

RGB Color Slider



The color slider is of such an appearance.

When you press the "Adjust" button on the tool bar, the following slider view will appear.

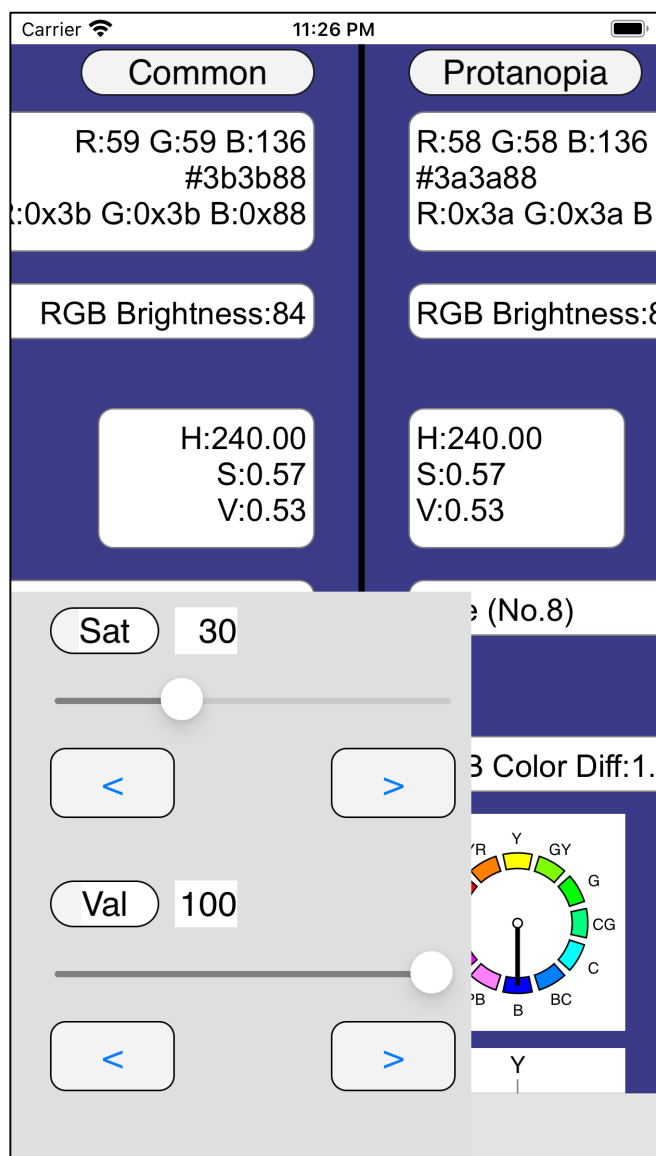


- movable.
- It is possible to operate by leaving it out.
- Use the “close” button to turn it off.
- Also “long press”, to turn it off.

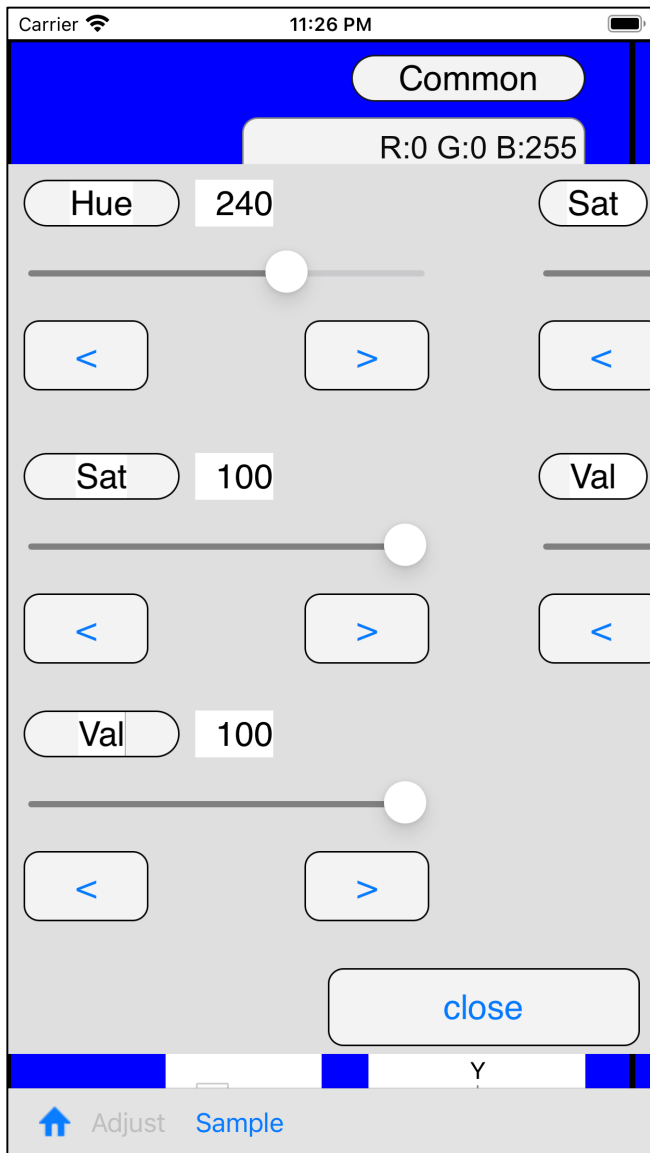
This slider view is made like this.

In this "RGB color slider", you can specify the value as follows.

RGB value red	(0 to 255)
RGB value green	(0 to 255)
RGB value blue	(0 to 255)
Saturation	(0 to 100)
Value	(0 to 100)



For example, if saturation is 30,
it will be like the color on the left.



With the HSV color slider, the slider that comes out with the "Adjust" button will be the next one.

HSV H (0 to 359)

HSV S (0 to 100)

HSV V (0 to 100)

Saturation (0 to 100)

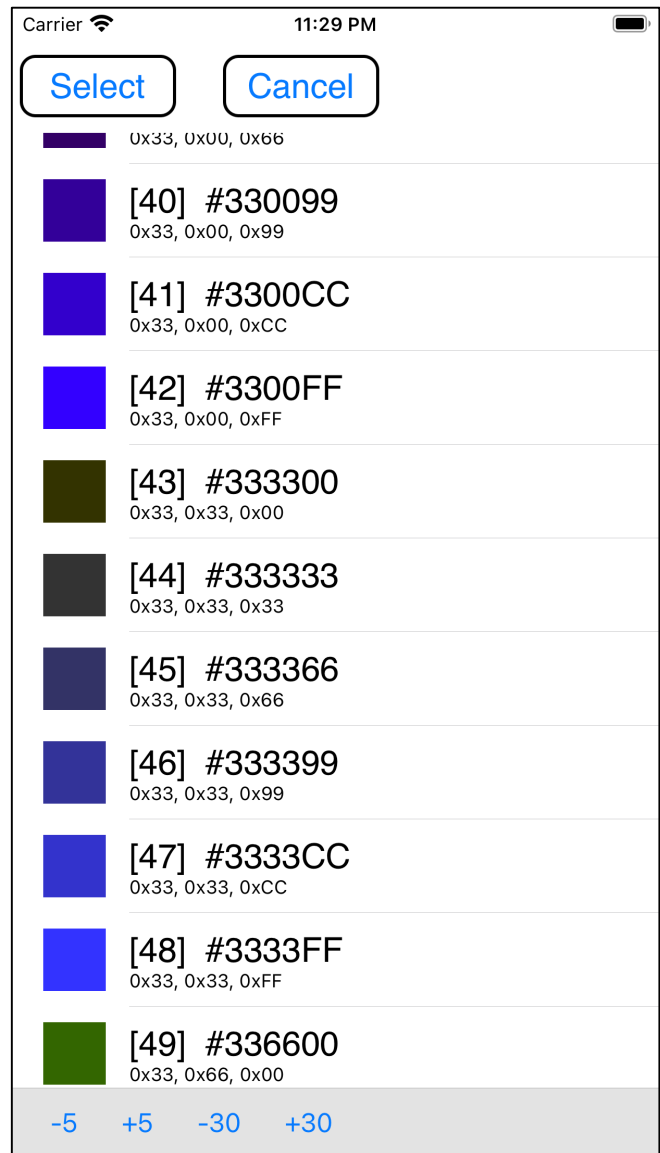
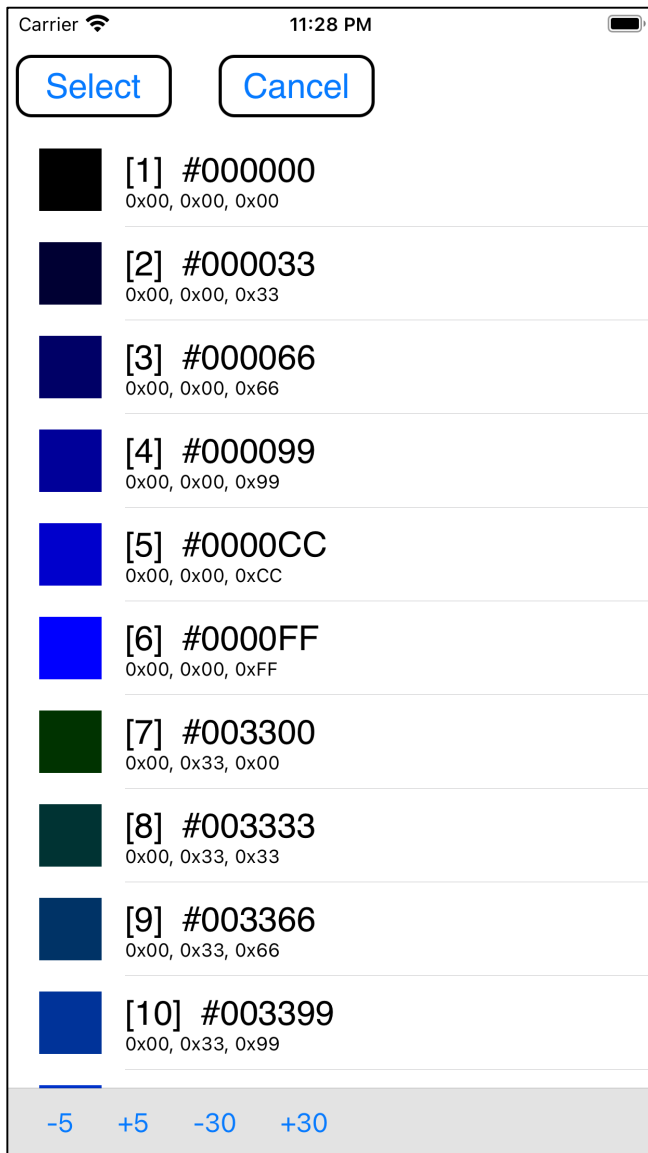
Value (0 to 100)

(If H of HSV is 0, it becomes yellow.)

Other than here, there is no difference from the RGB color slider.



When you press the "Sample" button on the toolbar, such a menu view will appear.

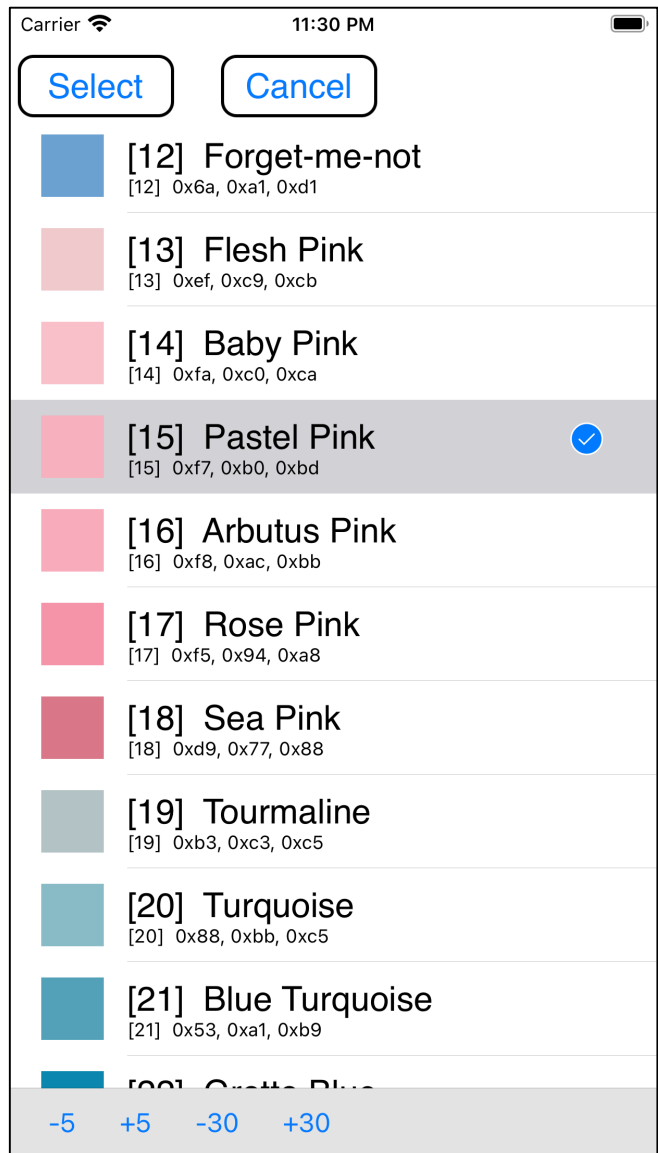


When you press "WebSafe", table view like the one on the left appears.

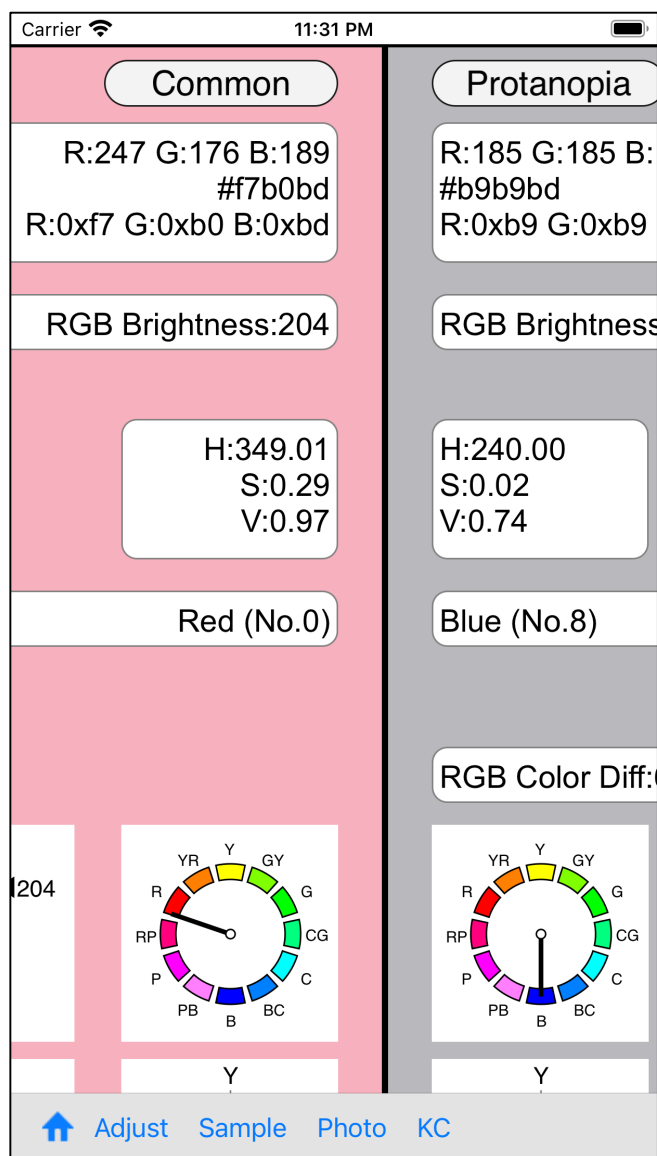
Scroll a little, select [48] and press the top [Select] button, it will be something like the following.



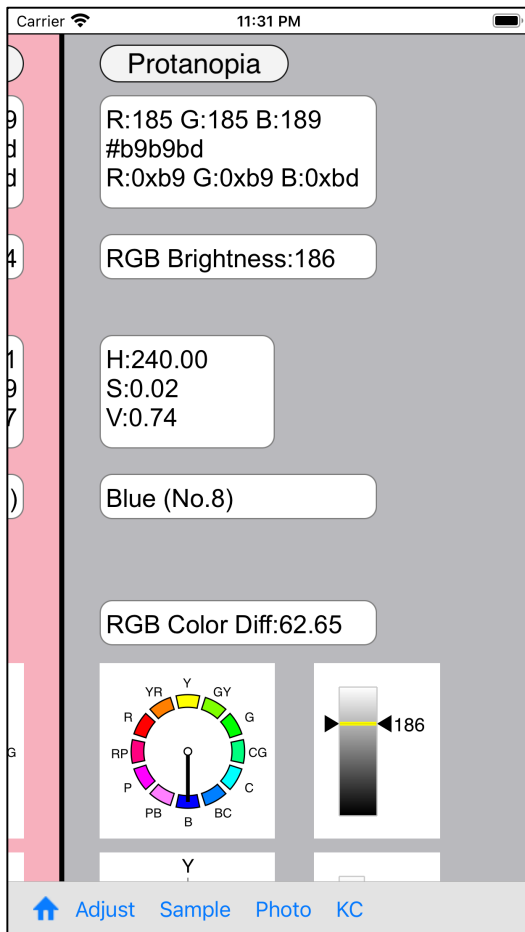
In this way, the color value selected in the table view is displayed.



Press "STDC (sRGB)" at the top of the right and select [15] Pastel Pink, the color will be as shown below.



The meanings of the values of each part are as follows.



[RGB value after calculation of lightness and saturation]

[RGB Brightness value]

Calculated value of $(R + G + B) / 3$

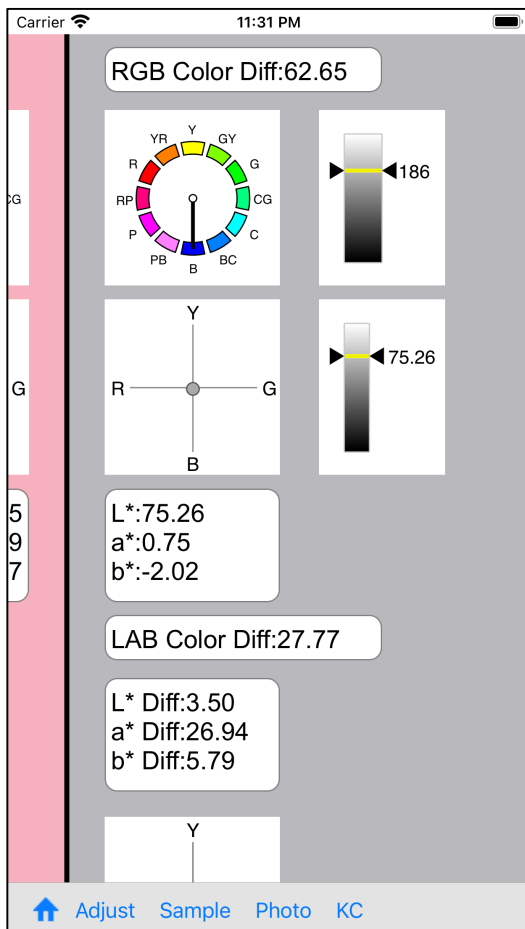
[HSV value]

[Color name obtained from H of HSV value]

[Color difference using RGB value]

HSV color angle diagram

RGB tone value



L* a* b* Coordinate position diagram

(-70 to +70)

L* value of L* a* b*

L* a* b* value

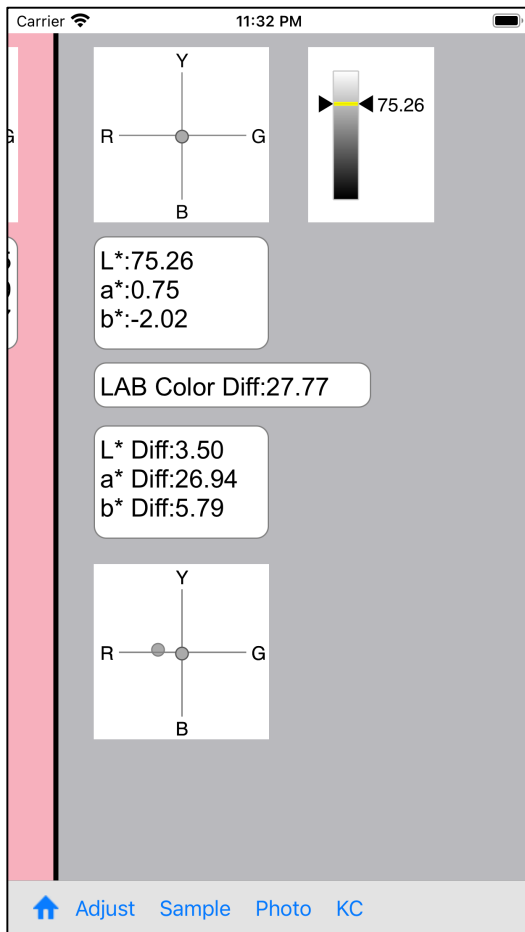
L* a* b* color difference

L*, a*, b* Each single unit difference

L* - L*

a* - a*

b* - b*



L* a* b* Coordinate position diagram
(-70 to +70)

hollow ... position of Common

non-hollow ... position after LMS
conversion

please note

In general, 0° of HSV is red and
the horizontal axis a^* of the coordinates of $L^* a^* b^*$ is green (G) red (R).

But in this software 0° of HSV is yellow and
the horizontal axis a^* of the coordinates of $L^* a^* b^*$ is red (R) green (G).

Also, the coordinates of $L^* a^* b^*$ are from -70 to +70 for both vertical axis b^* and
horizontal axis a^* .

Therefore, values less than -70, greater than 70 are placed at positions -70, 70.

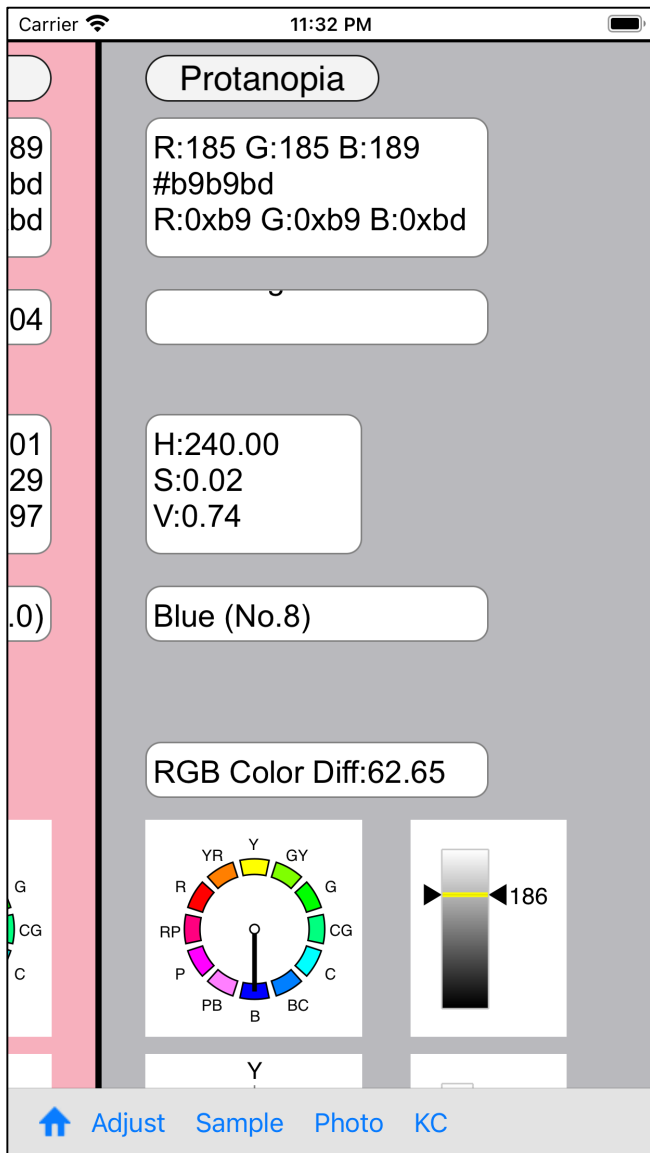
Therefore, the coordinate position with a value less than -70 and greater than 70
will be incorrect.

Also it does not matter, '*' of $L^* a^* b^*$ is called a star.

L^* ... el star ... value

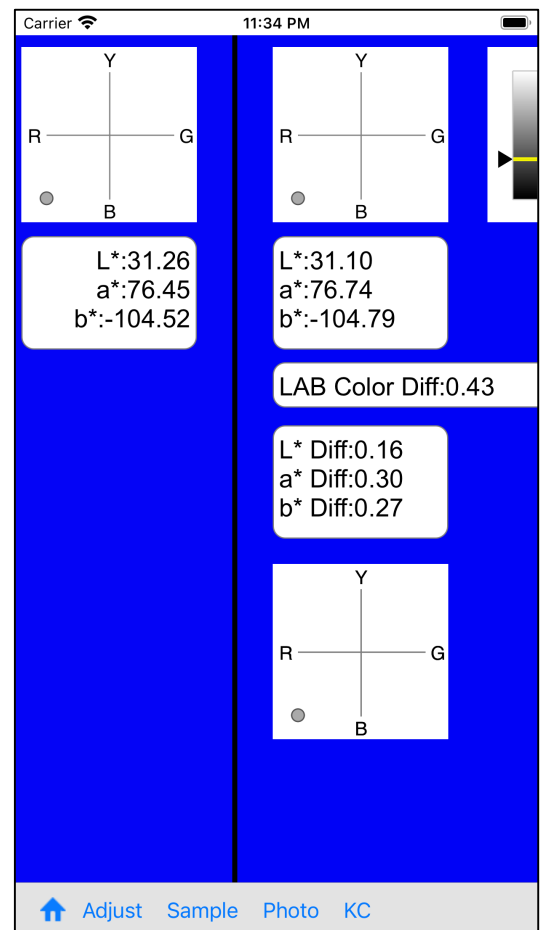
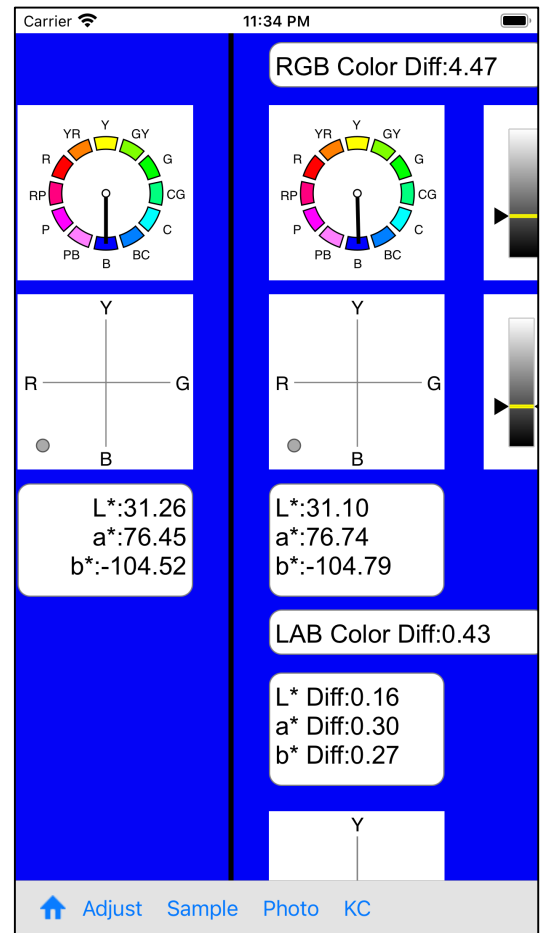
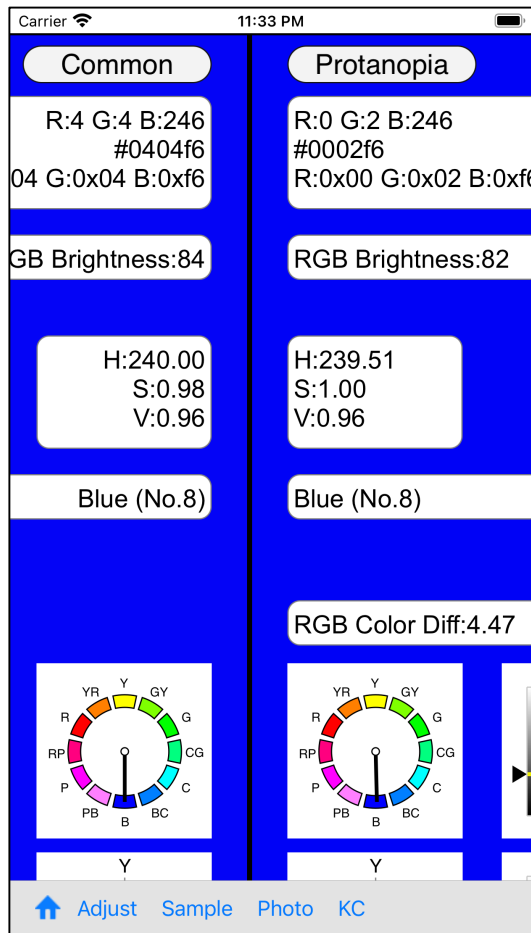
a^* ... a star ... horizontal axis (component values of green (G) to red (R))

b^* ... b star ... vertical axis (component values of yellow (Y) to blue (B))

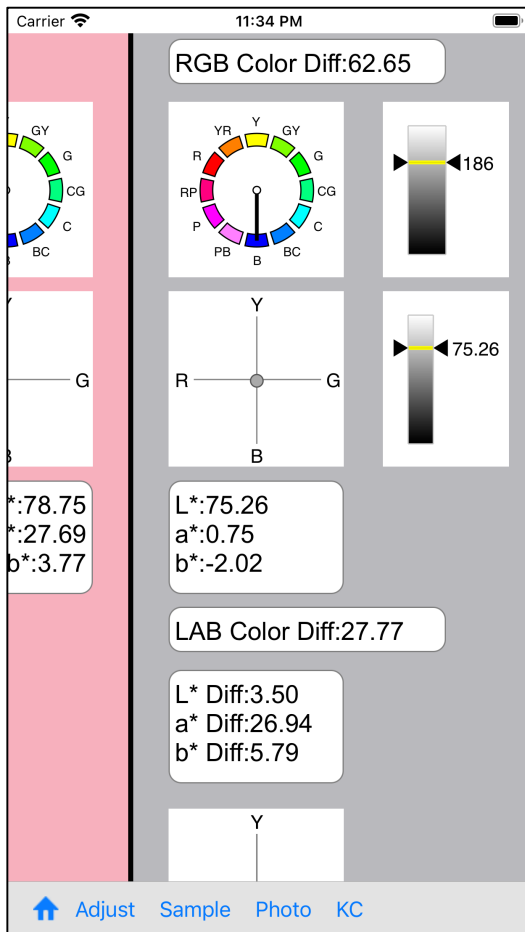


White background view is implemented in text view.

If you scroll for some reason, it will be equivalent to no character being displayed.



As a rough measure,
if RGB color difference ... 5.0 or less and
LAB color difference ... 1.5 or less,
I think that it can be regarded as the same color.

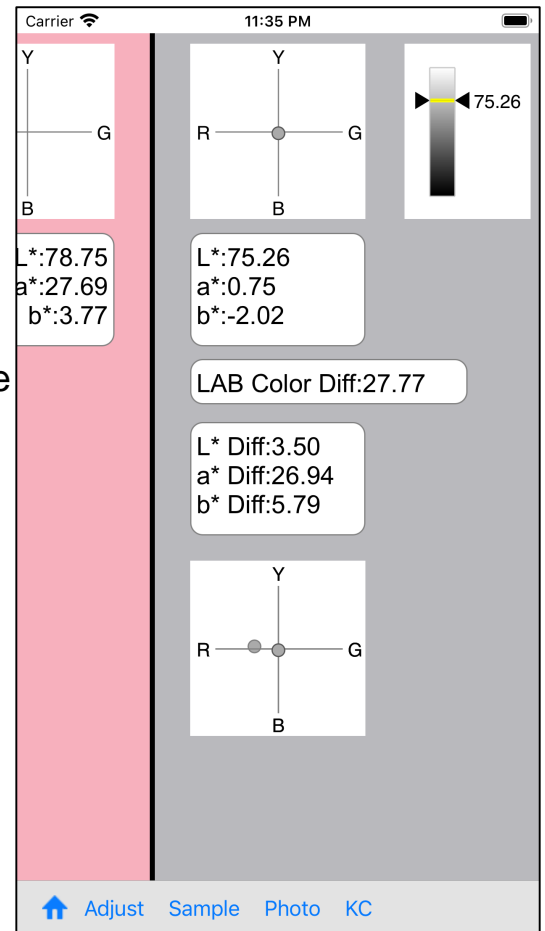


LAB color difference

L* difference
a* difference
b* difference

LAB color difference

L* difference
a* difference
b* difference



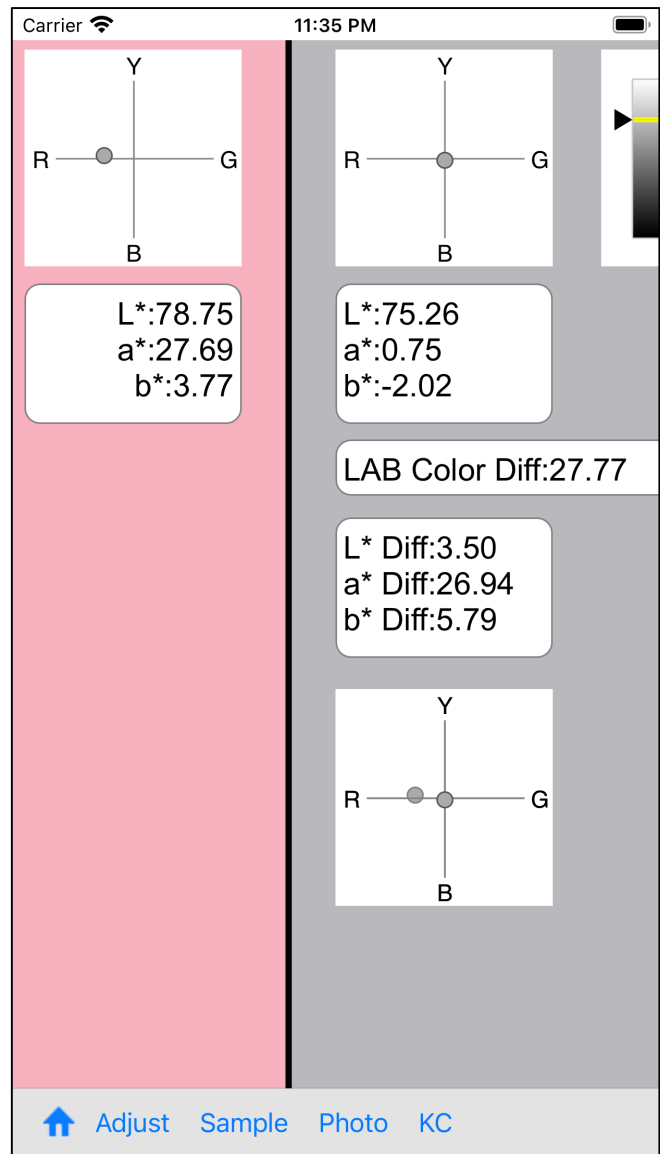
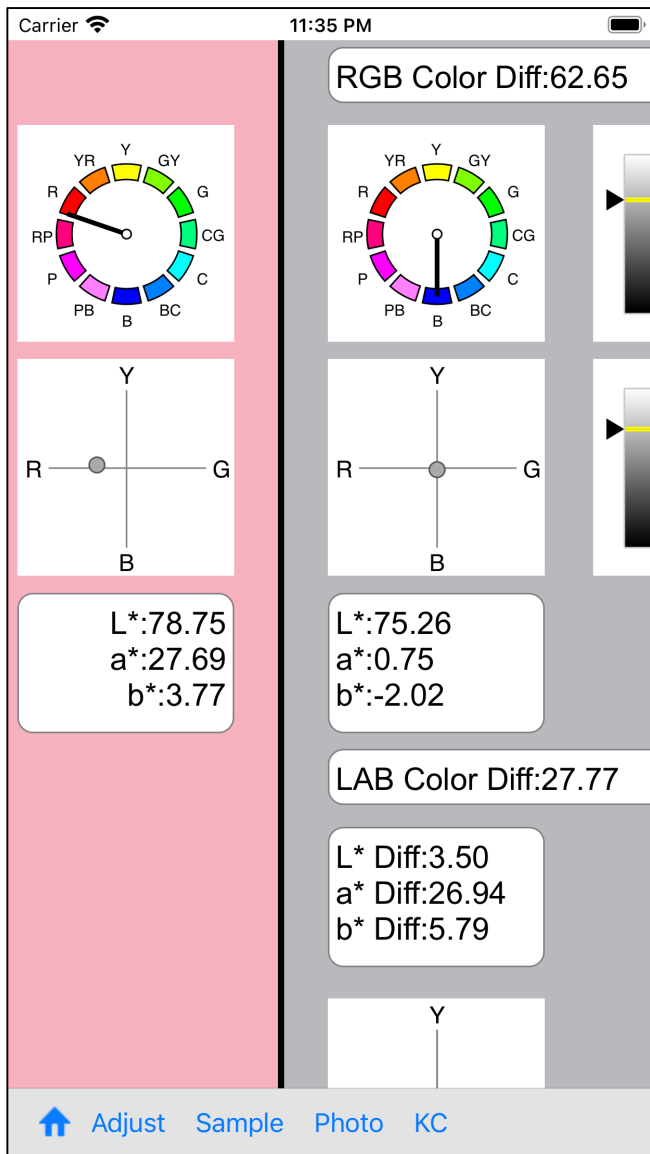
If any of these four, even one, exceeds 10.0, I think whether you can think that it is usually (completely) different color.

L* a* b* Coordinate position diagram (-70 to +70)

hollow ... position of Common

non-hollow ... position after LMS conversion

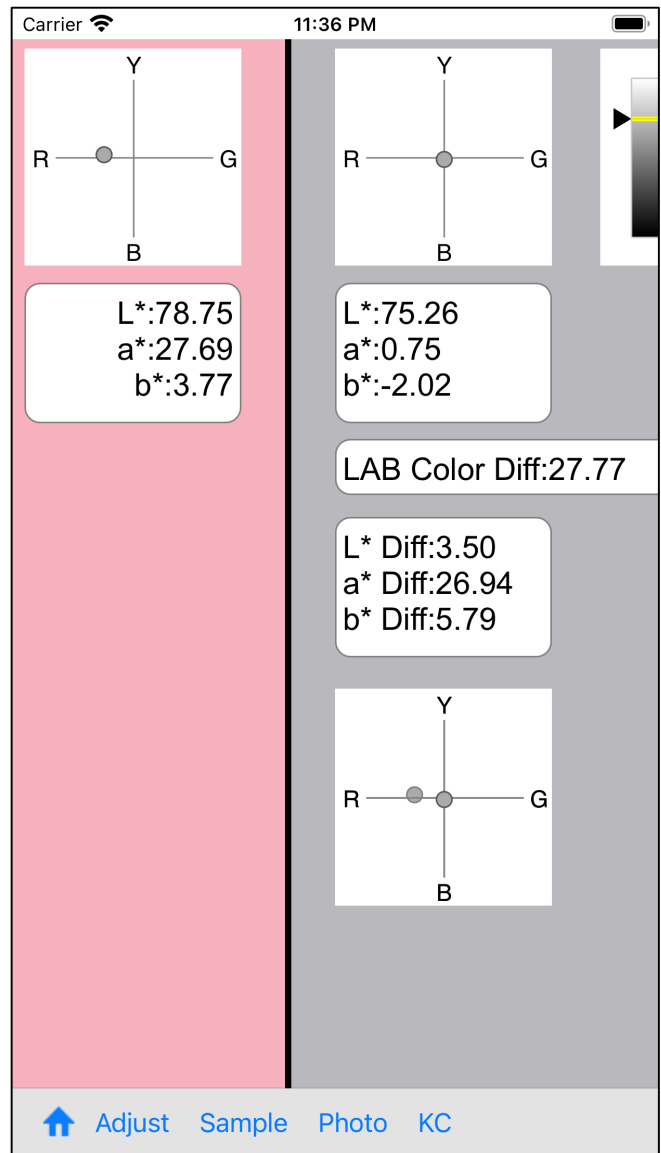
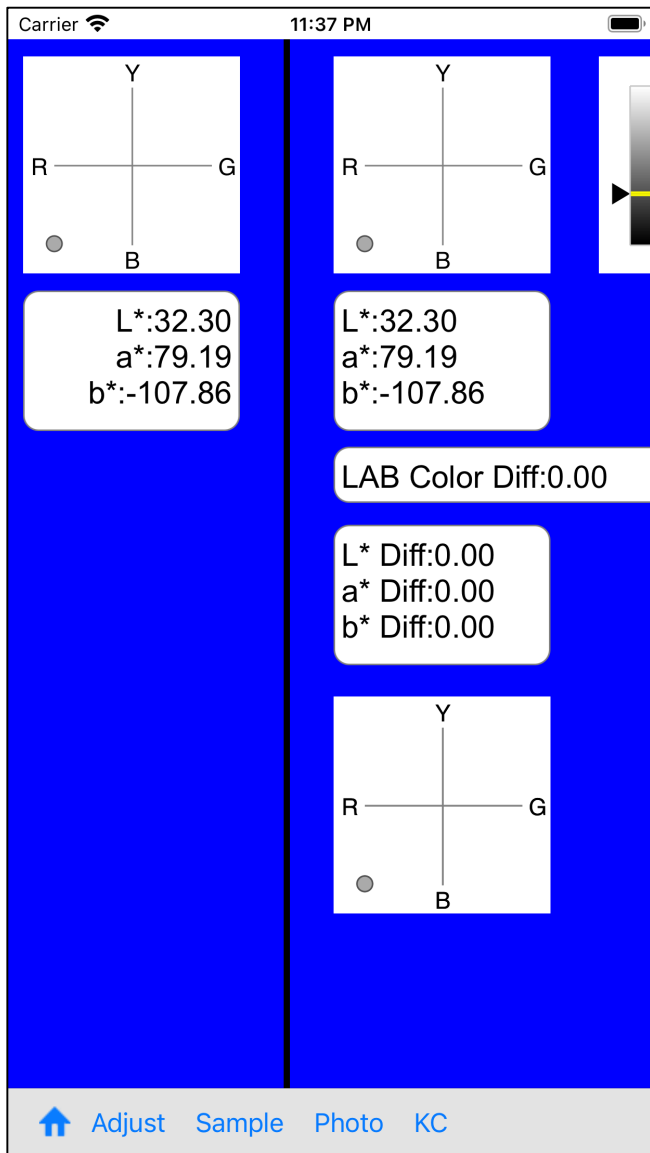
These two circles do not overlap at all in the figure on the right, so, I think, you can think they are (completely) different colors.



The diameter of the circle showing the coordinate position of L^* a^* b^* is 10.

If it is not in the overlapping position, I think that it is OK to think of it as a different color.

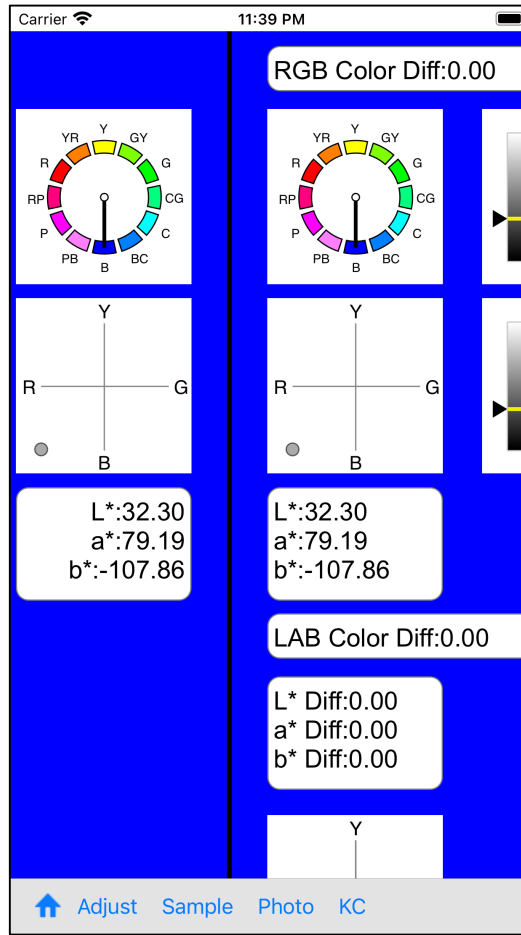
Also, as described above, the coordinates in this figure are from -70 to +70, so this figure is inaccurate for a^* and b^* values that exceed this value.



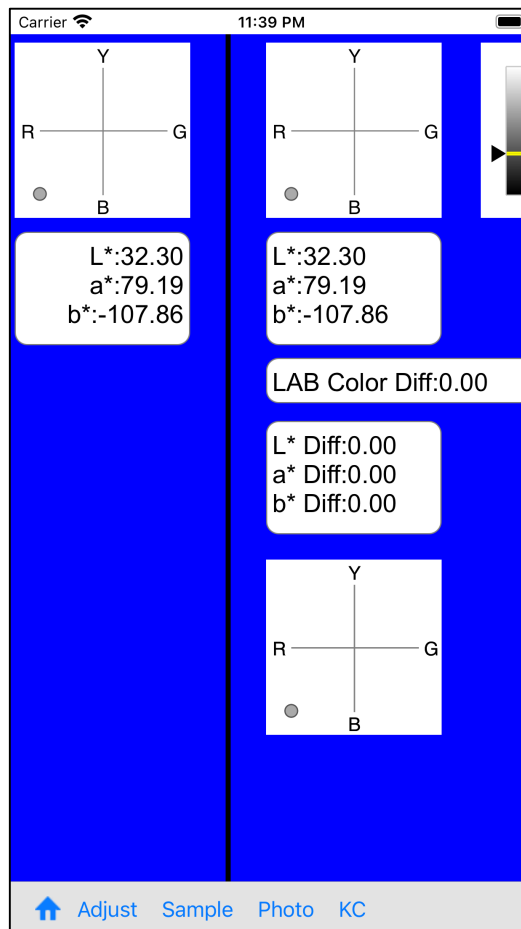
In the figure on the left, two circles overlap each other, they look like one circle.

In the figure on the right, these two circles are not overlapping at all, and two circles are displayed.

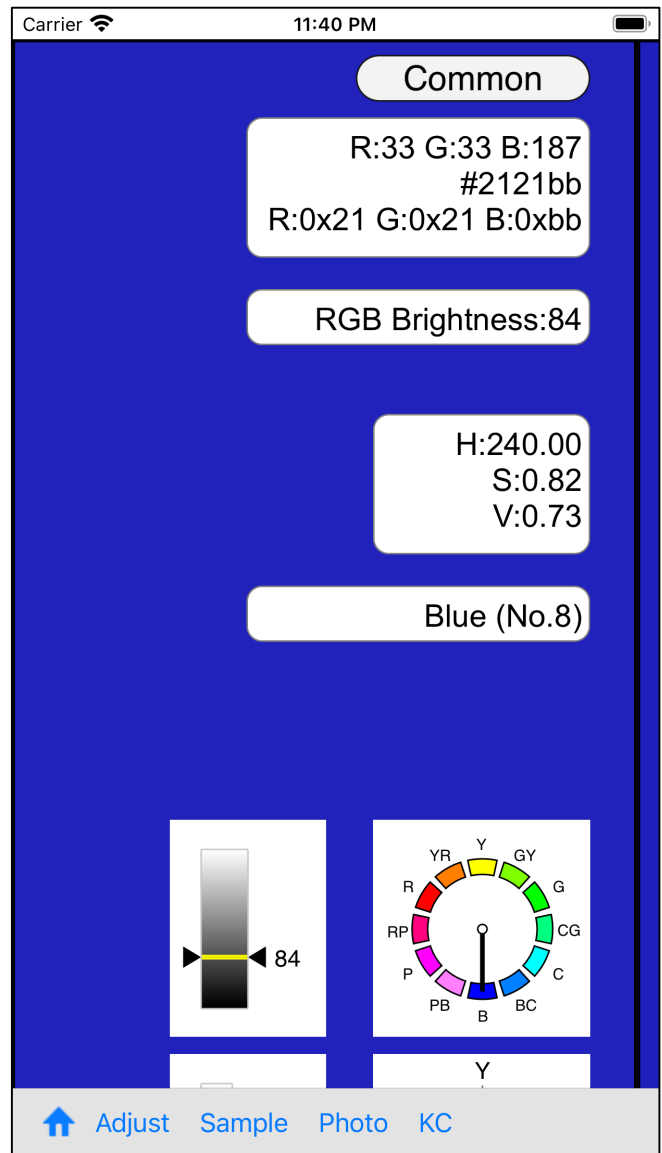
If two circles are displayed clearly, I think that it can be thought of as a (completely) different color.



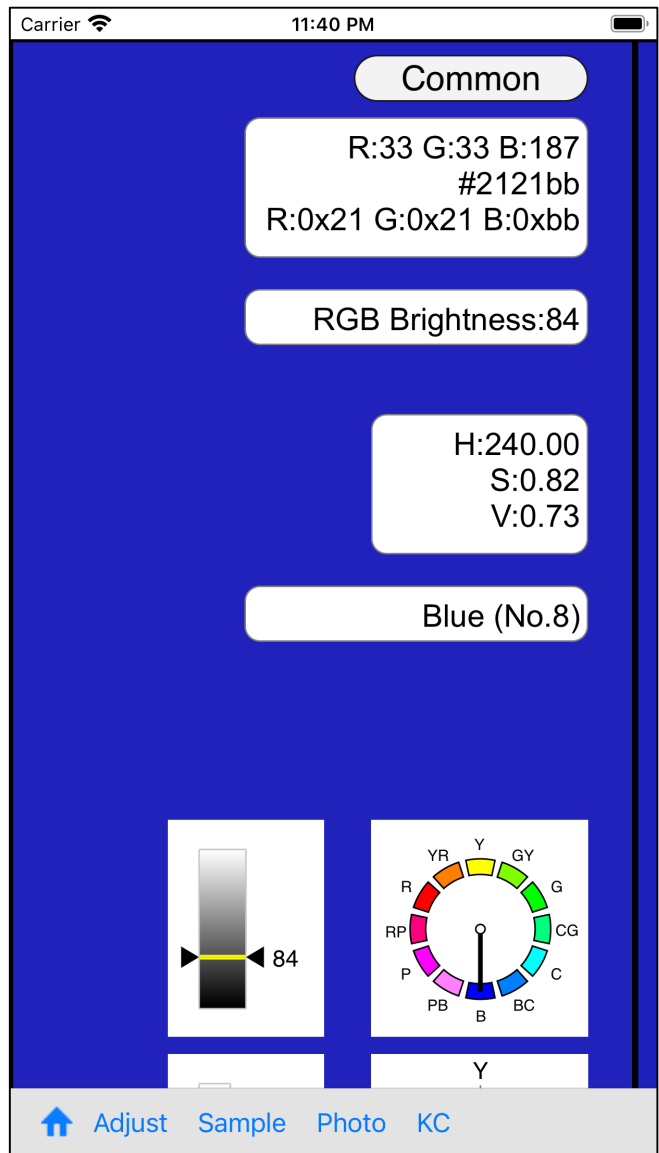
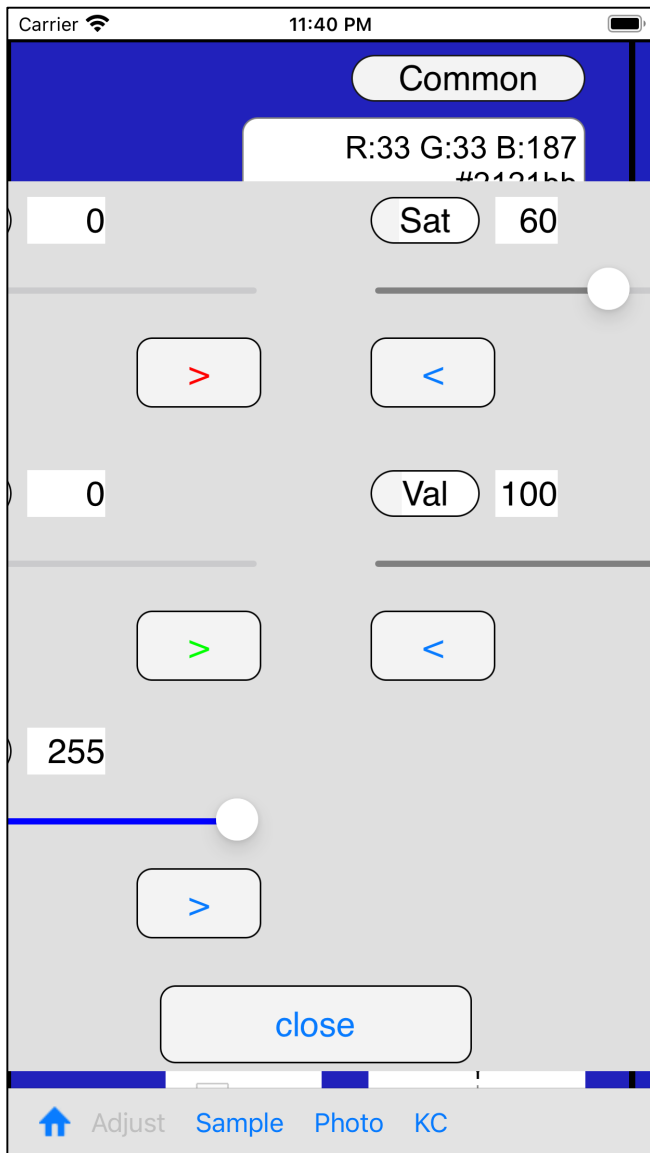
This figure is $a^* 79.19$, $b^* -107.86$, but the position of the point (circle) is the position of $a^* 70$, $b^* -70$.



please note



The value displayed as RGB value is the value after calculation of value and saturation.



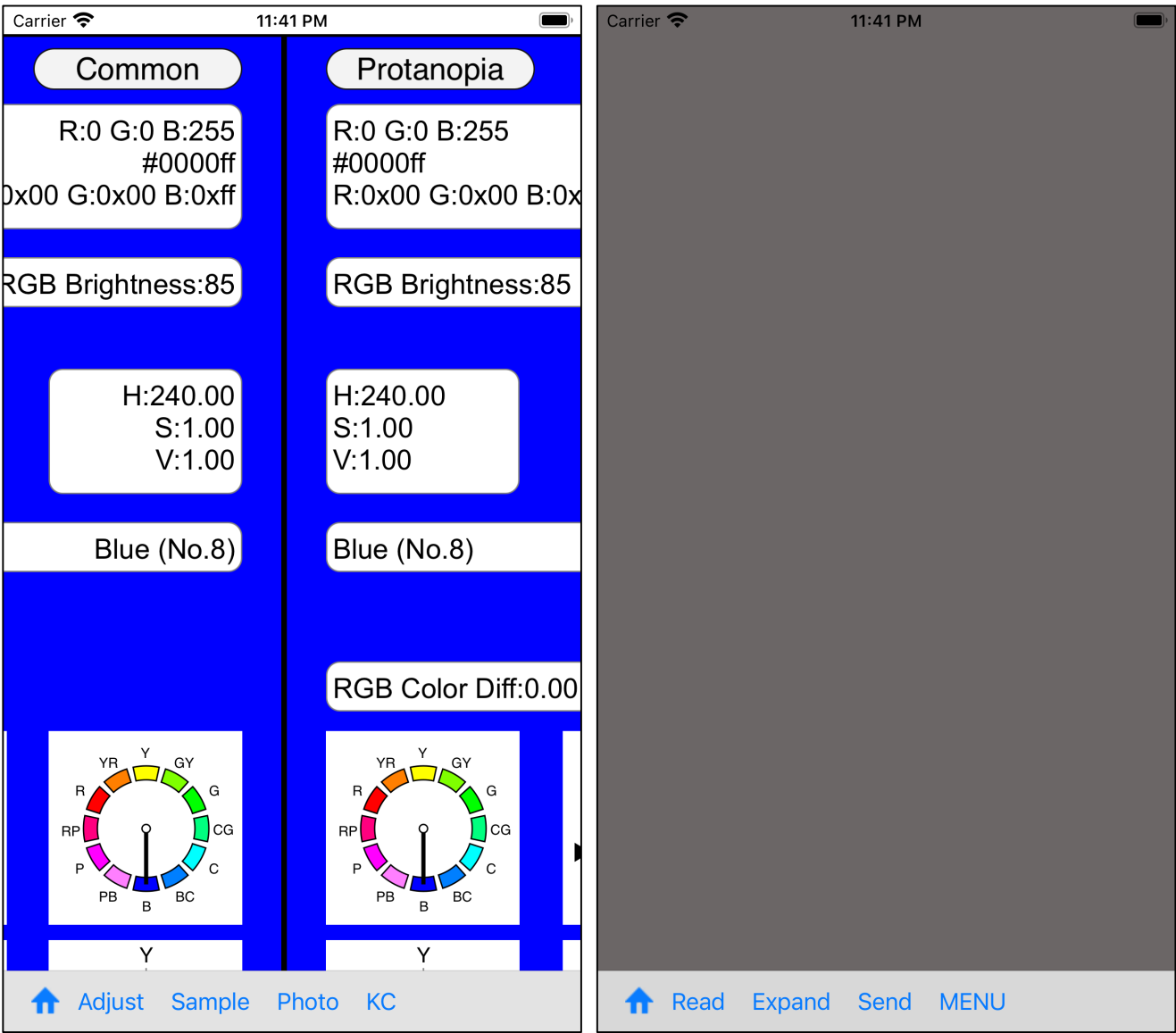
The value specified by the slider itself is displayed only on the slider view side.

The value displayed in the RGB value of the main view is the value of the final result after all calculations and is the color value displayed as the background color.

blank

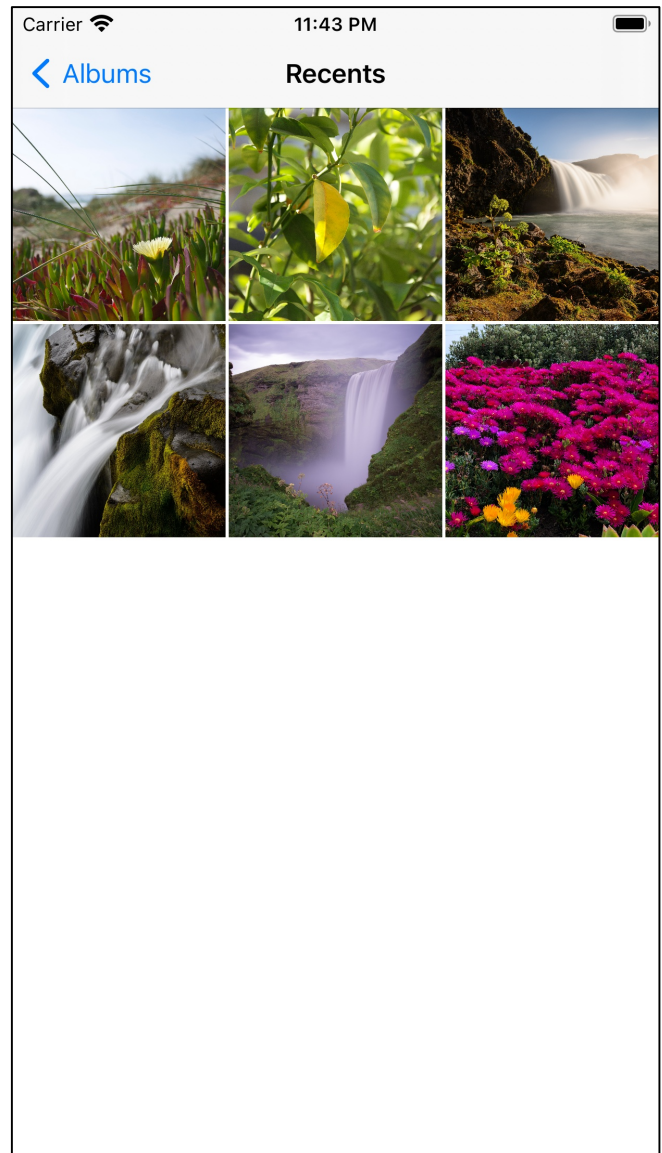
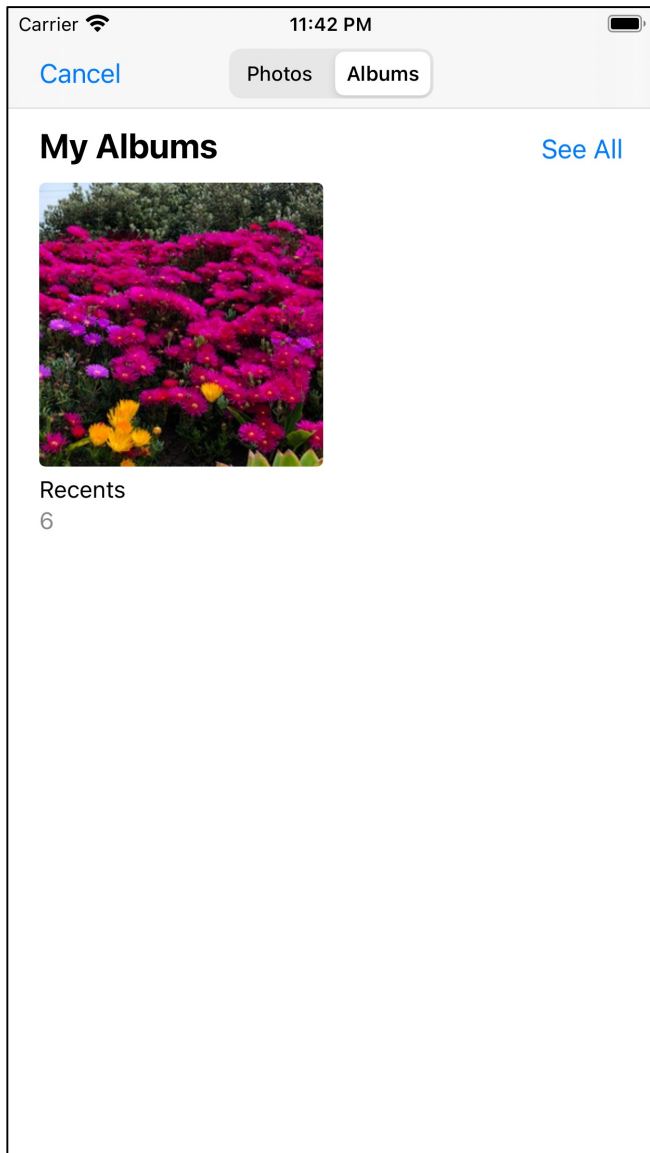
(image pixel picker) Reading from Photos (Camera Roll)

(This function is not included in the HSV slider.)

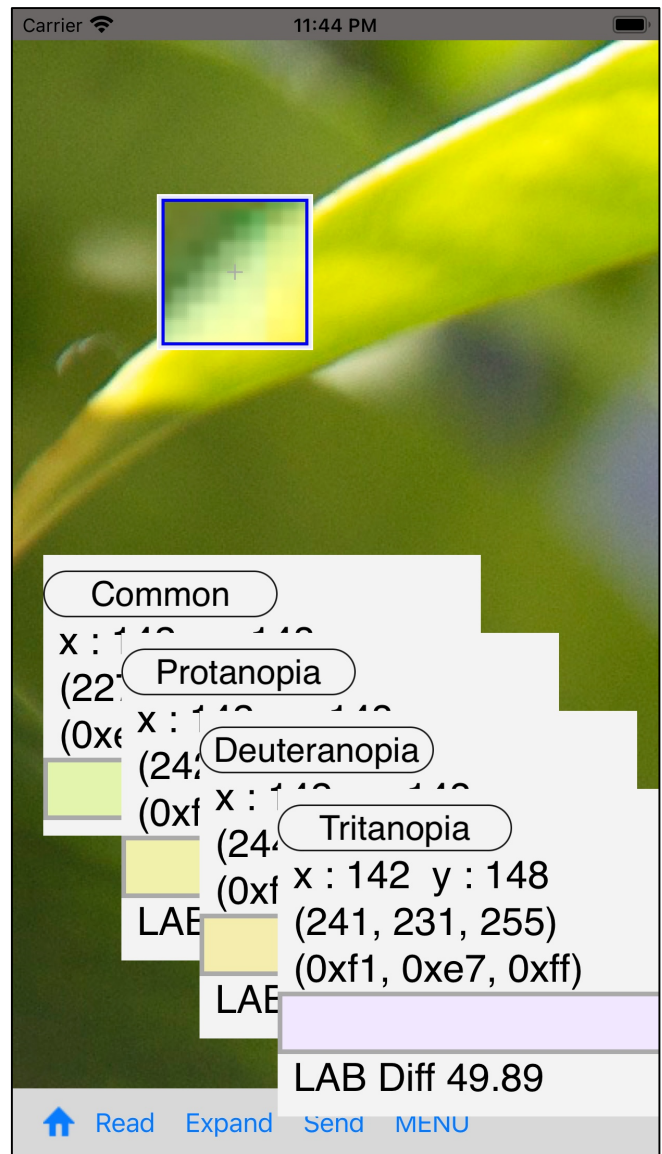
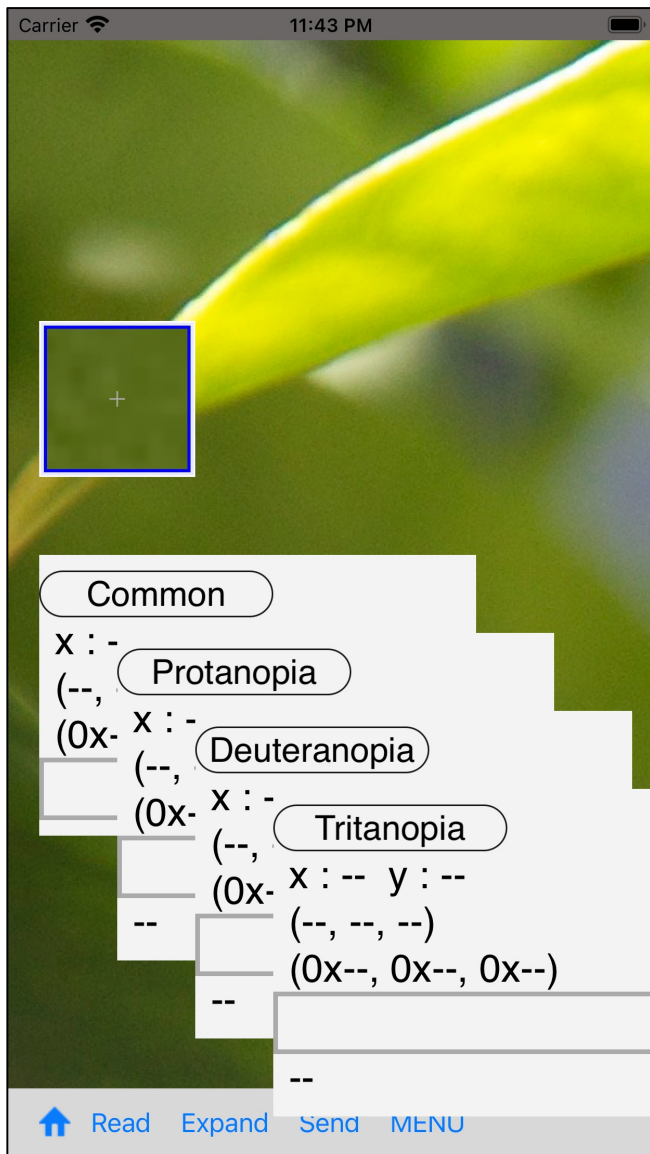


When you press the 4th "Photo" button on the tool bar, you will see a view like the one on the right.

When you press the second "read" button in that view, it transits to the selected view of the Photos (Camera Roll) as follows.



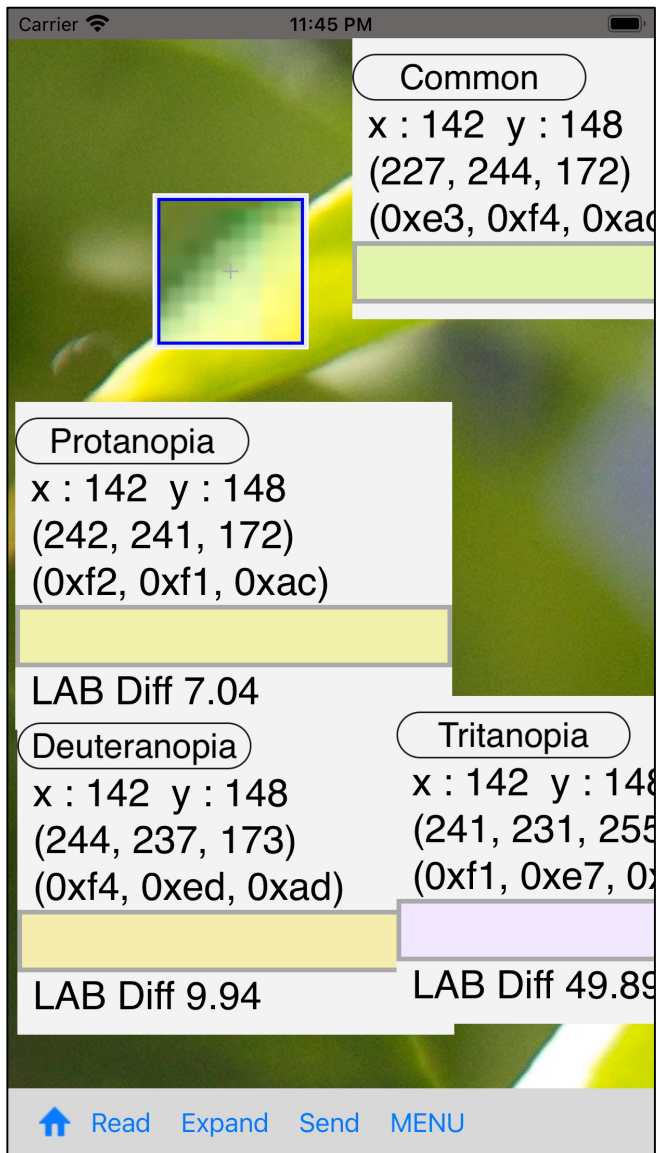
Here, when you select the second image from the left in the upper row, it will be as follows.



When you start moving the cursor view, the value is displayed in the value display view.

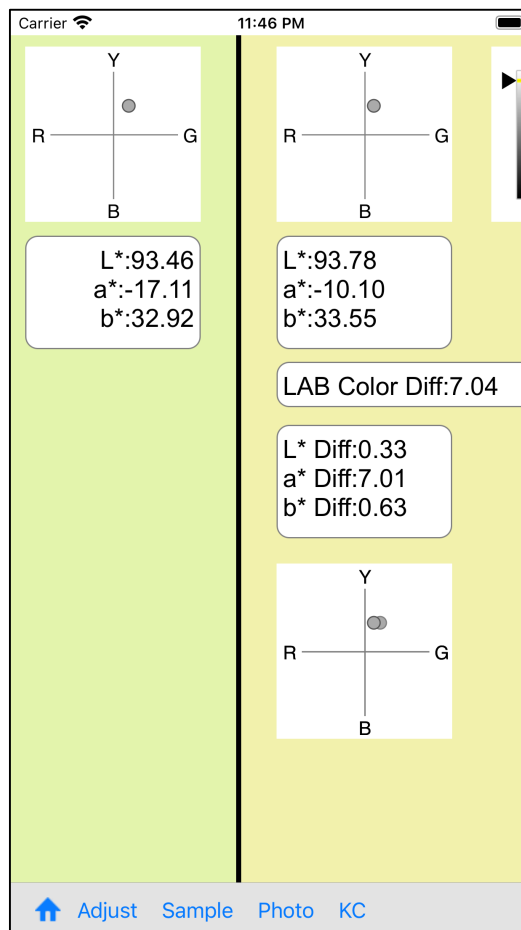
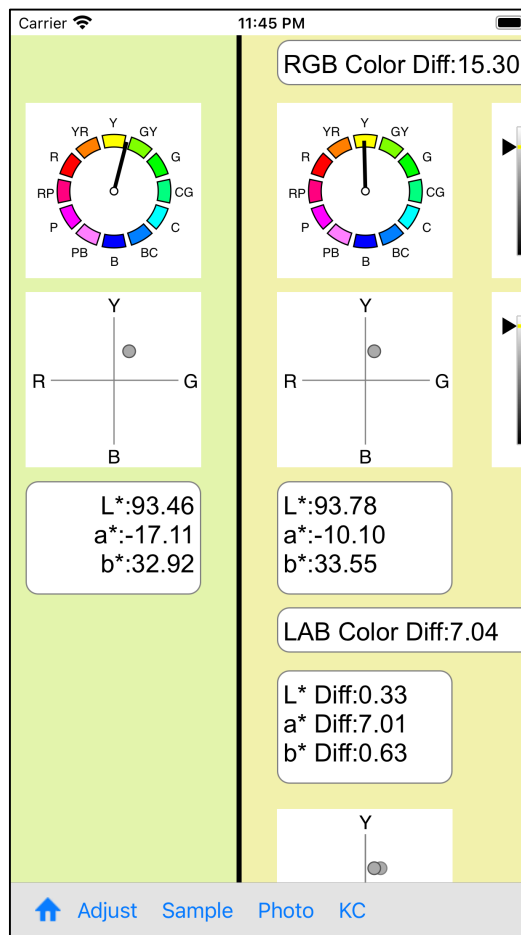
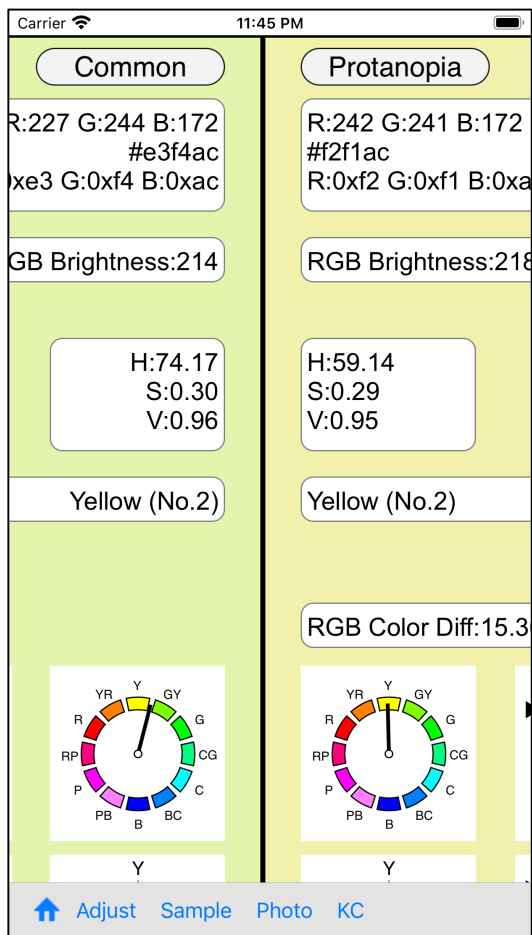
The cursor view here is a magnifying glass of 10 times.

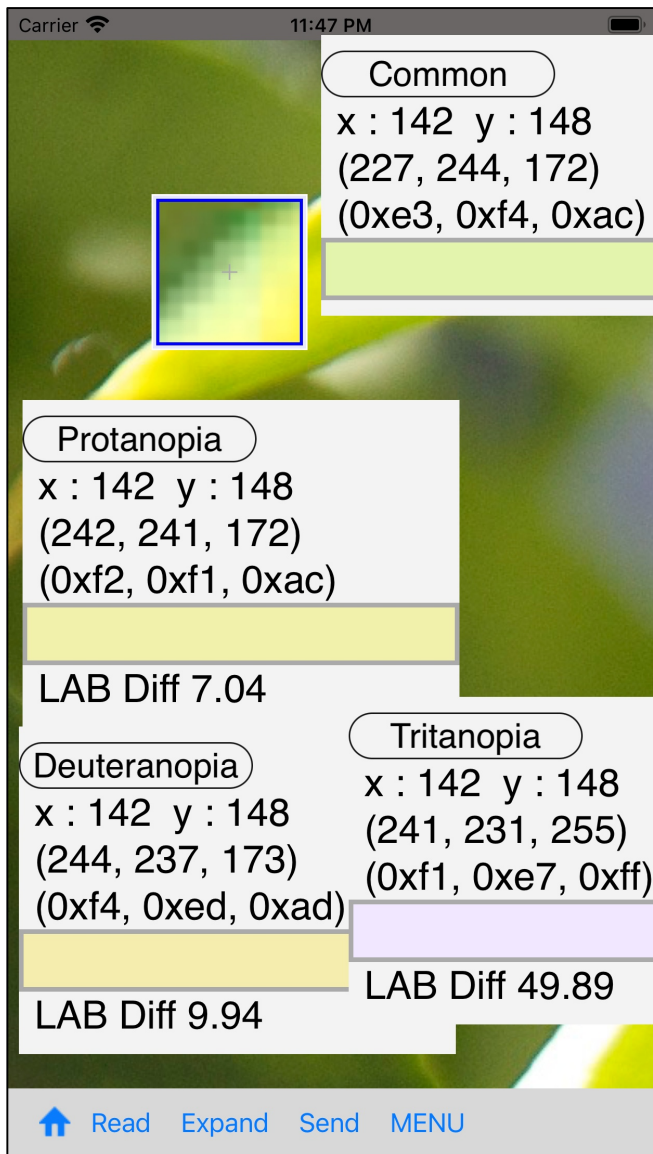
The center will be the position like the mouse cursor pointer.



If the value display view is appropriately scattered, it looks like this.

In this state, pressing the 4th "Send" button on this toolbar will transfer the value of "Common" to the slider view and return as follows.



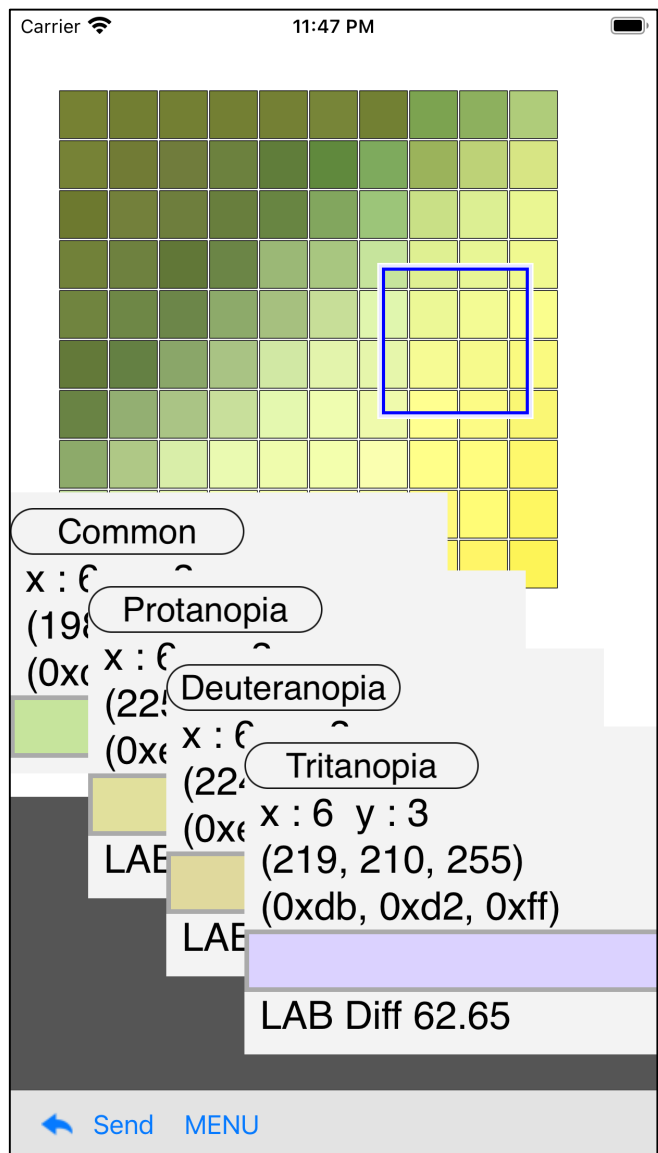
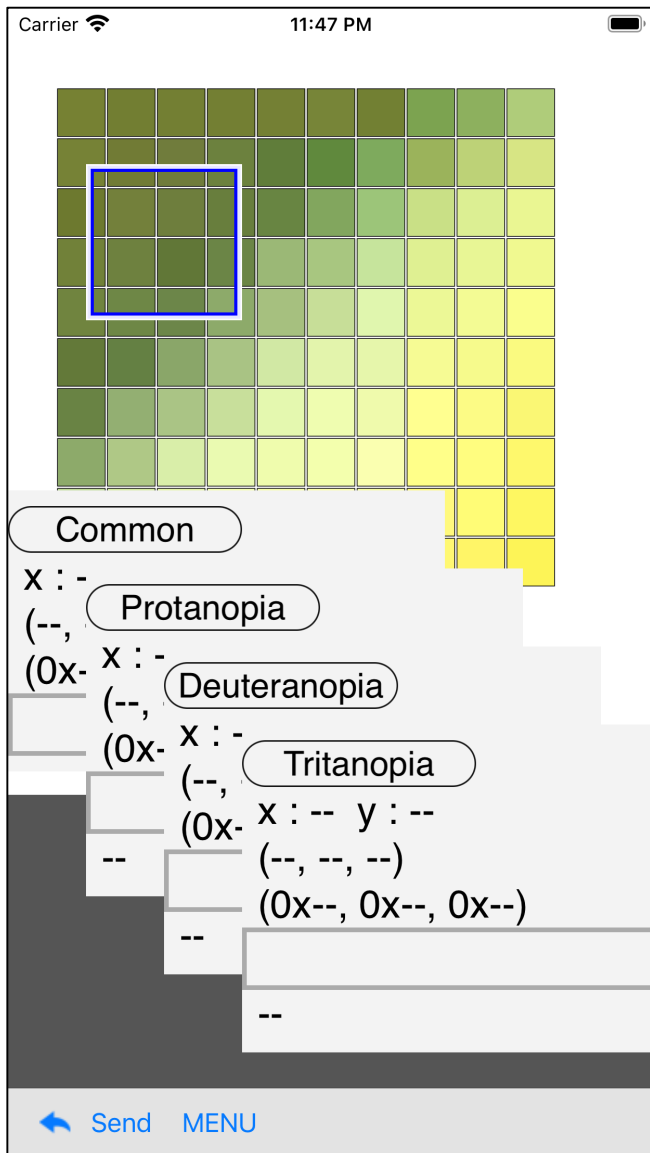


In this state, pressing the third “Expand” button on the tool bar will bring up a Expand view of the 10 × 10 pixel value around cursor view center as follows.

This is the maximum, 10 × 10.

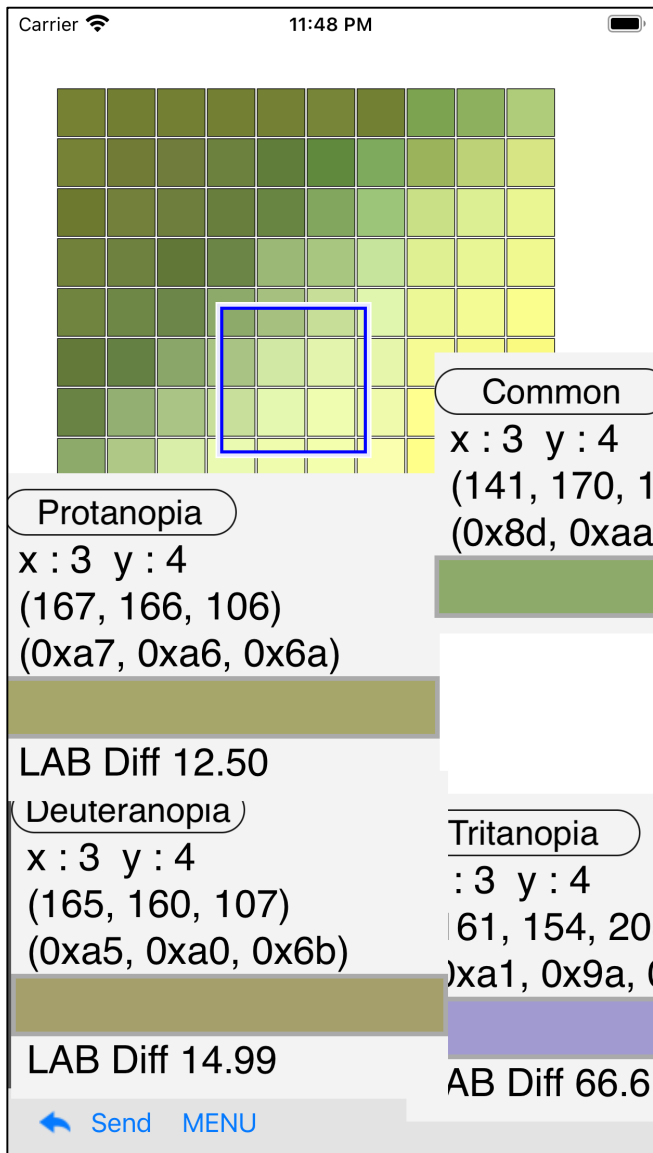
For example, if the original image is smaller than this size, or if the center of the cursor view points towards the edge of the original image, it becomes 5 × 8.

Also, if the center of the cursor view is outside the area of the original image, it will not transition to the Expand view.



When you start moving the cursor view, the value is displayed in the value display view.

On the view cursor view in the Expand view, the upper left corner is the mouse pointer.



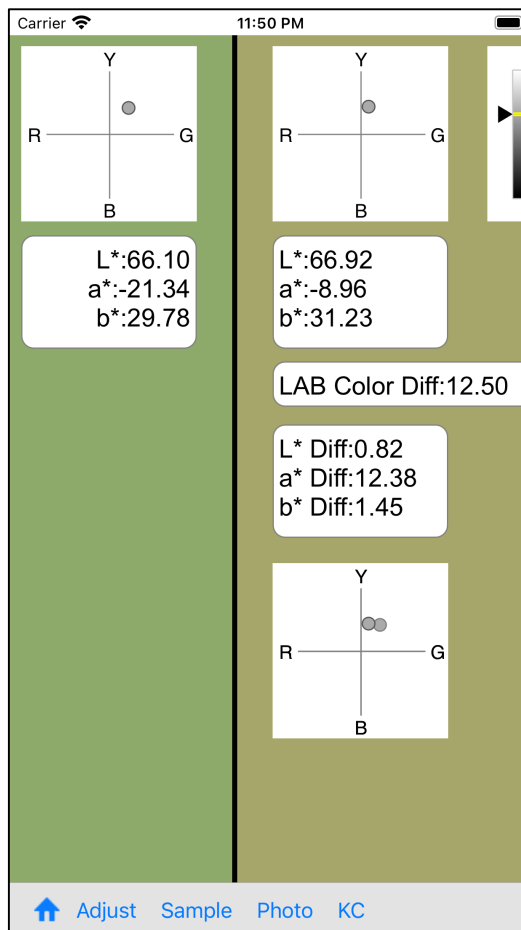
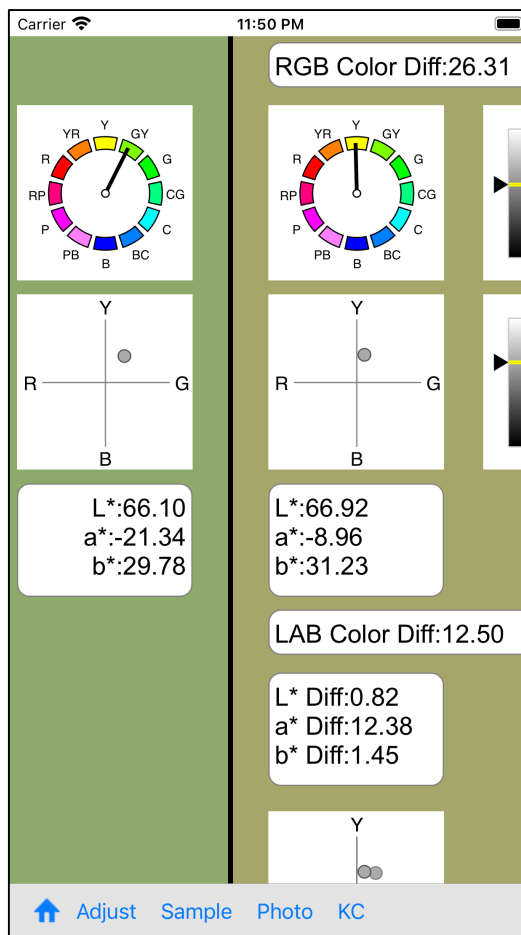
If the value display view is appropriately scattered, it looks like this.

When you press the second "Send" button in the Expand view, the value pointed to by the cursor view is transferred to the color slider.

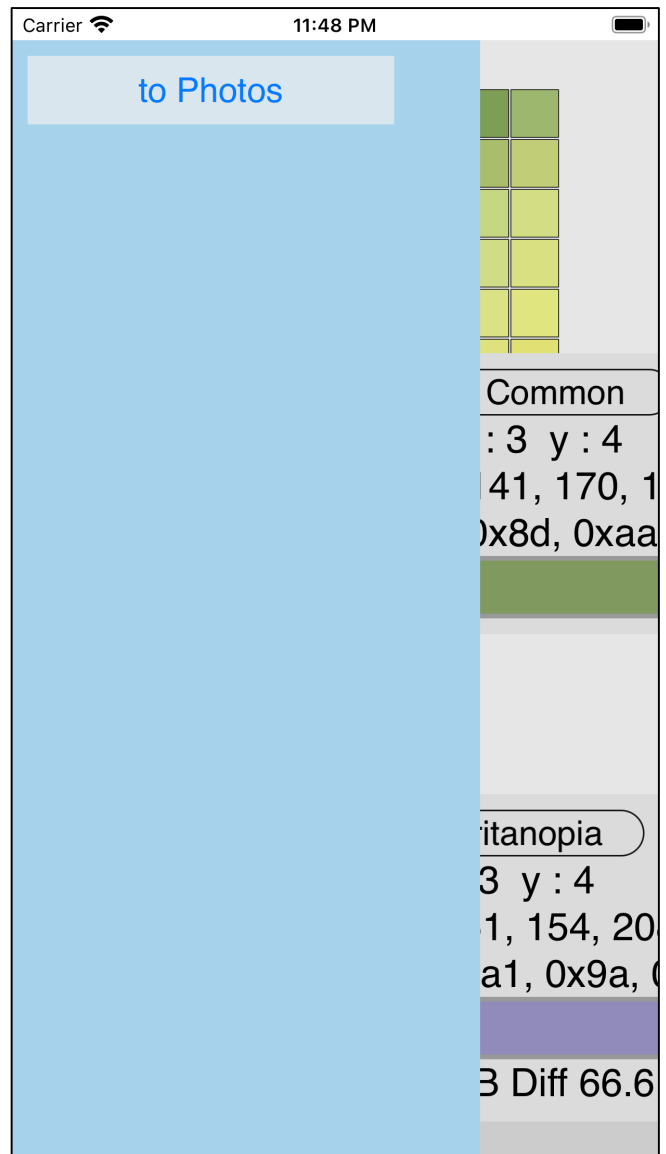
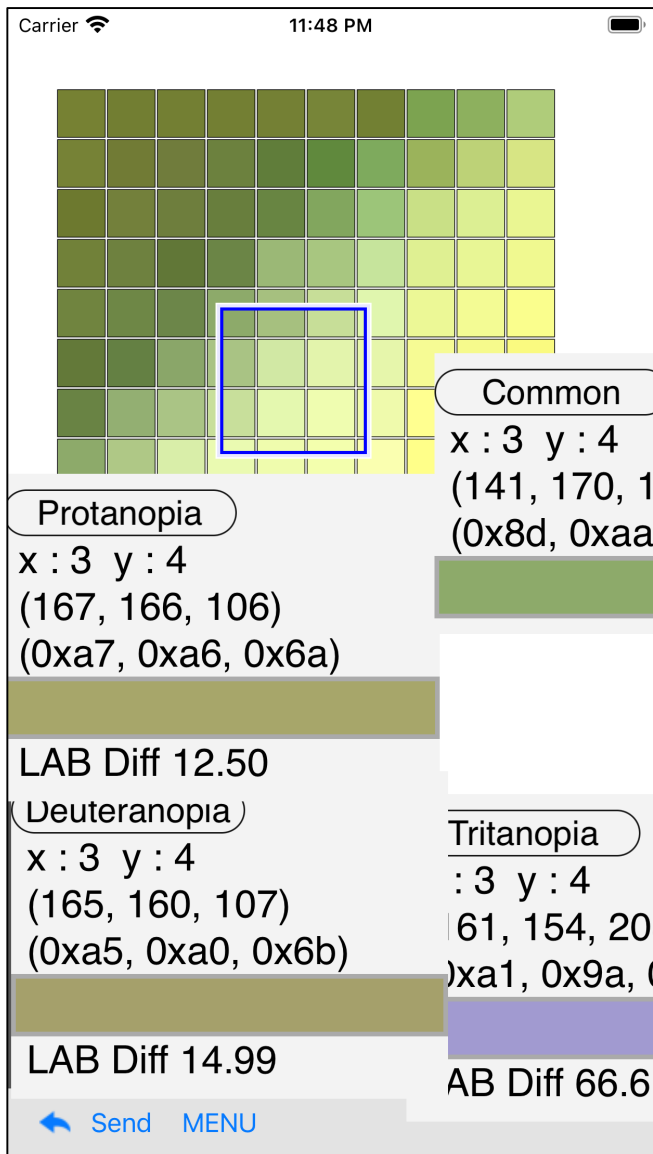
The transferred value is the value displayed by "Common".

Even if the value display view of "Common" is hidden, the value to be returned is the value displayed by "Common".

Non-expanded view (caller) is skipped automatically.



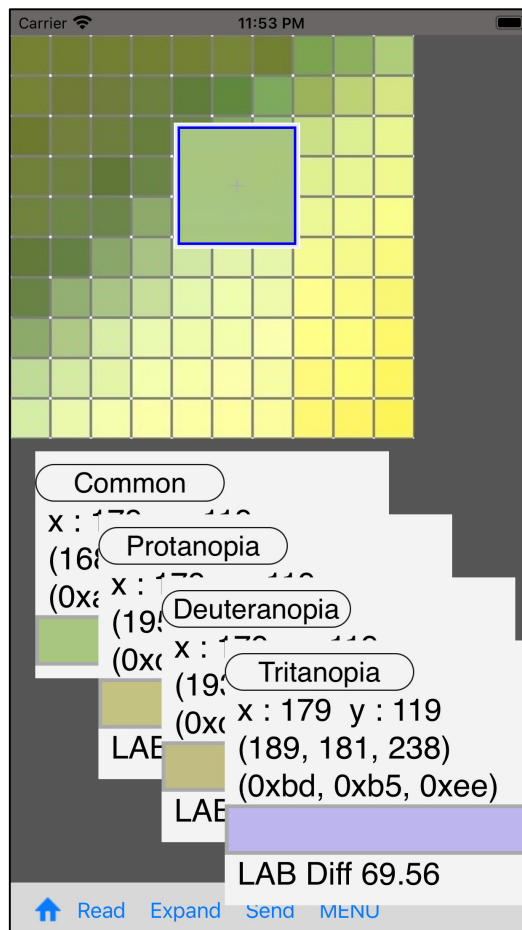
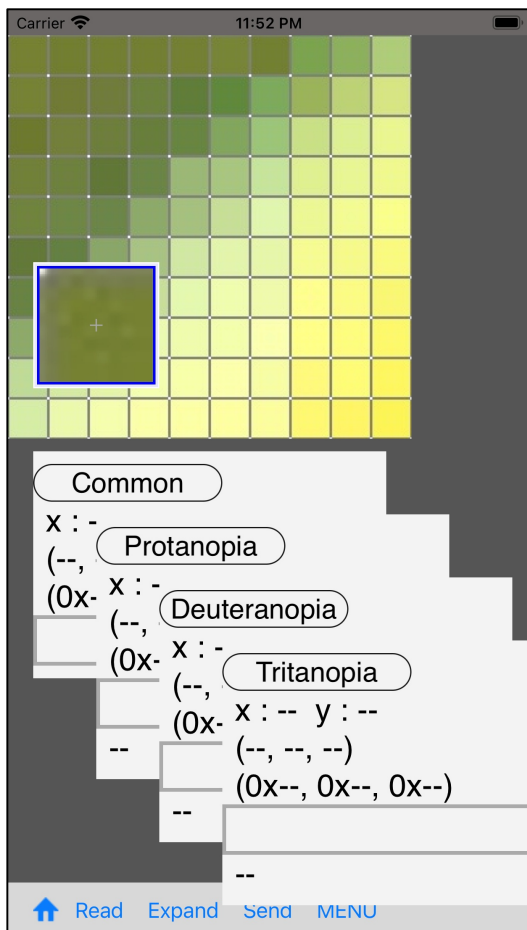
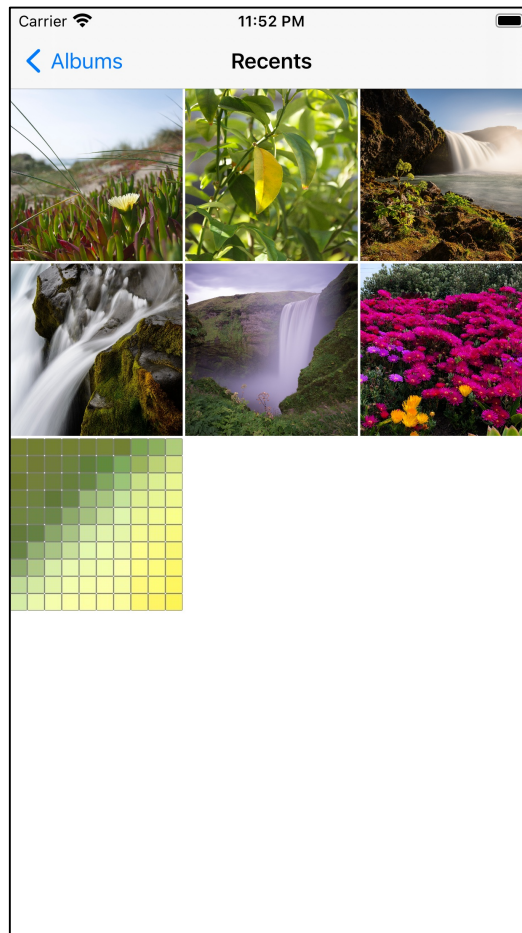
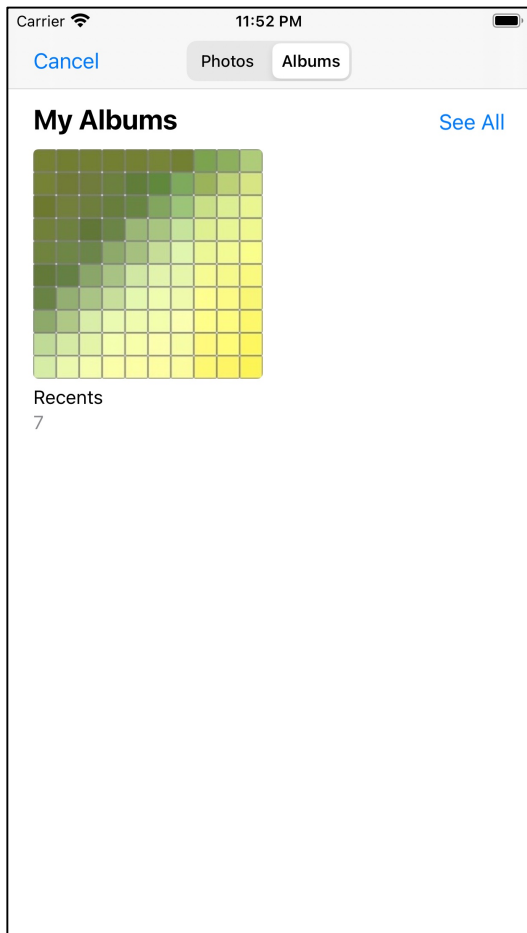
blank

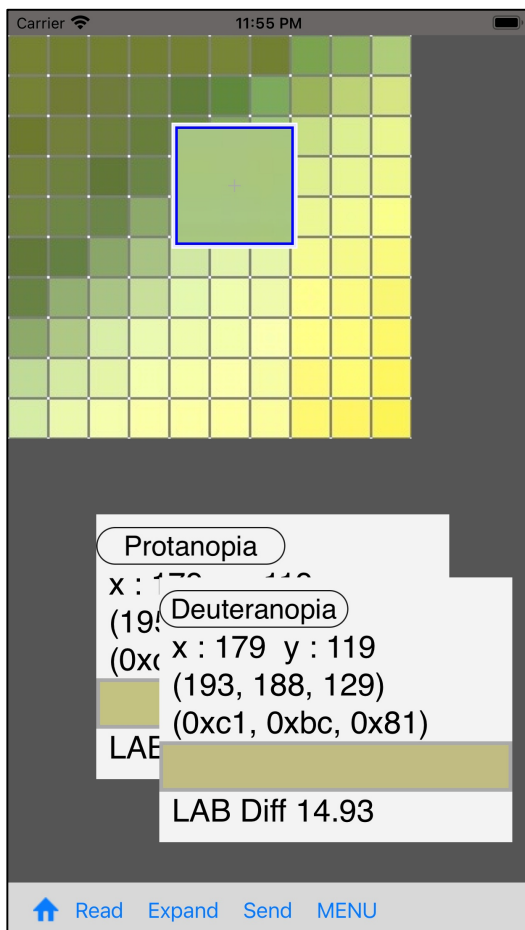
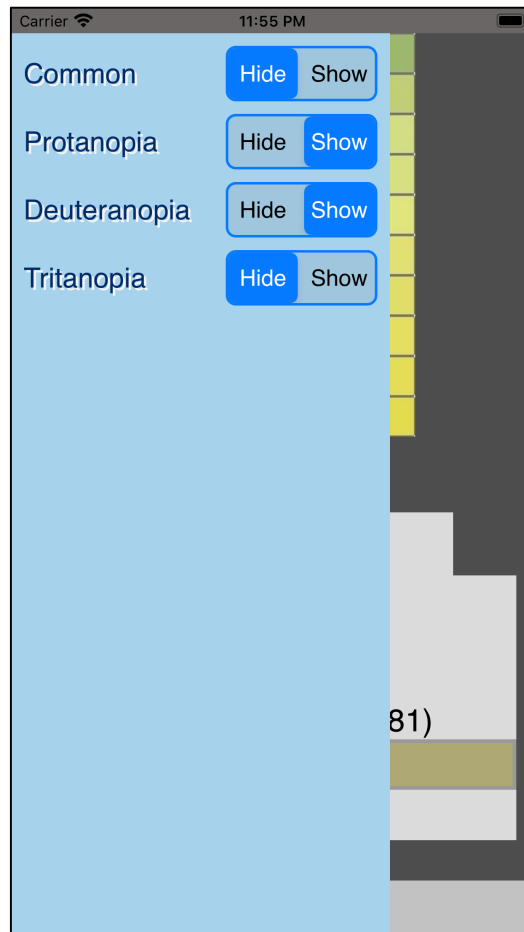
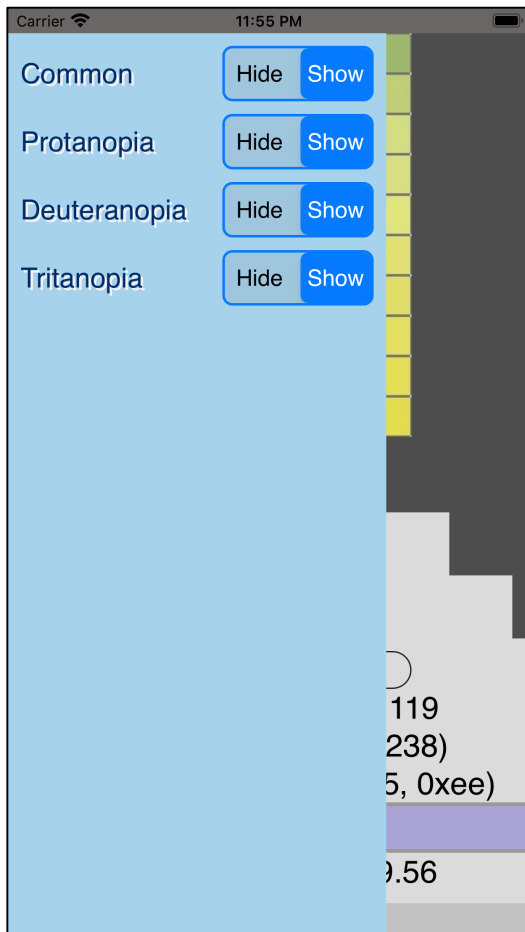


If you Long-Touch the pattern part of the Expand view, such a menu view will appear.

When you press the "to Photos" button, the image itself of the pattern part is transferred to Photos (Camera Roll).

For confirmation, look at it as follows.

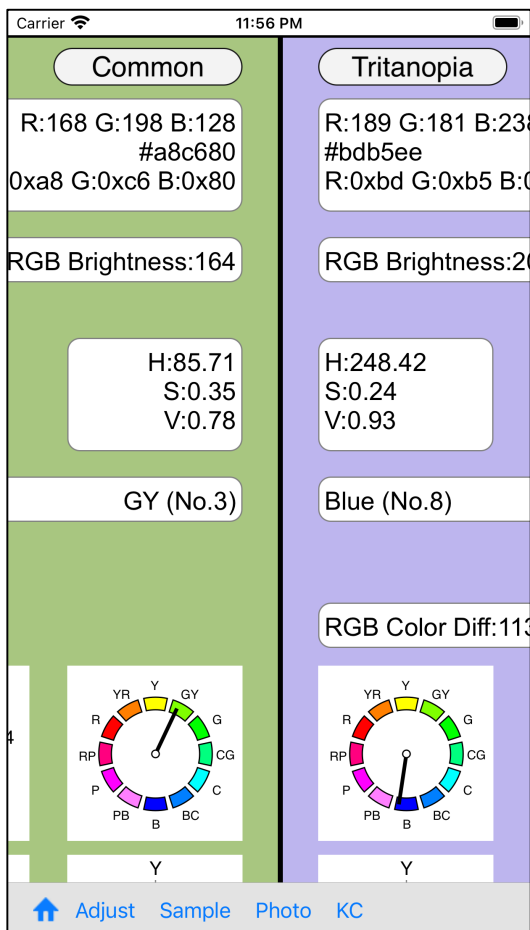
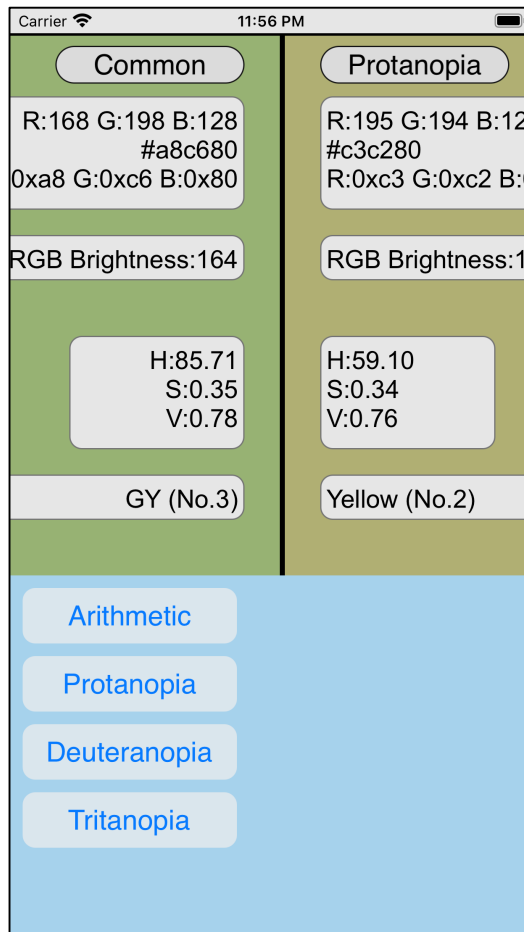
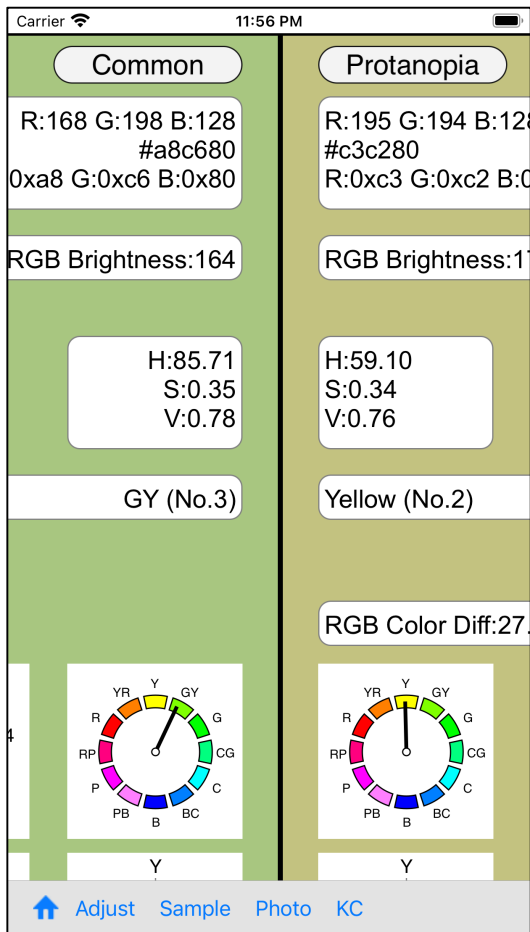




When you press the menu button on the toolbar, the display-hide setting menu view like this will appear.

If you set only Protanopia and Deuteranopia to display state, it will be as shown on the left.

blank



When you press the “KC” (Kind Change) button on the far right of the color slider view, such a view comes out from the bottom.

If pressed, then the LMS conversion method is changed to that kind.