## 8 Device（d）colours rgb $b_{d}^{*}=o l v^{*}$ in CIELAB：OYLCVM and $N W$

Hexagon－triangle system based on device（d）colours： $\boldsymbol{r g} \boldsymbol{b}_{\mathrm{d}}^{\text {券 }}=\boldsymbol{o l} \boldsymbol{v}^{\text {＊}}$ with linear relations between $\boldsymbol{r g} \boldsymbol{b}_{\mathrm{d}} \rightarrow \boldsymbol{o l v} \boldsymbol{v}^{*}$ and $\boldsymbol{L C H} \boldsymbol{H}^{*}$

（compare linear relations between $r g b_{\mathrm{sRGB}}$ and $L^{*}$ ）
Equations olv＊－LCH＊in both directions have been published，see： Richter，CIE－Proceedings，Beijing，2008，Volume 3 und DIN 33872－1 Three equations（tables）are needed for office applications： $\boldsymbol{r g} \boldsymbol{b}_{\mathrm{d}}-\boldsymbol{L C H} \boldsymbol{H}^{*}, \quad$ for a 9 x 9 x 9 grid of equally spaced $r g b_{\mathrm{d}}$－input data $\boldsymbol{o l} \boldsymbol{v}^{*}-\boldsymbol{L C H} \boldsymbol{H}^{*} \quad$ a $9 \times 9 \times 9$ grid of equally spaced data olv＊＊and $L \boldsymbol{C H}^{*}$ olv＇＊- LCH $^{*} \quad$ Device output linearisation by $\mathrm{rgb}_{\mathrm{d}} \rightarrow$ olv $^{\text {＇氺 }}$


Hexagon－triangle system based on device（d）colours： $\boldsymbol{r g} \boldsymbol{b}_{\mathrm{d}}^{\boldsymbol{*}}=\boldsymbol{o l} \boldsymbol{v}^{*}$ with linear relations between $\boldsymbol{r g} b_{\mathrm{d}} \rightarrow \boldsymbol{o l} \boldsymbol{v}^{*}$ and $\boldsymbol{L C H} \boldsymbol{H}^{*}$
（compare linear relations between $r g b_{\text {sRGB }}$ and $L^{*}$ ）
Equations olv＊－LCH＊in both directions have been published，see： Richter，CIE－Proceedings，Beijing，2008，Volume 3 und DIN 33872－1 Three equations（tables）are needed for office applications： $\boldsymbol{r g b}_{\mathrm{d}}-\boldsymbol{L C H} \boldsymbol{H}^{*}$ ，for a 9 x 9 x 9 grid of equally spaced $r g b_{\mathrm{d}}$－input data ol $\boldsymbol{v}^{*}-\boldsymbol{L C H}^{*} \quad$ a $9 \times 9 \times 9$ grid of equally spaced data olv＊and $L \boldsymbol{C H}^{*}$ olv，${ }^{\prime *}-$ LCH $^{*} \quad$ Device output linearisation by rgb $_{\mathrm{d}} \rightarrow$ olv ${ }^{\text {＇s }}$

## 6 Elementary（e）colours $r g b_{\mathrm{e}}^{*}=r g b^{*}$ in CIELAB：RJGB and $N W$

Hexagon－triangle system based on elementary（e）colours： $\boldsymbol{r g} \boldsymbol{b}_{\mathrm{e}}^{*}=\boldsymbol{r g} \boldsymbol{b}^{*}$ with linear relations between $\boldsymbol{r g} \boldsymbol{b}_{\mathrm{e}} \rightarrow \mathbf{r g} \boldsymbol{b}^{*}-\boldsymbol{L C H}{ }^{*}$

（compare linear relations between $r g b_{\mathrm{sRGB}}$ and $L^{*}$ ）
Equations $r g b^{*}-L C H^{*}$ in both directions have been published，see： Richter，CIE－Proceedings，Beijing，2008，Volume 3 und DIN 33872－1 Three equations（tables）are needed for office applications：
$\boldsymbol{r g} \boldsymbol{b}_{\mathrm{e}}-\boldsymbol{L C H} \boldsymbol{H}^{*}$ ，for a $9 \times 9 \times 9$ grid of equally spaced $r g b_{\mathrm{e}}$－input data $\boldsymbol{r g} \boldsymbol{b}^{*}-\boldsymbol{L C H}^{*} \quad$ a $9 \times 9 \times 9$ grid of equally spaced data $r g b^{*}$ and $L C H^{*}$ $r g b^{, *}-L^{*} C^{*} \quad$ Device output linearisation by $r g b_{\mathrm{e}} \rightarrow r g b^{, \cdots}$

## 6 Elementary（e）colours $r g b_{\mathrm{e}}^{*}=r g b^{*}$ in CIELAB：RJGB and NW

Hexagon－triangle system based on elementary（e）colours： $\boldsymbol{r g} \boldsymbol{b}_{\mathrm{e}}^{\text {＊}}=\boldsymbol{r g} \boldsymbol{b}^{\text {＊}}$ with linear relations between $\boldsymbol{r g} \boldsymbol{b}_{\mathrm{e}} \rightarrow \boldsymbol{r g} \boldsymbol{b}^{*}-\boldsymbol{L C H}$

（compare linear relations between $r g b_{\mathrm{sRGB}}$ and $L^{*}$ ）
Equations $r \mathrm{rg}^{*}-\mathrm{LCH}^{*}$ in both directions have been published，see： Richter，CIE－Proceedings，Beijing，2008，Volume 3 und DIN 33872－1 Three equations（tables）are needed for office applications： $\boldsymbol{r g} \boldsymbol{b}_{\mathrm{e}}-\boldsymbol{L C H} \boldsymbol{H}^{*}, \quad$ for a 9 x 9 x 9 grid of equally spaced $r g b_{\mathrm{e}}$－input data $\boldsymbol{r g} \boldsymbol{b}^{*}-\boldsymbol{L C H}^{*} \quad$ a 9 x 9 x 9 grid of equally spaced data $r \mathrm{rg}^{*}$ and $L \mathrm{CH}^{*}$ $r g b^{\prime *}-L^{\prime} C^{*} \quad$ Device output linearisation by $r g b_{\mathrm{e}} \rightarrow \mathrm{rgb}^{\text {，}}$

8 Device（d）colours rgb ${ }_{d}^{*}=o l v^{*}$ in CIELAB：OYLCVM and $N W$
Hexagon－triangle system based on device（d）colours： $\boldsymbol{r g} \boldsymbol{b}_{\mathrm{d}}=\boldsymbol{o l} \boldsymbol{v}^{*}$ with linear relations between $\boldsymbol{r g} b_{\mathrm{d}} \rightarrow$ ol $\boldsymbol{v}^{*}$ and $\boldsymbol{L C H} \boldsymbol{H}^{*}$


Equations olv＊－LCH ${ }^{*}$ in both directions have been published，see： Richter，CIE－Proceedings，Beijing，2008，Volume 3 und DIN 33872－ Three equations（tables）are needed for office applications： $\boldsymbol{r g b}_{\mathrm{d}}-\boldsymbol{L C H} \boldsymbol{H}^{*}, \quad$ for a 9 x 9 x 9 grid of equally spaced $r g b_{\mathrm{d}}$－input data $\boldsymbol{o l v}^{*}-\boldsymbol{L C H}^{*} \quad$ a $9 \times 9 \times 9$ grid of equally spaced data olv $^{*}$ and $L$ LH $^{*}$


Hexagon－triangle system based on device（d）colours： $\boldsymbol{c m} \boldsymbol{y}_{\mathrm{d}}^{\mathrm{B}^{2}}=\mathbf{1}-\boldsymbol{o l} \boldsymbol{v}^{\text {米 }}$ with linear relations between $\boldsymbol{c m y _ { \mathrm { d } } \rightarrow \mathbf { c m y }}{ }^{*}$ and $\boldsymbol{L C H}^{*}$

（compare linear relations between $r g b_{\mathrm{sRGB}}$ and $L^{*}$ ）
Equations $c m y^{*}-L C H^{*}$ in both directions have been published，see： Richter，CIE－Proceedings，Beijing，2008，Volume 3 und DIN 33872－ Three equations（tables）are needed for office applications： $\boldsymbol{c m} \boldsymbol{y}_{\mathrm{d}}-\boldsymbol{L C H}^{*}$＇for a 9 x 9 x 9 grid of equally spaced $c m y_{\mathrm{d}}$－input data cmy＊$-\boldsymbol{L C H}^{*} \quad$ a 9 x 9 x 9 grid of equally spaced data $c m y^{*}$ and $L \mathrm{LCH}^{*}$ cmy ${ }^{\prime *}$－LCH ${ }^{*}$ Device output linearisation by cmy ${ }_{\mathrm{d}} \rightarrow$ cmy $^{\text {＇／}}$



