

Names and colorimetric characteristics of colour difference data sets							
Group	Name	Short name and number of pairs	Mean of colour difference $\Delta E^*_{ab}$	Background Tristimulus value and lightness $Y$ $L^*$	Background Illuminance and luminance $E$ [lux] / $L$ [cd/m <sup>2</sup> ]		
SCD	WITT	WI_S0418	1,38	24,9	57,0	1300	103
	RIT-DUPONT	RD_S0312	1,40	10,8	39,4	2000	69
	LEEDS	LE_S0307	1,60	18,0	49,5	1005	57
	BFD-P	BF_S2776	3,00	19,9	51,8	1570	99
	BIGC-S-SG	SS_S0446	3,04	18,6	50,3	958	56
TCD	WANG-M	WA_T0100	0,55	40,7	70,0	1100	142
	BIGC-T1-SG	1M_T0890	1,10	18,6	50,3	958	56
	BIGC-T2-M	2M_T0399	0,70	18,6	50,3	1036	61
	BIGC-T2-SG	2S_T0446	1,10	18,6	50,3	1036	61
	BIGC-T2-G	2G_T0379	0,80	18,6	50,3	1036	61
VTCD	RICHTER	RI_V0330	0,90	17,0	48,2	1108	60
	KITTELMANN	KI_V0392	0,41	18,4	50,0	1022	60
	AVRAMOPOULOS	AV_V0106	0,75	17,0	48,2	1108	60

1-000030-L0

XE210-SN

Visual and other characteristics of colour difference data sets					
Short Name, number of pairs	Number of observers and replications	light source and/or background chromaticity near	Material properties	Scaling and comparison method	
WI_S0418 RD_S0312 LE_S0307 BF_S2776 SS_S0446	10-14	D65	Gloss Paint	Own grey scale	
	50	CCT 6100 K	Gloss Paint	Anchor pair	
	12-15	D65	Matt Paint (textile)	grey scale <sup>3)</sup>	
	Mean>20	D65		Grey scale	
	9 x 27	D65	Print	Own grey scale	
WA_T0100 1S_T0890 2M_T0399 2S_T0446 2G_T0379	21 x 26	D65	Gloss Paint	fixed Yes/No <sup>4)</sup>	
	16 x 3	D65	Gloss Paint	fixed Yes/No <sup>4)</sup>	
	23 x 3	D65	Gloss Paint	fixed Pass/Fail <sup>4)</sup>	
	23 x 3	D65	Gloss Paint	fixed Pass/Fail <sup>4)</sup>	
	23 x 3	D65	Gloss Paint	fixed Pass/Fail <sup>4)</sup>	
RI_V0330 KI_V0392 AV_V0106	7 x 3	D65 (258 pairs) <sup>1)</sup>	light colours	slider Yes/No <sup>5)</sup>	
	31	D65	photo paper	slider Yes/No <sup>5)</sup>	
	4 x 3	CCT 4000 K <sup>2)</sup>	light colours	slider Yes/No <sup>5)</sup>	

Remarks:

- 72 pairs are seen in a surround with a correlated colour temperature near the CCT 4000K.
- large range 0,1-Y<200; all pairs are seen in surround chromaticity near the CCT 4000K.
- grey scale and anchor pair.
- Pass/Fail decision of colour difference.
- Yes/No detection of colour difference at visual threshold.

1-000030-L0

XE210-SN

Name of data set, data file folder in internet, reference for the data set			
Short Name, number of pairs	data file folder in internet: ABCD <sup>1)2)</sup>	line range of CIE XYZ data of pairs in internet file: ABCD0-7R.PS <sup>3)</sup>	Publication reference for the data set Author(s) and publication year
WI_S0418	YE94	0268 to 0700	WITT, K. (1999)
RD_S0312	YE95	0268 to 0592	BERNS, R. S. et al. (1991)
LE_S0307	YE96	0268 to 0587	KIM, D. H. et al. (1997)
BF_S2776	YE97	0268 to 3105	LUO, M. R. et al. (1986)
SS_S0446	YE98	0238 to 0663	HUANG, M. et al. (2012b)
WA_T0100	YE71	0238 to 0345	WANG, H. et al. (2012)
1S_T0890	YE72	0238 to 1135	HUANG, M. et al. (2012a)
2M_T0399	YE73	0238 to 0644	HUANG, M. et al. (2010)
2S_T0446	YE74	0238 to 0691	HUANG, M. et al. (2010)
2G_T0379	YE75	0238 to 0624	HUANG, M. et al. (2010)
RI_V0330	YE91	0268 to 0610	RICHTER, K. (1985)
KI_V0392	YE92	0268 to 0673	KITTELMANN, P. (2010)
AV_V0106	YE93	0268 to 0408	AVRAMOPOULOS, D. (1987)

1-000030-L0

XE210-SN

Content of a file with the example SCD data set: WI_S0418									
see for example the following folder for WI_S0418 with many files for the download:	<a href="http://farbe.li.tu-berlin.de/YE94/">http://farbe.li.tu-berlin.de/YE94/</a>								
see the following file with the PostScript programming text	<a href="http://farbe.li.tu-berlin.de/YE94/YE940-7R.TXT">http://farbe.li.tu-berlin.de/YE94/YE940-7R.TXT</a>								
one can study the output of the corresponding PDF file	<a href="http://farbe.li.tu-berlin.de/YE94/YE940-7R.PDF">http://farbe.li.tu-berlin.de/YE94/YE940-7R.PDF</a>								
the ASCII text output of the preceding PDF file is in the file:	<a href="http://farbe.li.tu-berlin.de/YE94/YE940-7T.TXT">http://farbe.li.tu-berlin.de/YE94/YE940-7T.TXT</a>								
This output includes the following text and numerical data:									
1000*CIEXYZ & 1000*DV data for all colours (a) of all colour difference data pairs									
The XYZn data are for the experimental reference white of the 2 or 10 degree observer									
The reference white is for example Xn =95,01, Yn =100,00, Zn =108,85 for D65									
Xn	Yn	Zn	X0	Y0	Z0	X1	Y1	Z1	DV
0094810	0100000	0107330	0062894	0069530	0030219	0062792	0069510	0029574	0000573
0094810	0100000	0107330	0062894	0069530	0030219	0062921	0069620	0028877	0000866
If the decimal comma for the CIEXYZ and DV data is considered, then for example									
X0=62,894 and DV=0,573									

1-000030-L0

XE210-SN

see similar files: http://farbe.li.tu-berlin.de/XE21/XE21L0N1.TXT /PS  
 technical information: http://www.ps.bam.de or http://farbe.li.tu-berlin.de

TUB registration: 20161001-XE21/XE21L0N1.TXT /PS  
 application for measurement of display output

TUB material: code=thata