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Ostwald optimal colours (o) of maximum (m) C _{AB} for D65, Y _w =100, Y _m =520_770, CIEXYZ data															%
i ₁ , λ ₁	i ₂ , λ ₂	X ₁₀₀	Y ₁₀₀	Z ₁₀₀	x	y	z	h _{xy}	i _d , λ _d	i _c , λ _c	Code		%		
0 405	32 561	32.57	58.2	108.12	0.1637	0.2926	0.5436	193.7	16 483	37 589	Cm		%		
6 435	32 562	29.09	58.79	88.73	0.1647	0.3328	0.5023	178.4	17 486	42 610			%		
10 450	32 563	22.93	59.42	52.37	0.1702	0.441	0.3887	141.8	19 496	−1 496c			%		
12 460	33 565	20.88	60.32	34.02	0.1812	0.5234	0.2952	124.0	21 505	−1 505c			%		
12 465	33 567	21.95	61.66	34.03	0.1866	0.5241	0.2892	122.8	21 506	−1 506c			%		
14 470	33 569	21.46	62.72	19.98	0.206	0.602	0.1918	111.3	24 520	−1 520c			%		
15 475	34 573	23.76	65.29	14.91	0.2285	0.6279	0.1434	105.6	25 528	−1 528c	Gm		%		
16 480	36 580	29.0	69.95	11.05	0.2636	0.6358	0.1005	99.0	27 537	−1 537c			%		
17 485	39 595	42.11	78.75	8.23	0.3262	0.6099	0.0638	87.2	29 548	−1 548c			%		
18 490	−1 490c	77.09	93.8	6.13	0.4354	0.5298	0.0346	58.5	33 565	11 459	max		%		
19 495	−1 495c	77.04	92.3	4.52	0.4431	0.5308	0.026	57.1	33 566	12 462			%		
20 500	−1 500c	77.02	90.42	3.27	0.4511	0.5296	0.0191	55.3	33 567	12 464			%		
22 510	−1 510c	76.89	85.27	1.63	0.4694	0.5205	0.01	50.7	33 569	13 469			%		
23 520	−1 519c	76.66	81.98	1.16	0.4797	0.513	0.0072	47.7	34 570	14 471	Ym		%		
25 530	−1 529c	75.53	74.04	0.57	0.503	0.4931	0.0038	40.7	34 573	15 475			%		
27 540	−1 539c	73.26	64.9	0.26	0.5292	0.4688	0.0019	32.8	35 577	15 478			%		
28 545	−1 544c	71.66	60.13	0.18	0.5429	0.4556	0.0014	28.7	35 579	15 479			%		
29 550	−1 549c	69.7	55.26	0.13	0.5571	0.4417	0.001	24.7	36 582	16 480			%		
30 555	−1 554c	67.4	50.4	0.09	0.5716	0.4274	0.0008	20.8	36 584	16 481			%		
32 560	−1 560c	61.78	41.0	0.05	0.6007	0.3987	0.0005	13.6	37 589	16 483			%		
380	770	95.04	100.0	108.89	0.3127	0.329	0.3582	0.0					%		

Ostwald optimal colours (o) of maximum (m) C _{AB} for D65, Y _w =100, Y _m =770_520, CIEXYZ complementary															%
i ₁ , λ ₁	i ₂ , λ ₂	X ₁₀₀	Y ₁₀₀	Z ₁₀₀	x	y	z	h _{xy}	i _d , λ _d	i _c , λ _c	Code		%		
32 561	0 405	62.47	41.79	0.76	0.5947	0.3979	0.0072	13.7	37 589	16 483	Rm		%		
32 562	6 435	65.95	41.2	20.15	0.518	0.3236	0.1583	358.5	42 610	17 486			%		
32 563	10 450	72.11	40.57	56.51	0.4261	0.2398	0.334	321.8	-1 496c	19 496			%		
33 565	12 460	74.16	39.67	74.86	0.393	0.2102	0.3967	304.0	-1 505c	21 505			%		
33 567	12 465	73.08	38.33	74.86	0.3923	0.2057	0.4018	302.9	-1 506c	21 506			%		
33 569	14 470	73.57	37.27	88.9	0.3683	0.1866	0.445	291.3	-1 520c	24 520			%		
34 573	15 475	71.27	34.7	93.97	0.3564	0.1735	0.4699	285.7	-1 528c	25 528	Mm		%		
36 580	16 480	66.03	30.04	97.83	0.3405	0.1549	0.5045	279.1	-1 537c	27 537			%		
39 595	17 485	52.92	21.24	100.65	0.3027	0.1215	0.5757	267.2	-1 548c	29 548			%		
-1 490c	18 490	17.95	6.19	102.75	0.1414	0.0487	0.8097	238.5	11 459	33 565	min		%		
-1 495c	19 495	18.0	7.69	104.36	0.1384	0.0591	0.8024	237.1	12 462	33 566			%		
-1 500c	20 500	18.02	9.57	105.61	0.1352	0.0719	0.7928	235.4	12 464	33 567			%		
-1 510c	22 510	18.14	14.72	107.25	0.1295	0.105	0.7654	230.7	13 469	33 569			%		
-1 519c	23 520	18.37	18.01	107.72	0.1275	0.1249	0.7475	227.7	14 471	34 570	Bm		%		
-1 529c	25 530	19.5	25.95	108.31	0.1268	0.1687	0.7043	220.7	15 475	34 573			%		
-1 539c	27 540	21.77	35.09	108.62	0.1315	0.212	0.6563	212.8	15 478	35 577			%		
-1 544c	28 545	23.38	39.86	108.7	0.1359	0.2318	0.6321	208.8	15 479	35 579			%		
-1 549c	29 550	25.33	44.73	108.76	0.1416	0.2501	0.6081	204.7	16 480	36 582			%		
-1 554c	30 555	27.63	49.59	108.79	0.1485	0.2665	0.5848	200.8	16 481	36 584			%		
-1 560c	32 560	33.26	58.99	108.83	0.1654	0.2933	0.5412	193.6	16 483	37 589			%		
380	770	95.04	100.0	108.89	0.3127	0.329	0.3582	0.0					%		

Ostwald optimal colours (o) of maximum (m) C _{AB} for D65, Y _{w,10} =100, Y _m =520_770, CIEXYZ data															%
i ₁ , λ ₁	i ₂ , λ ₂	X ₁₀₀	Y ₁₀₀	Z ₁₀₀	x	y	z	h _{xy}	i _d , λ _d	i _c , λ _c	Code			%	
0 405	31 556	31.74	56.57	106.53	0.1629	0.2903	0.5467	195.0	15 476	37 585	Cm			%	
6 435	31 557	27.99	57.41	83.63	0.1656	0.3396	0.4947	176.6	16 480	44 621				%	
10 450	31 559	22.06	57.53	46.52	0.1749	0.4561	0.3688	137.9	18 491	-1 491c				%	
11 460	32 562	22.29	59.27	37.3	0.1875	0.4986	0.3137	126.9	19 498	-1 498c				%	
12 465	33 565	22.82	60.91	28.98	0.2025	0.5403	0.2571	117.9	21 506	-1 506c				%	
14 470	34 570	24.61	63.07	16.02	0.2373	0.6081	0.1544	105.3	24 522	-1 522c				%	
15 475	35 579	31.53	68.64	11.53	0.2822	0.6144	0.1032	96.3	26 533	-1 533c	Gm			%	
16 480	41 606	54.04	81.94	8.23	0.3746	0.5682	0.0571	75.5	30 550	-1 550c				%	
16 485	-1 484c	77.05	92.3	8.23	0.4339	0.5197	0.0463	57.5	32 560	10 454				%	
18 490	-1 490c	76.87	89.06	4.2	0.4518	0.5234	0.0247	54.3	32 562	11 459	max			%	
19 495	-1 495c	76.85	87.05	2.97	0.4605	0.5216	0.0178	52.4	32 563	12 461				%	
19 500	-1 499c	76.85	87.05	2.97	0.4605	0.5216	0.0178	52.4	32 563	12 461				%	
22 510	-1 510c	76.43	79.1	1.01	0.4882	0.5052	0.0064	44.9	33 567	13 466				%	
23 520	-1 519c	76.0	75.81	0.68	0.4983	0.4971	0.0045	41.9	33 568	13 468	Ym			%	
26 530	-1 530c	73.15	64.17	0.16	0.532	0.4667	0.0012	31.8	34 573	14 472				%	
27 540	-1 539c	71.61	59.9	0.08	0.5441	0.4551	0.0006	28.3	35 576	14 473				%	
28 545	-1 544c	69.75	55.54	0.04	0.5565	0.4431	0.0003	24.7	35 578	14 474				%	
29 550	-1 549c	67.56	51.12	0.01	0.5691	0.4306	0.0001	21.3	36 580	15 475				%	
31 555	-1 555c	62.15	42.37	0.0	0.5946	0.4053	0.0	14.8	37 586	15 476				%	
32 560	10 451	70.49	40.04	58.44	0.4171	0.2369	0.3458	317.7	-1 492c	18 492				%	
380	770	94.81	100.0	107.33	0.3137	0.3309	0.3552	0.0						%	

Ostwald optimal colours (o) of maximum (m) C _{AB} for D65, Y _{w,10} =100, Y _m =770_520, CIEXYZ complementary															%
i ₁ , λ ₁	i ₂ , λ ₂	X ₁₀₀	Y ₁₀₀	Z ₁₀₀	x	y	z	h _{xy}	i _d , λ _d	i _c , λ _c	Code			%	
31 556	0 405	63.06	43.42	0.8	0.5877	0.4047	0.0074	15.0	37 585	15 476	Rm			%	
31 557	6 435	66.81	42.58	23.7	0.5019	0.3199	0.178	356.6	44 621	16 480				%	
31 559	10 450	72.75	42.46	60.8	0.4132	0.2412	0.3454	317.9	-1 491c	18 491				%	
32 562	11 460	72.51	40.72	70.03	0.3956	0.2221	0.3821	307.0	-1 498c	19 498				%	
33 565	12 465	71.98	39.08	78.34	0.38	0.2063	0.4136	298.0	-1 506c	21 506				%	
34 570	14 470	70.19	36.92	91.31	0.3537	0.186	0.4601	285.4	-1 522c	24 522				%	
35 579	15 475	63.28	31.35	95.79	0.3323	0.1646	0.503	276.3	-1 533c	26 533	Mm			%	
41 606	16 480	40.77	18.05	99.09	0.2581	0.1143	0.6275	255.6	-1 550c	30 550				%	
-1 484c	16 485	17.75	7.69	99.09	0.1425	0.0618	0.7956	237.5	10 454	32 560				%	
-1 490c	18 490	17.94	10.93	103.13	0.1359	0.0828	0.7812	234.3	11 459	32 562	min			%	
-1 495c	19 495	17.96	12.94	104.35	0.1327	0.0957	0.7714	232.4	12 461	32 563				%	
-1 499c	19 500	17.96	12.94	104.35	0.1327	0.0957	0.7714	232.4	12 461	32 563				%	
-1 510c	22 510	18.38	20.89	106.32	0.1262	0.1435	0.7302	224.9	13 466	33 567				%	
-1 519c	23 520	18.8	24.18	106.64	0.1256	0.1616	0.7126	222.0	13 468	33 568	Bm			%	
-1 530c	26 530	21.65	35.82	107.16	0.1315	0.2175	0.6508	211.8	14 472	34 573				%	
-1 539c	27 540	23.19	40.09	107.24	0.136	0.2351	0.6288	208.3	14 473	35 576				%	
-1 544c	28 545	25.05	44.45	107.29	0.1417	0.2514	0.6068	204.8	14 474	35 578				%	
-1 549c	29 550	27.25	48.87	107.32	0.1485	0.2664	0.585	201.3	15 475	36 580				%	
-1 555c	31 555	32.65	57.62	107.33	0.1652	0.2916	0.5431	194.8	15 476	37 586				%	
10 451	32 560	24.31	59.95	48.88	0.1826	0.4502	0.3671	137.6	18 492	-1 492c				%	
380	770	94.81	100.0	107.33	0.3137	0.3309	0.3552	0.0						%	

http://130.149.60.45/~farbmetrik/VE47/VE47LONA.TXT /PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 2/5

$rgb^*_{e,AB}$ and CIE data of a elementary hue circle according to CIE R1-47 for Ostwald colours for CIE illuminant D65
 $Yxy, abc_{AB}, ABC_{AB}, LabC^*_{ab}, h_{ab}$ data for relative spacing of elementary hue h_{AB} of LYNAB for CIE 2 degree observer

Elementary hue circle with 4 intended elementary hue angles: $h_{AB} = 17.7, 93.3, 159.1, 270.8$ of LYNAB, and 90 intended hue angles:

000, 001, ..., 089, LYNAB data of CIE test colours 9 (R): 11.2 9.9 3.1, 10 (Y): 59.0 -1.2 20.9, 11 (G): 20.3 -7.2 2.7, 12 (B): 6.4 0.1 -8.2

no-AB _{X0}	x ₁₀	y ₁₀	a ₁₀	b ₁₀	C _{AB,10}	A ₁₀	B ₁₀	C _{AB,10}	h _{AB,10}	L* ₁₀	a* ₁₀	b* ₁₀	C* _{ab,10}	h _{ab,10}	rgb* _{e,AB,10}	CodeAB ₁₀	
000	40.7	0.447	0.259	1.727	-0.453	0.777	31.6	-0.7	31.6	358.7	78.0	81.6	-1.9	81.7	358.6	1.00 0.00 0.39 %B88R	
001	40.8	0.445	0.261	1.72	-0.44	0.77	31.4	-0.1	31.4	359.6	78.0	81.1	-0.5	81.1	359.6	1.00 0.00 0.37 %B88R	
002	40.8	0.453	0.264	1.714	-0.427	0.764	31.1	0.3	31.2	0.6	78.0	80.6	0.9	80.6	0.6	1.00 0.00 0.35 %B82R	
003	40.8	0.456	0.267	1.708	-0.414	0.758	30.9	0.8	30.9	1.6	78.0	80.0	2.4	80.1	1.7	1.00 0.00 0.33 %B83R	
004	40.8	0.459	0.269	1.701	-0.4	0.752	30.7	1.4	30.7	2.6	78.0	79.5	4.0	79.6	2.9	1.00 0.00 0.3 %B84R	
005	40.8	0.463	0.272	1.695	-0.387	0.746	30.4	1.9	30.5	3.6	78.1	78.9	5.6	79.1	4.0	1.00 0.00 0.28 %B85R	
006	40.9	0.465	0.275	1.689	-0.374	0.741	30.2	2.4	30.3	4.7	78.1	78.6	7.2	79.2	5.2	1.00 0.00 0.26 %B86R	
007	40.9	0.469	0.278	1.682	-0.361	0.736	29.9	3.0	30.1	5.7	78.1	77.8	8.9	79.3	6.5	1.00 0.00 0.24 %B87R	
008	40.9	0.472	0.281	1.676	-0.348	0.731	29.7	3.5	29.9	6.8	78.1	77.3	10.6	79.4	7.2	1.00 0.00 0.21 %B88R	
009	40.9	0.475	0.284	1.67	-0.335	0.726	29.4	4.1	29.7	7.9	78.1	76.7	12.3	79.7	9.1	1.00 0.00 0.19 %B89R	
010	40.9	0.478	0.288	1.663	-0.322	0.721	29.2	4.6	29.6	9.0	78.1	76.1	14.1	79.5	10.5	1.00 0.00 0.17 %B90R	
011	41.0	0.483	0.291	1.657	-0.309	0.718	28.9	5.1	29.4	10.1	78.1	75.6	15.9	79.7	11.9	1.00 0.00 0.15 %B92R	
012	41.0	0.486	0.294	1.65	-0.296	0.714	28.7	5.6	29.3	11.2	78.2	75.0	17.8	79.7	13.3	1.00 0.00 0.12 %B93R	
013	41.0	0.49	0.298	1.644	-0.283	0.71	28.5	6.2	29.1	12.3	78.2	74.5	19.7	79.7	14.8	1.00 0.00 0.1 %B94R	
014	41.0	0.493	0.298	1.638	-0.271	0.707	28.2	6.7	29.0	13.4	78.2	73.9	21.6	79.7	16.3	1.00 0.00 0.08 %B95R	
015	41.0	0.497	0.304	1.632	-0.258	0.704	28.0	7.2	28.9	14.5	78.2	73.2	23.6	79.7	17.8	1.00 0.00 0.06 %B96R	
016	41.1	0.501	0.308	1.626	-0.246	0.701	27.7	7.7	28.8	15.6	78.2	72.5	25.7	79.7	19.2	1.00 0.00 0.03 %B98R	
017	41.1	0.505	0.311	1.619	-0.234	0.699	27.5	8.2	28.7	16.7	78.2	72.2	27.7	79.7	21.0	1.00 0.00 0.01 %B99R	
018	41.1	0.509	0.315	1.613	-0.222	0.697	27.3	8.7	28.6	17.8	78.2	71.7	29.7	79.7	22.6	1.00 0.0	0.00 %R00Y
019	41.1	0.513	0.319	1.607	-0.21	0.695	27.0	9.2	28.6	18.9	78.2	71.2	32.0	79.7	24.2	1.00 0.01	0.00 %R01Y
020	41.1	0.517	0.322	1.601	-0.199	0.693	26.8	9.7	28.5	19.9	78.2	70.7	34.3	79.7	25.8	1.00 0.02	0.00 %R02Y
021	41.2	0.521	0.327	1.594	-0.184	0.691	26.5	10.3	28.5	21.3	78.3	70.0	37.1	79.2	27.9	1.00 0.04	0.00 %R04Y
022	41.2	0.527	0.332	1.586	-0.169	0.689	26.2	10.9	28.4	22.7	78.3	69.3	40.1	80.1	30.1	1.00 0.05	0.00 %R05Y
023	41.3	0.532	0.337	1.578	-0.155	0.687	25.9	11.5	28.4	24.0	78.4	68.6	43.3	81.1	32.2	1.00 0.06	0.00 %R06Y
024	41.3	0.537	0.341	1.57	-0.141	0.686	25.6	12.1	28.4	25.3	78.4	67.9	46.5	82.1	34.4	1.00 0.08	0.00 %R07Y
025	41.4	0.542	0.346	1.563	-0.128	0.684	25.3	12.7	28.4	26.6	78.4	67.2	49.8	83.1	36.6	1.00 0.09	0.00 %R08Y
026	41.4	0.546	0.351	1.556	-0.115	0.685	25.1	13.2	28.4	27.8	78.5	66.6	53.1	85.2	38.5	1.00 0.1	0.00 %R10Y
027	41.5	0.551	0.355	1.549	-0.103	0.685	24.8	13.7	28.4	28.9	78.5	66.0	56.6	86.9	40.6	1.00 0.12	0.00 %R11Y
028	41.5	0.556	0.36	1.543	-0.092	0.685	24.6	14.2	28.4	30.0	78.5	65.4	60.1	88.8	42.6	1.00 0.13	0.00 %R13Y
029	41.5	0.56	0.364	1.537	-0.081	0.685	24.3	14.7	28.4	31.1	78.5	64.8	63.8	91.0	44.5	1.00 0.14	0.00 %R14Y
030	41.6	0.565	0.369	1.531	-0.071	0.685	24.1	15.1	28.5	32.1	78.6	64.2	67.5	93.2	46.4	1.00 0.16	0.00 %R15Y
031	41.6	0.569	0.373	1.525	-0.061	0.686	23.9	15.5	28.5	33.0	78.6	63.7	71.5	95.8	48.2	1.00 0.17	0.00 %R17Y
032	41.6	0.573	0.377	1.52	-0.052	0.686	23.7	15.9	28.6	33.9	78.6	63.2	75.7	98.6	50.1	1.00 0.18	0.00 %R18Y
033	41.7	0.577	0.381	1.515	-0.043	0.687	23.5	16.3	28.6	34.7	78.6	62.8	80.0	101.7	51.8	1.00 0.2	0.00 %R20Y
034	41.7	0.581	0.384	1.51	-0.035	0.688	23.3	16.7	28.7	35.5	78.6	62.3	84.6	105.1	53.6	1.00 0.21	0.00 %R21Y
035	41.7	0.584	0.388	1.506	-0.027	0.689	23.2	17.0	28.7	36.2	78.7	61.9	89.0	109.0	55.3	1.00 0.22	0.00 %R22Y
036	41.7	0.588	0.391	1.502	-0.02	0.691	23.0	17.3	28.8	36.9	78.7	61.6	95.2	113.4	57.0	1.00 0.24	0.00 %R24Y
037	41.7	0.591	0.394	1.498	-0.014	0.691	22.9	17.6	28.8	37.5	78.7	61.2	101.5	118.5	58.8	1.00 0.25	0.00 %R25Y
038	41.7	0.594	0.397	1.495	-0.008	0.692	22.7	17.8	28.9	38.0	78.7	60.9	108.2	124.2	60.6	1.00 0.26	0.00 %R26Y
039	41.8	0.598	0.401	1.491	-0.002	0.693	22.5	18.1	28.9	38.7	78.7	60.6	115.1	130.1	62.4	1.00 0.27	0.00 %R27Y
040	42.4	0.595	0.403	1.475	-0.0	0.682	22.2	18.4	28.9	39.6	71.1	59.3	122.2	135.9	64.1	1.00 0.29	0.00 %R29Y
041	43.3	0.593	0.406	1.458	0.0	0.669	22.0	18.8	28.9	40.5	71.7	58.0	123.3	136.3	64.8	1.00 0.3	0.00 %R30Y
042	44.2	0.59	0.409	1.44	0.0	0.655	21.6	19.2	29.0	41.5	72.3	56.6	124.4	136.7	65.5	1.00 0.32	0.00 %R32Y
043	45.1	0.587	0.412	1.423	0.0	0.642	21.3	19.6	29.0	42.6	73.9	55.2	125.5	137.0	66.2	1.00 0.33	0.00 %R33Y
044	46.1	0.584	0.415	1.406	0.0	0.629	21.0	20.0	29.0	43.6	73.6	53.9	126.6	137.4	67.0	1.00 0.34	0.00 %R34Y
045	47.1	0.581	0.418	1.388	0.0	0.617	20.6	20.5	29.1	44.7	74.2	52.4	127.3	137.7	67.6	1.00 0.36	0.00 %R36Y
046	48.1	0.578	0.421	1.372	0.0	0.606	20.3	20.9	29.1	45.8	74.9	51.0	128.2	138.0	68.2	1.00 0.37	0.00 %R37Y
047	49.1	0.575	0.424	1.356	0.0	0.595	19.9	21.3	29.2	46.9	75.5	49.7	129.0	138.3	68.9	1.00 0.38	0.00 %R38Y
048	50.0	0.572	0.426	1.342	0.0	0.585	19.6	21.7	29.3	47.9	76.1	48.3	129.8	138.5	69.5	1.00 0.4	0.00 %R40Y
049	51.0	0.569	0.429	1.328	0.0	0.574	19.2	22.2	29.3	49.0	76.7	46.9	130.7	138.7	70.2	1.00 0.41	0.00 %R41Y
050	51.9	0.567	0.432	1.312	0.0	0.565	18.8	22.6	29.4	50.2	77.2	45.6	131.6	139.3	70.8	1.00 0.42	0.00 %R42Y
051	52.8	0.564	0.434	1.299	0.0	0.557	18.4	22.9	29.4	51.2	77.7	44.4	132.3	139.6	71.4	1.00 0.43	0.00 %R43Y
052	53.5	0.562	0.438	1.287	0.0	0.55	18.0	23.2	29.4	52.1	78.2	43.2	133.0	139.9	71.9	1.00 0.45	0.00 %R45Y
053	54.2	0.56	0.438	1.276	0.0	0.543	17.7	23.6	29.5	53.1	78.6	42.1	133.6	140.1	72.5	1.00 0.46	0.00 %R46Y
054	54.9	0.558	0.44	1.265	0.0	0.537	17.3	23.9	29.5	54.0	79.0	41.0	134.2	140.4	73.0	1.00 0.47	0.00 %R47Y
055	55.6	0.555	0.443	1.254	0.0	0.53	16.9	24.2	29.5	54.9	79.4	39.9	134.8	140.6	73.5	1.00 0.49	0.00 %R49Y
056	56.4	0.553	0.445	1.243	-0.001	0.524	16.5	24.5	29.5	55.9	79.8	38.7	135.5	140.9	74.0	1.00 0.5	0.00 %R50Y
057	57.1	0.551	0.447	1.233	-0.001	0.518	16.1	24.8	29.6	56.9	80.2	37.6	136.1	141.2	74.5	1.00 0.51	0.00 %R51Y
058	57.9	0.549	0.449	1.222	-0.001	0.512	15.7	25.1	29.6	57.9	80.6	36.4	136.7	141.5	75.0	1.00 0.52	0.00 %R52Y
059	58.6	0.547	0.451	1.211	-0.001	0.507	15.3	25.4	29.7	58.9	81.1	35.3	137.2	141.7	75.5	1.00 0.54	0.00 %R54Y
060	59.4	0.545	0.453	1.201	-0.001	0.501	14.9	25.8	29.8	59.9	81.5	34.1	137.8	142.0	76.0	1.00 0.55	0.00 %R55Y
061	60.1	0.542	0.455	1.191	-0.001	0.496	14.4	26.1	29.8	60.9	81.9	33.0	138.3	142.2	76.5	1.00 0.57	0.00 %R57Y
062	60.7	0.541	0.457	1.183	-0.001	0.492	14.1	26.3	29.9	61.8	82.2	32.0	138.8	142.5	76.9	1.00 0.58	0.00 %R58Y
063	61.3	0.539	0.459														

TUB registration: 20130201-VE47/VE47L0NA.TXT/.PS TUB material: code=rha4ta

TUB registration: 20130201-VE47/VE47LONA.TXT / PS TUB material: code=rha4ta

* e_{AB} and CIE data of a elementary hue circle according to CIE R1-47 for *Ostwald* colours for CIE illuminant D65
 a_{AB} , b_{AB} , ABC_{AB} , $LabC^*_{AB}$, h_{AB} for relative spacing of elementary hue h_{AB} of CIE 10 degree observer
 elementary hue circle with 4 intended elementary hue angles: $h_{AB} = 18.2, 86.3, 156.2, 260.1$ of *LINEAB*, and 90 intended hue angles:

0.091, ..., 179. LYNAB data of CIE test colours 9 (R): 10.8 8.7 2.8, 10 (Y): 55.9 1.2 19.6, 11 (G): 20.4 -6.8 3.0, 12 (B): 7.8 -1.2 -7.2

		Y10		Y10		b10		CAB10		A10		B10		CAB10		AB10		L*10		a*10		b*10		C*ab10		ab10		rgb*ab10		e.ab10		CodeAB10	
89.8	0.481	0.569	0.946	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086		
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086		
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9	0.0	0.0	0.0	0.0	0.0	138.8	138.8	96.0	0.94	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Y086	
89.9	0.479	0.571	0.947	-0.067	0.422	-0.1	34.1	34.1	90.1	92.9																							

XYZ data of CIE test colours 9 (R): 19.0 10.8 4.3, 10 (Y): 54.3 55.9 11.0, 11 (G): 12.5 20.4 14.4, 12 (B): 6.1 7.8 26.5

input: w/rab/cmyk ->

CIEXYZ, Y_{xy} , $YABCABh$, $LabCabh$ data, D65, 2 and 10 degree observer

http://130.149.60.45/~farbmatrik/VE47/VE47L0NA.TXT /.PS; transfer output
N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 4/5

see similar files: <http://130.149.60.45/~farbmertik/VE47/VE47.HTM>
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmertik>

1 UB registration: 20130201-VE4//VE4/LUNA.1X1/.PS
1 UB material: code=rh44
application for measurement of display output, no separation

rgb_{eAB} and CIE data of a elementary hue circle according to CIE R1-47 for *Ostwald* colours for CIE illuminant D65
 $X_{xy}, abc_{AB}, ABC_{AB}, LabC_{ab}, h_{ab}$ data for relative spacing of elementary hue h_{AB} of *LINYAB* for CIE 2 degree observer
 Elementary hue circle with 4 intended elementary hue angles: $h_{AB} = 17.7, 93.3, 159.1, 270.8$ of *LINYAB*, and 90 intended hue angles:

180, 181, ..., 269, LINYAB data of CIE test colours 9 (R): 11.2 9.9 3.1, 10 (Y): 59.0 -1.2 20.9, 11 (G): 20.3 -7.2 2.7, 12 (B): 6.4 0.1 -8.2

λ	α_{J2000}	x	y	z	b	c_{AB}	A	B	C_{AB}	h_{AB}	L^*	a^*	b^*	C_{AB}	h_{AB}	rgb^*_{AB}	CodeAB		
180	59.2	0.167	0.404	0.415	-0.423	0.535	-31.6	0.7	31.6	178.7	81.4	-101.1	-1.5	181.1	179.1	0.00	1.00	0.37	G188
181	59.1	0.167	0.399	0.419	-0.432	0.531	-31.4	0.1	31.4	179.6	81.4	-100.0	-1.4	180.1	179.7	0.00	1.00	0.39	G191
182	59.1	0.167	0.395	0.423	-0.441	0.527	-31.1	-0.3	31.2	180.6	81.3	-99.2	-0.7	99.2	180.4	0.00	1.00	0.4	G208
183	59.1	0.167	0.391	0.427	-0.45	0.523	-30.9	-0.8	30.9	181.6	81.3	-98.2	-1.8	98.2	181.0	0.00	1.00	0.42	G218
184	59.1	0.167	0.387	0.431	-0.46	0.519	-30.6	-1.3	30.6	182.6	81.3	-97.2	-2.7	97.2	180.7	0.00	1.00	0.44	G228
185	59.1	0.166	0.383	0.434	-0.468	0.516	-30.4	-1.9	30.5	183.6	81.3	-96.2	-4.1	96.3	180.2	0.00	1.00	0.46	G238
186	59.0	0.166	0.379	0.438	-0.477	0.513	-30.2	-2.4	30.3	184.7	81.3	-95.2	-5.2	95.3	183.1	0.00	1.00	0.48	G248
187	59.0	0.166	0.375	0.442	-0.486	0.51	-29.9	-3.0	30.1	185.7	81.3	-94.2	-6.3	94.4	183.8	0.00	1.00	0.49	G248
188	59.0	0.166	0.372	0.446	-0.495	0.507	-29.7	-3.5	29.9	186.8	81.3	-93.2	-7.4	93.5	184.5	0.00	1.00	0.51	G258
189	59.0	0.166	0.368	0.45	-0.505	0.504	-29.4	-4.1	29.7	187.9	81.3	-92.2	-8.4	92.6	185.2	0.00	1.00	0.53	G268
190	58.9	0.166	0.364	0.454	-0.514	0.501	-29.2	-4.6	29.4	189.0	81.3	-91.2	-9.4	91.4	185.9	0.00	1.00	0.55	G278
191	58.9	0.165	0.361	0.458	-0.523	0.499	-28.9	-5.1	29.4	190.1	81.2	-90.3	-10.5	90.6	186.6	0.00	1.00	0.57	G288
192	58.9	0.165	0.357	0.462	-0.532	0.497	-28.7	-5.6	29.3	191.2	81.2	-89.3	-11.5	90.1	187.3	0.00	1.00	0.58	G298
193	58.9	0.165	0.354	0.466	-0.541	0.495	-28.5	-6.2	29.1	192.3	81.2	-88.4	-12.5	89.3	188.0	0.00	1.00	0.6	G308
194	58.9	0.165	0.351	0.47	-0.55	0.493	-28.2	-6.7	29.0	193.4	81.2	-87.4	-13.5	89.5	188.8	0.00	1.00	0.62	G318
195	58.9	0.165	0.348	0.474	-0.557	0.49	-28.0	-7.2	28.9	194.5	81.2	-86.4	-14.5	89.7	189.5	0.00	1.00	0.64	G328
196	58.8	0.165	0.345	0.478	-0.567	0.49	-27.7	-7.7	28.8	195.6	81.2	-85.5	-15.4	87.9	190.2	0.00	1.00	0.65	G338
197	58.8	0.165	0.342	0.482	-0.576	0.488	-27.5	-8.2	28.7	196.7	81.2	-84.7	-16.3	86.3	190.9	0.00	1.00	0.67	G348
198	58.8	0.164	0.339	0.486	-0.584	0.487	-27.3	-8.7	28.6	197.8	81.2	-83.8	-17.2	85.6	191.6	0.00	1.00	0.69	G358
199	58.8	0.164	0.336	0.49	-0.593	0.486	-27.0	-9.2	28.6	198.9	81.1	-82.9	-18.1	84.9	192.3	0.00	1.00	0.71	G368
200	58.8	0.164	0.333	0.494	-0.602	0.485	-26.8	-9.7	28.5	200.0	81.1	-81.9	-19.0		193.0	0.00	1.00	0.73	G378
201	58.7	0.164	0.33	0.498	-0.611	0.485	-26.5	-10.3	28.5	201.3	81.1	-81.0	-20.0	83.4	193.9	0.00	1.00	0.74	G378
202	58.7	0.164	0.326	0.503	-0.622	0.484	-26.2	-10.9	28.4	202.7	81.1	-79.9	-21.1	82.6	194.8	0.00	1.00	0.76	G388
203	58.6	0.164	0.323	0.507	-0.633	0.484	-25.9	-11.5	28.4	204.0	81.1	-78.8	-22.2	81.9	195.7	0.00	1.00	0.78	G398
204	58.6	0.164	0.32	0.512	-0.643	0.484	-25.6	-12.1	28.4	205.3	81.0	-77.8	-23.2	81.2	196.5	0.00	1.00	0.8	G408
205	58.6	0.164	0.317	0.517	-0.653	0.483	-25.3	-12.7	28.3	206.6	81.0	-76.8	-24.2	81.1	197.3	0.00	1.00	0.82	G418
206	58.5	0.164	0.314	0.521	-0.661	0.485	-25.1	-13.2	28.4	207.8	81.0	-75.9	-25.0	79.9	198.2	0.00	1.00	0.83	G418
207	58.4	0.164	0.312	0.525	-0.67	0.486	-24.8	-13.7	28.4	208.9	81.0	-75.0	-25.8	79.3	199.0	0.00	1.00	0.85	G428
208	58.4	0.163	0.309	0.529	-0.679	0.486	-24.6	-14.2	28.4	210.0	80.9	-74.1	-26.7	78.8	199.8	0.00	1.00	0.87	G438
209	58.4	0.163	0.307	0.532	-0.687	0.487	-24.4	-14.7	28.4	211.1	80.9	-73.3	-27.4	78.2	200.5	0.00	1.00	0.89	G448
210	58.3	0.163	0.305	0.536	-0.695	0.488	-24.1	-15.1	28.5	212.2	80.9	-72.5	-28.1	77.8	201.2	0.00	1.00	0.91	G458
211	58.3	0.163	0.303	0.54	-0.703	0.489	-23.9	-15.5	28.5	213.3	80.9	-71.7	-28.9	77.3	201.9	0.00	1.00	0.93	G468
212	58.3	0.163	0.301	0.543	-0.709	0.49	-23.7	-15.9	28.6	213.9	80.9	-71.0	-29.5	76.9	202.5	0.00	1.00	0.94	G478
213	58.2	0.163	0.299	0.546	-0.716	0.492	-23.5	-16.3	28.6	214.7	80.9	-70.3	-30.1	76.5	203.1	0.00	1.00	0.96	G488
214	58.2	0.163	0.298	0.549	-0.722	0.493	-23.3	-16.7	28.7	215.5	80.8	-69.7	-30.6	76.1	203.7	0.00	1.00	0.98	G498
215	58.2	0.163	0.296	0.552	-0.727	0.494	-23.2	-17.0	28.7	216.2	80.8	-69.1	-31.1	75.8	204.2	0.00	0.99	1.00	G508
216	58.2	0.163	0.294	0.555	-0.733	0.495	-23.0	-17.4	28.7	217.0	80.8	-68.4	-31.6	75.4	204.8	0.00	0.99	1.00	G518
217	58.2	0.163	0.293	0.557	-0.737	0.496	-22.9	-17.6	28.8	217.5	80.8	-68.1	-32.0	75.2	205.2	0.00	0.96	1.00	G518
218	58.2	0.163	0.292	0.559	-0.742	0.497	-22.7	-17.8	28.9	218.0	80.8	-67.6	-32.4	75.0	205.6	0.00	0.94	1.00	G528
219	58.3	0.164	0.291	0.563	-0.746	0.496	-22.5	-18.1	28.9	218.7	80.9	-66.8	-32.8	74.4	206.2	0.00	0.92	1.00	G538
220	57.5	0.162	0.289	0.562	-0.756	0.503	-22.3	-18.4	28.9	219.6	80.4	-66.6	-33.6	74.6	206.7	0.00	0.91	1.00	G548
221	57.5	0.162	0.288	0.565	-0.762	0.504	-22.1	-18.7	28.9	220.4	80.4	-66.0	-34.2	74.6	207.3	0.00	0.9	1.00	G558
222	55.7	0.159	0.284	0.561	-0.78	0.52	-21.6	-19.2	29.0	221.5	79.4	-66.2	-35.3	75.0	208.0	0.00	0.87	1.00	G568
223	54.8	0.158	0.281	0.56	-0.794	0.529	-21.3	-19.6	29.0	222.6	78.9	-65.9	-36.2	75.3	208.8	0.00	0.85	1.00	G578
224	53.8	0.156	0.279	0.56	-0.808	0.54	-21.0	-20.0	29.0	223.6	78.3	-65.7	-37.2	75.5	209.5	0.00	0.83	1.00	G588
225	52.8	0.156	0.276	0.559	-0.823	0.551	-20.6	-20.5	29.1	224.7	77.7	-65.4	-38.2	75.8	210.2	0.00	0.82	1.00	G588
226	51.8	0.155	0.273	0.557	-0.837	0.554	-20.2	-20.9	29.1	225.7	77.1	-65.0	-39.0	76.1	210.8	0.00	0.8	1.00	G598
227	50.8	0.15	0.27	0.557	-0.855	0.574	-19.9	-21.3	29.2	226.9	76.6	-64.9	-40.2	76.4	211.8	0.00	0.78	1.00	G608
228	49.9	0.149	0.267	0.557	-0.871	0.587	-19.6	-21.7	29.3	227.9	76.0	-64.6	-41.2	76.8	212.5	0.00	0.76	1.00	G618
229	48.9	0.147	0.264	0.557	-0.889	0.6	-19.2	-22.2	29.3	229.1	75.4	-64.1	-42.3	76.8	213.4	0.00	0.74	1.00	G628
230	48.0	0.146	0.261	0.558	-0.906	0.612	-18.8	-22.6	29.4	230.2	74.8	-63.6	-43.3	76.9	214.2	0.00	0.73	1.00	G638
231	47.1	0.145	0.258	0.558	-0.923	0.625	-18.4	-23.0	29.4	231.3	74.3	-63.2	-44.3	76.9	215.0	0.00	0.71	1.00	G648
232	46.1	0.143	0.256	0.561	-0.937	0.635	-18.0	-23.3	29.4	232.3	73.8	-62.9	-45.3	76.9	215.8	0.00	0.69	1.00	G658
233	45.7	0.142	0.253	0.563	-0.951	0.645	-17.7	-23.6	29.5	233.1	73.3	-61.6	-45.8	76.8	216.6	0.00	0.67	1.00	G668
234	45.0	0.141	0.251	0.565	-0.966	0.655	-17.3	-23.8	29.5	234.0	72.9	-60.9	-46.6	76.7	217.4	0.00	0.65	1.00	G678
235	44.3	0.141	0.248	0.567	-0.981	0.667	-16.9	-24.2	29.5	234.9	72.4	-60.1	-47.4	76.6	218.2	0.00	0.64	1.00	G678
236	43.5	0.14	0.245	0.568	-0.998	0.678	-16.5	-24.5	29.6	235.7	71.9	-59.3	-48.2	76.5	218.9	0.00	0.62	1.00	G688
237	42.7	0.139	0.242	0.572	-1.014	0.692	-16.1	-24.8	29.6	236.6	71.4	-58.5	-49.0	76.4	219.6	0.00	0.6	1.00	G698
238	42.0	0.138	0.24	0.575	-1.034	0.706	-15.7	-25.1	29.6	237.9	70.9	-57.6	-50.0	76.3	220.9	0.00	0.58	1.00	G708
239	41.3	0.137	0.237	0.579	-1.052	0.72	-15.3	-25.4	29.7	238.9	70.4	-56.6	-50.9	76.1	221.9	0.00	0.56	1.00	G718
240	40.5	0.136	0.234	0.582	-1.071	0.734	-14.9	-25.8	29.8	239.9	69.8	-55.6	-51.8	76.0	222.9	0.00	0.55	1.00	G728
241	39.8	0.135	0.231	0.586	-1.091	0.75	-14.4	-26.1	29.8	240.9	69.3	-54.6	-52.7	75.9	223.9	0.00	0.53	1.00	G738
242	39.1	0.134	0.228	0.589	-1.111	0.763	-14.0	-26.4	29.9	241.9	68.8	-53.5	-53.6	75.8	224.8	0.00	0.51	1.00	G748
243	38.6	0.134	0.226	0.593	-1.126	0.777	-13.7	-26.6	30.0	242.6	68.4	-52.9	-54.2	75.7	225.7	0.00	0.49	1.00	G758
244	37.9	0.133	0.224	0.597	-1.145	0.792	-13.3	-26.9	30.0	243.5	67.9	-51.9	-55.0						

CIEXYZ data of CIE test colours 9 (R): 20.6 11.2 4.3, 10 (Y): 54.8 59.0 12.0, 11 (G): 12.1 20.3 15.3, 12 (B): 6.2 6.4 27.6

* c_{AB} and CIE data of a elementary hue circle according to CIE R1-47 for *Ostwald* colours for CIE illuminant D65
 $y_{AB}, abc_{AB}, ABC_{AB}, LabC^*_{ab}, h_{AB}$ data for relative spacing of elementary hue h_{AB} of *LINYAB* for CIE 10 degree observer
 elementary hue circle with 4 intended elementary hue angles: $h_{AB} = 18.2, 86.3, 156.2, 260.1$ of *LINYAB*, and 90 intended hue angle

0, 181, ..., 269, LINYAB data of CIE test colours 9 (R): 10.8 8.7 2.8, 10 (Y): 55.9 1.2 19.6, 11 (G): 20.4 -6.8 3.0, 12 (B): 7.8 -1.2 -7.

λ_{10}	λ_{15}	λ_{18}	λ_{20}	λ_{24}	λ_{30}	λ_{36}	λ_{45}	λ_{60}	λ_{72}	λ_{90}	λ_{108}	λ_{144}	λ_{180}	λ_{225}	λ_{270}	λ_{315}	λ_{360}	λ_{405}	λ_{450}	λ_{540}	λ_{630}	λ_{720}	λ_{810}	λ_{900}	λ_{1080}	λ_{1260}	λ_{1530}	λ_{1800}	λ_{2070}	λ_{2250}	λ_{2520}	λ_{2700}	λ_{3060}	λ_{3240}	λ_{3600}	λ_{4050}	λ_{4500}	λ_{5400}	λ_{6300}	λ_{7200}	λ_{8100}	λ_{9000}	λ_{10800}	λ_{12600}	λ_{15300}	λ_{18000}	λ_{20700}	λ_{22500}	λ_{25200}	λ_{27000}	λ_{30600}	λ_{32400}	λ_{36000}	λ_{40500}	λ_{45000}	λ_{54000}	λ_{63000}	λ_{72000}	λ_{81000}	λ_{90000}	λ_{108000}	λ_{126000}	λ_{153000}	λ_{180000}	λ_{207000}	λ_{225000}	λ_{252000}	λ_{270000}	λ_{306000}	λ_{324000}	λ_{360000}	λ_{405000}	λ_{450000}	λ_{540000}	λ_{630000}	λ_{720000}	λ_{810000}	λ_{900000}	$\lambda_{1080000}$	$\lambda_{1260000}$	$\lambda_{1530000}$	$\lambda_{1800000}$	$\lambda_{2070000}$	$\lambda_{2250000}$	$\lambda_{2520000}$	$\lambda_{2700000}$	$\lambda_{3060000}$	$\lambda_{3240000}$	$\lambda_{3600000}$	$\lambda_{4050000}$	$\lambda_{4500000}$	$\lambda_{5400000}$	$\lambda_{6300000}$	$\lambda_{7200000}$	$\lambda_{8100000}$	$\lambda_{9000000}$	$\lambda_{10800000}$	$\lambda_{12600000}$	$\lambda_{15300000}$	$\lambda_{18000000}$	$\lambda_{20700000}$	$\lambda_{22500000}$	$\lambda_{25200000}$	$\lambda_{27000000}$	$\lambda_{30600000}$	$\lambda_{32400000}$	$\lambda_{36000000}$	$\lambda_{40500000}$	$\lambda_{45000000}$	$\lambda_{54000000}$	$\lambda_{63000000}$	$\lambda_{72000000}$	$\lambda_{81000000}$	$\lambda_{90000000}$	$\lambda_{108000000}$	$\lambda_{126000000}$	$\lambda_{153000000}$	$\lambda_{180000000}$	$\lambda_{207000000}$	$\lambda_{225000000}$	$\lambda_{252000000}$	$\lambda_{270000000}$	$\lambda_{306000000}$	$\lambda_{324000000}$	$\lambda_{360000000}$	$\lambda_{405000000}$	$\lambda_{450000000}$	$\lambda_{540000000}$	$\lambda_{630000000}$	$\lambda_{720000000}$	$\lambda_{810000000}$	$\lambda_{900000000}$	$\lambda_{1080000000}$	$\lambda_{1260000000}$	$\lambda_{1530000000}$	$\lambda_{1800000000}$	$\lambda_{2070000000}$	$\lambda_{2250000000}$	$\lambda_{2520000000}$	$\lambda_{2700000000}$	$\lambda_{3060000000}$	$\lambda_{3240000000}$	$\lambda_{3600000000}$	$\lambda_{4050000000}$	$\lambda_{4500000000}$	$\lambda_{5400000000}$	$\lambda_{6300000000}$	$\lambda_{7200000000}$	$\lambda_{8100000000}$	$\lambda_{9000000000}$	$\lambda_{10800000000}$	$\lambda_{12600000000}$	$\lambda_{15300000000}$	$\lambda_{18000000000}$	$\lambda_{20700000000}$	$\lambda_{22500000000}$	$\lambda_{25200000000}$	$\lambda_{27000000000}$	$\lambda_{30600000000}$	$\lambda_{32400000000}$	$\lambda_{36000000000}$	$\lambda_{40500000000}$	$\lambda_{45000000000}$	$\lambda_{54000000000}$	$\lambda_{63000000000}$	$\lambda_{72000000000}$	$\lambda_{81000000000}$	$\lambda_{90000000000}$	$\lambda_{108000000000}$	$\lambda_{126000000000}$	$\lambda_{153000000000}$	$\lambda_{180000000000}$	$\lambda_{207000000000}$	$\lambda_{225000000000}$	$\lambda_{252000000000}$	$\lambda_{270000000000}$	$\lambda_{306000000000}$	$\lambda_{324000000000}$	$\lambda_{360000000000}$	$\lambda_{405000000000}$	$\lambda_{450000000000}$	$\lambda_{540000000000}$	$\lambda_{630000000000}$	$\lambda_{720000000000}$	$\lambda_{810000000000}$	$\lambda_{900000000000}$	$\lambda_{1080000000000}$	$\lambda_{1260000000000}$	$\lambda_{1530000000000}$	$\lambda_{1800000000000}$	$\lambda_{2070000000000}$	$\lambda_{2250000000000}$	$\lambda_{2520000000000}$	$\lambda_{2700000000000}$	$\lambda_{3060000000000}$	$\lambda_{3240000000000}$	$\lambda_{3600000000000}$	$\lambda_{4050000000000}$	$\lambda_{4500000000000}$	$\lambda_{5400000000000}$	$\lambda_{6300000000000}$	$\lambda_{7200000000000}$	$\lambda_{8100000000000}$	$\lambda_{9000000000000}$	$\lambda_{10800000000000}$	$\lambda_{12600000000000}$	$\lambda_{15300000000000}$	$\lambda_{18000000000000}$	$\lambda_{20700000000000}$	$\lambda_{22500000000000}$	$\lambda_{25200000000000}$	$\lambda_{27000000000000}$	$\lambda_{30600000000000}$	$\lambda_{324000000000$
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XYZ data of CIE test colours 9 (R): 19.0 10.8 4.3, 10 (Y): 54.3 55.9 11.0, 11 (G): 12.5 20.4 14.4, 12 (B): 6.1 7.8 26.5

TUB-test chart VE47; CIE data for 360 Ostwald colour
CIEXYZ, Yxy, YABCAbh, LabCabh data, D65, 2 and 10

input: w/rqb/cmyk ->

| CI XYZ, Y_{xy} , YABCABh, LabCabh data, D65, 2 and 10

see similar files: <http://130.149.60.45/~farbmatrik/VE47/VE47LONA.TXT> /PS; transfer output

technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmatrik>

TUB registration: 20130201-VE47/VE47LONA.TXT /PS

application for measurement of display output, no separation

TUB material: code=rha4ta

input: w/rgb/cmyk ->

TUB-test chart VE47; CIE data for 360 Ostwald colours

CIEXYZ, Yxy, YABCAh, LabCah data, D65, 2 and 10 degree observer

http://130.149.60.45/~farbmatrik/VE47/VE47LONA.TXT /PS; transfer output

N: no 3D-linearization (OL) in file (F) or PS-startup (S), page 5/5

rgb*_{LAB} and CIE data of a elementary hue circle according to CIE R1-47 for Ostwald colours for CIE illuminant D65

Yxy, abc_{AB}, ABC_{AB}, LabC*_{ab}, h_{AB} data for relative spacing of elementary hue h_{AB} of LYNAB for CIE 2 degree observer

Elementary hue circle with 4 intended elementary hue angles: h_{AB} = 17.7, 93.3, 159.1, 270.8 of LYNAB, and 90 intended hue angles:

270, 271, ..., 360, LYNAB data of CIE test colours 9 (R): 11.2 9.9 3.1, 10 (Y): 55.9 1.2 2.0 9, 11 (G): 20.3 -7.2 2.7, 12 (B): 6.4 0.1 -8.2

no-AB_X0 x₁₀ y₁₀ a₁₀ b₁₀ C_{AB,10} h_{AB,10} L*₁₀ a*₁₀ b*₁₀ C*_{ab} h_{ab} rgb*_{LAB} Code_{AB,10}

270 19.2 0.127 0.132 0.963 -2.244 1.889 0.2 -34.7 34.7 272.0 50.9 1.2 -83.9 83.9 276.8 0.00 0.61 1.00 % 699B

271 18.6 0.127 0.128 0.989 -2.116 1.889 0.2 -35.2 35.2 272.0 49.5 6.6 -85.1 85.1 276.8 0.00 0.61 1.00 % 699B

272 18.0 0.127 0.125 1.019 -2.389 1.954 1.2 -35.2 35.2 272.0 49.5 6.6 -85.1 85.1 276.8 0.00 0.61 1.00 % 699B

273 17.1 0.127 0.119 1.066 -2.512 2.08 1.9 -35.5 35.5 273.2 48.4 10.8 -88.1 88.8 277.0 0.04 0.00 1.00 % 602R

274 16.3 0.128 0.115 1.111 -2.627 2.197 2.6 -35.8 35.9 274.2 47.4 14.6 -89.7 89.9 279.2 0.05 0.00 1.00 % 602R

275 15.7 0.128 0.111 1.166 -2.736 2.389 3.2 -36.1 36.2 275.4 46.6 18.2 -91.1 93.7 281.3 0.07 0.00 1.00 % 603R

276 15.0 0.129 0.107 1.205 -2.85 2.428 3.8 -36.3 36.5 276.6 45.7 21.9 -92.6 95.1 283.3 0.09 0.00 1.00 % 604R

277 14.3 0.129 0.102 1.264 -2.989 2.573 4.5 -36.6 36.8 277.6 44.7 26.1 -94.1 97.7 285.5 0.11 0.00 1.00 % 605R

278 13.5 0.13 0.097 1.336 -3.157 2.749 5.2 -36.8 37.2 278.0 43.5 30.9 -96.0 100.9 287.8 0.13 0.00 1.00 % 606R

279 12.7 0.131 0.092 1.419 -3.349 2.951 5.9 -37.1 37.6 279.1 42.3 36.8 -97.9 104.3 289.1 0.15 0.00 1.00 % 607R

280 11.3 0.132 0.087 1.513 -3.567 3.202 6.6 -38.0 38.3 280.3 41.1 43.9 -101.9 105.2 290.3 0.17 0.00 1.00 % 608R

281 11.1 0.133 0.082 1.619 -3.809 3.44 7.4 -37.6 38.3 281.2 39.8 46.7 -102.0 112.2 294.6 0.19 0.00 1.00 % 609R

282 10.3 0.134 0.077 1.734 -4.075 3.723 8.1 -37.8 38.7 282.1 38.5 52.1 -104.6 114.6 296.6 0.2 0.00 1.00 % 610R

283 9.6 0.135 0.072 1.858 -4.357 4.025 8.8 -38.0 39.0 283.0 37.3 57.5 -106.0 120.6 298.4 0.22 0.00 1.00 % 611R

284 8.7 0.136 0.066 2.006 -4.631 4.358 9.7 -38.2 39.4 284.2 35.4 65.5 -109.0 127.2 301.0 0.24 0.00 1.00 % 612R

285 7.9 0.137 0.061 2.251 -4.973 4.73 10.4 -38.3 39.9 285.1 33.9 71.7 -111.7 132.3 302.8 0.26 0.00 1.00 % 613R

286 6.7 0.131 0.052 2.488 -5.282 5.168 10.7 -38.6 40.0 286.9 31.1 76.8 -115.6 138.8 305.3 0.28 0.00 1.00 % 614R

287 5.6 0.128 0.045 2.846 -5.795 5.717 10.7 -38.8 40.2 288.4 28.5 84.7 -119.6 146.5 305.3 0.3 0.00 1.00 % 615R

288 6.3 0.144 0.05 2.887 -6.421 6.291 12.3 -38.2 40.2 287.9 30.4 89.6 -115.1 146.6 307.6 0.32 0.00 1.00 % 616R

289 6.7 0.15 0.052 2.866 -6.655 6.597 12.9 -38.1 40.2 288.8 31.3 90.6 -114.5 146.0 308.3 0.34 0.00 1.00 % 617R

290 7.1 0.157 0.052 2.844 -6.847 6.823 13.7 -38.1 40.2 289.7 32.2 91.7 -112.7 145.4 309.3 0.35 0.00 1.00 % 618R

291 7.6 0.163 0.057 2.826 -5.395 5.362 14.2 -37.6 40.3 290.7 33.1 92.7 -112.1 144.8 309.8 0.37 0.00 1.00 % 619R

292 8.0 0.169 0.06 2.807 -5.699 5.62 14.9 -37.4 40.3 291.7 34.0 93.7 -109.6 144.2 310.5 0.39 0.00 1.00 % 619R

293 8.4 0.175 0.063 2.788 -4.826 4.76 15.6 -37.7 40.3 292.7 34.9 94.7 -108.0 143.7 311.2 0.41 0.00 1.00 % 620R

294 8.9 0.182 0.065 2.77 -4.572 4.52 16.2 -37.9 40.4 293.7 35.9 95.8 -106.4 143.1 311.9 0.43 0.00 1.00 % 621R

295 9.4 0.189 0.068 2.753 -4.846 4.599 16.7 -38.1 40.4 294.7 36.8 96.9 -104.4 142.4 312.6 0.44 0.00 1.00 % 622R

296 9.9 0.194 0.071 2.736 -4.12 4.095 17.7 -36.5 40.6 295.8 37.7 97.7 -103.2 142.1 313.4 0.47 0.00 1.00 % 623R

297 10.4 0.201 0.073 2.72 -3.919 3.967 18.4 -36.3 40.7 296.9 38.6 98.7 -101.6 141.6 314.1 0.48 0.00 1.00 % 624R

298 10.9 0.207 0.076 2.704 -3.733 3.735 19.1 -36.0 40.8 298.0 39.4 99.6 -100.0 141.2 314.8 0.5 0.00 1.00 % 625R

299 11.4 0.213 0.079 2.689 -3.56 3.576 19.9 -35.8 40.9 299.1 40.3 100.6 -98.5 140.8 315.6 0.52 0.00 1.00 % 626R

300 12.0 0.221 0.082 2.671 -3.402 3.472 20.6 -35.5 41.0 300.2 41.2 101.7 -96.9 139.9 316.3 0.53 0.00 1.00 % 627R

301 12.5 0.225 0.084 2.661 -3.251 3.294 21.4 -35.2 41.2 301.2 42.0 102.4 -95.4 140.0 316.9 0.56 0.00 1.00 % 628R

302 13.0 0.231 0.087 2.647 -3.113 3.17 22.1 -35.0 41.4 302.3 42.8 103.2 -94.0 139.6 317.6 0.58 0.00 1.00 % 629R

303 13.6 0.237 0.09 2.634 -2.985 3.055 22.9 -34.7 41.6 303.4 43.7 104.1 -92.5 139.3 318.3 0.6 0.00 1.00 % 630R

304 14.1 0.243 0.093 2.617 -2.864 2.933 23.7 -34.4 41.8 304.5 44.6 105.0 -91.1 138.4 319.0 0.61 0.00 1.00 % 631R

305 14.7 0.248 0.095 2.61 -2.754 2.851 24.4 -34.1 42.0 305.5 45.3 105.7 -89.7 138.6 319.6 0.63 0.00 1.00 % 631R

306 15.3 0.254 0.097 2.598 -2.65 2.761 25.2 -33.9 42.2 306.6 46.0 106.5 -88.3 138.3 320.3 0.65 0.00 1.00 % 632R

307 15.8 0.259 0.1 2.586 -2.554 2.677 25.9 -33.6 42.5 307.6 46.8 107.2 -86.9 138.0 320.9 0.67 0.00 1.00 % 633R

308 16.4 0.264 0.102 2.575 -2.464 2.599 26.7 -33.3 42.7 308.7 47.5 107.9 -85.6 137.8 321.5 0.69 0.00 1.00 % 634R

309 17.0 0.267 0.105 2.567 -2.381 2.577 27.4 -33.0 42.9 309.7 48.3 108.6 -84.3 137.4 322.1 0.7 0.00 1.00 % 635R

310 17.5 0.274 0.107 2.554 -2.301 2.56 28.2 -32.8 43.2 310.6 49.0 109.3 -83.0 137.3 322.7 0.73 0.00 1.00 % 636R

311 18.1 0.279 0.109 2.544 -2.227 2.398 28.9 -32.5 43.5 311.6 49.6 109.9 -81.8 137.0 323.3 0.75 0.00 1.00 % 637R

312 18.7 0.283 0.111 2.534 -2.158 2.34 29.6 -32.2 43.8 312.5 50.3 110.5 -80.6 136.8 323.9 0.77 0.00 1.00 % 638R

313 19.2 0.286 0.114 2.524 -2.093 2.286 30.3 -31.9 44.0 313.5 51.0 111.1 -79.4 136.6 324.4 0.78 0.00 1.00 % 639R

314 19.8 0.291 0.117 2.514 -2.028 2.273 31.0 -31.6 44.2 314.4 51.7 111.7 -78.2 136.2 324.9 0.79 0.00 1.00 % 640R

315 20.3 0.296 0.118 2.505 -1.976 2.189 31.7 -31.4 44.6 315.2 52.2 112.2 -77.1 136.2 325.4 0.82 0.00 1.00 % 641R

316 20.9 0.3 0.12 2.496 -1.923 2.145 32.3 -31.1 44.9 316.1 52.8 112.7 -76.0 136.0 325.9 0.84 0.00 1.00 % 642R

317 21.8 0.306 0.123 2.474 -1.841 2.073 33.2 -30.7 45.2 317.2 53.8 113.4 -74.3 135.6 326.6 0.86 0.00 1.00 % 643R

318 23.0 0.313 0.128 2.456 -1.736 1.974 34.3 -30.0 45.9 318.5 55.1 113.6 -71.8 133.9 327.5 0.88 0.00 1.00 % 644R

319 24.0 0.318 0.133 2.439 -1.643 1.889 35.2 -29.5 46.5 319.6 56.9 114.2 -69.5 132.4 328.2 0.9 0.00 1.00 % 645R

320 25.3 0.324 0.137 2.363 -1.57 1.812 35.8 -28.7 45.9 321.2 57.4 112.3 -67.1 131.0 328.9 0.91 0.00 1.00 % 646R

321 26.4 0.328 0.141 2.328 -1.504 1.744 36.4 -28.2 46.0 322.2 58.4 111.6 -65.6 129.5 329.5 0.93 0.00 1.00 % 646R

322 27.3 0.332 0.144 2.295 -1.446 1.682 36.8 -27.6 46.0 323.0 59.3 110.9 -63.8 127.9 330.0 0.95 0.00 1.00 % 647R

323 28.2 0.335 0.148 2.263 -1.395 1.626 37.1 -27.1 45.9 323.8 60.1 110.0 -62.2 126.4 330.5 0.97 0.00 1.00 % 648R

324 29.4 0.34 0.151 2.232 -1.35 1.575 37.3 -26.6 45.8 324.4 60.8 109.1 -60.7 124.2 331.2 0.98 0.00 1.00 % 649R

325 29.8 0.34 0.154 2.203 -1.31 1.528 37.4 -26.1 45.6 325.0 61.5 108.1 -59.3 123.3 331.2 0.98 0.00 1.00 % 649R

326 31.1 0.344 0.159 2.165 -1.248 1.462 37.8 -25.3 45.5 326.2 62.6 107.7 -57.0 121.2 331.9 1.00 0.00 0.96 % 651R

327 32.3 0.348 0.163 2.129 -1.192 1.4 38.1 -24.4 45.2 327.3 63.6 105.8 -54.7 119.1 332.6 1.00 0.00 0.94 % 652R

328 33.0 0.35 0.167 2.092 -1.144 1.348 38.6 -23.4 44.9 328.2 64.4 105.0 -52.7 117.2 333.2 1.00 0.00 0.93 % 653R

329 34.2 0.354 0.171 2.068 -1.104 1.303 38.3 -22.9 44.6 329.1 65.1 103.5 -50.8 115.3 333.8 1.00 0.00 0.91 % 654R

330 35.1 0.357 0.175 2.042 -1.066 1.261 38.3 -22.1 44.2 329.9 65.8 102.4 -49.0 113.5 334.4 1.00 0.00 0.89 % 655R

331 35.9 0.36 0.178 2.017 -1.029 1.221 38.3 -21.3 43.9 330.8 66.4 101.3 -47.2 111.8 335.0 1.00 0.00 0.87 % 656R

332 36.6 0.364 0.182 1.996 -0.994 1.185 38.3 -20.4 43.8 331.8 67.0 100.3 -45.3 110.1 335.6 1.00 0.00 0.85 % 657R

333 37.2 0.367 0.188 1.976 -0.958 1.151 38.1 -19.4 42.8 332.9 67.4 99.3 -43.2 108.3 336.4 1.00 0.00 0.83 % 658R

334 37.4 0.371 0.188 1.964 -0.931 1.128 37.9 -18.5 42.2 333.9 67.6 98.6 -41.5 107.0 337.1 1.00 0.00 0.81 % 659R

335 37.6 0.374 0.191 1.954 -0.904 1.107 37.7 -17.6 41.6 334.9 67.7 98.0 -39.8 105.8 337.8 1.00 0.00 0.79 % 660R

336 37.7 0.378 0.194 1.944 -0.877 1.087 37.5 -16.7 41.0 336.0 67.8 97.3 -38.0 104.5 338.6 1.00 0.00 0.78 % 661R

337 37.9 0.381 0.197 1.934 -0.851 1.068 37.3 -15.7 40.5 337.0 67.9 96.7 -36.2 103.2 339.4 1.00 0.00 0.76 % 662R

338 38.0 0.385 0.2 1.925 -0.827 1.05 37.1 -14.6 40.0 338.1 68.1 95.9 -34.5 102.1 340.1 1.00 0.00 0.74 % 663R

339 38.1 0.388 0.202 1.915 -0.804 1.033 36.8 -14.0 39.4 339.1 68.1 95.4 -32.9 100.9 340.9 1.00 0.00 0.72 % 663R

340 38.3 0.391 0.205 1.907 -0.783 1.018 36.6 -13.3 39.0 340.8 68.2 94.9 -31.4 99.9 341.6 1.00 0.00 0.7 % 664R

341 39.6 0.393 0.21 1.868 -0.753 0.971 36.4 -12.6 38.5 340.9 69.2 92.8 -29.4 97.3 342.4 1.00 0.00 0.68 % 665R

342 39.7 0.399 0.212 1.862 -0.741 0.961 36.2 -12.1 38.0 341.4 69.3 92.4 -28.5 96.2 343.2 1.00 0.00 0.66 % 666R

343 39.9 0.396 0.213 1.856 -0.728 0.953 35.9 -11.5 37.5 342.0 69.1 91.4 -27.0 94.9 343.9 1.00 0.00 0.64 % 667R

344 39.9 0.398 0.215 1.849 -0.714 0.941 35.9 -11.1 37.6 342.7 69.4 91.4 -26.3 93.2 343.9 1.00 0.00 0.63 % 668R

345 40.0 0.401 0.217 1.841 -0.698 0.929 35.7 -10.5 37.2 343.5 69.5 90.9 -25.1 94.3 344.5 1.00 0.00 0.61 % 669R

346 40.1 0.404 0.22 1.833 -0.681 0.913 35.4 -9.8 36.8 344.4 69.5 90.3 -23.7 93.3 345.2 1.00 0.00 0.59 % 670R

347 40.2 0.407 0.223 1.825 -0.662 0.906 35.1 -9.1 36.3 345.4 69.6 89.6 -22.1 92.3 346.1 1.00 0.00 0.57 % 671R

348 40.3 0.41 0.226 1.818 -0.644 0.89 34.8 -8.4 35.9 346.2 69.7 88.9 -20.4 91.2 347.0 1.00 0.00 0.55 % 672R

349 40.3 0.414 0.229 1.806 -0.62 0.875 34.6 -7.4 35.3 347.7 69.7 88.1 -18.5 90.1 348.1 1.00 0.00 0.53 % 673R

350 40.4 0.418 0.233 1.795 -0.597 0.86 34.2 -6.5 34.9 349.1 69.8 87.3 -16.4 88.8 349.3 1.00 0.00 0.51 % 674R

351 40.5 0.423 0.237 1.784 -0.573 0.845 33.8 -5.5 34.2 350.