

Performance (STRESS values) for very small colour difference data (VCD)

dataset	Calculations with data for grey surrounds (D65, P40) and 0,1 < Y < 190					Colour difference formula and STRESS value				
	Difference $\Delta E^*_{\text{CIELAB}}$									
Name	Pairs	ΔE^*_{ab} range	min	max	mean	CIELAB	CMC	CIE94	CIEDE2000	LABJND
WA_0100	100	0.0 to <99.0	0.19	1.35	0.54	33.2	23.0	30.9	18.0	45.7
1S_0890	890	0.0 to <99.0	0.1	4.87	1.09	55.2	47.7	44.9	45.3	55.8
2M_0399	399	0.0 to <99.0	0.09	2.74	0.7	55.2	52.0	46.2	45.4	57.5
2S_0446	446	0.0 to <99.0	0.07	4.28	1.08	51.8	59.0	46.4	48.7	51.2
2G_0379	379	0.0 to <99.0	0.08	2.61	0.81	55.6	55.4	48.6	50.3	50.9
WA_0100	100	0.0 to <5.0	0.19	1.35	0.54	33.2	23.0	30.9	18.0	45.7
1S_0890	890	0.0 to <5.0	0.1	4.87	1.09	55.2	47.7	44.9	45.3	55.8
2M_0399	399	0.0 to <5.0	0.09	2.74	0.7	55.2	52.0	46.2	45.4	57.5
2S_0446	446	0.0 to <5.0	0.07	4.28	1.08	51.8	59.0	46.4	48.7	51.2
2G_0379	379	0.0 to <5.0	0.08	2.61	0.81	55.6	55.4	48.6	50.3	50.9
WA_0100	46	0.0 to <0.5	0.19	0.49	0.39	32.0	23.2	26.7	14.9	43.2
1S_0890	157	0.0 to <0.5	0.1	0.49	0.35	55.1	41.1	36.9	36.5	46.6
2M_0399	143	0.0 to <0.5	0.09	0.49	0.3	56.0	51.0	45.0	44.6	54.4
2S_0446	133	0.0 to <0.5	0.07	0.49	0.32	53.2	51.6	42.2	42.5	45.2
2G_0379	106	0.0 to <0.5	0.08	0.49	0.34	34.7	40.6	40.1	40.5	45.0
WA_0100	53	0.5 to <1.0	0.5	0.94	0.66	32.0	23.1	27.2	15.4	45.1
1S_0890	356	0.5 to <1.0	0.5	0.99	0.75	54.7	44.0	39.5	40.6	46.3
2M_0399	173	0.5 to <1.0	0.5	0.99	0.72	62.2	58.7	50.1	50.8	55.4
2S_0446	122	0.5 to <1.0	0.5	0.99	0.72	48.9	47.0	40.3	40.0	45.8
2G_0379	170	0.5 to <1.0	0.5	0.99	0.71	41.6	41.3	36.3	36.8	45.2
WA_0100	1	1.0 to <1.5	1.35	1.35	1.35	0.1	0.1	0.1	0.1	0.1
1S_0890	198	1.0 to <1.5	1.0	1.49	1.23	51.9	39.6	36.4	35.7	46.4
2M_0399	66	1.0 to <1.5	1.02	1.49	1.21	38.3	42.9	38.4	37.6	45.1
2S_0446	76	1.0 to <1.5	1.0	1.49	1.2	31.6	30.2	31.7	31.2	39.6
2G_0379	64	1.0 to <1.5	1.0	1.49	1.23	33.6	35.8	33.8	34.6	41.6
WA_0100	0									
1S_0890	84	1.5 to <2.0	1.5	1.98	1.72	38.8	33.6	34.4	31.9	45.0
2M_0399	12	1.5 to <2.0	1.5	1.97	1.67	27.4	32.1	27.5	28.2	45.5
2S_0446	49	1.5 to <2.0	1.51	1.99	1.74	29.1	32.8	29.1	31.7	37.6
2G_0379	29	1.5 to <2.0	1.51	1.99	1.69	27.4	29.0	27.7	27.7	37.6
WA_0100	0									
1S_0890	95	2.0 to <5.0	2.0	4.87	2.77	43.0	35.9	33.3	31.6	42.9
2M_0399	5	2.0 to <5.0	2.01	2.74	2.26	15.1	23.7	15.7	11.9	44.9
2S_0446	66	2.0 to <5.0	2.0	4.28	2.62	28.0	30.2	28.0	29.5	35.7
2G_0379	10	2.0 to <5.0	2.07	2.61	2.23	29.3	39.6	28.5	32.9	26.9

datasets: WA=WANG, 1S=BIGC_T1_SG, 2M=BIGC_T2_M, 2S=BIGC_T2_SG, 2G=BIGC_T2_G

TUB-test chart VE95; Colour differences and formulae

VCD datasets: WA, 1S, 2M, 2S, 2G, ΔE^* ranges of CIELAB, all colours of 100

input: w/rgb/cmyk -> (w/rgb/cmyk)

TUB registration: 20140801-VE95/VE95L0NA.TXT /PS
application for measurement of display or printer output

TUB material: code=rha4ta

Performance (STRESS values) for very small colour difference data (VCD)

dataset	Calculations with data for grey surrounds (D65, P40) and 0,1 < Y < 190						Colour difference formula and STRESS value				
	Difference $\Delta E^*_{CIEDE2000}$										
Name	Pairs	ΔE^*_{C00} range	min	max	mean	CIELAB	CMC	CIE94	CIEDE2000	LABJND	
WA_0100	100	0.0 to <99.0	0.19	1.35	0.54	33.2	23.0	30.9	18.0	45.7	
1S_0890	890	0.0 to <99.0	0.1	4.87	1.09	55.2	47.7	44.9	45.3	55.8	
2M_0399	399	0.0 to <99.0	0.09	2.74	0.7	55.2	52.0	46.2	45.4	57.5	
2S_0446	446	0.0 to <99.0	0.07	4.28	1.08	51.8	59.0	46.4	48.7	51.2	
2G_0379	379	0.0 to <99.0	0.08	2.61	0.81	55.6	55.4	48.6	50.3	50.9	
WA_0100	100	0.0 to <5.0	0.19	1.35	0.54	33.2	23.0	30.9	18.0	45.7	
1S_0890	890	0.0 to <5.0	0.1	4.87	1.09	55.2	47.7	44.9	45.3	55.8	
2M_0399	399	0.0 to <5.0	0.09	2.74	0.7	55.2	52.0	46.2	45.4	57.5	
2S_0446	446	0.0 to <5.0	0.07	4.28	1.08	51.8	59.0	46.4	48.7	51.2	
2G_0379	379	0.0 to <5.0	0.08	2.61	0.81	55.6	55.4	48.6	50.3	50.9	
WA_0100	98	0.0 to <0.5	0.19	1.35	0.55	33.4	23.0	30.9	17.8	45.5	
1S_0890	337	0.0 to <0.5	0.1	1.71	0.58	55.1	45.1	39.2	41.4	45.9	
2M_0399	277	0.0 to <0.5	0.09	1.35	0.49	60.6	54.9	47.0	47.3	52.5	
2S_0446	229	0.0 to <0.5	0.07	1.51	0.52	58.5	63.7	51.3	54.6	50.4	
2G_0379	234	0.0 to <0.5	0.08	1.49	0.59	41.5	43.4	38.0	39.0	49.0	
WA_0100	2	0.5 to <1.0	0.36	0.44	0.4	4.5	5.0	5.0	5.9	0.5	
1S_0890	430	0.5 to <1.0	0.44	3.52	1.19	57.3	47.5	42.4	43.3	49.0	
2M_0399	118	0.5 to <1.0	0.64	2.21	1.15	49.7	45.8	41.7	40.2	51.5	
2S_0446	151	0.5 to <1.0	0.44	2.84	1.36	53.7	54.7	44.8	45.5	46.0	
2G_0379	123	0.5 to <1.0	0.47	2.26	1.07	37.7	39.5	38.7	38.7	47.7	
WA_0100	0										
1S_0890	97	1.0 to <1.5	0.74	4.85	1.93	42.9	36.3	33.8	32.0	43.1	
2M_0399	3	1.0 to <1.5	1.44	2.74	1.89	17.0	21.3	18.0	10.3	55.0	
2S_0446	53	1.0 to <1.5	1.1	3.61	2.17	28.6	31.6	28.6	31.2	36.8	
2G_0379	21	1.0 to <1.5	1.17	2.61	1.73	28.6	32.0	28.6	29.8	36.0	
WA_0100	0										
1S_0890	19	1.5 to <2.0	1.57	4.87	2.91	29.1	32.4	29.1	33.6	35.1	
2M_0399	1	1.5 to <2.0	2.01	2.01	2.01	0.1	0.1	0.1	0.1	0.1	
2S_0446	10	1.5 to <2.0	2.37	4.28	2.97	31.5	29.8	31.6	33.8	42.8	
2G_0379	1	1.5 to <2.0	2.07	2.07	2.07	0.1	0.1	0.1	0.1	0.1	
WA_0100	0										
1S_0890	7	2.0 to <5.0	2.25	3.74	2.77	36.0	36.6	36.1	38.8	42.9	
2M_0399	0										
2S_0446	3	2.0 to <5.0	3.01	3.61	3.28	18.9	11.5	19.5	15.7	41.6	
2G_0379	0										

datasets: WA=WANG, 1S=BIGC_T1_SG, 2M=BIGC_T2_M, 2S=BIGC_T2_SG, 2G=BIGC_T2_G

Performance (STRESS values) for very small colour difference data (VCD)

dataset	Calculations with data for grey surrounds (D65, P40) and 0,1 < Y < 190						Colour difference formula and STRESS value				
	Difference ΔE^*_{LABJND}										
Name	Pairs	ΔE^*_{C85} range	min	max	mean	CIELAB	CMC	CIE94	CIEDE2000	LABJND	
WA_0100	100	0.0 to <99.0	0.19	1.35	0.54	33.2	23.0	30.9	18.0	45.7	
1S_0890	890	0.0 to <99.0	0.1	4.87	1.09	55.2	47.7	44.9	45.3	55.8	
2M_0399	399	0.0 to <99.0	0.09	2.74	0.7	55.2	52.0	46.2	45.4	57.5	
2S_0446	446	0.0 to <99.0	0.07	4.28	1.08	51.8	59.0	46.4	48.7	51.2	
2G_0379	379	0.0 to <99.0	0.08	2.61	0.81	55.6	55.4	48.6	50.3	50.9	
WA_0100	93	0.0 to <5.0	0.19	1.35	0.54	33.0	22.5	31.3	18.1	45.2	
1S_0890	522	0.0 to <5.0	0.1	4.38	0.88	56.5	48.6	42.8	43.7	49.2	
2M_0399	339	0.0 to <5.0	0.09	2.74	0.64	56.4	53.1	45.1	45.1	52.6	
2S_0446	304	0.0 to <5.0	0.07	3.61	0.8	52.9	61.4	48.2	51.2	50.5	
2G_0379	306	0.0 to <5.0	0.08	2.24	0.71	43.5	47.1	40.2	41.2	50.4	
WA_0100	0										
1S_0890	4	0.0 to <0.5	0.16	0.35	0.22	34.0	39.9	33.9	36.4	25.2	
2M_0399	4	0.0 to <0.5	0.1	0.12	0.11	17.1	24.3	17.8	9.3	50.6	
2S_0446	2	0.0 to <0.5	0.07	0.1	0.08	15.4	12.2	15.8	16.3	27.2	
2G_0379	6	0.0 to <0.5	0.08	0.3	0.18	32.7	43.3	31.8	36.1	25.2	
WA_0100	9	0.5 to <1.0	0.19	0.67	0.38	13.8	20.0	14.7	8.5	51.5	
1S_0890	26	0.5 to <1.0	0.1	0.52	0.27	30.7	30.7	30.8	31.9	41.4	
2M_0399	19	0.5 to <1.0	0.11	0.6	0.25	28.9	28.6	29.1	27.4	48.7	
2S_0446	10	0.5 to <1.0	0.11	0.3	0.17	31.5	29.8	31.6	33.8	42.8	
2G_0379	20	0.5 to <1.0	0.12	0.72	0.39	29.5	32.9	29.5	30.6	37.0	
WA_0100	12	1.0 to <1.5	0.29	0.74	0.49	26.5	18.5	27.2	9.0	48.4	
1S_0890	37	1.0 to <1.5	0.16	1.31	0.55	28.3	29.3	28.5	27.0	43.7	
2M_0399	63	1.0 to <1.5	0.09	1.06	0.42	39.4	43.4	39.5	38.5	45.9	
2S_0446	23	1.0 to <1.5	0.12	0.88	0.34	33.0	35.8	32.8	38.5	37.3	
2G_0379	29	1.0 to <1.5	0.11	1.01	0.57	27.4	29.0	27.7	27.7	37.6	
WA_0100	17	1.5 to <2.0	0.34	1.35	0.63	29.4	23.8	30.1	9.8	49.3	
1S_0890	75	1.5 to <2.0	0.18	2.1	0.61	38.3	34.8	35.3	32.8	45.0	
2M_0399	57	1.5 to <2.0	0.18	1.39	0.6	36.6	40.1	36.7	37.3	43.5	
2S_0446	29	1.5 to <2.0	0.16	1.06	0.48	30.3	34.1	30.2	35.1	38.8	
2G_0379	52	1.5 to <2.0	0.18	1.46	0.65	31.7	33.0	32.0	31.3	41.1	
WA_0100	55	2.0 to <5.0	0.3	0.94	0.55	31.9	23.1	27.2	15.2	46.0	
1S_0890	380	2.0 to <5.0	0.23	4.38	1.01	56.1	45.2	40.5	41.5	47.0	
2M_0399	196	2.0 to <5.0	0.24	2.74	0.77	59.7	57.4	48.6	48.9	55.7	
2S_0446	240	2.0 to <5.0	0.19	3.61	0.92	57.5	63.7	50.9	54.3	50.3	
2G_0379	199	2.0 to <5.0	0.21	2.24	0.8	41.5	42.9	37.8	38.4	47.6	

datasets: WA=WANG, 1S=BIGC_T1_SG, 2M=BIGC_T2_M, 2S=BIGC_T2_SG, 2G=BIGC_T2_G