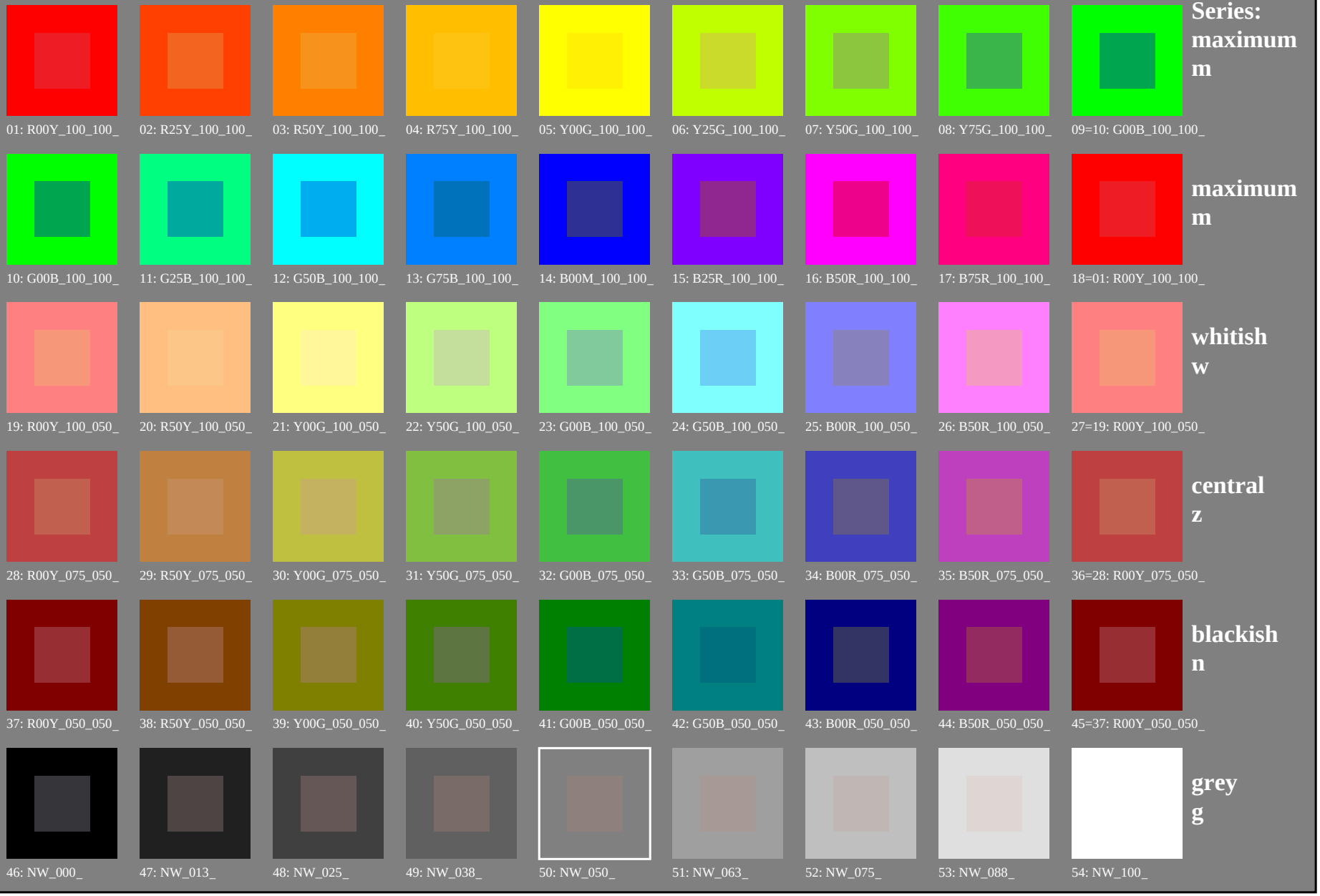
Test chart 1 for color rendering: 54 standard colours for D65; offset print *(CMY0)*



5−103031−L0 PN170−7N

TUB-test chart PN17; colour rendering
54 standard colors; image technology

input: *rgb/cmyk −> rgb/cmyk*
output: no change compared

see similar files: http://130.149.60.45/~farbmetrik/PN17/PN17.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-PN17/PN17L0FP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

PN17 10L

Test chart 1 for color rendering: 54 standard colours for D65; offset print *(CMY0); rgb−>rgb*dd*

see similar files: http://130.149.60.45/~farbmetrik/PN17/PN17.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-PN17/PN17L0FP.PDF /.PS
application for measurement of offset print output, separation cmy0* (CMY0)

TUB material: code=rha4ta

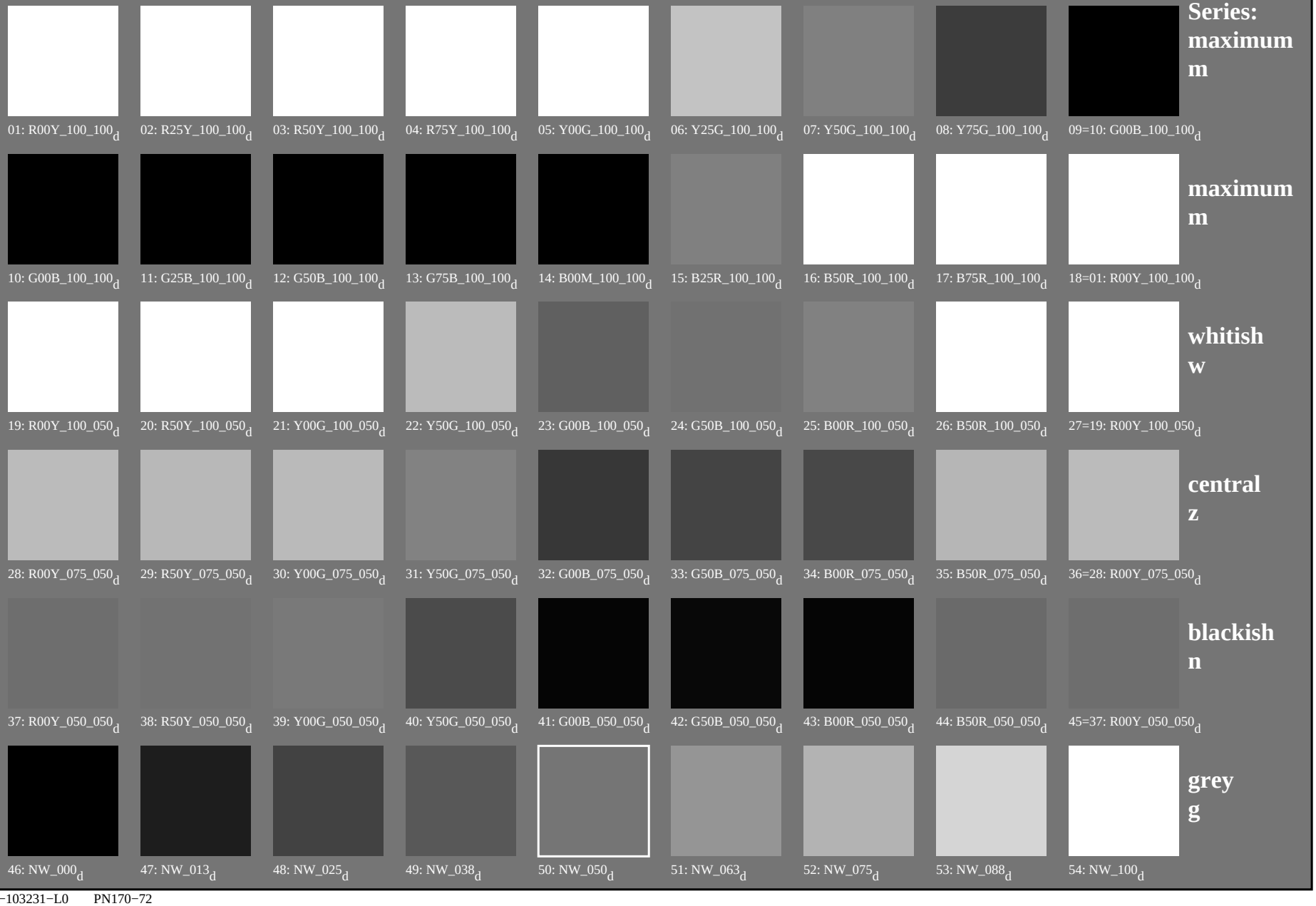
5−103131−L0 PN170−72

TUB-test chart PN17; colour rendering
54 standard colors, 3D=1, de=0, *cmy0**

input: *rgb/cmyk −> rgb*dd
output: 3D-linearization to *cmy0**dd

5−103131−F0

Test chart 1 for color rendering: 54 standard colours for D65; offset print *(CMY0); rgb−>rgb*dd*



5−103231−L0 PN170−72

TUB-test chart PN17; colour rendering
54 standard colors, 3D=1, de=0, *cmy0**

input: *rgb/cmyk −> rgb*dd
output: 3D-linearization to *cmy0**dd

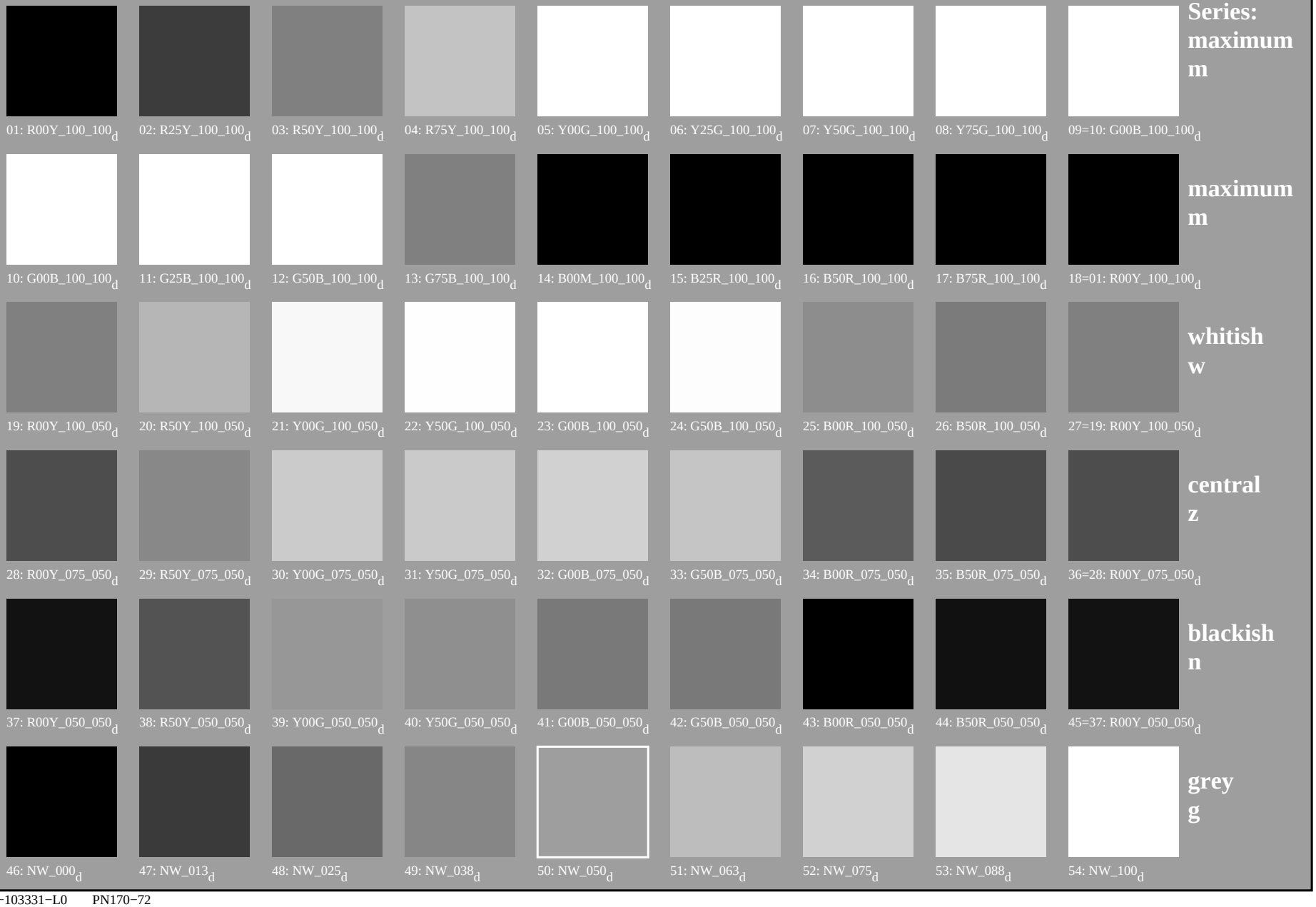
5−103231−F0

see similar files: http://130.149.60.45/~farbmetrik/PN17/PN17.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

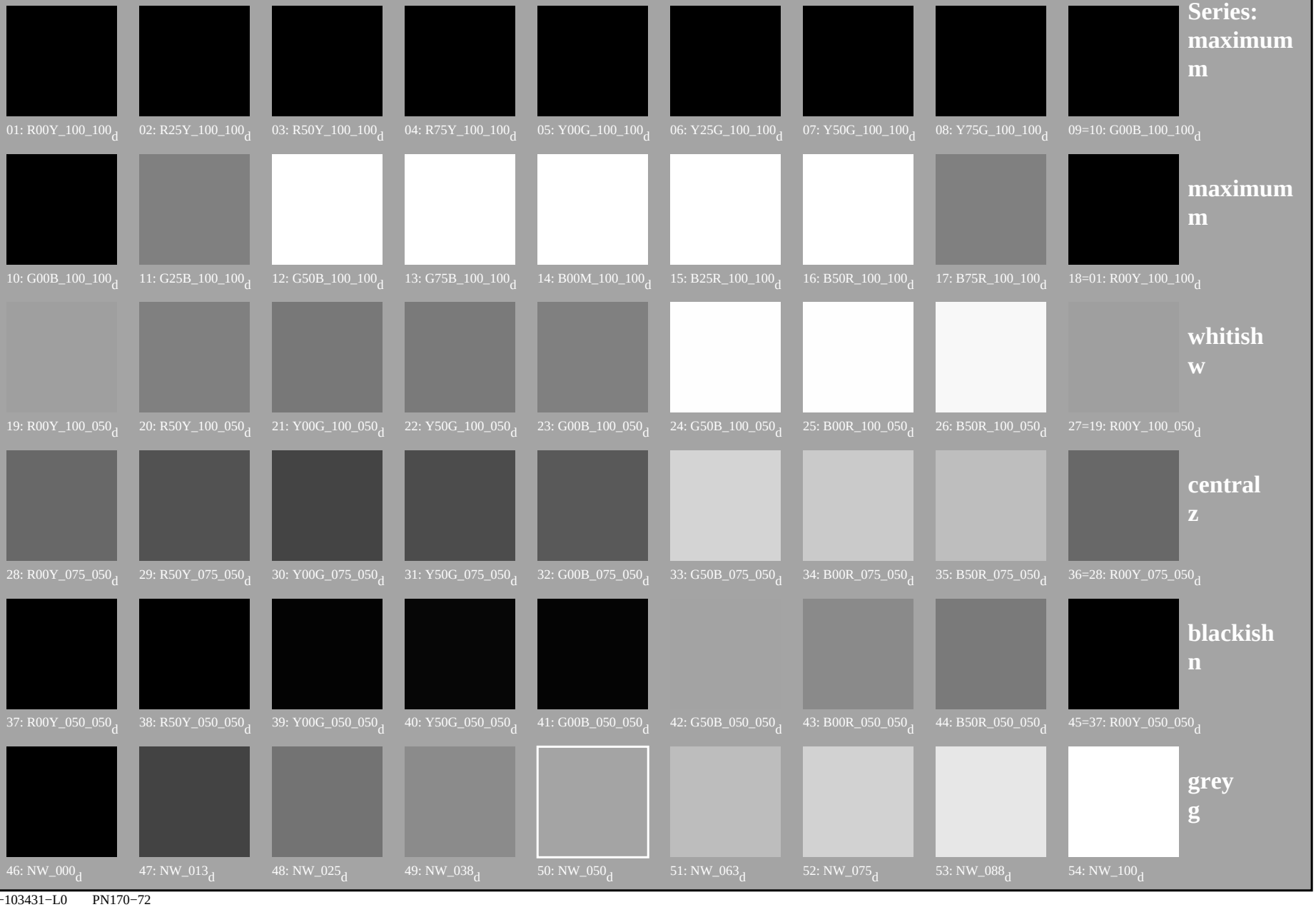
TUB registration: 20130201-PN17/PN17L0FP.PDF /.PS
application for measurement of offset print output, separation cmy0* (CMY0)

TUB material: code=rha4ta

Test chart 1 for color rendering: 54 standard colours for D65; offset print *(CMY0); rgb−>rgb*dd*



Test chart 1 for color rendering: 54 standard colours for D65; offset print *(CMY0); rgb−>rgb*dd*



see similar files: http://130.149.60.45/~farbmetrik/PN17/PN17.HTM
technical information: http://www.ps.bam.de or http://130.149.60.45/~farbmetrik

TUB registration: 20130201-PN17/PN17L0FP.PDF /.PS
application for measurement of offset print output, separation cmy0* (CMY0)

TUB material: code=rha4ta

5−103431−L0 PN170−72

TUB-test chart PN17; colour rendering
54 standard colors, 3D=1, de=0, *cmy0**

input: *rgb/cmyk −> rgb*dd
output: 3D-linearization to *cmy0**dd

5−103431−F0

TUB-test chart PN17; colour rendering
54 standard colors, 3D=1, de=0, *cmy0**

input: *rgb/cmyk -> rgb*$_{dd}$
output: 3D-linearization to *cmy0**$_{dd}$

n/j	**HIC*$_{Fdd}$**	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$					*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
0/648	R00Y_100_100$_{dd}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	0.0	1.0	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
1/657	R13Y_100_100$_{dd}$	1.0	0.125	0.0	1.0	1.0	0.5	37	1.0	0.116	0.0	48.6	63.3	49.1	80.2	37.7	0.0	0.882	1.0	0.0	36	1.0	0.116	0.0	48.6	63.3	49.1	80.2	37.7
2/666	R25Y_100_100$_{dd}$	1.0	0.25	0.0	1.0	1.0	0.5	44	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7	0.0	0.765	1.0	0.0	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
3/675	R38Y_100_100$_{dd}$	1.0	0.375	0.0	1.0	1.0	0.5	52	1.0	0.366	0.0	58.8	41.1	61.7	74.1	56.3	0.0	0.632	1.0	0.0	51	1.0	0.366	0.0	58.8	41.1	61.7	74.1	56.3
4/684	R50Y_100_100$_{dd}$	1.0	0.5	0.0	1.0	1.0	0.5	60	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1	0.0	0.498	0.999	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
5/693	R63Y_100_100$_{dd}$	1.0	0.625	0.0	1.0	1.0	0.5	68	1.0	0.633	0.0	72.5	14.8	77.6	79.0	79.1	0.0	0.368	1.0	0.0	68	1.0	0.633	0.0	72.5	14.8	77.6	79.0	79.1
6/702	R75Y_100_100$_{dd}$	1.0	0.75	0.0	1.0	1.0	0.5	76	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0	0.0	0.234	1.0	0.0	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
7/711	R88Y_100_100$_{dd}$	1.0	0.875	0.0	1.0	1.0	0.5	83	1.0	0.883	0.0	83.7	−3.8	90.5	90.6	92.4	0.0	0.117	1.0	0.0	83	1.0	0.883	0.0	83.7	−3.8	90.5	90.6	92.4
8/720	Y00G_100_100$_{dd}$	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	0.0	0.0	1.0	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
9/639	Y13G_100_100$_{dd}$	0.875	1.0	0.0	1.0	1.0	0.5	97	0.883	1.0	0.0	84.5	−13.6	89.7	90.7	98.6	0.116	0.0	1.0	0.0	96	0.883	1.0	0.0	84.5	−13.6	89.7	90.7	98.6
10/558	Y25G_100_100$_{dd}$	0.75	1.0	0.0	1.0	1.0	0.5	104	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4	0.235	0.0	1.0	0.0	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
11/477	Y38G_100_100$_{dd}$	0.625	1.0	0.0	1.0	1.0	0.5	112	0.633	1.0	0.0	75.6	−23.6	76.2	79.8	107.2	0.368	0.0	1.0	0.0	111	0.633	1.0	0.0	75.6	−23.6	76.2	79.8	107.2
12/396	Y50G_100_100$_{dd}$	0.5	1.0	0.0	1.0	1.0	0.5	120	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0	0.498	0.0	1.0	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
13/315	Y63G_100_100$_{dd}$	0.375	1.0	0.0	1.0	1.0	0.5	128	0.366	1.0	0.0	65.2	−36.4	57.6	68.2	122.3	0.632	0.0	1.0	0.0	128	0.366	1.0	0.0	65.2	−36.4	57.6	68.2	122.3
14/234	Y75G_100_100$_{dd}$	0.25	1.0	0.0	1.0	1.0	0.5	136	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5	0.766	0.0	1.0	0.0	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
15/153	Y88G_100_100$_{dd}$	0.125	1.0	0.0	1.0	1.0	0.5	143	0.116	1.0	0.0	54.4	−54.7	38.0	66.6	145.1	0.882	0.0	1.0	0.0	143	0.116	1.0	0.0	54.4	−54.7	38.0	66.6	145.1
16/72	G00C_100_100$_{dd}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	1.0	0.0	1.0	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
17/73	G13C_100_100$_{dd}$	0.0	1.0	0.125	1.0	1.0	0.5	157	0.0	1.0	0.116	50.5	−62.9	22.4	66.8	160.4	1.0	0.0	0.882	0.0	156	0.0	1.0	0.116	50.5	−62.9	22.4	66.8	160.4
18/74	G25C_100_100$_{dd}$	0.0	1.0	0.25	1.0	1.0	0.5	164	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8	1.0	0.0	0.765	0.0	162	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
19/75	G38C_100_100$_{dd}$	0.0	1.0	0.375	1.0	1.0	0.5	172	0.0	1.0	0.366	51.9	−54.9	3.7	55.0	176.1	1.0	0.0	0.631	0.0	171	0.0	1.0	0.366	51.9	−54.9	3.7	55.0	176.1
20/76	G50C_100_100$_{dd}$	0.0	1.0	0.5	1.0	1.0	0.5	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3	1.0	0.0	0.498	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
21/77	G63C_100_100$_{dd}$	0.0	1.0	0.625	1.0	1.0	0.5	188	0.0	1.0	0.633	54.1	−42.0	−18.8	46.0	204.1	1.0	0.0	0.367	0.0	188	0.0	1.0	0.633	54.1	−42.0	−18.8	46.0	204.1
22/78	G75C_100_100$_{dd}$	0.0	1.0	0.75	1.0	1.0	0.5	196	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7	1.0	0.0	0.234	0.0	197	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
23/79	G88C_100_100$_{dd}$	0.0	1.0	0.875	1.0	1.0	0.5	203	0.0	1.0	0.883	55.9	−30.4	−35.0	46.3	229.0	1.0	0.0	0.117	0.0	203	0.0	1.0	0.883	55.9	−30.4	−35.0	46.3	229.0
24/80	C00B_100_100$_{dd}$	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4	1.0	0.0	0.0	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
25/71	C13B_100_100$_{dd}$	0.0	0.875	1.0	1.0	1.0	0.5	217	0.0	0.883	1.0	54.3	−21.4	−41.4	46.6	242.6	1.0	0.117	0.0	0.0	216	0.0	0.883	1.0	54.3	−21.4	−41.4	46.6	242.6
26/62	C25B_100_100$_{dd}$	0.0	0.75	1.0	1.0	1.0	0.5	224	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4	1.0	0.234	0.0	0.0	222	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
27/53	C38B_100_100$_{dd}$	0.0	0.625	1.0	1.0	1.0	0.5	232	0.0	0.633	1.0	46.8	−9.8	−40.9	42.1	256.4	1.0	0.368	0.0	0.0	231	0.0	0.633	1.0	46.8	−9.8	−40.9	42.1	256.4
28/44	C50B_100_100$_{dd}$	0.0	0.5	1.0	1.0	1.0	0.5	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2	1.0	0.5	0.0	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
29/35	C63B_100_100$_{dd}$	0.0	0.375	1.0	1.0	1.0	0.5	248	0.0	0.366	1.0	37.0	6.6	−40.2	40.8	279.3	1.0	0.631	0.0	0.0	248	0.0	0.366	1.0	37.0	6.6	−40.2	40.8	279.3
30/26	C75B_100_100$_{dd}$	0.0	0.25	1.0	1.0	1.0	0.5	256	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8	1.0	0.765	0.0	0.0	257	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
31/17	C88B_100_100$_{dd}$	0.0	0.125	1.0	1.0	1.0	0.5	263	0.0	0.116	1.0	28.4	22.8	−40.3	46.3	299.5	1.0	0.882	0.0	0.0	263	0.0	0.116	1.0	28.4	22.8	−40.3	46.3	299.5
32/8	B00M_100_100$_{dd}$	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2	0.999	1.0	0.0	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
33/89	B13M_100_100$_{dd}$	0.125	0.0	1.0	1.0	1.0	0.5	277	0.116	0.0	1.0	27.7	35.6	−36.7	51.1	314.1	0.882	0.999	0.0	0.0	276	0.116	0.0	1.0	27.7	35.6	−36.7	51.1	314.1
34/170	B25M_100_100$_{dd}$	0.25	0.0	1.0	1.0	1.0	0.5	284	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1	0.765	1.0	0.0	0.0	282	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1
35/251	B38M_100_100$_{dd}$	0.375	0.0	1.0	1.0	1.0	0.5	292	0.366	0.0	1.0	32.5	51.2	−26.5	57.7	332.6	0.632	0.999	0.0	0.0	291	0.366	0.0	1.0	32.5	51.2	−26.5	57.7	332.6
36/332	B50M_100_100$_{dd}$	0.5	0.0	1.0	1.0	1.0	0.5	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5	0.5	1.0	0.0	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
37/413	B63M_100_100$_{dd}$	0.625	0.0	1.0	1.0	1.0	0.5	308	0.633	0.0	1.0	38.3	65.8	−13.7	67.2	348.2	0.368	0.999	0.0	0.0	308	0.633	0.0	1.0	38.3	65.8	−13.7	67.2	348.2
38/494	B75M_100_100$_{dd}$	0.75	0.0	1.0	1.0	1.0	0.5	316	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0	0.233	0.999	0.0	0.0	317	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0
39/575	B88M_100_100$_{dd}$	0.875	0.0	1.0	1.0	1.0	0.5	323	0.883	0.0	1.0	44.3	75.4	−4.7	75.6	356.3	0.115	1.0	0.0	0.0	323	0.883	0.0	1.0	44.3	75.4	−4.7	75.6	356.3
40/656	M00R_100_100$_{dd}$	1.0	0.0	1.0	1.0	1.0	0.5	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	0.0	1.0	0.0	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
41/655	M13R_100_100$_{dd}$	1.0	0.0	0.875	1.0	1.0	0.5	337	1.0	0.0	0.883	45.9	78.3	3.8	78.4	2.8	0.0	1.0	0.117	0.0	336	1.0	0.0	0.883	45.9	78.3	3.8	78.4	2.8
42/654	M25R_100_100$_{dd}$	1.0	0.0	0.75	1.0	1.0	0.5	344	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9	0.0	1.0	0.234	0.0	342	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9
43/653	M38R_100_100$_{dd}$	1.0	0.0	0.625	1.0	1.0	0.5	352	1.0	0.0	0.633	46.0	75.7	14.4	77.1	10.8	0.0	1.0	0.368	0.0	351	1.0	0.0	0.633	46.0	75.7	14.4	77.1	10.8
44/652	M50R_100_100$_{dd}$	1.0	0.0	0.5	1.0	1.0	0.5	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9	0.0	1.0	0.5	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
45/651	M63R_100_100$_{dd}$	1.0	0.0	0.375	1.0	1.0	0.5	368	1.0	0.0	0.366	45.8	72.9	28.7	78.4	21.5	0.0	1.0	0.631	0.0	368	1.0	0.0	0.366	45.8	72.9	28.7	78.4	21.5
46/650	M75R_100_100$_{dd}$	1.0	0.0	0.25	1.0	1.0	0.5	376	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1	0.0	1.0	0.765	0.0	377	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1
47/649	M88R_100_100$_{dd}$	1.0	0.0	0.125	1.0	1.0	0.5	383	1.0	0.0	0.116	45.5	71.4	40.4	82.1	29.5	0.0	0.999	0.884	0.0	383	1.0	0.0	0.116	45.5	71.4	40.4	82.1	29.5
48/648	R00Y_100_100$_{dd}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	0.0	1.0	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
49/0	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
50/91	NW_013$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0	0.885	0.774	0.736	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
51/182	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0	0.743	0.587	0.55	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
52/273	NW_038$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0	0.653	0.473	0.452	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
53/364	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0	0.54	0.382	0.356	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
54/455	NW_063$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0	0.417	0.26	0.26	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
55/546	NW_075$_{dd}$	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0	0.299	0.181	0.177	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
56/637	NW_088$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0	0.162	0.101	0.093	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
57/728	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

delta

n/j	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$					*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
0/648	R00Y_100_100$_{dd}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	0.0	1.0	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
1/666	R25Y_100_100$_{dd}$	1.0	0.25	0.0	1.0	1.0	0.5	44	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7	0.0	0.765	1.0	0.0	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
2/684	R50Y_100_100$_{dd}$	1.0	0.5	0.0	1.0	1.0	0.5	60	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1	0.0	0.498	0.999	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
3/702	R75Y_100_100$_{dd}$	1.0	0.75	0.0	1.0	1.0	0.5	76	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0	0.0	0.234	1.0	0.0	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
4/720	Y00G_100_100$_{dd}$	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	0.0	0.0	1.0	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
5/558	Y25G_100_100$_{dd}$	0.75	1.0	0.0	1.0	1.0	0.5	104	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4	0.235	0.0	1.0	0.0	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
6/396	Y50G_100_100$_{dd}$	0.5	1.0	0.0	1.0	1.0	0.5	120	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0	0.498	0.0	1.0	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
7/234	Y75G_100_100$_{dd}$	0.25	1.0	0.0	1.0	1.0	0.5	136	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5	0.766	0.0	1.0	0.0	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
8/72	G00B_100_100$_{dd}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	1.0	0.0	1.0	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
9/72	G00B_100_100$_{dd}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	1.0	0.0	1.0	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
10/76	G25B_100_100$_{dd}$	0.0	1.0	0.5	1.0	1.0	0.5	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3	1.0	0.0	0.498	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
11/80	G50B_100_100$_{dd}$	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4	1.0	0.0	0.0	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
12/44	G75B_100_100$_{dd}$	0.0	0.5	1.0	1.0	1.0	0.5	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2	1.0	0.5	0.0	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
13/8	B00M_100_100$_{dd}$	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2	0.999	1.0	0.0	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
14/332	B25R_100_100$_{dd}$	0.5	0.0	1.0	1.0	1.0	0.5	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5	0.5	1.0	0.0	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
15/656	B50R_100_100$_{dd}$	1.0	0.0	1.0	1.0	1.0	0.5	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	0.0	1.0	0.0	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
16/652	B75R_100_100$_{dd}$	1.0	0.0	0.5	1.0	1.0	0.5	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9	0.0	1.0	0.5	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
17/648	R00Y_100_100$_{dd}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	0.0	1.0	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
18/688	R00Y_100_050$_{dd}$	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.5	70.5	35.4	22.4	41.9	32.3	0.0	0.5	0.375	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
19/706	R50Y_100_050$_{dd}$	1.0	0.75	0.5	1.0	0.5	0.75	60	1.0	0.75	0.5	80.2	14.4	34.3	37.2	67.1	0.0	0.286	0.498	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
20/724	Y00G_100_050$_{dd}$	1.0	1.0	0.5	1.0	0.5	0.75	90	1.0	1.0	0.5	91.7	−5.1	47.7	48.0	96.1	0.0	0.027	0.529	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
21/562	Y50G_100_050$_{dd}$	0.75	1.0	0.5	1.0	0.5	0.75	120	0.75	1.0	0.5	83.1	−14.8	33.2	36.4	114.0	0.266	0.004	0.52	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
22/400	G00B_100_050$_{dd}$	0.5	1.0	0.5	1.0	0.5	0.75	150	0.5	1.0	0.5	72.8	−32.5	14.8	35.7	155.5	0.625	0.0	0.5	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
23/404	G50B_100_050$_{dd}$	0.5	1.0	1.0	1.0	0.5	0.75	210	0.5	1.0	1.0	76.2	−12.7	−20.7	24.3	238.4	0.556	0.007	0.001	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
24/368	B00R_100_050$_{dd}$	0.5	0.5	1.0	1.0	0.5	0.75	270	0.5	0.5	1.0	60.3	14.7	−20.2	25.0	306.2	0.493	0.447	0.003	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
25/692	B50R_100_050$_{dd}$	1.0	0.5	1.0	1.0	0.5	0.75	330	1.0	0.5	1.0	70.8	39.6	−0.1	39.6	359.8	0.0	0.517	0.027	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
26/688	R00Y_100_050$_{dd}$	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.5	70.5	35.4	22.4	41.9	32.3	0.0	0.5	0.375	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
27/506	R00Y_075_050$_{dd}$	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.25	52.7	35.4	22.4	41.9	32.3	0.266	0.699	0.592	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
28/524	R50Y_075_050$_{dd}$	0.75	0.5	0.25	0.75	0.5	0.5	60	0.75	0.5	0.25	62.4	14.4	34.3	37.2	67.1	0.277	0.465	0.677	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
29/542	Y00G_075_050$_{dd}$	0.75	0.75	0.25	0.75	0.5	0.5	90	0.75	0.75	0.25	73.9	−5.1	47.7	48.0	96.1	0.269	0.204	0.731	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
30/380	Y50G_075_050$_{dd}$	0.5	0.75	0.25	0.75	0.5	0.5	120	0.5	0.75	0.25	65.3	−14.8	33.2	36.4	114.0	0.49	0.207	0.702	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
31/218	G00B_075_050$_{dd}$	0.25	0.75	0.25	0.75	0.5	0.5	150	0.25	0.75	0.25	55.0	−32.5	14.8	35.7	155.5	0.784	0.18	0.652	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
32/222	G50B_075_050$_{dd}$	0.25	0.75	0.75	0.75	0.5	0.5	210	0.25	0.75	0.75	58.4	−12.7	−20.7	24.3	238.4	0.735	0.228	0.168	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
33/186	B00R_075_050$_{dd}$	0.25	0.25	0.75	0.75	0.5	0.5	270	0.25	0.25	0.75	42.5	14.7	−20.2	25.0	306.2	0.719	0.642	0.208	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
34/510	B50R_075_050$_{dd}$	0.75	0.25	0.75	0.75	0.5	0.5	330	0.75	0.25	0.75	53.0	39.6	−0.1	39.6	359.8	0.286	0.71	0.256	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
35/506	R00Y_075_050$_{dd}$	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.25	52.7	35.4	22.4	41.9	32.3	0.266	0.699	0.592	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
36/324	R00Y_050_050$_{dd}$	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.0	34.9	35.4	22.4	41.9	32.3	0.567	0.93	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
37/342	R50Y_050_050$_{dd}$	0.5	0.25	0.0	0.5	0.5	0.25	60	0.5	0.25	0.0	44.6	14.4	34.3	37.2	67.1	0.552	0.674	1.0	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
38/360	Y00G_050_050$_{dd}$	0.5	0.5	0.0	0.5	0.5	0.25	90	0.5	0.5	0.0	56.1	−5.1	47.7	48.0	96.1	0.524	0.405	0.988	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
39/198	Y50G_050_050$_{dd}$	0.25	0.5	0.0	0.5	0.5	0.25	120	0.25	0.5	0.0	47.4	−14.8	33.2	36.4	114.0	0.704	0.44	0.976	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
40/36	G00B_050_050$_{dd}$	0.0	0.5	0.0	0.5	0.5	0.25	150	0.0	0.5	0.0	37.2	−32.5	14.8	35.7	155.5	0.982	0.524	0.985	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
41/40	G50B_050_050$_{dd}$	0.0	0.5	0.5	0.5	0.5	0.25	210	0.0	0.5	0.5	40.5	−12.7	−20.7	24.3	238.4	0.967	0.525	0.358	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
42/4	B00R_050_050$_{dd}$	0.0	0.0	0.5	0.5	0.5	0.25	270	0.0	0.0	0.5	24.7	14.7	−20.2	25.0	306.2	0.979	1.0	0.459	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
43/328	B50R_050_050$_{dd}$	0.5	0.0	0.5	0.5	0.5	0.25	330	0.5	0.0	0.5	35.2	39.6	−0.1	39.6	359.8	0.583	0.931	0.522	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
44/324	R00Y_050_050$_{dd}$	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.0	34.9	35.4	22.4	41.9	32.3	0.567	0.93	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
45/0	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
46/91	NW_013$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0	0.885	0.774	0.736	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
47/182	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0	0.743	0.587	0.55	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
48/273	NW_038$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0	0.653	0.473	0.452	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
49/364	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0	0.54	0.382	0.356	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
50/455	NW_063$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0	0.417	0.26	0.26	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
51/546	NW_075$_{dd}$	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0	0.299	0.181	0.177	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
52/637	NW_088$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0	0.162	0.101	0.093	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
53/728	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

delta

n=j	HIC*Fdd	rgb_Fdd			ict_Fdd			hsi_F,dd	rgb*Fdd			LabCh*Fdd				cmyn*sep,Fdd				hsiM,dd	rgb*Mdd			LabCh*Mdd			
0	NW_000dd	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	1.0	1.0	1.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0
1	B00R_012_012dd	0.0	0.0	0.125	0.125	0.125	0.062	270	0.0	0.0	0.125	24.4	3.6	−5.0	6.2	0.989	0.986	0.816	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0
2	B00R_025_025dd	0.0	0.0	0.25	0.25	0.25	0.125	270	0.0	0.0	0.25	24.5	7.3	−10.1	12.5	0.984	0.994	0.671	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0
3	B00R_037_037dd	0.0	0.0	0.375	0.375	0.375	0.187	270	0.0	0.0	0.375	24.6	11.0	−15.1	18.7	0.98	1.0	0.558	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0
4	B00R_050_050dd	0.0	0.0	0.5	0.5	0.5	0.25	270	0.0	0.0	0.5	24.7	14.7	−20.2	25.0	0.979	1.0	0.459	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0
5	B00R_062_062dd	0.0	0.0	0.625	0.625	0.625	0.312	270	0.0	0.0	0.625	24.8	18.4	−25.2	31.3	0.982	1.0	0.354	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0
6	B00R_075_075dd	0.0	0.0	0.75	0.75	0.75	0.375	270	0.0	0.0	0.75	24.9	22.1	−30.3	37.5	0.984	1.0	0.25	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0
7	B00R_087_087dd	0.0	0.0	0.875	0.875	0.875	0.437	270	0.0	0.0	0.875	24.9	25.8	−35.3	43.8	0.99	1.0	0.133	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0
8	B00R_100_100dd	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	0.999	1.0	0.0	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0
9	G00B_012_012dd	0.0	0.0	0.125	0.0	0.125	0.125	0.062	150	0.0	0.125	0.0	27.5	−8.1	3.7	8.9	155.5	0.992	0.866	1.0	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
10	G50B_012_012dd	0.0	0.125	0.125	0.125	0.125	0.062	210	0.0	0.125	0.125	28.4	−3.1	−5.1	6.0	238.4	0.979	0.849	0.731	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
11	G75B_025_025dd	0.0	0.125	0.25	0.25	0.25	0.125	240	0.0	0.125	0.25	28.7	−0.3	−10.1	10.1	268.2	0.978	0.846	0.615	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
12	G84B_037_037dd	0.0	0.125	0.375	0.375	0.375	0.187	251	0.0	0.118	0.375	28.4	3.7	−15.1	15.6	283.7	0.978	0.857	0.529	0.0	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
13	G88B_050_050dd	0.0	0.125	0.5	0.5	0.5	0.25	256	0.0	0.116	0.5	28.3	7.6	−20.1	21.5	290.8	0.978	0.868	0.44	0.0	257	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
14	G90B_062_062dd	0.0	0.125	0.625	0.625	0.625	0.312	259	0.0	0.114	0.625	28.2	11.6	−25.2	27.8	294.6	0.981	0.879	0.342	0.0	260	0.0	0.183	1.0	30.6	18.5	−40.4	44.5	294.6
15	G92B_075_075dd	0.0	0.125	0.75	0.75	0.75	0.375	261	0.0	0.112	0.75	28.2	15.5	−30.3	34.0	297.1	0.984	0.886	0.238	0.0	262	0.0	0.15	1.0	29.5	20.7	−40.4	45.4	297.1
16	G93B_087_087dd	0.0	0.125	0.875	0.875	0.875	0.437	262	0.0	0.116	0.875	28.3	19.1	−35.2	40.1	298.4	0.99	0.883	0.127	0.0	262	0.0	0.133	1.0	28.9	21.8	−40.3	45.8	298.4
17	G94B_100_100dd	0.0	0.125	1.0	1.0	1.0	0.5	263	0.0	0.116	1.0	28.4	22.8	−40.3	46.3	299.5	1.0	0.882	0.0	0.0	263	0.0	0.116	1.0	28.4	22.8	−40.3	46.3	299.5
18	G00B_025_025dd	0.0	0.25	0.0	0.25	0.25	0.125	150	0.0	0.25	0.0	30.7	−16.2	7.4	17.8	155.5	0.986	0.754	0.984	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
19	G25B_025_025dd	0.0	0.25	0.125	0.25	0.25	0.125	180	0.0	0.25	0.125	31.5	−12.1	−2.0	12.3	189.3	0.985	0.748	0.75	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
20	G50B_025_025dd	0.0	0.25	0.25	0.25	0.25	0.125	210	0.0	0.25	0.25	32.4	−6.3	−10.3	12.1	238.4	0.971	0.748	0.574	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
21	G65B_037_037dd	0.0	0.25	0.375	0.375	0.375	0.187	229	0.0	0.256	0.375	33.3	−4.6	−15.4	16.0	253.3	0.972	0.724	0.484	0.0	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
22	G75B_050_050dd	0.0	0.25	0.5	0.5	0.5	0.25	240	0.0	0.25	0.5	33.0	−0.6	−20.3	20.3	268.2	0.976	0.738	0.399	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
23	G80B_062_062dd	0.0	0.25	0.625	0.625	0.625	0.312	247	0.0	0.239	0.625	32.6	3.5	−25.1	25.4	277.9	0.981	0.75	0.312	0.0	247	0.0	0.383	1.0	37.6	5.6	−40.3	40.7	277.9
24	G84B_075_075dd	0.0	0.25	0.75	0.75	0.75	0.375	251	0.0	0.237	0.75	32.5	7.4	−30.3	31.2	283.7	0.987	0.754	0.216	0.0	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
25	G86B_087_087dd	0.0	0.25	0.875	0.875	0.875	0.437	254	0.0	0.233	0.875	32.3	11.5	−35.2	37.1	288.1	0.99	0.76	0.112	0.0	255	0.0	0.266	1.0	33.4	13.2	−40.3	42.4	288.1
26	G88B_100_100dd	0.0	0.25	1.0	1.0	1.0	0.5	256	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8	1.0	0.765	0.0	0.0	257	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
27	G00B_037_037dd	0.0	0.375	0.0	0.375	0.375	0.187	150	0.0	0.375	0.0	34.0	−24.3	11.1	26.7	155.5	0.983	0.641	0.986	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
28	G15B_037_037dd	0.0	0.375	0.125	0.375	0.375	0.187	169	0.0	0.375	0.118	34.6	−21.3	2.7	21.4	172.5	0.985	0.636	0.8	0.0	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
29	G34B_037_037dd	0.0	0.375	0.25	0.375	0.375	0.187	191	0.0	0.375	0.256	35.6	−14.8	−8.5	17.1	209.7	0.978	0.63	0.583	0.0	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
30	G50B_037_037dd	0.0	0.375	0.375	0.375	0.375	0.187	210	0.0	0.375	0.375	36.5	−9.5	−15.5	18.2	238.4	0.967	0.637	0.461	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
31	G61B_050_050dd	0.0	0.375	0.5	0.5	0.5	0.25	224	0.0	0.383	0.5	37.6	−8.1	−20.6	22.1	248.4	0.97	0.614	0.371	0.0	222	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
32	G69B_062_062dd	0.0	0.375	0.625	0.625	0.625	0.312	233	0.0	0.385	0.625	38.0	−5.5	−25.5	26.1	257.7	0.976	0.6	0.285	0.0	232	0.0	0.616	1.0	46.2	−8.9	−40.9	41.8	257.7
33	G75B_075_075dd	0.0	0.375	0.75	0.75	0.75	0.375	240	0.0	0.375	0.75	37.3	−0.9	−30.4	30.5	268.2	0.981	0.615	0.196	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
34	G79B_087_087dd	0.0	0.375	0.875	0.875	0.875	0.437	245	0.0	0.364	0.875	37.0	3.2	−35.4	35.6	275.1	0.991	0.623	0.102	0.0	245	0.0	0.416	1.0	38.8	3.6	−40.5	40.6	275.1
35	G81B_100_100dd	0.0	0.375	1.0	1.0	1.0	0.5	248	0.0	0.366	1.0	37.0	6.6	−40.2	40.8	279.3	1.0	0.631	0.0	0.0	248	0.0	0.366	1.0	37.0	6.6	−40.2	40.8	279.3
36	G00B_050_050dd	0.0	0.5	0.0	0.5	0.5	0.25	150	0.0	0.5	0.0	37.2	−32.5	14.8	35.7	155.5	0.982	0.524	0.985	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
37	G11B_050_050dd	0.0	0.5	0.125	0.5	0.5	0.25	164	0.0	0.5	0.116	37.7	−29.7	6.9	30.5	166.8	0.985	0.519	0.823	0.0	162	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
38	G25B_050_050dd	0.0	0.5	0.25	0.5	0.5	0.25	180	0.0	0.5	0.25	38.6	−24.3	−4.0	24.6	189.3	0.983	0.514	0.641	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
39	G38B_050_050dd	0.0	0.5	0.375	0.5	0.5	0.25	196	0.0	0.5	0.383	39.7	−17.7	−14.2	22.7	218.7	0.974	0.515	0.469	0.0	197	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
40	G50B_050_050dd	0.0	0.5	0.5	0.5	0.5	0.25	210	0.0	0.5	0.5	40.5	−12.7	−20.7	24.3	238.4	0.967	0.525	0.358	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
41	G59B_062_062dd	0.0	0.5	0.625	0.625	0.625	0.312	221	0.0	0.51	0.625	41.9	−11.5	−25.8	28.3	245.8	0.973	0.496	0.27	0.0	219	0.0	0.816	1.0	52.4	−18.5	−41.3	45.3	245.8
42	G65B_075_075dd	0.0	0.5	0.75	0.75	0.75	0.375	229	0.0	0.512	0.75	42.3	−9.2	−30.8	32.1	253.3	0.982	0.486	0.185	0.0	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
43	G70B_087_087dd	0.0	0.5	0.875	0.875	0.875	0.437	235	0.0	0.51	0.875	42.3	−5.8	−35.8	36.3	260.7	0.991	0.485	0.094	0.0	234	0.0	0.583	1.0	44.9	−6.6	−41.0	41.5	260.7
44	G75B_100_100dd	0.0	0.5	1.0	1.0	1.0	0.5	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2	1.0	0.5	0.0	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
45	G00B_062_062dd	0.0	0.625	0.0	0.625	0.625	0.312	150	0.0	0.625	0.0	40.4	−40.6	18.5	44.6	155.5	0.983	0.419	0.986	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
46	G09B_062_062dd	0.0	0.625	0.125	0.625	0.625	0.312	161	0.0	0.625	0.114	40.9	−38.2	10.9	39.7	164.0	0.987	0.414	0.838	0.0	159	0.0	1.0	0.183	50.8	−61.1	17.4	63.6	164.0
47	G19B_062_062dd	0.0	0.625	0.25	0.625	0.625	0.312	173	0.0	0.625	0.239	41.6	−33.9	1.4	33.9	177.5	0.988	0.412	0.694	0.0	172	0.0	1.0	0.383	52.0	−54.2	2.3	54.3	177.5
48	G30B_062_062dd	0.0	0.625	0.375	0.625	0.625	0.312	187	0.0	0.625	0.385	42.8	−26.7	−10.9	28.9	202.2	0.982	0.408	0.509	0.0	187	0.0	1.0	0.616	53.9	−42.8	−17.5	46.3	202.2
49	G40B_062_062dd	0.0	0.625	0.5	0.625	0.625	0.312	199	0.0	0.625	0.51	43.8	−20.8	−19.5	28.6	223.1	0.977	0.415	0.37	0.0	200	0.0	1.0	0.816	55.4	−33.3	−31.3	45.7	223.1
50	G50B_062_062dd	0.0	0.625	0.625	0.625	0.625	0.312	210	0.0	0.625	0.625	44.6	−15.9	−25.9	30.4	238.4	0.972	0.422	0.26	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
51	G57B_075_075dd	0.0	0.625	0.75	0.75	0.75	0.375	219	0.0	0.637	0.75	46.1	−15.0	−31.0	34.4	244.1	0.978	0.387	0.172	0.0	217	0.0	0.85	1.0	53.4	−20.0	−41.3	45.9	244.1
52	G63B_087_087dd	0.0	0.625	0.875	0.875	0.875	0.437	226	0.0	0.641	0.875	46.7	−12.8	−36.0	38.2	250.3	0.988	0.372	0.087	0.0	224	0.0	0.733	1.0	49.9	−14.7	−41.1	43.6	250.3
53	G68B_100_100dd	0.0	0.625	1.0	1.0	1.0	0.5	232	0.0	0.633	1.0	46.8	−9.8	−40.9	42.1	256.4	1.0	0.368	0.0	0.0	231	0.0	0.633	1.0	46.8	−9.8	−40.9	42.1	256.4
54	G00B_075_075dd	0.0	0.75	0.0	0.75	0.75	0.375	150	0.0	0.75	0.0	43.6	−48.7	22.2	53.5	155.5	0.988	0.294	0.992	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
55	G07B_075_075dd	0.0	0.75	0.125	0.75	0.75	0.375	159	0.0	0.75	0.112	44.1	−46.6	14.9	48.9	162.1	0.99	0.286	0.856	0.0	157	0.0	1.0	0.15	50.6	−62.1	19.9	65.2	162.1
56	G15B_075_075dd	0.0	0.75	0.25	0.75	0.75	0.375	169	0.0	0.75	0.237	44.8	−42.6	5.5	42.9	172.5	0.991	0.283	0.72	0.0	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
57	G25B_075_075dd	0.0	0.75	0.375	0.75	0.75	0.375	180	0.0	0.75	0.375	45.8	−36.5	−6.0	37.0	189.3	0.989	0.282	0.563	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
58	G34B_075_075dd	0.0	0.75	0.5	0.75	0.75	0.375	191	0.0	0.75	0.512	46.9	−29.7	−17.0	34.3	209.7	0.987	0.282	0.412	0.0	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
59	G42B_075_075dd	0.0	0.75	0.625	0.75	0.75	0.375	201	0.0	0.75	0.637	47.8	−23.9	−24.8	34.5	226.1	0.982	0.289	0.279	0.0	202	0.0	1.0	0.85	55.7	−31.8	−33.1	46.0	226.1
60	G50B_075_075dd	0.0	0.75	0.75	0.75	0.75	0.375	210	0.0	0.75	0.75	48.7	−19.1	−31.1	36.5	238.4	0.978	0.296	0.167	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
61	G56B_087_087dd	0.0	0.75	0.875	0.875	0.875	0.437	218	0.0	0.758	0.875	50.2	−18.1	−36.2	40.5	243.3	0.987	0.251	0.082	0.0	217	0.0	0.866	1.0	53.9	−20.7	−41.3	46.3	243.3
62	G61B_100_100dd	0.0	0.75	1.0	1.0	1.0	0.5	224	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4	1.0	0.234	0.0	0.0	222	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
63	G00B_087_087dd	0.0	0.875	0.0	0.875	0.875	0.437	150	0.0	0.875	0.0	46.8	−56.8	25.9	62.5	155.5	0.991	0.16	0.998	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
64	G06B_087_087dd	0.0	0.875	0.125	0.875	0.875	0.437	158	0.0	0.875	0.116	47.3	−54.7	18.6	57.8	161.2	0.994	0.157	0.87	0.0	157	0.0	1.0	0.133	50.5	−62.5	21.2	66.1	161.2
65	G13B_087_087dd	0.0	0.875	0.25	0.875	0.875	0.437	166	0.0	0.875	0.233	47.9	−51.1	9.9	52.1	168.9	0.995	0.156	0.746	0.0	164	0.0	1.0	0.266	51.3	−58.4	11.3	59.5	168.9
66	G20B_087_087dd	0.0	0.875	0.375	0.875	0.875	0.437	175	0.0	0.875	0.364	48.8	−46.2	−0.7	46.2	180.9	0.996	0.155	0.605	0.0	174	0.0	1.0	0.416	52.3	−52.8	−0.8	52.9	180.9
67	G29B_087_087dd	0.0	0.875	0.5	0.875	0.875	0.437	185	0.0	0.875	0.51	50.0	−39.1	−13.1	41.2	198.5	0.995	0.153	0.459	0.0	185	0.0	1.0	0.583	53.6	−44.7	−15.0	47.1	198.5
68	G36B_087_087dd	0.0	0.875	0.625	0.875	0.875	0.437	194	0.0	0.875	0.641	51.0	−32.3	−23.0	39.7	215.4	0.993	0.156	0.318	0.0	195	0.0	1.0	0.733	54.9	−37.0	−26.3	45.4	215.4
69	G43B_087_087dd	0.0	0.875	0.75	0.875	0.875	0.437	202	0.0	0.875	0.758	51.8	−27.2	−29.8	40.3	227.5	0.99	0.16	0.2	0.0	202	0.0	1.0	0.866	55.8	−31.1	−34.0	46.1	227.5
70	G50B_087_087dd	0.0	0.875	0.875	0.875	0.875	0.437	210	0.0	0.875	0.875	52.7	−22.3	−36.3	42.6	238.4	0.99	0.164	0.081	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
71	G55B_100_100dd	0.0	0.875	1.0	1.0	1.0	0.5	217	0.0	0.883	1.0	54.3	−21.4	−41.4	46.6	242.6	1.0	0.117	0.0	0.0	216	0.0	0.883	1.0	54.3	−21.4	−41.4	46.6	242.6
72	G00B_100_100dd	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	1.0	0.0	1.0	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
73	G05B_100_100dd	0.0	1.0	0.125	1.0	1.0	0.5	157	0.0	1.0	0.116	50.5	−62.9	22.4	66.8	160.4	1.0	0.0	0.882	0.0	156	0.0	1.0	0.116	50.5	−62.9	22.4	66.8	160.4
74	G11B_100_100dd	0.0	1.0	0.25	1.0	1.0	0.5	164	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8	1.0	0.0	0.765	0.0	162	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
75	G18B_100_100dd	0.0	1.0	0.375	1.0	1.0	0.5	172	0.0	1.0	0.366	51.9	−54.9	3.7	55.0	176.1	1.0	0.0	0.631	0.0	171	0.0	1.0	0.366	51.9	−54.9	3.7	55.0	176.1
76	G25B_100_100dd	0.0	1.0	0.5	1.0	1.0	0.5	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3	1.0	0.0	0.498	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
77	G31B_100_100dd	0.0	1.0	0.625	1.0	1.0	0.5	188	0.0	1.0	0.633	54.1	−42.0	−18.8	46.0	204.1	1.0	0.0	0.367	0.0	188	0.0	1.0	0.633	54.1	−42.0	−18.8	46.0	204.1
78	G38B_100_100dd	0.0	1.0	0.75	1.0	1.0	0.5	196	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7	1.0	0.0	0.234	0.0	197	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
79	G44B_100_100dd	0.0	1.0	0.875	1.0	1.0	0.5	203	0.0	1.0	0.883	55.9	−30.4	−35.0	46.3	229.0	1.0	0.0	0.117	0.0	203	0.0	1.0	0.883	55.9	−30.4	−35.0	46.3	229.0
80	G50B_100_100dd	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4	1.0	0.0	0.0	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

delta

TUB-test chart PN17; colour rendering
colors and differences, ΔE'*, 3D=1, de=0, *cmy0**

input: *rgb/cmyk* −> rgb_{dd}
output: 3D-linearization to $cmy0^*_{dd}$

5−103831−F0

http://130.149.60.45/~farbmetrik/PN17/PN17L0FP.PDF /.PS; 3D-linearization
F: 3D-linearization PN17/PN17LJ30FP.DAT in file (F), page 10/22

n	HIC*Fdd	rgb_Fdd			ict_Fdd			h_si_F,dd	rgb*Fdd			LabCh*Fdd					cmyn*sep,Fdd				h_siM,dd	rgb*Mdd			LabCh*Mdd				
81	R00Y_012_012dd	0.125	0.0	0.0	0.125	0.125	0.062	390	0.125	0.0	0.0	27.0	8.8	5.6	10.4	32.3	0.9	0.966	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
82	B50R_012_012dd	0.125	0.0	0.125	0.125	0.125	0.062	330	0.125	0.0	0.125	27.0	9.9	0.0	9.9	359.8	0.904	0.957	0.862	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
83	B25R_025_025dd	0.125	0.0	0.25	0.25	0.25	0.125	300	0.125	0.0	0.25	27.1	14.6	−5.1	15.5	340.5	0.89	0.973	0.728	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
84	B15R_037_037dd	0.125	0.0	0.375	0.375	0.375	0.187	289	0.118	0.0	0.375	26.8	17.7	−11.0	20.9	328.1	0.889	0.986	0.592	0.0	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
85	B11R_050_050dd	0.125	0.0	0.5	0.5	0.5	0.25	284	0.116	0.0	0.5	26.5	20.6	−16.5	26.4	321.1	0.894	1.0	0.486	0.0	282	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1
86	B09R_062_062dd	0.125	0.0	0.625	0.625	0.625	0.312	281	0.114	0.0	0.625	26.8	24.2	−21.7	32.5	318.2	0.888	1.0	0.376	0.0	279	0.183	0.0	1.0	28.3	38.8	−34.7	52.1	318.2
87	B07R_075_075dd	0.125	0.0	0.75	0.75	0.75	0.375	279	0.112	0.0	0.75	27.1	27.9	−26.8	38.7	316.2	0.886	0.999	0.262	0.0	278	0.15	0.0	1.0	28.1	37.2	−35.7	51.6	316.2
88	B06R_087_087dd	0.125	0.0	0.875	0.875	0.875	0.437	278	0.116	0.0	0.875	27.5	31.9	−31.6	44.9	315.2	0.88	0.994	0.138	0.0	277	0.133	0.0	1.0	27.9	36.4	−36.2	51.3	315.2
89	B05R_100_100dd	0.125	0.0	1.0	1.0	1.0	0.5	277	0.116	0.0	1.0	27.7	35.6	−36.7	51.1	314.1	0.882	0.999	0.0	0.0	276	0.116	0.0	1.0	27.7	35.6	−36.7	51.1	314.1
90	Y00G_012_012dd	0.125	0.125	0.0	0.125	0.125	0.062	90	0.125	0.125	0.0	32.3	−1.2	11.9	12.0	96.1	0.875	0.791	1.0	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
91	NW_012dd	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0	0.885	0.774	0.736	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
92	B00R_025_012dd	0.125	0.125	0.25	0.25	0.125	0.187	270	0.124	0.124	0.25	33.3	3.6	−5.0	6.2	306.2	0.878	0.784	0.632	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
93	B00R_037_025dd	0.125	0.125	0.375	0.375	0.25	0.25	270	0.124	0.124	0.375	33.4	7.3	−10.1	12.5	306.2	0.867	0.792	0.538	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
94	B00R_050_037dd	0.125	0.125	0.5	0.5	0.375	0.312	270	0.124	0.124	0.5	33.5	11.0	−15.1	18.7	306.2	0.861	0.799	0.441	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
95	B00R_062_050dd	0.125	0.125	0.625	0.625	0.5	0.375	270	0.125	0.125	0.625	33.6	14.7	−20.2	25.0	306.2	0.857	0.807	0.344	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
96	B00R_075_062dd	0.125	0.125	0.75	0.75	0.625	0.437	270	0.125	0.125	0.75	33.7	18.4	−25.2	31.3	306.2	0.853	0.816	0.243	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
97	B00R_087_075dd	0.125	0.125	0.875	0.875	0.75	0.5	270	0.125	0.125	0.875	33.8	22.1	−30.3	37.5	306.2	0.852	0.819	0.129	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
98	B00R_100_087dd	0.125	0.125	1.0	1.0	0.875	0.562	270	0.125	0.125	1.0	33.9	25.8	−35.3	43.8	306.2	0.852	0.826	0.002	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
99	Y50G_025_025dd	0.125	0.25	0.0	0.25	0.25	0.125	120	0.125	0.25	0.0	35.9	−7.4	16.6	18.2	114.0	0.845	0.687	1.0	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
100	G00B_025_012dd	0.125	0.25	0.125	0.25	0.125	0.187	150	0.124	0.25	0.124	36.4	−8.1	3.7	8.9	155.5	0.885	0.673	0.755	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
101	G50B_025_012dd	0.125	0.25	0.25	0.25	0.125	0.187	210	0.124	0.25	0.25	37.3	−3.1	−5.1	6.0	238.4	0.873	0.675	0.588	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
102	G75B_037_025dd	0.125	0.25	0.375	0.375	0.25	0.25	240	0.124	0.25	0.375	37.6	−0.3	−10.1	10.1	268.2	0.867	0.681	0.501	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
103	G84B_050_037dd	0.125	0.25	0.5	0.5	0.375	0.312	251	0.124	0.243	0.5	37.3	3.7	−15.1	15.6	283.7	0.864	0.692	0.411	0.0	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
104	G88B_062_050dd	0.125	0.25	0.625	0.625	0.5	0.375	256	0.125	0.241	0.625	37.2	7.6	−20.1	21.5	290.8	0.861	0.703	0.322	0.0	257	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
105	G90B_075_062dd	0.125	0.25	0.75	0.75	0.625	0.437	259	0.125	0.239	0.75	37.1	11.6	−25.2	27.8	294.6	0.861	0.714	0.226	0.0	260	0.0	0.183	1.0	30.6	18.5	−40.4	44.5	294.6
106	G92B_087_075dd	0.125	0.25	0.875	0.875	0.75	0.5	261	0.125	0.237	0.875	37.1	15.5	−30.3	34.0	297.1	0.862	0.725	0.122	0.0	262	0.0	0.15	1.0	29.5	20.7	−40.4	45.4	297.1
107	G93B_100_087dd	0.125	0.25	1.0	1.0	0.875	0.562	262	0.125	0.241	1.0	37.2	19.1	−35.2	40.1	298.4	0.861	0.729	0.003	0.0	262	0.0	0.133	1.0	28.9	21.8	−40.3	45.8	298.4
108	Y68G_037_037dd	0.125	0.375	0.0	0.375	0.375	0.187	131	0.118	0.375	0.0	38.6	−15.5	19.9	25.3	127.8	0.853	0.594	1.0	0.0	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
109	G00B_037_025dd	0.125	0.375	0.125	0.375	0.25	0.25	150	0.124	0.375	0.124	39.7	−16.2	7.4	17.8	155.5	0.885	0.564	0.773	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
110	G25B_037_025dd	0.125	0.375	0.25	0.375	0.25	0.25	180	0.124	0.375	0.25	40.4	−12.1	−2.0	12.3	189.3	0.882	0.564	0.618	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
111	G50B_037_025dd	0.125	0.375	0.375	0.375	0.25	0.25	210	0.124	0.375	0.375	41.3	−6.3	−10.3	12.1	238.4	0.862	0.572	0.465	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
112	G65B_050_037dd	0.125	0.375	0.5	0.5	0.375	0.312	229	0.124	0.381	0.5	42.2	−4.6	−15.4	16.0	253.3	0.86	0.558	0.378	0.0	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
113	G75B_062_050dd	0.125	0.375	0.625	0.625	0.5	0.375	240	0.125	0.375	0.625	41.9	−0.6	−20.3	20.3	268.2	0.86	0.574	0.298	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
114	G80B_075_062dd	0.125	0.375	0.75	0.75	0.625	0.437	247	0.125	0.364	0.75	41.5	3.5	−25.1	25.4	277.9	0.862	0.59	0.212	0.0	247	0.0	0.383	1.0	37.6	5.6	−40.3	40.7	277.9
115	G84B_087_075dd	0.125	0.375	0.875	0.875	0.75	0.5	251	0.125	0.362	0.875	41.4	7.4	−30.3	31.2	283.7	0.864	0.598	0.114	0.0	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
116	G86B_100_087dd	0.125	0.375	1.0	1.0	0.875	0.562	254	0.125	0.358	1.0	41.2	11.5	−35.2	37.1	288.1	0.867	0.606	0.006	0.0	255	0.0	0.266	1.0	33.4	13.2	−40.3	42.4	288.1
117	Y76G_050_050dd	0.125	0.5	0.0	0.5	0.5	0.25	136	0.116	0.5	0.0	41.1	−24.1	22.9	33.2	136.5	0.871	0.494	1.0	0.0	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
118	G00B_050_037dd	0.125	0.5	0.125	0.5	0.375	0.312	150	0.124	0.5	0.124	42.9	−24.3	11.1	26.7	155.5	0.89	0.458	0.788	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
119	G15B_050_037dd	0.125	0.5	0.25	0.5	0.375	0.312	169	0.124	0.5	0.243	43.5	−21.3	2.7	21.4	172.5	0.891	0.458	0.662	0.0	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
120	G34B_050_037dd	0.125	0.5	0.375	0.5	0.375	0.312	191	0.124	0.5	0.381	44.5	−14.8	−8.5	17.1	209.7	0.877	0.46	0.483	0.0	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
121	G50B_050_037dd	0.125	0.5	0.5	0.5	0.375	0.312	210	0.124	0.5	0.5	45.4	−9.5	−15.5	18.2	238.4	0.858	0.475	0.36	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
122	G61B_062_050dd	0.125	0.5	0.625	0.625	0.5	0.375	224	0.125	0.508	0.625	46.5	−8.1	−20.6	22.1	248.4	0.861	0.459	0.276	0.0	222	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
123	G69B_075_062dd	0.125	0.5	0.75	0.75	0.625	0.437	233	0.125	0.51	0.75	46.9	−5.5	−25.5	26.1	257.7	0.867	0.457	0.191	0.0	232	0.0	0.616	1.0	46.2	−8.9	−40.9	41.8	257.7
124	G75B_087_075dd	0.125	0.5	0.875	0.875	0.75	0.5	240	0.125	0.5	0.875	46.2	−0.9	−30.4	30.5	268.2	0.868	0.476	0.103	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
125	G79B_100_087dd	0.125	0.5	1.0	1.0	0.875	0.562	245	0.125	0.489	1.0	45.9	3.2	−35.4	35.6	275.1	0.871	0.487	0.006	0.0	245	0.0	0.416	1.0	38.8	3.6	−40.5	40.6	275.1
126	Y81G_062_062dd	0.125	0.625	0.0	0.625	0.625	0.312	139	0.114	0.625	0.0	44.4	−31.9	26.6	41.5	140.1	0.871	0.395	1.0	0.0	140	0.183	1.0	0.0	56.4	−51.0	42.5	66.4	140.1
127	G00B_062_050dd	0.125	0.625	0.125	0.625	0.5	0.375	150	0.125	0.625	0.125	46.1	−32.5	14.8	35.7	155.5	0.895	0.357	0.798	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
128	G11B_062_050dd	0.125	0.625	0.25	0.625	0.5	0.375	164	0.125	0.625	0.241	46.6	−29.7	6.9	30.5	166.8	0.897	0.358	0.685	0.0	162	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
129	G25B_062_050dd	0.125	0.625	0.375	0.625	0.5	0.375	180	0.125	0.625	0.375	47.5	−24.3	−4.0	24.6	189.3	0.891	0.359	0.534	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
130	G38B_062_050dd	0.125	0.625	0.5	0.625	0.5	0.375	196	0.125	0.625	0.508	48.6	−17.7	−14.2	22.7	218.7	0.876	0.371	0.375	0.0	197	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
131	G50B_062_050dd	0.125	0.625	0.625	0.625	0.5	0.375	210	0.125	0.625	0.625	49.4	−12.7	−20.7	24.3	238.4	0.861	0.388	0.263	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
132	G59B_075_062dd	0.125	0.625	0.75	0.75	0.625	0.437	221	0.125	0.635	0.75	50.8	−11.5	−25.8	28.3	245.8	0.868	0.363	0.177	0.0	219	0.0	0.816	1.0	52.4	−18.5	−41.3	45.3	245.8
133	G65B_087_075dd	0.125	0.625	0.875	0.875	0.75	0.5	229	0.125	0.637	0.875	51.2	−9.2	−30.8	32.1	253.3	0.876	0.358	0.093	0.0	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
134	G70B_100_087dd	0.125	0.625	1.0	1.0	0.875	0.562	235	0.125	0.635	1.0	51.2	−5.8	−35.8	36.3	260.7	0.876	0.363	0.001	0.0	234	0.0	0.583	1.0	44.9	−6.6	−41.0	41.5	260.7
135	Y85G_075_075dd	0.125	0.75	0.0	0.75	0.75	0.375	141	0.112	0.75	0.0	47.6	−39.5	30.2	49.8	142.6	0.877	0.275	1.0	0.0	142	0.15	1.0	0.0	55.4	−52.7	40.3	66.4	142.6
136	G00B_075_062dd	0.125	0.75	0.125	0.75	0.625	0.437	150	0.125	0.75	0.125	49.3	−40.6	18.5	44.6	155.5	0.901	0.223	0.81	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
137	G09B_075_062dd	0.125	0.75	0.25	0.75	0.625	0.437	161	0.125	0.75	0.239	49.8	−38.2	10.9	39.7	164.0	0.903	0.223	0.704	0.0	159	0.0	1.0	0.183	50.8	−61.1	17.4	63.6	164.0
138	G19B_075_062dd	0.125	0.75	0.375	0.75	0.625	0.437	173	0.125	0.75	0.364	50.6	−33.9	1.4	33.9	177.5	0.898	0.225	0.579	0.0	172	0.0	1.0	0.383	52.0	−54.2	2.3	54.3	177.5
139	G30B_075_062dd	0.125	0.75	0.5	0.75	0.625	0.437	187	0.125	0.75	0.51	51.7	−26.7	−10.9	28.9	202.2	0.888	0.235	0.422	0.0	187	0.0	1.0	0.616	53.9	−42.8	−17.5	46.3	202.2
140	G40B_075_062dd	0.125	0.75	0.625	0.75	0.625	0.437	199	0.125	0.75	0.635	52.7	−20.8	−19.5	28.6	223.1	0.88	0.248	0.285	0.0	200	0.0	1.0	0.816	55.4	−33.3	−31.3	45.7	223.1
141	G50B_075_062dd	0.125	0.75	0.75	0.75	0.625	0.437	210	0.125	0.75	0.75	53.5	−15.9	−25.9	30.4	238.4	0.87	0.266	0.173	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
142	G57B_087_075dd	0.125	0.75	0.875	0.875	0.75	0.5	219	0.125	0.762	0.875	55.0	−15.0	−31.0	34.4	244.1	0.877	0.232	0.088	0.0	217	0.0	0.85	1.0	53.4	−20.0	−41.3	45.9	244.1
143	G63B_100_087dd	0.125	0.75	1.0	1.0	0.875	0.562	226	0.125	0.766	1.0	55.6	−12.8	−36.0	38.2	250.3	0.882	0.223	0.004	0.0	224	0.0	0.733	1.0	49.9	−14.7	−41.1	43.6	250.3
144	Y86G_087_087dd	0.125	0.875	0.0	0.875	0.875	0.437	142	0.116	0.875	0.0	51.1	−46.8	34.2	58.0	143.8	0.875	0.151	1.0	0.0	142	0.133	1.0	0.0	54.9	−53.5	39.1	66.3	143.8
145	G00B_087_075dd	0.125	0.875	0.125	0.875	0.75	0.5	150	0.125	0.875	0.125	52.5	−48.7	22.2	53.5	155.5	0.906	0.095	0.823	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
146	G07B_087_075dd	0.125	0.875	0.25	0.875	0.75	0.5	159	0.125	0.875	0.237	53.0	−46.6	14.9	48.9	162.1	0.91	0.094	0.726	0.0	157	0.0	1.0	0.15	50.6	−62.1	19.9	65.2	162.1
147	G15B_087_075dd	0.125	0.875	0.375	0.875	0.75	0.5	169	0.125	0.875	0.362	53.7	−42.6	5.5	42.9	172.5	0.906	0.1	0.604	0.0	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
148	G25B_087_075dd	0.125	0.875	0.5	0.875	0.75	0.5	180	0.125	0.875	0.5	54.7	−36.5	−6.0	37.0	189.3	0.898	0.113	0.47	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
149	G34B_087_075dd	0.125	0.875	0.625	0.875	0.75	0.5	191	0.125	0.875	0.637	55.8	−29.7	−17.0	34.3	209.7	0.894	0.123	0.333	0.0	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
150	G42B_087_075dd	0.125	0.875	0.75	0.875	0.75	0.5	201	0.125	0.875	0.762	56.7	−23.9	−24.8	34.5	226.1	0.885	0.136	0.202	0.0	202	0.0	1.0	0.85	55.7	−31.8	−33.1	46.0	226.1
151	G50B_087_075dd	0.125	0.875	0.875	0.875	0.75	0.5	210	0.125	0.875	0.875	57.6	−19.1	−31.1	36.5	238.4	0.879	0.148	0.085	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
152	G56B_100_087dd	0.125	0.875	1.0	1.0	0.875	0.562	218	0.125	0.883	1.0	59.1	−18.1	−36.2	40.5	243.3	0.883	0.108	0.002	0.0	217	0.0	0.866	1.0	53.9	−20.7	−41.3	46.3	243.3
153	Y88G_100_100dd	0.125	1.0	0.0	1.0	1.0	0.5	143	0.116	1.0	0.0	54.4	−54.7	38.0	66.6	145.1	0.882	0.0	1.0	0.0	143	0.116	1.0	0.0	54.4	−54.7	38.0	66.6	145.1
154	G00B_100_087dd	0.125	1.0	0.125	1.0	0.875	0.562	150	0.125	1.0	0.125	55.7	−56.8	25.9	62.5	155.5	0.914	0.0	0.874	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
155	G06B_100_087dd	0.125	1.0	0.25	1.0	0.875	0.562	158	0.125	1.0	0.241	56.2	−54.7	18.6	57.8	161.2	0.917	0.0	0.749	0.0	157	0.0	1.0	0.133	50.5	−62.5	21.2	66.1	161.2
156	G13B_100_087dd	0.125	1.0	0.375	1.0	0.875	0.562	166	0.125	1.0	0.358	56.8	−51.1	9.9	52.1	168.9	0.913	0.0	0.623	0.0	164	0.0	1.0	0.266	51.3	−58.4	11.3	59.5	168.9
157	G20B_100_087dd	0.125	1.0	0.5	1.0	0.875	0.562	175	0.125	1.0	0.489	57.7	−46.2	−0.7	46.2	180.9	0.902	0.0	0.498	0.0	174	0.0	1.0	0.416	52.3	−52.8	−0.8	52.9	180.9
158	G29B_100_087dd	0.125	1.0	0.625	1.0	0.875	0.562	185	0.125	1.0	0.635	58.9	−39.1	−13.1	41.2	198.5	0.906	0.0	0.376	0.0	185	0.0	1.0	0.583	53.6	−44.7	−15.0	47.1	198.5
159	G36B_100_087dd	0.125	1.0	0.75	1.0	0.875	0.562	194	0.125	1.0	0.766	60.0	−32.3	−23.0	39.7	215.4	0.896	0.0	0.25	0.0	195	0.0	1.0	0.733	54.9	−37.0	−26.3	45.4	215.4
160	G43B_100_087dd	0.125	1.0	0.875	1.0	0.875	0.562	202	0.125	1.0	0.883	60.7	−27.2	−29.8	40.3	227.5	0.892	0.0	0.116	0.0	202	0.0	1.0	0.866	55.8	−31.1	−34.0	46.1	227.5
161	G50B_100_087dd	0.125	1.0	1.0	1.0	0.875	0.562	210	0.125	1.0	1.0	61.6	−22.3	−36.3	42.6	238.4	0.886	0.0	0.0	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

delta

5−103931−F0

PN170−7N, 10/22−F

TUB-test chart PN17; colour rendering
colors and differences, $\Delta E'^{*}$, 3D=1, de=0, *cmy0**

input: *rgb/cmyk* −> *rgb*dd
output: 3D-linearization to *cmy0**dd

5−103931−F0

http://130.149.60.45/~farbmetrik/PN17/PN17L0FP.PDF /.PS; 3D-linearization
F: 3D-linearization PN17/PN17LJ30FP.DAT in file (F), page 11/22

n	HIC*Fdd	rgb_Fdd			ict_Fdd			$h_{si\_F,dd}$	rgb*Fdd			LabCh*Fdd					cmyn*sep,Fdd			
162	R00Y_025_025dd	0.25	0.0	0.0	0.25	0.25	0.125	390	0.25	0.0	0.0	29.6	17.7	11.2	20.9	32.3	0.764	0.927	1.0	0.0
163	R00Y_025_025dd	0.25	0.0	0.125	0.25	0.25	0.125	360	0.25	0.0	0.125	29.7	18.5	5.2	19.2	15.9	0.772	0.922	0.86	0.0
164	B50R_025_025dd	0.25	0.0	0.25	0.25	0.25	0.125	330	0.25	0.0	0.25	29.8	19.8	0.0	19.8	359.8	0.784	0.927	0.736	0.0
165	B34R_037_037dd	0.25	0.0	0.375	0.375	0.375	0.187	311	0.256	0.0	0.375	30.1	25.5	−4.4	25.9	350.0	0.747	0.939	0.6	0.0
166	B25R_050_050dd	0.25	0.0	0.5	0.5	0.5	0.25	300	0.25	0.0	0.5	29.9	29.3	−10.3	31.0	340.5	0.737	0.959	0.484	0.0
167	B19R_062_062dd	0.25	0.0	0.625	0.625	0.625	0.312	293	0.239	0.0	0.625	29.7	32.7	−16.0	36.4	333.8	0.733	0.976	0.374	0.0
168	B15R_075_075dd	0.25	0.0	0.75	0.75	0.75	0.375	289	0.237	0.0	0.75	29.3	35.5	−22.0	41.8	328.1	0.742	0.985	0.261	0.0
169	B13R_087_087dd	0.25	0.0	0.875	0.875	0.875	0.437	286	0.233	0.0	0.875	28.7	37.9	−27.8	47.0	323.6	0.758	0.992	0.138	0.0
170	B11R_100_100dd	0.25	0.0	1.0	1.0	1.0	0.5	284	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1	0.765	1.0	0.0	0.0
171	R50Y_025_025dd	0.25	0.125	0.0	0.25	0.25	0.125	60	0.25	0.125	0.0	34.5	7.2	17.1	18.6	67.1	0.745	0.771	1.0	0.0
172	R00Y_025_012dd	0.25	0.125	0.125	0.25	0.125	0.187	390	0.25	0.124	0.124	35.9	8.8	5.6	10.4	32.3	0.744	0.753	0.714	0.0
173	B50R_025_012dd	0.25	0.125	0.25	0.25	0.125	0.187	330	0.25	0.124	0.25	36.0	9.9	0.0	9.9	359.8	0.753	0.756	0.616	0.0
174	B25R_037_025dd	0.25	0.125	0.375	0.375	0.25	0.25	300	0.25	0.124	0.375	36.0	14.6	−5.1	15.5	340.5	0.735	0.771	0.523	0.0
175	B15R_050_037dd	0.25	0.125	0.5	0.5	0.375	0.312	289	0.243	0.124	0.5	35.7	17.7	−11.0	20.9	328.1	0.738	0.786	0.43	0.0
176	B11R_062_050dd	0.25	0.125	0.625	0.625	0.5	0.375	284	0.241	0.125	0.625	35.4	20.6	−16.5	26.4	321.1	0.743	0.797	0.335	0.0
177	B09R_075_062dd	0.25	0.125	0.75	0.75	0.625	0.437	281	0.239	0.125	0.75	35.7	24.2	−21.7	32.5	318.2	0.737	0.804	0.227	0.0
178	B07R_087_075dd	0.25	0.125	0.875	0.875	0.75	0.5	279	0.237	0.125	0.875	36.0	27.9	−26.8	38.7	316.2	0.731	0.812	0.112	0.0
179	B06R_100_087dd	0.25	0.125	1.0	1.0	0.875	0.562	278	0.241	0.125	1.0	36.4	31.9	−31.6	44.9	315.2	0.722	0.816	0.0	0.0
180	Y00G_025_025dd	0.25	0.25	0.0	0.25	0.25	0.125	90	0.25	0.25	0.0	40.2	−2.5	23.8	24.0	96.1	0.729	0.621	0.977	0.0
181	Y00G_025_012dd	0.25	0.25	0.125	0.25	0.125	0.187	90	0.25	0.25	0.124	41.2	−1.2	11.9	12.0	96.1	0.732	0.608	0.741	0.0
182	NW_025dd	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0	0.743	0.587	0.55	0.0
183	B00R_037_012dd	0.25	0.25	0.375	0.375	0.125	0.312	270	0.249	0.249	0.375	42.2	3.6	−5.0	6.2	306.2	0.734	0.601	0.472	0.0
184	B00R_050_025dd	0.25	0.25	0.5	0.5	0.25	0.375	270	0.249	0.249	0.5	42.3	7.3	−10.1	12.5	306.2	0.726	0.611	0.385	0.0
185	B00R_062_037dd	0.25	0.25	0.625	0.625	0.375	0.437	270	0.25	0.25	0.625	42.4	11.0	−15.1	18.7	306.2	0.722	0.627	0.299	0.0
186	B00R_075_050dd	0.25	0.25	0.75	0.75	0.5	0.5	270	0.25	0.25	0.75	42.5	14.7	−20.2	25.0	306.2	0.719	0.642	0.208	0.0
187	B00R_087_062dd	0.25	0.25	0.875	0.875	0.625	0.562	270	0.25	0.25	0.875	42.6	18.4	−25.2	31.3	306.2	0.714	0.652	0.106	0.0
188	B00R_100_075dd	0.25	0.25	1.0	1.0	0.75	0.625	270	0.25	0.25	1.0	42.7	22.1	−30.3	37.5	306.2	0.711	0.661	0.0	0.0
189	Y31G_037_037dd	0.25	0.375	0.0	0.375	0.375	0.187	109	0.256	0.375	0.0	44.4	−7.9	29.8	30.8	104.9	0.706	0.523	0.979	0.0
190	Y50G_037_025dd	0.25	0.375	0.125	0.375	0.25	0.25	120	0.25	0.375	0.124	44.8	−7.4	16.6	18.2	114.0	0.719	0.516	0.761	0.0
191	G00B_037_012dd	0.25	0.375	0.25	0.375	0.125	0.312	150	0.249	0.375	0.249	45.4	−8.1	3.7	8.9	155.5	0.749	0.489	0.578	0.0
192	G50B_037_012dd	0.25	0.375	0.375	0.375	0.125	0.312	210	0.249	0.375	0.375	46.2	−3.1	−5.1	6.0	238.4	0.735	0.5	0.448	0.0
193	G75B_050_025dd	0.25	0.375	0.5	0.5	0.25	0.375	240	0.249	0.375	0.5	46.5	−0.3	−10.1	10.1	268.2	0.731	0.511	0.37	0.0
194	G84B_062_037dd	0.25	0.375	0.625	0.625	0.375	0.437	251	0.25	0.368	0.625	46.2	3.7	−15.1	15.6	283.7	0.727	0.529	0.29	0.0
195	G88B_075_050dd	0.25	0.375	0.75	0.75	0.5	0.5	256	0.25	0.366	0.75	46.1	7.6	−20.1	21.5	290.8	0.723	0.541	0.202	0.0
196	G90B_087_062dd	0.25	0.375	0.875	0.875	0.625	0.562	259	0.25	0.364	0.875	46.0	11.6	−25.2	27.8	294.6	0.722	0.549	0.105	0.0
197	G92B_100_075dd	0.25	0.375	1.0	1.0	0.75	0.625	261	0.25	0.362	1.0	46.0	15.5	−30.3	34.0	297.1	0.719	0.566	0.0	0.0
198	Y50G_050_050dd	0.25	0.5	0.0	0.5	0.5	0.25	120	0.25	0.5	0.0	47.4	−14.8	33.2	36.4	114.0	0.704	0.44	0.976	0.0
199	Y68G_050_037dd	0.25	0.5	0.125	0.5	0.375	0.312	131	0.243	0.5	0.124	47.5	−15.5	19.9	25.3	127.8	0.728	0.431	0.781	0.0
200	G00B_050_025dd	0.25	0.5	0.25	0.5	0.25	0.375	150	0.249	0.5	0.249	48.6	−16.2	7.4	17.8	155.5	0.755	0.402	0.604	0.0
201	G25B_050_025dd	0.25	0.5	0.375	0.5	0.25	0.375	180	0.249	0.5	0.375	49.3	−12.1	−2.0	12.3	189.3	0.745	0.406	0.481	0.0
202	G50B_050_025dd	0.25	0.5	0.5	0.5	0.25	0.375	210	0.249	0.5	0.5	50.2	−6.3	−10.3	12.1	238.4	0.731	0.422	0.349	0.0
203	G65B_062_037dd	0.25	0.5	0.625	0.625	0.375	0.437	229	0.25	0.506	0.625	51.1	−4.6	−15.4	16.0	253.3	0.729	0.419	0.271	0.0
204	G75B_075_050dd	0.25	0.5	0.75	0.75	0.5	0.5	240	0.25	0.5	0.75	50.8	−0.6	−20.3	20.3	268.2	0.728	0.433	0.19	0.0
205	G80B_087_062dd	0.25	0.5	0.875	0.875	0.625	0.562	247	0.25	0.489	0.875	50.4	3.5	−25.1	25.4	277.9	0.728	0.446	0.103	0.0
206	G84B_100_075dd	0.25	0.5	1.0	1.0	0.75	0.625	251	0.25	0.487	1.0	50.3	7.4	−30.3	31.2	283.7	0.727	0.458	0.005	0.0
207	Y61G_062_062dd	0.25	0.625	0.0	0.625	0.625	0.312	127	0.239	0.625	0.0	50.4	−22.0	36.7	42.8	120.9	0.706	0.356	0.982	0.0
208	Y76G_062_050dd	0.25	0.625	0.125	0.625	0.5	0.375	136	0.241	0.625	0.125	50.0	−24.1	22.9	33.2	136.5	0.744	0.335	0.797	0.0
209	G00B_062_037dd	0.25	0.625	0.25	0.625	0.375	0.437	150	0.25	0.625	0.25	51.8	−24.3	11.1	26.7	155.5	0.769	0.292	0.627	0.0
210	G15B_062_037dd	0.25	0.625	0.375	0.625	0.375	0.437	169	0.25	0.625	0.368	52.4	−21.3	2.7	21.4	172.5	0.762	0.295	0.527	0.0
211	G34B_062_037dd	0.25	0.625	0.5	0.625	0.375	0.437	191	0.25	0.625	0.506	53.4	−14.8	−8.5	17.1	209.7	0.747	0.309	0.374	0.0
212	G50B_062_037dd	0.25	0.625	0.625	0.625	0.375	0.437	210	0.25	0.625	0.625	54.3	−9.5	−15.5	18.2	238.4	0.731	0.336	0.258	0.0
213	G61B_075_050dd	0.25	0.625	0.75	0.75	0.5	0.5	224	0.25	0.633	0.75	55.4	−8.1	−20.6	22.1	248.4	0.732	0.318	0.175	0.0
214	G69B_087_062dd	0.25	0.625	0.875	0.875	0.625	0.562	233	0.25	0.635	0.875	55.8	−5.5	−25.5	26.1	257.7	0.734	0.318	0.093	0.0
215	G75B_100_075dd	0.25	0.625	1.0	1.0	0.75	0.625	240	0.25	0.625	1.0	55.1	−0.9	−30.4	30.5	268.2	0.732	0.348	0.005	0.0
216	Y68G_075_075dd	0.25	0.75	0.0	0.75	0.75	0.375	131	0.237	0.75	0.0	52.8	−31.1	39.9	50.6	127.8	0.723	0.242	0.996	0.0
217	Y81G_075_062dd	0.25	0.75	0.125	0.75	0.625	0.437	139	0.239	0.75	0.125	53.3	−31.9	26.6	41.5	140.1	0.756	0.221	0.81	0.0
218	G00B_075_050dd	0.25	0.75	0.25	0.75	0.5	0.5	150	0.25	0.75	0.25	55.0	−32.5	14.8	35.7	155.5	0.784	0.18	0.652	0.0
219	G11B_075_050dd	0.25	0.75	0.375	0.75	0.5	0.5	164	0.25	0.75	0.366	55.5	−29.7	6.9	30.5	166.8	0.779	0.183	0.556	0.0
220	G25B_075_050dd	0.25	0.75	0.5	0.75	0.5	0.5	180	0.25	0.75	0.5	56.4	−24.3	−4.0	24.6	189.3	0.767	0.194	0.426	0.0
221	G38B_075_050dd	0.25	0.75	0.625	0.75	0.5	0.5	196	0.25	0.75	0.633	57.5	−17.7	−14.2	22.7	218.7	0.747	0.208	0.279	0.0
222	G50B_075_050dd	0.25	0.75	0.75	0.75	0.5	0.5	210	0.25	0.75	0.75	58.4	−12.7	−20.7	24.3	238.4	0.735	0.228	0.168	0.0
223	G59B_087_062dd	0.25	0.75	0.875	0.875	0.625	0.562	221	0.25	0.76	0.875	59.7	−11.5	−25.8	28.3	245.8	0.738	0.209	0.086	0.0
224	G65B_100_075dd	0.25	0.75	1.0	1.0	0.75	0.625	229	0.25	0.762	1.0	60.1	−9.2	−30.8	32.1	253.3	0.741	0.21	0.005	0.0
225	Y73G_087_087dd	0.25	0.875	0.0	0.875	0.875	0.437	134	0.233	0.875	0.0	55.0	−40.2	42.4	58.5	133.4	0.746	0.138	0.996	0.0
226	Y85G_087_075dd	0.25	0.875	0.125	0.875	0.75	0.5	141	0.237	0.875	0.125	56.5	−39.5	30.2	49.8	142.6	0.764	0.112	0.821	0.0
227	G00B_087_062dd	0.25	0.875	0.25	0.875	0.625	0.562	150	0.25	0.875	0.25	58.2	−40.6	18.5	44.6	155.5	0.796	0.051	0.672	0.0
228	G09B_087_062dd	0.25	0.875	0.375	0.875	0.625	0.562	161	0.25	0.875	0.364	58.7	−38.2	10.9	39.7	164.0	0.794	0.054	0.579	0.0
229	G19B_087_062dd	0.25	0.875	0.5	0.875	0.625	0.562	173	0.25	0.875	0.489	59.5	−33.9	1.4	33.9	177.5	0.783	0.067	0.47	0.0
230	G30B_087_062dd	0.25	0.875	0.625	0.875	0.625	0.562	187	0.25	0.875	0.635	60.6	−26.7	−10.9	28.9	202.2	0.769	0.091	0.327	0.0
231	G40B_087_062dd	0.25	0.875	0.75	0.875	0.625	0.562	199	0.25	0.875	0.76	61.6	−20.8	−19.5	28.6	223.1	0.753	0.111	0.197	0.0
232	G50B_087_062dd	0.25	0.875	0.875	0.875	0.625	0.562	210	0.25	0.875	0.875	62.4	−15.9	−25.9	30.4	238.4	0.741	0.131	0.083	0.0
233	G57B_100_075dd	0.25	0.875	1.0	1.0	0.75	0.625	219	0.25	0.887	1.0	63.9	−15.0	−31.0	34.4	244.1	0.743	0.102	0.002	0.0
234	Y76G_100_100dd	0.25	1.0	0.0	1.0	1.0	0.5	136	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5	0.766	0.0	1.0	0.0
235	Y86G_100_087dd	0.25	1.0	0.125	1.0	0.875	0.562	142	0.241	1.0	0.125	60.0	−46.8	34.2	58.0	143.8	0.768	0.0	0.829	0.0
236	G00B_100_075dd	0.25	1.0	0.25	1.0	0.75	0.625	150	0.25	1.0	0.25	61.4	−48.7	22.2	53.5	155.5	0.812	0.0	0.749	0.0
237	G07B_100_075dd	0.25	1.0	0.375	1.0	0.75	0.625	159	0.25	1.0	0.362	61.9	−46.6	14.9	48.9	162.1	0.809	0.0	0.623	0.0
238	G15B_100_075dd	0.25	1.0	0.5	1.0	0.75	0.625	169	0.25	1.0	0.487	62.6	−42.6	5.5	42.9	172.5	0.793	0.0	0.498	0.0
239	G25B_100_075dd	0.25	1.0	0.625	1.0	0.75	0.625	180	0.25	1.0	0.625	63.6	−36.5	−6.0	37.0	189.3	0.79	0.0	0.376	0.0
240	G34B_100_075dd	0.25	1.0	0.75	1.0	0.75	0.625	191	0.25	1.0	0.762	64.7	−29.7	−17.0	34.3	209.7	0.775	0.0	0.25	0.0
241	G42B_100_075dd	0.25	1.0	0.875	1.0	0.75	0.625	201	0.25	1.0	0.887	65.6	−23.9	−24.8	34.5	226.1	0.755	0.0	0.115	0.0
242	G50B_100_075dd	0.25	1.0	1.0	1.0	0.75	0.625	210	0.25	1.0	1.0	66.5	−19.1	−31.1	36.5	238.4	0.75	0.0	0.0	0.0

n	$h_{siM,dd}$	rgb*Mdd			LabCh*Mdd				
162	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
163	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
164	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
165	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
166	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
167	292	0.383	0.0	1.0	32.9	52.3	−25.7	58.3	333.8
168	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
169	284	0.266	0.0	1.0	29.4	43.3	−31.8	53.8	323.6
170	282	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1
171	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
172	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
173	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
174	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
175	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
176	282	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1
177	279	0.183	0.0	1.0	28.3	38.8	−34.7	52.1	318.2
178	278	0.15	0.0	1.0	28.1	37.2	−35.7	51.6	316.2
179	277	0.133	0.0	1.0	27.9	36.4	−36.2	51.3	315.2
180	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
181	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
182	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
183	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
184	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
185	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
186	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
187	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
188	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
189	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
190	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
191	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
192	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
193	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
194	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
195	257	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
196	260	0.0	0.183	1.0	30.6	18.5	−40.4	44.5	294.6
197	262	0.0	0.15	1.0	29.5	20.7	−40.4	45.4	297.1
198	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
199	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
200	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
201	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
202	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
203	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
204	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
205	247	0.0	0.383	1.0	37.6	5.6	−40.3	40.7	277.9
206	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
207	127	0.383	1.0	0.0	66.0	−35.2	58.8	68.6	120.9
208	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
209	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
210	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
211	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
212	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
213	222	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
214	232	0.0	0.616	1.0	46.2	−8.9	−40.9	41.8	257.7
215	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
216	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
217	140	0.183	1.0	0.0	56.4	−51.0	42.5	66.4	140.1
218	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
219	162	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
220	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
221	197	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
222	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
223	219	0.0	0.816	1.0	52.4	−18.5	−41.3	45.3	245.8
224	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
225	135	0.266	1.0	0.0	59.3	−45.9	48.5	66.8	133.4
226	142	0.15	1.0	0.0	55.4	−52.7	40.3	66.4	142.6
227	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
228	159	0.0	1.0	0.183	50.8	−61.1	17.4	63.6	164.0
229	172	0.0	1.0	0.383	52.0	−54.2	2.3	54.3	177.5
230	187	0.0	1.0	0.616	53.9	−42.8	−17.5	46.3	202.2
231	200	0.0	1.0	0.816	55.4	−33.3	−31.3	45.7	223.1
232	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
233	217	0.0	0.85	1.0	53.4	−20.0	−41.3	45.9	244.1
234	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
235	142	0.133	1.0	0.0	54.9	−53.5	39.1	66.3	143.8
236	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
237	157	0.0	1.0	0.15	50.6	−62.1	19.9	65.2	162.1
238	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
239	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
240	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
241	202	0.0	1.0	0.85	55.7	−31.8	−33.1	46.0	226.1
242	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

delta

5−1031031−F0

PN170−7N, 11/22−F

input: *rgb/cmyk* −> rgb_{dd}
output: 3D-linearization to $cmy0*_{dd}$

TUB-test chart PN17; colour rendering
colors and differences, $\Delta E'*$, 3D=1, de=0, *cmy0**

5−1031031−F0

http://130.149.60.45/~farbmetrik/PN17/PN17L0FP.PDF /.PS; 3D-linearization
F: 3D-linearization PN17/PN17LJ30FP.DAT in file (F), page 12/22

n	HIC*Fdd	rgb_Fdd			ict_Fdd			$h_{si\_F,dd}$	rgb*Fdd			LabCh*Fdd					cmyn*sep,Fdd				$h_{siM,dd}$	rgb*Mdd			LabCh*Mdd				
243	R00Y_037_037dd	0.375	0.0	0.0	0.375	0.375	0.187	390	0.375	0.0	0.0	32.2	26.6	16.8	31.4	32.3	0.67	0.922	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
244	R18Y_037_037dd	0.375	0.0	0.125	0.375	0.375	0.187	371	0.375	0.0	0.118	32.3	27.2	11.7	29.6	23.2	0.67	0.921	0.866	0.0	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
245	B65R_037_037dd	0.375	0.0	0.25	0.375	0.375	0.187	349	0.375	0.0	0.256	32.4	28.6	4.4	29.0	8.9	0.678	0.92	0.704	0.0	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
246	B50R_037_037dd	0.375	0.0	0.375	0.375	0.375	0.187	330	0.375	0.0	0.375	32.5	29.7	0.0	29.7	359.8	0.682	0.921	0.607	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
247	B38R_050_050dd	0.375	0.0	0.5	0.5	0.5	0.25	316	0.383	0.0	0.5	33.2	35.8	−4.3	36.0	353.0	0.651	0.939	0.5	0.0	317	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0
248	B30R_062_062dd	0.375	0.0	0.625	0.625	0.625	0.312	307	0.385	0.0	0.625	32.8	40.6	−9.0	41.6	347.4	0.64	0.969	0.402	0.0	307	0.616	0.0	1.0	37.9	65.0	−14.5	66.6	347.4
249	B25R_075_075dd	0.375	0.0	0.75	0.75	0.75	0.375	300	0.375	0.0	0.75	32.7	43.9	−15.5	46.6	340.5	0.637	0.979	0.272	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
250	B20R_087_087dd	0.375	0.0	0.875	0.875	0.875	0.437	295	0.364	0.0	0.875	32.5	47.4	−21.3	51.9	335.7	0.635	0.99	0.141	0.0	294	0.416	0.0	1.0	33.7	54.1	−24.4	59.4	335.7
251	B18R_100_100dd	0.375	0.0	1.0	1.0	1.0	0.5	292	0.366	0.0	1.0	32.5	51.2	−26.5	57.7	332.6	0.632	0.999	0.0	0.0	291	0.366	0.0	1.0	32.5	51.2	−26.5	57.7	332.6
252	R31Y_037_037dd	0.375	0.125	0.0	0.375	0.375	0.187	49	0.375	0.118	0.0	36.4	17.1	22.2	28.1	52.2	0.663	0.799	1.0	0.0	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
253	R00Y_037_025dd	0.375	0.125	0.125	0.375	0.25	0.25	390	0.375	0.124	0.124	38.5	17.7	11.2	20.9	32.3	0.652	0.765	0.721	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
254	R00Y_037_025dd	0.375	0.125	0.25	0.375	0.25	0.25	360	0.375	0.124	0.25	38.6	18.5	5.2	19.2	15.9	0.66	0.768	0.62	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
255	B50R_037_025dd	0.375	0.125	0.375	0.375	0.25	0.25	330	0.375	0.124	0.375	38.7	19.8	0.0	19.8	359.8	0.664	0.768	0.539	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
256	B34R_050_037dd	0.375	0.125	0.5	0.5	0.375	0.312	311	0.381	0.124	0.5	39.0	25.5	−4.4	25.9	350.0	0.638	0.79	0.449	0.0	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
257	B25R_062_050dd	0.375	0.125	0.625	0.625	0.5	0.375	300	0.375	0.125	0.625	38.8	29.3	−10.3	31.0	340.5	0.632	0.808	0.342	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
258	B19R_075_062dd	0.375	0.125	0.75	0.75	0.625	0.437	293	0.364	0.125	0.75	38.6	32.7	−16.0	36.4	333.8	0.629	0.825	0.237	0.0	292	0.383	0.0	1.0	32.9	52.3	−25.7	58.3	333.8
259	B15R_087_075dd	0.375	0.125	0.875	0.875	0.75	0.5	289	0.362	0.125	0.875	38.2	35.5	−22.0	41.8	328.1	0.639	0.836	0.122	0.0	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
260	B13R_100_087dd	0.375	0.125	1.0	1.0	0.875	0.562	286	0.358	0.125	1.0	37.6	37.9	−27.8	47.0	323.6	0.649	0.841	0.0	0.0	284	0.266	0.0	1.0	29.4	43.3	−31.8	53.8	323.6
261	R68Y_037_037dd	0.375	0.25	0.0	0.375	0.375	0.187	71	0.375	0.256	0.0	43.2	4.1	30.1	30.4	82.1	0.65	0.62	0.98	0.0	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
262	R50Y_037_025dd	0.375	0.25	0.125	0.375	0.25	0.25	60	0.375	0.25	0.124	43.4	7.2	17.1	18.6	67.1	0.648	0.634	0.756	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
263	R00Y_037_012dd	0.375	0.25	0.25	0.375	0.125	0.312	390	0.375	0.249	0.249	44.8	8.8	5.6	10.4	32.3	0.649	0.62	0.565	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
264	B50R_037_012dd	0.375	0.25	0.375	0.375	0.125	0.312	330	0.375	0.249	0.375	44.9	9.9	0.0	9.9	359.8	0.656	0.62	0.49	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
265	B25R_050_025dd	0.375	0.25	0.5	0.5	0.25	0.375	300	0.375	0.249	0.5	44.9	14.6	−5.1	15.5	340.5	0.641	0.643	0.399	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
266	B15R_062_037dd	0.375	0.25	0.625	0.625	0.375	0.437	289	0.368	0.25	0.625	44.6	17.7	−11.0	20.9	328.1	0.644	0.661	0.305	0.0	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
267	B11R_075_050dd	0.375	0.25	0.75	0.75	0.5	0.5	284	0.366	0.25	0.75	44.3	20.6	−16.5	26.4	321.1	0.647	0.676	0.211	0.0	282	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1
268	B09R_087_062dd	0.375	0.25	0.875	0.875	0.625	0.562	281	0.364	0.25	0.875	44.6	24.2	−21.7	32.5	318.2	0.641	0.689	0.104	0.0	279	0.183	0.0	1.0	28.3	38.8	−34.7	52.1	318.2
269	B07R_100_075dd	0.375	0.25	1.0	1.0	0.75	0.625	279	0.362	0.25	1.0	44.9	27.9	−26.8	38.7	316.2	0.631	0.698	0.0	0.0	278	0.15	0.0	1.0	28.1	37.2	−35.7	51.6	316.2
270	Y00G_037_037dd	0.375	0.375	0.0	0.375	0.375	0.187	90	0.375	0.375	0.0	48.1	−3.8	35.8	36.0	96.1	0.643	0.499	0.977	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
271	Y00G_037_025dd	0.375	0.375	0.125	0.375	0.25	0.25	90	0.375	0.375	0.124	49.1	−2.5	23.8	24.0	96.1	0.637	0.496	0.783	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
272	Y00G_037_012dd	0.375	0.375	0.25	0.375	0.125	0.312	90	0.375	0.375	0.249	50.1	−1.2	11.9	12.0	96.1	0.643	0.487	0.61	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
273	NW_037dd	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0	0.653	0.473	0.452	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
274	B00R_050_012dd	0.375	0.375	0.5	0.5	0.125	0.437	270	0.375	0.375	0.5	51.1	3.6	−5.0	6.2	306.2	0.645	0.49	0.376	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
275	B00R_062_025dd	0.375	0.375	0.625	0.625	0.25	0.5	270	0.375	0.375	0.625	51.2	7.3	−10.1	12.5	306.2	0.638	0.505	0.293	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
276	B00R_075_037dd	0.375	0.375	0.75	0.75	0.375	0.562	270	0.375	0.375	0.75	51.3	11.0	−15.1	18.7	306.2	0.632	0.52	0.201	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
277	B00R_087_050dd	0.375	0.375	0.875	0.875	0.5	0.625	270	0.375	0.375	0.875	51.4	14.7	−20.2	25.0	306.2	0.628	0.534	0.103	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
278	B00R_100_062dd	0.375	0.375	1.0	1.0	0.625	0.687	270	0.375	0.375	1.0	51.5	18.4	−25.2	31.3	306.2	0.622	0.55	0.0	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
279	Y23G_050_050dd	0.375	0.5	0.0	0.5	0.5	0.25	104	0.383	0.5	0.0	52.8	−8.5	42.1	43.0	101.4	0.612	0.419	0.982	0.0	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
280	Y31G_050_037dd	0.375	0.5	0.125	0.5	0.375	0.312	109	0.381	0.5	0.124	53.3	−7.9	29.8	30.8	104.9	0.614	0.418	0.808	0.0	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
281	Y50G_050_025dd	0.375	0.5	0.25	0.5	0.25	0.375	120	0.375	0.5	0.249	53.7	−7.4	16.6	18.2	114.0	0.633	0.412	0.638	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
282	G00B_050_012dd	0.375	0.5	0.375	0.5	0.125	0.437	150	0.375	0.5	0.375	54.3	−8.1	3.7	8.9	155.5	0.659	0.389	0.486	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
283	G50B_050_012dd	0.375	0.5	0.5	0.5	0.125	0.437	210	0.375	0.5	0.5	55.1	−3.1	−5.1	6.0	238.4	0.648	0.401	0.354	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
284	G75B_062_025dd	0.375	0.5	0.625	0.625	0.25	0.5	240	0.375	0.5	0.625	55.4	−0.3	−10.1	10.1	268.2	0.646	0.414	0.28	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
285	G84B_075_037dd	0.375	0.5	0.75	0.75	0.375	0.562	251	0.375	0.493	0.75	55.1	3.7	−15.1	15.6	283.7	0.642	0.433	0.197	0.0	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
286	G88B_087_050dd	0.375	0.5	0.875	0.875	0.5	0.625	256	0.375	0.491	0.875	55.0	7.6	−20.1	21.5	290.8	0.637	0.447	0.104	0.0	257	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
287	G90B_100_062dd	0.375	0.5	1.0	1.0	0.625	0.687	259	0.375	0.489	1.0	54.9	11.6	−25.2	27.8	294.6	0.633	0.46	0.006	0.0	260	0.0	0.183	1.0	30.6	18.5	−40.4	44.5	294.6
288	Y38G_062_062dd	0.375	0.625	0.0	0.625	0.625	0.312	113	0.385	0.625	0.0	56.0	−15.3	46.9	49.4	108.0	0.61	0.329	1.0	0.0	112	0.616	1.0	0.0	75.0	−24.4	75.1	79.0	108.0
289	Y50G_062_050dd	0.375	0.625	0.125	0.625	0.5	0.375	120	0.375	0.625	0.125	56.4	−14.8	33.2	36.4	114.0	0.616	0.328	0.821	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
290	Y68G_062_037dd	0.375	0.625	0.25	0.625	0.375	0.437	131	0.368	0.625	0.25	56.4	−15.5	19.9	25.3	127.8	0.647	0.313	0.663	0.0	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
291	G00B_062_025dd	0.375	0.625	0.375	0.625	0.25	0.5	150	0.375	0.625	0.375	57.5	−16.2	7.4	17.8	155.5	0.67	0.273	0.511	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
292	G25B_062_025dd	0.375	0.625	0.5	0.625	0.25	0.5	180	0.375	0.625	0.5	58.2	−12.1	−2.0	12.3	189.3	0.665	0.286	0.397	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
293	G50B_062_025dd	0.375	0.625	0.625	0.625	0.25	0.5	210	0.375	0.625	0.625	59.2	−6.3	−10.3	12.1	238.4	0.648	0.315	0.265	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
294	G65B_075_037dd	0.375	0.625	0.75	0.75	0.375	0.562	229	0.375	0.631	0.75	60.0	−4.6	−15.4	16.0	253.3	0.649	0.311	0.183	0.0	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
295	G75B_087_050dd	0.375	0.625	0.875	0.875	0.5	0.625	240	0.375	0.625	0.875	59.7	−0.6	−20.3	20.3	268.2	0.646	0.34	0.099	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
296	G80B_100_062dd	0.375	0.625	1.0	1.0	0.625	0.687	247	0.375	0.614	1.0	59.3	3.5	−25.1	25.4	277.9	0.641	0.361	0.01	0.0	247	0.0	0.383	1.0	37.6	5.6	−40.3	40.7	277.9
297	Y50G_075_075dd	0.375	0.75	0.0	0.75	0.75	0.375	120	0.375	0.75	0.0	59.0	−22.2	49.8	54.6	114.0	0.615	0.226	0.996	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
298	Y61G_075_062dd	0.375	0.75	0.125	0.75	0.625	0.437	127	0.364	0.75	0.125	59.3	−22.0	36.7	42.8	120.9	0.624	0.222	0.836	0.0	127	0.383	1.0	0.0	66.0	−35.2	58.8	68.6	120.9
299	Y76G_075_050dd	0.375	0.75	0.25	0.75	0.5	0.5	136	0.366	0.75	0.25	58.9	−24.1	22.9	33.2	136.5	0.668	0.202	0.686	0.0	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
300	G00B_075_037dd	0.375	0.75	0.375	0.75	0.375	0.562	150	0.375	0.75	0.375	60.7	−24.3	11.1	26.7	155.5	0.68	0.165	0.536	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
301	G15B_075_037dd	0.375	0.75	0.5	0.75	0.375	0.562	169	0.375	0.75	0.493	61.3	−21.3	2.7	21.4	172.5	0.679	0.172	0.441	0.0	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
302	G34B_075_037dd	0.375	0.75	0.625	0.75	0.375	0.562	191	0.375	0.75	0.631	62.3	−14.8	−8.5	17.1	209.7	0.666	0.193	0.294	0.0	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
303	G50B_075_037dd	0.375	0.75	0.75	0.75	0.375	0.562	210	0.375	0.75	0.75	63.2	−9.5	−15.5	18.2	238.4	0.651	0.22	0.173	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
304	G61B_087_050dd	0.375	0.75	0.875	0.875	0.5	0.625	224	0.375	0.758	0.875	64.3	−8.1	−20.6	22.1	248.4	0.653	0.21	0.09	0.0	222	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
305	G69B_100_062dd	0.375	0.75	1.0	1.0	0.625	0.687	233	0.375	0.76	1.0	64.7	−5.5	−25.5	26.1	257.7	0.654	0.216	0.009	0.0	232	0.0	0.616	1.0	46.2	−8.9	−40.9	41.8	257.7
306	Y58G_087_087dd	0.375	0.875	0.0	0.875	0.875	0.437	125	0.364	0.875	0.0	61.9	−29.5	53.4	61.1	118.9	0.624	0.129	0.998	0.0	125	0.416	1.0	0.0	67.3	−33.8	61.0	69.8	118.9
307	Y68G_087_075dd	0.375	0.875	0.125	0.875	0.75	0.5	131	0.362	0.875	0.125	61.7	−31.1	39.9	50.6	127.8	0.648	0.116	0.852	0.0	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
308	Y81G_087_062dd	0.375	0.875	0.25	0.875	0.625	0.562	139	0.364	0.875	0.25	62.2	−31.9	26.6	41.5	140.1	0.677	0.088	0.703	0.0	140	0.183	1.0	0.0	56.4	−51.0	42.5	66.4	140.1
309	G00B_087_050dd	0.375	0.875	0.375	0.875	0.5	0.625	150	0.375	0.875	0.375	63.9	−32.5	14.8	35.7	155.5	0.692	0.037	0.556	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
310	G11B_087_050dd	0.375	0.875	0.5	0.875	0.5	0.625	164	0.375	0.875	0.491	64.4	−29.7	6.9	30.5	166.8	0.69	0.045	0.468	0.0	162	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
311	G25B_087_050dd	0.375	0.875	0.625	0.875	0.5	0.625	180	0.375	0.875	0.625	65.4	−24.3	−4.0	24.6	189.3	0.683	0.067	0.345	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
312	G38B_087_050dd	0.375	0.875	0.75	0.875	0.5	0.625	196	0.375	0.875	0.758	66.4	−17.7	−14.2	22.7	218.7	0.669	0.1	0.202	0.0	197	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
313	G50B_087_050dd	0.375	0.875	0.875	0.875	0.5	0.625	210	0.375	0.875	0.875	67.3	−12.7	−20.7	24.3	238.4	0.656	0.127	0.085	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
314	G59B_100_062dd	0.375	0.875	1.0	1.0	0.625	0.687	221	0.375	0.885	1.0	68.6	−11.5	−25.8	28.3	245.8	0.658	0.105	0.004	0.0	219	0.0	0.816	1.0	52.4	−18.5	−41.3	45.3	245.8
315	Y63G_100_100dd	0.375	1.0	0.0	1.0	1.0	0.5	128	0.366	1.0	0.0	65.2	−36.4	57.6	68.2	122.3	0.632	0.0	1.0	0.0	128	0.366	1.0	0.0	65.2	−36.4	57.6	68.2	122.3
316	Y73G_100_087dd	0.375	1.0	0.125	1.0	0.875	0.562	134	0.358	1.0	0.125	63.9	−40.2	42.4	58.5	133.4	0.673	0.0	0.859	0.0	135	0.266	1.0	0.0	59.3	−45.9	48.5	66.8	133.4
317	Y85G_100_075dd	0.375	1.0	0.25	1.0	0.75	0.625	141	0.362	1.0	0.25	65.5	−39.5	30.2	49.8	142.6	0.686	0.0	0.749	0.0	142	0.15	1.0	0.0	55.4	−52.7	40.3	66.4	142.6
318	G00B_100_062dd	0.375	1.0	0.375	1.0	0.625	0.687	150	0.375	1.0	0.375	67.1	−40.6	18.5	44.6	155.5	0.706	0.0	0.623	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
319	G09B_100_062dd	0.375	1.0	0.5	1.0	0.625	0.687	161	0.375	1.0	0.489	67.6	−38.2	10.9	39.7	164.0	0.7	0.0	0.498	0.0	159	0.0	1.0	0.183	50.8	−61.1	17.4	63.6	164.0
320	G19B_100_062dd	0.375	1.0	0.625	1.0	0.625	0.687	173	0.375	1.0	0.614	68.4	−33.9	1.4	33.9	177.5	0.697	0.0	0.386	0.0	172	0.0	1.0	0.383	52.0	−54.2	2.3	54.3	177.5
321	G30B_100_062dd	0.375	1.0	0.75	1.0	0.625	0.687	187	0.375	1.0	0.76	69.5	−26.7	−10.9	28.9	202.2	0.686	0.0	0.251	0.0	187	0.0	1.0	0.616	53.9	−42.8	−17.5	46.3	202.2
322	G40B_100_062dd	0.375	1.0	0.875	1.0	0.625	0.687	199	0.375	1.0	0.885	70.5	−20.8	−19.5	28.6	223.1	0.673	0.0	0.125	0.0	200	0.0	1.0	0.816	55.4	−33.3	−31.3	45.7	223.1
323	G50B_100_062dd	0.375	1.0	1.0	1.0	0.625	0.687	210	0.375	1.0	1.0	71.3	−15.9	−25.9	30.4	238.4	0.664	0.002	0.0	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

delta

5-1031131-F0 PN170-7N, 12/22-F

TUB-test chart PN17; colour rendering
colors and differences, $\Delta E'^*$, 3D=1, de=0, *cmy0**

input: *rgb/cmyk* −> rgb_{dd}
output: 3D-linearization to $cmy0^*_{dd}$

http://130.149.60.45/~farbmetrik/PN17/PN17L0FP.PDF /.PS; 3D-linearization
F: 3D-linearization PN17/PN17LJ30FP.DAT in file (F), page 13/22

n	HIC*Fdd	rgb_Fdd			ict_Fdd			hsi_F,dd	rgb*Fdd			LabCh*Fdd					cmyn*sep,Fdd				hsiM,dd	rgb*Mdd			LabCh*Mdd				
324	R00Y_050_050dd	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.0	34.9	35.4	22.4	41.9	32.3	0.567	0.93	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
325	R26Y_050_050dd	0.5	0.0	0.125	0.5	0.5	0.25	376	0.5	0.0	0.116	35.0	36.0	17.6	40.1	26.1	0.567	0.932	0.883	0.0	377	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1
326	R00Y_050_050dd	0.5	0.0	0.25	0.5	0.5	0.25	360	0.5	0.0	0.25	35.1	37.1	10.5	38.5	15.9	0.57	0.928	0.726	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
327	B61R_050_050dd	0.5	0.0	0.375	0.5	0.5	0.25	344	0.5	0.0	0.383	35.1	38.6	4.0	38.8	5.9	0.577	0.93	0.596	0.0	342	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9
328	B50R_050_050dd	0.5	0.0	0.5	0.5	0.5	0.25	330	0.5	0.0	0.5	35.2	39.6	−0.1	39.6	359.8	0.583	0.931	0.522	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
329	B40R_062_062dd	0.5	0.0	0.625	0.625	0.625	0.312	319	0.51	0.0	0.625	36.0	45.8	−4.4	46.0	354.4	0.534	0.949	0.407	0.0	320	0.816	0.0	1.0	43.1	73.2	−7.0	73.6	354.4
330	B34R_075_075dd	0.5	0.0	0.75	0.75	0.75	0.375	311	0.512	0.0	0.75	35.9	51.0	−8.9	51.8	350.0	0.515	0.979	0.298	0.0	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
331	B29R_087_087dd	0.5	0.0	0.875	0.875	0.875	0.437	305	0.51	0.0	0.875	35.6	55.3	−14.3	57.1	345.4	0.506	0.998	0.166	0.0	305	0.583	0.0	1.0	37.2	63.2	−16.4	65.3	345.4
332	B25R_100_100dd	0.5	0.0	1.0	1.0	1.0	0.5	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5	0.5	1.0	0.0	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
333	R23Y_050_050dd	0.5	0.125	0.0	0.5	0.5	0.25	44	0.5	0.116	0.0	38.7	26.7	27.4	38.2	45.7	0.563	0.819	1.0	0.0	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
334	R00Y_050_037dd	0.5	0.125	0.125	0.5	0.375	0.312	390	0.5	0.124	0.124	41.1	26.6	16.8	31.4	32.3	0.54	0.784	0.745	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
335	R18Y_050_037dd	0.5	0.125	0.25	0.5	0.375	0.312	371	0.5	0.124	0.243	41.2	27.2	11.7	29.6	23.2	0.546	0.784	0.656	0.0	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
336	B65R_050_037dd	0.5	0.125	0.375	0.5	0.375	0.312	349	0.5	0.124	0.381	41.3	28.6	4.4	29.0	8.9	0.555	0.787	0.542	0.0	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
337	B50R_050_037dd	0.5	0.125	0.5	0.5	0.375	0.312	330	0.5	0.124	0.5	41.4	29.7	0.0	29.7	359.8	0.56	0.79	0.47	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
338	B38R_062_050dd	0.5	0.125	0.625	0.625	0.5	0.375	316	0.508	0.125	0.625	42.1	35.8	−4.3	36.0	353.0	0.514	0.811	0.365	0.0	317	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0
339	B30R_075_062dd	0.5	0.125	0.75	0.75	0.625	0.437	307	0.51	0.125	0.75	41.7	40.6	−9.0	41.6	347.4	0.501	0.839	0.272	0.0	307	0.616	0.0	1.0	37.9	65.0	−14.5	66.6	347.4
340	B25R_087_075dd	0.5	0.125	0.875	0.875	0.75	0.5	300	0.5	0.125	0.875	41.7	43.9	−15.5	46.6	340.5	0.495	0.845	0.134	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
341	B20R_100_087dd	0.5	0.125	1.0	1.0	0.875	0.562	295	0.489	0.125	1.0	41.4	47.4	−21.3	51.9	335.7	0.489	0.856	0.0	0.0	294	0.416	0.0	1.0	33.7	54.1	−24.4	59.4	335.7
342	R50Y_050_050dd	0.5	0.25	0.0	0.5	0.5	0.25	60	0.5	0.25	0.0	44.6	14.4	34.3	37.2	67.1	0.552	0.674	1.0	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
343	R31Y_050_037dd	0.5	0.25	0.125	0.5	0.375	0.312	49	0.5	0.243	0.124	45.3	17.1	22.2	28.1	52.2	0.539	0.677	0.778	0.0	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
344	R00Y_050_025dd	0.5	0.25	0.25	0.5	0.25	0.375	390	0.5	0.249	0.249	47.4	17.7	11.2	20.9	32.3	0.529	0.651	0.586	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
345	R00Y_050_025dd	0.5	0.25	0.375	0.5	0.25	0.375	360	0.5	0.249	0.375	47.5	18.5	5.2	19.2	15.9	0.538	0.652	0.503	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
346	B50R_050_025dd	0.5	0.25	0.5	0.5	0.25	0.375	330	0.5	0.249	0.5	47.6	19.8	0.0	19.8	359.8	0.546	0.654	0.422	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
347	B34R_062_037dd	0.5	0.25	0.625	0.625	0.375	0.437	311	0.506	0.25	0.625	47.9	25.5	−4.4	25.9	350.0	0.508	0.685	0.333	0.0	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
348	B25R_075_050dd	0.5	0.25	0.75	0.75	0.5	0.5	300	0.5	0.25	0.75	47.8	29.3	−10.3	31.0	340.5	0.498	0.707	0.229	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
349	B19R_087_062dd	0.5	0.25	0.875	0.875	0.625	0.562	293	0.489	0.25	0.875	47.5	32.7	−16.0	36.4	333.8	0.493	0.721	0.112	0.0	292	0.383	0.0	1.0	32.9	52.3	−25.7	58.3	333.8
350	B15R_100_075dd	0.5	0.25	1.0	1.0	0.75	0.625	289	0.487	0.25	1.0	47.1	35.5	−22.0	41.8	328.1	0.504	0.734	0.0	0.0	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
351	R76Y_050_050dd	0.5	0.375	0.0	0.5	0.5	0.25	76	0.5	0.383	0.0	51.5	2.1	42.3	42.4	87.0	0.536	0.499	0.997	0.0	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
352	R68Y_050_037dd	0.5	0.375	0.125	0.5	0.375	0.312	71	0.5	0.381	0.124	52.2	4.1	30.1	30.4	82.1	0.529	0.505	0.807	0.0	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
353	R50Y_050_025dd	0.5	0.375	0.25	0.5	0.25	0.375	60	0.5	0.375	0.249	52.3	7.2	17.1	18.6	67.1	0.532	0.524	0.627	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
354	R00Y_050_012dd	0.5	0.375	0.375	0.5	0.125	0.437	390	0.5	0.375	0.375	53.7	8.8	5.6	10.4	32.3	0.531	0.51	0.467	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
355	B50R_050_012dd	0.5	0.375	0.5	0.5	0.125	0.437	330	0.5	0.375	0.5	53.8	9.9	0.0	9.9	359.8	0.541	0.509	0.39	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
356	B25R_062_025dd	0.5	0.375	0.625	0.625	0.25	0.5	300	0.5	0.375	0.625	53.9	14.6	−5.1	15.5	340.5	0.518	0.539	0.301	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
357	B15R_075_037dd	0.5	0.375	0.75	0.75	0.375	0.562	289	0.493	0.375	0.75	53.5	17.7	−11.0	20.9	328.1	0.518	0.559	0.205	0.0	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
358	B11R_087_050dd	0.5	0.375	0.875	0.875	0.5	0.625	284	0.491	0.375	0.875	53.2	20.6	−16.5	26.4	321.1	0.521	0.574	0.105	0.0	282	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1
359	B09R_100_062dd	0.5	0.375	1.0	1.0	0.625	0.687	281	0.489	0.375	1.0	53.5	24.2	−21.7	32.5	318.2	0.505	0.588	0.0	0.0	279	0.183	0.0	1.0	28.3	38.8	−34.7	52.1	318.2
360	Y00G_050_050dd	0.5	0.5	0.0	0.5	0.5	0.25	90	0.5	0.5	0.0	56.1	−5.1	47.7	48.0	96.1	0.524	0.405	0.988	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
361	Y00G_050_037dd	0.5	0.5	0.125	0.5	0.375	0.312	90	0.5	0.5	0.124	57.0	−3.8	35.8	36.0	96.1	0.516	0.406	0.818	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
362	Y00G_050_025dd	0.5	0.5	0.25	0.5	0.25	0.375	90	0.5	0.5	0.249	58.0	−2.5	23.8	24.0	96.1	0.514	0.401	0.661	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
363	Y00G_050_012dd	0.5	0.5	0.375	0.5	0.125	0.437	90	0.5	0.5	0.375	59.0	−1.2	11.9	12.0	96.1	0.522	0.393	0.509	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
364	NW_050dd	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0	0.54	0.382	0.356	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
365	B00R_062_012dd	0.5	0.5	0.625	0.625	0.125	0.562	270	0.5	0.5	0.625	60.0	3.6	−5.0	6.2	306.2	0.529	0.402	0.279	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
366	B00R_075_025dd	0.5	0.5	0.75	0.75	0.25	0.625	270	0.5	0.5	0.75	60.1	7.3	−10.1	12.5	306.2	0.516	0.419	0.194	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
367	B00R_087_037dd	0.5	0.5	0.875	0.875	0.375	0.687	270	0.5	0.5	0.875	60.2	11.0	−15.1	18.7	306.2	0.504	0.434	0.102	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
368	B00R_100_050dd	0.5	0.5	1.0	1.0	0.5	0.75	270	0.5	0.5	1.0	60.3	14.7	−20.2	25.0	306.2	0.493	0.447	0.003	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
369	Y18G_062_062dd	0.5	0.625	0.0	0.625	0.625	0.312	101	0.51	0.625	0.0	60.8	−9.7	54.1	55.0	100.2	0.489	0.309	0.989	0.0	99	0.816	1.0	0.0	82.6	−15.6	86.6	88.0	100.2
370	Y23G_062_050dd	0.5	0.625	0.125	0.625	0.5	0.375	104	0.508	0.625	0.125	61.7	−8.5	42.1	43.0	101.4	0.48	0.31	0.83	0.0	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
371	Y31G_062_037dd	0.5	0.625	0.25	0.625	0.375	0.437	109	0.506	0.625	0.25	62.2	−7.9	29.8	30.8	104.9	0.485	0.304	0.686	0.0	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
372	Y50G_062_025dd	0.5	0.625	0.375	0.625	0.25	0.5	120	0.5	0.625	0.375	62.6	−7.4	16.6	18.2	114.0	0.512	0.297	0.539	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
373	G00B_062_012dd	0.5	0.625	0.5	0.625	0.125	0.562	150	0.5	0.625	0.5	63.2	−8.1	3.7	8.9	155.5	0.557	0.269	0.398	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
374	G50B_062_012dd	0.5	0.625	0.625	0.625	0.125	0.562	210	0.5	0.625	0.625	64.0	−3.1	−5.1	6.0	238.4	0.539	0.291	0.266	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
375	G75B_075_025dd	0.5	0.625	0.75	0.75	0.25	0.625	240	0.5	0.625	0.75	64.3	−0.3	−10.1	10.1	268.2	0.532	0.308	0.186	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
376	G84B_087_037dd	0.5	0.625	0.875	0.875	0.375	0.687	251	0.5	0.618	0.875	64.0	3.7	−15.1	15.6	283.7	0.522	0.337	0.1	0.0	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7
377	G88B_100_050dd	0.5	0.625	1.0	1.0	0.5	0.75	256	0.5	0.616	1.0	63.9	7.6	−20.1	21.5	290.8	0.512	0.357	0.009	0.0	257	0.0	0.233	1.0	32.2	15.3	−40.3	43.1	290.8
378	Y31G_075_075dd	0.5	0.75	0.0	0.75	0.75	0.375	109	0.512	0.75	0.0	64.4	−15.8	59.6	61.6	104.9	0.483	0.212	1.0	0.0	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
379	Y38G_075_062dd	0.5	0.75	0.125	0.75	0.625	0.437	113	0.51	0.75	0.125	64.9	−15.3	46.9	49.4	108.0	0.486	0.213	0.852	0.0	112	0.616	1.0	0.0	75.0	−24.4	75.1	79.0	108.0
380	Y50G_075_050dd	0.5	0.75	0.25	0.75	0.5	0.5	120	0.5	0.75	0.25	65.3	−14.8	33.2	36.4	114.0	0.49	0.207	0.702	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
381	Y68G_075_037dd	0.5	0.75	0.375	0.75	0.375	0.562	131	0.493	0.75	0.375	65.3	−15.5	19.9	25.3	127.8	0.536	0.196	0.568	0.0	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
382	G00B_075_025dd	0.5	0.75	0.5	0.75	0.25	0.625	150	0.5	0.75	0.5	66.4	−16.2	7.4	17.8	155.5	0.575	0.164	0.431	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
383	G25B_075_025dd	0.5	0.75	0.625	0.75	0.25	0.625	180	0.5	0.75	0.625	67.1	−12.1	−2.0	12.3	189.3	0.567	0.177	0.313	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
384	G50B_075_025dd	0.5	0.75	0.75	0.75	0.25	0.625	210	0.5	0.75	0.75	68.1	−6.3	−10.3	12.1	238.4	0.54	0.207	0.177	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
385	G65B_087_037dd	0.5	0.75	0.875	0.875	0.375	0.687	229	0.5	0.756	0.875	68.9	−4.6	−15.4	16.0	253.3	0.539	0.206	0.094	0.0	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3
386	G75B_100_050dd	0.5	0.75	1.0	1.0	0.5	0.75	240	0.5	0.75	1.0	68.6	−0.6	−20.3	20.3	268.2	0.532	0.233	0.01	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
387	Y41G_087_087dd	0.5	0.875	0.0	0.875	0.875	0.437	115	0.51	0.875	0.0	67.5	−22.8	63.6	67.6	109.7	0.497	0.122	1.0	0.0	114	0.583	1.0	0.0	73.7	−26.1	72.7	77.2	109.7
388	Y50G_087_075dd	0.5	0.875	0.125	0.875	0.75	0.5	120	0.5	0.875	0.125	67.9	−22.2	49.8	54.6	114.0	0.49	0.121	0.855	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
389	Y61G_087_062dd	0.5	0.875	0.25	0.875	0.625	0.562	127	0.489	0.875	0.25	68.2	−22.0	36.7	42.8	120.9	0.5	0.114	0.721	0.0	127	0.383	1.0	0.0	66.0	−35.2	58.8	68.6	120.9
390	Y76G_087_050dd	0.5	0.875	0.375	0.875	0.5	0.625	136	0.491	0.875	0.375	67.8	−24.1	22.9	33.2	136.5	0.57	0.082	0.592	0.0	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5
391	G00B_087_037dd	0.5	0.875	0.5	0.875	0.375	0.687	150	0.5	0.875	0.5	69.6	−24.3	11.1	26.7	155.5	0.593	0.038	0.454	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
392	G15B_087_037dd	0.5	0.875	0.625	0.875	0.375	0.687	169	0.5	0.875	0.618	70.2	−21.3	2.7	21.4	172.5	0.592	0.049	0.36	0.0	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5
393	G34B_087_037dd	0.5	0.875	0.75	0.875	0.375	0.687	191	0.5	0.875	0.756	71.3	−14.8	−8.5	17.1	209.7	0.57	0.086	0.211	0.0	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7
394	G50B_087_037dd	0.5	0.875	0.875	0.875	0.375	0.687	210	0.5	0.875	0.875	72.1	−9.5	−15.5	18.2	238.4	0.545	0.123	0.088	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
395	G61B_100_050dd	0.5	0.875	1.0	1.0	0.5	0.75	224	0.5	0.883	1.0	73.2	−8.1	−20.6	22.1	248.4	0.546	0.108	0.007	0.0	222	0.0	0.766	1.0	50.9	−16.2	−41.2	44.2	248.4
396	Y50G_100_100dd	0.5	1.0	0.0	1.0	1.0	0.5	120	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0	0.498	0.0	1.0	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
397	Y58G_100_087dd	0.5	1.0	0.125	1.0	0.875	0.562	125	0.489	1.0	0.125	70.8	−29.5	53.4	61.1	118.9	0.501	0.0	0.863	0.0	125	0.416	1.0	0.0	67.3	−33.8	61.0	69.8	118.9
398	Y68G_100_075dd	0.5	1.0	0.25	1.0	0.75	0.625	131	0.487	1.0	0.25	70.6	−31.1	39.9	50.6	127.8	0.541	0.0	0.749	0.0	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
399	Y81G_100_062dd	0.5	1.0	0.375	1.0	0.625	0.687	139	0.489	1.0	0.375	71.1	−31.9	26.6	41.5	140.1	0.588	0.0	0.623	0.0	140	0.183	1.0	0.0	56.4	−51.0	42.5	66.4	140.1
400	G00B_100_050dd	0.5	1.0	0.5	1.0	0.5	0.75	150	0.5	1.0	0.5	72.8	−32.5	14.8	35.7	155.5	0.625	0.0	0.5	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
401	G11B_100_050dd	0.5	1.0	0.625	1.0	0.5	0.75	164	0.5	1.0	0.616	73.3	−29.7	6.9	30.5	166.8	0.611	0.0	0.383	0.0	162	0.0	1.0	0.233	51.1	−59.5	13.9	61.1	166.8
402	G25B_100_050dd	0.5	1.0	0.75	1.0	0.5	0.75	180	0.5	1.0	0.75	74.3	−24.3	−4.0	24.6	189.3	0.6	0.0	0.267	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
403	G38B_100_050dd	0.5	1.0	0.875	1.0	0.5	0.75	196	0.5	1.0	0.883	75.3	−17.7	−14.2	22.7	218.7	0.576	0.0	0.125	0.0	197	0.0	1.0	0.766	55.1	−35.4	−28.4	45.4	218.7
404	G50B_100_050dd	0.5	1.0	1.0	1.0	0.5	0.75	210	0.5	1.0	1.0	76.2	−12.7	−20.7	24.3	238.4	0.556	0.007	0.001	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

delta

5−1031231−F0

PN170−7N, 13/22−F

TUB-test chart PN17; colour rendering
colors and differences, $\Delta E'^*$, 3D=1, de=0, *cmy0**

input: *rgb/cmyk* −> rgb_{dd}
output: 3D-linearization to $cmy0^*_{dd}$

5−1031231−F0

TUB registration: 20130201-PN17/PN17L0FP.PDF /.PS TUB material: code=rha4ta
application for measurement of offset print output, separation cmy0* (CMY0)

http://130.149.60.45/~farbmetrik/PN17/PN17L0FP.PDF /.PS; 3D-linearization
F: 3D-linearization PN17/PN17LJ30FP.DAT in file (F), page 14/22

n	HIC*Fdd	rgb_Fdd			ict_Fdd			hsi_F,dd	rgb*Fdd			LabCh*Fdd					cmyn*sep,Fdd				hsiM,dd	rgb*Mdd			LabCh*Mdd					delta
405	R00Y_062_062dd	0.625	0.0	0.0	0.625	0.625	0.312	390	0.625	0.0	0.0	37.5	44.3	28.0	52.4	32.3	0.444	0.936	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	
406	R31Y_062_062dd	0.625	0.0	0.125	0.625	0.625	0.312	379	0.625	0.0	0.114	37.6	44.9	23.4	50.6	27.5	0.445	0.94	0.9	0.0	380	1.0	0.0	0.183	45.5	71.8	37.5	81.0	27.5	
407	R11Y_062_062dd	0.625	0.0	0.25	0.625	0.625	0.312	367	0.625	0.0	0.239	37.7	45.6	17.4	48.8	20.8	0.444	0.937	0.755	0.0	367	1.0	0.0	0.383	45.8	73.0	27.8	78.2	20.8	
408	B69R_062_062dd	0.625	0.0	0.375	0.625	0.625	0.312	353	0.625	0.0	0.385	37.8	47.2	9.5	48.1	11.4	0.448	0.937	0.606	0.0	352	1.0	0.0	0.616	46.0	75.5	15.2	77.1	11.4	
409	B59R_062_062dd	0.625	0.0	0.5	0.625	0.625	0.312	341	0.625	0.0	0.51	37.8	48.6	3.9	48.7	4.6	0.451	0.942	0.507	0.0	339	1.0	0.0	0.816	45.9	77.7	6.2	78.0	4.6	
410	B50R_062_062dd	0.625	0.0	0.625	0.625	0.625	0.312	330	0.625	0.0	0.625	37.9	49.5	−0.1	49.5	359.8	0.456	0.941	0.425	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	
411	B42R_075_075dd	0.625	0.0	0.75	0.75	0.75	0.375	321	0.637	0.0	0.75	38.9	55.7	−4.4	55.9	355.4	0.409	0.955	0.283	0.0	322	0.85	0.0	1.0	43.7	74.3	−5.9	74.6	355.4	
412	B36R_087_087dd	0.625	0.0	0.875	0.875	0.875	0.437	314	0.641	0.0	0.875	39.2	61.5	−8.7	62.1	351.9	0.378	0.972	0.144	0.0	315	0.733	0.0	1.0	41.3	70.3	−9.9	71.0	351.9	
413	B31R_100_100dd	0.625	0.0	1.0	1.0	1.0	0.5	308	0.633	0.0	1.0	38.3	65.8	−13.7	67.2	348.2	0.368	0.999	0.0	0.0	308	0.633	0.0	1.0	38.3	65.8	−13.7	67.2	348.2	
414	R18Y_062_062dd	0.625	0.125	0.0	0.625	0.625	0.312	41	0.625	0.114	0.0	41.1	36.1	32.8	48.8	42.2	0.441	0.827	1.0	0.0	39	1.0	0.183	0.0	51.1	57.8	52.5	78.1	42.2	
415	R00Y_062_050dd	0.625	0.125	0.125	0.625	0.5	0.375	390	0.625	0.125	0.125	43.8	35.4	22.4	41.9	32.3	0.413	0.79	0.739	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	
416	R26Y_062_050dd	0.625	0.125	0.25	0.625	0.5	0.375	376	0.625	0.125	0.241	43.9	36.0	17.6	40.1	26.1	0.418	0.79	0.659	0.0	377	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1	
417	R00Y_062_050dd	0.625	0.125	0.375	0.625	0.5	0.375	360	0.625	0.125	0.375	44.0	37.1	10.5	38.5	15.9	0.424	0.792	0.551	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9	
418	B61R_062_050dd	0.625	0.125	0.5	0.625	0.5	0.375	344	0.625	0.125	0.508	44.0	38.6	4.0	38.8	5.9	0.43	0.798	0.448	0.0	342	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9	
419	B50R_062_050dd	0.625	0.125	0.625	0.625	0.5	0.375	330	0.635	0.125	0.625	44.1	39.6	−0.1	39.6	359.8	0.433	0.801	0.376	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	
420	B40R_075_062dd	0.625	0.125	0.75	0.75	0.625	0.437	319	0.637	0.125	0.75	44.9	45.8	−4.4	46.0	354.4	0.389	0.819	0.255	0.0	320	0.816	0.0	1.0	43.1	73.2	−7.0	73.6	354.4	
421	B34R_087_075dd	0.625	0.125	0.875	0.875	0.75	0.5	311	0.635	0.125	0.875	44.8	51.0	−8.9	51.8	350.0	0.364	0.838	0.142	0.0	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0	
422	B29R_100_087dd	0.625	0.125	1.0	1.0	0.875	0.562	305	0.625	0.125	1.0	44.5	55.3	−14.3	57.1	345.4	0.354	0.858	0.0	0.0	305	0.583	0.0	1.0	37.2	63.2	−16.4	65.3	345.4	
423	R38Y_062_062dd	0.625	0.25	0.0	0.625	0.625	0.312	53	0.625	0.239	0.0	46.3	24.7	39.1	46.2	57.6	0.433	0.7	1.0	0.0	52	1.0	0.383	0.0	59.5	39.5	62.5	74.0	57.6	
424	R23Y_062_050dd	0.625	0.25	0.125	0.625	0.5	0.375	44	0.625	0.241	0.125	47.6	26.7	27.4	38.2	45.7	0.414	0.691	0.772	0.0	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7	
425	R00Y_062_037dd	0.625	0.25	0.25	0.625	0.375	0.437	390	0.625	0.25	0.25	50.1	26.6	16.8	31.4	32.3	0.396	0.655	0.575	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	
426	R18Y_062_037dd	0.625	0.25	0.375	0.625	0.375	0.437	371	0.625	0.25	0.368	50.2	27.2	11.7	29.6	23.2	0.402	0.657	0.506	0.0	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2	
427	B65R_062_037dd	0.625	0.25	0.5	0.625	0.375	0.437	349	0.625	0.25	0.506	50.2	28.6	4.4	29.0	8.9	0.411	0.663	0.403	0.0	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9	
428	B50R_062_037dd	0.625	0.25	0.625	0.625	0.375	0.437	330	0.625	0.25	0.625	50.3	29.7	0.0	29.7	359.8	0.418	0.671	0.336	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	
429	B38R_075_050dd	0.625	0.25	0.75	0.75	0.5	0.5	316	0.633	0.25	0.75	51.0	35.8	−4.3	36.0	353.0	0.372	0.695	0.228	0.0	317	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0	
430	B30R_087_062dd	0.625	0.25	0.875	0.875	0.625	0.562	307	0.635	0.25	0.875	50.6	40.6	−9.0	41.6	347.4	0.358	0.725	0.126	0.0	307	0.616	0.0	1.0	37.9	65.0	−14.5	66.6	347.4	
431	B25R_100_075dd	0.625	0.25	1.0	1.0	0.75	0.625	300	0.625	0.25	1.0	50.6	43.9	−15.5	46.6	340.5	0.348	0.738	0.0	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5	
432	R61Y_062_062dd	0.625	0.375	0.0	0.625	0.625	0.312	67	0.625	0.385	0.0	53.9	10.2	47.9	49.0	77.8	0.418	0.518	0.989	0.0	67	1.0	0.616	0.0	71.6	16.4	76.6	78.4	77.8	
433	R50Y_062_050dd	0.625	0.375	0.125	0.625	0.5	0.375	60	0.625	0.375	0.125	53.5	14.4	34.3	37.2	67.1	0.411	0.546	0.797	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1	
434	R31Y_062_037dd	0.625	0.375	0.25	0.625	0.375	0.437	49	0.625	0.368	0.25	54.2	17.1	22.2	28.1	52.2	0.4	0.55	0.618	0.0	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2	
435	R00Y_062_025dd	0.625	0.375	0.375	0.625	0.25	0.5	390	0.625	0.375	0.375	56.3	17.7	11.2	20.9	32.3	0.393	0.522	0.456	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	
436	R00Y_062_025dd	0.625	0.375	0.5	0.625	0.25	0.5	360	0.625	0.375	0.5	56.4	18.5	5.2	19.2	15.9	0.404	0.525	0.382	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9	
437	B50R_062_025dd	0.625	0.375	0.625	0.625	0.25	0.5	330	0.625	0.375	0.625	56.5	19.8	0.0	19.8	359.8	0.411	0.532	0.307	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	
438	B34R_075_037dd	0.625	0.375	0.75	0.75	0.375	0.562	311	0.631	0.375	0.75	56.8	25.5	−4.4	25.9	350.0	0.367	0.559	0.211	0.0	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0	
439	B25R_087_050dd	0.625	0.375	0.875	0.875	0.5	0.625	300	0.625	0.375	0.875	56.7	29.3	−10.3	31.0	340.5	0.357	0.583	0.099	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5	
440	B19R_100_062dd	0.625	0.375	1.0	1.0	0.625	0.687	293	0.614	0.375	1.0	56.4	32.7	−16.0	36.4	333.8	0.348	0.604	0.0	0.0	292	0.383	0.0	1.0	32.9	52.3	−25.7	58.3	333.8	
441	R81Y_062_062dd	0.625	0.5	0.0	0.625	0.625	0.312	79	0.625	0.51	0.0	59.7	0.5	54.6	54.6	89.4	0.404	0.394	0.981	0.0	80	1.0	0.816	0.0	80.8	0.8	87.3	87.3	89.4	
442	R76Y_062_050dd	0.625	0.5	0.125	0.625	0.5	0.375	76	0.625	0.508	0.125	60.4	2.1	42.3	42.4	87.0	0.397	0.398	0.812	0.0	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0	
443	R68Y_062_037dd	0.625	0.5	0.25	0.625	0.375	0.437	71	0.625	0.506	0.25	61.1	4.1	30.1	30.4	82.1	0.392	0.4	0.655	0.0	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1	
444	R50Y_062_025dd	0.625	0.5	0.375	0.625	0.25	0.5	60	0.625	0.5	0.375	61.2	7.2	17.1	18.6	67.1	0.395	0.415	0.502	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1	
445	R00Y_062_012dd	0.625	0.5	0.5	0.625	0.125	0.562	390	0.625	0.5	0.5	62.6	8.8	5.6	10.4	32.3	0.399	0.407	0.351	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	
446	B50R_062_012dd	0.625	0.5	0.625	0.625	0.125	0.562	330	0.625	0.5	0.625	62.7	9.9	0.0	9.9	359.8	0.409	0.41	0.278	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	
447	B25R_075_025dd	0.625	0.5	0.75	0.75	0.25	0.625	300	0.625	0.5	0.75	62.8	14.6	−5.1	15.5	340.5	0.38	0.429	0.186	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5	
448	B15R_087_037dd	0.625	0.5	0.875	0.875	0.375	0.687	289	0.618	0.5	0.875	62.4	17.7	−11.0	20.9	328.1	0.379	0.445	0.091	0.0	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1	
449	B11R_100_050dd	0.625	0.5	1.0	1.0	0.5	0.75	284	0.616	0.5	1.0	62.1	20.6	−16.5	26.4	321.1	0.383	0.456	0.0	0.0	282	0.233	0.0	1.0	28.7	41.2	−33.1	52.9	321.1	
450	Y00G_062_062dd	0.625	0.625	0.0	0.625	0.625	0.312	90	0.625	0.625	0.0	64.0	−6.3	59.6	60.0	96.1	0.401	0.285	0.978	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	
451	Y00G_062_050dd	0.625	0.625	0.125	0.625	0.5	0.375	90	0.625	0.625	0.125	65.0	−5.1	47.7	48.0	96.1	0.391	0.286	0.821	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	
452	Y00G_062_037dd	0.625	0.625	0.25	0.625	0.375	0.437	90	0.625	0.625	0.25	65.9	−3.8	35.8	36.0	96.1	0.385	0.282	0.675	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	
453	Y00G_062_025dd	0.625	0.625	0.375	0.625	0.25	0.5	90	0.625	0.625	0.375	66.9	−2.5	23.8	24.0	96.1	0.386	0.28	0.538	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	
454	Y00G_062_012dd	0.625	0.625	0.5	0.625	0.125	0.562	90	0.625	0.625	0.5	67.9	−1.2	11.9	12.0	96.1	0.397	0.274	0.403	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	
455	NW_062dd	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0	0.417	0.26	0.26	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	
456	B00R_075_012dd	0.625	0.625	0.75	0.75	0.125	0.687	270	0.625	0.625	0.75	68.9	3.6	−5.0	6.2	306.2	0.402	0.285	0.178	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2	
457	B00R_087_025dd	0.625	0.625	0.875	0.875	0.25	0.75	270	0.625	0.625	0.875	69.0	7.3	−10.1	12.5	306.2	0.387	0.309	0.093	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2	
458	B00R_100_037dd	0.625	0.625	1.0	1.0	0.375	0.812	270	0.625	0.625	1.0	69.1	11.0	−15.1	18.7	306.2	0.376	0.33	0.0	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2	
459	Y15G_075_075dd	0.625	0.75	0.0	0.75	0.75	0.375	99	0.637	0.75	0.0	68.8	−11.0	66.1	67.0	99.4	0.369	0.195	0.977	0.0	97	0.85	1.0	0.0	83.6	−14.6	88.1	89.3	99.4	
460	Y18G_075_062dd	0.625	0.75	0.125	0.75	0.625	0.437	101	0.635	0.75	0.125	69.7	−9.7	54.1	55.0	100.2	0.359	0.199	0.835	0.0	99	0.816	1.0	0.0	82.6	−15.6	86.6	88.0	100.2	
461	Y23G_075_050dd	0.625	0.75	0.25	0.75	0.5	0.5	104	0.633	0.75	0.25	70.6	−8.5	42.1	43.0	101.4	0.353	0.199	0.701	0.0	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4	
462	Y31G_075_037dd	0.625	0.75	0.375	0.75	0.375	0.562	109	0.631	0.75	0.375	71.1	−7.9	29.8	30.8	104.9	0.363	0.196	0.57	0.0	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9	
463	Y50G_075_025dd	0.625	0.75	0.5	0.75	0.25	0.625	120	0.625	0.75	0.5	71.5	−7.4	16.6	18.2	114.0	0.388	0.189	0.436	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0	
464	G00B_075_012dd	0.625	0.75	0.625	0.75	0.125	0.687	150	0.625	0.75	0.625	72.1	−8.1	3.7	8.9	155.5	0.437	0.166	0.305	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	
465	G50B_075_012dd	0.625	0.75	0.75	0.75	0.125	0.687	210	0.625	0.75	0.75	72.9	−3.1	−5.1	6.0	238.4	0.417	0.188	0.172	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4	
466	G75B_087_025dd	0.625	0.75	0.875	0.875	0.25	0.75	240	0.625	0.75	0.875	73.2	−0.3	−10.1	10.1	268.2	0.409	0.201	0.093	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2	
467	G84B_100_037dd	0.625	0.75	1.0	1.0	0.375	0.812	251	0.625	0.743	1.0	72.9	3.7	−15.1	15.6	283.7	0.4	0.226	0.009	0.0	251	0.0	0.316	1.0	35.2	9.9	−40.4	41.6	283.7	
468	Y26G_087_087dd	0.625	0.875	0.0	0.875	0.875	0.437	106	0.641	0.875	0.0	73.0	−16.1	72.2	74.0	102.6	0.35	0.112	0.988	0.0	104	0.733	1.0	0.0	80.0	−18.4	82.5	84.6	102.6	
469	Y31G_087_075dd	0.625	0.875	0.125	0.875	0.75	0.5	109	0.637	0.875	0.125	73.4	−15.8	59.6	61.6	104.9	0.357	0.115	0.856	0.0	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9	
470	Y38G_087_062dd	0.625	0.875	0.25	0.875	0.625	0.562	113	0.635	0.875	0.25	73.8	−15.3	46.9	49.4	108.0	0.363	0.112	0.725	0.0	112	0.616	1.0	0.0	75.0	−24.4	75.1	79.0	108.0	
471	Y50G_087_050dd	0.625	0.875	0.375	0.875	0.5	0.625	120	0.625	0.875	0.375	74.2	−14.8	33.2	36.4	114.0	0.373	0.108	0.588	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0	
472	Y68G_087_037dd	0.625	0.875	0.5	0.875	0.375	0.687	131	0.618	0.875	0.5	74.2	−15.5	19.9	25.3	127.8	0.414	0.092	0.47	0.0	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8	
473	G00B_087_025dd	0.625	0.875	0.625	0.875	0.25	0.75	150	0.625	0.875	0.625	75.3	−16.2	7.4	17.8	155.5	0.458	0.052	0.34	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	
474	G25B_087_025dd	0.625	0.875	0.75	0.875	0.25	0.75	180	0.625	0.875	0.75	76.0	−12.1	−2.0	12.3	189.3	0.448	0.073	0.221	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3	
475	G50B_087_025dd	0.625	0.875	0.875	0.875	0.25	0.75	210	0.625	0.875	0.875	77.0	−6.3	−10.3	12.1	238.4	0.418	0.111	0.086	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4	
476	G65B_100_037dd	0.625	0.875	1.0	1.0	0.375	0.812	229	0.625	0.881	1.0	77.9	−4.6	−15.4	16.0	253.3	0.416	0.109	0.007	0.0	228	0.0	0.683	1.0	48.3	−12.2	−41.1	42.9	253.3	
477	Y36G_100_100dd	0.625	1.0	0.0	1.0	1.0	0.5	112	0.633	1.0	0.0	75.6	−23.6	76.2	79.8	107.2	0.368	0.0	1.0	0.0	111	0.633	1.0	0.0	75.6	−23.6	76.2	79.8	107.2	
478	Y41G_100_087dd	0.625	1.0	0.125	1.0	0.875	0.562	115	0.635	1.0	0.125	76.4	−22.8	63.6	67.6	109.7	0.371	0.001	0.862	0.0	114	0.583	1.0	0.0	73.7	−26.1	72.7	77.2	109.7	
479	Y50G_100_075dd	0.625	1.0	0.25	1.0	0.75	0.625	120	0.625	1.0	0.25	76.8	−22.2	49.8	54.6	114.0	0.369	0.001	0.728	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0	
480	Y61G_100_062dd	0.625	1.0	0.375	1.0	0.625	0.687	127	0.614	1.0	0.375	77.1	−22.0	36.7	42.8	120.9	0.379	0.0	0.601	0.0	127	0.383	1.0	0.0	66.0	−35.2	58.8	68.6	120.9	
481	Y76G_100_050dd	0.625	1.0	0.5	1.0	0.5	0.75	136	0.616	1.0	0.5	76.7	−24.1	22.9	33.2	136.5	0.453	0.0	0.498	0.0	137	0.233	1.0	0.0	57.9	−48.3	45.8	66.5	136.5	
482	G00B_100_037dd	0.625	1.0	0.625	1.0	0.375	0.812	150	0.625	1.0	0.625	78.5	−24.3	11.1	26.7	155.5	0.48	0.0	0.376	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	
483	G15B_100_037dd	0.625	1.0	0.75	1.0	0.375	0.812	169	0.625	1.0	0.743	79.1	−21.3	2.7	21.4	172.5	0.475	0.0	0.269	0.0	168	0.0	1.0	0.316	51.6	−56.8	7.4	57.3	172.5	
484	G34B_100_037dd	0.625	1.0	0.875	1.0	0.375	0.812	191	0.625	1.0	0.881	80.2	−14.8	−8.5	17.1	209.7	0.451	0.0	0.125	0.0	191	0.0	1.0	0.683	54.5	−39.7	−22.7	45.7	209.7	
485	G50B_100_037dd	0.625	1.0	1.0	1.0	0.375	0.812	210	0.625	1.0	1.0	81.0	−9.5	−15.5	18.2	238.4	0.425	0.007	0.0	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4	

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PN170−7N, 14/22−F

TUB-test chart PN17; colour rendering
colors and differences, ΔE'*, 3D=1, de=0, cmy0*

input: rgb/cmyk −> rgbdd
output: 3D-linearization to cmy0*dd

5−1031331−F0

http://130.149.60.45/~farbmetrik/PN17/PN17L0FP.PDF /.PS; 3D-linearization
F: 3D-linearization PN17/PN17LJ30FP.DAT in file (F), page 15/22

n	HIC*Fdd	rgb_Fdd			ict_Fdd			hsi_F,dd	rgb*Fdd			LabCh*Fdd					cmyn*sep,Fdd				hsiM,dd	rgb*Mdd			LabCh*Mdd				
486	R00Y_075_075dd	0.75	0.0	0.0	0.75	0.75	0.375	390	0.75	0.0	0.0	40.2	53.2	33.6	62.9	32.3	0.315	0.951	0.992	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
487	R35Y_075_075dd	0.75	0.0	0.125	0.75	0.75	0.375	381	0.75	0.0	0.112	40.2	53.7	29.2	61.1	28.5	0.316	0.956	0.88	0.0	382	1.0	0.0	0.15	45.5	71.6	39.0	81.5	28.5
488	R18Y_075_075dd	0.75	0.0	0.25	0.75	0.75	0.375	371	0.75	0.0	0.237	40.4	54.5	23.4	59.3	23.2	0.317	0.955	0.751	0.0	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
489	R00Y_075_075dd	0.75	0.0	0.375	0.75	0.75	0.375	360	0.75	0.0	0.375	40.5	55.6	15.8	57.8	15.9	0.319	0.953	0.608	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
490	B65R_075_075dd	0.75	0.0	0.5	0.75	0.75	0.375	349	0.75	0.0	0.512	40.5	57.3	8.9	58.0	8.9	0.318	0.954	0.493	0.0	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
491	B57R_075_075dd	0.75	0.0	0.625	0.75	0.75	0.375	339	0.75	0.0	0.637	40.5	58.5	3.7	58.6	3.7	0.321	0.957	0.393	0.0	337	1.0	0.0	0.85	45.9	78.0	5.0	78.2	3.7
492	B50R_075_075dd	0.75	0.0	0.75	0.75	0.75	0.375	330	0.75	0.0	0.75	40.6	59.4	−0.1	59.4	359.8	0.327	0.956	0.307	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
493	B43R_087_087dd	0.75	0.0	0.875	0.875	0.875	0.437	322	0.758	0.0	0.875	41.6	65.5	−4.6	65.7	355.9	0.278	0.977	0.156	0.0	322	0.866	0.0	1.0	44.0	74.9	−5.3	75.1	355.9
494	B38R_100_100dd	0.75	0.0	1.0	1.0	1.0	0.5	316	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0	0.233	0.999	0.0	0.0	317	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0
495	R15Y_075_075dd	0.75	0.125	0.0	0.75	0.75	0.375	39	0.75	0.112	0.0	43.4	45.5	38.0	59.3	39.9	0.311	0.843	0.999	0.0	37	1.0	0.15	0.0	49.8	60.7	50.7	79.1	39.9
496	R00Y_075_062dd	0.75	0.125	0.125	0.75	0.625	0.437	390	0.75	0.125	0.125	46.4	44.3	28.0	52.4	32.3	0.284	0.815	0.741	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
497	R31Y_075_062dd	0.75	0.125	0.25	0.75	0.625	0.437	379	0.75	0.125	0.239	46.5	44.9	23.4	50.6	27.5	0.287	0.815	0.663	0.0	380	1.0	0.0	0.183	45.5	71.8	37.5	81.0	27.5
498	R11Y_075_062dd	0.75	0.125	0.375	0.75	0.625	0.437	367	0.75	0.125	0.364	46.6	45.6	17.4	48.8	20.8	0.29	0.815	0.572	0.0	367	1.0	0.0	0.383	45.8	73.0	27.8	78.2	20.8
499	B69R_075_062dd	0.75	0.125	0.5	0.75	0.625	0.437	353	0.75	0.125	0.51	46.8	47.2	9.5	48.1	11.4	0.294	0.819	0.456	0.0	352	1.0	0.0	0.616	46.0	75.5	15.2	77.1	11.4
500	B59R_075_062dd	0.75	0.125	0.625	0.75	0.625	0.437	341	0.75	0.125	0.635	46.7	48.6	3.9	48.7	4.6	0.297	0.824	0.359	0.0	339	1.0	0.0	0.816	45.9	77.7	6.2	78.0	4.6
501	B50R_075_062dd	0.75	0.125	0.75	0.75	0.625	0.437	330	0.75	0.125	0.75	46.8	49.5	−0.1	49.5	359.8	0.303	0.826	0.283	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
502	B42R_087_075dd	0.75	0.125	0.875	0.875	0.75	0.5	321	0.762	0.125	0.875	47.8	55.7	−4.4	55.9	355.4	0.25	0.849	0.15	0.0	322	0.85	0.0	1.0	43.7	74.3	−5.9	74.6	355.4
503	B36R_100_087dd	0.75	0.125	1.0	1.0	0.875	0.562	314	0.766	0.125	1.0	48.1	61.5	−8.7	62.1	351.9	0.205	0.871	0.009	0.0	315	0.733	0.0	1.0	41.3	70.3	−9.9	71.0	351.9
504	R31Y_075_075dd	0.75	0.25	0.0	0.75	0.75	0.375	49	0.75	0.237	0.0	48.5	34.3	44.4	56.2	52.2	0.307	0.719	0.995	0.0	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
505	R18Y_075_062dd	0.75	0.25	0.125	0.75	0.625	0.437	41	0.75	0.239	0.125	50.0	36.1	32.8	48.8	42.2	0.284	0.725	0.777	0.0	39	1.0	0.183	0.0	51.1	57.8	52.5	78.1	42.2
506	R00Y_075_050dd	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.25	52.7	35.4	22.4	41.9	32.3	0.266	0.699	0.592	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
507	R26Y_075_050dd	0.75	0.25	0.375	0.75	0.5	0.5	376	0.75	0.25	0.366	52.8	36.0	17.6	40.1	26.1	0.27	0.698	0.527	0.0	377	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1
508	R00Y_075_050dd	0.75	0.25	0.5	0.75	0.5	0.5	360	0.75	0.25	0.5	52.9	37.1	10.5	38.5	15.9	0.277	0.702	0.43	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
509	B61R_075_050dd	0.75	0.25	0.625	0.75	0.5	0.5	344	0.75	0.25	0.633	52.9	38.6	4.0	38.8	5.9	0.282	0.708	0.329	0.0	342	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9
510	B50R_075_050dd	0.75	0.25	0.75	0.75	0.5	0.5	330	0.75	0.25	0.75	53.0	39.6	−0.1	39.6	359.8	0.286	0.71	0.256	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
511	B40R_087_062dd	0.75	0.25	0.875	0.875	0.625	0.562	319	0.76	0.25	0.875	53.9	45.8	−4.4	46.0	354.4	0.236	0.742	0.137	0.0	320	0.816	0.0	1.0	43.1	73.2	−7.0	73.6	354.4
512	B34R_100_075dd	0.75	0.25	1.0	1.0	0.75	0.625	311	0.762	0.25	1.0	53.7	51.0	−8.9	51.8	350.0	0.203	0.768	0.009	0.0	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
513	R50Y_075_075dd	0.75	0.375	0.0	0.75	0.75	0.375	60	0.75	0.375	0.0	54.7	21.6	51.5	55.9	67.1	0.303	0.582	0.986	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
514	R38Y_075_062dd	0.75	0.375	0.125	0.75	0.625	0.437	53	0.75	0.364	0.125	55.2	24.7	39.1	46.2	57.6	0.287	0.594	0.808	0.0	52	1.0	0.383	0.0	59.5	39.5	62.5	74.0	57.6
515	R23Y_075_050dd	0.75	0.375	0.25	0.75	0.5	0.5	44	0.75	0.366	0.25	56.5	26.7	27.4	38.2	45.7	0.27	0.602	0.637	0.0	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
516	R00Y_075_037dd	0.75	0.375	0.375	0.75	0.375	0.562	390	0.75	0.375	0.375	59.0	26.6	16.8	31.4	32.3	0.259	0.576	0.476	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
517	R18Y_075_037dd	0.75	0.375	0.5	0.75	0.375	0.562	371	0.75	0.375	0.493	59.1	27.2	11.7	29.6	23.2	0.266	0.577	0.413	0.0	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
518	B65R_075_037dd	0.75	0.375	0.625	0.75	0.375	0.562	349	0.75	0.375	0.631	59.1	28.6	4.4	29.0	8.9	0.274	0.581	0.308	0.0	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
519	B50R_075_037dd	0.75	0.375	0.75	0.75	0.375	0.562	330	0.75	0.375	0.75	59.2	29.7	0.0	29.7	359.8	0.279	0.582	0.233	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
520	B38R_087_050dd	0.75	0.375	0.875	0.875	0.5	0.625	316	0.758	0.375	0.875	59.9	35.8	−4.3	36.0	353.0	0.228	0.618	0.121	0.0	317	0.766	0.0	1.0	42.1	71.6	−8.7	72.1	353.0
521	B30R_100_062dd	0.75	0.375	1.0	1.0	0.625	0.687	307	0.76	0.375	1.0	59.5	40.6	−9.0	41.6	347.4	0.205	0.652	0.008	0.0	307	0.616	0.0	1.0	37.9	65.0	−14.5	66.6	347.4
522	R68Y_075_075dd	0.75	0.5	0.0	0.75	0.75	0.375	71	0.75	0.512	0.0	62.2	8.2	60.3	60.8	82.1	0.293	0.432	0.988	0.0	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
523	R61Y_075_062dd	0.75	0.5	0.125	0.75	0.625	0.437	67	0.75	0.51	0.125	62.8	10.2	47.9	49.0	77.8	0.284	0.442	0.835	0.0	67	1.0	0.616	0.0	71.6	16.4	76.6	78.4	77.8
524	R50Y_075_050dd	0.75	0.5	0.25	0.75	0.5	0.5	60	0.75	0.5	0.25	62.4	14.4	34.3	37.2	67.1	0.277	0.465	0.677	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
525	R31Y_075_037dd	0.75	0.5	0.375	0.75	0.375	0.562	49	0.75	0.493	0.375	63.1	17.1	22.2	28.1	52.2	0.268	0.475	0.526	0.0	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
526	R00Y_075_025dd	0.75	0.5	0.5	0.75	0.25	0.625	390	0.75	0.5	0.5	65.2	17.7	11.2	20.9	32.3	0.264	0.458	0.377	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
527	R00Y_075_025dd	0.75	0.5	0.625	0.75	0.25	0.625	360	0.75	0.5	0.625	65.3	18.5	5.2	19.2	15.9	0.274	0.456	0.294	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
528	B50R_075_025dd	0.75	0.5	0.75	0.75	0.25	0.625	330	0.75	0.5	0.75	65.4	19.8	0.0	19.8	359.8	0.28	0.459	0.212	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
529	B34R_087_037dd	0.75	0.5	0.875	0.875	0.375	0.687	311	0.756	0.5	0.875	65.7	25.5	−4.4	25.9	350.0	0.238	0.494	0.117	0.0	311	0.683	0.0	1.0	39.8	68.1	−11.9	69.1	350.0
530	B25R_100_050dd	0.75	0.5	1.0	1.0	0.5	0.75	300	0.75	0.5	1.0	65.6	29.3	−10.3	31.0	340.5	0.224	0.516	0.0	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
531	R85Y_075_075dd	0.75	0.625	0.0	0.75	0.75	0.375	81	0.75	0.637	0.0	67.8	−1.1	66.7	66.7	91.0	0.285	0.297	0.987	0.0	81	1.0	0.85	0.0	82.3	−1.5	89.0	89.0	91.0
532	R81Y_075_062dd	0.75	0.625	0.125	0.75	0.625	0.437	79	0.75	0.635	0.125	68.6	0.5	54.6	54.6	89.4	0.276	0.312	0.849	0.0	80	1.0	0.816	0.0	80.8	0.8	87.3	87.3	89.4
533	R76Y_075_050dd	0.75	0.625	0.25	0.75	0.5	0.5	76	0.75	0.633	0.25	69.3	2.1	42.3	42.4	87.0	0.272	0.321	0.713	0.0	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
534	R68Y_075_037dd	0.75	0.625	0.375	0.75	0.375	0.562	71	0.75	0.631	0.375	70.0	4.1	30.1	30.4	82.1	0.27	0.327	0.574	0.0	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
535	R50Y_075_025dd	0.75	0.625	0.5	0.75	0.25	0.625	60	0.75	0.625	0.5	70.1	7.2	17.1	18.6	67.1	0.273	0.347	0.429	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
536	R00Y_075_012dd	0.75	0.625	0.625	0.75	0.125	0.687	390	0.75	0.625	0.625	71.5	8.8	5.6	10.4	32.3	0.277	0.336	0.273	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
537	B50R_075_012dd	0.75	0.625	0.75	0.75	0.125	0.687	330	0.75	0.625	0.75	71.6	9.9	0.0	9.9	359.8	0.286	0.336	0.193	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
538	B25R_087_025dd	0.75	0.625	0.875	0.875	0.25	0.75	300	0.75	0.625	0.875	71.7	14.6	−5.1	15.5	340.5	0.26	0.378	0.1	0.0	300	0.5	0.0	1.0	35.6	58.6	−20.7	62.1	340.5
539	B15R_100_037dd	0.75	0.625	1.0	1.0	0.375	0.812	289	0.743	0.625	1.0	71.3	17.7	−11.0	20.9	328.1	0.258	0.395	0.0	0.0	288	0.316	0.0	1.0	30.9	47.3	−29.4	55.7	328.1
540	Y00G_075_075dd	0.75	0.75	0.0	0.75	0.75	0.375	90	0.75	0.75	0.0	71.9	−7.6	71.6	72.0	96.1	0.285	0.195	0.988	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
541	Y00G_075_062dd	0.75	0.75	0.125	0.75	0.625	0.437	90	0.75	0.75	0.125	72.9	−6.3	59.6	60.0	96.1	0.274	0.201	0.859	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
542	Y00G_075_050dd	0.75	0.75	0.25	0.75	0.5	0.5	90	0.75	0.75	0.25	73.9	−5.1	47.7	48.0	96.1	0.269	0.204	0.731	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
543	Y00G_075_037dd	0.75	0.75	0.375	0.75	0.375	0.562	90	0.75	0.75	0.375	74.8	−3.8	35.8	36.0	96.1	0.267	0.205	0.6	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
544	Y00G_075_025dd	0.75	0.75	0.5	0.75	0.25	0.625	90	0.75	0.75	0.5	75.8	−2.5	23.8	24.0	96.1	0.269	0.203	0.474	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
545	Y00G_075_012dd	0.75	0.75	0.625	0.75	0.125	0.687	90	0.75	0.75	0.625	76.8	−1.2	11.9	12.0	96.1	0.281	0.195	0.335	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
546	NW_075dd	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0	0.299	0.181	0.177	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
547	B00R_087_012dd	0.75	0.75	0.875	0.875	0.125	0.812	270	0.75	0.75	0.875	77.9	3.6	−5.0	6.2	306.2	0.282	0.207	0.094	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
548	B00R_100_025dd	0.75	0.75	1.0	1.0	0.25	0.875	270	0.75	0.75	1.0	77.9	7.3	−10.1	12.5	306.2	0.269	0.232	0.007	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
549	Y13G_087_087dd	0.75	0.875	0.0	0.875	0.875	0.437	98	0.758	0.875	0.0	76.6	−12.3	77.8	78.7	99.0	0.261	0.108	0.993	0.0	97	0.866	1.0	0.0	84.1	−14.1	88.9	90.0	99.0
550	Y15G_087_075dd	0.75	0.875	0.125	0.875	0.75	0.5	99	0.762	0.875	0.125	77.7	−11.0	66.1	67.0	99.4	0.244	0.114	0.872	0.0	97	0.85	1.0	0.0	83.6	−14.6	88.1	89.3	99.4
551	Y18G_087_062dd	0.75	0.875	0.25	0.875	0.625	0.562	101	0.76	0.875	0.25	78.6	−9.7	54.1	55.0	100.2	0.237	0.119	0.753	0.0	99	0.816	1.0	0.0	82.6	−15.6	86.6	88.0	100.2
552	Y23G_087_050dd	0.75	0.875	0.375	0.875	0.5	0.625	104	0.758	0.875	0.375	79.5	−8.5	42.1	43.0	101.4	0.237	0.123	0.625	0.0	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
553	Y31G_087_037dd	0.75	0.875	0.5	0.875	0.375	0.687	109	0.756	0.875	0.5	80.0	−7.9	29.8	30.8	104.9	0.254	0.119	0.509	0.0	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
554	Y50G_087_025dd	0.75	0.875	0.625	0.875	0.25	0.75	120	0.75	0.875	0.625	80.4	−7.4	16.6	18.2	114.0	0.277	0.109	0.377	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
555	G00B_087_012dd	0.75	0.875	0.75	0.875	0.125	0.812	150	0.75	0.875	0.75	81.0	−8.1	3.7	8.9	155.5	0.321	0.072	0.221	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
556	G50B_087_012dd	0.75	0.875	0.875	0.875	0.125	0.812	210	0.75	0.875	0.875	81.8	−3.1	−5.1	6.0	238.4	0.299	0.104	0.088	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
557	G75B_100_025dd	0.75	0.875	1.0	1.0	0.25	0.875	240	0.75	0.875	1.0	82.1	−0.3	−10.1	10.1	268.2	0.29	0.125	0.01	0.0	240	0.0	0.5	1.0	41.7	−1.2	−40.6	40.6	268.2
558	Y23G_100_100dd	0.75	1.0	0.0	1.0	1.0	0.5	104	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4	0.235	0.0	1.0	0.0	102	0.766	1.0	0.0	81.2	−17.0	84.3	86.0	101.4
559	Y26G_100_087dd	0.75	1.0	0.125	1.0	0.875	0.562	106	0.766	1.0	0.125	81.9	−16.1	72.2	74.0	102.6	0.227	0.007	0.883	0.0	104	0.733	1.0	0.0	80.0	−18.4	82.5	84.6	102.6
560	Y31G_100_075dd	0.75	1.0	0.25	1.0	0.75	0.625	109	0.762	1.0	0.25	82.3	−15.8	59.6	61.6	104.9	0.238	0.008	0.769	0.0	108	0.683	1.0	0.0	77.8	−21.1	79.4	82.2	104.9
561	Y38G_100_062dd	0.75	1.0	0.375	1.0	0.625	0.687	113	0.76	1.0	0.375	82.7	−15.3	46.9	49.4	108.0	0.252	0.008	0.649	0.0	112	0.616	1.0	0.0	75.0	−24.4	75.1	79.0	108.0
562	Y50G_100_050dd	0.75	1.0	0.5	1.0	0.5	0.75	120	0.75	1.0	0.5	83.1	−14.8	33.2	36.4	114.0	0.266	0.004	0.52	0.0	119	0.5	1.0	0.0	70.6	−29.7	66.5	72.8	114.0
563	Y68G_100_037dd	0.75	1.0	0.625	1.0	0.375	0.812	131	0.743	1.0	0.625	83.1	−15.5	19.9	25.3	127.8	0.305	0.0	0.396	0.0	131	0.316	1.0	0.0	62.3	−41.4	53.2	67.5	127.8
564	G00B_100_025dd	0.75	1.0	0.75	1.0	0.25	0.875	150	0.75	1.0	0.75	84.2	−16.2	7.4	17.8	155.5	0.341	0.0	0.252	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
565	G25B_100_025dd	0.75	1.0	0.875	1.0	0.25	0.875	180	0.75	1.0	0.875	84.9	−12.1	−2.0	12.3	189.3	0.332	0.0	0.136	0.0	180	0.0	1.0	0.5	52.9	−48.6	−8.0	49.3	189.3
566	G50B_100_025dd	0.75	1.0	1.0	1.0	0.25	0.875	210	0.75	1.0	1.0	85.9	−6.3	−10.3	12.1	238.4	0.303	0.007	0.0	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4

delta

5−1031431−F0 PN170−7N, 15/22−F

TUB-test chart PN17; colour rendering
colors and differences, $\Delta E'^*$, 3D=1, de=0, *cmy0**

input: *rgb/cmyk* −> rgb_{dd}
output: 3D-linearization to $cmy0^*_{dd}$

http://130.149.60.45/~farbmetrik/PN17/PN17L0FP.PDF /.PS; 3D-linearization
F: 3D-linearization PN17/PN17LJ30FP.DAT in file (F), page 16/22

n	HIC*Fdd	rgb_Fdd			ict_Fdd			$h_{si\_F,dd}$	rgb*Fdd			LabCh*Fdd				
567	R00Y_087_087dd	0.875	0.0	0.0	0.875	0.875	0.437	390	0.875	0.0	0.0	42.8	62.0	39.2	73.4	32.3
568	R36Y_087_087dd	0.875	0.0	0.125	0.875	0.875	0.437	382	0.875	0.0	0.116	42.9	62.5	34.7	71.6	29.0
569	R23Y_087_087dd	0.875	0.0	0.25	0.875	0.875	0.437	374	0.875	0.0	0.233	43.0	63.2	29.5	69.8	25.0
570	R08Y_087_087dd	0.875	0.0	0.375	0.875	0.875	0.437	365	0.875	0.0	0.364	43.1	64.2	22.7	68.1	19.4
571	B70R_087_087dd	0.875	0.0	0.5	0.875	0.875	0.437	355	0.875	0.0	0.51	43.2	65.8	14.8	67.4	12.7
572	B63R_087_087dd	0.875	0.0	0.625	0.875	0.875	0.437	346	0.875	0.0	0.641	43.2	67.3	8.3	67.8	7.0
573	B56R_087_087dd	0.875	0.0	0.75	0.875	0.875	0.437	338	0.875	0.0	0.758	43.2	68.4	3.8	68.5	3.2
574	B50R_087_087dd	0.875	0.0	0.875	0.875	0.875	0.437	330	0.875	0.0	0.875	43.4	69.4	-0.1	69.4	359.8
575	B44R_100_100dd	0.875	0.0	1.0	1.0	1.0	0.5	323	0.883	0.0	1.0	44.3	75.4	-4.7	75.6	356.3
576	R13Y_087_087dd	0.875	0.125	0.0	0.875	0.875	0.437	38	0.875	0.116	0.0	46.1	54.3	43.6	69.7	38.7
577	R00Y_087_075dd	0.875	0.125	0.125	0.875	0.75	0.5	390	0.875	0.125	0.125	49.1	53.2	33.6	62.9	32.3
578	R35Y_087_075dd	0.875	0.125	0.25	0.875	0.75	0.5	381	0.875	0.125	0.237	49.1	53.7	29.2	61.1	28.5
579	R18Y_087_075dd	0.875	0.125	0.375	0.875	0.75	0.5	371	0.875	0.125	0.362	49.3	54.5	23.4	59.3	23.2
580	R00Y_087_075dd	0.875	0.125	0.5	0.875	0.75	0.5	360	0.875	0.125	0.5	49.4	55.6	15.8	57.8	15.9
581	B65R_087_075dd	0.875	0.125	0.625	0.875	0.75	0.5	349	0.875	0.125	0.637	49.4	57.3	8.9	58.0	8.9
582	B57R_087_075dd	0.875	0.125	0.75	0.875	0.75	0.5	339	0.875	0.125	0.762	49.4	58.5	3.7	58.6	3.7
583	B50R_087_075dd	0.875	0.125	0.875	0.875	0.75	0.5	330	0.875	0.125	0.875	49.5	59.4	-0.1	59.4	359.8
584	B43R_100_087dd	0.875	0.125	1.0	1.0	0.875	0.562	322	0.883	0.125	1.0	50.5	65.5	-4.6	65.7	355.9
585	R26Y_087_087dd	0.875	0.25	0.0	0.875	0.875	0.437	46	0.875	0.233	0.0	50.6	44.1	49.4	66.2	48.2
586	R15Y_087_075dd	0.875	0.25	0.125	0.875	0.75	0.5	39	0.875	0.237	0.125	52.4	45.5	38.0	59.3	39.9
587	R00Y_087_062dd	0.875	0.25	0.25	0.875	0.625	0.562	390	0.875	0.25	0.25	55.3	44.3	28.0	52.4	32.3
588	R31Y_087_062dd	0.875	0.25	0.375	0.875	0.625	0.562	379	0.875	0.25	0.364	55.4	44.9	23.4	50.6	27.5
589	R11Y_087_062dd	0.875	0.25	0.5	0.875	0.625	0.562	367	0.875	0.25	0.489	55.6	45.6	17.4	48.8	20.8
590	B69R_087_062dd	0.875	0.25	0.625	0.875	0.625	0.562	353	0.875	0.25	0.635	55.7	47.2	9.5	48.1	11.4
591	B59R_087_062dd	0.875	0.25	0.75	0.875	0.625	0.562	341	0.875	0.25	0.76	55.6	48.6	3.9	48.7	4.6
592	B50R_087_062dd	0.875	0.25	0.875	0.875	0.625	0.562	330	0.875	0.25	0.875	55.7	49.5	-0.1	49.5	359.8
593	B42R_100_075dd	0.875	0.25	1.0	1.0	0.75	0.625	321	0.887	0.25	1.0	56.7	55.7	-4.4	55.9	355.4
594	R41Y_087_087dd	0.875	0.375	0.0	0.875	0.875	0.437	55	0.875	0.364	0.0	56.5	32.0	56.4	64.9	60.3
595	R31Y_087_075dd	0.875	0.375	0.125	0.875	0.75	0.5	49	0.875	0.362	0.125	57.4	34.3	44.4	56.2	52.2
596	R18Y_087_062dd	0.875	0.375	0.25	0.875	0.625	0.562	41	0.875	0.364	0.25	58.9	36.1	32.8	48.8	42.2
597	R00Y_087_050dd	0.875	0.375	0.375	0.875	0.5	0.625	390	0.875	0.375	0.375	61.6	35.4	22.4	41.9	32.3
598	R26Y_087_050dd	0.875	0.375	0.5	0.875	0.5	0.625	376	0.875	0.375	0.491	61.7	36.0	17.6	40.1	26.1
599	R00Y_087_050dd	0.875	0.375	0.625	0.875	0.5	0.625	360	0.875	0.375	0.625	61.8	37.1	10.5	38.5	15.9
600	B61R_087_050dd	0.875	0.375	0.75	0.875	0.5	0.625	344	0.875	0.375	0.758	61.8	38.6	4.0	38.8	5.9
601	B50R_087_050dd	0.875	0.375	0.875	0.875	0.5	0.625	330	0.875	0.375	0.875	61.9	39.6	-0.1	39.6	359.8
602	B40R_100_062dd	0.875	0.375	1.0	1.0	0.625	0.687	319	0.885	0.375	1.0	62.8	45.8	-4.4	46.0	354.4
603	R58Y_087_087dd	0.875	0.5	0.0	0.875	0.875	0.437	65	0.875	0.51	0.0	64.0	17.7	65.2	67.6	74.8
604	R50Y_087_075dd	0.875	0.5	0.125	0.875	0.75	0.5	60	0.875	0.5	0.125	63.6	21.6	51.5	55.9	67.1
605	R38Y_087_062dd	0.875	0.5	0.25	0.875	0.625	0.562	53	0.875	0.489	0.25	64.1	24.7	39.1	46.2	57.6
606	R23Y_087_050dd	0.875	0.5	0.375	0.875	0.5	0.625	44	0.875	0.491	0.375	65.4	26.7	27.4	38.2	45.7
607	R00Y_087_037dd	0.875	0.5	0.5	0.875	0.375	0.687	390	0.875	0.5	0.5	67.9	26.6	16.8	31.4	32.3
608	R18Y_087_037dd	0.875	0.5	0.625	0.875	0.375	0.687	371	0.875	0.5	0.618	68.0	27.2	11.7	29.6	23.2
609	B65R_087_037dd	0.875	0.5	0.75	0.875	0.375	0.687	349	0.875	0.5	0.756	68.1	28.6	4.4	29.0	8.9
610	B50R_087_037dd	0.875	0.5	0.875	0.875	0.375	0.687	330	0.875	0.5	0.875	68.1	29.7	0.0	29.7	359.8
611	B38R_100_050dd	0.875	0.5	1.0	1.0	0.5	0.75	316	0.883	0.5	1.0	68.8	35.8	-4.3	36.0	353.0
612	R73Y_087_087dd	0.875	0.625	0.0	0.875	0.875	0.437	74	0.875	0.641	0.0	70.5	6.0	72.6	72.9	85.2
613	R68Y_087_075dd	0.875	0.625	0.125	0.875	0.75	0.5	71	0.875	0.637	0.125	71.1	8.2	60.3	60.8	82.1
614	R61Y_087_062dd	0.875	0.625	0.25	0.875	0.625	0.562	67	0.875	0.635	0.25	71.7	10.2	47.9	49.0	77.8
615	R50Y_087_050dd	0.875	0.625	0.375	0.875	0.5	0.625	60	0.875	0.625	0.375	71.3	14.4	34.3	37.2	67.1
616	R31Y_087_037dd	0.875	0.625	0.5	0.875	0.375	0.687	49	0.875	0.618	0.5	72.0	17.1	22.2	28.1	52.2
617	R00Y_087_025dd	0.875	0.625	0.625	0.875	0.25	0.75	390	0.875	0.625	0.625	74.1	17.7	11.2	20.9	32.3
618	R00Y_087_025dd	0.875	0.625	0.75	0.875	0.25	0.75	360	0.875	0.625	0.75	74.2	18.5	5.2	19.2	15.9
619	B50R_087_025dd	0.875	0.625	0.875	0.875	0.25	0.75	330	0.875	0.625	0.875	74.3	19.8	0.0	19.8	359.8
620	B34R_100_037dd	0.875	0.625	1.0	1.0	0.375	0.812	311	0.881	0.625	1.0	74.7	25.5	-4.4	25.9	350.0
621	R86Y_087_087dd	0.875	0.75	0.0	0.875	0.875	0.437	82	0.875	0.758	0.0	75.7	-2.4	78.6	78.6	91.7
622	R85Y_087_075dd	0.875	0.75	0.125	0.875	0.75	0.5	81	0.875	0.762	0.125	76.7	-1.1	66.7	66.7	91.0
623	R81Y_087_062dd	0.875	0.75	0.25	0.875	0.625	0.562	79	0.875	0.76	0.25	77.5	0.5	54.6	54.6	89.4
624	R76Y_087_050dd	0.875	0.75	0.375	0.875	0.5	0.625	76	0.875	0.758	0.375	78.2	2.1	42.3	42.4	87.0
625	R68Y_087_037dd	0.875	0.75	0.5	0.875	0.375	0.687	71	0.875	0.756	0.5	78.9	4.1	30.1	30.4	82.1
626	R50Y_087_025dd	0.875	0.75	0.625	0.875	0.25	0.75	60	0.875	0.75	0.625	79.0	7.2	17.1	18.6	67.1
627	R00Y_087_012dd	0.875	0.75	0.75	0.875	0.125	0.812	390	0.875	0.75	0.75	80.4	8.8	5.6	10.4	32.3
628	B50R_087_012dd	0.875	0.75	0.875	0.875	0.125	0.812	330	0.875	0.75	0.875	80.5	9.9	0.0	9.9	359.8
629	B25R_100_025dd	0.875	0.75	1.0	1.0	0.25	0.875	300	0.875	0.75	1.0	80.6	14.6	-5.1	15.5	340.5
630	Y00G_087_087dd	0.875	0.875	0.0	0.875	0.875	0.437	90	0.875	0.875	0.0	79.8	-8.9	83.5	84.0	96.1
631	Y00G_087_075dd	0.875	0.875	0.125	0.875	0.75	0.5	90	0.875	0.875	0.125	80.8	-7.6	71.6	72.0	96.1
632	Y00G_087_062dd	0.875	0.875	0.25	0.875	0.625	0.562	90	0.875	0.875	0.25	81.8	-6.3	59.6	60.0	96.1
633	Y00G_087_050dd	0.875	0.875	0.375	0.875	0.5	0.625	90	0.875	0.875	0.375	82.8	-5.1	47.7	48.0	96.1
634	Y00G_087_037dd	0.875	0.875	0.5	0.875	0.375	0.687	90	0.875	0.875	0.5	83.7	-3.8	35.8	36.0	96.1
635	Y00G_087_025dd	0.875	0.875	0.625	0.875	0.25	0.75	90	0.875	0.875	0.625	84.7	-2.5	23.8	24.0	96.1
636	Y00G_087_012dd	0.875	0.875	0.75	0.875	0.125	0.812	90	0.875	0.875	0.75	85.7	-1.2	11.9	12.0	96.1
637	NW_087dd	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0
638	B00R_100_012dd	0.875	1.0	1.0	1.0	0.125	0.937	270	0.875	0.875	1.0	86.8	3.6	-5.0	6.2	306.2
639	Y11G_100_100dd	0.875	1.0	0.0	1.0	1.0	0.5	97	0.883	1.0	0.0	84.5	-13.6	89.7	90.7	98.6
640	Y13G_100_087dd	0.875	1.0	0.125	1.0	0.875	0.562	98	0.883	1.0	0.125	85.5	-12.3	77.8	78.7	99.0
641	Y15G_100_075dd	0.875	1.0	0.25	1.0	0.75	0.625	99	0.887	1.0	0.25	86.6	-11.0	66.1	67.0	99.4
642	Y18G_100_062dd	0.875	1.0	0.375	1.0	0.625	0.687	101	0.885	1.0	0.375	87.5	-9.7	54.1	55.0	100.2
643	Y23G_100_050dd	0.875	1.0	0.5	1.0	0.5	0.75	104	0.883	1.0	0.5	88.4	-8.5	42.1	43.0	101.4
644	Y31G_100_037dd	0.875	1.0	0.625	1.0	0.375	0.812	109	0.881	1.0	0.625	88.9	-7.9	29.8	30.8	104.9
645	Y50G_100_025dd	0.875	1.0	0.75	1.0	0.25	0.875	120	0.875	1.0	0.75	89.3	-7.4	16.6	18.2	114.0
646	G00B_100_012dd	0.875	1.0	0.875	1.0	0.125	0.937	150	0.875	1.0	0.875	89.9	-8.1	3.7	8.9	155.5
647	G50B_100_012dd	0.875	1.0	1.0	1.0	0.125	0.937	210	0.875	1.0	1.0	90.7	-3.1	-5.1	6.0	238.4

n	cmyn*sep,Fdd				$h_{siM,dd}$	rgb*Mdd			LabCh*Mdd				
567	0.171	0.983	0.994	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
568	0.171	0.983	0.883	0.0	382	1.0	0.0	0.133	45.5	71.5	39.7	81.8	29.0
569	0.173	0.986	0.775	0.0	375	1.0	0.0	0.266	45.6	72.3	33.8	79.8	25.0
570	0.173	0.984	0.637	0.0	365	1.0	0.0	0.416	45.8	73.4	25.9	77.9	19.4
571	0.174	0.982	0.505	0.0	354	1.0	0.0	0.583	45.9	75.2	16.9	77.1	12.7
572	0.176	0.986	0.388	0.0	344	1.0	0.0	0.733	45.9	77.0	9.4	77.5	7.0
573	0.179	0.985	0.29	0.0	337	1.0	0.0	0.866	45.9	78.1	4.4	78.3	3.2
574	0.182	0.984	0.19	0.0	330	1.0	0.0	1.0	46.1	79.3	-0.2	79.3	359.8
575	0.115	1.0	0.0	0.0	323	0.883	0.0	1.0	44.3	75.4	-4.7	75.6	356.3
576	0.172	0.871	1.0	0.0	37	1.0	0.133	0.0	49.2	62.1	49.8	79.6	38.7
577	0.135	0.843	0.759	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
578	0.137	0.846	0.686	0.0	382	1.0	0.0	0.15	45.5	71.6	39.0	81.5	28.5
579	0.138	0.846	0.592	0.0	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
580	0.142	0.846	0.48	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
581	0.143	0.852	0.374	0.0	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
582	0.147	0.853	0.275	0.0	337	1.0	0.0	0.85	45.9	78.0	5.0	78.2	3.7
583	0.15	0.855	0.186	0.0	330	1.0	0.0	1.0	46.1	79.3	-0.2	79.3	359.8
584	0.081	0.869	0.013	0.0	322	0.866	0.0	1.0	44.0	74.9	-5.3	75.1	355.9
585	0.167	0.753	1.0	0.0	44	1.0	0.266	0.0	54.4	50.4	56.5	75.7	48.2
586	0.135	0.764	0.797	0.0	37	1.0	0.15	0.0	49.8	60.7	50.7	79.1	39.9
587	0.105	0.732	0.604	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
588	0.108	0.733	0.537	0.0	380	1.0	0.0	0.183	45.5	71.8	37.5	81.0	27.5
589	0.114	0.735	0.456	0.0	367	1.0	0.0	0.383	45.8	73.0	27.8	78.2	20.8
590	0.12	0.74	0.347	0.0	352	1.0	0.0	0.616	46.0	75.5	15.2	77.1	11.4
591	0.124	0.745	0.248	0.0	339	1.0	0.0	0.816	45.9	77.7	6.2	78.0	4.6
592	0.128	0.749	0.163	0.0	330	1.0	0.0	1.0	46.1	79.3	-0.2	79.3	359.8
593	0.052	0.762	0.004	0.0	322	0.85	0.0	1.0	43.7	74.3	-5.9	74.6	355.4
594	0.163	0.625	1.0	0.0	54	1.0	0.416	0.0	61.0	36.6	64.5	74.1	60.3
595	0.137	0.634	0.826	0.0	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
596	0.111	0.641	0.651	0.0	39	1.0	0.183	0.0	51.1	57.8	52.5	78.1	42.2
597	0.087	0.606	0.479	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
598	0.094	0.61	0.421	0.0	377	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1
599	0.104	0.615	0.327	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
600	0.109	0.622	0.227	0.0	342	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9
601	0.114	0.629	0.148	0.0	330	1.0	0.0	1.0	46.1	79.3	-0.2	79.3	359.8
602	0.039	0.648	0.007	0.0	320	0.816	0.0	1.0	43.1	73.2	-7.0	73.6	354.4
603	0.157	0.477	1.0	0.0	65	1.0	0.583	0.0	69.7	20.2	74.6	77.3	74.8
604	0.14	0.497	0.851	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
605	0.121	0.506	0.695	0.0	52	1.0	0.383	0.0	59.5	39.5	62.5	74.0	57.6
606	0.101	0.512	0.532	0.0	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
607	0.086	0.487	0.38	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
608	0.096	0.489	0.316	0.0	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
609	0.107	0.495	0.214	0.0	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
610	0.114	0.501	0.135	0.0	330	1.0	0.0	1.0	46.1	79.3	-0.2	79.3	359.8
611	0.041	0.524	0.009	0.0	317	0.766	0.0	1.0	42.1	71.6	-8.7	72.1	353.0
612	0.153	0.342	0.998	0.0	75	1.0	0.733	0.0	77.1	6.9	83.0	83.3	85.2
613	0.134	0.357	0.864	0.0	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
614	0.123	0.37	0.731	0.0	67	1.0	0.616	0.0	71.6	16.4	76.6	78.4	77.8
615	0.115	0.392	0.578	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
616	0.104	0.402	0.431	0.0	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
617	0.098	0.386	0.279	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
618	0.114	0.389	0.198	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
619	0.125	0.395	0.117	0.0	330	1.0	0.0	1.0	46.1	79.3	-0.2	79.3	359.8
620	0.064	0.418	0.009	0.0	311	0.683	0.0	1.0	39.8	68.1	-11.9	69.1	350.0
621	0.149	0.207	0.998	0.0	82	1.0	0.866	0.0	83.1	-2.8	89.8	89.8	91.7
622	0.131	0.219	0.874	0.0	81	1.0	0.85	0.0	82.3	-1.5	89.0	89.0	91.0
623	0.119	0.226	0.748	0.0	80	1.0	0.816	0.0	80.8	0.8	87.3	87.3	89.4
624	0.115	0.233	0.614	0.0	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
625	0.115	0.236	0.484	0.0	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
626	0.12	0.252	0.342	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
627	0.127	0.248	0.185	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
628	0.14	0.25	0.105	0.0	330	1.0	0.0	1.0	46.1	79.3	-0.2	79.3	359.8
629	0.1	0.278	0.004	0.0	300	0.5	0.0	1.0	35.6	58.6	-20.7	62.1	340.5
630	0.148	0.107	0.999	0.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
631	0.129	0.115	0.88	0.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
632	0.117	0.119	0.759	0.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
633	0.109	0.123	0.633	0.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
634	0.113	0.126	0.516	0.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
635	0.12	0.122	0.392	0.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
636	0.135	0.113	0.254	0.0	89	1.0	1.0	0.0	87.8	-10.2	95.4	96.0	96.1
637	0.162	0.101	0.093	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
638	0.14	0.131	0.01	0.0	270	0.0	0.0	1.0	25.0	29.5	-40.4	50.0	306.2
639	0.116	0.0	1.0	0.0	96	0.883	1.0	0.0	84.5	-13.6	89.7	90.7	98.6
640	0.096	0.009	0.881	0.0	97	0.866	1.0	0.0	84.1	-14.1	88.9	90.0	99.0
641	0.081	0.015	0.762	0.0	97	0.85	1.0	0.0	83.6	-14.6	88.1	89.3	99.4
642	0.073	0.019	0.643	0.0	99	0.816	1.0	0.0	82.6	-15.6	86.6	88.0	100.2
643	0.072	0.023	0.529	0.0	102	0.766	1.0	0.0	81.2	-17.0	84.3	86.0	101.4
644	0.097	0.018	0.417	0.0	108	0.683	1.0	0.0	77.8	-21.1	79.4	82.2	104.9
645	0.138	0.009	0.29	0.0	119	0.5	1.0	0.0	70.6	-29.7	66.5	72.8	114.0
646	0.197	0.0	0.141	0.0	149	0.0	1.0	0.0	50.0	-65.0	29.6	71.4	155.5
647	0.167	0.007	0.001	0.0	210	0.0	1.0	1.0	56.8	-25.5	-41.5	48.7	238.4

delta

5−1031531−F0 PN170−7N, 16/22−F

TUB-test chart PN17; colour rendering
colors and differences, $\Delta E'^*$, 3D=1, de=0, *cmy0**

input: *rgb/cmyk* −> rgb_{dd}
output: 3D-linearization to $cmy0^*_{dd}$

5−1031531−F0

n	HIC*$_{Fdd}$	*rgb*$_{\_Fdd}$			*ict*$_{\_Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$				*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$			
648	R00Y_100_100$_{dd}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	0.0	1.0	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
649	R38Y_100_100$_{dd}$	1.0	0.0	0.125	1.0	1.0	0.5	383	1.0	0.0	0.116	45.5	71.4	40.4	82.1	29.5	0.0	0.999	0.884	0.0	383	1.0	0.0	0.116	45.5	71.4	40.4	82.1	29.5
650	R26Y_100_100$_{dd}$	1.0	0.0	0.25	1.0	1.0	0.5	376	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1	0.0	1.0	0.765	0.0	377	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1
651	R13Y_100_100$_{dd}$	1.0	0.0	0.375	1.0	1.0	0.5	368	1.0	0.0	0.366	45.8	72.9	28.7	78.4	21.5	0.0	1.0	0.631	0.0	368	1.0	0.0	0.366	45.8	72.9	28.7	78.4	21.5
652	R00Y_100_100$_{dd}$	1.0	0.0	0.5	1.0	1.0	0.5	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9	0.0	1.0	0.5	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
653	B68R_100_100$_{dd}$	1.0	0.0	0.625	1.0	1.0	0.5	352	1.0	0.0	0.633	46.0	75.7	14.4	77.1	10.8	0.0	1.0	0.368	0.0	351	1.0	0.0	0.633	46.0	75.7	14.4	77.1	10.8
654	B61R_100_100$_{dd}$	1.0	0.0	0.75	1.0	1.0	0.5	344	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9	0.0	1.0	0.234	0.0	342	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9
655	B55R_100_100$_{dd}$	1.0	0.0	0.875	1.0	1.0	0.5	337	1.0	0.0	0.883	45.9	78.3	3.8	78.4	2.8	0.0	1.0	0.117	0.0	336	1.0	0.0	0.883	45.9	78.3	3.8	78.4	2.8
656	B50R_100_100$_{dd}$	1.0	0.0	1.0	1.0	1.0	0.5	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	0.0	1.0	0.0	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
657	R11Y_100_100$_{dd}$	1.0	0.125	0.0	1.0	1.0	0.5	37	1.0	0.116	0.0	48.6	63.3	49.1	80.2	37.7	0.0	0.882	1.0	0.0	36	1.0	0.116	0.0	48.6	63.3	49.1	80.2	37.7
658	R00Y_100_087$_{dd}$	1.0	0.125	0.125	1.0	0.875	0.562	390	1.0	0.125	0.125	51.7	62.0	39.2	73.4	32.3	0.0	0.841	0.749	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
659	R36Y_100_087$_{dd}$	1.0	0.125	0.25	1.0	0.875	0.562	382	1.0	0.125	0.241	51.8	62.5	34.7	71.6	29.0	0.0	0.845	0.665	0.0	382	1.0	0.0	0.133	45.5	71.5	39.7	81.8	29.0
660	R23Y_100_087$_{dd}$	1.0	0.125	0.375	1.0	0.875	0.562	374	1.0	0.125	0.358	51.9	63.2	29.5	69.8	25.0	0.0	0.875	0.625	0.0	375	1.0	0.0	0.266	45.6	72.3	33.8	79.8	25.0
661	R08Y_100_087$_{dd}$	1.0	0.125	0.5	1.0	0.875	0.562	365	1.0	0.125	0.489	52.0	64.2	22.7	68.1	19.4	0.0	0.875	0.5	0.0	365	1.0	0.0	0.416	45.8	73.4	25.9	77.9	19.4
662	B70R_100_087$_{dd}$	1.0	0.125	0.625	1.0	0.875	0.562	355	1.0	0.125	0.635	52.1	65.8	14.8	67.4	12.7	0.0	0.875	0.375	0.0	354	1.0	0.0	0.583	45.9	75.2	16.9	77.1	12.7
663	B63R_100_087$_{dd}$	1.0	0.125	0.75	1.0	0.875	0.562	346	1.0	0.125	0.766	52.1	67.3	8.3	67.8	7.0	0.0	0.875	0.25	0.0	344	1.0	0.0	0.733	45.9	77.0	9.4	77.5	7.0
664	B56R_100_087$_{dd}$	1.0	0.125	0.875	1.0	0.875	0.562	338	1.0	0.125	0.883	52.1	68.4	3.8	68.5	3.2	0.0	0.874	0.135	0.0	337	1.0	0.0	0.866	45.9	78.1	4.4	78.3	3.2
665	B50R_100_087$_{dd}$	1.0	0.125	1.0	1.0	0.875	0.562	330	1.0	0.125	1.0	52.3	69.4	−0.1	69.4	359.8	0.0	0.874	0.029	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
666	R23Y_100_100$_{dd}$	1.0	0.25	0.0	1.0	1.0	0.5	44	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7	0.0	0.765	1.0	0.0	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
667	R13Y_100_087$_{dd}$	1.0	0.25	0.125	1.0	0.875	0.562	38	1.0	0.241	0.125	55.0	54.3	43.6	69.7	38.7	0.0	0.764	0.779	0.0	37	1.0	0.133	0.0	49.2	62.1	49.8	79.6	38.7
668	R00Y_100_075$_{dd}$	1.0	0.25	0.25	1.0	0.75	0.625	390	1.0	0.25	0.25	58.0	53.2	33.6	62.9	32.3	0.0	0.75	0.625	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
669	R35Y_100_075$_{dd}$	1.0	0.25	0.375	1.0	0.75	0.625	381	1.0	0.25	0.362	58.0	53.7	29.2	61.1	28.5	0.0	0.749	0.519	0.0	382	1.0	0.0	0.15	45.5	71.6	39.0	81.5	28.5
670	R18Y_100_075$_{dd}$	1.0	0.25	0.5	1.0	0.75	0.625	371	1.0	0.25	0.487	58.2	54.5	23.4	59.3	23.2	0.0	0.75	0.5	0.0	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
671	R00Y_100_075$_{dd}$	1.0	0.25	0.625	1.0	0.75	0.625	360	1.0	0.25	0.625	58.3	55.6	15.8	57.8	15.9	0.0	0.75	0.375	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
672	B65R_100_075$_{dd}$	1.0	0.25	0.75	1.0	0.75	0.625	349	1.0	0.25	0.762	58.3	57.3	8.9	58.0	8.9	0.0	0.75	0.25	0.0	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
673	B57R_100_075$_{dd}$	1.0	0.25	0.875	1.0	0.75	0.625	339	1.0	0.25	0.887	58.3	58.5	3.7	58.6	3.7	0.0	0.75	0.129	0.0	337	1.0	0.0	0.85	45.9	78.0	5.0	78.2	3.7
674	B50R_100_075$_{dd}$	1.0	0.25	1.0	1.0	0.75	0.625	330	1.0	0.25	1.0	58.4	59.4	−0.1	59.4	359.8	0.0	0.755	0.024	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
675	R36Y_100_100$_{dd}$	1.0	0.375	0.0	1.0	1.0	0.5	52	1.0	0.366	0.0	58.8	41.1	61.7	74.1	56.3	0.0	0.632	1.0	0.0	51	1.0	0.366	0.0	58.8	41.1	61.7	74.1	56.3
676	R26Y_100_087$_{dd}$	1.0	0.375	0.125	1.0	0.875	0.562	46	1.0	0.358	0.125	59.5	44.1	49.4	66.2	48.2	0.0	0.633	0.811	0.0	44	1.0	0.266	0.0	54.4	50.4	56.5	75.7	48.2
677	R15Y_100_075$_{dd}$	1.0	0.375	0.25	1.0	0.75	0.625	39	1.0	0.362	0.25	61.3	45.5	38.0	59.3	39.9	0.0	0.642	0.623	0.0	37	1.0	0.15	0.0	49.8	60.7	50.7	79.1	39.9
678	R00Y_100_062$_{dd}$	1.0	0.375	0.375	1.0	0.625	0.687	390	1.0	0.375	0.375	64.2	44.3	28.0	52.4	32.3	0.0	0.625	0.5	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
679	R31Y_100_062$_{dd}$	1.0	0.375	0.5	1.0	0.625	0.687	379	1.0	0.375	0.489	64.3	44.9	23.4	50.6	27.5	0.0	0.623	0.396	0.0	380	1.0	0.0	0.183	45.5	71.8	37.5	81.0	27.5
680	R11Y_100_062$_{dd}$	1.0	0.375	0.625	1.0	0.625	0.687	367	1.0	0.375	0.614	64.5	45.6	17.4	48.8	20.8	0.0	0.625	0.375	0.0	367	1.0	0.0	0.383	45.8	73.0	27.8	78.2	20.8
681	B69R_100_062$_{dd}$	1.0	0.375	0.75	1.0	0.625	0.687	353	1.0	0.375	0.76	64.6	47.2	9.5	48.1	11.4	0.0	0.625	0.25	0.0	352	1.0	0.0	0.616	46.0	75.5	15.2	77.1	11.4
682	B59R_100_062$_{dd}$	1.0	0.375	0.875	1.0	0.625	0.687	341	1.0	0.375	0.885	64.5	48.6	3.9	48.7	4.6	0.0	0.631	0.128	0.0	339	1.0	0.0	0.816	45.9	77.7	6.2	78.0	4.6
683	B50R_100_062$_{dd}$	1.0	0.375	1.0	1.0	0.625	0.687	330	1.0	0.375	1.0	64.6	49.5	−0.1	49.5	359.8	0.0	0.639	0.029	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
684	R50Y_100_100$_{dd}$	1.0	0.5	0.0	1.0	1.0	0.5	60	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1	0.0	0.498	0.999	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
685	R41Y_100_087$_{dd}$	1.0	0.5	0.125	1.0	0.875	0.562	55	1.0	0.489	0.125	65.4	32.0	56.4	64.9	60.3	0.0	0.5	0.833	0.0	54	1.0	0.416	0.0	61.0	36.6	64.5	74.1	60.3
686	R31Y_100_075$_{dd}$	1.0	0.5	0.25	1.0	0.75	0.625	49	1.0	0.487	0.25	66.3	34.3	44.4	56.2	52.2	0.0	0.513	0.668	0.0	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
687	R18Y_100_062$_{dd}$	1.0	0.5	0.375	1.0	0.625	0.687	41	1.0	0.489	0.375	67.8	36.1	32.8	48.8	42.2	0.0	0.525	0.511	0.0	39	1.0	0.183	0.0	51.1	57.8	52.5	78.1	42.2
688	R00Y_100_050$_{dd}$	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.5	70.5	35.4	22.4	41.9	32.3	0.0	0.5	0.375	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
689	R26Y_100_050$_{dd}$	1.0	0.5	0.625	1.0	0.5	0.75	376	1.0	0.5	0.616	70.6	36.0	17.6	40.1	26.1	0.0	0.5	0.375	0.0	377	1.0	0.0	0.233	45.6	72.1	35.3	80.3	26.1
690	R00Y_100_050$_{dd}$	1.0	0.5	0.75	1.0	0.5	0.75	360	1.0	0.5	0.75	70.7	37.1	10.5	38.5	15.9	0.0	0.5	0.25	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
691	B61R_100_050$_{dd}$	1.0	0.5	0.875	1.0	0.5	0.75	344	1.0	0.5	0.883	70.7	38.6	4.0	38.8	5.9	0.0	0.514	0.125	0.0	342	1.0	0.0	0.766	45.9	77.3	8.0	77.7	5.9
692	B50R_100_050$_{dd}$	1.0	0.5	1.0	1.0	0.5	0.75	330	1.0	0.5	1.0	70.8	39.6	−0.1	39.6	359.8	0.0	0.517	0.027	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
693	R63Y_100_100$_{dd}$	1.0	0.625	0.0	1.0	1.0	0.5	68	1.0	0.633	0.0	72.5	14.8	77.6	79.0	79.1	0.0	0.368	1.0	0.0	68	1.0	0.633	0.0	72.5	14.8	77.6	79.0	79.1
694	R58Y_100_087$_{dd}$	1.0	0.625	0.125	1.0	0.875	0.562	65	1.0	0.635	0.125	72.9	17.7	65.2	67.6	74.8	0.0	0.387	0.874	0.0	65	1.0	0.583	0.0	69.7	20.2	74.6	77.3	74.8
695	R50Y_100_075$_{dd}$	1.0	0.625	0.25	1.0	0.75	0.625	60	1.0	0.625	0.25	72.5	21.6	51.5	55.9	67.1	0.0	0.402	0.704	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
696	R38Y_100_062$_{dd}$	1.0	0.625	0.375	1.0	0.625	0.687	53	1.0	0.614	0.375	73.0	24.7	39.1	46.2	57.6	0.0	0.415	0.559	0.0	52	1.0	0.383	0.0	59.5	39.5	62.5	74.0	57.6
697	R23Y_100_050$_{dd}$	1.0	0.625	0.5	1.0	0.5	0.75	44	1.0	0.616	0.5	74.3	26.7	27.4	38.2	45.7	0.0	0.422	0.42	0.0	42	1.0	0.233	0.0	53.0	53.4	54.8	76.5	45.7
698	R00Y_100_037$_{dd}$	1.0	0.625	0.625	1.0	0.375	0.812	390	1.0	0.625	0.625	76.8	26.6	16.8	31.4	32.3	0.0	0.4	0.267	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
699	R18Y_100_037$_{dd}$	1.0	0.625	0.75	1.0	0.375	0.812	371	1.0	0.625	0.743	76.9	27.2	11.7	29.6	23.2	0.0	0.401	0.25	0.0	371	1.0	0.0	0.316	45.7	72.6	31.2	79.1	23.2
700	B65R_100_037$_{dd}$	1.0	0.625	0.875	1.0	0.375	0.812	349	1.0	0.625	0.881	77.0	28.6	4.4	29.0	8.9	0.0	0.413	0.125	0.0	348	1.0	0.0	0.683	45.9	76.4	11.9	77.3	8.9
701	B50R_100_037$_{dd}$	1.0	0.625	1.0	1.0	0.375	0.812	330	1.0	0.625	1.0	77.0	29.7	0.0	29.7	359.8	0.0	0.414	0.021	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
702	R76Y_100_100$_{dd}$	1.0	0.75	0.0	1.0	1.0	0.5	76	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0	0.0	0.234	1.0	0.0	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
703	R73Y_100_087$_{dd}$	1.0	0.75	0.125	1.0	0.875	0.562	74	1.0	0.766	0.125	79.4	6.0	72.6	72.9	85.2	0.0	0.248	0.874	0.0	75	1.0	0.733	0.0	77.1	6.9	83.0	83.3	85.2
704	R68Y_100_075$_{dd}$	1.0	0.75	0.25	1.0	0.75	0.625	71	1.0	0.762	0.25	80.0	8.2	60.3	60.8	82.1	0.0	0.258	0.749	0.0	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
705	R61Y_100_062$_{dd}$	1.0	0.75	0.375	1.0	0.625	0.687	67	1.0	0.76	0.375	80.6	10.2	47.9	49.0	77.8	0.0	0.262	0.623	0.0	67	1.0	0.616	0.0	71.6	16.4	76.6	78.4	77.8
706	R50Y_100_050$_{dd}$	1.0	0.75	0.5	1.0	0.5	0.75	60	1.0	0.75	0.5	80.2	14.4	34.3	37.2	67.1	0.0	0.286	0.498	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
707	R31Y_100_037$_{dd}$	1.0	0.75	0.625	1.0	0.375	0.812	49	1.0	0.743	0.625	80.9	17.1	22.2	28.1	52.2	0.0	0.302	0.376	0.0	48	1.0	0.316	0.0	56.6	45.8	59.2	74.9	52.2
708	R00Y_100_025$_{dd}$	1.0	0.75	0.75	1.0	0.25	0.875	390	1.0	0.75	0.75	83.0	17.7	11.2	20.9	32.3	0.0	0.281	0.181	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
709	R00Y_100_025$_{dd}$	1.0	0.75	0.875	1.0	0.25	0.875	360	1.0	0.75	0.875	83.1	18.5	5.2	19.2	15.9	0.0	0.285	0.125	0.0	360	1.0	0.0	0.5	45.9	74.2	21.1	77.1	15.9
710	B50R_100_025$_{dd}$	1.0	0.75	1.0	1.0	0.25	0.875	330	1.0	0.75	1.0	83.2	19.8	0.0	19.8	359.8	0.0	0.291	0.017	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
711	R88Y_100_100$_{dd}$	1.0	0.875	0.0	1.0	1.0	0.5	83	1.0	0.883	0.0	83.7	−3.8	90.5	90.6	92.4	0.0	0.117	1.0	0.0	83	1.0	0.883	0.0	83.7	−3.8	90.5	90.6	92.4
712	R86Y_100_087$_{dd}$	1.0	0.875	0.125	1.0	0.875	0.562	82	1.0	0.883	0.125	84.6	−2.4	78.6	78.6	91.7	0.0	0.125	0.874	0.0	82	1.0	0.866	0.0	83.1	−2.8	89.8	89.8	91.7
713	R85Y_100_075$_{dd}$	1.0	0.875	0.25	1.0	0.75	0.625	81	1.0	0.887	0.25	85.6	−1.1	66.7	66.7	91.0	0.0	0.125	0.751	0.0	81	1.0	0.85	0.0	82.3	−1.5	89.0	89.0	91.0
714	R81Y_100_062$_{dd}$	1.0	0.875	0.375	1.0	0.625	0.687	79	1.0	0.885	0.375	86.4	0.5	54.6	54.6	89.4	0.0	0.143	0.624	0.0	80	1.0	0.816	0.0	80.8	0.8	87.3	87.3	89.4
715	R76Y_100_050$_{dd}$	1.0	0.875	0.5	1.0	0.5	0.75	76	1.0	0.883	0.5	87.1	2.1	42.3	42.4	87.0	0.0	0.147	0.509	0.0	77	1.0	0.766	0.0	78.6	4.3	84.7	84.8	87.0
716	R68Y_100_037$_{dd}$	1.0	0.875	0.625	1.0	0.375	0.812	71	1.0	0.881	0.625	87.8	4.1	30.1	30.4	82.1	0.0	0.152	0.39	0.0	71	1.0	0.683	0.0	74.8	11.0	80.4	81.1	82.1
717	R50Y_100_025$_{dd}$	1.0	0.875	0.75	1.0	0.25	0.875	60	1.0	0.875	0.75	87.9	7.2	17.1	18.6	67.1	0.0	0.166	0.25	0.0	59	1.0	0.5	0.0	64.9	28.9	68.6	74.5	67.1
718	R00Y_100_012$_{dd}$	1.0	0.875	0.875	1.0	0.125	0.937	390	1.0	0.875	0.875	89.3	8.8	5.6	10.4	32.3	0.0	0.158	0.088	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
719	B50R_100_012$_{dd}$	1.0	0.875	1.0	1.0	0.125	0.937	330	1.0	0.875	1.0	89.4	9.9	0.0	9.9	359.8	0.0	0.159	0.012	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
720	Y00G_100_100$_{dd}$	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	0.0	0.0	1.0	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
721	Y00G_100_087$_{dd}$	1.0	1.0	0.125	1.0	0.875	0.562	90	1.0	1.0	0.125	88.8	−8.9	83.5	84.0	96.1	0.0	0.0	0.875	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
722	Y00G_100_075$_{dd}$	1.0	1.0	0.25	1.0	0.75	0.625	90	1.0	1.0	0.25	89.7	−7.6	71.6	72.0	96.1	0.0	0.02	0.753	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
723	Y00G_100_062$_{dd}$	1.0	1.0	0.375	1.0	0.625	0.687	90	1.0	1.0	0.375	90.7	−6.3	59.6	60.0	96.1	0.0	0.024	0.639	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
724	Y00G_100_050$_{dd}$	1.0	1.0	0.5	1.0	0.5	0.75	90	1.0	1.0	0.5	91.7	−5.1	47.7	48.0	96.1	0.0	0.027	0.529	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
725	Y00G_100_037$_{dd}$	1.0	1.0	0.625	1.0	0.375	0.812	90	1.0	1.0	0.625	92.6	−3.8	35.8	36.0	96.1	0.0	0.027	0.415	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
726	Y00G_100_025$_{dd}$	1.0	1.0	0.75	1.0	0.25	0.875	90	1.0	1.0	0.75	93.6	−2.5	23.8	24.0	96.1	0.0	0.023	0.289	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
727	Y00G_100_012$_{dd}$	1.0	1.0	0.875	1.0	0.125	0.937	90	1.0	1.0	0.875	94.6	−1.2	11.9	12.0	96.1	0.0	0.016	0.153	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
728	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

delta

5−1031631−F0

TUB-test chart PN17; colour rendering
colors and differences, Δ*E'**, 3D=1, de=0, *cmy0**

input: *rgb/cmyk* −> *rgb*$_{dd}$
output: 3D-linearization to *cmy0**$_{dd}$

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$				*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
729	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
730	G50B_100_012$_{dd}$	0.875	1.0	1.0	1.0	0.125	0.937	210	0.875	1.0	1.0	90.7	−3.1	−5.1	6.0	238.4	0.167	0.007	0.001	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
731	G50B_100_025$_{dd}$	0.75	1.0	1.0	1.0	0.25	0.875	210	0.75	1.0	1.0	85.9	−6.3	−10.3	12.1	238.4	0.303	0.007	0.0	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
732	G50B_100_037$_{dd}$	0.625	1.0	1.0	1.0	0.375	0.812	210	0.625	1.0	1.0	81.0	−9.5	−15.5	18.2	238.4	0.425	0.007	0.0	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
733	G50B_100_050$_{dd}$	0.5	1.0	1.0	1.0	0.5	0.75	210	0.5	1.0	1.0	76.2	−12.7	−20.7	24.3	238.4	0.556	0.007	0.001	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
734	G50B_100_062$_{dd}$	0.375	1.0	1.0	1.0	0.625	0.687	210	0.375	1.0	1.0	71.3	−15.9	−25.9	30.4	238.4	0.664	0.002	0.0	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
735	G50B_100_075$_{dd}$	0.25	1.0	1.0	1.0	0.75	0.625	210	0.25	1.0	1.0	66.5	−19.1	−31.1	36.5	238.4	0.75	0.0	0.0	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
736	G50B_100_087$_{dd}$	0.125	1.0	1.0	1.0	0.875	0.562	210	0.125	1.0	1.0	61.6	−22.3	−36.3	42.6	238.4	0.886	0.0	0.0	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
737	G50B_100_100$_{dd}$	0.0	1.0	1.0	1.0	1.0	0.5	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4	1.0	0.0	0.0	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
738	R00Y_100_012$_{dd}$	1.0	0.875	0.875	1.0	0.125	0.937	390	1.0	0.875	0.875	89.3	8.8	5.6	10.4	32.3	0.0	0.158	0.088	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
739	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0	0.162	0.101	0.093	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
740	G50B_087_012$_{dd}$	0.75	0.875	0.875	0.875	0.125	0.812	210	0.75	0.875	0.875	81.8	−3.1	−5.1	6.0	238.4	0.299	0.104	0.088	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
741	G50B_087_025$_{dd}$	0.625	0.875	0.875	0.875	0.25	0.75	210	0.625	0.875	0.875	77.0	−6.3	−10.3	12.1	238.4	0.418	0.111	0.086	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
742	G50B_087_037$_{dd}$	0.5	0.875	0.875	0.875	0.375	0.687	210	0.5	0.875	0.875	72.1	−9.5	−15.5	18.2	238.4	0.545	0.123	0.088	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
743	G50B_087_050$_{dd}$	0.375	0.875	0.875	0.875	0.5	0.625	210	0.375	0.875	0.875	67.3	−12.7	−20.7	24.3	238.4	0.656	0.127	0.085	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
744	G50B_087_062$_{dd}$	0.25	0.875	0.875	0.875	0.625	0.562	210	0.25	0.875	0.875	62.4	−15.9	−25.9	30.4	238.4	0.741	0.131	0.083	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
745	G50B_087_075$_{dd}$	0.125	0.875	0.875	0.875	0.75	0.5	210	0.125	0.875	0.875	57.6	−19.1	−31.1	36.5	238.4	0.879	0.148	0.085	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
746	G50B_087_087$_{dd}$	0.0	0.875	0.875	0.875	0.875	0.437	210	0.0	0.875	0.875	52.7	−22.3	−36.3	42.6	238.4	0.99	0.164	0.081	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
747	R00Y_100_025$_{dd}$	1.0	0.75	0.75	1.0	0.25	0.875	390	1.0	0.75	0.75	83.0	17.7	11.2	20.9	32.3	0.0	0.281	0.181	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
748	R00Y_087_012$_{dd}$	0.875	0.75	0.75	0.875	0.125	0.812	390	0.875	0.75	0.75	80.4	8.8	5.6	10.4	32.3	0.127	0.248	0.185	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
749	NW_075$_{dd}$	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0	0.299	0.181	0.177	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
750	G50B_075_012$_{dd}$	0.625	0.75	0.75	0.75	0.125	0.687	210	0.625	0.75	0.75	72.9	−3.1	−5.1	6.0	238.4	0.417	0.188	0.172	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
751	G50B_075_025$_{dd}$	0.5	0.75	0.75	0.75	0.25	0.625	210	0.5	0.75	0.75	68.1	−6.3	−10.3	12.1	238.4	0.54	0.207	0.177	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
752	G50B_075_037$_{dd}$	0.375	0.75	0.75	0.75	0.375	0.562	210	0.375	0.75	0.75	63.2	−9.5	−15.5	18.2	238.4	0.651	0.22	0.173	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
753	G50B_075_050$_{dd}$	0.25	0.75	0.75	0.75	0.5	0.5	210	0.25	0.75	0.75	58.4	−12.7	−20.7	24.3	238.4	0.735	0.228	0.168	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
754	G50B_075_062$_{dd}$	0.125	0.75	0.75	0.75	0.625	0.437	210	0.125	0.75	0.75	53.5	−15.9	−25.9	30.4	238.4	0.87	0.266	0.173	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
755	G50B_075_075$_{dd}$	0.0	0.75	0.75	0.75	0.75	0.375	210	0.0	0.75	0.75	48.7	−19.1	−31.1	36.5	238.4	0.978	0.296	0.167	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
756	R00Y_100_037$_{dd}$	1.0	0.625	0.625	1.0	0.375	0.812	390	1.0	0.625	0.625	76.8	26.6	16.8	31.4	32.3	0.0	0.4	0.267	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
757	R00Y_087_025$_{dd}$	0.875	0.625	0.625	0.875	0.25	0.75	390	0.875	0.625	0.625	74.1	17.7	11.2	20.9	32.3	0.098	0.386	0.279	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
758	R00Y_075_012$_{dd}$	0.75	0.625	0.625	0.75	0.125	0.687	390	0.75	0.625	0.625	71.5	8.8	5.6	10.4	32.3	0.277	0.336	0.273	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
759	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0	0.417	0.26	0.26	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
760	G50B_062_012$_{dd}$	0.5	0.625	0.625	0.625	0.125	0.562	210	0.5	0.625	0.625	64.0	−3.1	−5.1	6.0	238.4	0.539	0.291	0.266	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
761	G50B_062_025$_{dd}$	0.375	0.625	0.625	0.625	0.25	0.5	210	0.375	0.625	0.625	59.2	−6.3	−10.3	12.1	238.4	0.648	0.315	0.265	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
762	G50B_062_037$_{dd}$	0.25	0.625	0.625	0.625	0.375	0.437	210	0.25	0.625	0.625	54.3	−9.5	−15.5	18.2	238.4	0.731	0.336	0.258	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
763	G50B_062_050$_{dd}$	0.125	0.625	0.625	0.625	0.5	0.375	210	0.125	0.625	0.625	49.4	−12.7	−20.7	24.3	238.4	0.861	0.388	0.263	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
764	G50B_062_062$_{dd}$	0.0	0.625	0.625	0.625	0.625	0.312	210	0.0	0.625	0.625	44.6	−15.9	−25.9	30.4	238.4	0.972	0.422	0.26	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
765	R00Y_100_050$_{dd}$	1.0	0.5	0.5	1.0	0.5	0.75	390	1.0	0.5	0.5	70.5	35.4	22.4	41.9	32.3	0.0	0.5	0.375	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
766	R00Y_087_037$_{dd}$	0.875	0.5	0.5	0.875	0.375	0.687	390	0.875	0.5	0.5	67.9	26.6	16.8	31.4	32.3	0.086	0.487	0.38	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
767	R00Y_075_025$_{dd}$	0.75	0.5	0.5	0.75	0.25	0.625	390	0.75	0.5	0.5	65.2	17.7	11.2	20.9	32.3	0.264	0.458	0.377	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
768	R00Y_062_012$_{dd}$	0.625	0.5	0.5	0.625	0.125	0.562	390	0.625	0.5	0.5	62.6	8.8	5.6	10.4	32.3	0.399	0.407	0.351	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
769	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0	0.54	0.382	0.356	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
770	G50B_050_012$_{dd}$	0.375	0.5	0.5	0.5	0.125	0.437	210	0.375	0.5	0.5	55.1	−3.1	−5.1	6.0	238.4	0.648	0.401	0.354	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
771	G50B_050_025$_{dd}$	0.25	0.5	0.5	0.5	0.25	0.375	210	0.249	0.5	0.5	50.2	−6.3	−10.3	12.1	238.4	0.731	0.422	0.349	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
772	G50B_050_037$_{dd}$	0.125	0.5	0.5	0.5	0.375	0.312	210	0.124	0.5	0.5	45.4	−9.5	−15.5	18.2	238.4	0.858	0.475	0.36	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
773	G50B_050_050$_{dd}$	0.0	0.5	0.5	0.5	0.5	0.25	210	0.0	0.5	0.5	40.5	−12.7	−20.7	24.3	238.4	0.967	0.525	0.358	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
774	R00Y_100_062$_{dd}$	1.0	0.375	0.375	1.0	0.625	0.687	390	1.0	0.375	0.375	64.2	44.3	28.0	52.4	32.3	0.0	0.625	0.5	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
775	R00Y_087_050$_{dd}$	0.875	0.375	0.375	0.875	0.5	0.625	390	0.875	0.375	0.375	61.6	35.4	22.4	41.9	32.3	0.087	0.606	0.479	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
776	R00Y_075_037$_{dd}$	0.75	0.375	0.375	0.75	0.375	0.562	390	0.75	0.375	0.375	59.0	26.6	16.8	31.4	32.3	0.259	0.576	0.476	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
777	R00Y_062_025$_{dd}$	0.625	0.375	0.375	0.625	0.25	0.5	390	0.625	0.375	0.375	56.3	17.7	11.2	20.9	32.3	0.393	0.522	0.456	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
778	R00Y_050_012$_{dd}$	0.5	0.375	0.375	0.5	0.125	0.437	390	0.5	0.375	0.375	53.7	8.8	5.6	10.4	32.3	0.531	0.51	0.467	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
779	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0	0.653	0.473	0.452	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
780	G50B_037_012$_{dd}$	0.25	0.375	0.375	0.375	0.125	0.312	210	0.249	0.375	0.375	46.2	−3.1	−5.1	6.0	238.4	0.735	0.5	0.448	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
781	G50B_037_025$_{dd}$	0.125	0.375	0.375	0.375	0.25	0.25	210	0.124	0.375	0.375	41.3	−6.3	−10.3	12.1	238.4	0.862	0.572	0.465	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
782	G50B_037_037$_{dd}$	0.0	0.375	0.375	0.375	0.375	0.187	210	0.0	0.375	0.375	36.5	−9.5	−15.5	18.2	238.4	0.967	0.637	0.461	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
783	R00Y_100_075$_{dd}$	1.0	0.25	0.25	1.0	0.75	0.625	390	1.0	0.25	0.25	58.0	53.2	33.6	62.9	32.3	0.0	0.75	0.625	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
784	R00Y_087_062$_{dd}$	0.875	0.25	0.25	0.875	0.625	0.562	390	0.875	0.25	0.25	55.3	44.3	28.0	52.4	32.3	0.105	0.732	0.604	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
785	R00Y_075_050$_{dd}$	0.75	0.25	0.25	0.75	0.5	0.5	390	0.75	0.25	0.25	52.7	35.4	22.4	41.9	32.3	0.266	0.699	0.592	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
786	R00Y_062_037$_{dd}$	0.625	0.25	0.25	0.625	0.375	0.437	390	0.625	0.25	0.25	50.1	26.6	16.8	31.4	32.3	0.396	0.655	0.575	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
787	R00Y_050_025$_{dd}$	0.5	0.25	0.25	0.5	0.25	0.375	390	0.5	0.249	0.249	47.4	17.7	11.2	20.9	32.3	0.529	0.651	0.586	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
788	R00Y_037_012$_{dd}$	0.375	0.25	0.25	0.375	0.125	0.312	390	0.375	0.249	0.249	44.8	8.8	5.6	10.4	32.3	0.649	0.62	0.565	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
789	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0	0.743	0.587	0.55	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
790	G50B_025_012$_{dd}$	0.125	0.25	0.25	0.25	0.125	0.187	210	0.124	0.25	0.25	37.3	−3.1	−5.1	6.0	238.4	0.873	0.675	0.588	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
791	G50B_025_025$_{dd}$	0.0	0.25	0.25	0.25	0.25	0.125	210	0.0	0.25	0.25	32.4	−6.3	−10.3	12.1	238.4	0.971	0.748	0.574	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
792	R00Y_100_087$_{dd}$	1.0	0.125	0.125	1.0	0.875	0.562	390	1.0	0.125	0.125	51.7	62.0	39.2	73.4	32.3	0.0	0.841	0.749	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
793	R00Y_087_075$_{dd}$	0.875	0.125	0.125	0.875	0.75	0.5	390	0.875	0.125	0.125	49.1	53.2	33.6	62.9	32.3	0.135	0.843	0.759	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
794	R00Y_075_062$_{dd}$	0.75	0.125	0.125	0.75	0.625	0.437	390	0.75	0.125	0.125	46.4	44.3	28.0	52.4	32.3	0.284	0.815	0.741	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
795	R00Y_062_050$_{dd}$	0.625	0.125	0.125	0.625	0.5	0.375	390	0.625	0.125	0.125	43.8	35.4	22.4	41.9	32.3	0.413	0.79	0.739	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
796	R00Y_050_037$_{dd}$	0.5	0.125	0.125	0.5	0.375	0.312	390	0.5	0.124	0.124	41.1	26.6	16.8	31.4	32.3	0.54	0.784	0.745	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
797	R00Y_037_025$_{dd}$	0.375	0.125	0.125	0.375	0.25	0.25	390	0.375	0.124	0.124	38.5	17.7	11.2	20.9	32.3	0.652	0.765	0.721	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
798	R00Y_025_012$_{dd}$	0.25	0.125	0.125	0.25	0.125	0.187	390	0.25	0.124	0.124	35.9	8.8	5.6	10.4	32.3	0.744	0.753	0.714	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
799	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0	0.885	0.774	0.736	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
800	G50B_012_012$_{dd}$	0.0	0.125	0.125	0.125	0.125	0.062	210	0.0	0.125	0.125	28.4	−3.1	−5.1	6.0	238.4	0.979	0.849	0.731	0.0	210	0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
801	R00Y_100_100$_{dd}$	1.0	0.0	0.0	1.0	1.0	0.5	390	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3	0.0	1.0	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
802	R00Y_087_087$_{dd}$	0.875	0.0	0.0	0.875	0.875	0.437	390	0.875	0.0	0.0	42.8	62.0	39.2	73.4	32.3	0.171	0.983	0.994	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
803	R00Y_075_075$_{dd}$	0.75	0.0	0.0	0.75	0.75	0.375	390	0.75	0.0	0.0	40.2	53.2	33.6	62.9	32.3	0.315	0.951	0.992	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
804	R00Y_062_062$_{dd}$	0.625	0.0	0.0	0.625	0.625	0.312	390	0.625	0.0	0.0	37.5	44.3	28.0	52.4	32.3	0.444	0.936	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
805	R00Y_050_050$_{dd}$	0.5	0.0	0.0	0.5	0.5	0.25	390	0.5	0.0	0.0	34.9	35.4	22.4	41.9	32.3	0.567	0.93	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
806	R00Y_037_037$_{dd}$	0.375	0.0	0.0	0.375	0.375	0.187	390	0.375	0.0	0.0	32.2	26.6	16.8	31.4	32.3	0.67	0.922	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
807	R00Y_025_025$_{dd}$	0.25	0.0	0.0	0.25	0.25	0.125	390	0.25	0.0	0.0	29.6	17.7	11.2	20.9	32.3	0.764	0.927	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
808	R00Y_012_012$_{dd}$	0.125	0.0	0.0	0.125	0.125	0.062	390	0.125	0.0	0.0	27.0	8.8	5.6	10.4	32.3	0.9	0.966	1.0	0.0	389	1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
809	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

delta

TUB-test chart PN17; colour rendering
colors and differences, Δ*E'*, 3D=1, de=0, *cmy0**

input: *rgb/cmyk* −> *rgb*$_{dd}$
output: 3D-linearization to *cmy0**$_{dd}$

5−1031731−F0

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$					*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
810	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
811	B00R_100_012$_{dd}$	0.875	0.875	1.0	1.0	0.125	0.937	270	0.875	0.875	1.0	86.8	3.6	−5.0	6.2	306.2	0.14	0.131	0.01	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
812	B00R_100_025$_{dd}$	0.75	0.75	1.0	1.0	0.25	0.875	270	0.75	0.75	1.0	77.9	7.3	−10.1	12.5	306.2	0.269	0.232	0.007	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
813	B00R_100_037$_{dd}$	0.625	0.625	1.0	1.0	0.375	0.812	270	0.625	0.625	1.0	69.1	11.0	−15.1	18.7	306.2	0.376	0.33	0.0	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
814	B00R_100_050$_{dd}$	0.5	0.5	1.0	1.0	0.5	0.75	270	0.5	0.5	1.0	60.3	14.7	−20.2	25.0	306.2	0.493	0.447	0.003	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
815	B00R_100_062$_{dd}$	0.375	0.375	1.0	1.0	0.625	0.687	270	0.375	0.375	1.0	51.5	18.4	−25.2	31.3	306.2	0.622	0.55	0.0	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
816	B00R_100_075$_{dd}$	0.25	0.25	1.0	1.0	0.75	0.625	270	0.25	0.25	1.0	42.7	22.1	−30.3	37.5	306.2	0.711	0.661	0.0	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
817	B00R_100_087$_{dd}$	0.125	0.125	1.0	1.0	0.875	0.562	270	0.125	0.125	1.0	33.9	25.8	−35.3	43.8	306.2	0.852	0.826	0.002	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
818	B00R_100_100$_{dd}$	0.0	0.0	1.0	1.0	1.0	0.5	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2	0.999	1.0	0.0	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
819	Y00G_100_012$_{dd}$	1.0	1.0	0.875	1.0	0.125	0.937	90	1.0	1.0	0.875	94.6	−1.2	11.9	12.0	96.1	0.0	0.016	0.153	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
820	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0	0.162	0.101	0.093	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
821	B00R_087_012$_{dd}$	0.75	0.75	0.875	0.875	0.125	0.812	270	0.75	0.75	0.875	77.9	3.6	−5.0	6.2	306.2	0.282	0.207	0.094	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
822	B00R_087_025$_{dd}$	0.625	0.625	0.875	0.875	0.25	0.75	270	0.625	0.625	0.875	69.0	7.3	−10.1	12.5	306.2	0.387	0.309	0.093	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
823	B00R_087_037$_{dd}$	0.5	0.5	0.875	0.875	0.375	0.687	270	0.5	0.5	0.875	60.2	11.0	−15.1	18.7	306.2	0.504	0.434	0.102	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
824	B00R_087_050$_{dd}$	0.375	0.375	0.875	0.875	0.5	0.625	270	0.375	0.375	0.875	51.4	14.7	−20.2	25.0	306.2	0.628	0.534	0.103	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
825	B00R_087_062$_{dd}$	0.25	0.25	0.875	0.875	0.625	0.562	270	0.25	0.25	0.875	42.6	18.4	−25.2	31.3	306.2	0.714	0.652	0.106	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
826	B00R_087_075$_{dd}$	0.125	0.125	0.875	0.875	0.75	0.5	270	0.125	0.125	0.875	33.8	22.1	−30.3	37.5	306.2	0.852	0.819	0.129	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
827	B00R_087_087$_{dd}$	0.0	0.0	0.875	0.875	0.875	0.437	270	0.0	0.0	0.875	24.9	25.8	−35.3	43.8	306.2	0.99	1.0	0.133	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
828	Y00G_100_025$_{dd}$	1.0	1.0	0.75	1.0	0.25	0.875	90	1.0	1.0	0.75	93.6	−2.5	23.8	24.0	96.1	0.0	0.023	0.289	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
829	Y00G_087_012$_{dd}$	0.875	0.875	0.75	0.875	0.125	0.812	90	0.875	0.875	0.75	85.7	−1.2	11.9	12.0	96.1	0.135	0.113	0.254	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
830	NW_075$_{dd}$	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0	0.299	0.181	0.177	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
831	B00R_075_012$_{dd}$	0.625	0.625	0.75	0.75	0.125	0.687	270	0.625	0.625	0.75	68.9	3.6	−5.0	6.2	306.2	0.402	0.285	0.178	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
832	B00R_075_025$_{dd}$	0.5	0.5	0.75	0.75	0.25	0.625	270	0.5	0.5	0.75	60.1	7.3	−10.1	12.5	306.2	0.516	0.419	0.194	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
833	B00R_075_037$_{dd}$	0.375	0.375	0.75	0.75	0.375	0.562	270	0.375	0.375	0.75	51.3	11.0	−15.1	18.7	306.2	0.632	0.52	0.201	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
834	B00R_075_050$_{dd}$	0.25	0.25	0.75	0.75	0.5	0.5	270	0.25	0.25	0.75	42.5	14.7	−20.2	25.0	306.2	0.719	0.642	0.208	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
835	B00R_075_062$_{dd}$	0.125	0.125	0.75	0.75	0.625	0.437	270	0.125	0.125	0.75	33.7	18.4	−25.2	31.3	306.2	0.853	0.816	0.243	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
836	B00R_075_075$_{dd}$	0.0	0.0	0.75	0.75	0.75	0.375	270	0.0	0.0	0.75	24.9	22.1	−30.3	37.5	306.2	0.984	1.0	0.25	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
837	Y00G_100_037$_{dd}$	1.0	1.0	0.625	1.0	0.375	0.812	90	1.0	1.0	0.625	92.6	−3.8	35.8	36.0	96.1	0.0	0.027	0.415	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
838	Y00G_087_025$_{dd}$	0.875	0.875	0.625	0.875	0.25	0.75	90	0.875	0.875	0.625	84.7	−2.5	23.8	24.0	96.1	0.12	0.122	0.392	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
839	Y00G_075_012$_{dd}$	0.75	0.75	0.625	0.75	0.125	0.687	90	0.75	0.75	0.625	76.8	−1.2	11.9	12.0	96.1	0.281	0.195	0.335	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
840	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0	0.417	0.26	0.26	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
841	B00R_062_012$_{dd}$	0.5	0.5	0.625	0.625	0.125	0.562	270	0.5	0.5	0.625	60.0	3.6	−5.0	6.2	306.2	0.529	0.402	0.279	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
842	B00R_062_025$_{dd}$	0.375	0.375	0.625	0.625	0.25	0.5	270	0.375	0.375	0.625	51.2	7.3	−10.1	12.5	306.2	0.638	0.505	0.293	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
843	B00R_062_037$_{dd}$	0.25	0.25	0.625	0.625	0.375	0.437	270	0.25	0.25	0.625	42.4	11.0	−15.1	18.7	306.2	0.722	0.627	0.299	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
844	B00R_062_050$_{dd}$	0.125	0.125	0.625	0.625	0.5	0.375	270	0.125	0.125	0.625	33.6	14.7	−20.2	25.0	306.2	0.857	0.807	0.344	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
845	B00R_062_062$_{dd}$	0.0	0.0	0.625	0.625	0.625	0.312	270	0.0	0.0	0.625	24.8	18.4	−25.2	31.3	306.2	0.982	1.0	0.354	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
846	Y00G_100_050$_{dd}$	1.0	1.0	0.5	1.0	0.5	0.75	90	1.0	1.0	0.5	91.7	−5.1	47.7	48.0	96.1	0.0	0.027	0.529	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
847	Y00G_087_037$_{dd}$	0.875	0.875	0.5	0.875	0.375	0.687	90	0.875	0.875	0.5	83.7	−3.8	35.8	36.0	96.1	0.113	0.126	0.516	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
848	Y00G_075_025$_{dd}$	0.75	0.75	0.5	0.75	0.25	0.625	90	0.75	0.75	0.5	75.8	−2.5	23.8	24.0	96.1	0.269	0.203	0.474	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
849	Y00G_062_012$_{dd}$	0.625	0.625	0.5	0.625	0.125	0.562	90	0.625	0.625	0.5	67.9	−1.2	11.9	12.0	96.1	0.397	0.274	0.403	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
850	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0	0.54	0.382	0.356	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
851	B00R_050_012$_{dd}$	0.375	0.375	0.5	0.5	0.125	0.437	270	0.375	0.375	0.5	51.1	3.6	−5.0	6.2	306.2	0.645	0.49	0.376	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
852	B00R_050_025$_{dd}$	0.25	0.25	0.5	0.5	0.25	0.375	270	0.249	0.249	0.5	42.3	7.3	−10.1	12.5	306.2	0.726	0.611	0.385	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
853	B00R_050_037$_{dd}$	0.125	0.125	0.5	0.5	0.375	0.312	270	0.124	0.124	0.5	33.5	11.0	−15.1	18.7	306.2	0.861	0.799	0.441	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
854	B00R_050_050$_{dd}$	0.0	0.0	0.5	0.5	0.5	0.25	270	0.0	0.0	0.5	24.7	14.7	−20.2	25.0	306.2	0.979	1.0	0.459	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
855	Y00G_100_062$_{dd}$	1.0	1.0	0.375	1.0	0.625	0.687	90	1.0	1.0	0.375	90.7	−6.3	59.6	60.0	96.1	0.0	0.024	0.639	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
856	Y00G_087_050$_{dd}$	0.875	0.875	0.375	0.875	0.5	0.625	90	0.875	0.875	0.375	82.8	−5.1	47.7	48.0	96.1	0.109	0.123	0.633	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
857	Y00G_075_037$_{dd}$	0.75	0.75	0.375	0.75	0.375	0.562	90	0.75	0.75	0.375	74.8	−3.8	35.8	36.0	96.1	0.267	0.205	0.6	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
858	Y00G_062_025$_{dd}$	0.625	0.625	0.375	0.625	0.25	0.5	90	0.625	0.625	0.375	66.9	−2.5	23.8	24.0	96.1	0.386	0.28	0.538	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
859	Y00G_050_012$_{dd}$	0.5	0.5	0.375	0.5	0.125	0.437	90	0.5	0.5	0.375	59.0	−1.2	11.9	12.0	96.1	0.522	0.393	0.509	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
860	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0	0.653	0.473	0.452	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
861	B00R_037_012$_{dd}$	0.25	0.25	0.375	0.375	0.125	0.312	270	0.249	0.249	0.375	42.2	3.6	−5.0	6.2	306.2	0.734	0.601	0.472	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
862	B00R_037_025$_{dd}$	0.125	0.125	0.375	0.375	0.25	0.25	270	0.124	0.124	0.375	33.4	7.3	−10.1	12.5	306.2	0.867	0.792	0.538	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
863	B00R_037_037$_{dd}$	0.0	0.0	0.375	0.375	0.375	0.187	270	0.0	0.0	0.375	24.6	11.0	−15.1	18.7	306.2	0.98	1.0	0.558	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
864	Y00G_100_075$_{dd}$	1.0	1.0	0.25	1.0	0.75	0.625	90	1.0	1.0	0.25	89.7	−7.6	71.6	72.0	96.1	0.0	0.02	0.753	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
865	Y00G_087_062$_{dd}$	0.875	0.875	0.25	0.875	0.625	0.562	90	0.875	0.875	0.25	81.8	−6.3	59.6	60.0	96.1	0.117	0.119	0.759	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
866	Y00G_075_050$_{dd}$	0.75	0.75	0.25	0.75	0.5	0.5	90	0.75	0.75	0.25	73.9	−5.1	47.7	48.0	96.1	0.269	0.204	0.731	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
867	Y00G_062_037$_{dd}$	0.625	0.625	0.25	0.625	0.375	0.437	90	0.625	0.625	0.25	65.9	−3.8	35.8	36.0	96.1	0.385	0.282	0.675	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
868	Y00G_050_025$_{dd}$	0.5	0.5	0.25	0.5	0.25	0.375	90	0.5	0.5	0.249	58.0	−2.5	23.8	24.0	96.1	0.514	0.401	0.661	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
869	Y00G_037_012$_{dd}$	0.375	0.375	0.25	0.375	0.125	0.312	90	0.375	0.375	0.249	50.1	−1.2	11.9	12.0	96.1	0.643	0.487	0.61	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
870	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0	0.743	0.587	0.55	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
871	B00R_025_012$_{dd}$	0.125	0.125	0.25	0.25	0.125	0.187	270	0.124	0.124	0.25	33.3	3.6	−5.0	6.2	306.2	0.878	0.784	0.632	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
872	B00R_025_025$_{dd}$	0.0	0.0	0.25	0.25	0.25	0.125	270	0.0	0.0	0.25	24.5	7.3	−10.1	12.5	306.2	0.984	0.994	0.671	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
873	Y00G_100_087$_{dd}$	1.0	1.0	0.125	1.0	0.875	0.562	90	1.0	1.0	0.125	88.8	−8.9	83.5	84.0	96.1	0.0	0.0	0.875	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
874	Y00G_087_075$_{dd}$	0.875	0.875	0.125	0.875	0.75	0.5	90	0.875	0.875	0.125	80.8	−7.6	71.6	72.0	96.1	0.129	0.115	0.88	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
875	Y00G_075_062$_{dd}$	0.75	0.75	0.125	0.75	0.625	0.437	90	0.75	0.75	0.125	72.9	−6.3	59.6	60.0	96.1	0.274	0.201	0.859	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
876	Y00G_062_050$_{dd}$	0.625	0.625	0.125	0.625	0.5	0.375	90	0.625	0.625	0.125	65.0	−5.1	47.7	48.0	96.1	0.391	0.286	0.821	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
877	Y00G_050_037$_{dd}$	0.5	0.5	0.125	0.5	0.375	0.312	90	0.5	0.5	0.124	57.0	−3.8	35.8	36.0	96.1	0.516	0.406	0.818	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
878	Y00G_037_025$_{dd}$	0.375	0.375	0.125	0.375	0.25	0.25	90	0.375	0.375	0.124	49.1	−2.5	23.8	24.0	96.1	0.637	0.496	0.783	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
879	Y00G_025_012$_{dd}$	0.25	0.25	0.125	0.25	0.125	0.187	90	0.25	0.25	0.124	41.2	−1.2	11.9	12.0	96.1	0.732	0.608	0.741	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
880	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0	0.885	0.774	0.736	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
881	B00R_012_012$_{dd}$	0.0	0.0	0.125	0.125	0.125	0.062	270	0.0	0.0	0.125	24.4	3.6	−5.0	6.2	306.2	0.989	0.986	0.816	0.0	270	0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
882	Y00G_100_100$_{dd}$	1.0	1.0	0.0	1.0	1.0	0.5	90	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1	0.0	0.0	1.0	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
883	Y00G_087_087$_{dd}$	0.875	0.875	0.0	0.875	0.875	0.437	90	0.875	0.875	0.0	79.8	−8.9	83.5	84.0	96.1	0.148	0.107	0.999	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
884	Y00G_075_075$_{dd}$	0.75	0.75	0.0	0.75	0.75	0.375	90	0.75	0.75	0.0	71.9	−7.6	71.6	72.0	96.1	0.285	0.195	0.988	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
885	Y00G_062_062$_{dd}$	0.625	0.625	0.0	0.625	0.625	0.312	90	0.625	0.625	0.0	64.0	−6.3	59.6	60.0	96.1	0.401	0.285	0.978	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
886	Y00G_050_050$_{dd}$	0.5	0.5	0.0	0.5	0.5	0.25	90	0.5	0.5	0.0	56.1	−5.1	47.7	48.0	96.1	0.524	0.405	0.988	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
887	Y00G_037_037$_{dd}$	0.375	0.375	0.0	0.375	0.375	0.187	90	0.375	0.375	0.0	48.1	−3.8	35.8	36.0	96.1	0.643	0.499	0.977	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
888	Y00G_025_025$_{dd}$	0.25	0.25	0.0	0.25	0.25	0.125	90	0.25	0.25	0.0	40.2	−2.5	23.8	24.0	96.1	0.729	0.621	0.977	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
889	Y00G_012_012$_{dd}$	0.125	0.125	0.0	0.125	0.125	0.062	90	0.125	0.125	0.0	32.3	−1.2	11.9	12.0	96.1	0.875	0.791	1.0	0.0	89	1.0	1.0	0.0	87.8	−10.2	95.4	96.0	96.1
890	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

delta

5−1031831−F0

TUB-test chart PN17; colour rendering
colors and differences, Δ*E'**, 3D=1, de=0, *cmy0**

input: *rgb/cmyk* −> *rgb*$_{dd}$
output: 3D-linearization to *cmy0**$_{dd}$

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$					*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
891	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
892	B50R_100_012$_{dd}$	1.0	0.875	1.0	1.0	0.125	0.937	330	1.0	0.875	1.0	89.4	9.9	0.0	9.9	359.8	0.0	0.159	0.012	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
893	B50R_100_025$_{dd}$	1.0	0.75	1.0	1.0	0.25	0.875	330	1.0	0.75	1.0	83.2	19.8	0.0	19.8	359.8	0.0	0.291	0.017	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
894	B50R_100_037$_{dd}$	1.0	0.625	1.0	1.0	0.375	0.812	330	1.0	0.625	1.0	77.0	29.7	0.0	29.7	359.8	0.0	0.414	0.021	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
895	B50R_100_050$_{dd}$	1.0	0.5	1.0	1.0	0.5	0.75	330	1.0	0.5	1.0	70.8	39.6	−0.1	39.6	359.8	0.0	0.517	0.027	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
896	B50R_100_062$_{dd}$	1.0	0.375	1.0	1.0	0.625	0.687	330	1.0	0.375	1.0	64.6	49.5	−0.1	49.5	359.8	0.0	0.639	0.029	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
897	B50R_100_075$_{dd}$	1.0	0.25	1.0	1.0	0.75	0.625	330	1.0	0.25	1.0	58.4	59.4	−0.1	59.4	359.8	0.0	0.755	0.024	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
898	B50R_100_087$_{dd}$	1.0	0.125	1.0	1.0	0.875	0.562	330	1.0	0.125	1.0	52.3	69.4	−0.1	69.4	359.8	0.0	0.874	0.029	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
899	B50R_100_100$_{dd}$	1.0	0.0	1.0	1.0	1.0	0.5	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8	0.0	1.0	0.0	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
900	G00B_100_012$_{dd}$	0.875	1.0	0.875	1.0	0.125	0.937	150	0.875	1.0	0.875	89.9	−8.1	3.7	8.9	155.5	0.197	0.0	0.141	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
901	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.0	0.162	0.101	0.093	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
902	B50R_087_012$_{dd}$	0.875	0.75	0.875	0.875	0.125	0.812	330	0.875	0.75	0.875	80.5	9.9	0.0	9.9	359.8	0.14	0.25	0.105	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
903	B50R_087_025$_{dd}$	0.875	0.625	0.875	0.875	0.25	0.75	330	0.875	0.625	0.875	74.3	19.8	0.0	19.8	359.8	0.125	0.395	0.117	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
904	B50R_087_037$_{dd}$	0.875	0.5	0.875	0.875	0.375	0.687	330	0.875	0.5	0.875	68.1	29.7	0.0	29.7	359.8	0.114	0.501	0.135	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
905	B50R_087_050$_{dd}$	0.875	0.375	0.875	0.875	0.5	0.625	330	0.875	0.375	0.875	61.9	39.6	−0.1	39.6	359.8	0.114	0.629	0.148	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
906	B50R_087_062$_{dd}$	0.875	0.25	0.875	0.875	0.625	0.562	330	0.875	0.25	0.875	55.7	49.5	−0.1	49.5	359.8	0.128	0.749	0.163	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
907	B50R_087_075$_{dd}$	0.875	0.125	0.875	0.875	0.75	0.5	330	0.875	0.125	0.875	49.5	59.4	−0.1	59.4	359.8	0.15	0.855	0.186	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
908	B50R_087_087$_{dd}$	0.875	0.0	0.875	0.875	0.875	0.437	330	0.875	0.0	0.875	43.4	69.4	−0.1	69.4	359.8	0.182	0.984	0.19	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
909	G00B_100_025$_{dd}$	0.75	1.0	0.75	1.0	0.25	0.875	150	0.75	1.0	0.75	84.2	−16.2	7.4	17.8	155.5	0.341	0.0	0.252	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
910	G00B_087_012$_{dd}$	0.75	0.875	0.75	0.875	0.125	0.812	150	0.75	0.875	0.75	81.0	−8.1	3.7	8.9	155.5	0.321	0.072	0.221	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
911	NW_075$_{dd}$	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.0	0.299	0.181	0.177	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
912	B50R_075_012$_{dd}$	0.75	0.625	0.75	0.75	0.125	0.687	330	0.75	0.625	0.75	71.6	9.9	0.0	9.9	359.8	0.286	0.336	0.193	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
913	B50R_075_025$_{dd}$	0.75	0.5	0.75	0.75	0.25	0.625	330	0.75	0.5	0.75	65.4	19.8	0.0	19.8	359.8	0.28	0.459	0.212	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
914	B50R_075_037$_{dd}$	0.75	0.375	0.75	0.75	0.375	0.562	330	0.75	0.375	0.75	59.2	29.7	0.0	29.7	359.8	0.279	0.582	0.233	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
915	B50R_075_050$_{dd}$	0.75	0.25	0.75	0.75	0.5	0.5	330	0.75	0.25	0.75	53.0	39.6	−0.1	39.6	359.8	0.286	0.71	0.256	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
916	B50R_075_062$_{dd}$	0.75	0.125	0.75	0.75	0.625	0.437	330	0.75	0.125	0.75	46.8	49.5	−0.1	49.5	359.8	0.303	0.826	0.283	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
917	B50R_075_075$_{dd}$	0.75	0.0	0.75	0.75	0.75	0.375	330	0.75	0.0	0.75	40.6	59.4	−0.1	59.4	359.8	0.327	0.956	0.307	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
918	G00B_100_037$_{dd}$	0.625	1.0	0.625	1.0	0.375	0.812	150	0.625	1.0	0.625	78.5	−24.3	11.1	26.7	155.5	0.48	0.0	0.376	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
919	G00B_087_025$_{dd}$	0.625	0.875	0.625	0.875	0.25	0.75	150	0.625	0.875	0.625	75.3	−16.2	7.4	17.8	155.5	0.458	0.052	0.34	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
920	G00B_075_012$_{dd}$	0.625	0.75	0.625	0.75	0.125	0.687	150	0.625	0.75	0.625	72.1	−8.1	3.7	8.9	155.5	0.437	0.166	0.305	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
921	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.0	0.417	0.26	0.26	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
922	B50R_062_012$_{dd}$	0.625	0.5	0.625	0.625	0.125	0.562	330	0.625	0.5	0.625	62.7	9.9	0.0	9.9	359.8	0.409	0.41	0.278	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
923	B50R_062_025$_{dd}$	0.625	0.375	0.625	0.625	0.25	0.5	330	0.625	0.375	0.625	56.5	19.8	0.0	19.8	359.8	0.411	0.532	0.307	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
924	B50R_062_037$_{dd}$	0.625	0.25	0.625	0.625	0.375	0.437	330	0.625	0.25	0.625	50.3	29.7	0.0	29.7	359.8	0.418	0.671	0.336	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
925	B50R_062_050$_{dd}$	0.625	0.125	0.625	0.625	0.5	0.375	330	0.625	0.125	0.625	44.1	39.6	−0.1	39.6	359.8	0.433	0.801	0.376	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
926	B50R_062_062$_{dd}$	0.625	0.0	0.625	0.625	0.625	0.312	330	0.625	0.0	0.625	37.9	49.5	−0.1	49.5	359.8	0.456	0.941	0.425	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
927	G00B_100_050$_{dd}$	0.5	1.0	0.5	1.0	0.5	0.75	150	0.5	1.0	0.5	72.8	−32.5	14.8	35.7	155.5	0.625	0.0	0.5	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
928	G00B_087_037$_{dd}$	0.5	0.875	0.5	0.875	0.375	0.687	150	0.5	0.875	0.5	69.6	−24.3	11.1	26.7	155.5	0.593	0.038	0.454	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
929	G00B_075_025$_{dd}$	0.5	0.75	0.5	0.75	0.25	0.625	150	0.5	0.75	0.5	66.4	−16.2	7.4	17.8	155.5	0.575	0.164	0.431	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
930	G00B_062_012$_{dd}$	0.5	0.625	0.5	0.625	0.125	0.562	150	0.5	0.625	0.5	63.2	−8.1	3.7	8.9	155.5	0.557	0.269	0.398	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
931	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.0	0.54	0.382	0.356	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
932	B50R_050_012$_{dd}$	0.5	0.375	0.5	0.5	0.125	0.437	330	0.5	0.375	0.5	53.8	9.9	0.0	9.9	359.8	0.541	0.509	0.39	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
933	B50R_050_025$_{dd}$	0.5	0.25	0.5	0.5	0.25	0.375	330	0.5	0.249	0.5	47.6	19.8	0.0	19.8	359.8	0.546	0.654	0.422	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
934	B50R_050_037$_{dd}$	0.5	0.125	0.5	0.5	0.375	0.312	330	0.5	0.124	0.5	41.4	29.7	0.0	29.7	359.8	0.56	0.79	0.47	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
935	B50R_050_050$_{dd}$	0.5	0.0	0.5	0.5	0.5	0.25	330	0.5	0.0	0.5	35.2	39.6	−0.1	39.6	359.8	0.583	0.931	0.522	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
936	G00B_100_062$_{dd}$	0.375	1.0	0.375	1.0	0.625	0.687	150	0.375	1.0	0.375	67.1	−40.6	18.5	44.6	155.5	0.706	0.0	0.623	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
937	G00B_087_050$_{dd}$	0.375	0.875	0.375	0.875	0.5	0.625	150	0.375	0.875	0.375	63.9	−32.5	14.8	35.7	155.5	0.692	0.037	0.556	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
938	G00B_075_037$_{dd}$	0.375	0.75	0.375	0.75	0.375	0.562	150	0.375	0.75	0.375	60.7	−24.3	11.1	26.7	155.5	0.68	0.165	0.536	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
939	G00B_062_025$_{dd}$	0.375	0.625	0.375	0.625	0.25	0.5	150	0.375	0.625	0.375	57.5	−16.2	7.4	17.8	155.5	0.67	0.273	0.511	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
940	G00B_050_012$_{dd}$	0.375	0.5	0.375	0.5	0.125	0.437	150	0.375	0.5	0.375	54.3	−8.1	3.7	8.9	155.5	0.659	0.389	0.486	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
941	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.0	0.653	0.473	0.452	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
942	B50R_037_012$_{dd}$	0.375	0.25	0.375	0.375	0.125	0.312	330	0.375	0.249	0.375	44.9	9.9	0.0	9.9	359.8	0.656	0.62	0.49	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
943	B50R_037_025$_{dd}$	0.375	0.125	0.375	0.375	0.25	0.25	330	0.375	0.124	0.375	38.7	19.8	0.0	19.8	359.8	0.664	0.768	0.539	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
944	B50R_037_037$_{dd}$	0.375	0.0	0.375	0.375	0.375	0.187	330	0.375	0.0	0.375	32.5	29.7	0.0	29.7	359.8	0.682	0.921	0.607	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
945	G00B_100_075$_{dd}$	0.25	1.0	0.25	1.0	0.75	0.625	150	0.25	1.0	0.25	61.4	−48.7	22.2	53.5	155.5	0.812	0.0	0.749	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
946	G00B_087_062$_{dd}$	0.25	0.875	0.25	0.875	0.625	0.562	150	0.25	0.875	0.25	58.2	−40.6	18.5	44.6	155.5	0.796	0.051	0.672	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
947	G00B_075_050$_{dd}$	0.25	0.75	0.25	0.75	0.5	0.5	150	0.25	0.75	0.25	55.0	−32.5	14.8	35.7	155.5	0.784	0.18	0.652	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
948	G00B_062_037$_{dd}$	0.25	0.625	0.25	0.625	0.375	0.437	150	0.25	0.625	0.25	51.8	−24.3	11.1	26.7	155.5	0.769	0.292	0.627	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
949	G00B_050_025$_{dd}$	0.25	0.5	0.25	0.5	0.25	0.375	150	0.249	0.5	0.249	48.6	−16.2	7.4	17.8	155.5	0.755	0.402	0.604	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
950	G00B_037_012$_{dd}$	0.25	0.375	0.25	0.375	0.125	0.312	150	0.249	0.375	0.249	45.4	−8.1	3.7	8.9	155.5	0.749	0.489	0.578	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
951	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.0	0.743	0.587	0.55	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
952	B50R_025_012$_{dd}$	0.25	0.125	0.25	0.25	0.125	0.187	330	0.25	0.124	0.25	36.0	9.9	0.0	9.9	359.8	0.753	0.756	0.616	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
953	B50R_025_025$_{dd}$	0.25	0.0	0.25	0.25	0.25	0.125	330	0.25	0.0	0.25	29.8	19.8	0.0	19.8	359.8	0.784	0.927	0.736	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
954	G00B_100_087$_{dd}$	0.125	1.0	0.125	1.0	0.875	0.562	150	0.125	1.0	0.125	55.7	−56.8	25.9	62.5	155.5	0.914	0.0	0.874	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
955	G00B_087_075$_{dd}$	0.125	0.875	0.125	0.875	0.75	0.5	150	0.125	0.875	0.125	52.5	−48.7	22.2	53.5	155.5	0.906	0.095	0.823	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
956	G00B_075_062$_{dd}$	0.125	0.75	0.125	0.75	0.625	0.437	150	0.125	0.75	0.125	49.3	−40.6	18.5	44.6	155.5	0.901	0.223	0.81	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
957	G00B_062_050$_{dd}$	0.125	0.625	0.125	0.625	0.5	0.375	150	0.125	0.625	0.125	46.1	−32.5	14.8	35.7	155.5	0.895	0.357	0.798	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
958	G00B_050_037$_{dd}$	0.125	0.5	0.125	0.5	0.375	0.312	150	0.124	0.5	0.124	42.9	−24.3	11.1	26.7	155.5	0.89	0.458	0.788	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
959	G00B_037_025$_{dd}$	0.125	0.375	0.125	0.375	0.25	0.25	150	0.124	0.375	0.124	39.7	−16.2	7.4	17.8	155.5	0.885	0.564	0.773	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
960	G00B_025_012$_{dd}$	0.125	0.25	0.125	0.25	0.125	0.187	150	0.124	0.25	0.124	36.4	−8.1	3.7	8.9	155.5	0.885	0.673	0.755	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
961	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.0	0.885	0.774	0.736	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
962	B50R_012_012$_{dd}$	0.125	0.0	0.125	0.125	0.125	0.062	330	0.125	0.0	0.125	27.0	9.9	0.0	9.9	359.8	0.904	0.957	0.862	0.0	330	1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8
963	G00B_100_100$_{dd}$	0.0	1.0	0.0	1.0	1.0	0.5	150	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5	1.0	0.0	1.0	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
964	G00B_087_087$_{dd}$	0.0	0.875	0.0	0.875	0.875	0.437	150	0.0	0.875	0.0	46.8	−56.8	25.9	62.5	155.5	0.991	0.16	0.998	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
965	G00B_075_075$_{dd}$	0.0	0.75	0.0	0.75	0.75	0.375	150	0.0	0.75	0.0	43.6	−48.7	22.2	53.5	155.5	0.988	0.294	0.992	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
966	G00B_062_062$_{dd}$	0.0	0.625	0.0	0.625	0.625	0.312	150	0.0	0.625	0.0	40.4	−40.6	18.5	44.6	155.5	0.983	0.419	0.986	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
967	G00B_050_050$_{dd}$	0.0	0.5	0.0	0.5	0.5	0.25	150	0.0	0.5	0.0	37.2	−32.5	14.8	35.7	155.5	0.982	0.524	0.985	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
968	G00B_037_037$_{dd}$	0.0	0.375	0.0	0.375	0.375	0.187	150	0.0	0.375	0.0	34.0	−24.3	11.1	26.7	155.5	0.983	0.641	0.986	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
969	G00B_025_025$_{dd}$	0.0	0.25	0.0	0.25	0.25	0.125	150	0.0	0.25	0.0	30.7	−16.2	7.4	17.8	155.5	0.986	0.754	0.984	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
970	G00B_012_012$_{dd}$	0.0	0.125	0.0	0.125	0.125	0.062	150	0.0	0.125	0.0	27.5	−8.1	3.7	8.9	155.5	0.992	0.866	1.0	0.0	149	0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
971	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

delta

TUB-test chart PN17; colour rendering
colors and differences, Δ*E'**, 3D=1, de=0, *cmy0**

input: *rgb/cmyk* −> *rgb*$_{dd}$
output: 3D-linearization to *cmy0**$_{dd}$

5−1031931−F0

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}	*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$				$h_{siM,dd}$	*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$			
972	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	1.0	1.0	1.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
973	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.885	0.774	0.736	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
974	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.743	0.587	0.55	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
975	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.653	0.473	0.452	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
976	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.54	0.382	0.356	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
977	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.417	0.26	0.26	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
978	NW_075$_{dd}$	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.299	0.181	0.177	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
979	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.162	0.101	0.093	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
980	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
981	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	1.0	1.0	1.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
982	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.885	0.774	0.736	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
983	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.743	0.587	0.55	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
984	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.653	0.473	0.452	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
985	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.54	0.382	0.356	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
986	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.417	0.26	0.26	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
987	NW_075$_{dd}$	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.299	0.181	0.177	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
988	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.162	0.101	0.093	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
989	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
990	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	1.0	1.0	1.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
991	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.885	0.774	0.736	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
992	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.743	0.587	0.55	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
993	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.653	0.473	0.452	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
994	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.54	0.382	0.356	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
995	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.417	0.26	0.26	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
996	NW_075$_{dd}$	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.299	0.181	0.177	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
997	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.162	0.101	0.093	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
998	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
999	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	1.0	1.0	1.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1000	NW_012$_{dd}$	0.125	0.125	0.125	0.125	0.0	0.125	360	0.125	0.125	0.125	33.2	0.0	0.0	0.0	0.885	0.774	0.736	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1001	NW_025$_{dd}$	0.25	0.25	0.25	0.25	0.0	0.25	360	0.25	0.25	0.25	42.1	0.0	0.0	0.0	0.743	0.587	0.55	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1002	NW_037$_{dd}$	0.375	0.375	0.375	0.375	0.0	0.375	360	0.375	0.375	0.375	51.0	0.0	0.0	0.0	0.653	0.473	0.452	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1003	NW_050$_{dd}$	0.5	0.5	0.5	0.5	0.0	0.5	360	0.5	0.5	0.5	60.0	0.0	0.0	0.0	0.54	0.382	0.356	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1004	NW_062$_{dd}$	0.625	0.625	0.625	0.625	0.0	0.625	360	0.625	0.625	0.625	68.9	0.0	0.0	0.0	0.417	0.26	0.26	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1005	NW_075$_{dd}$	0.75	0.75	0.75	0.75	0.0	0.75	360	0.75	0.75	0.75	77.8	0.0	0.0	0.0	0.299	0.181	0.177	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1006	NW_087$_{dd}$	0.875	0.875	0.875	0.875	0.0	0.875	360	0.875	0.875	0.875	86.7	0.0	0.0	0.0	0.162	0.101	0.093	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1007	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1008	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	1.0	1.0	1.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1009	NW_006$_{dd}$	0.066	0.066	0.066	0.066	0.0	0.066	360	0.066	0.066	0.066	29.0	0.0	0.0	0.0	0.935	0.855	0.825	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1010	NW_013$_{dd}$	0.133	0.133	0.133	0.133	0.0	0.133	360	0.133	0.133	0.133	33.8	0.0	0.0	0.0	0.879	0.763	0.725	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1011	NW_020$_{dd}$	0.2	0.2	0.2	0.2	0.0	0.2	360	0.2	0.2	0.2	38.6	0.0	0.0	0.0	0.799	0.661	0.614	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1012	NW_026$_{dd}$	0.266	0.266	0.266	0.266	0.0	0.266	360	0.266	0.266	0.266	43.3	0.0	0.0	0.0	0.731	0.571	0.537	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1013	NW_033$_{dd}$	0.333	0.333	0.333	0.333	0.0	0.333	360	0.333	0.333	0.333	48.1	0.0	0.0	0.0	0.682	0.507	0.485	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1014	NW_040$_{dd}$	0.4	0.4	0.4	0.4	0.0	0.4	360	0.4	0.4	0.4	52.8	0.0	0.0	0.0	0.636	0.454	0.433	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1015	NW_046$_{dd}$	0.466	0.466	0.466	0.466	0.0	0.466	360	0.466	0.466	0.466	57.5	0.0	0.0	0.0	0.574	0.404	0.381	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1016	NW_053$_{dd}$	0.533	0.533	0.533	0.533	0.0	0.533	360	0.533	0.533	0.533	62.3	0.0	0.0	0.0	0.509	0.354	0.33	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1017	NW_060$_{dd}$	0.6	0.6	0.6	0.6	0.0	0.6	360	0.6	0.6	0.6	67.1	0.0	0.0	0.0	0.442	0.285	0.278	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1018	NW_066$_{dd}$	0.666	0.666	0.666	0.666	0.0	0.666	360	0.666	0.666	0.666	71.8	0.0	0.0	0.0	0.377	0.228	0.228	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1019	NW_073$_{dd}$	0.734	0.734	0.734	0.734	0.0	0.734	360	0.734	0.734	0.734	76.6	0.0	0.0	0.0	0.314	0.191	0.186	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1020	NW_080$_{dd}$	0.8	0.8	0.8	0.8	0.0	0.8	360	0.8	0.8	0.8	81.3	0.0	0.0	0.0	0.252	0.153	0.146	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1021	NW_086$_{dd}$	0.866	0.866	0.866	0.866	0.0	0.866	360	0.866	0.866	0.866	86.0	0.0	0.0	0.0	0.173	0.108	0.099	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1022	NW_093$_{dd}$	0.933	0.933	0.933	0.933	0.0	0.933	360	0.933	0.933	0.933	90.8	0.0	0.0	0.0	0.09	0.054	0.05	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1023	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1024	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	1.0	1.0	1.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1025	NW_006$_{dd}$	0.066	0.066	0.066	0.066	0.0	0.066	360	0.066	0.066	0.066	29.0	0.0	0.0	0.0	0.935	0.855	0.825	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1026	NW_013$_{dd}$	0.133	0.133	0.133	0.133	0.0	0.133	360	0.133	0.133	0.133	33.8	0.0	0.0	0.0	0.879	0.763	0.725	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1027	NW_020$_{dd}$	0.2	0.2	0.2	0.2	0.0	0.2	360	0.2	0.2	0.2	38.6	0.0	0.0	0.0	0.799	0.661	0.614	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1028	NW_026$_{dd}$	0.266	0.266	0.266	0.266	0.0	0.266	360	0.266	0.266	0.266	43.3	0.0	0.0	0.0	0.731	0.571	0.537	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1029	NW_033$_{dd}$	0.333	0.333	0.333	0.333	0.0	0.333	360	0.333	0.333	0.333	48.1	0.0	0.0	0.0	0.682	0.507	0.485	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1030	NW_040$_{dd}$	0.4	0.4	0.4	0.4	0.0	0.4	360	0.4	0.4	0.4	52.8	0.0	0.0	0.0	0.636	0.454	0.433	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1031	NW_046$_{dd}$	0.466	0.466	0.466	0.466	0.0	0.466	360	0.466	0.466	0.466	57.5	0.0	0.0	0.0	0.574	0.404	0.381	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1032	NW_053$_{dd}$	0.533	0.533	0.533	0.533	0.0	0.533	360	0.533	0.533	0.533	62.3	0.0	0.0	0.0	0.509	0.354	0.33	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1033	NW_060$_{dd}$	0.6	0.6	0.6	0.6	0.0	0.6	360	0.6	0.6	0.6	67.1	0.0	0.0	0.0	0.442	0.285	0.278	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1034	NW_066$_{dd}$	0.666	0.666	0.666	0.666	0.0	0.666	360	0.666	0.666	0.666	71.8	0.0	0.0	0.0	0.377	0.228	0.228	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1035	NW_073$_{dd}$	0.734	0.734	0.734	0.734	0.0	0.734	360	0.734	0.734	0.734	76.6	0.0	0.0	0.0	0.314	0.191	0.186	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1036	NW_080$_{dd}$	0.8	0.8	0.8	0.8	0.0	0.8	360	0.8	0.8	0.8	81.3	0.0	0.0	0.0	0.252	0.153	0.146	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1037	NW_086$_{dd}$	0.866	0.866	0.866	0.866	0.0	0.866	360	0.866	0.866	0.866	86.0	0.0	0.0	0.0	0.173	0.108	0.099	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1038	NW_093$_{dd}$	0.933	0.933	0.933	0.933	0.0	0.933	360	0.933	0.933	0.933	90.8	0.0	0.0	0.0	0.09	0.054	0.05	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1039	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1040	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360	0.0	0.0	0.0	24.3	0.0	0.0	0.0	1.0	1.0	1.0	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1041	NW_006$_{dd}$	0.066	0.066	0.066	0.066	0.0	0.066	360	0.066	0.066	0.066	29.0	0.0	0.0	0.0	0.935	0.855	0.825	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1042	NW_013$_{dd}$	0.133	0.133	0.133	0.133	0.0	0.133	360	0.133	0.133	0.133	33.8	0.0	0.0	0.0	0.879	0.763	0.725	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1043	NW_020$_{dd}$	0.2	0.2	0.2	0.2	0.0	0.2	360	0.2	0.2	0.2	38.6	0.0	0.0	0.0	0.799	0.661	0.614	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1044	NW_026$_{dd}$	0.266	0.266	0.266	0.266	0.0	0.266	360	0.266	0.266	0.266	43.3	0.0	0.0	0.0	0.731	0.571	0.537	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1045	NW_033$_{dd}$	0.333	0.333	0.333	0.333	0.0	0.333	360	0.333	0.333	0.333	48.1	0.0	0.0	0.0	0.682	0.507	0.485	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1046	NW_040$_{dd}$	0.4	0.4	0.4	0.4	0.0	0.4	360	0.4	0.4	0.4	52.8	0.0	0.0	0.0	0.636	0.454	0.433	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1047	NW_046$_{dd}$	0.466	0.466	0.466	0.466	0.0	0.466	360	0.466	0.466	0.466	57.5	0.0	0.0	0.0	0.574	0.404	0.381	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1048	NW_053$_{dd}$	0.533	0.533	0.533	0.533	0.0	0.533	360	0.533	0.533	0.533	62.3	0.0	0.0	0.0	0.509	0.354	0.33	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1049	NW_060$_{dd}$	0.6	0.6	0.6	0.6	0.0	0.6	360	0.6	0.6	0.6	67.1	0.0	0.0	0.0	0.442	0.285	0.278	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1050	NW_066$_{dd}$	0.666	0.666	0.666	0.666	0.0	0.666	360	0.666	0.666	0.666	71.8	0.0	0.0	0.0	0.377	0.228	0.228	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1051	NW_073$_{dd}$	0.734	0.734	0.734	0.734	0.0	0.734	360	0.734	0.734	0.734	76.6	0.0	0.0	0.0	0.314	0.191	0.186	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1052	NW_080$_{dd}$	0.8	0.8	0.8	0.8	0.0	0.8	360	0.8	0.8	0.8	81.3	0.0	0.0	0.0	0.252	0.153	0.146	0.0	360	1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0

delta

TUB-test chart PN17; colour rendering
colors and differences, $\Delta E'$*, 3D=1, de=0, *cmy0**

input: *rgb/cmyk* −> *rgb*$_{dd}$
output: 3D-linearization to *cmy0**$_{dd}$

5−1032031−F0

n	HIC*$_{Fdd}$	*rgb*$_{Fdd}$			*ict*$_{Fdd}$			h_{si_Fdd}
1053	NW_086$_{dd}$	0.866	0.866	0.866	0.866	0.0	0.866	360
1054	NW_093$_{dd}$	0.933	0.933	0.933	0.933	0.0	0.933	360
1055	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360
1056	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360
1057	NW_006$_{dd}$	0.066	0.066	0.066	0.066	0.0	0.066	360
1058	NW_013$_{dd}$	0.133	0.133	0.133	0.133	0.0	0.133	360
1059	NW_020$_{dd}$	0.2	0.2	0.2	0.2	0.0	0.2	360
1060	NW_026$_{dd}$	0.266	0.266	0.266	0.266	0.0	0.266	360
1061	NW_033$_{dd}$	0.333	0.333	0.333	0.333	0.0	0.333	360
1062	NW_040$_{dd}$	0.4	0.4	0.4	0.4	0.0	0.4	360
1063	NW_046$_{dd}$	0.466	0.466	0.466	0.466	0.0	0.466	360
1064	NW_053$_{dd}$	0.533	0.533	0.533	0.533	0.0	0.533	360
1065	NW_060$_{dd}$	0.6	0.6	0.6	0.6	0.0	0.6	360
1066	NW_066$_{dd}$	0.666	0.666	0.666	0.666	0.0	0.666	360
1067	NW_073$_{dd}$	0.734	0.734	0.734	0.734	0.0	0.734	360
1068	NW_080$_{dd}$	0.8	0.8	0.8	0.8	0.0	0.8	360
1069	NW_086$_{dd}$	0.866	0.866	0.866	0.866	0.0	0.866	360
1070	NW_093$_{dd}$	0.933	0.933	0.933	0.933	0.0	0.933	360
1071	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360
1072	NW_000$_{dd}$	0.0	0.0	0.0	0.0	0.0	0.0	360
1073	NW_100$_{dd}$	1.0	1.0	1.0	1.0	0.0	1.0	360
1074	R00Y_100_100$_{dd}$	1.0	0.0	0.0	1.0	1.0	0.5	390
1075	G50B_100_100$_{dd}$	0.0	1.0	1.0	1.0	1.0	0.5	210
1076	Y00G_100_100$_{dd}$	1.0	1.0	0.0	1.0	1.0	0.5	90
1077	B00R_100_100$_{dd}$	0.0	0.0	1.0	1.0	1.0	0.5	270
1078	G00B_100_100$_{dd}$	0.0	1.0	0.0	1.0	1.0	0.5	150
1079	B50R_100_100$_{dd}$	1.0	0.0	1.0	1.0	1.0	0.5	330

*rgb**$_{Fdd}$			*LabCh**$_{Fdd}$				
0.866	0.866	0.866	86.0	0.0	0.0	0.0	0.0
0.933	0.933	0.933	90.8	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0
0.066	0.066	0.066	29.0	0.0	0.0	0.0	0.0
0.133	0.133	0.133	33.8	0.0	0.0	0.0	0.0
0.2	0.2	0.2	38.6	0.0	0.0	0.0	0.0
0.266	0.266	0.266	43.3	0.0	0.0	0.0	0.0
0.333	0.333	0.333	48.1	0.0	0.0	0.0	0.0
0.4	0.4	0.4	52.8	0.0	0.0	0.0	0.0
0.466	0.466	0.466	57.5	0.0	0.0	0.0	0.0
0.533	0.533	0.533	62.3	0.0	0.0	0.0	0.0
0.6	0.6	0.6	67.1	0.0	0.0	0.0	0.0
0.666	0.666	0.666	71.8	0.0	0.0	0.0	0.0
0.734	0.734	0.734	76.6	0.0	0.0	0.0	0.0
0.8	0.8	0.8	81.3	0.0	0.0	0.0	0.0
0.866	0.866	0.866	86.0	0.0	0.0	0.0	0.0
0.933	0.933	0.933	90.8	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
1.0	0.0	1.0	87.8	−10.2	95.4	96.0	96.1
0.0	0.0	1.0	25.0	29.5	−40.4	50.0	306.2
0.0	1.0	0.0	50.0	−65.0	29.6	71.4	155.5
1.0	0.0	1.0	46.1	79.3	−0.2	79.3	359.8

*cmyn**$_{sep,Fdd}$				$h_{siM,dd}$
0.173	0.108	0.099	0.0	360
0.09	0.054	0.05	0.0	360
0.0	0.0	0.0	0.0	360
1.0	1.0	1.0	0.0	360
0.935	0.855	0.825	0.0	360
0.879	0.763	0.725	0.0	360
0.799	0.661	0.614	0.0	360
0.731	0.571	0.537	0.0	360
0.682	0.507	0.485	0.0	360
0.636	0.454	0.433	0.0	360
0.574	0.404	0.381	0.0	360
0.509	0.354	0.33	0.0	360
0.442	0.285	0.278	0.0	360
0.377	0.228	0.228	0.0	360
0.314	0.191	0.186	0.0	360
0.252	0.153	0.146	0.0	360
0.173	0.108	0.099	0.0	360
0.09	0.054	0.05	0.0	360
0.0	0.0	0.0	0.0	360
1.0	1.0	1.0	0.0	360
0.0	0.0	0.0	0.0	360
0.0	1.0	1.0	0.0	389
1.0	0.0	0.0	0.0	210
0.0	0.0	1.0	0.0	89
0.999	1.0	0.0	0.0	270
1.0	0.0	1.0	0.0	149
0.0	1.0	0.0	0.0	330

delta

*rgb**$_{Mdd}$			*LabCh**$_{Mdd}$				
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	1.0	1.0	95.6	0.0	0.0	0.0	0.0
1.0	0.0	0.0	45.4	70.9	44.8	83.9	32.3
0.0	1.0	1.0	56.8	−25.5	−41.5	48.7	238.4
0.0	0.0	1.0	87.8	−10.2	95.4	96.0	96.1
0.0	1.0	0.0	25.0	29.5	−40.4	50.0	306.2
0.0	0.0	1.0	50.0	−65.0	29.6	71.4	155.5
0.0	1.0	0.0	46.1	79.3	−0.2	79.3	359.8

TUB-test chart PN17; colour rendering
colors and differences, $\Delta E'^*$, 3D=1, de=0, *cmy0**

input: *rgb/cmyk* −> *rgb*$_{dd}$
output: 3D-linearization to *cmy0**$_{dd}$

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