Hyperbolic response function of achromatic vision space T^*_{HYP3X}

nonlinear color terms	**name and relationship with test field luminance *L***	***notes*** equation type 1/(1+X)
threshold sum T^*_{HYP3X} T^*_{HYP3}	$T^*_{HYP3X} = A / (1 + A_2 / L^t)$; $X = 1/L^t = L^{-t}$ $= A_1 / (1 + A_2 \cdot X)$; $dX/dL = -t \cdot L^{-t-1}$ $= A_1 \cdot [1 + A_2 \cdot X)]^{-1}$	*T. Seim* 2014: exponent: t = 0,8 for presentation time: t_p = 0,1s of *Avramopoulos* experiments 1989
CIE luminance contrast sensitivity threshold *L / dL*	$dT^*_{HYP3X}/dX = -A_1 \cdot A_2 \cdot [1 + A_2 \cdot X)]^{-2}$ $dT^*_{HYP3X}/dL = dT^*_{HYP3X}/dX \cdot dX / dL$ $dT^*_{HYP3X}/dL = A_1 \cdot A_2 [1+A_2 \cdot X)]^{-2} t \cdot L^{-t-1}$ *for* $dT^*_{HYP3X} = 1$, and multiplication with L: $L / dL = A_1 \cdot A_2 [1+A_2 \cdot X)]^{-2} t \cdot L^{-t}$ $= A_1 \cdot A_2 \cdot t \cdot / (L^t [1+A_2 / L^t)]^2)$	Hyperbolic function: $T^*_{max} = A_1$ $T^*_{average} = 0{,}5 \cdot A_1$ $A_{2x} = A_2^{1/t}$
CIE luminance difference threshold *dL*	$dL = L \cdot (L^t [1+A_2 / L^t)] / (A_1 \cdot A_2 \cdot t)$ $= (L^t + A_2)^2 / (A_1 \cdot A_2 \cdot t \cdot L^{t-1})$	