

Converting Colors

CIELCh(20, 23.302, 78.026)

Have a look what the booklet for
CIELCh(20, 23.302, 78.026) contains.

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Color

CIELCh(20, 23.225, 77.659)

Conversions

Conversions Part 1

Format	Color
Hex	402D0E
RGB	64, 45, 14
RGB Percent	25%, 18%, 5%
CMY	0.7494, 0.8238, 0.9455
CMYK	0.00, 0.30, 0.78, 0.75
HSL	37°, 64%, 15%
HSV	37°, 78%, 25%
XYZ	3.1225, 2.9891, 0.8246
YIQ	47.1470, 21.2750, -5.6130

Conversions

Conversions Part 2

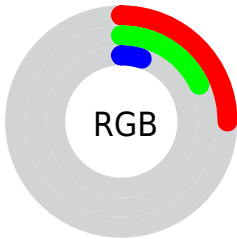
Format	Color
RYB	45, 64, 14
Decimal	4205838
CIELab	20.00, 4.96, 22.69
CIElCh	20, 23.225, 77.659
Yxy	2.9891, 0.4502, 0.4309
Android (android.graphics.Color)	4282395918 (0xFF402D0E)
YUV	47.1470, -16.3415, 14.7801
Hunter-Lab	17.2889, 1.9825, 9.2744

Details

The CIELCh color **20, 23.225, 77.659** is a dark color, and the websafe version is hex **333300**. A complement of this color would be **13, 22.566, 282.272**, and the grayscale version is **19, 0.004, 296.813**.

A 20% lighter version of the original color is **40, 23.322, 77.124**, and **1, 3.677, 19.405** is the 20% darker color. If you saturate the color by 10%, you get **19, 25.332, 75.834**, and if you desaturate by 10%, it is **21, 20.349, 79.085**.

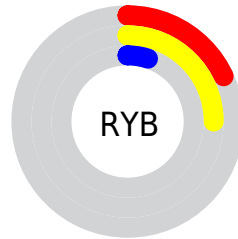
Distribution



Red (25%)

Green (18%)

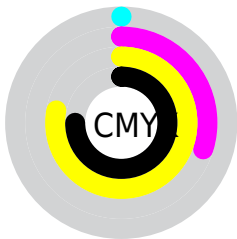
Blue (5%)



Red (18%)

Yellow (25%)

Blue (5%)

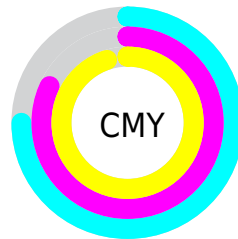


Cyan (0%)

Magenta (30%)

Yellow (78%)

Black (75%)



Cyan (75%)

Magenta (82%)

Yellow (95%)

Brightness & Saturation Gradients

These gradients show how the CIELCh color 20, 23.225, 77.659 changes by changing the brightness by 10 percent. The first figure shows a shift by +10% for each color and the second figure -10%.

Similar to the brightness gradients but the following saturation gradients show a change of the CIELCh color 20, 23.225, 77.659 by changing the saturation by 10% instead.

■ 20, 23.225, 77.659

■ 20, 23.225, 77.659

■ 100, 23.225,
77.659

■ 10, 23.225, 77.659

■ 0, 23.225, 77.659

■ 40, 23.225, 77.659

■ 50, 23.225, 77.659

■ 60, 23.225, 77.659

■ 70, 23.225, 77.659

■ 80, 23.225, 77.659

■ 90, 23.225, 77.659

■ 20, 23.225, 77.659

■ 20, 23.225, 77.659

■ 19, 25.332, 75.834

■ 21, 20.349, 79.085

■ 18, 27.285, 74.137

■ 22, 17.273, 80.379

■ 18, 27.631, 73.863

■ 23, 14.183, 81.628

■ 23, 11.125, 82.843

■ 24, 8.120, 84.027

■ 25, 5.181, 85.178

■ 26, 2.310, 86.276

■ 27, 0.494, 267.670

■ 28, 3.233, 268.517

Harmonies

Complementary

The Complementary color scheme is a pair of colors which are on the opposite of each other on the color wheel.



20, 23.225, 77.659



13, 22.566, 282.272

Rectangle

The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



20, 23.225, 77.659



20, 23.225, 127.659



20, 23.225, 257.659



20, 23.225, 307.659

Sweetspot

The Sweet Spot groups the original color and five complimentary colors.



20, 23.225, 77.662



33, 8.274, 84.514



13, 25.935, 0.917



16, 5.790, 84.311



70, 0.009, 296.813



18, 0.003, 296.813

Same Dimension

The Same Dimension uses a secret algorithm to generate beautiful new colors.



20, 23.225, 77.662



25, 34.200, 74.574



26, 30.095, 109.881



12, 1.609, 86.241



29, 40.410, 73.333



65, 75.032, 70.827

Inverse Universe

The Inverse Universe completely reimagines the original color for something new.



13, 22.566, 282.272



15, 34.624, 288.607



7, 36.878, 303.375



12, 1.604, 268.262



16, 41.709, 291.185



41, 83.333, 294.295

Previews

White Background



This preview shows how the CIELCh color 20, 23.225, 77.659 looks on a white background.

Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass

Black Background



This preview shows how the CIE LCh color 20, 23.225, 77.659 looks on a black background.

Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

Any Text WCAG AA × Fail

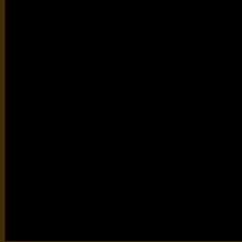
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

If you want to check with other color combinations, try the [Color Contrast Checker](#).

CIELCh 20, 23.225, 77.659

Background



This preview shows how black text looks on a background with the CIELCh color 20, 23.225, 77.659.

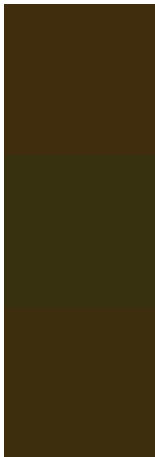


This preview shows how white text looks on a background with the CIELCh color 20, 23.225, 77.659.

Color Blindness Simulation

Color vision deficiency is a very complex topic, and I could not describe the different causes any better than Wikipedia does, so if you want to learn more, you should check out their [article about color blindness](#).

Dichromacy



Original Color

20, 23.225, 77.659

Protanopia

20, 22.203, 96.261

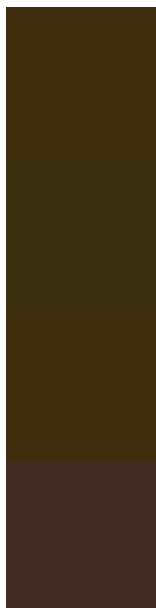
Deuteranopia

20, 23.118, 83.474



Tritanopia
20, 11.973, 12.599

Trichromacy



Original Color
20, 23.225, 77.659

Protanomaly
20, 22.186, 90.412

Deuteranomaly
20, 23.363, 82.219

Tritanomaly
20, 13.320, 48.307

Monochromacy



Original Color
20, 23.225, 77.659

Achromatopsia
19, 0.004, 296.813

Achromatomaly
19, 8.333, 82.684

CSS Examples

Text

The CSS property to change the color of the text to CIELCh 20, 23.225, 77.659 is called "color". The color property can be set on classes, ids or directly on the HTML element.

This example shows how text in the color `rgb(64, 45, 14)` looks like.

```
.text, #text, p{  
    color:rgb(64, 45, 14)  
}
```

If you want to add a text shadow in that color use the text-shadow property, you can generate a text shadow directly with our [CSS Text Shadow Generator](#).

Here you see how black text with a 4 pixel rgb(64, 45, 14) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(64, 45, 14) }
```

Border

The CSS property to change the border of an element to CIELCh 20, 23.225, 77.659 is called "border". The border property can be set on classes, ids or directly on the HTML element.

This example shows the color as border, it can be applied via the CSS property "border" or "border-color".

```
.border, #border, table{ border:4px solid rgb(64, 45, 14) }
```

If only the border color should be changed use the property `border-color`.

```
.border{ border-color:rgb(64, 45, 14) }
```

If you want to add a box shadow in that color use:

Here you see how a box with a 4 pixel `rgb(64, 45, 14)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(64, 45, 14); -webkit-box-  
shadow:4px 4px 4px 4px rgb(64, 45, 14);  
box-shadow:4px 4px 4px 4px rgb(64, 45, 14)  
}
```

Background

The CSS property to change the background color of an element to CIELCh 20, 23.225, 77.659 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(64, 45, 14) }
```

If only the background color should be changed can be used:

```
.background{ background-color: rgb(64, 45,  
14) }
```

This example shows the color as background, it is applied via the CSS property "background".

To optimize and compress your CSS code, you can use our [online CSS compressor and optimizer](#) based on csstidy. If you want to create a linear or radial gradient as background or border, check our [CSS Gradient Generator](#).

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