TUB registration: 20220301-BEV6/BEV6L0NP.PDF /.PS

application for measurement of display output

TUB material: code=rha4ta

BEV60–1A — IECsRGBu6 triangle lightness t^*, $Y_{nc}=Y_{WRGBnc}=100, 21, 72, 7$
$t^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$t^*_N(3,6)=26, t^*_u(18)=50, t^*_W(90)=98$
$t^*_{90}=97,77, \gamma=2,4, 1/\gamma=1/2,4=0,41$
$t^*_{18}=50,00, S_n=50,00, D_n=-0,00$
$t^*_{3,6}=25,51, t^*_u=50,00, Y_u=18$
$t^*_u=50,00, m_u=47,94$
$L^*_u=49, t^*_u=50$
$0,1$ 10 $Y_u=18$ 100 Y
$Y_N=3,6$ $Y_W=90$ $\log(Y)$

BEV60–2A — IECsRGBu6 relative triangle lightness t^*/t^*_u, $Y_{nc}=Y_{WRGBnc}=100, 21, 72, 7$
$t^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$t^*_N(3,6)=26, t^*_u(18)=50, t^*_W(90)=98$
$t^*_{90}/t^*_u=1,95, \gamma=2,4, 1/\gamma=1/2,4=0,41$
$t^*_{18}/t^*_u=1,00, S_n=50,00, D_n=-0,00$
$t^*_{3,6}/t^*_u=0,51, t^*_u=50,00, Y_u=18$
$t^*/t^*_u=1, m_u=-0,29$
$L^*_u=49, t^*_u=50$
$Y_N=3,6$ $Y_W=90$ $\log(Y)$

BEV61–1A — IECsRGBu6 triangle lightness T^*, $Y_{nc}=L^*_{WRGBnc}=100, 52, 87, 31$
$T^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$T^*_N(3,6)=26, T^*_u(18)=50, T^*_W(90)=98$
$T^*_{90}=97,77, \gamma=2,4, 1/\gamma=1/2,4=0,41$
$T^*_{18}=50,00, S_n=50,00, D_n=-0,00$
$T^*_{3,6}=25,51, T^*_u=50,00, Y_u=18$
$T^*_u=50,00, m_u=47,94$
$L^*_u=49, T^*_u=50$

BEV61–2A — IECsRGBu6 relative triangle lightness T^*/T^*_u, $Y_{nc}=L^*_{WRGBnc}=100, 52, 87, 31$
$T^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$T^*_N(3,6)=26, T^*_u(18)=50, T^*_W(90)=98$
$T^*_{90}/T^*_u=1,95, \gamma=2,4, 1/\gamma=1/2,4=0,41$
$T^*_{18}/T^*_u=1,00, S_n=50,00, D_n=-0,01$
$T^*_{3,6}/T^*_u=0,51, T^*_u=50,00, Y_u=18$
$T^*/T^*_u=1, m_u=-0,29$
$L^*_u=49, T^*_u=50$

BEV60–3A — IECsRGBu6 tristimulus value difference, $Y_{nc}=Y_{WRGBnc}=100, 21, 72, 7$
$t^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$\log(dY) = (1/2,4)\log[2,4(Y_u/50)] + [1-(1/2,4)]\log(Y)$
$t^*=50, dY_u=4,80, dY_u/Y_u=0,2666$
$\log(dY)=4,80, m_u=0,58$
$dY_{90}=12,27, \gamma=2,4, 1/\gamma=1/2,4=0,4$
$dY_{18}=4,80, S_n=50,00, D_n=-0,00$
$dY_{3,6}=1,87, Y_u=18, dY_u=4,80$

BEV60–4A — IECsRGBu6 relative tristimulus value difference, $Y_{nc}=Y_{WRGBnc}=100, 21, 72, 7$
$t^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$\log(dY/dY_u) = [1-(1/2,4)]\log(Y/Y_u)$
$dY_{90}/dY_u=2,55, \gamma=2,4, 1/\gamma=1/2,4=0,41$
$dY_{18}/dY_u=1,00, S_n=50,00, D_n=-0,00$
$dY_{3,6}/dY_u=0,39, Y_u=18, dY_u=4,80$
$t^*=50, dY_u=4,80, dY_u/Y_u=0,2666$
$\log[(dY)/(dY)_u]=0, m_u=0,58$

BEV61–3A — IECsRGBu6 tristimulus value difference, $Y_{nc}=L^*_{WRGBnc}=100, 52, 87, 31$
$T^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$\log(dY) = (1/2,4)\log[2,4(Y_u/50)] + [1-(1/2,4)]\log(Y)$
$T^*=50, dY_u=4,80, dY_u/Y_u=0,2666$
$\log(dY)=4,80, m_u=0,58$
$dY_{90}=12,27, \gamma=2,4, 1/\gamma=1/2,4=0,4$
$dY_{18}=4,80, S_n=50,00, D_n=-0,00$
$dY_{3,6}=1,87, Y_u=18, dY_u=4,80$

BEV61–4A — IECsRGBu6 relative tristimulus value difference, $Y_{nc}=L^*_{WRGBnc}=100, 52, 87, 31$
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$dY_{90}/dY_u=2,55, \gamma=2,4, 1/\gamma=1/2,4=0,41$
$dY_{18}/dY_u=1,00, S_n=50,00, D_n=-0,00$
$dY_{3,6}/dY_u=0,39, Y_u=18, dY_u=4,80$
$T^*=50, dY_u=4,80, dY_u/Y_u=0,2666$
$\log[(dY)/(dY)_u]=0, m_u=0,58$

BEV60–5A — IECsRGBu6 tristimulus value sensitivity, $Y_{nc}=Y_{WRGBnc}=100, 21, 72, 7$
$t^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$\log(dY/Y) = \log[2,4(Y_u/50)] - (1/2,4)\log(Y/Y_u)$
$= (1/2,4)\log[2,4(Y_u/50)] - (1/2,4)\log(Y)$
$\log(dY/Y)=-0,57, m_u=-0,41$
$t^*=50, dY_u=4,80, dY_u/Y_u=0,2666$
$(dY/Y)_{90}=0,1363, \gamma=2,4, 1/\gamma=1/2,4=0,41$
$(dY/Y)_{18}=0,2666, S_n=50,00, D_n=-0,00$
$(dY/Y)_{3,6}=0,5202, Y_u=18, dY_u=4,80$

BEV60–6A — IECsRGBu6 relative tristimulus value sensitivity, $Y_{nc}=Y_{WRGBnc}=100, 21, 72, 7$
$t^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$\log[(dY/Y)/(dY/Y)_u] = -(1/2,4)\log(Y/Y_u)$
$(dY/Y)_{90}/(dY/Y)_u=0,51, \gamma=2,4, 1/\gamma=1/2,4=0,41$
$(dY/Y)_{18}/(dY/Y)_u=1,00, S_n=50,00, D_n=-0,00$
$(dY/Y)_{3,6}/(dY/Y)_u=1,95, Y_u=18, dY_u=4,80$
$\log[(dY/Y)/(dY/Y)_u]=0, m_u=0,3$
$t^*=50, dY_u=4,80, dY_u/Y_u=0,2666$

BEV61–5A — IECsRGBu6 tristimulus value sensitivity, $Y_{nc}=L^*_{WRGBnc}=100, 52, 87, 31$
$T^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$\log(dY/Y) = \log[2,4(Y_u/50)] - (1/2,4)\log(Y/Y_u)$
$= (1/2,4)\log[2,4(Y_u/50)] - (1/2,4)\log(Y)$
$\log(dY/Y)=-0,57, m_u=-0,41$
$T^*=50, dY_u=4,80, dY_u/Y_u=0,2666$
$(dY/Y)_{90}=0,1363, \gamma=2,4, 1/\gamma=1/2,4=0,41$
$(dY/Y)_{18}=0,2666, S_n=50,00, D_n=-0,00$
$(dY/Y)_{3,6}=0,5202, Y_u=18, dY_u=4,80$

BEV61–6A — IECsRGBu6 relative tristimulus value sensitivity, $Y_{nc}=L^*_{WRGBnc}=100, 52, 87, 31$
$T^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$\log[(dY/Y)/(dY/Y)_u] = -(1/2,4)\log(Y/Y_u)$
$(dY/Y)_{90}/(dY/Y)_u=0,51, \gamma=2,4, 1/\gamma=1/2,4=0,41$
$(dY/Y)_{18}/(dY/Y)_u=1,00, S_n=50,00, D_n=-0,00$
$(dY/Y)_{3,6}/(dY/Y)_u=1,95, Y_u=18, dY_u=4,80$
$\log[(dY/Y)/(dY/Y)_u]=0, m_u=-0,41$
$T^*=50, dY_u=4,80, dY_u/Y_u=0,2666$

BEV60–7A — IECsRGBu6 tristimulus value contrast, $Y_{nc}=Y_{WRGBnc}=100, 21, 72, 7$
$t^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$\log(Y/dY) = -\log[2,4(Y_u/50)] + (1/2,4)\log(Y/Y_u)$
$= -(1/2,4)\log[2,4(Y_u/50)] + (1/2,4)\log(Y)$
$t^*_u=50, dY_u=4,80, Y_u/dY_u=3$
$\log(Y/dY)=0,57, m_u=0,41$
$(Y/dY)_{90}=7,33, \gamma=2,4, 1/\gamma=1/2,4=0,41$
$(Y/dY)_{18}=3,74, S_n=50,00, D_n=-0,00$
$(Y/dY)_{3,6}=1,92, Y_u=18, dY_u=4,80$

BEV60–8A — IECsRGBu6 relative tristimulus value contrast, $Y_{nc}=Y_{WRGBnc}=100, 21, 72, 7$
$t^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$\log[(Y/dY)/(Y/dY)_u] = (1/2,4)\log(Y/Y_u)$
$(Y/dY)_{90}/(Y/dY)_u=1,95, \gamma=2,4, 1/\gamma=1/2,4=0,41$
$(Y/dY)_{18}/(Y/dY)_u=1,00, S_n=50,00, D_n=-0,00$
$(Y/dY)_{3,6}/(Y/dY)_u=0,51, Y_u=18, dY_u=4,80$
$\log[(Y/dY)/(Y/dY)_u]=0, m_u=0,41$
$t^*=50, dY_u=4,80, Y_u/dY_u$

BEV61–7A — IECsRGBu6 tristimulus value contrast, $Y_{nc}=L^*_{WRGBnc}=100, 52, 87, 31$
$T^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$\log(Y/dY) = -\log[2,4(Y_u/50)] + (1/2,4)\log(Y/Y_u)$
$= -(1/2,4)\log[2,4(Y_u/50)] + (1/2,4)\log(Y)$
$T^*_u=50, dY_u=4,80, Y_u/dY_u=3$
$\log(Y/dY)=0,57, m_u=0,41$
$(Y/dY)_{90}=7,33, \gamma=2,4, 1/\gamma=1/2,4=0,41$
$(Y/dY)_{18}=3,74, S_n=50,00, D_n=-0,00$
$(Y/dY)_{3,6}=1,92, Y_u=18, dY_u=4,80$

BEV61–8A — IECsRGBu6 relative tristimulus value contrast, $Y_{nc}=L^*_{WRGBnc}=100, 52, 87, 31$
$T^*_{IECsRGBu6}=50(Y/Y_u)^{1/2,4}$ ($Y_u=18$, $Y_{nc}/100<Y<=Y_{nc}$)
$\log[(Y/dY)/(Y/dY)_u] = (1/2,4)\log(Y/Y_u)$
$(Y/dY)_{90}/(Y/dY)_u=1,95, \gamma=2,4, 1/\gamma=1/2,4=0,41$
$(Y/dY)_{18}/(Y/dY)_u=1,00, S_n=50,00, D_n=-0,00$
$(Y/dY)_{3,6}/(Y/dY)_u=0,51, Y_u=18, dY_u=4,80$
$\log[(Y/dY)/(Y/dY)_u]=0, m_u=0,41$
$T^*=50, dY_u=4,80, Y_u/dY_u$

BEV60–7N
BEV61–7N

TUB-test chart BEV6; IECsRGBu6, t^* & T^* for Y/Y_u with additional data, $Y_{nc}=(Y\&L^*)_{WRGBnc}$
Absolute and relative lightness, sensitivity and contrast, $S_n=50,00$, $1/\gamma=1/2,4=0,41$