

Colour stimuli of just noticeable colour thresholds ($p=50\%$) in 3 directions

number Colour series	Colour stimuli colour values			Colour stimuli differences at threshold					notes experimental series
	Y	x	y	<u>WN</u> ΔY	<u>GR</u> Δx	Δy	<u>BY</u> Δx	Δy	
0 <i>WPN</i>	196.9	0.3986	0.4175	1.19	-0.0011	0.0009	-0.0016	-0.0014	<i>_WN, GR, BY</i>
1 <i>WPN</i>	74.13	0.3919	0.4139	0.41	-0.0012	0.0011	-0.0016	-0.0013	grey surround
2 <i>WPN</i>	34.31	0.3926	0.414	0.18	-0.0013	0.0011	-0.0017	-0.0015	CIE data no. 03
3 <i>WPN</i>	17.69	0.3973	0.4153	0.09	-0.0016	0.0013	-0.002	-0.0017	with white
4 <i>WPN</i>	9.15	0.4052	0.4185	0.07	-0.0017	0.0015	-0.0029	-0.0024	border
5 <i>WPN</i>	4.65	0.4159	0.4226	0.05	-0.0023	0.002	-0.0042	-0.0036	
6 <i>WPN</i>	3.14	0.386	0.4113	0.04	-0.0027	0.0022	-0.0039	-0.0034	
7 <i>GDR</i>	14.96	0.1198	0.3961	0.06	-0.0061	0.003	-0.0012	-0.0022	<i>_WN, GR, BY</i>
8 <i>GDR</i>	15.71	0.2422	0.3728	0.06	-0.0037	0.0021	-0.0013	-0.0016	grey surround
9 <i>GDR</i>	16.52	0.321	0.3578	0.06	-0.0017	0.001	-0.0016	-0.0013	CIE data no. 09
10 <i>GDR</i>	16.96	0.4598	0.2388	0.07	-0.0022	0.0011	-0.0022	-0.001	with white
11 <i>GDR</i>	17.17	0.485	0.2119	0.09	-0.002	0.0009	-0.0026	-0.001	border
12 <i>BDY</i>	17.29	0.2497	0.2914	0.07	-0.0018	0.0008	-0.0011	-0.0009	<i>_WN, GR, BY</i>
13 <i>BDY</i>	17.26	0.2877	0.3257	0.06	-0.0017	0.0009	-0.0013	-0.0011	grey surround
14 <i>BDY</i>	16.44	0.3232	0.3593	0.06	-0.0016	0.001	-0.0014	-0.0013	CIE data no. 14
15 <i>BDY</i>	17.72	0.4338	0.4529	0.05	-0.002	0.0019	-0.0026	-0.0024	with white
16 <i>BDY</i>	18.46	0.4841	0.4968	0.05	-0.002	0.0025	-0.0037	-0.0032	border
Samples: bright white (W, no. 0), dark black (S, no. 10), White (W, no. 11), Black (N, no. 21) Green (G=T (turquoise), no. 22), Red (R=M (magenta), no. 32), Blue (B, no. 33), Yellow (Y, no. 43) Source: BAM Research Report no. 115 (1985), Tables 5.40;1 to 11									

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XE020-3N

Colour stimuli of just noticeable colour thresholds ($p=50\%$) in WN direction

number Colour series	CIELAB differences lightness, chroma, Σ				LABJND differences lightness, chroma, Σ				colour differences other formulae			notes experimental _WN series
	ΔL^*	Δa^*	Δb^*	ΔE^*_{ab}	ΔL^*	Δa^*	Δb^*	ΔE^*_{85}	CMC	C94	C00	
0 WPN	0.29	0.0	0.0	0.29	1.54	0.0	0.0	1.54	0.14	0.29	0.13	
1 WPN	0.19	0.0	0.0	0.19	1.37	0.0	0.0	1.37	0.1	0.19	0.12	grey surround
2 WPN	0.14	0.0	0.0	0.14	1.24	0.0	0.0	1.24	0.09	0.14	0.11	CIE data no. 03
3 WPN	0.12	0.0	0.0	0.12	1.23	0.0	0.0	1.23	0.09	0.12	0.12	with white
4 WPN	0.15	-0.01	-0.01	0.15	1.7	-0.05	-0.03	1.7	0.14	0.15	0.12	border
5 WPN	0.15	-0.02	-0.03	0.15	1.73	-0.07	-0.08	1.73	0.19	0.15	0.11	
6 WPN	0.19	0.0	0.02	0.19	2.11	0.0	0.07	2.12	0.28	0.19	0.13	
7 GDR	0.09	0.46	0.03	0.47	0.67	0.24	0.14	0.73	0.16	0.13	0.13	
8 GDR	0.09	0.11	0.01	0.14	0.64	0.14	0.04	0.66	0.09	0.1	0.1	grey surround
9 GDR	0.08	0.0	0.0	0.08	0.61	0.0	0.0	0.61	0.07	0.08	0.08	CIE data no. 09
10 GDR	0.1	-0.17	0.04	0.2	0.69	-0.31	0.18	0.78	0.09	0.1	0.1	with white
11 GDR	0.11	-0.25	0.06	0.28	0.77	-0.4	0.27	0.91	0.11	0.12	0.12	border
12 BDY	0.08	0.0	0.03	0.09	0.59	0.0	0.18	0.62	0.07	0.08	0.08	
13 BDY	0.07	0.0	0.01	0.07	0.51	0.0	0.08	0.51	0.06	0.07	0.07	grey surround
14 BDY	0.07	0.0	0.0	0.07	0.54	0.0	0.0	0.54	0.06	0.07	0.07	CIE data no. 14
15 BDY	0.07	-0.01	-0.17	0.19	0.5	-0.03	-0.17	0.53	0.09	0.09	0.09	with white
16 BDY	0.07	-0.01	-0.8	0.8	0.48	-0.02	-0.19	0.52	0.27	0.2	0.2	border
mean				0.21				1.02	0.12	0.13	0.11	
standard deviation				0.17				0.5	0.06	0.05	0.02	
Source: BAM Research Report no. 115 (1985), Tables 5.40;1 to 11												

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XE020-7N

TUB-test chart XE02; Colour thresholds data
RI experiments: Series WPN, GDR, BDY in directions WN, GR, BY; LABJND_A & D65

Colour stimuli of just noticeable colour thresholds ($p=50\%$) in GR direction

number Colour series	CIELAB differences lightness, chroma, Σ				LABJND differences lightness, chroma, Σ				colour differences other formulae			notes experimental _GR series
	ΔL^*	Δa^*	Δb^*	ΔE^*_{ab}	ΔL^*	Δa^*	Δb^*	ΔE^*_{85}	CMC	C94	C00	
0 WPN	0.01	-1.13	0.1	1.13	0.06	-1.31	0.1	1.31	1.59	1.08	1.62	
1 WPN	0.0	-0.9	0.1	0.9	0.07	-1.4	0.13	1.4	1.18	0.85	1.25	grey surround
2 WPN	0.0	-0.75	0.08	0.75	0.06	-1.45	0.14	1.46	1.0	0.72	1.07	CIE data no. 03
3 WPN	0.01	-0.71	0.06	0.71	0.11	-1.6	0.11	1.6	1.01	0.69	1.03	with white
4 WPN	0.0	-0.62	0.07	0.62	0.0	-1.53	0.15	1.54	0.84	0.59	0.87	border
5 WPN	0.0	-0.64	0.07	0.64	0.0	-1.61	0.14	1.61	0.89	0.6	0.88	
6 WPN	0.0	-0.66	0.06	0.67	0.0	-1.58	0.14	1.59	0.89	0.64	0.94	
7 GDR	0.01	-3.6	0.04	3.6	0.09	-1.51	0.12	1.52	1.16	0.81	0.8	
8 GDR	0.01	-1.69	0.05	1.69	0.09	-1.55	0.14	1.56	0.89	0.78	0.79	grey surround
9 GDR	0.01	-0.78	0.02	0.78	0.07	-1.12	0.07	1.13	1.13	0.77	1.12	CIE data no. 09
10 GDR	0.01	-1.1	0.03	1.1	0.08	-1.16	0.1	1.17	0.37	0.24	0.24	with white
11 GDR	0.02	-1.1	0.03	1.1	0.17	-1.06	0.12	1.08	0.34	0.2	0.2	border
12 BDY	0.01	-0.94	0.01	0.94	0.08	-1.24	0.04	1.25	0.8	0.68	0.75	
13 BDY	0.01	-0.8	0.02	0.8	0.08	-1.1	0.07	1.11	0.95	0.67	0.94	grey surround
14 BDY	0.0	-0.7	0.03	0.7	0.0	-1.01	0.07	1.01	1.07	0.7	1.02	CIE data no. 14
15 BDY	0.01	-0.86	0.11	0.86	0.08	-1.21	0.08	1.21	0.78	0.55	0.65	with white
16 BDY	0.01	-0.92	0.4	1.01	0.07	-1.28	0.08	1.29	0.64	0.46	0.58	border
mean				1.06				1.34	0.91	0.65	0.87	
standard deviation				0.68				0.19	0.28	0.2	0.33	
Source: BAM Research Report no. 115 (1985), Tables 5.40;1 to 11												

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XE021-3N

Colour stimuli of just noticeable colour thresholds ($p=50\%$) in BY direction

number Colour series	CIELAB differences lightness, chroma, Σ				LABJND differences lightness, chroma, Σ				colour differences other formulae			notes experimental _BY series
	ΔL^*	Δa^*	Δb^*	ΔE^*_{ab}	ΔL^*	Δa^*	Δb^*	ΔE^*_{85}	CMC	C94	C00	
0 WPN	0.0	-0.14	-1.75	1.75	0.05	-0.16	-1.69	1.7	2.49	1.71	1.71	
1 WPN	0.0	-0.1	-1.16	1.16	0.07	-0.16	-1.56	1.57	1.4	1.02	1.0	grey surround
2 WPN	0.0	-0.08	-1.01	1.02	0.06	-0.16	-1.7	1.7	1.32	0.93	0.91	CIE data no. 03
3 WPN	0.0	-0.08	-0.94	0.95	0.0	-0.19	-1.8	1.81	1.4	0.93	0.92	with white
4 WPN	0.0	-0.09	-1.08	1.08	0.0	-0.23	-2.16	2.17	1.43	1.01	1.02	border
5 WPN	0.0	-0.1	-1.31	1.32	0.0	-0.26	-2.46	2.47	1.55	1.12	1.15	
6 WPN	0.0	-0.08	-0.97	0.98	0.0	-0.2	-2.09	2.1	1.29	0.9	0.89	
7 GDR	0.0	-0.25	-0.51	0.57	0.0	-0.1	-1.36	1.37	0.22	0.22	0.22	
8 GDR	0.0	-0.11	-0.46	0.47	0.0	-0.1	-1.16	1.16	0.3	0.31	0.31	grey surround
9 GDR	0.0	-0.09	-0.48	0.49	0.0	-0.14	-1.17	1.18	0.71	0.48	0.48	CIE data no. 09
10 GDR	0.01	-0.07	-0.63	0.63	0.08	-0.09	-1.64	1.64	0.54	0.28	0.23	with white
11 GDR	0.01	-0.08	-0.74	0.75	0.07	-0.09	-1.97	1.97	0.58	0.29	0.23	border
12 BDY	0.0	-0.09	-0.36	0.37	0.0	-0.12	-0.97	0.97	0.2	0.17	0.17	
13 BDY	0.0	-0.1	-0.42	0.44	0.0	-0.15	-1.09	1.1	0.34	0.28	0.29	grey surround
14 BDY	0.0	-0.09	-0.45	0.46	0.0	-0.13	-1.08	1.09	0.69	0.45	0.46	CIE data no. 14
15 BDY	0.0	-0.08	-1.24	1.24	0.0	-0.11	-1.0	1.01	0.54	0.45	0.45	with white
16 BDY	0.01	-0.11	-4.84	4.85	0.07	-0.16	-1.07	1.09	1.59	1.1	1.14	border
mean				1.09				1.54	0.98	0.69	0.68	
standard deviation				1.01				0.44	0.61	0.42	0.43	
Source: BAM Research Report no. 115 (1985), Tables 5.40;1 to 11												

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XE021-7N

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