See original copy: http://web.me.com/klaus.richter/LE00/LE00L0N1.TXT /.PS
Technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

Interpretation *rgb* −> *rgb and CIELAB data of a 48 step elementary hue circle**
for a LECD low glossy display with the luminance reflection L_r=0% compared to the white reference (100%)
48 step elementary hue circle with hues: *R/G/B*: $h_{RGB,a}$ = 25.5, 92.3, 162.2, 271.7, and L^* M^* = 217.0, 328.6
comparison with six device hues *O/Y/G/B/M/R*: h_{Lab} = −85.0, 101.2, 131.0, 196.6, 306.1, 326.8
9 step equidistant grey scale: L^* = 0.0, 11.9, 23.9, 35.8, 47.7, 59.6, 71.6, 83.5, 95.4

a^*_{Lab}	h_{rgb}	$[L^*,a^*,b^*,C^*_{ab},h_{ab},h_{Luv}$	rgb −> rgb*	a^*_{Lab}	h_{rgb}	$[L^*,a^*,b^*,C^*_{ab},h_{ab},h_{Luv}$	rgb −> rgb*	a^*_{Lab}	h_{rgb}	$[L^*,a^*,b^*,C^*_{ab},h_{ab},h_{Luv}$	rgb −> rgb*
r00/−R	30.0	50.5	79.3 97.8 87.9 25.5	1.000 0.000 0.000	c'00b-C'	210.0	79.7	−36.1 −27.2 45.3	217.0	0.000 1.000 1.000	
r12	36.6	50.3	78.0 52.3 93.9 33.8	1.000 0.125 0.000	c'12b	216.6	77.2	−31.9 −38.6 44.4	223.8	0.000 0.875 1.000	
r25	43.9	50.1	77.6 70.3 104.7 42.2	1.000 0.250 0.000	c'25b	223.9	74.8	−27.6 −33.7 43.6	230.7	0.000 0.750 1.000	
r37	51.8	53.6	66.5 80.8 104.6 58.5	1.000 0.375 0.000	c'37b	231.8	72.4	−24.2 −38.0 45.2	237.5	0.000 0.625 1.000	
r50	60.0	59.4	49.8 90.1 104.5 75.1	1.000 0.500 0.000	c'50b	240.0	70.0	−21.0 −36.2 41.9	244.4	0.000 0.500 1.000	
r62	68.2	65.1	35.9 85.6 92.8 67.2	1.000 0.625 0.000	c'62b	248.2	67.6	−15.4 −45.6 48.2	251.2	0.000 0.375 1.000	
r75	76.1	70.6	22.9 89.3 92.2 75.6	1.000 0.750 0.000	c'75b	256.1	64.9	−10.5 −50.1 51.3	258.0	0.000 0.250 1.000	
r87	83.9	76.5	9.9 93.9 93.9 84.0	1.000 0.875 0.000	c'87b	263.9	62.0	−4.8 −55.0 55.3	264.9	0.000 0.125 1.000	
j00g=J	90.0	83.5	−3.9 100.0 100.1 92.3	1.000 1.000 0.000	b00m'=B	270.0	58.9	−1.8 −59.8 59.9	271.7	0.000 0.000 1.000	
j12g	96.6	92.7	−21.1 108.5 110.6 101.1	0.875 1.000 0.000	b12m'	276.6	54.8	10.4 −66.7 67.6	278.8	0.125 0.000 1.000	
j25g	103.9	89.9	−37.5 104.4 111.0 109.8	0.750 1.000 0.000	b25m'	283.9	50.1	21.4 −76.6 77.7	286.0	0.250 0.000 1.000	
j37g	111.8	87.4	−54.6 100.6 114.5 118.5	0.625 1.000 0.000	b37m'	291.8	44.3	33.9 −84.1 90.7	293.1	0.375 0.000 1.000	
j50g	120.0	85.0	−73.9 97.3 122.3 127.3	0.500 1.000 0.000	b50m'	300.0	37.1	56.1 −96.4 111.6	300.2	0.500 0.000 1.000	
j62g	128.2	84.2	−80.8 78.1 112.5 136.0	0.375 1.000 0.000	b62m'	308.2	31.5	80.3 −105.4 132.6	307.3	0.625 0.000 1.000	
j75g	136.1	84.5	−74.7 52.9 91.6 144.7	0.250 1.000 0.000	b75m'	316.1	42.5	85.0 −88.1 122.4	314.4	0.750 0.000 1.000	
j87g	143.4	85.0	−68.3 34.1 76.5 153.5	0.125 1.000 0.000	b87m'	323.4	51.0	90.9 −72.2 116.1	321.5	0.875 0.000 1.000	
g00c'=G	150.0	85.4	−63.0 20.2 66.2 162.2	0.000 1.000 0.000	m'00a=M	330.0	56.1	−58.0 111.5 128.6	328.6	1.000 0.000 1.000	
g12c'	156.6	85.7	−58.9 11.1 60.1 169.1	0.000 1.000 0.125	m'12a	336.6	54.2	91.0 −41.0 99.8	335.7	1.000 0.000 0.875	
g25c'	163.9	86.1	−56.6 4.4 57.5 175.7	0.000 1.000 0.250	m'25a	343.9	50.0	97.5 −27.0 101.3	342.8	1.000 0.000 0.750	
g37c'	171.8	86.4	−53.8 −2.5 53.9 182.8	0.000 1.000 0.375	m'37a	351.8	52.3	85.3 −15.0 86.7	349.9	1.000 0.000 0.625	
g50c'	180.0	86.7	−50.3 −8.4 51.1 189.6	0.000 1.000 0.500	m'50a	360.0	51.7	83.4 −4.2 83.6	357.0	1.000 0.000 0.500	
g62c'	188.2	87.1	−46.2 −13.8 48.2 196.4	0.000 1.000 0.625	m'62a	368.2	51.9	80.7 6.0 82.3	4.2	1.000 0.000 0.375	
g75c'	196.1	84.6	−43.3 −18.6 47.2 203.3	0.000 1.000 0.750	m'75a	376.1	51.0	80.8 16.1 82.4	11.3	1.000 0.000 0.250	
g87c'	203.4	82.2	−39.9 −23.1 46.3 210.1	0.000 1.000 0.875	m'87a	383.4	50.7	79.7 26.5 83.9	18.4	1.000 0.000 0.125	

LE000−3N_1

Interpretation *rgb* −> *rgb and CIELAB data of a 48 step elementary hue circle**
for a LECD low glossy display with the luminance reflection L_r=1,2% compared to the white reference (100%)
48 step elementary hue circle with hues: *R/G/B*: $h_{RGB,a}$ = 25.5, 92.3, 162.2, 271.7, and L^* M^* = 217.0, 328.6
comparison with six device hues *O/Y/G/B/M/R*: h_{Lab} = −41.1, 101.5, 131.8, 196.7, 305.8, 326.7
9 step equidistant grey scale: L^* = 10.4, 21.0, 31.7, 42.3, 52.9, 63.5, 74.2, 84.8, 95.4

a^*_{Lab}	h_{rgb}	$[L^*,a^*,b^*,C^*_{ab},h_{ab},h_{Luv}$	rgb −> rgb*	a^*_{Lab}	h_{rgb}	$[L^*,a^*,b^*,C^*_{ab},h_{ab},h_{Luv}$	rgb −> rgb*	a^*_{Lab}	h_{rgb}	$[L^*,a^*,b^*,C^*_{ab},h_{ab},h_{Luv}$	rgb −> rgb*
r00/−R	30.0	51.2	56.3 76.3 36.4 84.5	25.5 1.000 0.000 0.000	c'00b-C'	210.0	80.3	−35.4 −26.7 44.5	217.0	0.000 1.000 1.000	
r12	36.6	51.4	74.6 50.0 89.8 33.8	1.000 0.125 0.000 0.000	c'12b	216.6	77.6	−31.3 −38.0 44.5	223.8	0.000 0.875 1.000	
r25	43.9	51.9	71.9 65.2 97.0 42.2	1.000 0.250 0.000 0.000	c'25b	223.9	75.2	−27.0 −32.9 42.7	230.7	0.000 0.750 1.000	
r37	51.8	57.1	57.3 69.6 90.2 50.5	1.000 0.375 0.000 0.000	c'37b	231.8	72.9	−23.6 −37.2 44.2	237.5	0.000 0.625 1.000	
r50	60.0	61.9	40.9 74.0 90.0 65.2	1.000 0.500 0.000 0.000	c'50b	240.0	70.7	−20.5 −35.4 41.1	244.4	0.000 0.500 1.000	
r62	68.2	66.7	32.8 78.2 84.8 67.2	1.000 0.625 0.000 0.000	c'62b	248.2	68.2	−15.1 −44.6 47.2	251.2	0.000 0.375 1.000	
r75	76.1	71.6	21.2 82.7 85.4 75.6	1.000 0.750 0.000 0.000	c'75b	256.1	65.6	−10.3 −48.9 50.1	258.0	0.000 0.250 1.000	
r87	83.9	77.1	9.3 86.8 86.8 84.0	1.000 0.875 0.000 0.000	c'87b	263.9	62.7	−4.7 −53.8 54.1	264.9	0.000 0.125 1.000	
j00g=J	90.0	83.5	−3.7 94.5 94.6 92.3	1.000 1.000 0.000	b00m'=B	270.0	59.7	1.8 −58.5 58.6	271.7	0.000 0.000 1.000	
j12g	96.6	92.4	−20.1 103.6 105.6 101.1	0.875 1.000 0.000	b12m'	276.6	55.8	10.4 −65.2 66.2	278.8	0.125 0.000 1.000	
j25g	103.9	90.2	−35.9 99.9 106.2 108.8	0.750 1.000 0.000	b25m'	283.9	51.1	21.9 −73.0 76.0	286.0	0.250 0.000 1.000	
j37g	111.8	87.7	−52.2 92.3 109.5 117.9	0.625 1.000 0.000	b37m'	291.8	45.4	33.5 −81.9 88.5	293.1	0.375 0.000 1.000	
j50g	120.0	85.0	−70.9 87.3 117.1 126.9	0.500 1.000 0.000	b50m'	300.0	38.3	55.4 −93.4 108.6	300.2	0.500 0.000 1.000	
j62g	128.2	84.2	−77.4 70.1 104.6 137.9	0.375 1.000 0.000	b62m'	308.2	32.8	79.3 −102.3 128.9	307.3	0.625 0.000 1.000	
j75g	136.1	84.6	−71.6 47.5 85.9 146.7	0.250 1.000 0.000	b75m'	316.1	43.9	84.0 −85.6 119.8	314.4	0.750 0.000 1.000	
j87g	143.4	85.0	−65.5 30.6 73.3 153.5	0.125 1.000 0.000	b87m'	323.4	52.7	89.8 −70.2 112.6	321.5	0.875 0.000 1.000	
g00c'=G	150.0	85.4	−60.4 18.1 63.5 162.2	0.000 1.000 0.000	m'00a=M	330.0	57.9	52.5 −96.3 108.3	328.6	1.000 0.000 1.000	
g12c'	156.6	85.7	−56.5 10.0 57.6 169.1	0.000 1.000 0.125	m'12a	336.6	55.9	84.2 −37.9 92.6	335.7	1.000 0.000 0.875	
g25c'	163.9	86.1	−54.3 3.9 55.1 175.7	0.000 1.000 0.250	m'25a	343.9	51.6	90.1 −24.9 94.0	342.8	1.000 0.000 0.750	
g37c'	171.8	86.7	−51.7 −2.4 51.8 182.8	0.000 1.000 0.375	m'37a	351.8	53.9	78.9 −13.9 80.2	349.9	1.000 0.000 0.625	
g50c'	180.0	86.9	−48.3 −8.0 49.1 189.6	0.000 1.000 0.500	m'50a	360.0	53.3	77.1 −3.9 77.3	357.0	1.000 0.000 0.500	
g62c'	188.2	87.3	−44.3 −13.2 46.2 196.4	0.000 1.000 0.625	m'62a	368.2	53.5	74.6 5.6 74.8	4.2	1.000 0.000 0.375	
g75c'	196.1	84.8	−42.5 −18.2 46.4 203.3	0.000 1.000 0.750	m'75a	376.1	52.6	74.7 15.0 75.5	11.3	1.000 0.000 0.250	
g87c'	203.4	82.4	−39.2 −22.7 45.4 210.1	0.000 1.000 0.875	m'87a	383.4	52.2	73.9 24.6 77.9	18.4	1.000 0.000 0.125	

LE001−3N_1

Interpretation *rgb* −> *rgb and CIELAB data of a 48 step elementary hue circle**
for a LECD low glossy display with the luminance reflection L_r=0,6% compared to the white reference (100%)
48 step elementary hue circle with hues: *R/G/B*: $h_{RGB,a}$ = 25.5, 92.3, 162.2, 271.7, and L^* M^* = 217.0, 328.6
comparison with six device hues *O/Y/G/B/M/R*: h_{Lab} = −41.3, 101.4, 131.4, 196.6, 305.6, 326.8
9 step equidistant grey scale: L^* = 5.0, 16.3, 27.6, 38.9, 50.2, 61.5, 72.8, 84.1, 95.4

a^*_{Lab}	h_{rgb}	$[L^*,a^*,b^*,C^*_{ab},h_{ab},h_{Luv}$	rgb −> rgb*	a^*_{Lab}	h_{rgb}	$[L^*,a^*,b^*,C^*_{ab},h_{ab},h_{Luv}$	rgb −> rgb*	a^*_{Lab}	h_{rgb}	$[L^*,a^*,b^*,C^*_{ab},h_{ab},h_{Luv}$	rgb −> rgb*
r00/−R	30.0	51.1	77.8 37.1 86.2 25.5	1.000 0.000 0.000	c'00b-C'	210.0	79.9	−35.8 −26.9 44.8	217.0	0.000 1.000 1.000	
r12	36.6	50.8	76.2 51.1 91.7 34.7	1.000 0.125 0.000	c'12b	216.6	77.4	−31.6 −38.3 44.0	223.8	0.000 0.875 1.000	
r25	43.9	50.7	75.5 68.4 101.9 42.2	1.000 0.250 0.000	c'25b	223.9	75.0	−27.3 −33.3 43.2	230.7	0.000 0.750 1.000	
r37	51.8	55.7	63.9 73.9 95.4 58.5	1.000 0.375 0.000	c'37b	231.8	72.6	−23.9 −37.6 44.7	237.5	0.000 0.625 1.000	
r50	60.0	60.9	46.7 79.6 90.7 58.9	1.000 0.500 0.000	c'50b	240.0	70.3	−19.9 −41.6 46.2	244.4	0.000 0.500 1.000	
r62	68.2	66.0	34.2 81.5 88.4 67.2	1.000 0.625 0.000	c'62b	248.2	67.9	−15.3 −45.1 47.7	251.2	0.000 0.375 1.000	
r75	76.1	71.2	22.0 85.8 88.5 75.6	1.000 0.750 0.000	c'75b	256.1	65.3	−10.4 −49.5 50.7	258.0	0.000 0.250 1.000	
r87	83.9	76.8	9.6 90.8 91.3 84.0	1.000 0.875 0.000	c'87b	263.9	62.3	−4.8 −54.4 54.7	264.9	0.000 0.125 1.000	
j00g=J	90.0	83.5	−3.8 97.1 97.2 92.3	1.000 1.000 0.000	b00m'=B	270.0	59.3	1.8 −59.1 59.3	271.7	0.000 0.000 1.000	
j12g	96.6	92.6	−20.6 106.0 108.0 101.1	0.875 1.000 0.000	b12m'	276.6	55.3	10.3 −66.0 66.9	278.8	0.125 0.000 1.000	
j25g	103.9	90.1	−36.6 102.1 108.5 109.8	0.750 1.000 0.000	b25m'	283.9	50.6	21.1 −73.8 76.9	286.0	0.250 0.000 1.000	
j37g	111.8	87.6	−53.4 98.4 112.8 118.5	0.625 1.000 0.000	b37m'	291.8	44.9	33.5 −82.8 90.2	293.1	0.375 0.000 1.000	
j50g	120.0	85.2	−72.2 95.0 119.4 127.3	0.500 1.000 0.000	b50m'	300.0	37.7	55.5 −95.4 110.5	300.2	0.500 0.000 1.000	
j62g	128.2	84.2	−80.0 77.4 111.4 136.0	0.375 1.000 0.000	b62m'	308.2	33.7	77.6 −101.8 128.1	307.3	0.625 0.000 1.000	
j75g	136.1	84.6	−73.9 52.3 90.7 144.7	0.250 1.000 0.000	b75m'	316.1	42.5	83.2 −84.9 118.9	314.4	0.750 0.000 1.000	
j87g	143.4	85.0	−67.6 33.8 75.7 153.5	0.125 1.000 0.000	b87m'	323.4	51.6	89.1 −71.1 114.3	321.5	0.875 0.000 1.000	
g00c'=G	150.0	85.5	−62.3 20.0 65.5 162.2	0.000 1.000 0.000	m'00a=M	330.0	56.6	93.8 −57.1 109.9	328.6	1.000 0.000 1.000	
g12c'	156.6	85.8	−58.3 11.3 59.4 169.1	0.000 1.000 0.125	m'12a	336.6	54.7	89.6 −40.3 98.3	335.7	1.000 0.000 0.875	
g25c'	163.9	86.1	−56.0 4.0 56.7 175.7	0.000 1.000 0.250	m'25a	343.9	51.6	86.3 −26.6 90.3	342.8	1.000 0.000 0.750	
g37c'	171.8	86.5	−53.2 −2.5 53.4 182.8	0.000 1.000 0.375	m'37a	351.8	52.8	84.0 −14.8 85.3	349.9	1.000 0.000 0.625	
g50c'	180.0	86.8	−49.8 −8.3 50.6 189.6	0.000 1.000 0.500	m'50a	360.0	52.3	82.1 −4.1 82.2	357.0	1.000 0.000 0.500	
g62c'	188.2	87.3	−45.7 −13.4 47.8 196.4	0.000 1.000 0.625	m'62a	368.2	51.9	80.7 5.9 80.9	4.2	1.000 0.000 0.375	
g75c'	196.1	84.7	−42.9 −18.4 46.8 203.3	0.000 1.000 0.750	m'75a	376.1	51.5	79.4 15.8 80.9	11.3	1.000 0.000 0.250	
g87c'	203.4	82.3	−39.6 −22.9 45.9 210.1	0.000 1.000 0.875	m'87a	383.4	51.3	78.2 26.0 82.4	18.4	1.000 0.000 0.125	

LE000−7N_1

Interpretation *rgb* −> *rgb and CIELAB data of a 48 step elementary hue circle**
for a LECD low glossy display with the luminance reflection L_r=2,5% compared to the white reference (100%)
48 step elementary hue circle with hues: *R/G/B*: $h_{RGB,a}$ = 25.5, 92.3, 162.2, 271.7, and L^* M^* = 217.0, 328.6
comparison with six device hues *O/Y/G/B/M/R*: h_{Lab} = −41.1, 101.5, 131.8, 196.7, 305.8, 326.6
9 step equidistant grey scale: L^* = 17.7, 27.4, 37.1, 46.8, 56.5, 66.3, 76.0, 85.7, 95.4

a^*_{Lab}	h_{rgb}	$[L^*,a^*,b^*,C^*_{ab},h_{ab},h_{Luv}$	rgb −> rgb*	a^*_{Lab}	h_{rgb}	$[L^*,a^*,b^*,C^*_{ab},h_{ab},h_{Luv}$	rgb −> rgb*	a^*_{Lab}	h_{rgb}	$[L^*,a^*,b^*,C^*_{ab},h_{ab},h_{Luv}$	rgb −> rgb*
r00/−R	30.0	52.7	73.4 35.0 81.3 25.5	1.000 0.000 0.000	c'00b-C'	210.0	80.3	−34.7 −26.1 43.6	217.0	0.000 1.000 1.000	
r12	36.6	52.5	71.9 48.2 86.6 33.8	1.000 0.125 0.000	c'12b	216.6	78.0	−30.7 −36.9 43.7	223.8	0.000 0.875 1.000	
r25	43.9	52.3	69.8 64.7 97.4 42.2	1.000 0.250 0.000	c'25b	223.9	75.6	−26.4 −32.2 41.8	230.7	0.000 0.750 1.000	
r37	51.8	57.8	60.1 63.6 83.4 58.5	1.000 0.375 0.000	c'37b	231.8	73.3	−23.1 −36.4 43.3	237.5	0.000 0.625 1.000	
r50	60.0	63.5	41.2 68.2 79.7 58.9	1.000 0.500 0.000	c'50b	240.0	71.1	−19.3 −40.2 44.7	244.4	0.000 0.500 1.000	
r62	68.2	67.9	30.5 72.8 78.9 67.2	1.000 0.625 0.000	c'62b	248.2	68.8	−14.8 −43.7 46.2	251.2	0.000 0.375 1.000	
r75	76.1	72.5	19.9 77.6 80.1 75.6	1.000 0.750 0.000	c'75b	256.1	66.2	−10.0 −47.8 49.0	258.0	0.000 0.250 1.000	
r87	83.9	77.6	8.8 81.1 81.5 84.0	1.000 0.875 0.000	c'87b	263.9	63.4	−4.6 −52.6 52.9	264.9	0.000 0.125 1.000	
j00g=J	90.0	83.7	−3.5 89.7 89.8 92.3	1.000 1.000 0.000	b00m'=B	270.0	60.5	1.7 −57.2 57.3	271.7	0.000 0.000 1.000	
j12g	96.6	92.2	−19.3 99.2 101.0 101.1	0.875 1.000 0.000	b12m'	276.6	56.6	9.9 −63.7 64.6	278.8	0.125 0.000 1.000	
j25g	103.9	90.4	−34.5 96.0 102.1 109.8	0.750 1.000 0.000	b25m'	283.9	52.0	20.4 −71.4 74.3	286.0	0.250 0.000 1.000	
j37g	111.8	88.0	−51.3 94.6 108.4 118.5	0.625 1.000 0.000	b37m'	291.8	46.7	32.4 −80.6 87.7	293.1	0.375 0.000 1.000	
j50g	120.0	85.7	−67.6 89.0 111.8 127.3	0.500 1.000 0.000	b50m'	300.0	39.7	53.8 −92.4 107.0	300.2	0.500 0.000 1.000	
j62g	128.2	84.5	−77.5 75.1 108.2 136.0	0.375 1.000 0.000	b62m'	308.2	38.6	71.1 −98.3 121.4	307.3	0.625 0.000 1.000	
j75g	136.1	84.9	−71.7 50.7 87.9 144.7	0.250 1.000 0.000	b75m'	316.1	43.5	81.4 −82.5 116.0	314.4	0.750 0.000 1.000	
j87g	143.4	85.3	−65.5 32.7 73.3 153.5	0.125 1.000 0.000	b87m'	323.4	53.6	85.4 −67.8 109.1	321.5	0.875 0.000 1.000	
g00c'=G	150.0	85.7	−60.4 19.4 63.5 162.2	0.000 1.000 0.000	m'00a=M	330.0	57.9	89.5 −54.7 105.3	328.6	1.000 0.000 1.000	
g12c'	156.6	86.0	−56.5 10.9 57.6 169.1	0.000 1.000 0.125	m'12a	336.6	56.2	85.6 −38.5 93.9	335.7	1.000 0.000 0.875	
g25c'	163.9	86.4	−54.3 3.9 55.1 175.7	0.000 1.000 0.250	m'25a	343.9	52.9	82.3 −25.3 86.2	342.8	1.000 0.000 0.750	
g37c'	171.8	86.7	−51.7 −2.4 51.9 182.8	0.000 1.000 0.375	m'37a	351.8	54.4	80.1 −14.1 81.2	349.9	1.000 0.000 0.625	
g50c'	180.0	87.0	−48.4 −8.1 49.2 189.6	0.000 1.000 0.500	m'50a	360.0	53.9	78.1 −3.9 78.2	357.0	1.000 0.000 0.500	
g62c'	188.2	87.3	−44.5 −13.1 46.5 196.4	0.000 1.000 0.625	m'62a	368.2	53.7	76.0 5.6 76.2	4.2	1.000 0.000 0.375	
g75c'	196.1	85.0	−41.7 −17.9 45.5 203.3	0.000 1.000 0.750	m'75a	376.1	53.2	75.3 15.0 76.7	11.3	1.000 0.000 0.250	
g87c'	203.4	82.7	−38.4 −22.3 44.6 210.1	0.000 1.000 0.875	m'87a	383.4	52.9	74.2 24.6 77.9	18.4	1.000 0.000 0.125	

LE001−7N_1

TUB registration: 20100601-LE00/LE00L0N1.TXT /.PS
application for measurement of printer or monitor systems

TUB-test chart LE00; 48 step LECD elementary hue circle
Interpretation *rgb* −> *rgb** and CIELAB data of colours Ma
input: *rgb−>rgb* setrgbcolor*
output: *no change compared to input*
TUB material: code=fha4a