

# Converting Colors

CIELCh(90, 9.707, 110.133)

Have a look what the booklet for  
CIELCh(90, 9.707, 110.133) contains.

<b>CIELCh(90, 9.834, 111.512)</b> .....	3
<i><b>Conversions</b></i> .....	4
<i><b>Details</b></i> .....	6
<i><b>Harmonies</b></i> .....	12
<i><b>Previews</b></i> .....	21
<i><b>Color Blindness Simulation</b></i> .....	24
<i><b>CSS Examples</b></i> .....	27

# Color

**CIELCh(90, 9.834, 111.512)**

# Conversions

## Conversions Part 1

Format	Color
Hex	E3E4D1
RGB	227, 228, 209
RGB Percent	89%, 89%, 82%
CMY	0.1104, 0.1065, 0.1810
CMYK	0.00, 0.00, 0.08, 0.11
HSL	63°, 26%, 86%
HSV	63°, 8%, 89%
XYZ	70.8204, 76.3034, 71.2183
YIQ	225.5350, 5.5030, -6.1210

# Conversions

## Conversions Part 2

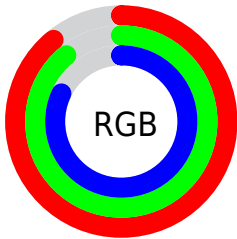
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	209, 228, 210
Decimal	14935249
CIE Lab	90.00, -3.61, 9.15
CIE LCh	90, 9.834, 111.512
Yxy	76.3034, 0.3244, 0.3495
Android (android.graphics.Color)	4293125329 (0xFFE3E4D1)
YUV	225.5350, -8.1518, 1.2848
Hunter-Lab	87.3518, -8.1470, 12.8068

# Details

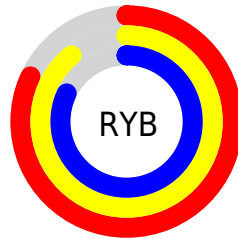
The CIELCh color **90, 9.834, 111.512** is a light color, and the websafe version is hex **CCCCCC**. A complement of this color would be **84, 10.034, 293.041**, and the grayscale version is **90, 0.011, 296.813**.

A 20% lighter version of the original color is **100, 0.012, 296.813**, and **70, 9.808, 111.465** is the 20% darker color. If you saturate the color by 10%, you get **89, 21.578, 110.632**, and if you desaturate by 10%, it is **91, 1.974, 292.428**.

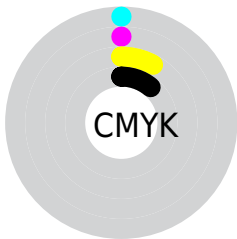
# Distribution



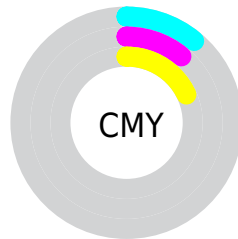
- Red (89%)
- Green (89%)
- Blue (82%)



- Red (82%)
- Yellow (89%)
- Blue (82%)



- Cyan (0%)
- Magenta (0%)
- Yellow (8%)
- Black (11%)



- Cyan (11%)
- Magenta (11%)
- Yellow (18%)

# Brightness & Saturation Gradients

These gradients show how the CIELCh color 90, 9.834, 111.512 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, 9.834, 111.512 by changing the saturation by 10% instead.



90, 9.834, 111.512

90, 9.834, 111.512

100, 9.834,  
111.512

80, 9.834, 111.512

70, 9.834, 111.512

60, 9.834, 111.512

50, 9.834, 111.512

40, 9.834, 111.512

30, 9.834, 111.512

20, 9.834, 111.512

10, 9.834, 111.512

0, 9.834, 111.512

90, 9.834, 111.512

90, 9.834, 111.512

89, 21.578,  
110.632

91, 1.974, 292.428

89, 33.171,  
109.741

91, 13.798,  
293.260

88, 44.489,  
108.870

91, 14.124,  
294.899

88, 55.339,  
108.046

92, 14.161,  
296.555

88, 65.425,  
107.305

92, 14.209,  
298.206

87, 74.324,  
106.693

92, 14.269,  
299.848

87, 81.491,  
106.266

92, 14.340,  
301.479

87, 86.394,  
106.076

92, 14.422,  
303.097

■ 87, 88.890,  
106.136

■ 92, 14.516,  
304.699

# Harmonies

# Complementary

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



90, 9.834, 111.512



84, 10.034, 293.041

# Rectangle

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



90, 9.834, 111.512



90, 9.834, 161.512



90, 9.834, 291.512



90, 9.834, 341.512

# Sweetspot

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



90, 9.836, 111.521



100, 3.873, 111.982



86, 6.666, 24.077



53, 2.937, 111.914



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, 9.836, 111.521



99, 12.920, 111.369



89, 10.593, 130.453



48, 6.737, 111.422



70, 74.313, 106.105



20, 29.336, 106.609



# Inverse Universe

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



84, 10.034, 293.041



92, 13.226, 293.214



85, 10.713, 311.140



44, 6.888, 293.153



21, 102.119, 306.450

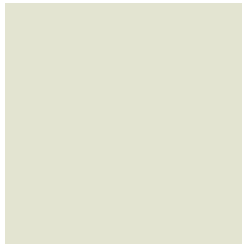


2, 33.770, 298.043



# Previews

## White Background



This preview shows how the CIELCh color 90, 9.834, 111.512 looks on a white background.

## Color Contrast Check

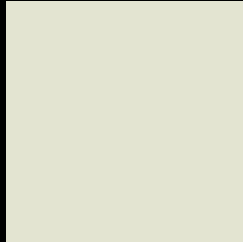
Large Text (above 18pt) WCAG AA × Fail

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, 9.834, 111.512 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

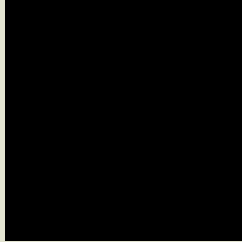
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass

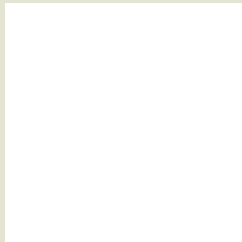
If you want to check with other color combinations, try the [Color Contrast Checker](#).

# **CIELCh 90, 9.834, 111.512**

## **Background**



This preview shows how black text looks on a background with the CIELCh color 90, 9.834, 111.512.



This preview shows how white text looks on a background with the CIELCh color 90, 9.834, 111.512.

# 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, 9.834, 111.512

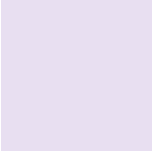
### Protanopia

90, 9.537, 86.560

### Deuteranopia

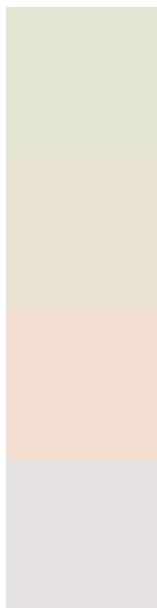
90, 13.958, 35.255





**Tritanopia**  
90, 9.924, 309.388

# Trichromacy



**Original Color**  
90, 9.834, 111.512

**Protanomaly**  
90, 9.564, 95.985

**Deuteranomaly**  
90, 10.281, 56.876

**Tritanomaly**  
90, 2.762, 330.539

# Monochromacy



**Original Color**  
90, 9.834, 111.512

**Achromatopsia**  
90, 0.011, 296.813

**Achromatomaly**  
90, 3.621, 109.862

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 90, 9.834, 111.512 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, 228, 209)` looks like.

```
.text, #text, p{  
    color:rgb(227, 228, 209)  
}
```

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, 228, 209) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(227, 228, 209) }
```

## Border

The CSS property to change the border of an element to CIELCh 90, 9.834, 111.512 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, 228, 209) }
```

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

```
.border{ border-color:rgb(227, 228, 209) }
```

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

Here you see how a box with a 4 pixel rgb(227, 228, 209) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(227, 228, 209); -webkit-box-  
shadow:4px 4px 4px 4px rgb(227, 228, 209);  
box-shadow:4px 4px 4px 4px rgb(227, 228,  
209) }
```

# Background

The CSS property to change the background color of an element to CIELCh 90, 9.834, 111.512 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(227, 228, 209) }
```

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

```
.background{ background-color: rgb(227,  
228, 209) }
```

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](#).

Hey! You found this booklet interesting? Support Converting Colors with the new Membership Option!

The pro membership hides all ads, plus gives you double the colors in the color bucket, and more awesome pro features!

**[Learn more, Memberships starting at \\$2.50/m!](#)**

**Follow me  
on Twitter!**

@ConvertingColor