

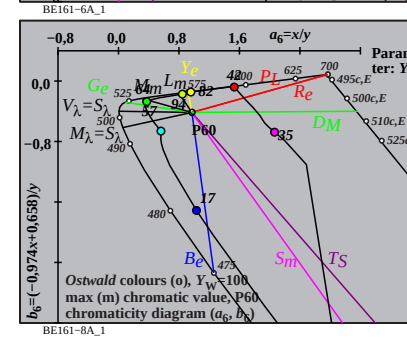
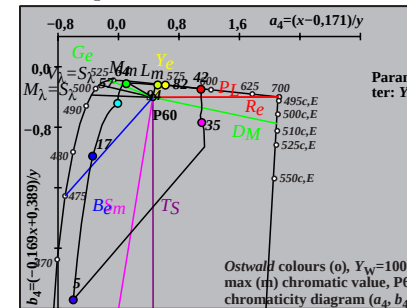
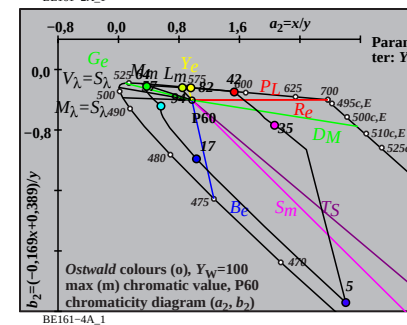
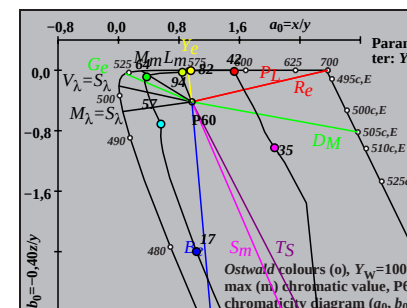
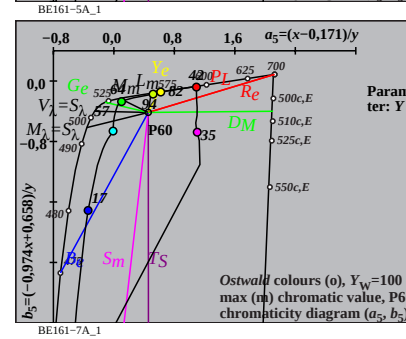
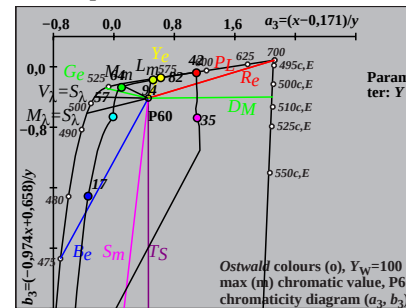
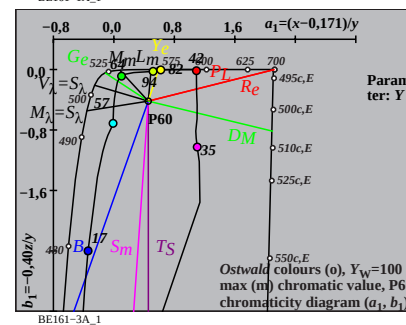
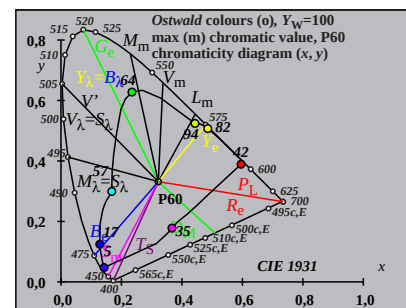
Oswald optimal colours (o) of maximum (m) C_{AB} for P60, Y_w=100, Y_m=520_770

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	563	32.54	57.75	103.62	0.1678	0.2978	0.5343	192.3	16 483 38 590 Cm
6	435	32	563	28.58	58.29	82.04	0.1692	0.345	0.4856	174.9	17 487 44 621
10	450	33	565	22.8	58.9	47.87	0.1759	0.4545	0.3694	139.8	19 497 -1 497c
11	460	33	566	22.48	60.12	39.44	0.1842	0.4925	0.3231	130.4	20 502 -1 502c
13	465	33	568	21.08	60.68	24.55	0.1982	0.5707	0.2309	117.2	22 513 -1 513c
14	470	34	570	21.89	62.18	18.77	0.2129	0.6045	0.1825	111.7	24 521 -1 521c
15	475	34	574	24.2	64.7	14.16	0.2348	0.6277	0.1374	106.3	25 529 -1 529c Gm
15	480	36	580	29.74	69.95	14.17	0.2611	0.6143	0.1245	102.0	27 535 -1 535c
17	485	39	595	42.39	78.0	7.95	0.3303	0.6077	0.0619	88.2	29 549 -1 549c
18	490	-1	490c	79.69	94.22	5.93	0.4431	0.5238	0.0329	57.7	33 566 11 459 max
19	495	-1	495c	79.65	92.78	4.38	0.4504	0.5247	0.0247	56.3	33 567 12 461
20	500	-1	500c	79.63	90.97	3.18	0.4582	0.5234	0.0183	54.5	33 568 12 464
22	510	-1	510c	79.5	85.98	1.6	0.4758	0.5145	0.0095	49.9	34 570 13 469
24	520	-1	520c	78.85	79.07	0.8	0.4967	0.4981	0.005	43.5	34 572 14 473 Ym
25	530	-1	529c	78.18	75.03	0.56	0.5084	0.4879	0.0036	39.9	34 574 15 475
27	540	-1	539c	75.99	66.2	0.26	0.5334	0.4647	0.0018	32.1	35 578 15 478
29	545	-1	545c	72.53	56.82	0.13	0.5601	0.4388	0.001	24.2	36 582 16 480
29	550	-1	549c	72.53	56.82	0.13	0.5601	0.4388	0.001	24.2	36 582 16 480
30	555	-1	554c	70.27	52.07	0.09	0.5739	0.4252	0.0007	20.3	36 584 16 481
32	560	-1	560c	64.66	42.7	0.05	0.6019	0.3975	0.0005	13.2	37 589 16 483
32	563	0	405	64.52	42.24	0.94	0.599	0.3921	0.0087	12.3	38 590 16 483 Rm
32	563	6	435	68.48	41.7	22.52	0.516	0.3142	0.1697	354.9	44 621 17 487
33	565	10	450	74.26	41.09	56.7	0.4316	0.2388	0.3295	319.8	-1 497c 19 497
33	566	11	460	74.58	39.87	65.12	0.4153	0.222	0.3626	310.5	-1 502c 20 502
33	568	13	465	75.98	39.31	80.02	0.389	0.2012	0.4096	297.3	-1 513c 22 513
34	570	14	470	75.17	37.81	85.8	0.3781	0.1902	0.4316	291.7	-1 521c 24 521
34	574	15	475	72.86	35.29	90.4	0.3669	0.1777	0.4552	286.3	-1 529c 25 529 Mm
36	580	15	480	67.32	30.04	90.39	0.3585	0.1599	0.4814	282.1	-1 535c 27 535
39	595	17	485	54.67	21.99	96.61	0.3154	0.1269	0.5575	268.2	-1 549c 29 549
-1	490c	18	490	17.37	5.77	98.64	0.1426	0.0474	0.8099	237.7	11 459 33 566 min
-1	495c	19	495	17.41	7.21	100.19	0.1395	0.0578	0.8026	236.3	12 461 33 567
-1	500c	20	500	17.43	9.02	101.39	0.1363	0.0705	0.793	234.6	12 464 33 568
-1	510c	22	510	17.56	14.01	102.97	0.1305	0.1041	0.7653	229.9	13 469 34 570
-1	520c	24	520	18.21	20.92	103.76	0.1274	0.1464	0.7261	223.6	14 473 34 572 Bm
-1	529c	25	530	18.88	24.96	104.01	0.1277	0.1688	0.7034	219.9	15 475 34 574
-1	539c	27	540	21.07	33.79	104.3	0.1324	0.2122	0.6552	212.2	15 478 35 578
-1	545c	29	545	24.53	43.17	104.44	0.1425	0.2507	0.6066	204.2	16 480 36 582
-1	549c	29	550	24.53	43.17	104.44	0.1425	0.2507	0.6066	204.2	16 480 36 582
-1	554c	30	555	26.78	47.92	104.47	0.1495	0.2674	0.583	200.4	16 481 36 584
-1	560c	32	560	32.4	57.29	104.51	0.1668	0.2949	0.5381	193.2	16 483 37 589
380	770	97.06	99.99	104.57	0.3218	0.3315	0.3466	0.0			

TUB-test chart BE16; CIE (x, y) and chromaticities (a_i, b_i)

Oswald optimal colours for illuminant P60; diagram for illuminant P60, Y_w=100

input: w/rgb/cmyk -> rgb



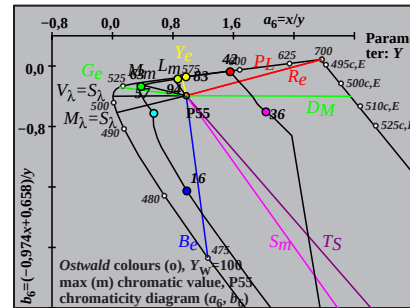
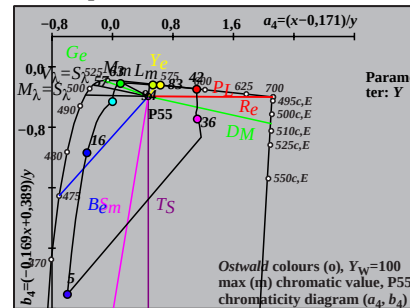
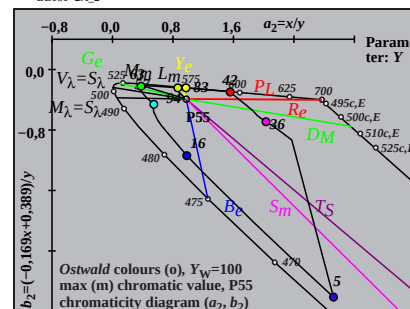
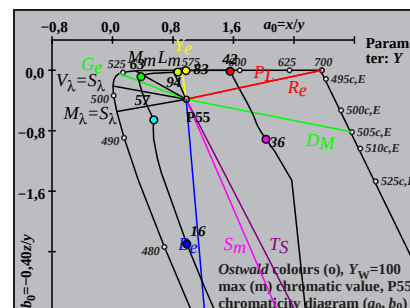
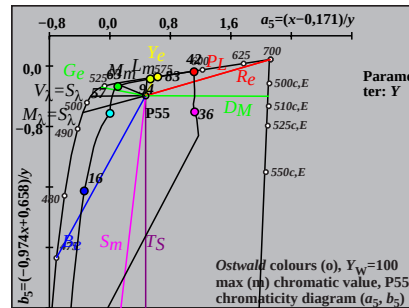
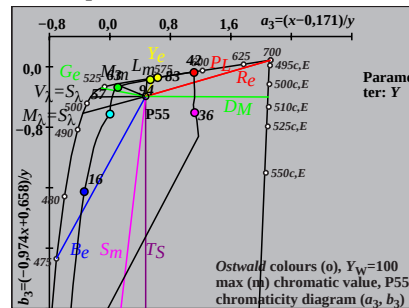
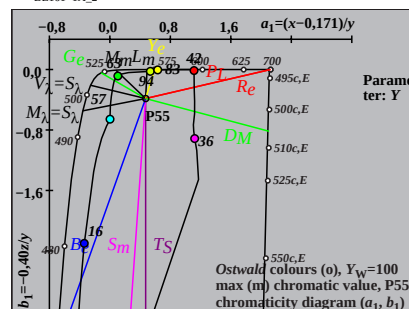
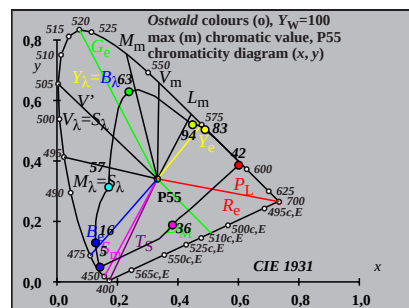
Ostwald optimal colours (o) of maximum (m) C_{AB} for P55, Y_w=100, Y_m=520-770

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
1 405	32 564	31.45	57.57	94.52	0.1713	0.3136	0.5149	189.5	16 484	38 591	Cm
6 435	32 564	28.07	58.07	75.95	0.1732	0.3582	0.4685	173.7	17 488	43 619	
9 450	33 565	24.36	58.81	52.79	0.1791	0.4325	0.3882	149.0	18 494	-1 494c	
11 460	33 567	22.58	59.73	37.09	0.1891	0.5002	0.3106	131.8	20 502	-1 502c	
13 465	33 568	21.27	60.24	23.26	0.203	0.5749	0.222	118.8	22 513	-1 513c	
14 470	34 570	22.03	61.59	17.85	0.2171	0.6069	0.1759	113.3	24 521	-1 521c	
15 475	34 574	24.13	63.89	13.53	0.2376	0.629	0.1332	108.1	25 529	-1 529c	Gm
16 480	36 580	28.75	67.97	10.19	0.2689	0.6357	0.0953	102.0	27 537	-1 537c	
17 485	38 592	39.89	75.72	7.65	0.3236	0.6142	0.0621	91.7	29 547	-1 547c	
17 490	-1 489c	81.73	95.68	7.66	0.4415	0.5169	0.0414	58.1	33 566	11 456	max
19 495	-1 495c	81.57	93.2	4.25	0.4556	0.5205	0.0237	55.4	33 567	12 462	
19 500	-1 499c	81.57	93.2	4.25	0.4556	0.5205	0.0237	55.4	33 567	12 462	
21 510	-1 509c	81.53	89.29	2.21	0.4711	0.516	0.0128	51.5	33 569	13 467	
24 520	-1 520c	80.8	79.9	0.79	0.5003	0.4947	0.0049	42.4	34 573	14 474	Ym
26 530	-1 530c	79.21	71.7	0.38	0.5235	0.4739	0.0025	34.8	35 576	15 477	
27 540	-1 539c	77.98	67.24	0.26	0.5359	0.4621	0.0018	30.7	35 578	15 479	
28 545	-1 544c	76.43	62.63	0.18	0.5488	0.4497	0.0013	26.6	36 580	16 480	
30 550	-1 550c	72.29	53.19	0.09	0.5756	0.4235	0.0007	18.7	37 585	16 482	
30 555	-1 554c	72.29	53.19	0.09	0.5756	0.4235	0.0007	18.7	37 585	16 482	
32 560	-1 560c	66.66	43.79	0.05	0.6032	0.3962	0.0005	11.5	38 590	16 484	
32 564	1 405	66.0	42.42	1.45	0.6006	0.386	0.0132	9.5	38 591	16 484	Rm
32 564	6 435	69.37	41.92	20.03	0.5282	0.3191	0.1525	353.7	43 619	17 488	
33 565	9 450	73.09	41.18	43.18	0.4641	0.2615	0.2742	329.0	-1 494c	18 494	
33 567	11 460	74.87	40.26	58.89	0.4302	0.2313	0.3383	311.9	-1 502c	20 502	
33 568	13 465	76.18	39.75	72.71	0.4038	0.2107	0.3854	298.9	-1 513c	22 513	
34 570	14 470	75.42	38.4	78.12	0.3929	0.2	0.4069	293.4	-1 521c	24 521	
34 574	15 475	73.32	36.1	82.45	0.3821	0.1881	0.4296	288.1	-1 529c	25 529	Mm
36 580	16 480	68.7	32.02	85.79	0.3683	0.1716	0.4599	282.1	-1 537c	27 537	
38 592	17 485	57.56	24.27	88.32	0.3382	0.1426	0.519	271.8	-1 547c	29 547	
-1 489c	17 490	15.72	4.31	88.31	0.1451	0.0398	0.815	238.1	11 456	33 566	min
-1 495c	19 495	15.88	6.79	91.73	0.1388	0.0594	0.8017	235.5	12 462	33 567	
-1 499c	19 500	15.88	6.79	91.73	0.1388	0.0594	0.8017	235.5	12 462	33 567	
-1 509c	21 510	15.92	10.7	93.76	0.1322	0.0888	0.7788	231.5	13 467	33 569	
-1 520c	24 520	16.65	20.09	95.18	0.1262	0.1523	0.7214	222.4	14 474	34 573	Bm
-1 530c	26 530	18.24	28.29	95.59	0.1283	0.199	0.6725	214.8	15 477	35 576	
-1 539c	27 540	19.47	32.75	95.71	0.1316	0.2214	0.6469	210.7	15 479	35 578	
-1 544c	28 545	21.02	37.36	95.79	0.1363	0.2423	0.6212	206.7	16 480	36 580	
-1 550c	30 550	25.15	46.8	95.88	0.1498	0.2788	0.5712	198.7	16 482	37 585	
-1 554c	30 555	25.15	46.8	95.88	0.1498	0.2788	0.5712	198.7	16 482	37 585	
-1 560c	32 560	30.79	56.2	95.92	0.1683	0.3072	0.5244	191.5	16 484	38 590	
380	770	97.45	100.0	95.98	0.3321	0.3407	0.327	0.0			

TUB-test chart BE16; CIE (x, y) and chromaticities (a_i, b_i)

Ostwald optimal colours for illuminant P55; diagram for illuminant P55, Y_w=100

input: w/rgb/cmyk -> rgb



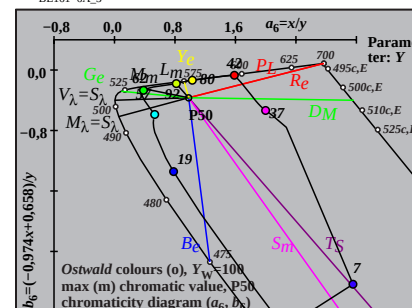
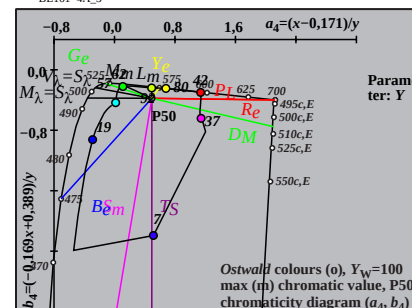
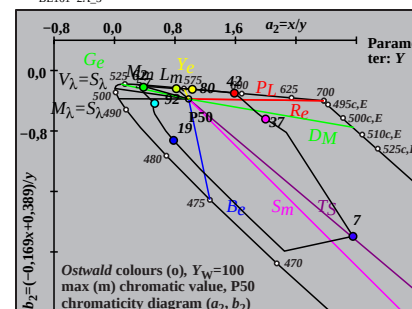
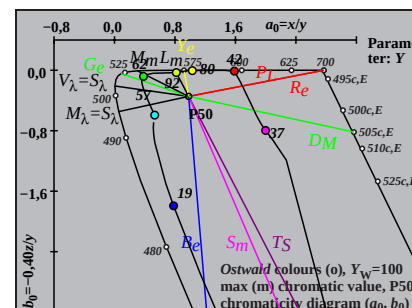
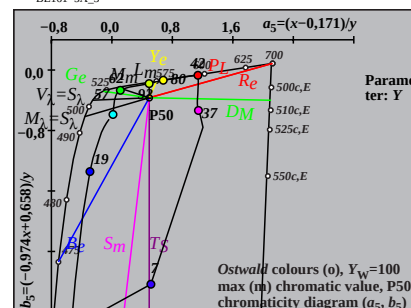
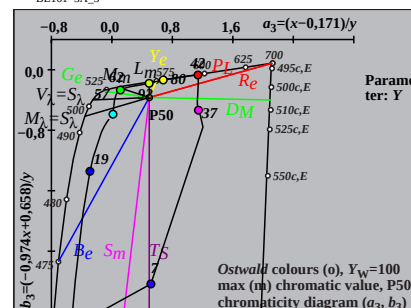
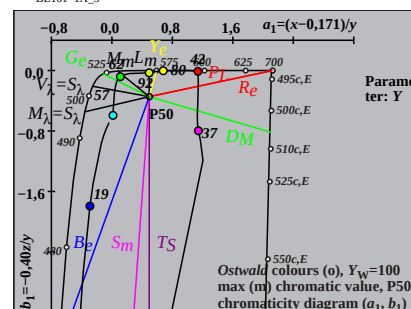
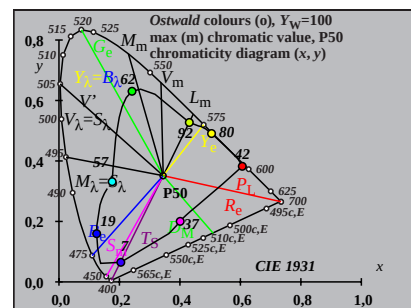
Oswald optimal colours (o) of maximum (m) C_{AB} for P50, Y_w=100, Y_m=520_770

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	565	30.59	57.35	85.81	0.176	0.33	0.4938	187.1	17	485	38	592	Cm
7	435	33	565	26.3	57.7	62.61	0.1793	0.3935	0.427	165.6	18	490	-1	490c	
9	450	33	566	24.34	58.44	48.57	0.1853	0.4449	0.3697	149.5	19	495	-1	495c	
11	460	33	568	22.73	59.26	34.4	0.1953	0.5091	0.2955	133.4	20	502	-1	502c	
12	465	33	569	22.47	60.07	27.73	0.2037	0.5447	0.2514	126.0	21	507	-1	507c	
14	470	34	571	22.23	60.91	16.79	0.2224	0.6094	0.168	115.3	24	520	-1	520c	
15	475	34	574	24.11	62.96	12.79	0.2414	0.6304	0.128	110.2	25	528	-1	528c	Gm
16	480	35	579	28.21	66.58	9.67	0.27	0.6373	0.0926	104.6	27	536	-1	536c	
16	485	37	589	37.74	74.17	9.68	0.3103	0.6099	0.0796	97.5	28	544	-1	544c	
17	490	47	636	75.97	92.98	7.31	0.431	0.5274	0.0415	63.8	33	565	-1	565c	max
19	495	-1	495c	83.93	93.68	4.09	0.4618	0.5155	0.0225	54.4	33	568	12	462	
20	500	-1	500c	83.91	92.03	2.99	0.4689	0.5143	0.0167	52.6	33	569	13	465	
21	510	-1	509c	83.88	89.95	2.15	0.4766	0.5111	0.0122	50.4	34	570	13	468	
24	520	-1	520c	83.18	80.88	0.78	0.5046	0.4906	0.0047	41.0	34	574	14	474	Ym
26	530	-1	530c	81.62	72.86	0.38	0.527	0.4704	0.0024	33.1	35	577	15	478	
28	540	-1	540c	78.88	63.92	0.18	0.5516	0.447	0.0013	24.8	36	581	16	481	
28	545	-1	544c	78.88	63.92	0.18	0.5516	0.447	0.0013	24.8	36	581	16	481	
30	550	-1	550c	74.77	54.53	0.09	0.5778	0.4214	0.0007	16.7	37	585	16	483	
30	555	-1	554c	74.77	54.53	0.09	0.5778	0.4214	0.0007	16.7	37	585	16	483	
32	560	-1	560c	69.12	45.11	0.06	0.6047	0.3947	0.0005	9.4	38	590	17	485	
33	565	0	405	67.52	42.64	0.68	0.6091	0.3846	0.0062	7.1	38	592	17	485	Rm
33	565	7	435	71.82	42.29	23.88	0.5204	0.3064	0.173	345.6	-1	490c	18	490	
33	566	9	450	73.78	41.55	37.93	0.4813	0.2711	0.2474	329.6	-1	495c	19	495	
33	568	11	460	75.38	40.73	52.09	0.4481	0.2421	0.3097	313.4	-1	502c	20	502	
33	569	12	465	75.64	39.92	58.77	0.4339	0.229	0.337	306.1	-1	507c	21	507	
34	571	14	470	75.88	39.08	69.7	0.4109	0.2116	0.3774	295.3	-1	520c	24	520	
34	574	15	475	74.0	37.03	73.7	0.4005	0.2004	0.3989	290.3	-1	528c	25	528	Mm
35	579	16	480	69.9	33.41	76.82	0.388	0.1854	0.4264	284.6	-1	536c	27	536	
37	589	16	485	60.37	25.82	76.81	0.3703	0.1583	0.4712	277.6	-1	544c	28	544	
47	636	17	490	22.14	7.01	79.18	0.2043	0.0647	0.7308	243.9	-1	565c	33	565	min
-1	495c	19	495	14.19	6.31	82.4	0.1378	0.0613	0.8007	234.5	12	462	33	568	
-1	500c	20	500	14.2	7.96	83.5	0.1344	0.0753	0.7901	232.7	13	465	33	569	
-1	509c	21	510	14.23	10.04	84.34	0.131	0.0924	0.7765	230.4	13	468	34	570	
-1	520c	24	520	14.93	19.11	85.71	0.1247	0.1596	0.7156	221.0	14	474	34	574	Bm
-1	530c	26	530	16.49	27.13	86.11	0.1271	0.2091	0.6637	213.1	15	478	35	577	
-1	540c	28	540	19.23	36.07	86.31	0.1358	0.2547	0.6094	204.8	16	481	36	581	
-1	544c	28	545	19.23	36.07	86.31	0.1358	0.2547	0.6094	204.8	16	481	36	581	
-1	550c	30	550	23.34	45.46	86.4	0.1504	0.2929	0.5566	196.7	16	483	37	585	
-1	554c	30	555	23.34	45.46	86.4	0.1504	0.2929	0.5566	196.7	16	483	37	585	
-1	560c	32	560	28.99	54.88	86.44	0.1702	0.3222	0.5075	189.4	17	485	38	590	
	380		770	98.12	100.0	86.5	0.3447	0.3513	0.3039	0.0					

TUB-test chart BE16; CIE (x, y) and chromaticities (a_i, b_i)

Oswald optimal colours for illuminant P50; diagram for illuminant P50, Y_w=100

input: w/rgb/cmyk -> rgb



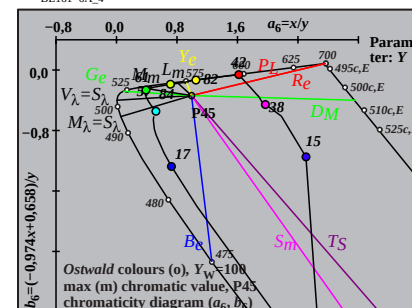
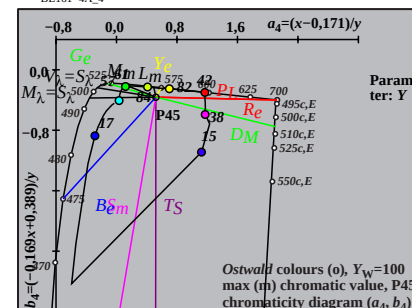
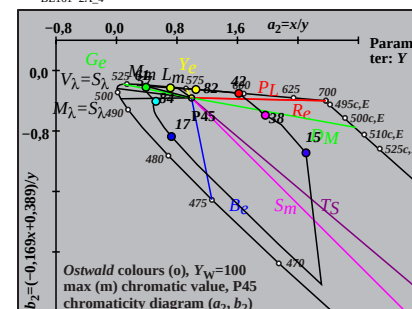
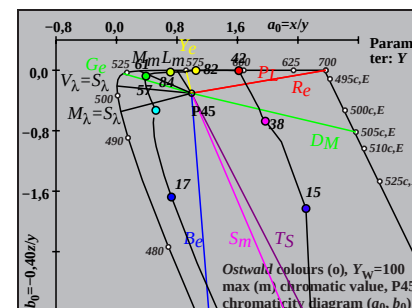
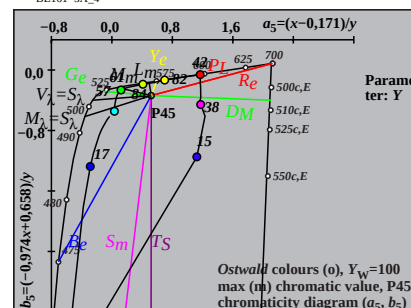
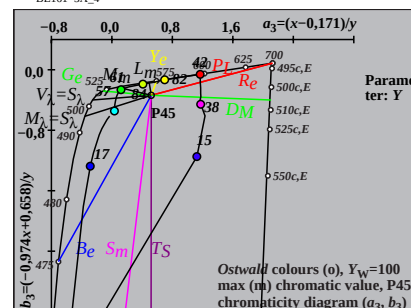
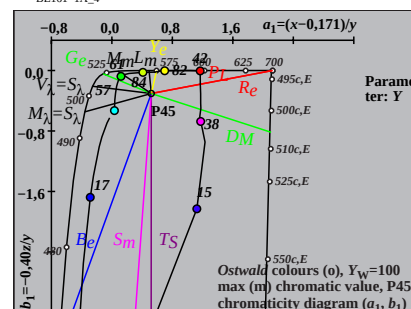
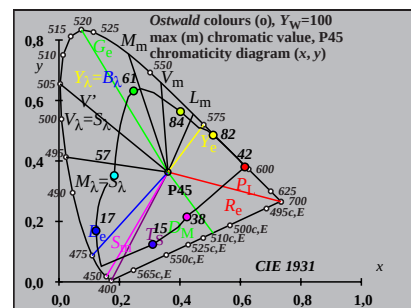
Ostwald optimal colours (o) of maximum (m) C_{AB} for P45, Y_w=100, Y_m=520_770

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
1 405	33 566	29.57	57.01	75.07	0.1829	0.3527	0.4643	183.4	17 487	38 593	Cm
7 435	33 567	26.05	57.33	55.94	0.1869	0.4114	0.4015	164.4	18 491	-1 491c	
10 450	33 568	23.2	57.83	37.52	0.1957	0.4877	0.3165	142.8	19 498	-1 498c	
12 460	33 569	21.94	58.45	25.38	0.2074	0.5525	0.2399	128.9	21 507	-1 507c	
13 465	34 570	21.89	59.09	20.05	0.2166	0.5848	0.1984	122.9	22 512	-1 512c	
13 470	34 571	23.19	60.51	20.05	0.2235	0.5831	0.1932	121.8	22 514	-1 514c	
15 475	34 574	24.18	61.91	11.91	0.2467	0.6316	0.1216	112.9	25 528	-1 528c	Gm
15 480	35 578	28.04	65.64	11.92	0.2655	0.6215	0.1129	110.1	26 532	-1 532c	
17 485	37 587	35.45	70.76	6.88	0.3134	0.6256	0.0608	100.1	28 544	-1 544c	
17 490	42 611	60.47	85.47	6.89	0.3956	0.5592	0.0451	79.7	31 559	-1 559c	max
19 495	-1 495c	86.85	94.24	3.9	0.4694	0.5094	0.021	53.2	33 569	12 463	
20 500	-1 500c	86.84	92.68	2.87	0.4761	0.5081	0.0157	51.3	34 570	13 466	
22 510	-1 510c	86.73	88.3	1.48	0.4913	0.5002	0.0084	46.2	34 572	14 471	Ym
24 520	-1 520c	86.14	82.03	0.76	0.5098	0.4855	0.0045	39.2	34 574	15 475	
26 530	-1 530c	84.63	74.25	0.37	0.5313	0.4662	0.0023	31.0	35 578	15 479	
27 540	-1 539c	83.44	69.96	0.26	0.5429	0.4552	0.0017	26.7	35 579	16 480	
29 545	-1 545c	80.08	60.86	0.13	0.5676	0.4314	0.0009	18.1	36 583	16 483	
29 550	-1 549c	80.08	60.86	0.13	0.5676	0.4314	0.0009	18.1	36 583	16 483	
30 555	-1 554c	77.86	56.17	0.1	0.5804	0.4187	0.0007	14.1	37 585	16 484	
31 560	-1 559c	75.23	51.44	0.07	0.5935	0.4058	0.0006	10.3	37 588	17 485	
33 566	1 405	69.63	42.98	0.99	0.6129	0.3783	0.0087	3.4	38 593	17 487	Rm
33 567	7 435	73.14	42.66	20.12	0.5381	0.3138	0.148	344.4	-1 491c	18 491	
33 568	10 450	76.0	42.16	38.54	0.4849	0.269	0.2459	322.9	-1 498c	19 498	
33 569	12 460	77.25	41.54	50.68	0.4558	0.245	0.299	308.9	-1 507c	21 507	
34 570	13 465	77.31	40.9	56.02	0.4437	0.2347	0.3215	302.9	-1 512c	22 512	
34 571	13 470	76.01	39.48	56.01	0.4431	0.2302	0.3266	301.9	-1 514c	22 514	
34 574	15 475	75.02	38.08	64.15	0.4232	0.2148	0.3619	292.9	-1 528c	25 528	Mm
35 578	15 480	71.15	34.35	64.14	0.4194	0.2024	0.378	290.1	-1 532c	26 532	
37 587	17 485	63.75	29.23	69.19	0.3931	0.1802	0.4266	280.1	-1 544c	28 544	
42 611	17 490	38.73	14.52	69.17	0.3163	0.1186	0.5649	259.8	-1 559c	31 559	min
-1 495c	19 495	12.34	5.75	72.16	0.1367	0.0637	0.7994	233.2	12 463	33 569	
-1 500c	20 500	12.36	7.31	73.19	0.1331	0.0787	0.7881	231.3	13 466	34 570	
-1 510c	22 510	12.47	11.69	74.58	0.1262	0.1184	0.7552	226.2	14 471	34 572	
-1 520c	24 520	13.06	17.96	75.3	0.1228	0.1689	0.7082	219.2	15 475	34 574	Bm
-1 530c	26 530	14.57	25.74	75.69	0.1256	0.2218	0.6524	211.0	15 479	35 578	
-1 539c	27 540	15.76	30.03	75.8	0.1296	0.2469	0.6234	206.7	16 480	35 579	
-1 545c	29 545	19.12	39.13	75.93	0.1424	0.2916	0.5659	198.2	16 483	36 583	
-1 549c	29 550	19.12	39.13	75.93	0.1424	0.2916	0.5659	198.2	16 483	36 583	
-1 554c	30 555	21.34	43.82	75.97	0.1512	0.3105	0.5382	194.1	16 484	37 585	
-1 559c	31 560	23.96	48.55	75.99	0.1613	0.3269	0.5117	190.3	17 485	37 588	
380	770	99.2	100.0	76.07	0.3603	0.3632	0.2763	0.0			

TUB-test chart BE16; CIE (x, y) and chromaticities (a_i, b_i)

Ostwald optimal colours for illuminant P45; diagram for illuminant P45, Y_w=100

input: w/rgb/cmyk -> rgb



TUB registration: 20170801-BE16/BE16L0NP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

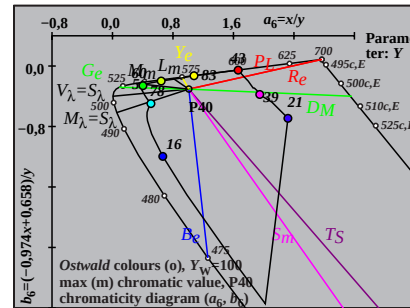
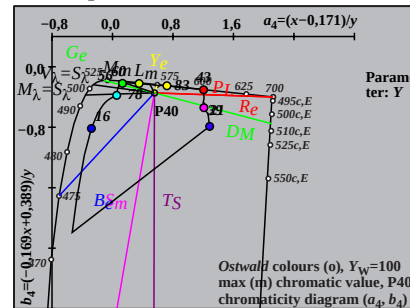
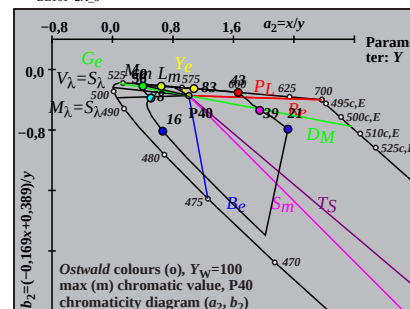
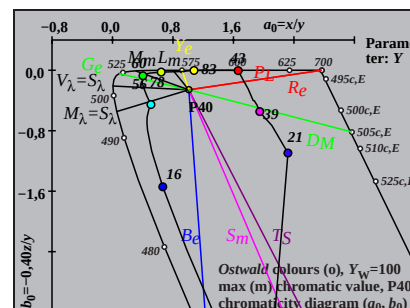
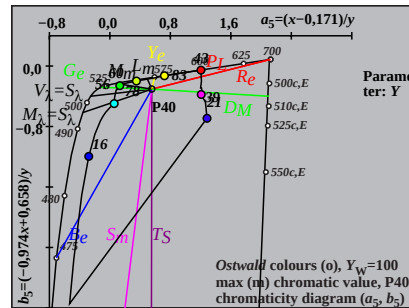
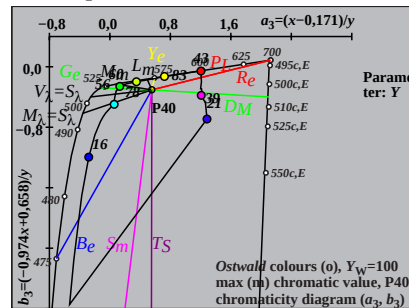
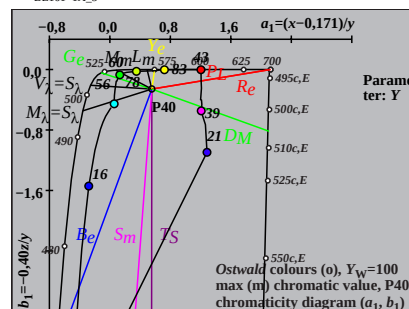
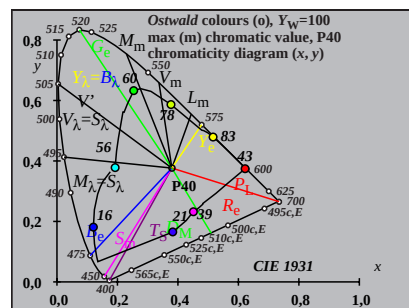
Ostwald optimal colours (o) of maximum (m) C_{AB} for P40, $Y_w=100$, $Y_m=520\text{--}770$

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
0	405	33	568	28.76	56.58	64.26	0.1922	0.3782	0.4295	179.4	17 488 38 594 Cm
7	435	33	568	25.87	56.85	48.49	0.1971	0.4333	0.3695	162.7	18 493 54 674
10	450	33	569	23.49	57.27	33.07	0.2063	0.5031	0.2905	143.8	19 499 -1 499c
12	460	34	570	22.45	57.79	22.67	0.2181	0.5615	0.2202	131.1	21 507 -1 507c
13	465	34	571	22.44	58.31	18.03	0.2271	0.5902	0.1825	125.5	22 512 -1 512c
14	470	34	572	22.98	59.17	14.1	0.2387	0.6147	0.1464	120.6	23 519 -1 519c
14	475	34	574	24.78	61.12	14.1	0.2477	0.6111	0.141	119.3	24 522 -1 522c Gm
15	480	35	578	27.65	63.82	10.88	0.2701	0.6234	0.1063	113.9	26 531 -1 531c
17	485	37	585	33.55	68.02	6.37	0.3108	0.6301	0.059	105.2	28 543 -1 543c
17	490	40	600	50.32	79.03	6.38	0.3707	0.5822	0.047	92.5	30 554 -1 554c max
19	495	-1	495c	90.57	94.87	3.66	0.4789	0.5016	0.0193	51.6	34 571 12 464
20	500	-1	500c	90.56	93.44	2.71	0.485	0.5004	0.0145	49.6	34 571 13 467
21	510	-1	509c	90.54	91.62	1.97	0.4916	0.4975	0.0107	47.2	34 572 13 469
24	520	-1	520c	89.9	83.41	0.74	0.5164	0.4792	0.0042	36.9	35 575 15 476 Ym
26	530	-1	530c	88.44	75.94	0.37	0.5368	0.4609	0.0022	28.2	35 578 16 480
27	540	-1	539c	87.29	71.77	0.26	0.5478	0.4504	0.0016	23.7	36 580 16 481
29	545	-1	545c	84.0	62.86	0.13	0.5714	0.4276	0.0009	14.9	36 584 16 484
29	550	-1	549c	84.0	62.86	0.13	0.5714	0.4276	0.0009	14.9	36 584 16 484
31	555	-1	555c	79.18	53.5	0.07	0.5963	0.403	0.0006	6.9	37 588 17 486
32	560	-1	560c	76.14	48.79	0.06	0.6091	0.3903	0.0005	3.4	38 591 17 487
33	568	0	405	72.16	43.41	0.42	0.622	0.3742	0.0037	359.4	38 594 17 488 Rm
33	568	7	435	75.05	43.14	16.19	0.5584	0.3209	0.1205	342.7	54 674 18 493
33	569	10	450	77.44	42.72	31.61	0.5102	0.2814	0.2082	323.9	-1 499c 19 499
34	570	12	460	78.47	42.2	42.01	0.4823	0.2593	0.2582	311.1	-1 507c 21 507
34	571	13	465	78.48	41.68	46.65	0.4704	0.2498	0.2796	305.5	-1 512c 22 512
34	572	14	470	77.94	40.82	50.58	0.4602	0.241	0.2987	300.6	-1 519c 23 519
34	574	14	475	76.15	38.87	50.58	0.4598	0.2347	0.3054	299.4	-1 522c 24 522 Mm
35	578	15	480	73.27	36.17	53.8	0.4488	0.2215	0.3295	294.0	-1 531c 26 531
37	585	17	485	67.37	31.97	58.31	0.4273	0.2028	0.3698	285.2	-1 543c 28 543
40	600	17	490	50.61	20.96	58.3	0.3896	0.1614	0.4488	272.6	-1 554c 30 554 min
-1	495c	19	495	10.35	5.12	61.02	0.1353	0.0669	0.7977	231.6	12 464 34 571
-1	500c	20	500	10.36	6.55	61.97	0.1313	0.083	0.7855	229.7	13 467 34 571
-1	509c	21	510	10.38	8.37	62.71	0.1275	0.1028	0.7696	227.3	13 469 34 572
-1	520c	24	520	11.02	16.58	63.94	0.1204	0.1811	0.6984	216.9	15 476 35 575 Bm
-1	530c	26	530	12.48	24.05	64.31	0.1237	0.2385	0.6377	208.3	16 480 35 578
-1	539c	27	540	13.63	28.22	64.42	0.1282	0.2655	0.6061	203.7	16 481 36 580
-1	545c	29	545	16.92	37.13	64.55	0.1427	0.313	0.5442	194.9	16 484 36 584
-1	549c	29	550	16.92	37.13	64.55	0.1427	0.313	0.5442	194.9	16 484 36 584
-1	555c	31	555	21.74	46.49	64.6	0.1636	0.3499	0.4863	186.9	17 486 37 588
-1	560c	32	560	24.79	51.2	64.62	0.1762	0.3641	0.4595	183.4	17 487 38 591
380	770	100.93	100.0	64.68	0.3799	0.3764	0.2435	0.0			

TUB-test chart BE16; 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



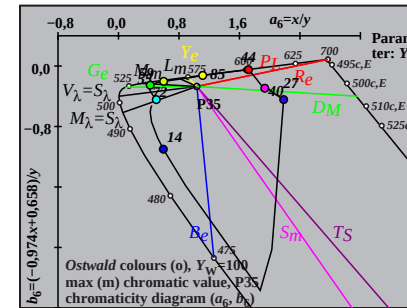
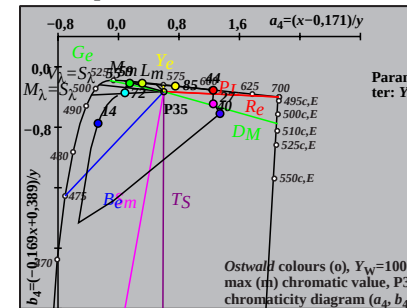
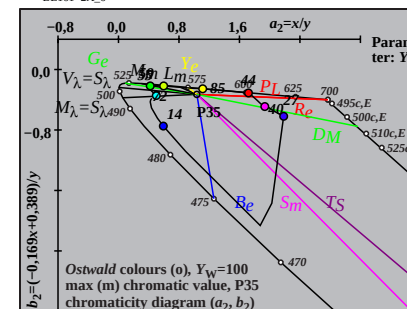
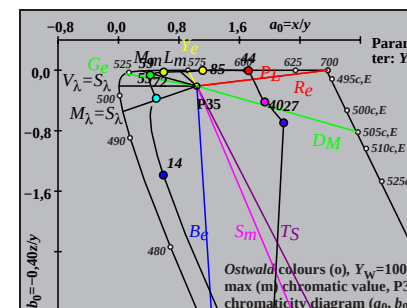
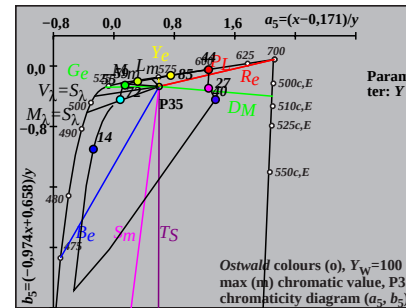
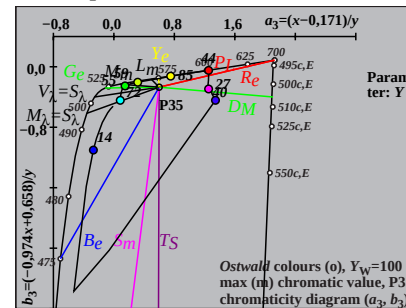
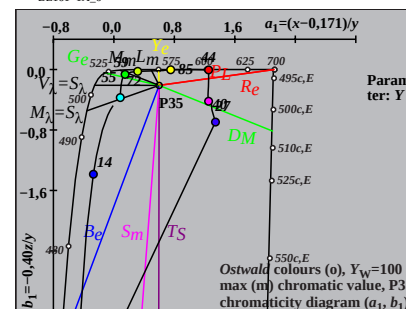
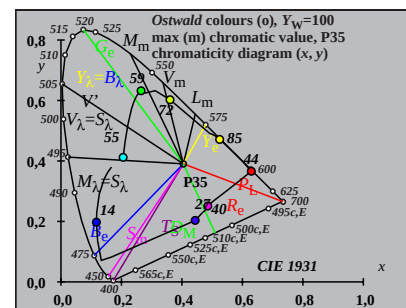
Ostwald optimal colours (o) of maximum (m) C_{AB} for P35, $Y_w=100$, $Y_m=520\text{--}770$

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	34	570	27.94	55.96	51.88	0.2057	0.4121	0.382	173.7	18 490 39 596 Cm
7	435	34	570	25.85	56.18	40.23	0.2114	0.4595	0.329	160.3	18 494 48 640
9	450	34	571	24.83	56.61	32.26	0.2183	0.4979	0.2837	150.0	19 498 -1 498c
12	460	34	572	23.22	56.91	19.53	0.2329	0.571	0.1959	133.5	21 507 -1 507c
12	465	34	572	23.81	57.56	19.53	0.236	0.5703	0.1935	133.1	21 508 -1 508c
14	470	34	573	23.63	58.03	12.38	0.2513	0.617	0.1316	124.0	23 519 -1 519c
14	475	35	575	25.15	59.59	12.38	0.2589	0.6135	0.1274	123.1	24 520 -1 520c Gm
15	480	35	578	27.46	61.75	9.65	0.2777	0.6246	0.0976	118.4	25 529 -1 529c
17	485	36	583	32.02	64.96	5.75	0.3117	0.6322	0.0559	111.0	28 542 -1 542c
18	490	38	593	43.3	72.36	4.42	0.3605	0.6026	0.0368	101.7	30 552 -1 552c max
19	495	52	661	92.84	94.66	3.37	0.4864	0.4959	0.0176	52.2	34 572 12 460
20	500	-1	500c	95.42	94.32	2.52	0.4963	0.4905	0.0131	47.5	34 573 13 468
22	510	-1	510c	95.33	90.59	1.35	0.509	0.4837	0.0072	41.7	34 574 14 473
23	520	-1	519c	95.15	88.05	0.98	0.5165	0.478	0.0053	38.0	35 576 15 475 Ym
26	530	-1	530c	93.43	78.01	0.36	0.5437	0.454	0.0021	24.5	35 579 16 481
27	540	-1	539c	92.33	74.02	0.26	0.5541	0.4442	0.0015	19.8	36 581 16 483
29	545	-1	545c	89.12	65.37	0.13	0.5763	0.4227	0.0008	10.6	37 585 17 486
29	550	-1	549c	89.12	65.37	0.13	0.5763	0.4227	0.0008	10.6	37 585 17 486
31	555	-1	555c	84.37	56.13	0.08	0.6001	0.3992	0.0005	2.5	37 589 17 488
32	560	-1	560c	81.32	51.42	0.06	0.6123	0.3871	0.0004	359.0	38 591 17 489
34	570	1	405	75.72	44.03	0.54	0.6294	0.3659	0.0045	353.7	39 596 18 490 Rm
34	570	7	435	77.8	43.81	12.2	0.5814	0.3273	0.0911	340.3	48 640 18 494
34	571	9	450	78.83	43.38	20.16	0.5536	0.3046	0.1416	330.0	-1 498c 19 498
34	572	12	460	80.44	43.08	32.89	0.5142	0.2754	0.2103	313.6	-1 507c 21 507
34	572	12	465	79.84	42.43	32.89	0.5145	0.2734	0.2119	313.1	-1 508c 21 508
34	573	14	470	80.02	41.96	40.05	0.4938	0.2589	0.2471	304.1	-1 519c 23 519
35	575	14	475	78.51	40.4	40.04	0.4939	0.2541	0.2519	303.2	-1 520c 24 520
35	578	15	480	76.2	38.24	42.78	0.4846	0.2432	0.272	298.5	-1 529c 25 529
36	583	17	485	71.64	35.03	46.68	0.4671	0.2284	0.3043	291.0	-1 542c 28 542
38	593	18	490	60.36	27.63	48.01	0.4438	0.2031	0.353	281.8	-1 552c 30 552 min
52	661	19	495	10.82	5.33	49.06	0.1659	0.0817	0.7522	232.2	12 460 34 572
-1	500c	20	500	8.24	5.67	49.91	0.1291	0.0889	0.7819	227.5	13 468 34 573
-1	510c	22	510	8.33	9.4	51.08	0.1211	0.1366	0.7422	221.8	14 473 34 574
-1	519c	23	520	8.51	11.94	51.44	0.1184	0.166	0.7154	218.0	15 475 35 576
-1	530c	26	530	10.23	21.98	52.06	0.1214	0.2608	0.6177	204.5	16 481 35 579
-1	539c	27	540	11.33	25.97	52.17	0.1267	0.2902	0.583	199.8	16 483 36 581
-1	545c	29	545	14.53	34.62	52.29	0.1432	0.3412	0.5154	190.6	17 486 37 585
-1	549c	29	550	14.53	34.62	52.29	0.1432	0.3412	0.5154	190.6	17 486 37 585
-1	555c	31	555	19.29	43.86	52.35	0.167	0.3797	0.4532	182.5	17 488 37 589
-1	560c	32	560	22.33	48.57	52.36	0.1812	0.394	0.4247	179.0	17 489 38 591
380	770	103.66	99.99	52.43	0.4047	0.3904	0.2047	0.0			

TUB-test chart BE16; CIE (x, y) and chromaticities (a_i, b_i)

Ostwald optimal colours for illuminant P35; diagram for illuminant P35, $Y_w=100$

input: w/rgb/cmyk -> rgb



TUB registration: 20170801-BE16/BE16L0NP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

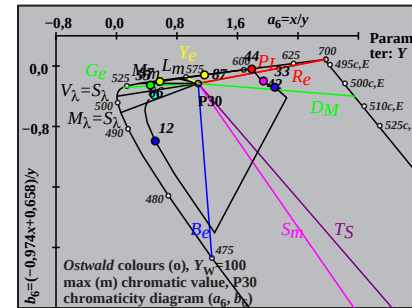
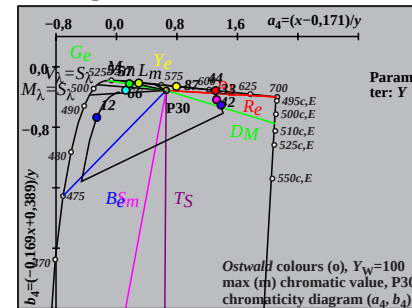
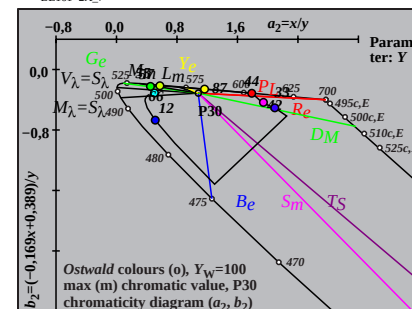
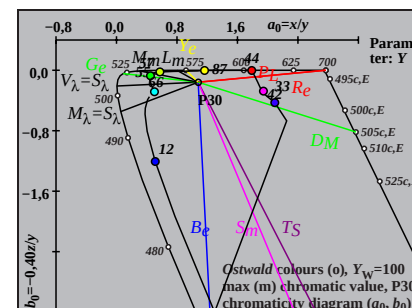
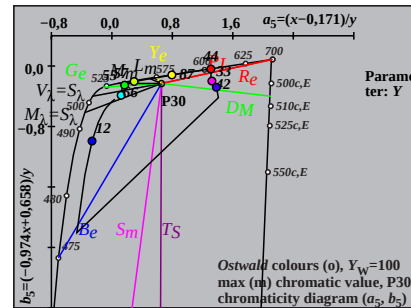
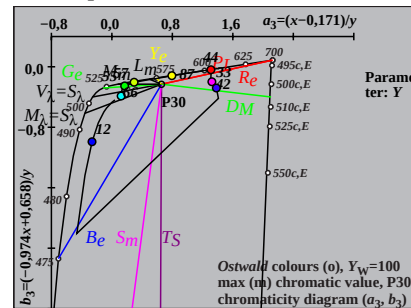
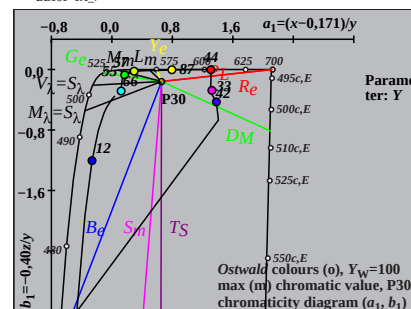
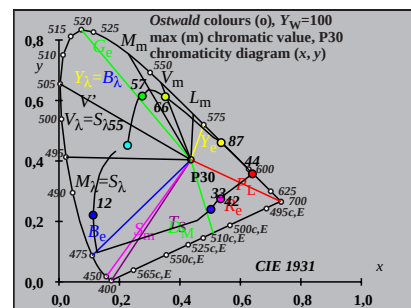
Ostwald optimal colours (o) of maximum (m) C_{AB} for P30, $Y_w=100$, $Y_m=520-770$

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	34	573	27.64	55.03	39.34	0.2265	0.451	0.3224	167.3	18 493 39 598 Cm
6	435	34	573	26.71	55.24	33.71	0.2309	0.4775	0.2914	160.2	19 495 42 612
10	450	34	573	24.91	55.46	22.36	0.2424	0.5398	0.2177	144.9	20 502 -1 502c
12	460	34	574	24.29	55.76	15.93	0.253	0.5809	0.166	135.9	21 508 -1 508c
13	465	34	574	24.26	56.07	12.95	0.2601	0.601	0.1388	131.7	22 512 -1 512c
14	470	35	575	24.65	56.58	10.35	0.2691	0.6178	0.113	127.9	23 518 -1 518c
15	475	35	576	25.59	57.45	8.16	0.2806	0.6298	0.0895	124.5	25 525 -1 525c Gm
16	480	35	579	27.41	58.97	6.39	0.2954	0.6355	0.0689	121.2	26 533 -1 533c
17	485	36	582	30.95	61.63	4.98	0.3172	0.6316	0.0511	117.5	28 540 -1 540c
18	490	37	589	38.29	66.7	3.87	0.3517	0.6126	0.0356	112.0	29 549 -1 549c max
19	495	41	606	58.87	78.16	2.99	0.4204	0.5581	0.0213	95.8	32 561 -1 561c
20	500	-1	500c	101.99	95.33	2.27	0.5109	0.4776	0.0113	44.6	35 575 13 469
21	510	-1	509c	101.97	93.9	1.68	0.5161	0.4752	0.0085	41.7	35 576 14 472
24	520	-1	520c	101.44	87.11	0.67	0.536	0.4603	0.0035	29.4	35 578 15 479 Ym
25	530	-1	529c	100.92	84.03	0.49	0.5442	0.4531	0.0026	24.5	36 580 16 481
28	540	-1	540c	97.78	72.83	0.18	0.5724	0.4264	0.001	9.4	36 584 17 486
29	545	-1	545c	96.07	68.59	0.13	0.5829	0.4162	0.0008	4.7	37 586 17 488
30	550	-1	550c	93.97	64.15	0.1	0.5938	0.4054	0.0006	0.5	37 588 17 489
31	555	-1	555c	91.42	59.57	0.08	0.6051	0.3943	0.0005	356.7	38 590 18 490
32	560	-1	560c	88.4	54.9	0.06	0.6166	0.3829	0.0004	353.3	38 592 18 491
34	573	0	405	80.39	44.96	0.2	0.6402	0.358	0.0016	347.3	39 598 18 493 Rm
34	573	6	435	81.32	44.75	5.83	0.6164	0.3392	0.0442	340.2	42 612 19 495
34	573	10	450	83.13	44.53	17.18	0.5738	0.3074	0.1186	324.9	-1 502c 20 502
34	574	12	460	83.74	44.23	23.61	0.5524	0.2917	0.1557	316.0	-1 508c 21 508
34	574	13	465	83.77	43.92	26.59	0.5429	0.2846	0.1723	311.8	-1 512c 22 512
35	575	14	470	83.39	43.41	29.19	0.5345	0.2782	0.1871	308.0	-1 518c 23 518
35	576	15	475	82.44	42.54	31.38	0.5272	0.272	0.2006	304.6	-1 525c 25 525 Mm
35	579	16	480	80.62	41.02	33.15	0.5208	0.265	0.2141	301.3	-1 533c 26 533
36	582	17	485	77.08	38.36	34.56	0.5138	0.2557	0.2303	297.6	-1 540c 28 540
37	589	18	490	69.74	33.29	35.67	0.5027	0.24	0.2571	292.0	-1 549c 29 549 min
41	606	19	495	49.16	21.83	36.55	0.457	0.203	0.3398	275.9	-1 561c 32 561
-1	500c	20	500	6.04	4.66	37.28	0.126	0.0971	0.7768	224.6	13 469 35 575
-1	509c	21	510	6.06	6.09	37.86	0.1212	0.1219	0.7568	221.8	14 472 35 576
-1	520c	24	520	6.6	12.88	38.87	0.1131	0.2208	0.666	209.5	15 479 35 578 Bm
-1	529c	25	530	7.11	15.96	39.05	0.1144	0.2569	0.6285	204.5	16 481 36 580
-1	540c	28	540	10.25	27.16	39.36	0.1336	0.3537	0.5126	189.4	17 486 36 584
-1	545c	29	545	11.96	31.4	39.41	0.1445	0.3793	0.476	184.8	17 488 37 586
-1	550c	30	550	14.07	35.84	39.44	0.1574	0.4011	0.4414	180.5	17 489 37 588
-1	555c	31	555	16.61	40.42	39.46	0.1721	0.4188	0.4089	176.7	18 490 38 590
-1	560c	32	560	19.63	45.09	39.48	0.1884	0.4327	0.3788	173.3	18 491 38 592
380	770	108.04	100.0	39.55	0.4363	0.4038	0.1597	0.0			

TUB-test chart BE16; CIE (x, y) and chromaticities (a_i, b_i)

Ostwald optimal colours for illuminant P30; diagram for illuminant P30, $Y_w=100$

input: w/rgb/cmyk -> rgb



TUB registration: 20170801-BE16/BE16L0NP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

Ostwald optimal colours (o) of maximum (m) C_{AB} for P25, $Y_w=100$, $Y_m=520-770$

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
1 405	35 576	27.93	53.61	26.39	0.2588	0.4966	0.2445	159.1	19 497	40 601	Cm
6 435	35 576	27.46	53.74	23.27	0.2628	0.5144	0.2227	154.7	19 499	42 611	
10 450	35 577	26.38	53.9	16.18	0.2735	0.5587	0.1677	144.4	20 504	-1 504c	
11 460	35 577	26.38	54.19	14.04	0.2788	0.5726	0.1484	141.1	21 506	-1 506c	
13 465	35 577	26.03	54.3	9.82	0.2887	0.6022	0.1089	134.8	22 513	-1 513c	
14 470	35 578	26.3	54.64	7.98	0.2957	0.6144	0.0897	131.9	23 518	-1 518c	
15 475	35 579	26.93	55.22	6.4	0.3041	0.6235	0.0723	129.3	24 524	-1 524c	Gm
16 480	36 580	28.21	56.22	5.1	0.3151	0.6278	0.057	126.9	26 531	-1 531c	
17 485	36 582	30.63	57.93	4.04	0.3307	0.6255	0.0437	124.4	27 539	-1 539c	
18 490	37 586	35.18	61.06	3.19	0.3537	0.614	0.0321	121.4	29 546	-1 546c	max
18 495	38 594	45.09	67.89	3.2	0.3881	0.5843	0.0275	117.3	30 553	-1 553c	
20 500	44 620	79.03	83.78	1.93	0.4797	0.5085	0.0117	87.9	34 570	-1 570c	
21 510	-1 509c	111.27	95.32	1.46	0.5348	0.4581	0.007	37.2	35 578	14 474	Ym
24 520	-1 520c	110.81	89.58	0.62	0.5512	0.4456	0.003	23.1	36 581	16 481	
25 530	-1 529c	110.36	86.89	0.45	0.5581	0.4394	0.0023	17.5	36 582	16 484	
28 540	-1 540c	107.51	76.78	0.18	0.5827	0.4162	0.0009	1.4	37 586	17 489	
28 545	-1 544c	107.51	76.78	0.18	0.5827	0.4162	0.0009	1.4	37 586	17 489	
29 550	-1 549c	105.92	72.82	0.13	0.5921	0.4071	0.0007	356.7	37 588	18 491	
30 555	-1 554c	103.93	68.62	0.1	0.6019	0.3974	0.0006	352.6	37 589	18 492	
32 560	-1 560c	98.53	59.65	0.07	0.6226	0.3769	0.0004	345.9	38 594	18 494	
35 576	1 405	87.24	46.38	0.19	0.6519	0.3466	0.0014	339.1	40 601	19 497	Rm
35 576	6 435	87.71	46.25	3.32	0.6389	0.3368	0.0241	334.7	42 611	19 499	
35 577	10 450	88.79	46.09	10.41	0.611	0.3172	0.0716	324.4	-1 504c	20 504	
35 577	11 460	88.79	45.8	12.54	0.6034	0.3112	0.0852	321.1	-1 506c	21 506	
35 577	13 465	89.14	45.69	16.77	0.5879	0.3013	0.1106	314.8	-1 513c	22 513	
35 578	14 470	88.88	45.35	18.6	0.5815	0.2967	0.1217	311.9	-1 518c	23 518	
35 579	15 475	88.24	44.77	20.18	0.576	0.2922	0.1317	309.4	-1 524c	24 524	Mm
36 580	16 480	86.96	43.77	21.48	0.5712	0.2875	0.1411	306.9	-1 531c	26 531	
36 582	17 485	84.55	42.06	22.54	0.5668	0.282	0.1511	304.5	-1 539c	27 539	
37 586	18 490	80.0	38.93	23.39	0.562	0.2735	0.1643	301.4	-1 546c	29 546	min
38 594	18 495	70.08	32.1	23.38	0.558	0.2556	0.1862	297.3	-1 553c	30 553	
44 620	20 500	36.14	16.21	24.65	0.4692	0.2105	0.3201	268.0	-1 570c	34 570	
-1 509c	21 510	3.91	4.67	25.12	0.116	0.1386	0.7453	217.3	14 474	35 578	
-1 520c	24 520	4.36	10.41	25.97	0.1071	0.2555	0.6373	203.1	16 481	36 581	Bm
-1 529c	25 530	4.81	13.1	26.13	0.1093	0.2973	0.5932	197.5	16 484	36 582	
-1 540c	28 540	7.66	23.21	26.41	0.1338	0.4051	0.461	181.4	17 489	37 586	
-1 544c	28 545	7.66	23.21	26.41	0.1338	0.4051	0.461	181.4	17 489	37 586	
-1 549c	29 550	9.25	27.17	26.45	0.1472	0.432	0.4206	176.7	18 491	37 588	
-1 554c	30 555	11.25	31.37	26.48	0.1628	0.4539	0.3832	172.6	18 492	37 589	
-1 560c	32 560	16.65	40.34	26.52	0.1993	0.483	0.3175	165.9	18 494	38 594	
380	770	115.18	100.0	26.59	0.4764	0.4136	0.1099	0.0			

TUB-test chart BE16; CIE (x, y) and chromaticities (a_i, b_i)

Ostwald optimal colours for illuminant P25; diagram for illuminant P25, $Y_w=100$

input: w/rgb/cmyk -> rgb

