

48 step circle with interpretation <i>rgb</i> -> <i>rgb</i> * _d device hue steps of 1080 standard colours																																			
<i>rgb</i> -> <i>rgb</i> * _d	<i>h</i> _{ab,a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>rgb</i> -> <i>rgb</i> * _d	<i>h</i> _{ab,a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>rgb</i> -> <i>rgb</i> * _d	<i>h</i> _{ab,a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>rgb</i> -> <i>rgb</i> * _d	<i>h</i> _{ab,a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>rgb</i> -> <i>rgb</i> * _d	<i>h</i> _{ab,a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>rgb</i> -> <i>rgb</i> * _d	<i>h</i> _{ab,a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>rgb</i> -> <i>rgb</i> * _d	<i>h</i> _{ab,a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	
1.0 0.0 0.0	32.2	50.5	69.4	43.8	1.0 1.0 0.0	92.7	90.9	-4.1	87.7	0.0 1.0 0.0	153.5	55.0	-62.9	31.2	0.0 1.0 1.0	229.1	61.4	-38.8	-44.8	0.0 0.0 1.0	292.2	26.8	19.6	-48.0	1.0 0.0 1.0	355.9	51.2	73.9	-5.2	0.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	
1.0 0.12 0.0	38.8	54.6	60.5	48.7	0.87 1.0 0.0	96.4	86.9	-9.2	82.4	0.0 1.0 0.12	161.0	55.8	-61.3	21.0	0.0 0.87 1.0	233.8	57.6	-33.1	-45.3	0.12 0.0 1.0	304.6	29.4	29.4	-42.6	1.0 0.0 0.87	0.0	51.2	73.2	0.0	0.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	
1.0 0.25 0.0	46.2	59.0	51.1	53.5	0.75 1.0 0.0	99.9	83.1	-13.8	78.5	0.0 1.0 0.25	170.1	56.6	-59.1	10.2	0.0 0.75 1.0	238.8	53.9	-27.5	-45.6	0.25 0.0 1.0	315.4	31.4	37.5	-36.9	1.0 0.0 0.75	3.8	51.1	72.5	4.8	0.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	
1.0 0.37 0.0	55.4	64.2	40.7	59.2	0.62 1.0 0.0	106.9	77.7	-20.6	67.7	0.0 1.0 0.37	181.5	57.5	-56.1	-1.5	0.0 0.62 1.0	245.8	49.1	-20.6	-46.1	0.37 0.0 1.0	321.8	35.7	42.3	-33.2	1.0 0.0 0.62	8.5	51.2	71.3	10.7	0.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	
1.0 0.5 0.0	65.0	69.7	30.2	65.1	0.5 1.0 0.0	113.8	73.3	-27.1	61.3	0.0 1.0 0.5	192.1	58.2	-53.3	-11.4	0.0 0.5 1.0	254.1	44.5	-13.2	-46.5	0.5 0.0 1.0	332.5	39.1	51.1	-26.5	1.0 0.0 0.5	13.2	50.8	71.3	16.7	0.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	
1.0 0.62 0.0	74.2	75.5	20.0	71.3	0.37 1.0 0.0	122.0	68.5	-34.4	55.0	0.0 1.0 0.62	202.2	58.8	-50.3	-20.6	0.0 0.37 1.0	264.0	39.6	-4.8	-46.6	0.62 0.0 1.0	341.3	42.1	58.2	-19.6	1.0 0.0 0.37	17.9	50.9	70.6	22.9	0.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	
1.0 0.75 0.0	81.6	80.8	11.3	76.7	0.25 1.0 0.0	137.1	62.0	-45.0	41.7	0.0 1.0 0.75	212.2	59.6	-46.6	-29.4	0.0 0.25 1.0	272.7	35.6	2.2	-47.3	0.75 0.0 1.0	345.8	46.2	62.8	-15.8	1.0 0.0 0.25	23.7	50.8	69.9	30.7	0.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	
1.0 0.87 0.0	87.6	85.8	3.4	81.7	0.12 1.0 0.0	145.6	58.7	-53.5	36.5	0.0 1.0 0.87	220.4	60.5	-43.1	-36.8	0.0 0.12 1.0	282.0	31.6	10.1	-47.6	0.87 0.0 1.0	351.0	48.9	68.2	-10.7	1.0 0.0 0.12	28.2	50.7	69.5	37.3	0.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	1.0 0.0 0.0	
RYGB_{ton} : 25.4, 92.3, 162.2, 271.7 RYGB_{all} : 25.4 42.1 58.8 75.6 92.3 109.7 127.2 144.7 162.2 189.6 216.9 244.3 271.7 300.1 328.6 357.0 LAB*_{Nio} : 22.2, 0.5, 0.5 LAB*_{Wio} : 96.3, -0.5, 1.9																																			
25.4	42.1	58.8	75.6	92.3	109.7	127.2	144.7	162.2	189.6	216.9	244.3	271.7	300.1	328.6	357.0	LAB*_{Nio}	22.2	0.5	0.5	LAB*_{Wio}	96.3	-0.5	1.9	328.6	357.0	357.0	357.0	357.0	357.0	357.0	357.0	357.0	357.0	357.0	357.0
46	3	5	7	11	13	14	17	19	22	26	32	35	40	46	50	54	58	62	66	70	74	78	82	86	90	94	98	102	106	110	114	118	122	126	130
17.9 23.7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
28.2 32.2	46.2	55.4	65.0	74.2	81.6	87.6	92.7	96.4	101.3	105.2	109.1	113.0	116.9	120.8	124.7	128.6	132.5	136.4	140.3	144.2	148.1	152.0	155.9	159.8	163.7	167.6	171.5	175.4	179.3	183.2	187.1	191.0	194.9	198.8	
0.382	0.452	0.522	0.592	0.662	0.732	0.802	0.872	0.942	1.012	1.082	1.152	1.222	1.292	1.362	1.432	1.502	1.572	1.642	1.712	1.782	1.852	1.922	2.000	2.078	2.156	2.234	2.312	2.390	2.468	2.546	2.624	2.702	2.780	2.858	
651 650	648 657	645 666	642 687	639 708	636 729	633 750	630 771	627 792	624 813	621 834	618 855	615 876	612 897	609 918	606 939	603 960	600 981	597 1002	594 1023	591 1044	588 1065	585 1086	582 1107	579 1128	576 1149	573 1170	570 1191	567 1212	564 1233	561 1254	558 1275	555 1296	552 1317	549 1338	
649 648	646 657	643 678	640 699	637 720	634 741	631 762	628 783	625 804	622 825	619 846	616 867	613 888	610 909	607 930	604 951	601 972	598 993	595 1014	592 1035	589 1056	586 1077	583 1098	580 1119	577 1140	574 1161	571 1182	568 1203	565 1224	562 1245	559 1266	556 1287	553 1308	550 1329	547 1350	
507 506	504 531	501 556	498 581	495 606	492 631	489 656	486 681	483 706	480 731	477 756	474 781	471 806	468 831	465 856	462 881	459 906	456 931	453 956	450 981	447 1006	444 1031	441 1056	438 1081	435 1106	432 1131	429 1156	426 1181	423 1206	420 1231	417 1256	414 1281	411 1306	408 1331	405 1356	
505 504	502 527	499 552	496 577	493 602	490 627	487 652	484 677	481 702	478 727	475 752	472 777	469 802	466 827	463 852	460 877	457 902	454 927	451 952	448 977	445 1002	442 1027	439 1052	436 1077	433 1102	430 1127	427 1152	424 1177	421 1202	418 1227	415 1252	412 1277	409 1302	406 1327	403 1352	
16 step elementary hue circle with intended elementary hues: <i>h</i>_{ab,a} = 25.4, 92.3, 162.2, 271.7																																			
<i>r00j</i>=R	1399	1173	935	789	697	669	667	674	687	639	570	595	695	707	591	498	469	418	353	19.1	5.4	0.59	0.318	13.0	50.8	69.9	34.3	50.8	69.7	33.2	77.2	25.4	1.00	0.00	0.00
<i>r25j</i>	329	286	491	1963	4763	6932	8013	8463	8652	8747	8802	8814	8824	8827	8844	8864	8859	8876	38.9	24.5	4.0	0.576	0.364	22.2	56.6	56.2	52.2	56.6	56.2	50.9	75.8	42.2	1.00	0.25	0.00
<i>r50j</i>	993	905	1171	2760	5375	7254	8154	8523	8680	8762	8815	8823	8823	8839	8857	8853	8873	46.1	35.5	5.0	0.531	0.409	37.9	66.1	36.9	62.6	66.1	36.9	61.2	71.5	58.8	1.00	0.50	0.00	
<i>r75j</i>	1431	1173	887	662	513	446	424	447	532	572	592	826	1444	2185	2552	2615	2632	2878	46.1	35.5	5.0	0.531	0.409	37.9	66.1	36.9	62.6	66.1	36.9	61.2	71.5	58.8	1.00	0.50	0.00
<i>r00g</i>=J	2427	2315	2609	4110	6259	7684	8344	8611	8731	8795	8834	8837	8841	8838	8853	8871	8865	8880	55.7	50.5	6.4	0.494	0.448	62.0	76.3	18.3	73.8	76.3	18.5	72.2	74.6	75.5	1.00	0.75	0.00
<i>j25g</i>	1994	1703	1314	968	726	617	564	609	774	903	1007	1560	3094	5403	7229	8001	8299	8447	73.0	77.7	8.7	0.457	0.487	94.4	90.6	-3.9	89.3	90.6	-3.5	87.4	87.5	92.3	1.00	1.00	0.00
<i>j50g</i>	8508	8568	8605	8687	8738	8783	8825	8853	8884	8914	8934	8927	8924	8920	8933	8947	8938	8951	39.9	49.7	8.0	0.408	0.509	121.8	75.9	-23.5	66.3	75.9	-23.3	64.7	68.8	109.8	0.75	1.00	0.00
<i>j75g</i>	1346	1297	1104	857	654	561	527	572	738	861	963	1497	2948	4999	6332	6543	6278	5831	24.2	35.4	7.5	0.36	0.527	139.6	66.0	-38.2	51.4	66.0	-38.1	50.0	62.9	127.3	0.50	1.00	0.00
<i>g00b</i>=G	5302	4882	4611	4476	4361	4282	4277	4294	4332	4433	4572	4643	4611	4533	4407	4306	4353	4597	15.4	27.1	7.8	0.305	0.539	152.5	59.1	-52.4	38.3	59.1	-52.4	37.0	64.2	144.7	0.25	1.00	0.00
<i>g25b</i>	2069	1404	1036	861	737	656	647	666	701	807	965	1063	1036	954	818	718	784	1064	11.9	23.8	11.3	0.252	0.506	164.2											

48 step circle with interpretation <i>rgb</i> -> <i>rgb</i> * _d device hue steps of 1080 standard colours																																			
<i>rgb</i> -> <i>rgb</i> * _d	<i>h</i> _{ab,a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>rgb</i> -> <i>rgb</i> * _d	<i>h</i> _{ab,a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>rgb</i> -> <i>rgb</i> * _d	<i>h</i> _{ab,a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>rgb</i> -> <i>rgb</i> * _d	<i>h</i> _{ab,a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>rgb</i> -> <i>rgb</i> * _d	<i>h</i> _{ab,a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>rgb</i> -> <i>rgb</i> * _d	<i>h</i> _{ab,a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	<i>rgb</i> -> <i>rgb</i> * _d	<i>h</i> _{ab,a}	<i>L</i> *	<i>a</i> *	<i>b</i> *	
1.0 0.0 0.0	32.2	50.5	69.4	43.8	1.0 1.0 0.0	92.7	90.9	-4.1	87.7	0.0 1.0 0.0	153.5	55.0	-62.9	31.2	0.0 1.0 1.0	229.1	61.4	-38.8	-44.8	0.0 0.0 1.0	292.2	26.8	19.6	-48.0	1.0 0.0 1.0	355.9	51.2	73.9	-5.2	1.0 0.0 0.0	1.0	0.0	0.0	0.0	
1.0 0.12 0.0	38.8	54.6	60.5	48.7	0.87 1.0 0.0	96.4	86.9	-9.2	82.4	0.0 1.0 0.12	161.0	55.8	-61.3	21.0	0.0 0.87 1.0	233.8	57.6	-33.1	-45.3	0.12 0.0 1.0	304.6	29.4	29.4	-42.6	1.0 0.0 0.87	0.0	51.2	73.2	0.0	1.0 0.0 0.0	1.0	0.0	0.0	0.0	
1.0 0.25 0.0	46.2	59.0	51.1	53.5	0.75 1.0 0.0	99.9	83.1	-13.8	78.5	0.0 1.0 0.25	170.1	56.6	-59.1	10.2	0.0 0.75 1.0	238.8	53.9	-27.5	-45.6	0.25 0.0 1.0	315.4	31.4	37.5	-36.9	1.0 0.0 0.75	3.8	51.1	72.5	4.8	1.0 0.0 0.0	1.0	0.0	0.0	0.0	
1.0 0.37 0.0	55.4	64.2	40.7	59.2	0.62 1.0 0.0	106.9	77.7	-20.6	67.7	0.0 1.0 0.37	181.5	57.5	-56.1	-1.5	0.0 0.62 1.0	245.8	49.1	-20.6	-46.1	0.37 0.0 1.0	321.8	35.7	42.3	-33.2	1.0 0.0 0.62	8.5	51.2	71.3	10.7	1.0 0.0 0.0	1.0	0.0	0.0	0.0	
1.0 0.5 0.0	65.0	69.7	30.2	65.1	0.5 1.0 0.0	113.8	73.3	-27.1	61.3	0.0 1.0 0.5	192.1	58.2	-53.3	-11.4	0.0 0.5 1.0	254.1	44.5	-13.2	-46.5	0.5 0.0 1.0	332.5	39.1	51.1	-26.5	1.0 0.0 0.5	13.2	50.8	71.3	16.7	1.0 0.0 0.0	1.0	0.0	0.0	0.0	
1.0 0.62 0.0	74.2	75.5	20.0	71.3	0.37 1.0 0.0	122.0	68.5	-34.4	55.0	0.0 1.0 0.62	202.2	58.8	-50.3	-20.6	0.0 0.37 1.0	264.0	39.6	-4.8	-46.6	0.62 0.0 1.0	341.3	42.1	58.2	-19.6	1.0 0.0 0.37	17.9	50.9	70.6	22.9	1.0 0.0 0.0	1.0	0.0	0.0	0.0	
1.0 0.75 0.0	81.6	80.8	11.3	76.7	0.25 1.0 0.0	137.1	62.0	-45.0	41.7	0.0 1.0 0.75	212.2	59.6	-46.6	-29.4	0.0 0.25 1.0	272.7	35.6	2.2	-47.3	0.75 0.0 1.0	345.8	46.2	62.8	-15.8	1.0 0.0 0.25	23.7	50.8	69.9	30.7	1.0 0.0 0.0	1.0	0.0	0.0	0.0	
1.0 0.87 0.0	87.6	85.8	3.4	81.7	0.12 1.0 0.0	145.6	58.7	-53.5	36.5	0.0 1.0 0.87	220.4	60.5	-43.1	-36.8	0.0 0.12 1.0	282.0	31.6	10.1	-47.6	0.87 0.0 1.0	351.0	48.9	68.2	-10.7	1.0 0.0 0.12	28.2	50.7	69.5	37.3	1.0 0.0 0.0	1.0	0.0	0.0	0.0	
RYGB_{ton} : 25.4, 92.3, 162.2, 271.7 RYGB_{all} : 25.4 42.1 58.8 75.6 92.3 109.7 127.2 144.7 162.2 189.6 216.9 244.3 271.7 300.1 328.6 357.0 LAB*_{Nio} : 22.2, 0.5, 0.5 LAB*_{Wio} : 96.3, -0.5, 1.9																																			
25.4	42.1	58.8	75.6	92.3	109.7	127.2	144.7	162.2	189.6	216.9	244.3	271.7	300.1	328.6	357.0	LAB*_{Nio}	22.2	0.5	0.5	LAB*_{Wio}	96.3	-0.5	1.9	357.0	328.6	357.0	328.6	357.0	328.6	357.0	328.6	357.0	328.6	357.0	
46	1	3	5	7	11	13	14	17	19	22	26	29	32	35	40	46	50	54	58	62	66	70	74	78	82	86	90	94	98	102	106	110	114	118	122
17.9 23.7	32	38.8	46.2	55.4	65.0	74.2	81.6	87.6	92.7	96.4	101.3	105.8	110.3	114.7	119.2	123.6	128.1	132.5	137.0	141.4	145.8	150.3	154.7	159.2	163.6	168.1	172.5	177.0	181.4	185.8	190.3	194.7	199.1	203.6	208.0
0.382	0.452	0.356	0.178	0.922	0.408	0.343	0.89	0.124	0.76	0.573	0.787	0.884	0.961	1.038	1.115	1.192	1.269	1.346	1.423	1.500	1.577	1.654	1.731	1.808	1.885	1.962	2.039	2.116	2.193	2.270	2.347	2.424	2.501	2.578	2.655
651 650	648 657	666 675	684 693	702 711	720 711	739 702	758 669	777 631	796 585	815 539	834 493	853 447	872 401	891 355	910 309	929 263	948 217	967 171	986 125	1005 79	1024 33	1043 -13	1062 -67	1081 -121	1100 -175	1119 -229	1138 -283	1157 -337	1176 -391	1195 -445	1214 -499	1233 -553	1252 -607	1271 -661	1290 -715
649 648	666 675	684 693	702 711	720 711	739 702	758 669	777 631	796 585	815 539	834 493	853 447	872 401	891 355	910 309	929 263	948 217	967 171	986 125	1005 79	1024 33	1043 -13	1062 -67	1081 -121	1100 -175	1119 -229	1138 -283	1157 -337	1176 -391	1195 -445	1214 -499	1233 -553	1252 -607	1271 -661	1290 -715	
507 506	504 531	558 585	612 639	666 693	720 711	774 702	828 631	882 559	936 487	990 415	1044 343	1098 271	1152 199	1206 127	1260 55	1314 -17	1368 -89	1422 -161	1476 -233	1530 -305	1584 -377	1638 -449	1692 -521	1746 -593	1800 -665	1854 -737	1908 -809	1962 -881	2016 -953	2070 -1025	2124 -1097	2178 -1169	2232 -1241	2286 -1313	
505 504	558 585	612 639	666 693	720 711	774 702	828 631	882 559	936 487	990 415	1044 343	1098 271	1152 199	1206 127	1260 55	1314 -17	1368 -89	1422 -161	1476 -233	1530 -305	1584 -377	1638 -449	1692 -521	1746 -593	1800 -665	1854 -737	1908 -809	1962 -881	2016 -953	2070 -1025	2124 -1097	2178 -1169	2232 -1241	2286 -1313	2340 -1385	
16 step elementary hue circle with intended elementary hues: <i>h</i>_{ab,a} = 25.4, 92.3, 162.2, 271.7																																			
<i>r00j</i>=R	1399	1173	935	789	697	669	667	674	687	639	570	595	695	707	591	498	469	418	353	19.1	5.4	1.85	-0.114	16.9	3.9	17.4	13.0	50.8	69.7	33.2	77.2	25.4	1.00	0.00	0.00
<i>r25j</i>	329	286	491	1963	4763	6932	8013	8463	8652	8747	8802	8814	8824	8827	8844	8864	8859	8876	38.9	24.5	4.0	1.582	-0.065	15.2	6.2	16.5	22.2	56.6	56.2	50.9	75.8	42.2	1.00	0.25	0.00
<i>r50j</i>	993	905	1171	2760	5375	7254	8154	8523	8680	8762	8808	8815	8823	8823	8839	8857	8853	8873	46.1	35.5	5.0	1.298	-0.057	11.9	9.3	15.1	37.9	66.1	36.9	61.2	71.5	58.8	1.00	0.50	0.00
<i>r75j</i>	1431	1173	887	662	513	446	424	447	532	572	592	826	1444	2185	2552	2615	2632	2578	55.7	50.5	6.4	1.103	-0.05	7.2	13.6	15.3	62.0	76.3	18.5	72.2	74.6	75.5	1.00	0.75	0.00
<i>j00g</i>=J	2427	2315	2609	4110	6259	7684	8344	8611	8731	8795	8834	8837	8841	8838	8853	8871	8865	8880	73.0	77.7	8.7	0.939	-0.044	-1.6	21.3	21.4	94.4	90.6	-3.5	87.4	87.5	92.3	1.00	1.00	0.00
<i>j25g</i>	1346	1297	1104	857	654	561	527	572	738	861	963	1497	2948	4999	6332	6543	6278	5831	39.9	49.7	8.0	0.802	-0.064	-7.8	12.6	14.9	121.8	75.9	-23.3	64.7	68.8	109.8	0.75	1.00	0.00
<i>j50g</i>	5302	4882	4611	4476	4361	4282	4277	4294	4332	4433	4572	4643	4611	4533	4407	4306	4353	4597	55.7	50.5	6.4	1.103	-0.05	7.2	13.6	15.3	62.0	76.3	18.5	72.2	74.6	75.5	1.00	0.75	0.00
<i>j75g</i>	952	1015	951	770	596	520	495	545	702	823	919	1427	2805	4667	5689	5591	5045	4337	73.0	77.7	8.7	0.939	-0.044	-1.6	21.3	21.4	94.4	90.6	-3.5	87.4	87.5	92.3	1.00	1.00	0.00
<i>j100g</i>=G	3584	3012	2671	2499	2367	2277	2264	2280	2319	2429	2588	2679	2647	2558	2414	2300	2363	2642	24.2	35.4	7.5	0.684	-0.084	-9.8	8.3	12.8	139.6	66.0	-38.1	50.0	62.9	127.3	0.50	1.00	0.00
<i>g25b</i>	741	920	927	788	629	556	540	594	759	883	979	1489	2832	4541	5312	4992	4272	3415	15.4	27.1	7.8	0.567	-0.115	-10.6	5.5	12.0	152.5	59.1	-52.4	37.0	64.2	144.7	0.25	1.00	0.00
<i>g50b</i>	2548	1914	1554	1379	1250	1165	1153	1170	1207	1313	1472	1567	1537	1453	1314</																				