

What is Output Linearization? (For the elementary hues, see CIE R1–47:2009.)
 The colour space of a double cone includes 6 colours. The six colours can be the device-dependent device colours (index d): $(R, Y, G, B, N, W)_d$
 or the device-independent elementary colours (index e): $(R, Y, G, B, N, W)_e$.
 Elementary red appears neither yellowish nor bluish. The hue angle is $h_{ab,e} = 26$.

For example for the *sRGB* colours according to IEC 61966–2–1 it is valid:
 Device red R_d has the coordinates $rgb^*_{R_d}$ and $LCh^*_{R_d} = (L^*, C^*_{ab}, h_{ab})_{R_d}$
 Elementary red R_e has the coordinates $rgb^*_{R_e}$ and $LCh^*_{R_e} = (L^*, C^*_{ab}, h_{ab})_{R_e}$
 Corresponding data are given in the following for R_d, R_e , and $W = W_d = W_e$

$$rgb_W = (1 \ 1 \ 1)_W$$

$$LCh^*_W = (L^*, C^*_{ab}, h_{ab})_W = (95, 0, -)_W$$

$$rgb^*_{R_d} = (1 \ 0 \ 0)_{R_d}$$

$$LCh^*_{R_d} = (50, 100, 40)_{R_d}$$

$$rgb^*_{R_e} = (1 \ 0 \ 0)_{R_e}$$

$$LCh^*_{R_e} = (50, 87, 26)_{R_e}$$

Output Linearization of CIE R1–09:2015

produces for the hue angle $h_{ab,R_e} = 26$
 the CIELAB data $L^*_{R_e} = 50$ and $C^*_{ab,R_e} = 87$.
 These CIELAB data are produced with the
 device to elementary input data (de)

$$rgb_{de,R_e} = (1 \ 0 \ 0, 26)_{de,R_e}$$

A calculated table for 360 hue angles includes:

h_{ab}	LCh^*_{de}	rgb_{de}
26	50 87 26	1 0 0,26

