

Colour stimuli of just noticeable colour thresholds, see Richter (1985)

Colour series number	Colour stimuli colour values			Colour stimuli differences at threshold			notes
	Y	x	y	-WN ΔY	-RG Δx	-BY Δy	
WPN 01	197.5	0.3987	0.4175	1.16	-0.0012	0.0001	P40
WPN 02	74.3	0.3919	0.414	0.41	-0.0013	0.0011	
WPN 03	34.4	0.3926	0.414	0.18	-0.0013	0.0012	
WPN 04	17.7	0.3973	0.4153	0.1	-0.0017	0.0013	
WPN 05	9.1	0.4052	0.4185	0.08	-0.0018	0.0016	
WPN 06	4.6	0.4158	0.4226	0.05	-0.0024	0.0021	
WPN 07	3.1	0.3861	0.4114	0.05	-0.0027	0.0023	
WPN 08	1.2	0.3831	0.409	0.03	-0.0047	0.0038	
WPN 09	0.6	0.3859	0.4107	0.02	-0.0075	0.006	
WPN 10	0.3	0.3907	0.4143	0.02	-0.0136	0.0109	
WPN 11	0.1	0.4019	0.4167	0.02	-0.0203	0.0164	
TDM 01	15.0	0.1204	0.396	0.07	-0.0061	0.003	D65
TDM 02	15.7	0.2425	0.3728	0.07	-0.0037	0.0021	
TDM 03	16.5	0.3211	0.3578	0.07	-0.0018	0.0011	
TDM 04	17.0	0.4596	0.239	0.08	-0.0022	0.0011	
TDM 05	17.2	0.4848	0.2122	0.09	-0.0021	0.001	
BDY 01	17.3	0.2498	0.2915	0.07	-0.0019	0.0008	D65
BDY 02	17.2	0.2878	0.3258	0.06	-0.0017	0.0009	
BDY 03	16.4	0.3231	0.3594	0.06	-0.0016	0.001	
BDY 04	17.7	0.4336	0.4527	0.06	-0.002	0.002	
BDY 05	18.4	0.4838	0.4965	0.06	-0.0021	0.0026	

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WPN 05	9.1	0.4052	0.4185	0.08	-0.0018	0.0016	
WPN 06	4.6	0.4158	0.4226	0.05	-0.0024	0.0021	
WPN 07	3.1	0.3861	0.4114	0.05	-0.0027	0.0023	
WPN 08	1.2	0.3831	0.409	0.03	-0.0047	0.0038	
WPN 09	0.6	0.3859	0.4107	0.02	-0.0075	0.006	
WPN 10	0.3	0.3907	0.4143	0.02	-0.014	0.011	
WPN 11	0.1	0.4019	0.4167	0.02	-0.02	0.016	
TDM 01							
TDM 02							
TDM 03							
TDM 04							
TDM 05							
BDY 01							
BDY 02							
BDY 03							
BDY 04							
BDY 05							

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Colour differences: just noticeable colour thresholds, see Richter (1985/87)

Colour series number	Colour difference ISO 11644-4 (CIELAB)				Colour difference LABJND 1985				Colour difference LABJND 1987			
	ΔL*	Δa*	Δb*	ΔE* _{ab}	ΔT* _L	ΔT* _a	ΔT* _b	ΔE* _{ab}	ΔT* _L	ΔT* _a	ΔT* _b	ΔE* _{ab}
WPN 01	0.28				0.99				1.21			
WPN 02	0.19				0.91				0.92			
WPN 03	0.14				0.83				0.79			
WPN 04	0.12				0.83				0.8			
WPN 05	0.15				1.13				1.12			
WPN 06	0.14				1.13				1.26			
WPN 07	0.19				1.41				1.11			
WPN 08	0.21				1.22				0.95			
WPN 09	0.18				0.96				0.94			
WPN 10	0.18				1.06				0.88			
WPN 11	0.18				1.11				0.98			
TDM 01	0.09				1.0				1.21			
TDM 02	0.09				0.96				1.13			
TDM 03	0.08				0.92				1.12			
TDM 04	0.1				1.03				1.15			
TDM 05	0.11				1.15				1.35			
BDY 01	0.08				0.89				1.21			
BDY 02	0.07				0.76				1.13			
BDY 03	0.07				0.79				1.12			
BDY 04	0.07				0.75				1.15			
BDY 05	0.07				0.72				1.35			

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Colour series number	Colour difference ISO 11644-4 (CIELAB)				Colour difference LABJND 1985				Colour difference LABJND 1987			
	ΔL*	Δa*	Δb*	ΔE* _{ab}	ΔT* _L	ΔT* _a	ΔT* _b	ΔE* _{ab}	ΔT* _L	ΔT* _a	ΔT* _b	ΔE* _{ab}
WPN 01	0.28	1.12	1.74	0.28	0.9978	0.7992	0.1657		0.362	0.1141	0.0769	
WPN 02	0.19	0.89	1.15	0.19	0.9148	1.5233	1.7302		0.3348	0.1848	0.0717	
WPN 03	0.14	0.75	1.01	0.14	0.8313	1.3836	1.6628		0.3091	0.1936	0.0784	
WPN 04	0.12	0.71	0.94	0.12	0.834	0.8104	0.856		0.0	0.0003	0.0001	
WPN 05	0.15	0.62	1.07	0.15	1.1379	0.0281	0.3006		0.4276	0.2118	0.1011	
WPN 06	0.14	0.65	1.3	0.14	1.1326	0.5935	1.268		0.4169	0.2269	0.118	
WPN 07	0.19	0.67	0.96	0.19	1.4129	1.598	2.2164		0.5131	0.2251	0.1011	
WPN 08	0.21	0.83	1.12	0.21	1.2282	1.2935	1.9264		0.4327	0.2288	0.0988	
WPN 09	0.18	0.81	0.56	0.22	0.9683	0.9737	1.3324		0.3352	0.2162	0.0956	
WPN 10	0.18	0.7	0.41	0.36	1.0672	0.7837	0.8257		0.3654	0.0951	0.0357	
WPN 11	0.18	0.59	0.37	0.52	1.1119	0.5649	0.6309		0.3788	0.037	0.0147	
TDM 01	0.09	3.6	0.51	0.09	1.0096	44.968	0.4618		0.2559	0.248	0.1042	
TDM 02	0.09	1.69	0.45	0.09	0.969	24.397	11.5495		0.2458	0.2757	0.0869	
TDM 03	0.08	0.79	0.48	0.08	0.9288	1.2809	1.411		0.2358	0.0003	0.0001	
TDM 04	0.1	1.1	0.62	0.1	1.038	58.011	82.9982		0.2636	0.184	0.1253	
TDM 05	0.11	1.1	0.73	0.11	1.155	65.777	73.672		0.2935	0.1709	0.1514	
BDY 01	0.08	0.94	0.35	0.08	0.8935	5.7657	45.6462		0.227	0.2477	0.0759	
BDY 02	0.07	0.8	0.42	0.07	0.7673	2.7924	22.4532		0.195	0.2242	0.083	
BDY 03	0.07	0.7	0.45	0.07	0.7994	0.9407	0.173		0.203	0.1099	0.08	
BDY 04	0.07	0.86	1.22	0.07	0.7503	5.0373	41.7202		0.0634	0.2339	0.0767	
BDY 05	0.07	0.93	5.83	0.07	0.7244	6.6512	52.8395		0.1839	0.2465	0.0841	

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TUB-test chart UE38; Colour thresholds data
Experimental data of Richter (1985) for series WN, RG, YB

input: w/rgb/cmyk -> w/rgb/cmyk-
output: no change