

# Converting Colors

CIE LCh(90, 2.148, 111.209)

Have a look what the booklet for  
CIELCh(90, 2.148, 111.209) contains.

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# **Color**

**CIELCh(90, 2.582, 109.940)**

# Conversions

## Conversions Part 1

Format	Color
Hex	E3E3DE
RGB	227, 227, 222
RGB Percent	89%, 89%, 87%
CMY	0.1110, 0.1110, 0.1306
CMYK	0.00, 0.00, 0.02, 0.11
HSL	60°, 8%, 88%
HSV	60°, 2%, 89%
XYZ	72.1055, 76.3034, 79.8149
YIQ	226.4300, 1.6050, -1.5550

# Conversions

## Conversions Part 2

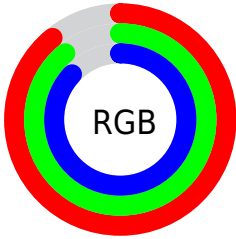
<b>Format</b>	<b>Color</b>
R <sub>YB</sub>	222, 227, 222
Decimal	14935006
CIE Lab	90.00, -0.88, 2.43
CIE LCh	90, 2.582, 109.940
Yxy	76.3034, 0.3159, 0.3343
Android (android.graphics.Color)	4293125086 (0xFFE3E3DE)
YUV	226.4300, -2.1840, 0.4999
Hunter-Lab	87.3518, -5.5208, 6.9719

# Details

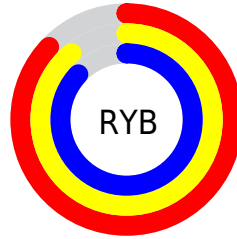
The CIELCh color **90, 2.582, 109.940** is a light color, and the websafe version is hex **CCCCCC**. A complement of this color would be **88, 2.617, 290.451**, and the grayscale version is **90, 0.011, 296.813**.

A 20% lighter version of the original color is **100, 0.012, 296.813**, and **70, 2.721, 109.884** is the 20% darker color. If you saturate the color by 10%, you get **89, 14.314, 109.029**, and if you desaturate by 10%, it is **91, 9.178, 290.954**.

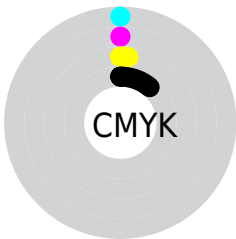
# Distribution



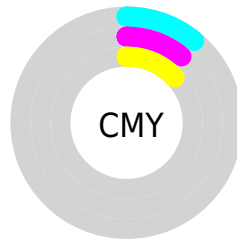
- Red (89%)
- Green (89%)
- Blue (87%)



- Red (87%)
- Yellow (89%)
- Blue (87%)



- Cyan (0%)
- Magenta (0%)
- Yellow (2%)
- Black (11%)



- Cyan (11%)
- Magenta (11%)
- Yellow (13%)

# Brightness & Saturation Gradients

These gradients show how the CIELCh color 90, 2.582, 109.940 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 90, 2.582, 109.940 by changing the saturation by 10% instead.



■ 90, 2.582, 109.940

■ 90, 2.582, 109.940

■ 100, 2.582,  
109.940

■ 80, 2.582, 109.940

■ 70, 2.582, 109.940

■ 60, 2.582, 109.940

■ 50, 2.582, 109.940

■ 40, 2.582, 109.940

■ 30, 2.582, 109.940

■ 20, 2.582, 109.940

■ 10, 2.582, 109.940

■ 0, 2.582, 109.940

90, 2.582, 109.940

90, 2.582, 109.940

89, 14.314,  
109.029

91, 9.178, 290.954

89, 25.950,  
108.058

91, 14.698,  
291.398

89, 37.397,  
107.094

91, 14.698,  
291.423

88, 48.508,  
106.158

91, 14.698,  
291.447

88, 59.052,  
105.277

91, 14.699,  
291.472

88, 68.685,  
104.484

91, 14.699,  
291.496

88, 76.928,  
103.819

91, 14.699,  
291.521

88, 83.220,  
103.321

91, 14.699,  
291.545

■ 88, 87.107,  
103.021

■ 91, 14.699,  
291.570

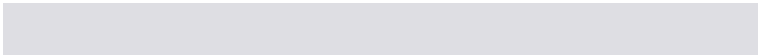
# Harmonies

# Complementary

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



90, 2.582, 109.940



88, 2.617, 290.451

# Rectangle

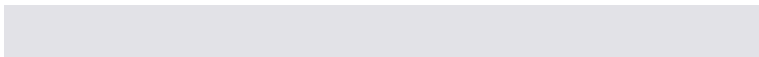
The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



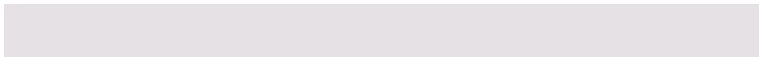
90, 2.582, 109.940



90, 2.582, 159.940



90, 2.582, 289.940



90, 2.582, 339.940

# Sweetspot

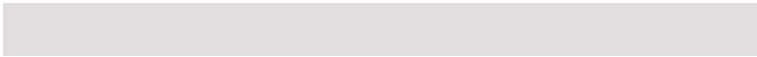
The Sweet Spot groups the original color and five complimentary colors.



90, 2.584, 109.972



100, 1.282, 110.055



89, 1.801, 19.202



53, 0.729, 110.056



0, 0.000, 0.000



53, 0.007, 296.813



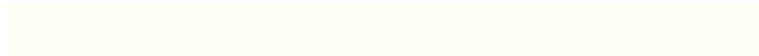


# Same Dimension

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



90, 2.584, 109.972



100, 3.868, 109.902



90, 2.747, 129.020



47, 2.642, 109.833



70, 73.366, 102.903

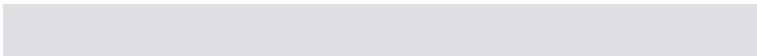


19, 27.933, 103.931



# Inverse Universe

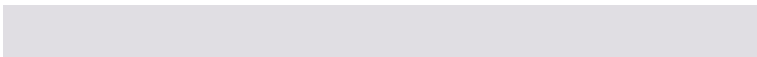
The Inverse Universe completely reimagines the original color for something new.



88, 2.617, 290.451



98, 3.916, 290.525



89, 2.775, 309.118



46, 2.675, 290.597



21, 101.301, 306.290

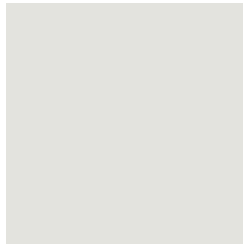


2, 31.635, 295.849



# Previews

## White Background



This preview shows how the CIELCh color 90, 2.582, 109.940 looks on a white background.

## Color Contrast Check

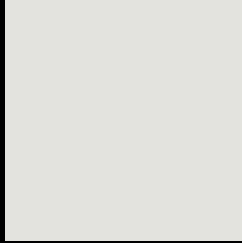
Large Text (above 18pt) WCAG AA × Fail

Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

# Black Background



This preview shows how the CIE LCh color 90, 2.582, 109.940 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

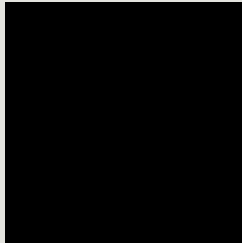
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass

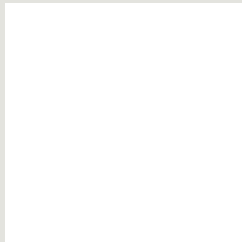
If you want to check with other color combinations, try the [Color Contrast Checker](#).

# CIELCh 90, 2.582, 109.940

## Background



This preview shows how black text looks on a background with the CIELCh color 90, 2.582, 109.940.

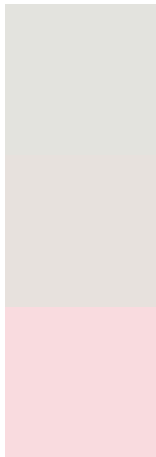


This preview shows how white text looks on a background with the CIELCh color 90, 2.582, 109.940.

# 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

90, 2.582, 109.940

### Protanopia

90, 2.982, 63.289

### Deuteranopia

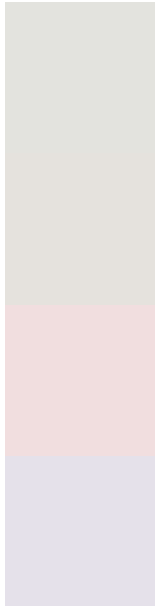
90, 11.155, 9.503





**Tritanopia**  
90, 9.120, 304.147

# Trichromacy



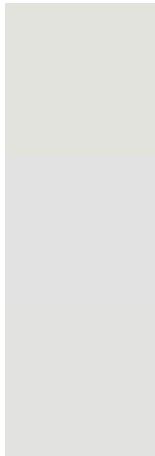
**Original Color**  
90, 2.582, 109.940

**Protanomaly**  
90, 2.791, 87.105

**Deuteranomaly**  
90, 6.925, 15.535

**Tritanomaly**  
90, 4.912, 307.260

# Monochromacy



**Original Color**  
90, 2.582, 109.940

**Achromatopsia**  
90, 0.011, 296.813

**Achromatomaly**  
90, 1.027, 110.025

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 90, 2.582, 109.940 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(227, 227, 222)` looks like.

```
.text, #text, p{  
    color:rgb(227, 227, 222)  
}
```

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(227, 227, 222) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(227, 227, 222) }
```

## Border

The CSS property to change the border of an element to CIELCh 90, 2.582, 109.940 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(227, 227, 222) }
```

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

```
.border{ border-color:rgb(227, 227, 222) }
```

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

Here you see how a box with a 4 pixel `rgb(227, 227, 222)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(227, 227, 222); -webkit-box-  
shadow:4px 4px 4px 4px rgb(227, 227, 222);  
box-shadow:4px 4px 4px 4px rgb(227, 227,  
222) }
```

# Background

The CSS property to change the background color of an element to CIELCh 90, 2.582, 109.940 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(227, 227, 222) }
```

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

```
.background{ background-color: rgb(227,  
227, 222) }
```

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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