colour valence metric (color data: linear relation to CIE 1931 data)		
linear color terms	**name and relationship to CIE tristimulus or chromaticity values**	**notes**
tristimulus values	X, Y, Z	
chromatic value	*linear chromatic value diagram (A, B)*	*n=D65*
red−green	$A = [\, X / Y - X_n / Y_n \,]\, Y = [\, a - a_n \,]\, Y$ $= [\, x / y - x_n / y_n \,]\, Y$	*(background)*
yellow−blue	$B = -\,0{,}4\, [\, Z/Y - Z_n/Y_n \,]\, Y = [\, b - b_n \,]\, Y$ $= -\,0{,}4\, [\, z / y - z_n / y_n \,]\, Y$	
radial	$C_{AB} = [\, A^2 + B^2 \,]^{1/2}$	
chromaticity	*linear chromaticity diagram (a, b)*	***compare to linear cone excitation***
red−green	$a = X / Y = x / y$	
yellow−blue	$b = -\,0{,}4\, [Z / Y\,] = -\,0{,}4\, [z / y\,]$	
radial	$c_{ab} = [\, (\, a - a_n \,)^2 + (\, b - b_n \,)^2 \,]^{1/2}$	$L/(L+M)=P/(P+D)$ $S/(L+M)=T/(P+D)$

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