see similar files: http://farbe.li.tu-berlin.de/CEO6/CEO6.HTM
technical information: http://farbe.li.tu-berlin.de or http://color.li.tu-berlin.de

TUB registration: 20220101-CEO6/CEO6L0NP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

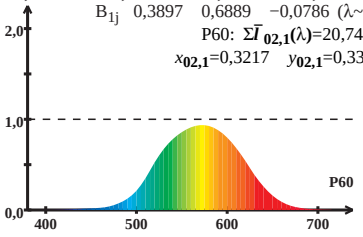
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{l}_{02,1}(\lambda)=B_{11}\bar{x}_{02,1}(\lambda)+B_{12}\bar{y}_{02,1}(\lambda)+B_{13}\bar{z}_{02,1}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

P60: $\Sigma\bar{l}_{02,1}(\lambda)=20,74$

$x_{02,1}=0,3217$ $y_{02,1}=0,3314$



CEO60−1A_P60

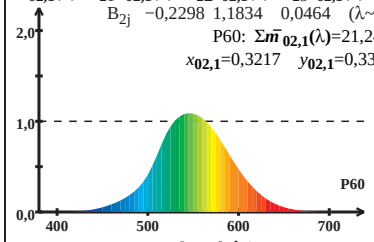
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{m}_{02,1}(\lambda)=B_{21}\bar{x}_{02,1}(\lambda)+B_{22}\bar{y}_{02,1}(\lambda)+B_{23}\bar{z}_{02,1}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

P60: $\Sigma\bar{m}_{02,1}(\lambda)=21,24$

$x_{02,1}=0,3217$ $y_{02,1}=0,3314$



CEO60−2A_P60

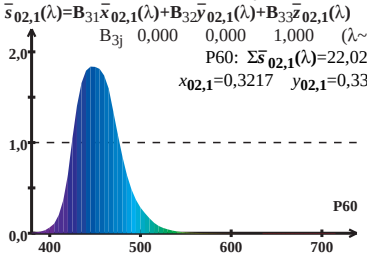
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{s}_{02,1}(\lambda)=B_{31}\bar{x}_{02,1}(\lambda)+B_{32}\bar{y}_{02,1}(\lambda)+B_{33}\bar{z}_{02,1}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

P60: $\Sigma\bar{s}_{02,1}(\lambda)=22,02$

$x_{02,1}=0,3217$ $y_{02,1}=0,3314$



CEO60−3A_P60

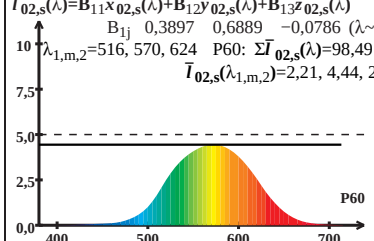
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{l}_{02,s}(\lambda)=B_{11}\bar{x}_{02,s}(\lambda)+B_{12}\bar{y}_{02,s}(\lambda)+B_{13}\bar{z}_{02,s}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}$=516, 570, 624 P60: $\Sigma\bar{l}_{02,s}(\lambda)=98,49$

$\bar{l}_{02,s}(\lambda_{1,m,2})$=2,21, 4,44, 2,21



CEO60−4A_P60

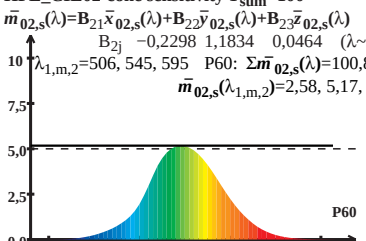
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{m}_{02,s}(\lambda)=B_{21}\bar{x}_{02,s}(\lambda)+B_{22}\bar{y}_{02,s}(\lambda)+B_{23}\bar{z}_{02,s}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}$=506, 545, 595 P60: $\Sigma\bar{m}_{02,s}(\lambda)=100,88$

$\bar{m}_{02,s}(\lambda_{1,m,2})$=2,58, 5,17, 2,58



CEO60−5A_P60

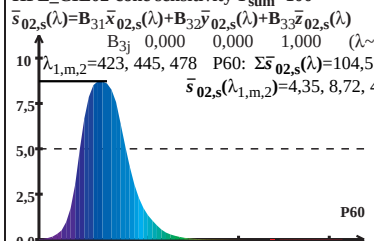
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{s}_{02,s}(\lambda)=B_{31}\bar{x}_{02,s}(\lambda)+B_{32}\bar{y}_{02,s}(\lambda)+B_{33}\bar{z}_{02,s}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

$\lambda_{1,m,2}$=423, 445, 478 P60: $\Sigma\bar{s}_{02,s}(\lambda)=104,57$

$\bar{s}_{02,s}(\lambda_{1,m,2})$=4,35, 8,72, 4,35



CEO60−6A_P60

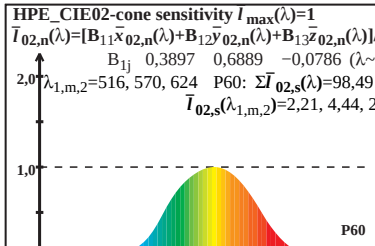
HPE_CIE02-cone sensitivity $l_{max}(\lambda)=1$

$\bar{l}_{02,n}(\lambda)=[B_{11}\bar{x}_{02,n}(\lambda)+B_{12}\bar{y}_{02,n}(\lambda)+B_{13}\bar{z}_{02,n}(\lambda)]/4,44$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}$=516, 570, 624 P60: $\Sigma\bar{l}_{02,s}(\lambda)=98,49$

$\bar{l}_{02,s}(\lambda_{1,m,2})$=2,21, 4,44, 2,21



CEO60−7A_P60

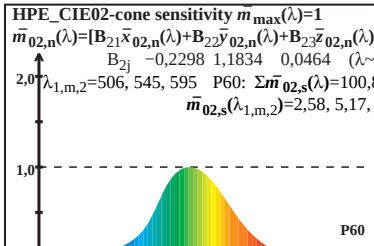
HPE_CIE02-cone sensitivity $\bar{m}_{max}(\lambda)=1$

$\bar{m}_{02,n}(\lambda)=[B_{21}\bar{x}_{02,n}(\lambda)+B_{22}\bar{y}_{02,n}(\lambda)+B_{23}\bar{z}_{02,n}(\lambda)]/5,1$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}$=506, 545, 595 P60: $\Sigma\bar{m}_{02,s}(\lambda)=100,88$

$\bar{m}_{02,s}(\lambda_{1,m,2})$=2,58, 5,17, 2,58



CEO60−8A_P60

CEO60−7N

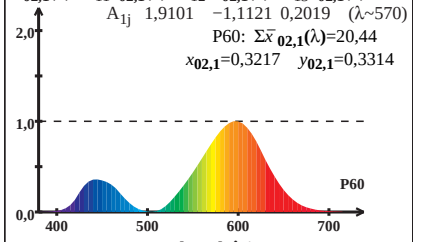
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{x}_{02,1}(\lambda)=A_{11}\bar{l}_{02,1}(\lambda)+A_{12}\bar{m}_{02,1}(\lambda)+A_{13}\bar{s}_{02,1}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P60: $\Sigma\bar{x}_{02,1}(\lambda)=20,44$

$x_{02,1}=0,3217$ $y_{02,1}=0,3314$



CEO61−1A_P60

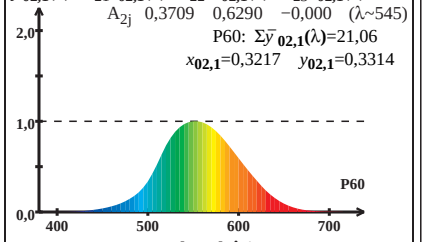
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P60: $\Sigma\bar{y}_{02,1}(\lambda)=21,06$

$x_{02,1}=0,3217$ $y_{02,1}=0,3314$



CEO61−2A_P60

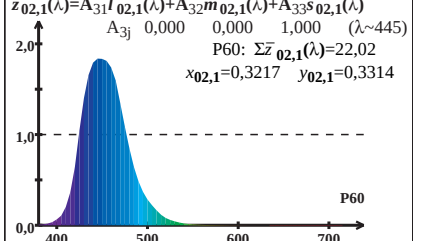
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{z}_{02,1}(\lambda)=A_{31}\bar{l}_{02,1}(\lambda)+A_{32}\bar{m}_{02,1}(\lambda)+A_{33}\bar{s}_{02,1}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P60: $\Sigma\bar{z}_{02,1}(\lambda)=22,02$

$x_{02,1}=0,3217$ $y_{02,1}=0,3314$



CEO61−3A_P60

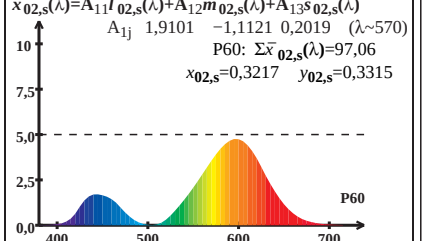
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{x}_{02,s}(\lambda)=A_{11}\bar{l}_{02,s}(\lambda)+A_{12}\bar{m}_{02,s}(\lambda)+A_{13}\bar{s}_{02,s}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P60: $\Sigma\bar{x}_{02,s}(\lambda)=97,06$

$x_{02,s}=0,3217$ $y_{02,s}=0,3315$



CEO61−4A_P60

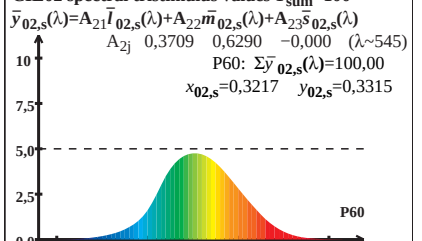
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{y}_{02,s}(\lambda)=A_{21}\bar{l}_{02,s}(\lambda)+A_{22}\bar{m}_{02,s}(\lambda)+A_{23}\bar{s}_{02,s}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P60: $\Sigma\bar{y}_{02,s}(\lambda)=100,00$

$x_{02,s}=0,3217$ $y_{02,s}=0,3315$



CEO61−5A_P60

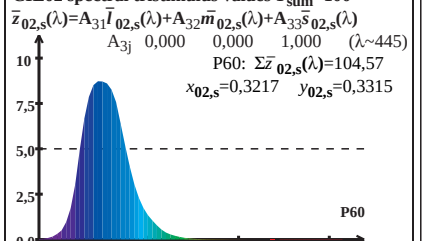
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{z}_{02,s}(\lambda)=A_{31}\bar{l}_{02,s}(\lambda)+A_{32}\bar{m}_{02,s}(\lambda)+A_{33}\bar{s}_{02,s}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P60: $\Sigma\bar{z}_{02,s}(\lambda)=104,57$

$x_{02,s}=0,3217$ $y_{02,s}=0,3315$



CEO61−6A_P60

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

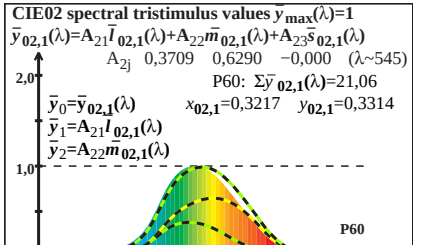
A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P60: $\Sigma\bar{y}_{02,1}(\lambda)=21,06$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0,3217$ $y_{02,1}=0,3314$

$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$



CEO61−7A_P60

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P60: $\Sigma\bar{y}_{02,1}(\lambda)=21,06$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0,3217$ $y_{02,1}=0,3314$

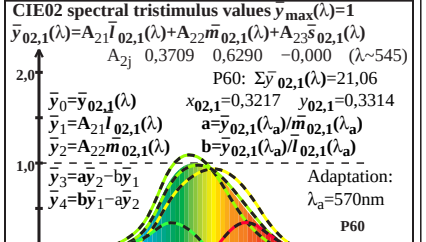
$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$ $a=\bar{y}_{02,1}(\lambda_a)/\bar{m}_{02,1}(\lambda_a)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$ $b=\bar{y}_{02,1}(\lambda_a)/\bar{l}_{02,1}(\lambda_a)$

$\bar{y}_3=a\bar{y}_2-b\bar{y}_1$

$\bar{y}_4=b\bar{y}_1-a\bar{y}_2$

Adaptation:
λ_a=570nm



CEO61−8A_P60

see similar files: http://farbe.li.tu-berlin.de/CEO6/CEO6.HTM
technical information: http://farbe.li.tu-berlin.de or http://color.li.tu-berlin.de

TUB registration: 20220101-CEO6/CEO6L0NP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

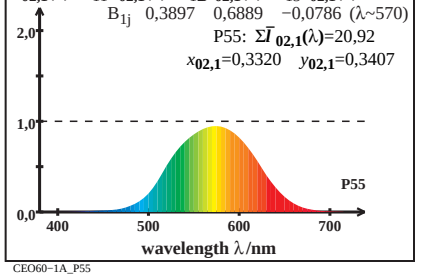
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{l}_{02,1}(\lambda)=B_{11}\bar{x}_{02,1}(\lambda)+B_{12}\bar{y}_{02,1}(\lambda)+B_{13}\bar{z}_{02,1}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

P55: $\Sigma\bar{l}_{02,1}(\lambda)=20{,}92$

$x_{02,1}=0{,}3320$ $y_{02,1}=0{,}3407$



CEO60−1A_P55

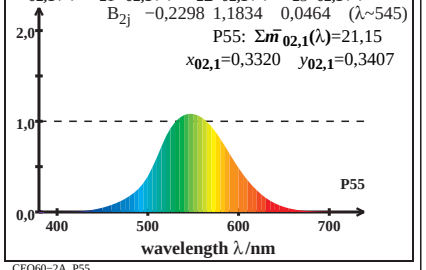
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{m}_{02,1}(\lambda)=B_{21}\bar{x}_{02,1}(\lambda)+B_{22}\bar{y}_{02,1}(\lambda)+B_{23}\bar{z}_{02,1}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

P55: $\Sigma\bar{m}_{02,1}(\lambda)=21{,}15$

$x_{02,1}=0{,}3320$ $y_{02,1}=0{,}3407$



CEO60−2A_P55

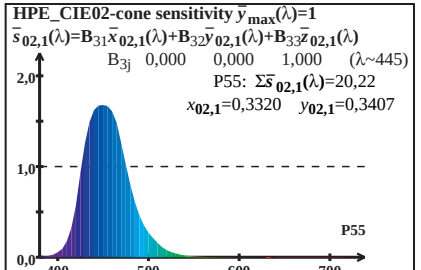
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{s}_{02,1}(\lambda)=B_{31}\bar{x}_{02,1}(\lambda)+B_{32}\bar{y}_{02,1}(\lambda)+B_{33}\bar{z}_{02,1}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

P55: $\Sigma\bar{s}_{02,1}(\lambda)=20{,}22$

$x_{02,1}=0{,}3320$ $y_{02,1}=0{,}3407$



CEO60−3A_P55

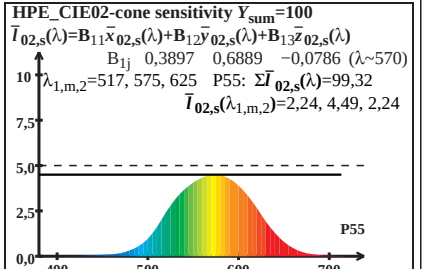
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{l}_{02,s}(\lambda)=B_{11}\bar{x}_{02,s}(\lambda)+B_{12}\bar{y}_{02,s}(\lambda)+B_{13}\bar{z}_{02,s}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}=517, 575, 625$ P55: $\Sigma\bar{l}_{02,s}(\lambda)=99{,}32$

$\bar{l}_{02,s}(\lambda_{1,m,2})=2{,}24, 4{,}49, 2{,}24$



CEO60−4A_P55

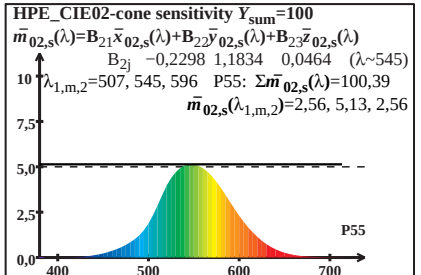
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{m}_{02,s}(\lambda)=B_{21}\bar{x}_{02,s}(\lambda)+B_{22}\bar{y}_{02,s}(\lambda)+B_{23}\bar{z}_{02,s}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}=507, 545, 596$ P55: $\Sigma\bar{m}_{02,s}(\lambda)=100{,}39$

$\bar{m}_{02,s}(\lambda_{1,m,2})=2{,}56, 5{,}13, 2{,}56$



CEO60−5A_P55

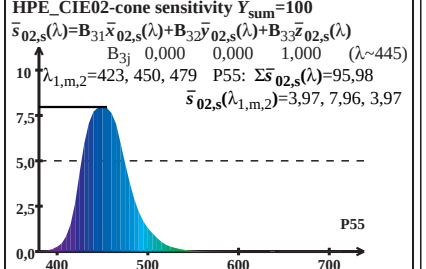
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{s}_{02,s}(\lambda)=B_{31}\bar{x}_{02,s}(\lambda)+B_{32}\bar{y}_{02,s}(\lambda)+B_{33}\bar{z}_{02,s}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

$\lambda_{1,m,2}=423, 450, 479$ P55: $\Sigma\bar{s}_{02,s}(\lambda)=95{,}98$

$\bar{s}_{02,s}(\lambda_{1,m,2})=3{,}97, 7{,}96, 3{,}97$



CEO60−6A_P55

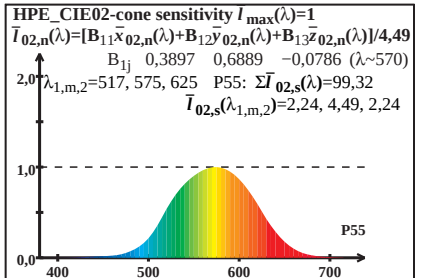
HPE_CIE02-cone sensitivity $l_{max}(\lambda)=1$

$\bar{l}_{02,n}(\lambda)=[B_{11}\bar{x}_{02,n}(\lambda)+B_{12}\bar{y}_{02,n}(\lambda)+B_{13}\bar{z}_{02,n}(\lambda)]/4{,}49$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}=517, 575, 625$ P55: $\Sigma\bar{l}_{02,s}(\lambda)=99{,}32$

$\bar{l}_{02,s}(\lambda_{1,m,2})=2{,}24, 4{,}49, 2{,}24$



CEO60−7A_P55

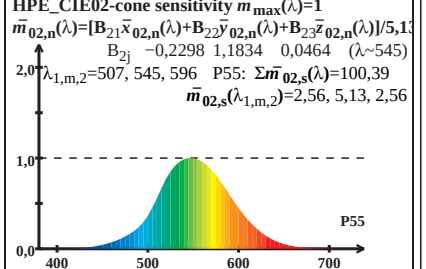
HPE_CIE02-cone sensitivity $\bar{m}_{max}(\lambda)=1$

$\bar{m}_{02,n}(\lambda)=[B_{21}\bar{x}_{02,n}(\lambda)+B_{22}\bar{y}_{02,n}(\lambda)+B_{23}\bar{z}_{02,n}(\lambda)]/5{,}1$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}=507, 545, 596$ P55: $\Sigma\bar{m}_{02,s}(\lambda)=100{,}39$

$\bar{m}_{02,s}(\lambda_{1,m,2})=2{,}56, 5{,}13, 2{,}56$



CEO60−8A_P55

CEO60−7N

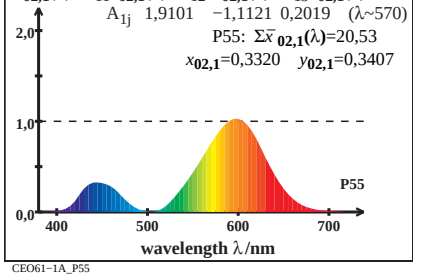
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{x}_{02,1}(\lambda)=A_{11}\bar{l}_{02,1}(\lambda)+A_{12}\bar{m}_{02,1}(\lambda)+A_{13}\bar{s}_{02,1}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P55: $\Sigma\bar{x}_{02,1}(\lambda)=20{,}53$

$x_{02,1}=0{,}3320$ $y_{02,1}=0{,}3407$



CEO61−1A_P55

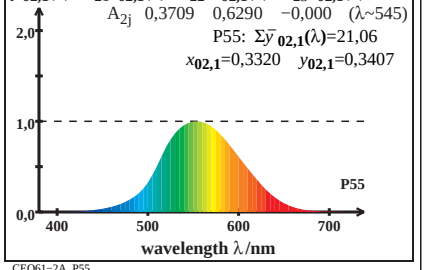
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P55: $\Sigma\bar{y}_{02,1}(\lambda)=21{,}06$

$x_{02,1}=0{,}3320$ $y_{02,1}=0{,}3407$



CEO61−2A_P55

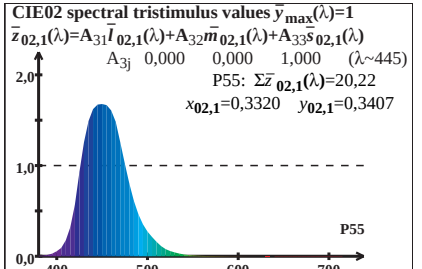
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{z}_{02,1}(\lambda)=A_{31}\bar{l}_{02,1}(\lambda)+A_{32}\bar{m}_{02,1}(\lambda)+A_{33}\bar{s}_{02,1}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P55: $\Sigma\bar{z}_{02,1}(\lambda)=20{,}22$

$x_{02,1}=0{,}3320$ $y_{02,1}=0{,}3407$



CEO61−3A_P55

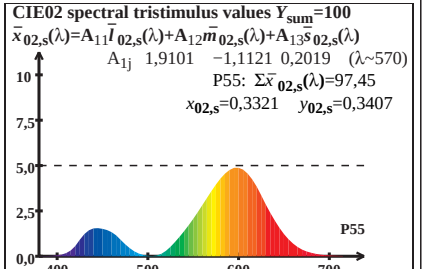
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{x}_{02,s}(\lambda)=A_{11}\bar{l}_{02,s}(\lambda)+A_{12}\bar{m}_{02,s}(\lambda)+A_{13}\bar{s}_{02,s}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P55: $\Sigma\bar{x}_{02,s}(\lambda)=97{,}45$

$x_{02,s}=0{,}3321$ $y_{02,s}=0{,}3407$



CEO61−4A_P55

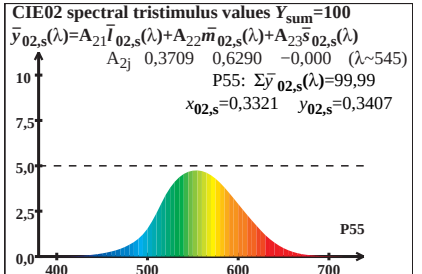
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{y}_{02,s}(\lambda)=A_{21}\bar{l}_{02,s}(\lambda)+A_{22}\bar{m}_{02,s}(\lambda)+A_{23}\bar{s}_{02,s}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P55: $\Sigma\bar{y}_{02,s}(\lambda)=99{,}99$

$x_{02,s}=0{,}3321$ $y_{02,s}=0{,}3407$



CEO61−5A_P55

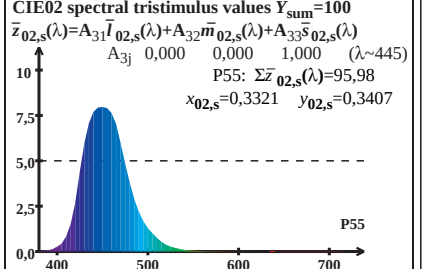
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{z}_{02,s}(\lambda)=A_{31}\bar{l}_{02,s}(\lambda)+A_{32}\bar{m}_{02,s}(\lambda)+A_{33}\bar{s}_{02,s}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P55: $\Sigma\bar{z}_{02,s}(\lambda)=95{,}98$

$x_{02,s}=0{,}3321$ $y_{02,s}=0{,}3407$



CEO61−6A_P55

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

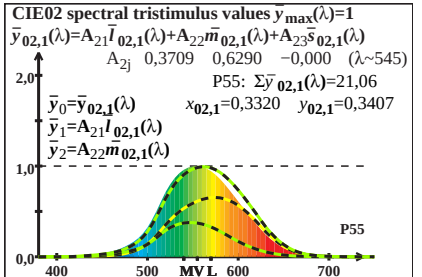
A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P55: $\Sigma\bar{y}_{02,1}(\lambda)=21{,}06$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0{,}3320$ $y_{02,1}=0{,}3407$

$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$



CEO61−7A_P55

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P55: $\Sigma\bar{y}_{02,1}(\lambda)=21{,}06$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0{,}3320$ $y_{02,1}=0{,}3407$

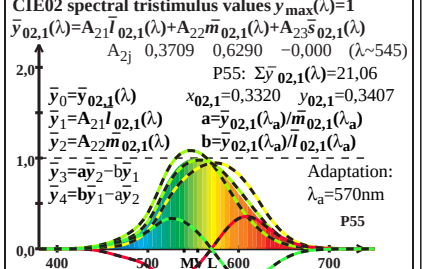
$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$ $a=\bar{y}_{02,1}(\lambda_a)/\bar{m}_{02,1}(\lambda_a)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$ $b=\bar{y}_{02,1}(\lambda_a)/\bar{l}_{02,1}(\lambda_a)$

$\bar{y}_3=a\bar{y}_2-b\bar{y}_1$

$\bar{y}_4=b\bar{y}_1-a\bar{y}_2$

Adaptation:
$\lambda_a=570$nm



CEO61−8A_P55

CEO61−7N

see similar files: http://farbe.li.tu-berlin.de/CEO6/CEO6.HTM
technical information: http://farbe.li.tu-berlin.de or http://color.li.tu-berlin.de

TUB registration: 20220101-CEO6/CEO6L0NP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

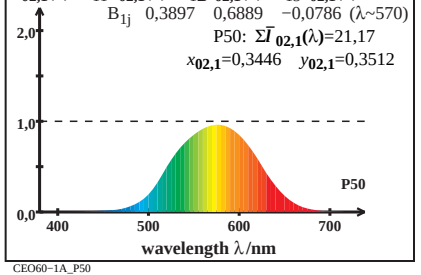
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{l}_{02,1}(\lambda)=B_{11}\bar{x}_{02,1}(\lambda)+B_{12}\bar{y}_{02,1}(\lambda)+B_{13}\bar{z}_{02,1}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

P50: $\Sigma\bar{l}_{02,1}(\lambda)=21,17$

$x_{02,1}=0,3446$ $y_{02,1}=0,3512$



CEO60−1A_P50

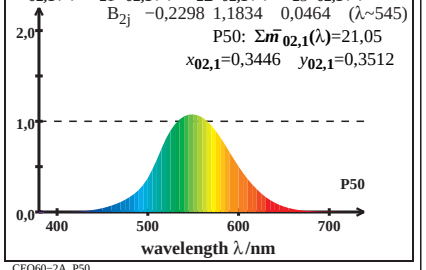
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{m}_{02,1}(\lambda)=B_{21}\bar{x}_{02,1}(\lambda)+B_{22}\bar{y}_{02,1}(\lambda)+B_{23}\bar{z}_{02,1}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

P50: $\Sigma\bar{m}_{02,1}(\lambda)=21,05$

$x_{02,1}=0,3446$ $y_{02,1}=0,3512$



CEO60−2A_P50

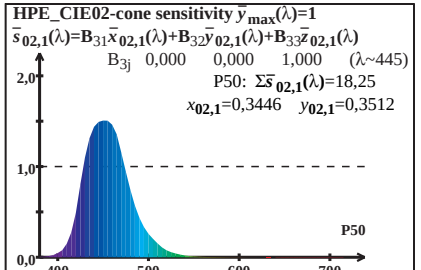
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{s}_{02,1}(\lambda)=B_{31}\bar{x}_{02,1}(\lambda)+B_{32}\bar{y}_{02,1}(\lambda)+B_{33}\bar{z}_{02,1}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

P50: $\Sigma\bar{s}_{02,1}(\lambda)=18,25$

$x_{02,1}=0,3446$ $y_{02,1}=0,3512$



CEO60−3A_P50

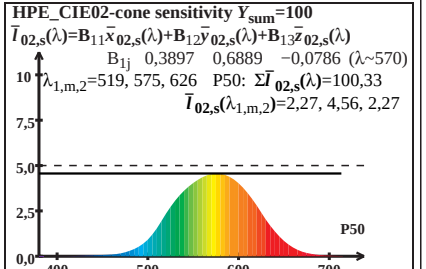
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{l}_{02,s}(\lambda)=B_{11}\bar{x}_{02,s}(\lambda)+B_{12}\bar{y}_{02,s}(\lambda)+B_{13}\bar{z}_{02,s}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}$=519, 575, 626 P50: $\Sigma\bar{l}_{02,s}(\lambda)=100,33$

$\bar{l}_{02,s}(\lambda_{1,m,2})$=2,27, 4,56, 2,27



CEO60−4A_P50

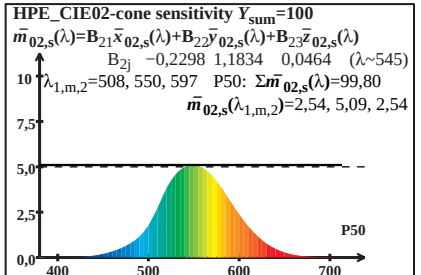
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{m}_{02,s}(\lambda)=B_{21}\bar{x}_{02,s}(\lambda)+B_{22}\bar{y}_{02,s}(\lambda)+B_{23}\bar{z}_{02,s}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}$=508, 550, 597 P50: $\Sigma\bar{m}_{02,s}(\lambda)=99,80$

$\bar{m}_{02,s}(\lambda_{1,m,2})$=2,54, 5,09, 2,54



CEO60−5A_P50

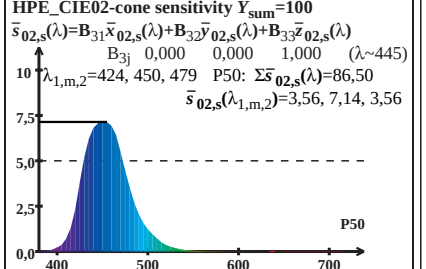
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{s}_{02,s}(\lambda)=B_{31}\bar{x}_{02,s}(\lambda)+B_{32}\bar{y}_{02,s}(\lambda)+B_{33}\bar{z}_{02,s}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

$\lambda_{1,m,2}$=424, 450, 479 P50: $\Sigma\bar{s}_{02,s}(\lambda)=86,50$

$\bar{s}_{02,s}(\lambda_{1,m,2})$=3,56, 7,14, 3,56



CEO60−6A_P50

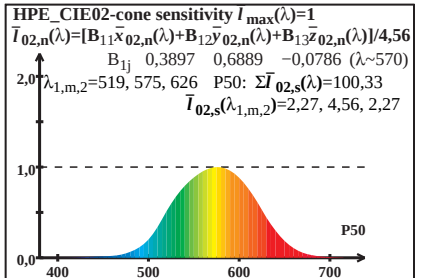
HPE_CIE02-cone sensitivity $l_{max}(\lambda)=1$

$\bar{l}_{02,n}(\lambda)=[B_{11}\bar{x}_{02,n}(\lambda)+B_{12}\bar{y}_{02,n}(\lambda)+B_{13}\bar{z}_{02,n}(\lambda)]/4,56$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}$=519, 575, 626 P50: $\Sigma\bar{l}_{02,s}(\lambda)=100,33$

$\bar{l}_{02,s}(\lambda_{1,m,2})$=2,27, 4,56, 2,27



CEO60−7A_P50

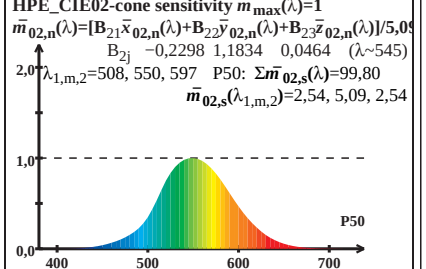
HPE_CIE02-cone sensitivity $\bar{m}_{max}(\lambda)=1$

$\bar{m}_{02,n}(\lambda)=[B_{21}\bar{x}_{02,n}(\lambda)+B_{22}\bar{y}_{02,n}(\lambda)+B_{23}\bar{z}_{02,n}(\lambda)]/5,09$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}$=508, 550, 597 P50: $\Sigma\bar{m}_{02,s}(\lambda)=99,80$

$\bar{m}_{02,s}(\lambda_{1,m,2})$=2,54, 5,09, 2,54



CEO60−8A_P50

CEO60−7N

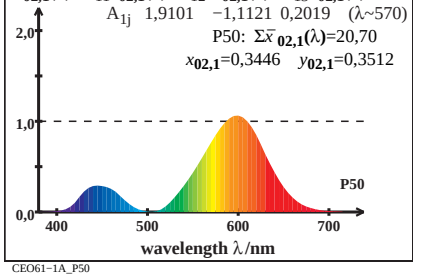
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{x}_{02,1}(\lambda)=A_{11}\bar{l}_{02,1}(\lambda)+A_{12}\bar{m}_{02,1}(\lambda)+A_{13}\bar{s}_{02,1}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P50: $\Sigma\bar{x}_{02,1}(\lambda)=20,70$

$x_{02,1}=0,3446$ $y_{02,1}=0,3512$



CEO61−1A_P50

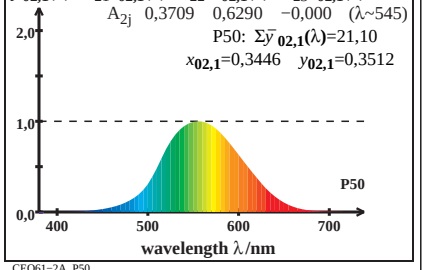
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P50: $\Sigma\bar{y}_{02,1}(\lambda)=21,10$

$x_{02,1}=0,3446$ $y_{02,1}=0,3512$



CEO61−2A_P50

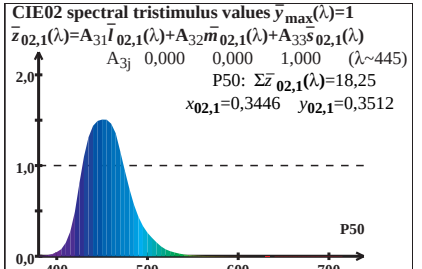
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{z}_{02,1}(\lambda)=A_{31}\bar{l}_{02,1}(\lambda)+A_{32}\bar{m}_{02,1}(\lambda)+A_{33}\bar{s}_{02,1}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P50: $\Sigma\bar{z}_{02,1}(\lambda)=18,25$

$x_{02,1}=0,3446$ $y_{02,1}=0,3512$



CEO61−3A_P50

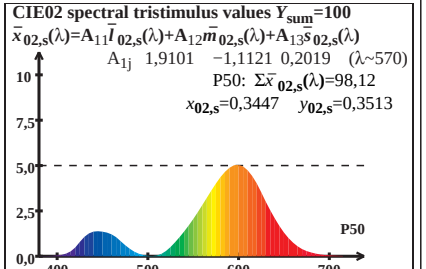
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{x}_{02,s}(\lambda)=A_{11}\bar{l}_{02,s}(\lambda)+A_{12}\bar{m}_{02,s}(\lambda)+A_{13}\bar{s}_{02,s}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P50: $\Sigma\bar{x}_{02,s}(\lambda)=98,12$

$x_{02,s}=0,3447$ $y_{02,s}=0,3513$



CEO61−4A_P50

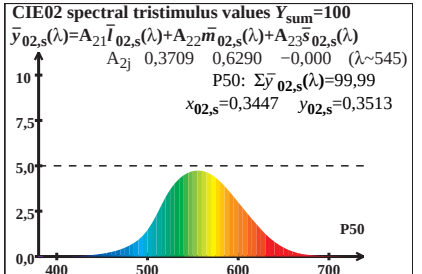
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{y}_{02,s}(\lambda)=A_{21}\bar{l}_{02,s}(\lambda)+A_{22}\bar{m}_{02,s}(\lambda)+A_{23}\bar{s}_{02,s}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P50: $\Sigma\bar{y}_{02,s}(\lambda)=99,99$

$x_{02,s}=0,3447$ $y_{02,s}=0,3513$



CEO61−5A_P50

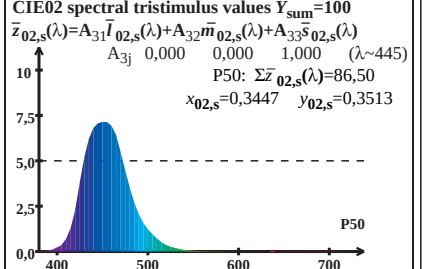
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{z}_{02,s}(\lambda)=A_{31}\bar{l}_{02,s}(\lambda)+A_{32}\bar{m}_{02,s}(\lambda)+A_{33}\bar{s}_{02,s}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P50: $\Sigma\bar{z}_{02,s}(\lambda)=86,50$

$x_{02,s}=0,3447$ $y_{02,s}=0,3513$



CEO61−6A_P50

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

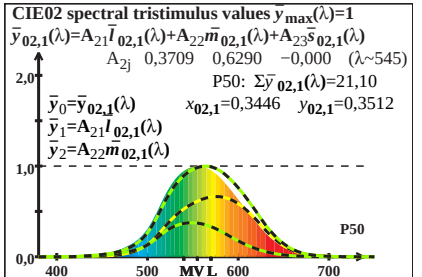
A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P50: $\Sigma\bar{y}_{02,1}(\lambda)=21,10$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0,3446$ $y_{02,1}=0,3512$

$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$



CEO61−7A_P50

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P50: $\Sigma\bar{y}_{02,1}(\lambda)=21,10$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0,3446$ $y_{02,1}=0,3512$

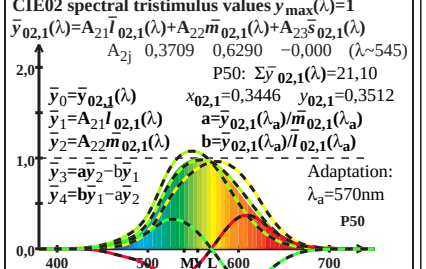
$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$ $a=\bar{y}_{02,1}(\lambda_a)/\bar{m}_{02,1}(\lambda_a)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$ $b=\bar{y}_{02,1}(\lambda_a)/\bar{l}_{02,1}(\lambda_a)$

$\bar{y}_3=a\bar{y}_2-b\bar{y}_1$

$\bar{y}_4=b\bar{y}_1-a\bar{y}_2$

Adaptation:
λ_a=570nm



CEO61−8A_P50

CEO61−7N

see similar files: http://farbe.li.tu-berlin.de/CEO6/CEO6.HTM
technical information: http://farbe.li.tu-berlin.de or http://color.li.tu-berlin.de

TUB registration: 20220101-CEO6/CEO6L0NP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

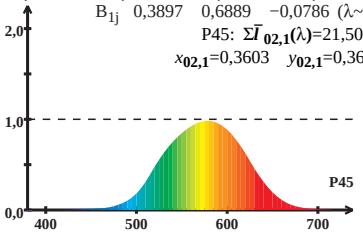
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{l}_{02,1}(\lambda)=B_{11}\bar{x}_{02,1}(\lambda)+B_{12}\bar{y}_{02,1}(\lambda)+B_{13}\bar{z}_{02,1}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

P45: $\Sigma\bar{l}_{02,1}(\lambda)=21{,}50$

$x_{02,1}=0{,}3603$ $y_{02,1}=0{,}3632$



CEO60−1A_P45

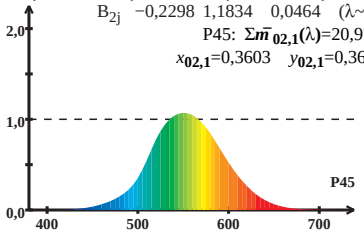
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{m}_{02,1}(\lambda)=B_{21}\bar{x}_{02,1}(\lambda)+B_{22}\bar{y}_{02,1}(\lambda)+B_{23}\bar{z}_{02,1}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

P45: $\Sigma\bar{m}_{02,1}(\lambda)=20{,}97$

$x_{02,1}=0{,}3603$ $y_{02,1}=0{,}3632$



CEO60−2A_P45

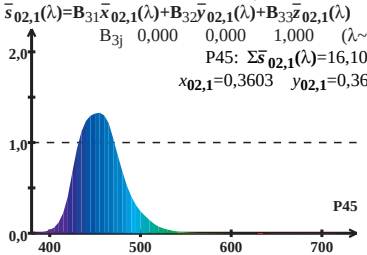
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{s}_{02,1}(\lambda)=B_{31}\bar{x}_{02,1}(\lambda)+B_{32}\bar{y}_{02,1}(\lambda)+B_{33}\bar{z}_{02,1}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

P45: $\Sigma\bar{s}_{02,1}(\lambda)=16{,}10$

$x_{02,1}=0{,}3603$ $y_{02,1}=0{,}3632$



CEO60−3A_P45

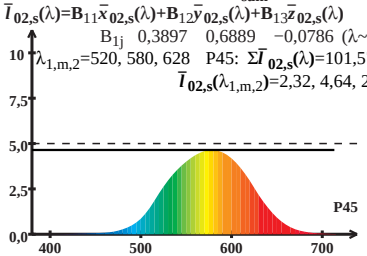
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{l}_{02,s}(\lambda)=B_{11}\bar{x}_{02,s}(\lambda)+B_{12}\bar{y}_{02,s}(\lambda)+B_{13}\bar{z}_{02,s}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}$=520, 580, 628 P45: $\Sigma\bar{l}_{02,s}(\lambda)=101{,}57$

$\bar{l}_{02,s}(\lambda_{1,m,2})$=2,32, 4,64, 2,31



CEO60−4A_P45

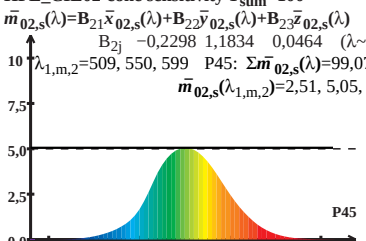
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{m}_{02,s}(\lambda)=B_{21}\bar{x}_{02,s}(\lambda)+B_{22}\bar{y}_{02,s}(\lambda)+B_{23}\bar{z}_{02,s}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}$=509, 550, 599 P45: $\Sigma\bar{m}_{02,s}(\lambda)=99{,}07$

$\bar{m}_{02,s}(\lambda_{1,m,2})$=2,51, 5,05, 2,51



CEO60−5A_P45

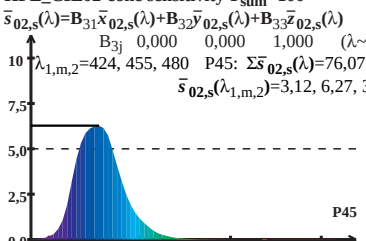
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{s}_{02,s}(\lambda)=B_{31}\bar{x}_{02,s}(\lambda)+B_{32}\bar{y}_{02,s}(\lambda)+B_{33}\bar{z}_{02,s}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

$\lambda_{1,m,2}$=424, 455, 480 P45: $\Sigma\bar{s}_{02,s}(\lambda)=76{,}07$

$\bar{s}_{02,s}(\lambda_{1,m,2})$=3,12, 6,27, 3,13



CEO60−6A_P45

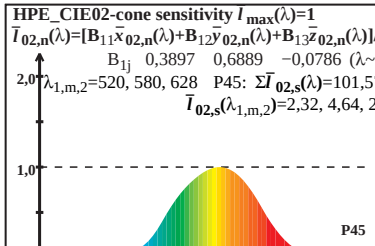
HPE_CIE02-cone sensitivity $l_{max}(\lambda)=1$

$\bar{l}_{02,n}(\lambda)=[B_{11}\bar{x}_{02,n}(\lambda)+B_{12}\bar{y}_{02,n}(\lambda)+B_{13}\bar{z}_{02,n}(\lambda)]/4{,}64$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}$=520, 580, 628 P45: $\Sigma\bar{l}_{02,s}(\lambda)=101{,}57$

$\bar{l}_{02,s}(\lambda_{1,m,2})$=2,32, 4,64, 2,31



CEO60−7A_P45

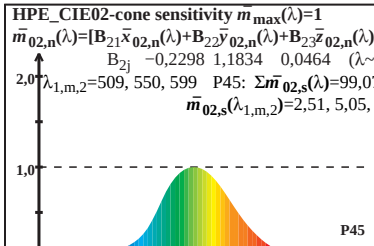
HPE_CIE02-cone sensitivity $\bar{m}_{max}(\lambda)=1$

$\bar{m}_{02,n}(\lambda)=[B_{21}\bar{x}_{02,n}(\lambda)+B_{22}\bar{y}_{02,n}(\lambda)+B_{23}\bar{z}_{02,n}(\lambda)]/5{,}0$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}$=509, 550, 599 P45: $\Sigma\bar{m}_{02,s}(\lambda)=99{,}07$

$\bar{m}_{02,s}(\lambda_{1,m,2})$=2,51, 5,05, 2,51



CEO60−8A_P45

CEO60−7N

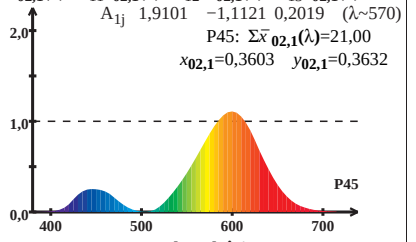
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{x}_{02,1}(\lambda)=A_{11}\bar{l}_{02,1}(\lambda)+A_{12}\bar{m}_{02,1}(\lambda)+A_{13}\bar{s}_{02,1}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P45: $\Sigma\bar{x}_{02,1}(\lambda)=21{,}00$

$x_{02,1}=0{,}3603$ $y_{02,1}=0{,}3632$



CEO61−1A_P45

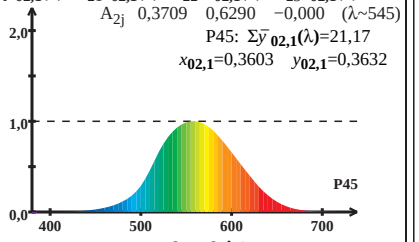
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P45: $\Sigma\bar{y}_{02,1}(\lambda)=21{,}17$

$x_{02,1}=0{,}3603$ $y_{02,1}=0{,}3632$



CEO61−2A_P45

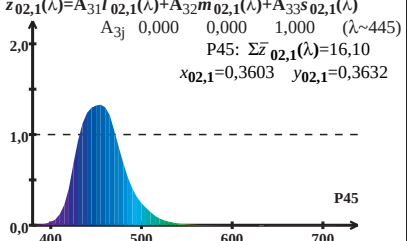
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{z}_{02,1}(\lambda)=A_{31}\bar{l}_{02,1}(\lambda)+A_{32}\bar{m}_{02,1}(\lambda)+A_{33}\bar{s}_{02,1}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P45: $\Sigma\bar{z}_{02,1}(\lambda)=16{,}10$

$x_{02,1}=0{,}3603$ $y_{02,1}=0{,}3632$



CEO61−3A_P45

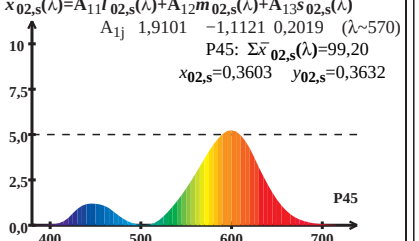
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{x}_{02,s}(\lambda)=A_{11}\bar{l}_{02,s}(\lambda)+A_{12}\bar{m}_{02,s}(\lambda)+A_{13}\bar{s}_{02,s}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P45: $\Sigma\bar{x}_{02,s}(\lambda)=99{,}20$

$x_{02,s}=0{,}3603$ $y_{02,s}=0{,}3632$



CEO61−4A_P45

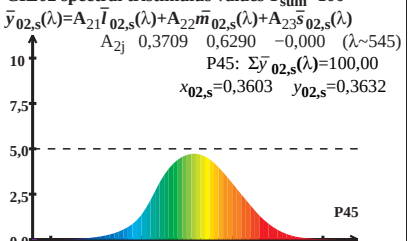
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{y}_{02,s}(\lambda)=A_{21}\bar{l}_{02,s}(\lambda)+A_{22}\bar{m}_{02,s}(\lambda)+A_{23}\bar{s}_{02,s}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P45: $\Sigma\bar{y}_{02,s}(\lambda)=100{,}00$

$x_{02,s}=0{,}3603$ $y_{02,s}=0{,}3632$



CEO61−5A_P45

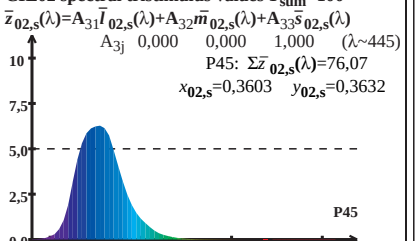
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{z}_{02,s}(\lambda)=A_{31}\bar{l}_{02,s}(\lambda)+A_{32}\bar{m}_{02,s}(\lambda)+A_{33}\bar{s}_{02,s}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P45: $\Sigma\bar{z}_{02,s}(\lambda)=76{,}07$

$x_{02,s}=0{,}3603$ $y_{02,s}=0{,}3632$



CEO61−6A_P45

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

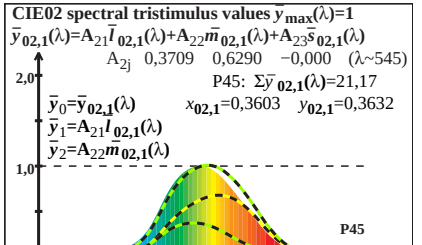
A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P45: $\Sigma\bar{y}_{02,1}(\lambda)=21{,}17$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0{,}3603$ $y_{02,1}=0{,}3632$

$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$



CEO61−7A_P45

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P45: $\Sigma\bar{y}_{02,1}(\lambda)=21{,}17$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0{,}3603$ $y_{02,1}=0{,}3632$

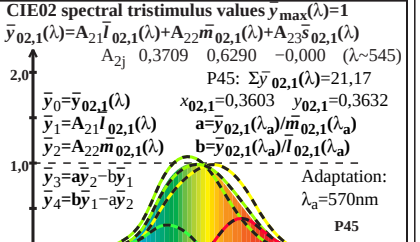
$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$ $a=\bar{y}_{02,1}(\lambda_a)/\bar{m}_{02,1}(\lambda_a)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$ $b=\bar{y}_{02,1}(\lambda_a)/\bar{l}_{02,1}(\lambda_a)$

$\bar{y}_3=a\bar{y}_2-b\bar{y}_1$

$\bar{y}_4=b\bar{y}_1-a\bar{y}_2$

Adaptation: λ_a=570nm



CEO61−8A_P45

CEO61−7N

see similar files: http://farbe.li.tu-berlin.de/CEO6/CEO6.HTM
technical information: http://farbe.li.tu-berlin.de or http://color.li.tu-berlin.de

TUB registration: 20220101-CEO6/CEO6L0NP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

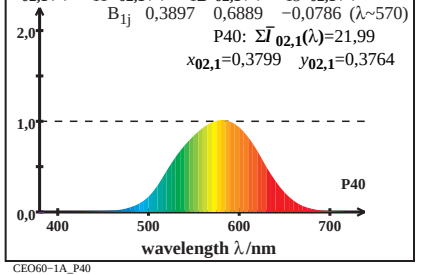
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{l}_{02,1}(\lambda)=B_{11}\bar{x}_{02,1}(\lambda)+B_{12}\bar{y}_{02,1}(\lambda)+B_{13}\bar{z}_{02,1}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

P40: $\Sigma\bar{l}_{02,1}(\lambda)=21{,}99$

$x_{02,1}=0{,}3799$ $y_{02,1}=0{,}3764$



CEO60−1A_P40

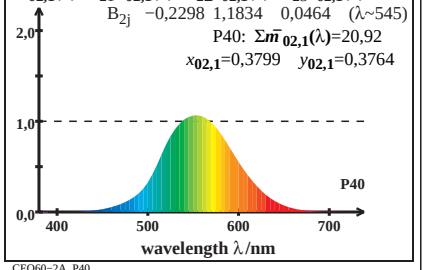
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{m}_{02,1}(\lambda)=B_{21}\bar{x}_{02,1}(\lambda)+B_{22}\bar{y}_{02,1}(\lambda)+B_{23}\bar{z}_{02,1}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

P40: $\Sigma\bar{m}_{02,1}(\lambda)=20{,}92$

$x_{02,1}=0{,}3799$ $y_{02,1}=0{,}3764$



CEO60−2A_P40

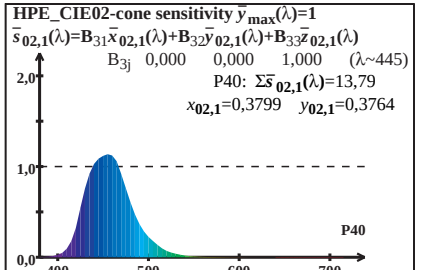
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{s}_{02,1}(\lambda)=B_{31}\bar{x}_{02,1}(\lambda)+B_{32}\bar{y}_{02,1}(\lambda)+B_{33}\bar{z}_{02,1}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

P40: $\Sigma\bar{s}_{02,1}(\lambda)=13{,}79$

$x_{02,1}=0{,}3799$ $y_{02,1}=0{,}3764$



CEO60−3A_P40

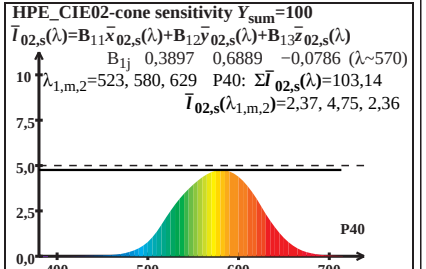
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{l}_{02,s}(\lambda)=B_{11}\bar{x}_{02,s}(\lambda)+B_{12}\bar{y}_{02,s}(\lambda)+B_{13}\bar{z}_{02,s}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}=523, 580, 629$ P40: $\Sigma\bar{l}_{02,s}(\lambda)=103{,}14$

$\bar{l}_{02,s}(\lambda_{1,m,2})=2{,}37, 4{,}75, 2{,}36$



CEO60−4A_P40

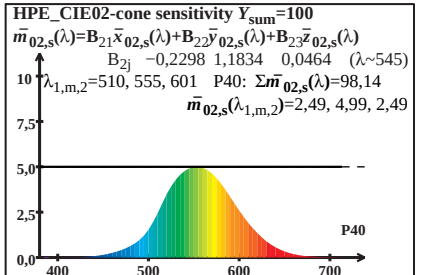
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{m}_{02,s}(\lambda)=B_{21}\bar{x}_{02,s}(\lambda)+B_{22}\bar{y}_{02,s}(\lambda)+B_{23}\bar{z}_{02,s}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}=510, 555, 601$ P40: $\Sigma\bar{m}_{02,s}(\lambda)=98{,}14$

$\bar{m}_{02,s}(\lambda_{1,m,2})=2{,}49, 4{,}99, 2{,}49$



CEO60−5A_P40

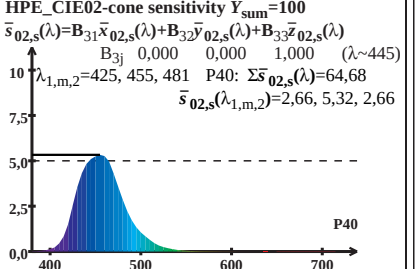
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{s}_{02,s}(\lambda)=B_{31}\bar{x}_{02,s}(\lambda)+B_{32}\bar{y}_{02,s}(\lambda)+B_{33}\bar{z}_{02,s}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

$\lambda_{1,m,2}=425, 455, 481$ P40: $\Sigma\bar{s}_{02,s}(\lambda)=64{,}68$

$\bar{s}_{02,s}(\lambda_{1,m,2})=2{,}66, 5{,}32, 2{,}66$



CEO60−6A_P40

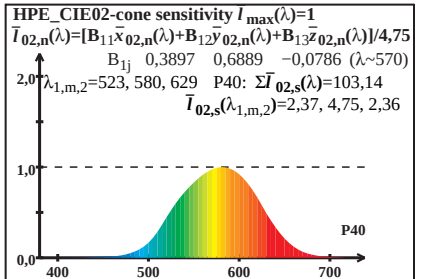
HPE_CIE02-cone sensitivity $l_{max}(\lambda)=1$

$\bar{l}_{02,n}(\lambda)=[B_{11}\bar{x}_{02,n}(\lambda)+B_{12}\bar{y}_{02,n}(\lambda)+B_{13}\bar{z}_{02,n}(\lambda)]/4{,}75$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}=523, 580, 629$ P40: $\Sigma\bar{l}_{02,s}(\lambda)=103{,}14$

$\bar{l}_{02,s}(\lambda_{1,m,2})=2{,}37, 4{,}75, 2{,}36$



CEO60−7A_P40

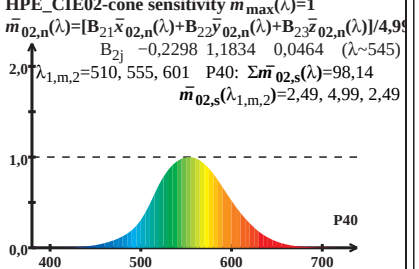
HPE_CIE02-cone sensitivity $\bar{m}_{max}(\lambda)=1$

$\bar{m}_{02,n}(\lambda)=[B_{21}\bar{x}_{02,n}(\lambda)+B_{22}\bar{y}_{02,n}(\lambda)+B_{23}\bar{z}_{02,n}(\lambda)]/4{,}9$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}=510, 555, 601$ P40: $\Sigma\bar{m}_{02,s}(\lambda)=98{,}14$

$\bar{m}_{02,s}(\lambda_{1,m,2})=2{,}49, 4{,}99, 2{,}49$



CEO60−8A_P40

CEO60−7N

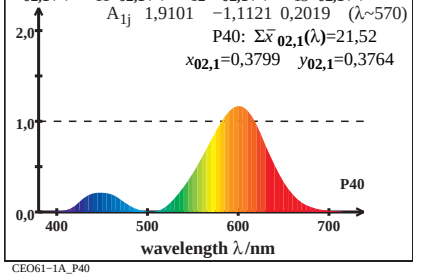
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{x}_{02,1}(\lambda)=A_{11}\bar{l}_{02,1}(\lambda)+A_{12}\bar{m}_{02,1}(\lambda)+A_{13}\bar{s}_{02,1}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P40: $\Sigma\bar{x}_{02,1}(\lambda)=21{,}52$

$x_{02,1}=0{,}3799$ $y_{02,1}=0{,}3764$



CEO61−1A_P40

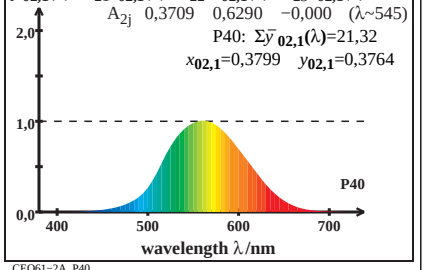
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P40: $\Sigma\bar{y}_{02,1}(\lambda)=21{,}32$

$x_{02,1}=0{,}3799$ $y_{02,1}=0{,}3764$



CEO61−2A_P40

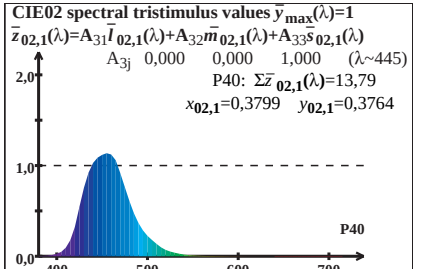
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{z}_{02,1}(\lambda)=A_{31}\bar{l}_{02,1}(\lambda)+A_{32}\bar{m}_{02,1}(\lambda)+A_{33}\bar{s}_{02,1}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P40: $\Sigma\bar{z}_{02,1}(\lambda)=13{,}79$

$x_{02,1}=0{,}3799$ $y_{02,1}=0{,}3764$



CEO61−3A_P40

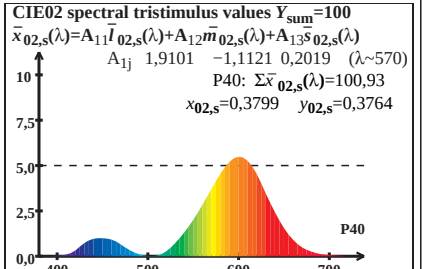
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{x}_{02,s}(\lambda)=A_{11}\bar{l}_{02,s}(\lambda)+A_{12}\bar{m}_{02,s}(\lambda)+A_{13}\bar{s}_{02,s}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P40: $\Sigma\bar{x}_{02,s}(\lambda)=100{,}93$

$x_{02,s}=0{,}3799$ $y_{02,s}=0{,}3764$



CEO61−4A_P40

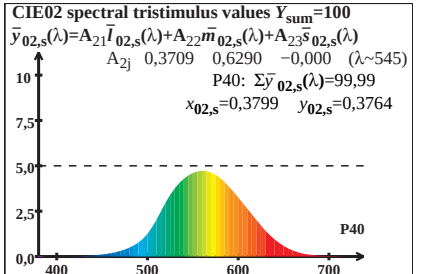
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{y}_{02,s}(\lambda)=A_{21}\bar{l}_{02,s}(\lambda)+A_{22}\bar{m}_{02,s}(\lambda)+A_{23}\bar{s}_{02,s}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P40: $\Sigma\bar{y}_{02,s}(\lambda)=99{,}99$

$x_{02,s}=0{,}3799$ $y_{02,s}=0{,}3764$



CEO61−5A_P40

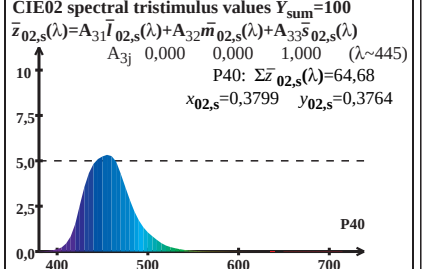
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{z}_{02,s}(\lambda)=A_{31}\bar{l}_{02,s}(\lambda)+A_{32}\bar{m}_{02,s}(\lambda)+A_{33}\bar{s}_{02,s}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P40: $\Sigma\bar{z}_{02,s}(\lambda)=64{,}68$

$x_{02,s}=0{,}3799$ $y_{02,s}=0{,}3764$



CEO61−6A_P40

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

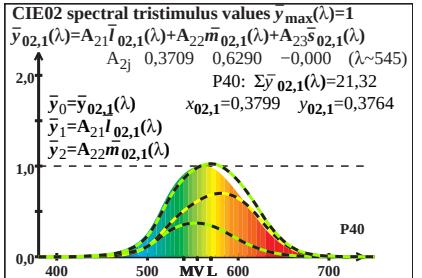
A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P40: $\Sigma\bar{y}_{02,1}(\lambda)=21{,}32$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0{,}3799$ $y_{02,1}=0{,}3764$

$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$



CEO61−7A_P40

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P40: $\Sigma\bar{y}_{02,1}(\lambda)=21{,}32$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0{,}3799$ $y_{02,1}=0{,}3764$

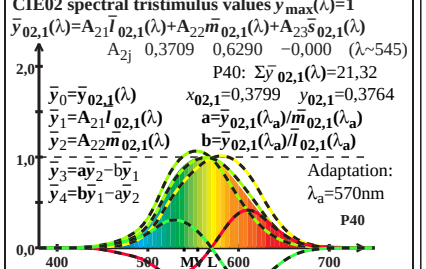
$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$ $a=\bar{y}_{02,1}(\lambda_a)/\bar{m}_{02,1}(\lambda_a)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$ $b=\bar{y}_{02,1}(\lambda_a)/\bar{l}_{02,1}(\lambda_a)$

$\bar{y}_3=a\bar{y}_2-b\bar{y}_1$

$\bar{y}_4=b\bar{y}_1-a\bar{y}_2$

Adaptation: $\lambda_a=570$nm



CEO61−8A_P40

CEO61−7N

TUB-test chart CEO6; HPE-CIE_02-degree colorimetry, CIE and R21 components of $\bar{y}(\lambda)$
Cone sensivity, transformation, and spectral tristimulus values for CIE illuminant P40, linear data

see similar files: http://farbe.li.tu-berlin.de/CEO6/CEO6.HTM
technical information: http://farbe.li.tu-berlin.de or http://color.li.tu-berlin.de

TUB registration: 20220101-CEO6/CEO6L0NP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

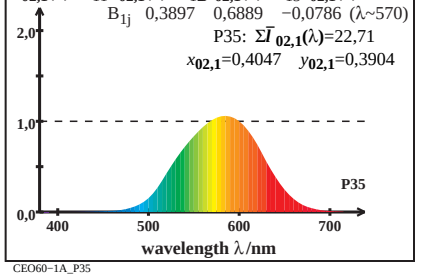
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{l}_{02,1}(\lambda)=B_{11}\bar{x}_{02,1}(\lambda)+B_{12}\bar{y}_{02,1}(\lambda)+B_{13}\bar{z}_{02,1}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

P35: $\Sigma\bar{l}_{02,1}(\lambda)=22,71$

$x_{02,1}=0,4047$ $y_{02,1}=0,3904$



CEO60−1A_P35

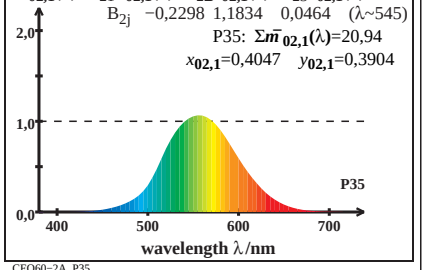
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{m}_{02,1}(\lambda)=B_{21}\bar{x}_{02,1}(\lambda)+B_{22}\bar{y}_{02,1}(\lambda)+B_{23}\bar{z}_{02,1}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

P35: $\Sigma\bar{m}_{02,1}(\lambda)=20,94$

$x_{02,1}=0,4047$ $y_{02,1}=0,3904$



CEO60−2A_P35

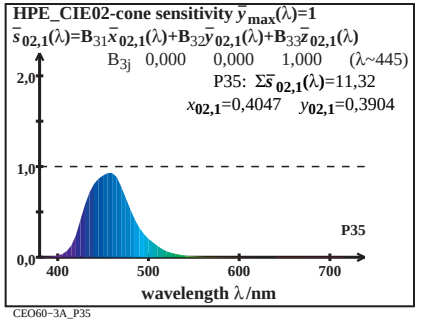
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{s}_{02,1}(\lambda)=B_{31}\bar{x}_{02,1}(\lambda)+B_{32}\bar{y}_{02,1}(\lambda)+B_{33}\bar{z}_{02,1}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

P35: $\Sigma\bar{s}_{02,1}(\lambda)=11,32$

$x_{02,1}=0,4047$ $y_{02,1}=0,3904$



CEO60−3A_P35

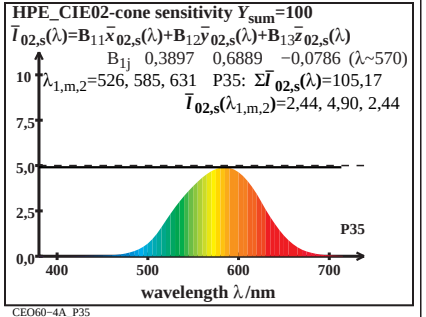
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{l}_{02,s}(\lambda)=B_{11}\bar{x}_{02,s}(\lambda)+B_{12}\bar{y}_{02,s}(\lambda)+B_{13}\bar{z}_{02,s}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}$=526, 585, 631 P35: $\Sigma\bar{l}_{02,s}(\lambda)=105,17$

$\bar{l}_{02,s}(\lambda_{1,m,2})$=2,44, 4,90, 2,44



CEO60−4A_P35

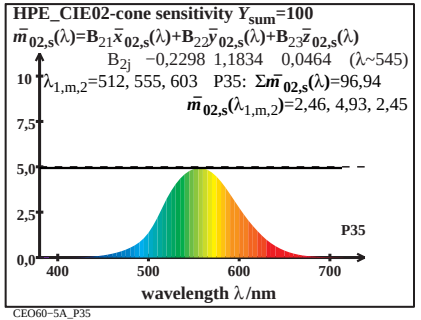
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{m}_{02,s}(\lambda)=B_{21}\bar{x}_{02,s}(\lambda)+B_{22}\bar{y}_{02,s}(\lambda)+B_{23}\bar{z}_{02,s}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}$=512, 555, 603 P35: $\Sigma\bar{m}_{02,s}(\lambda)=96,94$

$\bar{m}_{02,s}(\lambda_{1,m,2})$=2,46, 4,93, 2,45



CEO60−5A_P35

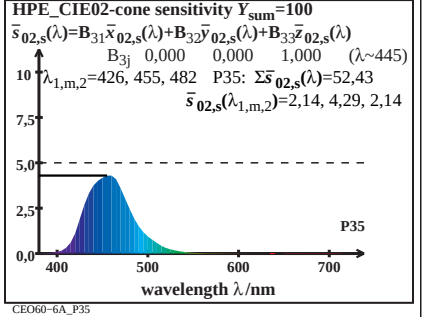
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{s}_{02,s}(\lambda)=B_{31}\bar{x}_{02,s}(\lambda)+B_{32}\bar{y}_{02,s}(\lambda)+B_{33}\bar{z}_{02,s}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

$\lambda_{1,m,2}$=426, 455, 482 P35: $\Sigma\bar{s}_{02,s}(\lambda)=52,43$

$\bar{s}_{02,s}(\lambda_{1,m,2})$=2,14, 4,29, 2,14



CEO60−6A_P35

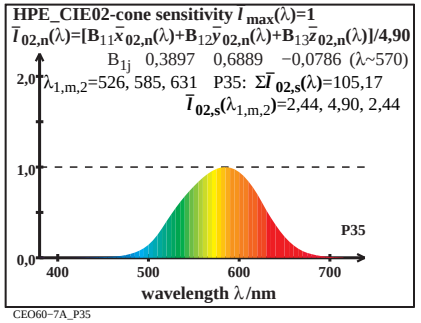
HPE_CIE02-cone sensitivity $l_{max}(\lambda)=1$

$\bar{l}_{02,n}(\lambda)=[B_{11}\bar{x}_{02,n}(\lambda)+B_{12}\bar{y}_{02,n}(\lambda)+B_{13}\bar{z}_{02,n}(\lambda)]/4,90$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}$=526, 585, 631 P35: $\Sigma\bar{l}_{02,s}(\lambda)=105,17$

$\bar{l}_{02,s}(\lambda_{1,m,2})$=2,44, 4,90, 2,44



CEO60−7A_P35

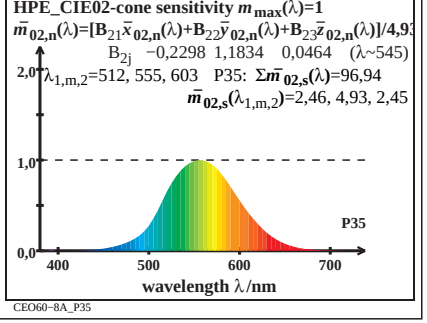
HPE_CIE02-cone sensitivity $\bar{m}_{max}(\lambda)=1$

$\bar{m}_{02,n}(\lambda)=[B_{21}\bar{x}_{02,n}(\lambda)+B_{22}\bar{y}_{02,n}(\lambda)+B_{23}\bar{z}_{02,n}(\lambda)]/4,9$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}$=512, 555, 603 P35: $\Sigma\bar{m}_{02,s}(\lambda)=96,94$

$\bar{m}_{02,s}(\lambda_{1,m,2})$=2,46, 4,93, 2,45



CEO60−8A_P35

CEO60−7N

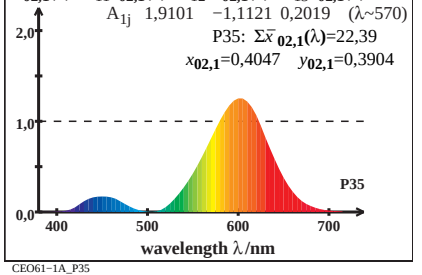
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{x}_{02,1}(\lambda)=A_{11}\bar{l}_{02,1}(\lambda)+A_{12}\bar{m}_{02,1}(\lambda)+A_{13}\bar{s}_{02,1}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P35: $\Sigma\bar{x}_{02,1}(\lambda)=22,39$

$x_{02,1}=0,4047$ $y_{02,1}=0,3904$



CEO61−1A_P35

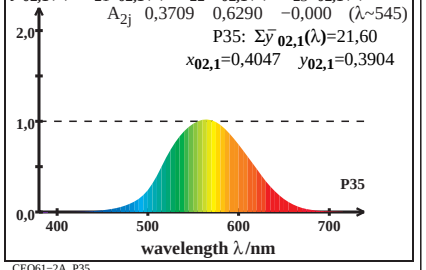
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P35: $\Sigma\bar{y}_{02,1}(\lambda)=21,60$

$x_{02,1}=0,4047$ $y_{02,1}=0,3904$



CEO61−2A_P35

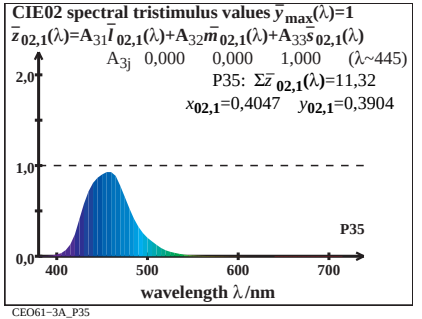
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{z}_{02,1}(\lambda)=A_{31}\bar{l}_{02,1}(\lambda)+A_{32}\bar{m}_{02,1}(\lambda)+A_{33}\bar{s}_{02,1}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P35: $\Sigma\bar{z}_{02,1}(\lambda)=11,32$

$x_{02,1}=0,4047$ $y_{02,1}=0,3904$



CEO61−3A_P35

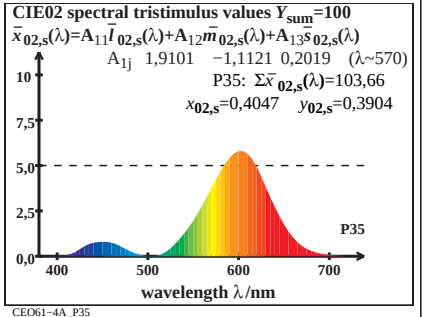
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{x}_{02,s}(\lambda)=A_{11}\bar{l}_{02,s}(\lambda)+A_{12}\bar{m}_{02,s}(\lambda)+A_{13}\bar{s}_{02,s}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P35: $\Sigma\bar{x}_{02,s}(\lambda)=103,66$

$x_{02,s}=0,4047$ $y_{02,s}=0,3904$



CEO61−4A_P35

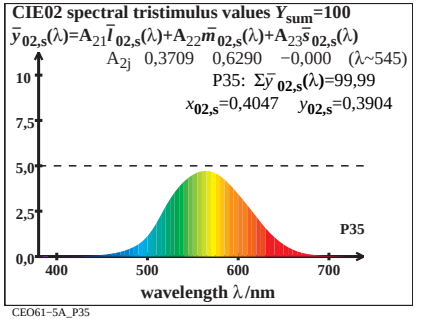
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{y}_{02,s}(\lambda)=A_{21}\bar{l}_{02,s}(\lambda)+A_{22}\bar{m}_{02,s}(\lambda)+A_{23}\bar{s}_{02,s}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P35: $\Sigma\bar{y}_{02,s}(\lambda)=99,99$

$x_{02,s}=0,4047$ $y_{02,s}=0,3904$



CEO61−5A_P35

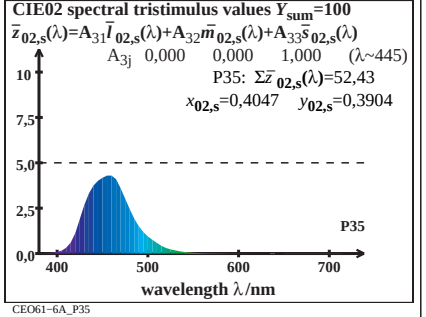
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{z}_{02,s}(\lambda)=A_{31}\bar{l}_{02,s}(\lambda)+A_{32}\bar{m}_{02,s}(\lambda)+A_{33}\bar{s}_{02,s}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P35: $\Sigma\bar{z}_{02,s}(\lambda)=52,43$

$x_{02,s}=0,4047$ $y_{02,s}=0,3904$



CEO61−6A_P35

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

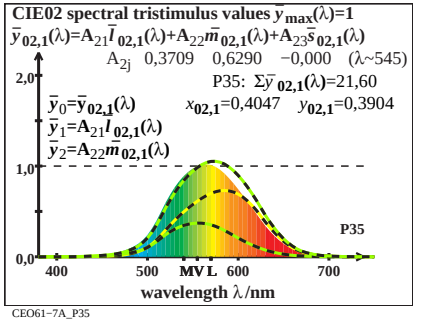
A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P35: $\Sigma\bar{y}_{02,1}(\lambda)=21,60$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0,4047$ $y_{02,1}=0,3904$

$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$



CEO61−7A_P35

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P35: $\Sigma\bar{y}_{02,1}(\lambda)=21,60$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0,4047$ $y_{02,1}=0,3904$

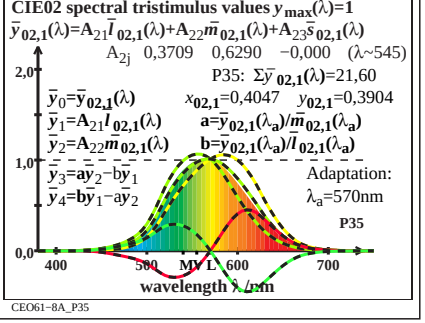
$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$ $a=\bar{y}_{02,1}(\lambda_a)/\bar{m}_{02,1}(\lambda_a)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$ $b=\bar{y}_{02,1}(\lambda_a)/\bar{l}_{02,1}(\lambda_a)$

$\bar{y}_3=a\bar{y}_2-b\bar{y}_1$

$\bar{y}_4=b\bar{y}_1-a\bar{y}_2$

Adaptation: λ_a=570nm



CEO61−8A_P35

CEO61−7N

see similar files: http://farbe.li.tu-berlin.de/CEO6/CEO6.HTM
technical information: http://farbe.li.tu-berlin.de or http://color.li.tu-berlin.de

TUB registration: 20220101-CEO6/CEO6L0NP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

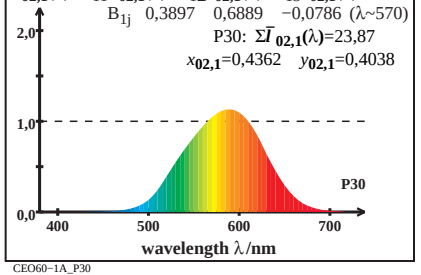
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{l}_{02,1}(\lambda)=B_{11}\bar{x}_{02,1}(\lambda)+B_{12}\bar{y}_{02,1}(\lambda)+B_{13}\bar{z}_{02,1}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

P30: $\Sigma\bar{l}_{02,1}(\lambda)=23{,}87$

$x_{02,1}=0{,}4362$ $y_{02,1}=0{,}4038$



CEO60−1A_P30

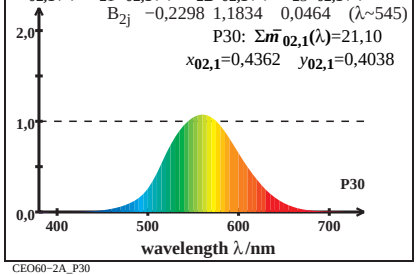
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{m}_{02,1}(\lambda)=B_{21}\bar{x}_{02,1}(\lambda)+B_{22}\bar{y}_{02,1}(\lambda)+B_{23}\bar{z}_{02,1}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

P30: $\Sigma\bar{m}_{02,1}(\lambda)=21{,}10$

$x_{02,1}=0{,}4362$ $y_{02,1}=0{,}4038$



CEO60−2A_P30

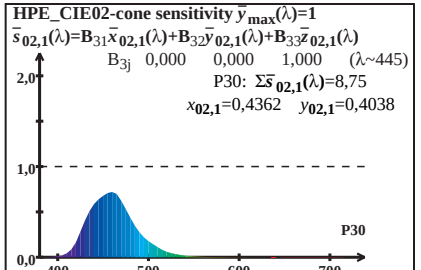
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{s}_{02,1}(\lambda)=B_{31}\bar{x}_{02,1}(\lambda)+B_{32}\bar{y}_{02,1}(\lambda)+B_{33}\bar{z}_{02,1}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

P30: $\Sigma\bar{s}_{02,1}(\lambda)=8{,}75$

$x_{02,1}=0{,}4362$ $y_{02,1}=0{,}4038$



CEO60−3A_P30

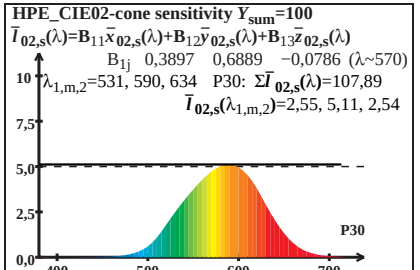
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{l}_{02,s}(\lambda)=B_{11}\bar{x}_{02,s}(\lambda)+B_{12}\bar{y}_{02,s}(\lambda)+B_{13}\bar{z}_{02,s}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}$=531, 590, 634 P30: $\Sigma\bar{l}_{02,s}(\lambda)=107{,}89$

$\bar{l}_{02,s}(\lambda_{1,m,2})$=2,55, 5,11, 2,54



CEO60−4A_P30

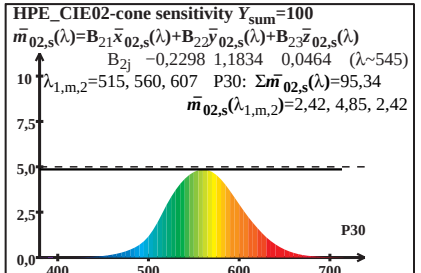
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{m}_{02,s}(\lambda)=B_{21}\bar{x}_{02,s}(\lambda)+B_{22}\bar{y}_{02,s}(\lambda)+B_{23}\bar{z}_{02,s}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}$=515, 560, 607 P30: $\Sigma\bar{m}_{02,s}(\lambda)=95{,}34$

$\bar{m}_{02,s}(\lambda_{1,m,2})$=2,42, 4,85, 2,42



CEO60−5A_P30

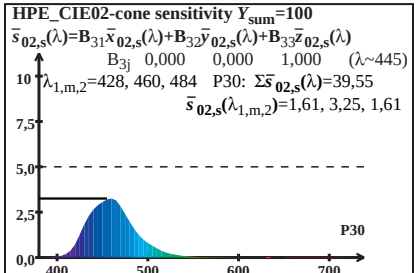
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{s}_{02,s}(\lambda)=B_{31}\bar{x}_{02,s}(\lambda)+B_{32}\bar{y}_{02,s}(\lambda)+B_{33}\bar{z}_{02,s}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

$\lambda_{1,m,2}$=428, 460, 484 P30: $\Sigma\bar{s}_{02,s}(\lambda)=39{,}55$

$\bar{s}_{02,s}(\lambda_{1,m,2})$=1,61, 3,25, 1,61



CEO60−6A_P30

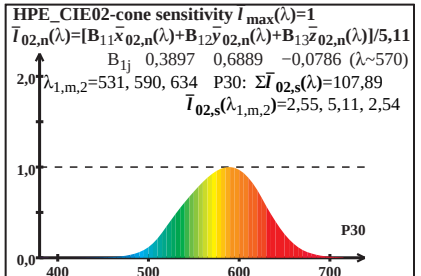
HPE_CIE02-cone sensitivity $l_{max}(\lambda)=1$

$\bar{l}_{02,n}(\lambda)=[B_{11}\bar{x}_{02,n}(\lambda)+B_{12}\bar{y}_{02,n}(\lambda)+B_{13}\bar{z}_{02,n}(\lambda)]/5{,}11$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}$=531, 590, 634 P30: $\Sigma\bar{l}_{02,s}(\lambda)=107{,}89$

$\bar{l}_{02,s}(\lambda_{1,m,2})$=2,55, 5,11, 2,54



CEO60−7A_P30

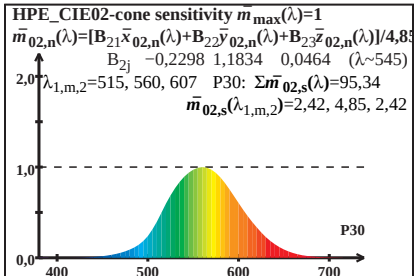
HPE_CIE02-cone sensitivity $\bar{m}_{max}(\lambda)=1$

$\bar{m}_{02,n}(\lambda)=[B_{21}\bar{x}_{02,n}(\lambda)+B_{22}\bar{y}_{02,n}(\lambda)+B_{23}\bar{z}_{02,n}(\lambda)]/4{,}8$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}$=515, 560, 607 P30: $\Sigma\bar{m}_{02,s}(\lambda)=95{,}34$

$\bar{m}_{02,s}(\lambda_{1,m,2})$=2,42, 4,85, 2,42



CEO60−8A_P30

CEO60−7N

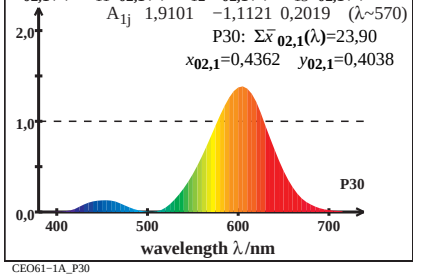
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{x}_{02,1}(\lambda)=A_{11}\bar{l}_{02,1}(\lambda)+A_{12}\bar{m}_{02,1}(\lambda)+A_{13}\bar{s}_{02,1}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P30: $\Sigma\bar{x}_{02,1}(\lambda)=23{,}90$

$x_{02,1}=0{,}4362$ $y_{02,1}=0{,}4038$



CEO61−1A_P30

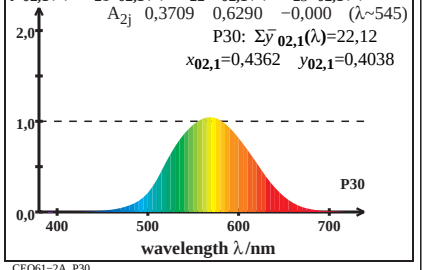
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P30: $\Sigma\bar{y}_{02,1}(\lambda)=22{,}12$

$x_{02,1}=0{,}4362$ $y_{02,1}=0{,}4038$



CEO61−2A_P30

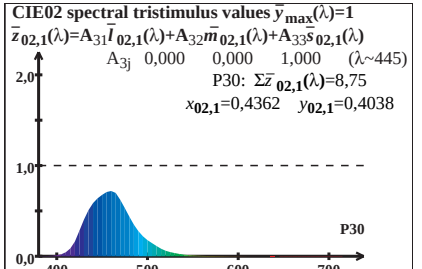
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{z}_{02,1}(\lambda)=A_{31}\bar{l}_{02,1}(\lambda)+A_{32}\bar{m}_{02,1}(\lambda)+A_{33}\bar{s}_{02,1}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P30: $\Sigma\bar{z}_{02,1}(\lambda)=8{,}75$

$x_{02,1}=0{,}4362$ $y_{02,1}=0{,}4038$



CEO61−3A_P30

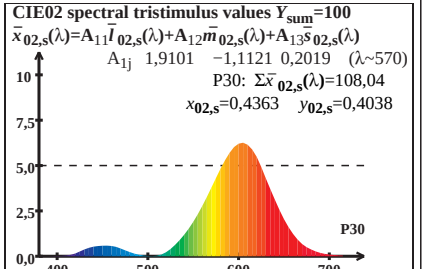
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{x}_{02,s}(\lambda)=A_{11}\bar{l}_{02,s}(\lambda)+A_{12}\bar{m}_{02,s}(\lambda)+A_{13}\bar{s}_{02,s}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P30: $\Sigma\bar{x}_{02,s}(\lambda)=108{,}04$

$x_{02,s}=0{,}4363$ $y_{02,s}=0{,}4038$



CEO61−4A_P30

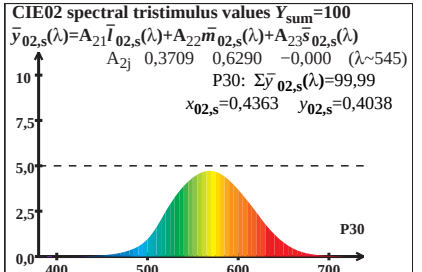
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{y}_{02,s}(\lambda)=A_{21}\bar{l}_{02,s}(\lambda)+A_{22}\bar{m}_{02,s}(\lambda)+A_{23}\bar{s}_{02,s}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P30: $\Sigma\bar{y}_{02,s}(\lambda)=99{,}99$

$x_{02,s}=0{,}4363$ $y_{02,s}=0{,}4038$



CEO61−5A_P30

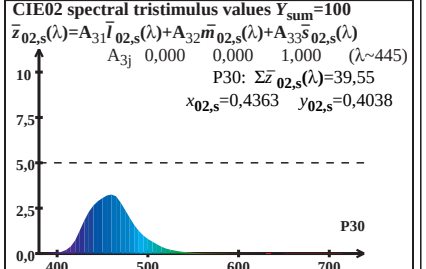
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{z}_{02,s}(\lambda)=A_{31}\bar{l}_{02,s}(\lambda)+A_{32}\bar{m}_{02,s}(\lambda)+A_{33}\bar{s}_{02,s}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P30: $\Sigma\bar{z}_{02,s}(\lambda)=39{,}55$

$x_{02,s}=0{,}4363$ $y_{02,s}=0{,}4038$



CEO61−6A_P30

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

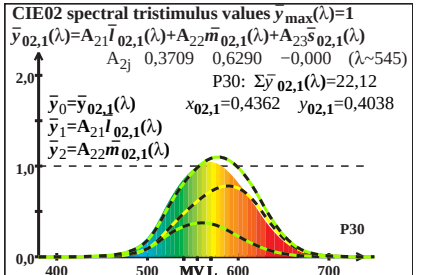
A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P30: $\Sigma\bar{y}_{02,1}(\lambda)=22{,}12$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0{,}4362$ $y_{02,1}=0{,}4038$

$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$



CEO61−7A_P30

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P30: $\Sigma\bar{y}_{02,1}(\lambda)=22{,}12$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0{,}4362$ $y_{02,1}=0{,}4038$

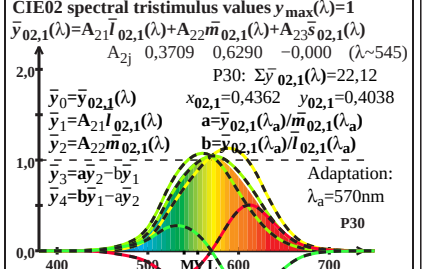
$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$ $a=\bar{y}_{02,1}(\lambda_a)/\bar{m}_{02,1}(\lambda_a)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$ $b=\bar{y}_{02,1}(\lambda_a)/\bar{l}_{02,1}(\lambda_a)$

$\bar{y}_3=a\bar{y}_2-b\bar{y}_1$

$\bar{y}_4=b\bar{y}_1-a\bar{y}_2$

Adaptation: λ_a=570nm



CEO61−8A_P30

CEO61−7N

TUB-test chart CEO6; HPE-CIE_02-degree colorimetry, CIE and R21 components of $\bar{y}(\lambda)$
Cone sensivity, transformation, and spectral tristimulus values for CIE illuminant P30, linear data

see similar files: http://farbe.li.tu-berlin.de/CEO6/CEO6.HTM
technical information: http://farbe.li.tu-berlin.de or http://color.li.tu-berlin.de

TUB registration: 20220101-CEO6/CEO6L0NP.PDF /.PS
application for measurement of offset print output

TUB material: code=rha4ta

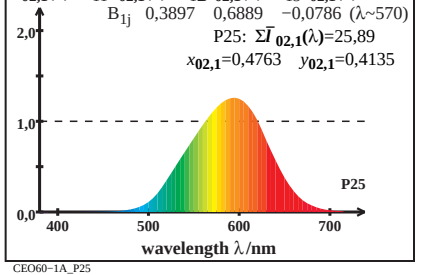
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{l}_{02,1}(\lambda)=B_{11}\bar{x}_{02,1}(\lambda)+B_{12}\bar{y}_{02,1}(\lambda)+B_{13}\bar{z}_{02,1}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

P25: $\Sigma\bar{l}_{02,1}(\lambda)=25,89$

$x_{02,1}=0,4763$ $y_{02,1}=0,4135$



CEO60−1A_P25

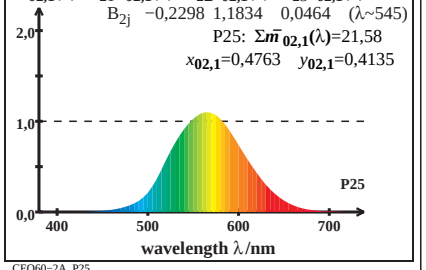
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{m}_{02,1}(\lambda)=B_{21}\bar{x}_{02,1}(\lambda)+B_{22}\bar{y}_{02,1}(\lambda)+B_{23}\bar{z}_{02,1}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

P25: $\Sigma\bar{m}_{02,1}(\lambda)=21,58$

$x_{02,1}=0,4763$ $y_{02,1}=0,4135$



CEO60−2A_P25

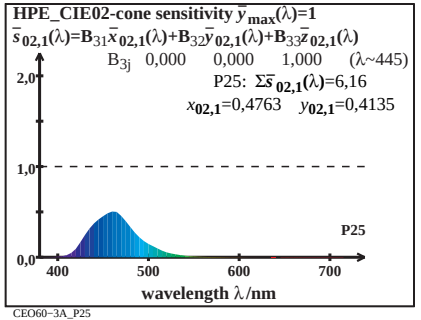
HPE_CIE02-cone sensitivity $\bar{y}_{max}(\lambda)=1$

$\bar{s}_{02,1}(\lambda)=B_{31}\bar{x}_{02,1}(\lambda)+B_{32}\bar{y}_{02,1}(\lambda)+B_{33}\bar{z}_{02,1}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

P25: $\Sigma\bar{s}_{02,1}(\lambda)=6,16$

$x_{02,1}=0,4763$ $y_{02,1}=0,4135$



CEO60−3A_P25

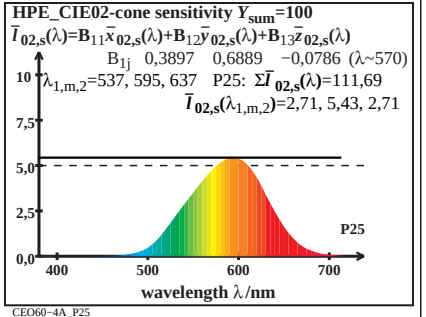
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{l}_{02,s}(\lambda)=B_{11}\bar{x}_{02,s}(\lambda)+B_{12}\bar{y}_{02,s}(\lambda)+B_{13}\bar{z}_{02,s}(\lambda)$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}$=537, 595, 637 P25: $\Sigma\bar{l}_{02,s}(\lambda)=111,69$

$\bar{l}_{02,s}(\lambda_{1,m,2})$=2,71, 5,43, 2,71



CEO60−4A_P25

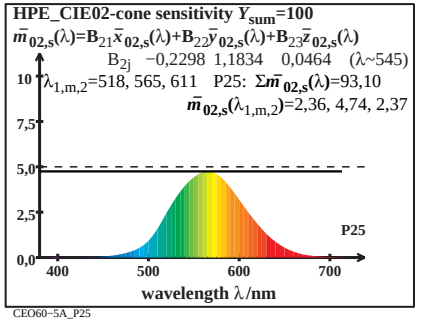
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{m}_{02,s}(\lambda)=B_{21}\bar{x}_{02,s}(\lambda)+B_{22}\bar{y}_{02,s}(\lambda)+B_{23}\bar{z}_{02,s}(\lambda)$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}$=518, 565, 611 P25: $\Sigma\bar{m}_{02,s}(\lambda)=93,10$

$\bar{m}_{02,s}(\lambda_{1,m,2})$=2,36, 4,74, 2,37



CEO60−5A_P25

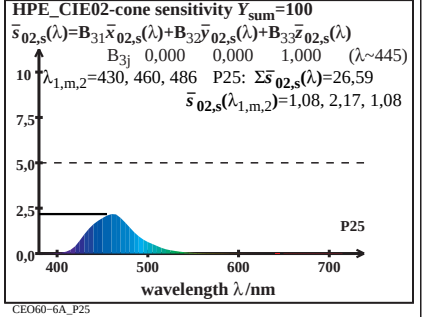
HPE_CIE02-cone sensitivity $Y_{sum}=100$

$\bar{s}_{02,s}(\lambda)=B_{31}\bar{x}_{02,s}(\lambda)+B_{32}\bar{y}_{02,s}(\lambda)+B_{33}\bar{z}_{02,s}(\lambda)$

B_{3j} 0,000 0,000 1,000 (λ~445)

$\lambda_{1,m,2}$=430, 460, 486 P25: $\Sigma\bar{s}_{02,s}(\lambda)=26,59$

$\bar{s}_{02,s}(\lambda_{1,m,2})$=1,08, 2,17, 1,08



CEO60−6A_P25

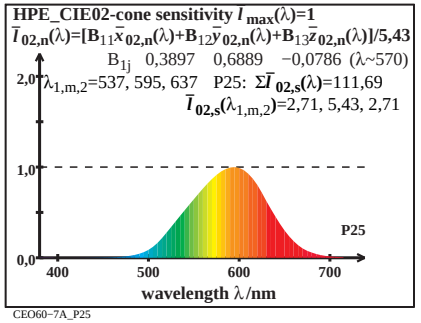
HPE_CIE02-cone sensitivity $l_{max}(\lambda)=1$

$\bar{l}_{02,n}(\lambda)=[B_{11}\bar{x}_{02,n}(\lambda)+B_{12}\bar{y}_{02,n}(\lambda)+B_{13}\bar{z}_{02,n}(\lambda)]/5,43$

B_{1j} 0,3897 0,6889 −0,0786 (λ~570)

$\lambda_{1,m,2}$=537, 595, 637 P25: $\Sigma\bar{l}_{02,s}(\lambda)=111,69$

$\bar{l}_{02,s}(\lambda_{1,m,2})$=2,71, 5,43, 2,71



CEO60−7A_P25

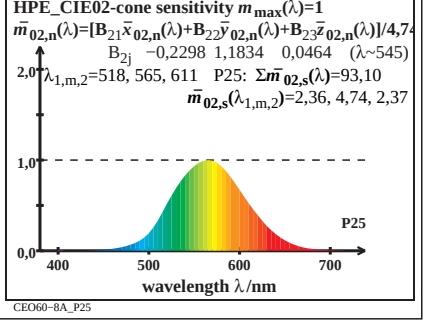
HPE_CIE02-cone sensitivity $\bar{m}_{max}(\lambda)=1$

$\bar{m}_{02,n}(\lambda)=[B_{21}\bar{x}_{02,n}(\lambda)+B_{22}\bar{y}_{02,n}(\lambda)+B_{23}\bar{z}_{02,n}(\lambda)]/4,7$

B_{2j} −0,2298 1,1834 0,0464 (λ~545)

$\lambda_{1,m,2}$=518, 565, 611 P25: $\Sigma\bar{m}_{02,s}(\lambda)=93,10$

$\bar{m}_{02,s}(\lambda_{1,m,2})$=2,36, 4,74, 2,37



CEO60−8A_P25

CEO60−7N

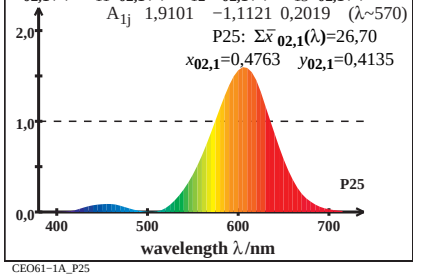
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{x}_{02,1}(\lambda)=A_{11}\bar{l}_{02,1}(\lambda)+A_{12}\bar{m}_{02,1}(\lambda)+A_{13}\bar{s}_{02,1}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P25: $\Sigma\bar{x}_{02,1}(\lambda)=26,70$

$x_{02,1}=0,4763$ $y_{02,1}=0,4135$



CEO61−1A_P25

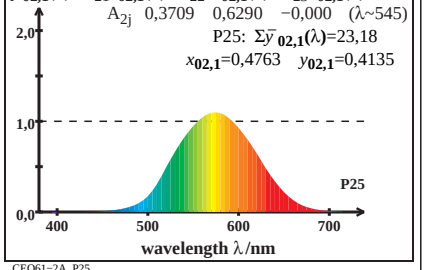
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P25: $\Sigma\bar{y}_{02,1}(\lambda)=23,18$

$x_{02,1}=0,4763$ $y_{02,1}=0,4135$



CEO61−2A_P25

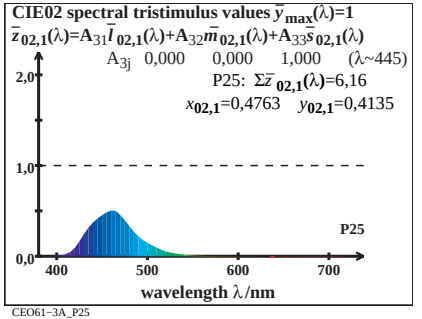
CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{z}_{02,1}(\lambda)=A_{31}\bar{l}_{02,1}(\lambda)+A_{32}\bar{m}_{02,1}(\lambda)+A_{33}\bar{s}_{02,1}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P25: $\Sigma\bar{z}_{02,1}(\lambda)=6,16$

$x_{02,1}=0,4763$ $y_{02,1}=0,4135$



CEO61−3A_P25

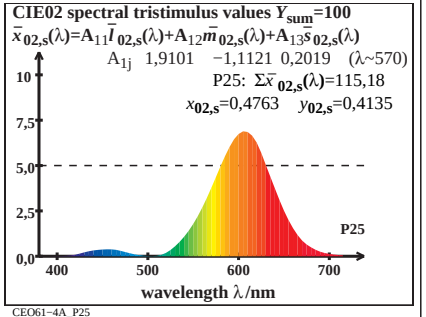
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{x}_{02,s}(\lambda)=A_{11}\bar{l}_{02,s}(\lambda)+A_{12}\bar{m}_{02,s}(\lambda)+A_{13}\bar{s}_{02,s}(\lambda)$

A_{1j} 1,9101 −1,1121 0,2019 (λ~570)

P25: $\Sigma\bar{x}_{02,s}(\lambda)=115,18$

$x_{02,s}=0,4763$ $y_{02,s}=0,4135$



CEO61−4A_P25

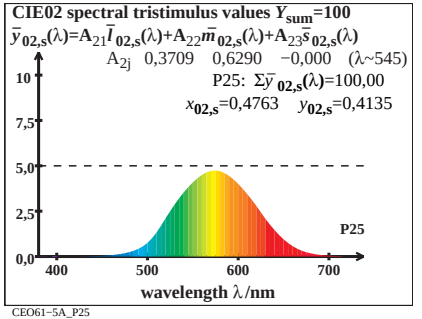
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{y}_{02,s}(\lambda)=A_{21}\bar{l}_{02,s}(\lambda)+A_{22}\bar{m}_{02,s}(\lambda)+A_{23}\bar{s}_{02,s}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P25: $\Sigma\bar{y}_{02,s}(\lambda)=100,00$

$x_{02,s}=0,4763$ $y_{02,s}=0,4135$



CEO61−5A_P25

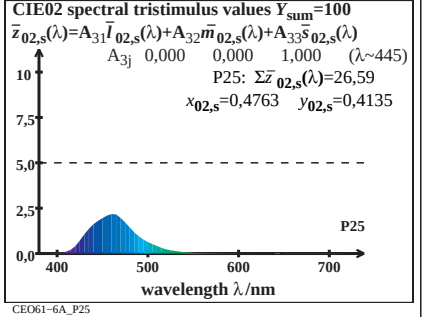
CIE02 spectral tristimulus values $Y_{sum}=100$

$\bar{z}_{02,s}(\lambda)=A_{31}\bar{l}_{02,s}(\lambda)+A_{32}\bar{m}_{02,s}(\lambda)+A_{33}\bar{s}_{02,s}(\lambda)$

A_{3j} 0,000 0,000 1,000 (λ~445)

P25: $\Sigma\bar{z}_{02,s}(\lambda)=26,59$

$x_{02,s}=0,4763$ $y_{02,s}=0,4135$



CEO61−6A_P25

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

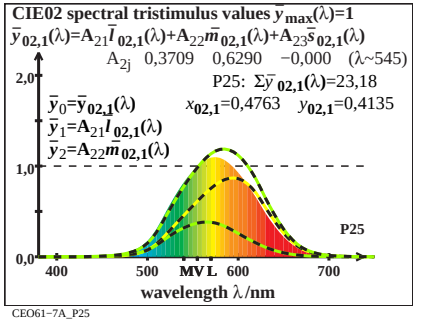
A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P25: $\Sigma\bar{y}_{02,1}(\lambda)=23,18$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0,4763$ $y_{02,1}=0,4135$

$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$



CEO61−7A_P25

CIE02 spectral tristimulus values $\bar{y}_{max}(\lambda)=1$

$\bar{y}_{02,1}(\lambda)=A_{21}\bar{l}_{02,1}(\lambda)+A_{22}\bar{m}_{02,1}(\lambda)+A_{23}\bar{s}_{02,1}(\lambda)$

A_{2j} 0,3709 0,6290 −0,000 (λ~545)

P25: $\Sigma\bar{y}_{02,1}(\lambda)=23,18$

$\bar{y}_0=\bar{y}_{02,1}(\lambda)$ $x_{02,1}=0,4763$ $y_{02,1}=0,4135$

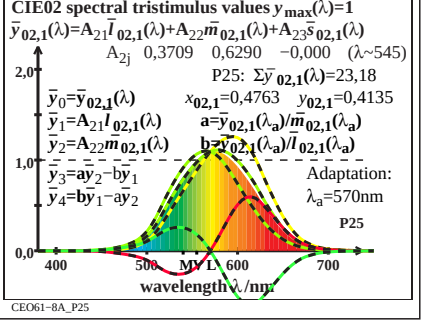
$\bar{y}_1=A_{21}\bar{l}_{02,1}(\lambda)$ $a=\bar{y}_{02,1}(\lambda_a)/\bar{m}_{02,1}(\lambda_a)$

$\bar{y}_2=A_{22}\bar{m}_{02,1}(\lambda)$ $b=\bar{y}_{02,1}(\lambda_a)/\bar{l}_{02,1}(\lambda_a)$

$\bar{y}_3=a\bar{y}_2-b\bar{y}_1$

$\bar{y}_4=b\bar{y}_1-a\bar{y}_2$

Adaptation:
λ_a=570nm



CEO61−8A_P25

CEO61−7N