0.0                  | 0.109 | 1.0                                | 28.2 | 23.3 | -40.3 46.6              | 300 | 0.5                | 0.0                               | 1.0   | 0.0   | 0.106                   | 1.0 | 28.1 | 23.5                    | -40.3 46.7 | 300 | 0.5                | 0.0 | 1.0   |
| 341                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 301 | 301 | 0.516                  | 0.0 | 1.0   | 35.9                               | 59.5 | -19.9 62.8 | 341                     | 0.0                  | 0.091 | 1.0                                | 27.7 | 24.3 | -40.3 47.2              | 301 | 0.517              | 0.0                               | 1.0   | 0.0   | 0.089                   | 1.0 | 27.6 | 24.4                    | -40.3 47.2 | 301 | 0.517              | 0.0 | 1.0   |
| 342                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 302 | 302 | 0.533                  | 0.0 | 1.0   | 36.2                               | 60.5 | -19.0 63.4 | 342                     | 0.0                  | 0.074 | 1.0                                | 27.2 | 25.3 | -40.4 47.7              | 302 | 0.533              | 0.0                               | 1.0   | 0.0   | 0.073                   | 1.0 | 27.2 | 25.4                    | -40.4 47.8 | 302 | 0.533              | 0.0 | 1.0   |
| 343                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 303 | 303 | 0.55                   | 0.0 | 1.0   | 36.6                               | 61.4 | -18.2 64.0 | 343                     | 0.0                  | 0.056 | 1.0                                | 26.7 | 26.3 | -40.4 48.3              | 303 | 0.55               | 0.0                               | 1.0   | 0.0   | 0.056                   | 1.0 | 26.7 | 26.3                    | -40.4 48.3 | 303 | 0.55               | 0.0 | 1.0   |
| 344                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 304 | 303 | 0.566                  | 0.0 | 1.0   | 36.9                               | 62.3 | -17.3 64.7 | 344                     | 0.0                  | 0.039 | 1.0                                | 26.2 | 27.3 | -40.4 48.9              | 304 | 0.567              | 0.0                               | 1.0   | 0.0   | 0.039                   | 1.0 | 26.2 | 27.3                    | -40.4 48.8 | 303 | 0.567              | 0.0 | 1.0   |
| 345                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 305 | 304 | 0.583                  | 0.0 | 1.0   | 37.2                               | 63.2 | -16.4 65.3 | 345                     | 0.0                  | 0.021 | 1.0                                | 25.7 | 28.3 | -40.4 49.4              | 305 | 0.583              | 0.0                               | 1.0   | 0.0   | 0.023                   | 1.0 | 25.7 | 28.2                    | -40.4 49.4 | 304 | 0.583              | 0.0 | 1.0   |
| 346                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 306 | 305 | 0.6                    | 0.0 | 1.0   | 37.6                               | 64.1 | -15.4 66.0 | 346                     | 0.0                  | 0.004 | 1.0                                | 25.2 | 29.4 | -40.3 50.0              | 306 | 0.6                | 0.0                               | 1.0   | 0.0   | 0.006                   | 1.0 | 25.3 | 29.2                    | -40.3 49.9 | 305 | 0.6                | 0.0 | 1.0   |
| 347                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 307 | 306 | 0.616                  | 0.0 | 1.0   | 37.9                               | 65.0 | -14.5 66.6 | 347                     | 0.011                | 0.0   | 1.0                                | 25.3 | 30.2 | -40.0 50.2              | 307 | 0.617              | 0.0                               | 1.0   | 0.009 | 0.0                     | 1.0 | 25.3 | 30.1                    | -40.1 50.2 | 306 | 0.617              | 0.0 | 1.0   |
| 348                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 308 | 307 | 0.633                  | 0.0 | 1.0   | 38.3                               | 65.8 | -13.7 67.2 | 348                     | 0.026                | 0.0   | 1.0                                | 25.7 | 31.0 | -39.6 50.3              | 308 | 0.633              | 0.0                               | 1.0   | 0.023 | 0.0                     | 1.0 | 25.6 | 30.8                    | -39.7 50.3 | 307 | 0.633              | 0.0 | 1.0   |
| 348                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 309 | 308 | 0.65                   | 0.0 | 1.0   | 38.8                               | 66.6 | -13.1 67.9 | 348                     | 0.041                | 0.0   | 1.0                                | 26.0 | 31.8 | -39.1 50.5              | 309 | 0.65               | 0.0                               | 1.0   | 0.036 | 0.0                     | 1.0 | 25.9 | 31.5                    | -39.3 50.4 | 308 | 0.65               | 0.0 | 1.0   |
| 349                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 310 | 309 | 0.666                  | 0.0 | 1.0   | 39.3                               | 67.3 | -12.5 68.5 | 349                     | 0.056                | 0.0   | 1.0                                | 26.3 | 32.5 | -38.7 50.6              | 310 | 0.667              | 0.0                               | 1.0   | 0.05  | 0.0                     | 1.0 | 26.2 | 32.3                    | -38.8 50.6 | 309 | 0.667              | 0.0 | 1.0   |
| 350                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 311 | 310 | 0.683                  | 0.0 | 1.0   | 39.8                               | 68.1 | -11.9 69.1 | 350                     | 0.07                 | 0.0   | 1.0                                | 26.7 | 33.3 | -38.2 50.8              | 311 | 0.683              | 0.0                               | 1.0   | 0.064 | 0.0                     | 1.0 | 26.5 | 33.0                    | -38.4 50.7 | 310 | 0.683              | 0.0 | 1.0   |
| 350                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 312 | 311 | 0.7                    | 0.0 | 1.0   | 40.3                               | 68.8 | -11.2 69.7 | 350                     | 0.085                | 0.0   | 1.0                                | 27.0 | 34.1 | -37.7 50.9              | 312 | 0.7                | 0.0                               | 1.0   | 0.078 | 0.0                     | 1.0 | 26.9 | 33.7                    | -37.9 50.8 | 311 | 0.7                | 0.0 | 1.0   |
| 351                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 313 | 312 | 0.716                  | 0.0 | 1.0   | 40.8                               | 69.5 | -10.6 70.4 | 351                     | 0.1                  | 0.0   | 1.0                                | 27.3 | 34.8 | -37.2 51.0              | 313 | 0.717              | 0.0                               | 1.0   | 0.092 | 0.0                     | 1.0 | 27.2 | 34.4                    | -37.5 51.0 | 312 | 0.717              | 0.0 | 1.0   |
| 351                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 314 | 313 | 0.733                  | 0.0 | 1.0   | 41.3                               | 70.3 | -9.9 71.0  | 351                     | 0.114                | 0.0   | 1.0                                | 27.7 | 35.5 | -36.7 51.2              | 314 | 0.733              | 0.0                               | 1.0   | 0.106 | 0.0                     | 1.0 | 27.5 | 35.1                    | -37.0 51.1 | 313 | 0.733              | 0.0 | 1.0   |
| 352                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 315 | 314 | 0.75                   | 0.0 | 1.0   | 41.8                               | 71.0 | -9.2 71.6  | 352                     | 0.13                 | 0.0   | 1.0                                | 27.9 | 36.3 | -36.2 51.3              | 315 | 0.75               | 0.0                               | 1.0   | 0.12  | 0.0                     | 1.0 | 27.8 | 35.8                    | -36.5 51.2 | 314 | 0.75               | 0.0 | 1.0   |
| 353                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 316 | 315 | 0.766                  | 0.0 | 1.0   | 42.1                               | 71.6 | -8.7 72.1  | 353                     | 0.146                | 0.0   | 1.0                                | 28.1 | 37.1 | -35.7 51.6              | 316 | 0.767              | 0.0                               | 1.0   | 0.135 | 0.0                     | 1.0 | 28.0 | 36.6                    | -36.0 51.4 | 315 | 0.767              | 0.0 | 1.0   |
| 353                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 317 | 316 | 0.783                  | 0.0 | 1.0   | 42.4                               | 72.1 | -8.1 72.6  | 353                     | 0.163                | 0.0   | 1.0                                | 28.2 | 37.9 | -35.3 51.8              | 317 | 0.783              | 0.0                               | 1.0   | 0.151 | 0.0                     | 1.0 | 28.1 | 37.3                    | -35.6 51.7 | 316 | 0.783              | 0.0 | 1.0   |
| 353                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 318 | 317 | 0.8                    | 0.0 | 1.0   | 42.7                               | 72.7 | -7.6 73.1  | 353                     | 0.18                 | 0.0   | 1.0                                | 28.3 | 38.7 | -34.8 52.1              | 318 | 0.8                | 0.0                               | 1.0   | 0.167 | 0.0                     | 1.0 | 28.2 | 38.1                    | -35.1 51.9 | 317 | 0.8                | 0.0 | 1.0   |
| 354                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 319 | 318 | 0.816                  | 0.0 | 1.0   | 43.1                               | 73.2 | -7.0 73.6  | 354                     | 0.197                | 0.0   | 1.0                                | 28.5 | 39.5 | -34.2 52.4              | 319 | 0.817              | 0.0                               | 1.0   | 0.183 | 0.0                     | 1.0 | 28.4 | 38.9                    | -34.7 52.1 | 318 | 0.817              | 0.0 | 1.0   |
| 354                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 320 | 319 | 0.833                  | 0.0 | 1.0   | 43.4                               | 73.8 | -6.5 74.1  | 354                     | 0.213                | 0.0   | 1.0                                | 28.6 | 40.3 | -33.7 52.6              | 320 | 0.833              | 0.0                               | 1.0   | 0.199 | 0.0                     | 1.0 | 28.5 | 39.6                    | -34.2 52.4 | 319 | 0.833              | 0.0 | 1.0   |
| 355                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 321 | 320 | 0.85                   | 0.0 | 1.0   | 43.7                               | 74.3 | -5.9 74.6  | 355                     | 0.23                 | 0.0   | 1.0                                | 28.7 | 41.1 | -33.2 52.9              | 321 | 0.85               | 0.0                               | 1.0   | 0.215 | 0.0                     | 1.0 | 28.6 | 40.4                    | -33.7 52.6 | 320 | 0.85               | 0.0 | 1.0   |
| 355                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 322 | 321 | 0.866                  | 0.0 | 1.0   | 44.0                               | 74.9 | -5.3 75.1  | 355                     | 0.247                | 0.0   | 1.0                                | 28.9 | 41.9 | -32.6 53.1              | 322 | 0.867              | 0.0                               | 1.0   | 0.231 | 0.0                     | 1.0 | 28.7 | 41.1                    | -33.2 52.9 | 321 | 0.867              | 0.0 | 1.0   |
| 356                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 323 | 321 | 0.883                  | 0.0 | 1.0   | 44.3                               | 75.4 | -4.7 75.6  | 356                     | 0.259                | 0.0   | 1.0                                | 29.2 | 42.7 | -32.1 53.5              | 323 | 0.883              | 0.0                               | 1.0   | 0.247 | 0.0                     | 1.0 | 28.9 | 41.8                    | -32.6 53.1 | 321 | 0.883              | 0.0 | 1.0   |
| 356                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 324 | 322 | 0.9                    | 0.0 | 1.0   | 44.6                               | 76.0 | -4.1 76.1  | 356                     | 0.27                 | 0.0   | 1.0                                | 29.5 | 43.7 | -31.6 54.0              | 324 | 0.9                | 0.0                               | 1.0   | 0.258 | 0.0                     | 1.0 | 29.2 | 42.7                    | -32.1 53.5 | 322 | 0.9                | 0.0 | 1.0   |
| 357                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 325 | 323 | 0.916                  | 0.0 | 1.0   | 44.8                               | 76.6 | -3.5 76.6  | 357                     | 0.282                | 0.0   | 1.0                                | 29.9 | 44.6 | -31.1 54.4              | 325 | 0.917              | 0.0                               | 1.0   | 0.269 | 0.0                     | 1.0 | 29.5 | 43.5                    | -31.7 53.9 | 323 | 0.917              | 0.0 | 1.0   |
| 357                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 326 | 324 | 0.933                  | 0.0 | 1.0   | 45.1                               | 77.1 | -2.8 77.2  | 357                     | 0.293                | 0.0   | 1.0                                | 30.2 | 45.5 | -30.6 54.8              | 326 | 0.933              | 0.0                               | 1.0   | 0.28  | 0.0                     | 1.0 | 29.8 | 44.4                    | -31.2 54.3 | 324 | 0.933              | 0.0 | 1.0   |
| 358                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 327 | 325 | 0.95                   | 0.0 | 1.0   | 45.3                               | 77.7 | -2.2 77.7  | 358                     | 0.304                | 0.0   | 1.0                                | 30.6 | 46.4 | -30.0 55.3              | 327 | 0.95               | 0.0                               | 1.0   | 0.29  | 0.0                     | 1.0 | 30.1 | 45.2                    | -30.7 54.7 | 325 | 0.95               | 0.0 | 1.0   |
| 358                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 328 | 326 | 0.966                  | 0.0 | 1.0   | 45.6                               | 78.2 | -1.5 78.2  | 358                     | 0.315                | 0.0   | 1.0                                | 30.9 | 47.2 | -29.4 55.7              | 328 | 0.967              | 0.0                               | 1.0   | 0.301 | 0.0                     | 1.0 | 30.5 | 46.1                    | -30.2 55.1 | 326 | 0.967              | 0.0 | 1.0   |
| 359                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 329 | 327 | 0.983                  | 0.0 | 1.0   | 45.8                               | 78.7 | -0.8 78.7  | 359                     | 0.326                | 0.0   | 1.0                                | 31.3 | 48.1 | -28.8 56.1              | 329 | 0.983              | 0.0                               | 1.0   | 0.311 | 0.0                     | 1.0 | 30.8 | 46.9                    | -29.6 55.6 | 327 | 0.983              | 0.0 | 1.0   |
| 359                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 330 | 328 | 1.0                    | 0.0 | 1.0   | 46.1                               | 79.3 | -0.2 79.3  | 359                     | M <sub>d</sub> 0.337 | 0.0   | 1.0                                | 31.6 | 49.0 | -28.2 56.6              | 330 | M <sub>s</sub> 1.0 | 0.0                               | 1.0   | 0.322 | 0.0                     | 1.0 | 31.1 | 47.8                    | -29.1 56.0 | 328 | M <sub>e</sub> 1.0 | 0.0 | 1.0   |
| 360                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 331 | 329 | 1.0                    | 0.0 | 0.983 | 46.1                               | 79.1 | 0.3 79.1   | 360                     | 0.349                | 0.0   | 1.0                                | 32.0 | 49.9 | -27.5 57.0              | 331 | 1.0                | 0.0                               | 0.983 | 0.332 | 0.0                     | 1.0 | 31.5 | 48.6                    | -28.5 56.4 | 329 | 1.0                | 0.0 | 0.983 |
| 360                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 332 | 330 | 1.0                    | 0.0 | 0.966 | 46.0                               | 79.0 | 0.9 79.0   | 360                     | 0.36                 | 0.0   | 1.0                                | 32.3 | 50.7 | -26.9 57.5              | 332 | 1.0                | 0.0                               | 0.967 | 0.343 | 0.0                     | 1.0 | 31.8 | 49.4                    | -27.9 56.8 | 330 | 1.0                | 0.0 | 0.967 |
| 361                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 333 | 331 | 1.0                    | 0.0 | 0.95  | 46.0                               | 78.9 | 1.5 78.9   | 361                     | 0.371                | 0.0   | 1.0                                | 32.7 | 51.6 | -26.2 57.9              | 333 | 1.0                | 0.0                               | 0.95  | 0.354 | 0.0                     | 1.0 | 32.1 | 50.3                    | -27.2 57.2 | 331 | 1.0                | 0.0 | 0.95  |
| 361                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 334 | 332 | 1.0                    | 0.0 | 0.933 | 46.0                               | 78.7 | 2.1 78.8   | 361                     | 0.386                | 0.0   | 1.0                                | 33.0 | 52.5 | -25.5 58.4              | 334 | 1.0                | 0.0                               | 0.933 | 0.364 | 0.0                     | 1.0 | 32.4 | 51.1                    | -26.6 57.6 | 332 | 1.0                | 0.0 | 0.933 |
| 361                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 335 | 333 | 1.0                    | 0.0 | 0.916 | 46.0                               | 78.6 | 2.7 78.6   | 361                     | 0.404                | 0.0   | 1.0                                | 33.4 | 53.5 | -24.8 59.0              | 335 | 1.0                | 0.0                               | 0.917 | 0.375 | 0.0                     | 1.0 | 32.8 | 51.9                    | -25.9 58.0 | 333 |                    |     |       |

Data of Maximum color M in colorimetric system Offset standard print; separation cmy\*, D65 for input or output; Six hue angles of the 60 degree standard colours  $RYGBM_{ab,d}$ :  $h_{ab,d,s} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ; Six hue angles of the device colours  $RYGBM_{ab,d}$ :  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours  $RYGBM_{ab,e}$ :  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| Lab,d |     |     | hab,s |     |       | rgb*<br>dd361M |      |      | LAB*<br>dex361Mi (x=LabCh) |     |       | rgb*<br>ds361Mi |       |      | LAB*<br>dsx361Mi (x=LabCh) |       |      | rgb*<br>dd361Mi |     |     | rgb*<br>de361Mi |       |     | LAB*<br>dex361Mi (x=LabCh) |      |      | rgb*<br>dd361Mi |      |     | rgb*<br>ds361Mi |     |       | rgb*<br>de361Mi |  |  |
|-------|-----|-----|-------|-----|-------|----------------|------|------|----------------------------|-----|-------|-----------------|-------|------|----------------------------|-------|------|-----------------|-----|-----|-----------------|-------|-----|----------------------------|------|------|-----------------|------|-----|-----------------|-----|-------|-----------------|--|--|
| 366   | 345 | 342 | 1.0   | 0.0 | 0.75  | 45.9           | 77.1 | 8.6  | 77.6                       | 366 | 0.576 | 0.0             | 1.0   | 37.1 | 62.9                       | -16.7 | 65.1 | 345             | 1.0 | 0.0 | 0.75            | 0.539 | 0.0 | 1.0                        | 36.4 | 60.8 | -18.7           | 63.7 | 342 | 1.0             | 0.0 | 0.75  |                 |  |  |
| 367   | 346 | 343 | 1.0   | 0.0 | 0.733 | 45.9           | 77.0 | 9.4  | 77.5                       | 367 | 0.593 | 0.0             | 1.0   | 37.5 | 63.8                       | -15.8 | 65.7 | 346             | 1.0 | 0.0 | 0.733           | 0.555 | 0.0 | 1.0                        | 36.7 | 61.7 | -17.9           | 64.3 | 343 | 1.0             | 0.0 | 0.733 |                 |  |  |
| 367   | 347 | 344 | 1.0   | 0.0 | 0.716 | 45.9           | 76.8 | 10.3 | 77.5                       | 367 | 0.61  | 0.0             | 1.0   | 37.8 | 64.7                       | -14.8 | 66.4 | 347             | 1.0 | 0.0 | 0.717           | 0.571 | 0.0 | 1.0                        | 37.0 | 62.6 | -17.0           | 64.9 | 344 | 1.0             | 0.0 | 0.717 |                 |  |  |
| 368   | 348 | 345 | 1.0   | 0.0 | 0.7   | 45.9           | 76.6 | 11.1 | 77.4                       | 368 | 0.627 | 0.0             | 1.0   | 38.2 | 65.6                       | -13.8 | 67.1 | 348             | 1.0 | 0.0 | 0.7             | 0.587 | 0.0 | 1.0                        | 37.3 | 63.5 | -16.1           | 65.5 | 345 | 1.0             | 0.0 | 0.7   |                 |  |  |
| 368   | 349 | 346 | 1.0   | 0.0 | 0.683 | 45.9           | 76.4 | 11.9 | 77.3                       | 368 | 0.654 | 0.0             | 1.0   | 39.0 | 66.8                       | -12.9 | 68.1 | 349             | 1.0 | 0.0 | 0.683           | 0.603 | 0.0 | 1.0                        | 37.7 | 64.3 | -15.2           | 66.1 | 346 | 1.0             | 0.0 | 0.683 |                 |  |  |
| 369   | 350 | 347 | 1.0   | 0.0 | 0.666 | 45.9           | 76.2 | 12.8 | 77.2                       | 369 | 0.681 | 0.0             | 1.0   | 39.8 | 68.0                       | -11.9 | 69.1 | 350             | 1.0 | 0.0 | 0.667           | 0.619 | 0.0 | 1.0                        | 38.0 | 65.2 | -14.3           | 66.7 | 347 | 1.0             | 0.0 | 0.667 |                 |  |  |
| 370   | 351 | 348 | 1.0   | 0.0 | 0.65  | 46.0           | 75.9 | 13.6 | 77.2                       | 370 | 0.708 | 0.0             | 1.0   | 40.6 | 69.2                       | -10.9 | 70.1 | 351             | 1.0 | 0.0 | 0.65            | 0.641 | 0.0 | 1.0                        | 38.6 | 66.2 | -13.4           | 67.6 | 348 | 1.0             | 0.0 | 0.65  |                 |  |  |
| 370   | 352 | 349 | 1.0   | 0.0 | 0.633 | 46.0           | 75.7 | 14.4 | 77.1                       | 370 | 0.735 | 0.0             | 1.0   | 41.4 | 70.4                       | -9.8  | 71.1 | 352             | 1.0 | 0.0 | 0.633           | 0.667 | 0.0 | 1.0                        | 39.3 | 67.4 | -12.4           | 68.5 | 349 | 1.0             | 0.0 | 0.633 |                 |  |  |
| 371   | 353 | 350 | 1.0   | 0.0 | 0.616 | 46.0           | 75.5 | 15.2 | 77.1                       | 371 | 0.765 | 0.0             | 1.0   | 42.1 | 71.6                       | -8.7  | 72.1 | 353             | 1.0 | 0.0 | 0.617           | 0.692 | 0.0 | 1.0                        | 40.1 | 68.5 | -11.5           | 69.5 | 350 | 1.0             | 0.0 | 0.617 |                 |  |  |
| 372   | 354 | 351 | 1.0   | 0.0 | 0.6   | 45.9           | 75.4 | 16.1 | 77.1                       | 372 | 0.8   | 0.0             | 1.0   | 42.8 | 72.7                       | -7.5  | 73.1 | 354             | 1.0 | 0.0 | 0.6             | 0.717 | 0.0 | 1.0                        | 40.9 | 69.6 | -10.5           | 70.4 | 351 | 1.0             | 0.0 | 0.6   |                 |  |  |
| 372   | 355 | 352 | 1.0   | 0.0 | 0.583 | 45.9           | 75.2 | 16.9 | 77.1                       | 372 | 0.835 | 0.0             | 1.0   | 43.5 | 73.9                       | -6.4  | 74.2 | 355             | 1.0 | 0.0 | 0.583           | 0.743 | 0.0 | 1.0                        | 41.6 | 70.7 | -9.5            | 71.4 | 352 | 1.0             | 0.0 | 0.583 |                 |  |  |
| 373   | 356 | 353 | 1.0   | 0.0 | 0.566 | 45.9           | 75.0 | 17.8 | 77.1                       | 373 | 0.87  | 0.0             | 1.0   | 44.2 | 75.0                       | -5.1  | 75.2 | 356             | 1.0 | 0.0 | 0.567           | 0.774 | 0.0 | 1.0                        | 42.3 | 71.9 | -8.4            | 72.4 | 353 | 1.0             | 0.0 | 0.567 |                 |  |  |
| 374   | 357 | 354 | 1.0   | 0.0 | 0.55  | 45.9           | 74.8 | 18.6 | 77.1                       | 374 | 0.904 | 0.0             | 1.0   | 44.7 | 76.2                       | -3.9  | 76.3 | 357             | 1.0 | 0.0 | 0.55            | 0.807 | 0.0 | 1.0                        | 42.9 | 73.0 | -7.3            | 73.3 | 354 | 1.0             | 0.0 | 0.55  |                 |  |  |
| 374   | 358 | 355 | 1.0   | 0.0 | 0.533 | 45.9           | 74.6 | 19.5 | 77.1                       | 374 | 0.938 | 0.0             | 1.0   | 45.2 | 77.3                       | -2.6  | 77.3 | 358             | 1.0 | 0.0 | 0.533           | 0.84  | 0.0 | 1.0                        | 43.6 | 74.1 | -6.2            | 74.3 | 355 | 1.0             | 0.0 | 0.533 |                 |  |  |
| 375   | 359 | 356 | 1.0   | 0.0 | 0.516 | 45.9           | 74.4 | 20.3 | 77.1                       | 375 | 0.971 | 0.0             | 1.0   | 45.7 | 78.4                       | -1.3  | 78.4 | 359             | 1.0 | 0.0 | 0.517           | 0.873 | 0.0 | 1.0                        | 44.2 | 75.1 | -5.0            | 75.3 | 356 | 1.0             | 0.0 | 0.517 |                 |  |  |
| 375   | 360 | 352 | 1.0   | 0.0 | 0.5   | 45.9           | 74.2 | 21.1 | 77.1                       | 375 | 1.0   | 0.0             | 0.994 | 46.1 | 79.3                       | 0.0   | 79.3 | 360             | 1.0 | 0.0 | 0.5             | 0.736 | 0.0 | 1.0                        | 41.4 | 70.5 | -9.7            | 71.1 | 352 | 1.0             | 0.0 | 0.5   |                 |  |  |
| 376   | 361 | 353 | 1.0   | 0.0 | 0.483 | 45.8           | 74.1 | 22.1 | 77.3                       | 376 | 1.0   | 0.0             | 0.955 | 46.1 | 79.0                       | 1.4   | 79.0 | 361             | 1.0 | 0.0 | 0.483           | 0.771 | 0.0 | 1.0                        | 42.2 | 71.8 | -8.5            | 72.3 | 353 | 1.0             | 0.0 | 0.483 |                 |  |  |
| 377   | 362 | 354 | 1.0   | 0.0 | 0.466 | 45.8           | 73.9 | 23.1 | 77.4                       | 377 | 1.0   | 0.0             | 0.916 | 46.0 | 78.6                       | 2.7   | 78.7 | 362             | 1.0 | 0.0 | 0.467           | 0.81  | 0.0 | 1.0                        | 43.0 | 73.1 | -7.2            | 73.4 | 354 | 1.0             | 0.0 | 0.467 |                 |  |  |
| 378   | 363 | 355 | 1.0   | 0.0 | 0.45  | 45.8           | 73.8 | 24.0 | 77.6                       | 378 | 1.0   | 0.0             | 0.876 | 46.0 | 78.3                       | 4.1   | 78.4 | 363             | 1.0 | 0.0 | 0.45            | 0.849 | 0.0 | 1.0                        | 43.8 | 74.4 | -5.9            | 74.6 | 355 | 1.0             | 0.0 | 0.45  |                 |  |  |
| 378   | 364 | 356 | 1.0   | 0.0 | 0.433 | 45.8           | 73.6 | 25.0 | 77.7                       | 378 | 1.0   | 0.0             | 0.839 | 46.0 | 78.0                       | 5.5   | 78.2 | 364             | 1.0 | 0.0 | 0.433           | 0.887 | 0.0 | 1.0                        | 44.4 | 75.6 | -4.5            | 75.8 | 356 | 1.0             | 0.0 | 0.433 |                 |  |  |
| 379   | 365 | 357 | 1.0   | 0.0 | 0.416 | 45.8           | 73.4 | 25.9 | 77.9                       | 379 | 1.0   | 0.0             | 0.802 | 46.0 | 77.7                       | 6.8   | 78.0 | 365             | 1.0 | 0.0 | 0.417           | 0.925 | 0.0 | 1.0                        | 45.0 | 76.9 | -3.1            | 77.0 | 357 | 1.0             | 0.0 | 0.417 |                 |  |  |
| 380   | 366 | 358 | 1.0   | 0.0 | 0.4   | 45.8           | 73.2 | 26.9 | 78.0                       | 380 | 1.0   | 0.0             | 0.765 | 46.0 | 77.3                       | 8.1   | 77.8 | 366             | 1.0 | 0.0 | 0.4             | 0.963 | 0.0 | 1.0                        | 45.6 | 78.1 | -1.6            | 78.1 | 358 | 1.0             | 0.0 | 0.4   |                 |  |  |
| 380   | 367 | 359 | 1.0   | 0.0 | 0.383 | 45.8           | 73.0 | 27.8 | 78.2                       | 380 | 1.0   | 0.0             | 0.734 | 46.0 | 77.0                       | 9.5   | 77.6 | 367             | 1.0 | 0.0 | 0.383           | 1.0   | 0.0 | 1.0                        | 46.1 | 79.3 | -0.1            | 79.3 | 359 | 1.0             | 0.0 | 0.383 |                 |  |  |
| 381   | 368 | 360 | 1.0   | 0.0 | 0.366 | 45.8           | 72.9 | 28.7 | 78.4                       | 381 | 1.0   | 0.0             | 0.708 | 46.0 | 76.7                       | 10.8  | 77.5 | 368             | 1.0 | 0.0 | 0.367           | 1.0   | 0.0 | 0.956                      | 46.1 | 79.0 | 1.3             | 79.0 | 360 | 1.0             | 0.0 | 0.367 |                 |  |  |
| 382   | 369 | 362 | 1.0   | 0.0 | 0.35  | 45.8           | 72.8 | 29.6 | 78.6                       | 382 | 1.0   | 0.0             | 0.681 | 46.0 | 76.4                       | 12.1  | 77.4 | 369             | 1.0 | 0.0 | 0.35            | 1.0   | 0.0 | 0.912                      | 46.0 | 78.6 | 2.9             | 78.7 | 362 | 1.0             | 0.0 | 0.35  |                 |  |  |
| 382   | 370 | 363 | 1.0   | 0.0 | 0.333 | 45.7           | 72.7 | 30.4 | 78.8                       | 382 | 1.0   | 0.0             | 0.655 | 46.0 | 76.1                       | 13.4  | 77.2 | 370             | 1.0 | 0.0 | 0.333           | 1.0   | 0.0 | 0.869                      | 46.0 | 78.2 | 4.4             | 78.3 | 363 | 1.0             | 0.0 | 0.333 |                 |  |  |
| 383   | 371 | 364 | 1.0   | 0.0 | 0.316 | 45.7           | 72.6 | 31.2 | 79.1                       | 383 | 1.0   | 0.0             | 0.628 | 46.0 | 75.7                       | 14.7  | 77.1 | 371             | 1.0 | 0.0 | 0.317           | 1.0   | 0.0 | 0.828                      | 46.0 | 77.9 | 5.9             | 78.1 | 364 | 1.0             | 0.0 | 0.317 |                 |  |  |
| 383   | 372 | 365 | 1.0   | 0.0 | 0.3   | 45.7           | 72.5 | 32.1 | 79.3                       | 383 | 1.0   | 0.0             | 0.602 | 46.0 | 75.4                       | 16.0  | 77.1 | 372             | 1.0 | 0.0 | 0.3             | 1.0   | 0.0 | 0.786                      | 46.0 | 77.5 | 7.4             | 77.9 | 365 | 1.0             | 0.0 | 0.3   |                 |  |  |
| 384   | 373 | 366 | 1.0   | 0.0 | 0.283 | 45.6           | 72.4 | 32.9 | 79.6                       | 384 | 1.0   | 0.0             | 0.576 | 46.0 | 75.2                       | 17.4  | 77.1 | 373             | 1.0 | 0.0 | 0.283           | 1.0   | 0.0 | 0.746                      | 46.0 | 77.1 | 8.8             | 77.7 | 366 | 1.0             | 0.0 | 0.283 |                 |  |  |
| 385   | 374 | 367 | 1.0   | 0.0 | 0.266 | 45.6           | 72.3 | 33.8 | 79.8                       | 385 | 1.0   | 0.0             | 0.55  | 45.9 | 74.9                       | 18.7  | 77.2 | 374             | 1.0 | 0.0 | 0.267           | 1.0   | 0.0 | 0.717                      | 46.0 | 76.8 | 10.3            | 77.5 | 367 | 1.0             | 0.0 | 0.267 |                 |  |  |
| 385   | 375 | 368 | 1.0   | 0.0 | 0.25  | 45.6           | 72.1 | 34.6 | 80.0                       | 385 | 1.0   | 0.0             | 0.524 | 45.9 | 74.5                       | 20.0  | 77.2 | 375             | 1.0 | 0.0 | 0.25            | 1.0   | 0.0 | 0.687                      | 46.0 | 76.5 | 11.8            | 77.4 | 368 | 1.0             | 0.0 | 0.25  |                 |  |  |
| 386   | 376 | 369 | 1.0   | 0.0 | 0.233 | 45.6           | 72.1 | 35.3 | 80.3                       | 386 | 1.0   | 0.0             | 0.498 | 45.9 | 74.2                       | 21.3  | 77.2 | 376             | 1.0 | 0.0 | 0.233           | 1.0   | 0.0 | 0.658                      | 46.0 | 76.1 | 13.3            | 77.2 | 369 | 1.0             | 0.0 | 0.233 |                 |  |  |
| 386   | 377 | 370 | 1.0   | 0.0 | 0.216 | 45.6           | 72.0 | 36.1 | 80.5                       | 386 | 1.0   | 0.0             | 0.475 | 45.9 | 74.0                       | 22.6  | 77.4 | 377             | 1.0 | 0.0 | 0.217           | 1.0   | 0.0 | 0.628                      | 46.0 | 75.7 | 14.7            | 77.1 | 370 | 1.0             | 0.0 | 0.217 |                 |  |  |
| 387   | 378 | 372 | 1.0   | 0.0 | 0.2   | 45.6           | 71.9 | 36.8 | 80.8                       | 387 | 1.0   | 0.0             | 0.451 | 45.9 | 73.8                       | 24.0  | 77.6 | 378             | 1.0 | 0.0 | 0.2             | 1.0   | 0.0 | 0.599                      | 46.0 | 75.4 | 16.2            | 77.1 | 372 | 1.0             | 0.0 | 0.2   |                 |  |  |
| 387   | 379 | 373 | 1.0   | 0.0 | 0.183 | 45.5           | 71.8 | 37.5 | 81.0                       | 387 | 1.0   | 0.0             | 0.428 | 45.9 | 73.6                       | 25.3  | 77.8 | 379             | 1.0 | 0.0 | 0.183           | 1.0   | 0.0 | 0.57                       | 46.0 | 75.1 | 17.6            | 77.1 | 373 | 1.0             | 0.0 | 0.183 |                 |  |  |
| 388   | 380 | 374 | 1.0   | 0.0 | 0.166 | 45.5           | 71.7 | 38.2 | 81.3                       | 388 | 1.0   | 0.0             | 0.404 | 45.9 | 73.3                       | 26.7  | 78.0 | 380             | 1.0 | 0.0 | 0.167           | 1.0   | 0.0 | 0.541                      | 45.9 | 74.8 | 19.1            | 77.2 | 374 | 1.0             | 0.0 | 0.167 |                 |  |  |
| 388   | 381 | 375 | 1.0   | 0.0 | 0.15  | 45.5           | 71.6 | 39.0 | 81.5                       | 388 | 1.0   | 0.0             | 0.38  | 45.8 | 73.1                       | 28.0  | 78.3 | 381             | 1.0 | 0.0 | 0.15            | 1.0   | 0.0 | 0.512                      | 45.9 | 74.4 | 20.6            | 77.2 | 375 | 1.0             | 0.0 | 0.15  |                 |  |  |
| 389   | 382 | 376 | 1.0   | 0.0 | 0.133 | 45.5           | 71.5 | 39.7 | 81.8                       | 389 | 1.0   | 0.0             | 0.353 | 45.8 | 72.9                       | 29.4  | 78.6 | 382             | 1.0 | 0.0 | 0.133           | 1.0   | 0.0 | 0.485                      | 45.9 | 74.1 | 22.0            | 77.3 | 376 | 1.0             | 0.0 | 0.133 |                 |  |  |
| 389   | 383 | 377 | 1.0   | 0.0 | 0.116 | 45.5           | 71.4 | 40.4 | 82.1                       | 389 | 1.0   | 0.0             | 0.325 | 45.8 | 72.7                       | 30.9  | 79.0 | 383             | 1.0 | 0.0 | 0.117           | 1.0   | 0.0 | 0.459                      | 45.9 | 73.9 | 23.6            | 77.6 | 377 | 1.0             | 0.0 | 0.117 |                 |  |  |
| 389   | 384 | 378 | 1.0   | 0.0 | 0.1   | 45.5           | 71.3 | 41.0 | 82.3                       | 389 | 1.0   | 0.0             | 0.297 | 45.7 | 72.5                       | 32.3  | 79.4 | 384             | 1.0 | 0.0 | 0.1             | 1.0   | 0.0 | 0.433                      | 45.9 | 73.6 | 25.1            | 77.8 | 378 | 1.0             | 0.0 | 0.1   |                 |  |  |
| 390   | 385 | 379 | 1.0   | 0.0 | 0.083 | 45.5           | 71.3 | 41.6 | 82.6                       | 390 | 1.0   | 0.0             | 0.268 | 45.7 | 72.3                       | 33.7  | 79.8 | 385             | 1.0 | 0.0 | 0.083           |       |     |                            |      |      |                 |      |     |                 |     |       |                 |  |  |

4-0031631-L0 PI970-70

LAB\*la0, YN=0%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB\*nw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0

uscita: Offset standard print; separation cmy0\*, D65, pagina 17/33

[grafico TUB-PI97; codice di tinte:  $H^*_d=R00Y_d$   
cerchio delle tinte a 48 passi;  $rqb-LabCh^*$ tavole

Input:  $rgb/cmyk \rightarrow rgb_d$   
Output: trasferire a  $cmy0_d$

4-0031631-F0

C

M

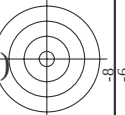
Y

1

L

V

-6



TUB materiale: code=rha4ta

-vedi file simili: <http://farbe.li.tu-berlin.de/PI97/PI97.HTM>

grafico TUB-PI97; codice di tinte: H<sub>d</sub><sup>\*</sup>=R00Y<sub>d</sub><sup>\*</sup>, colori e la differenza  $\Delta F_{\text{d}}^*$ ,

Input: *rgb/cmyk*  $\rightarrow$  *rgb*<sub>d</sub>  
Output: trasferire a *cmy*<sub>d</sub>

[illegible]

PI970-7N, 18/33-F

gratico TUB-PI97; colori e la differenza  $\Delta F^*$ ,

4-0031731-F0

Y

DI

1

V

11



TUB materiale: code=rha4ta

informazioni tecniche: <http://www.ps.bam.de> o <http://130.149.60.45/~farbmetrik>

grafico TUB-PI97; codice di tinte: H<sub>d</sub>=R00Y<sub>d</sub>  
colori e la differenza  $\Delta E^*$ ,

[illegible]
$$\Delta E^* = 5.0$$



TUB materiale: code=rha4ta

[illegible]













- Applicazione per la misura dell'output output nella stampa di offset, separazione cmy0 (CMY0)

<http://farbe.li.tu-berlin.de/PI97/PI97LONP.PDF> /PS; Output di trasferimento N: nessuna linearizzazione 3D (OL) nel file (F) o PS-startup (S) pagine 27/33

Input: *rgb/cmyk* → *rgb*  
Output: trasferire a *cmyk*

grafico TUB-PI97; codice di tinte: H<sup>\*</sup><sub>d</sub>=R00Y<sub>d</sub>

21070-7N 27/22-E

4-0027621-E0

vedi file simili: <http://farbe.li.tu-berlin.de/PI97/PI97.HTM>  
informazioni tecniche: <http://www.ps.bam.de> o <http://130.149.60.45/~farbmetrik/>













TUB materiale: code=rha4ta

grafico TUB-PI97; codice di tinte: H<sub>d</sub><sup>\*</sup>=R00Y<sub>d</sub>  
colori e la differenza  $\Delta F_{\text{d}}^*$ ,



PI970-7N, 33/33-F

4-0033231-F0

informazioni tecniche: <http://www.ps.bam.de> o <http://130.149.60.45/~farbmetrik>

| n    | HIC*Pd        | rgb_Fd | ic_Fd | ha_Fd | rgb_Fd | LabCh*Pd | LabCh*Pd | DE**Pd | rgb*Ma | LabCh*Ma | DE**Pd | rgb*Ma | LabCh*Ma |
|------|---------------|--------|-------|-------|--------|----------|----------|--------|--------|----------|--------|--------|----------|
| 1053 | NW_086d       | 0.866  | 0.866 | 0.866 | 360    | 0.866    | 0.866    | 86.0   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1054 | NW_093d       | 0.933  | 0.933 | 0.933 | 360    | 0.933    | 0.933    | 90.8   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1055 | NW_100d       | 1.0    | 1.0   | 1.0   | 360    | 1.0      | 1.0      | 95.6   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1056 | NW_000d       | 0.0    | 0.0   | 0.0   | 360    | 0.0      | 0.0      | 24.3   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1057 | NW_006d       | 0.066  | 0.066 | 0.066 | 360    | 0.066    | 0.066    | 29.0   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1058 | NW_013d       | 0.133  | 0.133 | 0.133 | 360    | 0.133    | 0.133    | 33.8   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1059 | NW_020d       | 0.2    | 0.2   | 0.2   | 360    | 0.2      | 0.2      | 38.6   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1060 | NW_026d       | 0.266  | 0.266 | 0.266 | 360    | 0.266    | 0.266    | 43.3   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1061 | NW_033d       | 0.333  | 0.333 | 0.333 | 360    | 0.333    | 0.333    | 48.1   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1062 | NW_040d       | 0.4    | 0.4   | 0.4   | 360    | 0.4      | 0.4      | 52.8   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1063 | NW_046d       | 0.466  | 0.466 | 0.466 | 360    | 0.466    | 0.466    | 57.5   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1064 | NW_053d       | 0.533  | 0.533 | 0.533 | 360    | 0.533    | 0.533    | 62.3   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1065 | NW_060d       | 0.6    | 0.6   | 0.6   | 360    | 0.6      | 0.6      | 67.1   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1066 | NW_066d       | 0.666  | 0.666 | 0.666 | 360    | 0.666    | 0.666    | 71.8   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1067 | NW_073d       | 0.734  | 0.734 | 0.734 | 360    | 0.734    | 0.734    | 76.6   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1068 | NW_080d       | 0.8    | 0.8   | 0.8   | 360    | 0.8      | 0.8      | 81.3   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1069 | NW_086d       | 0.866  | 0.866 | 0.866 | 360    | 0.866    | 0.866    | 86.0   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1070 | NW_093d       | 0.933  | 0.933 | 0.933 | 360    | 0.933    | 0.933    | 90.8   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1071 | NW_100d       | 1.0    | 1.0   | 1.0   | 360    | 1.0      | 1.0      | 95.6   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1072 | NW_000d       | 0.0    | 0.0   | 0.0   | 360    | 0.0      | 0.0      | 24.3   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1073 | R00Y_100_100d | 1.0    | 1.0   | 1.0   | 360    | 1.0      | 1.0      | 95.6   | 0.0    | 0.0      | 0.0    | 0.0    | 0.0      |
| 1074 | R00Y_100_100d | 1.0    | 0.0   | 0.0   | 390    | 1.0      | 0.0      | 45.4   | 70.9   | 44.8     | 83.9   | 44.8   | 83.9     |
| 1075 | G50B_100_100d | 0.0    | 1.0   | 1.0   | 210    | 0.0      | 1.0      | 56.8   | -25.5  | -41.5    | 48.7   | 238.4  | 238.4    |
| 1076 | Y00G_100_100d | 1.0    | 1.0   | 0.0   | 90     | 1.0      | 0.0      | 87.8   | -10.2  | 95.4     | 96.0   | 96.1   | 96.1     |
| 1077 | B00R_100_100d | 0.0    | 0.0   | 1.0   | 270    | 0.0      | 0.0      | 25.0   | 29.5   | -40.4    | 50.0   | 306.2  | 306.2    |
| 1078 | G00B_100_100d | 0.0    | 1.0   | 0.0   | 150    | 0.0      | 1.0      | 50.0   | -65.0  | 79.3     | 29.6   | 71.4   | 155.5    |
| 1079 | B50R_100_100d | 1.0    | 0.0   | 1.0   | 330    | 1.0      | 0.0      | 46.1   | 79.3   | -0.2     | 79.3   | 359.8  | 359.8    |