

Three device (d) coordinates rgb_d^* describe 8 device colours RGB_d , CMY_d , and NW .

Hexagon-triangle system based on device (d) colours: rgb^*_d

with **linear relations** between $rgb^*_d - LCH^*_d$

(compare approximately linear relations between rgb_{sRGB} and L^*)

Equations $rgb^*_d - LCH^*_d$ 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:

$$rgb_d - LCH^*_d \quad \text{for a } 9 \times 9 \times 9 \text{ grid of equally spaced } rgb_d \text{ input data}$$

$rgb^*_d - LCH^*_d$ a 9x9x9 grid of equally spaced data rgb^*_d and LCH^*_d

$$rgb'^*_d - LCH'^*_d \sim LCH^*_d \text{ device linearization: } rgb_d \rightarrow rgb'^*_d = rgb_{dd}$$
