

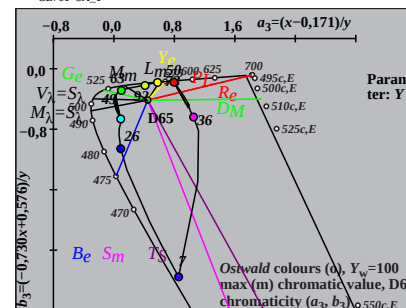
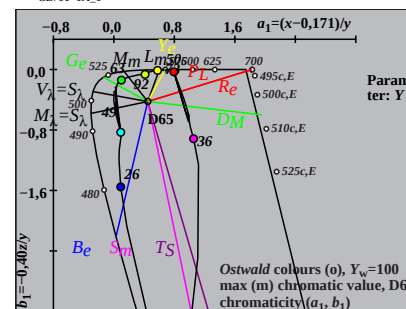
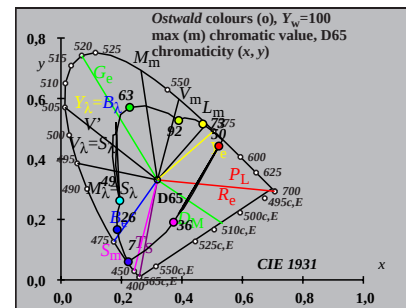
Ostwald optimal colours (o) of maximum (m) C_{AB} for D65, $Y_w=100$, $Y_m=520-770$

i_1, λ_1	i_2, λ_2	X	Y	Z	x	y	z	h_{xy}	i_d, λ_d	i_c, λ_c	Code
0	405	32	561	32.21	57.55	106.92	0.1637	0.2926	0.5436	193.7	16 483 37 589 Cm
7	435	32	562	27.17	58.04	79.81	0.1646	0.3517	0.4836	171.2	17 488 -1 488c
9	450	32	563	24.47	58.99	61.43	0.1688	0.4071	0.4239	151.4	18 493 -1 493c
11	460	33	565	22.13	60.01	42.4	0.1776	0.4818	0.3404	131.4	20 501 -1 501c
13	465	33	567	20.5	60.53	26.03	0.1914	0.5653	0.2431	117.1	22 512 -1 512c
14	470	33	569	21.23	62.02	19.76	0.206	0.602	0.1918	111.3	24 520 -1 520c
15	475	34	573	23.5	64.56	14.75	0.2285	0.6279	0.1434	105.6	25 528 -1 528c Gm
16	480	36	580	28.68	69.17	10.93	0.2636	0.6358	0.1005	99.0	27 537 -1 537c
17	485	39	595	41.64	77.87	8.14	0.3261	0.6099	0.0638	87.2	29 548 -1 548c
18	490	-1 490c	76.23	92.76	6.07	0.4354	0.5298	0.0346	58.5	33 565 11 459 max	
18	495	-1 494c	76.23	92.76	6.07	0.4354	0.5298	0.0346	58.5	33 565 11 459	
20	500	-1 500c	76.16	89.41	3.23	0.4511	0.5296	0.0191	55.3	33 567 12 464	
21	510	-1 509c	76.13	87.1	2.29	0.4599	0.5262	0.0138	53.2	33 568 13 467	
23	520	-1 519c	75.81	81.07	1.15	0.4797	0.513	0.0072	47.7	34 570 14 471 Ym	
25	530	-1 529c	74.69	73.22	0.56	0.503	0.4931	0.0038	40.7	34 573 15 475	
28	540	-1 540c	70.86	59.46	0.18	0.5429	0.4556	0.0014	28.7	35 579 15 479	
29	545	-1 545c	68.93	54.65	0.12	0.5571	0.4417	0.001	24.7	36 582 16 480	
30	550	-1 550c	66.65	49.84	0.09	0.5716	0.4274	0.0008	20.8	36 584 16 481	
31	555	-1 555c	64.04	45.12	0.07	0.5862	0.4131	0.0006	17.0	37 586 16 482	
31	560	-1 559c	64.04	45.12	0.07	0.5862	0.4131	0.0006	17.0	37 586 16 482	
32	561	0	405	61.77	41.32	0.75	0.5948	0.3979	0.0072	13.7	37 589 16 483 Rm
32	562	7	435	66.8	40.83	27.85	0.493	0.3013	0.2055	351.2	-1 488c 17 488
32	563	9	450	69.51	39.89	46.24	0.4466	0.2562	0.297	331.5	-1 493c 18 493
33	565	11	460	71.85	38.86	65.27	0.4082	0.2208	0.3708	311.4	-1 501c 20 501
33	567	13	465	73.48	38.35	81.64	0.3797	0.1982	0.4219	297.1	-1 512c 22 512
33	569	14	470	72.75	36.85	87.91	0.3683	0.1865	0.445	291.3	-1 520c 24 520
34	573	15	475	70.48	34.31	92.92	0.3564	0.1735	0.4699	285.7	-1 528c 25 528 Mm
36	580	16	480	65.3	29.7	96.74	0.3405	0.1549	0.5045	279.1	-1 537c 27 537
39	595	17	485	52.33	21.0	99.53	0.3027	0.1215	0.5757	267.2	-1 548c 29 548
-1 490c	18	490	17.75	6.12	101.6	0.1414	0.0487	0.8097	238.5	11 459 33 565 min	
-1 494c	18	495	17.75	6.12	101.6	0.1414	0.0487	0.8097	238.5	11 459 33 565	
-1 500c	20	500	17.82	9.47	104.44	0.1352	0.0719	0.7928	235.4	12 464 33 567	
-1 509c	21	510	17.85	11.77	105.37	0.1322	0.0872	0.7805	233.2	13 467 33 568	
-1 519c	23	520	18.17	17.8	106.52	0.1275	0.1249	0.7475	227.7	14 471 34 570 Bm	
-1 529c	25	530	19.29	25.66	107.1	0.1268	0.1687	0.7043	220.7	15 475 34 573	
-1 540c	28	540	23.12	39.42	107.49	0.1359	0.2318	0.6321	208.8	15 479 35 579	
-1 545c	29	545	25.05	44.23	107.54	0.1416	0.2501	0.6081	204.7	16 480 36 582	
-1 550c	30	550	27.33	49.04	107.58	0.1485	0.2665	0.5848	200.8	16 481 36 584	
-1 555c	31	555	29.94	53.75	107.6	0.1565	0.2809	0.5624	197.0	16 482 37 586	
-1 559c	31	560	29.94	53.75	107.6	0.1565	0.2809	0.5624	197.0	16 482 37 586	
380	770	93.98	98.88	107.67	0.3127	0.329	0.3582	0.0			

TUB-test chart CE70; CIE (x, y) and chromaticities (a_i, b_i)

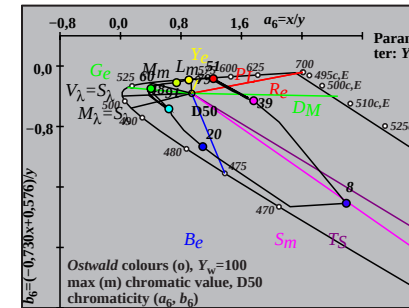
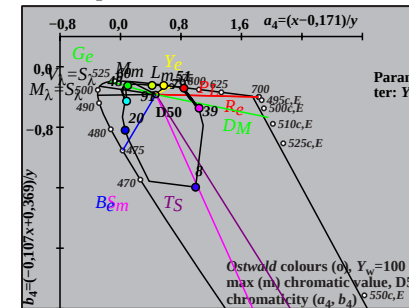
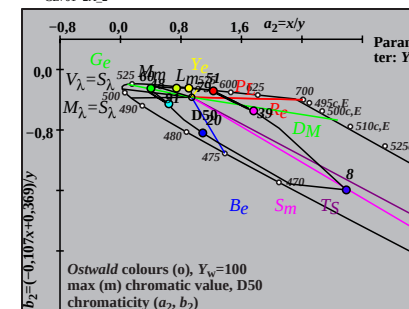
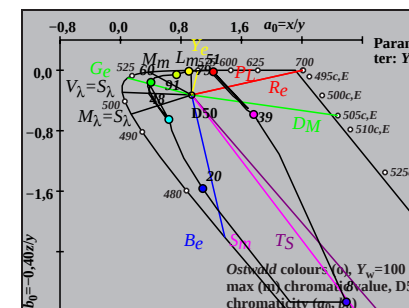
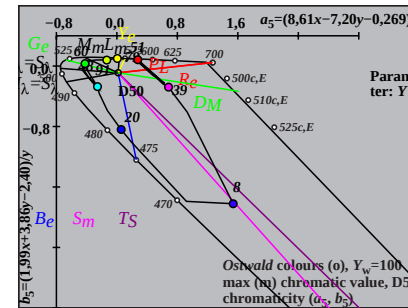
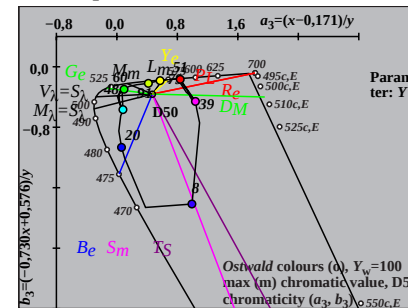
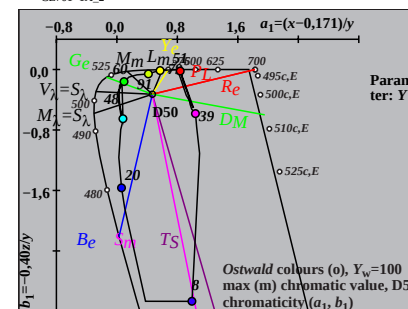
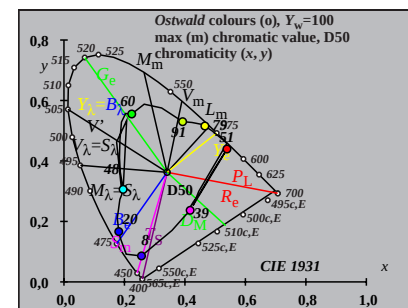
Ostwald optimal colours for illuminant D65; diagram for illuminant D65, $Y_w=100$

input: w/rgb/cmyk -> rgb



Ostwald optimal colours (o) of maximum (m) C _{AB} for D50, Y _w =100, Y _m =520_770													
i ₁ , λ ₁	i ₂ , λ ₂	X	Y	Z	x	y	z	h _{xy}	i _d , λ _d	i _c , λ _c	Code		
0 405	32 564	29.2	56.83	80.63	0.1752	0.3409	0.4837	185.8	17 486	38 592	Cm		
7 435	33 565	25.88	57.19	62.41	0.1779	0.393	0.4289	168.3	18 490	46 634			
10 450	33 566	22.64	57.68	41.74	0.1854	0.4725	0.342	144.5	19 497	-1 497c			
11 460	33 567	22.26	58.57	34.58	0.1928	0.5075	0.2996	135.7	20 501	-1 501c			
13 465	33 568	20.95	58.93	21.79	0.206	0.5796	0.2143	122.2	22 511	-1 511c			
14 470	34 570	21.49	60.0	16.76	0.2187	0.6106	0.1706	116.7	23 519	-1 519c			
15 475	34 573	23.15	61.82	12.69	0.237	0.6329	0.1299	111.5	25 527	-1 527c	Gm		
15 480	35 578	27.14	65.77	12.7	0.2569	0.6227	0.1202	108.5	26 531	-1 531c			
17 485	37 587	34.72	71.01	7.2	0.3074	0.6287	0.0637	98.0	28 544	-1 544c			
18 490	44 620	64.49	86.52	5.44	0.4122	0.5529	0.0348	71.0	32 561	-1 561c	max		
18 495	-1 494c	81.74	93.35	5.44	0.4527	0.517	0.0301	55.9	33 567	12 461			
19 500	-1 499c	81.69	92.06	4.06	0.4594	0.5177	0.0228	54.4	33 568	12 463			
22 510	-1 510c	81.56	85.85	1.52	0.4827	0.5081	0.009	47.4	34 571	14 471			
24 520	-1 520c	80.96	79.4	0.78	0.5023	0.4927	0.0048	40.5	34 573	15 475	Ym		
26 530	-1 530c	79.37	71.26	0.38	0.5255	0.4718	0.0025	32.1	35 577	15 479			
28 540	-1 540c	76.61	62.26	0.18	0.5509	0.4477	0.0013	23.4	36 581	16 481			
29 545	-1 545c	74.72	57.55	0.13	0.5643	0.4346	0.0009	19.1	36 583	16 483			
29 550	-1 549c	74.72	57.55	0.13	0.5643	0.4346	0.0009	19.1	36 583	16 483			
31 555	-1 555c	69.87	48.11	0.07	0.5918	0.4075	0.0006	11.2	37 587	17 485			
32 560	-1 560c	66.91	43.52	0.05	0.6055	0.3938	0.0005	7.7	38 590	17 486			
32 564	0 405	65.57	41.46	0.46	0.6099	0.3857	0.0042	5.8	38 592	17 486	Rm		
33 565	7 435	68.89	41.1	18.67	0.5354	0.3194	0.1451	348.3	46 634	18 490			
33 566	10 450	72.14	40.61	39.34	0.4743	0.267	0.2586	324.5	-1 497c	19 497			
33 567	11 460	72.52	39.72	46.5	0.4568	0.2502	0.2929	315.7	-1 501c	20 501			
33 568	13 465	73.82	39.36	59.3	0.428	0.2281	0.3437	302.3	-1 511c	22 511			
34 570	14 470	73.29	38.29	64.32	0.4166	0.2176	0.3656	296.7	-1 519c	23 519			
34 573	15 475	71.62	36.47	68.4	0.4058	0.2066	0.3875	291.6	-1 527c	25 527	Mm		
35 578	15 480	67.64	32.51	68.39	0.4013	0.1929	0.4057	288.5	-1 531c	26 531			
37 587	17 485	60.05	27.28	73.88	0.3724	0.1692	0.4582	278.0	-1 544c	28 544			
44 620	18 490	30.28	11.77	75.64	0.2573	0.1	0.6426	251.1	-1 561c	32 561	min		
-1 494c	18 495	13.04	4.94	75.64	0.1392	0.0528	0.8078	235.9	12 461	33 567			
-1 499c	19 500	13.08	6.23	77.03	0.1357	0.0647	0.7994	234.4	12 463	33 568			
-1 510c	22 510	13.21	12.44	79.56	0.1255	0.1182	0.7561	227.5	14 471	34 571			
-1 520c	24 520	13.82	18.89	80.3	0.1222	0.1671	0.7105	220.5	15 475	34 573	Bm		
-1 530c	26 530	15.4	27.03	80.71	0.125	0.2195	0.6553	212.2	15 479	35 577			
-1 540c	28 540	18.16	36.03	80.9	0.1344	0.2666	0.5988	203.5	16 481	36 581			
-1 545c	29 545	20.05	40.74	80.96	0.1414	0.2873	0.5711	199.2	16 483	36 583			
-1 549c	29 550	20.05	40.74	80.96	0.1414	0.2873	0.5711	199.2	16 483	36 583			
-1 555c	31 555	24.9	50.18	81.01	0.1595	0.3214	0.5189	191.2	17 485	37 587			
-1 560c	32 560	27.86	54.77	81.03	0.1702	0.3346	0.495	187.7	17 486	38 590			
380	770	94.78	98.29	81.09	0.3457	0.3585	0.2957	0.0					

TUB-test chart CE70; CIE (x, y) and chromaticities (a_i, b_i)
Ostwald optimal colours for illuminant D50; diagram for illuminant D50, Y_w=100



TUB registration: 20170801-CE70/CE70LONP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

input: w/rgb/cmyk -> rgb

Ostwald optimal colours (o) of maximum (m) C_{AB} for P40, $Y_w=100$, $Y_m=520\text{--}770$

i_1, λ_1	i_2, λ_2	X	Y	Z	x	y	z	h_{xy}	i_d, λ_d	i_c, λ_c	Code
1 405	33 568	28.25	55.72	62.95	0.1923	0.3792	0.4284	179.1	17 488	38 594	Cm
6 435	33 568	26.38	56.05	52.25	0.1958	0.4161	0.3879	167.8	18 491	42 614	
9 450	33 569	24.1	56.53	37.78	0.2035	0.4774	0.319	150.2	19 497	-1 497c	
12 460	34 570	22.11	56.92	22.32	0.2181	0.5615	0.2202	131.1	21 507	-1 507c	
13 465	34 571	22.1	57.42	17.76	0.2271	0.5902	0.1825	125.5	22 512	-1 512c	
13 470	34 572	23.2	58.61	17.76	0.2329	0.5886	0.1784	124.7	22 513	-1 513c	
15 475	34 574	23.99	59.76	10.71	0.254	0.6325	0.1134	116.1	25 527	-1 527c	Gm
16 480	35 578	26.96	62.31	8.21	0.2765	0.6391	0.0842	111.4	27 535	-1 535c	
17 485	37 585	33.04	66.99	6.27	0.3108	0.6301	0.059	105.2	28 543	-1 543c	
18 490	40 600	49.47	76.97	4.78	0.3769	0.5865	0.0364	90.7	31 555	-1 555c	max
19 495	-1 495c	89.2	93.44	3.61	0.4789	0.5016	0.0193	51.6	34 571	12 464	
20 500	-1 500c	89.19	92.03	2.67	0.485	0.5004	0.0145	49.6	34 571	13 467	
22 510	-1 510c	89.09	87.99	1.4	0.4991	0.4929	0.0078	44.3	34 573	14 472	Ym
24 520	-1 520c	88.54	82.15	0.73	0.5164	0.4792	0.0042	36.9	35 575	15 476	
26 530	-1 530c	87.1	74.79	0.36	0.5368	0.4609	0.0022	28.2	35 578	16 480	
28 540	-1 540c	84.52	66.38	0.18	0.5594	0.4393	0.0012	19.2	36 582	16 483	
29 545	-1 545c	82.73	61.91	0.13	0.5714	0.4276	0.0009	14.9	36 584	16 484	
29 550	-1 549c	82.73	61.91	0.13	0.5714	0.4276	0.0009	14.9	36 584	16 484	
31 555	-1 555c	77.98	52.69	0.07	0.5963	0.403	0.0006	6.9	37 588	17 486	
31 560	-1 559c	77.98	52.69	0.07	0.5963	0.403	0.0006	6.9	37 588	17 486	
33 568	1 405	71.14	42.75	0.75	0.6204	0.3729	0.0065	359.1	38 594	17 488	Rm
33 568	6 435	73.01	42.43	11.45	0.5753	0.3343	0.0902	347.8	42 614	18 491	
33 569	9 450	75.29	41.94	25.92	0.5259	0.2929	0.1811	330.2	-1 497c	19 497	
34 570	12 460	77.29	41.56	41.38	0.4823	0.2593	0.2582	311.1	-1 507c	21 507	
34 571	13 465	77.29	41.05	45.94	0.4704	0.2498	0.2796	305.5	-1 512c	22 512	
34 572	13 470	76.2	39.86	45.94	0.4703	0.246	0.2835	304.7	-1 513c	22 513	
34 574	15 475	75.4	38.71	52.99	0.4512	0.2316	0.3171	296.2	-1 527c	25 527	Mm
35 578	16 480	72.43	36.17	55.49	0.4414	0.2204	0.3381	291.5	-1 535c	27 535	
37 585	17 485	66.35	31.49	57.43	0.4273	0.2028	0.3698	285.2	-1 543c	28 543	
40 600	18 490	49.93	21.51	58.92	0.3829	0.1649	0.452	270.8	-1 555c	31 555	min
-1 495c	19 495	10.19	5.04	60.09	0.1353	0.0669	0.7977	231.6	12 464	34 571	
-1 500c	20 500	10.2	6.45	61.03	0.1313	0.083	0.7855	229.7	13 467	34 571	
-1 510c	22 510	10.3	10.48	62.3	0.124	0.1262	0.7497	224.3	14 472	34 573	
-1 520c	24 520	10.86	16.33	62.97	0.1204	0.1811	0.6984	216.9	15 476	35 575	Bm
-1 530c	26 530	12.29	23.68	63.34	0.1237	0.2385	0.6377	208.3	16 480	35 578	
-1 540c	28 540	14.87	32.1	63.52	0.1346	0.2905	0.5748	199.3	16 483	36 582	
-1 545c	29 545	16.67	36.57	63.57	0.1427	0.313	0.5442	194.9	16 484	36 584	
-1 549c	29 550	16.67	36.57	63.57	0.1427	0.313	0.5442	194.9	16 484	36 584	
-1 555c	31 555	21.41	45.78	63.63	0.1636	0.3499	0.4863	186.9	17 486	37 588	
-1 559c	31 560	21.41	45.78	63.63	0.1636	0.3499	0.4863	186.9	17 486	37 588	
380	770	99.4	98.48	63.71	0.3799	0.3764	0.2435	0.0			

TUB-test chart CE70; CIE (x, y) and chromaticities (a_i, b_i)
Ostwald optimal colours for illuminant P40; diagram for illuminant P40, $Y_w=100$

input: w/rgb/cmyk -> rgb

TUB registration: 20170801-CE70/CE70L0NP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

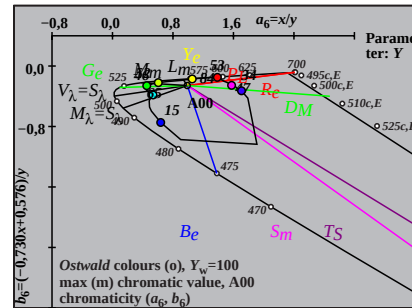
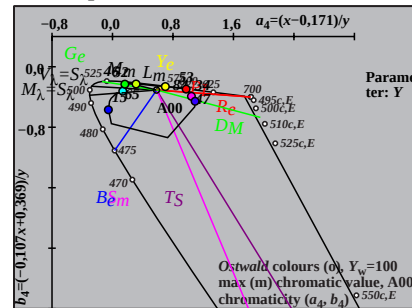
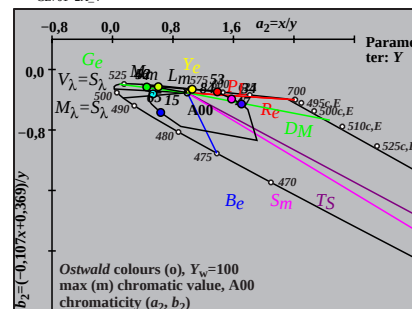
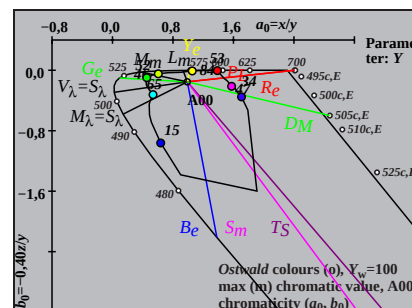
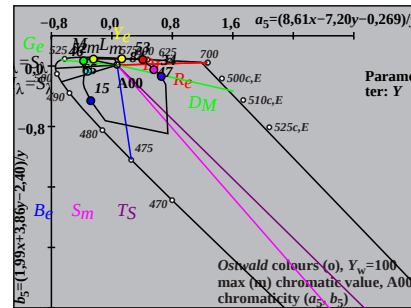
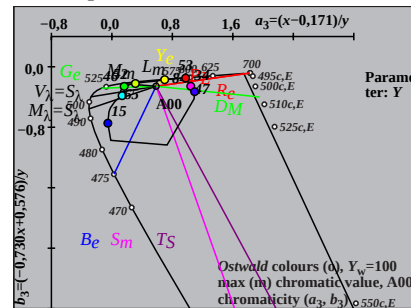
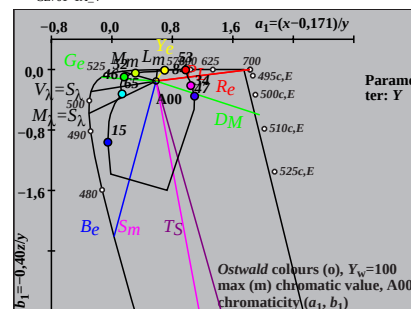
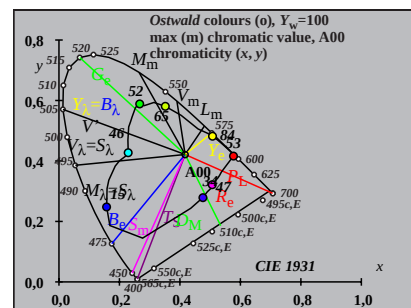
Ostwald optimal colours (o) of maximum (m) C_{AB} for A00, $Y_w=100$, $Y_m=520\text{--}770$

i_1, λ_1	i_2, λ_2	X	Y	Z	x	y	z	h_{xy}	i_d, λ_d	i_c, λ_c	Code
0 405	34 574	27.89	55.2	35.75	0.2347	0.4644	0.3008	164.9	18 494	39 599	Cm
6 435	34 574	27.09	55.38	30.85	0.239	0.4887	0.2722	158.6	19 496	42 611	
9 450	34 574	26.01	55.66	23.54	0.2472	0.5289	0.2238	148.7	20 501	-1 501c	
12 460	35 575	24.94	55.86	14.89	0.2606	0.5837	0.1556	136.6	21 508	-1 508c	
13 465	35 575	24.97	56.14	12.16	0.2677	0.6018	0.1303	132.7	22 512	-1 512c	
13 470	35 576	25.68	56.81	12.16	0.2712	0.6001	0.1285	132.4	22 513	-1 513c	
14 475	35 577	26.45	57.66	9.76	0.2817	0.6142	0.104	128.7	23 519	-1 519c	Gm
16 480	35 579	27.84	58.76	6.08	0.3003	0.6339	0.0656	123.0	26 532	-1 532c	
17 485	36 582	31.06	61.14	4.77	0.3202	0.6305	0.0491	119.6	28 540	-1 540c	
18 490	37 588	37.53	65.61	3.72	0.3512	0.6139	0.0348	114.9	29 548	-1 548c	max
19 495	40 601	54.0	75.2	2.88	0.4088	0.5693	0.0218	103.4	31 559	-1 559c	
20 500	-1 500c	105.48	96.6	2.2	0.5163	0.4728	0.0107	43.5	35 576	13 469	
22 510	-1 510c	105.4	93.46	1.21	0.5267	0.4671	0.006	36.9	35 577	15 475	
23 520	-1 519c	105.24	91.27	0.9	0.533	0.4623	0.0045	32.6	35 578	15 478	Ym
26 530	-1 530c	103.7	82.3	0.35	0.5564	0.4416	0.0019	17.4	36 582	16 484	
28 540	-1 540c	101.34	74.64	0.18	0.5752	0.4236	0.001	7.2	37 585	17 487	
29 545	-1 545c	99.65	70.43	0.14	0.5854	0.4137	0.0008	2.6	37 586	17 489	
29 550	-1 549c	99.65	70.43	0.14	0.5854	0.4137	0.0008	2.6	37 586	17 489	
30 555	-1 554c	97.55	66.01	0.1	0.596	0.4033	0.0006	358.4	37 588	18 490	
32 560	-1 560c	91.97	56.73	0.07	0.6182	0.3813	0.0004	351.3	38 593	18 492	
34 574	0 405	83.01	45.76	0.17	0.6437	0.3548	0.0013	345.0	39 599	18 494	Rm
34 574	6 435	83.82	45.58	5.07	0.6233	0.3389	0.0377	338.7	42 611	19 496	
34 574	9 450	84.9	45.31	12.37	0.5954	0.3177	0.0868	328.7	-1 501c	20 501	
35 575	12 460	85.96	45.1	21.03	0.5651	0.2965	0.1382	316.7	-1 508c	21 508	
35 575	13 465	85.94	44.82	23.76	0.5561	0.29	0.1537	312.7	-1 512c	22 512	
35 576	13 470	85.23	44.15	23.76	0.5565	0.2883	0.1551	312.4	-1 513c	22 513	
35 577	14 475	84.46	43.3	26.16	0.5487	0.2813	0.1699	308.7	-1 519c	23 519	Mm
35 579	16 480	83.07	42.2	29.84	0.5355	0.272	0.1923	303.0	-1 532c	26 532	
36 582	17 485	79.85	39.82	31.15	0.5294	0.264	0.2065	299.7	-1 540c	28 540	
37 588	18 490	73.37	35.35	32.2	0.5206	0.2508	0.2285	295.0	-1 548c	29 548	min
40 601	19 495	56.91	25.76	33.04	0.4917	0.2226	0.2855	283.4	-1 559c	31 559	
-1 500c	20 500	5.43	4.36	33.72	0.1248	0.1002	0.7748	223.5	13 469	35 576	
-1 510c	22 510	5.51	7.5	34.71	0.1155	0.1572	0.7272	217.0	15 475	35 577	
-1 519c	23 520	5.66	9.69	35.02	0.1124	0.1924	0.6951	212.6	15 478	35 578	Bm
-1 530c	26 530	7.21	18.67	35.57	0.1173	0.3037	0.5788	197.4	16 484	36 582	
-1 540c	28 540	9.56	26.32	35.74	0.1335	0.3674	0.4989	187.2	17 487	37 585	
-1 545c	29 545	11.26	30.53	35.78	0.1451	0.3935	0.4612	182.6	17 489	37 586	
-1 549c	29 550	11.26	30.53	35.78	0.1451	0.3935	0.4612	182.6	17 489	37 586	
-1 554c	30 555	13.36	34.95	35.81	0.1587	0.4154	0.4257	178.4	18 490	37 588	
-1 560c	32 560	18.94	44.23	35.85	0.1912	0.4466	0.362	171.2	18 492	38 593	
380	770	110.91	100.97	35.92	0.4475	0.4074	0.1449	0.0			

TUB-test chart CE70; CIE (x, y) and chromaticities (a_i, b_i)

Ostwald optimal colours for illuminant A00; diagram for illuminant A00, $Y_w=100$

input: w/rgb/cmyk -> rgb



TUB registration: 20170801-CE70/CE70LONP.PDF /PS
application for measurement of offset print output

TUB material: code=rha4ta

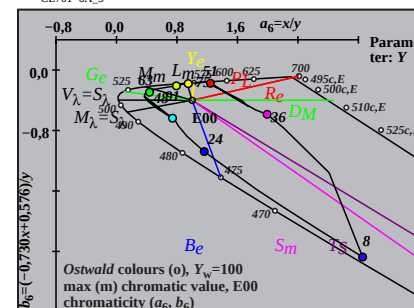
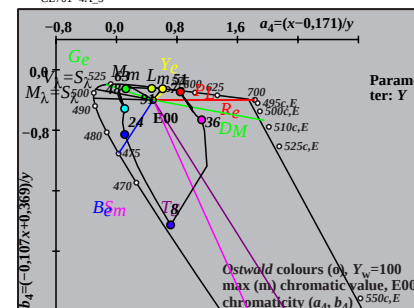
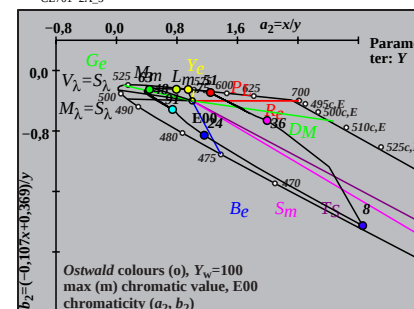
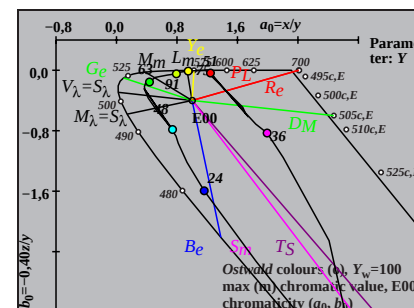
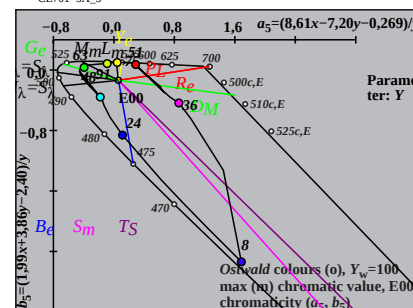
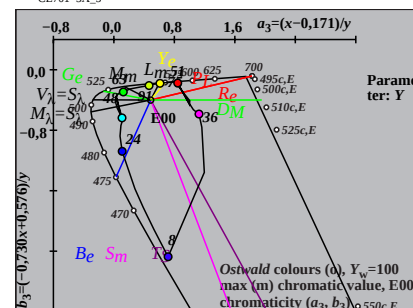
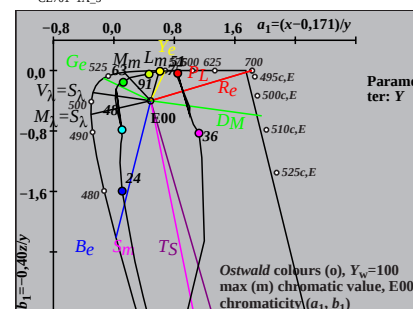
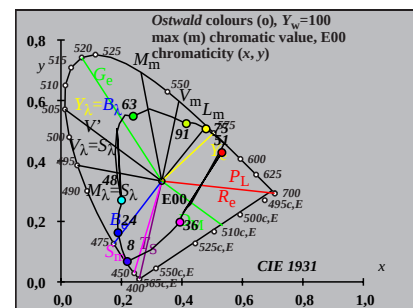
Ostwald optimal colours (o) of maximum (m) C_{AB} for E00, $Y_w=100$, $Y_m=520\text{--}770$

i_1, λ_1	i_2, λ_2	X	Y	Z	x	y	z	h_{xy}	i_d, λ_d	i_c, λ_c	Code
1 405	32 564	32.46	57.42	98.28	0.1725	0.3051	0.5222	189.9	16 484	38 592	Cm
7 435	33 565	27.18	57.82	70.01	0.1753	0.3729	0.4516	165.8	17 489	-1 489c	
10 450	33 566	23.31	58.44	45.21	0.1835	0.4603	0.3561	139.6	19 498	-1 498c	
11 460	33 568	23.0	59.59	37.23	0.1919	0.4973	0.3107	130.7	20 502	-1 502c	
13 465	33 569	21.68	60.14	23.17	0.2065	0.5727	0.2206	117.8	22 514	-1 514c	
13 470	34 571	23.36	62.0	23.17	0.2152	0.5712	0.2135	116.3	23 516	-1 516c	
14 475	35 575	25.39	64.53	17.73	0.2358	0.5994	0.1646	110.0	25 525	-1 525c	Gm
15 480	36 581	30.27	68.93	13.39	0.2688	0.6121	0.1189	103.0	27 536	-1 536c	
17 485	39 595	42.54	76.7	7.54	0.3355	0.6049	0.0594	89.5	29 549	-1 549c	
18 490	-1 490c	83.34	94.54	5.63	0.4541	0.5151	0.0307	56.3	33 568	11 459	max
19 495	-1 495c	83.29	93.18	4.17	0.461	0.5157	0.0231	54.9	33 568	12 461	
20 500	-1 500c	83.28	91.47	3.04	0.4684	0.5144	0.0171	53.2	33 569	12 464	
21 510	-1 509c	83.25	89.34	2.17	0.4763	0.5111	0.0124	51.1	34 570	13 466	
24 520	-1 520c	82.54	80.14	0.78	0.5049	0.4902	0.0047	42.4	34 574	14 473	Ym
25 530	-1 529c	81.9	76.26	0.54	0.516	0.4805	0.0034	38.8	35 575	15 475	
28 540	-1 540c	78.25	63.21	0.18	0.5524	0.4462	0.0012	27.2	36 581	15 479	
29 545	-1 545c	76.4	58.59	0.13	0.5654	0.4336	0.0009	23.3	36 583	16 480	
29 550	-1 549c	76.4	58.59	0.13	0.5654	0.4336	0.0009	23.3	36 583	16 480	
30 555	-1 554c	74.18	53.92	0.09	0.5786	0.4205	0.0007	19.5	37 585	16 482	
32 560	-1 560c	68.62	44.64	0.05	0.6055	0.3939	0.0005	12.5	38 590	16 483	
32 564	1 405	67.53	42.57	1.71	0.6039	0.3807	0.0153	9.9	38 592	16 484	Rm
33 565	7 435	72.81	42.17	29.98	0.5022	0.2909	0.2068	345.9	-1 489c	17 489	
33 566	10 450	76.68	41.55	54.78	0.4432	0.2401	0.3166	319.7	-1 498c	19 498	
33 568	11 460	76.99	40.4	62.76	0.4273	0.2242	0.3483	310.7	-1 502c	20 502	
33 569	13 465	78.31	39.85	76.83	0.4015	0.2043	0.394	297.9	-1 514c	22 514	
34 571	13 470	76.63	37.99	76.82	0.4002	0.1984	0.4012	296.4	-1 516c	23 516	
35 575	14 475	74.61	35.46	82.27	0.3878	0.1843	0.4277	290.1	-1 525c	25 525	Mm
36 581	15 480	69.72	31.06	86.6	0.372	0.1657	0.4621	283.0	-1 536c	27 536	
39 595	17 485	57.45	23.29	92.46	0.3317	0.1344	0.5337	269.5	-1 549c	29 549	
-1 490c	18 490	16.65	5.45	94.36	0.1429	0.0468	0.8101	236.4	11 459	33 568	min
-1 495c	19 495	16.7	6.81	95.82	0.1399	0.0571	0.8029	235.0	12 461	33 568	
-1 500c	20 500	16.71	8.52	96.96	0.1368	0.0697	0.7934	233.3	12 464	33 569	
-1 509c	21 510	16.74	10.65	97.82	0.1337	0.0851	0.7811	231.2	13 466	34 570	
-1 520c	24 520	17.45	19.85	99.22	0.1278	0.1454	0.7267	222.4	14 473	34 574	Bm
-1 529c	25 530	18.09	23.73	99.45	0.1281	0.1679	0.7039	218.8	15 475	35 575	
-1 540c	28 540	21.74	36.78	99.81	0.1373	0.2323	0.6303	207.2	15 479	36 581	
-1 545c	29 545	23.59	41.4	99.86	0.1431	0.2511	0.6057	203.3	16 480	36 583	
-1 549c	29 550	23.59	41.4	99.86	0.1431	0.2511	0.6057	203.3	16 480	36 583	
-1 554c	30 555	25.81	46.07	99.9	0.1502	0.2682	0.5815	199.5	16 482	37 585	
-1 560c	32 560	31.37	55.35	99.94	0.168	0.2965	0.5353	192.5	16 483	38 590	
380	770	100.0	100.0	100.0	0.3333	0.3333	0.3333	0.0			

TUB-test chart CE70; CIE (x, y) and chromaticities (a_i, b_i)

Ostwald optimal colours for illuminant E00; diagram for illuminant E00, $Y_w=100$

input: w/rgb/cmyk -> rgb



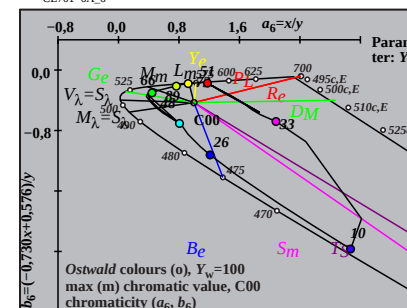
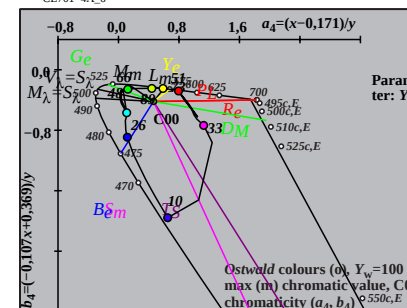
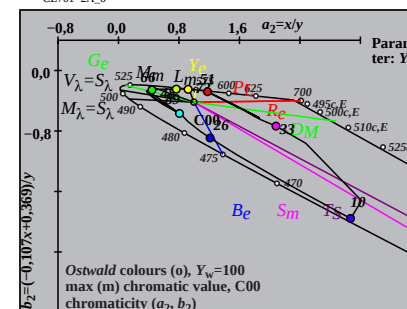
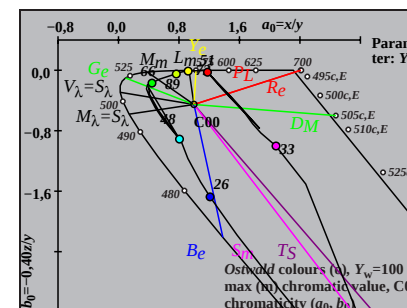
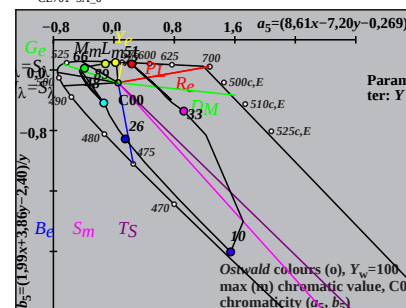
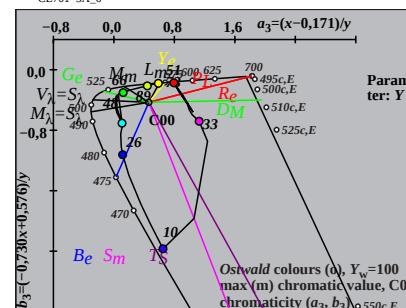
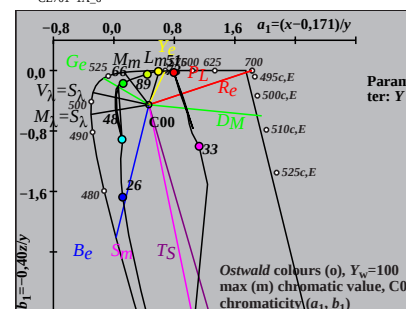
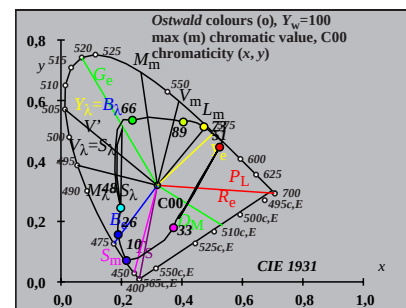
TUB registration: 20170801-CE70/CE70LONP.PDF /PS
application for measurement of offset print output

TUB material: code=rha4ta

Ostwald optimal colours (o) of maximum (m) C_{AB} for C00, $Y_w=100$, $Y_m=520\text{--}770$

i_1, λ_1	i_2, λ_2	X	Y	Z	x	y	z	h_{xy}	i_d, λ_d	i_c, λ_c	Code
1 405	32 562	34.38	57.47	116.6	0.1649	0.2756	0.5593	195.5	16 482	37 589	Cm
7 435	32 563	28.58	58.03	85.36	0.1662	0.3374	0.4963	171.5	17 487	-1 487c	
10 450	32 564	23.71	58.88	54.77	0.1726	0.4286	0.3987	140.6	19 496	-1 496c	
12 460	33 566	21.75	59.93	35.71	0.1852	0.5105	0.3042	122.6	21 506	-1 506c	
12 465	33 568	22.98	61.46	35.71	0.1912	0.5115	0.2972	121.2	21 507	-1 507c	
14 470	34 570	22.65	62.73	20.82	0.2132	0.5906	0.1961	109.4	24 522	-1 522c	
15 475	35 575	25.36	65.69	15.45	0.2381	0.6167	0.1451	103.4	26 530	-1 530c	Gm
16 480	36 582	31.57	70.82	11.33	0.2775	0.6227	0.0996	96.0	28 540	-1 540c	
16 485	40 602	48.66	82.26	11.35	0.342	0.5781	0.0798	83.0	30 551	-1 551c	
18 490	-1 490c	78.11	92.99	5.99	0.441	0.525	0.0338	57.8	33 566	11 459	max
19 495	-1 495c	78.06	91.44	4.31	0.449	0.526	0.0248	56.4	33 567	12 462	
20 500	-1 500c	78.04	89.57	3.06	0.4572	0.5247	0.0179	54.7	33 567	12 464	
22 510	-1 510c	77.92	84.74	1.52	0.4746	0.5161	0.0092	50.5	33 569	13 468	
23 520	-1 519c	77.71	81.72	1.08	0.4841	0.5091	0.0067	47.9	34 571	14 470	Ym
26 530	-1 530c	75.78	70.43	0.38	0.5169	0.4804	0.0026	38.4	35 575	15 475	
27 540	-1 539c	74.56	66.01	0.26	0.5293	0.4686	0.0019	34.8	35 577	15 477	
28 545	-1 544c	72.99	61.35	0.18	0.5425	0.456	0.0013	31.0	35 579	15 478	
29 550	-1 549c	71.05	56.51	0.13	0.5563	0.4425	0.001	27.1	36 581	15 479	
30 555	-1 554c	68.72	51.59	0.09	0.5706	0.4284	0.0008	23.3	36 584	16 480	
31 560	-1 559c	65.99	46.67	0.07	0.5853	0.4139	0.0006	19.5	37 586	16 481	
32 562	1 405	63.33	42.16	1.18	0.5936	0.3952	0.0111	15.5	37 589	16 482	Rm
32 563	7 435	69.13	41.6	32.43	0.4828	0.2906	0.2265	351.5	-1 487c	17 487	
32 564	10 450	73.99	40.75	63.02	0.4162	0.2292	0.3544	320.7	-1 496c	19 496	
33 566	12 460	75.96	39.7	82.08	0.3841	0.2007	0.415	302.7	-1 506c	21 506	
33 568	12 465	74.73	38.16	82.07	0.3832	0.1957	0.4209	301.3	-1 507c	21 507	
34 570	14 470	75.06	36.9	96.96	0.3592	0.1766	0.4641	289.4	-1 522c	24 522	
35 575	15 475	72.35	33.94	102.34	0.3467	0.1627	0.4905	283.4	-1 530c	26 530	Mm
36 582	16 480	66.14	28.81	106.45	0.3284	0.143	0.5285	276.0	-1 540c	28 540	
40 602	16 485	49.05	17.37	106.44	0.2837	0.1005	0.6157	263.0	-1 551c	30 551	
-1 490c	18 490	19.6	6.64	111.8	0.142	0.0481	0.8098	237.9	11 459	33 566	min
-1 495c	19 495	19.65	8.19	113.48	0.139	0.0579	0.8029	236.4	12 462	33 567	
-1 500c	20 500	19.67	10.06	114.72	0.1361	0.0696	0.7941	234.8	12 464	33 567	
-1 510c	22 510	19.79	14.89	116.27	0.1311	0.0986	0.7702	230.5	13 468	33 569	
-1 519c	23 520	20.0	17.91	116.7	0.1293	0.1158	0.7547	227.9	14 470	34 571	Bm
-1 530c	26 530	21.92	29.2	117.4	0.1301	0.1732	0.6966	218.4	15 475	35 575	
-1 539c	27 540	23.15	33.62	117.52	0.1328	0.1929	0.6742	214.8	15 477	35 577	
-1 544c	28 545	24.71	38.28	117.6	0.1368	0.2119	0.6511	211.0	15 478	35 579	
-1 549c	29 550	26.66	43.11	117.66	0.1422	0.23	0.6277	207.1	15 479	36 581	
-1 554c	30 555	28.99	48.04	117.69	0.1488	0.2466	0.6044	203.3	16 480	36 584	
-1 559c	31 560	31.72	52.96	117.72	0.1567	0.2616	0.5816	199.5	16 481	37 586	
380	770	97.71	99.63	117.79	0.31	0.3161	0.3737	0.0			

TUB-test chart CE70; CIE (x, y) and chromaticities (a_i, b_i)
Ostwald optimal colours for illuminant C00; diagram for illuminant C00, $Y_w=100$



input: w/rgb/cmyk -> rgb

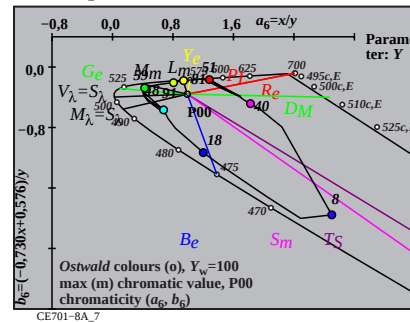
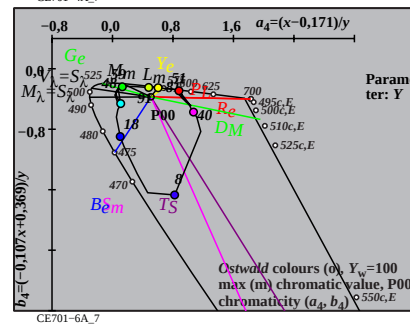
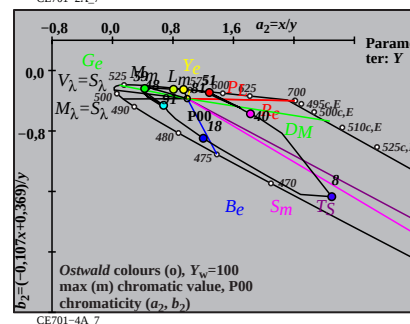
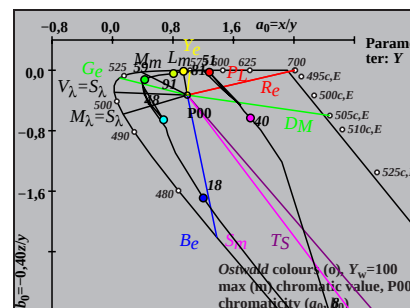
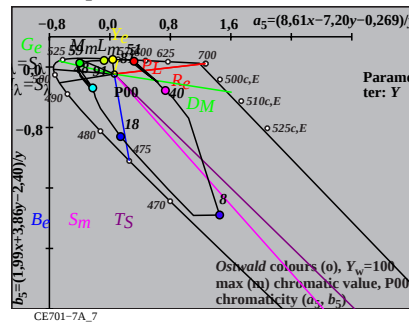
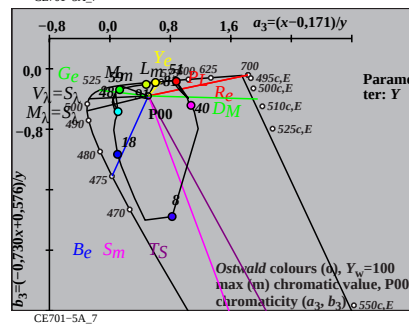
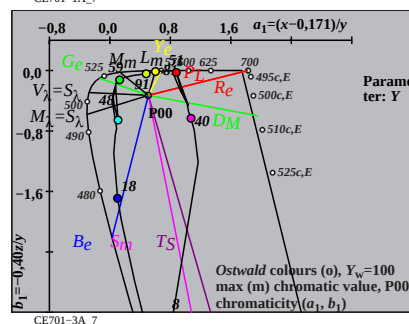
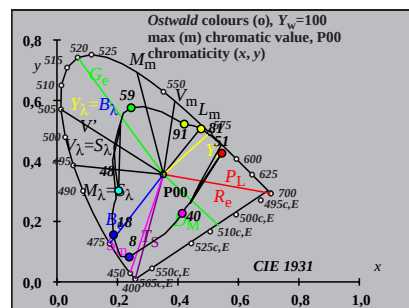
Ostwald optimal colours (o) of maximum (m) C_{AB} for P00, $Y_w=100$, $Y_m=520_770$

i_1, λ_1	i_2, λ_2	X	Y	Z	x	y	z	h_{xy}	i_d, λ_d	i_c, λ_c	Code
0 405	33 567	30.88	56.84	80.38	0.1837	0.3381	0.4781	184.8	17 486	38 594	Cm
7 435	33 567	26.74	57.15	58.15	0.1882	0.4023	0.4093	164.0	18 491	-1 491c	
10 450	33 568	23.65	57.66	38.34	0.1977	0.4818	0.3204	141.6	19 499	-1 499c	
12 460	34 570	22.36	58.32	25.64	0.2103	0.5485	0.2411	127.5	21 507	-1 507c	
13 465	34 571	22.38	58.97	20.14	0.2205	0.5809	0.1984	121.5	22 513	-1 513c	
14 470	34 572	23.11	60.08	15.55	0.234	0.6084	0.1575	116.3	24 521	-1 521c	
14 475	35 575	25.42	62.5	15.56	0.2456	0.6039	0.1503	114.5	24 524	-1 524c	Gm
16 480	36 580	28.91	65.38	8.99	0.2799	0.6329	0.087	106.0	27 537	-1 537c	
17 485	37 589	37.83	71.73	6.8	0.325	0.6164	0.0584	97.6	29 547	-1 547c	
18 490	45 625	72.23	88.96	5.13	0.4342	0.5348	0.0308	67.8	32 564	-1 564c	max
19 495	-1 495c	88.76	94.19	3.83	0.4751	0.5042	0.0205	52.7	34 570	12 462	
20 500	-1 500c	88.74	92.65	2.82	0.4817	0.5029	0.0153	50.9	34 571	13 465	
22 510	-1 510c	88.63	88.34	1.45	0.4967	0.495	0.0081	46.1	34 573	14 470	
24 520	-1 520c	88.06	82.21	0.75	0.5148	0.4807	0.0043	39.5	35 575	14 474	Ym
25 530	-1 529c	87.45	78.56	0.53	0.525	0.4717	0.0032	35.7	35 577	15 476	
27 540	-1 539c	85.42	70.41	0.26	0.5472	0.451	0.0016	27.6	36 580	15 479	
29 545	-1 545c	82.13	61.51	0.13	0.5712	0.4278	0.0009	19.4	36 584	16 482	
29 550	-1 549c	82.13	61.51	0.13	0.5712	0.4278	0.0009	19.4	36 584	16 482	
30 555	-1 554c	79.95	56.9	0.1	0.5837	0.4155	0.0007	15.5	37 586	16 483	
32 560	-1 560c	74.38	47.62	0.06	0.6093	0.3901	0.0005	8.4	38 591	17 485	
33 567	0 405	71.21	43.19	0.7	0.6186	0.3752	0.0061	4.8	38 594	17 486	Rm
33 567	7 435	75.35	42.87	22.93	0.5338	0.3037	0.1624	344.0	-1 491c	18 491	
33 568	10 450	78.44	42.37	42.74	0.4795	0.259	0.2613	321.6	-1 499c	19 499	
34 570	12 460	79.73	41.71	55.44	0.4507	0.2357	0.3134	307.5	-1 507c	21 507	
34 571	13 465	79.71	41.05	60.94	0.4386	0.2259	0.3353	301.5	-1 513c	22 513	
34 572	14 470	78.99	39.95	65.53	0.4281	0.2165	0.3552	296.3	-1 521c	24 521	
35 575	14 475	76.67	37.53	65.52	0.4266	0.2088	0.3645	294.6	-1 524c	24 524	Mm
36 580	16 480	73.18	34.65	72.09	0.4067	0.1925	0.4006	286.0	-1 537c	27 537	
37 589	17 485	64.27	28.29	74.28	0.3851	0.1695	0.4452	277.6	-1 547c	29 547	
45 625	18 490	29.86	11.06	75.95	0.2555	0.0946	0.6497	247.9	-1 564c	32 564	min
-1 495c	19 495	13.33	5.84	77.25	0.1383	0.0605	0.801	232.8	12 462	34 570	
-1 500c	20 500	13.35	7.37	78.26	0.1349	0.0745	0.7905	231.0	13 465	34 571	
-1 510c	22 510	13.46	11.68	79.63	0.1284	0.1115	0.7599	226.1	14 470	34 573	
-1 520c	24 520	14.04	17.82	80.33	0.1251	0.1588	0.716	219.5	14 474	35 575	Bm
-1 529c	25 530	14.64	21.46	80.55	0.1255	0.184	0.6904	215.7	15 476	35 577	
-1 539c	27 540	16.67	29.61	80.82	0.1311	0.2329	0.6358	207.6	15 479	36 580	
-1 545c	29 545	19.96	38.52	80.95	0.1431	0.2762	0.5805	199.5	16 482	36 584	
-1 549c	29 550	19.96	38.52	80.95	0.1431	0.2762	0.5805	199.5	16 482	36 584	
-1 554c	30 555	22.15	43.12	80.98	0.1514	0.2948	0.5537	195.5	16 483	37 586	
-1 560c	32 560	27.72	52.41	81.02	0.172	0.3252	0.5027	188.4	17 485	38 591	
380	770	102.1	100.03	81.08	0.3604	0.3531	0.2863	0.0			

TUB-test chart CE70; CIE (x, y) and chromaticities (a_i, b_i)

Ostwald optimal colours for illuminant P00; diagram for illuminant P00, $Y_w=100$

input: w/rgb/cmyk -> rgb



TUB registration: 20170801-CE70/CE70LONP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

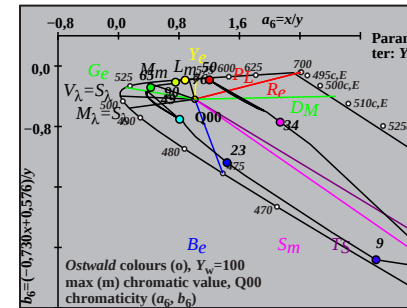
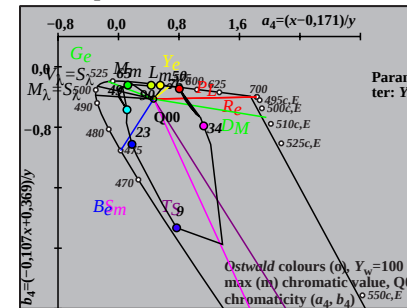
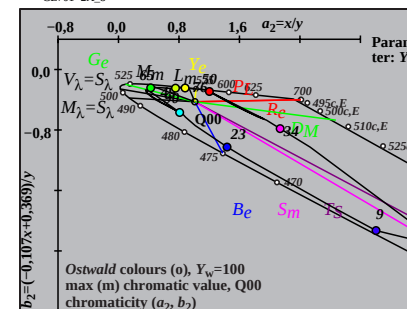
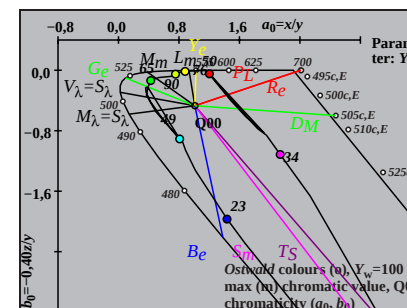
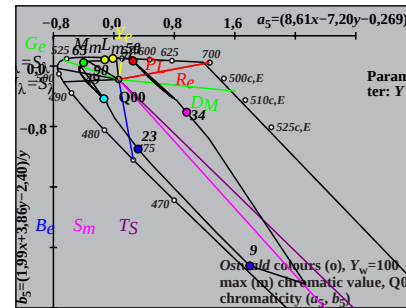
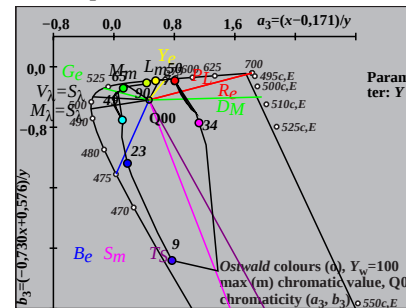
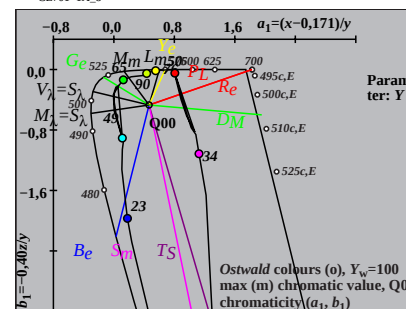
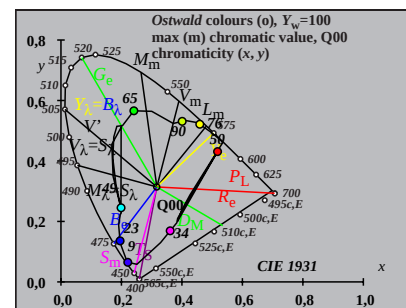
Ostwald optimal colours (o) of maximum (m) C_{AB} for Q00, $Y_w=100$, $Y_m=520\text{--}770$

i_1, λ_1	i_2, λ_2	X	Y	Z	x	y	z	h_{xy}	i_d, λ_d	i_c, λ_c	Code
1 405	32 562	34.29	57.87	116.72	0.1641	0.277	0.5587	194.9	16 482	38 590	Cm
6 435	32 562	29.65	58.48	91.48	0.1651	0.3255	0.5093	176.0	17 486	45 628	
10 450	32 564	22.96	59.17	52.09	0.171	0.4408	0.388	137.7	19 497	-1 497c	
12 460	33 566	21.09	60.2	33.86	0.1831	0.5227	0.294	121.2	21 507	-1 507c	
13 465	33 568	21.06	61.23	26.19	0.1941	0.5644	0.2414	114.7	22 514	-1 514c	
13 470	34 570	22.94	63.49	26.19	0.2036	0.5637	0.2325	112.9	23 516	-1 516c	Gm
15 475	35 575	24.71	65.88	14.91	0.2342	0.6243	0.1413	103.6	26 530	-1 530c	Gm
16 480	36 582	30.95	71.08	11.12	0.2735	0.6281	0.0982	96.4	27 539	-1 539c	
17 485	40 602	48.48	81.92	8.27	0.3496	0.5907	0.0596	81.5	30 552	-1 552c	
18 490	-1 490c	77.88	93.68	6.13	0.4382	0.5271	0.0345	58.5	33 565	11 458	max
18 495	-1 494c	77.88	93.68	6.13	0.4382	0.5271	0.0345	58.5	33 565	11 458	
20 500	-1 500c	77.81	90.28	3.26	0.4541	0.5268	0.019	55.5	33 567	12 463	
22 510	-1 510c	77.69	85.13	1.62	0.4724	0.5176	0.0098	51.0	33 569	13 468	Ym
23 520	-1 519c	77.45	81.82	1.14	0.4828	0.51	0.0071	48.1	34 571	14 470	
25 530	-1 529c	76.34	73.97	0.56	0.5059	0.4902	0.0037	41.5	34 574	14 474	
28 540	-1 540c	72.56	60.39	0.18	0.545	0.4536	0.0013	30.3	36 580	15 478	
28 545	-1 544c	72.56	60.39	0.18	0.545	0.4536	0.0013	30.3	36 580	15 478	
29 550	-1 549c	70.66	55.67	0.12	0.5587	0.4402	0.001	26.5	36 582	15 479	
30 555	-1 554c	68.42	50.94	0.09	0.5727	0.4264	0.0007	22.7	36 584	16 480	
32 560	-1 560c	62.86	41.65	0.05	0.6011	0.3983	0.0005	15.8	37 589	16 482	
32 562	1 405	63.6	42.09	2.18	0.5895	0.3901	0.0202	14.8	38 590	16 482	Rm
32 562	6 435	68.24	41.48	27.43	0.4975	0.3024	0.1999	356.0	45 628	17 486	
32 564	10 450	74.93	40.79	66.81	0.4104	0.2234	0.366	317.7	-1 497c	19 497	
33 566	12 460	76.8	39.76	85.04	0.3809	0.1972	0.4218	301.3	-1 507c	21 507	
33 568	13 465	76.83	38.73	92.72	0.3688	0.1859	0.4451	294.8	-1 514c	22 514	
34 570	13 470	74.95	36.46	92.71	0.3671	0.1786	0.4541	293.0	-1 516c	23 516	
35 575	15 475	73.18	34.08	103.99	0.3464	0.1613	0.4922	283.6	-1 530c	26 530	Mm
36 582	16 480	66.94	28.87	107.79	0.3287	0.1418	0.5293	276.5	-1 539c	27 539	
40 602	17 485	49.41	18.03	110.63	0.2774	0.1012	0.6212	261.6	-1 552c	30 552	
-1 490c	18 490	20.01	6.28	112.77	0.1438	0.0451	0.8109	238.5	11 458	33 565	min
-1 494c	18 495	20.01	6.28	112.77	0.1438	0.0451	0.8109	238.5	11 458	33 565	
-1 500c	20 500	20.08	9.67	115.65	0.138	0.0665	0.7953	235.5	12 463	33 567	
-1 510c	22 510	20.2	14.82	117.28	0.1326	0.0973	0.7699	231.0	13 468	33 569	
-1 519c	23 520	20.44	18.14	117.76	0.1307	0.116	0.7532	228.2	14 470	34 571	Bm
-1 529c	25 530	21.55	25.99	118.35	0.1299	0.1566	0.7134	221.5	14 474	34 574	
-1 540c	28 540	25.33	39.56	118.73	0.1379	0.2154	0.6465	210.3	15 478	36 580	
-1 544c	28 545	25.33	39.56	118.73	0.1379	0.2154	0.6465	210.3	15 478	36 580	
-1 549c	29 550	27.23	44.29	118.78	0.143	0.2327	0.6241	206.5	15 479	36 582	
-1 554c	30 555	29.47	49.02	118.81	0.1493	0.2484	0.6021	202.8	16 480	36 584	
-1 560c	32 560	35.03	58.3	118.85	0.1651	0.2747	0.5601	195.8	16 482	37 589	
380	770	97.89	99.96	118.91	0.309	0.3155	0.3753	0.0			

TUB-test chart CE70; CIE (x, y) and chromaticities (a_i, b_i)

Ostwald optimal colours for illuminant Q00; diagram for illuminant Q00, $Y_w=100$

input: w/rgb/cmyk -> rgb



TUB registration: 20170801-CE70/CE70L0NP.PDF /PS
application for measurement of offset print output

TUB material: code=rha4ta