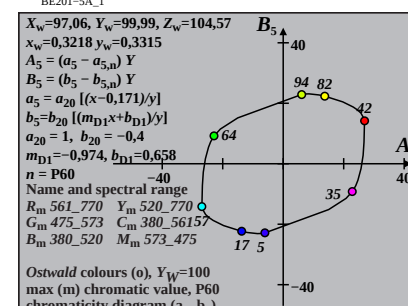
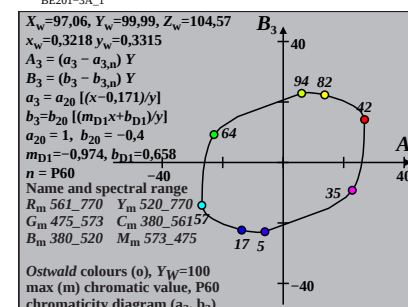
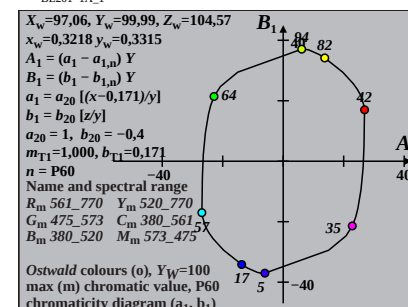
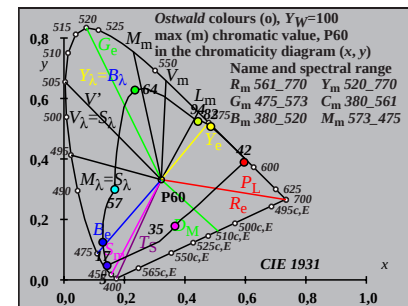


Ostwald optimal colours (o) of maximum (m) C_{AB} for P60, $Y_w=100$, $Y_m=520\text{--}770$

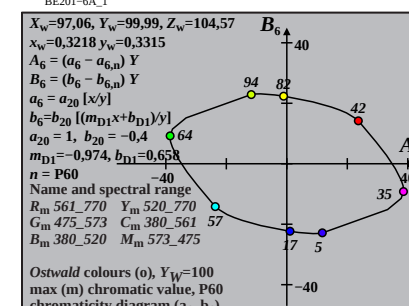
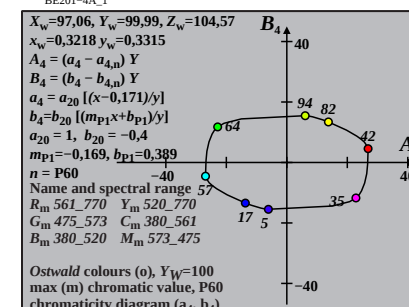
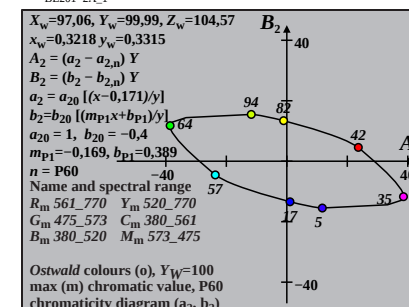
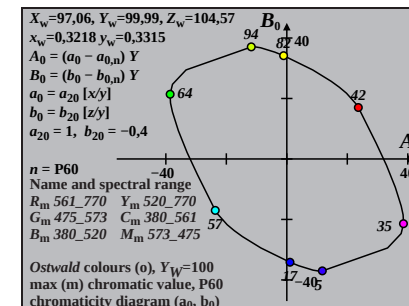
i_1, λ_1	i_2, λ_2	Y	A	B	C_{AB}	a	b	h_{AB}	i_d, λ_d	i_c, λ_c	Code
0 405	32 563	57.75	-23.52	-17.29	29.19	0.5634	-0.7177	216.3	16 483	38 590	Cm
6 435	32 563	58.29	-28.0	-8.43	29.24	0.4903	-0.5629	196.7	17 487	44 621	
10 450	33 565	58.9	-34.37	5.49	34.81	0.3871	-0.325	170.9	19 497	-1 497c	
11 460	33 566	60.12	-35.87	9.37	37.07	0.374	-0.2624	165.3	20 502	-1 502c	
13 465	33 568	60.68	-37.82	15.56	40.9	0.3474	-0.1618	157.6	22 513	-1 513c	
14 470	34 570	62.18	-38.45	18.5	42.67	0.3521	-0.1207	154.3	24 521	-1 521c	
15 475	34 574	64.7	-38.6	21.39	44.13	0.374	-0.0875	151.0	25 529	-1 529c	Gm
15 480	36 580	69.95	-38.16	23.59	44.86	0.4251	-0.081	148.2	27 535	-1 535c	
17 485	39 595	78.0	-33.31	29.44	44.46	0.5435	-0.0407	138.5	29 549	-1 549c	
18 490	-1 490c	94.22	-11.76	37.03	38.86	0.8458	-0.0251	107.6	33 566	11 459	max
19 495	-1 495c	92.78	-10.41	37.05	38.49	0.8584	-0.0188	105.6	33 567	12 461	
20 500	-1 500c	90.97	-8.67	36.78	37.78	0.8753	-0.0139	103.2	33 568	12 464	
22 510	-1 510c	85.98	-3.96	35.32	35.54	0.9246	-0.0074	96.3	34 570	13 469	
24 520	-1 520c	79.07	2.1	32.75	32.82	0.9972	-0.004	86.3	34 572	14 473	Ym
25 530	-1 529c	75.03	5.34	31.16	31.61	1.0419	-0.0029	80.2	34 574	15 475	
27 540	-1 539c	66.2	11.72	27.58	29.97	1.1478	-0.0016	66.9	35 578	15 478	
29 545	-1 545c	56.82	17.37	23.71	29.39	1.2763	-0.0009	53.7	36 582	16 480	
29 550	-1 549c	56.82	17.37	23.71	29.39	1.2763	-0.0009	53.7	36 582	16 480	
30 555	-1 554c	52.07	19.73	21.74	29.36	1.3495	-0.0007	47.7	36 584	16 481	
32 560	-1 560c	42.7	23.2	17.84	29.27	1.5141	-0.0005	37.5	37 589	16 483	
32 563	0 405	42.24	23.52	17.29	29.19	1.5274	-0.0089	36.3	38 590	16 483	Rm
32 563	6 435	41.7	28.0	8.43	29.24	1.642	-0.216	16.7	44 621	17 487	
33 565	10 450	41.09	34.37	-5.49	34.81	1.8072	-0.5519	350.9	-1 497c	19 497	
33 566	11 460	39.87	35.87	-9.37	37.07	1.8703	-0.6532	345.3	-1 502c	20 502	
33 568	13 465	39.31	37.82	-15.56	40.9	1.9328	-0.8142	337.6	-1 513c	22 513	
34 570	14 470	37.81	38.45	-18.5	42.67	1.9876	-0.9074	334.3	-1 521c	24 521	
34 574	15 475	35.29	38.6	-21.39	44.13	2.0643	-1.0244	331.0	-1 529c	25 529	Mm
36 580	15 480	30.04	38.16	-23.59	44.86	2.2411	-1.2035	328.2	-1 535c	27 535	
39 595	17 485	21.99	33.31	-29.44	44.46	2.4851	-1.7567	318.5	-1 549c	29 549	
-1 490c	18 490	5.77	11.76	-37.03	38.86	3.0068	-6.8297	287.6	11 459	33 566	min
-1 495c	19 495	7.21	10.41	-37.05	38.49	2.413	-5.5515	285.6	12 461	33 567	
-1 500c	20 500	9.02	8.67	-36.78	37.78	1.9318	-4.4493	283.2	12 464	33 568	
-1 510c	22 510	14.01	3.96	-35.32	35.54	1.2533	-2.9397	276.3	13 469	34 570	
-1 520c	24 520	20.92	-2.1	-32.75	32.82	0.8702	-1.9835	266.3	14 473	34 572	Bm
-1 529c	25 530	24.96	-5.34	-31.16	31.61	0.7564	-1.6667	260.2	15 475	34 574	
-1 539c	27 540	33.79	-11.72	-27.58	29.97	0.6237	-1.2346	246.9	15 478	35 578	
-1 545c	29 545	43.17	-17.37	-23.71	29.39	0.5683	-0.9676	233.7	16 480	36 582	
-1 549c	29 550	43.17	-17.37	-23.71	29.39	0.5683	-0.9676	233.7	16 480	36 582	
-1 554c	30 555	47.92	-19.73	-21.74	29.36	0.559	-0.872	227.7	16 481	36 584	
-1 560c	32 560	57.29	-23.2	-17.84	29.27	0.5655	-0.7297	217.5	16 483	37 589	
380	770	99.99	0.0	0.0	0.01	0.9706	-0.4182	0.0			

TUB-test chart BE20; CIE (x, y) and chromatic values (A_i, B_i)
Ostwald optimal colours for illuminant P60; diagram for illuminant P60, $Y_w=100$

input: w/rgb/cmyk -> rgb



BE201-1A_1



BE201-2A_1

TUB registration: 20170801-BE20/BE20L0NP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

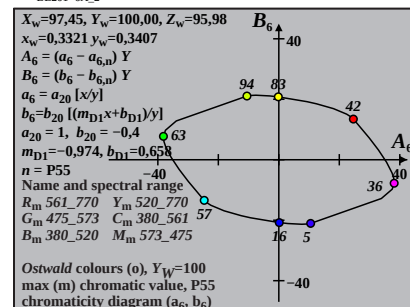
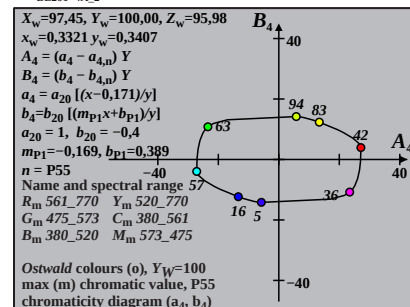
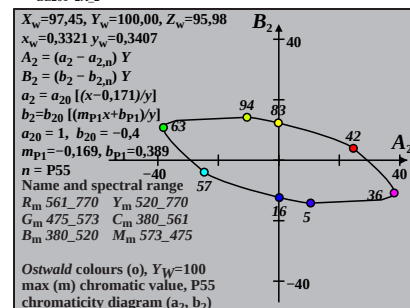
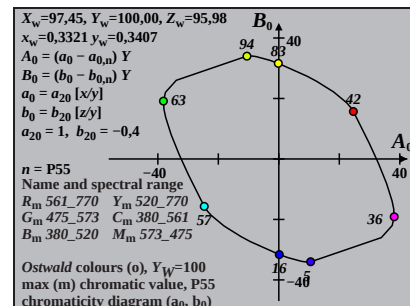
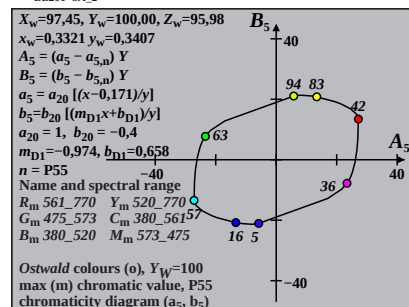
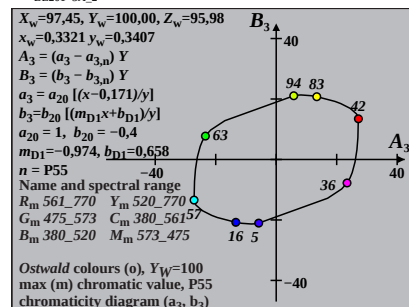
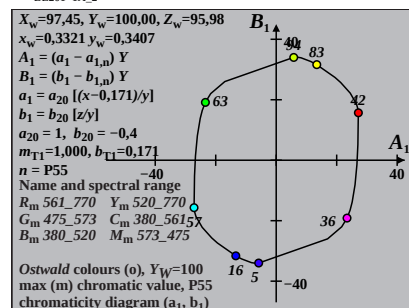
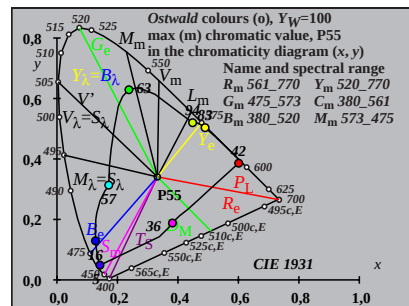
Ostwald optimal colours (o) of maximum (m) C_{AB} for P55, $Y_w=100$, $Y_m=520\text{--}770$

i_1, λ_1	i_2, λ_2	Y	A	B	C_{AB}	a	b	h_{AB}	i_d, λ_d	i_c, λ_c	Code
1 405	32 564	57.57	-24.66	-15.7	29.23	0.5462	-0.6566	212.4	16 484	38 591	Cm
6 435	32 564	58.07	-28.52	-8.08	29.64	0.4834	-0.523	195.8	17 488	43 619	
9 450	33 565	58.81	-32.95	1.46	32.98	0.4142	-0.359	177.4	18 494	-1 494c	
11 460	33 567	59.73	-35.62	8.09	36.53	0.3781	-0.2484	167.1	20 502	-1 502c	
13 465	33 568	60.24	-37.43	13.82	39.9	0.3531	-0.1544	159.7	22 513	-1 513c	
14 470	34 570	61.59	-37.99	16.5	41.42	0.3577	-0.1159	156.5	24 521	-1 521c	
15 475	34 574	63.89	-38.13	19.11	42.65	0.3777	-0.0847	153.3	25 529	-1 529c	Gm
16 480	36 580	67.97	-37.49	22.02	43.48	0.423	-0.0599	149.5	27 537	-1 537c	
17 485	38 592	75.72	-33.9	26.01	42.73	0.5267	-0.0404	142.5	29 547	-1 547c	
17 490	-1 489c	95.68	-11.52	33.67	35.58	0.8541	-0.032	108.8	33 566	11 456	max
19 495	-1 495c	93.2	-9.25	34.08	35.31	0.8752	-0.0182	105.1	33 567	12 462	
19 500	-1 499c	93.2	-9.25	34.08	35.31	0.8752	-0.0182	105.1	33 567	12 462	
21 510	-1 509c	89.29	-5.49	33.39	33.84	0.913	-0.0099	99.3	33 569	13 467	
24 520	-1 520c	79.9	2.93	30.36	30.5	1.0112	-0.0039	84.4	34 573	14 474	Ym
26 530	-1 530c	71.7	9.33	27.37	28.92	1.1047	-0.0021	71.1	35 576	15 477	
27 540	-1 539c	67.24	12.44	25.71	28.56	1.1597	-0.0015	64.1	35 578	15 479	
28 545	-1 544c	62.63	15.39	23.97	28.48	1.2203	-0.0011	57.2	36 580	16 480	
30 550	-1 550c	53.19	20.46	20.38	28.88	1.3592	-0.0007	44.8	37 585	16 482	
30 555	-1 554c	53.19	20.46	20.38	28.88	1.3592	-0.0007	44.8	37 585	16 482	
32 560	-1 560c	43.79	23.98	16.79	29.27	1.5222	-0.0005	34.9	38 590	16 484	
32 564	1 405	42.42	24.66	15.7	29.23	1.5559	-0.0137	32.4	38 591	16 484	Rm
32 564	6 435	41.92	28.52	8.08	29.64	1.6549	-0.1911	15.8	43 619	17 488	
33 565	9 450	41.18	32.95	-1.46	32.98	1.7746	-0.4194	357.4	-1 494c	18 494	
33 567	11 460	40.26	35.62	-8.09	36.53	1.8593	-0.5849	347.1	-1 502c	20 502	
33 568	13 465	39.75	37.43	-13.82	39.9	1.9162	-0.7316	339.7	-1 513c	22 513	
34 570	14 470	38.4	37.99	-16.5	41.42	1.9637	-0.8135	336.5	-1 521c	24 521	
34 574	15 475	36.1	38.13	-19.11	42.65	2.0305	-0.9133	333.3	-1 529c	25 529	Mm
36 580	16 480	32.02	37.49	-22.02	43.48	2.1454	-1.0716	329.5	-1 537c	27 537	
38 592	17 485	24.27	33.9	-26.01	42.73	2.3714	-1.4554	322.5	-1 547c	29 547	
-1 489c	17 490	4.31	11.52	-33.66	35.58	3.6461	-8.1914	288.8	11 456	33 566	min
-1 495c	19 495	6.79	9.25	-34.08	35.31	2.3366	-5.399	285.1	12 462	33 567	
-1 499c	19 500	6.79	9.25	-34.08	35.31	2.3366	-5.399	285.1	12 462	33 567	
-1 509c	21 510	10.7	5.49	-33.39	33.84	1.488	-3.5045	279.3	13 467	33 569	
-1 520c	24 520	20.09	-2.93	-30.36	30.5	0.8286	-1.8947	264.4	14 474	34 573	Bm
-1 530c	26 530	28.29	-9.33	-27.37	28.92	0.6447	-1.3514	251.1	15 477	35 576	
-1 539c	27 540	32.75	-12.44	-25.71	28.56	0.5945	-1.1688	244.1	15 479	35 578	
-1 544c	28 545	37.36	-15.39	-23.97	28.48	0.5626	-1.0254	237.2	16 480	36 580	
-1 550c	30 550	46.8	-20.46	-20.38	28.88	0.5374	-0.8193	224.8	16 482	37 585	
-1 554c	30 555	46.8	-20.46	-20.38	28.88	0.5374	-0.8193	224.8	16 482	37 585	
-1 560c	32 560	56.2	-23.98	-16.79	29.27	0.5478	-0.6826	214.9	16 484	38 590	
380	770	100.0	0.0	0.0	0.01	0.9745	-0.3839	0.0			

TUB-test chart BE20; CIE (x, y) and chromatic values (A_i, B_i)

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

input: w/rgb/cmyk -> rgb



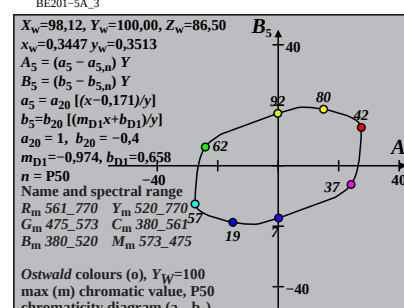
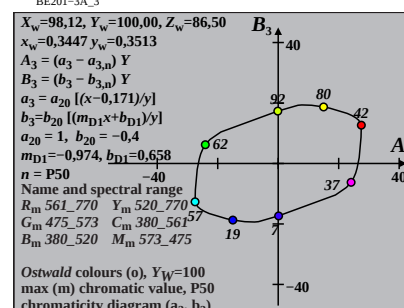
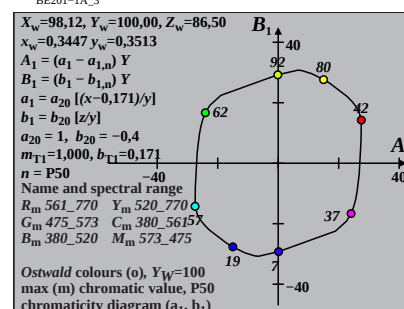
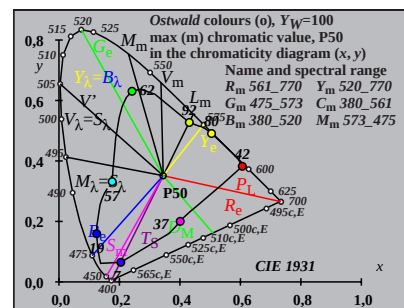
see similar files: <http://farbe.li.tu-berlin.de/BE20/BE20.HTM>
technical information: <http://farbe.li.tu-berlin.de> or <http://130.149.60.45/~farbmetrik>

Ostwald optimal colours (o) of maximum (m) C_{AB} for P50, $Y_w=100$, $Y_m=520\text{--}770$													
i_1, λ_1	i_2, λ_2	Y	A	B	C_{AB}	a	b	h_{AB}	i_d, λ_d	i_c, λ_c	Code		
0 405	33 565	57.35	-25.68	-14.48	29.48	0.5334	-0.5984	209.4	17 485	38 592	Cm		
7 435	33 565	57.7	-30.32	-5.07	30.74	0.4557	-0.434	189.5	18 490	-1 490c			
9 450	33 566	58.44	-33.0	0.79	33.01	0.4165	-0.3324	178.6	19 495	-1 495c			
11 460	33 568	59.26	-35.41	6.74	36.05	0.3836	-0.2321	169.2	20 502	-1 502c			
12 465	33 569	60.07	-36.47	9.69	37.73	0.3741	-0.1846	165.1	21 507	-1 507c			
14 470	34 571	60.91	-37.52	14.35	40.18	0.365	-0.1103	159.0	24 520	-1 520c			
15 475	34 574	62.96	-37.66	16.66	41.19	0.383	-0.0812	156.1	25 528	-1 528c	Gm		
16 480	35 579	66.58	-37.12	19.16	41.77	0.4237	-0.0581	152.6	27 536	-1 536c			
16 485	37 589	74.17	-35.04	21.79	41.26	0.5088	-0.0522	148.1	28 544	-1 544c			
17 490	47 636	92.98	-15.25	29.24	32.98	0.8171	-0.0314	117.5	33 565	-1 565c	max		
19 495	-1 495c	93.68	-7.99	30.77	31.8	0.8958	-0.0174	104.5	33 568	12 462			
20 500	-1 500c	92.03	-6.39	30.64	31.3	0.9117	-0.013	101.7	33 569	13 465			
21 510	-1 509c	89.95	-4.38	30.26	30.58	0.9325	-0.0095	98.2	34 570	13 468			
24 520	-1 520c	80.88	3.82	27.67	27.93	1.0284	-0.0038	82.1	34 574	14 474	Ym		
26 530	-1 530c	72.86	10.12	25.05	27.02	1.1202	-0.0021	67.9	35 577	15 478			
28 540	-1 540c	63.92	16.16	22.04	27.33	1.234	-0.0011	53.7	36 581	16 481			
28 545	-1 544c	63.92	16.16	22.04	27.33	1.234	-0.0011	53.7	36 581	16 481			
30 550	-1 550c	54.53	21.26	18.82	28.4	1.3711	-0.0007	41.5	37 585	16 483			
30 555	-1 554c	54.53	21.26	18.82	28.4	1.3711	-0.0007	41.5	37 585	16 483			
32 560	-1 560c	45.11	24.85	15.58	29.33	1.5321	-0.0005	32.0	38 590	17 485			
33 565	0 405	42.64	25.68	14.48	29.48	1.5834	-0.0064	29.4	38 592	17 485	Rm		
33 565	7 435	42.29	30.32	5.07	30.74	1.6982	-0.2258	9.5	-1 490c	18 490			
33 566	9 450	41.55	33.0	-0.79	33.01	1.7753	-0.365	358.6	-1 495c	19 495			
33 568	11 460	40.73	35.41	-6.74	36.05	1.8508	-0.5116	349.2	-1 502c	20 502			
33 569	12 465	39.92	36.47	-9.69	37.73	1.8946	-0.5887	345.1	-1 507c	21 507			
34 571	14 470	39.08	37.52	-14.35	40.18	1.9413	-0.7132	339.0	-1 520c	24 520			
34 574	15 475	37.03	37.66	-16.66	41.19	1.9983	-0.7961	336.1	-1 528c	25 528	Mm		
35 579	16 480	33.41	37.12	-19.16	41.77	2.0921	-0.9196	332.6	-1 536c	27 536			
37 589	16 485	25.82	35.04	-21.79	41.26	2.3383	-1.1899	328.1	-1 544c	28 544			
47 636	17 490	7.01	15.25	-29.24	32.98	3.1554	-4.513	297.5	-1 565c	33 565	min		
-1 495c	19 495	6.31	7.99	-30.77	31.8	2.248	-5.2216	284.5	12 462	33 568			
-1 500c	20 500	7.96	6.39	-30.64	31.3	1.7834	-4.1927	281.7	13 465	33 569			
-1 509c	21 510	10.04	4.38	-30.26	30.57	1.4175	-3.3598	278.2	13 468	34 570			
-1 520c	24 520	19.11	-3.82	-27.67	27.93	0.7812	-1.7933	262.1	14 474	34 574	Bm		
-1 530c	26 530	27.13	-10.13	-25.05	27.02	0.6078	-1.2695	247.9	15 478	35 577			
-1 540c	28 540	36.07	-16.16	-22.04	27.33	0.5332	-0.9569	233.7	16 481	36 581			
-1 544c	28 545	36.07	-16.16	-22.04	27.33	0.5332	-0.9569	233.7	16 481	36 581			
-1 550c	30 550	45.46	-21.26	-18.82	28.4	0.5135	-0.7601	221.5	16 483	37 585			
-1 554c	30 555	45.46	-21.26	-18.82	28.4	0.5135	-0.7601	221.5	16 483	37 585			
-1 560c	32 560	54.88	-24.85	-15.58	29.33	0.5283	-0.6299	212.0	17 485	38 590			
380	770	100.0	0.0	0.0	0.01	0.9812	-0.346	0.0					

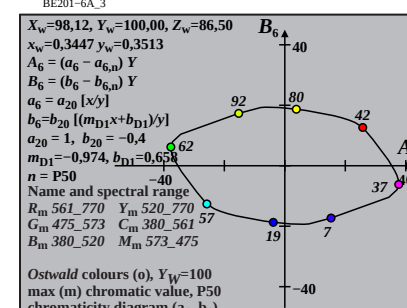
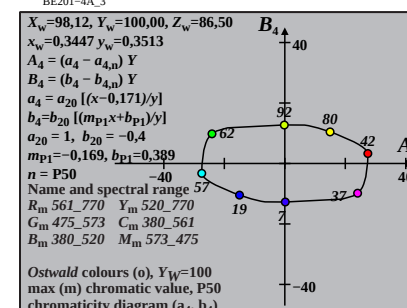
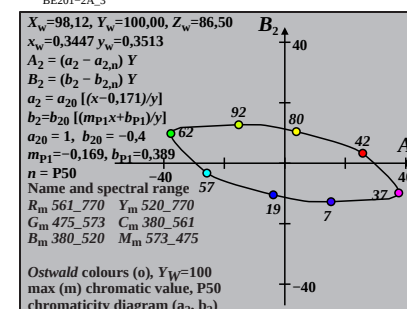
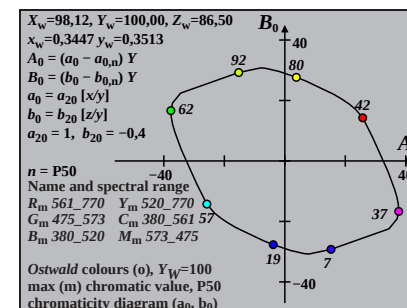
TUB-test chart BE20; CIE (x, y) and chromatic values (A_i, B_i)

Ostwald optimal colours for illuminant P50; diagram for illuminant P50, $Y_w=100$

input: w/rgb/cmyk -> rgb



BE201-1A_3



BE201-2A_3

TUB registration: 20170801-BE20/BE20L0NP.PDF / .PS
application for measurement of offset print output

TUB material: code=rha4ta

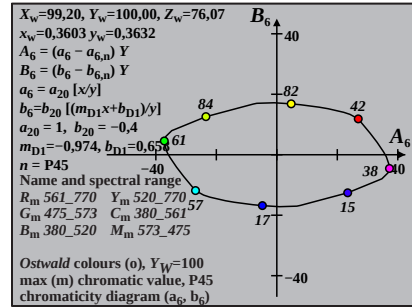
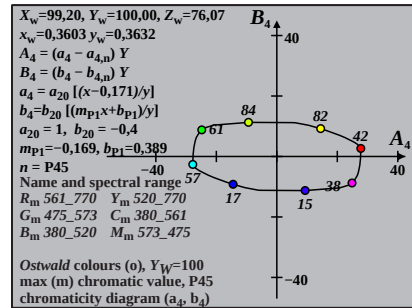
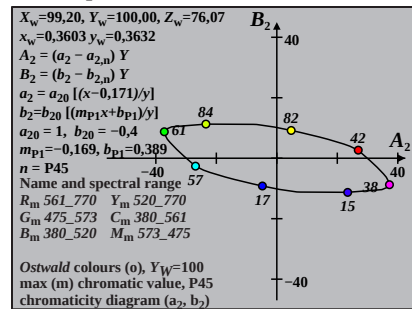
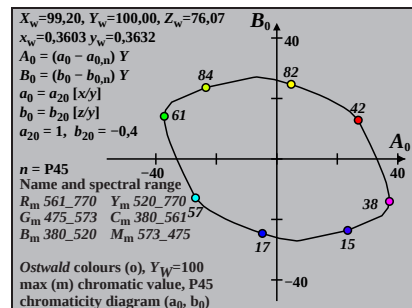
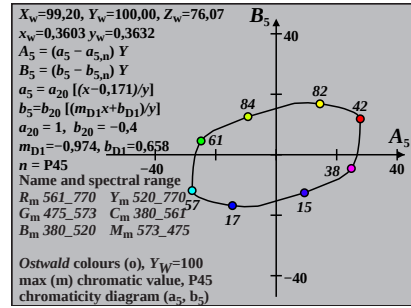
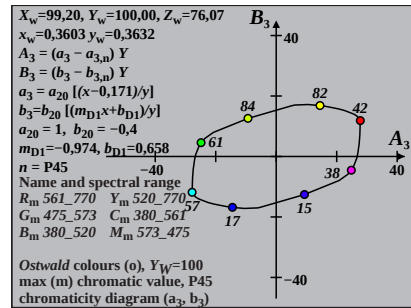
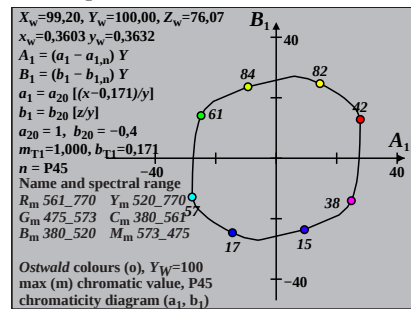
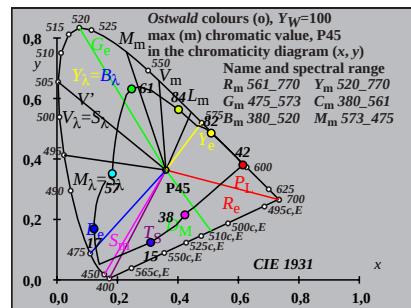
Ostwald optimal colours (o) of maximum (m) C_{AB} for P45, $Y_w=100$, $Y_m=520\text{--}770$

i_1, λ_1	i_2, λ_2	Y	A	B	C_{AB}	a	b	h_{AB}	i_d, λ_d	i_c, λ_c	Code
1 405	33 566	57.01	-26.99	-12.67	29.82	0.5185	-0.5266	205.1	17 487	38 593	Cm
7 435	33 567	57.33	-30.82	-4.93	31.21	0.4544	-0.3902	189.0	18 491	-1 491c	
10 450	33 568	57.83	-34.16	2.58	34.26	0.4012	-0.2595	175.6	19 498	-1 498c	
12 460	33 569	58.45	-36.04	7.63	36.84	0.3754	-0.1736	168.0	21 507	-1 507c	
13 465	34 570	59.09	-36.73	9.96	38.06	0.3704	-0.1357	164.8	22 512	-1 512c	
13 470	34 571	60.51	-36.83	10.39	38.27	0.3832	-0.1325	164.2	22 514	-1 514c	
15 475	34 574	61.91	-37.23	14.07	39.8	0.3905	-0.077	159.2	25 528	-1 528c	Gm
15 480	35 578	65.64	-37.07	15.2	40.07	0.4272	-0.0726	157.7	26 532	-1 532c	
17 485	37 587	70.76	-34.75	18.78	39.5	0.501	-0.0388	151.6	28 544	-1 544c	
17 490	42 611	85.47	-24.31	23.24	33.64	0.7075	-0.0322	136.2	31 559	-1 559c	max
19 495	-1 495c	94.24	-6.63	27.11	27.91	0.9216	-0.0165	103.7	33 569	12 463	
20 500	-1 500c	92.68	-5.1	27.05	27.53	0.9369	-0.0124	100.6	34 570	13 466	
22 510	-1 510c	88.3	-0.86	26.27	26.28	0.9822	-0.0067	91.8	34 572	14 471	Ym
24 520	-1 520c	82.03	4.75	24.65	25.11	1.05	-0.0037	79.0	34 574	15 475	
26 530	-1 530c	74.25	10.96	22.44	24.97	1.1396	-0.002	63.9	35 578	15 479	
27 540	-1 539c	69.96	14.03	21.18	25.41	1.1926	-0.0015	56.4	35 579	16 480	
29 545	-1 545c	60.86	19.69	18.46	27.0	1.3156	-0.0008	43.1	36 583	16 483	
29 550	-1 549c	60.86	19.69	18.46	27.0	1.3156	-0.0008	43.1	36 583	16 483	
30 555	-1 554c	56.17	22.13	17.05	27.93	1.386	-0.0007	37.6	37 585	16 484	
31 560	-1 559c	51.44	24.19	15.62	28.8	1.4623	-0.0006	32.8	37 588	17 485	
33 566	1 405	42.98	26.99	12.67	29.82	1.6201	-0.0092	25.1	38 593	17 487	Rm
33 567	7 435	42.66	30.82	4.93	31.21	1.7146	-0.1887	9.0	-1 491c	18 491	
33 568	10 450	42.16	34.16	-2.58	34.26	1.8023	-0.3656	355.6	-1 498c	19 498	
33 569	12 460	41.54	36.04	-7.63	36.84	1.8597	-0.488	348.0	-1 507c	21 507	
34 570	13 465	40.9	36.73	-9.96	38.06	1.8901	-0.5478	344.8	-1 512c	22 512	
34 571	13 470	39.48	36.83	-10.39	38.27	1.9249	-0.5674	344.2	-1 514c	22 514	
34 574	15 475	38.08	37.23	-14.07	39.8	1.9697	-0.6737	339.2	-1 528c	25 528	Mm
35 578	15 480	34.35	37.07	-15.2	40.07	2.0712	-0.7468	337.7	-1 532c	26 532	
37 587	17 485	29.23	34.75	-18.78	39.5	2.1808	-0.9467	331.6	-1 544c	28 544	
42 611	17 490	14.52	24.31	-23.24	33.64	2.6657	-1.9043	316.2	-1 559c	31 559	min
-1 495c	19 495	5.75	6.63	-27.11	27.91	2.1442	-5.0134	283.7	12 463	33 569	
-1 500c	20 500	7.31	5.1	-27.05	27.53	1.6906	-4.0043	280.6	13 466	34 570	
-1 510c	22 510	11.69	0.86	-26.27	26.28	1.066	-2.55	271.8	14 471	34 572	Bm
-1 520c	24 520	17.96	-4.75	-24.65	25.11	0.7271	-1.6768	259.0	15 475	34 574	
-1 530c	26 530	25.74	-10.96	-22.44	24.97	0.5661	-1.1761	243.9	15 479	35 578	
-1 539c	27 540	30.03	-14.03	-21.18	25.41	0.5247	-1.0095	236.4	16 480	35 579	
-1 545c	29 545	39.13	-19.69	-18.46	27.0	0.4886	-0.7762	223.1	16 483	36 583	
-1 549c	29 550	39.13	-19.69	-18.46	27.0	0.4886	-0.7762	223.1	16 483	36 583	
-1 554c	30 555	43.82	-22.13	-17.05	27.93	0.487	-0.6934	217.6	16 484	37 585	
-1 559c	31 560	48.55	-24.19	-15.62	28.8	0.4936	-0.6261	212.8	17 485	37 588	
380	770	100.0	0.0	0.0	0.01	0.992	-0.3042	0.0			

TUB-test chart BE20; CIE (x, y) and chromatic values (A_i, B_i)

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

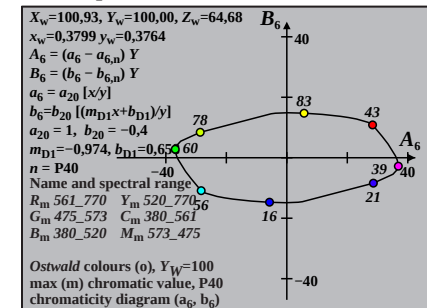
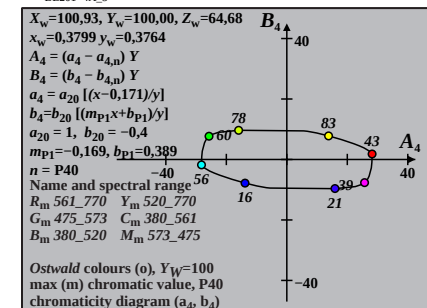
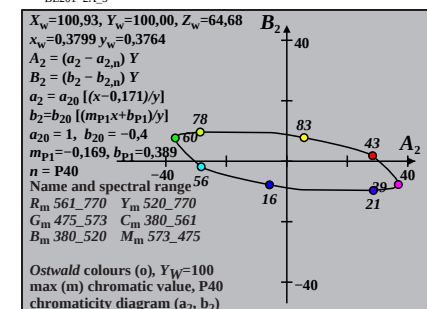
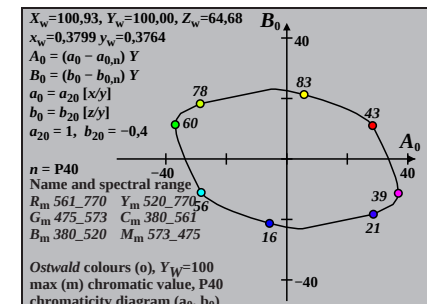
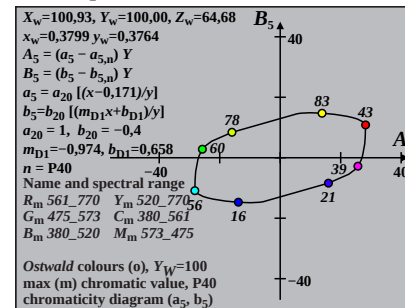
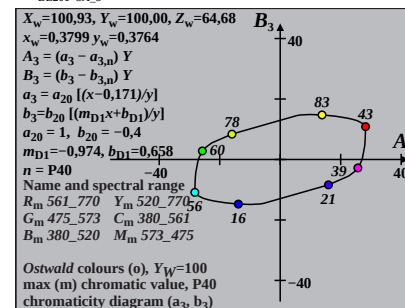
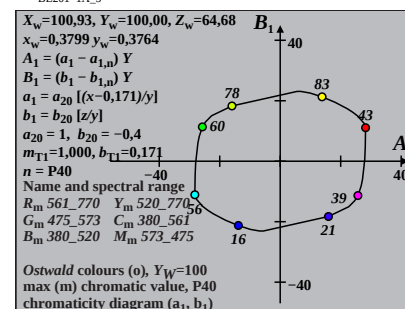
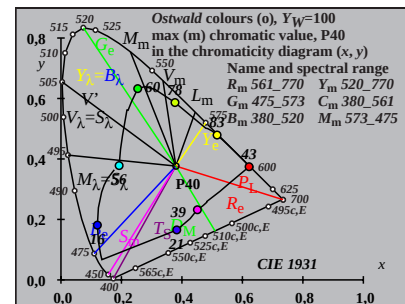
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Ostwald optimal colours (o) of maximum (m) C_{AB} for P40, $Y_w=100$, $Y_m=520_770$

i_1, λ_1	i_2, λ_2	Y	A	B	C_{AB}	a	b	h_{AB}	i_d, λ_d	i_c, λ_c	Code
0 405	33 568	56.58	-28.34	-11.06	30.43	0.5083	-0.4542	201.3	17 488	38 594	Cm
7 435	33 568	56.85	-31.51	-4.68	31.86	0.455	-0.3411	188.4	18 493	54 674	
10 450	33 569	57.27	-34.31	1.59	34.35	0.4101	-0.2309	177.3	19 499	-1 499c	
12 460	34 570	57.79	-35.88	5.88	36.36	0.3884	-0.1569	170.6	21 507	-1 507c	
13 465	34 571	58.31	-36.41	7.87	37.25	0.3848	-0.1237	167.7	22 512	-1 512c	
14 470	34 572	59.17	-36.74	9.67	37.99	0.3884	-0.0953	165.2	23 519	-1 519c	
14 475	34 574	61.12	-36.91	10.17	38.29	0.4054	-0.0923	164.5	24 522	-1 522c	Gm
15 480	35 578	63.82	-36.76	12.15	38.72	0.4332	-0.0682	161.6	26 531	-1 531c	
17 485	37 585	68.02	-35.1	15.05	38.19	0.4932	-0.0374	156.7	28 543	-1 543c	
17 490	40 600	79.03	-29.45	17.89	34.46	0.6366	-0.0323	148.7	30 554	-1 554c	max
19 495	-1 495c	94.87	-5.18	23.08	23.65	0.9546	-0.0154	102.6	34 571	12 464	
20 500	-1 500c	93.44	-3.75	23.09	23.39	0.9691	-0.0116	99.2	34 571	13 467	
21 510	-1 509c	91.62	-1.93	22.91	22.99	0.9882	-0.0086	94.8	34 572	13 469	
24 520	-1 520c	83.41	5.7	21.28	22.03	1.0777	-0.0035	74.9	35 575	15 476	Ym
26 530	-1 530c	75.94	11.79	19.5	22.79	1.1646	-0.0019	58.8	35 578	16 480	
27 540	-1 539c	71.77	14.84	18.46	23.69	1.2161	-0.0014	51.1	36 580	16 481	
29 545	-1 545c	62.86	20.55	16.21	26.17	1.3362	-0.0008	38.2	36 584	16 484	
29 550	-1 549c	62.86	20.55	16.21	26.17	1.3362	-0.0008	38.2	36 584	16 484	
31 555	-1 555c	53.5	25.17	13.81	28.71	1.4798	-0.0005	28.7	37 588	17 486	
32 560	-1 560c	48.79	26.89	12.59	29.7	1.5605	-0.0005	25.1	38 591	17 487	
33 568	0 405	43.41	28.34	11.06	30.43	1.6623	-0.0039	21.3	38 594	17 488	Rm
33 568	7 435	43.14	31.51	4.68	31.86	1.7398	-0.1501	8.4	54 674	18 493	
33 569	10 450	42.72	34.31	-1.59	34.35	1.8125	-0.2959	357.3	-1 499c	19 499	
34 570	12 460	42.2	35.88	-5.88	36.36	1.8594	-0.3982	350.6	-1 507c	21 507	
34 571	13 465	41.68	36.41	-7.87	37.25	1.8827	-0.4476	347.7	-1 512c	22 512	
34 572	14 470	40.82	36.73	-9.67	37.99	1.9092	-0.4956	345.2	-1 519c	23 519	
34 574	14 475	38.87	36.91	-10.17	38.29	1.9588	-0.5204	344.5	-1 522c	24 522	Mm
35 578	15 480	36.17	36.76	-12.15	38.72	2.0255	-0.5948	341.6	-1 531c	26 531	
37 585	17 485	31.97	35.1	-15.05	38.19	2.107	-0.7294	336.7	-1 543c	28 543	
40 600	17 490	20.96	29.44	-17.89	34.46	2.414	-1.1123	328.7	-1 554c	30 554	min
-1 495c	19 495	5.12	5.18	-23.08	23.65	2.0215	-4.7666	282.6	12 464	34 571	
-1 500c	20 500	6.55	3.75	-23.09	23.39	1.5816	-3.7821	279.2	13 467	34 571	
-1 509c	21 510	8.37	1.93	-22.91	22.99	1.2401	-2.9941	274.8	13 469	34 572	
-1 520c	24 520	16.58	-5.7	-21.28	22.03	0.665	-1.5424	254.9	15 476	35 575	Bm
-1 530c	26 530	24.05	-11.79	-19.5	22.79	0.5189	-1.0695	238.8	16 480	35 578	
-1 539c	27 540	28.22	-14.84	-18.46	23.69	0.4831	-0.9131	231.1	16 481	36 580	
-1 545c	29 545	37.13	-20.55	-16.21	26.17	0.4558	-0.6953	218.2	16 484	36 584	
-1 549c	29 550	37.13	-20.55	-16.21	26.17	0.4558	-0.6953	218.2	16 484	36 584	
-1 555c	31 555	46.49	-25.17	-13.81	28.71	0.4677	-0.5558	208.7	17 486	37 588	
-1 560c	32 560	51.2	-26.89	-12.59	29.7	0.484	-0.5047	205.1	17 487	38 591	
380	770	100.0	0.0	0.0	0.01	1.0093	-0.2587	0.0			

TUB-test chart BE20; CIE (x, y) and chromatic values (A_i, B_i)
Ostwald optimal colours for illuminant P40; diagram for illuminant P40, $Y_w=100$



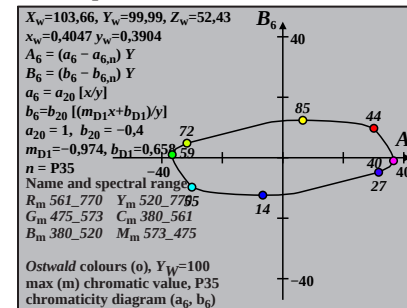
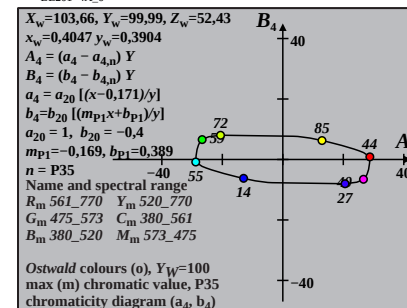
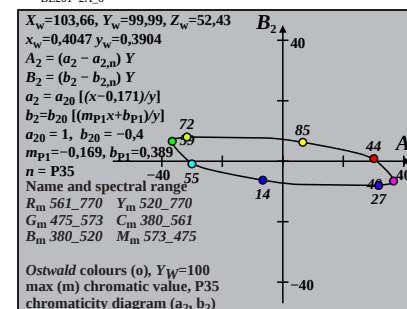
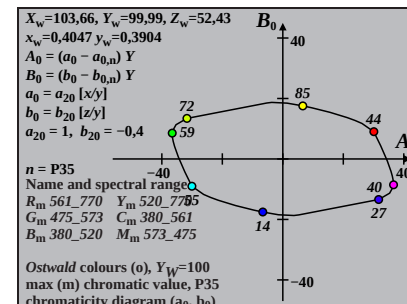
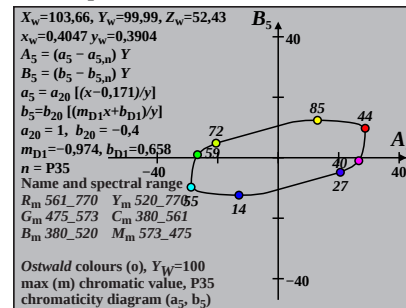
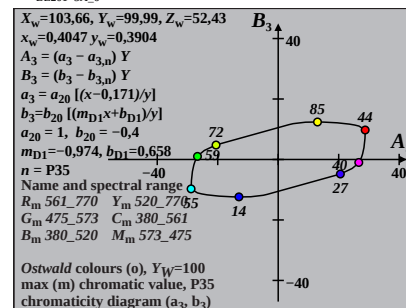
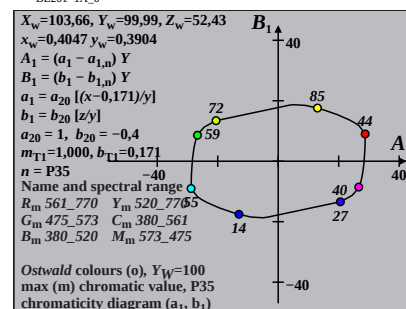
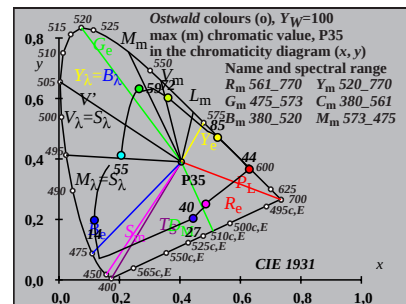
Ostwald optimal colours (o) of maximum (m) C_{AB} for P35, $Y_w=100$, $Y_m=520\text{--}770$

i_1, λ_1	i_2, λ_2	Y	A	B	C_{AB}	a	b	h_{AB}	i_d, λ_d	i_c, λ_c	Code
1 405	34 570	55.96	-30.07	-9.01	31.4	0.4992	-0.3708	196.6	18 490	39 596	Cm
7 435	34 570	56.18	-32.38	-4.3	32.67	0.4602	-0.2864	187.5	18 494	48 640	
9 450	34 571	56.61	-33.86	-1.03	33.87	0.4385	-0.2279	181.7	19 498	-1 498c	
12 460	34 572	56.91	-35.78	4.12	36.01	0.408	-0.1372	173.4	21 507	-1 507c	
12 465	34 572	57.56	-35.85	4.25	36.1	0.4137	-0.1357	173.2	21 508	-1 508c	
14 470	34 573	58.03	-36.52	7.21	37.23	0.4073	-0.0853	168.8	23 519	-1 519c	
14 475	35 575	59.59	-36.63	7.54	37.4	0.422	-0.0831	168.3	24 520	-1 520c Gm	
15 480	35 578	61.75	-36.55	9.09	37.66	0.4447	-0.0625	166.0	25 529	-1 529c	
17 485	36 583	64.96	-35.31	11.32	37.08	0.493	-0.0354	162.2	28 542	-1 542c	
18 490	38 593	72.36	-31.72	13.4	34.44	0.5983	-0.0244	157.0	30 552	-1 552c max	
19 495	52 661	94.66	-5.29	18.5	19.24	0.9807	-0.0142	105.9	34 572	12 460	
20 500	-1 500c	94.32	-2.35	18.77	18.92	1.0116	-0.0106	97.1	34 573	13 468	
22 510	-1 510c	90.59	1.41	18.46	18.51	1.0522	-0.0059	85.6	34 574	14 473	
23 520	-1 519c	88.05	3.86	18.07	18.48	1.0805	-0.0044	77.9	35 576	15 475	Ym
26 530	-1 530c	78.01	12.55	16.21	20.5	1.1975	-0.0018	52.2	35 579	16 481	
27 540	-1 539c	74.02	15.58	15.42	21.92	1.2472	-0.0014	44.6	36 581	16 483	
29 545	-1 545c	65.37	21.35	13.65	25.35	1.3634	-0.0008	32.5	37 585	17 486	
29 550	-1 549c	65.37	21.35	13.65	25.35	1.3634	-0.0008	32.5	37 585	17 486	
31 555	-1 555c	56.13	26.17	11.74	28.68	1.5029	-0.0005	24.1	37 589	17 488	
32 560	-1 560c	51.42	28.01	10.75	30.01	1.5815	-0.0005	21.0	38 591	17 489	
34 570	1 405	44.03	30.07	9.01	31.4	1.7198	-0.0049	16.6	39 596	18 490	Rm
34 570	7 435	43.81	32.38	4.3	32.67	1.7758	-0.1114	7.5	48 640	18 494	
34 571	9 450	43.38	33.86	1.03	33.87	1.8172	-0.1859	1.7	-1 498c	19 498	
34 572	12 460	43.08	35.78	-4.12	36.01	1.8672	-0.3054	353.4	-1 507c	21 507	
34 572	12 465	42.43	35.85	-4.25	36.1	1.8816	-0.31	353.2	-1 508c	21 508	
34 573	14 470	41.96	36.52	-7.21	37.23	1.907	-0.3817	348.8	-1 519c	23 519	
35 575	14 475	40.4	36.63	-7.54	37.4	1.9433	-0.3965	348.3	-1 520c	24 520	Mm
35 578	15 480	38.24	36.55	-9.09	37.66	1.9923	-0.4474	346.0	-1 529c	25 529	
36 583	17 485	35.03	35.31	-11.32	37.08	2.0447	-0.5329	342.2	-1 542c	28 542	
38 593	18 490	27.63	31.72	-13.4	34.44	2.1847	-0.695	337.0	-1 552c	30 552	min
52 661	19 495	5.33	5.29	-18.5	19.24	2.0285	-3.679	285.9	12 460	34 572	
-1 500c	20 500	5.67	2.35	-18.77	18.92	1.4523	-3.5177	277.1	13 468	34 573	
-1 510c	22 510	9.4	-1.41	-18.46	18.51	0.8862	-2.1722	265.6	14 473	34 574	
-1 519c	23 520	11.94	-3.86	-18.07	18.48	0.7129	-1.7231	257.9	15 475	35 576	Bm
-1 530c	26 530	21.98	-12.55	-16.21	20.5	0.4655	-0.9474	232.2	16 481	35 579	
-1 539c	27 540	25.97	-15.58	-15.42	21.92	0.4365	-0.8034	224.6	16 483	36 581	
-1 545c	29 545	34.62	-21.35	-13.65	25.35	0.4198	-0.604	212.5	17 486	37 585	
-1 549c	29 550	34.62	-21.35	-13.65	25.35	0.4198	-0.604	212.5	17 486	37 585	
-1 555c	31 555	43.86	-26.17	-11.74	28.68	0.4399	-0.4774	204.1	17 488	37 589	
-1 560c	32 560	48.57	-28.01	-10.75	30.01	0.4598	-0.4312	201.0	17 489	38 591	
380	770	99.99	0.0	0.0	0.01	1.0366	-0.2097	0.0			

TUB-test chart BE20; CIE (x, y) and chromatic values (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-BE20/BE20L0NP.PDF /.PS
application for measurement of offset print output

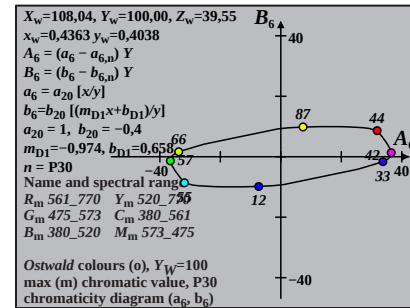
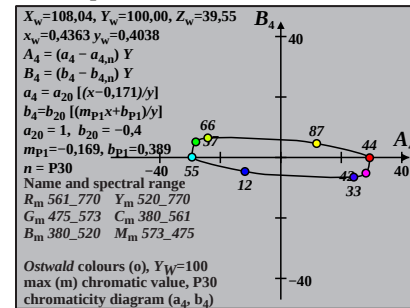
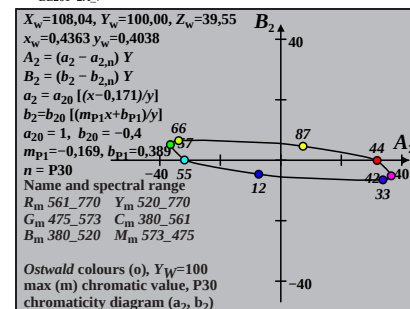
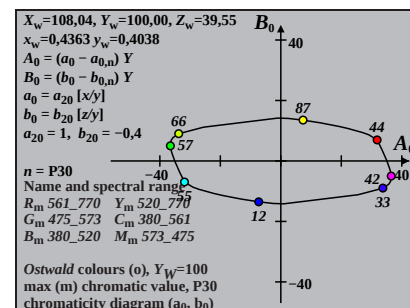
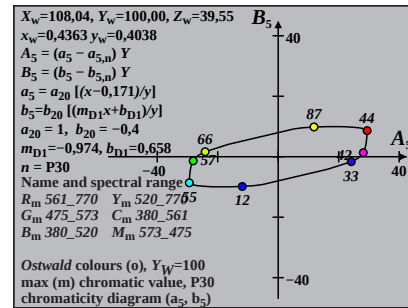
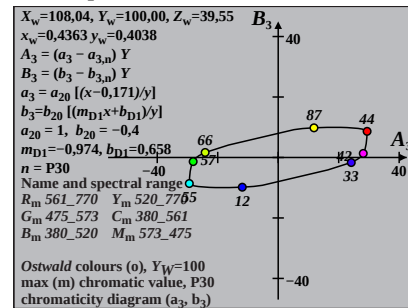
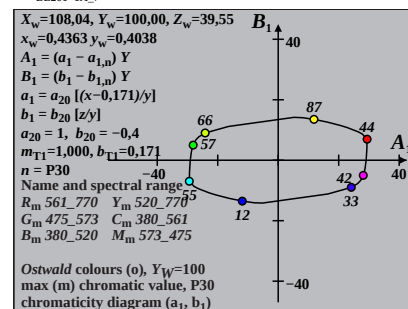
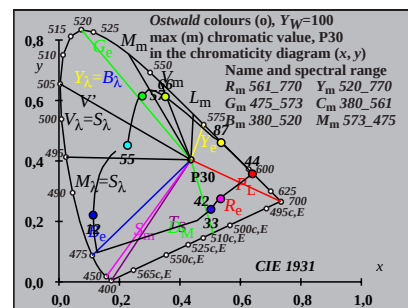
TUB material: code=rha4ta

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

i_1, λ_1	i_2, λ_2	Y	A	B	C_{AB}	a	b	h_{AB}	i_d, λ_d	i_c, λ_c	Code
0 405	34 573	55.03	-31.81	-7.03	32.58	0.5023	-0.2859	192.4	18 493	39 598	Cm
6 435	34 573	55.24	-32.96	-4.74	33.3	0.4836	-0.2441	188.1	19 495	42 612	
10 450	34 573	55.46	-35.01	-0.17	35.01	0.4491	-0.1613	180.2	20 502	-1 502c	
12 460	34 574	55.76	-35.95	2.44	36.04	0.4356	-0.1143	176.1	21 508	-1 508c	
13 465	34 574	56.07	-36.31	3.68	36.5	0.4327	-0.0924	174.2	22 512	-1 512c	
14 470	35 575	56.58	-36.48	4.81	36.8	0.4356	-0.0731	172.4	23 518	-1 518c	
15 475	35 576	57.45	-36.47	5.82	36.93	0.4455	-0.0568	170.9	25 525	-1 525c	Gm
16 480	35 579	58.97	-36.29	6.77	36.92	0.4649	-0.0433	169.4	26 533	-1 533c	
17 485	36 582	61.63	-35.63	7.75	36.46	0.5022	-0.0323	167.7	28 540	-1 540c	
18 490	37 589	66.7	-33.76	9.0	34.94	0.5741	-0.0232	165.0	29 549	-1 549c	max
19 495	41 606	78.16	-25.57	11.16	27.9	0.7532	-0.0153	156.4	32 561	-1 561c	
20 500	-1 500c	95.33	-1.01	14.17	14.21	1.0697	-0.0095	94.0	35 575	13 469	
21 510	-1 509c	93.9	0.52	14.18	14.18	1.0859	-0.0071	87.8	35 576	14 472	Ym
24 520	-1 520c	87.11	7.32	13.5	15.36	1.1644	-0.0031	61.5	35 578	15 479	
25 530	-1 529c	84.03	10.13	13.09	16.56	1.201	-0.0023	52.2	36 580	16 481	
28 540	-1 540c	72.83	19.08	11.44	22.25	1.3424	-0.001	30.9	36 584	17 486	
29 545	-1 545c	68.59	21.96	10.79	24.47	1.4006	-0.0008	26.1	37 586	17 488	
30 550	-1 550c	64.15	24.65	10.1	26.64	1.4646	-0.0006	22.2	37 588	17 489	
31 555	-1 555c	59.57	27.05	9.39	28.64	1.5345	-0.0005	19.1	38 590	18 490	
32 560	-1 560c	54.9	29.09	8.65	30.35	1.6102	-0.0005	16.5	38 592	18 491	
34 573	0 405	44.96	31.81	7.03	32.58	1.788	-0.0018	12.4	39 598	18 493	Rm
34 573	6 435	44.75	32.96	4.74	33.3	1.8169	-0.0521	8.1	42 612	19 495	
34 573	10 450	44.53	35.01	0.17	35.01	1.8664	-0.1543	0.2	-1 502c	20 502	
34 574	12 460	44.23	35.95	-2.44	36.04	1.8933	-0.2135	356.1	-1 508c	21 508	
34 574	13 465	43.92	36.31	-3.68	36.5	1.9073	-0.2421	354.2	-1 512c	22 512	
35 575	14 470	43.41	36.48	-4.81	36.8	1.9207	-0.269	352.4	-1 518c	23 518	
35 576	15 475	42.54	36.47	-5.82	36.93	1.9376	-0.295	350.9	-1 525c	25 525	Mm
35 579	16 480	41.02	36.29	-6.77	36.92	1.9652	-0.3232	349.4	-1 533c	26 533	
36 582	17 485	38.36	35.63	-7.75	36.46	2.0093	-0.3603	347.7	-1 540c	28 540	
37 589	18 490	33.29	33.76	-9.0	34.94	2.0944	-0.4285	345.0	-1 549c	29 549	min
41 606	19 495	21.83	25.57	-11.16	27.9	2.2514	-0.6696	336.4	-1 561c	32 561	
-1 500c	20 500	4.66	1.01	-14.17	14.21	1.2977	-3.1997	274.0	13 469	35 575	
-1 509c	21 510	6.09	-0.52	-14.17	14.18	0.9945	-2.4829	267.8	14 472	35 576	
-1 520c	24 520	12.88	-7.32	-13.5	15.36	0.5121	-1.2063	241.5	15 479	35 578	Bm
-1 529c	25 530	15.96	-10.13	-13.09	16.56	0.4455	-0.9783	232.2	16 481	36 580	
-1 540c	28 540	27.16	-19.08	-11.44	22.25	0.3777	-0.5797	210.9	17 486	36 584	
-1 545c	29 545	31.4	-21.96	-10.79	24.47	0.381	-0.5019	206.1	17 488	37 586	
-1 550c	30 550	35.84	-24.65	-10.1	26.64	0.3925	-0.4402	202.2	17 489	37 588	
-1 555c	31 555	40.42	-27.05	-9.39	28.64	0.411	-0.3905	199.1	18 490	38 590	
-1 560c	32 560	45.09	-29.09	-8.65	30.35	0.4353	-0.3501	196.5	18 491	38 592	
380	770	100.0	0.0	0.0	0.01	1.0804	-0.1582	0.0			

TUB-test chart BE20; CIE (x, y) and chromatic values (A_i, B_i)
Ostwald optimal colours for illuminant P30; diagram for illuminant P30, $Y_w=100$

input: w/rgb/cmyk -> rgb



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	Y	A	B	C_{AB}	a	b	h_{AB}	i_d, λ_d	i_c, λ_c	Code
1 405	35 576	53.61	-33.81	-4.85	34.16	0.5211	-0.1969	188.1	19 497	40 601	Cm
6 435	35 576	53.74	-34.44	-3.59	34.63	0.5109	-0.1731	185.9	19 499	42 611	
10 450	35 577	53.9	-35.69	-0.73	35.7	0.4895	-0.12	181.1	20 504	-1 504c	
11 460	35 577	54.19	-36.03	0.14	36.03	0.4869	-0.1036	179.7	21 506	-1 506c	
13 465	35 577	54.3	-36.51	1.84	36.56	0.4794	-0.0723	177.1	22 513	-1 513c	
14 470	35 578	54.64	-36.64	2.61	36.73	0.4812	-0.0584	175.9	23 518	-1 518c	
15 475	35 579	55.22	-36.67	3.31	36.82	0.4877	-0.0464	174.8	24 524	-1 524c	Gm
16 480	36 580	56.22	-36.54	3.93	36.75	0.5018	-0.0363	173.8	26 531	-1 531c	
17 485	36 582	57.93	-36.1	4.54	36.38	0.5287	-0.0279	172.8	27 539	-1 539c	
18 490	37 586	61.06	-35.15	5.21	35.54	0.5761	-0.0209	171.5	29 546	-1 546c	max
18 495	38 594	67.89	-33.1	5.94	33.63	0.6642	-0.0188	169.8	30 553	-1 553c	
20 500	44 620	83.78	-17.46	8.13	19.26	0.9433	-0.0092	155.0	34 570	-1 570c	
21 510	-1 509c	95.32	1.47	9.55	9.66	1.1673	-0.0061	81.2	35 578	14 474	
24 520	-1 520c	89.58	7.62	9.28	12.01	1.2369	-0.0027	50.5	36 581	16 481	Ym
25 530	-1 529c	86.89	10.27	9.06	13.69	1.27	-0.0021	41.4	36 582	16 484	
28 540	-1 540c	76.78	19.07	8.09	20.71	1.4002	-0.0009	22.9	37 586	17 489	
28 545	-1 544c	76.78	19.07	8.09	20.71	1.4002	-0.0009	22.9	37 586	17 489	
29 550	-1 549c	72.82	22.03	7.69	23.34	1.4544	-0.0007	19.2	37 588	18 491	
30 555	-1 554c	68.62	24.88	7.25	25.91	1.5143	-0.0006	16.2	37 589	18 492	
32 560	-1 560c	59.65	29.81	6.31	30.48	1.6517	-0.0004	11.9	38 594	18 494	
35 576	1 405	46.38	33.81	4.85	34.16	1.8808	-0.0016	8.1	40 601	19 497	Rm
35 576	6 435	46.25	34.44	3.59	34.63	1.8965	-0.0287	5.9	42 611	19 499	
35 577	10 450	46.09	35.69	0.73	35.7	1.9261	-0.0903	1.1	-1 504c	20 504	
35 577	11 460	45.8	36.03	-0.14	36.03	1.9385	-0.1095	359.7	-1 506c	21 506	
35 577	13 465	45.69	36.51	-1.84	36.56	1.9509	-0.1468	357.1	-1 513c	22 513	
35 578	14 470	45.35	36.64	-2.61	36.73	1.9597	-0.1641	355.9	-1 518c	23 518	
35 579	15 475	44.77	36.67	-3.31	36.82	1.9709	-0.1803	354.8	-1 524c	24 524	Mm
36 580	16 480	43.77	36.54	-3.93	36.75	1.9864	-0.1963	353.8	-1 531c	26 531	
36 582	17 485	42.06	36.1	-4.54	36.38	2.01	-0.2143	352.8	-1 539c	27 539	
37 586	18 490	38.93	35.15	-5.21	35.54	2.0548	-0.2404	351.5	-1 546c	29 546	min
38 594	18 495	32.1	33.1	-5.94	33.63	2.1829	-0.2913	349.8	-1 553c	30 553	
44 620	20 500	16.21	17.46	-8.13	19.26	2.2285	-0.6081	335.0	-1 570c	34 570	
-1 509c	21 510	4.67	-1.47	-9.55	9.66	0.8364	-2.1496	261.2	14 474	35 578	
-1 520c	24 520	10.41	-7.62	-9.28	12.01	0.4193	-0.9977	230.5	16 481	36 581	Bm
-1 529c	25 530	13.1	-10.27	-9.06	13.69	0.3675	-0.7979	221.4	16 484	36 582	
-1 540c	28 540	23.21	-19.07	-8.09	20.71	0.3302	-0.4551	202.9	17 489	37 586	
-1 544c	28 545	23.21	-19.07	-8.09	20.71	0.3302	-0.4551	202.9	17 489	37 586	
-1 549c	29 550	27.17	-22.03	-7.69	23.34	0.3407	-0.3894	199.2	18 491	37 588	
-1 554c	30 555	31.37	-24.88	-7.25	25.91	0.3586	-0.3377	196.2	18 492	37 589	
-1 560c	32 560	40.34	-29.81	-6.31	30.48	0.4127	-0.2629	191.9	18 494	38 594	
380	770	100.0	0.0	0.0	0.01	1.1518	-0.1063	0.0			

TUB-test chart BE20; CIE (x, y) and chromatic values (A_i, B_i)

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

input: w/rgb/cmyk -> rgb

