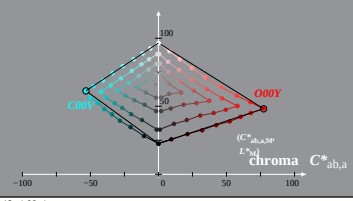
Linear relation CIELAB (L^*, a^*, b^*) and *adapted (a)* CIELAB ($C^*_{ab,a}$, L^*)
System: JE94_ORS20_95_D65_cmyn6*
Hue: h^*_{O00Y}=38 /360; h^*_{C00V}=236 /360

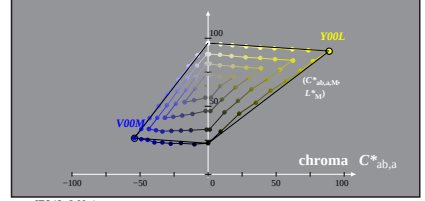
$l^*_{lab*}=(L^*-L^*_N)/(L^*_W-L^*_N)$
$a^*_a=a^*-a^*_N-l^*_{lab*}[a^*_W-a^*_N]$
$b^*_a=b^*-b^*_N-l^*_{lab*}[b^*_W-b^*_N]$
$C^*_{ab,a}=[a^{*2}_a+b^{*2}_a]^{1/2}$



JE940−1 N, 1

Linear relation CIELAB (L^*, a^*, b^*) and *adapted (a)* CIELAB ($C^*_{ab,a}$, L^*)
System: JE94_ORS20_95_D65_cmyn6*
Hue: h^*_{Y00L}=96 /360; h^*_{V00M}=305 /360

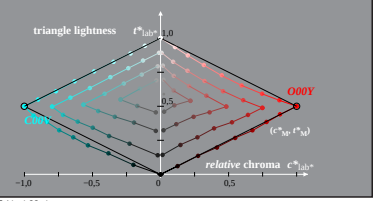
$l^*_{lab*}=(L^*-L^*_N)/(L^*_W-L^*_N)$
$a^*_a=a^*-a^*_N-l^*_{lab*}[a^*_W-a^*_N]$
$b^*_a=b^*-b^*_N-l^*_{lab*}[b^*_W-b^*_N]$
$C^*_{ab,a}=[a^{*2}_a+b^{*2}_a]^{1/2}$



JE940−2 N, 1

Linear relation *adapted (a)* CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB (c^*, t^*)
System: JE94_ORS20_95_D65_cmyn6*
Hue: h^*_{O00Y}=38 /360; h^*_{C00V}=236 /360

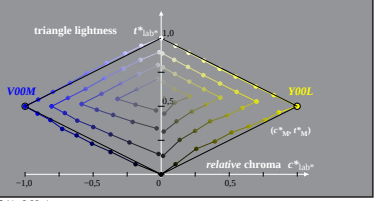
$l^*_M=(L^*_M-L^*_N)/(L^*_W-L^*_N)$
$t^*_{lab*}=l^*_{lab*}-c^*_{lab*}[l^*_M-0{,}5]$
$c^*_{lab*}=C^*_{ab,a}/C^*_{ab,a,M}$
M=Maximum colour



JE941−1 N, 1

Linear relation *adapted (a)* CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB (c^*, t^*)
System: JE94_ORS20_95_D65_cmyn6*
Hue: h^*_{Y00L}=96 /360; h^*_{V00M}=305 /360

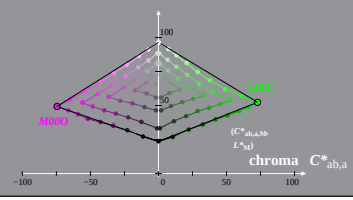
$l^*_M=(L^*_M-L^*_N)/(L^*_W-L^*_N)$
$t^*_{lab*}=l^*_{lab*}-c^*_{lab*}[l^*_M-0{,}5]$
$c^*_{lab*}=C^*_{ab,a}/C^*_{ab,a,M}$
M=Maximum colour



JE941−2 N, 1

Linear relation CIELAB (L^*, a^*, b^*) and *adapted (a)* CIELAB ($C^*_{ab,a}$, L^*)
System: JE94_ORS20_95_D65_cmyn6*
Hue: h^*_{L00C}=151 /360; h^*_{M00O}=354 /360

$l^*_{lab*}=(L^*-L^*_N)/(L^*_W-L^*_N)$
$a^*_a=a^*-a^*_N-l^*_{lab*}[a^*_W-a^*_N]$
$b^*_a=b^*-b^*_N-l^*_{lab*}[b^*_W-b^*_N]$
$C^*_{ab,a}=[a^{*2}_a+b^{*2}_a]^{1/2}$

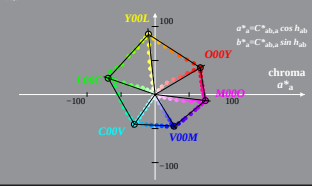


JE940−3 N, 1

Linear relation CIELAB (L^*, a^*, b^*) and *adapted (a)* CIELAB ($C^*_{ab,a}$, L^*)
System: JE94_ORS20_95_D65_cmyn6*
Hue: h^*_{L00C}=151 /360; h^*_{M00O}=354 /360

$l^*_{lab*}=(L^*-L^*_N)/(L^*_W-L^*_N)$
$a^*_a=a^*-a^*_N-l^*_{lab*}[a^*_W-a^*_N]$
$b^*_a=b^*-b^*_N-l^*_{lab*}[b^*_W-b^*_N]$
$C^*_{ab,a}=[a^{*2}_a+b^{*2}_a]^{1/2}$

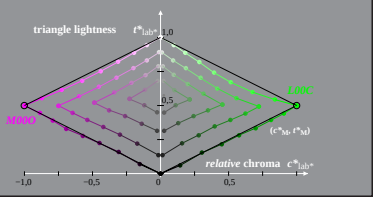
CIELAB hue angles:
$h_{ab,d}$=[34 , 92 , 143 , 226 , 312 , 337]
$h_{ab,dc}$=[34 , 92 , 143 , 226 , 311 , 337]



JE940−4 N, 1

Linear relation *adapted (a)* CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB (c^*, t^*)
System: JE94_ORS20_95_D65_cmyn6*
Hue: h^*_{L00C}=151 /360; h^*_{M00O}=354 /360

$l^*_M=(L^*_M-L^*_N)/(L^*_W-L^*_N)$
$t^*_{lab*}=l^*_{lab*}-c^*_{lab*}[l^*_M-0{,}5]$
$c^*_{lab*}=C^*_{ab,a}/C^*_{ab,a,M}$
M=Maximum colour

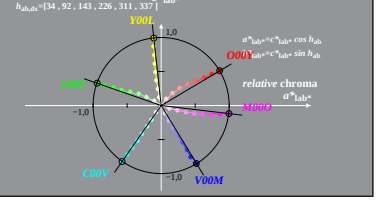


JE941−3 N, 1

Linear relation *adapted (a)* CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB (c^*, t^*)
System: JE94_ORS20_95_D65_cmyn6*
Hue: h^*_{Y00L}=96 /360; h^*_{V00M}=305 /360

$l^*_M=(L^*_M-L^*_N)/(L^*_W-L^*_N)$
$t^*_{lab*}=l^*_{lab*}-c^*_{lab*}[l^*_M-0{,}5]$
$c^*_{lab*}=C^*_{ab,a}/C^*_{ab,a,M}$
M=Maximum colour

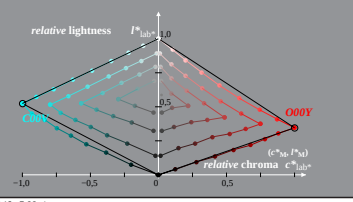
CIELAB hue angles:
$h_{ab,d}$=[34 , 92 , 143 , 226 , 312 , 337]
$h_{ab,dc}$=[34 , 92 , 143 , 226 , 311 , 337]



JE941−4 N, 1

***Adapted (a)* CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB (c^*_{lab*}, l^*_{lab*})**
System: JE94_ORS20_95_D65_cmyn6*
Hue: h^*_{O00Y}=38 /360; h^*_{C00V}=236 /360

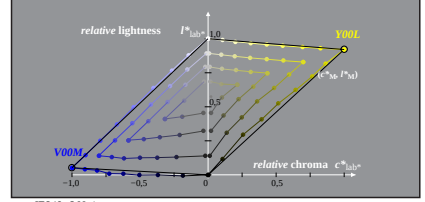
$l^*_{lab*}=(L^*-L^*_N)/(L^*_W-L^*_N)$
$c^*_{lab*}=C^*_{ab,a}/C^*_{ab,a,M}$
M=Maximum colour



JE940−5 N, 1

***Adapted (a)* CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB (c^*_{lab*}, l^*_{lab*})**
System: JE94_ORS20_95_D65_cmyn6*
Hue: h^*_{Y00L}=96 /360; h^*_{V00M}=305 /360

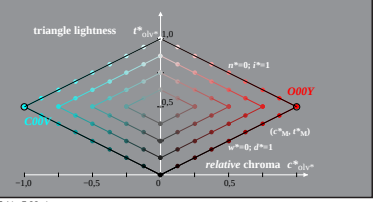
$l^*_{lab*}=(L^*-L^*_N)/(L^*_W-L^*_N)$
$c^*_{lab*}=C^*_{ab,a}/C^*_{ab,a,M}$
M=Maximum colour



JE940−6 N, 1

Linear relation *olv and *relative* chroma c^*_{olv*} and triangle lightness t^*_{olv*}**
System: JE94_ORS20_95_D65_cmyn6*
Hue: h^*_{O00Y}=38 /360; h^*_{C00V}=236 /360
Result: $c^*_{olv*}=c^*_{lab*}$; $t^*_{olv*}=t^*_{lab*}$

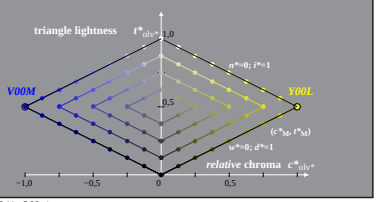
$c^*_{olv*}=\max(olv^*)-\min(olv^*)$
$n^*=1-\max(olv^*)=1-i^*$
$w^*=\min(olv^*)=1-d^*$
$t^*_{olv*}=w^*+0{,}5\,c^*_{olv*}$
M=Maximum colour



JE941−5 N, 1

Linear relation *olv and *relative* chroma c^*_{olv*} and triangle lightness t^*_{olv*}**
System: JE94_ORS20_95_D65_cmyn6*
Hue: h^*_{Y00L}=96 /360; h^*_{V00M}=305 /360
Result: $c^*_{olv*}=c^*_{lab*}$; $t^*_{olv*}=t^*_{lab*}$

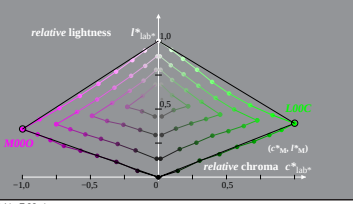
$c^*_{olv*}=\max(olv^*)-\min(olv^*)$
$n^*=1-\max(olv^*)=1-i^*$
$w^*=\min(olv^*)=1-d^*$
$t^*_{olv*}=w^*+0{,}5\,c^*_{olv*}$
M=Maximum colour



JE941−6 N, 1

***Adapted (a)* CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB (c^*_{lab*}, l^*_{lab*})**
System: JE94_ORS20_95_D65_cmyn6*
Hue: h^*_{L00C}=151 /360; h^*_{M00O}=354 /360

$l^*_{lab*}=(L^*-L^*_N)/(L^*_W-L^*_N)$
$c^*_{lab*}=C^*_{ab,a}/C^*_{ab,a,M}$
M=Maximum colour

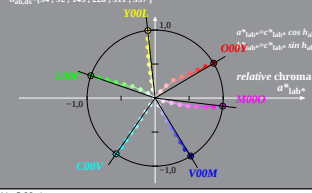


JE941−7 N, 1

***Adapted (a)* CIELAB ($C^*_{ab,a}$, L^*) and *relative* CIELAB (c^*_{lab*}, l^*_{lab*})**
System: JE94_ORS20_95_D65_cmyn6*

$l^*_{lab*}=(L^*-L^*_N)/(L^*_W-L^*_N)$
$c^*_{lab*}=C^*_{ab,a}/C^*_{ab,a,M}$
M=Maximum colour

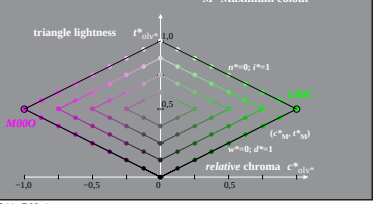
CIELAB hue angles:
$h_{ab,d}$=[34 , 92 , 143 , 226 , 312 , 337]
$h_{ab,dc}$=[34 , 92 , 143 , 226 , 311 , 337]



JE941−8 N, 1

Linear relation *olv and *relative* chroma c^*_{olv*} and triangle lightness t^*_{olv*}**
System: JE94_ORS20_95_D65_cmyn6*
Hue: h^*_{L00C}=151 /360; h^*_{M00O}=354 /360
Result: $c^*_{olv*}=c^*_{lab*}$; $t^*_{olv*}=t^*_{lab*}$

$c^*_{olv*}=\max(olv^*)-\min(olv^*)$
$n^*=1-\max(olv^*)=1-i^*$
$w^*=\min(olv^*)=1-d^*$
$t^*_{olv*}=w^*+0{,}5\,c^*_{olv*}$
M=Maximum colour

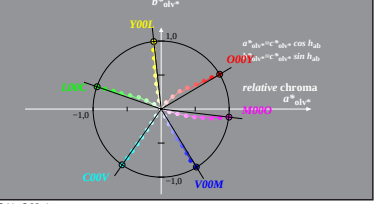


JE941−7 N, 1

Linear relation *olv and *relative* chroma c^*_{olv*} or chroma a^*_{olv*}, b^*_{olv*}**
System: JE94_ORS20_95_D65_cmyn6*
Result: $c^*_{olv*}=c^*_{lab*}$; $t^*_{olv*}=t^*_{lab*}$

$c^*_{olv*}=\max(olv^*)-\min(olv^*)$
$n^*=1-\max(olv^*)=1-i^*$
$w^*=\min(olv^*)=1-d^*$
$t^*_{olv*}=w^*+0{,}5\,c^*_{olv*}$

CIELAB hue angles:



JE941−8 N, 1

JE940−7N: Measurement: JE94_ORS20_95_D65_cmyn6*_LUT.DAT, 243 colours, 090115, Separation olv*, adapted