

Performance (STRESS values) for Small Colour Difference data (SCD)

data set	Calculations with data for grey backgrounds (chromaticity near D65)						Colour difference formula and STRESS value				
	Colour difference $\Delta E^*_{\text{CIELAB}}$						CIELAB	CMC	CIE94	CIEDE2000	LABJND
Name	Pairs	ΔE^*_{ab} range	min	max	mean	ΔE^*_{ab}	ΔE^*_{CM}	ΔE^*_{94}	ΔE^*_{00}	ΔE^*_{85}	
WI_0418	418	0.0 to <99.0	0.11	10.62	1.86	51.7	35.0	31.6	30.1	55.1	
RD_0312	312	0.0 to <99.0	0.77	4.4	1.43	33.4	27.3	20.3	19.5	38.3	
LE_0307	307	0.0 to <99.0	0.39	4.73	1.63	40.0	24.8	30.4	19.2	45.1	
BF_2776	2776	0.0 to <99.0	0.03	18.2	3.0	42.4	30.6	33.7	29.5	52.9	
SS_0446	446	0.0 to <99.0	0.17	7.97	3.03	42.1	31.7	28.7	29.3	45.8	
WI_0418	126	0.0 to <1.0	0.11	0.99	0.62	44.0	32.3	29.5	28.0	55.8	
RD_0312	48	0.0 to <1.0	0.77	0.99	0.92	6.2	21.8	10.8	17.4	32.0	
LE_0307	52	0.0 to <1.0	0.39	0.99	0.79	26.4	24.0	26.2	19.5	48.8	
BF_2776	546	0.0 to <1.0	0.03	0.99	0.53	49.4	42.3	42.9	41.5	55.8	
SS_0446	37	0.0 to <1.0	0.17	0.96	0.71	33.0	43.1	41.6	38.7	55.9	
WI_0418	274	0.0 to <2.0	0.11	1.99	1.07	45.3	32.8	30.4	27.9	57.1	
RD_0312	280	0.0 to <2.0	0.77	1.94	1.31	21.7	27.8	19.0	18.6	37.0	
LE_0307	232	0.0 to <2.0	0.39	1.99	1.34	34.0	24.0	29.8	18.7	46.5	
BF_2776	1154	0.0 to <2.0	0.03	1.99	1.06	38.5	33.7	33.8	30.0	56.8	
SS_0446	130	0.0 to <2.0	0.17	1.99	1.3	38.7	37.7	39.6	34.8	56.7	
WI_0418	38	0.0 to <0.5	0.11	0.49	0.36	41.6	35.9	31.7	29.9	55.9	
RD_0312	0										
LE_0307	3	0.0 to <0.5	0.39	0.42	0.4	25.2	30.2	35.5	28.1	35.6	
BF_2776	253	0.0 to <0.5	0.03	0.49	0.32	59.7	56.9	56.7	54.6	63.0	
SS_0446	7	0.0 to <0.5	0.17	0.48	0.38	23.2	41.3	38.1	44.5	42.9	
WI_0418	88	0.5 to <1.0	0.51	0.99	0.74	43.3	30.2	27.6	25.5	55.4	
RD_0312	48	0.5 to <1.0	0.77	0.99	0.92	6.2	21.8	10.8	17.4	32.0	
LE_0307	49	0.5 to <1.0	0.52	0.99	0.81	26.3	23.6	26.0	19.0	48.9	
BF_2776	293	0.5 to <1.0	0.5	0.99	0.72	46.4	37.6	38.5	37.3	53.9	
SS_0446	30	0.5 to <1.0	0.57	0.96	0.79	27.7	39.5	37.8	33.8	54.5	
WI_0418	91	1.0 to <1.5	1.01	1.49	1.26	43.7	31.8	28.8	26.9	56.9	
RD_0312	148	1.0 to <1.5	1.0	1.49	1.23	11.8	28.8	16.5	18.2	37.0	
LE_0307	89	1.0 to <1.5	1.0	1.49	1.25	28.2	23.6	23.7	15.8	47.7	
BF_2776	266	1.0 to <1.5	1.0	1.49	1.26	38.0	30.2	31.2	27.8	58.3	
SS_0446	41	1.0 to <1.5	1.0	1.49	1.26	34.6	30.4	31.2	29.4	49.1	
WI_0418	57	1.5 to <2.0	1.51	1.99	1.74	43.2	29.1	26.4	23.3	55.3	
RD_0312	84	1.5 to <2.0	1.5	1.94	1.67	6.5	24.1	19.2	17.0	38.3	
LE_0307	91	1.5 to <2.0	1.5	1.99	1.75	25.6	20.1	26.7	14.7	38.9	
BF_2776	342	1.5 to <2.0	1.5	1.99	1.75	33.4	32.0	31.2	26.5	55.7	
SS_0446	52	1.5 to <2.0	1.5	1.99	1.74	24.8	29.8	30.7	26.0	49.5	

data sets: WI=WITT, RD=RIT-DUPONT, LE=LEEDS, BF=BFD-P, SS=BIGC-S-SG

Performance (STRESS values) for Small Colour Difference data (SCD)

data set	Calculations with data for grey backgrounds (chromaticity near D65)									
	Colour difference $\Delta E^*_{CIEDE2000}$					Colour difference formula and STRESS value				
Name	Pairs	ΔE^*_{C00} range	min	max	mean	CIELAB ΔE^*	CMC ΔE^*	CIE94 ΔE^*	CIEDE2000 ΔE^*	LABJND ΔE^*
WI_0418	418	0.0 to <99.0	0.11	10.62	1.86	51.7	35.0	31.6	30.1	55.1
RD_0312	312	0.0 to <99.0	0.77	4.4	1.43	33.4	27.3	20.3	19.5	38.3
LE_0307	307	0.0 to <99.0	0.39	4.73	1.63	40.0	24.8	30.4	19.2	45.1
BF_2776	2776	0.0 to <99.0	0.03	18.2	3.0	42.4	30.6	33.7	29.5	52.9
SS_0446	446	0.0 to <99.0	0.17	7.97	3.03	42.1	31.7	28.7	29.3	45.8
WI_0418	221	0.0 to <1.0	0.11	3.69	1.08	57.1	46.0	41.7	34.5	61.6
RD_0312	184	0.0 to <1.0	0.77	3.21	1.29	26.0	26.9	16.1	9.3	33.2
LE_0307	128	0.0 to <1.0	0.39	2.94	1.37	43.0	25.3	26.8	22.1	42.9
BF_2776	815	0.0 to <1.0	0.03	4.13	0.92	51.0	40.9	39.7	38.4	51.2
SS_0446	110	0.0 to <1.0	0.17	3.9	1.46	49.6	38.5	38.2	35.0	51.7
WI_0418	386	0.0 to <2.0	0.11	5.72	1.68	51.8	37.0	33.5	30.6	55.7
RD_0312	312	0.0 to <2.0	0.77	4.4	1.43	33.4	27.3	20.3	19.5	38.3
LE_0307	305	0.0 to <2.0	0.39	4.73	1.62	40.3	25.0	30.6	19.1	45.4
BF_2776	1851	0.0 to <2.0	0.03	7.84	1.84	43.8	31.2	32.2	27.5	53.2
SS_0446	313	0.0 to <2.0	0.17	6.65	2.39	46.7	35.3	34.0	31.9	51.2
WI_0418	94	0.0 to <0.5	0.11	1.67	0.65	55.8	47.9	43.8	35.5	61.5
RD_0312	0	0.0 to <0.5	0.39	0.67	0.53	32.6	29.3	36.5	27.0	32.2
LE_0307	10	0.0 to <0.5	0.03	2.09	0.48	58.4	52.6	52.3	50.9	58.0
BF_2776	417	0.0 to <0.5	0.03	2.09	0.48	58.4	52.6	52.3	50.9	58.0
SS_0446	23	0.0 to <0.5	0.17	1.79	0.76	50.4	44.3	43.0	35.9	50.8
WI_0418	127	0.5 to <1.0	0.44	3.69	1.4	57.1	45.4	40.9	33.5	61.6
RD_0312	184	0.5 to <1.0	0.77	3.21	1.29	26.0	26.9	16.1	9.3	33.2
LE_0307	118	0.5 to <1.0	0.52	2.94	1.44	41.9	23.6	25.7	20.8	42.8
BF_2776	398	0.5 to <1.0	0.35	4.13	1.38	49.3	38.3	36.8	35.5	49.7
SS_0446	87	0.5 to <1.0	0.48	3.9	1.64	46.4	33.0	33.6	30.0	49.7
WI_0418	102	1.0 to <1.5	0.76	5.67	2.18	52.3	37.0	34.1	29.5	57.0
RD_0312	122	1.0 to <1.5	0.79	4.4	1.61	34.2	19.7	16.9	10.1	45.0
LE_0307	147	1.0 to <1.5	0.85	3.67	1.7	39.4	23.7	30.1	17.1	48.0
BF_2776	606	1.0 to <1.5	0.81	6.06	2.31	45.5	31.4	31.0	25.9	53.6
SS_0446	124	1.0 to <1.5	0.83	5.15	2.58	42.3	30.1	31.1	24.5	53.0
WI_0418	63	1.5 to <2.0	1.17	5.72	3.0	47.5	29.4	25.9	27.1	48.1
RD_0312	6	1.5 to <2.0	1.35	3.64	2.39	31.4	15.3	8.8	8.9	31.9
LE_0307	30	1.5 to <2.0	1.25	4.73	2.3	37.1	24.8	27.9	14.1	28.9
BF_2776	430	1.5 to <2.0	1.1	7.84	2.93	39.2	26.4	29.5	22.7	53.0
SS_0446	79	1.5 to <2.0	1.67	6.65	3.4	44.6	30.2	25.6	25.1	43.6

data sets: WI=WITT, RD=RIT-DUPONT, LE=LEEDS, BF=BFD-P, SS=BIGC-S-SG

Performance (STRESS values) for Small Colour Difference data (SCD)

data set	Calculations with data for grey backgrounds (chromaticity near D65)									
	Colour difference $\Delta E^*_{\text{LABJND}}$					Colour difference formula and <i>STRESS</i> value				
Name	Pairs	ΔE^*_{C85} range	min	max	mean	CIELAB ΔE^*	CMC ΔE^*	CIE94 ΔE^*	CIEDE2000 ΔE^*	LABJND ΔE^*
WI_0418	418	0.0 to <99.0	0.11	10.62	1.86	51.7	35.0	31.6	30.1	55.1
RD_0312	312	0.0 to <99.0	0.77	4.4	1.43	33.4	27.3	20.3	19.5	38.3
LE_0307	307	0.0 to <99.0	0.39	4.73	1.63	40.0	24.8	30.4	19.2	45.1
BF_2776	2776	0.0 to <99.0	0.03	18.2	3.0	42.4	30.6	33.7	29.5	52.9
SS_0446	446	0.0 to <99.0	0.17	7.97	3.03	42.1	31.7	28.7	29.3	45.8
WI_0418	8	0.0 to <1.0	0.11	0.56	0.31	50.2	36.7	31.3	32.5	34.7
RD_0312	0									
LE_0307	0									
BF_2776	65	0.0 to <1.0	0.03	1.5	0.27	71.0	63.2	64.7	64.7	68.8
SS_0446	1	0.0 to <1.0	0.41	0.41	0.41	0.1	0.1	0.1	0.1	0.1
WI_0418	46	0.0 to <2.0	0.11	1.12	0.6	45.8	30.6	23.7	27.6	47.7
RD_0312	4	0.0 to <2.0	0.86	1.02	0.94	7.9	11.4	9.0	9.7	5.9
LE_0307	0									
BF_2776	239	0.0 to <2.0	0.03	2.57	0.43	61.6	45.5	46.9	45.0	60.4
SS_0446	7	0.0 to <2.0	0.17	0.84	0.61	45.9	50.7	40.3	46.7	34.1
WI_0418	0									
RD_0312	0									
LE_0307	0									
BF_2776	12	0.0 to <0.5	0.03	0.33	0.14	73.3	72.5	71.1	74.4	62.0
SS_0446	0									
WI_0418	8	0.5 to <1.0	0.11	0.56	0.31	50.2	36.7	31.3	32.5	34.7
RD_0312	0									
LE_0307	0									
BF_2776	53	0.5 to <1.0	0.05	1.5	0.3	70.3	61.9	63.7	63.4	68.6
SS_0446	1	0.5 to <1.0	0.41	0.41	0.41	0.1	0.1	0.1	0.1	0.1
WI_0418	18	1.0 to <1.5	0.23	1.03	0.61	45.2	30.5	22.3	25.8	45.3
RD_0312	0									
LE_0307	0									
BF_2776	92	1.0 to <1.5	0.11	1.72	0.41	60.7	45.7	47.6	45.0	60.9
SS_0446	3	1.0 to <1.5	0.17	0.84	0.6	41.4	35.1	36.3	41.7	14.2
WI_0418	20	1.5 to <2.0	0.24	1.12	0.72	45.3	23.3	19.3	20.9	49.6
RD_0312	4	1.5 to <2.0	0.86	1.02	0.94	7.9	11.4	9.0	9.7	5.9
LE_0307	0									
BF_2776	82	1.5 to <2.0	0.17	2.57	0.57	56.3	32.7	34.0	31.3	53.3
SS_0446	3	1.5 to <2.0	0.43	0.81	0.68	48.0	54.0	38.5	46.8	24.3

data sets: WI=WITT, RD=RIT-DUPONT, LE=LEEDS, BF=BFD-P, SS=BIGC-S-SG