

# Converting Colors

CIELCh(49, 20.013, 236.441)

Have a look what the booklet for  
CIELCh(49, 20.013, 236.441)  
contains.

<b>CIELCh(49, 20.007, 236.490)</b> .....	3
<b><i>Conversions</i></b> .....	4
<b><i>Details</i></b> .....	6
<b><i>Harmonies</i></b> .....	11
<b><i>Previews</i></b> .....	20
<b><i>Color Blindness Simulation</i></b> .....	23
<b><i>CSS Examples</i></b> .....	26

# Color

**CIELCh(49, 20.007, 236.490)**

# Conversions

## Conversions Part 1

Format	Color
Hex	487B90
RGB	72, 123, 144
RGB Percent	28%, 48%, 56%
CMY	0.7172, 0.5172, 0.4348
CMYK	0.50, 0.15, 0.00, 0.43
HSL	198°, 33%, 42%
HSV	198°, 50%, 57%
XYZ	14.8218, 17.5941, 29.0481
YIQ	110.1450, -37.1370, -4.2810

# Conversions

## Conversions Part 2

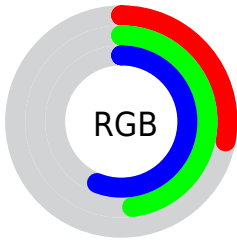
Format	Color
<a href="#">RYB</a>	72, 102, 144
Decimal	4750224
CIELab	49.00, -11.05, -16.68
CIELCh	49, 20.007, 236.490
Yxy	17.5941, 0.2411, 0.2863
Android (android.graphics.Color)	4282940304 (0xFF487B90)
YUV	110.1450, 16.6905, -33.4532
Hunter-Lab	41.9453, -10.3296, -11.6980

# Details

The CIELCh color **49, 20.007, 236.490** is a dark color, and the websafe version is hex **336666**. A complement of this color would be **45, 27.628, 48.287**, and the grayscale version is **46, 0.006, 296.813**.

A 20% lighter version of the original color is **69, 20.089, 237.674**, and **29, 20.175, 237.729** is the 20% darker color. If you saturate the color by 10%, you get **47, 23.014, 238.740**, and if you desaturate by 10%, it is **51, 16.604, 234.692**.

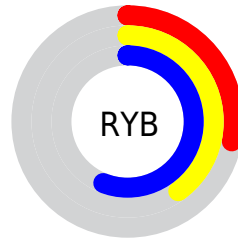
# Distribution



Red (28%)

Green (48%)

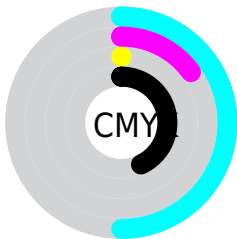
Blue (56%)



Red (28%)

Yellow (40%)

Blue (56%)

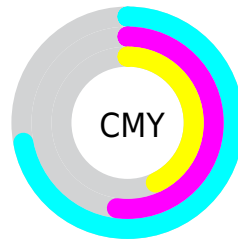


Cyan (50%)

Magenta (15%)

Yellow (0%)

Black (43%)



Cyan (72%)

Magenta (52%)

Yellow (43%)

# Brightness & Saturation Gradients

These gradients show how the CIELCh color 49, 20.007, 236.490 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 49, 20.007, 236.490 by changing the saturation by 10% instead.





 49, 20.007,  
236.490


 49, 20.007,  
236.490


 100, 20.007,  
236.490


 39, 20.007,  
236.490

 69, 20.007,  
236.490


 29, 20.007,  
236.490

 79, 20.007,  
236.490

 19, 20.007,  
236.490

 89, 20.007,  
236.490

 9, 20.007, 236.490

 99, 20.007,  
236.490

 0, 20.007, 236.490

 49, 20.007,

 49, 20.007,

236.490

236.490

■ 47, 23.014,  
238.740

■ 51, 16.604,  
234.692

■ 45, 25.606,  
241.533

■ 53, 12.850,  
233.271

■ 44, 27.794,  
244.940

■ 55, 8.794, 232.157

■ 42, 29.636,  
249.002

■ 58, 4.488, 231.312

■ 60, 0.018, 27.852

■ 40, 31.330,  
253.444

■ 62, 4.677, 49.892

■ 40, 31.338,  
253.463

■ 65, 9.453, 49.506

■ 67, 14.315, 49.184

■ 69, 19.235, 48.930

# Harmonies

# Complementary

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



49, 20.007, 236.490



45, 27.628, 48.287

# Rectangle

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



49, 20.007, 236.490



49, 20.007, 286.490



49, 20.007, 56.490



49, 20.007, 106.490

# Sweetspot

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



49, 20.006, 236.488



71, 8.234, 231.731



54, 40.272, 149.125



37, 5.637, 231.897



88, 0.010, 296.813



40, 0.006, 296.813



# Same Dimension

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



49, 20.006, 236.488



60, 28.214, 239.063



38, 34.693, 287.510



29, 2.530, 231.259



38, 29.835, 253.139



1, 1.741, 230.544





# Inverse Universe

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



41, 40.310, 337.670



49, 57.931, 338.726



54, 32.640, 93.504



28, 4.572, 334.520



29, 58.180, 343.746



1, 3.066, 333.951



# Previews

## White Background



This preview shows how the CIE LCh color 49, 20.007, 236.490 looks on a white background.

## Color Contrast Check

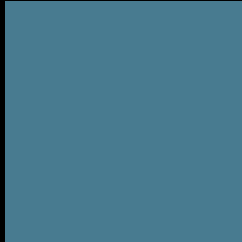
Large Text (above 18pt) WCAG AA ✓ Pass

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 49, 20.007, 236.490 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

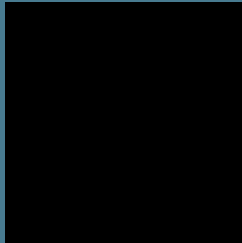
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA × Fail

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

**CIELCh 49, 20.007, 236.490**

## **Background**



This preview shows how black text looks on a background with the CIELCh color 49, 20.007, 236.490.



This preview shows how white text looks on a background with the CIELCh color 49, 20.007, 236.490.

# 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**

49, 20.007, 236.490

**Protanopia**

49, 13.571, 285.703

**Deuteranopia**

49, 18.818, 290.435



**Tritanopia**  
49, 19.160, 215.647



# Trichromacy



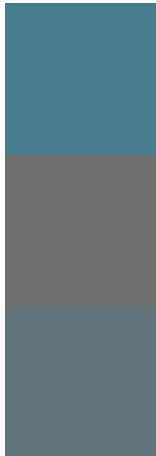
**Original Color**  
49, 20.007, 236.490

**Protanomaly**  
49, 14.669, 261.360

**Deuteranomaly**  
49, 17.613, 269.097

**Tritanomaly**  
49, 19.140, 223.472

# Monochromacy



**Original Color**  
49, 20.007, 236.490

**Achromatopsia**  
46, 0.006, 296.813

**Achromatomaly**  
47, 8.186, 229.270

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 49, 20.007, 236.490 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(72, 123, 144)` looks like.

```
.text, #text, p{  
    color:rgb(72, 123, 144)  
}
```

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(72, 123, 144) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(72, 123, 144) }
```

## Border

The CSS property to change the border of an element to CIELCh 49, 20.007, 236.490 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(72, 123, 144) }
```

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

```
.border{ border-color:rgb(72, 123, 144) }
```

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

Here you see how a box with a 4 pixel `rgb(72, 123, 144)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(72, 123, 144); -webkit-box-  
shadow:4px 4px 4px 4px rgb(72, 123, 144);  
box-shadow:4px 4px 4px 4px rgb(72, 123,  
144) }
```

# Background

The CSS property to change the background color of an element to CIELCh 49, 20.007, 236.490 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(72, 123, 144) }
```

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

```
.background{ background-color: rgb(72, 123,  
144) }
```

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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