

see similar files: http://farbe.li.tu-berlin.de/ME96/ME96.HTM
http://130.149.60.45/~farbmetrik or http://farbe.li.tu-berlin.de

TUB registration: 20190801-ME96/ME96L0N0.TXT /.PS
application for measurement of display output

TUB material: code=rh4ta

percieved color terms (colorness: cube root coordinates)

percieved color terms	name and relationship with standard chromaticity values	notes:
lightness	$L^* = 116 (Y / 100)^{1/3} - 16$ Aproximation: $L^* = 100 (Y / 100)^{1/3}$	definition 1976 in: CIELUV, CIELAB
chroma	for nonlinear chroma diagram (a^* , b^*)	
red-green	$a^* = 500 [(X / X_n)^{1/3} - (Y / Y_n)^{1/3}]$ $= 500 (a' - a'_n) Y^{1/3}$	definition 1976 in: CIELAB
yellow-blue	$b^* = 200 [(Y / Y_n)^{1/3} - (Z / Z_n)^{1/3}]$ $= 500 (b' - b'_n) Y^{1/3}$	$n=D65 (surround)$
radial	$C^*_{ab} = [a^{*2} + b^{*2}]^{1/2}$	
saturation	= chroma / lightness	
red-green	$S^*_a = a^* / [100 (Y / 100)^{1/3}]$ $= 21,6 (a' - a'_n)$	definition for:
yellow-blue	$S^*_b = b^* / [100 (Y / 100)^{1/3}]$ $= 21,6 (b' - b'_n)$	CIELAB 1976
radial	$S^*_{ab} = C^*_{ab} / [100 (Y / 100)^{1/3}]$ $= 21,6 [(a' - a'_n)^2 + (b' - b'_n)^2]^{1/2}$	
chromaticity	for nonlinear chromaticity diagram (a' , b')	
red-green	$a' = (1 / X_n)^{1/3} (x / y)^{1/3}$ $= 0,2191 (x / y)^{1/3}$ for D65	definition for opponent
yellow-blue	$b' = -0,4 (1 / Z_n)^{1/3} (z / y)^{1/3}$ $= -0,08376 (z / y)^{1/3}$ for D65	color system
radial	$c'_{ab} = [(a' - a'_n)^2 + (b' - b'_n)^2]^{1/2}$	

