

Performance (STRESS values) for small colour difference data (SCD)

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
WI_0418	418	0.0 to <99.0	0.11	10.62	1.86	51.7	39.5	31.6	33.7	55.1
RD_0312	312	0.0 to <99.0	0.77	4.4	1.43	33.4	31.7	20.3	20.5	38.3
LE_0307	307	0.0 to <99.0	0.39	4.73	1.63	40.0	28.3	30.4	21.4	45.1
BF_2776	2776	0.0 to <99.0	0.03	18.2	3.0	42.4	32.6	33.7	31.0	52.9
SS_0446	446	0.0 to <99.0	0.17	7.97	3.03	42.1	33.2	28.7	28.8	45.8
WI_0418	400	0.0 to <5.0	0.11	4.94	1.67	51.9	38.8	31.9	33.8	55.7
RD_0312	312	0.0 to <5.0	0.77	4.4	1.43	33.4	31.7	20.3	20.5	38.3
LE_0307	307	0.0 to <5.0	0.39	4.73	1.63	40.0	28.3	30.4	21.4	45.1
BF_2776	2325	0.0 to <5.0	0.03	4.99	2.14	42.5	32.6	33.6	31.0	52.8
SS_0446	385	0.0 to <5.0	0.17	4.96	2.57	42.2	34.3	29.1	29.3	46.4
WI_0418	38	0.0 to <0.5	0.11	0.49	0.36	51.4	33.8	29.1	22.7	52.4
RD_0312	0									
LE_0307	3	0.0 to <0.5	0.39	0.42	0.4	36.3	28.9	35.2	27.2	37.5
BF_2776	253	0.0 to <0.5	0.03	0.49	0.32	43.9	32.0	23.6	21.6	37.3
SS_0446	7	0.0 to <0.5	0.17	0.48	0.38	33.5	37.4	33.9	34.5	35.9
WI_0418	88	0.5 to <1.0	0.51	0.99	0.74	57.7	37.8	33.1	30.3	55.4
RD_0312	48	0.5 to <1.0	0.77	0.99	0.92	32.3	27.3	16.8	19.1	38.3
LE_0307	49	0.5 to <1.0	0.52	0.99	0.81	44.7	41.8	29.2	26.7	36.1
BF_2776	293	0.5 to <1.0	0.5	0.99	0.72	46.6	34.1	27.1	27.3	49.3
SS_0446	30	0.5 to <1.0	0.57	0.96	0.79	32.1	36.6	33.4	33.1	34.9
WI_0418	91	1.0 to <1.5	1.01	1.49	1.26	57.7	37.7	32.9	30.2	55.2
RD_0312	148	1.0 to <1.5	1.0	1.49	1.23	30.5	32.3	19.7	21.3	38.3
LE_0307	89	1.0 to <1.5	1.0	1.49	1.25	44.9	36.4	27.8	24.5	39.6
BF_2776	266	1.0 to <1.5	1.0	1.49	1.26	47.1	34.0	27.3	27.8	49.2
SS_0446	41	1.0 to <1.5	1.0	1.49	1.26	31.1	35.4	31.9	31.2	36.0
WI_0418	57	1.5 to <2.0	1.51	1.99	1.74	56.4	34.9	28.5	23.6	53.6
RD_0312	84	1.5 to <2.0	1.5	1.94	1.67	30.5	27.3	16.4	18.8	38.5
LE_0307	91	1.5 to <2.0	1.5	1.99	1.75	45.5	36.3	28.5	24.7	40.3
BF_2776	342	1.5 to <2.0	1.5	1.99	1.75	47.8	34.1	26.9	26.8	48.9
SS_0446	52	1.5 to <2.0	1.5	1.99	1.74	29.5	34.7	29.7	29.2	34.7
WI_0418	18	5.0 to <99.0	5.03	10.62	6.15	45.8	30.1	29.9	25.6	43.6
RD_0312	0									
LE_0307	0									
BF_2776	451	5.0 to <99.0	5.0	18.2	7.43	46.9	32.9	27.7	25.7	50.6
SS_0446	61	5.0 to <99.0	5.0	7.97	5.93	30.1	34.3	28.7	28.5	35.4

datasets: WI=WITT, RD=RIT_DUPONT, LE=LEEDS, BF=BFD_ALL, SS=BIGC_SSG

Performance (STRESS values) for small colour difference data (SCD)

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
WI_0418	418	0.0 to <99.0	0.11	10.62	1.86	51.7	39.5	31.6	33.7	55.1
RD_0312	312	0.0 to <99.0	0.77	4.4	1.43	33.4	31.7	20.3	20.5	38.3
LE_0307	307	0.0 to <99.0	0.39	4.73	1.63	40.0	28.3	30.4	21.4	45.1
BF_2776	2776	0.0 to <99.0	0.03	18.2	3.0	42.4	32.6	33.7	31.0	52.9
SS_0446	446	0.0 to <99.0	0.17	7.97	3.03	42.1	33.2	28.7	28.8	45.8
WI_0418	418	0.0 to <5.0	0.11	10.62	1.86	51.7	39.5	31.6	33.7	55.1
RD_0312	312	0.0 to <5.0	0.77	4.4	1.43	33.4	31.7	20.3	20.5	38.3
LE_0307	307	0.0 to <5.0	0.39	4.73	1.63	40.0	28.3	30.4	21.4	45.1
BF_2776	2705	0.0 to <5.0	0.03	16.07	2.81	42.4	32.6	33.7	31.0	52.9
SS_0446	443	0.0 to <5.0	0.17	7.97	3.01	42.1	33.1	28.5	28.6	45.8
WI_0418	83	0.0 to <0.5	0.11	1.21	0.58	58.6	38.5	33.1	30.4	52.7
RD_0312	0									
LE_0307	10	0.0 to <0.5	0.39	0.67	0.53	32.6	28.1	36.5	27.0	32.2
BF_2776	412	0.0 to <0.5	0.03	2.09	0.47	47.1	34.2	26.6	26.5	47.8
SS_0446	22	0.0 to <0.5	0.17	1.35	0.71	35.9	39.4	35.9	36.7	38.8
WI_0418	123	0.5 to <1.0	0.44	3.69	1.26	56.7	41.9	33.8	32.4	57.8
RD_0312	176	0.5 to <1.0	0.77	2.38	1.27	33.9	32.0	20.7	21.2	38.5
LE_0307	115	0.5 to <1.0	0.52	2.5	1.37	43.9	33.3	26.4	23.9	41.9
BF_2776	395	0.5 to <1.0	0.35	3.77	1.34	46.9	34.1	26.2	26.3	47.7
SS_0446	83	0.5 to <1.0	0.48	3.2	1.58	39.8	34.6	28.3	28.5	35.1
WI_0418	107	1.0 to <1.5	0.76	4.45	2.09	57.2	41.2	32.8	30.9	53.4
RD_0312	128	1.0 to <1.5	0.79	4.4	1.59	31.4	31.9	18.2	19.2	37.6
LE_0307	144	1.0 to <1.5	0.85	3.67	1.69	42.8	32.7	26.9	23.0	45.5
BF_2776	579	1.0 to <1.5	0.81	6.06	2.24	39.6	27.6	25.4	22.6	47.2
SS_0446	120	1.0 to <1.5	0.83	5.15	2.5	49.2	32.5	27.8	28.2	37.9
WI_0418	69	1.5 to <2.0	1.17	5.72	2.98	59.4	38.8	32.4	29.4	51.9
RD_0312	8	1.5 to <2.0	1.35	3.64	2.6	45.5	33.9	31.8	33.9	44.0
LE_0307	31	1.5 to <2.0	1.25	3.42	2.22	49.3	37.3	33.8	29.2	36.8
BF_2776	436	1.5 to <2.0	1.1	7.84	2.9	47.3	33.6	28.2	26.2	51.4
SS_0446	85	1.5 to <2.0	1.67	6.65	3.38	40.5	33.6	27.8	27.7	34.1
WI_0418	0									
RD_0312	0									
LE_0307	0									
BF_2776	71	5.0 to <99.0	3.61	18.2	10.22	38.9	23.9	22.4	21.3	29.8
SS_0446	3	5.0 to <99.0	5.35	7.13	6.19	19.6	16.0	10.7	11.4	8.2

datasets: WI=WITT, RD=RIT_DUPONT, LE=LEEDS, BF=BFD_ALL, SS=BIGC_SSG

Performance (STRESS values) for small colour difference data (SCD)

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	
WI_0418	418	0.0 to <99.0	0.11	10.62	1.86	51.7	39.5	31.6	33.7	55.1	
RD_0312	312	0.0 to <99.0	0.77	4.4	1.43	33.4	31.7	20.3	20.5	38.3	
LE_0307	307	0.0 to <99.0	0.39	4.73	1.63	40.0	28.3	30.4	21.4	45.1	
BF_2776	2776	0.0 to <99.0	0.03	18.2	3.0	42.4	32.6	33.7	31.0	52.9	
SS_0446	446	0.0 to <99.0	0.17	7.97	3.03	42.1	33.2	28.7	28.8	45.8	
WI_0418	189	0.0 to <5.0	0.11	4.39	1.11	54.5	40.0	33.2	32.9	57.9	
RD_0312	87	0.0 to <5.0	0.79	4.4	1.56	30.3	29.4	16.5	18.8	38.5	
LE_0307	86	0.0 to <5.0	0.39	2.5	1.39	45.3	36.9	27.7	25.0	37.8	
BF_2776	851	0.0 to <5.0	0.03	6.06	1.09	40.2	27.8	26.4	22.5	47.4	
SS_0446	90	0.0 to <5.0	0.17	5.15	1.44	43.4	32.0	26.5	27.1	33.1	
WI_0418	0										
RD_0312	0										
LE_0307	0										
BF_2776	12	0.0 to <0.5	0.03	0.33	0.14	22.1	16.3	15.1	15.8	20.2	
SS_0446	0										
WI_0418	8	0.5 to <1.0	0.11	0.56	0.31	12.6	12.3	12.3	11.0	11.1	
RD_0312	0										
LE_0307	0										
BF_2776	53	0.5 to <1.0	0.05	1.5	0.3	37.0	21.3	21.9	19.4	29.8	
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	45.8	30.1	29.9	25.6	43.6	
RD_0312	0										
LE_0307	0										
BF_2776	92	1.0 to <1.5	0.11	1.72	0.41	37.7	23.3	21.6	20.5	30.1	
SS_0446	3	1.0 to <1.5	0.17	0.84	0.6	19.6	16.0	10.7	11.4	8.2	
WI_0418	20	1.5 to <2.0	0.24	1.12	0.72	49.3	30.4	30.3	25.5	46.9	
RD_0312	4	1.5 to <2.0	0.86	1.02	0.94	19.7	18.9	19.6	21.3	41.2	
LE_0307	0										
BF_2776	82	1.5 to <2.0	0.17	2.57	0.57	38.5	23.8	21.7	20.8	29.4	
SS_0446	3	1.5 to <2.0	0.43	0.81	0.68	19.6	16.0	10.7	11.4	8.2	
WI_0418	229	5.0 to <99.0	0.59	10.62	2.48	53.3	37.6	31.8	33.0	55.6	
RD_0312	225	5.0 to <99.0	0.77	3.64	1.38	33.1	31.1	19.7	20.3	38.1	
LE_0307	221	5.0 to <99.0	0.52	4.73	1.72	41.2	29.7	29.5	21.1	45.8	
BF_2776	1925	5.0 to <99.0	0.55	18.2	3.84	39.4	30.4	32.9	27.5	54.6	
SS_0446	356	5.0 to <99.0	0.65	7.97	3.43	43.2	35.3	29.7	30.0	44.1	

datasets: WI=WITT, RD=RIT_DUPONT, LE=LEEDS, BF=BFD_ALL, SS=BIGC_SSG