

L^* IECsRGBu4 standard lightness L^*

$$Y_{nc} = L^*_{wRGBnc} = 100, 52, 87, 31$$

 L^*

4 10000

$$L^*_{IECsRGBu4} = 50 (Y/Y_u)^{1/1,2} \quad (Y_u = 18, Y_{nc}/100 < Y \leq Y_{nc})$$

$$L^*_{N(3,6)} = 13, L^*_u(18) = 50, L^*_{W(90)} = 191$$

3 1000

$$L^*_{90} = 191, 18, \gamma = 1,2, 1/\gamma = 1/1,2 = 0,83$$

$$L^*_{18} = 50,00, S_u = 50,00, D_u = -0,00$$

$$L^*_{3,6} = 13,05, L^*_u = 50,00, Y_u = 18$$

2 100

$$\log[L^*/L^*_u] = 0, m_u = 0,83$$

$$L^*_u = 49, L^*_u = 50$$

application range

1

0,1

1

10

100

 $Y_u = 18$

100

 Y

-2

-1

0

1

10

100

1000

10000

100000

1000000

10000000

100000000

1000000000

10000000000

 $r_{N=3,6}$

1

10

100

1000

10000

100000

1000000

10000000

100000000

1000000000

10000000000

100000000000

 $r_{N=3,6}$

1

10

100

1000

10000

100000

1000000

10000000

100000000

1000000000

10000000000

100000000000

 $r_{N=3,6}$

1

10

100

1000

10000

100000

1000000

10000000

100000000

1000000000

10000000000

100000000000

 $r_{N=3,6}$

1

10

100

1000

10000

100000

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10000000

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10000000000

100000000000

 $r_{N=3,6}$

1

10

100

1000

10000

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100000000000

 $r_{N=3,6}$

1

10

100

1000

10000

100000

1000000

10000000

100000000

1000000000

10000000000

100000000000

 $r_{N=3,6}$

1

10

100

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