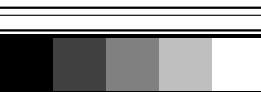


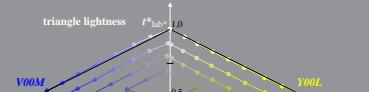
TUB registration: 20100301-JE95/JE95L0NP.PDF /PS

TUB application for evaluation and measurement of printer or monitor systems

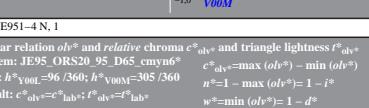
TUB material: code=rha4ta



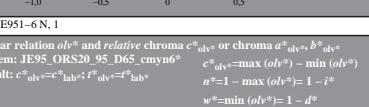
Linear relation adapted (a) CIELAB ($C^*_{ab,M}, L^*$) and relative CIELAB (c^*, t^*)
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-96/360; h^*_{V00M}=305/360$
 $I^*_{lab}=(L^*-L^*_{N})/(L^*_{W}-L^*_{N})$
 $a^*_{lab}=a^*-a^*_{N}-I^*_{lab} [a^*_{W}-a^*_{N}]$
 $b^*_{lab}=b^*-b^*_{N}-I^*_{lab} [b^*_{W}-b^*_{N}]$
 $C^*_{ab,a}=[a^*_{a}^2+b^*_{a}^2]^{1/2}$



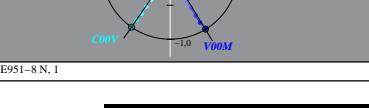
Linear relation adapted (a) CIELAB ($C^*_{ab,M}, L^*$) and relative CIELAB (c^*, t^*)
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-96/360; h^*_{V00M}=305/360$
 $I^*_{lab}=(L^*-L^*_{N})/(L^*_{W}-L^*_{N})$
 $a^*_{lab}=a^*-a^*_{N}-I^*_{lab} [a^*_{W}-a^*_{N}]$
 $b^*_{lab}=b^*-b^*_{N}-I^*_{lab} [b^*_{W}-b^*_{N}]$
 $C^*_{ab,a}=[a^*_{a}^2+b^*_{a}^2]^{1/2}$



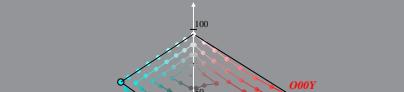
Linear relation adapted (a) CIELAB ($C^*_{ab,M}, L^*$) and relative CIELAB (c^*, t^*)
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-96/360; h^*_{V00M}=305/360$
 $I^*_{lab}=(L^*-L^*_{N})/(L^*_{W}-L^*_{N})$
 $t^*_{lab}=t^*_{lab}-c^*_{lab} [t^*_{M}-0.5]$
 $c^*_{lab}=C^*_{ab,a}/C^*_{ab,M}$
 $M=\text{Maximum colour}$



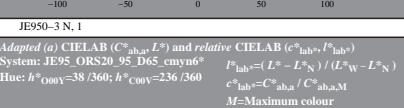
Linear relation adapted (a) CIELAB ($C^*_{ab,M}, L^*$) and relative CIELAB (c^*, t^*)
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-96/360; h^*_{V00M}=305/360$
 $I^*_{lab}=(L^*-L^*_{N})/(L^*_{W}-L^*_{N})$
 $t^*_{lab}=t^*_{lab}-c^*_{lab} [t^*_{M}-0.5]$
 $c^*_{lab}=C^*_{ab,a}/C^*_{ab,M}$
 $M=\text{Maximum colour}$



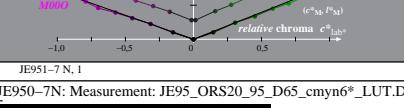
Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,M}, L^*$)
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00Y}=38/360; h^*_{C00V}=236/360$
 $I^*_{lab}=(L^*-L^*_{N})/(L^*_{W}-L^*_{N})$
 $a^*_{lab}=a^*-a^*_{N}-I^*_{lab} [a^*_{W}-a^*_{N}]$
 $b^*_{lab}=b^*-b^*_{N}-I^*_{lab} [b^*_{W}-b^*_{N}]$
 $C^*_{ab,a}=[a^*_{a}^2+b^*_{a}^2]^{1/2}$



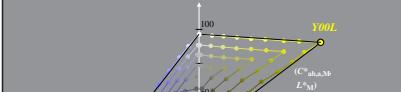
Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,M}, L^*$)
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00Y}=38/360; h^*_{C00V}=236/360$
 $I^*_{lab}=(L^*-L^*_{N})/(L^*_{W}-L^*_{N})$
 $a^*_{lab}=a^*-a^*_{N}-I^*_{lab} [a^*_{W}-a^*_{N}]$
 $b^*_{lab}=b^*-b^*_{N}-I^*_{lab} [b^*_{W}-b^*_{N}]$
 $C^*_{ab,a}=[a^*_{a}^2+b^*_{a}^2]^{1/2}$



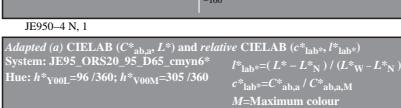
Adapted (a) CIELAB ($C^*_{ab,M}, L^*$) and relative CIELAB (c^*_{lab}, t^*_{lab})
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00Y}=38/360; h^*_{C00V}=236/360$
 $I^*_{lab}=(L^*-L^*_{N})/(L^*_{W}-L^*_{N})$
 $c^*_{lab}=C^*_{ab,a}/C^*_{ab,M}$
 $M=\text{Maximum colour}$



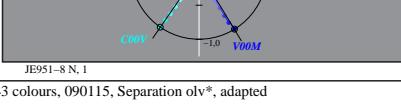
Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,M}, L^*$)
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-96/360; h^*_{V00M}=305/360$
 $I^*_{lab}=(L^*-L^*_{N})/(L^*_{W}-L^*_{N})$
 $a^*_{lab}=a^*-a^*_{N}-I^*_{lab} [a^*_{W}-a^*_{N}]$
 $b^*_{lab}=b^*-b^*_{N}-I^*_{lab} [b^*_{W}-b^*_{N}]$
 $C^*_{ab,a}=[a^*_{a}^2+b^*_{a}^2]^{1/2}$



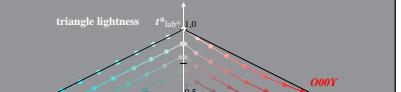
Linear relation CIELAB (L^*, a^*, b^*) and adapted (a) CIELAB ($C^*_{ab,M}, L^*$)
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-96/360; h^*_{V00M}=305/360$
 $I^*_{lab}=(L^*-L^*_{N})/(L^*_{W}-L^*_{N})$
 $a^*_{lab}=a^*-a^*_{N}-I^*_{lab} [a^*_{W}-a^*_{N}]$
 $b^*_{lab}=b^*-b^*_{N}-I^*_{lab} [b^*_{W}-b^*_{N}]$
 $C^*_{ab,a}=[a^*_{a}^2+b^*_{a}^2]^{1/2}$



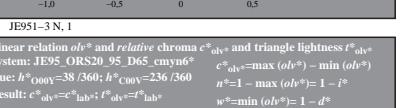
Adapted (a) CIELAB ($C^*_{ab,M}, L^*$) and relative CIELAB (c^*_{lab}, t^*_{lab})
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-96/360; h^*_{V00M}=305/360$
 $I^*_{lab}=(L^*-L^*_{N})/(L^*_{W}-L^*_{N})$
 $c^*_{lab}=C^*_{ab,a}/C^*_{ab,M}$
 $M=\text{Maximum colour}$



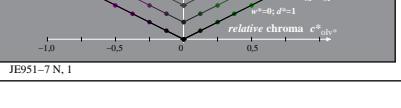
Linear relation adapted (a) CIELAB ($C^*_{ab,M}, L^*$) and relative CIELAB (c^*, t^*)
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-96/360; h^*_{V00M}=305/360$
 $I^*_{M}=(L^*_M-L^*_{N})/(L^*_{W}-L^*_{N})$
 $t^*_{lab}=t^*_{lab}-c^*_{lab} [t^*_{M}-0.5]$
 $c^*_{lab}=C^*_{ab,a}/C^*_{ab,M}$
 $M=\text{Maximum colour}$



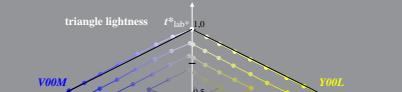
Linear relation adapted (a) CIELAB ($C^*_{ab,M}, L^*$) and relative CIELAB (c^*, t^*)
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-96/360; h^*_{V00M}=305/360$
 $I^*_{M}=(L^*_M-L^*_{N})/(L^*_{W}-L^*_{N})$
 $t^*_{lab}=t^*_{lab}-c^*_{lab} [t^*_{M}-0.5]$
 $c^*_{lab}=C^*_{ab,a}/C^*_{ab,M}$
 $M=\text{Maximum colour}$



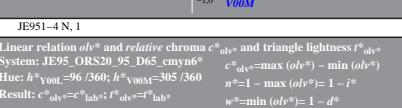
Linear relation adapted (a) CIELAB ($C^*_{ab,M}, L^*$) and relative CIELAB (c^*, t^*)
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-96/360; h^*_{V00M}=305/360$
 $I^*_{M}=(L^*_M-L^*_{N})/(L^*_{W}-L^*_{N})$
 $t^*_{lab}=t^*_{lab}-c^*_{lab} [t^*_{M}-0.5]$
 $c^*_{lab}=C^*_{ab,a}/C^*_{ab,M}$
 $M=\text{Maximum colour}$



Linear relation adapted (a) CIELAB ($C^*_{ab,M}, L^*$) and relative CIELAB (c^*, t^*)
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-96/360; h^*_{V00M}=305/360$
 $I^*_{M}=(L^*_M-L^*_{N})/(L^*_{W}-L^*_{N})$
 $t^*_{lab}=t^*_{lab}-c^*_{lab} [t^*_{M}-0.5]$
 $c^*_{lab}=C^*_{ab,a}/C^*_{ab,M}$
 $M=\text{Maximum colour}$



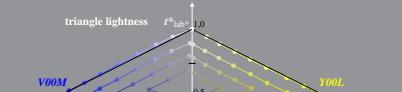
Linear relation adapted (a) CIELAB ($C^*_{ab,M}, L^*$) and relative CIELAB (c^*, t^*)
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-96/360; h^*_{V00M}=305/360$
 $I^*_{M}=(L^*_M-L^*_{N})/(L^*_{W}-L^*_{N})$
 $t^*_{lab}=t^*_{lab}-c^*_{lab} [t^*_{M}-0.5]$
 $c^*_{lab}=C^*_{ab,a}/C^*_{ab,M}$
 $M=\text{Maximum colour}$



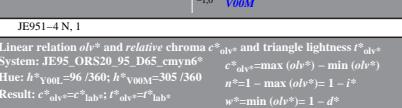
Linear relation olv* and relative chroma c^*_{olv*} and triangle lightness t^*_{olv*}
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-38/360; h^*_{C00V}=236/360$
Result: $c^*_{olv}=c^*_{lab}; t^*_{olv}=t^*_{lab}$
 $c^*_{lab}=C^*_{ab,a}/C^*_{ab,M}$
 $M=\text{Maximum colour}$



Linear relation olv* and relative chroma c^*_{olv*} and triangle lightness t^*_{olv*}
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-38/360; h^*_{C00V}=236/360$
Result: $c^*_{olv}=c^*_{lab}; t^*_{olv}=t^*_{lab}$
 $w= \max (olv*) - \min (olv*)$
 $n=1 - \max (olv*) = 1 - i^*$
 $w= \min (olv*) = 1 - d^*$
 $t^*_{olv}=w^* + 0.5 \cdot c^*_{olv*}$
 $M=\text{Maximum colour}$



Linear relation olv* and relative chroma c^*_{olv*} and triangle lightness t^*_{olv*}
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-38/360; h^*_{C00V}=236/360$
Result: $c^*_{olv}=c^*_{lab}; t^*_{olv}=t^*_{lab}$
 $w= \max (olv*) - \min (olv*)$
 $n=1 - \max (olv*) = 1 - i^*$
 $w= \min (olv*) = 1 - d^*$
 $t^*_{olv}=w^* + 0.5 \cdot c^*_{olv*}$
 $M=\text{Maximum colour}$



Linear relation olv* and relative chroma c^*_{olv*} and triangle lightness t^*_{olv*}
System: JE95_ORS20_95_D65_cmyn6*
Hue: $h^*_{Y00L}=-38/360; h^*_{C00V}=236/360$
Result: $c^*_{olv}=c^*_{lab}; t^*_{olv}=t^*_{lab}$
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 $n=1 - \max (olv*) = 1 - i^*$
 $w= \min (olv*) = 1 - d^*$
 $t^*_{olv}=w^* + 0.5 \cdot c^*_{olv*}$
 $M=\text{Maximum colour}$



JE95-7N: Measurement: JE95_ORS20_95_D65_cmyn6*_LUT.DAT, 243 colours, 090115, Separation olv*, adapted



TUB-test chart JE95; Relative Device Colour System G
1080 spectral reflexions R → LAB*a and CIE diagrams

input: w setgray
output: no change compared to input

See original or copy: http://web.me.com/klaus_richter/JE95/JE95L0NP.PDF /PS
Technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmtrik>