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 application for evaluation and measurement of display or print output
 TUB material: code=rh4ta

Basic television colour or mixture colour for D65 CIE data for $Y_W=88,6$	chromaticity		tristimulus values ($Y_d=88,6$ for white D65)			Standard CIELAB data $L^*a^*b^*C^*_{ab}h_{ab}$ ($L^*_d=88,6$ for white; $L^*_d=18,0$ for black)					TUBLAB ₂ data $Y_{A_2}B_2C_{AB_2}h_{AB_2}$ ($Y_d=88,6$ for white; $Y_d=2,5$ for black, $B_c=0,8$)				
	x_d	y_d	X_d	Y_d	Z_d	L^*_d	a^*_d	b^*_d	$C^*_{ab,d}$	$h_{ab,d}$	Y_d	A_{2d}	B_{2d}	$C_{AB_2,d}$	$h_{AB_2,d}$
<i>three additive mixture colours: television colours according to ITU-R BT.709.3 and sRGB display according to IEC 61966-2-1</i>															
C_d cyan (cyan blue)	0,224	0,328	48,42	70,86	96,28	87,41	-46,42	-13,64	48,38	199	70,86	-47,36	-15,28	49,77	197
M_d magenta (magenta red)	0,320	0,154	53,35	25,63	87,29	57,68	94,83	-58,74	111,55	324	25,63	48,17	-47,50	67,65	315
Y_d yellow	0,419	0,505	69,29	83,50	12,46	93,23	-20,83	91,22	93,56	110	83,50	-0,83	62,77	62,78	90
<i>three additive basic colours: television colours according to ITU-R BT.709.3 and sRGB display according to IEC 61966-2-1</i>															
R_d Red (orange red)	0,640	0,330	37,10	19,13	1,73	50,84	77,31	64,87	100,93	19	19,13	47,35	15,27	49,75	17
G_d Green (leaf green)	0,300	0,600	32,18	64,36	10,72	84,15	-83,21	80,31	115,65	144	64,36	-48,18	47,49	67,66	135
B_d Blue (violet blue)	0,150	0,060	16,24	6,49	85,55	30,63	76,46	-104,14	129,19	290	6,49	0,82	-62,78	62,78	270
<i>achromatic colours and equations:</i> $a_{20} = 1,0; b_{20} = -0,4; x_c = 0,110; B_c = 0,8; A_{2d} = 2,5[a_{2d} - a_{2n}]Y_d; B_{2d} = 2,5B_c[b_{2d} - b_{2n}]Y_d; C_{AB_2,d} = [A_{2d}^2 + B_{2d}^2]^{1/2}; h_{AB_2,d} = \text{atan}[B_{2d} / A_{2d}]$ $a_n = (x_w - x_c)/y_w; b_n = -0,4[z_w/y_w]; a_d = (x_d - x_c)/y_d; b_d = -0,4[z_d/y_d]; z_d = 1 - x_d - y_d$ compare CIE 230:2019															
W_0 (white monitor, 100%)	0,312	0,329	95,05	100,00	108,90	100,00	0,00	0,00	0,00	0	100,00	0,00	0,00	0,00	0
W_1 (white monitor, 88,6%)	0,312	0,329	84,21	88,60	96,48	95,40	0,00	0,00	0,00	0	88,60	0,00	0,00	0,00	0
N_1 (black monitor, 2,5%)	0,312	0,329	2,37	2,50	2,72	18,00	0,00	0,00	0,00	0	2,50	0,00	0,00	0,00	0
N_0 (black monitor, 0,00%)	0,312	0,329	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0	0,00	0,00	0,00	0,00	0

eev90-3n

Basic television colour or mixture colour for D65 CIE data for $Y_W=88,6$	chromaticity		tristimulus values ($Y_d=88,6$ for white D65)			Standard CIELAB data $L^*a^*b^*C^*_{ab}h_{ab}$ ($L^*_d=88,6$ for white; $L^*_d=18,0$ for black)					TUBLAB ₂ data $Y_{A_2}B_2C_{AB_2}h_{AB_2}$ ($Y_d=88,6$ for white; $Y_d=2,5$ for black, $B_c=0,8$)				
	x_d	y_d	X_d	Y_d	Z_d	L^*_d	a^*_d	b^*_d	$C^*_{ab,d}$	$h_{ab,d}$	Y_d	A_{2d}	B_{2d}	$C_{AB_2,d}$	$h_{AB_2,d}$
<i>three additive mixture colours: television colours according to ITU-R BT.2020-2 & ISO 22028-5: Wide Colour Gamut WCGa display</i>															
C_d cyan (cyan blue)	0,146	0,344	28,21	66,35	98,01	85,17	-102,57	-18,65	104,25	194	66,35	-84,63	-20,59	87,10	193
M_d magenta (magenta red)	0,368	0,147	72,52	28,97	95,48	60,76	126,01	-59,07	139,17	333	28,97	82,50	-51,14	97,06	328
Y_d yellow	0,446	0,537	70,34	84,66	2,52	93,73	-20,74	132,16	133,77	107	84,66	2,12	71,74	71,77	88
<i>three additive basic colours: television colours according to ITU-R BT.2020-2 & ISO 22028-5: Wide Colour Gamut WCGa display</i>															
R_d Red (orange red)	0,708	0,292	57,32	23,64	0,00	55,72	113,27	96,08	148,53	14	23,64	84,63	20,59	87,10	13
G_d Green (leaf green)	0,170	0,797	13,01	61,01	2,52	82,38	-166,37	112,59	200,89	153	61,01	-82,50	51,14	97,06	148
B_d Blue (violet blue)	0,131	0,046	15,19	5,33	95,48	27,67	83,13	-116,12	142,81	287	5,33	-2,12	-71,73	71,77	268
<i>achromatic colours and equations:</i> $a_{20} = 1,0; b_{20} = -0,4; x_c = 0,110; B_c = 0,8; A_{2d} = 2,5[a_{2d} - a_{2n}]Y_d; B_{2d} = 2,5B_c[b_{2d} - b_{2n}]Y_d; C_{AB_2,d} = [A_{2d}^2 + B_{2d}^2]^{1/2}; h_{AB_2,d} = \text{atan}[B_{2d} / A_{2d}]$ $a_n = (x_w - x_c)/y_w; b_n = -0,4[z_w/y_w]; a_d = (x_d - x_c)/y_d; b_d = -0,4[z_d/y_d]; z_d = 1 - x_d - y_d$ compare CIE 230:2019															
W_0 (white monitor, 100%)	0,312	0,329	95,05	100,00	108,90	100,00	0,00	0,00	0,00	0	100,00	0,00	0,00	0,00	0
W_1 (white monitor, 88,6%)	0,312	0,329	84,21	88,60	96,48	95,40	0,00	0,00	0,00	0	88,60	0,00	0,00	0,00	0
N_1 (black monitor, 2,5%)	0,312	0,329	2,37	2,50	2,72	18,00	0,00	0,00	0,00	0	2,50	0,00	0,00	0,00	0
N_0 (black monitor, 0,00%)	0,312	0,329	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0	0,00	0,00	0,00	0,00	0

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