

Performance (STRESS values) for large colour difference data (LCD)										
dataset	Calculations with data for grey surrounds (D65, P40) and 0,1 < Y < 190									
	Difference $\Delta E^*_{CIE\text{LAB}}$					Colour difference formula and STRESS value				
Name	Pairs	ΔE^*_{ab} range	min	max	mean	CIELAB	CMC	CIE94	CIEDE2000	LABJND
OS_0128	128	0.0 to <99.0	7.33	21.63	14.32	24.5	32.8	21.6	22.7	44.2
MU_0844	844	0.0 to <99.0	4.17	22.59	10.05	17.2	31.3	31.3	30.2	54.8
PO_1308	1308	0.0 to <99.0	0.87	26.19	8.9	29.6	38.5	30.6	34.0	40.0
GU= _0292	292	0.0 to <99.0	4.79	20.86	11.42	24.9	34.3	18.8	19.5	42.6
ZH_0144	144	0.0 to <99.0	4.85	19.79	9.91	26.3	47.1	34.5	30.9	36.7
BA_0238	238	0.0 to <99.0	4.11	35.78	11.74	30.6	32.4	20.1	19.2	39.6
RL_0080	80	0.0 to <99.0	1.38	36.6	11.11	47.4	66.5	56.2	53.8	52.8
KL_0624	624	0.0 to <99.0	1.91	43.77	21.21	25.0	43.1	33.1	28.8	36.5
OS_0128	0									
MU_0844	17	0.0 to <5.0	4.17	4.97	4.63	22.7	19.1	21.6	35.0	22.6
PO_1308	268	0.0 to <5.0	0.87	4.99	3.36	25.7	32.6	26.1	31.1	34.3
GU= _0292	1	0.0 to <5.0	4.79	4.79	4.79	0.1	0.1	0.1	0.1	0.1
ZH_0144	3	0.0 to <5.0	4.85	4.96	4.91	12.3	35.0	12.3	4.6	12.9
BA_0238	8	0.0 to <5.0	4.11	4.92	4.63	10.7	19.2	10.7	20.0	6.6
RL_0080	13	0.0 to <5.0	1.38	4.93	3.27	27.0	45.8	45.3	39.5	42.5
KL_0624	6	0.0 to <5.0	1.91	4.88	3.23	14.1	14.0	14.1	11.8	5.3
OS_0128	9	5.0 to <10.0	7.33	9.86	8.71	10.0	8.7	11.3	12.5	15.6
MU_0844	411	5.0 to <10.0	5.01	9.99	8.58	18.5	25.0	26.5	25.1	54.8
PO_1308	567	5.0 to <10.0	5.01	9.99	7.44	24.7	32.9	24.8	28.9	35.7
GU= _0292	95	5.0 to <10.0	5.33	9.97	8.64	15.1	30.0	21.8	22.9	27.5
ZH_0144	70	5.0 to <10.0	5.0	9.98	7.4	27.7	47.6	33.8	32.5	29.7
BA_0238	33	5.0 to <10.0	5.0	9.96	7.09	28.1	13.9	24.7	16.5	55.6
RL_0080	27	5.0 to <10.0	5.14	9.99	7.54	37.1	50.6	49.6	48.6	39.7
KL_0624	68	5.0 to <10.0	5.02	9.99	8.08	17.7	24.8	17.6	17.6	36.2
OS_0128	115	10.0 to <20.0	10.2	19.7	14.54	23.7	32.2	21.9	23.3	36.8
MU_0844	412	10.0 to <20.0	10.0	19.34	11.63	18.5	25.0	26.5	25.1	54.7
PO_1308	460	10.0 to <20.0	10.02	19.87	13.55	23.9	32.5	24.6	28.9	33.1
GU= _0292	195	10.0 to <20.0	10.01	18.64	12.76	18.2	30.1	22.5	23.3	30.7
ZH_0144	71	10.0 to <20.0	10.02	19.79	12.59	27.5	47.7	33.8	32.5	29.5
BA_0238	191	10.0 to <20.0	10.11	19.3	12.39	26.1	33.5	19.8	19.6	41.2
RL_0080	33	10.0 to <20.0	10.1	19.9	14.34	41.6	50.7	50.8	48.2	40.8
KL_0624	211	10.0 to <20.0	10.0	19.95	14.86	21.0	34.4	28.9	25.4	33.0
OS_0128	4	20.0 to <99.0	20.01	21.63	20.85	3.8	12.6	15.7	16.8	20.5
MU_0844	4	20.0 to <99.0	20.81	22.59	21.89	26.7	18.9	27.1	43.8	16.6
PO_1308	13	20.0 to <99.0	20.02	26.19	22.77	28.8	42.7	31.5	37.4	26.5
GU= _0292	1	20.0 to <99.0	20.86	20.86	20.86	0.1	0.1	0.1	0.1	0.1
ZH_0144	0									
BA_0238	6	20.0 to <99.0	20.19	35.78	26.08	4.7	19.6	4.7	13.3	5.2
RL_0080	7	20.0 to <99.0	20.07	36.6	24.25	24.1	27.9	25.4	24.4	19.9
KL_0624	339	20.0 to <99.0	20.06	43.77	28.11	22.2	39.5	31.4	26.8	35.7
OS_0128	128	5.0 to <99.0	7.33	21.63	14.32	24.5	32.8	21.6	22.7	44.2
MU_0844	827	5.0 to <99.0	5.01	22.59	10.16	17.3	31.3	31.3	30.1	54.3
PO_1308	1040	5.0 to <99.0	5.01	26.19	10.33	24.9	36.2	27.5	32.7	36.3
GU= _0292	291	5.0 to <99.0	5.33	20.86	11.44	24.8	34.4	18.7	19.5	42.6
ZH_0144	141	5.0 to <99.0	5.0	19.79	10.01	26.1	47.4	34.5	30.9	36.7
BA_0238	230	5.0 to <99.0	5.0	35.78	11.98	27.9	32.6	19.3	18.7	39.0
RL_0080	67	5.0 to <99.0	5.14	36.6	12.63	43.7	63.7	55.1	49.8	50.2
KL_0624	618	5.0 to <99.0	5.02	43.77	21.38	25.1	43.2	33.3	29.0	36.5
datasets: OS=OSA, MU_0844, PO_1308, GU= _0292, ZH_0144, BA_0238, RL_0080, KL_0624										

Performance (STRESS values) for large colour difference data (LCD)										
dataset	Calculations with data for grey surrounds (D65, P40) and 0,1 < Y < 190									
	Difference $\Delta E^*_{CIEDE2000}$					Colour difference formula and STRESS value				
Name	Pairs	ΔE^*_{C00} range	min	max	mean	CIELAB	CMC	CIE94	CIEDE2000	LABJND
OS_0128	128	0.0 to <99.0	7.33	21.63	14.32	24.5	32.8	21.6	22.7	44.2
MU_0844	844	0.0 to <99.0	4.17	22.59	10.05	17.2	31.3	31.3	30.2	54.8
PO_1308	1308	0.0 to <99.0	0.87	26.19	8.9	29.6	38.5	30.6	34.0	40.0
GU= _0292	292	0.0 to <99.0	4.79	20.86	11.42	24.9	34.3	18.8	19.5	42.6
ZH_0144	144	0.0 to <99.0	4.85	19.79	9.91	26.3	47.1	34.5	30.9	36.7
BA_0238	238	0.0 to <99.0	4.11	35.78	11.74	30.6	32.4	20.1	19.2	39.6
RL_0080	80	0.0 to <99.0	1.38	36.6	11.11	47.4	66.5	56.2	53.8	52.8
KL_0624	624	0.0 to <99.0	1.91	43.77	21.21	25.0	43.1	33.1	28.8	36.5
OS_0128	6	0.0 to <5.0	7.33	14.28	9.61	9.9	10.6	13.4	15.0	19.1
MU_0844	230	0.0 to <5.0	4.17	15.18	8.58	22.9	24.2	20.6	27.0	29.0
PO_1308	549	0.0 to <5.0	0.87	12.69	5.2	24.6	32.7	24.8	28.9	35.6
GU= _0292	35	0.0 to <5.0	4.79	15.27	9.73	13.7	21.4	17.5	18.8	13.5
ZH_0144	73	0.0 to <5.0	4.85	16.42	8.06	27.2	48.4	34.0	32.8	29.1
BA_0238	37	0.0 to <5.0	4.11	20.19	8.24	26.6	13.8	24.4	16.4	54.4
RL_0080	34	0.0 to <5.0	1.38	20.07	7.45	41.3	50.3	50.4	47.8	40.4
KL_0624	42	0.0 to <5.0	1.91	15.72	8.18	20.6	30.6	20.4	18.1	37.4
OS_0128	83	5.0 to <10.0	8.75	21.63	14.43	24.4	31.8	23.7	23.3	28.2
MU_0844	527	5.0 to <10.0	4.74	19.17	10.37	16.5	26.0	24.8	23.1	49.5
PO_1308	535	5.0 to <10.0	4.12	20.02	10.2	24.4	32.5	24.6	28.7	35.6
GU= _0292	186	5.0 to <10.0	6.31	20.86	11.14	17.9	29.7	22.6	23.3	30.3
ZH_0144	60	5.0 to <10.0	6.3	16.88	11.11	30.1	47.9	34.4	32.1	32.0
BA_0238	150	5.0 to <10.0	5.12	29.29	11.67	23.5	29.6	19.4	17.7	42.2
RL_0080	33	5.0 to <10.0	6.44	24.29	12.62	41.6	50.7	50.8	48.2	40.8
KL_0624	140	5.0 to <10.0	5.68	29.88	12.74	17.9	29.0	23.6	21.9	33.2
OS_0128	39	10.0 to <20.0	10.63	20.68	14.83	21.5	25.4	24.7	21.1	28.8
MU_0844	87	10.0 to <20.0	10.12	22.59	12.04	20.9	24.1	18.1	27.7	27.3
PO_1308	221	10.0 to <20.0	7.82	25.81	14.74	26.0	34.2	26.5	32.0	34.4
GU= _0292	71	10.0 to <20.0	9.25	18.64	13.0	14.9	30.4	23.9	25.1	22.6
ZH_0144	11	10.0 to <20.0	10.34	19.79	15.66	28.3	40.4	27.0	18.6	36.4
BA_0238	51	10.0 to <20.0	9.83	35.78	14.46	25.6	13.7	23.0	16.2	55.1
RL_0080	12	10.0 to <20.0	9.99	26.36	15.23	29.4	47.8	47.6	42.9	46.1
KL_0624	303	10.0 to <20.0	10.79	41.13	22.54	21.8	38.3	31.4	26.4	35.2
OS_0128	0									
MU_0844	0									
PO_1308	3	20.0 to <99.0	24.26	26.19	25.31	19.6	29.6	25.6	27.7	28.4
GU= _0292	0									
ZH_0144	0									
BA_0238	0									
RL_0080	1	20.0 to <99.0	36.6	36.6	36.6	0.1	0.1	0.1	0.1	0.1
KL_0624	139	20.0 to <99.0	23.23	43.77	30.77	17.8	28.3	23.2	21.6	33.3
OS_0128	122	5.0 to <99.0	8.75	21.63	14.55	24.4	33.4	21.4	22.7	38.7
MU_0844	614	5.0 to <99.0	4.74	22.59	10.6	15.9	27.4	25.8	24.4	47.8
PO_1308	759	5.0 to <99.0	4.12	26.19	11.58	25.5	36.1	26.9	31.6	36.2
GU= _0292	257	5.0 to <99.0	6.31	20.86	11.65	24.1	34.3	19.2	20.5	44.3
ZH_0144	71	5.0 to <99.0	6.3	19.79	11.81	27.5	47.7	33.8	32.5	29.5
BA_0238	201	5.0 to <99.0	5.12	35.78	12.38	27.2	33.8	20.0	19.7	41.0
RL_0080	46	5.0 to <99.0	6.44	36.6	13.82	40.9	66.3	63.1	55.4	48.1
KL_0624	582	5.0 to <99.0	5.68	43.77	22.15	25.2	43.6	33.4	29.2	36.9
datasets: OS=OSA, MU_0844, PO_1308, GU= _0292, ZH_0144, BA_0238, RL_0080, KL_0624										

Performance (STRESS values) for large colour difference data (LCD)

dataset	Calculations with data for grey surrounds (D65, P40) and 0,1 < Y < 190									
	Difference ΔE^*_{LABJND}					Colour difference formula and STRESS value				
Name	Pairs	ΔE^*_{C85} range	min	max	mean	CIELAB	CMC	CIE94	CIEDE2000	LABJND
OS_0128	116	0.0 to <99.0	7.33	21.63	14.23	23.8	32.4	22.1	23.3	37.1
MU_0844	701	0.0 to <99.0	4.17	22.59	9.95	15.9	30.5	29.7	28.3	50.8
PO_1308	1283	0.0 to <99.0	0.87	25.81	8.7	29.4	38.4	30.5	34.0	39.9
GU= _0292	242	0.0 to <99.0	4.79	20.86	11.37	23.1	33.5	20.2	21.4	45.3
ZH_0144	141	0.0 to <99.0	4.85	19.79	9.82	26.1	47.4	34.5	30.9	36.7
BA_0238	212	0.0 to <99.0	4.11	35.78	11.38	27.5	33.9	19.4	19.2	40.1
RL_0080	76	0.0 to <99.0	1.38	36.6	10.81	47.9	66.8	56.4	53.8	51.5
KL_0624	273	0.0 to <99.0	1.91	41.4	16.6	22.3	37.7	31.4	26.6	34.9
OS_0128	0									
MU_0844	0									
PO_1308	16	0.0 to <5.0	0.87	2.94	1.71	34.4	43.3	34.7	40.7	29.7
GU= _0292	0									
ZH_0144	0									
BA_0238	0									
RL_0080	0									
KL_0624	0									
OS_0128	0									
MU_0844	2	5.0 to <10.0	4.69	5.26	4.97	24.4	18.8	24.8	34.0	1.2
PO_1308	52	5.0 to <10.0	1.12	7.58	3.13	32.4	39.4	33.1	39.5	30.1
GU= _0292	1	5.0 to <10.0	7.57	7.57	7.57	0.1	0.1	0.1	0.1	0.1
ZH_0144	1	5.0 to <10.0	7.55	7.55	7.55	0.1	0.1	0.1	0.1	0.1
BA_0238	0									
RL_0080	4	5.0 to <10.0	2.31	7.44	5.14	26.6	15.7	16.8	16.1	27.2
KL_0624	0									
OS_0128	4	10.0 to <20.0	7.33	10.69	9.1	3.8	12.6	15.7	16.8	20.5
MU_0844	133	10.0 to <20.0	4.42	15.18	8.88	22.4	25.1	21.0	29.7	27.5
PO_1308	259	10.0 to <20.0	1.31	10.26	4.9	26.0	33.1	26.5	31.5	34.7
GU= _0292	34	10.0 to <20.0	5.33	14.0	9.25	13.4	20.8	17.9	19.2	13.8
ZH_0144	31	10.0 to <20.0	4.85	12.61	7.58	35.4	41.2	29.0	29.4	39.8
BA_0238	28	10.0 to <20.0	5.12	20.19	9.63	31.7	14.6	26.9	17.4	54.4
RL_0080	20	10.0 to <20.0	1.38	20.72	7.98	35.2	44.9	42.3	39.6	37.2
KL_0624	6	10.0 to <20.0	1.91	8.58	6.39	14.1	14.0	14.1	11.8	5.3
OS_0128	112	20.0 to <99.0	7.51	21.63	14.42	23.6	31.1	22.3	22.9	36.8
MU_0844	566	20.0 to <99.0	4.17	22.59	10.22	15.9	26.2	24.2	22.6	48.0
PO_1308	956	20.0 to <99.0	2.11	25.81	10.15	24.9	35.2	27.1	32.5	36.3
GU= _0292	207	20.0 to <99.0	4.79	20.86	11.74	19.9	31.2	21.8	22.8	38.5
ZH_0144	109	20.0 to <99.0	4.92	19.79	10.48	24.6	48.4	34.0	32.0	31.9
BA_0238	184	20.0 to <99.0	4.11	35.78	11.65	25.8	33.9	20.1	19.7	41.4
RL_0080	52	20.0 to <99.0	2.51	36.6	12.33	40.7	65.7	62.3	54.8	48.2
KL_0624	267	20.0 to <99.0	2.02	41.4	16.83	22.0	37.4	31.2	26.6	35.0
OS_0128	116	5.0 to <99.0	7.33	21.63	14.23	23.8	32.4	22.1	23.3	37.1
MU_0844	701	5.0 to <99.0	4.17	22.59	9.95	15.9	30.5	29.7	28.3	50.8
PO_1308	1267	5.0 to <99.0	1.12	25.81	8.79	28.9	38.0	30.1	33.7	39.9
GU= _0292	242	5.0 to <99.0	4.79	20.86	11.37	23.1	33.5	20.2	21.4	45.3
ZH_0144	141	5.0 to <99.0	4.85	19.79	9.82	26.1	47.4	34.5	30.9	36.7
BA_0238	212	5.0 to <99.0	4.11	35.78	11.38	27.5	33.9	19.4	19.2	40.1
RL_0080	76	5.0 to <99.0	1.38	36.6	10.81	47.9	66.8	56.4	53.8	51.5
KL_0624	273	5.0 to <99.0	1.91	41.4	16.6	22.3	37.7	31.4	26.6	34.9

datasets: OS=OSA, MU_0844, PO_1308, GU= _0292, ZH_0144, BA_0238, RL_0080, KL_0624