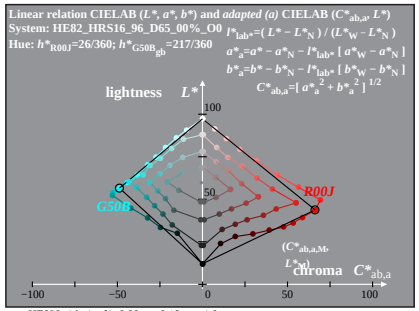
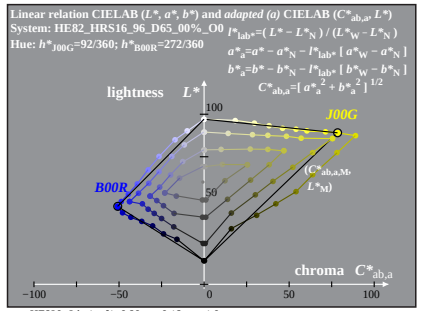
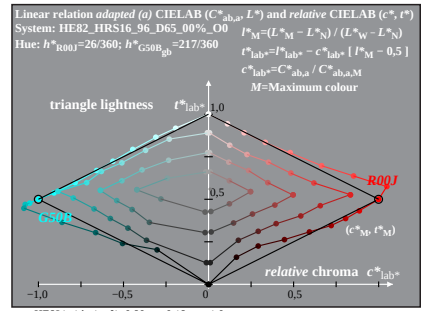


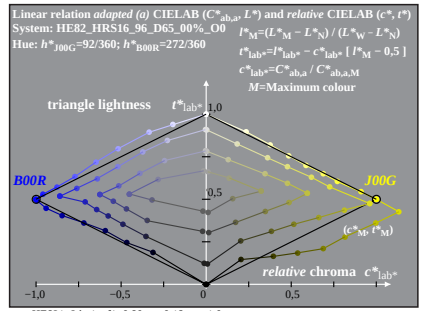

HE820−1A, 1; cf1=0.90; nt=0.18; nx=1.0



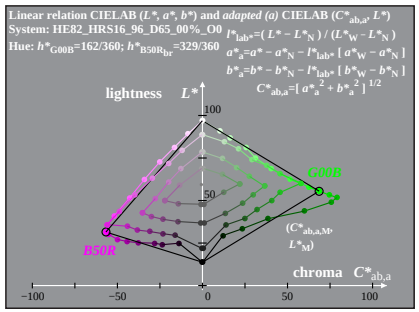

HE820−2A, 1; cf1=0.90; nt=0.18; nx=1.0



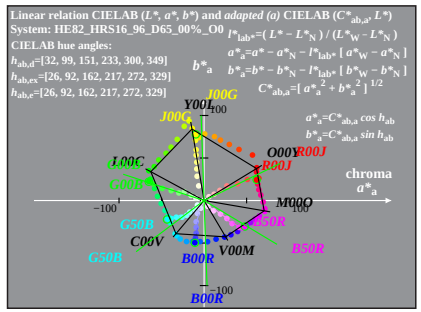

HE821−1A, 1; cf1=0.90; nt=0.18; nx=1.0



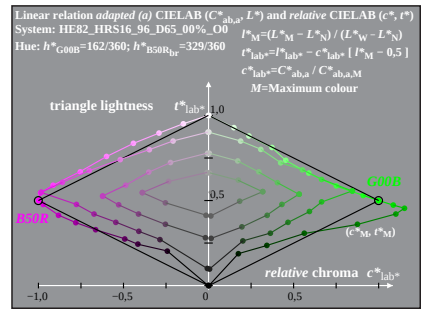

HE821−2A, 1; cf1=0.90; nt=0.18; nx=1.0



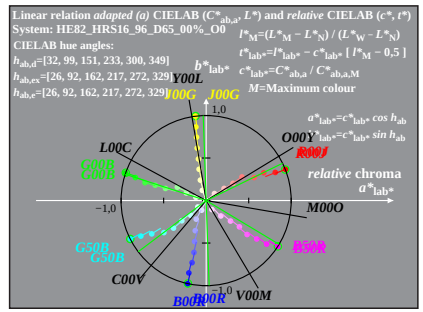

HE820−3A, 1; cf1=0.90; nt=0.18; nx=1.0



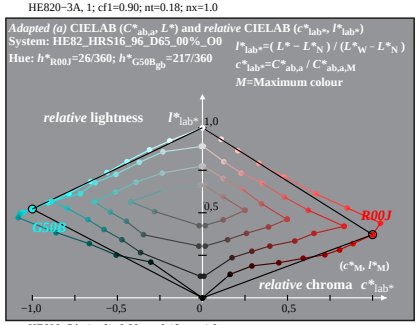

HE820−4A, 1; cf1=0.90; nt=0.18; nx=1.0



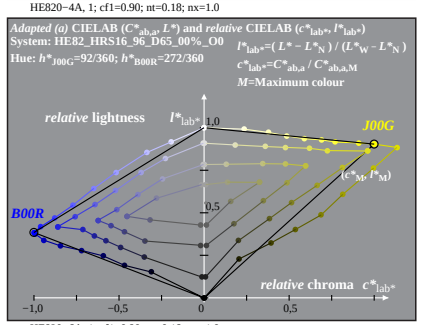

HE821−3A, 1; cf1=0.90; nt=0.18; nx=1.0



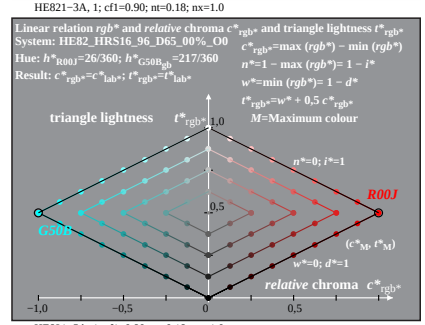

HE821−4A, 1; cf1=0.90; nt=0.18; nx=1.0



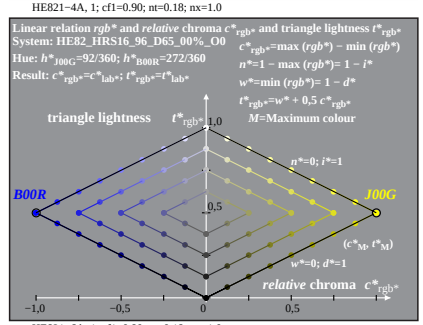

HE820−5A, 1; cf1=0.90; nt=0.18; nx=1.0



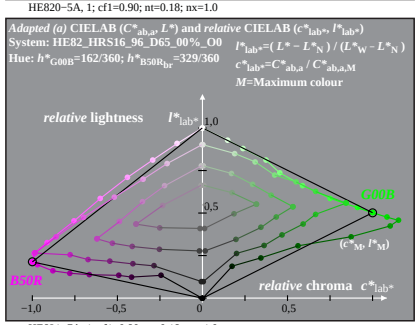

HE820−6A, 1; cf1=0.90; nt=0.18; nx=1.0



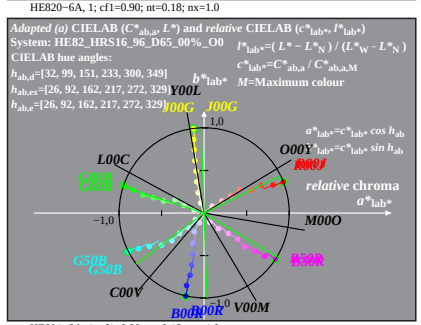

HE821−5A, 1; cf1=0.90; nt=0.18; nx=1.0



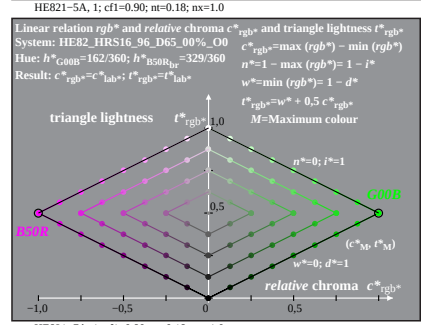

HE821−6A, 1; cf1=0.90; nt=0.18; nx=1.0



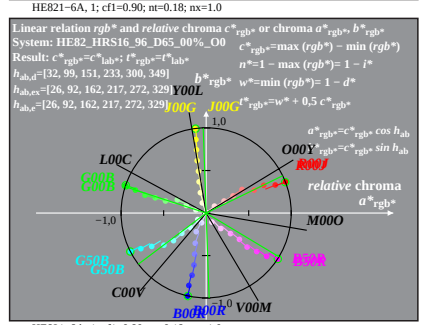

HE821−7A, 1; cf1=0.90; nt=0.18; nx=1.0



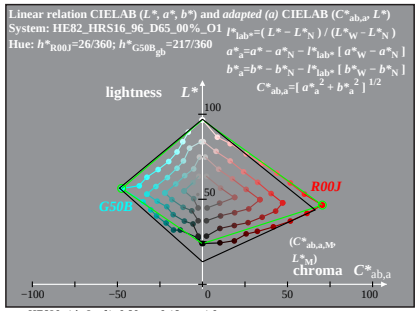

HE821−8A, 1; cf1=0.90; nt=0.18; nx=1.0

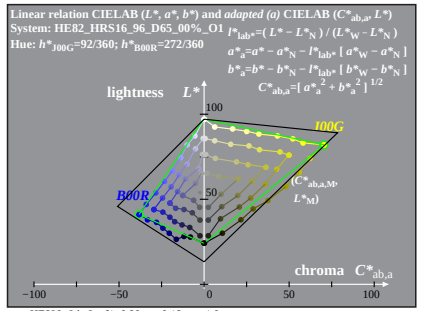


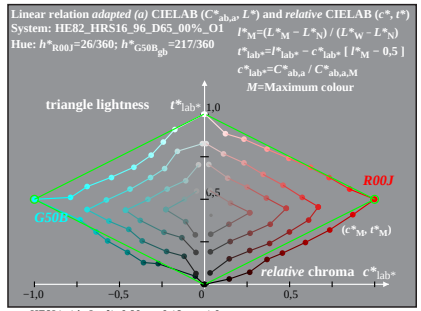

HE821−7A, 1; cf1=0.90; nt=0.18; nx=1.0

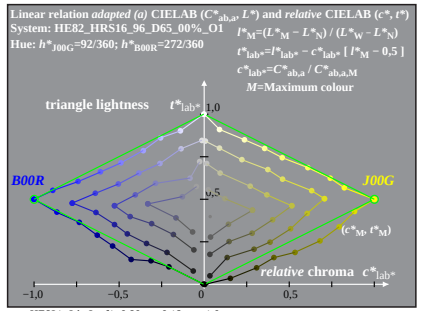


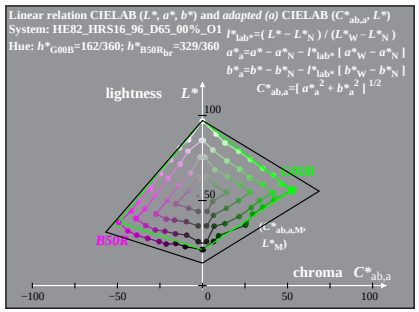

HE821−8A, 1; cf1=0.90; nt=0.18; nx=1.0

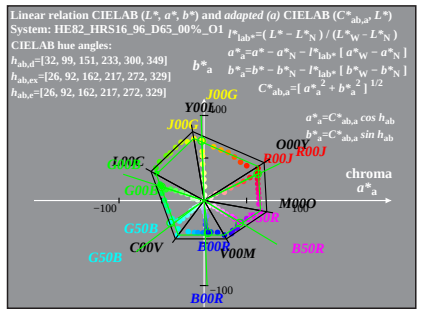

Linear relation CIELAB (L*, a*, b*) and adapted (a) CIELAB (C*ab,a, L*)
System: HE82_HRS16_96_D65_00%_O1
Hue: h*R00J=26/360; h*G50Bgb=217/360
l*lab*=(L* − L*N) / (L*W − L*N)
a*a=a* − a*N − l*lab* [ a*W − a*N ]
b*a=b* − b*N − l*lab* [ b*W − b*N ]
C*ab,a=[ a*a2 + b*a2 ] 1/2
lightness L*
chroma C*ab,a
R00J
G50B
(C*ab,a,M, L*M)
HE820−1A, 2; cf1=0.90; nt=0.18; nx=1.0

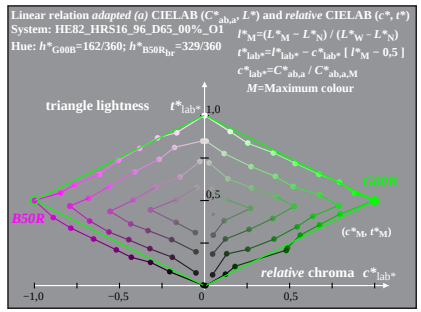

Linear relation CIELAB (L*, a*, b*) and adapted (a) CIELAB (C*ab,a, L*)
System: HE82_HRS16_96_D65_00%_O1
Hue: h*J00G=92/360; h*B00R=272/360
l*lab*=(L* − L*N) / (L*W − L*N)
a*a=a* − a*N − l*lab* [ a*W − a*N ]
b*a=b* − b*N − l*lab* [ b*W − b*N ]
C*ab,a=[ a*a2 + b*a2 ] 1/2
lightness L*
chroma C*ab,a
J00G
B00R
(C*ab,a,M, L*M)
HE820−2A, 2; cf1=0.90; nt=0.18; nx=1.0

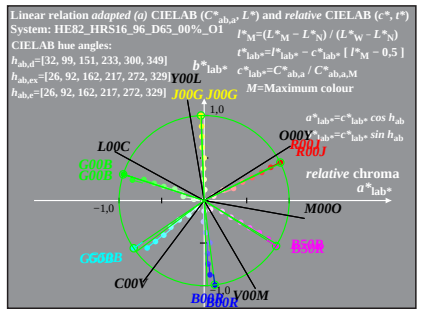

Linear relation adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*, t*)
System: HE82_HRS16_96_D65_00%_O1
Hue: h*R00J=26/360; h*G50Bgb=217/360
l*M=(L*M − L*N) / (L*W − L*N)
t*lab*=l*lab* − c*lab* [ l*M − 0,5 ]
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
triangle lightness t*lab*
relative chroma c*lab*
R00J
G50B
(c*M, t*M)
HE821−1A, 2; cf1=0.90; nt=0.18; nx=1.0

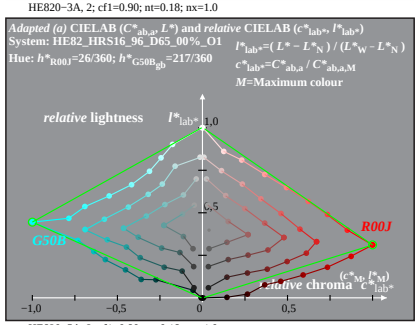

Linear relation adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*, t*)
System: HE82_HRS16_96_D65_00%_O1
Hue: h*J00G=92/360; h*B00R=272/360
l*M=(L*M − L*N) / (L*W − L*N)
t*lab*=l*lab* − c*lab* [ l*M − 0,5 ]
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
triangle lightness t*lab*
relative chroma c*lab*
B00R
J00G
(c*M, t*M)
HE821−2A, 2; cf1=0.90; nt=0.18; nx=1.0

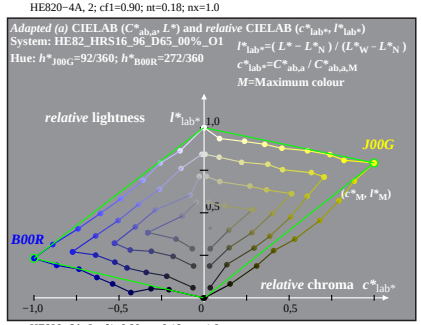

Linear relation CIELAB (L*, a*, b*) and adapted (a) CIELAB (C*ab,a, L*)
System: HE82_HRS16_96_D65_00%_O1
Hue: h*G00B=162/360; h*B50Rbr=329/360
l*lab*=(L* − L*N) / (L*W − L*N)
a*a=a* − a*N − l*lab* [ a*W − a*N ]
b*a=b* − b*N − l*lab* [ b*W − b*N ]
C*ab,a=[ a*a2 + b*a2 ] 1/2
lightness L*
chroma C*ab,a
G00B
B50R
(C*ab,a,M, L*M)
HE820−3A, 2; cf1=0.90; nt=0.18; nx=1.0

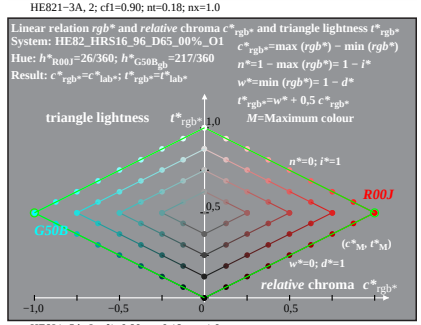

Linear relation CIELAB (L*, a*, b*) and adapted (a) CIELAB (C*ab,a, L*)
System: HE82_HRS16_96_D65_00%_O1
CIELAB hue angles:
hab,d=[32, 99, 151, 233, 300, 349]
hab,ex=[26, 92, 162, 217, 272, 329]
hab,e=[26, 92, 162, 217, 272, 329]
l*lab*=(L* − L*N) / (L*W − L*N)
a*a=a* − a*N − l*lab* [ a*W − a*N ]
b*a=b* − b*N − l*lab* [ b*W − b*N ]
C*ab,a=[ a*a2 + b*a2 ] 1/2
a*a=C*ab,a cos hab
b*a=C*ab,a sin hab
chroma a*a
b*a
Y00L
J00G
O00Y
R00J
L00C
G00B
M00O
B50R
C00V
V00M
B00R
HE820−4A, 2; cf1=0.90; nt=0.18; nx=1.0

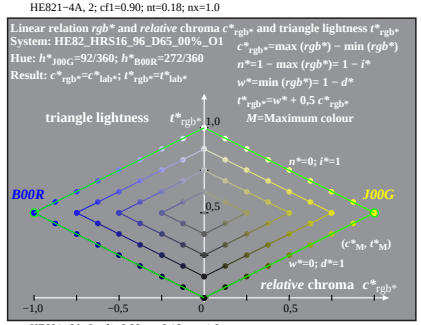

Linear relation adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*, t*)
System: HE82_HRS16_96_D65_00%_O1
Hue: h*G00B=162/360; h*B50Rbr=329/360
l*M=(L*M − L*N) / (L*W − L*N)
t*lab*=l*lab* − c*lab* [ l*M − 0,5 ]
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
triangle lightness t*lab*
relative chroma c*lab*
G00B
B50R
(c*M, t*M)
HE821−3A, 2; cf1=0.90; nt=0.18; nx=1.0

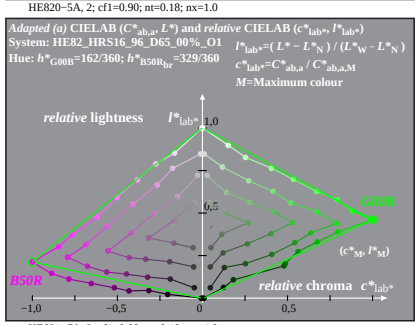

Linear relation adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*, t*)
System: HE82_HRS16_96_D65_00%_O1
CIELAB hue angles:
hab,d=[32, 99, 151, 233, 300, 349]
hab,ex=[26, 92, 162, 217, 272, 329]
hab,e=[26, 92, 162, 217, 272, 329]
l*M=(L*M − L*N) / (L*W − L*N)
t*lab*=l*lab* − c*lab* [ l*M − 0,5 ]
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
a*lab*=c*lab* cos hab
b*lab*=c*lab* sin hab
relative chroma a*lab*
b*lab*
Y00L
J00G
O00Y
R00J
L00C
G00B
M00O
B50R
C00V
V00M
B00R
HE821−4A, 2; cf1=0.90; nt=0.18; nx=1.0

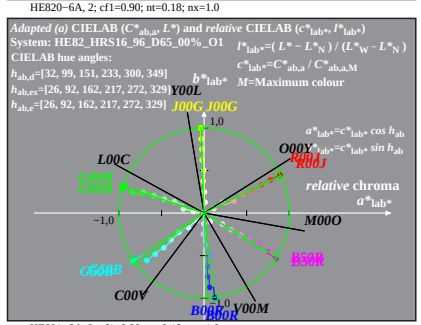

Adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*lab*, l*lab*)
System: HE82_HRS16_96_D65_00%_O1
Hue: h*R00J=26/360; h*G50Bgb=217/360
l*lab*=(L* − L*N) / (L*W − L*N)
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
relative lightness l*lab*
relative chroma c*lab*
R00J
G50B
(c*M, l*M)
HE820−5A, 2; cf1=0.90; nt=0.18; nx=1.0

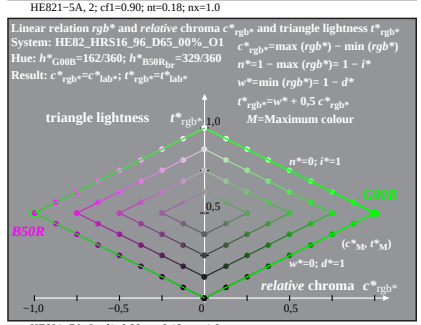

Adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*lab*, l*lab*)
System: HE82_HRS16_96_D65_00%_O1
Hue: h*J00G=92/360; h*B00R=272/360
l*lab*=(L* − L*N) / (L*W − L*N)
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
relative lightness l*lab*
relative chroma c*lab*
J00G
B00R
(c*M, l*M)
HE820−6A, 2; cf1=0.90; nt=0.18; nx=1.0

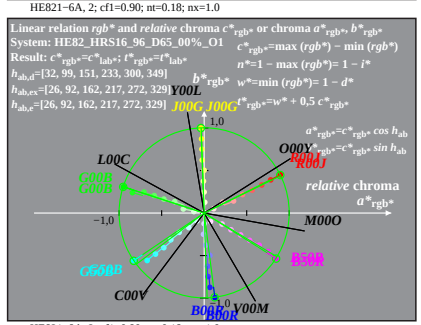

Linear relation rgb* and relative chroma c*rgb* and triangle lightness t*rgb*
System: HE82_HRS16_96_D65_00%_O1
Hue: h*R00J=26/360; h*G50Bgb=217/360
Result: c*rgb*=c*lab*; t*rgb*=t*lab*
c*rgb*=max (rgb*) − min (rgb*)
n*=1 − max (rgb*)= 1 − i*
w*=min (rgb*)= 1 − d*
t*rgb*=w* + 0,5 c*rgb*
M=Maximum colour
triangle lightness t*rgb*
n*=0; i*=1
w*=0; d*=1
relative chroma c*rgb*
R00J
G50B
(c*M, t*M)
HE821−5A, 2; cf1=0.90; nt=0.18; nx=1.0

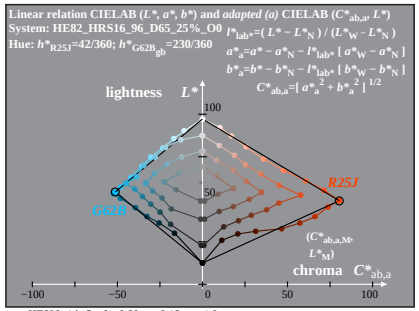

Linear relation rgb* and relative chroma c*rgb* and triangle lightness t*rgb*
System: HE82_HRS16_96_D65_00%_O1
Hue: h*J00G=92/360; h*B00R=272/360
Result: c*rgb*=c*lab*; t*rgb*=t*lab*
c*rgb*=max (rgb*) − min (rgb*)
n*=1 − max (rgb*)= 1 − i*
w*=min (rgb*)= 1 − d*
t*rgb*=w* + 0,5 c*rgb*
M=Maximum colour
triangle lightness t*rgb*
n*=0; i*=1
w*=0; d*=1
relative chroma c*rgb*
B00R
J00G
(c*M, t*M)
HE821−6A, 2; cf1=0.90; nt=0.18; nx=1.0


Adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*lab*, l*lab*)
System: HE82_HRS16_96_D65_00%_O1
Hue: h*G00B=162/360; h*B50Rbr=329/360
l*lab*=(L* − L*N) / (L*W − L*N)
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
relative lightness l*lab*
relative chroma c*lab*
G00B
B50R
(c*M, l*M)
HE821−7A, 2; cf1=0.90; nt=0.18; nx=1.0

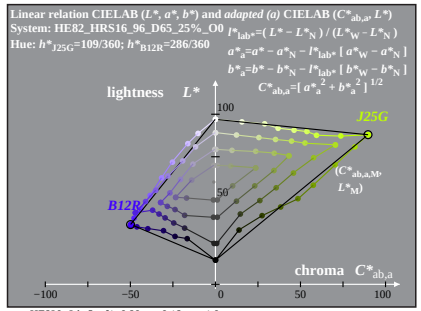

Adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*lab*, l*lab*)
System: HE82_HRS16_96_D65_00%_O1
CIELAB hue angles:
hab,d=[32, 99, 151, 233, 300, 349]
hab,ex=[26, 92, 162, 217, 272, 329]
hab,e=[26, 92, 162, 217, 272, 329]
l*lab*=(L* − L*N) / (L*W − L*N)
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
a*lab*=c*lab* cos hab
b*lab*=c*lab* sin hab
relative chroma a*lab*
b*lab*
Y00L
J00G
L00C
G00B
M00O
B50R
C00V
V00M
B00R
HE821−8A, 2; cf1=0.90; nt=0.18; nx=1.0


Linear relation rgb* and relative chroma c*rgb* and triangle lightness t*rgb*
System: HE82_HRS16_96_D65_00%_O1
Hue: h*G00B=162/360; h*B50Rbr=329/360
Result: c*rgb*=c*lab*; t*rgb*=t*lab*
c*rgb*=max (rgb*) − min (rgb*)
n*=1 − max (rgb*)= 1 − i*
w*=min (rgb*)= 1 − d*
t*rgb*=w* + 0,5 c*rgb*
M=Maximum colour
triangle lightness t*rgb*
n*=0; i*=1
w*=0; d*=1
relative chroma c*rgb*
G00B
B50R
(c*M, t*M)
HE821−7A, 2; cf1=0.90; nt=0.18; nx=1.0

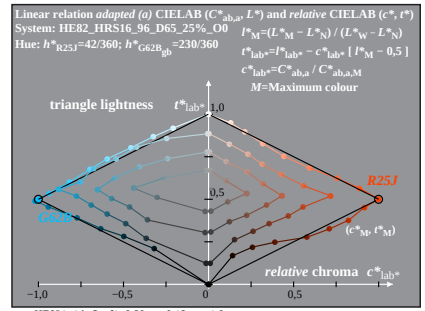

Linear relation rgb* and relative chroma c*rgb* or chroma a*rgb*, b*rgb*
System: HE82_HRS16_96_D65_00%_O1
Result: c*rgb*=c*lab*; t*rgb*=t*lab*
hab,d=[32, 99, 151, 233, 300, 349]
hab,ex=[26, 92, 162, 217, 272, 329]
hab,e=[26, 92, 162, 217, 272, 329]
c*rgb*=max (rgb*) − min (rgb*)
n*=1 − max (rgb*)= 1 − i*
w*=min (rgb*)= 1 − d*
t*rgb*=w* + 0,5 c*rgb*
a*rgb*=c*rgb* cos hab
b*rgb*=c*rgb* sin hab
relative chroma a*rgb*
b*rgb*
Y00L
J00G
O00Y
R00J
L00C
G00B
M00O
B50R
C00V
V00M
B00R
HE821−8A, 2; cf1=0.90; nt=0.18; nx=1.0



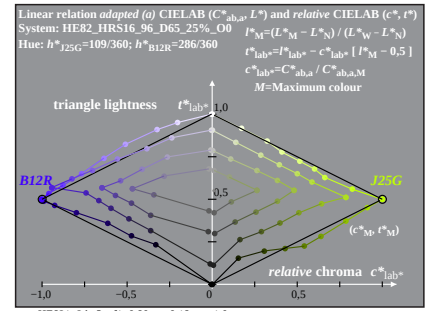

HE820−1A, 3; cf1=0.90; nt=0.18; nx=1.0



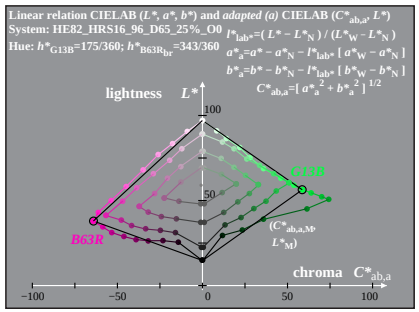

HE820−2A, 3; cf1=0.90; nt=0.18; nx=1.0



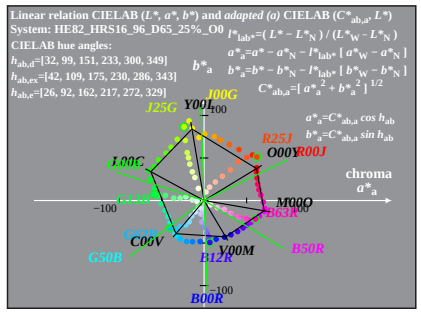

HE821−1A, 3; cf1=0.90; nt=0.18; nx=1.0



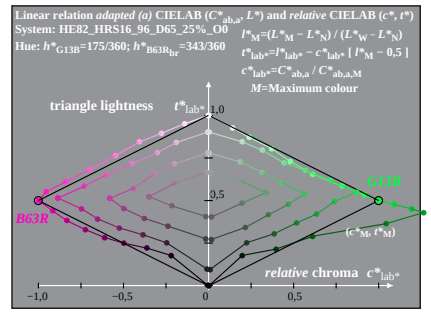

HE821−2A, 3; cf1=0.90; nt=0.18; nx=1.0



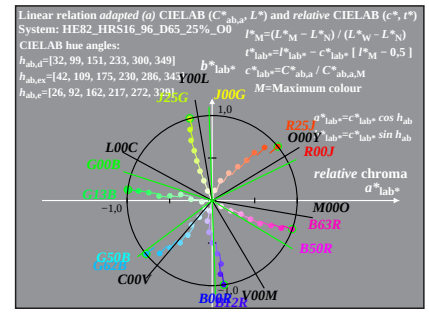

HE820−3A, 3; cf1=0.90; nt=0.18; nx=1.0



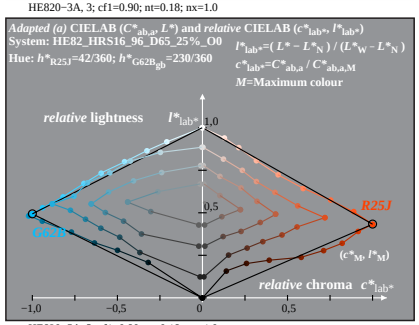

HE820−4A, 3; cf1=0.90; nt=0.18; nx=1.0



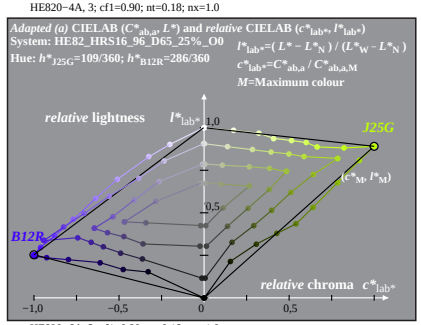

HE821−3A, 3; cf1=0.90; nt=0.18; nx=1.0



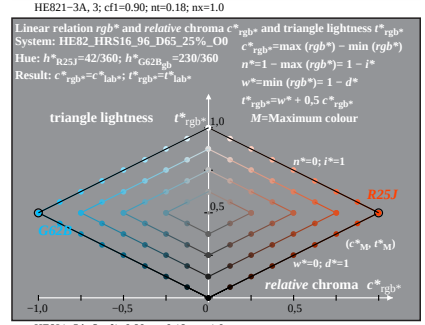

HE821−4A, 3; cf1=0.90; nt=0.18; nx=1.0



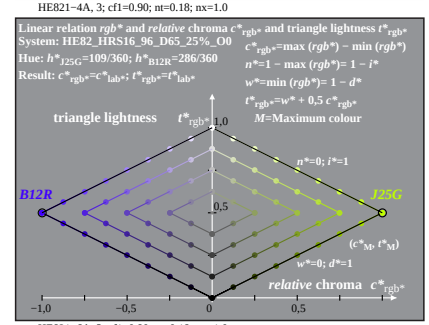

HE820−5A, 3; cf1=0.90; nt=0.18; nx=1.0



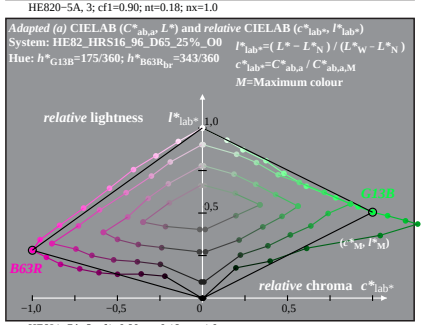

HE820−6A, 3; cf1=0.90; nt=0.18; nx=1.0



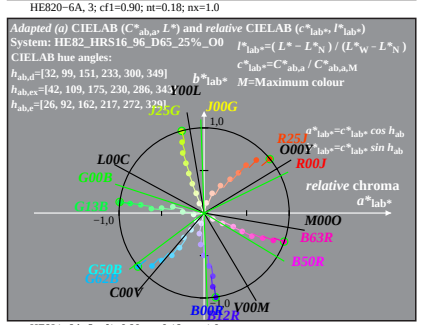

HE821−5A, 3; cf1=0.90; nt=0.18; nx=1.0



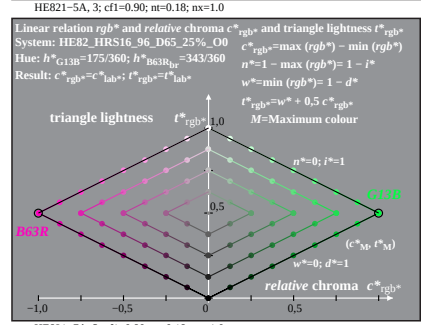

HE821−6A, 3; cf1=0.90; nt=0.18; nx=1.0



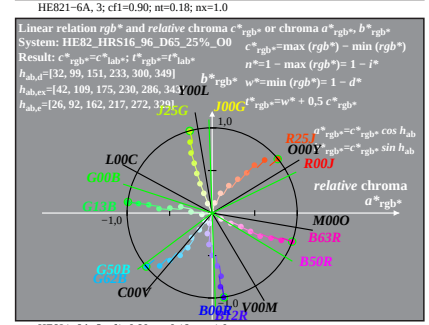

HE821−7A, 3; cf1=0.90; nt=0.18; nx=1.0




HE821−8A, 3; cf1=0.90; nt=0.18; nx=1.0

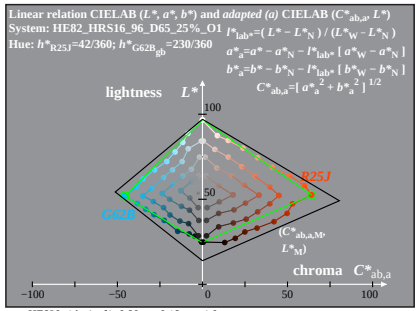



HE821−7A, 3; cf1=0.90; nt=0.18; nx=1.0

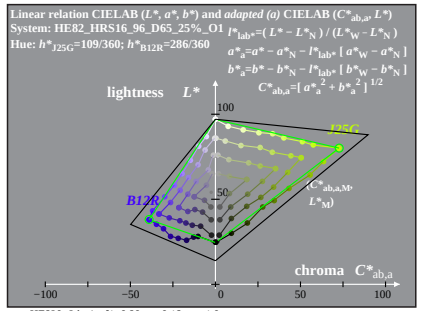



HE821−8A, 3; cf1=0.90; nt=0.18; nx=1.0

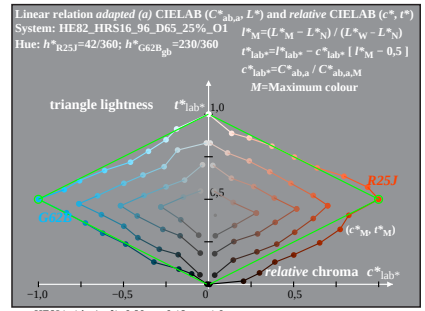
HE820−7A: Measurement: HE82_HRS16_96_D65_25%_O0_LU.DAT, 243 colours, 090115, Separation olv*, adapted, Page 3/8



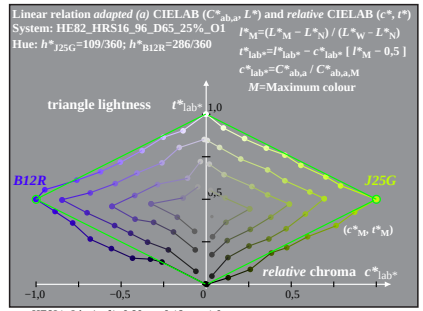

HE820−1A, 4; cf1=0.90; nt=0.18; nx=1.0



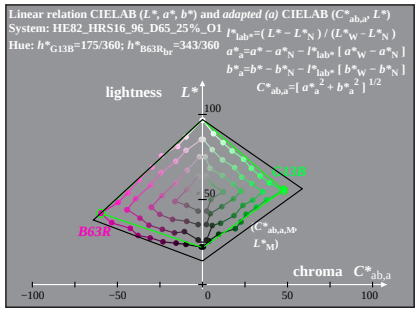

HE820−2A, 4; cf1=0.90; nt=0.18; nx=1.0



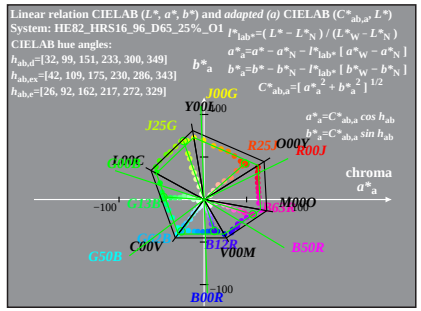

HE821−1A, 4; cf1=0.90; nt=0.18; nx=1.0



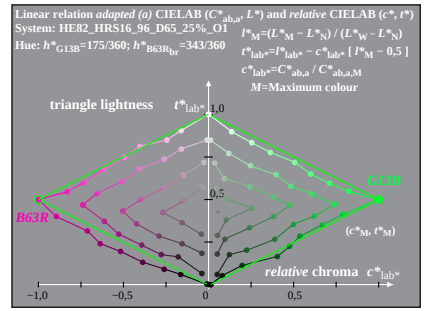

HE821−2A, 4; cf1=0.90; nt=0.18; nx=1.0



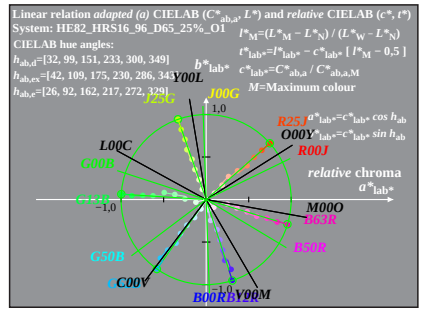

HE820−3A, 4; cf1=0.90; nt=0.18; nx=1.0



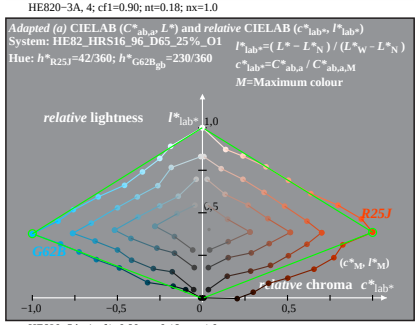

HE820−4A, 4; cf1=0.90; nt=0.18; nx=1.0



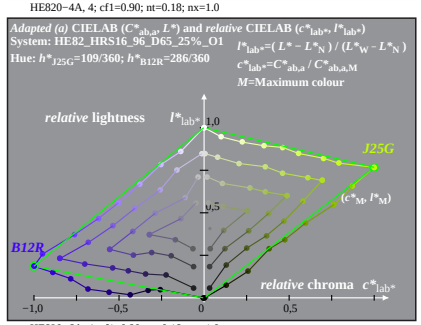

HE821−3A, 4; cf1=0.90; nt=0.18; nx=1.0



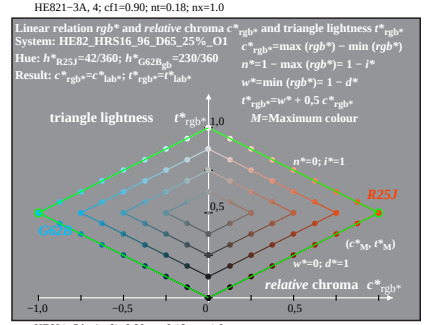

HE821−4A, 4; cf1=0.90; nt=0.18; nx=1.0



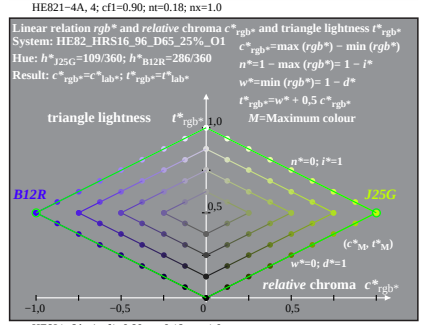

HE820−5A, 4; cf1=0.90; nt=0.18; nx=1.0



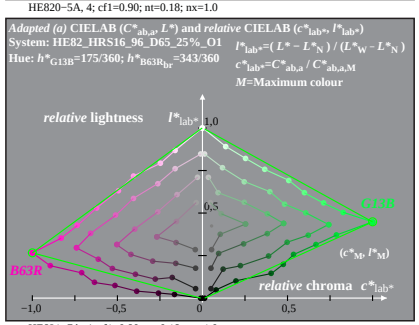

HE820−6A, 4; cf1=0.90; nt=0.18; nx=1.0



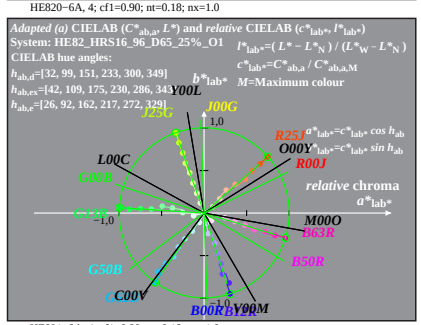

HE821−5A, 4; cf1=0.90; nt=0.18; nx=1.0



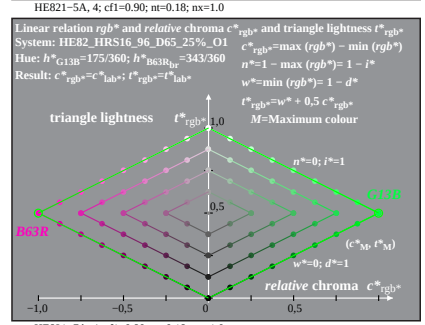

HE821−6A, 4; cf1=0.90; nt=0.18; nx=1.0



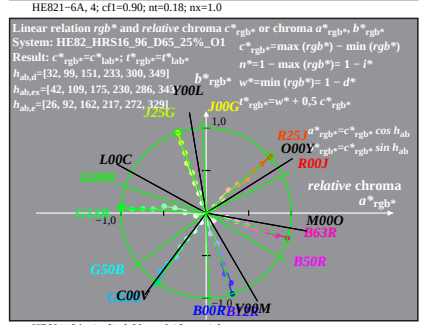

HE821−7A, 4; cf1=0.90; nt=0.18; nx=1.0




HE821−8A, 4; cf1=0.90; nt=0.18; nx=1.0

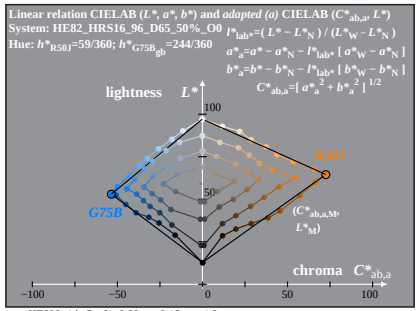



HE821−7A, 4; cf1=0.90; nt=0.18; nx=1.0

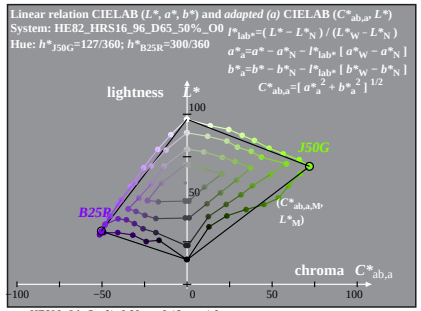



HE821−8A, 4; cf1=0.90; nt=0.18; nx=1.0

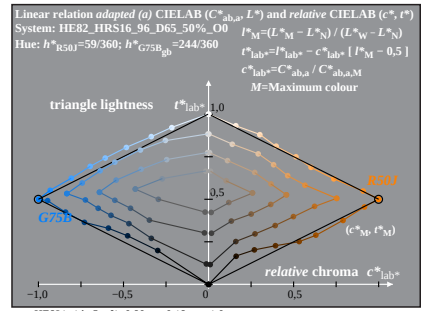
HE820−7A: Measurement: HE82_HRS16_96_D65_25%_O1_LU.DAT, 243 colours, 090115, Separation olv*, adapted, Page 4/8



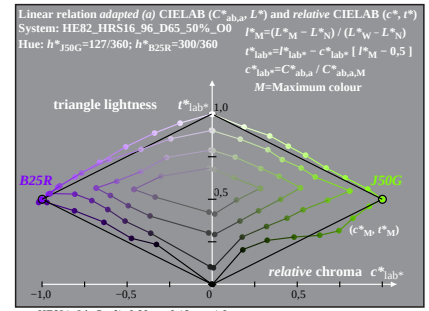

HE820−1A, 5; cf1=0.90; nt=0.18; nx=1.0



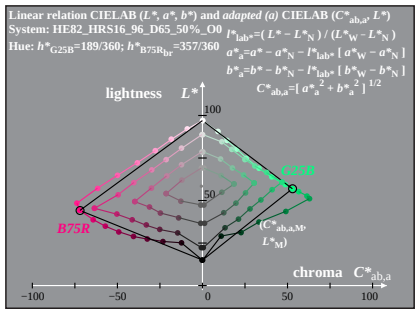

HE820−2A, 5; cf1=0.90; nt=0.18; nx=1.0



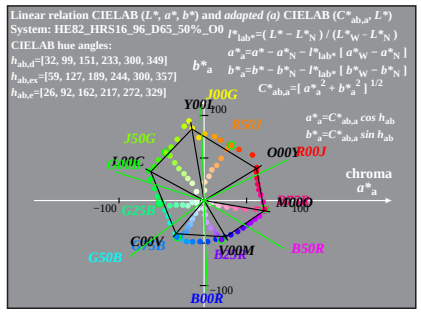

HE821−1A, 5; cf1=0.90; nt=0.18; nx=1.0



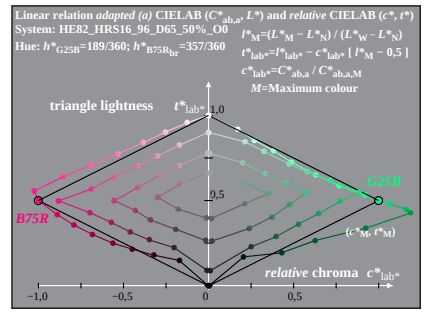

HE821−2A, 5; cf1=0.90; nt=0.18; nx=1.0



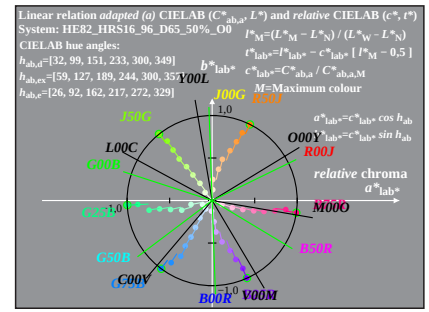

HE820−3A, 5; cf1=0.90; nt=0.18; nx=1.0



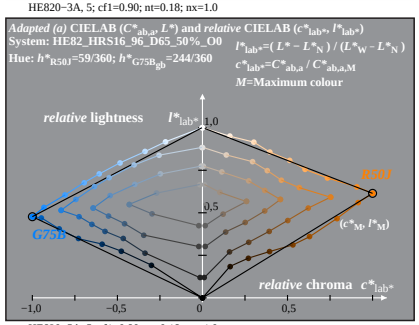

HE820−4A, 5; cf1=0.90; nt=0.18; nx=1.0



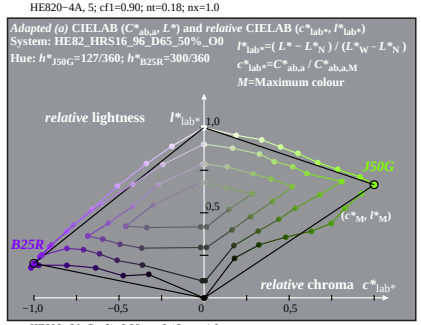

HE821−3A, 5; cf1=0.90; nt=0.18; nx=1.0



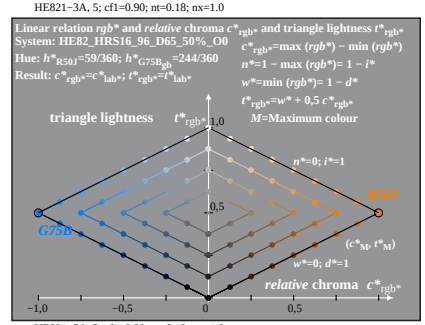

HE821−4A, 5; cf1=0.90; nt=0.18; nx=1.0



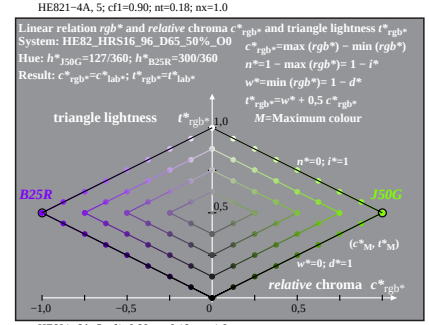

HE820−5A, 5; cf1=0.90; nt=0.18; nx=1.0



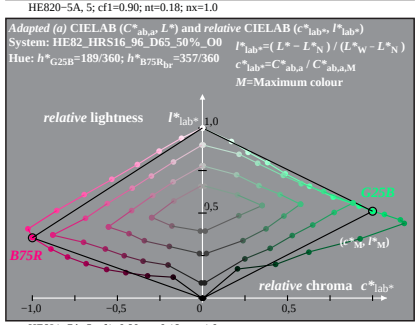

HE820−6A, 5; cf1=0.90; nt=0.18; nx=1.0



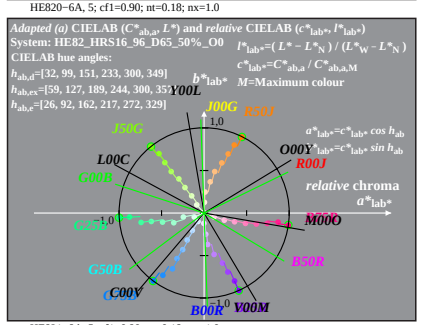

HE821−5A, 5; cf1=0.90; nt=0.18; nx=1.0



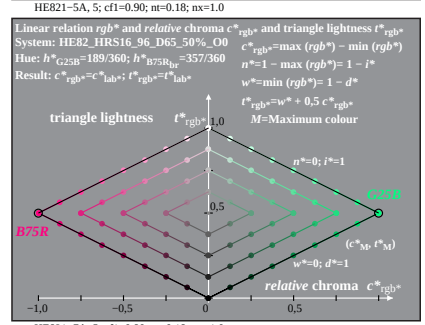

HE821−6A, 5; cf1=0.90; nt=0.18; nx=1.0



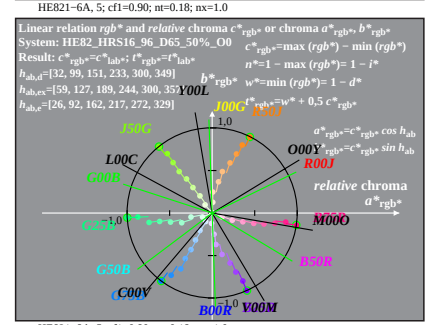

HE821−7A, 5; cf1=0.90; nt=0.18; nx=1.0



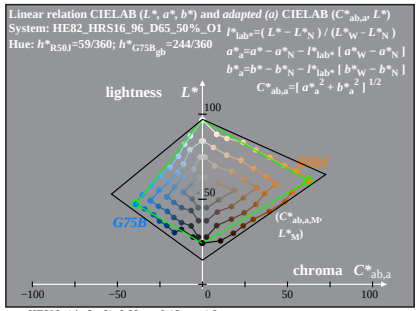

HE821−8A, 5; cf1=0.90; nt=0.18; nx=1.0

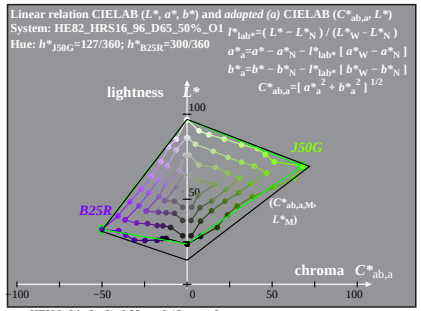


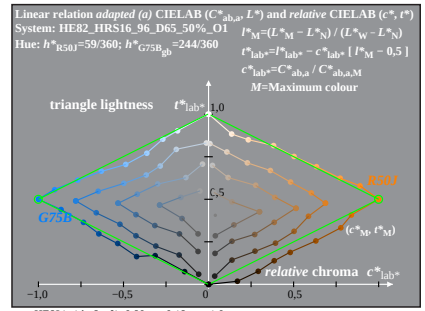

HE821−7A, 5; cf1=0.90; nt=0.18; nx=1.0

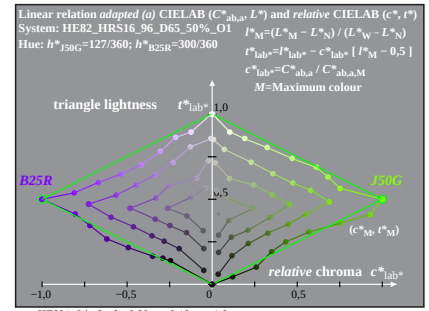


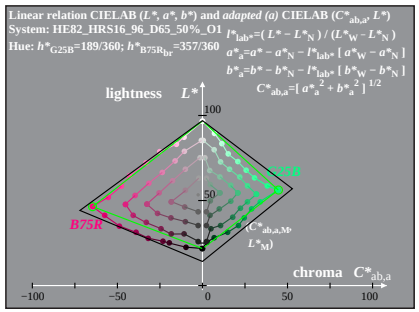

HE821−8A, 5; cf1=0.90; nt=0.18; nx=1.0

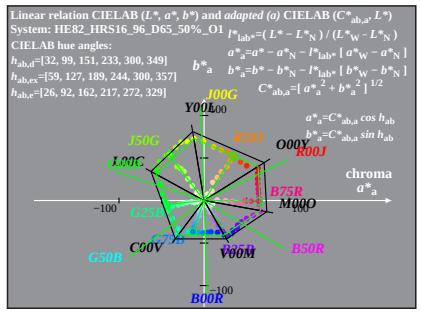

Linear relation CIELAB (L*, a*, b*) and adapted (a) CIELAB (C*ab,a, L*)
System: HE82_HRS16_96_D65_50%_O1
Hue: h*R50J=59/360; h*G75Bgb=244/360
l*lab*=(L* − L*N) / (L*W − L*N)
a*a=a* − a*N − l*lab* [ a*W − a*N ]
b*a=b* − b*N − l*lab* [ b*W − b*N ]
C*ab,a=[ a*a2 + b*a2 ] 1/2
lightness L*
chroma C*ab,a
R50J
G75B
(C*ab,a,M, L*M)
HE820−1A, 6; cf1=0.90; nt=0.18; nx=1.0

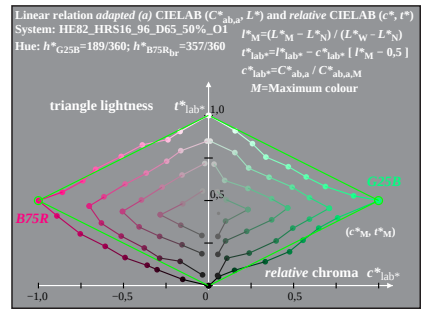

Linear relation CIELAB (L*, a*, b*) and adapted (a) CIELAB (C*ab,a, L*)
System: HE82_HRS16_96_D65_50%_O1
Hue: h*J50G=127/360; h*B25R=300/360
l*lab*=(L* − L*N) / (L*W − L*N)
a*a=a* − a*N − l*lab* [ a*W − a*N ]
b*a=b* − b*N − l*lab* [ b*W − b*N ]
C*ab,a=[ a*a2 + b*a2 ] 1/2
lightness L*
chroma C*ab,a
J50G
B25R
(C*ab,a,M, L*M)
HE820−2A, 6; cf1=0.90; nt=0.18; nx=1.0

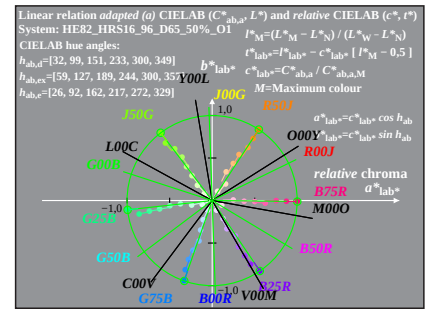

Linear relation adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*, t*)
System: HE82_HRS16_96_D65_50%_O1
Hue: h*R50J=59/360; h*G75Bgb=244/360
l*M=(L*M − L*N) / (L*W − L*N)
t*lab*=l*lab* − c*lab* [ l*M − 0,5 ]
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
triangle lightness t*lab*
relative chroma c*lab*
R50J
G75B
(c*M, t*M)
HE821−1A, 6; cf1=0.90; nt=0.18; nx=1.0

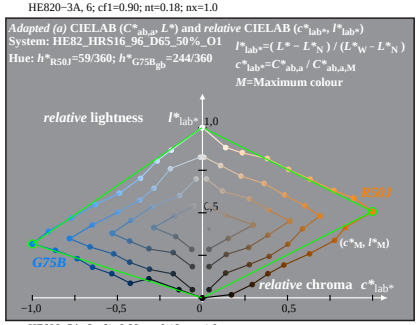

Linear relation adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*, t*)
System: HE82_HRS16_96_D65_50%_O1
Hue: h*J50G=127/360; h*B25R=300/360
l*M=(L*M − L*N) / (L*W − L*N)
t*lab*=l*lab* − c*lab* [ l*M − 0,5 ]
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
triangle lightness t*lab*
relative chroma c*lab*
B25R
J50G
(c*M, t*M)
HE821−2A, 6; cf1=0.90; nt=0.18; nx=1.0

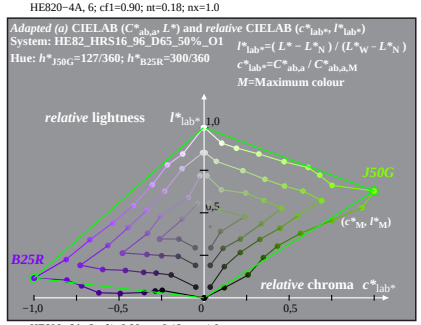

Linear relation CIELAB (L*, a*, b*) and adapted (a) CIELAB (C*ab,a, L*)
System: HE82_HRS16_96_D65_50%_O1
Hue: h*G25Bgb=189/360; h*B75Rbr=357/360
l*lab*=(L* − L*N) / (L*W − L*N)
a*a=a* − a*N − l*lab* [ a*W − a*N ]
b*a=b* − b*N − l*lab* [ b*W − b*N ]
C*ab,a=[ a*a2 + b*a2 ] 1/2
lightness L*
chroma C*ab,a
G25B
B75R
(C*ab,a,M, L*M)
HE820−3A, 6; cf1=0.90; nt=0.18; nx=1.0

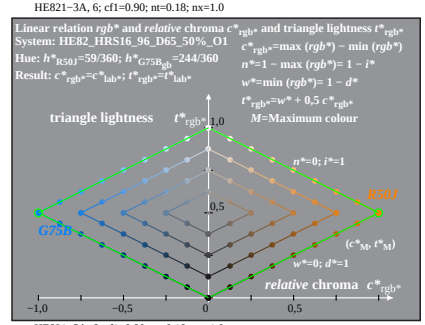

Linear relation CIELAB (L*, a*, b*) and adapted (a) CIELAB (C*ab,a, L*)
System: HE82_HRS16_96_D65_50%_O1
CIELAB hue angles:
hab,d=[32, 99, 151, 233, 300, 349]
hab,ex=[59, 127, 189, 244, 300, 357]
hab,e=[26, 92, 162, 217, 272, 329]
l*lab*=(L* − L*N) / (L*W − L*N)
a*a=a* − a*N − l*lab* [ a*W − a*N ]
b*a=b* − b*N − l*lab* [ b*W − b*N ]
C*ab,a=[ a*a2 + b*a2 ] 1/2
a*a=C*ab,a cos hab
b*a=C*ab,a sin hab
b*a
chroma a*a
Y00L
J00G
J50G
R50J
L00C
O00Y
R00J
B75R
M00O
G25B
G50B
C00V
V00M
B50R
B00R
HE820−4A, 6; cf1=0.90; nt=0.18; nx=1.0

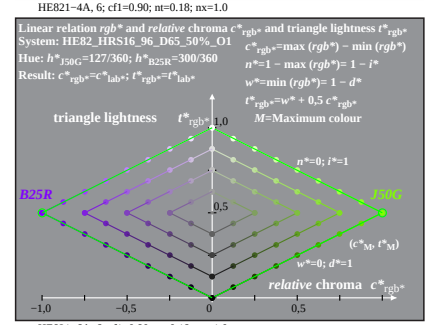

Linear relation adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*, t*)
System: HE82_HRS16_96_D65_50%_O1
Hue: h*G25Bgb=189/360; h*B75Rbr=357/360
l*M=(L*M − L*N) / (L*W − L*N)
t*lab*=l*lab* − c*lab* [ l*M − 0,5 ]
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
triangle lightness t*lab*
relative chroma c*lab*
G25B
B75R
(c*M, t*M)
HE821−3A, 6; cf1=0.90; nt=0.18; nx=1.0

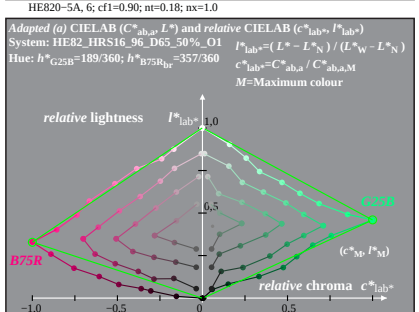

Linear relation adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*, t*)
System: HE82_HRS16_96_D65_50%_O1
CIELAB hue angles:
hab,d=[32, 99, 151, 233, 300, 349]
hab,ex=[59, 127, 189, 244, 300, 357]
hab,e=[26, 92, 162, 217, 272, 329]
l*M=(L*M − L*N) / (L*W − L*N)
t*lab*=l*lab* − c*lab* [ l*M − 0,5 ]
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
b*lab*
a*lab*=c*lab* cos hab
b*lab*=c*lab* sin hab
relative chroma a*lab*
Y00L
J00G
R50J
J50G
L00C
O00Y
R00J
G00B
B75R
M00O
G25B
G50B
B50R
C00V
B25R
G75B
B00R
V00M
HE821−4A, 6; cf1=0.90; nt=0.18; nx=1.0

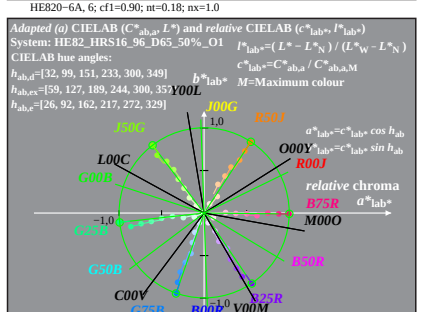

Adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*lab*, l*lab*)
System: HE82_HRS16_96_D65_50%_O1
Hue: h*R50J=59/360; h*G75Bgb=244/360
l*lab*=(L* − L*N) / (L*W − L*N)
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
relative lightness l*lab*
relative chroma c*lab*
R50J
G75B
(c*M, l*M)
HE820−5A, 6; cf1=0.90; nt=0.18; nx=1.0

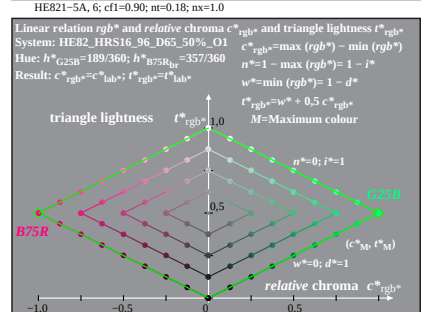

Adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*lab*, l*lab*)
System: HE82_HRS16_96_D65_50%_O1
Hue: h*J50G=127/360; h*B25R=300/360
l*lab*=(L* − L*N) / (L*W − L*N)
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
relative lightness l*lab*
relative chroma c*lab*
J50G
B25R
(c*M, l*M)
HE820−6A, 6; cf1=0.90; nt=0.18; nx=1.0

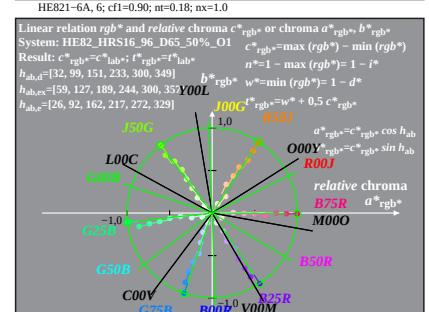

Linear relation rgb* and relative chroma c*rgb* and triangle lightness t*rgb*
System: HE82_HRS16_96_D65_50%_O1
Hue: h*R50J=59/360; h*G75Bgb=244/360
Result: c*rgb*=c*lab*; t*rgb*=t*lab*
c*rgb*=max (rgb*) − min (rgb*)
n*=1 − max (rgb*)= 1 − i*
w*=min (rgb*)= 1 − d*
t*rgb*=w* + 0,5 c*rgb*
M=Maximum colour
triangle lightness t*rgb*
n*=0; i*=1
w*=0; d*=1
relative chroma c*rgb*
R50J
G75B
(c*M, t*M)
HE821−5A, 6; cf1=0.90; nt=0.18; nx=1.0

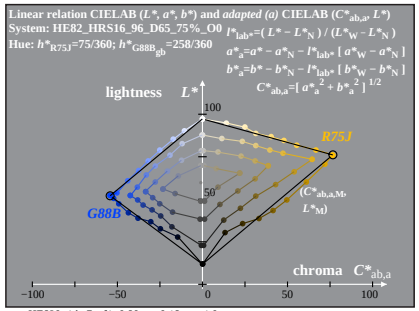

Linear relation rgb* and relative chroma c*rgb* and triangle lightness t*rgb*
System: HE82_HRS16_96_D65_50%_O1
Hue: h*J50G=127/360; h*B25R=300/360
Result: c*rgb*=c*lab*; t*rgb*=t*lab*
c*rgb*=max (rgb*) − min (rgb*)
n*=1 − max (rgb*)= 1 − i*
w*=min (rgb*)= 1 − d*
t*rgb*=w* + 0,5 c*rgb*
M=Maximum colour
triangle lightness t*rgb*
n*=0; i*=1
w*=0; d*=1
relative chroma c*rgb*
B25R
J50G
(c*M, t*M)
HE821−6A, 6; cf1=0.90; nt=0.18; nx=1.0


Adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*lab*, l*lab*)
System: HE82_HRS16_96_D65_50%_O1
Hue: h*G25Bgb=189/360; h*B75Rbr=357/360
l*lab*=(L* − L*N) / (L*W − L*N)
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
relative lightness l*lab*
relative chroma c*lab*
G25B
B75R
(c*M, l*M)
HE821−7A, 6; cf1=0.90; nt=0.18; nx=1.0

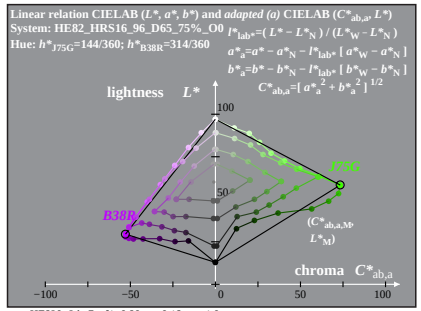

Adapted (a) CIELAB (C*ab,a, L*) and relative CIELAB (c*lab*, l*lab*)
System: HE82_HRS16_96_D65_50%_O1
CIELAB hue angles:
hab,d=[32, 99, 151, 233, 300, 349]
hab,ex=[59, 127, 189, 244, 300, 357]
hab,e=[26, 92, 162, 217, 272, 329]
l*lab*=(L* − L*N) / (L*W − L*N)
c*lab*=C*ab,a / C*ab,a,M
M=Maximum colour
b*lab*
a*lab*=c*lab* cos hab
b*lab*=c*lab* sin hab
relative chroma a*lab*
Y00L
J00G
R50J
J50G
L00C
O00Y
R00J
G00B
B75R
M00O
G25B
G50B
B50R
C00V
B25R
G75B
B00R
V00M
HE821−8A, 6; cf1=0.90; nt=0.18; nx=1.0


Linear relation rgb* and relative chroma c*rgb* and triangle lightness t*rgb*
System: HE82_HRS16_96_D65_50%_O1
Hue: h*G25Bgb=189/360; h*B75Rbr=357/360
Result: c*rgb*=c*lab*; t*rgb*=t*lab*
c*rgb*=max (rgb*) − min (rgb*)
n*=1 − max (rgb*)= 1 − i*
w*=min (rgb*)= 1 − d*
t*rgb*=w* + 0,5 c*rgb*
M=Maximum colour
triangle lightness t*rgb*
n*=0; i*=1
w*=0; d*=1
relative chroma c*rgb*
G25B
B75R
(c*M, t*M)
HE821−7A, 6; cf1=0.90; nt=0.18; nx=1.0

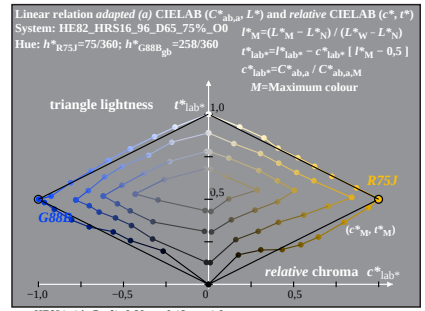

Linear relation rgb* and relative chroma c*rgb* or chroma a*rgb*, b*rgb*
System: HE82_HRS16_96_D65_50%_O1
Result: c*rgb*=c*lab*; t*rgb*=t*lab*
hab,d=[32, 99, 151, 233, 300, 349]
hab,ex=[59, 127, 189, 244, 300, 357]
hab,e=[26, 92, 162, 217, 272, 329]
c*rgb*=max (rgb*) − min (rgb*)
n*=1 − max (rgb*)= 1 − i*
w*=min (rgb*)= 1 − d*
t*rgb*=w* + 0,5 c*rgb*
b*rgb*
a*rgb*=c*rgb* cos hab
b*rgb*=c*rgb* sin hab
relative chroma a*rgb*
Y00L
J00G
R50J
J50G
L00C
O00Y
R00J
G00B
B75R
M00O
G25B
G50B
B50R
C00V
B25R
G75B
B00R
V00M
HE821−8A, 6; cf1=0.90; nt=0.18; nx=1.0



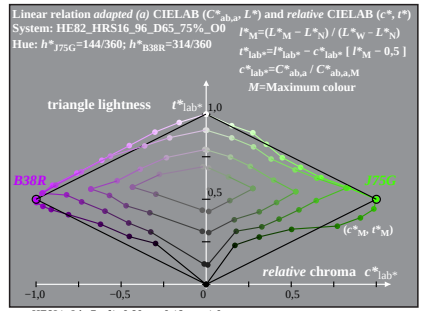

HE820−1A, 7; cf1=0.90; nt=0.18; nx=1.0



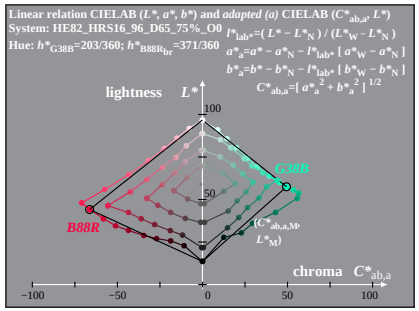

HE820−2A, 7; cf1=0.90; nt=0.18; nx=1.0



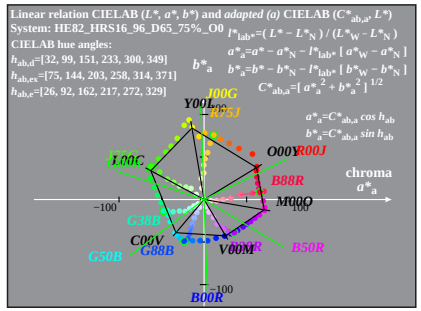

HE821−1A, 7; cf1=0.90; nt=0.18; nx=1.0



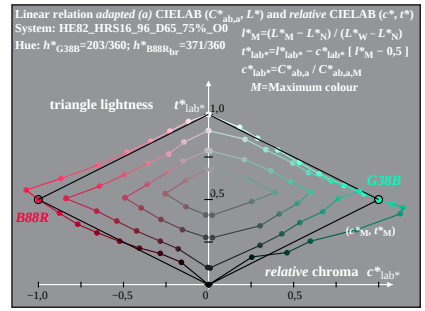

HE821−2A, 7; cf1=0.90; nt=0.18; nx=1.0



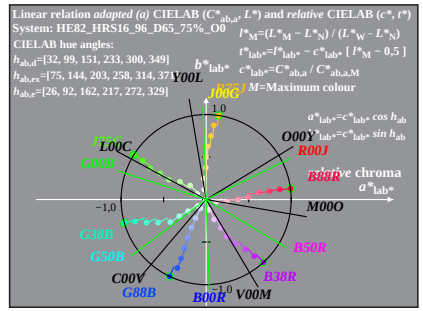

HE820−3A, 7; cf1=0.90; nt=0.18; nx=1.0



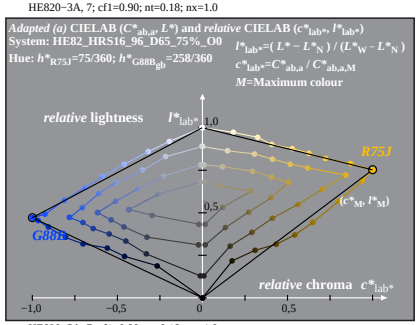

HE820−4A, 7; cf1=0.90; nt=0.18; nx=1.0



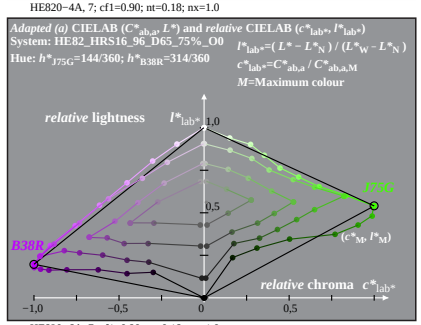

HE821−3A, 7; cf1=0.90; nt=0.18; nx=1.0



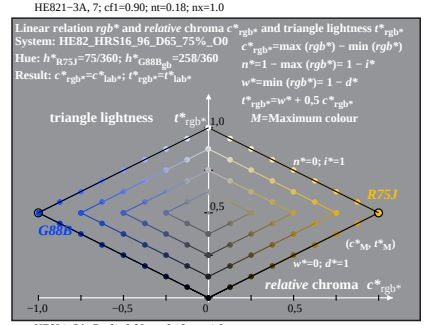

HE821−4A, 7; cf1=0.90; nt=0.18; nx=1.0



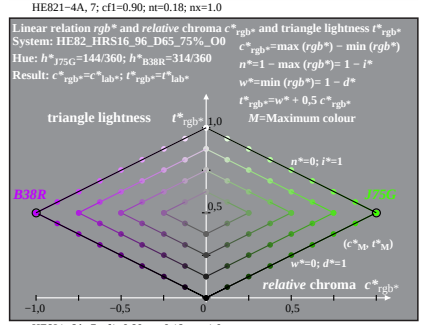

HE820−5A, 7; cf1=0.90; nt=0.18; nx=1.0



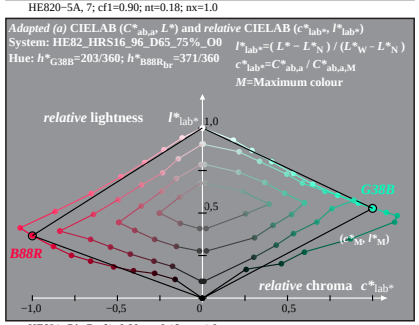

HE820−6A, 7; cf1=0.90; nt=0.18; nx=1.0



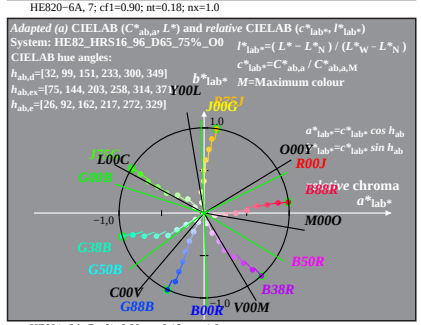

HE821−5A, 7; cf1=0.90; nt=0.18; nx=1.0



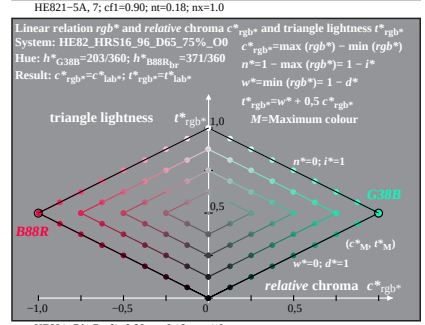

HE821−6A, 7; cf1=0.90; nt=0.18; nx=1.0



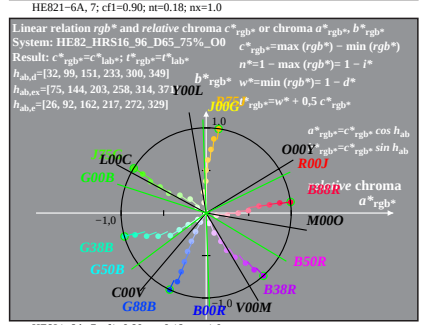

HE821−7A, 7; cf1=0.90; nt=0.18; nx=1.0




HE821−8A, 7; cf1=0.90; nt=0.18; nx=1.0

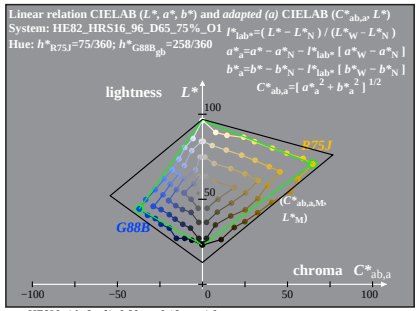



HE821−7A, 7; cf1=0.90; nt=0.18; nx=1.0

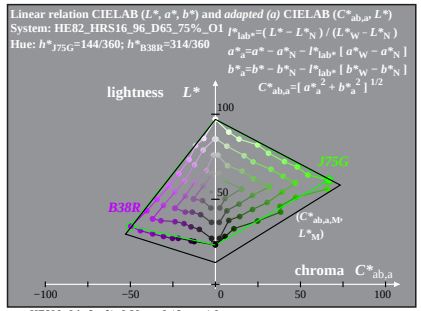



HE821−8A, 7; cf1=0.90; nt=0.18; nx=1.0

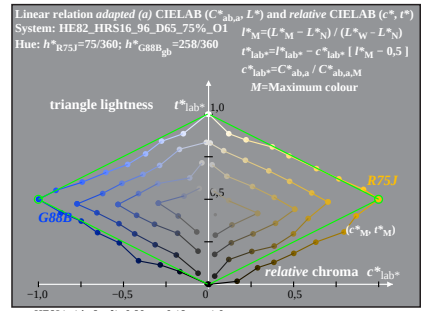
HE820−7A: Measurement: HE82_HRS16_96_D65_75%_O0_LU.DAT, 243 colours, 090115, Separation olv*, adapted, Page 7/8



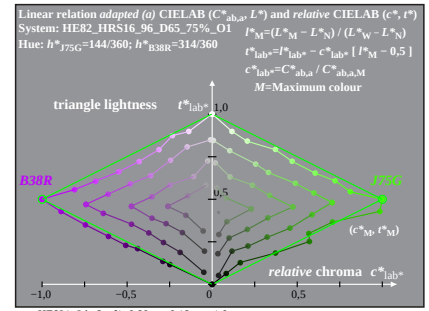

HE820−1A, 8; cf1=0.90; nt=0.18; nx=1.0



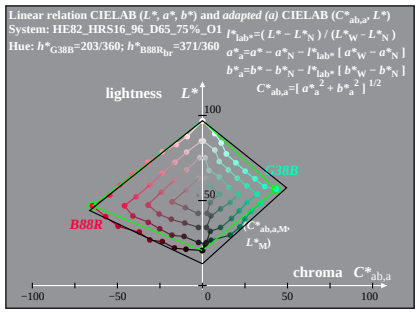

HE820−2A, 8; cf1=0.90; nt=0.18; nx=1.0



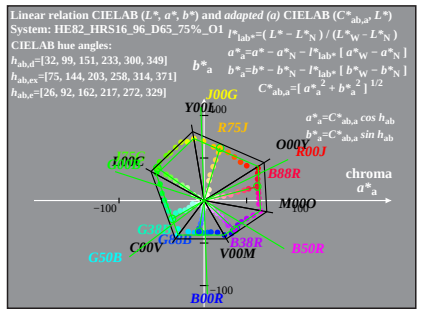

HE821−1A, 8; cf1=0.90; nt=0.18; nx=1.0



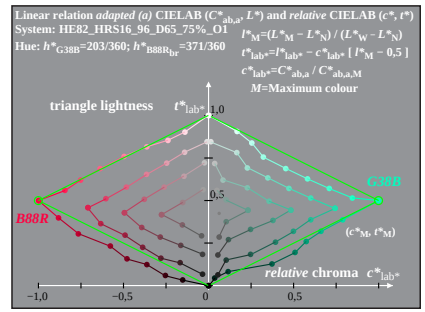

HE821−2A, 8; cf1=0.90; nt=0.18; nx=1.0



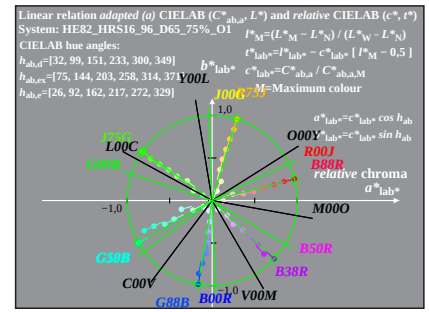

HE820−3A, 8; cf1=0.90; nt=0.18; nx=1.0



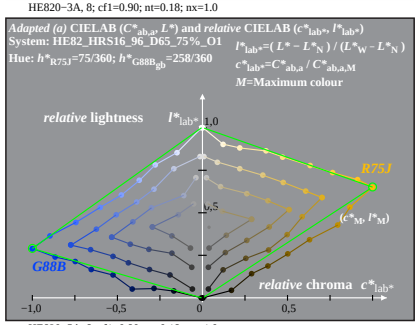

HE820−4A, 8; cf1=0.90; nt=0.18; nx=1.0



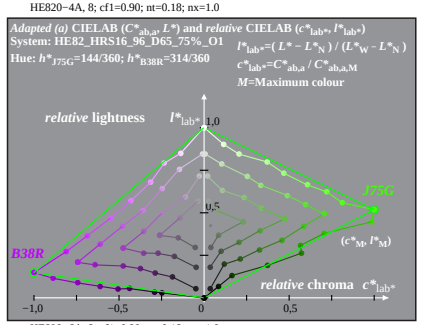

HE821−3A, 8; cf1=0.90; nt=0.18; nx=1.0



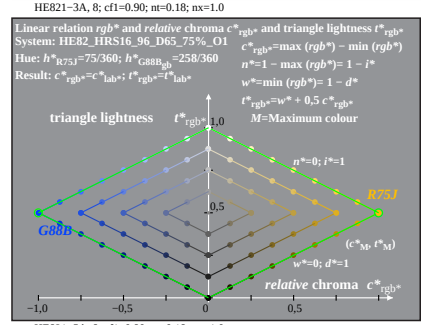

HE821−4A, 8; cf1=0.90; nt=0.18; nx=1.0



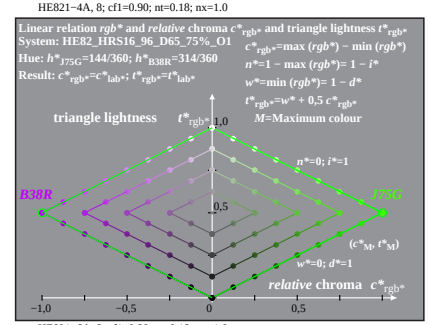

HE820−5A, 8; cf1=0.90; nt=0.18; nx=1.0



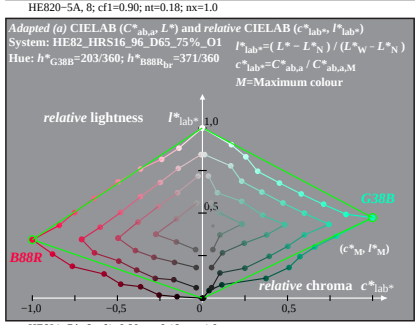

HE820−6A, 8; cf1=0.90; nt=0.18; nx=1.0



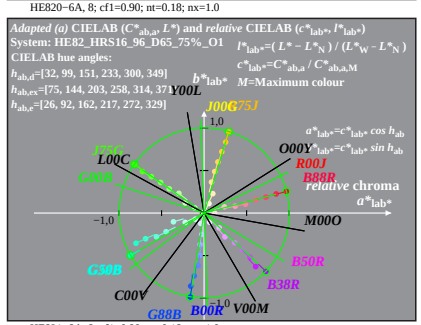

HE821−5A, 8; cf1=0.90; nt=0.18; nx=1.0



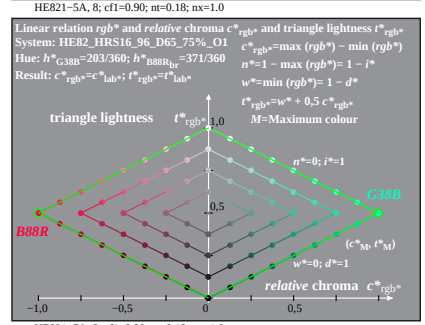

HE821−6A, 8; cf1=0.90; nt=0.18; nx=1.0



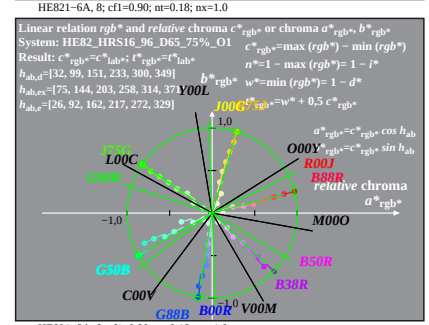

HE821−7A, 8; cf1=0.90; nt=0.18; nx=1.0




HE821−8A, 8; cf1=0.90; nt=0.18; nx=1.0




HE821−7A, 8; cf1=0.90; nt=0.18; nx=1.0




HE821−8A, 8; cf1=0.90; nt=0.18; nx=1.0

HE820−7A: Measurement: HE82_HRS16_96_D65_75%_O1_LU.DAT, 243 colours, 090115, Separation olv*, adapted, Page 8/8