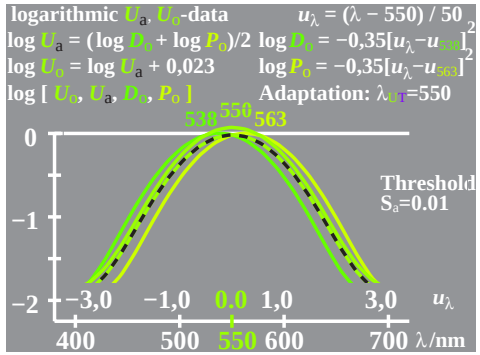
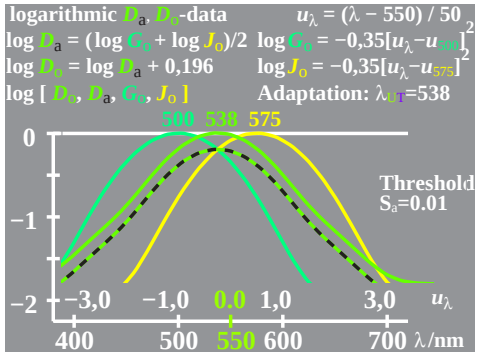
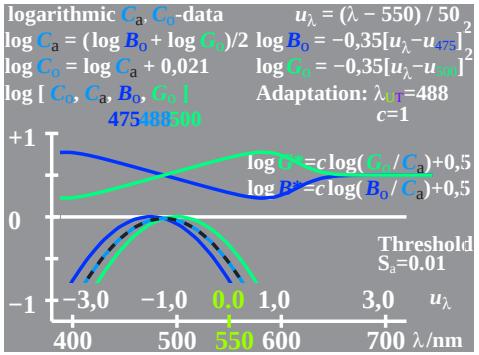
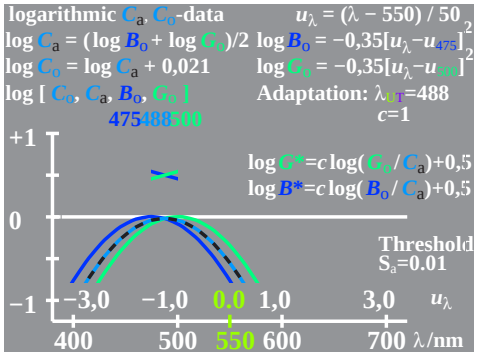
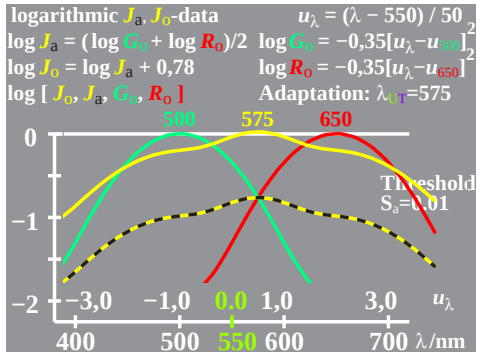
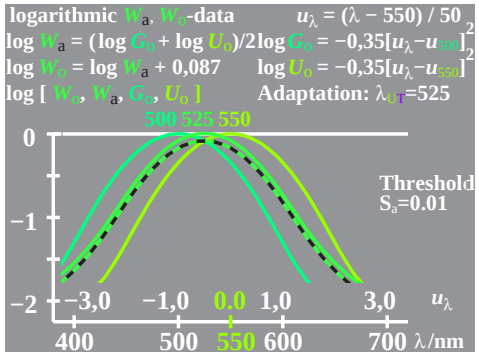

logarithmic U_a, U_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log U_a = (\log D_o + \log P_o)/2$
$\log D_o = -0{,}35[u_\lambda - u_{538}]^2$
$\log U_o = \log U_a + 0{,}023$
$\log P_o = -0{,}35[u_\lambda - u_{563}]^2$
$\log [\ U_o, U_a, D_o, P_o\ ]$
Adaptation: λ_{UT}=550
538 550 563
Threshold
S_a=0.01
DoPo->UaUo
IE190−1X

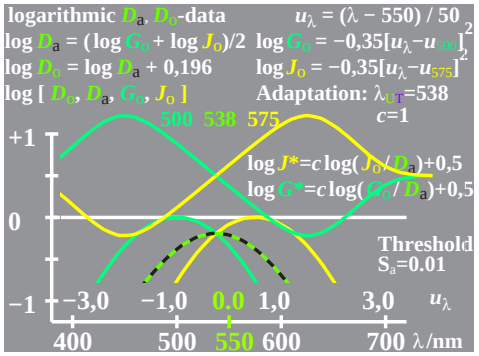

logarithmic D_a, D_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log D_a = (\log G_o + \log J_o)/2$
$\log G_o = -0{,}35[u_\lambda - u_{538}]^2$
$\log D_o = \log D_a + 0{,}196$
$\log J_o = -0{,}35[u_\lambda - u_{575}]^2$
$\log [\ D_o, D_a, G_o, J_o\ ]$
Adaptation: λ_{UT}=538
500 538 575
Threshold
S_a=0.01
GoJo->DaDo
IE190−2X

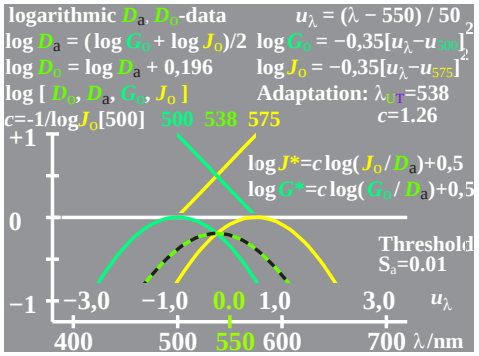

logarithmic C_a, C_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log C_a = (\log B_o + \log G_o)/2$
$\log B_o = -0{,}35[u_\lambda - u_{475}]^2$
$\log C_o = \log C_a + 0{,}021$
$\log G_o = -0{,}35[u_\lambda - u_{488}]^2$
$\log [\ C_o, C_a, B_o, G_o\ ]$
Adaptation: λ_{UT}=488
c=1
475 488 500
$\log G^* = c\log(G_o / C_a)+0{,}5$
$\log B^* = c\log(B_o / C_a)+0{,}5$
Threshold
S_a=0.01
BoGo->Ca, G*, B*
IE191−1X

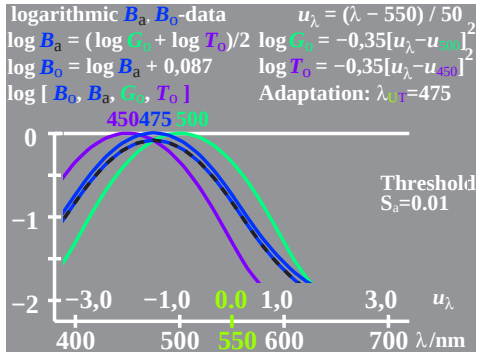

logarithmic C_a, C_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log C_a = (\log B_o + \log G_o)/2$
$\log B_o = -0{,}35[u_\lambda - u_{475}]^2$
$\log C_o = \log C_a + 0{,}021$
$\log G_o = -0{,}35[u_\lambda - u_{488}]^2$
$\log [\ C_o, C_a, B_o, G_o\ ]$
Adaptation: λ_{UT}=488
c=1
475 488 500
$\log G^* = c\log(G_o / C_a)+0{,}5$
$\log B^* = c\log(B_o / C_a)+0{,}5$
Threshold
S_a=0.01
BoGo->Ca, G*, B*
IE191−2X

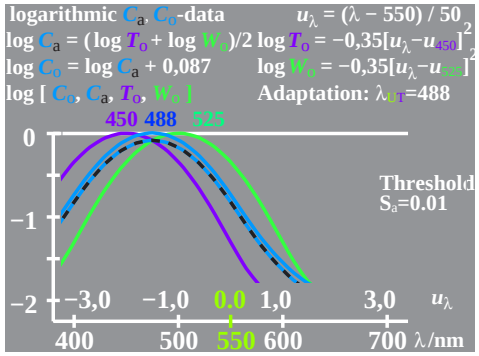

logarithmic J_a, J_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log J_a = (\log G_o + \log R_o)/2$
$\log G_o = -0{,}35[u_\lambda - u_{500}]^2$
$\log J_o = \log J_a + 0{,}78$
$\log R_o = -0{,}35[u_\lambda - u_{650}]^2$
$\log [\ J_o, J_a, G_o, R_o\ ]$
Adaptation: λ_{UT}=575
500 575 650
Threshold
S_a=0.01
GoRo->JaJo
IE190−3X

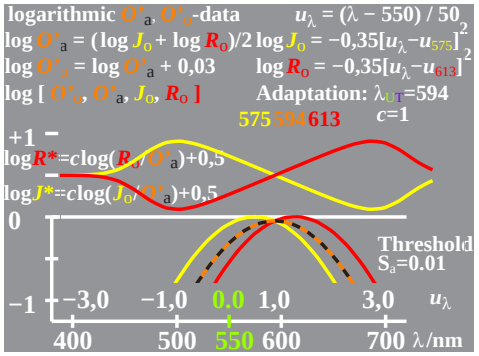

logarithmic W_a, W_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log W_a = (\log G_o + \log U_o)/2$
$\log G_o = -0{,}35[u_\lambda - u_{508}]^2$
$\log W_o = \log W_a + 0{,}087$
$\log U_o = -0{,}35[u_\lambda - u_{550}]^2$
$\log [\ W_o, W_a, G_o, U_o\ ]$
Adaptation: λ_{UT}=525
500 525 550
Threshold
S_a=0.01
GoUo->MaMo
IE190−4X

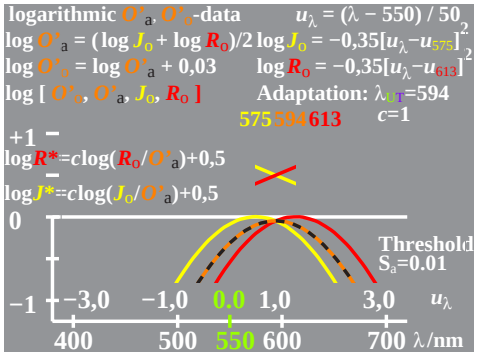

logarithmic D_a, D_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log D_a = (\log G_o + \log J_o)/2$
$\log G_o = -0{,}35[u_\lambda - u_{538}]^2$
$\log D_o = \log D_a + 0{,}196$
$\log J_o = -0{,}35[u_\lambda - u_{575}]^2$
$\log [\ D_o, D_a, G_o, J_o\ ]$
Adaptation: λ_{UT}=538
c=1
500 538 575
$\log J^* = c\log(J_o / D_a)+0{,}5$
$\log G^* = c\log(G_o / D_a)+0{,}5$
Threshold
S_a=0.01
GoJo->Da, J*, G*
IE191−3X

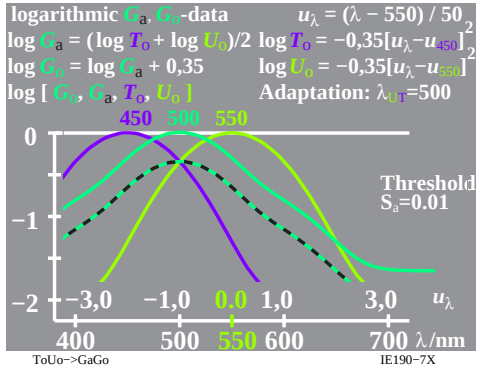

logarithmic D_a, D_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log D_a = (\log G_o + \log J_o)/2$
$\log G_o = -0{,}35[u_\lambda - u_{538}]^2$
$\log D_o = \log D_a + 0{,}196$
$\log J_o = -0{,}35[u_\lambda - u_{575}]^2$
$\log [\ D_o, D_a, G_o, J_o\ ]$
Adaptation: λ_{UT}=538
c=-1/logJ_o[500]
c=1.26
500 538 575
$\log J^* = c\log(J_o / D_a)+0{,}5$
$\log G^* = c\log(G_o / D_a)+0{,}5$
Threshold
S_a=0.01
GoJo->Da, J*, G*
IE191−4X

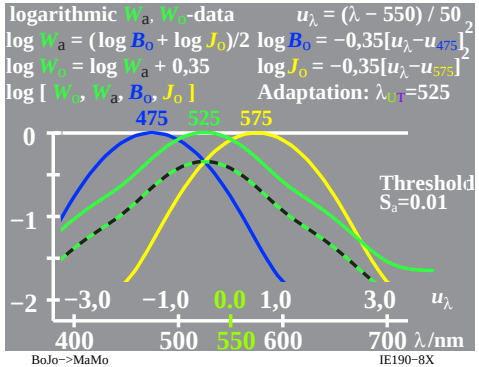

logarithmic B_a, B_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log B_a = (\log G_o + \log T_o)/2$
$\log G_o = -0{,}35[u_\lambda - u_{503}]^2$
$\log B_o = \log B_a + 0{,}087$
$\log T_o = -0{,}35[u_\lambda - u_{450}]^2$
$\log [\ B_o, B_a, G_o, T_o\ ]$
Adaptation: λ_{UT}=475
450 475 500
Threshold
S_a=0.01
ToGo->BaBo
IE190−5X

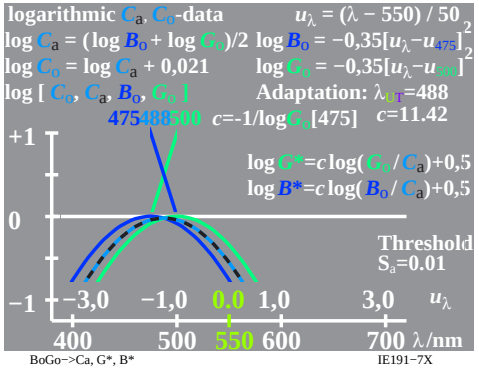

logarithmic C_a, C_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log C_a = (\log T_o + \log W_o)/2$
$\log T_o = -0{,}35[u_\lambda - u_{450}]^2$
$\log C_o = \log C_a + 0{,}087$
$\log W_o = -0{,}35[u_\lambda - u_{525}]^2$
$\log [\ C_o, C_a, T_o, W_o\ ]$
Adaptation: λ_{UT}=488
450 488 525
Threshold
S_a=0.01
ToMo->CaCo
IE190−6X

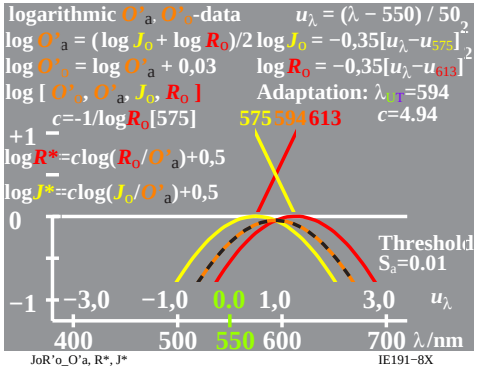

logarithmic O'_a, O'_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log O'_a = (\log J_o + \log R_o)/2$
$\log J_o = -0{,}35[u_\lambda - u_{575}]^2$
$\log O'_o = \log O'_a + 0{,}03$
$\log R_o = -0{,}35[u_\lambda - u_{613}]^2$
$\log [\ O'_o, O'_a, J_o, R_o\ ]$
Adaptation: λ_{UT}=594
c=1
575 594 613
$\log R^* = c\log(R_o / O'_a)+0{,}5$
$\log J^* = c\log(J_o / O'_a)+0{,}5$
Threshold
S_a=0.01
JoR'o_O'a, R*, J*
IE191−5X


logarithmic O'_a, O'_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log O'_a = (\log J_o + \log R_o)/2$
$\log J_o = -0{,}35[u_\lambda - u_{575}]^2$
$\log O'_o = \log O'_a + 0{,}03$
$\log R_o = -0{,}35[u_\lambda - u_{613}]^2$
$\log [\ O'_o, O'_a, J_o, R_o\ ]$
Adaptation: λ_{UT}=594
c=1
575 594 613
$\log R^* = c\log(R_o / O'_a)+0{,}5$
$\log J^* = c\log(J_o / O'_a)+0{,}5$
Threshold
S_a=0.01
JoR'o_O'a, R*, J*
IE191−6X


logarithmic G_a, G_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log G_a = (\log T_o + \log U_o)/2$
$\log T_o = -0{,}35[u_\lambda - u_{450}]^2$
$\log G_o = \log G_a + 0{,}35$
$\log U_o = -0{,}35[u_\lambda - u_{550}]^2$
$\log [\ G_o, G_a, T_o, U_o\ ]$
Adaptation: λ_{UT}=500
450 500 550
Threshold
S_a=0.01
ToUo->GaGo
IE190−7X


logarithmic W_a, W_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log W_a = (\log B_o + \log J_o)/2$
$\log B_o = -0{,}35[u_\lambda - u_{475}]^2$
$\log W_o = \log W_a + 0{,}35$
$\log J_o = -0{,}35[u_\lambda - u_{575}]^2$
$\log [\ W_o, W_a, B_o, J_o\ ]$
Adaptation: λ_{UT}=525
475 525 575
Threshold
S_a=0.01
BoJo->MaMo
IE190−8X


logarithmic C_a, C_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log C_a = (\log B_o + \log G_o)/2$
$\log B_o = -0{,}35[u_\lambda - u_{475}]^2$
$\log C_o = \log C_a + 0{,}021$
$\log G_o = -0{,}35[u_\lambda - u_{488}]^2$
$\log [\ C_o, C_a, B_o, G_o\ ]$
Adaptation: λ_{UT}=488
c=11.42
c=-1/logG_o[475]
475 488 500
$\log G^* = c\log(G_o / C_a)+0{,}5$
$\log B^* = c\log(B_o / C_a)+0{,}5$
Threshold
S_a=0.01
BoGo->Ca, G*, B*
IE191−7X


logarithmic O'_a, O'_o-data
$u_\lambda = (\lambda - 550) / 50$
$\log O'_a = (\log J_o + \log R_o)/2$
$\log J_o = -0{,}35[u_\lambda - u_{575}]^2$
$\log O'_o = \log O'_a + 0{,}03$
$\log R_o = -0{,}35[u_\lambda - u_{613}]^2$
$\log [\ O'_o, O'_a, J_o, R_o\ ]$
Adaptation: λ_{UT}=594
c=-1/logR_o[575]
c=4.94
575 594 613
$\log R^* = c\log(R_o / O'_a)+0{,}5$
$\log J^* = c\log(J_o / O'_a)+0{,}5$
Threshold
S_a=0.01
JoR'o_O'a, R*, J*
IE191−8X