**percieved color terms (colorness: cube root coordinates)**

| **percieved color terms** | **name and relationship with standard valori chromatico** | **Note:** |
|---|---|---|
| **chiarezza** | $L^* = 116\,(\,Y / 100\,)^{1/3} - 16$ | *definition 1976 in:* |
| | Approssimazione: $L^* = 100\,(\,Y / 100\,)^{1/3}$ | *CIELUV, CIELAB* |
| **chroma** | *per diagramma chroma (A, B)* | |
| rosso−verde | $a^* = 500\,[\,(\,X / X_n)^{1/3} - (\,Y / Y_n)^{1/3}\,]$ | *definition 1976 per:* |
| | $= 500\,(\,a' - a'_n\,)\,Y^{1/3}$ | *CIELAB* |
| giallo−blu | $b^* = 200\,[\,(\,Y / Y_n)^{1/3} - (\,Z / Z_n)^{1/3}\,]$ | |
| | $= 500\,(\,b' - b'_n\,)\,Y^{1/3}$ | *n=D65 (sfondo)* |
| radiale | $C^* = [\,a^{*2} + b^{*2}\,]^{1/2}$ | |
| **saturation** | **= chroma / chiarezza** | *definition* |
| rosso−verde | $S^*_a = a^* / [\,100\,(\,Y / 100\,)^{1/3}\,]$ | *per:* |
| | $= 21{,}6\,(\,a' - a'_n\,)$ | *CIELAB 1976* |
| giallo−blu | $S^*_b = b^* / [\,100\,(\,Y / 100\,)^{1/3}\,]$ | |
| | $= 21{,}6\,(\,b' - b'_n\,)$ | |
| radiale | $S^*_c = C^* / [\,100\,(\,Y / 100\,)^{1/3}\,]$ | |
| | $= 21{,}6\,[\,(\,a' - a'_n\,)^2 + (\,b' - b'_n\,)^2\,]^{1/2}$ | |
| **chromaticito** | *for nonlinear chromaticity diagram (a', b')* | *definition* |
| rosso−verde | $a' = (\,1 / X_n\,)^{1/3}\,(\,x / y\,)^{1/3}$ | *opponent* |
| giallo−blu | $= 0{,}2191\,(\,x / y\,)^{1/3}$ per *D65* | *color system* |
| radiale | $b' = -\,0{,}4\,(\,1 / Z_n\,)^{1/3}\,(\,z / y\,)^{1/3}$ | |
| | $= -\,0{,}08376\,(\,z / y\,)^{1/3}$ per *D65* | |
| | $c' = [\,(\,a' - a'_n\,)^2 + (\,b' - b'_n\,)^2\,]^{1/2}$ | |