

Ostwald optimal colours (o) of maximum (m) C _{AB} for E00, Y _w =100, Y _m =520_770, CIELAB data														%
i ₁ , λ ₁	i ₂ , λ ₂	L* ₁₀₀	a* ₁₀₀	b* ₁₀₀	C* _{ab}	a'	b'	h _{ab}	i _d , λ _d	i _c , λ _c	Code		%	
1	405	32 564	80.42	-71.93	-32.6	78.97	0.1811	-0.1001	204.3	16 484	38 592	Cm	%	
6	435	33 565	80.69	-86.68	-17.31	88.4	0.1735	-0.0924	191.2	17 488	45 627		%	
10	450	33 566	80.99	-110.3	13.71	111.15	0.1612	-0.0768	172.9	19 498	-1 498c		%	
12	460	33 568	81.45	-119.36	34.48	124.25	0.1568	-0.0665	163.8	21 507	-1 507c		%	
13	465	33 569	81.92	-121.61	45.97	130.01	0.1559	-0.0609	159.2	22 514	-1 514c		%	
14	470	34 571	82.66	-120.77	57.74	133.86	0.1568	-0.0553	154.4	24 522	-1 522c		%	
14	475	35 575	84.24	-115.44	60.46	130.32	0.1605	-0.0544	152.3	25 525	-1 525c	Gm	%	
16	480	36 581	86.11	-105.73	83.03	134.43	0.1664	-0.0442	141.8	27 538	-1 538c		%	
17	485	39 595	90.19	-81.64	98.55	127.97	0.18	-0.0386	129.6	29 549	-1 549c		%	
18	490	-1 490c	97.85	-20.19	119.57	121.26	0.21	-0.0327	99.5	33 568	11 459	max	%	
19	495	-1 495c	97.3	-17.91	125.92	127.19	0.211	-0.0297	98.0	33 568	12 461		%	
19	500	-1 499c	97.3	-17.91	125.92	127.19	0.211	-0.0297	98.0	33 568	12 461		%	
22	510	-1 510c	94.63	-6.64	140.85	141.01	0.216	-0.0218	92.7	34 571	13 469		%	
24	520	-1 520c	91.75	4.59	146.03	146.1	0.2212	-0.0178	88.1	34 574	14 473	Ym	%	
26	530	-1 530c	88.02	17.68	145.85	146.92	0.2277	-0.0145	83.0	35 577	15 477		%	
28	540	-1 540c	83.56	31.64	141.2	144.7	0.2352	-0.0119	77.3	36 581	15 479		%	
29	545	-1 545c	81.07	38.69	137.72	143.05	0.2393	-0.0109	74.3	36 583	16 480		%	
29	550	-1 549c	81.07	38.69	137.72	143.05	0.2393	-0.0109	74.3	36 583	16 480		%	
30	555	-1 554c	78.42	45.65	133.68	141.26	0.2436	-0.0102	71.1	37 585	16 482		%	
32	560	-1 560c	72.66	58.88	124.34	137.58	0.2528	-0.0092	64.6	38 590	16 483		%	
380	770	100.0	0.0	0.0	0.0	0.2191	-0.0837	0.0					%	
Ostwald optimal colours (o) of maximum (m) C _{AB} for E00, Y _w =100, Y _m =770_520, CIELAB complementary														%
i ₁ , λ ₁	i ₂ , λ ₂	L* ₁₀₀	a* ₁₀₀	b* ₁₀₀	C* _{ab}	a'	b'	h _{ab}	i _d , λ _d	i _c , λ _c	Code		%	
32	564	1 405	71.27	62.52	98.78	116.91	0.2555	-0.0287	57.6	38 592	16 484	Rm	%	
33	565	6 435	70.93	71.83	28.95	77.45	0.2611	-0.0675	21.9	45 627	17 488		%	
33	566	10 450	70.56	84.55	-14.4	85.77	0.2687	-0.0918	350.3	-1 498c	19 498		%	
33	568	12 460	69.98	90.17	-29.54	94.89	0.2724	-0.1004	341.8	-1 507c	21 507		%	
33	569	13 465	69.37	92.89	-35.98	99.61	0.2744	-0.1042	338.8	-1 514c	22 514		%	
34	571	14 470	68.37	95.44	-41.93	104.24	0.2766	-0.1079	336.2	-1 522c	24 522		%	
35	575	14 475	66.11	99.55	-45.82	109.59	0.2807	-0.1108	335.2	-1 525c	25 525	Mm	%	
36	581	16 480	63.17	102.89	-56.56	117.41	0.2851	-0.1184	331.2	-1 538c	27 538		%	
39	595	17 485	55.38	108.0	-71.77	129.67	0.296	-0.1326	326.3	-1 549c	29 549		%	
-1 490c	18 490	28.02	85.37	-120.26	147.48	0.3177	-0.2165	305.3	11 459	33 568	min	%		
-1 495c	19 495	31.41	71.03	-115.43	135.53	0.2953	-0.2021	301.6	12 461	33 568		%		
-1 499c	19 500	31.41	71.03	-115.43	135.53	0.2953	-0.2021	301.6	12 461	33 568		%		
-1 510c	22 510	43.16	21.12	-96.96	99.24	0.2372	-0.1634	282.2	13 469	34 571		%		
-1 520c	24 520	51.68	-12.26	-82.78	83.68	0.2098	-0.1431	261.5	14 473	34 574	Bm	%		
-1 530c	26 530	59.79	-39.13	-69.07	79.38	0.1928	-0.128	240.4	15 477	35 577		%		
-1 540c	28 540	67.12	-57.58	-56.56	80.72	0.1838	-0.1168	224.4	15 479	36 581		%		
-1 545c	29 545	70.46	-63.67	-50.83	81.48	0.1816	-0.1123	218.6	16 480	36 583		%		
-1 549c	29 550	70.46	-63.67	-50.83	81.48	0.1816	-0.1123	218.6	16 480	36 583		%		
-1 554c	30 555	73.6	-67.81	-45.45	81.64	0.1806	-0.1084	213.8	16 482	37 585		%		
-1 560c	32 560	79.25	-70.77	-35.73	79.28	0.1813	-0.1019	206.7	16 483	38 590		%		
380	770	100.0	0.0	0.0	0.0	0.2191	-0.0837	0.0					%	

rgb_{cab} and CIE data of a elementary hue circle according to CIE R1-47 for Ostwald colours for CIE illuminant E00

Xyy_{cabAB} ABC_{AB} LabC_{ab}_{hAB} data for relative spacing of elementary hue **h_{ab}** of CIELAB for CIE 2 degree observer

Elementary hue circle with 4 intended elementary hue angles: h_{ab} = 27.9, 91.3, 162.9, 267.6, CIE yellows, and 90 intended hue angles:

00.00, 001, ..., 089, CIELAB data of CIE test colours 9 (R): 41.9 59.0 31.3, 10 (Y): 81.8 -1.7 73.1, 11 (G): 51.5 -41.4 12.6, 12 (B): 29.4 -1.9 -46.6

no.	ab	Y	x	y	a	b	c	ab	A	B	C	ab	h _{ab}	L*	a*	b*	C* _{ab}	h _{ab}	rgb _{cab}	Code
000	41.7	0.463	0.257	1.8	-0.433	0.881	33.4	-1.3	33.4	357.6	70.6	80.9	-4.0	81.0	357.1	1.00	0.00	0.6	#B69R	
001	41.7	0.465	0.259	1.795	-0.423	0.796	33.2	-0.9	33.2	358.3	70.7	80.5	-2.8	80.5	357.9	1.00	0.00	0.58	#B70R	
002	41.7	0.468	0.261	1.79	-0.412	0.791	33.0	-0.5	33.0	359.0	70.7	80.1	-1.5	80.1	358.8	1.00	0.00	0.56	#B71R	
003	41.7	0.47	0.263	1.785	-0.402	0.785	32.8	-0.1	32.8	359.8	70.7	79.7	-0.3	79.7	359.7	1.00	0.00	0.54	#B72R	
004	41.8	0.473	0.265	1.78	-0.392	0.781	32.6	0.3	32.6	0.5	70.7	79.3	0.0	79.3	0.7	1.00	0.00	0.51	#B74R	
005	41.8	0.476	0.268	1.775	-0.381	0.776	32.4	0.7	32.4	1.3	70.7	78.9	2.3	78.9	1.6	1.00	0.00	0.49	#B75R	
006	41.8	0.478	0.27	1.77	-0.371	0.771	32.2	1.1	32.2	2.1	70.7	78.4	3.6	78.5	2.6	1.00	0.00	0.47	#B76R	
007	41.8	0.481	0.272	1.765	-0.36	0.767	32.0	1.6	32.1	2.9	70.7	78.0	5.0	78.2	3.6	1.00	0.00	0.45	#B77R	
008	41.8	0.484	0.274	1.76	-0.35	0.762	31.8	2.0	31.9	3.7	70.7	77.6	6.3	77.9	4.7	1.00	0.00	0.43	#B78R	
009	41.8	0.486	0.277	1.755	-0.339	0.758	31.6	2.5	31.7	4.5	70.7	77.2	7.8	77.6	5.8	1.00	0.00	0.41	#B79R	
010	41.9	0.489	0.279	1.75	-0.329	0.754	31.4	2.9	31.6	5.3	70.8	76.8	9.3	77.3	6.9	1.00	0.00	0.38	#B80R	
011	41.9	0.492	0.282	1.745	-0.319	0.75	31.2	3.3	31.4	6.1	70.8	76.3	10.8	77.1	8.0	1.00	0.00	0.36	#B81R	
012	41.9	0.495	0.284	1.74	-0.308	0.746	31.0	3.8	31.3	7.0	70.8	75.9	12.3	76.9	9.2	1.00	0.00	0.34	#B82R	
013	41.9	0.498	0.287	1.735	-0.298	0.742	30.8	4.2	31.1	7.8	70.8	75.5	13.9	76.8	10.4	1.00	0.00	0.32	#B83R	
014	41.9	0.501	0.289	1.73	-0.288	0.739	30.6	4.6	31.0	8.6	70.8	75.1	15.4	76.7	11.6	1.00	0.00	0.3	#B84R	
015	41.9	0.504	0.292	1.726	-0.278	0.736	30.4	5.1	30.9	9.5	70.8	74.7	17.0	76.6	12.8	1.00	0.00	0.28	#B85R	
016	42.0	0.507	0.294	1.721	-0.268	0.732	30.2	5.5	30.8	10.3	70.8	74.3	18.7	76.6	14.1	1.00	0.00	0.25	#B87R	
017	42.0	0.51	0.297	1.716	-0.257	0.73	30.0	5.9	30.6	11.2	70.8	73.8	20.3	76.6	15.4	1.00	0.00	0.23	#B88R	
018	42.0	0.513	0.3	1.711	-0.248	0.727	29.8	6.3	30.5	12.0	70.8	73.4	22.0	76.6	16.7	1.00	0.00	0.21	#B89R	
019	42.0	0.516	0.302	1.706	-0.238	0.724	29.7	6.7	30.4	12.8	70.9	73.0	23.7	76.8	18.0	1.00	0.00	0.19	#B90R	
020	42.0	0.519	0.305	1.701	-0.228	0.722	29.5	7.2	30.3	13.7	70.9	72.6	25.4	76.9	19.3	1.00	0.00	0.17	#B91R	
021	42.0	0.523	0.308	1.696	-0.219	0.72	29.3	7.6	30.2	14.5	70.9	72.2	27.2	77.1	20.6	1.00	0.00	0.15	#B92R	
022	42.0	0.526	0.31	1.692	-0.209	0.718	29.1	8.0	30.2	15.3	70.9	71.8	29.0	77.4	22.0	1.00	0.00	0.12	#B93R	
023	42.1	0.529	0.313	1.688	-0.199	0.717	28.9	8.4	30.1	16.2	70.9	71.5	30.9	77.9	23.2	1.00	0.00	0.1	#B94R	
024	42.1	0.533	0.316	1.685	-0.19	0.716	28.8	8.8	30.1	17.0	70.9	71.1	32.9	78.4	24.8	1.00	0.00	0.08	#B95R	
025	42.1	0.536	0.319	1.681	-0.18	0.715	28.6	9.2	30.1	17.8	70.9	70.8	34.8	78.9	26.2	1.00	0.00	0.06	#B96R	
026	42.1	0.54	0.321	1.677	-0.171	0.715	28.5	9.6	30.1	18.6	70.9	70.5	36.8	79.6	27.5	1.00	0.00	0.04	#B97R	
027	42.1	0.543	0.324	1.674	-0.162	0.715	28.4	9.9	30.1	19.3	70.9	70.2	38.8	80.2	28.9	1.00	0.00	0.02	#B98R	
028	42.1	0.546	0.327	1.67	-0.154	0.714	28.2	10.3	30.1	20.1	70.9	69.9	40.8	81.0	30.2	1.00	0.00	0.00	#B99R	
029	42.1	0.55	0.329	1.667	-0.145	0.714	28.1	10.7	30.1	20.8	70.9	69.6	42.8	81.7	31.6	1.00	0.01	0.00	#B91R	
030	42.1	0.553	0.332	1.664	-0.137	0.714	27.9	11.0	30.0	21.5	70.9	69.3	44.9	82.6	32.9	1.00	0.03	0.00	#B93R	
031	42.1	0.556	0.335	1.66	-0.129	0.713	27.8	11.3	30.0	22.2	70.9	69.0	46.9	83.5	34.1	1.00	0.05	0.00	#B94R	
032	42.1	0.559	0.337	1.657	-0.122	0.713	27.7	11.6	30.0	23.0	70.9	68.7	48.9	84.4	35.4	1.00	0.06	0.00	#B95R	
033	42.1	0.562	0.339	1.654	-0.114	0.713	27.5	12.0	30.0	23.5	70.9	68.4	51.0	85.4	36.6	1.00	0.07	0.00	#B97R	
034	42.1	0.565	0.342	1.65	-0.107	0.713	27.4	12.3	30.0	24.1	70.9	68.2	53.0	86.4	37.8	1.00	0.09	0.00	#B99R	
035	42.1	0.568	0.344	1.647	-0.101	0.713	27.3	12.6	30.0	24.7	71.0	67.9	55.1	87.4	39.0	1.00	0.11	0.00	#B11R	
036	42.2	0.57	0.347	1.644	-0.094	0.713	27.2	12.8	30.0	25.3	71.0	67.6	57.1	88.5	40.2	1.00	0.12	0.00	#B12R	
037	42.2	0.573	0.349	1.641	-0.088	0.713	27.0	13.1	30.0	25.8	71.0	67.3	59.2	89.7	41.3	1.00	0.14	0.00	#B14R	
038	42.2	0.575	0.351	1.638	-0.082	0.712	26.9	13.3	30.0	26.4	71.0	67.0	61.2	90.8	42.4	1.00	0.15	0.00	#B15R	
039	42.2	0.578	0.353	1.635	-0.077	0.712	26.8	13.6	30.0	26.9	71.0	66.8	63.3	92.0	43.4	1.00	0.17	0.00	#B17R	
040	42.2	0.58	0.355	1.632	-0.071	0.712	26.7	13.8	30.0	27.4	71.0	66.5	65.3	93.2	44.5	1.00	0.18	0.00	#B19R	
041	42.2	0.582	0.357	1.629	-0.066	0.712	26.5	14.0	30.0	27.8	71.0	66.3	67.4	94.5	45.4	1.00	0.2	0.00	#B20R	
042	42.2	0.584	0.359	1.626	-0.062	0.711	26.4	14.2	30.0	28.3	71.0	66.0	69.4	95.8	46.4	1.00	0.22	0.00	#B22R	
043	42.2	0.586	0.361	1.623	-0.057	0.711	26.3	14.4	30.0	28.7	71.0	65.7	71.4	97.1	47.3	1.00	0.23	0.00	#B23R	
044	42.2	0.588	0.363	1.62	-0.053	0.711	26.2	14.6	30.0	29.1	71.0	65.5	73.4	98.4	48.2	1.00	0.25	0.00	#B25R	
045	42.3	0.59	0.364	1.617	-0.049	0.71	26.1	14.8	30.0	29.5	71.0	65.2	75.4	99.7	49.1	1.00	0.26	0.00	#B26R	
046	42.3	0.591	0.366	1.615	-0.045	0.71	26.0	15.0	30.0	29.9	71.0	65.0	77.4	101.1	49.9	1.00	0.28	0.00	#B28R	
047	42.3	0.593	0.368	1.612	-0.041	0.708	25.9	15.1	30.0	30.3	71.1	64.8	79.3	102.4	50.7	1.00	0.30	0.00	#B30R	
048	42.3	0.594	0.369	1.609	-0.038	0.708	25.8	15.3	30.0	30.8	71.1	64.5	81.2	103.8	51.6	1.00	0.31	0.00	#B31R	
049	42.3	0.596	0.37	1.607	-0.035	0.708	25.7	15.4	30.0	30.9	71.1	64.3	83.2	105.1	52.2	1.00	0.33	0.00	#B33R	
050	42.4	0.597	0.372	1.604	-0.032	0.707	25.6	15.5	29.9	31.2	71.1	64.1	85.1	106.5	53.0	1.00	0.34	0.00	#B34R	
051	42.4	0.598	0.373	1.602	-0.029	0.706	25.5	15.7	29.9	31.5	71.1	63.9	86.9	107.9	53.6	1.00	0.36	0.00	#B36R	
052	42.4	0.599	0.374	1.599	-0.027	0.705	25.4	15.8	29.9	31.8	71.1	63.6	88.8	109.3	54.3	1.00	0.37	0.00	#B37R	
053	42.4	0.6	0.375	1.597	-0.025	0.705	25.3	15.9	29.9	32.1	71.1	63.4	90.6	110.6	55.0	1.00	0.39	0.00	#B39R	
054	42.4	0.601	0.377	1.594	-0.022	0.704	25.2	16.0	29.9	32.3	71.2	63.2	92.4	112.0	55.6	1.00	0.41	0.00	#B41R	
055	42.5	0.602	0.378	1.592	-0.02	0.703	25.1	16.1	29.8	32.6	71.2	63.0	94.2	113.3	56.2	1.00	0.42	0.00	#B42R	
056	42.5	0.602	0.379	1.589	-0.018	0.702	25.0	16.2	29.8	32.8	71.2	62.8	95.9	114.7	56.7	1.00	0.44	0.00	#B44R	
057	42.5	0.603	0.38	1.587	-0.017	0.701	25.0	16.2	29.8	33.0	71.2	62.6	97.6	116.0	57.3	1.00	0.45	0.00	#B45R	
058	42.6	0.604	0.381	1.584	-0.014	0.699	24.8	16.4	29.8	33.4	71.2	62.3	100.7	118.5	58.2	1.00	0.47	0.00	#B47R	
059	42.7	0.606	0.384	1.578	-0.01	0.6970														

$rgb^*_{e,ab}$ and CIE data of a elementary hue circle according to CIE R1-47 for *Ostwald* colours for CIE illuminant E00

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

Elementary hue circle with 4 intended elementary hue angles: $h_{ab} = 27.9, 91.3, 162.9, 267.6$ of *CIELAB*, and 90 intended hue ang

090, 091, ..., 179, CIELAB data of CIE test colours 9 (R): 41.9 59.0 31.3, 10 (Y): 81.8 -1.7 73.1, 11 (G): 51.5 -41.4 12.6, 12 (B): 29.4 -1.9 -46.6

Year	x	y	a	b	c _{AB}	A	B	C _{AB}	h _{AB}	I*	a*	b*	C _{ab} *	h _{ab}	r _{gbs} * _{c_{ab}}	Code _{ab}			
8909	82.9	0.496	0.497	0.999	-0.004	0.395	0.0	32.7	32.7	9.8	92.9	0.0	144.8	144.8	98.0	0.98	0.97	0.00	% R97Y *
8910	84.3	0.492	0.5	0.984	-0.005	0.394	-1.3	33.2	33.3	92.2	93.6	-2.4	143.7	143.7	99.0	1.00	0.99	0.00	% R99Y *
8992	85.7	0.488	0.503	0.969	-0.006	0.394	-2.6	33.7	33.8	94.4	94.4	-4.9	142.1	142.2	91.9	0.99	1.00	0.00	% Y00G *
8993	87.1	0.483	0.506	0.954	-0.007	0.395	-3.9	34.2	34.4	96.6	94.8	-7.3	140.0	140.2	93.0	0.97	1.00	0.00	% Y02G *
8994	88.5	0.478	0.509	0.94	-0.009	0.395	-5.3	34.5	34.4	98.7	95.3	-9.7	137.2	137.5	94.0	0.96	1.00	0.00	% Y03G *
8995	89.8	0.474	0.511	0.926	-0.011	0.395	-6.5	34.9	35.5	100.0	95.9	-12.1	134.2	134.7	95.1	0.94	1.00	0.00	% Y05G *
8996	91.0	0.469	0.513	0.914	-0.013	0.396	-7.8	35.2	36.0	102.6	96.4	-14.2	131.3	132.0	96.1	0.93	1.00	0.00	% Y06G *
8997	92.1	0.465	0.514	0.903	-0.015	0.396	-8.8	35.4	36.5	104.0	96.8	-16.1	128.5	129.5	97.1	0.92	1.00	0.00	% Y07G *
8998	93.2	0.461	0.509	0.894	-0.017	0.404	-9.8	35.7	37.6	105.4	98.2	-17.7	125.7	127.0	98.0	0.91	1.00	0.00	% Y08G *
8999	95.2	0.463	0.509	0.909	-0.02	0.39	-8.6	36.1	37.1	103.4	98.1	-15.3	123.3	124.3	97.1	0.89	1.00	0.00	% Y10G *
1000	93.4	0.452	0.516	0.877	-0.024	0.395	-11.5	35.4	37.3	108.0	97.7	-20.8	119.3	121.1	99.9	0.87	1.00	0.00	% Y12G *
1001	94.8	0.45	0.518	0.868	-0.024	0.398	-12.3	35.2	37.3	109.3	97.5	-22.5	118.7	120.8	100.7	0.86	1.00	0.00	% Y13G *
1002	93.3	0.447	0.52	0.858	-0.024	0.401	-13.2	35.6	37.4	110.6	97.3	-24.2	118.1	120.6	101.5	0.85	1.00	0.00	% Y14G *
1003	92.8	0.443	0.523	0.848	-0.025	0.404	-14.0	34.8	37.5	112.0	97.1	-25.9	117.1	125.3	102.4	0.83	1.00	0.00	% Y16G *
1004	92.3	0.44	0.525	0.838	-0.025	0.408	-14.9	34.5	37.6	113.3	96.9	-27.8	116.9	128.1	103.3	0.82	1.00	0.00	% Y17G *
1005	91.7	0.437	0.528	0.827	-0.025	0.411	-15.8	34.3	37.8	114.7	96.7	-29.6	116.2	129.0	104.3	0.8	1.00	0.00	% Y19G *
1006	91.3	0.435	0.531	0.816	-0.026	0.414	-16.7	34.2	38.9	116.1	96.9	-31.6	115.2	130.5	105.2	0.79	1.00	0.00	% Y20G *
1007	90.6	0.43	0.533	0.805	-0.026	0.42	-17.5	33.8	39.1	117.6	96.2	-33.4	114.9	119.7	106.0	0.78	1.00	0.00	% Y21G *
1008	90.0	0.426	0.536	0.794	-0.027	0.425	-18.4	33.8	38.3	118.8	96.0	-35.6	114.2	119.7	107.2	0.76	1.00	0.00	% Y23G *
1009	89.4	0.422	0.539	0.783	-0.027	0.43	-19.3	33.3	38.5	120.1	95.7	-37.6	113.6	119.6	108.3	0.75	1.00	0.00	% Y24G *
1010	88.8	0.419	0.542	0.772	-0.028	0.436	-20.2	33.8	37.7	121.4	95.5	-39.6	112.9	119.6	109.3	0.74	1.00	0.00	% Y25G *
1111	88.2	0.415	0.545	0.76	-0.028	0.441	-21.1	32.7	38.9	122.7	95.2	-41.7	112.2	119.7	110.4	0.72	1.00	0.00	% Y27G *
1112	87.6	0.411	0.548	0.749	-0.029	0.447	-21.9	32.5	39.2	124.0	95.0	-43.9	111.5	119.8	111.4	0.71	1.00	0.00	% Y28G *
1113	87.0	0.407	0.552	0.737	-0.029	0.454	-22.8	32.2	39.5	125.3	94.7	-46.0	110.9	119.9	112.5	0.69	1.00	0.00	% Y30G *
1114	86.3	0.403	0.555	0.725	-0.03	0.461	-23.6	31.9	40.7	126.6	94.4	-48.2	109.4	120.3	113.6	0.68	1.00	0.00	% Y31G *
1115	85.6	0.398	0.557	0.714	-0.03	0.467	-24.5	31.6	40.9	127.9	94.2	-50.4	108.3	120.4	114.1	0.67	1.00	0.00	% Y32G *
1116	85.1	0.394	0.561	0.702	-0.031	0.473	-25.3	31.3	40.3	128.8	93.9	-52.5	108.6	120.6	115.8	0.65	1.00	0.00	% Y34G *
1117	84.4	0.39	0.564	0.691	-0.031	0.48	-26.1	31.1	40.6	129.9	93.6	-54.7	107.8	120.9	116.9	0.64	1.00	0.00	% Y35G *
1118	83.8	0.386	0.568	0.679	-0.032	0.487	-26.8	30.8	40.9	131.0	93.3	-56.9	107.1	121.3	118.0	0.62	1.00	0.00	% Y37G *
1119	83.1	0.381	0.571	0.667	-0.032	0.495	-27.6	30.5	41.1	132.1	93.1	-59.1	106.4	121.7	119.0	0.61	1.00	0.00	% Y38G *
1210	82.5	0.377	0.574	0.656	-0.033	0.502	-28.3	30.2	41.3	133.1	92.8	-61.3	105.6	122.1	120.1	0.6	1.00	0.00	% Y39G *
1211	81.9	0.372	0.577	0.645	-0.033	0.509	-29.9	29.9	41.7	134.0	92.5	-63.5	104.9	122.6	121.2	0.58	1.00	0.00	% Y41G *
1212	81.3	0.368	0.581	0.634	-0.034	0.517	-30.7	29.7	42.1	134.9	92.3	-65.7	104.1	123.1	122.0	0.57	1.00	0.00	% Y42G *
1213	80.6	0.364	0.584	0.623	-0.035	0.524	-30.4	29.4	42.3	135.9	91.9	-67.9	103.2	123.7	122.2	0.55	1.00	0.00	% Y44G *
1214	80.0	0.359	0.587	0.612	-0.035	0.532	-31.0	29.1	42.5	136.7	91.7	-70.0	102.6	124.3	124.3	0.54	1.00	0.00	% Y45G *
1215	79.4	0.355	0.59	0.601	-0.036	0.539	-31.6	28.8	42.8	137.6	91.4	-72.1	101.9	124.9	125.2	0.53	1.00	0.00	% Y46G *
1216	78.8	0.351	0.593	0.591	-0.036	0.546	-32.2	28.6	43.1	138.4	91.1	-74.2	101.2	125.5	126.2	0.51	1.00	0.00	% Y48G *
1217	78.2	0.346	0.597	0.58	-0.037	0.554	-32.8	28.3	43.3	139.1	90.8	-76.3	100.4	126.1	127.2	0.5	1.00	0.00	% Y49G *
1218	77.6	0.342	0.6	0.57	-0.038	0.561	-33.3	28.0	43.5	139.8	90.6	-78.3	99.7	126.8	128.1	0.48	1.00	0.00	% Y51G *
1219	77.0	0.338	0.603	0.56	-0.038	0.568	-33.8	27.8	43.8	140.5	90.3	-80.3	99.0	127.5	129.0	0.47	1.00	0.00	% Y52G *
1220	76.3	0.333	0.606	0.549	-0.039	0.577	-34.4	27.5	44.0	141.3	90.0	-82.7	98.8	128.3	130.1	0.46	1.00	0.00	% Y53G *
1221	75.7	0.329	0.61	0.538	-0.039	0.584	-34.9	27.2	44.3	142.1	89.7	-84.9	98.1	129.0	131.0	0.45	1.00	0.00	% Y54G *
1222	75.0	0.325	0.614	0.521	-0.042	0.597	-35.6	26.6	44.5	143.2	89.1	-88.4	95.5	130.2	132.8	0.43	1.00	0.00	% Y56G *
1223	74.3	0.314	0.617	0.509	-0.043	0.606	-36.1	26.2	44.6	144.0	88.7	-91.0	94.2	131.0	133.9	0.41	1.00	0.00	% Y58G *
1224	73.6	0.309	0.62	0.497	-0.045	0.614	-36.6	25.8	44.8	144.7	88.3	-93.3	93.0	131.7	135.0	0.4	1.00	0.00	% Y59G *
1225	72.9	0.304	0.623	0.487	-0.046	0.622	-36.9	25.5	44.9	145.3	88.0	-95.4	91.8	132.4	136.1	0.39	1.00	0.00	% Y60G *
1226	72.1	0.299	0.625	0.478	-0.048	0.629	-37.2	25.1	44.9	145.9	87.7	-97.3	90.5	133.0	137.0	0.37	1.00	0.00	% Y62G *
1227	71.4	0.294	0.627	0.47	-0.049	0.635	-37.5	24.8	44.9	146.5	87.3	-99.1	89.3	133.4	137.9	0.36	1.00	0.00	% Y63G *
1228	70.8	0.29	0.628	0.462	-0.051	0.64	-37.7	24.4	44.9	147.0	87.1	-100.7	88.0	133.8	138.8	0.34	1.00	0.00	% Y65G *
1229	70.2	0.286	0.63	0.451	-0.052	0.645	-37.9	24.1	44.9	147.5	86.9	-102.5	87.1	134.1	139.7	0.33	1.00	0.00	% Y66G *
1230	69.1	0.282	0.63	0.448	-0.055	0.65	-38.0	23.8	44.9	147.9	86.5	-103.5	85.5	134.3	140.4	0.32	1.00	0.00	% Y67G *
1231	68.6	0.279	0.63	0.443	-0.057	0.654	-38.2	23.5	44.8	148.3	86.3	-104.7	84.2	134.4	141.2	0.3	1.00	0.00	% Y69G *
1232	68.1	0.275	0.63	0.437	-0.059	0.657	-38.3	23.2	44.8	148.6	86.0	-105.9	82.7	134.4	142.0	0.29	1.00	0.00	% Y70G *
1233	67.6	0.271	0.628	0.431	-0.063	0.66	-38.4	22.7	44.7	149.3	85.8	-107.3	80.4	134.1	143.1	0.27	1.00	0.00	% Y72G *
1234	67.2	0.266	0.626	0.425	-0.068	0.663	-38.6	22.3	44.6	149.9	85.6	-108.5	78.1	133.7	144.2	0.26	1.00	0.00	% Y73G *
1235	66.8	0.262	0.624	0.42	-0.072	0.665	-38.7	21.8	44.4	150.5	85.4	-109.7	75.7	133.3	145.3	0.25	1.00	0.00	% Y74G *
1236	66.4	0.258	0.621	0.415	-0.077	0.667	-38.8	21.4	44.4	151.1	85.2	-110.8	73.4	132.8	146.4	0.23	1.00	0.00	% Y76G *
1237	65.9	0.254	0.618	0.41	-0.081	0.669	-38.9	21.1	44.3	151.7	85.0	-112.0	71.6	132.2	147.5	0.22	1.00	0.00	% Y77G *
1238	65.7	0.25	0.614	0.407	-0.087	0.669	-38.9	20.5	44.3	152.2	84.8	-112.5	69.8	131.9	148.4	0.2	1.00	0.00	% Y79G *
1239	65.4	0.246	0.611	0.403	-0.093	0.67	-39.0	20.0	43.9	152.7	84.7	-113.6	68.0	131.5	149.4	0.19	1.00	0.00	% Y80G *
1240	65.1	0.243	0.607	0.4	-0.098	0.671	-39.0	19.6	43.7	153.2	84.5	-114.0	64.7	131.1	150.0	0.18	1.00	0.00	% Y81G *
1241	64.9	0.239	0.603	0.397	-0.103	0.671	-39.1	19.2	43.5	153.8	84.4	-114.6	62.8	130.7	151.2	0.16	1.00	0.00	% Y83G *
1242	64.6	0.236	0.6	0.394	-0.108	0.672	-39.1	18.8	43.4	154.2	84.2	-115.2	61.0	130.4	152.0	0.15	1.00	0.00	% Y84G *
1243	64.6	0.236	0.6	0.394	-0.108	0.672	-39.1	18.8	43.4	154.2	84.2	-115.2	61.0	130.4	152.0	0.13			

CIEXYZ data of CIE test colours 9 (R): 23.5 12.4 4.0, 10 (Y): 59.2 60.0 10.9, 11 (G): 12.4 19.7 13.0

Yxy, abc_{AB} , ABC_{AB} , $LabC^*_{ab}$ data for relative spacing of elementary hue h_{ab} of CIELAB for CIE 2 degree observerElementary hue circle with 4 intended elementary hue angles: $h_{ab} = 27.9, 91.3, 162.9, 267.6$ of CIE, and 90 intended hue angles:

180, 181, ..., 269, CIELAB data of CIE test colours 9 (R): 41.9 59.0 31.3, 10 (Y): 81.8 -1.7 73.1, 11 (G): 51.5 -41.4 12.6, 12 (B): 29.4 -1.9 -46.6

no.	ab	Y	x	y	a	b	c_{AB}	A	B	C_{AB}	h_{AB}	L*	a^*	b^*	C^*_{ab}	h_{ab}	rgb _{cab}	Code _{ab}	
180	58.2	0.18	0.415	0.433	-0.389	0.567	-33.0	0.6	33.0	178.8	80.8	-101.6	1.5	181.6	179.1	0.00	1.00	0.32	G16B
181	58.2	0.179	0.409	0.438	-0.401	0.561	-32.6	0.0	32.6	180.1	80.8	-100.3	-0.2	190.3	189.1	0.00	1.00	0.34	G17B
182	58.1	0.179	0.403	0.443	-0.414	0.556	-32.3	-0.8	32.3	181.4	80.8	-98.9	-1.9	99.0	181.1	0.00	1.00	0.36	G18B
183	58.1	0.178	0.397	0.449	-0.427	0.551	-32.0	-1.5	32.0	182.8	80.8	-97.6	-3.7	97.7	182.1	0.00	1.00	0.38	G19B
184	58.0	0.178	0.391	0.455	-0.44	0.546	-31.6	-2.3	31.7	184.2	80.8	-96.3	-5.4	96.4	183.2	0.00	1.00	0.4	G20B
185	58.0	0.177	0.385	0.46	-0.453	0.541	-31.3	-3.1	31.4	185.6	80.7	-94.9	-7.1	95.2	184.3	0.00	1.00	0.42	G21B
186	58.0	0.177	0.379	0.466	-0.467	0.537	-30.9	-3.8	31.2	187.1	80.7	-93.6	-8.8	94.0	185.3	0.00	1.00	0.44	G22B
187	58.0	0.176	0.374	0.472	-0.48	0.533	-30.6	-4.6	30.9	188.6	80.7	-92.2	-10.5	92.8	186.5	0.00	1.00	0.45	G23B
188	58.0	0.176	0.368	0.478	-0.494	0.53	-30.2	-5.4	30.7	190.2	80.7	-90.9	-12.1	91.7	187.6	0.00	1.00	0.47	G23B
189	57.9	0.175	0.363	0.483	-0.507	0.527	-29.9	-6.2	30.5	191.7	80.7	-89.6	-13.7	90.6	188.7	0.00	1.00	0.49	G24B
190	57.9	0.175	0.358	0.489	-0.52	0.524	-29.5	-7.0	30.4	193.3	80.7	-88.3	-15.3	89.6	189.8	0.00	1.00	0.51	G25B
191	57.9	0.174	0.353	0.495	-0.534	0.522	-29.2	-7.7	30.2	194.8	80.7	-87.0	-16.8	88.6	190.9	0.00	1.00	0.53	G26B
192	57.9	0.174	0.348	0.501	-0.548	0.52	-28.8	-8.6	30.1	196.5	80.6	-85.6	-18.5	87.6	192.1	0.00	1.00	0.55	G27B
193	57.8	0.174	0.342	0.508	-0.563	0.518	-28.4	-9.4	29.9	198.3	80.6	-84.1	-20.1	86.5	193.4	0.00	1.00	0.57	G28B
194	57.8	0.174	0.338	0.514	-0.576	0.516	-28.0	-10.2	29.8	200.0	80.6	-82.7	-21.6	85.5	194.6	0.00	1.00	0.59	G29B
195	57.8	0.173	0.333	0.52	-0.59	0.515	-27.7	-11.0	29.8	201.6	80.6	-81.4	-23.0	84.6	195.8	0.00	1.00	0.61	G30B
196	57.8	0.173	0.329	0.526	-0.603	0.513	-27.3	-11.7	29.7	203.2	80.6	-80.1	-24.4	83.7	196.9	0.00	1.00	0.63	G31B
197	57.8	0.173	0.325	0.532	-0.615	0.514	-27.0	-12.4	29.7	204.9	80.6	-78.8	-25.7	82.9	198.0	0.00	1.00	0.65	G32B
198	57.7	0.173	0.322	0.538	-0.626	0.514	-26.6	-13.0	29.7	206.1	80.6	-77.7	-26.8	82.2	199.0	0.00	1.00	0.66	G33B
199	57.7	0.173	0.318	0.543	-0.637	0.514	-26.3	-13.7	29.7	207.4	80.5	-76.6	-27.9	81.5	200.0	0.00	1.00	0.68	G34B
200	57.6	0.173	0.315	0.548	-0.647	0.515	-26.0	-14.2	29.7	208.7	80.5	-75.5	-29.0	80.9	200.9	0.00	1.00	0.7	G35B
201	57.6	0.172	0.312	0.552	-0.657	0.516	-25.7	-14.8	29.7	209.8	80.5	-74.6	-29.9	80.4	201.8	0.00	1.00	0.72	G36B
202	57.5	0.172	0.31	0.556	-0.666	0.516	-25.5	-15.3	29.7	210.9	80.5	-73.7	-30.8	79.9	202.6	0.00	1.00	0.74	G37B
203	57.5	0.172	0.308	0.56	-0.674	0.517	-25.2	-15.7	29.7	211.9	80.4	-72.9	-31.6	79.4	203.4	0.00	1.00	0.76	G38B
204	57.4	0.172	0.305	0.564	-0.681	0.519	-25.0	-16.1	29.8	212.8	80.4	-72.1	-32.3	79.3	204.4	0.00	1.00	0.78	G39B
205	57.3	0.172	0.301	0.57	-0.697	0.522	-24.6	-17.0	29.9	214.6	80.3	-70.9	-33.8	78.6	205.4	0.00	1.00	0.8	G40B
206	56.6	0.17	0.298	0.57	-0.71	0.53	-24.3	-17.5	29.9	215.8	79.9	-70.6	-34.8	78.7	206.3	0.00	1.00	0.82	G41B
207	55.1	0.167	0.295	0.566	-0.725	0.541	-23.8	-17.9	29.8	216.8	79.1	-70.7	-35.9	79.3	206.9	0.00	1.00	0.84	G42B
208	53.9	0.165	0.292	0.565	-0.742	0.552	-23.4	-18.4	29.8	218.2	78.4	-70.3	-37.2	79.6	207.8	0.00	1.00	0.86	G43B
209	52.5	0.162	0.288	0.564	-0.76	0.565	-22.8	-18.9	29.7	219.7	77.6	-70.0	-38.5	79.9	208.8	0.00	1.00	0.87	G43B
210	51.2	0.16	0.284	0.563	-0.781	0.579	-22.3	-19.5	29.6	221.1	76.8	-69.6	-40.0	80.2	209.8	0.00	1.00	0.89	G44B
211	49.8	0.157	0.28	0.562	-0.802	0.594	-21.8	-20.0	29.6	222.6	75.9	-69.1	-41.4	80.6	210.9	0.00	1.00	0.91	G45B
212	48.4	0.154	0.275	0.561	-0.825	0.611	-21.2	-20.6	29.6	224.1	75.1	-68.4	-42.9	81.0	212.0	0.00	1.00	0.93	G46B
213	47.1	0.152	0.271	0.56	-0.848	0.627	-20.7	-21.1	29.5	225.5	74.2	-68.2	-44.3	81.3	213.0	0.00	1.00	0.95	G47B
214	45.8	0.149	0.267	0.56	-0.871	0.644	-20.1	-21.6	29.5	227.0	73.4	-67.6	-45.7	81.6	214.0	0.00	1.00	0.97	G48B
215	44.5	0.147	0.262	0.562	-0.897	0.662	-19.4	-22.1	29.5	228.6	72.5	-66.7	-47.2	81.7	215.2	0.00	1.00	0.99	G49B
216	43.4	0.145	0.258	0.564	-0.92	0.679	-18.9	-22.5	29.4	230.0	71.8	-65.7	-48.5	81.7	216.4	0.00	1.00	1.00	G50B
217	42.4	0.144	0.255	0.566	-0.94	0.693	-18.4	-22.9	29.4	231.2	71.2	-64.8	-49.5	81.6	217.3	0.00	1.00	1.00	G51B
218	41.7	0.143	0.252	0.568	-0.956	0.704	-18.0	-23.2	29.4	232.2	70.7	-64.0	-50.0	81.5	218.2	0.00	1.00	1.00	G52B
219	41.2	0.142	0.25	0.57	-0.968	0.712	-17.7	-23.4	29.3	233.9	70.3	-63.5	-51.0	81.4	219.7	0.00	1.00	1.00	G53B
220	40.8	0.142	0.248	0.571	-0.98	0.721	-17.2	-23.6	29.3	235.0	69.6	-63.0	-51.6	81.4	221.0	0.00	1.00	1.00	G54B
221	40.1	0.141	0.246	0.574	-0.996	0.732	-17.0	-23.9	29.3	234.4	69.5	-62.2	-52.4	81.4	220.0	0.00	1.00	1.00	G55B
222	39.3	0.14	0.242	0.577	-1.015	0.746	-16.6	-24.2	29.3	235.3	68.9	-61.3	-53.3	81.2	221.0	0.00	1.00	1.00	G56B
223	38.4	0.139	0.239	0.581	-1.039	0.764	-16.0	-24.5	29.3	236.8	68.3	-60.0	-54.5	81.1	222.2	0.00	1.00	1.00	G57B
224	37.3	0.137	0.234	0.587	-1.068	0.785	-15.4	-24.9	29.3	238.3	67.5	-58.4	-55.8	80.8	223.6	0.00	1.00	1.00	G58B
225	36.5	0.137	0.231	0.592	-1.092	0.803	-14.8	-25.3	29.3	239.3	66.9	-57.1	-56.8	80.6	224.8	0.00	1.00	1.00	G59B
226	36.0	0.136	0.229	0.596	-1.107	0.814	-14.5	-25.5	29.3	240.3	66.5	-56.3	-57.5	80.5	225.6	0.00	1.00	1.00	G60B
227	35.5	0.136	0.226	0.6	-1.123	0.821	-14.2	-25.7	29.3	241.0	66.1	-55.4	-58.2	80.3	226.4	0.00	1.00	1.00	G61B
228	34.9	0.135	0.224	0.604	-1.14	0.839	-13.8	-25.9	29.3	241.8	65.7	-54.4	-58.9	80.2	227.2	0.00	1.00	1.00	G62B
229	34.4	0.135	0.221	0.608	-1.158	0.853	-13.4	-26.1	29.4	242.7	65.3	-53.4	-59.6	80.1	228.1	0.00	1.00	1.00	G63B
230	33.9	0.134	0.219	0.613	-1.177	0.868	-13.1	-26.3	29.4	243.5	64.8	-52.4	-60.3	79.9	229.0	0.00	1.00	1.00	G64B
231	33.3	0.134	0.216	0.618	-1.196	0.883	-12.7	-26.5	29.4	244.4	64.4	-51.3	-61.1	79.8	229.9	0.00	1.00	1.00	G64B
232	32.7	0.133	0.214	0.623	-1.217	0.899	-12.3	-26.7	29.4	245.2	63.9	-50.2	-61.9	79.7	230.9	0.00	1.00	1.00	G65B
233	32.2	0.133	0.211	0.629	-1.238	0.917	-11.9	-27.0	29.5	246.1	63.5	-49.0	-62.7	79.6	231.9	0.00	1.00	1.00	G66B
234	31.6	0.132	0.208	0.635	-1.261	0.935	-11.5	-27.2	29.5	247.0	63.0	-47.8	-63.5	79.5	233.0	0.00	1.00	1.00	G67B
235	31.0	0.132	0.206	0.641	-1.284	0.954	-11.1	-27.4	29.6	247.9	62.5	-46.5	-64.3	79.4	234.1	0.00	1.00	1.00	G68B
236	30.4	0.131	0.203	0.647	-1.308	0.974	-10.7	-27.7	29.6	248.8	62.0	-45.3	-65.2	79.4	235.2	0.00	1.00	1.00	G69B
237	29.8	0.131	0.2	0.654	-1.333	0.995	-10.3	-27.9	29.7	249.7	61.5	-43.9	-66.0	79.3	236.3	0.00	1.00	1.00	G70B
238	29.3	0.13	0.197	0.662	-1.36	1.017	-9.9	-28.1	29.8	250.6	61.0	-42.6	-66.9	79.7					

rgb* _{cab} and CIE data of a elementary hue circle according to CIE R1-47 for Ostwald colours for CIE illuminant E00																								
Yxy, cab _{AB} , ABC _{AB} , LabC* _{ahb} data for relative spacing of elementary hues h _{ab} of CIELAB for CIE 2 degree observer																								
Elementary hue circle with 144 intended elementary hue angles: h _{ab} = 27.9, 91.3, 162.9, 267.6 of CIELAB, and 90 intended hue angles:																								
270, 271, ..., 360, CIELAB data of CIE test colours 9 (R): 41.9 59.0 31.3, 10 (Y): 81.8 -1.7 73.1, 11 (G): 51.5 -41.4 12.6, 12 (B): 29.4 -1.9 -46.6																								
no.	ab	Y	x	y	a	b	c	ab	A	h _{ab}	L*	a*	b*	C* _{ab}	h _{ab}	rgb*	cab	Code _{ab}						
270	17.1	0.128	0.128	0.999	-2.312	1.912	0.0	-32.7	32.7	269.9	48.4	0.0	-88.2	88.2	269.9	0.03	0.00	1.00	%	B01R				
271	16.8	0.128	0.126	1.016	-2.355	1.955	0.2	-32.8	32.8	270.4	48.0	1.5	-88.9	88.9	270.9	0.05	0.00	1.00	%	B02R				
272	16.5	0.128	0.124	1.034	-2.399	1.999	0.5	-32.9	32.9	270.9	47.6	3.1	-89.6	89.6	271.9	0.07	0.00	1.00	%	B03R				
273	16.1	0.128	0.122	1.052	-2.445	2.044	0.8	-33.1	33.1	271.4	47.2	4.7	-90.3	90.4	272.9	0.08	0.00	1.00	%	B04R				
274	15.8	0.129	0.12	1.071	-2.493	2.094	1.1	-33.2	33.2	271.9	46.8	6.3	-90.9	91.2	273.9	0.1	0.00	1.00	%	B05R				
275	15.5	0.129	0.118	1.092	-2.542	2.144	1.4	-33.3	33.3	272.4	46.3	8.0	-91.6	92.0	274.9	0.12	0.00	1.00	%	B06R				
276	15.2	0.129	0.116	1.112	-2.593	2.196	1.7	-33.4	33.4	272.9	45.9	9.7	-92.3	92.8	275.9	0.13	0.00	1.00	%	B06R				
277	14.9	0.129	0.114	1.134	-2.646	2.251	2.0	-33.5	33.6	273.4	45.5	11.4	-93.0	93.7	276.9	0.15	0.00	1.00	%	B07R				
278	14.6	0.129	0.112	1.157	-2.697	2.302	2.3	-33.6	33.7	273.9	45.1	13.1	-93.8	94.7	278.0	0.17	0.00	1.00	%	B08R				
279	14.2	0.13	0.11	1.181	-2.76	2.367	2.6	-33.7	33.8	274.4	44.6	14.9	-94.5	95.7	279.0	0.18	0.00	1.00	%	B09R				
280	13.9	0.13	0.108	1.207	-2.82	2.429	2.8	-33.8	33.9	274.8	44.2	16.8	-95.2	96.7	280.0	0.2	0.00	1.00	%	B10R				
281	13.6	0.13	0.105	1.233	-2.883	2.494	3.1	-33.9	34.1	275.3	43.7	18.6	-95.9	97.7	281.0	0.22	0.00	1.00	%	B11R				
282	13.3	0.13	0.103	1.261	-2.949	2.562	3.4	-34.0	34.2	275.8	43.2	20.5	-96.7	98.9	282.0	0.23	0.00	1.00	%	B11R				
283	12.9	0.131	0.101	1.299	-3.037	2.654	3.8	-34.1	34.3	276.4	42.6	23.0	-97.7	100.3	283.2	0.25	0.00	1.00	%	B12R				
284	12.5	0.131	0.098	1.343	-3.138	2.759	4.2	-34.2	34.5	277.1	42.0	25.8	-98.7	102.0	284.6	0.27	0.00	1.00	%	B13R				
285	12.2	0.132	0.095	1.389	-3.244	2.871	4.7	-34.4	34.7	277.7	41.3	28.6	-99.8	103.8	286.0	0.28	0.00	1.00	%	B14R				
286	11.6	0.132	0.092	1.438	-3.356	2.986	5.1	-34.5	34.8	278.4	40.6	31.4	-100.9	105.6	287.3	0.3	0.00	1.00	%	B15R				
287	11.2	0.133	0.089	1.499	-3.473	3.112	5.5	-34.6	35.0	279.0	40.0	34.3	-101.9	107.5	288.6	0.32	0.00	1.00	%	B16R				
288	10.8	0.133	0.086	1.543	-3.595	3.241	5.9	-34.7	35.2	279.6	39.3	37.1	-103.0	109.4	289.8	0.33	0.00	1.00	%	B16R				
289	10.4	0.134	0.083	1.599	-3.723	3.377	6.2	-34.8	35.3	280.2	38.6	39.9	-104.0	111.4	291.0	0.35	0.00	1.00	%	B17R				
290	10.1	0.134	0.081	1.658	-3.856	3.518	6.6	-34.9	35.5	280.7	38.0	42.7	-105.0	113.4	292.1	0.37	0.00	1.00	%	B18R				
291	9.7	0.135	0.078	1.719	-3.994	3.665	7.0	-35.0	35.6	281.3	37.3	45.5	-106.1	115.4	293.2	0.38	0.00	1.00	%	B19R				
292	9.3	0.135	0.076	1.782	-4.136	3.817	7.3	-35.0	35.8	281.8	36.7	48.3	-107.1	117.5	294.2	0.4	0.00	1.00	%	B20R				
293	9.0	0.136	0.073	1.848	-4.282	3.974	7.6	-35.1	35.9	282.3	36.0	51.1	-108.1	119.5	295.2	0.42	0.00	1.00	%	B21R				
294	8.6	0.136	0.071	1.915	-4.432	4.135	7.9	-35.2	36.1	282.8	35.3	53.6	-109.1	121.5	296.2	0.43	0.00	1.00	%	B22R				
295	8.4	0.137	0.069	1.983	-4.586	4.3	8.2	-35.2	36.2	283.2	34.8	56.2	-110.0	123.5	297.0	0.45	0.00	1.00	%	B22R				
296	8.1	0.137	0.067	2.053	-4.741	4.467	8.5	-35.3	36.3	283.6	34.2	58.7	-110.9	125.5	297.8	0.47	0.00	1.00	%	B23R				
297	7.8	0.138	0.065	2.124	-4.899	4.537	8.8	-35.4	36.4	284.0	33.7	61.1	-111.8	127.4	298.6	0.48	0.00	1.00	%	B24R				
298	7.6	0.138	0.063	2.195	-5.057	4.608	9.1	-35.4	36.6	284.3	33.1	63.5	-112.7	129.3	299.4	0.5	0.00	1.00	%	B25R				
299	7.3	0.139	0.061	2.266	-5.214	4.787	9.3	-35.5	36.7	284.7	32.6	65.7	-113.5	131.1	300.0	0.52	0.00	1.00	%	B26R				
300	7.1	0.139	0.059	2.336	-5.37	5.147	9.5	-35.5	36.8	285.0	32.1	67.8	-114.2	132.9	300.7	0.53	0.00	1.00	%	B26R				
301	6.9	0.139	0.058	2.406	-5.523	5.122	9.7	-35.5	36.8	285.3	31.6	69.8	-115.0	134.5	301.2	0.55	0.00	1.00	%	B27R				
302	6.4	0.14	0.054	2.474	-5.695	5.097	9.7	-35.6	36.9	285.6	31.0	71.9	-116.7	137.0	301.6	0.57	0.00	1.00	%	B28R				
303	5.7	0.141	0.049	2.679	-6.653	6.474	9.6	-35.8	37.1	285.0	30.7	74.9	-117.9	141.3	302.0	0.58	0.00	1.00	%	B29R				
304	5.2	0.131	0.045	2.867	-7.207	7.058	9.8	-35.8	37.2	285.3	27.4	78.8	-121.6	144.9	302.9	0.6	0.00	1.00	%	B30R				
305	5.2	0.137	0.045	2.815	-7.145	7.04	10.6	-35.7	37.2	286.6	27.5	83.4	-122.2	147.1	304.5	0.62	0.00	1.00	%	B31R				
306	5.7	0.147	0.048	3.032	-6.614	6.538	11.5	-35.4	37.2	288.1	28.6	86.1	-119.1	147.0	305.8	0.63	0.00	1.00	%	B31R				
307	6.1	0.154	0.051	3.005	-6.166	6.104	12.2	-35.2	37.3	289.1	29.6	87.2	-117.2	146.2	306.6	0.65	0.00	1.00	%	B32R				
308	6.5	0.162	0.054	2.977	-5.734	5.699	12.9	-35.0	37.3	290.3	30.8	88.4	-113.3	145.3	307.4	0.67	0.00	1.00	%	B33R				
309	7.0	0.17	0.057	2.947	-5.324	5.285	13.7	-34.8	37.4	290.5	31.9	89.6	-113.2	144.4	308.3	0.68	0.00	1.00	%	B34R				
310	7.6	0.179	0.061	2.917	-4.916	4.877	14.4	-34.5	37.4	291.6	33.0	90.7	-111.1	143.5	309.2	0.7	0.00	1.00	%	B35R				
311	8.2	0.188	0.065	2.886	-4.573	4.579	15.4	-34.2	37.6	294.3	34.4	92.1	-108.9	142.6	310.2	0.72	0.00	1.00	%	B36R				
312	8.8	0.197	0.069	2.854	-4.234	4.259	16.4	-33.9	37.7	295.8	35.7	93.3	-106.6	141.6	311.1	0.73	0.00	1.00	%	B36R				
313	9.5	0.207	0.073	2.823	-3.921	3.965	17.4	-33.6	37.9	297.3	37.0	94.5	-104.2	140.7	312.1	0.75	0.00	1.00	%	B37R				
314	10.3	0.216	0.077	2.792	-3.632	3.695	18.4	-33.3	38.1	299.0	38.0	95.7	-101.8	139.7	313.2	0.77	0.00	1.00	%	B38R				
315	11.1	0.226	0.082	2.761	-3.366	3.449	19.5	-32.9	38.3	300.7	39.7	96.8	-99.4	138.8	314.2	0.78	0.00	1.00	%	B39R				
316	11.9	0.236	0.086	2.731	-3.122	3.226	20.7	-32.6	38.6	302.4	41.1	98.0	-96.9	137.8	315.3	0.8	0.00	1.00	%	B40R				
317	12.8	0.246	0.091	2.701	-2.9	3.024	21.9	-32.2	38.8	304.0	42.5	99.1	-94.4	136.5	316.3	0.82	0.00	1.00	%	B41R				
318	13.8	0.256	0.096	2.672	-2.697	2.841	23.1	-31.7	39.3	306.0	43.9	100.2	-91.9	136.0	317.4	0.83	0.00	1.00	%	B41R				
319	14.8	0.266	0.1	2.644	-2.512	2.674	24.4	-31.3	39.7	307.9	45.4	101.3	-89.8	135.2	318.5	0.85	0.00	1.00	%	B42R				
320	15.8	0.276	0.105	2.617	-2.344	2.529	25.6	-30.8	40.1	309.7	46.8	102.3	-86.9	134.3	319.6	0.87	0.00	1.00	%	B43R				
321	16.9	0.285	0.11	2.591	-2.192	2.396	27.0	-30.4	40.6	311.5	48.2	103.4	-84.4	133.5	320.7	0.88	0.00	1.00	%	B44R				
322	18.0	0.294	0.114	2.566	-2.054	2.277	28.3	-29.9	41.2	313.4	49.6	104.3	-82.0	132.7	321.8				%	B45				