

# Converting Colors

CIELCh(40, 12.310, 232.733)

Have a look what the booklet for  
CIELCh(40, 12.310, 232.733)  
contains.

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# Color

**CIELCh(40, 12.281, 231.643)**

# Conversions

## Conversions Part 1

Format	Color
Hex	46636E
RGB	70, 99, 110
RGB Percent	27%, 39%, 43%
CMY	0.7271, 0.6133, 0.5702
CMYK	0.36, 0.10, 0.00, 0.57
HSL	196°, 22%, 35%
HSV	196°, 36%, 43%
XYZ	9.7125, 11.2510, 16.2938
YIQ	91.5830, -20.8150, -2.7270

# Conversions

## Conversions Part 2

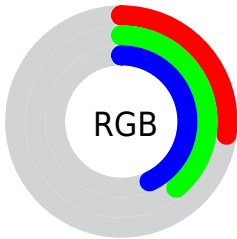
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	70, 87, 110
Decimal	4612974
CIE <sub>Lab</sub>	40.00, -7.62, -9.63
CIE <sub>LCh</sub>	40, 12.281, 231.643
Yxy	11.2510, 0.2607, 0.3020
Android (android.graphics.Color)	4282803054 (0xFF46636E)
YUV	91.5830, 9.0796, -18.9283
Hunter-Lab	33.5425, -7.0134, -5.3214

# Details

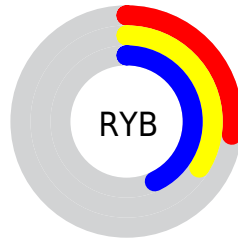
The CIELCh color **40, 12.281, 231.643** is a dark color, and the websafe version is hex **336666**. A complement of this color would be **37, 15.343, 46.907**, and the grayscale version is **39, 0.005, 296.813**.

A 20% lighter version of the original color is **60, 12.367, 232.003**, and **20, 12.118, 232.350** is the 20% darker color. If you saturate the color by 10%, you get **38, 15.104, 233.103**, and if you desaturate by 10%, it is **42, 9.188, 230.488**.

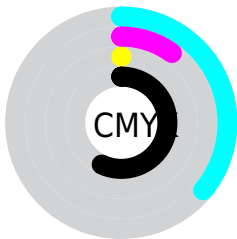
# Distribution



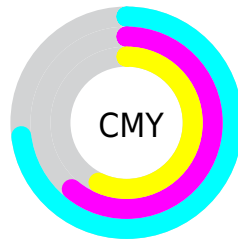
- Red (27%)
- Green (39%)
- Blue (43%)



- Red (27%)
- Yellow (34%)
- Blue (43%)



- Cyan (36%)
- Magenta (10%)
- Yellow (0%)
- Black (57%)



- Cyan (73%)
- Magenta (61%)
- Yellow (57%)

# Brightness & Saturation Gradients


These gradients show how the CIELCh color 40, 12.281, 231.643 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 40, 12.281, 231.643 by changing the saturation by 10% instead.





 40, 12.281,  
231.643


 40, 12.281,  
231.643


 100, 12.281,  
231.643


 30, 12.281,  
231.643

 60, 12.281,  
231.643


 20, 12.281,  
231.643

 70, 12.281,  
231.643


 10, 12.281,  
231.643

 80, 12.281,  
231.643

 0, 12.281, 231.643

 90, 12.281,  
231.643

 40, 12.281,

 40, 12.281,

231.643

■ 38, 15.104,  
233.103

■ 37, 17.618,  
234.948

■ 35, 19.796,  
237.252

■ 34, 21.630,  
240.091

■ 33, 23.139,  
243.530

■ 32, 24.438,  
247.433

■ 31, 24.914,  
248.744

231.643

■ 42, 9.188, 230.488

■ 43, 5.867, 229.597

■ 45, 2.360, 228.969

■ 47, 1.297, 48.015

■ 49, 5.068, 47.777

■ 51, 8.927, 47.475

■ 53, 12.849, 47.234

■ 54, 16.813, 47.050

■ 56, 20.806, 46.912

# Harmonies

# Complementary

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



40, 12.281, 231.643



37, 15.343, 46.907

# Rectangle

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



40, 12.281, 231.643



40, 12.281, 281.643



40, 12.281, 51.643



40, 12.281, 101.643

# Sweetspot

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



40, 12.281, 231.640



57, 4.921, 229.230



43, 24.129, 150.143



29, 3.277, 229.293



80, 0.010, 296.813



30, 0.005, 296.813



# Same Dimension

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



40, 12.281, 231.640



50, 17.849, 232.894



34, 19.396, 283.515



21, 1.995, 229.089



34, 26.214, 249.143



68, 46.056, 252.238





# Inverse Universe

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



35, 24.195, 335.743



43, 35.973, 336.411



43, 18.798, 94.155



21, 3.636, 333.815



25, 53.257, 342.324



55, 90.688, 343.415



# Previews

## White Background



This preview shows how the CIE LCh color 40, 12.281, 231.643 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 40, 12.281, 231.643 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA × Fail

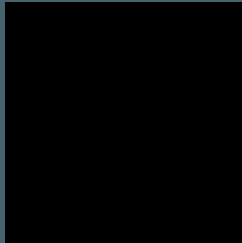
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

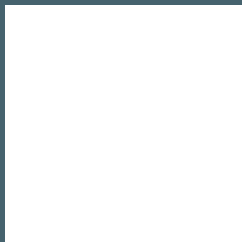
If you want to check with other color combinations, try the [Color Contrast Checker](#).

**CIELCh 40, 12.281, 231.643**

## **Background**



This preview shows how black text looks on a background with the CIELCh color 40, 12.281, 231.643.



This preview shows how white text looks on a background with the CIELCh color 40, 12.281, 231.643.

# 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

40, 12.281, 231.643

### Protanopia

40, 7.941, 288.535

### Deuteranopia

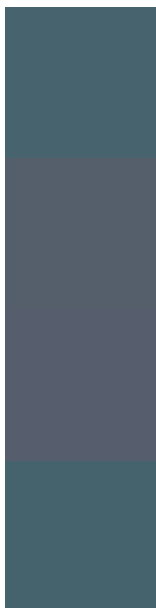
40, 11.687, 297.682



**Tritanopia**  
40, 11.903, 222.566



# Trichromacy



**Original Color**  
40, 12.281, 231.643

**Protanomaly**  
40, 8.355, 260.695

**Deuteranomaly**  
40, 10.151, 274.084

**Tritanomaly**  
40, 12.092, 225.408

# Monochromacy



**Original Color**  
40, 12.281, 231.643

**Achromatopsia**  
39, 0.005, 296.813

**Achromatomaly**  
39, 4.990, 228.430

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 40, 12.281, 231.643 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(70, 99, 110)` looks like.

```
.text, #text, p{  
    color:rgb(70, 99, 110)  
}
```

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(70, 99, 110) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(70, 99, 110) }
```

## Border

The CSS property to change the border of an element to CIELCh 40, 12.281, 231.643 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(70, 99, 110) }
```

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

```
.border{ border-color:rgb(70, 99, 110) }
```

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

Here you see how a box with a 4 pixel rgb(70, 99, 110) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(70, 99, 110); -webkit-box-  
shadow:4px 4px 4px 4px rgb(70, 99, 110);  
box-shadow:4px 4px 4px 4px rgb(70, 99,  
110) }
```

# Background

The CSS property to change the background color of an element to CIELCh 40, 12.281, 231.643 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(70, 99, 110) }
```

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

```
.background{ background-color: rgb(70, 99,  
110) }
```

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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