

Equations: colorimetric data transfer from LCH^*_a (CIELAB) to nce^* and olv^*_3

Given: adapted CIELAB data of any colour L^* , $C^*_{ab,a}$, $h_{ab,a} = LCH^*_a = LAB^*LCH^*_a$

adapted CIELAB data L^* , $C^*_{ab,a}$, $h_{ab,a}$, a^*_a , b^*_a of eight basic colours $X = OYLCVMNW$

Aim: nce^* and rgb device data olv^*_3 of the given colour

hue angle of of the given colour and of M	$h_{ab,a} = H^*_a$	(1)
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CIELAB $LCH^*_{a,M}$ data of maximum colour M	$L^*_M = \text{function} [h_{ab,a}]$	(with table/equation) (2)
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$C^*_{ab,a,M} = \text{function} [h_{ab,a}]$	(with table/equation) (3)
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$h_{ab,a,M} = h_{ab,a}$	(4)
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relative lightness of the given colour	$l^* = [L^* - L^*_N] / [L^*_W - L^*_N]$	(5)
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relative chroma of the given colour	$c^* = C^*_{ab,a} / C^*_{ab,a,M}$	(6)
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relative triangle lightness of the given colour	$t^* = l^* - [L^*_M - L^*_N] / [L^*_W - L^*_N] c^* + 0,5 c^*$	(7)
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relative blackness of the given colour	$n^* = 1 - t^* - 0,5 c^*$	(8)
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relative whiteness of the given colour	$w^* = 1 - n^* - c^*$	(9)
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elementary hue angle of the given colour	$e^* = \text{function} [h_{ab,a}]$	(with table or equation) (10)
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relative $olv^*_{3,M}$ data of maximum colour M	$o^*_{3,M} = \text{function} [h_{ab,a}]$	(with table/equation) (11)
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$l^*_{3,M} = \text{function} [h_{ab,a}]$	(with table/equation) (12)
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$v^*_{3,M} = \text{function} [h_{ab,a}]$	(with table/equation) (13)
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relative olv^*_3 data of the given colour	$o^*_3 = w^* + c^* o^*_{3,M}$	(14)
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$l^*_3 = w^* + c^* l^*_{3,M}$	(15)
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$v^*_3 = w^* + c^* v^*_{3,M}$	(16)
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