

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

number Colour series	CIELAB differences lightness, chroma, $\Sigma$				LABJND differences lightness, chroma, $\Sigma$				colour differences other formulae			notes experimental series
	$\Delta L^*$	$\Delta a^*$	$\Delta b^*$	$\Delta E^*$	$\Delta L^*$	$\Delta a^*$	$\Delta b^*$	$\Delta E^*$	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	_WN, GR, BY grey surround CIE data no. 03 with white border
1 WPN	0.0	-0.1	-1.16	1.16	0.07	-0.16	-1.56	1.57	1.4	1.02	1.0	
2 WPN	0.0	-0.08	-1.01	1.02	0.06	-0.16	-1.7	1.7	1.32	0.93	0.91	
3 WPN	0.0	-0.08	-0.94	0.95	0.0	-0.19	-1.8	1.81	1.4	0.93	0.92	
4 WPN	0.0	-0.09	-1.08	1.08	0.0	-0.23	-2.16	2.17	1.43	1.01	1.02	
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	-0.16	-2.17	2.17	0.22	0.22	0.22	_WN, GR, BY grey surround CIE data no. 09 with white border
8 GDR	0.0	-0.11	-0.46	0.47	0.0	-0.16	-1.84	1.85	0.3	0.31	0.31	
9 GDR	0.0	-0.09	-0.48	0.49	0.0	-0.21	-1.86	1.87	0.71	0.48	0.48	
10 GDR	0.01	-0.07	-0.63	0.63	0.12	-0.14	-2.61	2.61	0.54	0.28	0.23	
11 GDR	0.01	-0.08	-0.74	0.75	0.11	-0.14	-3.13	3.13	0.58	0.29	0.23	
12 BDY	0.0	-0.09	-0.36	0.37	0.0	-0.18	-1.54	1.55	0.2	0.17	0.17	_WN, GR, BY grey surround CIE data no. 14 with white border
13 BDY	0.0	-0.1	-0.42	0.44	0.0	-0.22	-1.73	1.75	0.34	0.28	0.29	
14 BDY	0.0	-0.09	-0.45	0.46	0.0	-0.19	-1.73	1.74	0.69	0.45	0.46	
15 BDY	0.0	-0.08	-1.24	1.24	0.0	-0.17	-1.59	1.6	0.54	0.45	0.45	
16 BDY	0.01	-0.11	-4.84	4.85	0.1	-0.24	-1.71	1.73	1.59	1.1	1.14	
<b>mean</b>				<b>1.09</b>					<b>1.97</b>	<b>0.98</b>	<b>0.69</b>	<b>0.68</b>
<b>standard deviation</b>				<b>1.01</b>					<b>0.41</b>	<b>0.61</b>	<b>0.42</b>	<b>0.43</b>

Source: BAM Research Report no. 115 (1985), Tables 5.40;1 to 11; LABJND D65