

# Converting Colors

CIELCh(38, 0.636, 0.156)

Have a look what the booklet for  
CIELCh(38, 0.636, 0.156) contains.

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# Color

**CIELCh(38, 0.850, 19.160)**

# Conversions

## Conversions Part 1

Format	Color
Hex	5B5959
RGB	91, 89, 89
RGB Percent	36%, 35%, 35%
CMY	0.6432, 0.6510, 0.6510
CMYK	0.00, 0.02, 0.02, 0.64
HSL	0°, 1%, 35%
HSV	0°, 2%, 36%
XYZ	9.6880, 10.0881, 10.8857
YIQ	89.5980, 1.1920, 0.4240

# Conversions

## Conversions Part 2

<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	91, 89, 89
Decimal	5986649
CIE Lab	38.00, 0.80, 0.28
CIE LCh	38, 0.850, 19.160
Yxy	10.0881, 0.3160, 0.3290
Android (android.graphics.Color)	4284176729 (0xFF5B5959)
YUV	89.5980, -0.2948, 1.2296
Hunter-Lab	31.7617, -1.1368, 1.9126

# Details

The CIELCh color  $[38, 0.850, 19.160]$  is a dark color, and the websafe version is hex `666666`. A complement of this color would be  $[38, 0.837, 199.735]$ , and the grayscale version is  $[38, 0.005, 296.813]$ .

A 20% lighter version of the original color is  $[58, 0.784, 18.946]$ , and  $[18, 0.476, 19.101]$  is the 20% darker color. If you saturate the color by 10%, you get  $[35, 4.883, 20.142]$ , and if you desaturate by 10%, it is  $[41, 2.902, 199.219]$ .

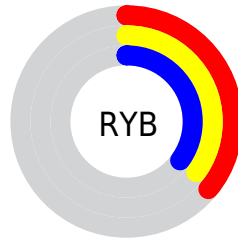
# Distribution



Red (36%)

Green (35%)

Blue (35%)



Red (36%)

Yellow (35%)

Blue (35%)

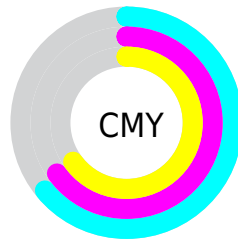


Cyan (0%)

Magenta (2%)

Yellow (2%)

Black (64%)



Cyan (64%)

Magenta (65%)

Yellow (65%)

# Brightness & Saturation Gradients

These gradients show how the CIELCh color 38, 0.850, 19.160 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 38, 0.850, 19.160 by changing the saturation by 10% instead.



 38, 0.850, 19.160       38, 0.850, 19.160

 100, 0.850, 19.160       28, 0.850, 19.160

 58, 0.850, 19.160       18, 0.850, 19.160

 68, 0.850, 19.160       8, 0.850, 19.160

 78, 0.850, 19.160       0, 0.850, 19.160

 88, 0.850, 19.160

 98, 0.850, 19.160

 38, 0.850, 19.160       38, 0.850, 19.160

 35, 4.883, 20.142       41, 2.902, 199.219

 32, 9.215, 20.943       44, 6.394, 198.770

29, 13.845, 21.938

47, 9.651, 198.437

27, 18.754, 23.205

50, 12.698,  
198.170

24, 23.887, 24.827

53, 15.560,  
197.952

22, 29.153, 26.892

20, 34.417, 29.468

56, 18.258,  
197.771

19, 39.380, 32.262

59, 20.812,  
197.619

17, 43.048, 33.685

62, 23.239,  
197.491

65, 25.554,  
197.383

# Harmonies

# Complementary

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



38, 0.850, 19.160



38, 0.837, 199.735

# Rectangle

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



38, 0.850, 19.160



38, 0.850, 69.160



38, 0.850, 199.160



38, 0.850, 249.160

# Sweetspot

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



38, 0.849, 19.229



49, 0.475, 18.748



38, 1.504, 324.456



25, 0.267, 18.658



76, 0.009, 296.813



25, 0.004, 296.813



# Same Dimension

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



38, 0.849, 19.229



48, 1.433, 19.385



38, 0.738, 74.894



18, 0.876, 19.443



21, 53.749, 36.870



50, 98.976, 40.007





# Inverse Universe

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



38, 0.837, 199.735



49, 1.406, 199.582



38, 0.742, 255.945



19, 0.858, 199.527



41, 26.882, 196.508



85, 47.379, 196.516



# Previews

## White Background



This preview shows how the CIELCh color 38, 0.850, 19.160 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 × Fail

# Black Background



This preview shows how the CIE LCh color 38, 0.850, 19.160 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA × Fail

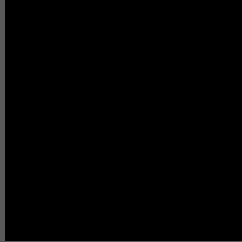
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

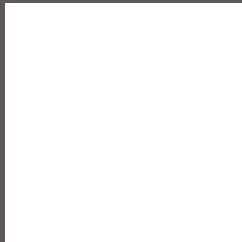
If you want to check with other color combinations, try the [Color Contrast Checker](#).

**CIELCh 38, 0.850, 19.160**

## **Background**



This preview shows how black text looks on a background with the CIELCh color 38, 0.850, 19.160.



This preview shows how white text looks on a background with the CIELCh color 38, 0.850, 19.160.

# 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


38, 0.850, 19.160

### Protanopia

38, 0.850, 19.160

### Deuteranopia

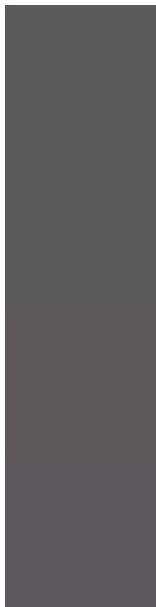
38, 4.890, 5.562



**Tritanopia**  
38, 4.642, 311.794



# Trichromacy



**Original Color**  
38, 0.850, 19.160

**Protanomaly**  
38, 0.850, 19.160

**Deuteranomaly**  
38, 3.062, 8.201

**Tritanomaly**  
38, 3.525, 318.996

# Monochromacy



**Original Color**  
38, 0.850, 19.160

**Achromatopsia**  
38, 0.005, 296.813

**Achromatomaly**  
38, 0.005, 296.813

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 38, 0.850, 19.160 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(91, 89, 89)` looks like.

```
.text, #text, p{  
    color:rgb(91, 89, 89)  
}
```

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(91, 89, 89) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(91, 89, 89) }
```

## Border

The CSS property to change the border of an element to CIELCh 38, 0.850, 19.160 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(91, 89, 89) }
```

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

```
.border{ border-color:rgb(91, 89, 89) }
```

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

Here you see how a box with a 4 pixel rgb(91, 89, 89) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(91, 89, 89); -webkit-box-  
shadow:4px 4px 4px 4px rgb(91, 89, 89);  
box-shadow:4px 4px 4px 4px rgb(91, 89, 89)  
}
```

# Background

The CSS property to change the background color of an element to CIELCh 38, 0.850, 19.160 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(91, 89, 89) }
```

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

```
.background{ background-color: rgb(91, 89,  
89) }
```

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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