

vea archivos semejantes: <http://130.149.60.45/~farbmetrik/SS33/SS33L0NP.PDF /.PS>  
 información técnica: <http://www.ps.bam.de> o <http://130.149.60.45/~farbmetrik>

TUB matrícula: 20130201-SS33/SS33L0NP.PDF /.PS  
 aplicación para la medida de display output

TUB material: code=rh4ta

**rgb<sub>e</sub>% and CIE data of a elementary hue circle according to CIE R1-47:2009 for sRGB display L<sub>r</sub>=5%**

16 step elementary hue circle with intended elementary hues:  $h_{ab,a,e} = 25.4, 92.3, 162.2, 271.7$

Code	X <sub>e</sub>	Y <sub>e</sub>	Z <sub>e</sub>	x <sub>e</sub>	y <sub>e</sub>	L* <sub>e</sub>	a* <sub>e</sub>	b* <sub>e</sub>	L* <sub>a,e</sub>	a* <sub>a,e</sub>	b* <sub>a,e</sub>	C* <sub>ab,a,e</sub>	h <sub>ab,a,e</sub>	rgb <sub>e</sub> %
R00Y <sub>e</sub> = R <sub>e</sub>	39.7	23.0	10.0	0.546	0.316	55.0	67.6	32.2	55.0	67.6	32.2	74.9	25.5	1.00 0.00 0.00
R25Y <sub>e</sub>	42.0	28.3	8.0	0.536	0.361	60.1	52.4	47.5	60.1	52.4	47.5	70.7	42.1	1.00 0.25 0.00
R50Y <sub>e</sub>	46.6	37.6	9.5	0.497	0.401	67.7	33.4	55.4	67.7	33.4	55.4	64.7	58.9	1.00 0.50 0.00
R75Y <sub>e</sub>	52.1	48.4	11.4	0.463	0.433	75.2	16.1	63.0	75.2	16.1	63.0	65.0	75.6	1.00 0.75 0.00
Y00G <sub>e</sub> = Y <sub>e</sub>	60.0	64.6	14.0	0.433	0.463	84.2	-2.8	71.7	84.2	-2.8	71.7	71.7	92.2	1.00 1.00 0.00
Y25G <sub>e</sub>	62.9	79.8	16.8	0.394	0.5	91.6	-28.1	78.1	91.6	-28.1	78.1	83.0	109.7	0.75 1.00 0.00
Y50G <sub>e</sub>	44.7	70.0	15.9	0.342	0.535	86.9	-54.9	72.2	86.9	-54.9	72.2	90.7	127.2	0.50 1.00 0.00
Y75G <sub>e</sub>	36.6	65.5	25.9	0.285	0.511	84.7	-70.4	49.7	84.7	-70.4	49.7	86.2	144.7	0.25 1.00 0.00
G00B <sub>e</sub> = G <sub>e</sub>	41.6	67.5	52.3	0.257	0.418	85.8	-58.9	18.8	85.8	-58.9	18.8	61.9	162.2	0.00 1.00 0.00
G25B <sub>e</sub>	49.0	71.4	88.3	0.234	0.341	87.6	-45.9	-7.8	87.6	-45.9	-7.8	46.5	189.6	0.00 1.00 0.50
G50B <sub>e</sub>	43.1	57.4	93.0	0.222	0.296	80.4	-31.3	-23.5	80.4	-31.3	-23.5	39.2	216.9	0.00 1.00 1.00
G75B <sub>e</sub>	36.2	43.9	90.3	0.212	0.257	72.1	-17.3	-35.9	72.1	-17.3	-35.9	39.8	244.2	0.00 0.50 1.00
B00R <sub>e</sub> = B <sub>e</sub>	29.8	30.9	88.2	0.2	0.207	62.4	1.5	-51.1	62.4	1.5	-51.1	51.1	271.6	0.00 0.00 1.00
B25R <sub>e</sub>	20.8	12.9	85.2	0.174	0.108	42.7	48.3	-83.0	42.7	48.3	-83.0	96.1	300.1	0.50 0.00 1.00
B50R <sub>e</sub>	54.2	28.8	84.2	0.324	0.172	60.6	84.4	-51.4	60.6	84.4	-51.4	98.8	328.6	1.00 0.00 1.00
B75R <sub>e</sub>	43.4	24.4	29.0	0.447	0.252	56.5	72.3	-3.7	56.5	72.3	-3.7	72.4	357.0	1.00 0.00 0.50

5 step equidistant grey scale with intended lightness:  $L^*_e = 26.8, 43.9, 61.1, 78.2, 95.4$

Code	X <sub>e</sub>	Y <sub>e</sub>	Z <sub>e</sub>	x <sub>e</sub>	y <sub>e</sub>	L* <sub>e</sub>	a* <sub>e</sub>	b* <sub>e</sub>	L* <sub>a,e</sub>	a* <sub>a,e</sub>	b* <sub>a,e</sub>	C* <sub>ab,a,e</sub>	h <sub>ab,a,e</sub>	rgb <sub>e</sub> %
N000W <sub>e</sub> =N <sub>e</sub>	4.7	5.0	5.4	0.312	0.329	26.8	0.0	0.0	26.8	0.0	0.0	0.0	0.0	0.00 0.00 0.00
N025W <sub>e</sub>	13.1	13.8	15.0	0.312	0.329	43.9	0.0	0.0	43.9	0.0	0.0	0.0	325.3	0.25 0.25 0.25
N050W <sub>e</sub>	27.9	29.4	32.0	0.312	0.329	61.1	0.0	0.0	61.1	0.0	0.0	0.0	325.1	0.50 0.50 0.50
N075W <sub>e</sub>	50.8	53.5	58.2	0.312	0.329	78.1	0.0	0.0	78.1	0.0	0.0	0.0	323.7	0.75 0.75 0.75
N100W <sub>e</sub> =W <sub>e</sub>	84.1	88.5	96.4	0.312	0.329	95.4	0.0	0.0	95.4	0.0	0.0	0.0	0.0	1.00 1.00 1.00

SS330-3N, Page 8/11, LAB\*1a4, adapted-not adapted

**rgb<sub>e</sub>% and CIE data of a elementary hue circle according to CIE R1-47:2009 for sRGB display L<sub>r</sub>=20%**

16 step elementary hue circle with intended elementary hues:  $h_{ab,a,e} = 25.4, 92.3, 162.2, 271.7$

Code	X <sub>e</sub>	Y <sub>e</sub>	Z <sub>e</sub>	x <sub>e</sub>	y <sub>e</sub>	L* <sub>e</sub>	a* <sub>e</sub>	b* <sub>e</sub>	L* <sub>a,e</sub>	a* <sub>a,e</sub>	b* <sub>a,e</sub>	C* <sub>ab,a,e</sub>	h <sub>ab,a,e</sub>	rgb <sub>e</sub> %
R00Y <sub>e</sub> = R <sub>e</sub>	47.4	34.9	23.2	0.449	0.33	65.6	44.6	21.2	65.6	44.6	21.2	49.4	25.4	1.00 0.00 0.00
R25Y <sub>e</sub>	51.1	42.3	24.5	0.433	0.358	71.1	31.3	28.4	71.1	31.3	28.4	42.3	42.2	1.00 0.25 0.00
R50Y <sub>e</sub>	54.7	49.3	25.7	0.421	0.38	75.6	20.7	34.4	75.6	20.7	34.4	40.2	58.9	1.00 0.50 0.00
R75Y <sub>e</sub>	58.7	57.3	27.0	0.41	0.4	80.3	10.3	40.4	80.3	10.3	40.4	41.7	75.6	1.00 0.75 0.00
Y00G <sub>e</sub> = Y <sub>e</sub>	64.3	68.5	28.9	0.397	0.423	86.2	-1.9	47.8	86.2	-1.9	47.8	47.8	92.3	1.00 1.00 0.00
Y25G <sub>e</sub>	69.1	82.8	31.4	0.376	0.451	92.9	-20.0	55.7	92.9	-20.0	55.7	59.2	109.7	0.75 1.00 0.00
Y50G <sub>e</sub>	54.4	74.6	30.6	0.34	0.467	89.2	-38.3	50.4	89.2	-38.3	50.4	63.3	127.2	0.50 1.00 0.00
Y75G <sub>e</sub>	44.8	69.6	36.7	0.296	0.46	86.8	-53.7	37.9	86.8	-53.7	37.9	65.7	144.7	0.25 1.00 0.00
G00B <sub>e</sub> = G <sub>e</sub>	49.3	71.4	60.3	0.272	0.394	87.6	-44.9	14.4	87.6	-44.9	14.4	47.1	162.1	0.00 1.00 0.00
G25B <sub>e</sub>	55.3	74.4	89.4	0.252	0.339	89.1	-35.7	-6.0	89.1	-35.7	-6.0	36.2	189.6	0.00 1.00 0.50
G50B <sub>e</sub>	50.9	63.7	93.9	0.244	0.305	83.8	-24.2	-18.2	83.8	-24.2	-18.2	30.3	217.0	0.00 1.00 1.00
G75B <sub>e</sub>	45.2	52.6	91.5	0.238	0.277	77.6	-13.1	-27.3	77.6	-13.1	-27.3	30.3	244.2	0.00 0.50 1.00
B00R <sub>e</sub> = B <sub>e</sub>	39.5	41.2	89.6	0.232	0.241	70.3	1.1	-38.5	70.3	1.1	-38.5	70.3	271.7	0.00 0.00 1.00
B25R <sub>e</sub>	33.5	26.1	87.0	0.228	0.178	58.1	33.5	-57.7	58.1	33.5	-57.7	66.8	300.1	0.50 0.00 1.00
B50R <sub>e</sub>	59.4	39.5	84.4	0.323	0.215	69.1	60.4	-36.9	69.1	60.4	-36.9	70.8	328.5	1.00 0.00 1.00
B75R <sub>e</sub>	50.8	36.0	41.4	0.395	0.281	66.5	49.8	-2.6	66.5	49.8	-2.6	49.9	357.0	1.00 0.00 0.50

5 step equidistant grey scale with intended lightness:  $L^*_e = 52.0, 62.8, 73.7, 84.5, 95.4$

Code	X <sub>e</sub>	Y <sub>e</sub>	Z <sub>e</sub>	x <sub>e</sub>	y <sub>e</sub>	L* <sub>e</sub>	a* <sub>e</sub>	b* <sub>e</sub>	L* <sub>a,e</sub>	a* <sub>a,e</sub>	b* <sub>a,e</sub>	C* <sub>ab,a,e</sub>	h <sub>ab,a,e</sub>	rgb <sub>e</sub> %
N000W <sub>e</sub> =N <sub>e</sub>	21.1	20.1	21.9	0.312	0.329	52.0	0.0	0.0	52.0	0.0	0.0	0.0	0.0	0.00 0.00 0.00
N025W <sub>e</sub>	29.8	31.4	34.2	0.312	0.329	62.8	0.0	0.0	62.8	0.0	0.0	0.0	325.1	0.25 0.25 0.25
N050W <sub>e</sub>	44.0	46.3	50.4	0.312	0.329	73.7	0.0	0.0	73.7	0.0	0.0	0.0	324.7	0.50 0.50 0.50
N075W <sub>e</sub>	61.9	65.1	70.9	0.312	0.329	84.5	0.0	0.0	84.5	0.0	0.0	0.0	323.8	0.75 0.75 0.75
N100W <sub>e</sub> =W <sub>e</sub>	84.1	88.5	96.4	0.312	0.329	95.4	0.0	0.0	95.4	0.0	0.0	0.0	0.0	1.00 1.00 1.00

SS331-3N, Page 10/11, LAB\*1a6, adapted-not adapted

**rgb<sub>e</sub>% and CIE data of a elementary hue circle according to CIE R1-47:2009 for sRGB display L<sub>r</sub>=10%**

16 step elementary hue circle with intended elementary hues:  $h_{ab,a,e} = 25.4, 92.3, 162.2, 271.7$

Code	X <sub>e</sub>	Y <sub>e</sub>	Z <sub>e</sub>	x <sub>e</sub>	y <sub>e</sub>	L* <sub>e</sub>	a* <sub>e</sub>	b* <sub>e</sub>	L* <sub>a,e</sub>	a* <sub>a,e</sub>	b* <sub>a,e</sub>	C* <sub>ab,a,e</sub>	h <sub>ab,a,e</sub>	rgb <sub>e</sub> %
R00Y <sub>e</sub> = R <sub>e</sub>	42.2	26.8	14.0	0.508	0.323	58.8	58.8	28.0	58.8	58.8	28.0	65.2	25.4	1.00 0.00 0.00
R25Y <sub>e</sub>	45.3	33.6	13.6	0.489	0.362	64.6	43.1	39.0	64.6	43.1	39.0	58.1	42.1	1.00 0.25 0.00
R50Y <sub>e</sub>	49.5	42.0	15.0	0.464	0.394	70.8	27.9	46.4	70.8	27.9	46.4	54.2	58.9	1.00 0.50 0.00
R75Y <sub>e</sub>	54.4	51.8	16.6	0.443	0.421	77.1	13.7	53.6	77.1	13.7	53.6	55.3	75.6	1.00 0.75 0.00
Y00G <sub>e</sub> = Y <sub>e</sub>	61.4	65.8	18.9	0.42	0.449	84.9	-2.5	62.2	84.9	-2.5	62.2	62.2	92.3	1.00 1.00 0.00
Y25G <sub>e</sub>	65.3	81.1	21.7	0.388	0.482	92.1	-25.0	69.6	92.1	-25.0	69.6	74.0	109.7	0.75 1.00 0.00
Y50G <sub>e</sub>	48.3	71.7	20.8	0.342	0.509	87.8	-48.5	63.7	87.8	-48.5	63.7	80.1	127.2	0.50 1.00 0.00
Y75G <sub>e</sub>	39.3	66.9	29.3	0.29	0.493	85.4	-64.6	45.6	85.4	-64.6	45.6	79.1	144.7	0.25 1.00 0.00
G00B <sub>e</sub> = G <sub>e</sub>	44.2	68.8	54.9	0.263	0.409	86.4	-54.0	17.3	86.4	-54.0	17.3	56.7	162.2	0.00 1.00 0.00
G25B <sub>e</sub>	51.1	72.4	88.7	0.24	0.341	88.1	-42.4	-7.2	88.1	-42.4	-7.2	43.0	189.6	0.00 1.00 0.50
G50B <sub>e</sub>	45.7	59.5	93.3	0.23	0.299	81.5	-28.8	-21.7	81.5	-28.8	-21.7	36.1	216.9	0.00 1.00 1.00
G75B <sub>e</sub>	39.3	46.8	90.7	0.222	0.264	74.1	-15.8	-32.8	74.1	-15.8	-32.8	36.5	244.2	0.00 0.50 1.00
B00R <sub>e</sub> = B <sub>e</sub>	33.0	34.3	88.6	0.211	0.22	65.2	1.4	-46.7	65.2	1.4	-46.7	46.7	271.7	0.00 0.00 1.00
B25R <sub>e</sub>	23.7	15.8	85.6	0.189	0.126	46.8	44.3	-76.2	46.8	44.3	-76.2	88.2	300.1	0.50 0.00 1.00
B50R <sub>e</sub>	55.9	32.4	84.2	0.324	0.187	63.6	75.6	-46.1	63.6	75.6	-46.1	88.6	328.5	1.00 0.00 1.00
B75R <sub>e</sub>	45.8	28.3	33.2	0.427	0.263	60.2	63.8	-3.2	60.2	63.8	-3.2	63.9	357.0	1.00 0.00 0.50

5 step equidistant grey scale with intended lightness:  $L^*_e = 37.9, 52.3, 66.6, 81.0, 95.4$

Code	X <sub>e</sub>	Y <sub>e</sub>	Z <sub>e</sub>	x <sub>e</sub>	y <sub>e</sub>	L* <sub>e</sub>	a* <sub>e</sub>	b* <sub>e</sub>	L* <sub>a,e</sub>	a* <sub>a,e</sub>	b* <sub>a,e</sub>	C* <sub>ab,a,e</sub>	h <sub>ab,a,e</sub>	rgb <sub>e</sub> %
N000W <sub>e</sub> =N <sub>e</sub>	9.5	10.0	10.9	0.312	0.329	37.9	0.0	0.0	37.9	0.0	0.0	0.0	0.0	0.00 0.00 0.00
N025W <sub>e</sub>	19.3	20.4	22.2	0.312	0.329	52.3	0.0	0.0	52.3	0.0	0.0	0.0	325.5	0.25 0.25 0.25
N050W <sub>e</sub>	34.4	36.2	39.4	0.312	0.329	66.6	0.0	0.0	66.6	0.0	0.0	0.0	324.4	0.50 0.50 0.50
N075W <sub>e</sub>	55.7	58.6	63.9	0.312	0.329	81.0	0.0	0.0	81.0	0.0	0.0	0.0	324.7	0.75 0.75 0.75
N100W <sub>e</sub> =W <sub>e</sub>	84.1	88.5	96.4	0.312	0									