

# Converting Colors

XYZ(31.9073, 38.9713, 84.1365)

Have a look what the booklet for  
XYZ(31.9073, 38.9713, 84.1365)  
contains.

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# Color

**XYZ(31.9439, 38.9640,  
84.4344)**

# Conversions

## Conversions Part 1

Format	Color
Hex	21B4EB
RGB	33, 180, 235
RGB Percent	13%, 71%, 92%
CMY	0.8705, 0.2941, 0.0784
CMYK	0.86, 0.23, 0.00, 0.08
HSL	196°, 83%, 53%
HSV	196°, 86%, 92%
XYZ	31.9439, 38.9640, 84.4344
YIQ	142.3170, -105.2670, -14.0590

# Conversions

## Conversions Part 2

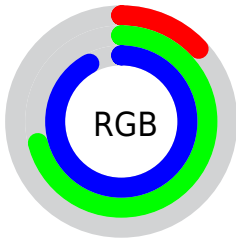
Format	Color
R <sub>Y</sub> B	33, 118, 235
Decimal	2209003
CIE Lab	68.73, -17.56, -37.67
CIE LCh	69, 41.561, 245.002
Yxy	38.9640, 0.2056, 0.2508
Android (android.graphics.Color)	4280399083 (0xFF21B4EB)
YUV	142.3170, 45.6927, -95.8710
Hunter-Lab	62.4212, -17.8900, -36.5042

# Details

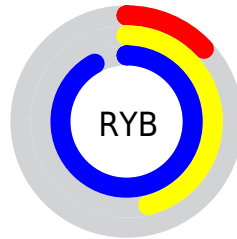
The XYZ color **31.9439, 38.9640, 84.4344** is a light color, and the websafe version is hex **33CCFF**. The color can be described as light washed azure. A complement of this color would be **38.0280, 24.7560, 4.2149**, and the grayscale version is **25.6948, 27.0329, 29.4388**.

A 20% lighter version of the original color is **55.2479, 70.9239, 105.3856**, and **15.7261, 18.4334, 45.3770** is the 20% darker color. If you saturate the color by 10%, you get **30.1742, 36.1785, 83.9908**, and if you desaturate by 10%, it is **34.2996, 42.1414, 84.9243**.

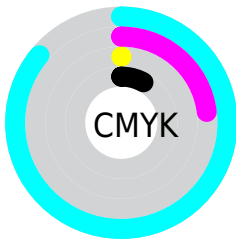
# Distribution



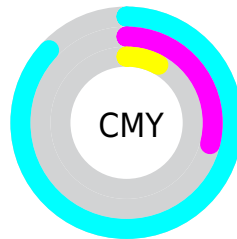
- Red (13%)
- Green (71%)
- Blue (92%)



- Red (13%)
- Yellow (46%)
- Blue (92%)



- Cyan (86%)
- Magenta (23%)
- Yellow (0%)
- Black (8%)



- Cyan (87%)
- Magenta (29%)
- Yellow (8%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 31.9439, 38.9640, 84.4344 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 XYZ color 31.9439, 38.9640, 84.4344 by changing the saturation by 10% instead.



■ 31.9439, 38.9640,  
84.4344

■ 31.9439, 38.9640,  
84.4344

302.6135,  
341.7374, 529.8504

■ 21.4740, 26.7317,  
62.8267

■ 62.0889, 73.5833,  
141.4498

■ 13.5853, 17.3718,  
45.2609

■ 82.4947, 96.7392,  
177.6946

■ 7.9126, 10.5000,  
31.3185

■ 106.9432,  
124.3050, 219.6555

■ 4.0904, 5.7317,  
20.5810

■ 135.7998,  
156.6651, 267.7510

■ 1.7534, 2.6826,  
12.6298

■ 169.4297,  
194.2041, 322.3997

■ 0.4894, 0.9684,  
7.0464

208.1984,

■ 0.0000, 0.0000,

237.3062, 384.0201

3.4123

252.4712,  
286.3558, 453.0308

■ 0.0000, 0.0000,  
1.3088

■ 0.0000, 0.0000,  
0.0690

■ 31.9439, 38.9640,  
84.4344

■ 31.9439, 38.9640,  
84.4344

■ 30.1742, 36.1785,  
83.9908

■ 34.2996, 42.1414,  
84.9243

■ 29.5601, 35.1273,  
83.8203

■ 37.3320, 45.7567,  
85.4623

■ 41.1192, 49.8519,  
86.0532

■ 45.7269, 54.4621,  
86.7002

■ 51.2136, 59.6185,  
87.4063

■ 57.6319, 65.3493,  
88.1742

■ 65.0302, 71.6805,  
89.0063

■ 73.4536, 78.6363,  
89.9049

■ 82.9440, 86.2395,  
90.8723

# Harmonies

## Analogous

The Analogous color harmony consists of three colors that are next to each other on the color wheel.



27.6126, 38.9640, 66.7705



31.9439, 38.9640, 84.4344



38.1476, 38.9640, 89.6885

# Triad

The Triadic color harmony groups three colors that are evenly spaced from another and form a triangle on the color wheel.



31.9439, 38.9640, 84.4344



51.1118, 38.9640, 39.3453



30.2446, 38.9640, 19.1392

# Complementary

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



31.9439, 38.9640, 84.4344



38.0280, 24.7560, 4.2149

# Split Complementary

Split-complementary colors differ from the complementary color scheme. The scheme consists of three colors, the original color and two neighbors of the complement color.



35.9425, 38.9640, 15.6101



31.9439, 38.9640, 84.4344



48.3866, 38.9640, 24.8594

# Square

The Square scheme is like the rectangle color scheme, but the four colors are evenly spaced on the color wheel.



31.9439, 38.9640, 84.4344



49.7162, 38.9640, 59.6407



42.6382, 38.9640, 17.3414



26.7160, 38.9640, 28.8891



# Rectangle

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



31.9439, 38.9640, 84.4344



42.6393, 38.9640, 84.4323



42.6382, 38.9640, 17.3414



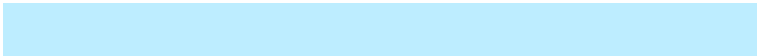
31.9430, 38.9640, 17.3421

# Sweetspot

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



31.9453, 38.9653, 84.4354



69.2305, 78.5376, 106.1182



32.0524, 60.4273, 18.9669



14.2163, 16.2803, 22.6431



0.0000, 0.0000, 0.0000



20.3446, 21.4041, 23.3091

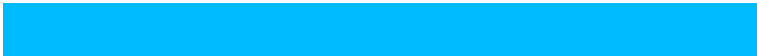


# Same Dimension

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



31.9453, 38.9653, 84.4354



35.5167, 42.1534, 100.8722



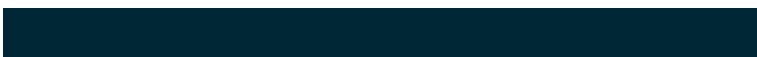
18.5036, 12.0819, 79.9548



15.1507, 16.3878, 19.2869



16.5629, 19.7727, 46.6865



1.3798, 1.7111, 3.6924



# Inverse Universe

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



43.0443, 22.0469, 45.1679



50.0564, 24.7866, 48.3565



52.4924, 53.6848, 9.0364



15.5296, 15.2397, 18.0742



23.2155, 11.4889, 22.7338

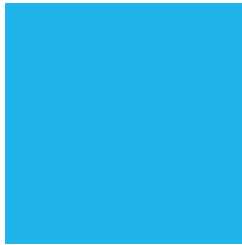


1.8630, 0.9181, 1.9957



# Previews

## White Background



This preview shows how the XYZ color 31.9439, 38.9640, 84.4344 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

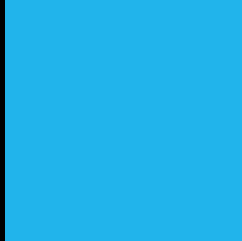
Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail



# Black Background



This preview shows how the XYZ color 31.9439, 38.9640, 84.4344 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

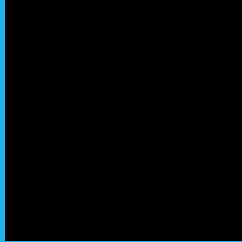
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass

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

**XYZ 31.9439, 38.9640, 84.4344**

## **Background**



This preview shows how black text looks on a background with the XYZ color 31.9439, 38.9640, 84.4344.



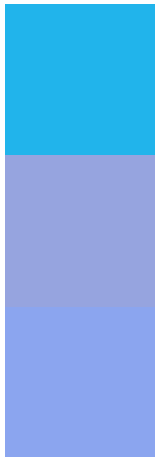
This preview shows how white text looks on a background with the XYZ color 31.9439, 38.9640,



# 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

31.9439, 38.9640, 84.4344

### Protanopia

39.1724, 38.3627, 75.1522

### Deuteranopia

39.6826, 38.6312, 87.0264



## Tritanopia

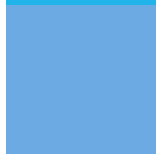
27.6578, 38.8214, 60.0684

# Trichromacy



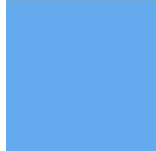
## Original Color

31.9439, 38.9640, 84.4344



## Protanomaly

34.3033, 37.4213, 78.0881



## Deuteranomaly

35.0629, 37.6318, 86.3046



## Tritanomaly

28.9688, 38.6986, 68.2301

# Monochromacy



## Original Color

31.9439, 38.9640, 84.4344



## Achromatopsia

25.7108, 27.0498, 29.4572



## Achromatomaly

25.2044, 29.7363, 45.4856

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 31.9439, 38.9640, 84.4344 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(33, 180, 235)` looks like.

```
.text, #text, p{  
    color:rgb(33, 180, 235)  
}
```

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(33, 180, 235) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(33, 180, 235) }
```

## Border

The CSS property to change the border of an element to XYZ 31.9439, 38.9640, 84.4344 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(33, 180, 235) }
```



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

```
.border{ border-color:rgb(33, 180, 235) }
```

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

Here you see how a box with a 4 pixel `rgb(33, 180, 235)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(33, 180, 235); -webkit-box-  
shadow:4px 4px 4px 4px rgb(33, 180, 235);  
box-shadow:4px 4px 4px 4px rgb(33, 180,  
235) }
```

# Background

The CSS property to change the background color of an element to XYZ 31.9439, 38.9640, 84.4344 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(33, 180, 235) }
```

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

```
.background{ background-color: rgb(33, 180,  
235) }
```

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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