

# Converting Colors

CIELCh(90, 2.353, 45.730)

Have a look what the booklet for  
CIELCh(90, 2.353, 45.730) contains.

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# **Color**

**CIELCh(90, 2.385, 45.019)**

# Conversions

## Conversions Part 1

Format	Color
Hex	E7E1DF
RGB	231, 225, 223
RGB Percent	91%, 88%, 87%
CMY	0.0934, 0.1169, 0.1248
CMYK	0.00, 0.03, 0.03, 0.09
HSL	15°, 14%, 89%
HSV	15°, 3%, 91%
XYZ	73.3298, 76.3034, 80.8018
YIQ	226.5660, 4.2180, 0.6500

# Conversions

## Conversions Part 2

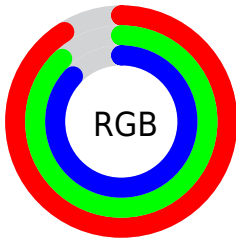
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	231, 226, 223
Decimal	15196639
CIE Lab	90.00, 1.69, 1.69
CIE LCh	90, 2.385, 45.019
Yxy	76.3034, 0.3182, 0.3311
Android (android.graphics.Color)	4293386719 (0xFFE7E1DF)
YUV	226.5660, -1.7580, 3.8886
Hunter-Lab	87.3518, -3.0190, 6.3020

# Details

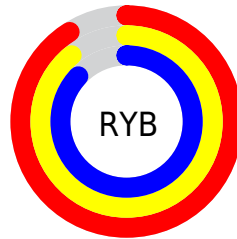
The CIELCh color **90, 2.385, 45.019** is a light color, and the websafe version is hex **CCCCCC**. A complement of this color would be **91, 2.344, 225.893**, and the grayscale version is **90, 0.011, 296.813**.

A 20% lighter version of the original color is **100, 0.012, 296.813**, and **70, 2.181, 49.343** is the 20% darker color. If you saturate the color by 10%, you get **85, 9.658, 44.861**, and if you desaturate by 10%, it is **95, 4.349, 225.927**.

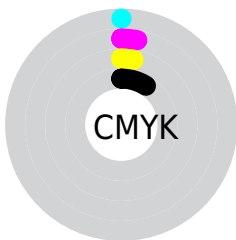
# Distribution



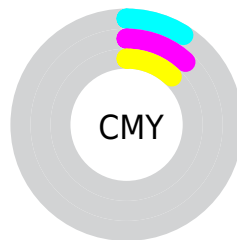
- Red (91%)
- Green (88%)
- Blue (87%)



- Red (91%)
- Yellow (89%)
- Blue (87%)



- Cyan (0%)
- Magenta (3%)
- Yellow (3%)
- Black (9%)



- Cyan (9%)
- Magenta (12%)
- Yellow (12%)

# Brightness & Saturation Gradients

These gradients show how the CIELCh color 90, 2.385, 45.019 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, 2.385, 45.019 by changing the saturation by 10% instead.



90, 2.385, 45.019

90, 2.385, 45.019

100, 2.385, 45.019

80, 2.385, 45.019

70, 2.385, 45.019

60, 2.385, 45.019

50, 2.385, 45.019

40, 2.385, 45.019

30, 2.385, 45.019

20, 2.385, 45.019

10, 2.385, 45.019

0, 2.385, 45.019

90, 2.385, 45.019

90, 2.385, 45.019

85, 9.658, 44.861

95, 4.349, 225.927

80, 17.530, 44.571

98, 8.129, 198.973

76, 26.051, 44.378

71, 35.250, 44.324

67, 45.118, 44.435

63, 55.565, 44.720

59, 66.347, 45.130

56, 76.880, 45.482

53, 85.905, 45.305

# Harmonies

# Complementary

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



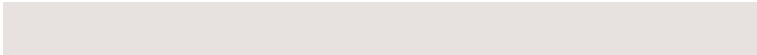
90, 2.385, 45.019



91, 2.344, 225.893

# Rectangle

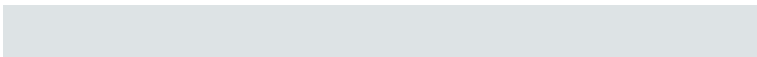
The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



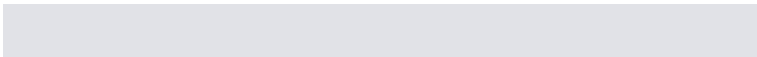
90, 2.385, 45.019



90, 2.385, 95.019



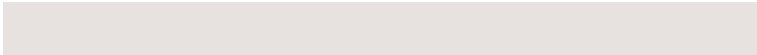
90, 2.385, 225.019



90, 2.385, 275.019

# Sweetspot

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



90, 2.384, 45.079



99, 0.737, 44.576



90, 4.258, 332.478



53, 0.419, 44.533



0, 0.000, 0.000



53, 0.007, 296.813

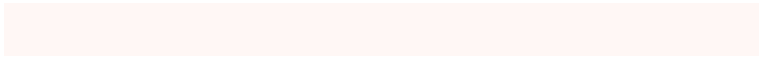


# Same Dimension

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



90, 2.384, 45.079



98, 2.992, 45.089



91, 3.169, 96.762



47, 1.956, 45.091



40, 74.139, 45.342



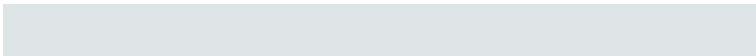
9, 22.930, 36.731





# Inverse Universe

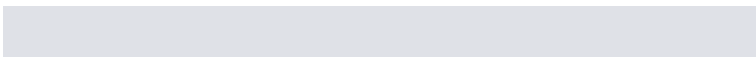
The Inverse Universe completely reimagines the original color for something new.



91, 2.344, 225.893



99, 2.929, 225.887



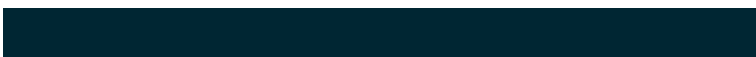
90, 3.195, 277.707



47, 1.906, 225.892



52, 35.003, 246.221

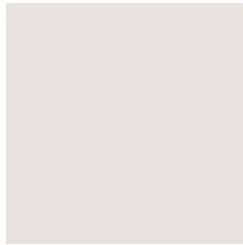


13, 14.199, 238.042



# Previews

## White Background



This preview shows how the CIE LCh color 90, 2.385, 45.019 looks on a white background.

## Color Contrast Check

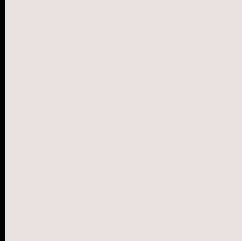
Large Text (above 18pt) WCAG AA × Fail

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, 2.385, 45.019 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

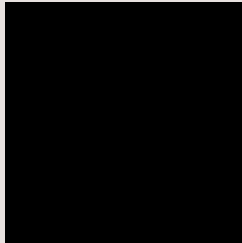
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass

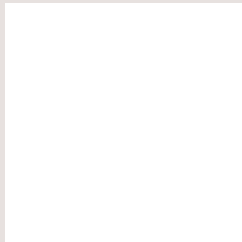
If you want to check with other color combinations, try the [Color Contrast Checker](#).

# CIELCh 90, 2.385, 45.019

## Background



This preview shows how black text looks on a background with the CIELCh color 90, 2.385, 45.019.

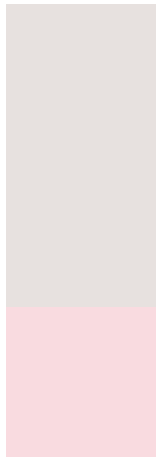


This preview shows how white text looks on a background with the CIELCh color 90, 2.385, 45.019.

# 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

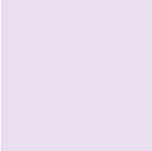
90, 2.385, 45.019

### Protanopia

90, 2.385, 45.019

### Deuteranopia

90, 11.246, 6.908



**Tritanopia**  
90, 9.696, 314.309



# Trichromacy



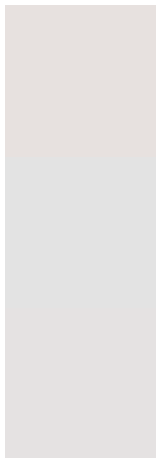
**Original Color**  
90, 2.385, 45.019

**Protanomaly**  
90, 2.385, 45.019

**Deuteranomaly**  
90, 8.148, 8.950

**Tritanomaly**  
90, 6.136, 321.879

# Monochromacy



**Original Color**  
90, 2.385, 45.019

**Achromatopsia**  
90, 0.011, 296.813

**Achromatomaly**  
90, 1.075, 18.918

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 90, 2.385, 45.019 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(231, 225, 223)` looks like.

```
.text, #text, p{  
    color:rgb(231, 225, 223)  
}
```

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(231, 225, 223) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(231, 225, 223) }
```

## Border

The CSS property to change the border of an element to CIELCh 90, 2.385, 45.019 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(231, 225, 223) }
```

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

```
.border{ border-color:rgb(231, 225, 223) }
```

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

Here you see how a box with a 4 pixel `rgb(231, 225, 223)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(231, 225, 223); -webkit-box-  
shadow:4px 4px 4px 4px rgb(231, 225, 223);  
box-shadow:4px 4px 4px 4px rgb(231, 225,  
223) }
```

# Background

The CSS property to change the background color of an element to CIELCh 90, 2.385, 45.019 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(231, 225, 223) }
```

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

```
.background{ background-color: rgb(231,  
225, 223) }
```

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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