

Colorimetric "Standard data": Colorimetric data of Natural Colour System NCS18 for CIE lightness L*=18 of black for D65

System NCS18	Color	r=ol ^v * ₁	g=ol ^v * ₂	b=ol ^v * ₃	L*=LAB* ₁	a*=LAB* ₂	b*=LAB* ₃	C* _{ab} =LAB* _r	h _{ab}	X=XYZ ₁	Y=XYZ ₂	Z=XYZ ₃	x	y	Y/88.59
NCS-System	00 Y00R	1.0	1.0	0.0	90.76	-0.82	124.09	124.09	90	73.69	77.96	2.94	0.4767	0.5043	0.88
	01 Y05R	1.0	0.95	0.0	89.83	5.6	122.81	122.94	87	74.86	75.94	2.89	0.4871	0.4941	0.8572
	02 Y10R	1.0	0.9	0.0	87.77	12.49	120.61	121.25	84	73.89	71.58	2.7	0.4987	0.4831	0.808
	03 Y15R	1.0	0.85	0.0	84.58	19.29	116.34	117.93	81	70.6	65.19	2.53	0.5104	0.4713	0.7359
	04 Y20R	1.0	0.8	0.0	80.98	25.51	110.3	113.22	77	66.34	58.43	2.51	0.5212	0.4591	0.6596
	05 Y25R	1.0	0.75	0.0	77.79	31.16	104.74	109.27	73	62.77	52.86	2.52	0.5313	0.4474	0.5967
	06 Y30R	1.0	0.7	0.0	74.98	36.13	100.39	106.7	70	59.74	48.25	2.45	0.5409	0.4369	0.5447
	07 Y35R	1.0	0.65	0.0	72.28	40.31	96.43	104.52	67	56.66	44.07	2.36	0.5496	0.4275	0.4975
	08 Y40R	1.0	0.6	0.0	69.7	43.96	92.22	102.16	65	53.7	40.33	2.33	0.5573	0.4185	0.4552
	09 Y45R	1.0	0.55	0.0	67.39	47.46	87.59	99.62	62	51.23	37.15	2.42	0.5642	0.4092	0.4194
	10 Y50R	1.0	0.5	0.0	65.32	51.18	83.49	97.93	58	49.28	34.45	2.48	0.5716	0.3996	0.3889
	11 Y55R	1.0	0.45	0.0	63.4	55.23	80.36	97.51	56	47.74	32.07	2.46	0.5803	0.3898	0.362
	12 Y60R	1.0	0.4	0.0	61.57	59.15	77.68	97.63	53	46.33	29.9	2.4	0.5892	0.3803	0.3375
	13 Y65R	1.0	0.35	0.0	59.77	62.58	74.78	97.51	50	44.81	27.87	2.37	0.5971	0.3713	0.3145
	14 Y70R	1.0	0.3	0.0	57.94	65.66	71.17	96.83	47	43.18	25.9	2.43	0.6038	0.3622	0.2924
	15 Y75R	1.0	0.25	0.0	56.04	68.55	66.17	95.28	44	41.41	23.95	2.66	0.6088	0.3521	0.2703
	16 Y80R	1.0	0.2	0.0	54.06	71.0	60.95	93.58	41	39.46	22.03	2.92	0.6126	0.3421	0.2487
	17 Y85R	1.0	0.25	0.0	52.0	72.9	56.6	92.29	38	37.27	20.14	3.03	0.6166	0.3332	0.2274
	18 Y90R	1.0	0.1	0.0	49.88	74.57	51.67	90.72	35	35.05	18.32	3.23	0.6192	0.3237	0.2068
	19 Y95R	1.0	0.05	0.0	47.78	76.51	45.35	88.94	31	33.0	16.62	3.67	0.6192	0.3119	0.1876
	20 R00B	1.0	0.0	0.0	45.83	77.83	36.96	86.16	25	31.04	15.14	4.59	0.6113	0.2982	0.1709
	21 R05B	1.0	0.0	0.1	44.25	78.82	27.82	83.59	19	29.5	14.01	5.99	0.5959	0.2831	0.1582
	22 R10B	1.0	0.0	0.2	43.21	80.67	19.25	82.93	13	28.81	13.3	7.74	0.578	0.2668	0.1501
	23 R15B	1.0	0.0	0.3	42.66	83.2	10.83	83.9	7	28.85	12.93	10.02	0.5569	0.2496	0.146
	24 R20B	1.0	0.0	0.4	42.27	86.82	1.66	86.83	1	29.35	12.67	13.13	0.5322	0.2298	0.1431
	25 R25B	1.0	0.0	0.5	41.87	87.68	-8.59	88.11	354	29.14	12.42	17.33	0.4948	0.2109	0.1402
	26 R30B	1.0	0.0	0.6	41.76	90.24	-19.98	92.42	348	29.68	12.35	23.27	0.4545	0.1891	0.1394
	27 R35B	1.0	0.0	0.7	42.19	96.59	-33.99	102.4	341	31.88	12.62	32.99	0.4114	0.1629	0.1425
	28 R40B	1.0	0.0	0.8	42.86	101.66	-48.43	112.61	335	34.12	13.06	45.86	0.3667	0.1404	0.1475
	29 R45B	1.0	0.0	0.9	43.53	104.52	-61.51	121.28	330	35.8	13.51	60.2	0.3269	0.1234	0.1525
	30 R50B	1.0	0.0	1.0	44.24	104.14	-73.11	127.24	325	36.61	14.0	75.44	0.2904	0.1111	0.1581
	31 R55B	0.9	0.0	1.0	45.02	97.88	-82.53	128.04	320	35.74	14.56	90.08	0.2546	0.1037	0.1643
	32 R60B	0.8	0.0	1.0	45.88	86.67	-89.0	124.24	314	33.56	15.18	102.02	0.2226	0.1007	0.1714
	33 R65B	0.7	0.0	1.0	46.69	70.9	-89.55	114.23	308	30.18	15.78	105.08	0.1998	0.1045	0.1782
	34 R70B	0.6	0.0	1.0	47.57	56.7	-88.65	105.25	303	27.5	16.46	106.08	0.1833	0.1097	0.1858
	35 R75B	0.5	0.0	1.0	48.47	43.85	-87.95	98.28	296	25.32	17.17	107.43	0.1689	0.1145	0.1938
	36 R80B	0.4	0.0	1.0	49.29	30.84	-86.64	91.97	290	23.15	17.83	107.61	0.1558	0.12	0.2013
	37 R85B	0.3	0.0	1.0	50.08	16.7	-83.29	84.95	281	20.84	18.49	104.41	0.145	0.1286	0.2087
	38 R90B	0.2	0.0	1.0	51.11	2.21	-78.01	78.05	272	18.83	19.36	98.95	0.1373	0.1412	0.2186
	39 R95B	0.1	0.0	1.0	52.44	-11.62	-71.57	72.52	261	17.3	20.54	92.74	0.1325	0.1573	0.2319
	40 B00G	0.0	0.0	1.0	53.84	-24.65	-65.25	69.76	249	16.05	21.82	87.11	0.1284	0.1746	0.2463
	41 B05G	0.0	0.1	1.0	55.11	-36.67	-58.85	69.36	238	14.94	23.04	81.33	0.1252	0.1931	0.26
	42 B10G	0.0	0.2	1.0	56.28	-47.82	-53.65	71.88	228	13.95	24.19	77.12	0.121	0.2099	0.2731
	43 B15G	0.0	0.3	1.0	57.35	-56.7	-48.82	74.83	221	13.28	25.28	73.29	0.1187	0.226	0.2853
	44 B20G	0.0	0.4	1.0	58.33	-63.79	-44.2	77.62	215	12.85	26.31	69.7	0.118	0.2417	0.297
	45 B25G	0.0	0.5	1.0	59.23	-70.17	-39.8	80.69	210	12.47	27.27	66.29	0.1176	0.2572	0.3079
	46 B30G	0.0	0.6	1.0	60.02	-76.12	-35.81	84.14	205	12.1	28.14	63.26	0.1169	0.2719	0.3177
	47 B35G	0.0	0.7	1.0	60.74	-81.57	-32.21	87.71	202	11.76	28.95	60.62	0.1161	0.2857	0.3268
	48 B40G	0.0	0.8	1.0	61.4	-86.84	-28.72	91.47	198	11.43	29.71	58.06	0.1152	0.2995	0.3353
	49 B45G	0.0	0.9	1.0	62.02	-92.35	-25.09	95.71	195	11.03	30.42	55.34	0.114	0.3143	0.3434